NEW CONSTRUCTION

NASHVILLE FIRE STATION NO.2

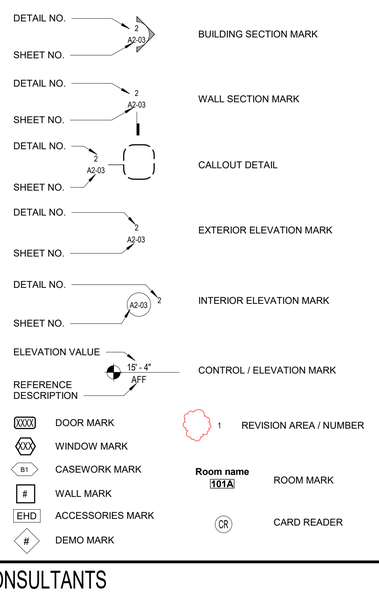
1200 EAST WASHINGTON ST.
NASHVILLE, NC 27856

BID SET

ABBREVIATIONS

@	AT
ACC	ACCENT COLOR
ACOUS	ACOUSTIC
ACT	ACOUSTICAL CEILING TILE
ACW	ACOUSTICAL WALL PANELS
AD	AREA DRAIN
ADJ	ADJUSTABLE
AE	APPROVED EQUAL
AFF	ABOVE FINISH FLOOR
AFL	ATHLETIC FLOORING
AHU	AIR HANDLING UNIT
ALUM	ALUMINUM
ANOD	ANODIZED
ANSI	AMERICAN NATIONAL STANDARDS INSTITUTE
ATTEN	ATTENUATION
AWP	ACRYLIC WALL PANELS
BBT	BIOBASED TILE
BF	BLOCK FILL
BFC	BROOMED FINISHED CONCRETE
BL	BLINDS
BLDG	BUILDING
BLKG	BLOCKING
BOT	BOTTOM
BPG	BULLET PROOF GLASS
CB	CATCH BASIN
CEM	CEMENTIOUS SIDING
CF	CORK FLOORING
CFT	CERAMIC FLOOR TILE
CG	CURVED CEILING GRID
CI	CAST IRON
CI#	CURB INLET
CJ	CONTROL JOINT
CL	CENTERLINE
CLG	CEILING
CLR	CLEAR
CMU	CONCRETE MASONRY UNIT
CO	CLEAN OUT
COL	COLUMN
CONC	CONCRETE
CONSTR	CONSTRUCTION
CONTR	CONTRACTOR
CORR	CORRUGATED
CPT	CARPET
CPTT	CARPET TILE
CRC	COLD ROLLED CHANNEL
CRF	CORK RUBBER FLOORING
CS	COUNTERSUNK
CSCI	CONTRACTOR SUPPLIED, CONTRACTOR INSTALLED
CTB	CERAMIC TILE BASE
CW	CURTAINWALL
CWT	CERAMIC WALL TILE
DFP	DRY FOG PAINT
DIA	DIAMETER
DISP	DISPENSER
DN	DOWN
DP	DEEP
DR	DOOR
DS	DOWNSPOUT
DTL	DETAIL
EDG	EDGE BANDING
EES	EMERGENCY EYE WASH AND SHOWER
EFC	EPOXY FLOOR COATING
EIFS	EXTERIOR INSULATION FINISH SYSTEM
EIP	EXISTING IRON PIPE
EJ	EXPANSION JOINT
ELEV	ELEVATION
EN	ENAMEL
EPT	HIGH PERFORMANCE EPOXY PAINT
EQ	EQUAL
ES	EXPOSED STRUCTURE
EST	EXISTING
EXP	EXPOSED CEILING
EXT	EXTERIOR
EW	EACH WAY
EWC	ELECTRIC WATER COOLER
FC	FIRECODE
FD	FLOOR DRAIN
FE	FIRE EXSTINGUISHER
FEC	SURFACE MOUNTED FIRE EXSTINGUISHER SEMI-RECESSED
FF	FINISH FLOOR
FH	FIRE HYDRANT
FLU	FLOURESCENT
FOF	FACE OF FRAME
FOM	FACE OF MASONRY
FT	FLOOR TILE
FTG	FOOTING
FV	FLOOD VENT
GA	GAGE
GALV	GALVANIZED
GC	GENERAL CONTRACTOR
GCT	GRANITE COUNTERTOP
GEN	GENERATOR
GFT	GRANITE FLOOR TILE
GL	GLASS
GMT	GLASS MOSAIC TILE
GT	GROUT
GWB	GYPSUM WALL BOARD
GYP	GYPSUM BOARD
HB	HOSE BIB
HC	HOLLOW CORE
HDC	HANDICAP
HDWD	HARDWOOD
HM	HOLLOW METAL
HORZ	HORIZONTAL
HR	HOUR
ID	INSIDE DIAMETER
IMP	INSULATED METAL PANEL
INSTAL	INSTALLATION
INSUL	INSULATION
INT	INTERIOR
INV	INVERT
JB	JOIST BEARING
JB#	JUNCTION BOX
JT	JOINT
L	LONG
LFT	LINOLEUM FLOOR TILE
LP	LIGHT POLE
LST	LINOLEUM SHEET FLOORING
LVS	LEAVES (DOOR)
LVT	LUXURY VINYL TILE
MATL	MATERIAL
MAX	MAXIMUM
MB	MASONRY - BRICK
MBL	MARBLE
MC	METAL CANOPY
MCT	METAL CEILING TILE
MECH	MECHANICAL
MFR	MANUFACTURER
MFT	MARBLE FLOOR TILE
MIN	MINIMUM
MO	MASONRY OPENING
MTB	MARBLE TILE BASE
MTD	MOUNTED
MTL	METAL
MWM	METAL WALK-OFF MAT
MWT	MARBLE WALL TILE
N/A	NOT APPLICABLE
NIC	NOT IN CONTRACT
NOM	NORMAL
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED, OWNER INSTALLED
OPP	OPPOSITE
OSC	OVERFLOW SCUPPER
OZ	OUNCE
P	PAINT
PC	POLISHED CONCRETE
PERF	PERFORATED
PFT	PORCELAIN FLOOR TILE
PIV	POST INDICATOR VALVE
PL	PLATE
P-LAM	PLASTIC LAMINATE
P-LAM WD	PLASTIC LAMINATE WOOD DOORS
PLYWD	PLYWOOD
PNT	PAINT
POLYETH	POLYETHYLENE
PP	POWER POLE
PR	PAIR
PTB	PORCELAIN TILE BASE
PTD	PAINTED
PTP	PLASTIC TOILET PARTITIONS
PWT	PORCELAIN WALL TILE
PVC	POLYVINYL CHLORIDE
QS	QUARTZ SURFACE
QT	QUARRY TILE
QZT	QUARTZ TILE
R	RADIUS
R&S	ROD AND SHELF
RB	RESILIENT BASE
RBT	RUBBER TILE
RCP	REINFORCED CONCRETE
RD	ROOF DRAIN
RDL	ROOF DRAIN LEADER
RECEPT	RECEPTACLE
RECYF	RECYCLED FLOORING
REQD	REQUIRED
RES	RESILIENT
RM	RUBBER MAT
RO	ROUGH OPENING
ROW	RIGHT OF WAY
RSF	RESINOUS FLOORING
RTF	RESILENT TILE FLOORING
SAT	SPRAYED ACOUSTICAL TREATMENT
SC	SEALED CONCRETE
SCH	SCHEDULE
SCW	SOLID CORE WOOD
SDT	STATIC DISSIPATIVE TILE
SF	STOREFRONT
SHEATH	SHEATHING
SIM	SIMILAR
SP	SPACES
SQ	SQUARE
SQFT	SQUARE FEET
SRT	SLIP RESISTANT TILE
SS	STAINLESS STEEL
SSC	STAINED SEALED CONCRETE
SSG	STRUCTURAL SILICON GLAZING
SSM	SOLID SURFACE
ST	STEEL
ST&R	STAIR TREADS AND RISERS
STD	STANDARD
SUSP	SUSPENDED
T&G	TONGUE AND GROOVE
TB	TILE BASE
TC	TERRA COTTA
TCA	TILE COUNCIL OF AMERICA
TELE	TELEPHONE
TEMP	TEMPERED
TEXD	TEXTURED
TFT	TERRAZZO FLOOR TILE
TOC	TOP OF CURB
TOS	TOP OF STEEL
TP	TELEPHONE POLE
TS	TRANSITION STRIP
TV	TELEVISION
TVB	TELEVISION MOUNTING BRACKET
TYP	TYPICAL
UL	UNDERWRITERS LABORATORY
UIL	UTILITYLIGHTS
UNO	UNLESS NOTED OTHERWISE
VACT	VINYL ACOUSTICAL TILE
VB	VAPOR BARRIER
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VIF	VERIFY IN FIELD
VWC	VINYL WALL COVERING
W/	WITH
WC	WATER CLOSET
WD	WOOD
WF	WOOD FLOORING
WT	WALL TILE
WT*	WALL TILE - SEE ELEVATION
WWF	WELDED WIRE FABRIC
WWM	WELDED WIRE MESH

SYMBOL LEGEND



VICINITY MAP

SHEET NAMING LEGEND

SECTION	
0	GENERAL
1	PLANS
2	EXTERIOR ELEVATIONS
3	BUILDING / WALL SECTIONS
4	VERTICAL CIRCULATION
5	DETAILS
6	WINDOW & DOOR SCHEDULES
7	INTERIOR ELEV / CASEWORK

DISCIPLINE	
G	COVER
G	CODE SUMMARY
G	LIFE SAFETY
CE	CIVIL
L	LANDSCAPE
S	STRUCTURAL
D	DEMOLITION
A	ARCHITECTURAL
Q	EQUIPMENT
FP	FIRE PROTECTION
P	PLUMBING
M	MECHANICAL
E	ELECTRICAL
FA	FIRE ALARM
X	MISCELLANEOUS

PAGE NUMBER: A1.01

APPLICABLE TO ARCHITECTURAL SHEETS ONLY

CONSULTANTS

STRUCTURAL ENGINEER:
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223 S. WEST STREET, SUITE 1100
RALEIGH, NC 27603
PHONE: 919-380-8750

PLUMBING, MECHANICAL, & ELECTRICAL ENGINEER:
ATLANTEC ENGINEERS, PA
3221 BLUE RIDGE ROAD, SUITE 113
RALEIGH, NC 27612
PHONE: 919-571-1111

CIVIL ENGINEER:
STOCKS ENGINEERING
801 EAST WASHINGTON STREET, PO BOX 1108
NASHVILLE, NC 27856
PHONE: 252-459-8196

INDEX OF DRAWINGS

* PREFIX TO SHEET NUMBER INDICATES FULL SHEET INFORMATION IN COLOR IMAGERY ONLY.

OAKLEY COLLIER ARCHITECTS
OCA
109 Candlewood Road, Rocky Mount, NC 27804 (P) 252.937.2500
1111 Haynes Street, Suite 109, Raleigh, NC 27604 (P) 919.985.7700

BID SET
TOWN OF NASHVILLE
FIRE STATION NO. 2
1200 EAST WASHINGTON ST.
NASHVILLE, NC 27856

OAKLEY COLLIER ARCHITECTS, P.A. — CERT NO. 50681 — ROCKY MOUNT, NC

KIMM W. COLLIER — REGISTERED ARCHITECT — NORTH CAROLINA — ROCKY MOUNT, NC — 05/15/23

GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By: JFK	Sheet No.: G0.1
Checked By: JFK	

Sheet Title: COVERSHEET

2018 APPENDIX B BUILDING CODE SUMMARY

Name of Project: NASHVILLE FIRE DEPARTMENT NO. 2
Address: 1200 EAST WASHINGTON ST. Zip Code 27856
Owner/Authorized Agent: TOWN OF NASHVILLE / RANDY LANSING (TOWN MANAGER)
Phone # (252) 459-4511 E-Mail RANDY.LANSING@TOWNOFNASHVILLENC.GOV
Owned By: ■ City/County ☐ Private ☐ State
Code Enforcement Jurisdiction: ■ City TOWN OF NASHVILLE ☐ County ☐ State

CONTACT: JOSEPH KLIMEK, ARCHITECT

DESIGNER	FIRM	NAME	LICENSE#	TELEPHONE#	E-MAIL
Architectural	OAKLEY COLLIER ARCHITECTS	ANN COLLIER	6886	252-937-2500	ACOLLIER@OAKLEYCOLLIER.COM
Civil	STOCKS ENGINEERING	J. MICHAEL STOCKS	19843	252-459-8196	MSTOCKS@STOCKSENGINEERING.COM
Electrical	ATLANTEC ENGINEERING	SUJIN PRAMOJANEY	027479	919-571-1111	SUJIN@ATLANTECENGINEERS.COM
Fire Alarm	ATLANTEC ENGINEERING	SUJIN PRAMOJANEY	027479	919-571-1111	SUJIN@ATLANTECENGINEERS.COM
Plumbing	ATLANTEC ENGINEERING	J. HARRISON HOLT	049754	919-571-1111	HARRISON@ATLANTECENGINEERS.COM
Mechanical	ATLANTEC ENGINEERING	PATRICK McCABE	051195	919-571-1111	PATRICK@ATLANTECENGINEERS.COM
Sprinkler-Standpipe					
Structural	STEWART	ANDREW S. PORDON	035263	919-380-8750	APORDON@STEWARTINC.COM
Retaining Walls >5' High					
Other					

("Other" should include firms and individuals such as truss, precast, pre-engineered, interior designers, etc.)

2018 NC BUILDING CODE: ■ New Building ☐ Addition ☐ Renovation
☐ 1st Time Interior Completion
☐ Shell/Core - Contact the local inspection jurisdiction for possible additional procedures and requirements
☐ Phased Construction - Shell/Core - Contact the local inspection jurisdiction for possible additional procedures and requirements

2018 NC EXISTING BUILDING CODE: Existing Alteration ☐ Prescriptive ☐ Repair ☐ Chapter 14 ☐ Level I ☐ Level II ☐ Level III ☐ Historic Property ☐ Change of Use

CONSTRUCTED: (date) N/A **CURRENT OCCUPANCY(S)** (Ch.3): N/A
RENOVATED: (date) N/A **PROPOSED OCCUPANCY(S)** (Ch.3): A-3, B, R-2, S-2 Low

Risk Category (Table 1604.5): Current: ☐ I ☐ II ☐ III ☐ IV
Proposed: ☐ I ☐ II ☐ III ■ IV

BASIC BUILDING DATA

Construction Type: ☐ I-A ☐ I-B ☐ II-A ☐ II-B ☐ III-A ☐ III-B ☐ IV ☐ V-A ■ V-B
Sprinklers: ☐ No ☐ Partial ■ Yes ■ NFPA 13 ☐ NFPA 13R ☐ NFPA 13D
Standpipes: ■ No ☐ Yes Class ☐ I ☐ II ☐ III ■ Wet ☐ Dry
Fire District: ☐ No ■ Yes **Flood Hazard Area:** ■ No ☐ Yes
Special Inspections Required: ☐ No ■ Yes (Contact local inspection jurisdiction for additional procedures and requirements.)

GROSS BUILDING AREA TABLE

FLOOR	EXISTING (SQ FT)	ADDITION (SQ FT)	SUB-TOTAL
6th Floor			
5th Floor			
4th Floor			
3rd Floor			
2nd Floor			
1st Floor	-	(BASE BID) 9,987 / (ALT. BID) 11,564	(BASE BID) 9,987 / (ALT. BID) 11,564
Basement	-	-	-
TOTAL	-	(BASE BID) 9,987 / (ALT. BID) 11,564	(BASE BID) 9,987 / (ALT. BID) 11,564

ALLOWABLE AREA

Primary Occupancy Classification(s):
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 Condition ☐ 1 ☐ 2 ☐ I-2 Condition ☐ 1 ☐ 2 ☐ I-3 Condition ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ I-4
Mercantile ☐
Residential ☐ R-1 ■ R-2 ☐ R-3 ☐ R-4
Storage ☐ S-1 Moderate ■ S-2 Low ☐ High-piled ☐ Parking Garage ☐ Open ☐ Enclosed ☐ Repair Garage
Utility and Miscellaneous ☐

Accessory Occupancy Classification(s): A-3 (EXERCISE ROOM IN BUSINESS OCCUPANCY)
Incidental Uses (Table 509): N/A
Special Uses (Chapter 4 - List Code Sections): N/A
Special Provisions: (Chapter 5 - List Code Sections): N/A
Mixed Occupancy: ☐ No ■ Yes Separation: N/A Hr. Exception: N/A

■ Non-Separated Use (508.3) - The required type of construction for the building shall be determined by applying the height and area limitations for each of the applicable occupancies to the entire buildign. The most restrictive type of construction, so determined, shall apply to the entire building.

☐ Separated Use (508.4) - See below for area 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.

$$\frac{\text{Actual Area of Occupancy A}}{\text{Allowable Area of Occupancy A}} + \frac{\text{Actual Area of Occupancy B}}{\text{Allowable Area of Occupancy B}} \leq 1$$

$$\frac{-}{-} + \frac{-}{-} + \ldots\ldots = \frac{-}{} \leq 1.00$$

STORY NO.	DESCRIPTION AND USE	(A) BLDG AREA PER STORY (ACTUAL)	(B) TABLE 506.2[4] AREA	(C) AREA FOR FRONTAGE INCREASE[1,5]	(D) ALLOWABLE AREA PER STORY OR UNLIMITED[2,3]
1	A-3	9,987 / 11,564	24,000	18,000	42,000

1. Frontage area increases from Section 506.3 are computed thus:
   a. Perimeter which fronts a public way or open space having 20 feet minimum width = 423 (F)
   b. Total Building Perimeter = 423 (P).
   c. Ratio (F/P) = 1 (F/P)
   d. W = Minimum width of public way = 30 (W)
   e. Percent of frontage increase *If = 100[F/P-0.25] x W/30* = 75 (%).
2. Unlimited area applicable under conditions of Section 507.
3. Maximum Building Area = total number of stories in the building x D (maximum 3 stories) (506.2).
4. The maximum area of open parking garages must comply with Table 406.5.4 .
5. Frontage increase is based on the unsprinklered area value in Table 506.2.

ALLOWABLE HEIGHT

	ALLOWABLE	SHOWN ON PLANS	CODE REFERENCE 1
Building Height in Feet (Table 504.3) 2	60 FT.	19 FT. 6 IN.	-
Building Height in Stories (Table 504.4) 3	2	1	-

1. Provide code reference if the "Shown on Plans" quantity is not based on Table 504.3 or 504.4.
2. The maximum height of air traffic towers must comply with Table 412.3.1.
3. The maximum height of open parking garages must comply with Table 406.5.4.

FIRE PROTECTION REQUIREMENTS

BUILDING ELEMENT	FIRE SEPARATION DISTANCE (FEET)	RATING REQ'D	RATING PROVIDED (W/ * REDUCTION)	DETAIL# AND SHEET#	DESIGN# FOR RATED ASSEMBLY	SHEET# FOR RATED PENETRATION	SHEET# FOR RATED JOINTS
Structural Frame, including columns, girders, trusses	>30	0	0	-	-	-	-
Bearing Walls							
Exterior							
North	10 - 30	0	0	-	-	-	-
East	>30	0	0	-	-	-	-
West	>30	0	0	-	-	-	-
South	>30	0	0	-	-	-	-
Interior	-	0	0	-	-	-	-
Nonbearing Walls and Partitions							
Exterior walls							
North	10 - 30	0	0	-	-	-	-
East	>30	0	0	-	-	-	-
West	>30	0	0	-	-	-	-
South	>30	0	0	-	-	-	-
Interior walls and partitions	-	0	0	-	-	-	-
Floor Construction Including supporting beams and joists		0	0	-	-	-	-
Floor Ceiling Assembly	-	-	-	-	-	-	-
Columns Supporting Floors	-	-	-	-	-	-	-
Roof Construction, including supporting beams and joists		0	0	-	-	-	-
Roof Ceiling Assembly	0	0	0	-	-	-	-
Columns Supporting Roof	0	0	0	-	-	-	-
Shaft Enclosures - Exit	-	-	-	-	-	-	-
Shaft Enclosures - Other		-	-	-	-	-	-
Corridor Separation	-	-	-	-	-	-	-
Occupancy/Fire Barrier Separation	-	-	-	-	-	-	-
Party/Fire Wall Separation	-	-	-	-	-	-	-
Smoke Barrier Separation	-	-	-	-	-	-	-
Smoke Partition	-	-	-	-	-	-	-
Tenant/Dwelling Unit/Sleeping Unit Separation		0.5HR	0.5HR	WALLS: 721.13-1 CEILING: 722.2.1.4(2)	SEE PME		-
Incidental Use Separation	-	-	-	-	-	-	-

* Indicate section number permitting reduction

PERCENTAGE OF WALL OPENING CALCULATIONS

FIRE SEPARATION DISTANCE (FEET) FROM PROPERTY LINES	DEGREE OF OPENINGS PROTECTION (TABLE 705.8)	ALLOWABLE AREA (%)	ACTUAL SHOWN ON PLANS (%)
30 OR GREATER	UP, NS	NO LIMIT	-
-	-	-	-
-	-	-	-

LIFE SAFETY SYSTEM REQUIREMENTS

Emergency Lighting: ☐ No ■ Yes
Exit Signs: ☐ No ■ Yes
Fire Alarm: ☐ No ■ Yes
Smoke Detection Systems: ☐ No ■ Yes ☐ Partial _____
Carbon Monoxide Detection: ☐ No ■ Yes

LIFE SAFETY PLAN REQUIREMENTS

Life Safety Plan Sheet #: LS1

■ Fire and/or smoke rated wall locations (Chapter 7)
☐ Assumed and real property line locations (if not on the site plan)
☐ Exterior wall opening area with respect to distance to assumed property lines (705.8)
■ Occupancy Use for each area as it relates to occupant load calculation (Table 1004.1.2)
■ Occupant loads for each area
■ Exit access travel distances (1017)
■ Common path of travel distances (Tables 1006.2.1 & 1006.3.2(1))
■ Dead end lengths (1020.4)
■ Clear exit widths for each exit door
■ Maximum calculated occupant load capacity each exit door can accommodate based on egress width (1005.3)
■ Actual occupant load for each exit 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 (1010.1.10)
☐ Location of doors with delayed egress locks and the amount of delay (1010.1.9.7)
☐ Location of doors with electromagnetic egress locks (1010.1.9.9)
■ Location of doors equipped with hold-open devices
☐ Location of emergency escape windows (1030)
■ The square footage of each fire area (202)
☐ The square footage of each smoke compartment for Occupancy Classification I-2 (407.5)
■ Note any code exceptions or table notes that may have been utilized regarding the items above

ACCESSIBLE DWELLING UNITS
(SECTION 1107)

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)

LOT OR PARKING AREA	TOTAL # OF PARKING SPACES		# OF ACCESSIBLE SPACES PROVIDED			TOTAL # ACCESSIBLE PROVIDED
	REQUIRED	PROVIDED	REGULAR WITH 5' ACCESS AISLE	VAN SPACES WITH 132" ACCESS AISLE	VAN SPACES WITH 8' ACCESS AISLE	
	-	-	-	-	-	-
TOTAL	-	-	-	-	-	-

PLUMBING FIXTURE REQUIREMENTS
(TABLE 2902.1)

USE		WATERCLOSETS			URINALS	LAVATORIES			SHOWERS /TUBS	DRINKING FOUNTAINS	
		MALE	FEMALE	UNISEX		MALE	FEMALE	UNISEX		REGULAR	ACCESSIBLE
SPACE	EXISTG										
	NEW	0	0	4	0	0	0	4	2	1	1
	REQ'D	2	2	-	0	2	2	-	-	1	1

SPECIAL APPROVALS

Special approval: (Local Jurisdiction, Department of Insurance, OSC, DPI, DHHS, etc., describe below)

ENERGY SUMMARY

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.

Existing building envelope complies with code: ☐ No ☐ Yes (The remainder of this section is not applicable)
Exempt Building: ■ No ☐ Yes (Provide code or statutory reference) _____
Climate Zone: ☐ 3A ■ 4A ☐ 5A
Method of Compliance: Energy Code ☐ Performance ■ Prescriptive
ASHRAE 90.1 ☐ Performance ☐ Prescriptive
(If "Other" specify here) _____

THERMAL ENVELOPE (Prescriptive method only) PEMB / METAL FRAMED BUILDING

Roof/ceiling Assembly (each assembly) PEMB ROOF SYSTEM / ROOF TRUSS, METAL DECK, SSM ROOF, SFI TO UNDERSIDE OF DECK.
Description of assembly:
U-Value of total assembly: -
R-Value of insulation: R-19+R-11 LS / R-49
Skylights in each assembly: -
U-Value of skylight: -
Total square footage of skylights in each assembly: -

Exterior Walls (each assembly)
Description of assembly: PEMB WALL SYSTEM / CMU MASS INSULATED WALL / METAL STUD WALLS
U-Value of total assembly: -
R-Value of insulation: R-0 + R-19ci / R-9.5ci / R-13 + R-7.5ci
Openings (windows or doors with glazing)
U-Value of assembly: 0.45
Solar heat gain coefficient: 0.25
Projection factor: < 0.25
Door R-Values: 0.77

Walls below grade (each assembly)
Description of assembly: N/A
U-Value of total assembly: -
R-Value of total assembly: -

Floors over unconditioned space (each assembly)
Description of assembly: N/A
U-Value of total assembly: -
R-Value of total assembly: -

Floors slab on grade
Description of assembly: SLAB ON GRADE, UNHEATED
U-Value of total assembly: -
R-Value of insulation: R-15 HORIZONTAL / R-7.5ci VERT.
Horizontal/vertical requirement: 24" HORIZONTAL AT PERIMETER / TO TOP OF FOOTING
Slab heated: NO

STRUCTURAL DESIGN

DESIGN LOADS:
Importance Factors: Snow (I_S) - Seismic (I_E) -
Live Loads: Roof - psf Mezzanine - psf Floor - psf
Ground Snow Load: - psf
Wind Load: Ultimate Wind Speed - mph (ASCE-7) Exposure Category -

REFERENCE STRUCTURAL DRAWINGS

SEISMIC DESIGN CATEGORY: ☐ A ☐ B ☐ C ☐ D
Provide the following Seismic Design Parameters:
Risk Category (Table 1604.5) ☐ I ☐ II ☐ III ☐ IV
Spectral Response Acceleration S_S - %g S_1 - %g
Site Classification (ASCE 7) ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F
Data Source: ☐ Field Test ☐ Presumptive ☐ Historical Data
Basic structural system ☐ Bearing Wall ☐ Building Frame ☐ Moment Frame ☐ Dual w/Special Moment Frame ☐ Dual w/Intermediate Concrete or Special Steel ☐ Inverted Pendulum
Analysis Procedure: ☐ Simplified ☐ Equivalent Lateral Force ☐ Dynamic
Architectural, Mechanical, Components anchored? ☐ Yes ☐ No
LATERAL DESIGN CONTROL: ☐ Earthquake ☐ Wind
SOIL BEARING CAPACITIES:
Field Test (provide copy of test report) - psf
Presumptive Bearing capacity - psf
Pile size, type, and capacity -

MECHANICAL DESIGN

*SEE SHEET M2.1

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT
Thermal design conditions:
winter dry bulb: -
summer dry bulb: -
Interior design conditions:
winter dry bulb: -
summer dry bulb: -
relative humidity: -
Building heating load: -
Building cooling load: -
Mechanical Spacing Conditioning System
Unitary
description of unit: -
heating efficiency: -
cooling efficiency: -
size category of unit: -
Boiler
Size category, if oversized, state reason: -
Chiller
Size category, if oversized, state reason: -
List equipment efficiencies: -

REFERENCE MECHANICAL DRAWINGS

*SEE SHEET E3.1

ELECTRICAL DESIGN

ELECTRICAL SYSTEM AND EQUIPMENT
Method of Compliance: Energy Code: ☐ Prescriptive ☐ Performance
ASHRAE 90.1: ☐ Prescriptive ☐ Performance

Lighting schedule (complete for each fixture type)
lamp type required in fixture
number of lamps in fixture
ballast type used in the fixture
number of ballasts in fixture
total wattage per fixture
total interior wattage specified vs. allowed (whole building or space by space)
total exterior wattage specified vs. allowed

Additional Efficiency Package Options
(When using the 2018 NCECC; not required for ASHRAE 90.1)
☐ C406.2 More Efficient HVAC Equipment Performance
☐ C406.3 Reduced Lighting Power Density
☐ C406.4 Enhanced Digital Lighting Controls
☐ C406.5 On-Site Renewable Energy
☐ C406.6 Dedicated Outdoor Air System
☐ C406.7 Reduced Energy Use in Service Water Heating

REFERENCE ELECTRICAL DRAWINGS

OAKLEY COLLIER ARCHITECTS
OCA
109 Candlewood Road, Rocky Mount, NC 27804 (P) 252.937.2500
1111 Haynes Street, Suite 109, Raleigh, NC 27604 (P) 919.965.7700

BID SET
TOWN OF NASHVILLE
FIRE STATION NO. 2
1200 EAST WASHINGTON ST.
NASHVILLE, NC 27856

OAKLEY COLLIER ARCHITECTS, P.A. CERT NO. 50681 NORTH CAROLINA ROCKY MOUNT, NC

ANN W. COLLIER REGISTERED ARCHITECT NORTH CAROLINA ROCKY MOUNT, N.C. 05/15/23

GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

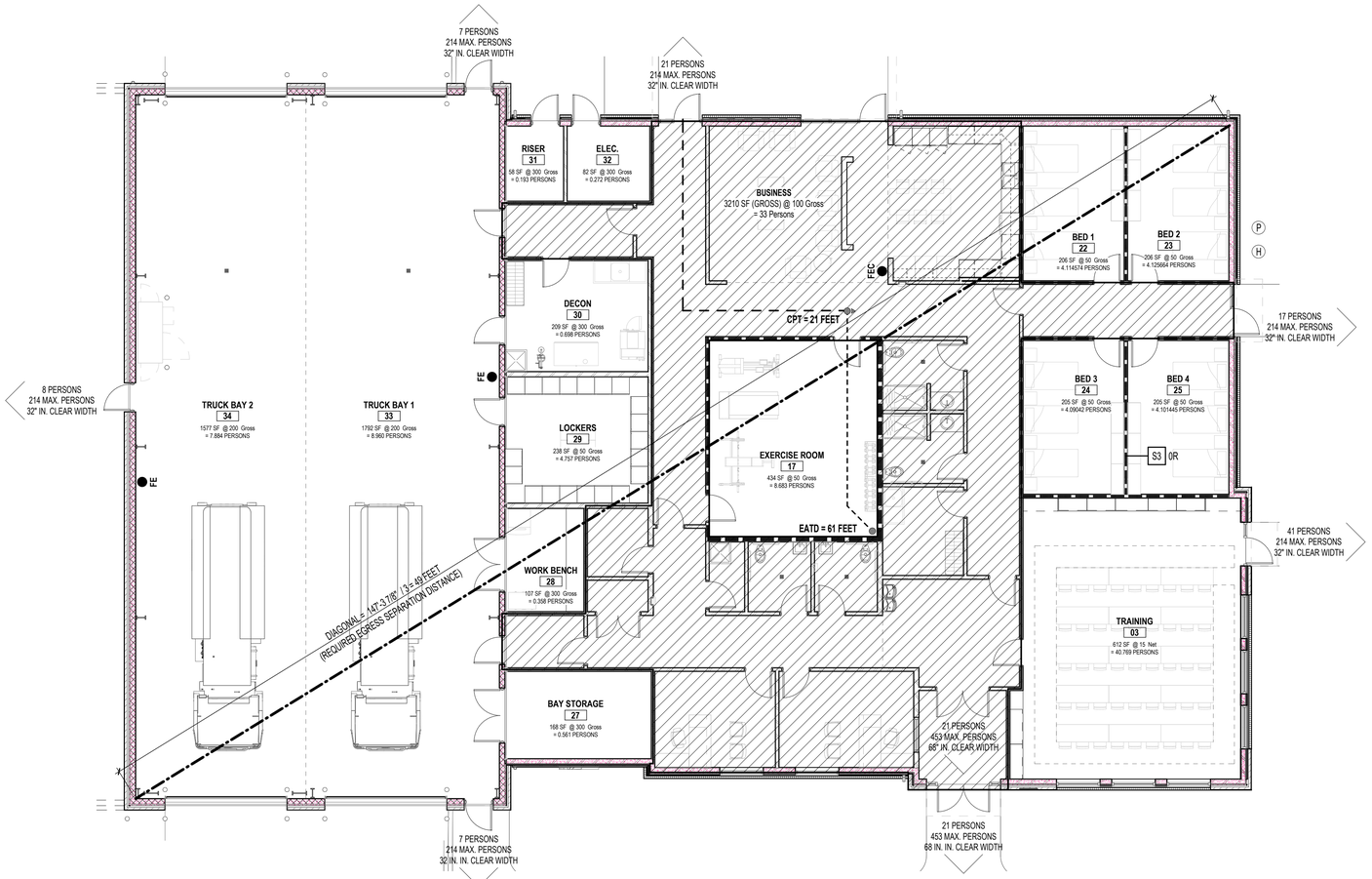
REVISIONS
#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By	Sheet No.
JFK	G0.2
Checked By	
JFK	

Sheet Title
BUILDING CODE SUMMARY

FUNCTION OF SPACE (PER ROOM)

Name	AREA	Occupant Load Factor (1004.1.2)	Occupant Load Factor	Occupant Load Factor Type	Occupant Total	Comments
(none)						
TRAINING	208 SF		0	NET		SUB-NET
	208 SF				0	
Accessory Storage Areas, Mechanical Equipment Room						
WORK BENCH	107 SF	300	300	Gross	1	
BAY STORAGE	168 SF	300	300	Gross	1	
RISER	58 SF	300	300	Gross	1	
ELEC.	82 SF	300	300	Gross	1	
DECON	209 SF	300	300	Gross	1	
	625 SF				5	
Assembly (Unconcentrated - tables & chairs)						
TRAINING	612 SF	15	15	Net	41	
	612 SF				41	
Business Areas						
DAYROOM	368 SF	100	100	Gross	4	
JAN.	33 SF	100	100	Gross	1	
LAUNDRY	94 SF	100	100	Gross	1	
TLT	73 SF	100	100	Gross	1	
TLT	73 SF	100	100	Gross	1	
OFFICE	152 SF	100	100	Gross	2	
OFFICE	170 SF	100	100	Gross	2	
VESTIBULE	102 SF	100	100	Gross	2	
AIR LOCK	54 SF	100	100	Gross	1	
AIR LOCK	88 SF	100	100	Gross	1	
TLT	58 SF	100	100	Gross	1	
TLT	58 SF	100	100	Gross	1	
CORRIDOR	670 SF	100	100	Gross	7	
STOR.	55 SF	100	100	Gross	1	
LOBBY	185 SF	100	100	Gross	2	
CORRIDOR	263 SF	100	100	Gross	3	
IT/AV	25 SF	100	100	Gross	1	
CORRIDOR	142 SF	100	100	Gross	2	
KITCHEN	262 SF	100	100	Gross	3	
	2925 SF				37	
Dormitories						
BED 1	206 SF	50	50	Gross	5	
BED 2	206 SF	50	50	Gross	5	
BED 4	205 SF	50	50	Gross	5	
BED 3	205 SF	50	50	Gross	5	
	822 SF				20	
Exercise Rooms (with exercise equipment)						
EXERCISE ROOM	434 SF	50	50	Gross	9	
	434 SF				9	
Locker Rooms						
LOCKERS	238 SF	50	50	Gross	5	
	238 SF				5	
Parking Garages						
TRUCK BAY 1	1792 SF	200	200	Gross	9	
TRUCK BAY 2	1577 SF	200	200	Gross	8	
	3369 SF				17	
Grand total: 34	9232 SF				134	
ALTERNATE G-1:						
TRUCK BAY 3	1577 SF	200	200	Gross	8	
GRAND TOTAL: 35	10,807 SF				142	



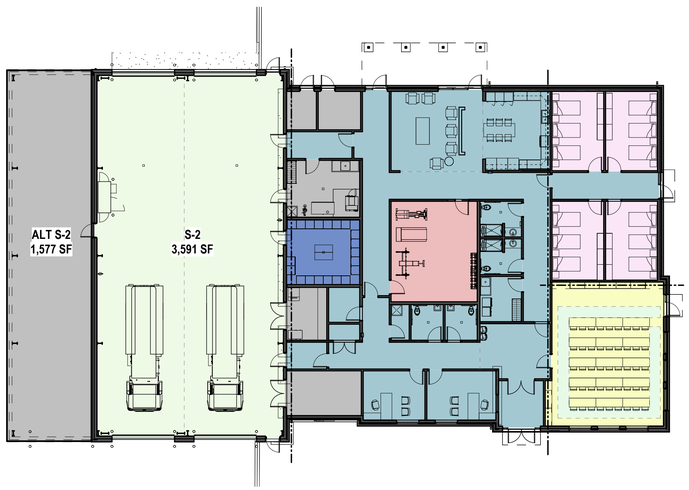
1 G0.3 LIFE SAFETY PLAN

1/8" = 1'-0"

LIFE SAFETY LEGEND

- ROOM NAME / 101A — 150 SF @ ### (GROSS/NET) = ### PERSONS — OCCUPANT LOAD FACTOR
- OCCUPANT LOAD
- (EGRESS) @ ### (GROSS/NET) = ### PERSONS — OCCUPANT LOAD FACTOR (EGRESS)
- OCCUPANT LOAD (EGRESS)
- 90 PERSONS / 180 MAX. PERSONS / 36" IN. CLEAR WIDTH — ANTICIPATED EGRESS LOAD / MAX EGRESS CAPACITY / CLEAR DOOR WIDTH
- (P) (P) — PANIC HARDWARE
- (H) (H) — HANDICAP DOOR OPERATOR WALL MOUNTED SWITCH
- (DE) # (DE) — DELAYED EGRESS PANIC HARDWARE NUMBER INDICATES LENGTH OF DELAY IN SECONDS
- FE — FIRE EXTINGUISHER - SURFACE MOUNTED
- FEC — FIRE EXTINGUISHER IN CABINET SEMI-RECESSED
- FAP — FIRE ALARM PULL STATION - NOTE 1
- FAH — FIRE ALARM HORN (AUDIO/VISUAL TYPE) - NOTE 1
- EXIT SIGN - NOTE 1
- EXIT SIGN/EMERGENCY LIGHT - NOTE 1
- EMERGENCY LIGHT - NOTE 1
- EATD — EGRESS TRAVEL DISTANCE
- CPT — COMMON PATH OF TRAVEL
- 3 HOUR FIRE SEPERATION
- AREA DIAGONAL 25'-0" (x 1/2 = 91'-0") — REQUIRED EGRESS DOOR SEPERATION
- EGRESS DOOR SEPERATION 25'-0" — ACTUAL EGRESS DOOR SEPERATION

NOTES:
1. SEE ELECTRICAL PLANS FOR COMPLETE DESCRIPTION OF DEVICES AND ADDITIONAL DETAILS INCLUDING MOUNTING AND PLACEMENT.



Function of Space
- (none)
- Accessory Storage Areas, Mechanical Equipment Room
- Assembly (Unconcentrated - tables & chairs)
- Business Areas
- Dormitories
- Exercise Rooms (with exercise equipment)
- Locker Rooms
- Parking Garages

3 G0.3 CODE DIAGRAM - FUNCTIONS (SEPARATED USE)

1/16" = 1'-0"

Occupancy
- A-3
- B
- R-2
- S-2

4 G0.3 CODE DIAGRAM - OCCUPANCY

1/16" = 1'-0"

OCCUPANCY TYPE (PER ROOM)

Name	AREA	Occupancy	Comments
A-3			
TRAINING	612 SF	A-3	
TRAINING	208 SF	A-3	SUB-NET
	820 SF		
B			
DAYROOM	368 SF	B	
EXERCISE ROOM	434 SF	B	
JAN.	33 SF	B	
LAUNDRY	94 SF	B	
TLT	73 SF	B	
TLT	73 SF	B	
OFFICE	152 SF	B	
OFFICE	170 SF	B	
VESTIBULE	102 SF	B	
AIR LOCK	54 SF	B	
AIR LOCK	88 SF	B	
TLT	58 SF	B	
TLT	58 SF	B	
CORRIDOR	670 SF	B	
STOR.	55 SF	B	
LOBBY	185 SF	B	
CORRIDOR	263 SF	B	
IT/AV	25 SF	B	
CORRIDOR	142 SF	B	
KITCHEN	262 SF	B	
	3359 SF		
R-2			
BED 1	206 SF	R-2	
BED 2	206 SF	R-2	
BED 4	205 SF	R-2	
BED 3	205 SF	R-2	
	822 SF		
S-2			
TRUCK BAY 1	1792 SF	S-2	
TRUCK BAY 2	1577 SF	S-2	
WORK BENCH	107 SF	S-2	
BAY STORAGE	168 SF	S-2	
RISER	58 SF	S-2	
ELEC.	82 SF	S-2	
DECON	209 SF	S-2	
LOCKERS	238 SF	S-2	
	4231 SF		
Grand total: 34	9232 SF		

OAKLEY COLLIER ARCHITECTS
OCA
109 Candlewood Road, Rocky Mount, NC 27804 (P) 252.937.2500
1111 Haynes Street, Suite 109, Raleigh, NC 27604 (P) 919.985.7700

BID SET

TOWN OF NASHVILLE FIRE STATION NO. 2

1200 EAST WASHINGTON ST.
NASHVILLE, NC 27856

OAKLEY COLLIER ARCHITECTS P.A. — CERT NO. 50681 — ROCKY MOUNT, NC

ANN W. COLLIER — REGISTERED ARCHITECT — NORTH CAROLINA — ROCKY MOUNT, N.C. — 05/15/23

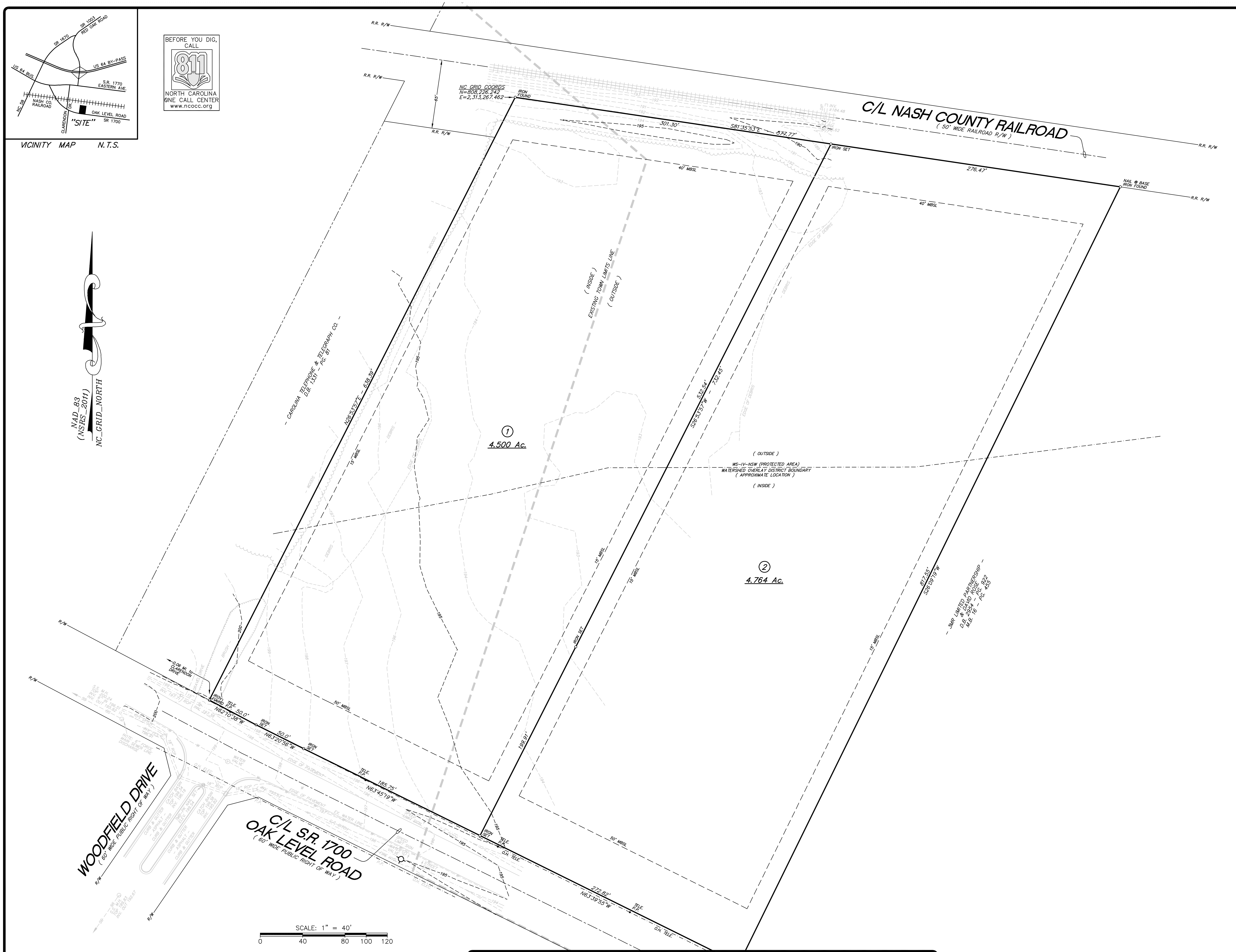
GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By: JFK	Sheet No.: G0.3
Checked By: JFK	

Sheet Title: LIFE SAFETY



LEGEND:

——	LINES SURVEYED
- - -	LINES NOT SURVEYED
EIP	EXISTING IRON PIPE
EIS	EXISTING IRON STAKE
EIA	EXISTING IRON AXLE
NIP	NEW IRON PIPE SET
IPF	IRON PIPE FOUND
	CONTROL CORNER
NI	NO IRON SET
PKF	P.K. NAIL FOUND
PKS	P.K. NAIL SET
RRSF	RAILROAD SPIKE FOUND
CM	CONCRETE MONUMENT
ECM	EX. CONC. MONUMENT
ELS	EX. LIGHTWOOD STAKE
DB	DEED BOOK
PB	PLAT BOOK
R/W	RIGHT OF WAY
C/L	CENTERLINE
CMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
NTS	NOT TO SCALE
MW	MONITORING WELL
LT	LIGHT
PP	POWER POLE
CA	CONTROL ACCESS
9121	ADDRESS

AREA CALCULATED BY THE COORDINATE METHOD.

STOCKS ENGINEERING
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
P.O. BOX 1108
PHONE: (252) 459-8196
WWW.STOCKSENGINEERING.COM

BLN=C-1874

NASHVILLE FIRE STATION #2
NASHVILLE, NORTH CAROLINA

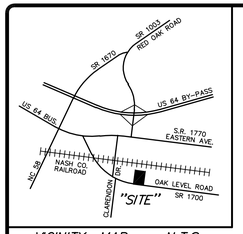
NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS

J. Michael Stocks 5/15/2023

EXISTING TOPO

REVISIONS	
FILE NO.	2020-058
HORZ. SCALE:	1"=40'
VERT. SCALE:	NONE

CE-01



VICINITY MAP N.T.S.

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TOPOGRAPHICAL SURVEY BY
James G. Strickland
Land Surveying, P.A.

123 West Washington Street
Nashville, North Carolina 27856
NORTH CAROLINA CERTIFICATE NUMBER: C-3721
TELEPHONE (252) 459-3838
FAX (252) 459-1885

LEGEND:

———	LINES SURVEYED
– – –	LINES NOT SURVEYED
EIP	EXISTING IRON PIPE
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IPF	IRON PIPE FOUND
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CM	CONCRETE MONUMENT
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DB	DEED BOOK
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NTS	NOT TO SCALE
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PP	POWER POLE
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9121	ADDRESS

AREA CALCULATED BY THE COORDINATE METHOD.

CONTACT INFORMATION

PLANNING/ZONING: TOWN OF NASHVILLE
499 S. BARNES ST.
NASHVILLE, NC 27856
RANDY LANSING
252-459-4511

WATER & SEWER: NASHVILLE PUBLIC UTILITIES
499 S. BARNES ST.
NASHVILLE, NC 27856
SANDRA MORRIS
252-459-4511

SITE INFORMATION

SITE ADDRESS: . . . . . .EASTPOINTE AVENUE
NASHVILLE, N.C.

TRACT ACREAGE: . . . . . .4.76 Ac.

PARKING REQUIRED: . . . . . .1 SPACE PER PERSON ON DUTY
10 SPACES REQUIRED

PARKING PROVIDED: . . . . . .16 REGULAR PARKS
1 H.C. (STANDARD)
1 H.C. (VAN)
18 SPACES TOTAL

DISTURBED AREA: . . . . . .±3.41 Ac.

ZONE: A-1

TAX ID# 3810 0637 5831

REFER TO: . . . . . .DB 2956/233

MINIMUM BUILDING SETBACKS:

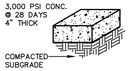
FRONT: . . . . . .50'
SIDE: . . . . . .15'
REAR: . . . . . .40'

TOTAL IMPERVIOUS AREA: . . . . . .1.35 Ac. (30%)

RED MAPLE (Acer rubrum)
6' HIGH @ PLANTING

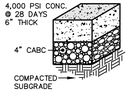
R7-8 HANDICAP SIGN

(SIDEWALKS)
LIGHT DUTY
RIGID PAVEMENT
NOT TO SCALE



HEAVY DUTY
FLEXIBLE PAVEMENT
NOT TO SCALE

(VALLEY GUTTER)
HEAVY DUTY
RIGID PAVEMENT
NOT TO SCALE



LIGHT DUTY
FLEXIBLE PAVEMENT
NOT TO SCALE

MANY ARE THE PLANS IN A PERSONS HEART, BUT IT IS THE LORD'S PURPOSE THAT PREVAILS. PROVERBS 19:21

STOCKS ENGINEERING
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
P.O. BOX 1108
PHONE: (252) 459-8196
WWW.STOCKSENGINEERING.COM

BLN-C-1874

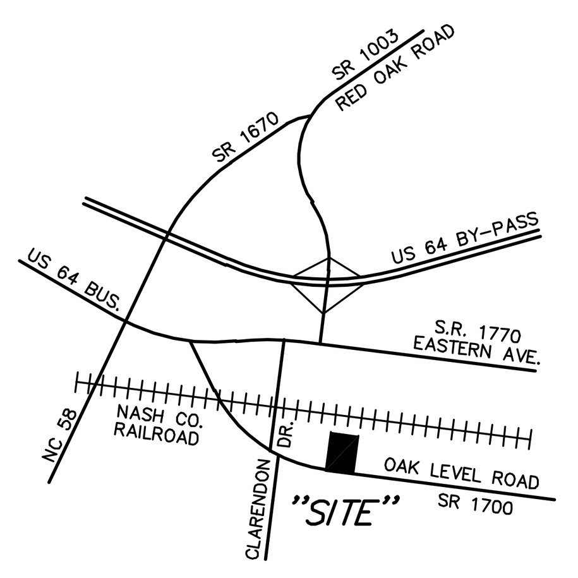
NASHVILLE FIRE STATION #2
NASHVILLE, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS
5/15/2023

SITE and UTILITY PLAN

REVISIONS
FILE NO. 2020-058
HORZ. SCALE: 1"=40'
VERT. SCALE: NONE

CE-02



VICINITY MAP N.T.S.

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TOPOGRAPHICAL SURVEY BY
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123 West Washington Street
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LEGEND:

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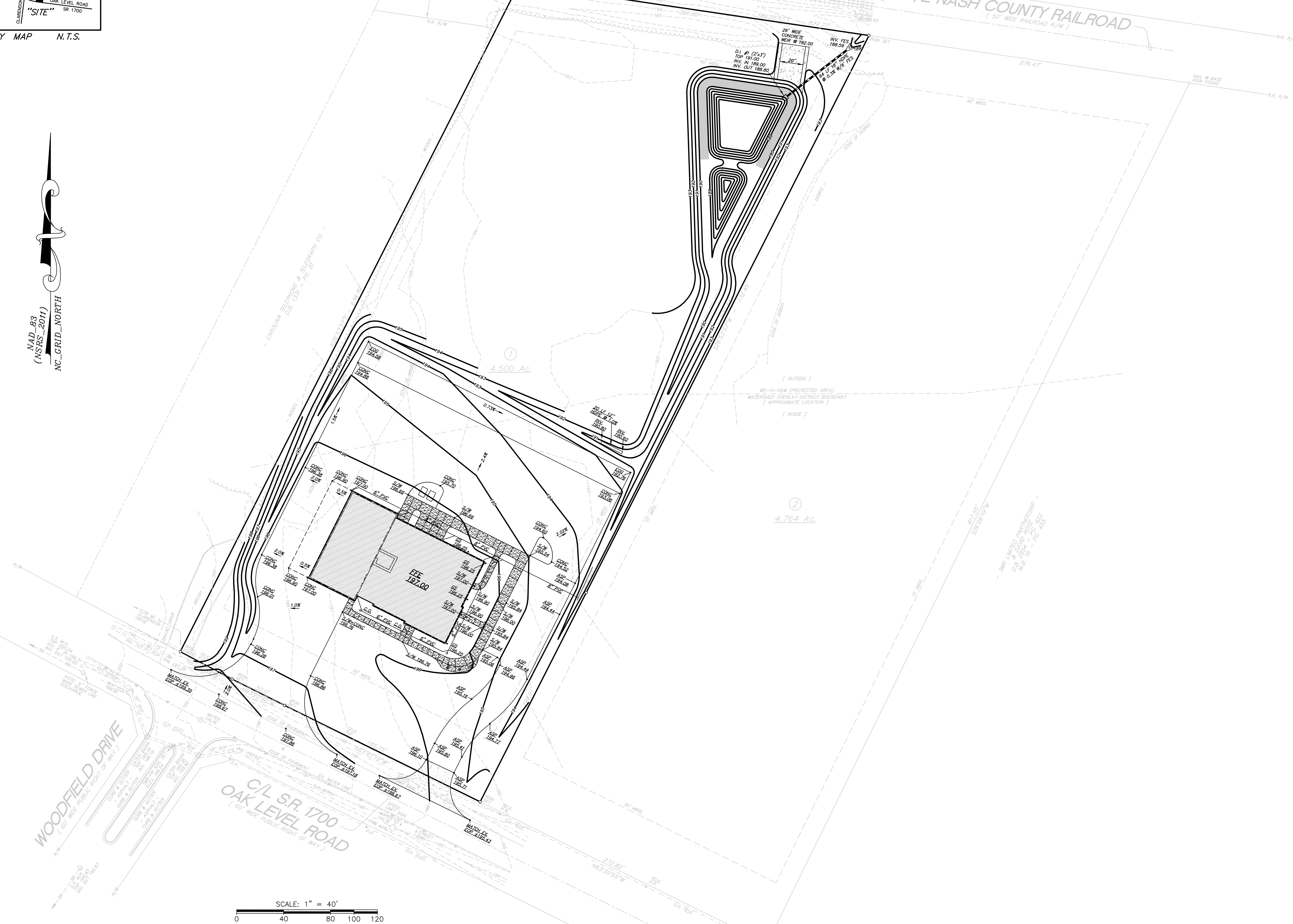
9121	ADDRESS

AREA CALCULATED BY THE COORDINATE METHOD.



SCALE: 1" = 40'
0 40 80 100 120

MANY ARE THE PLANS IN A PERSONS HEART, BUT IT IS THE LORD'S PURPOSE THAT PREVAILS. PROVERBS 19:21

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NASHVILLE FIRE STATION #2
NASHVILLE, NORTH CAROLINA

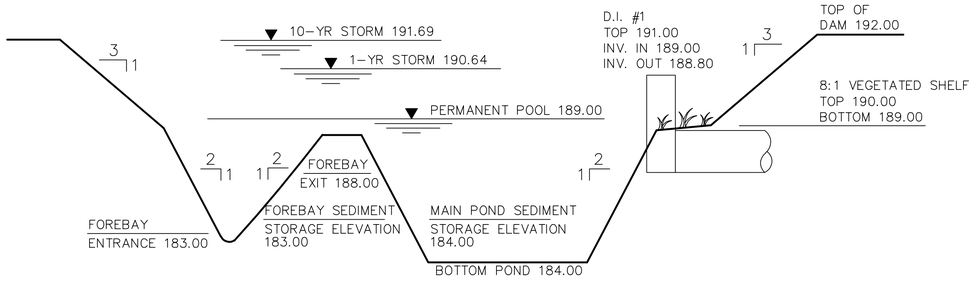
NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS
J. Michael Stocks
5/15/2023

DRAINAGE and GRADING PLAN

REVISIONS

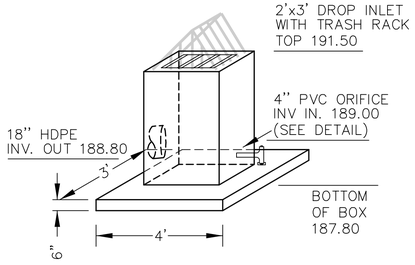
FILE NO.	2020-058
HORZ. SCALE:	1"=40'
VERT. SCALE:	NONE

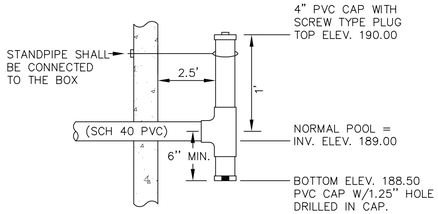
CE-03



WET DETENTION POND PROFILE

NOT TO SCALE





NOTE:
VEGETATED SHELF MUST HAVE 6 IN OF TOPSOIL AS THE TOP LAYER OF MATERIAL

STAGE/STORAGE TABLE

STAGE	ELEVATION	CONTOUR AREA (SF)	INCREMENTAL STORAGE (CF)	TOTAL STORAGE (CF)
0	189.00	4,966	0	0
1.00	190.00	8,791	6,879	6,879
2.00	191.00	11,481	10,136	17,015
3.00	192.00	15,066	13,274	30,288

NOTE:
CONTRACTOR TO COMPACT BOTTOM OF POND TO ENSURE INFILTRATION IS LESS THAN 0.01 IN./HR.

NOTE:
A PORTABLE PUMP SHALL BE USED FOR PUMP DOWN AND MAINTENANCE.

VEGETATED SHELF LANDSCAPE PLAN

VEGETATED SHELF = 1,260 S.F.

ALL PLANTS SHALL BE 3" CONTAINER PLANTS, THERE SHALL BE A MINIMUM OF 3 PLANT SPECIES, AND A MINIMUM OF 50 PLANTS PER 200 SF OF VEGETATED SHELF.

BELOW PERMANENT POOL

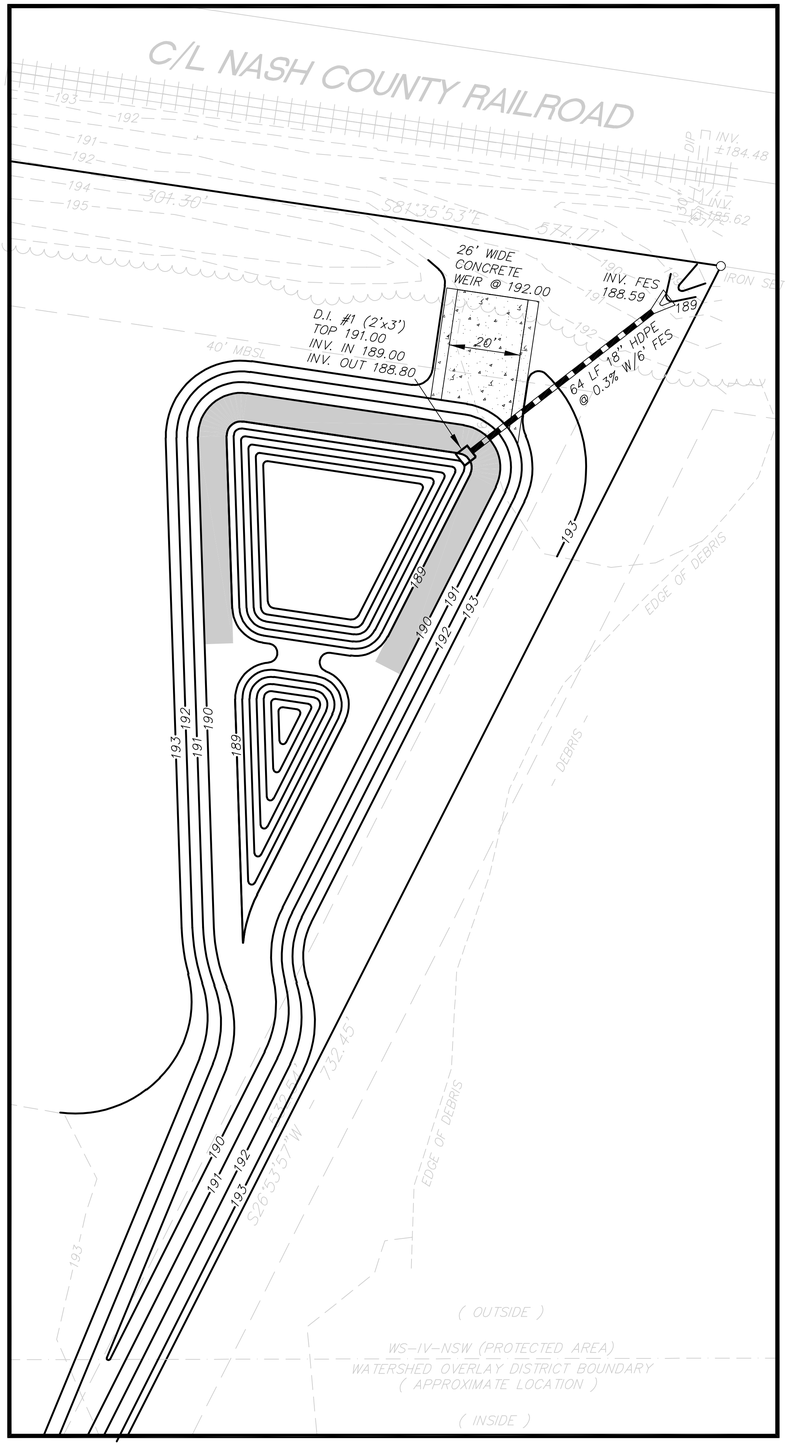
Botanical Name	Common Name	QTY.
Iris virginica	Blue flag iris	105
Helianthus augustifolius	Swamp Sunflower	105
Peltandra virginica	Arrow arum	105

POND SIDE SLOPES

Vegetate w/Centipede Seed @ a rate of 60 lbs./Ac.

Conversion Procedure
Sediment Basin to Wet Detention Pond

1. After the site is completely stabilized, contact Stocks Engineering @ 252-459-8196 for verification of completion and stabilization.
2. Contact DEQ for approval to remove all temporary erosion control measures.
3. Upon approval from NC DEQ, begin the conversion of the wet pond from a temporary sediment trap to a permanent BMP as follows.
4. If standing water is in the basin, contractor shall pump the water out discharging through a silt bag.
5. Remove the skimmer which is connected to the riser and convert to the permenent orifice as shown below in detail.
6. Bring the side slopes surrounding the pond and vegetated shelf to the proposed grade.
7. Contractor shall verify pond depth and muck out sediment to the design depth of the pond.
8. Excavated material must be disposed of in an approved off-site location.
9. If a rain event occurs during conversion, Contractor shall repeat steps 4 thru 8 of this procedure.
10. Care must be taken to prevent any sedimentation/re-sedimentation during this process, as sediment deposits in the bottom of the pond may affect the depth. If any sedimentation occurs during this process, Contractor shall remove sediment immediately.
11. Contact Stocks Engineering @ 252-459-8196 to inspect excavated pond before continuing construction.
12. Upon approval of Stocks Engineering, continue constructing pond per details. Establish appropriate permanent vegetation around pond as soon as possible.
13. Upon completion of pond construction, remove sediment from silt fence and dispose of at an approved off-site location. Plant vegetated shelf and seed and mulch side slopes.
14. Contact Stocks Engineering @ 252-459-8196 to inspect completed pond before placing pond in service.



SCALE: 1" = 20'

0 20 40 50 60 70 80

LET ME GET YOU SOMETHING TO EAT, SO YOU CAN BE REFRESHED AND THEN GO ON YOUR WAY..... GENESIS 18:5

STOCKS ENGINEERING
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
P.O. BOX 1108
PHONE: (252) 459-8196
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NASHVILLE FIRE STATION #2
NASHVILLE, NORTH CAROLINA

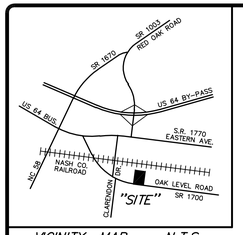
NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS 3/17/23

STORMWATER WET POND DETAIL

REVISIONS
4/20/23 EC COMMENTS

FILE NO. 2020-058
HORZ. SCALE: NONE
VERT. SCALE: NONE

CE-04



VICINITY MAP N.T.S.

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NAD_83 (NSRS_2011)
NC_GRID_NORTH

SILT BAG ON TRAILER OR #57 STONE PAD DURING OPERATION

SILT FENCE OUTLET

4'x4' #57 STONE PAD

BAFFLE

BAFFLE

6' WIDE x 20' LONG RIP RAP CHANNEL OVER FILTER FABRIC

STOCKPILE AREA

SILT FENCE OUTLET

NPDES PERMIT BOX & RAIN GAUGE

C/L NASH COUNTY RAILROAD
(50' WIDE RAILROAD R/W)

C/L S.R. 1700
OAK LEVEL ROAD
(60' WIDE PUBLIC RIGHT OF WAY)

WOODFIELD DRIVE
(60' WIDE PUBLIC RIGHT OF WAY)

WS-IV-NSW (PROTECTED AREA)
WATERSHED OVERLAY DISTRICT BOUNDARY
(APPROXIMATE LOCATION)
(INSIDE)
(OUTSIDE)

4.764 Ac.

① SEDIMENT BASIN
REQUIRED AREA = 7,017 S.F.
PROVIDED AREA = 15,066 S.F.
REQUIRED VOLUME = 6,300 C.F.
PROVIDED VOLUME = 36,925 C.F.
BASIN DEPTH = 3'
SKIMMER SIZE = 2"
ORIFICE SIZE = 1.5"
WEIR WIDTH = 20'
WEIR DEPTH =0.5'
BAFFLES = 3
SIDESLOPES = 3:1
DAYS TO DRAIN = 3 DAYS

LEGEND:

———	LINES SURVEYED
- - -	LINES NOT SURVEYED
EIS	EXISTING IRON STAKE
EIP	EXISTING IRON PIPE
EIA	EXISTING IRON AXLE
NIP	NEW IRON PIPE SET
IPF	IRON PIPE FOUND
	CONTROL CORNER
AV	NO IRON SET
PKF	P.K. NAIL FOUND
PKS	P.K. NAIL SET
RRSF	RAILROAD SPIKE FOUND
CM	CONCRETE MONUMENT
ECM	EX. CONC. MONUMENT
ELS	EX. LIGHTWOOD STAKE
DB	DEED BOOK
PB	PLAT BOOK
R/W	RIGHT OF WAY
C/L	CENTERLINE
CMP	CORRUGATED METAL PIPE
RCP	REINFORCED CONCRETE PIPE
NTS	NOT TO SCALE
MW	MONITORING WELL
LT	LIGHT
PP	POWER POLE
CA	CONTROL ACCESS
9121	ADDRESS

AREA CALCULATED BY THE COORDINATE METHOD.

EROSION LEGEND
- SILT FENCE
- SILT FENCE OUTLET
- CONSTRUCTION ENTRANCE
- PS — PERMANENT SEEDING
- TD — TD — TEMPORARY DIVERSION W/ NAG D575 EXCELSIOR MATTING
- SKIMMER SEDIMENT BASIN
- TOTAL AREA DISTURBED = 3.41 Ac.
- ARC FILTER INLET PROTECTION
- CONCRETE TRUCK WASHOUT
- NCDOT WATTLE
- CLASS B OUTLET PROTECTION
- EXCELSIOR MATTING (NAG 75)

SCALE: 1" = 40'
0 40 80 100 120

MANY ARE THE PLANS IN A PERSONS HEART, BUT IT IS THE LORD'S PURPOSE THAT PREVAILS. PROVERBS 19:21

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BLN-C-1874

NASHVILLE FIRE STATION #2
NASHVILLE, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS
J. Michael Stocks 5/15/2023

EROSION CONTROL PLAN

REVISIONS
4/20/23 EC COMMENTS

FILE NO.	2020-058
HORZ. SCALE:	1"=40'
VERT. SCALE:	NONE

CE-05

EROSION AND SEDIMENTATION CONTROL NARRATIVE

PROJECT DESCRIPTION
The purpose of this project is for the construction of a Fire Station.
The project is owned by Four Seasons Contracting. The site is currently vacant.

Approximately 3.41 acres will be disturbed during construction.

The project is scheduled to begin construction in Summer 2023 with project completion and final stabilization by Spring 2024. The erosion and sediment control program for this project will include the installation of a suitable construction entrance, silt fence, inlet protection with seeding.

ADJACENT PROPERTY
The adjacent property to the north and east are commercial, with all other properties vacant.

SOILS
The soil at this site is a sandy clay.

EROSION AND SEDIMENT CONTROL MEASURES
All vegetative and structural erosion and sediment control practices shall be constructed and maintained by the contractor according to these plans and specifications and the minimum standards of the Dept. of Environmental Management, Land Quality Section and City of Clayton. The contractor shall also follow any additional requirements as outlined by the Project Engineer.

Structural Practices
1. Vehicle wheels shall be clean when leaving the site to prevent the tracking of mud on paved roads.
2. Construction Road Stabilization: Construction traffic shall be limited to stabilized areas. At a minimum, a temporary gravel construction entrance shall be provided as shown on this drawing.
3. Silt Fence: Silt fences shall be provided where shown and as needed on the site plan. These barriers shall be used to contain sediment.
4. Rip Rap/Gravel Filter Sediment Basins: Construct basin to the shape and dimensions shown in the details. The basin is to be placed below the existing ditch flow line by 2' with the berm built above as dimensioned.

Vegetative Practices (Ground Stabilization)

Site Area Description:	Stabilization Time Frame:	Stabilization Time Frame Exceptions:
Perimeter dikes, swales, ditches & slopes.	7 Days	None
High Quality Water (HQW) Zones.	7 Days	None
Slope steeper than 3:1	7 Days	None
Slopes 3:1 or flatter.	10 Days	7 Days for slopes greater than 50 feet in length.

Seeding Schedule

Ongoing Activity. Land left exposed shall be planted or otherwise provided with temporary ground cover, devices, or structures sufficient to restrain erosion within the applicable time period after completetion of any phase of grading or period of inactivity as follows: seven (7) days for steep slope or inclination. Ten (10) days for a moderate slope, fourteen (14) days for land with no slope or inclination. For purposes of this section, a moderate slope means an inclined area, the inclination oif which is less than or equal to three (3) units of horizontal distance to one (1) unit of vertical distance; and a steep slope means an inclined area, the inclination of which is greater than three (3) units of horizontal distance to one (1) unit of vertical distance. No other criteria apply.

Completed Activity. For any area of land-disturbing activity where grading activities have been completed, temporary or permanent ground cover sufficient to restrain erosion shall be provided as soon as practicable, but in no case later than seven (7) days after completetion of grading.

Management Strategies
1. Perimeter measures are to be installed prior to grubbing or grading.
2. Tail Ditches shall be stabilized immediately following their construction. As an alternate, rock check dams may be provided at their outlets and/or the terminal downstream end of disturbance until ground cover is implemented.
3. Stockpile and/or waste areas must be maintained within the limits of the areas protected by the proposed measures and otherwise temporarily seeded if to be left stockpiled over 15 days.
4. Construction shall be planned so that grading operations can begin and end as quickly as possible.
5. Silt Fences shall also be installed prior to or as a first step in construction.
6. The Contractor shall be responsible for the installation and maintenance of all erosion and sediment control practices.

Vegetative Ground Cover
Immediately following grading, all areas shall receive either permanent or temporary seeding, as applicable, as follows:

TEMPORARY SEEDING SPECIFICATIONS

BETWEEN MAY 1 AND AUGUST 15, ADD 40 LB/ACRE GERMAN MILLET. PRIOR TO MAY 1 OR AFTER AUGUST 15, ADD 120 LB/ACRE RYE (GRAIN).

FALL IS BEST FOR TALL FESCUE AND LATE WINTER FOR LESPEDEZAS. OVERSEEDING OF KOBE LESPEDEZAS OVER THE FALL SEEDED TALL FESCUE IS VERY EFFECTIVE. USE UNHULLED BERMUDAGRASS SEED IN FALL.

SOIL AMENDMENTS
APPLY LIME AND FERTILIZER ACCORDING TO TESTS, OR APPLY 2,000 LB/ACRE GROUND AGRICULTURE LIMESTONE AND 750 LB/ACRE 10-10-10 FERTILIZER

MULCH
APPLY 4,000 LB/ACRE GRAIN STRAW, OR EQUIVALENT COVER OF ANOTHER SUITABLE MULCHING MATERIAL. ANCHOR MULCH BY TACKING WITH ASPHALT, ROVING OR NETTING. NETTING IS THE PREFERRED ANCHORING METHOD ON STEEP SLOPES.

MAINTENANCE
REFERTILIZE IF GROWTH IS NOT FULLY ADEQUATE. RESEED, REFERTILIZE AND MULCH IMMEDIATELY FOLLOWING EROSION OR OTHER DAMAGE.

PERMANENT SEEDING SPECIFICATIONS

FESCUE – 200 Lbs./Ac.
CENTIPEDE – 20 Lbs./Ac.

SOIL AMENDMENTS
APPLY LIME AND FERTILIZER ACCORDING TO SOIL TEST.

MAINTENANCE
IF GROWTH IS LESS THAN FULLY ADEQUATE, REFERTILIZE THE SECOND YEAR. ACCORDING TO SOIL TESTS OR TOPDRESS WITH 500 LB/ACRE 10-10-10 FERTILIZER. MOW AS NEEDED.
REPLACE, FERTILIZE, AND MULCH DAMAGED AREAS IMMEDIATELY.

Maintenance
1. Reseed and mulch bare spots larger than 9 square feet (limited to 5% maximum of site area.)
2. Maintain all seeded areas until uniform stand is acceptable.
3. If growth is not established by final project inspection, continue specified attention until the stand is acceptable.
4. Correct and repair all undue settling and erosion within 1 year after final inspection.
5. Remove from the site, all erosion control structures after complete stabilization at end of construction period.
6. Remove silt from sediment pits and from behind check dams when silt is within half depth of the pit or spillway. Dispose of in an area where silt cannot re-enter pit / trap.

Calculations
The practice utilized for the proposed site did require formal calculations. Calculations have been provided.

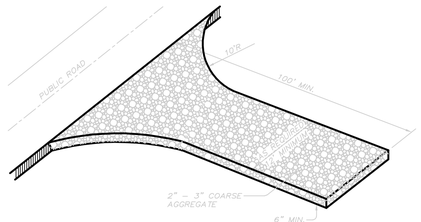
OWNER
Town of Nashville
P.O. Box 987
Nashville, NC 27856
Phone: 252.459.4511

Maintenance Notes:
1. Follow chart for timelines of when to apply temporary seeding.
2. Maintain all erosion control measures daily and reseed disturbed areas as needed.
3. Inspect all erosion control measures weekly and after each rainfall event. Repair as needed.

GENERAL NOTES:
1. All Stockpile areas shall be a minimum of 100' away from surface waters and inside the perimeter EC Measures.
2. All Concrete Washout areas shall be a minimum of 100' away from surface waters and inside the perimeter EC Measures.
3. If an offsite soil spoil or borrow site is utilized, then the disturbed area for the spoil/borrow site must be included in the land-disturbance plan and permit unless the spoil/borrow site already has a land-disturbance permit.

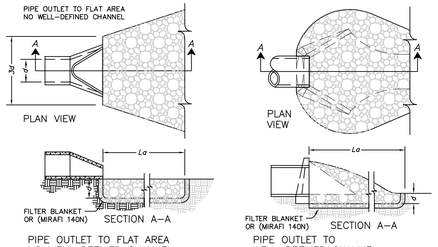
CONSTRUCTION ENTRANCE

NOT TO SCALE



CONSTRUCTION SPECIFICATIONS:
1. CLEAR THE ENTRANCE AND EXIT AREA OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL AND PROPERLY GRADE IT.
2. PLACE THE GRAVEL TO THE SPECIFIC GRADE AND DIMENSIONS SHOWN ON THE PLANS, AND SMOOTH IT.
3. PROVIDE DRAINAGE TO CARRY WATER TO A SEDIMENT TRAP OR OTHER SUITABLE OUTLET.
4. USE GEOTEXTILE FABRICS BECAUSE THEY IMPROVE STABILITY OF THE FOUNDATION IN LOCATIONS SUBJECT TO SEEPAGE OR HIGH WATER TABLE.

MAINTENANCE:
MAINTAIN THE GRAVEL PAD IN A CONDITION TO PREVENT MUD OR SEDIMENT FROM LEAVING THE CONSTRUCTION SITE. THIS MAY REQUIRE PERIODIC TOPDRESSING WITH 2-INCH STONE. AFTER EACH RAINFALL, INSPECT ANY STRUCTURE USED TO TRAP SEDIMENT AND CLEAN IT OUT AS NECESSARY. IMMEDIATELY REMOVE ALL OBJECTIONABLE MATERIALS SPILLED, WASHED, OR TRACKED ONTO PUBLIC ROADWAYS.



GENERAL NOTES:
1. La = THE LENGTH OF THE RIP RAP APRON.
2. d = 1.5 TIMES THE MAXIMUM STONE DIAMETER BUT NOT LESS THAN 6".
3. IN A WELL-DEFINED CHANNEL EXTEND THE APRON UP THE CHANNEL BANKS TO AN ELEVATION OF 6" ABOVE THE MAXIMUM TAILWATER DEPTH OR TO THE TOP OF THE BANK, WHICHEVER IS LESS.
4. A FILTER BLANKET OR FILTER FABRIC SHOULD BE INSTALLED BETWEEN THE RIP RAP AND SOIL FOUNDATION.
5. FLARED END SECTION IS OPTIONAL. SEE PLANS FOR REQUIREMENT.
6. SEE PLAN AND PROFILES FOR ACTUAL DIMENSIONS.

MAINTENANCE:
INSPECT RIP RAP OUTLET STRUCTURES WEEKLY AND AFTER SIGNIFICANT (½ INCH OR GREATER) RAINFALL EVENTS TO SEE IF ANY EROSION AROUND OR BELOW THE RIP RAP HAS TAKEN PLACE, OR IF STONES HAVE BEEN DISLODGED. IMMEDIATELY MAKE ALL NEEDED REPAIRS TO PREVENT FURTHER DAMAGE.

PIPE OUTLET PROTECTION

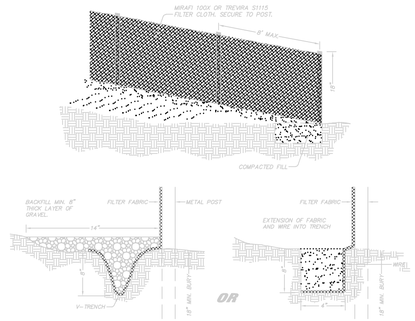
SCALE: N.T.S.

CONSTRUCTION SEQUENCE

1. Schedule and hold a pre-construction conference prior to beginning any land-disturbing activities. This conference should be attended by a representative of the financially responsible party and/or the general contractor, grading sub-contractor, erosion control sub-contractor and the Engineer.
2. Erosion and Sediment Control (E&SC) permit and a Certificate of Coverage (COC) must be obtained before and land disturbing activities occur. The COC can be obtained by filling out the electronic Notice of Intent (e-NOI) form at deq.nc.gov/NCG01. Please note, the e-NOI form may only be filled out once the plans have been approved. A copy of the E&SC permit, the COC, and a hard copy of the plan must be kept on site, preferably in a permits box, and accessible during inspection.
3. Per NPDES requirements, a rain gauge, self-inspections records, permit, Certificate of Coverage, and S&E plan are required to be maintained on site and accessible during inspection. It is recommended that these items be placed in a permits box at the beginning or entrance of project.
4. The contractor shall conduct self-inspections of the erosion and sedimentation control measures and compete the following combined self-inspection form found on the DEMLR website https://files.nc.gov/ncdeq/Energy%20Mineral%20and%20Land%20Resources/Stormwater/NPDES%20General%20Permits/DEMLR-CSW-Monitoring-Form-Rev-August-8-2019.pdf . Twelve months of complete inspection forms shall be kept on-site and available for inspection at all times. It is recommended a copy be kept in a permits box.
5. Self-inspections for erosion and sedimentation control measures are to be performed at least once every seven calendar days and within 24 hours of every rain event of greater than 1 inch. Any needed repairs shall be made immediately to maintain measures as designed. All ESC measures shall be maintained as specified in the construction details on this plan. A rain gauge shall be installed at the project site for monitoring.
6. Contact the DEMLR Raleigh Regional Office at least 48 hours prior to commencing the land disturbing activity. The DEMLR Raleigh Regional Office can be reached at (919) 791-4200.
7. Install construction egress/exit, silt fencing with outlets, skimmer sediment basins, and other initial erosion control measures as specified in the plan. Remove only trees and ground cover necessary to install these devices.
8. Notify the NC DEQ site inspector after measures have been installed and project has started.
9. Begin demolition, clearing, grubbing and grading of site in accordance with the approved S&E control plan. Install temporary diversions with excelsior matting.
10. Provide all disturbed areas with ground cover as per ground stabilization table or after completion of any phase of clearing, grubbing or grading. The seeding, seedbed preparation, mulch and/or rolled erosion control product installation must be in accordance with the seeding schedule provided in this S&E plan. Per the NPDES Permit, ground stabilization will be applied within 14 calendar days from last land disturbing activity. For steep slopes, that area must be stabilized within 7 calendar days.
11. Start installation of storm drain system beginning with outlet pipe and working uphill. Install inlet and outlet protections for storm drain system immediately after pipe installation.
12. At the conclusion of grading or if land-disturbing activity is stopped temporary or permanent vegetative cover shall be installed in accordance with ground stabilization table. Include excelsior matting as shown on plan. Permanent groundcover shall be established in 90 calendar days. However, NPDES groundcover requirements take precedence.
13. Continue construction of sewer, water and parking lot.
14. Perimeter measures must be left in place until all upland areas are permanently stabilized. After site is permanently stabilized, remove all temporary erosion control measures and provide permanent seeding where temporary measures have been removed and ground cover is not adequate. Sediment basins may not be removed or converted to permanent BMPs until all upland areas are permanently stabilized.
15. When DEMLR has approved removal of E&SC measures, remove sediment basins using dewatering silt bag. Silt bag to be continuously monitored during operation. (See Detail)
16. When the project is complete, the permittee shall contact DEMLR to close out the E&SC Plan. After DEMLR informs the permittee of the project close out, via inspection report, the permittee shall visit deq.nc.gov/NCG01 to submit an electronic Notice of Termination (e-NOT). A $100 annual general permit fee will be charged until the e-NOT has been filled out.
17. Remaining measures must be removed and resulting bare areas stabilized before permit can be closed.
18. Remove all erosion control measures after the NC DEQ office approval of permanent stabilization.

SILT FENCE

NOT TO SCALE

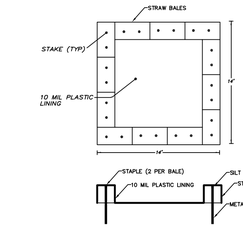


CONSTRUCTION SPECIFICATIONS:
1. CONCRETE WASHOUT SIGN SHALL BE INSTALLED NO FURTHER THAN 25' FROM THE FACILITY AND SHALL BE VISIBLE TO ALL CONSTRUCTION TRAFFIC.
2. POLYETHYLENE SHEETING SHALL BE 10 MILS FREE OF HOLES, TEARS, OR LEAKS.

MAINTENANCE:
FACILITY SHALL NOT BE FILLED MORE THAN 12" FROM THE TOP BEFORE DISPOSING OF CONCRETE. CONCRETE SHALL BE DISPOSED OF IN THE SAME MANNER AS OTHER NON-HAZORDOUS MATERIALS FROM THE SITE OR MAY BE BROKEN UP AND USED AS FILL IN NON-STRUCTURAL AREAS.

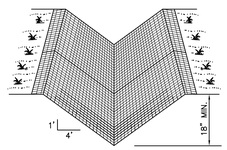
CONCRETE TRUCK WASHOUT

NOT TO SCALE



DRAINAGE CHANNEL

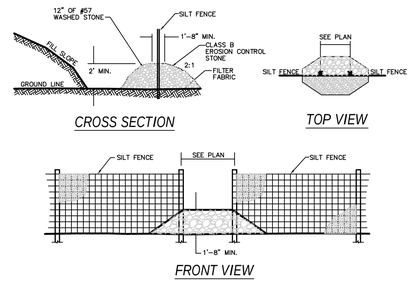
NOT TO SCALE



GENERAL NOTES:
1. NCDOT DITCH SIDE SLOPES TO BE 4:1 OR GREATER.
2. DEPTH TO BE 18" MINIMUM. SEE GRADING PLAN FOR INDIVIDUAL CHANNEL SLOPE AND DEPTH SPECIFICATIONS.
3. AFTER INSTALLING, APPLY SEED, AND TACK WITH RS OR CRS LIQUID EMULSIFIED ASPHALT AT A RATE EQUAL TO 10 GAL. PER 1000 S.F. COVER W/EXCELSIOR MATTING. SEE EXCELSIOR MATTING DETAIL FOR SPECIFICATIONS AND MAINTENANCE REQUIREMENTS.

SILT FENCE OUTLET

NOT TO SCALE



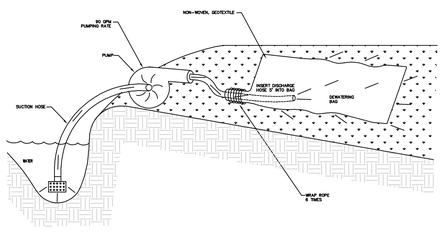
CONSTRUCTION SPECS:
1. CLEAR & GRUB THE AREA AROUND THE SILT FENCE OUTLET AND PROPERLY DISPOSE OF DEBRIS.
2. PLACE GRAVEL TO THE SPECIFIC GRADE AS SHOWN PER THE DETAIL.
3. PROPERLY OVERLAP STONE BEYOND EDGES OF SILT FENCE OPENING.

MAINTENANCE:
INSPECT OUTLETS WEEKLY AND AFTER EACH RAIN EVENT. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR AS NEEDED. CAREFULLY CHECK OUTLETS FOR EROSION AND REPAIR IMMEDIATELY. ENSURE THERE IS NO SCOURING APPARENT DOWNSTREAM OF OUTLET. IMMEDIATELY STABILIZE ANY AREAS THAT NEED REPAIR.

DIMENSIONS OF TEMPORARY DIVERSION (GRASSED):
SIDE SLOPES = 2:1
DEPTH = 2'
SLOPE = 1.50%

CONSTRUCTION SPECIFICATIONS:
1 REMOVE AND PROPERLY DISPOSE OF ALL TREES, BRUSH, STUMPS, AND OTHER OBJECTIONABLE MATERIAL.
2. ENSURE THAT THE MINIMUM CONSTRUCTED CROSS SECTION MEETS ALL DESIGN REQUIREMENTS.
3. ENSURE THAT THE TOP OF THE DIKE IS NOT LOWER AT ANY POINT THAN THE DESIGN ELEVATION PLUS THE SPECIFIED SETTLEMENT.
4. PROVIDE SUFFICIENT ROOM AROUND DIVERSIONS TO PERMIT MACHINE REGRADING AND CLEANOUT.
5. VEGETATE THE RIDGE IMMEDIATELY AFTER CONSTRUCTION, UNLESS IT WILL REMAIN IN PLACE LESS THAN 30 WORKING DAYS.

MAINTENANCE:
INSPECT TEMPORARY DIVERSIONS ONCE A WEEK AND AFTER EVERY RAINFALL. IMMEDIATELY REMOVE SEDIMENT FROM THE FLOW AREA AND REPAIR THE DIVERSION RIDGE. CAREFULLY CHECK OUTLETS AND MAKE TIMELY REPAIRS AS NEEDED. WHEN THE AREA PROTECTED IS PERMANENTLY STABILIZED, REMOVE THE RIDGE AND THE CHANNEL TO BLEND WITH THE NATURAL GROUND LEVEL AND APPROPRIATELY STABILIZE IT.

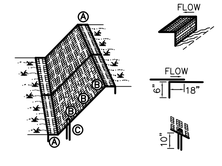


TEMPORARY DIVERSION

NOT TO SCALE

EXCELSIOR MATTING

NOT TO SCALE



GENERAL NOTES:
1. Apply seed, and tack with rs or crs liquid emulsified asphalt at a rate equal to 10 gal. per 1000 s.f. Cover w/excelsior matting.
2. Staple every 24" along perimeter edges and overlaps. Staple every 36" to 48" randomly to secure netting.
3. Roll out netting in the direction of water flow. Do not stretch.

MAINTENANCE:
1. Inspect rolled Excelsior matting at least weekly and after each significant (½" or greater) rain fall event and repair immediately.
2. Good contact with the ground must be maintained, and erosion must not occur beneath the matting.
3. Any areas of the matting that are damaged or not in close contact with the ground shall be repaired and stapled.
4. If erosion occurs due to poorly controlled drainage, the problem shall be fixed and the eroded area protected.
5. Monitor and repair the matting as necessary until groundcover is established.

Installation and Use:
1. Place Dewatering Bag on the ground or on a trailer over a relatively level, stabilized area.
2. Insert discharge pipe a minimum of 5ft. inside dewatering bag and secure with a rope wrapped 6 times around the snout over a 6 inch width of the bag.
3. Replace Dewatering Bag when half full of sediment or when the sediment has reduced the flow rate of the pump discharge to an impractical amount.

Maintenance and Disposal:
1. Remove and dispose of accumulated sediment away from waterways or environmentally sensitive areas. Slit open Sediment Bag and remove accumulated sediment. Dispose of bag at an appropriate recycling or solid waste facility. OR; as directed by engineer or inspector.

SILT BAG

SCALE: N.T.S.

STOCKS ENGINEERING
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
P.O. BOX 1108
PHONE: (252) 459-8196
WWW.STOCKSENGINEERING.COM

BLN-C-1874

NASHVILLE FIRE STATION #2
NASHVILLE, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS 5/15/2023

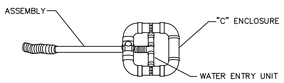
EROSION CONTROL DETAILS

REVISIONS
4/20/23 EC COMMENTS

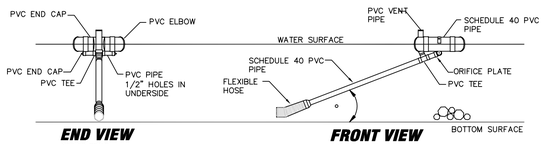
FILE NO.	2020-058
HORZ. SCALE:	AS NOTED
VERT. SCALE:	N/A

D-01

SKIMMER SEDIMENT BASIN
NOT TO SCALE

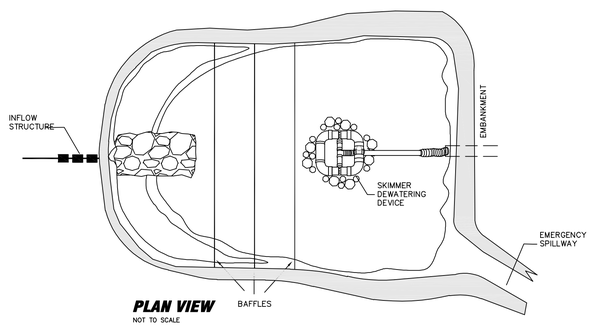


PERSPECTIVE VIEW
NOT TO SCALE

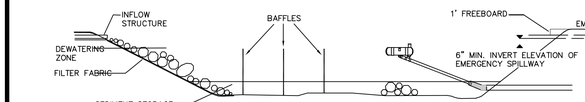


END VIEW
NOT TO SCALE

FRONT VIEW
NOT TO SCALE



PLAN VIEW
NOT TO SCALE



CROSS-SECTION VIEW
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS:

1. Clear, grub, and strip the area under the embankment of all vegetation and root mat. Remove all surface soil containing high amounts of organic matter and stockpile or dispose of it properly. Haul all objectionable material to the designated disposal area. Place temporary sediment control measures below basin as needed.

2. Ensure that fill material for the embankment is free of roots, woody vegetation, organic matter, and other objectionable material. Place the fill in lifts not to exceed 9 inches, and machine compact it. Over fill the embankment 6 inches to allow for settlement.

3. Shape the basin to the specified dimensions. Prevent the skimming device from settling into the mud by excavating a shallow pit under the skimmer or providing a low support under the skimmer of stone or timber.

4. Place the barrel (typically 4—inch Schedule 40 PVC pipe) on a firm, smooth foundation of impervious soil. Do not use pervious material such as sand, gravel, or crushed stone as backfill around the pipe. Place the fill material around the pipe spillway in 4—inch layers and compact it under and around the pipe to at least the same density as the adjacent embankment. Care must be taken not to raise the pipe from the firm contact with its foundation when compacting under the pipe haunches.
Place a minimum depth of 2 feet of compacted backfill over the pipe spillway before crossing it with construction equipment. In no case should the pipe conduit be installed by cutting a trench through the dam after the embankment is complete.

5. Assemble the skimmer following the manufacturers instructions, or as designed.

6. Lay the assembled skimmer on the bottom of the basin with the flexible joint at the inlet of the barrel pipe. Attach the flexible joint to the barrel pipe and position the skimmer over the excavated pit or support. Be sure to attach a rope to the skimmer and anchor it to the side of the basin. This will be used to pull the skimmer to the side for maintenance.

7. Earthen spillways — Install the spillway in undisturbed soil to the greatest extent possible. The achievement of planned elevations, grade, design width, and entrance and exit channel slopes are critical to the successful operation of the spillway. The spillway should be lined with laminated plastic or impermeable geotextile fabric. The fabric must be wide and long enough to cover the bottom and sides and extend onto the top of the dam for anchoring in a trench. The edges may be secured with 8—inch staples or pins. The fabric must be long enough to extend down the slope and exit onto stable ground. The width of the fabric must be one piece, not joined or spliced; otherwise water can get under the fabric. If the length of the fabric is insufficient for the entire length of the spillway, multiple sections, spanning the complete width, may be used. The upper section(s) should overlap the lower section(s) so the water cannot flow under the fabric. Secure the upper edge and sides of the fabric in a trench with staples or pins.

8. Inlets — Discharge water into the basin in a manner to prevent erosion. Use temporary slope drains or diversions with outlet protection to divert sediment—laden water to the upper end of the pool area to improve basin trap efficiency.

9. Erosion control — Construct the structure so that the disturbed area is minimized. Divert surface water away from bare areas. Complete the embankment before the area is cleared. Stabilize the emergency spillway embankment and all other disturbed areas. Mulch the area of the principal spillway immediately after construction.

10. Install porous baffles as specified.

11. After all the sediment—producing areas have been permanently stabilized, remove the structure and all the unstable sediment. Smooth the area to blend with the adjoining areas and stabilize properly.

MAINTENANCE:

Inspect skimmer sediment basins at least weekly and after each significant (one—half inch or greater) rainfall event and repair immediately. Remove sediment and restore the basin to its original dimensions when sediment accumulates to one—half the height of the first baffle. Pull the skimmer to one side so that the sediment underneath it can be excavated. Excavate the sediment from the entire basin, not just around the skimmer or the first cell. Make sure vegetation growing in the bottom of the basin does not hold down the skimmer.

Repair the baffles if they are damaged. Re—anchor the baffles if water is flowing underneath or around them.

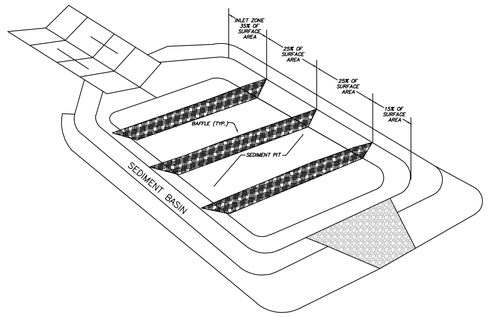
If the skimmer is clogged with trash and there is water in the basin, usually jerking on the rope will make the skimmer bob up and down and dislodge the debris and restore flow. If this does not work, pull the skimmer over to the side of the basin and remove the debris. Also check the orifice inside the skimmer to see if it is clogged; if so, remove the debris.

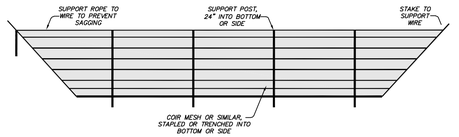
If the skimmer arm or barrel pipe is clogged, the orifice can be removed and the obstruction cleared with a plumber's snake or by flushing with water. Be sure and replace the orifice before repositioning the skimmer.

Check the fabric lined spillway for damage and make any required repairs with fabric that spans the full width of the spillway. Check the embankment, spillways, and outlet for erosion damage, and inspect the embankment for piping and settlement. Make all necessary repairs immediately. Remove all trash and other debris from the skimmer and pool areas.

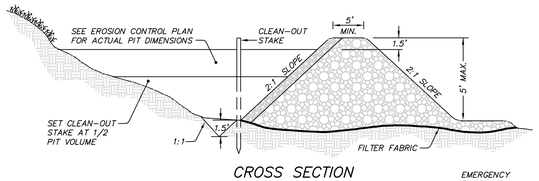
Freezing weather can result in ice forming in the basin. Some special precautions should be taken in the winter to prevent the skimmer from plugging with ice.

SEDIMENT BASIN
SCALE: N.T.S.

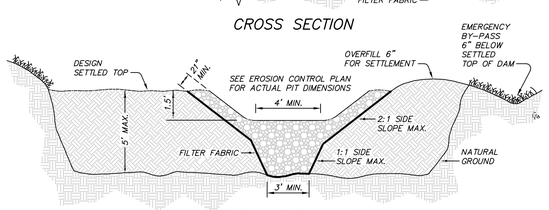




SED BASIN BAFFLES
SCALE: N.T.S.



CROSS SECTION



STONE SECTION

Site Plan Notes

1. Contractor to provide full water service to site including meter, setting, and connection fees in his bid.
2. The Site Contractor is to assume responsibility for all water and sewer utilities from a point 5' outside of the building to the point of public connection.
3. Contractor to furnish all paint striping.
4. Owner to purchase or lease dumpsters & recycle bins. These will not be provided by City.
5. A Geotechnical investigation was prepared for this project. Contractor is responsible for digging site, if desired prior to bid. Contact Engineer at 252.459.8196 at least 48 hours prior to want to gain access. Contact Denny Muyres to obtain copy of Geotech Report @ (770) 729-5700
6. All site plumbing is to meet the NC State Building Code, Volume II, Plumbing.
7. Water service lines to be HDPE 1 1/4 inch w/1 inch meter and backflow preventor.
8. Sewer services to be PVC, service weight. Minimum grades for 4—inch lines to be 2.08—percent.
9. Pressure reducing valve, if needed, to be located in building and is not Site Contractor's responsibility.
10. Provide handicap signs, markings and ramp per the details.
11. All signs, pavement markings, and other traffic control devices are the Site Contractor's responsibility and shall conform to: Manual on Uniform Traffic Control Devices, current edition, as amended; ADA guidelines; and, ANSI A117.1.
12. All dimensions are to face of curb unless indicated otherwise. Staking plan coordinates are to back of curb.
13. Contractor shall coordinate installation of all signs, pavement markings, and other traffic control devices with other Contractors on the site.
14. Contractor shall saw—cut to provide smooth transition at tie—in to existing edge of pavement when applicable.
15. Do not pour any concrete before forms are inspected and approved by Engineer/Owner.
16. Contractor shall comply with all pertinent provisions of the "Manual of Accident Prevention in Construction" issued by AGC of America, Inc., and the Safety and Health Regulations for Construction issued by the U.S. Department of Labor.
17. Storm drainage pipe is to be Class III reinforced concrete meeting ASTM C—76, latest revision.
18. All handicap ramps are to meet "ADA Accessibility Guidelines for Buildings and Facilities" as detailed in Federal Register, Vol. 56, No. 144, dated July 26, 1991, rules and regulations activated January 26, 1992, latest revisions. Also, refer to North Carolina State Building Code Volume I—C, "Making Buildings and Facilities Accessible To and Useable by the Physically Handicapped", 1991, latest edition and ANSI A117.1, current edition, as amended.

Parking, Roadway and Building Subgrade Preparation

1. Subgrade on Precompacted Original Soil
   a. Remove all the topsoil and all questionable organic soil and extend a minimum of four (4) feet beyond the outside edge of the pavement. Stockpile all topsoil that is free from trash and debris for re—use.
   b. Precompact the exposed grade with a vibratory roller weighing a minimum of ten (10) tons (static load) or equal. The stability of the initial settlement of the top strata of the soil. The stability of the subgrade will be considered adequate when the total settlement after the last four (4) complete passes by the vibratory roller does not exceed 1/8". Any area that settles excessively and fails to stabilize under continued rolling should be excavated and replaced with properly compacted select granular fill.

2. Subgrade on Certified Compacted Fill
   a. Prepare the site following the same procedures as outlined in Items 1 and 2 above.
   b. Using the same compaction equipment as outlined above, compact new fill soil in +/—8—inch layers to a minimum 98—percent of the maximum dry density at its optimum moisture content in accordance with the Standard Proctor Method, ASTM Standard D 698—78 and field controlled in accordance with ASTM Standard D 2167—84, or equal. The top one (1) foot of the prepared fill subgrade should be compacted to 100—percent of the maximum dry density using the Standard Proctor Method.
   c. The end of the fill should be terminated at the minimum slope of two (2) horizontal to one (1) vertical measured from three (3) feet beyond the outside edge of the pavement to the toe of the fill. The fill soil is to be select granular soil weighing a minimum of 110 pcf at its optimum moisture content.

Gospel Notes

The following notes do not represent the belief of any municipality, government organization, or client of Stocks Engineering. The detail is included to show the foundation of Stocks Engineering and its employees. Our prayer is that through the truth outlined below you will clearly see what it means to have a personal relationship with Christ.

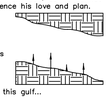
1. GOD'S LOVE

God loves you and he created you to know him personally.
He has a wonderful plan for your life.
John 3:16 "For God so loved the world that he gave his only son, that whoever believes in him shall not perish but have eternal life."
What prevents us from knowing God personally?

2. OUR CONDITION

People are sinful and separated from God, so we cannot know him personally and experience his love and plan.

Romans 3:23 "For all have sinned and fall short of the glory of God."
Romans 6:23 "For the wages of sin is death" (Spiritual separation from God)



This diagram illustrates that God is Holy and people are sinful. A great gulf separates the two. The arrows illustrate people continually trying to reach God through our own efforts, but we inevitably fail.

There is only on way to bridge this gulf...

3. GODS RESPONSE

Jesus Christ is God's only provision for sin, through Him alone we can know God personally and experience his love and plan.

Romans 5:8 "But God demonstrated His own love for us in this: While we were still sinners, Christ died for us.
John 14:6 Jesus answered, "I AM the way the Truth and the Life. No one comes to the Father except through me."

This diagram illustrates that God has bridged the gulf that separates us from Him by sending His son, Jesus Christ, to die on the cross in our place to pay the penalty for our sins.

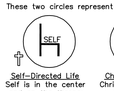
It is not enough just to know these truths...

4. OUR RESPONSE

We must individually receive Jesus Christ as Savior and Lord; only then can we know God personally and experience His love and plan.

Ephesians 2:8—9 "For it is by grace you have been saved, through faith — and this is not from yourselves, it is the gift of God — not by works, so no one can boast."
John 1:12 "Yet to all who received Him, to those who believed in His name, he gave the right to become children of God."

These two circles represent two kinds of lives...



Self—Directed Life
Self is in the center and on the throne; Christ is outside.

Christ—Directed Life
Christ is in the center and on the throne; self yields to Christ.

Which circle best represents your life?
Which circle would you like to have represent your life?

You can receive Christ right now by faith in prayer.
"Lord Jesus, I need you. Thank you for dying on the cross for my sins. I open the door to my life and receive you as my Savior and Lord. Thank you for forgiving my sins and giving me eternal life. Take control of the throne of my life. Make me the kind of person you want me to be."
If this prayer expresses the desire of your heart, then you can pray this prayer and Christ will come into your life as he promised.

For more information on what it means to have a relationship with God, or if you have any questions or prayer requests please submit them to stocksengineering@gmail.com, call us at 252.459.8196, or visit our web site, www.stocksengineering.com

Grading Notes

1. Site Contractor to inform General Contractor to verify finished grade at building before digging footings. Some portions of the building foundation wall may, of necessity, need to retain building pad fill to allow exterior grades to be dropped. In this case, step footings may be necessary to achieve the desired grade variations.
2. New finished contours shown are top of future paving in areas to receive pavement and top of topsoil in areas to be seeded or sodded.
3. Areas outside of the parking lot perimeters shown to be seeded shall receive 4 inches of topsoil. This topsoil to be placed and leveled by the Contractor.
4. Dimensions on buildings are for grading purposes only and are not to be used to lay—off footings. See Architectural Plans.
5. Contractor shall notify and cooperate with all utility companies or firms having facilities on or adjacent to the site before disturbing, altering, removing, relocating, adjusting or connecting to said facilities. Contractor shall raise or lower tops of existing manholes, as required, to match finished grades.
6. All catch basin grate and frames are to be Vulcan or approved equal. Verify that dimension heights on castings are not exceeded in critical areas before ordering substitute castings.
7. All areas not covered by an impervious surface or landscaped planting beds are to be grassed.
8. Unusable excavated materials and all waste resulting from clearing and grubbing shall be disposed of off—site by Contractor.
9. All excavation is unclassified and shall include all materials encountered.
10. Before any machine work is done, Contractor shall stake out and mark the items established by the Site Plan. Control points shall be preserved at all times during the course of the project. Lack of proper working points and grade stakes may require cessation of operations until such points and grades have been placed to the Owner's satisfaction.

Concrete Notes

1. All construction, placing, pouring and curing concrete is to conform to the latest edition of ACI 318.
2. All reinforcing steel is to be cold cut and bent in conformance with the latest edition of ACI 318 and ASTM A—615.
3. Portland Cement Concrete shall have a minimum 28—day compressive strength of 4,000 PSI (or noted), a non—vibrated slump between 2.5 and 4—inches, a minimum cement content of 545 pounds per cubic yard, an air entrainment of 5—7—percent and a maximum water—cement ratio of 0.545 in accordance with Class B concrete as described in the NCDOT Standard Specifications for Roads and Structures unless otherwise specified.
4. Do not use chloride in any concrete which has reinforcing steel or wire fabric.
5. Reinforcing steel shall meet ASTM A—615, Grade 60. Welded wire fabric shall meet ASTM A—185. Tie wire shall conform to ASTM A—82.
6. Lap welded wire fabric a minimum of one mesh. Lap all bars a minimum of 24 inch. Alternate adjacent bar splices a minimum of 48".
7. Use only approved chairs with sand plates to support reinforcing on grade.
8. All crossings of reinforcement are to be tied. Supports for reinforcing to hold bars against movement during pour and finish operation. Supports for reinforcing bars to be a minimum of 48 inches apart.
9. Concrete shall be only plant—mixed, transit—mixed or ready—mixed concrete. The time elapsing from mixing to placing the concrete shall not exceed ninety (90) minutes.
10. Concrete shall not be deposited on frozen subgrade and shall not be poured when the air temperature for the succeeding 24—hour period is less than 32 degrees F.
11. All concrete when placed in forms shall have a temperature between 50 degrees F and 90 degrees F and shall be maintained at a temperature of not less than 50 degrees for at least 72 hours for normal concrete and 24 hours for high—early strength concrete.
12. Do not place fresh concrete during summer on a dry subgrade. Moisten subgrade before placing concrete.
13. Subgrade is to be firm, free of water and/or silt and undisturbed or compacted properly. Consult Engineer if soft or yielding subgrade is encountered for improvement directives. If ground water is entering subgrade, consult Engineer for instructions.
14. Areas of concrete to be removed shall be saw cut before removing. The saw cut shall provide a smooth, straight edge approximately two (2) inches deep before breaking away the adjacent concrete.
15. Immediately after the forms have been removed and all honeycombed areas are repaired, backfill to proper elevations.
16. Brooming of the concrete surface shall be done transverse to the direction of traffic for all pedestrian areas.
17. Joint spacing shall be no less than 8—feet. Where existing sidewalks are being widened, transverse joints shall be located so as to line up with existing joints in the adjacent existing sidewalk. Grooved joints shall not be sealed.
18. Concrete Sub shall be responsible for all score joints and expansion joints. A preliminary score joint pattern and expansion joint pattern shall be submitted to the project engineer for review prior to pouring concrete.
19. Expansion joints shall be one—half (1/2) inch in width and shall be placed between all rigid objects at a distance of no more than thirty (30) feet apart and shall extend the full depth of the concrete with the top of the filler one—half (1/2) inch below the finished surface.
20. The edges of the curb/sidewalk shall be finished with an approved edging tool one—half (1/2) inch radius. Joints shall be similarly finished immediately after tampettes have been removed.
21. Saw control joints as soon as fresh concrete will retain coarse aggregate against the sawing action.
22. Contractor SHALL NOT POUR any concrete before forms are inspected by the project engineer and/or the owner. Any concrete that has not been approved by the engineer and/or owner will be the responsibility of the contractor.

Concrete and Asphalt Testing

Portland Cement Concrete Testing Requirements
Initial Test: The initial test (from first ready—mix truck) is to be taken after the second cubic yard is dispensed from the mixer and is to consist of the following:
1. One slump test
2. Three cylinders pulled, prepared and stored on—site for 24 hours
3. Temperature recording

Subsequent Tests: After the above tests are pulled from the initial truck, every 5th truck thereafter is to be tested in the same manner as noted above.

Asphalt Concrete Testing Requirements
Compaction: Testing for asphalt density is to follow NCDOT "Standard Specifications for Roads and Structures", Section 609—9, "Field Compaction Quality Management," latest revision.
Thickness: The minimum frequency of coring for thickness testing shall be on the basis of test sections consisting of not more than 1500 linear feet of lay down width, exclusive of intersections and irregular areas. The test sample is to be a 6—inch cored sample. The sample is to be numbered and logged for identification purposes.
Contractor's Quality Control System: Follow NCDOT "Standard Specifications for Roads and Structures", Section 609—5, "Contractor's Quality Control System," latest revision.
Mixture and Job Mix Formula Adjustments: Follow NCDOT "Standard Specifications for Roads and Structures", Section 609—4, "Field Verification of Mixture and Job Mix Formula Adjustments", latest revision.
General: All other applicable sections of Section 609 of the NCDOT "Standard Specifications for Roads and Structures" shall apply relating to Quality Control Plan, mix design, control limits, corrective action, equipment and measurement.
Testing Cost: Site Contractor is responsible for cost of testing.

Sewer Notes

1. No Sewer line installation shall take place until an approved Site Plan has been issued.
2. Sewer Pipe:
   a. SDR—35 SMOOTHWALL: Pipe shall conform to ASTM D—3034 Type PSM, SDR—35.
3. Pipe bedding shall be Class B modified (i.e. stone to top of pipe).
4. Any well pointing, dewatering, etc. needed during sewer construction is to be included in the cost of the line laid. Utilize select fill from on—site for trench borrow when needed. If material of a select nature is not available, bring in from off—site.
5. The minimum clearances for water, sewer and storm drainage lines shall be as follows:

Between	Horizontal	Vertical
Water and Sewer	10'	18" w/water above sewer
Water and StormDrainage	–	12" w/water above storm drainage
Sewer and Storm Drainage	–	24" w/storm drainage above sewer

6. The Contractor shall make arrangements with the local utility authority when connecting to existing manholes or mains.
7. Location, size and invert elevations of clean outs shown on "private" services are to be coordinated with the approved Plumbing Plans for the building. All plumbing is to meet the requirements of the NC State Building Code, Volume II, Plumbing, latest revision.
8. Contractor shall seed, mulch and tack all disturbed areas within 7 days after backfilling trench. All sedimentation control measures shall be kept in operable condition until a stand of grass is established and the area is capable of resisting erosion by wind and rain. All erosion control measures shall be removed when authorized by the Engineer after the completion of the project.
9. All excavated wood and rocks shall be disposed of offsite by the Contractor. Bury will not be permitted onsite.
10. Contractor shall take proper precautions not to disturb existing property corner markers. All disturbed property corner markers shall be replaced by a Registered Land Surveyor.
11. All cost for the provision of erosion control rip rap, jute meshing, matting, grass seeding and silt fence shall be included in total base bid.
12. Manholes or Wetwells qualify as "confined" and require compliance with OSHA "Confined Access Entry" requirements. Certified equipment, proper notification and other applicable equipment and or devices may be necessary to protect workers, after system is operational, from hydrogen—sulfide gas build—up or an otherwise oxygen—less environment.
13. The contractor shall provide to Engineer, upon completion of water and sewer construction, record drawings of the sewer installation specifically showing/depicting any deviations from the permitted plans. Plans are to be marked surveyed and submitted to Engineer. The final payment request will not be submitted to the owner nor will a "certificate of substantial completion" be issued until these "surveyed plans" have been completed and received by the Engineer.
14. Utility contractor is responsible for notifying local authority of time and date he plans to commence construction.
15. Where lines cross gravel/asphalt driveways, Contractor is to restore driveways to the original condition. Drives shall be repaired within 7—days of open cut.
16. All Sanitary Sewer shall be in accordance to Town of Clayton Standards and Specifications.
17. All Frames and Lids to receive a bituminous coating.

Water Notes

1. No existing valves and fire hydrants shall be operated without the explicit permission from the Public Utility Owner. The contractor shall make arrangements with the local utility authority prior to connecting to existing mains.
2. Contractor shall seed, mulch, and tack all disturbed area within 7 days after backfilling trench. All sedimentation control measures shall be kept in operable condition until a stand of control measures shall be removed when authorized by the Engineer after the completion of the project.
3. All excavated wood and rocks shall be disposed off—site by the Contractor. Bury will not be permitted on—site.
4. Water line crossing existing asphalt pavement shall be installed by the Open Cut method.
5. Where lines cross gravel/asphalt driveways, Contractor is to restore driveways to the original condition. Drives shall be repaired within 7—days of open cut.
6. Contractor shall take proper precautions not to disturb existing property corner markers. All disturbed property corner markers shall be replaced by a Registered Land Surveyor.
7. All cost for the provision of erosion control rip rap, jute meshing, matting, grass seeding and silt fence shall be included in the total base bid.
8. Utility contractor is responsible for notifying local authority of time and date he plans to commence construction.
9. Any well pointing, dewatering, etc. needed during construction shall be the responsibility of the contractor. Trench borrow needed during construction shall be included in the cost of the line laid, unless otherwise specified.
10. Valve box to be 3 piece telescopic with concrete collar when not in pavement.
11. The contractor shall provide all the material and appurtenances necessary for the complete installation of the utilities. All pipe and fittings shall be inspected prior to being covered.
12. Lines shall be flushed thoroughly to remove all dirt and debris. Chlorine shall be applied to all water lines in sufficient concentration to leave an overall residual of 50 ppm. The chlorinated water shall remain in the lines for 24 hours at the end of which time the chlorine residual shall be at least 10 ppm. The lines shall then be flushed until there is normal chlorine residual present and samples shall be collected for bacteriological analysis.
13. The contractor to conduct bacteriological testing of water lines, which have successfully passed hydrostatic testing and have been disinfected in conformance with AWWA Standards. This procedure requires (5) days to complete.
14. No contractors are authorized to use un—metered water during construction. All pipe and appurtenances shall be thoroughly cleaned prior to placement. Pipe shall be laid with straight lines and even grades and all joints shall be perfectly fitted. During periods when pipe is not being laid, open ends shall be securely blocked.
15. All excavation is unclassified and shall include all materials encountered.
16. All concrete used for blocking and concrete collars is to be minimum 3,000 psi at 28 days, air entrained.
17. Contractor shall saw—cut to provide smooth transitions where existing asphalt is to be removed.
18. All Fire Hydrants to be Clow Medallion 4.5" Barrel w/Storz Connection.
19. Water Services shall utilize the following materials as appropriate:
   - Single band saddle —Smith Blair Model 315
   - AC pipe and ductile iron will require a Smith Blair Model 317 Saddle (Double Strap Saddle)
   - Corp stop —FB1000 —3GNL 2" ball corp CCXGJ (CTS) no lead
   - 2" poly tubing service line — 2" CTS Poly Tubing 250 PSI PE 4710 NSF SDR—9 D2737
   - Ford meter setter — No Lead
   - Meter Box—Carson 11182500 Heavy Wall 18" Tall Box with TriCast—MS—CP1118 Lid with recessed hole.

General Notes:

1. This plan must be approved by the municipality prior to construction of any street, water, storm drainage or other site improvements.
2. All improvements shall conform to the municipality Standards and Specifications or NCDOT, as applicable.
3. Disturbed area is greater than 1 acre and formal Sedimentation & Erosion Control plan approval is required as a condition of construction plan approval. Measures shown on the approved Erosion & Sedimentation Control Plan should be regarded as minimum requirements; additional measures shall be put in place as needed to insure that no sediment is released from the site.
4. The General Contractor is responsible for installing and maintaining all measures necessary to ensure that all sediment is contained on—site.
5. Omitted.
6. Stormwater detention and nutrient management has previously been approved and addressed.
7. Water and sewer service fees are due on this site prior to setting of taps or meters. Contact the the municipality for payment information.
8. Contractor shall make arrangements with the local utility authority for connection to existing mains. Do NOT operate any existing valves without permission of the municipality.
9. Water meters supplied by contractors shall contain encoder register module for radio transmitted meter reading per the municipality Standard.
10. For the installation of electrical services, location of pad—mounted transformer if needed and to coordinate electrical temporary service, contact Duke Energy.
11. Any relocation of existing utilities will be at the cost of the General Contractor. The Town will not accept responsibility for damages to curb and gutter or street improvements if installed prior to underground services, nor will the Town absorb the cost for pavement patching, damages to landscaping or borings to install underground services.
12. Contractor shall be responsible for all work zone traffic control in or adjacent to ROW. All signs, pavement markings and other traffic control devices shall conform to the Manual on Uniform Traffic Control Devices (MUTCD), latest edition as amended.
13. Fire Protection water supply system including fire hydrants, shall be installed and in service prior to recording the subdivision, or, if no subdivision is involved, shall be installed prior to the placing of combustible building materials for structures or combustible pre—tested fabricated building assemblies on the project site or utilizing them in the construction of building structures. If phased coordination is planned, coordinate installation of the fire protection water system is permitted.
14. Fire department vehicular access to all structures under construction shall be provided at all times in areas where ground surfaces are soft or likely to become soft, hard all weather surface roads shall be provided and maintained.
15. Omitted.
16. Commercial property Address Numbers shall be a minimum of ten (10) inches in height with a minimum stroke width of one (1) inch. These numbers shall contrast with their background and shall be Arabic style numerals.
17. Address Numbers must be posted on the front of the structure nearest to the main entrance in a position to be plainly legible, visible and unobstructed from the street or road fronting the property.
18. Any change or deviation from this plat, prior to or during construction, will cause addressing and/or street names to be re—evaluated with possible subsequent change.
19. Plans are based on an actual field survey performed by FREELAND SURVEYING, P.C. Reference horizontal datum is NAD 83, reference vertical datum is NAVD 88.
20. Contractor to verify all building dimensions and/or location(s) with architectural drawings before beginning construction. If discrepancies are found, cease construction and consult the architect and civil site engineer for resolution.
21. Omitted.
22. All HVAC equipment shall be screened from the view of all public street rights—of—way for their entire length along those streets, except for necessary access.
23. For the installation of gas services, contact Public Utilities.
24. The customer is required to provide an outside disconnect.
25. Right—of—Way Easement must be signed prior to installation of utilities.
26. Call NC One Call Center at (800) 632—4949 before digging to locate existing utilities.
27. If overhead primary electric lines are present, mature tree height shall not exceed 15 feet.
28. Copies of all permits and approved plans must be kept on site in a permit box that is conspicuously located and easily accessible during construction. This includes approved construction plans, approved erosion control plans, encroachment agreements, driveway permits, water/sewer permits, etc.
29. Plan approval is valid for two (2) years from approved date.

Drainage Notes

1. Boxes may be reinforced masonry, masonry, precast concrete or cast—in—place reinforced concrete.
2. The maximum height of an un—reinforced masonry drainage structure with 8" walls shall be limited to 8' — 0" from invert of the outlet pipe to the top of the casting. Depths greater than 8' — 0" shall have walls 12" thick. Basins over 12' in total depth shall be designed by a NC Professional Engineer. 4? walls are not allowed on drainage structures.
3. Steps are to be provided on all basins deeper than 42".
4. Steps are to be PS1—PF as manufactured by M. A. Industries or an approved equal. Locate on non—pipe walls.
5. Mortar in masonry boxes is to be type M.
6. Clay brick structures are not allowed.
7. Concrete pipe is to be minimum Class III reinforced concrete meeting ASTM C—76, latest revision.
8. Concrete building brick is to meet ASTM C—55, Grade N, Type 1.
9. All iron castings are to be drilled and lagged to the drainage structure. The drainage structure as well is to be drilled.
10. All cast—in—place or precast concrete drainage structures located in paved areas accessible to truck loadings to be designed to meet AASHTO HS 20—44 loading. See manufacturers details for wall, top and bottom thickness.
11. All frames, grates, and hoods to receive a bituminous coating.

...That you, being rooted and grounded in love, may have strength to comprehend with all the saints what is the breadth and length and height and depth, and to know the love of Christ that surpasses knowledge, that you may be filled with all the fullness of God. — Ephesians 3:18—19

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NASHVILLE FIRE STATION #2
NASHVILLE, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS
J. Michael Stocks 5/15/2023

SITE NOTES AND DETAILS

REVISIONS

FILE NO.	2020—058
HORZ. SCALE:	AS NOTED
VERT. SCALE:	N/A

D—02

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION A: SELF-INSPECTION

Self-inspections are required during normal business hours in accordance with the table below. When adverse weather or site conditions would cause the safety of the inspection personnel to be in jeopardy, the inspection may be delayed until the next business day on which it is safe to perform the inspection. In addition, when a storm event of equal to or greater than 1.0 inch occurs outside of normal business hours, the self-inspection shall be performed upon the commencement of the next business day. Any time when inspections were delayed shall be noted in the Inspection Record.

Inspect	Frequency (during normal business hours)	Inspection records must include:
(1) Rain gauge maintained in good working order	Daily	Daily rainfall amounts. If no daily rain gauge observations are made during weekend or holiday periods, and no individual-day rainfall information is available, record the cumulative rain measurement for those un-attended days (and this will determine if a site inspection is needed). Days on which no rainfall occurred shall be recorded as "zero." The permittee may use another rain-monitoring device approved by the Division.
(2) E&SC Measures	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the measures inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Indication of whether the measures were operating properly, 5. Description of maintenance needs for the measure, 6. Description, evidence, and date of corrective actions taken.
(3) Stormwater discharge outfalls (SDOs)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	1. Identification of the discharge outfalls inspected, 2. Date and time of the inspection, 3. Name of the person performing the inspection, 4. Evidence of indicators of stormwater pollution such as oil sheen, floating or suspended solids or discoloration, 5. Indication of visible sediment leaving the site, 6. Description, evidence, and date of corrective actions taken.
(4) Perimeter of site	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If visible sedimentation is found outside site limits, then a record of the following shall be made: 1. Actions taken to clean up or stabilize the sediment that has left the site limits, 2. Description, evidence, and date of corrective actions taken, and 3. An explanation as to the actions taken to control future releases.
(5) Streams or wetlands onsite or offsite (where accessible)	At least once per 7 calendar days and within 24 hours of a rain event ≥ 1.0 inch in 24 hours	If the stream or wetland has increased visible sedimentation or a stream has visible increased turbidity from the construction activity, then a record of the following shall be made: 1. Description, evidence and date of corrective actions taken, and 2. Records of the required reports to the appropriate Division Regional Office per Part III, Section C, Item (2)(a) of this permit.
(6) Ground stabilization measures	After each phase of grading	1. The phase of grading (installation of perimeter E&SC measures, clearing and grubbing, installation of storm drainage facilities, completion of all land-disturbing activity, construction or redevelopment, permanent ground cover). 2. Documentation that the required ground stabilization measures have been provided within the required timeframe or an assurance that they will be provided as soon as possible.

NOTE: The rain inspection resets the required 7 calendar day inspection requirement.

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION B: RECORDKEEPING

1. E&SC Plan Documentation

The approved E&SC plan as well as any approved deviation shall be kept on the site. The approved E&SC plan must be kept up-to-date throughout the coverage under this permit. The following items pertaining to the E&SC plan shall be kept on site and available for inspection at all times during normal business hours.

Item to Document	Documentation Requirements
(a) Each E&SC measure has been installed and does not significantly deviate from the locations, dimensions and relative elevations shown on the approved E&SC plan.	Initial and date each E&SC measure on a copy of the approved E&SC plan or complete, date and sign an inspection report that lists each E&SC measure shown on the approved E&SC plan. This documentation is required upon the initial installation of the E&SC measures or if the E&SC measures are modified after initial installation.
(b) A phase of grading has been completed.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate completion of the construction phase.
(c) Ground cover is located and installed in accordance with the approved E&SC plan.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate compliance with approved ground cover specifications.
(d) The maintenance and repair requirements for all E&SC measures have been performed.	Complete, date and sign an inspection report.
(e) Corrective actions have been taken to E&SC measures.	Initial and date a copy of the approved E&SC plan or complete, date and sign an inspection report to indicate the completion of the corrective action.

2. Additional Documentation to be Kept on Site

In addition to the E&SC plan documents above, the following items shall be kept on the site and available for inspectors at all times during normal business hours, unless the Division provides a site-specific exemption based on unique site conditions that make this requirement not practical:

(a) This General Permit as well as the Certificate of Coverage, after it is received.

(b) Records of inspections made during the previous twelve months. The permittee shall record the required observations on the Inspection Record Form provided by the Division or a similar inspection form that includes all the required elements. Use of electronically-available records in lieu of the required paper copies will be allowed if shown to provide equal access and utility as the hard-copy records.

3. Documentation to be Retained for Three Years

All data used to complete the e-NOI and all inspection records shall be maintained for a period of three years after project completion and made available upon request. [40 CFR 122.41]

PART III
SELF-INSPECTION, RECORDKEEPING AND REPORTING

SECTION C: REPORTING

1. Occurrences that Must be Reported

Permittees shall report the following occurrences:

(a) Visible sediment deposition in a stream or wetland.

(b) Oil spills if:
- They are 25 gallons or more,
- They are less than 25 gallons but cannot be cleaned up within 24 hours,
- They cause sheen on surface waters (regardless of volume), or
- They are within 100 feet of surface waters (regardless of volume).

(c) Releases of hazardous substances in excess of reportable quantities under Section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or Section 102 of CERCLA (Ref: 40 CFR 302.4) or G.S. 143-215.85.

(d) Anticipated bypasses and unanticipated bypasses.

(e) Noncompliance with the conditions of this permit that may endanger health or the environment.

2. Reporting Timeframes and Other Requirements

After a permittee becomes aware of an occurrence that must be reported, he shall contact the appropriate Division regional office within the timeframes and in accordance with the other requirements listed below. Occurrences outside normal business hours may also be reported to the Department's Environmental Emergency Center personnel at (800) 858-0368.

Occurrence	Reporting Timeframes (After Discovery) and Other Requirements
(a) Visible sediment deposition in a stream or wetland	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days***, a report that contains a description of the sediment and actions taken to address the cause of the deposition. Division staff may waive the requirement for a written report on a case-by-case basis. • If the stream is named on the NC 303(d) list as impaired for sediment-related causes, the permittee may be required to perform additional monitoring, inspections or apply more stringent practices if staff determine that additional requirements are needed to assure compliance with the federal or state impaired-waters conditions.
(b) Oil spills and release of hazardous substances per Item 1(b)-(c) above	• ***Within 24 hours***, an oral or electronic notification. The notification shall include information about the date, time, nature, volume and location of the spill or release.
(c) Anticipated bypasses [40 CFR 122.41(m)(3)]	• ***A report at least ten days before the date of the bypass, if possible***. The report shall include an evaluation of the anticipated quality and effect of the bypass.
(d) Unanticipated bypasses [40 CFR 122.41(m)(3)]	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days,*** a report that includes an evaluation of the quality and effect of the bypass.
(e) Noncompliance with the conditions of this permit that may endanger health or the environment[40 CFR 122.41(l)(7)]	• ***Within 24 hours***, an oral or electronic notification. • ***Within 7 calendar days***, a report that contains a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time noncompliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance. [40 CFR 122.41(l)(6). • Division staff may waive the requirement for a written report on a case-by-case basis.

PART II, SECTION G, ITEM (4)
DRAW DOWN OF SEDIMENT BASINS FOR MAINTENANCE OR CLOSE OUT

Sediment basins and traps that receive runoff from drainage areas of one acre or more shall use outlet structures that withdraw water from the surface when these devices need to be drawn down for maintenance or close out unless this is infeasible. The circumstances in which it is not feasible to withdraw water from the surface shall be rare (for example, times with extended cold weather). Non-surface withdrawals from sediment basins shall be allowed only when all of the following criteria have been met:

(a) The E&SC plan authority has been provided with documentation of the non-surface withdrawal and the specific time periods or conditions in which it will occur. The non-surface withdrawal shall not commence until the E&SC plan authority has approved these items,
(b) The non-surface withdrawal has been reported as an anticipated bypass in accordance with Part III, Section C, Item (2)(c) and (d) of this permit,
(c) Dewatering discharges are treated with controls to minimize discharges of pollutants from stormwater that is removed from the sediment basin. Examples of appropriate controls include properly sited, designed and maintained dewatering tanks, weir tanks, and filtration systems,
(d) Vegetated, upland areas of the sites or a properly designed stone pad is used to the extent feasible at the outlet of the dewatering treatment devices described in Item (c) above,
(e) Velocity dissipation devices such as check dams, sediment traps, and riprap are provided at the discharge points of all dewatering devices, and
(f) Sediment removed from the dewatering treatment devices described in Item (c) above is disposed of in a manner that does not cause deposition of sediment into waters of the United States.

NCG01 SELF-INSPECTION, RECORDKEEPING AND REPORTING

EFFECTIVE: 04/01/19

The Lord is a refuge for the oppressed, a stronghold in times of trouble. Psalm 9:9

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NASHVILLE, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS
J. Michael Stocks
5/15/2023

NCG01 NOTES SHEET

REVISIONS

FILE NO. 2020-058
HORZ. SCALE: 1" = 30'
VERT. SCALE: NONE

D-03

GROUND STABILIZATION AND MATERIALS HANDLING PRACTICES FOR COMPLIANCE WITH THE NCG01 CONSTRUCTION GENERAL PERMIT

Implementing the details and specifications on this plan sheet will result in the construction activity being considered compliant with the Ground Stabilization and Materials Handling sections of the NCG01 Construction General Permit (Sections E and F, respectively). The permittee shall comply with the Erosion and Sediment Control plan approved by the delegated authority having jurisdiction. All details and specifications shown on this sheet may not apply depending on site conditions and the delegated authority having jurisdiction.

SECTION E: GROUND STABILIZATION

Required Ground Stabilization Timeframes		
Site Area Description	Stabilize within this many calendar days after ceasing land disturbance	Timeframe variations
(a) Perimeter dikes, swales, ditches, and perimeter slopes	7	None
(b) High Quality Water (HQW) Zones	7	None
(c) Slopes steeper than 3:1	7	If slopes are 10' or less in length and are not steeper than 2:1, 14 days are allowed
(d) Slopes 3:1 to 4:1	14	-7 days for slopes greater than 50' in length and with slopes steeper than 4:1 -7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed
(e) Areas with slopes flatter than 4:1	14	-7 days for perimeter dikes, swales, ditches, perimeter slopes and HQW Zones -10 days for Falls Lake Watershed unless there is zero slope

Note: After the permanent cessation of construction activities, any areas with temporary ground stabilization shall be converted to permanent ground stabilization as soon as practicable but in no case longer than 90 calendar days after the last land disturbing activity. Temporary ground stabilization shall be maintained in a manner to render the surface stable against accelerated erosion until permanent ground stabilization is achieved.

GROUND STABILIZATION SPECIFICATION

Stabilize the ground sufficiently so that rain will not dislodge the soil. Use one of the techniques in the table below:

Temporary Stabilization	Permanent Stabilization
• Temporary grass seed covered with straw or other mulches and tackifiers • Hydroseeding • Rolled erosion control products with or without temporary grass seed • Appropriately applied straw or other mulch • Plastic sheeting	• Permanent grass seed covered with straw or other mulches and tackifiers • Geotextile fabrics such as permanent soil reinforcement matting • Hydroseeding • Shrubs or other permanent plantings covered with mulch • Uniform and evenly distributed ground cover sufficient to restrain erosion • Structural methods such as concrete, asphalt or retaining walls • Rolled erosion control products with grass seed

POLYACRYLAMIDES (PAMS) AND FLOCCULANTS

1. Select flocculants that are appropriate for the soils being exposed during construction, selecting from the *NC DWR List of Approved PAMS/Flocculants*.
2. Apply flocculants at or before the inlets to Erosion and Sediment Control Measures.
3. Apply flocculants at the concentrations specified in the *NC DWR List of Approved PAMS/Flocculants* and in accordance with the manufacturer's instructions.
4. Provide ponding area for containment of treated Stormwater before discharging offsite.
5. Store flocculants in leak-proof containers that are kept under storm-resistant cover or surrounded by secondary containment structures.

EQUIPMENT AND VEHICLE MAINTENANCE

1. Maintain vehicles and equipment to prevent discharge of fluids.
2. Provide drip pans under any stored equipment.
3. Identify leaks and repair as soon as feasible, or remove leaking equipment from the project.
4. Collect all spent fluids, store in separate containers and properly dispose as hazardous waste (recycle when possible).
5. Remove leaking vehicles and construction equipment from service until the problem has been corrected.
6. Bring used fuels, lubricants, coolants, hydraulic fluids and other petroleum products to a recycling or disposal center that handles these materials.

LITTER, BUILDING MATERIAL AND LAND CLEARING WASTE

1. Never bury or burn waste. Place litter and debris in approved waste containers.
2. Provide a sufficient number and size of waste containers (e.g dumpster, trash receptacle) on site to contain construction and domestic wastes.
3. Locate waste containers at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
4. Locate waste containers on areas that do not receive substantial amounts of runoff from upland areas and does not drain directly to a storm drain, stream or wetland.
5. Cover waste containers at the end of each workday and before storm events or provide secondary containment. Repair or replace damaged waste containers.
6. Anchor all lightweight items in waste containers during times of high winds.
7. Empty waste containers as needed to prevent overflow. Clean up immediately if containers overflow.
8. Dispose waste off-site at an approved disposal facility.
9. On business days, clean up and dispose of waste in designated waste containers.

PAINT AND OTHER LIQUID WASTE

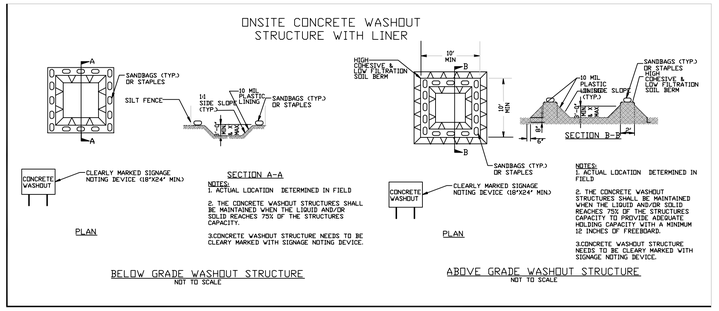
1. Do not dump paint and other liquid waste into storm drains, streams or wetlands.
2. Locate paint washouts at least 50 feet away from storm drain inlets and surface waters unless no other alternatives are reasonably available.
3. Contain liquid wastes in a controlled area.
4. Containment must be labeled, sized and placed appropriately for the needs of site.
5. Prevent the discharge of soaps, solvents, detergents and other liquid wastes from construction sites.

PORTABLE TOILETS

1. Install portable toilets on level ground, at least 50 feet away from storm drains, streams or wetlands unless there is no alternative reasonably available. If 50 foot offset is not attainable, provide relocation of portable toilet behind silt fence or place on a gravel pad and surround with sand bags.
2. Provide staking or anchoring of portable toilets during periods of high winds or in high foot traffic areas.
3. Monitor portable toilets for leaking and properly dispose of any leaked material. Utilize a licensed sanitary waste hauler to remove leaking portable toilets and replace with properly operating unit.

EARTHEN STOCKPILE MANAGEMENT

1. Show stockpile locations on plans. Locate earthen-material stockpile areas at least 50 feet away from storm drain inlets, sediment basins, perimeter sediment controls and surface waters unless it can be shown no other alternatives are reasonably available.
2. Protect stockpile with silt fence installed along toe of slope with a minimum offset of five feet from the toe of stockpile.
3. Provide stable stone access point when feasible.
4. Stabilize stockpile within the timeframes provided on this sheet and in accordance with the approved plan and any additional requirements. Soil stabilization is defined as vegetative, physical or chemical coverage techniques that will restrain accelerated erosion on disturbed soils for temporary or permanent control needs.



CONCRETE WASHOUTS

1. Do not discharge concrete or cement slurry from the site.
2. Dispose of, or recycle settled, hardened concrete residue in accordance with local and state solid waste regulations and at an approved facility.
3. Manage washout from mortar mixers in accordance with the above item and in addition place the mixer and associated materials on impervious barrier and within lot perimeter silt fence.
4. Install temporary concrete washouts per local requirements, where applicable. If an alternate method or product is to be used, contact your approval authority for review and approval. If local standard details are not available, use one of the two types of temporary concrete washouts provided on this detail.
5. Do not use concrete washouts for dewatering or storing defective curb or sidewalk sections. Stormwater accumulated within the washout may not be pumped into or discharged to the storm drain system or receiving surface waters. Liquid waste must be pumped out and removed from project.
6. Locate washouts at least 50 feet from storm drain inlets and surface waters unless it can be shown that no other alternatives are reasonably available. At a minimum, install protection of storm drain inlet(s) closest to the washout which could receive spills or overflow.
7. Locate washouts in an easily accessible area, on level ground and install a stone entrance pad in front of the washout. Additional controls may be required by the approving authority.
8. Install at least one sign directing concrete trucks to the washout within the project limits. Post signage on the washout itself to identify this location.
9. Remove leavings from the washout when at approximately 75% capacity to limit overflow events. Replace the tarp, sand bags or other temporary structural components when no longer functional. When utilizing alternative or proprietary products, follow manufacturer's instructions.
10. At the completion of the concrete work, remove remaining leavings and dispose of in an approved disposal facility. Fill pit, if applicable, and stabilize any disturbance caused by removal of washout.

HERBICIDES, PESTICIDES AND RODENTICIDES

1. Store and apply herbicides, pesticides and rodenticides in accordance with label restrictions.
2. Store herbicides, pesticides and rodenticides in their original containers with the label, which lists directions for use, ingredients and first aid steps in case of accidental poisoning.
3. Do not store herbicides, pesticides and rodenticides in areas where flooding is possible or where they may spill or leak into wells, stormwater drains, ground water or surface water. If a spill occurs, clean area immediately.
4. Do not stockpile these materials onsite.

HAZARDOUS AND TOXIC WASTE

1. Create designated hazardous waste collection areas on-site.
2. Place hazardous waste containers under cover or in secondary containment.
3. Do not store hazardous chemicals, drums or bagged materials directly on the ground.

NCG01 GROUND STABILIZATION AND MATERIALS HANDLING

EFFECTIVE: 04/01/19

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NASHVILLE, NORTH CAROLINA

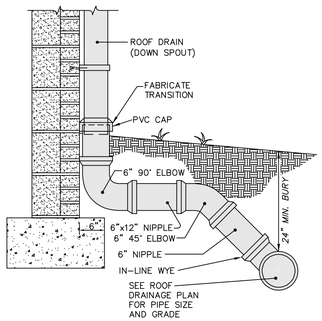
NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS
5/15/2023

NCG01 NOTES SHEET

REVISIONS

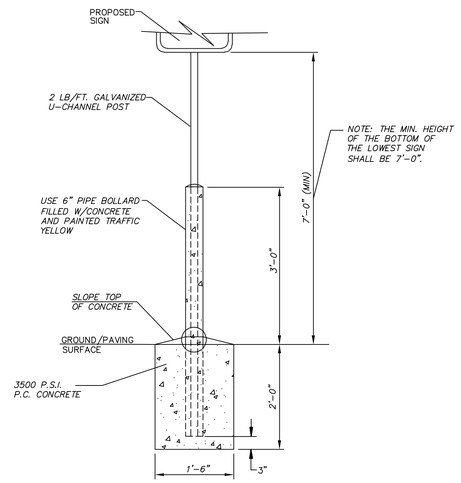
FILE NO.	2020-058
HORZ. SCALE:	1" = 30'
VERT. SCALE:	NONE

D-04



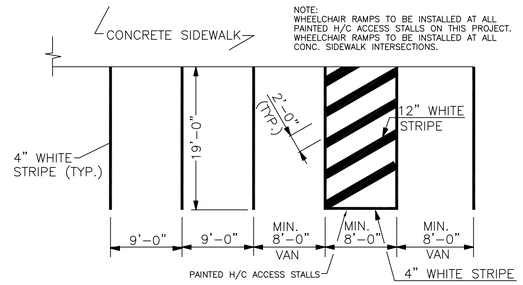
ROOF DRAIN TIE-IN

SCALE: N.T.S.



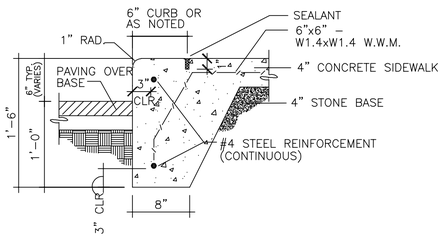
SIGN BASE DETAIL (ALL SIGNS)

SCALE: N.T.S.



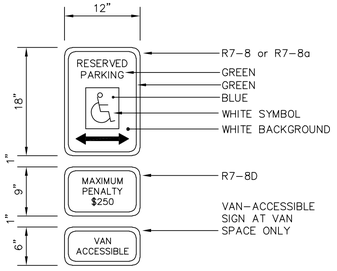
90° HANDICAP STALLS – TYPICAL

SCALE: N.T.S.



6" SIDEWALK TURN-DOWN

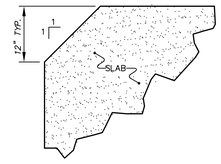
SCALE: N.T.S.



NOTE: HC SIGNS TO BE POLE MOUNTED
OR MOUNTED ON BUILDING AS SHOWN.

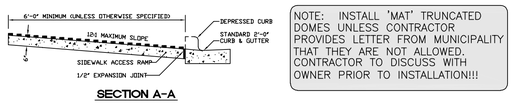
R7-8 HANDICAP SIGN

SCALE: N.T.S.



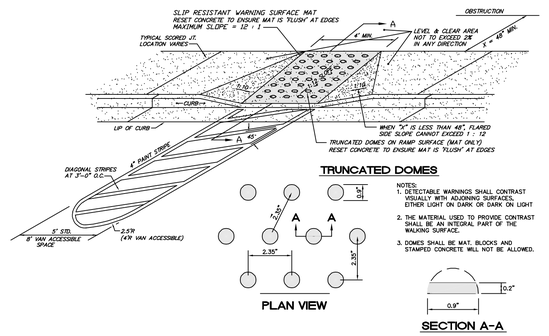
CONCRETE CORNER DETAIL

SCALE: N.T.S.



SECTION A-A

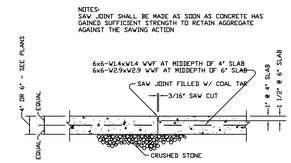
NOTE: INSTALL 'MAT' TRUNCATED DOMES UNLESS CONTRACTOR PROVIDES LETTER FROM MUNICIPALITY THAT THEY ARE NOT ALLOWED. CONTRACTOR TO DISCUSS WITH OWNER PRIOR TO INSTALLATION!!!



HANDICAP RAMP IN WALK (TYP)

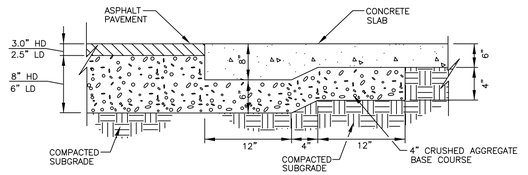
GENERIC DETAIL – SEE GRADING PLAN FOR ACTUAL DIMENSIONS AND GRADES

SCALE: N.T.S.



TYPICAL SLAB CRACK CONTROL JOINT DETAIL "SJ"

SCALE: N.T.S.



7" CONCRETE/BITUMINOUS PAVEMENT INTERFACE

SCALE: N.T.S.

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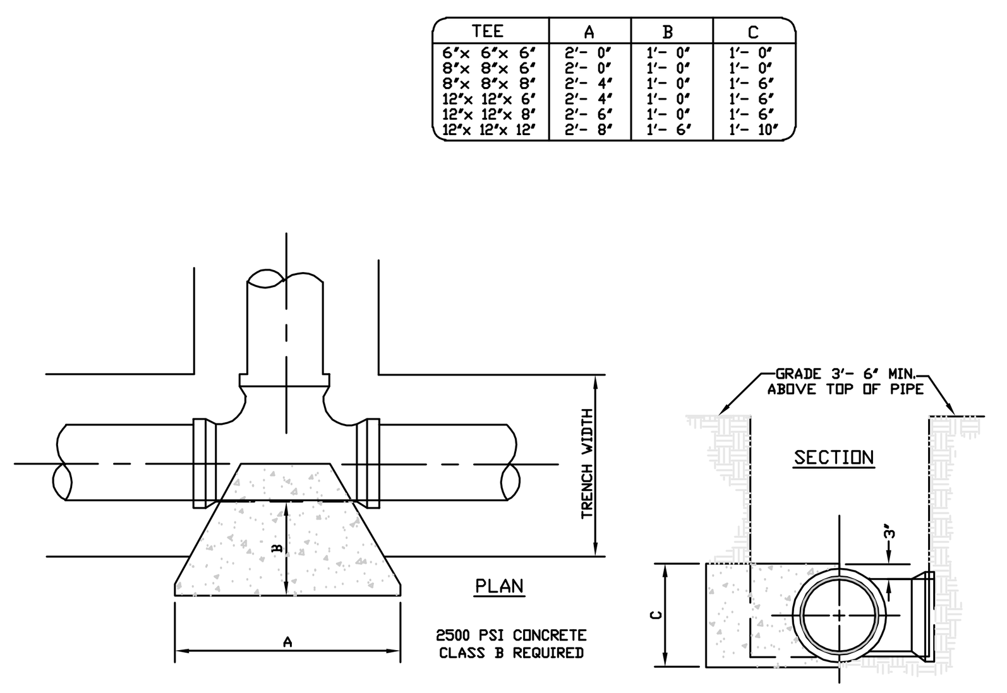
5/15/2023

SITE DETAILS

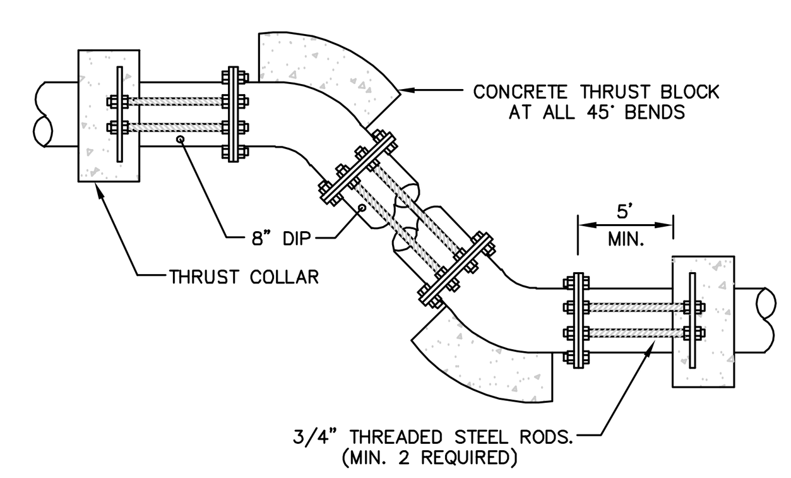
REVISIONS	
FILE NO.	2020-058
HORZ. SCALE:	NONE
VERT. SCALE:	NONE

D-05

BEFORE YOU DIG, CALL 811
NORTH CAROLINA ONE CALL CENTER
www.ncocc.org



2.1 TRENCHING & BLOCKING OF TEES
NOT TO SCALE



GENERAL NOTES:

1. ONCE INSTALLED AND TIGHT, THE STEEL RODS AND BOLTS SHALL BE COATED WITH 2 COATS OF BITUMINOUS BASE PAINT.
2. CONCRETE SHALL NOT CONTACT BOLTS OR ENDS OF MECHANICAL JOINT BENDS.

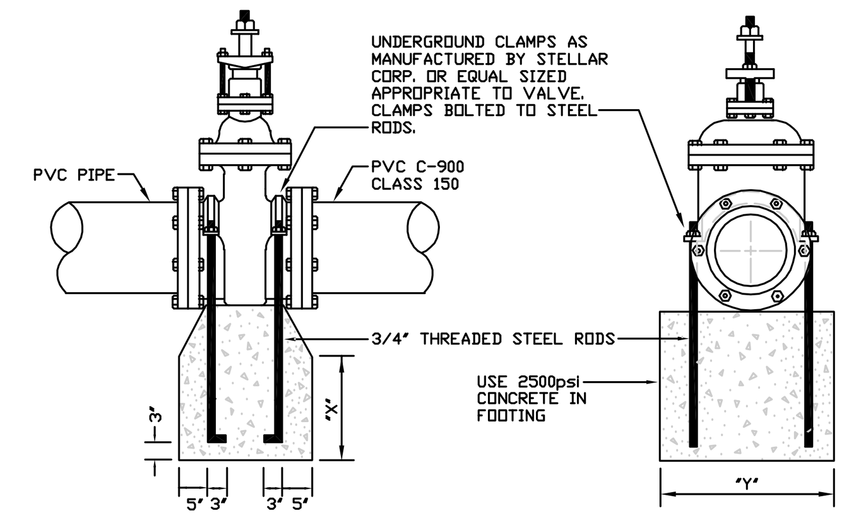
2.2 VERTICAL BEND DETAIL
NOT TO SCALE

1. RODS SHOULD EXTEND TO TOP OF PIPE CROWN.
2. X x Y MUST EQUAL THE SQUARE FOOTAGE OF THE BEARING AREA AS SHOWN IN THE TABLE BELOW:

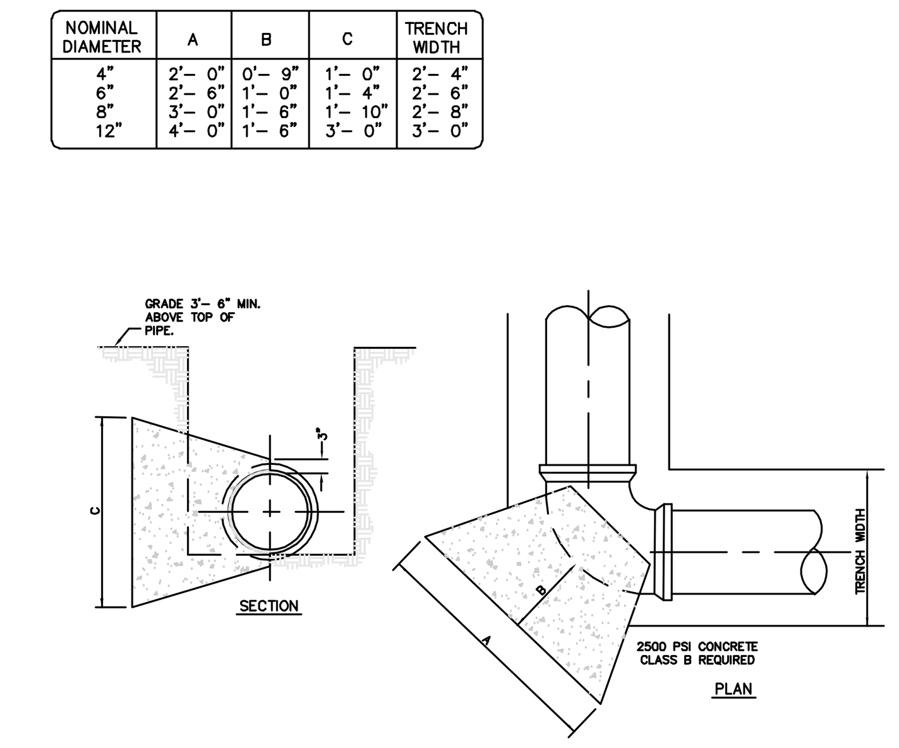
BEARING SURFACE AREA FOR VALVE FOOTINGS

VALVE SIZE	4"	6"	8"
QUICKSAND, POOR SOIL (1000psf)	3	7	12
GRAVEL, COURSE SAND (1600psf)	2	5	8
SOFT CLAY (2000psf)	2	4	6
FAIRLY DRY CLAY, CLEAN DRY SAND (4000psf)	1	2	3
DRY CLAY, COMPACT SAND (8000psf)	1	1	2
POOR ROCK (10,000psf)	1	1	2

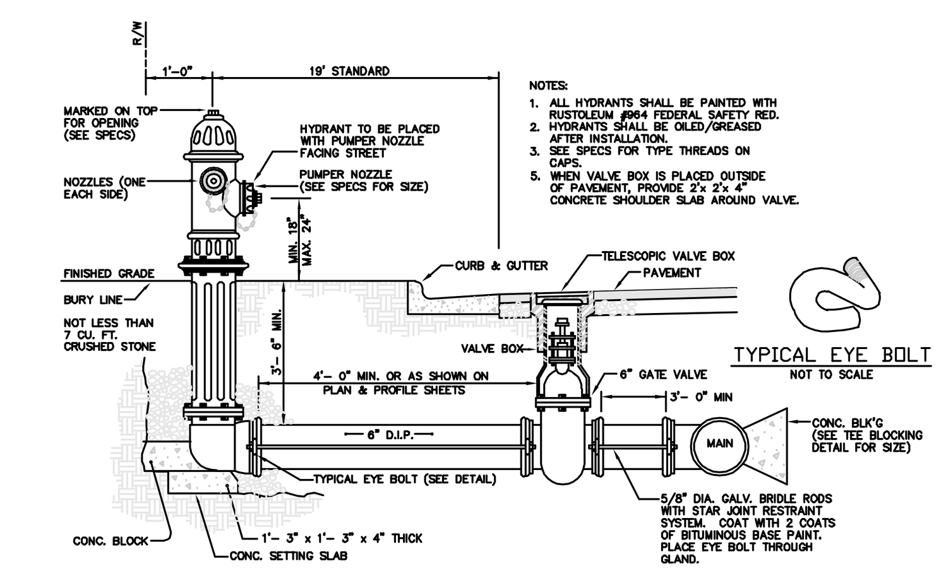
3. COAT EXPOSED STEEL RODS AND CLAMPS WITH BITUMININOUS BASE PAINT.



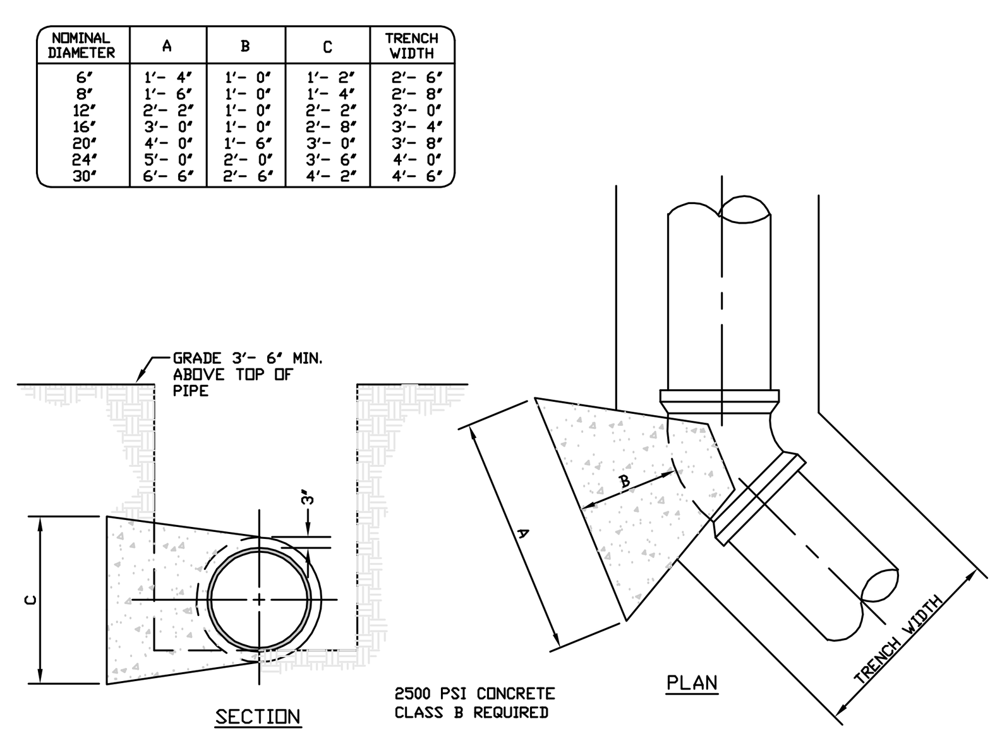
2.3 STANDARD VALVE FOOTING FOR PVC MAINS
NOT TO SCALE



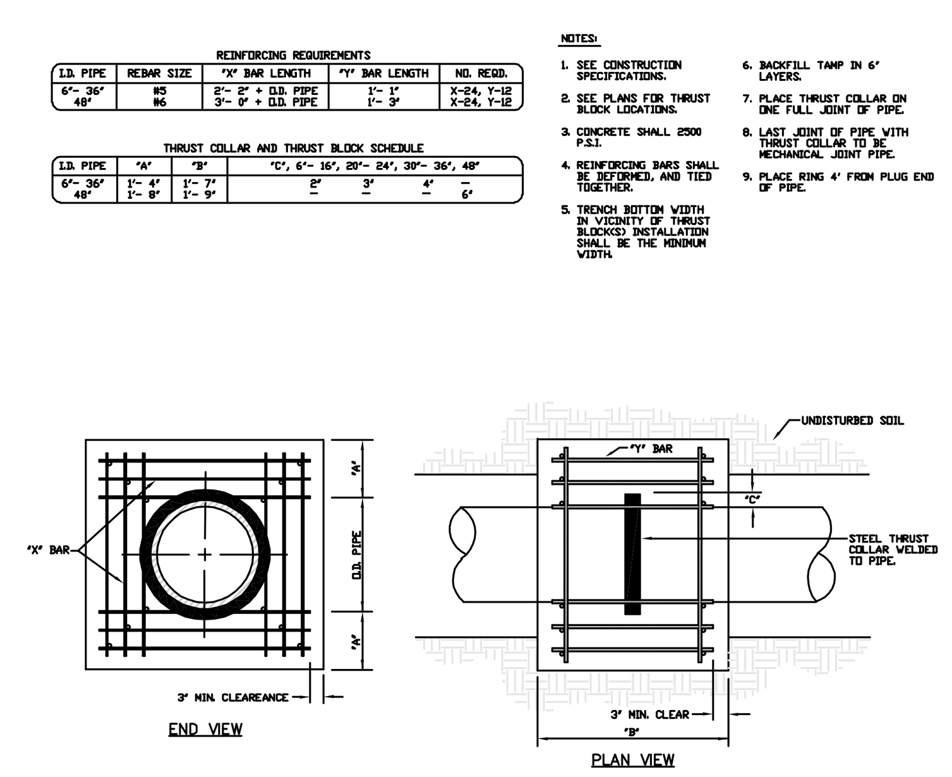
2.4 TRENCHING & BLOCKING OF 90° BENDS
NOT TO SCALE



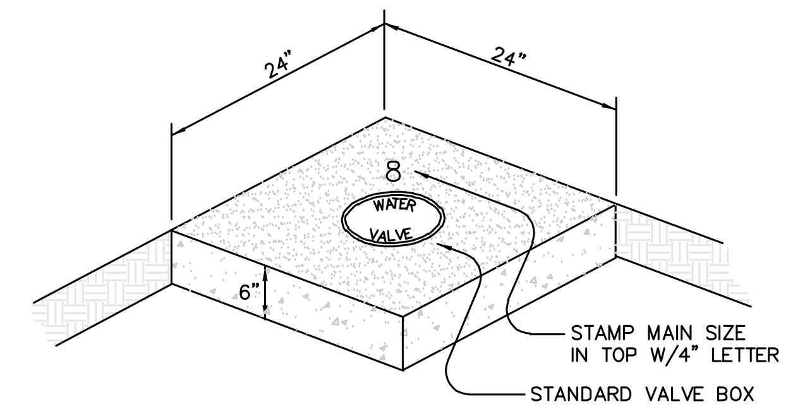
2.5 STANDARD FIRE HYDRANT INSTALLATION DETAIL
NOT TO SCALE



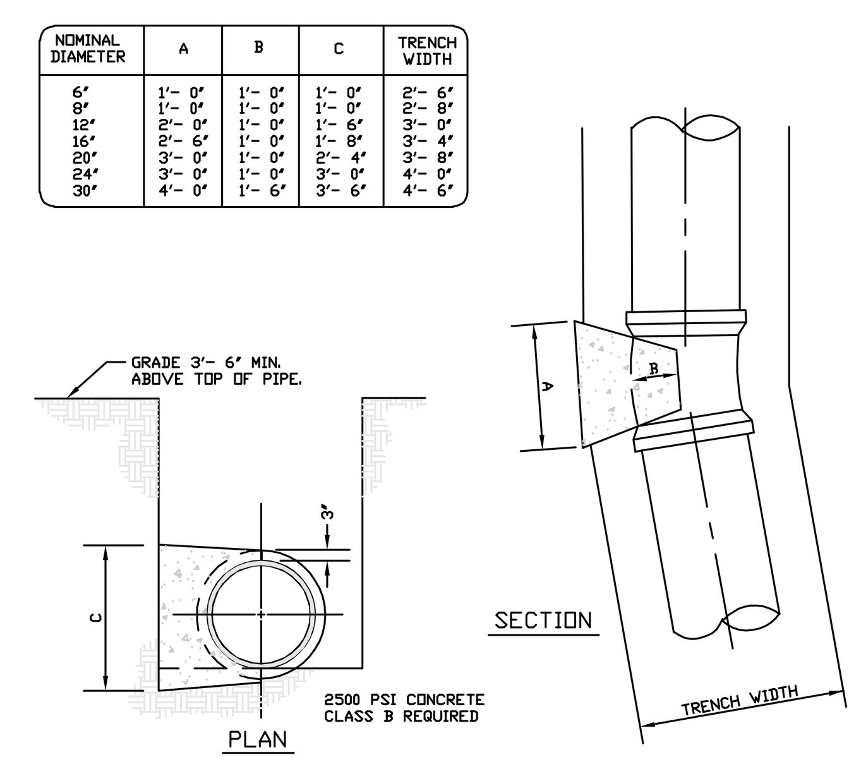
2.6 TRENCHING & BLOCKING OF 45° BENDS
NOT TO SCALE



2.8 THRUST BLOCKING DETAIL
NOT TO SCALE



2.9 VALVEBOX SHOULDER SLAB FOR UNPAVED AREAS
NOT TO SCALE

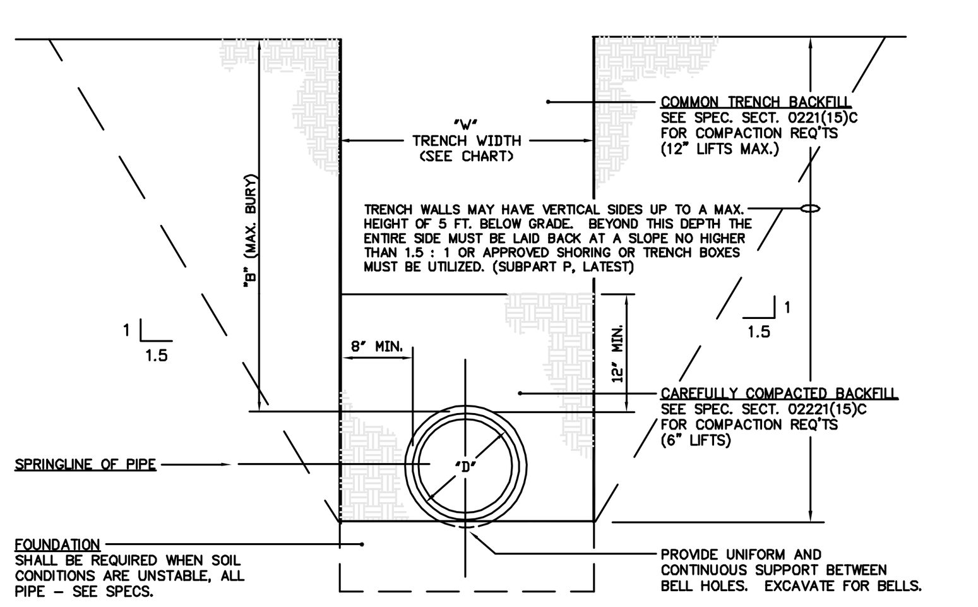


2.10 TRENCHING & BLOCKING OF 11 1/4° BEND
NOT TO SCALE

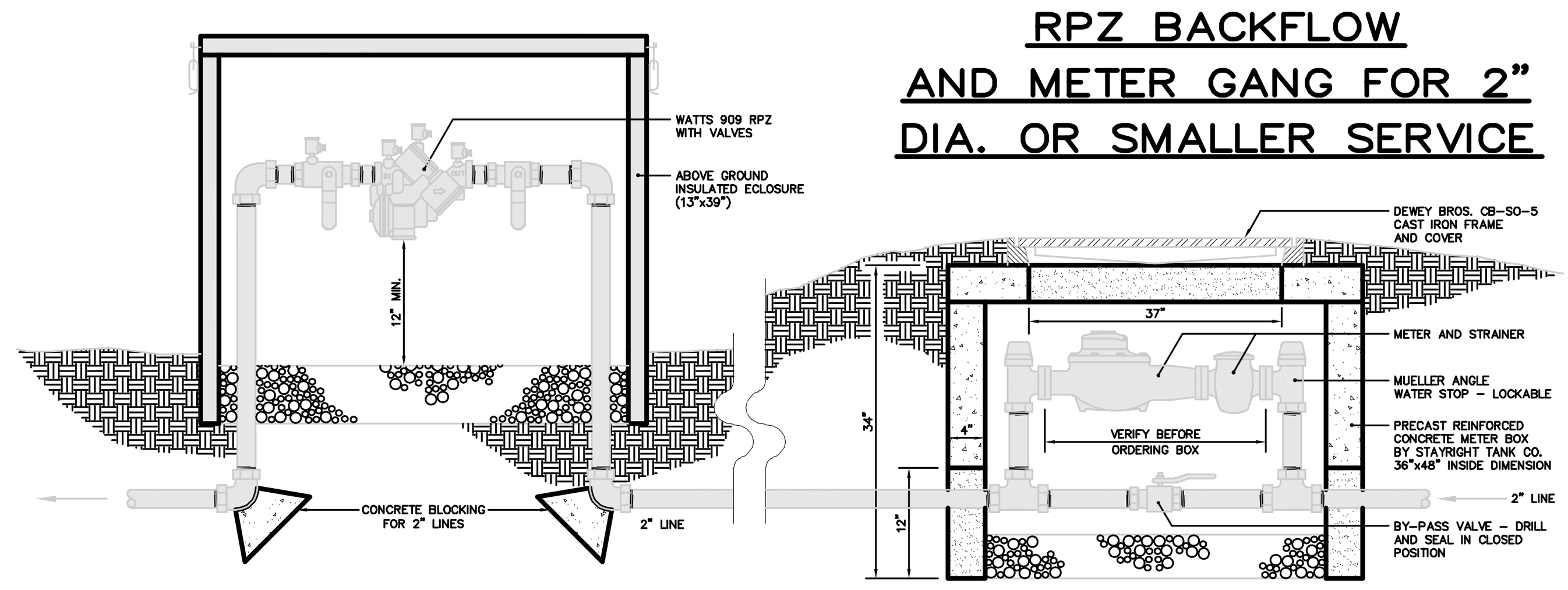
BURY LIMITATIONS
(TYPE I LAYING CONDITION)

PRESS CLASS	PIPE SIZE	"B" MAX.	"B" MIN.
350	4"	53'	2.5'
350	6"	26'	2.5'
350	8"	16'	2.5'
350	10"	11'	3'
350	12"	10'	3'
350	16"	15' (TYPE 2 L.C. MIN.)	3'

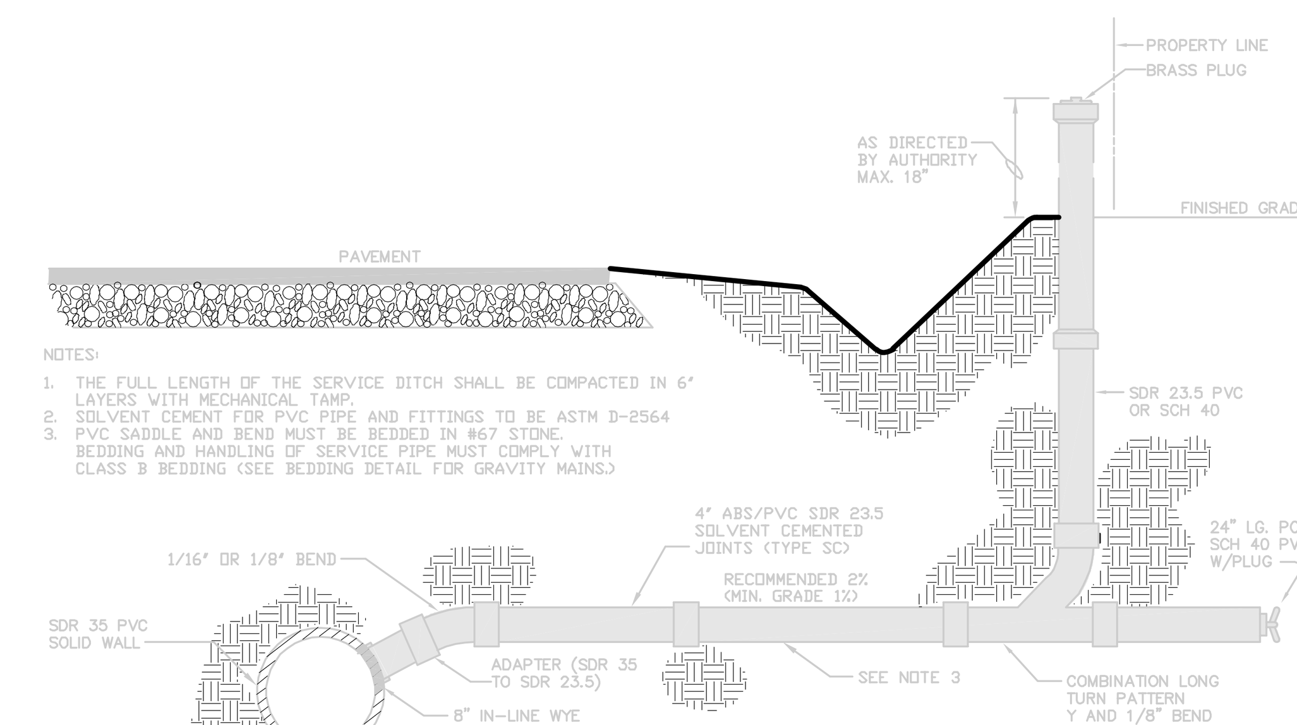
NOTE:
USE CLASS "D" BEDDING AS STANDARD BASED ON LIMITS OF TABLE. DO NOT USE CLASS D WITH WET TRENCH BOTTOMS, ROCK FOUNDATION OR WHEN UNSTABLE SOIL IS ENCOUNTERED.



2.11 TRENCH DETAIL
NOT TO SCALE



RPZ BACKFLOW AND METER GANG FOR 2" DIA. OR SMALLER SERVICE



TYPICAL PVC SEWER LATERAL CONNECTION
NOT TO SCALE

STOCKS ENGINEERING
801 EAST WASHINGTON STREET
NASHVILLE, N.C. 27856
P.O. BOX 1108
PHONE: (252) 459-8196
WWW.STOCKSENGINEERING.COM

BLN-C-1874

NASHVILLE FIRE STATION #2
NASHVILLE, NORTH CAROLINA

NORTH CAROLINA PROFESSIONAL SEAL 19843 ENGINEER J. MICHAEL STOCKS
5/15/2023

UTILITY NOTES AND DETAILS

REVISIONS	
FILE NO.	2020-058
HORZ. SCALE:	NONE
VERT. SCALE:	NONE

D-06

GENERAL

1. THESE GENERAL NOTES ARE NOT INTENDED TO REPLACE SPECIFICATIONS (IF PROVIDED). SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO THE GENERAL NOTES.
2. DO NOT SCALE DIMENSIONS FROM DRAWINGS. THE CONTRACTOR SHALL REQUEST NECESSARY DIMENSIONS NOT SHOWN ON THE DRAWINGS.
3. WHERE A DETAIL IS SHOWN FOR ONE CONDITION, IT SHALL APPLY FOR ALL LIKE OR SIMILAR CONDITIONS EVEN THOUGH NOT SPECIFICALLY REFERENCED ON THE DRAWINGS.
4. WHERE A CONFLICT BETWEEN DRAWINGS AND SPECIFICATIONS OCCURS THE MORE STRINGENT REQUIREMENT SHALL APPLY.
5. IF ANY BIDDER IS IN DOUBT AS TO THE INTENT OF THE DRAWINGS OR SPECIFICATIONS, THEY SHALL REQUEST AN INTERPRETATION IN WRITING PRIOR TO THE SCHEDULED BID DATE.
6. THE CONTRACTOR SHALL CHECK AND VERIFY ALL DIMENSIONS AND GRADE CONDITIONS (BOTH NEW AND EXISTING), REPORTING ANY DISCREPANCIES TO THE ENGINEER OF RECORD PRIOR TO FABRICATION OR PROCEEDING WITH STRUCTURAL WORK.
7. THE CONTRACTOR SHALL COMPARE THE STRUCTURAL DRAWINGS WITH THE ARCHITECTURAL DRAWINGS, AND REPORT ANY DISCREPANCIES TO THE ENGINEER OF RECORD PRIOR TO FABRICATION OR PROCEEDING WITH STRUCTURAL WORK.
8. SEE ARCHITECTURAL DRAWINGS FOR FLOOR ELEVATIONS, FLOOR SLOPES, AND THE LOCATION OF DEPRESSED FLOOR AREAS.

CONTRACTOR RESPONSIBILITY

1. THE STRUCTURAL DRAWINGS AND SPECIFICATIONS (IF PROVIDED) REPRESENT THE FINISHED STRUCTURE, AND, EXCEPT WHERE SPECIFICALLY SHOWN, DO NOT INDICATE THE METHOD OR MEANS OF CONSTRUCTION. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK AND SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION MEANS, METHODS, PROCEDURES, TECHNIQUES, AND SEQUENCE. ALL APPLICABLE SAFETY REGULATIONS TO BE FOLLOWED STRICTLY.
2. THE STRUCTURE HAS BEEN DESIGNED TO RESIST DESIGN LOADS ONLY AS A COMPLETED STRUCTURE. APPLICATIONS OF CONSTRUCTION LOADS TO THE PARTIALLY COMPLETED STRUCTURE SHALL BE CONSIDERED BY THE CONTRACTOR AND SO INCLUDED IN THE DESIGN OF SHORING, BRACING, FORMWORK, AND ANY OTHER SUPPORTING ELEMENTS PROVIDED FOR CONSTRUCTION OF THE STRUCTURE. DURING ERECTION AND UNTIL ALL PERMANENT CONNECTIONS ARE MADE, THE CONTRACTOR MUST PROVIDE TEMPORARY BRACING FOR THE STRUCTURE IN ALL DIRECTIONS UNTIL THE STRUCTURAL WORK IS COMPLETE.
3. ALL INTERIOR HANGING COMPONENTS (CEILING, DUCTWORK, PIPING, EQUIPMENT, ETC.) SHALL BE COORDINATED BY THE CONTRACTOR TO ENSURE LOADS APPLIED TO THE STRUCTURE DO NOT EXCEED THE LIMITS SHOWN IN THE DESIGN CRITERIA OR ELSEWHERE IN THE DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ADEQUACY OF THE CONNECTIONS TO THE SUPPORTING STRUCTURAL ELEMENTS AND THE ADEQUACY OF THE HANGING SYSTEM TO SUPPORT THE COMPONENTS.
4. ALL ARCHITECTURAL, ELECTRICAL, MECHANICAL, AND PLUMBING COMPONENTS NOT SHOWN ON THE STRUCTURAL DRAWINGS, THAT FRAME TO THE UNDERSIDE OF STRUCTURE ABOVE, SHALL BE DETAILED AND FRAMED BY THE CONTRACTOR TO ALLOW FOR DEFLECTION OF THE STRUCTURAL FRAMING. SEE THE DESIGN CRITERIA FOR THE LIMITS USED IN THE DESIGN.
5. PRINCIPAL OPENINGS IN THE STRUCTURE ARE SHOWN ON THESE DRAWINGS. THE CONTRACTOR SHALL EXAMINE THE ARCHITECTURAL, MECHANICAL, ELECTRICAL, AND PLUMBING DRAWINGS FOR ALL REQUIRED OPENINGS. SUPPORT FRAMING FOR ALL OPENINGS SHALL BE PROVIDED AND INSTALLED PER TYPICAL DETAILS HEREIN WHETHER SHOWN ON THESE DRAWINGS OR NOT. THE CONTRACTOR SHALL VERIFY SIZE AND LOCATION OF ALL OPENINGS WITH ALL SUBCONTRACTORS AND THEIR APPROVED SHOP DRAWINGS PRIOR TO CONSTRUCTION.
6. ALL EXTERIOR WALL AND ROOF COMPONENTS AND CLADDING ENGINEERED BY THE COMPONENT MANUFACTURER ARE TO BE DESIGNED BY THE MANUFACTURER'S ENGINEER FOR COMPONENTS AND CLADDING WIND LOADS NOTED IN THE DESIGN CRITERIA.
7. ALL ARCHITECTURAL, ELECTRICAL, MECHANICAL, AND PLUMBING COMPONENTS ARE TO BE ATTACHED AS REQUIRED BY ASCE/SEI 7 CHAPTER 13, "SEISMIC DESIGN REQUIREMENTS FOR NONSTRUCTURAL COMPONENTS". EACH INDIVIDUAL CONTRACTOR RESPONSIBLE FOR THE COMPONENT MUST PROVIDE PROJECT SPECIFIC DESIGN AND DOCUMENTATION PREPARED BY AN ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED. CHAPTER 13 DEFINES THE FORCE REQUIRED TO SUPPORT THE COMPONENT FOR THE ANCHORAGE AND BRACING. THE COST OF PREPARING THIS INFORMATION AND DESIGN SHALL BE INCLUDED IN EACH CONTRACTOR'S BID THAT IS PROVIDING THE COMPONENT.
8. SEVERAL ITEMS NOTED HEREIN (WHERE CHECKED) AND IN THE SPECIFICATIONS REQUIRE THE CONTRACTOR TO ENGAGE A PROFESSIONAL ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED, TO PROVIDE DESIGN AND/OR DETAILING OF STRUCTURAL ELEMENTS. SEE INDIVIDUAL NOTES AND SPECIFICATION SECTIONS FOR ADDITIONAL INFORMATION AND REQUIREMENTS. DELEGATED DESIGN ELEMENTS INCLUDE, BUT ARE NOT LIMITED TO:
   - [ ] SPECIALTY FOUNDATION SYSTEM
   - [ ] POST-TENSIONED CONCRETE
   - [ ] STRUCTURAL PRECAST CONCRETE
   - [ ] ARCHITECTURAL PRECAST CONCRETE
   - [ ] STRUCTURAL STEEL (CONNECTIONS)
   - [x] PREFABRICATED METAL BUILDING
   - [ ] STEEL STAIRS AND RAILINGS
   - [ ] STEEL JOISTS AND STEEL JOIST GIRDERS
   - [ ] ROOF ANCHORS
   - [ ] NON-LOAD BEARING COLD-FORMED STEEL
   - [ ] LOAD BEARING COLD-FORMED STEEL
   - [ ] LIGHT GAUGE COLD-FORMED STEEL TRUSSES
   - [x] PREFABRICATED WOOD TRUSSES
9. THIS PROJECT REQUIRES SPECIAL INSPECTIONS AS DESCRIBED IN CHAPTER 17 OF THE INTERNATIONAL BUILDING CODE. SEE STATEMENT OF SPECIAL INSPECTIONS FOR REQUIRED INSPECTIONS. CONTRACTOR SHALL COORDINATE WITH SPECIAL INSPECTOR ALL WORK REQUIRING SPECIAL INSPECTIONS AND TESTING.

CONCRETE | REINFORCING STEEL

1. ALL CONCRETE DESIGN AND CONSTRUCTION SHALL CONFORM TO THE REFERENCED EDITION OF THE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318).
2. CONCRETE MIXTURES AS REQUIRED (BASED ON CLASS DESIGNATION):
   CLASS A - FOOTINGS, GRADE/TIE BEAMS — NWC — 3,000 PSI
   CLASS B - INTERIOR SLABS ON GRADE — NWC — 3,000 PSI
   CLASS C - TRUCK APPARATUS BAY SLAB ON GRADE, EXTERIOR SLABS ON GRADE, PADS, TOPPINGS — NWC — 4,500 PSI
3. REINFORCING:
   TYPICAL - ASTM A615, GRADE 60
   REINFORCING TO BE WELDED - ASTM A706
   DEFORMED BAR ANCHORS - ASTM A496
   WELDED WIRE FABRIC - ASTM A1064 (FLAT SHEETS ONLY)
4. GROUT UNDER BASE PLATES TO BE HIGH STRENGTH (5,000 PSI), NON-SHRINK.
5. REFER TO THE DRAWINGS FOR REINFORCING LAP REQUIREMENTS. WHERE LAP SPLICES ARE NOT SHOWN, LAP PER ACI 318 OR CRSI STANDARDS.
6. LAP WELDED WIRE FABRIC SHEETS 8" MINIMUM.
7. CLEAR COVER FROM FACE OF CONCRETE:
   CAST IN PLACE CONCRETE (MEASURE TO OUTERMOST REINFORCING) -
   CONCRETE CAST AGAINST AND EXPOSED TO EARTH — 3"
   CONCRETE EXPOSED TO EARTH/WEATHER — 2" FOR #6 BARS AND LARGER, 1 1/2" ELSE
   CONCRETE NOT EXPOSED TO EARTH/WEATHER — 3/4" FOR SLABS AND WALLS, 1 1/2" (TO TIES) FOR BEAMS AND COLUMNS
8. PROVIDE REINFORCING IN SLABS ON GRADE, 1-1/2" FROM TOP OF SLAB:
   4" SLABS — 6x6-W2.1xW2.1
   6" SLABS — #3@12"OC EACH WAY
   8" SLABS — #4@12"OC EACH WAY
9. WHERE SCHEDULED BARS ARE NOT PRESENT, PROVIDE CONTINUOUS #5 TOP AND BOTTOM BARS TO SUPPORT STIRRUPS AS REQUIRED FOR THE LENGTH OF THE STIRRUP SPACING IN ALL BEAMS.
10. WALL FOOTING REINFORCING SHALL BE CONTINUOUS THROUGH ADJACENT COLUMN FOOTINGS.
11. PROVIDE VERTICAL DOVETAIL SLOTS AT 24"OC WITH TIES AT 16"OC VERTICALLY IN ALL CONCRETE WALLS BACKING-UP MASONRY VENEER.
12. BAR SUPPORTS FOR CONCRETE EXPOSED TO VIEW SHALL HAVE PLASTIC COATED LEGS OR BE HOT-DIP GALVANIZED AFTER FABRICATION.
13. MECHANICAL AND ELECTRICAL CONDUIT IN SLABS ON GRADE SHALL RUN UNDER TOP LAYER OF SLAB REINFORCING. PROVIDE A MINIMUM OF 1-1/2" CLEAR BETWEEN CONDUITS AND BETWEEN REINFORCING AND ADJACENT CONDUITS PARALLEL TO REINFORCING. IF MAXIMUM SIZE OF CONDUIT EXCEEDS ONE THIRD OF THE SLAB DEPTH, ADDITIONAL FRAMING OR REINFORCING MAY BE NECESSARY AT ENGINEER'S DISCRETION.
14. HEADED CONCRETE ANCHORS SHALL CONFORM TO THE REQUIREMENTS OF ASTM A108, GRADES 1010, 1015, 1017, OR 1020. STUDS SHALL BE AUTOMATICALLY END WELDED IN THE SHOP OR FIELD IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.
15. EMBED PLATES MUST BE SET IN THE FORM BEFORE POURING CONCRETE, NOT PLACED INTO TOP OF WET CONCRETE. THE CONTRACTOR SHALL CONTACT THE ARCHITECT FOR CORRECTIVE DETAILS FOR ANY EMBED PLATES LEFT OUT OF CONCRETE POURS.
16. FOR SLABS ON GRADE, SLAB AND FOOTING REINFORCING SHALL BE HELD IN PLACE BY BAR SUPPORTS WITH SAND PLATES, OR PRECAST CONCRETE BAR SUPPORTS AS DESCRIBED IN CHAPTER 3 OF THE CRSI MANUAL OF STANDARD PRACTICE. BAR SUPPORTS SHALL BE SPACED AT A MAXIMUM OF 4'-0"OC BOTH WAYS. ROCKS, CMU, OR CLAY BRICK WILL NOT BE USED AS SUPPORTS.
17. REBAR SHALL NOT BE HEATED WITH A TORCH IN THE FIELD.
18. THE CONTRACTOR SHALL NOTIFY THE ARCHITECT/ENGINEER FAR ENOUGH IN ADVANCE (48 HOURS) OF EACH CONCRETE POUR TO ALLOW AMPLE TIME TO CHECK THE LAYOUT OF THE STEEL BEFORE THE BEGINNING OF THE ACTUAL POUR, BUT NOT PRIOR TO 90% OF THE STEEL HAVING BEEN PLACED.

DESIGN CRITERIA

1. PROJECT LOCATION: OAK LEVEL ROAD | ROCKY MOUNT, NC 27856
2. APPLICABLE CODES:
   2018 NORTH CAROLINA BUILDING CODE (2015 INTERNATIONAL BUILDING CODE WITH REVISIONS)
   MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES (ASCE/SEI 7-10)
   BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE (ACI 318-14)
   BUILDING CODE REQUIREMENTS|SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530|530.1-13)
   SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (AISC 360-10)
   NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION (ANSI/AWC NDS-2015)
   NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS (AISI S100-12)
3. RISK CATEGORY: IV
4. DEFLECTION:
   ROOF FRAMING — L/180 FOR TOTAL LOADING (2.00" FOR 30' SPAN), L/240 FOR LIVE LOADING (1.50" FOR 30' SPAN)
   MEMBERS SUPPORTING BRICK — L/600 FOR LIVE LOADING (0.60" FOR 30' SPAN)
5. LIVE LOADS:

	UNIFORM (PSF)	CONCENTRATED (LB)
GROUND	100	2,000
MECHANICAL	150	NA
TRUCK BAYS	250	8,000
ROOF	20	300

6. SNOW LOAD:
   GROUND SNOW LOAD — p_g = 15 PSF
   IMPORTANCE FACTOR — I_s = 1.2
   SNOW EXPOSURE FACTOR — C_e = 1.0
   THERMAL FACTOR — C_t = 1.0
   FLAT SNOW ROOF LOAD — p_f = 18 PSF
7. WIND LOAD:
   ULTIMATE DESIGN WIND SPEED — V_{ult} = 121 MPH (NOMINAL DESIGN WIND SPEED, V_{asd} = 93 MPH)
   SERVICEABILITY WIND SPEED — V = 90 MPH (MEAN RECURRENCE INTERVAL OF 50 YEARS)
   EXPOSURE CATEGORY — C
   INTERNAL PRESSURE COEFFICIENTS — ±0.18
   BASE SHEAR (1.0xW) — V_x = 17k — V_y = 22k
   COMPONENTS AND CLADDING -
   ALL EXTERIOR WALL AND ROOF COMPONENTS AND CLADDING ENGINEERED BY THE COMPONENT MANUFACTURER ARE TO BE DESIGNED BY THE MANUFACTURER'S ENGINEER FOR COMPONENTS AND CLADDING WIND LOADS AS DETERMINED PER THE GOVERNING BUILDING CODE FOR THE ULTIMATE DESIGN WIND SPEED AND EXPOSURE CATEGORY LISTED ABOVE. ALTERNATIVELY, THE COMPONENT MANUFACTURER MAY USE THE LARGER OF THE 16 PSF MINIMUM (PER ASCE/SEI 7 30.2.2) AND THE WORST-CASE PRESSURES (PSF) BELOW:

ZONE		EFFECTIVE WIND AREA (SF)			
		10	50	100	500
ROOF	1	+5 -46	+5 -40	+5 -37	+5 -31
ROOF	2	+5 -72	+5 -63	+5 -60	+5 -52
ROOF	3	+5 -98	+5 -87	+5 -84	+5 -72
WALL	4	+31 -31	+28 -30	+27 -28	+23 -26
WALL	5	+31 -57	+28 -52	+27 -46	+23 -34

8. SEISMIC LOAD:
   DESIGN METHOD - EQUIVALENT LATERAL FORCE PROCEDURE
   S_S — 12.7 %g
   S_1 — 6.4 %g
   S_{DS} — 13.6 %g
   S_{D1} — 10.3 %g
   IMPORTANCE FACTOR — I_e = 1.5
   SITE CLASS — D
   SEISMIC DESIGN CATEGORY — C
   SEISMIC FORCE-RESISTING SYSTEM -
   LIGHT-FRAME (COLD-FORMED STEEL) WALL SYSTEMS USING FLAT STAP BRACING
   RESPONSE MODIFICATION COEFFICIENT — R_x = 4 — R_y = 4
   DEFLECTION AMPLIFICATION FACTOR — C_{dx} = 3.5 — C_{dy} = 3.5
   SEISMIC RESPONSE COEFFICIENT — C_{sx} = 0.051 — C_{sy} = 0.051
   BASE SHEAR (1.0xE) — V_x = 10k — V_y = 10k
9. FUTURE LOADS:
   UNLESS SPECIFICALLY NOTED, THERE ARE NO PROVISIONS MADE FOR FUTURE FLOORS, ROOFS, OR OTHER LOADS.

FOUNDATIONS

1. FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL INVESTIGATION REPORT BY:
   STEWART, DATED JANUARY 20, 2023 (PROJECT NO: F23001.00)
   THE DESIGN NET ALLOWABLE SOIL BEARING PRESSURE IS 2,000 PSF BASED ON THIS REPORT.
2. ALL RECOMMENDATIONS AS OUTLINED IN THE GEOTECHNICAL INVESTIGATION REPORT AND AS NOTED ON THE DRAWINGS MUST BE FOLLOWED IN PREPARATION OF THE SUBGRADE, UNLESS OTHERWISE DIRECTED BY THE ENGINEER OF RECORD. THE CONTRACTOR SHALL OBTAIN THE REPORT FROM THE OWNER AND BE FAMILIAR WITH THE RECOMMENDATIONS CONTAINED THEREIN PRIOR TO THE START OF CONSTRUCTION. IF CONDITIONS ENCOUNTERED DURING CONSTRUCTION DIFFER FROM THOSE DESCRIBED IN THE REPORT, THE OWNER SHALL NOTIFY THE GEOTECHNICAL ENGINEER OF RECORD SO THE RECOMMENDATIONS CAN BE REEVALUATED.
3. FOOTINGS SHALL BE CARRIED TO LOWER ELEVATIONS THAN THOSE SHOWN ON THE DRAWINGS IF REQUIRED BY THE GEOTECHNICAL ENGINEER OR TESTING LAB TO REACH SOIL CAPABLE OF PROVIDING THE DESIGN NET ALLOWABLE SOIL BEARING PRESSURE. ALL EXPANSIVE AND/OR LOOSE SOILS BELOW STRUCTURAL FOUNDATIONS SHALL BE REMOVED AND REPLACED AS DIRECTED HEREIN. AT A MINIMUM, THE UPPER 12 +/- INCHES OF THE SURFICIAL SOIL SHALL BE REMOVED, AS RECOMMENDED IN THE GEOTECHNICAL REPORT.
4. MINIMUM SUBGRADE PREPARATION REQUIREMENTS ARE AS FOLLOWS:
   1. PREPARE SUBGRADE AND UNDERFLOOR FILL TO A POINT THAT EXTENDS 3'-0" (MINIMUM) BEYOND THE LIMITS OF THE FOUNDATIONS.
   2. WHETHER IMPORTED OR BORROWED FROM ON ONSITE SOURCE, STRUCTURAL FILL SHALL SATISFY THE FOLLOWING:
      A. NO EXCESSIVE DELETERIOUS MATERIAL.
      B. ORGANIC CONTENT NO GREATER THAN 3% (BY WEIGHT).
      C. NO ROCKS OR OTHER INCLUSIONS GREATER THAN 3 INCHES IN DIAMETER.
      D. A MAXIMUM OF 30% OF THE TOTAL MATERIAL WEIGHT RETAINED ON THE 3/4 INCH SIEVE.
      E. MAXIMUM DRY DENSITY (MDD) OF 95 POUNDS PER CUBIC FOOT OR GREATER, AS DETERMINED BY THE STANDARD PROCTOR COMPACTION TEST (ASTM D698).
      F. LIQUID LIMIT (LL) OF 40 OR LESS AND A PLASTICITY INDEX (PI) OF 20 OR LESS, AS DETERMINED BY ATTERBERG LIMITS TESTING (ASTM D4318).
   3. THE WATER CONTENT OF THE STRUCTURAL FILL SHOULD BE MAINTAINED WITHIN -2 TO +3% OF T HE MATERIAL'S OPTIMUM WATER CONTENT AS DETERMINED BY ASTM D698.
   4. COMPACT ALL FILL UNDER BUILDING TO 98% MAXIMUM DRY DENSITY AS DETERMINED BY ASTM D698.
   5. PLACE IN LIFTS OF 8-10" (MAXIMUM) LOOSE THICKNESS WHEN USING LARGE RIDING COMPACTORS. LIFT THICKNESS SHALL BE THINNED TO 4-6" WHEN USING SMALLER, RAMMAX-TYPE COMPACTORS, AND NO MORE THAN 4" THICK FOR SLED AND JUMPING-JACK TAMPERS.
   6. SLABS ON GRADE SHALL BE SUPPORTED ON A BASE LAYER OF POROUS FILL (WASHED NO. 57 STONE OR FREE DRAINING SAND W/ LESS THAN 5% FINES) WITH THICKNESS AS FOLLOWS:
      A. FIRE TRUCK APPARATUS BAY: 6" MINIMUM THICKNESS OF POROUS FILL.
      B. ELSEWHERE: 4" MINIMUM THICKNESS OF POROUS FILL.
5. FIELD COMPACTION SHALL BE VERIFIED WITH AT LEAST ONE TEST PER 2,000 SQUARE FEET PER LIFT (AT LEAST ONE PER LIFT), IN ACCORDANCE WITH ASTM D1556 (SAND-CONE METHOD), ASTM D6938 (NUCLEAR METHODS, SHALLOW DEPTH), ASTM D2167 (RUBBER BALLOON METHOD), AND/OR ASTM D2937 (DRIVE-CYLINDER METHOD). SEE SPECIFICATIONS FOR OTHER TESTING REQUIREMENTS.
6. WALLS RETAINING SOIL SHALL BE TEMPORARILY BRACED DURING BACKFILLING AND UNTIL ALL SUPPORTING SOIL AND SLABS ARE IN PLACE AND ARE AT DESIGN STRENGTH UNLESS NOTED OTHERWISE ON PLANS AND DETAILS.
7. WALLS RETAINING SOIL HAVE BEEN DESIGNED UTILIZING THE FOLLOWING PARAMETERS:
   MOIST SOIL UNIT WEIGHT — 120 PCF
   ACTIVE PRESSURE COEFFICIENT — 0.33
   AT-REST PRESSURE COEFFICIENT — 0.55
   PASSIVE PRESSURE COEFFICIENT — 3.00
   COEFFICIENT OF FRICTION — 0.35
8. UTILITY LINES SHALL NOT BE PLACED THROUGH OR BELOW FOUNDATIONS WITHOUT APPROVAL OF THE STRUCTURAL ENGINEER. CONTRACTOR SHALL SUBMIT DETAILED DRAWINGS OF ALL SUCH CONDITIONS PRIOR TO CONSTRUCTION.

CONCRETE CONSTRUCTION JOINTS

1. CONTRACTOR SHALL PROVIDE NECESSARY CONSTRUCTION JOINTS IN MONOLITHIC CONCRETE POURS SO THAT THE QUALITY OF PLACEMENT AND FINISH MEETS THE REQUIREMENTS OF PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL SUBMIT A PLAN SHOWING THE LOCATION OF ALL CONSTRUCTION JOINTS TO THE STRUCTURAL ENGINEER FOR APPROVAL.
2. THERE SHALL BE NO HORIZONTAL CONSTRUCTION JOINTS IN CONCRETE POURS. ALL VERTICAL CONSTRUCTION JOINTS IN SLABS AND BEAMS SHALL BE MADE WITH BULKHEADS. ADDITIONAL REINFORCING AT CONSTRUCTION JOINTS SHALL BE AS SPECIFIED BY THE STRUCTURAL ENGINEER. SEE TYPICAL CONSTRUCTION JOINT DETAILS.

STRUCTURAL MASONRY

1. ALL MASONRY DESIGN AND CONSTRUCTION SHALL CONFORM TO THE REFERENCED EDITION OF THE BUILDING CODE REQUIREMENTS|SPECIFICATIONS FOR MASONRY STRUCTURES (ACI 530|530.1).
2. LOAD BEARING MASONRY WALLS, PILASTERS, PIERS, RETAINING WALLS, FOUNDATION WALLS AND ANY OTHER MASONRY SO DESIGNATED ON DRAWINGS IS CONSIDERED HERE TO BE STRUCTURAL MASONRY.
3. REQUIRED COMPRESSIVE STRENGTH OF MASONRY UNITS:
   SOLID CLAY UNITS - 6,200 PSI
   CONCRETE UNITS - 2,000 PSI ON NET AREA
4. CONCRETE MASONRY UNITS (CMU) SHALL BE LIGHT WEIGHT (105 PCF) CONFORMING TO ASTM C90. REFER TO ARCHITECTURAL DRAWINGS AND SPECIFICATIONS FOR UNIT SIZE, FACE, COLOR, JOINTING, ETC.
5. MORTAR SHALL BE TYPE S, ASTM C270.
6. GROUT FOR REINFORCED MASONRY SHALL BE FINE GROUT, ASTM C476. MINIMUM 28-DAY COMPRESSIVE STRENGTH SHALL BE 2,000 PSI.
7. MINIMUM 28-DAY COMPRESSIVE STRENGTH (f'_m) OF THE MASONRY WALLS SHALL BE 2,000 PSI. MASONRY STRENGTH SHALL BE DETERMINED BY THE UNIT STRENGTH METHOD OR THE PRISM TEST METHOD AS DESCRIBED BY ACI 530.
8. REINFORCING:
   TYPICAL - ASTM A615, GRADE 60
   ALL REINFORCING TO BE WELDED - ASTM A706
9. REFER TO THE DRAWINGS FOR REINFORCING LAP TYPICAL DETAIL AND SCHEDULE REQUIREMENTS.
10. MAXIMUM HEIGHT TO WHICH MASONRY SHALL BE LAID BEFORE GROUTING IS 5 FEET ABOVE CONSTRUCTION SURFACE OR PREVIOUSLY GROUTED MASONRY. IF GROUT POUR HEIGHT EXCEEDS 5 FEET, THEN "HIGH LIFT" GROUTING PROCEDURE MUST BE FOLLOWED. PROVIDE CLEANOUT OPENINGS AT THE BOTTOM OF EACH GROUT POUR HEIGHT. CLEANOUT OPENINGS SHALL BE PROVIDED AT EACH CELL TO BE FILLED WITH GROUT.
11. ALL GROUT PLACED OVER 12" IN HEIGHT SHALL BE MECHANICALLY CONSOLIDATED DURING GROUTING. GROUT SHALL BE RECONSOLIDATED BY MECHANICAL VIBRATION AFTER INITIAL WATER LOSS AND SETTLEMENT HAS OCCURRED.
12. MAXIMUM GROUT LIFT (GROUT POURED IN ONE CONTINUOUS OPERATION) IS 5 FEET. THIS LIMIT ALSO APPLIES TO "HIGH LIFT" GROUTING.
13. REINFORCE MASONRY WHERE SHOWN ON STRUCTURAL DRAWINGS. TIE REINFORCING IN POSITION AND PLACE GROUT AROUND REINFORCING. DO NOT PUSH REINFORCING DOWN INTO PREVIOUSLY PLACED GROUT FILL. SET BOLTS SIMILARLY.
14. TIE MASONRY WYTHES WITH HORIZONTAL REINFORCING AS SPECIFIED.
15. PROVIDE VERTICAL BARS, SIZE MATCHING WALL REINFORCING, AT ALL CORNERS, ENDS OF WALLS, EACH SIDE OF CONTROL JOINTS AND EACH SIDE OF WALL OPENINGS. TIE EACH BAR TO THE FOUNDATION WITH A MATCHING DOWEL.
16. ALL CORNERS OF STRUCTURAL MASONRY WALLS SHALL BE CONSTRUCTED BY INTERLOCKING COURSES. AT INTERSECTIONS WHERE SEQUENCING OR BLOCK COURSING PROHIBITS INTERLOCKED CONSTRUCTION SEE ALTERNATE DETAILS HEREIN.
17. ALL LINTELS TO BEAR 8" MINIMUM EACH SIDE OF OPENING, UNLESS NOTED OTHERWISE.
18. GROUT ALL MASONRY WALLS AND CAVITY BELOW GRADE SOLID. GROUT ALL WALLS ABOVE GRADE AT THE REINFORCED CELLS (MINIMUM) OR AS INDICATED IN SPECIFIC SECTIONS.
19. ONE 3/4"Ø (MAXIMUM) VERTICAL CONDUIT ALLOWED IN ANY REINFORCED CELL PROVIDED 1" CLEAR IS MAINTAINED BETWEEN REINFORCING AND CONDUIT. NO OTHER VERTICAL OR HORIZONTAL CONDUITS, PIPES, OR SLEEVES SHALL BE LOCATED IN REINFORCED CELLS UNLESS OTHERWISE APPROVED BY THE STRUCTURAL ENGINEER. CONTRACTOR SHALL COORDINATE LAYOUT TO AVOID REINFORCED CELLS.

STRUCTURAL STEEL

1. DESIGN, FABRICATION, AND ERECTION SHALL BE PER THE SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (ANSI/AISC 360).
2. STRUCTURAL STEEL MATERIALS:
   WIDE FLANGE SHAPES (W SECTIONS) - ASTM A992, GRADE 50 (FY=50 KSI)
   CHANNELS AND ANGLES - ASTM A36 (FY=36 KSI)
   PLATES AND BARS - ASTM A36 (FY=36 KSI) OR ASTM A572, GRADE 50 (FY=50 KSI) AS INDICATED ON THE DRAWINGS.
   SQUARE AND RECTANGULAR TUBES - ASTM A500, GRADE B (FY=46 KSI)
   PIPES OR ROUND TUBES - ASTM A53, GRADE B (FY=35 KSI) OR ASTM A500, GRADE B (FY=42 KSI)
3. A QUALIFIED FABRICATOR SHALL HAVE A MINIMUM OF 5 YEARS OF EXPERIENCE IN FABRICATING STRUCTURAL STEEL LIKE THAT INDICATED FOR THIS PROJECT AND SUFFICIENT CAPACITY TO FABRICATE THE STRUCTURAL STEEL WITHOUT DELAYING THE WORK, AND SHALL MEET ONE OF THE FOLLOWING:
   A. FABRICATOR PARTICIPATES IN THE AISC QUALITY CERTIFICATION PROGRAM AND IS DESIGNATED AN AISC-CERTIFIED PLANT, CATEGORY (BU) OR IS ACCREDITED BY THE IAS FABRICATOR INSPECTION PROGRAM FOR STRUCTURAL STEEL (ACCREDITATION CRITERIA 172).
   B. FABRICATOR HAS AN ESTABLISHED AND MAINTAINED QUALITY CONTROL PROGRAM TO ENSURE THAT THE WORK IS PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS IN ANSI/AISC 303, ANSI/AISC 360, AND THE CONTRACT DOCUMENTS. PROGRAM SHALL AT A MINIMUM ADDRESS INSPECTION OF THE ITEMS NOTED IN ANSI/AISC 360 N2.
4. A QUALIFIED ERECTOR SHALL HAVE A MINIMUM OF 5 YEARS OF EXPERIENCE IN ERECTING STRUCTURAL STEEL LIKE THAT INDICATED FOR THIS PROJECT AND SUFFICIENT CAPACITY TO ERECT THE STRUCTURAL STEEL WITHOUT DELAYING THE WORK, AND SHALL MEET ONE OF THE FOLLOWING:
   A. ERECTOR PARTICIPATES IN THE AISC QUALITY CERTIFICATION PROGRAM AND IS DESIGNATED AN AISC-CERTIFIED ERECTOR, CATEGORY (CSE).
   B. ERECTOR HAS AN ESTABLISHED AND MAINTAINED QUALITY CONTROL PROGRAM TO ENSURE THAT THE WORK IS PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS IN ANSI/AISC 303, ANSI/AISC 360, AND THE CONTRACT DOCUMENTS. PROGRAM SHALL AT A MINIMUM ADDRESS INSPECTION OF THE ITEMS NOTED IN ANSI/AISC 360 N2.
5. BEAM SIMPLE SHEAR, BRACED FRAME, AND ALL MOMENT CONNECTIONS NOT DETAILED ON STRUCTURAL DRAWINGS SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER RETAINED BY THE STEEL SUPPLIER AND REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED. THE CONNECTION ENGINEER SHALL SUBMIT A SIGNED AND SEALED LETTER STATING THEY HAVE REVIEWED THE STEEL SHOP DRAWINGS AND THE CONNECTIONS ARE CONSISTENT WITH THEIR CALCULATIONS AND INTENT.
6. THE CONNECTIONS FOR NON-COMPOSITE BEAMS SHALL BE DESIGNED FOR REACTIONS SHOWN ON DRAWINGS OR FOR REACTIONS DETERMINED BY USING THE MAXIMUM TOTAL UNIFORM LOAD TABULATED IN PART 3 OF THE AISC STEEL CONSTRUCTION MANUAL FOR THE SECTION, SPAN, AND STRENGTH OF STEEL SPECIFIED.
7. SIMPLE SHEAR CONNECTIONS SHALL BE MADE WITH ASTM A325 3/4"Ø BOLTS (MINIMUM), TIGHTENED TO A SNUG-TIGHT CONDITION PER AISC REQUIREMENTS.
8. ALL WELDING SHALL CONFORM TO THE AMERICAN WELDING SOCIETY CODE. USE E70 SERIES ELECTRODES FOR ALL STRUCTURAL STEEL WELDS. WHERE STEEL MEMBERS ARE WELDED AND NO SIZE IS SPECIFIED, PROVIDE FULL LENGTH FILLET WELDS BOTH SIDES OF MEMBER. SIZE OF FILLETS SHALL BE 3/16" FOR MEMBER THICKNESS UP TO 5/16", AND THE MEMBER THICKNESS MINUS 3/16" FOR ALL THICKER MATERIALS.
9. ANCHOR AND THREADED RODS SHALL CONFORM TO ASTM F1554, GRADE 36, 55, OR 105 AS INDICATED ON THE DRAWINGS. CONTRACTOR TO COORDINATE INSTALLATION OF ITEMS TO BE EMBEDDED IN OR ATTACHED TO OTHER CONSTRUCTION WITHOUT DELAYING THE WORK.
10. STEEL SHALL BE PRIMED WITH FABRICATOR'S STANDARD LEAD- AND CHROMATE-FREE, NON-ASPHALTIC, RUST-INHIBITING PRIMER COMPLYING WITH MPI#79 (MINIMUM COAT OF 3 MILS, MAXIMUM OF 5 MILS). CONTRACTOR TO COORDINATE SELECTION OF PRIMER WITH TOPCOATS TO BE APPLIED TO ENSURE THE TWO ARE COMPATIBLE. MEMBERS TO RECEIVE FIREPROOFING OR TO BE ENCASED IN CONCRETE SHALL NOT BE PRIMED.
11. SEE THE ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR ALL ITEMS REQUIRED TO BE HOT-DIP GALVANIZED AFTER FABRICATION.
12. STRUCTURAL STEEL SHALL BE PUNCHED FOR WOOD BLOCKING, NAILERS, CLIPS AND TIES IN ACCORDANCE WITH THE ARCHITECTURAL AND STRUCTURAL DRAWINGS.
13. CAP ALL OPEN HSS OR PIPE MEMBERS OUTSIDE THE BUILDING ENVELOPE WITH A 1/4" (MINIMUM) FITTED PLATE, UNO.
14. ERECTOR SHALL SET STRUCTURAL STEEL IN LOCATIONS AND TO ELEVATIONS IN ACCORDANCE WITH ANSI/AISC 303 AND 360. MAINTAIN THE FRAME WITHIN ERECTION TOLERANCES PER ANSI/AISC 303.
15. PROMPTLY PACK SHRINKAGE-RESISTANT GROUT SOLIDLY BETWEEN BEARING SURFACES AND PLATES SO NO VOIDS REMAIN.
16. SPLICING OF STRUCTURAL STEEL MEMBERS IS PROHIBITED WITHOUT PRIOR APPROVAL OF THE ENGINEER AS TO LOCATION AND TYPE OF SPLICE TO BE MADE. ANY MEMBER HAVING A SPLICE NOT SHOWN AND DETAILED ON SHOP DRAWINGS WILL BE REJECTED. THERMAL CUTTING MAY NOT BE USED IN THE FIELD DURING ERECTION.
17. QUALITY CONTROL INSPECTION TASKS SHALL BE PERFORMED BY BOTH THE FABRICATOR AND ERECTOR IN ACCORDANCE WITH ANSI/AISC 360 N5. NON-DESTRUCTIVE TESTING (NDT) OF WELDED JOINTS PROVIDED DURING FABRICATION SHALL BE IN ACCORDANCE WITH N5.5 AND PERFORMED BY AN INDEPENDENT AND QUALIFIED TESTING AGENCY OR THE FABRICATOR'S QCI. ALL TESTING REPORTS SHALL BE SUBMITTED TO THE OWNER FOR REVIEW.
18. AT THE COMPLETION OF FABRICATION AND ERECTION, THE FABRICATOR AND ERECTOR SHALL EACH SUBMIT A CERTIFICATE OF COMPLIANCE TO THE OWNER STATING THE MATERIALS SUPPLIED AND WORK PERFORMED ARE IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
19. NON-DESTRUCTIVE TESTING (NDT) OF WELDED JOINTS PROVIDED DURING ERECTION SHALL BE IN ACCORDANCE WITH N5.5 AND PERFORMED BY AN INDEPENDENT AND QUALIFIED TESTING AGENCY. ALL TESTING REPORTS SHALL BE SUBMITTED TO THE OWNER FOR REVIEW.

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 035263 ANDREW S. PORDON
Andrew S. Pordon
5/12/2023

GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

Date	Project No.
5/15/2023	22021.1
Drawn By: KAB	Sheet No.
Checked By: ASP	S0.1

Sheet Title
GENERAL NOTES

PREFABRICATED METAL BUILDING

1. DESIGN, FABRICATION, AND ERECTION SHALL BE PER THE SPECIFICATION FOR STRUCTURAL STEEL BUILDINGS (AISC 360). DESIGN AND CONSTRUCTION OF THE PREFABRICATED METAL BUILDING IS THE RESPONSIBILITY OF THE GENERAL CONTRACTOR.
2. DESIGN CRITERIA:
   MAXIMUM HORIZONTAL DRIFT - H/180 (H = MEAN HEIGHT OF STRUCTURE)
   MINIMUM COLLATERAL LOAD - 10 PSF PLUS ROOF TOP MECHANICAL UNITS, HANGING EQUIPMENT, FANS, ETC.
3. A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED SHALL BE RESPONSIBLE FOR THE DESIGN OF THE PREFABRICATED METAL BUILDING MEMBERS AND THEIR CONNECTIONS. THIS WORK SHALL ALSO INCLUDE ALL MEMBERS AND BRACES REQUIRED TO BRACE EXTERIOR WALLS.
4. ALL SHOP DRAWINGS SHALL BE SEALED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED AND SHALL BE SUBMITTED FOR RECORD PURPOSES UPON REQUEST.
5. ALL ANCHOR BOLTS SHALL BE DESIGNED BY THE METAL BUILDING SUPPLIER AND SUPPLIED BY THE CONTRACTOR. ALL ANCHOR BOLTS SHALL CONFORM TO ASTM F1554, GRADE 36 AS A MINIMUM. SUBMIT SHOP DRAWINGS FOR ALL ANCHOR BOLTS INDICATING THE REACTIONS IMPOSED ON THE FOUNDATION.
6. FOUNDATION DESIGN ASSUMES PINNED BASE CONNECTIONS FROM THE METAL BUILDING COLUMNS TO THE FOUNDATION.
7. FOUNDATIONS HAVE BEEN DESIGNED FOR REACTIONS INDICATED ON THE DRAWINGS. SUBMIT BASE REACTIONS FOR FOUNDATION DESIGN VERIFICATION AND POSSIBLE FOUNDATION RE-DESIGN. CONTRACTOR SHALL PROVIDE UNIT COSTS FOR POSSIBLE FOUNDATION REVISION.

LOAD BEARING COLD-FORMED STEEL (METAL STUDS)

1. ALL LOAD BEARING STUDS, JOISTS, AND ACCESSORIES SHALL BE MADE OF THE MINIMUM TYPE, SIZE, GAUGE, AND SPACING SHOWN ON DRAWINGS.
2. ALL STRUCTURAL MEMBERS SHALL BE MANUFACTURED IN ACCORDANCE WITH THE REFERENCED EDITION OF THE NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS BY THE AMERICAN IRON AND STEEL INSTITUTE.
3. ALL INTERIOR NON-LOAD BEARING COLD-FORMED LIGHT GAUGE METAL FRAMING AND CONNECTIONS SHALL BE DESIGNED BY THE SUPPLIER'S ENGINEER. ALL METAL STUDS, JOISTS, AND ACCESSORIES SHALL BE MADE OF THE MINIMUM TYPE, SIZE, GAUGE, AND SPACING SHOWN ON DRAWINGS. AT ARCHITECT'S OR ENGINEER'S REQUEST CONTRACTOR SHALL SUBMIT CALCULATIONS FOR ALL COLD-FORMED METAL FRAMING USED TO SUPPORT CEILINGS.
4. MINIMUM YIELD STRENGTH (FY) FOR STUDS IS 33 KSI FOR 18 GA (43 MILS) AND 20 GA (33 MILS) MATERIALS, AND 50 KSI FOR 12 GA (97 MILS), 14 GA (68 MILS), AND 16 GA (54 MILS) MATERIALS.
5. ALL THE COLD-FORMED STEEL STRUCTURAL MEMBERS SHALL COME FROM A SINGLE SOURCE MANUFACTURER. ONLY MANUFACTURERS WHO ARE MEMBERS OF THE STEEL STUD MANUFACTURERS ASSOCIATION (SSMA) OR THE STEEL FRAMING INDUSTRY ASSOCIATION (SFIA) WILL BE ACCEPTED. THE INSTALLATION SHALL COMPLY WITH THE MANUFACTURER'S RECOMMENDATIONS.
6. SUBMIT SHOP DRAWINGS FOR ALL COLD-FORMED METAL FRAMING. SHOP DRAWINGS SHALL INDICATE PLACING OF ALL FRAMING MEMBERS SHOWING TYPE, SIZE, GAUGE, NUMBER, LOCATION AND SPACING. THEY SHALL ALSO INDICATE SUPPLEMENTAL STRAPPING, BRACING, SPLICES, BRIDGING, ACCESSORIES AND DETAILS REQUIRED FOR PROPER INSTALLATION.
7. SHOP DRAWINGS SHALL SHOW SIZE AND LENGTH OF WELDS FOR ALL WELDED CONNECTIONS AND TYPE, SIZE AND NUMBER OF SCREWS FOR ALL SCREWED CONNECTIONS. SUBMIT MANUFACTURER'S DATA GIVING STRENGTH VALUES FOR SCREWS USED.
8. ALL STUDS, TRACK, BRIDGING AND ACCESSORIES SHALL BE FORMED FROM STEEL HAVING A G-60 GALVANIZED COATING MEETING THE REQUIREMENTS OF ASTM A653 AND C955. ALL ACCESSORIES SHALL BE FORMED FROM STRUCTURAL QUALITY STEEL WITH MINIMUM YIELD STRENGTH OF 50 KSI.
9. A MINIMUM LENGTH OF 10" OF UNPUNCHED STEEL IS REQUIRED AT BOTH ENDS OF STUDS. NO PUNCHING HOLES OF ANY SIZE IS PERMITTED IN THESE 10". NO CUTTING OF THE STUD FLANGE IS PERMITTED.
10. LOAD BEARING WALLS MAY BE PRE-FABRICATED OFFSITE IN A PRE-PANELIZATION SHOP IN A CONTROLLED ENVIRONMENT WITH A CERTIFIED QUALITY CONTROL PROGRAM. THE FACILITY MUST HAVE A MINIMUM OF 2 YEARS OF OPERATION EXPERIENCE.
11. THE PANELIZER MUST SUBMIT FULLY DIMENSIONED WALL PANEL SHOP DRAWINGS OF EACH INDIVIDUAL WALL PANEL WITH THE MATERIALS EXPLICITLY CALLED OUT, AS WELL AS A FULLY DIMENSIONED PANEL LAYOUT DRAWING LOCATING EACH PANEL. THESE DRAWINGS MUST BE SUBMITTED FOR APPROVAL, AND WALL PANEL CONSTRUCTION SHALL NOT BEGIN UNTIL THE ENGINEER'S APPROVAL IS RECEIVED.
12. WALL PANELS MUST BE FABRICATED IN SHOP OR IN FIELD WITH WELDED CONNECTIONS. FIELD WELDING OF MATERIALS LESS THAN 18 GA (43 MILS) SHALL NOT BE PERMITTED. WELDS SHALL BE PERFORMED BY OPERATORS QUALIFIED IN ACCORDANCE WITH SECTION 6.0 OF THE LATEST EDITION OF THE AMERICAN WELDING SOCIETY'S "STRUCTURAL WELDING CODE - SHEET STEEL" (AWS D1.3).
13. BOTH STUD FLANGES SHALL BE ATTACHED TO THE TOP AND BOTTOM TRACK WITH A 1" MINIMUM LENGTH OF WELD AT BEARING WALLS AND (2)#10 SCREWS EACH SIDE AT NON-LOAD BEARING WALLS.
14. ALL WELDS SHALL BE TOUCHED UP WIH ZINC-RICH PAINT.
15. SPLICES IN STUDS SHALL NOT BE PERMITTED UNLESS SPECIFICALLY DETAILED ON THE STRUCTURAL DRAWINGS.
16. STUDS SHALL HAVE FULL BEARING AGAINST THE INSIDE TRACK WEB TOP AND BOTTOM. STUDS MUST BE CUT SQUARE. THE PANELIZATION FACILITY MUST UTILIZE A COMPRESSION MECHANIZATION IN THEIR JIGS (HYDRAULIC RAMS) TO FULLY SEAT THE STUDS IN THE TRACK PRIOR TO WELDING.
17. MULTIPLE STUD "COLUMNS" SHALL BE WELDED TOGETHER IN GROUPS OF AT LEAST TWO STUDS WITH 2" WELD TOP AND BOTTOM AND 1" WELD AT 24"OC BOTH SIDES IN BETWEEN.
18. TRACK SPLICES WITHIN A PANEL/WALL MUST BE SECURELY ANCHORED TO A COMMON ELEMENT (I.E. STUD, HEADER, ETC.), BUTT-WELDED TOGETHER, OR SPLICED WITH STUD MATERIAL SECURELY FASTENED TO TRACK ON BOTH SIDES OF SPLICE.
19. LIGHT GAUGE STRAPS ON BOTH SIDES OF THE WALL ARE REQUIRED TO PROVIDE SHEAR RESISTANCE FOR SHEAR WALL FRAMING.
20. LATERAL BRIDGING SHALL BE USED TO RESIST TORSIONAL FORCES IN THE METAL STUDS. BRIDGING SHALL BE 2 1/2"-18 GA (43 MILS) FLAT STRAPS, SCREW ATTACHED TO BOTH FLANGES OF EACH STUD WITH SOLID BLOCKING REQUIRED AT 8"OC (MAX) AND ADJACENT TO EACH OPENING. BLOCKING MAY BE MADE FROM MATCHING GAUGE STUDS ATTACHED WITH 16 GA (54 MILS) CLIP ANGLES WITH (2)#10 SCREWS INTO EACH FLANGE.
21. ACCEPTABLE BRIDGING ALTERNATE IS COLD-FORMED CHANNELS (1 1/2" CHANNEL IN 3 5/8" OR 4" STUDS AND 2 1/2" CHANNEL IN 6" STUDS) WELDED TO THE OUTER EDGE OF PUNCHOUTS WITH 1/4" MINIMUM WELD.
22. BRIDGING IS TO BE PLACED AT NO MORE THAN 4'-0"OC VERTICALLY.
23. INSTALL DOUBLE STUDS AT EVERY INTERRUPTION (I.E. PLUMBING CHASES, ETC.).
24. MINIMUM TRACK FASTENINGS SHALL BE 0.157"Ø POWDER ACTUATED FASTENERS (PAFs) SPACED 12"OC FOR BEARING WALLS AND 16"OC FOR NON-LOAD BEARING WALLS (UNO), WITH 1 1/4" MINIMUM PENETRATION INTO CONCRETE. AT STRAP WALLS, TRACK FASTENINGS SHALL BE SPACED 3"OC (MINIMUM UNO).
25. VOIDS BENEATH TRACK SHALL NOT BE PERMITTED. CONTRACTOR SHALL PROVIDE A LEVEL SLAB WITHIN ACI 117 TOLERANCES. WHERE UNEVENNESS OF SUPPORTING FLOOR PREVENTS CONTINUOUS SOLID BEARING, PANEL OR TRACK SHALL BE LEVELED BY PLACING MORTAR OR GROUT BENEATH TRACK.
26. HEADERS SHALL BE CONSTRUCTED OF UNPUNCHED STUDS. SHEAR SHALL BE TRANSFERRED BY FULL BEARING ON JACK STUDS OR BY SHEAR PLATES. SHEAR PLATES SHALL BE 16 GA (54 MILS) MINIMUM.
27. CUTTING OF LOAD BEARING STUDS, TRACK, OR STRAPPING IS NOT PERMITTED WITHOUT SPECIFIC APPROVAL FROM THE ENGINEER OF RECORD.
28. MULTIPLE STUD COLUMNS WITHOUT LATERAL BRACING MUST BE 12 GA (97 MILS) MINIMUM, REGARDLESS OF GAUGES INDICATED ON FRAMING PLANS.
29. REFER TO ARCHITECTURAL PLANS FOR NON-LOAD BEARING WALLS AND TO VERIFY ALL DIMENSIONS SHOWN FOR LOAD BEARING WALLS.

LUMBER

1. ALL LUMBER AND ITS FASTENINGS SHALL CONFORM TO THE REFERENCED EDITION OF THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION BY THE AMERICAN FOREST AND PAPER ASSOCIATION.
2. ALL LUMBER SHALL BE OF THE FOLLOWING PROPERTIES UNLESS OTHERWISE NOTED (OR EQUIVALENT GRADE OF ANOTHER SPECIES):
   ALL STRUCTURAL LUMBER, SPRUCE PINE FIR NO. 2 (SPRUCE PINE FIR SOUTH IS NOT ACCEPTABLE) -
   2x4 Fb = 1,313 PSI Fc = 1,323 PSI (∥ TO GRAIN)
   2x6 Fb = 1,138 PSI Fc = 1,265 PSI (∥ TO GRAIN)
   2x8 Fb = 1,050 PSI Fc = 1,208 PSI (∥ TO GRAIN)
   2x10 Fb = 963 PSI Fc = 1,150 PSI (∥ TO GRAIN)
   2x12 Fb = 875 PSI Fc = 1,150 PSI (∥ TO GRAIN)
   Fv = 135 PSI FOR ALL SIZES NOTED ABOVE
   E = 1,400 KSI FOR ALL SIZES NOTED ABOVE
   ALL PRESSURE-TREATED LUMBER, SOUTHERN YELLOW PINE NO. 2 -
   2x4,4x4 Fb = 1,100 PSI Fc = 1,450 PSI (∥ TO GRAIN)
   2x6 Fb = 1,000 PSI Fc = 1,400 PSI (∥ TO GRAIN)
   2x8 Fb = 925 PSI Fc = 1,350 PSI (∥ TO GRAIN)
   2x10 Fb = 800 PSI Fc = 1,300 PSI (∥ TO GRAIN)
   2x12 Fb = 750 PSI Fc = 1,250 PSI (∥ TO GRAIN)
   Fv = 175 PSI FOR ALL SIZES NOTED ABOVE
   E = 1,400 KSI FOR ALL SIZES NOTED ABOVE
   6x6 Fb = 850 PSI Fc = 525 PSI (∥ TO GRAIN) Fv = 165 PSI E = 1,200 KSI
3. ALL WOOD BEARING ON CONCRETE, MASONRY, OR EXPOSED TO WEATHER SHALL BE PRESSURE-TREATED SOUTHERN PINE. ALL ENGINEERED LUMBER BEARING ON CONCRETE, MASONRY, OR EXPOSED TO WEATHER SHALL BE CHEMICALLY TREATED OR WOLMANIZED TO MEET AWPA USE CATEGORY 3/4.
4. STRUCTURAL MEMBERS SHALL NOT BE CUT FOR PIPES, DUCTWORK, ETC., UNLESS SPECIFICALLY NOTED OR DETAILED.
5. HOLES FOR BOLTS SHALL BE BORED 1/32" TO 1/16" LARGER THAN THE NOMINAL BOLT DIAMETER.
6. ALL BOLTS SHALL BE RE-TIGHTENED PRIOR TO APPLICATION TO GYPSUM WALLBOARD, PLYWOOD, ETC.
7. ALL BOLTS BEARING ON WOOD SHALL HAVE WASHERS UNDER HEAD AND/OR NUT.
8. 2x SOLID BLOCKING SHALL BE PLACED BETWEEN JOISTS OR RAFTERS AT ALL SUPPORTS, ENDS OF CANTILEVERS, AND HALFWAY BETWEEN SUPPORTS. CROSS BRIDGING OR SOLID BLOCKING SHALL BE PROVIDED AT 8'-0"OC MAXIMUM. FOR ALL JOISTS AND RAFTERS MORE THAN 8" IN DEPTH, 2x3 OR APPROVED METAL TYPE BRIDGING MAY BE USED.
9. ALL NAILS SHALL BE COMMON UNLESS NOTED OTHERWISE.
10. STANDARD WOOD CONNECTORS MUST BE PROVIDED BY THE GENERAL CONTRACTOR FOR WOOD FRAMED MEMBERS. INTERIOR FRAMING CONNECTORS MUST BE G90 GALVANIZED ZINC CONNECTORS. EXTERIOR FRAMING CONNECTORS MUST BE G185 GALVANIZED ZINC COATING, MINIMUM.
11. ADHESIVES SHALL MEET THE REQUIREMENTS FOR WET CONDITIONS OF SERVICE. EXPOSED BEAMS SHALL BE ARCHITECTURAL GRADE. ALL OTHERS SHALL BE INDUSTRIAL GRADE. MEMBERS SHALL BE INDIVIDUALLY WRAPPED.

SHEATHING

1. ALL SHEATHING SHALL BE PLYWOOD OR OSB. ALL PLYWOOD SHEATHING, DIAPHRAGMS, AND SHEAR WALL PANELS SHALL CONFORM TO U.S. PRODUCT STANDARD PS-1-07 WITH EXTERIOR GLUE. ALL OSB SHEATHING, DIAPHRAGMS, AND SHEAR WALL PANELS SHALL CONFORM TO U.S. PRODUCT STANDARD PS-2-04.
   A. ROOF SHEATHING SHALL BE 19/32" EXTERIOR GRADE (SPAN RATING 40/20).
2. SHEATHING SHEETS SHALL BE LAID WITH LONG DIMENSION PERPENDICULAR TO THE SUPPORTING FRAMING.

PREFABRICATED WOOD TRUSSES

1. ALL LUMBER AND ITS FASTENINGS SHALL CONFORM TO THE REFERENCED EDITION OF THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION BY THE AMERICAN FOREST AND PAPER ASSOCIATION. CONFORM TO APPLICABLE PROVISIONS OF TPI DESIGN SPECIFICATIONS FOR METAL PLATE CONNECTED WOOD TRUSSES (LATEST EDITION).
2. PREFABRICATED ROOF TRUSS MANUFACTURER SHALL SUBMIT CALCULATIONS AND TRUSS LAYOUT OR FRAMING PLAN TO SECURE APPROVALS FROM ARCHITECT AND BUILDING DEPARTMENT PRIOR TO ERECTION.
3. TRUSS DESIGN SHALL CONSIDER ALL NOTED DESIGN LOADS IN DESIGN CRITERIA AS WELL AS LOADS NOTED ON THE DRAWINGS. TRUSS DESIGNER SHALL ALSO INCLUDE ALL MECHANICAL EQUIPMENT AND PLUMBING SHOWN ON MECHANICAL AND PLUMBING DRAWINGS AS WELL AS FIRE PROTECTION SPRINKLER SHOP DRAWINGS FOR ALL PIPING LARGER THAN 4" INCHES IN DIAMETER AND EQUIPMENT HEAVIER THAN 200 LBS.
4. TRUSSES SHALL BE DESIGNED FOR THE FOLLOWING MINIMUM LOADS:
   TOP CHORD DL = 10 PSF (AT ROOF), 20 PSF (AT FLOOR)
   LL = SEE DESIGN CRITERIA
   BOTTOM CHORD DL = 15 PSF (INCLUDES HUNG MECHANICAL UNITS)
   LL = 250 LB AT ANY POINT (NFPA-13)
5. TRUSS SUPPLIER SHALL CALCULATE UPLIFT LOADS BASED ON THE WIND LOAD CRITERIA LISTED IN THESE GENERAL NOTES. AT A MINIMUM THE TRUSSES SHALL BE DESIGNED FOR A NET WIND UPLIFT LOAD OF 15 PSF (0.6D + 0.6W) UNLESS NOTED OTHERWISE.
6. GABLE END WALL TRUSSES SHALL BE DESIGNED FOR THE COMPONENTS AND CLADDING LOADS OF 25 PSF (0.6W). DEFLECTION OF THE VERTICAL SUPPORT MEMBERS SHALL BE LESS THAN L/360. SUPPLY BRACING AS REQUIRED FOR LOADS AND DEFLECTION. SEALED CALCULATIONS SHALL BE PROVIDED BY THE TRUSS ENGINEER FOR ALL GABLE END WALL TRUSSES.
7. TRUSS CHORDS AND WEBS SHALL BE DOUGLAS FIR OR SOUTHERN PINE, PS 20, GRADED TO NFPA RULES:
   MAXIMUM MOISTURE CONTENT - 19%
   MINIMUM GRADE OF CHORD - NO. 2
   MINIMUM GRADE OF WEB MEMBERS - NO. 3
8. ALL TRUSSES SHALL BE DESIGNED FOR THE ACTUAL DEAD LOAD PLUS LIVE LOAD (SPECIFIED ABOVE). MAXIMUM DEFLECTION DUE TO LIVE LOAD ONLY SHALL NOT EXCEED L/360. MAXIMUM DEFLECTION DUE TO TOTAL LOAD SHALL NOT EXCEED L/240. ROOF SLOPE SHALL BE 1/4" PER FOOT OR GREATER AFTER LONG TERM DEFLECTION OCCURS.
9. SUBMIT SHOP DRAWINGS FOR ALL TRUSSES. SHOP DRAWINGS SHALL INDICATE PLACING OF ALL FRAMING MEMBERS SHOWING TYPE, SIZE, NUMBER, LOCATION AND SPACING. THEY SHALL ALSO INDICATE SUPPLEMENTAL BRACING, SPLICES, BRIDGING, ACCESSORIES AND DETAILS REQUIRED FOR PROPER INSTALLATION. SHOP DRAWINGS SUBMITTED MUST BE PREPARED UNDER THE SUPERVISION OF AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED.
10. TRUSS MANUFACTURER SHALL PROVIDE A TRUSS LAYOUT PLAN INDICATING ALL TRUSSES WITH PIECE MARKS AND DIMENSIONS. THIS DRAWING SHALL BE SEALED BY THE TRUSS ENGINEER. THEIR SEAL SHALL ONLY ATTEST TO THE PERFORMANCE OF THE TRUSSES, THEIR CONNECTIONS TO ONE ANOTHER (GIRDER TRUSSES, MULTI-PLY, PIGGY-BACK, VALLEY, ETC.) AND THAT ALL NOTED DESIGN LOADS HAVE BEEN ACCOUNTED FOR IN THE DESIGN OF THE TRUSSES. IT IS NOT THE INTENT THAT THE TRUSS ENGINEER BE RESPONSIBLE FOR LOAD PATH BELOW THE BEARING ELEVATION UNLESS CHANGES TO THE TRUSS LAYOUT ARE MADE RELATIVE TO THE CONTRACT DOCUMENTS.
11. ALL TRUSSES AND CONNECTIONS SHALL BE DESIGNED BY THE SUPPLIER'S ENGINEER. SUBMIT CALCULATIONS FOR ALL TRUSSES AND THEIR CONNECTIONS. CALCULATIONS SHALL INCLUDE ALL DESIGN LOADS, MAXIMUM AXIAL TENSION AND COMPRESSION IN TRUSS MEMBERS, CALCULATED MAXIMUM DEFLECTIONS AND SPAN-TO-DEFLECTION RATIOS FOR LIVE AND TOTAL LOADS, AND REACTION FORCES AND DIRECTIONS, INCLUDING MAXIMUM UPLIFT REACTION FORCES.
12. TRUSS MANUFACTURER SHALL SELECT AND SIZE THE REQUIRED TRUSS UPLIFT ANCHORS, AS DETERMINED FROM THE MAXIMUM UPLIFT REACTION FOR EACH TRUSS. THESE ANCHORS SHALL BE SHOWN ON THE APPROVED TRUSS SHOP DRAWING LAYOUT PLAN.
13. ALL TRUSSES SHALL BE BRACED TO PREVENT ROTATION AND PROVIDE LATERAL STABILITY. SHOP DRAWINGS SHALL INDICATE ALL LATERAL BRIDGING REQUIRED WHICH SHALL BE SUPPLIED BY THE CONTRACTOR.
14. TRUSS SHOP DRAWINGS SHALL INCLUDE PERMANENT INDIVIDUAL TRUSS MEMBER RESTRAINT REQUIREMENTS CLEARLY NOTED ON THE LAYOUT DRAWING.
15. ALL BRACING MATERIAL SHALL BE A MINIMUM 2x4 SPRUCE PINE FIR NO. 2 OR BETTER ANCHORED WITH AT LEAST (2)16d NAILS AT EACH TRUSS.
16. IF PERMANENT TRUSS RESTRAINT/BRACING FOR TOP, BOTTOM AND WEB MEMBERS ARE NOT DETAILED ON THE TRUSS LAYOUT DRAWINGS, THEN BRACING SHALL BE IN ACCORDANCE WITH BCSI-B3 OR BCSI-B7 FOR PARALLEL CHORD TRUSSES.
17. TEMPORARY BRACING, WHERE REQUIRED, SHALL BE PROVIDED UNTIL THE ERECTION IS COMPLETE.
18. TRUSS SPANS OF 60 FEET OR GREATER REQUIRE THE TRUSS ENGINEER TO PROVIDE PROJECT SPECIFIC DESIGN FOR THE TEMPORARY INSTALLATION RESTRAINT/ BRACING AND THE PERMANENT INDIVIDUAL TRUSS MEMBER RESTRAINT/BRACING. ALL BRACING MUST BE INDICATED ON THE TRUSS LAYOUT DRAWING.

ADHESIVE AND MECHANICAL POST-INSTALLED ANCHORS

1. ANCHOR BOLTS, REINFORCING STEEL, THREADED RODS, STAIR HANDRAILS, AND OTHER EMBEDDED STEEL ITEMS SHALL BE SET INTO HARDENED CONCRETE WITH ADHESIVE OR MECHANICAL POST-INSTALLED ANCHORS ONLY WHERE DETAILED ON THE DRAWINGS OR WHERE APPROVED BY THE ENGINEER OF RECORD.
2. PRE-APPROVED MANUFACTURERS ARE HILTI, SIMPSON STRONG-TIE, AND DEWALT. WHERE DETAILS INDICATE SPECIFIC ADHESIVE OR MECHANICAL POST-INSTALLED ANCHORS, IT IS ACCEPTABLE AT THE CONTRACTOR'S OPTION TO SUBMIT AN ALTERNATE SIMILAR PRODUCT PROVIDED BY A DIFFERENT MANUFACTURER AS LONG AS THE MANUFACTURER'S DATA PROVIDES EQUIVALENT LOAD CAPACITY TO THE ANCHOR SPECIFIED. THE CONTRACTOR SHALL PROVIDE SIGNED AND SEALED CALCULATIONS THAT DEMONSTRATE THE ALTERNATE PRODUCT IS CAPABLE OF MEETING THE PERFORMANCE OF THE SPECIFIED ANCHOR. SUBSTITUTIONS WILL BE EVALUATED BY THEIR HAVING AN ICC-ESR SHOWING COMPLIANCE WITH THE GOVERNING BUILDING CODE FOR SEISMIC USE, LOAD RESISTANCE, INSTALLATION CATEGORY, AND THE AVAILABILITY OF COMPREHENSIVE INSTALLATION INSTRUCTIONS. ADHESIVE ANCHOR EVALUATION WILL ALSO CONSIDER CREEP, IN-SERVICE TEMPERATURE, INSTALLATION TEMPERATURE, MOISTURE CONDITION OF CONCRETE, AND DRILLING METHODS.
3. BASIS OF DESIGN FOR ADHESIVE ANCHORS DETAILED ON THE DRAWINGS INCLUDES THE FOLLOWING PARAMETERS: CRACKED CONCRETE; WATER-SATURATED CONCRETE; BASE MATERIAL BETWEEN 25 AND 100 DEGREES FAHRENHEIT; AND HOLES MADE BY HAMMER DRILL, HOLLOW DRILL BIT SYSTEM, OR CORE-DRILLING.
4. INSTALL ANCHORS PER THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS, AS INCLUDED IN THE ANCHOR PACKAGING. HEED ALL LABEL WARNINGS. INSTALL IN ACCORDANCE WITH APPLICABLE SAFETY LAWS. ALL HOLES SHALL BE DRILLED WITH A DIAMETER NO LARGER THAN 1/8" GREATER THAN THE DIAMETER OF THE ANCHOR BEING INSTALLED. ALL HOLES SHALL BE CLEANED WITH COMPRESSED AIR AND SHALL BE DRY PRIOR TO INSTALLATION OF ADHESIVE. HOLES SHALL BE FREE OF ALL DELETERIOUS MATERIAL SUCH AS LAITANCE, DUST, DIRT, AND OIL.
5. ANCHOR CAPACITY IS DEPENDENT UPON SPACING BETWEEN ADJACENT ANCHORS AND PROXIMITY OF ANCHORS TO EDGE OF CONCRETE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS.
6. WHERE ADHESIVE ANCHORS ARE TO BE INSTALLED IN HOLLOW MATERIAL WITH UNKNOWN CAPACITY, THE CONTRACTOR SHALL INSTALL THE ANCHOR IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. THE ADHESIVE SHALL BE INSTALLED IN THE HOLLOW BASE MATERIAL USING SCREEN TUBES SUPPLIED BY THE MANUFACTURER. THE ADHESIVE SHALL BE CAPABLE OF SUSTAINING MINIMUM TENSION AND SHEAR LOAD CAPACITIES NOTED ON THE DRAWINGS MULTIPLIED BY A FACTOR OF SAFETY OF 4. ALL HARDWARE AND MATERIAL SHALL BE SUPPLIED BY THE ANCHOR MANUFACTURER.
7. CONTRACTOR PERFORMING ADHESIVE WORK SHALL BE AN APPROVED CONTRACTOR BY THE MANUFACTURER FURNISHING THE ADHESIVE MATERIALS, AND SHALL HAVE NO LESS THAN FIVE YEARS EXPERIENCE IN THE VARIOUS TYPES OF ADHESIVE RELATED WORK REQUIRED IN THIS PROJECT. ALTERNATIVELY, THE CONTRACTOR SHALL ARRANGE FOR A REPRESENTATIVE OF THE ANCHOR MANUFACTURER TO PROVIDE ONSITE INSTALLATION TRAINING FOR ALL ANCHOR PRODUCTS SPECIFIED. DOCUMENTATION THAT ALL PERSONNEL INSTALLING ANCHORS ARE TRAINED SHALL BE SUBMITTED TO THE ENGINEER OR RECORD PRIOR TO THE COMMENCEMENT OF ANCHOR INSTALLATION.

REPRODUCTION

1. THE USE OF REPRODUCTIONS OF THESE CONTRACT DRAWINGS BY ANY CONTRACTOR, SUBCONTRACTOR, ERECTOR, FABRICATOR, OR MATERIAL SUPPLIER IN LIEU OF PREPARATION OF SHOP DRAWINGS SIGNIFIES HIS ACCEPTANCE OF ALL INFORMATION SHOWN HEREIN AS CORRECT, AND OBLIGATES HIMSELF TO ANY JOB EXPENSE, REAL OR IMPLIED, ARISING DUE TO ANY ERRORS THAT MAY OCCUR HERE ON.

ABBREVIATIONS

@	AT	HD	HEADED
&	AND	HI	HIGH
Ø	DIAMETER	HORIZ	HORIZONTAL
AB	ANCHOR BOLTS	HSS	HOLLOW STRUCTURAL SECTION
ACI	AMERICAN CONCRETE INSTITUTE	INT	INTERIOR
ADDL	ADDITIONAL	JT	JOINT
ADH	ADHESIVE	K	KIP(S)
AFF	ABOVE FINISHED FLOOR	KB	KNEE BRACE
AISC	AMERICAN INSTITUTE OF STEEL CONSTRUCTION	KSI	KIPS PER SQUARE INCH
AISI	AMERICAN IRON AND STEEL INSTITUTE	LB	LONG BAR
ALT	ALTERNATE	LBS	POUNDS
ARCH	ARCHITECT'S / ARCHITECTURAL	LLH	LONG LEG HORIZONTAL
ASTM	AMERICAN SOCIETY FOR TESTING AND MATERIALS	LLV	LONG LEG VERTICAL
AWS	AMERICAN WELDING SOCIETY	LO	LOW
B/ or BOT	BOTTOM	LOC	LOCATION
BCX	BOTTOM CHORD EXTENSION	LSH	LONG SIDE HORIZONTAL
BFB	BOTTOM FLANGE BRACE	LSV	LONG SIDE VERTICAL
BFF	BELOW FINISHED FLOOR	LWC	LIGHT WEIGHT CONCRETE
BLDG	BUILDING	MAX	MAXIMUM
BM	BEAM	MC	MOMENT CONNECTION
BOS	BOTTOM OF STEEL	MCJ	MASONRY CONTROL JOINT
BRG	BEARING	MECH	MECHANICAL
BTWN	BETWEEN	MFR	MANUFACTURER
CANT	CANTILEVER	MID	MIDDLE
CJ	CONTROL JOINT	MIN	MINIMUM
CL	CENTERLINE	MISC	MISCELLANEOUS
CLR	CLEAR	MOW	MIDDLE OF WALL
CMU	CONCRETE MASONRY UNIT	MP	MASONRY PILASTER
COL	COLUMN	No or #	NUMBER
CONC	CONCRETE	NS	NEAR SIDE
CONN	CONNECTION	NTS	NOT TO SCALE
CONST JT	CONSTRUCTION JOINT	NWC	NORMAL WEIGHT CONCRETE
CONT	CONTINUOUS	OC	ON CENTER
CONTR	CONTRACTOR	OPNG	OPENING
COORD	COORDINATE	OPP	OPPOSITE HAND
CTRD	CENTERED	PAF	POWDER ACTUATED FASTENER
d	NAILS (PENNY)	PED	PEDESTAL
DBA	DEFORMED BAR ANCHOR	PEMB	PRE-ENGINEERED METAL BUILDING
DEFL	DEFLECTION	PL	PLATE
DEPR	DEPRESSION / DEPRESSED	PSF	POUNDS PER SQUARE FOOT
DET	DETAIL	PSI	POUNDS PER SQUARE INCH
DIAG	DIAGONAL	PT	PRESSURE TREATED
DIM	DIMENSION	P-T	POST-TENSIONED
DIST	DISTANCE	REF	REFERENCE
DWG(S)	DRAWING(S)	REINF	REINFORCING
DWL(S)	DOWEL(S)	REQD	REQUIRED
EA	EACH	SB	SHORT BAR
EE	EACH END	SCHD	SCHEDULE
EF	EACH FACE	SIM	SIMILAR
EJ	EXPANSION JOINT	SOG	SLAB ON GRADE
ELEV	ELEVATION	SPEC(S)	SPECIFICATION(S)
EMBED	EMBEDDED / EMBEDMENT	SQ	SQUARE
ENGR	ENGINEER	STD	STANDARD
EOD	EDGE OF DECK	STIFF	STIFFENER
EOS	EDGE OF SLAB	STIRR	STIRRUP(S)
EQ	EQUAL	STL	STEEL
EQUIP	EQUIPMENT	STR	STRUCTURAL
EW	EACH WAY	T/	TOP
EXIST	EXISTING	TCX	TOP CHORD EXTENSION
EXP	EXPANSION	TOC	TOP CHORD CONCRETE
EXT	EXTERIOR	TOF	TOP OF FOOTING
FDN	FOUNDATION	TOS	TOP OF STEEL
FFE	FINISHED FLOOR ELEVATION	TOW	TOP OF WALL
FOM	FACE OF MASONRY	TYP	TYPICAL
FOW	FACE OF WALL	UNO	UNLESS NOTED OTHERWISE
FS	FAR SIDE	VERT	VERTICAL
FTG	FOOTING	VIF	VERIFY IN FIELD
GA	GAUGE	W/	WITH
GALV	GALVANIZED	WWF	WELDED WIRE FABRIC
GT	GIRDER TRUSS	WP	WORK POINT

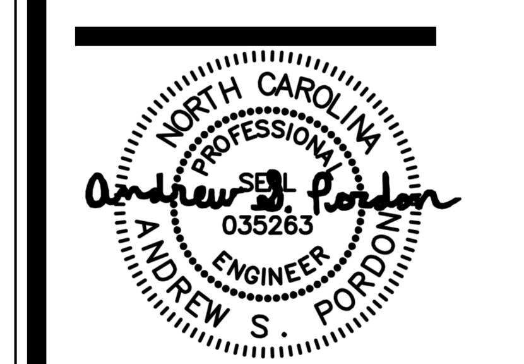
SYMBOL LEGEND

SYMBOL	MEANING
	SPOT ELEVATION. ELEVATION RELATIVE TO REFERENCE ELEVATION.
<No>	TOP OF FOOTING, GRADE BEAM, PILE CAP, OR DRILLED PIER. ELEVATION RELATIVE TO REFERENCE ELEVATION.
<No> <No>	STEP IN TOP OF FOOTING ELEVATION, SEE "TYPICAL STEP IN WALL FOOTING" DETAIL. ELEVATION RELATIVE TO REFERENCE ELEVATION.
No	DEPRESSED OR RAISED SLAB ELEVATION, SEE "TYPICAL STEP IN SLAB ON GRADE" DETAIL. ELEVATION RELATIVE TO REFERENCE ELEVATION.
[No]	TOP OF WALL OR PEDESTAL. ELEVATION RELATIVE TO REFERENCE ELEVATION.
(No) | [+No]	TOP OF STEEL/JOIST BEARING ELEVATION | TOP OF STEEL ABOVE STEEL/JOIST BEARING ELEVATION.
	SLOPED | STEPPED SLAB.
F#	SPREAD FOOTING TYPE, SEE SCHEDULE.
P#	CONCRETE PEDESTAL TYPE, SEE SCHEDULE.
GB# WxD	CONCRETE GRADE BEAM TYPE, SEE SCHEDULE. "W" INDICATES BEAM WIDTH AND "D" INDICATES BEAM DEPTH (IN INCHES).
HP#	HAIR PIN ROD TYPE, SEE SCHEDULE.
MP#	MASONRY PILASTER TYPE, SEE "TYPICAL MASONRY PILASTERS" DETAIL.
ML#	MASONRY LINTEL TYPE, SEE "TYPICAL LOAD BEARING LINTELS" DETAIL.
BP#	STEEL BEARING PLATE TYPE, SEE "TYPICAL STEEL BEAM BEARING" DETAIL.
MSW#	MASONRY SHEAR WALL TYPE, SEE SCHEDULE.
D1	SPAN DIRECTION OF METAL ROOF DECK, SEE "TYPICAL 1 1/2" METAL ROOF DECK" DETAIL. CONSTRUCTION SHALL BE 1 1/2"-22GA METAL ROOF DECK.
D2	SPAN DIRECTION OF METAL ROOF DECK, SEE "TYPICAL 3" METAL ROOF DECK" DETAIL. CONSTRUCTION SHALL BE 3"-18GA METAL ROOF DECK.
W10	COMPOSITE W10x15 STEEL BEAM WITH HEADED STUDS @24"OC.
W12	COMPOSITE W12x16 STEEL BEAM WITH HEADED STUDS @24"OC.
	STEEL BEAM MOMENT CONNECTION.
SSW#	METAL STUD SHEAR WALL TYPE, SEE SHEET S6.3.
C#	WOOD COLUMN TYPE, SEE SCHEDULE. ALL COLUMNS ARE TO BE EXTENDED TO THE FOUNDATION WHETHER SHOWN ON PLAN OR NOT.
H#	METAL STUD HEADER TYPE, SEE SCHEDULE.

OCA OAKLEY COLLIER ARCHITECTS
109 Candlewood Road, Rocky Mount, NC 27804 (P) 252.937.2500
1111 Haynes Street, Suite 109, Raleigh, NC 27604 (P) 919.985.7700

STEWART
223 S. WEST STREET SUITE 1100 RALEIGH, NC 27603
T 919.380.8750 FIRM LICENSE #C-1051 PROJECT #S22222

BID SET
TOWN OF NASHVILLE
FIRESTATION NO. 2
1200 EAST WASHINGTON ST
NASHVILLE, NC 27856



5/12/2023

GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

REVISIONS
Description Date

Date 5/15/2023
Project No. 22021.1
Drawn By KAB
Checked By ASP
Sheet No. S0.2

Sheet Title
GENERAL NOTES, ABBREVIATIONS, AND SYMBOLS LEGEND

STATEMENT OF SPECIAL INSPECTIONS

THIS STATEMENT OF SPECIAL INSPECTIONS IS SUBMITTED AS A CONDITION FOR PERMIT ISSUANCE IN ACCORDANCE WITH THE SPECIAL INSPECTION REQUIREMENTS OF THE INTERNATIONAL BUILDING CODE. IT INCLUDES A SCHEDULE OF SPECIAL INSPECTION SERVICES APPLICABLE TO THIS PROJECT, THE NAME OF THE SPECIAL INSPECTOR, THE IDENTITY OF OTHER APPROVED AGENCIES RETAINED FOR CONDUCTING SPECIAL INSPECTIONS, AND THE REQUIRED INSPECTOR QUALIFICATIONS. THIS STATEMENT OF SPECIAL INSPECTIONS WAS PREPARED BY THE DESIGNERS OF RECORD.

THE SPECIAL INSPECTOR SHALL KEEP RECORDS OF ALL SPECIAL INSPECTIONS AND TESTS AND SHALL FURNISH REPORTS TO THE CONTRACTOR, OWNER, AND THE DESIGNERS OF RECORD. REPORTS SHALL INDICATE IF THE WORK INSPECTED OR TESTED WAS OR WAS NOT COMPLETED IN CONFORMANCE WITH THE APPROVED CONSTRUCTION DOCUMENTS. DISCOVERED DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF SUCH DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE OWNER AND THE DESIGNERS OF RECORD. THE SPECIAL INSPECTIONS PROGRAM DOES NOT RELIEVE THE CONTRACTOR OF HIS OR HER RESPONSIBILITIES. JOB SITE SAFETY AND MEANS AND METHODS OF CONSTRUCTION ARE SOLELY THE RESPONSIBILITY OF THE CONTRACTOR.

MONTHLY INTERIM REPORTS SHALL BE SUBMITTED TO THE CONTRACTOR, OWNER, AND THE DESIGNERS OF RECORD. A FINAL REPORT OF SPECIAL INSPECTIONS DOCUMENTING COMPLETION OF ALL REQUIRED SPECIAL INSPECTIONS, TESTING, AND CORRECTION OF ANY DISCREPANCIES SHOULD BE SUBMITTED PRIOR TO ISSUANCE OF A CERTIFICATE OF USE AND OCCUPANCY.

PROJECT INFORMATION

CODE ENFORCEMENT PROJECT #:	---		
PERMIT #:	---		
PROJECT NAME:	TOWN OF NASHVILLE - FIRE STATION NO. 2		
PROJECT ADDRESS:	1200 EAST WASHINGTON ST | NASHVILLE, NC 27856		
OWNER:	TOWN OF NASHVILLE		
OWNER ADDRESS:	---		
SPECIAL INSPECTOR OF RECORD:	TBD		
SPECIAL INSPECTOR ADDRESS:	---		

DESIGN TEAM

STRUCTURAL (RDPIRC) FIRM:	STEWART	ENGINEER OF RECORD:	ANDREW PORDON, PE
ARCHITECTURAL FIRM:	OAKLEY COLLIER ARCHITECTS	ARCHITECT OF RECORD:	---, AIA
MECHANICAL FIRM:	ATLANTEC ENGINEERS	ENGINEER OF RECORD:	---, PE

SCHEDULE OF SPECIAL INSPECTIONS

THE INSPECTION AND TESTING AGENTS SHALL BE ENGAGED BY THE OWNER OR THE REGISTERED DESIGN PROFESSIONAL IN RESPONSIBLE CHARGE ACTING AS THE OWNER'S AGENT, AND NOT BY THE CONTRACTOR OR SUBCONTRACTOR WHOSE WORK IS TO BE INSPECTED OR TESTED. ANY CONFLICT OF INTEREST MUST BE DISCLOSED TO THE OWNER, PRIOR TO COMMENCING WORK.

PRIOR TO STARTING WORK THE OWNER SHALL BE PROVIDED WITH THE NAME AND RESUME FOR THE DESIGNATED SPECIAL INSPECTOR FOR THE PROJECT. THE DESIGNATED SPECIAL INSPECTOR SHALL BE A PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT LICENSED IN THE STATE IN WHICH THE PROJECT IS LOCATED AND BE APPROVED BY THE OWNER. INDIVIDUALS PROVIDING INSPECTIONS SHALL MEET THE FOLLOWING MINIMUM CRITERIA OF CERTIFICATION AND/OR DOCUMENTED EXPERIENCE. WORK EXPERIENCE MUST BE RELATED TO THE FIELD FOR WHICH THE INSPECTOR IS BEING UTILIZED. WORK EXPERIENCE MAY BE GAINED BY WORKING FOR AN INSPECTION/TESTING AGENCY, AN ENGINEERING FIRM, OR A CONTRACTOR AS A TECHNICIAN, INSPECTOR OR ENGINEER.

THE DESIGNATED SPECIAL INSPECTOR SHALL BE RESPONSIBLE FOR COLLECTING AND APPROVING DOCUMENTATION OF QUALIFICATIONS FOR ALL INSPECTORS. COPIES OF DOCUMENTATION OF QUALIFICATIONS, INCLUDING THE QUALIFICATIONS OF THE INDEPENDENT TESTING LABORATORY IF THEY ARE PROVIDING SPECIAL INSPECTION SERVICES, SHALL BE MAINTAINED BY THE SPECIAL INSPECTOR AND BE MADE AVAILABLE FOR OWNER REVIEW AS REQUESTED.

THE FOLLOWING TABLES COMPRISE THE REQUIRED SCHEDULE OF SPECIAL INSPECTIONS FOR THIS PROJECT. THE INSPECTION FREQUENCY INDICATED ON THE TABLES ARE "C" CONTINUOUS, "P" PERIODIC, AND "O" RANDOMIZED ON A DAILY BASIS. THE CONSTRUCTION DIVISIONS WHICH REQUIRE SPECIAL INSPECTIONS FOR THIS PROJECT ARE AS FOLLOWS:

REQD	ITEM	DIVISION	PRIMARY INSPECTOR/SUPERVISOR
☐	IT-1	SPECIAL CASES AND SPECIFIC ELEMENTS ALWAYS REQUIRED	AS IDENTIFIED BY THE RDPIRC
☒	IT-2A	STRUCTURAL STEEL AND HIGH-STRENGTH BOLTING	ICC STRUCTURAL STEEL AND BOLTING INSPECTOR CERTIFICATE (PLUS ONE YEAR OF RELATED EXPERIENCE)
☒	IT-2B	WELDING OF STRUCTURAL STEEL	ICC STRUCTURAL WELDING SPECIAL INSPECTOR CERTIFICATE (PLUS ONE YEAR OF RELATED EXPERIENCE), OR AWS D1.1 CERTIFIED WELDING INSPECTOR, OR NDT LEVEL III CERTIFICATE
☒	IT-2C	COLD-FORMED STEEL DECKING	ICC STRUCTURAL STEEL AND BOLTING INSPECTOR CERTIFICATE (PLUS ONE YEAR OF RELATED EXPERIENCE), OR ICC STRUCTURAL WELDING SPECIAL INSPECTOR CERTIFICATE (PLUS ONE YEAR OF RELATED EXPERIENCE), OR ICC COMMERCIAL BUILDING INSPECTOR CERTIFICATE (PLUS ONE YEAR OF RELATED EXPERIENCE)
☐	IT-2D	OPEN-WEB STEEL JOISTS AND JOIST GIRDERS	ICC STRUCTURAL STEEL AND BOLTING INSPECTOR CERTIFICATE (PLUS ONE YEAR OF RELATED EXPERIENCE)
☒	IT-2E	COLD-FORMED STEEL FRAMING	ICC STRUCTURAL STEEL AND BOLTING INSPECTOR CERTIFICATE (PLUS ONE YEAR OF RELATED EXPERIENCE), OR ICC STRUCTURAL WELDING SPECIAL INSPECTOR CERTIFICATE (PLUS ONE YEAR OF RELATED EXPERIENCE), OR ICC COMMERCIAL BUILDING INSPECTOR CERTIFICATE (PLUS ONE YEAR OF RELATED EXPERIENCE)
☒	IT-3	CONCRETE CONSTRUCTION	ICC REINFORCED CONCRETE SPECIAL INSPECTOR CERTIFICATE AND ACI CONCRETE FIELD TESTING TECHNICIAN CERTIFICATE, GRADE 1, OR ACI CONCRETE CONSTRUCTION SPECIAL INSPECTOR CERTIFICATE, OR NICET CONCRETE TECHNICIAN LEVEL III CERTIFICATE IN CONSTRUCTION MATERIALS TESTING
☒	IT-4	MASONRY CONSTRUCTION	ICC STRUCTURAL MASONRY SPECIAL INSPECTOR CERTIFICATE (PLUS ONE YEAR OF RELATED EXPERIENCE)
☒	IT-5	WOOD CONSTRUCTION	ICC COMMERCIAL BUILDING INSPECTOR CERTIFICATE (PLUS ONE YEAR OF RELATED EXPERIENCE)
☒	IT-6	SOILS	NICET SOILS TECHNICIAN LEVEL II CERTIFICATE IN CONSTRUCTION MATERIALS TESTING, OR NICET GEOTECHNICAL ENGINEERING TECHNICIAN LEVEL II CONSTRUCTION OR GENERALIST CERTIFICATE, OR ICC SOILS SPECIAL INSPECTOR CERTIFICATE (PLUS ONE YEAR OF RELATED EXPERIENCE), OR ENGINEER-IN-TRAINING (EIT) WITH ONE YEAR OF RELATED EXPERIENCE, OR GEOLOGIST-IN-TRAINING (GIT) WITH ONE YEAR OF RELATED EXPERIENCE
☐	IT-7	DRIVEN DEEP FOUNDATIONS	NICET SOILS TECHNICIAN LEVEL II CERTIFICATE IN CONSTRUCTION MATERIALS TESTING, OR NICET GEOTECHNICAL ENGINEERING TECHNICIAN LEVEL II CONSTRUCTION OR GENERALIST CERTIFICATE, OR ENGINEER-IN-TRAINING (EIT) WITH ONE YEAR OF RELATED EXPERIENCE, OR GEOLOGIST-IN-TRAINING (GIT) WITH ONE YEAR OF RELATED EXPERIENCE
☐	IT-8	CAST-IN-PLACE DEEP FOUNDATIONS	SEE IT-7
☐	IT-9A	HELICAL PILE FOUNDATIONS	SEE IT-7
☐	IT-9B	RAMMED AGGREGATE PIERS AND STONE COLUMNS	SEE IT-7
☒	IT-10	FABRICATED ITEMS	AS NOTED HEREIN FOR EACH COMPONENT TYPE
☐	IT-11	WIND RESISTANCE	AS NOTED HEREIN FOR EACH COMPONENT TYPE
☒	IT-12	SEISMIC RESISTANCE	AS NOTED HEREIN FOR EACH COMPONENT TYPE
☐	IT-13A	SEISMIC RESISTANCE, STRUCTURAL STEEL AND HIGH-STRENGTH BOLTING	AS NOTED HEREIN FOR EACH COMPONENT TYPE
☐	IT-13B	SEISMIC RESISTANCE, WELDING OF STRUCTURAL STEEL	AS NOTED HEREIN FOR EACH COMPONENT TYPE
☐	IT-13C	SEISMIC RESISTANCE, NON-DESTRUCTIVE TESTING OF WELDED JOINTS	AS NOTED HEREIN FOR EACH COMPONENT TYPE
☐	IT-13D	SEISMIC RESISTANCE, STEEL DRIVEN DEEP FOUNDATIONS (H-PILES)	AS NOTED HEREIN FOR EACH COMPONENT TYPE
☐	IT-14	SPRAYED FIRE-RESISTANT MATERIALS	ICC SPRAY-APPLIED FIREPROOFING SPECIAL INSPECTOR CERTIFICATE, OR ICC FIRE INSPECTOR I CERTIFICATE (PLUS ONE YEAR OF RELATED EXPERIENCE)
☐	IT-15	MASTIC AND INTUMESCENT FIRE-RESISTANT COATINGS	SEE IT-14
☐	IT-16	EXTERIOR INSULATION AND FINISH SYSTEMS (EIFS)	AWCI EIFS INSPECTOR CERTIFICATE
☒	IT-17	FIRE-RESISTANT PENETRATIONS AND JOINTS	ICC FIRE INSPECTOR I CERTIFICATE (PLUS ONE YEAR OF RELATED EXPERIENCE)
☐	IT-18	SMOKE CONTROL	REGISTERED PROFESSIONAL ENGINEER (MECHANICAL OR FIRE PROTECTION) AND CERTIFICATION AS AIR BALANCER, OR AABC TECHNICIAN CERTIFICATION (PLUS ONE YEAR OF RELATED EXPERIENCE)

IT-2A: STRUCTURAL STEEL AND HIGH-STRENGTH BOLTING

INSPECTION TASK	FREQ	REFERENCE
1. FABRICATOR CERTIFICATION/VERIFICATION OF QUALITY CONTROL PROCEDURES		
A. VERIFY FABRICATOR QUALIFICATIONS.	C	IBC 1704.2.5.1
B. REVIEW MATERIAL TEST REPORTS AND CERTIFICATIONS.	C	AISC 360 N5.2
C. COLLECT CERTIFICATES OF COMPLIANCE FROM THE STEEL FABRICATOR AT COMPLETION OF FABRICATION.	C	IBC 1704.5
2. INSPECTIONS PRIOR TO HIGH-STRENGTH BOLTING AT PRE-TENSIONED AND SLIP-CRITICAL JOINTS:		
A. COLLECT MANUFACTURER'S CERTIFICATIONS FOR FASTENER MATERIALS.	C	AISC 360 TABLE N5.6-1
B. VERIFY FASTENERS ARE MARKED PER ASTM REQUIREMENTS.	P	AISC 360 TABLE N5.6-1
C. ENSURE CORRECT FASTENERS AND BOLTING PROCEDURES ARE SELECTED FOR JOINT DETAILS VERIFY GRADE, TYPE, AND BOLT LENGTH (IF THREADS ARE TO BE EXCLUDED FROM SHEAR PLANE).	P	AISC 360 TABLE N5.6-1
D. VERIFY CONNECTING ELEMENTS, INCLUDING THE APPROPRIATE FAYING SURFACE CONDITION AND HOLE PREPARATION (WHEN SPECIFIED), COMPLY WITH THE CONTRACT DOCUMENTS.	P	AISC 360 TABLE N5.6-1
E. OBSERVE AND DOCUMENT PRE-INSTALLATION VERIFICATION TESTING BY INSTALLATION PERSONNEL FOR FASTENER ASSEMBLIES AND METHODS.	P	AISC 360 TABLE N5.6-1
F. VERIFY THE PROTECTED STORAGE FOR BOLTS, NUTS, WASHERS, AND OTHER FASTENER COMPONENTS.	P	AISC 360 TABLE N5.6-1
3. INSPECTIONS DURING HIGH-STRENGTH BOLTING AT PRE-TENSIONED AND SLIP-CRITICAL JOINTS:		
A. ENSURE CORRECT FASTENER ASSEMBLIES PLACED IN ALL HOLES AND WASHERS/NUTS (WHEN SPECIFIED) ARE POSITIONED AS REQUIRED.	P	AISC 360 TABLE N5.6-2
B. VERIFY JOINT BROUGHT TO SNUG-TIGHT CONDITION PRIOR TO PRE-TENSIONING.	P	AISC 360 TABLE N5.6-2
C. VERIFY FASTENER COMPONENTS NOT TURNED BY THE WRENCH PREVENTED FROM ROTATING.	P	AISC 360 TABLE N5.6-2
D. ENSURE FASTENERS ARE PRE-TENSIONED IN ACCORDANCE WITH RCSC, PROGRESSING FROM THE MOST RIGID POINT TOWARDS FREE EDGES.	P	AISC 360 TABLE N5.6-2
4. DOCUMENT ACCEPTANCE OR REJECTION OF BOLTED CONNECTIONS AFTER HIGH-STRENGTH BOLTING IS COMPLETE.	C	AISC 360 TABLE N5.6-3
5. STRUCTURAL DETAILS		
A. VERIFY DIAMETER, GRADE, TYPE, AND LENGTH OF ANCHOR RODS AND OTHER EMBEDDED ITEMS. THE EXTENT OR DEPTH OF EMBEDMENT INTO THE CONCRETE SHALL BE VERIFIED AND DOCUMENTED PRIOR TO PLACEMENT OF CONCRETE.	P	AISC 360 N5.7
B. INSPECT THE FABRICATED STEEL OR ERECTED STEEL FRAME TO VERIFY COMPLIANCE WITH THE DETAILS SHOWN ON THE CONTRACT DOCUMENTS.	P	AISC 360 N5.7

IT-2B: WELDING OF STRUCTURAL STEEL

INSPECTION TASK	FREQ	REFERENCE
1. INSPECTIONS PRIOR TO WELDING:		AISC 360 N5.4
A. COLLECT AND REVIEW WELDING PROCEDURE SPECIFICATION (WPS) AND VERIFY MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES.	C	AISC 360 TABLE N5.4-1
B. CONFIRM WELD MATERIAL TYPE AND GRADE.	P	AISC 360 TABLE N5.4-1
C. CONFIRM METHOD OF WELDER IDENTIFICATION. REVIEW WELDER QUALIFICATION AND CONTINUITY RECORDS.	P	AISC 360 TABLE N5.4-1
D. INSPECT FIT-UP FOR GROOVE AND FILLET WELDS, INCLUDING JOINT GEOMETRY.	P	AISC 360 TABLE N5.4-1
E. INSPECT FIT-UP FOR CJP GROOVE WELDS OF HSS T-, Y-, AND K- JOINTS WITHOUT BACKING, INCLUDING JOINT GEOMETRY.	P	AISC 360 TABLE N5.4-1
F. INSPECT CONFIGURATION AND FINISH OF ACCESS HOLES.	P	AISC 360 TABLE N5.4-1
G. CHECK WELDING EQUIPMENT.	C	AISC 360 TABLE N5.4-1
2. INSPECTIONS DURING WELDING:		AISC 360 N5.4
A. VERIFY WELDER QUALIFICATIONS.	P	AISC 360 TABLE N5.4-2
B. VERIFY PROPER CONTROL AND HANDLING OF WELDING CONSUMABLES, INCLUDING PACKAGING AND EXPOSURE.	P	AISC 360 TABLE N5.4-2
C. MONITOR THAT ENVIRONMENTAL CONDITIONS, INCLUDING WIND SPEED, PRECIPITATION AND TEMPERATURE, ARE WITHIN DEFINED LIMITS.	P	AISC 360 TABLE N5.4-2
D. MONITOR PROPER IMPLEMENTATION OF WPS, INCLUDING SETTINGS ON WELDING EQUIPMENT, TRAVEL SPEED, SELECTED WELDING MATERIALS, SHIELDING GAS TYPE/FLOW RATE, PREHEAT APPLIED, INTERPASS TEMPERATURE MAINTAINED, AND PROPER POSITION.	P	AISC 360 TABLE N5.4-2
E. INSPECT WELDING TECHNIQUES, INCLUDING INTERPASS AND FINAL CLEANING, EACH PASS WITHIN PROFILE LIMITATIONS, EACH PASS MEETING QUALITY REQUIREMENTS, AND NO WELDING OVER CRACKED TACK WELDS.	P	AISC 360 TABLE N5.4-2
F. INSPECT PLACEMENT AND INSTALLATION OF STEEL HEADED STUD ANCHORS.	C	AISC 360 TABLE N5.4-2
3. INSPECTIONS AFTER WELDING:		AISC 360 N5.4, N5.5
A. VERIFY WELDS HAVE BEEN CLEANED.	P	AISC 360 TABLE N5.4-3
B. CONFIRM THE INSTALLED SIZE, LENGTH, AND LOCATION OF WELDS MATCHES THE CONTRACT DOCUMENTS.	C	AISC 360 TABLE N5.4-3
C. VERIFY WELDS MEET VISUAL ACCEPTANCE CRITERIA, INCLUDING CRACK PROHIBITION, WELD/BASE-METAL FUSION, CRATER CROSS SECTION, WELD PROFILES, WELD SIZE, UNDERCUT, AND POROSITY.	C	AISC 360 TABLE N5.4-3
D. CONFIRM ARC STRIKES COMPLY WITH PART 5.28 OF AWS D1.1.	C	AISC 360 TABLE N5.4-3
E. VISUALLY OBSERVE WEB K-AREA FOR CRACKS WITHIN 3" OF WELDED DOUBLER PLATES, CONTINUITY PLATES, AND STIFFENERS.	C	AISC 360 TABLE N5.4-3
F. INSPECT WELD ACCESS HOLES IN ROLLED HEAVY SHAPES AND BUILT-UP HEAVY SHAPES FOR CRACKS.	C	AISC 360 TABLE N5.4-3
G. FOR RISK CATEGORY III OR IV STRUCTURES, CONDUCT ULTRASONIC TESTING (UT) OF CJP GROOVE WELDS IN MATERIALS ≥ 5/16" AT BUTT, T-, AND CORNER JOINTS SUBJECT TO TRANSVERSELY APPLIED TENSION LOADING.	C	AISC 360 N5.5b, N5.5e
H. FOR RISK CATEGORY II STRUCTURES, CONDUCT ULTRASONIC TESTING (UT) OF CJP GROOVE WELDS IN MATERIALS ≥ 5/16" AT BUTT, T-, AND CORNER JOINTS SUBJECT TO TRANSVERSELY APPLIED TENSION LOADING.	P	AISC 360 N5.5b, N5.5f
I. CONDUCT MAGNETIC PARTICLE TESTING (MT) OR LIQUID PENETRANT TESTING (PT) AT THERMALLY CUT SURFACES OF ACCESS HOLES FOR ROLLED SECTIONS WITH tf > 2" AND BUILT-UP SHAPES WITH tw > 2".	C	AISC 360 N5.5c
J. PROVIDE RADIOGRAPHIC/ULTRASONIC INSPECTION AT JOINTS SUBJECT TO FATIGUE.	C	AISC 360 N5.5d, TABLE A-3.1
K. VERIFY BACKING AND WELD TABS ARE REMOVED (AS REQUIRED) PER CONTRACT DOCUMENTS.	C	AISC 360 TABLE N5.4-3
L. OBSERVE AND INSPECT WELD REPAIR ACTIVITIES.	C	AISC 360 TABLE N5.4-3
M. DOCUMENT ACCEPTANCE/REJECTION OF WELDED JOINTS AND MEMBERS.	C	AISC 360 TABLE N5.4-3, N5.5g

IT-2C: COLD-FORMED STEEL DECKING

INSPECTION TASK	FREQ	REFERENCE
1. PRIOR TO DECK PLACEMENT, VERIFY DECK AND ACCESSORIES (INCLUDING PROFILES, MATERIAL PROPERTIES, AND BASE MATERIAL THICKNESS) COMPLY WITH THE CONTRACT DOCUMENTS. DOCUMENT ACCEPTANCE OR REJECTION OF DECK AND DECK ACCESSORIES.	C	SDI QA/QC TABLE 1.1
2. INSPECTION TASKS AFTER DECK PLACEMENT:		
A. VERIFY THE INSTALLATION OF DECK AND ACCESSORIES COMPLIES WITH THE CONTRACT DOCUMENTS.	C	SDI QA/QC TABLE 1.2
B. VERIFY THAT DECK MATERIAL MILL CERTIFICATIONS COMPLY WITH THE CONTRACT DOCUMENTS.	C	SDI QA/QC TABLE 1.2
C. DOCUMENT ACCEPTANCE OR REJECTION OF DECK AND DECK ACCESSORIES.	C	SDI QA/QC TABLE 1.2
3. INSPECTION TASKS PRIOR TO DECK WELDING:		
A. COLLECT WELDING PROCEDURE SPECIFICATION (WPS).	P	SDI QA/QC TABLE 1.3
B. COLLECT MANUFACTURER CERTIFICATIONS FOR WELDING CONSUMABLES.	P	SDI QA/QC TABLE 1.3
C. VERIFY MATERIAL TYPE AND GRADE.	P	SDI QA/QC TABLE 1.3
D. CHECK WELDING EQUIPMENT.	P	SDI QA/QC TABLE 1.3
4. INSPECTION TASKS DURING DECK WELDING:		
A. VERIFY WELDER QUALIFICATIONS.	P	SDI QA/QC TABLE 1.4
B. VERIFY PROPER CONTROL AND HANDLING OF WELDING CONSUMABLES.	P	SDI QA/QC TABLE 1.4
C. MONITOR ENVIRONMENTAL CONDITIONS.	P	SDI QA/QC TABLE 1.4
D. MONITOR PROPER IMPLEMENTATION OF WPS.	P	SDI QA/QC TABLE 1.4
5. INSPECTION TASKS AFTER DECK WELDING:		
A. VERIFY SIZE AND LOCATION OF WELDS, INCLUDING SUPPORT, SIDELAP AND PERIMETER WELDS.	C	SDI QA/QC TABLE 1.5
B. VERIFY WELDS MEET VISUAL ACCEPTANCE CRITERIA.	C	SDI QA/QC TABLE 1.5
C. OBSERVE WELD REPAIR ACTIVITIES.	C	SDI QA/QC TABLE 1.5
D. DOCUMENT ACCEPTANCE OR REJECTION OF DECK AND DECK ACCESSORIES.	C	SDI QA/QC TABLE 1.5
6. INSPECTION TASKS PRIOR TO MECHANICAL FASTENING:		
A. VERIFY MANUFACTURER INSTALLATION INSTRUCTIONS AVAILABLE FOR MECHANICAL FASTENERS.	P	SDI QA/QC TABLE 1.6
B. VERIFY PROPER TOOLS AVAILABLE FOR FASTENER INSTALLATION.	P	SDI QA/QC TABLE 1.6
C. VERIFY PROPER STORAGE OF MECHANICAL FASTENERS.	P	SDI QA/QC TABLE 1.6
7. INSPECTION TASKS DURING MECHANICAL FASTENING:		
A. OBSERVE FASTENER SPACING AND POSITION.	P	SDI QA/QC TABLE 1.7
B. VERIFY FASTENERS ARE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS.	P	SDI QA/QC TABLE 1.7
8. INSPECTION TASKS AFTER MECHANICAL FASTENING:		
A. VERIFY SPACING, TYPE AND INSTALLATION OF SUPPORT, SIDELAP, AND PERIMETER FASTENERS.	C	SDI QA/QC TABLE 1.8
B. VERIFY REPAIR ACTIVITIES.	C	SDI QA/QC TABLE 1.8
C. DOCUMENT ACCEPTANCE OR REJECTION OF DECK AND DECK ACCESSORIES.	C	SDI QA/QC TABLE 1.8

IT-2E: COLD-FORMED STEEL FRAMING

INSPECTION TASK	FREQ	REFERENCE
1. FABRICATOR CERTIFICATION/VERIFICATION OF QUALITY CONTROL PROCEDURES		
A. VERIFY FABRICATOR QUALIFICATIONS.	C	IBC 1704.2.5.1
B. COLLECT CERTIFICATES OF COMPLIANCE FROM THE STEEL FABRICATOR AT COMPLETION OF FABRICATION.	C	IBC 1704.5
2. FOR TRUSSES CLEAR SPANNING 60 FEET OR MORE, VERIFY THAT THE TEMPORARY INSTALLATION RESTRAINT/BRACING AND THE PERMANENT INDIVIDUAL TRUSS MEMBER RESTRAINT/BRACING ARE INSTALLED IN ACCORDANCE WITH THE APPROVED TRUSS SUBMITTAL PACKAGE.	P	IBC 1705.2.4

IT-3: CONCRETE CONSTRUCTION

	INSPECTION TASK	FREQ	REFERENCE
☒	1. INSPECT REINFORCEMENT, INCLUDING POST-TENSIONING TENDONS (IF APPLICABLE), AND VERIFY PLACEMENT.	P	IBC 1908.4 | ACI 318 20, 25.2, 25.3, 26.6.1-26.6.3
☒	2. REINFORCING BAR WELDING:		
	A. VERIFY WELDABILITY OF REINFORCING BARS OTHER THAN ASTM A706 AND COLLECT REPORTS.	P	IBC 1704.5 | ACI 318 26.6.4
	B. INSPECT SINGLE-PASS FILLET WELDS ≤ 5/16".	P	ACI 318 26.6.4
	C. INSPECT ALL WELDS OTHER THAN SINGLE-PASS FILLET WELDS ≤ 5/16".	C	ACI 318 26.6.4
☒	3. CONCRETE ANCHORS:		
	A. INSPECT ANCHORS CAST IN CONCRETE.	P	ACI 318 17.8.2
	B. INSPECT ADHESIVE ANCHORS INSTALLED IN HARDENED CONCRETE WITH HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS THAT RESIST SUSTAINED TENSION LOADS. PERIODIC INSPECTION REQUIRED FOR ALL OTHER CONDITIONS.	C	ACI 318 17.8.2, 17.8.2.4
	C. INSPECT MECHANICAL ANCHORS INSTALLED IN HARDENED CONCRETE.	P	ACI 318 17.8.2
☒	4. COLLECT MIX DESIGNS AND VERIFY THE CORRECT MIX USED DURING INSTALLATION.	P	IBC 1904.1, 1904.2, 1908.2, 1908.3 ACI 318 19, 26.4.3, 26.4.4
☒	5. PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	C	IBC 1908.10 | ACI 318 26.4, 26.12 ASTM C31, C172
☒	6. INSPECT CONCRETE AND SHOTCRETE (IF APPLICABLE) PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	C	IBC 1908.6-1908.8 | ACI 318 26.5
☐	7. COLLECT REPORTS OF PRECONSTRUCTION TESTS FOR SHOTCRETE WHEN PRECONSTRUCTION TESTS ARE REQUIRED BY IBC 1908.4.	C	IBC 1704.5, 1908.5
☒	8. VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	P	IBC 1908.9 | ACI 318 26.5.3-26.5.5
☐	9. INSPECTIONS FOR POST-TENSIONED CONCRETE:		
	A. OBSERVE APPLICATION OF POST-TENSIONING FORCE.	C	ACI 318 26.10
	B. INSPECT GROUTING OF BONDED POST-TENSIONING TENDONS.	C	ACI 318 26.10
☐	10. VERIFY CONCRETE STRENGTH PRIOR TO STRESSING OF POST-TENSIONING TENDONS AND PRIOR TO REMOVAL OF SHORES AND FORMS FROM POST-TENSIONED/MILD BEAMS AND STRUCTURAL SLABS.	P	ACI 318 26.11.2
☐	11. INSPECT ERECTION OF PRECAST MEMBERS.	P	ACI 318 26.9
☒	12. INSPECT FORMWORK FOR SHAPE, LOCATION, AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	P	ACI 318 26.11.1.2(b)
☐	13. COLLECT MILL TEST REPORTS FOR ASTM A615 REBAR USED IN SPECIAL REINFORCED CONCRETE MOMENT FRAMES AND SPECIAL REINFORCED CONCRETE SHEAR WALLS.	C	IBC 1704.5 | ACI 318 20.2.2.5

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BID SET

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NORTH CAROLINA PROFESSIONAL SEAL 035263 ENGINEER ANDREW S. PORDON
Andrew S. Pordon
5/12/2023

GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

Date	Project No.
5/15/2023	22021.1
Drawn By: KAB	Sheet No.: S0.3
Checked By: ASP	

Sheet Title: SPECIAL INSPECTIONS

IT-4: MASONRY CONSTRUCTION (LEVEL B)		
INSPECTION TASK	FREQ	REFERENCE
1. TEST AND VERIFY SLUMP FLOW AND VISUAL STABILITY INDEX AS DELIVERED TO SITE FOR SELF-CONSOLIDATING GROUT.	C	ACI 530 TABLE 3.1.2 | ACI 530.1 1.5B.1.b.3
2. TEST AND VERIFY f'_m AND f'_{AAC} PRIOR TO CONSTRUCTION.	C	ACI 530 TABLE 3.1.2 | ACI 530.1 1.4B
3. VERIFY COMPLIANCE WITH THE APPROVED SUBMITTALS.	P	ACI 530 TABLE 3.1.2 | ACI 530.1 1.5
4. AS MASONRY CONSTRUCTION BEGINS, VERIFY COMPLIANCE FOR THE FOLLOWING:		
A. PROPORTIONS OF SITE-PREPARED MORTAR.	P	ACI 530.1 2.1, 2.6A
B. CONSTRUCTION OF MORTAR JOINTS.	P	ACI 530.1 3.3B
C. LOCATION OF REINFORCEMENT AND CONNECTORS.	P	ACI 530.1 3.4, 3.6A
D. PROPERTIES OF THIN-BED MORTAR FOR AAC MASONRY. CONTINUOUS INSPECTION REQUIRED FOR FIRST 5,000 SF.	P	ACI 530.1 2.1C
5. PRIOR TO GROUT, VERIFY COMPLIANCE FOR THE FOLLOWING:		
A. GROUT SPACE IS CLEAN, AND CLEANOUTS ARE PROVIDED WHEN REQUIRED.	P	ACI 530.1 3.2D, 3.2F
B. GRADE, TYPE, AND SIZE OF REINFORCEMENT AND ANCHOR BOLTS.	P	ACI 530 6.1 | ACI 530.1 2.4, 3.4
C. PLACEMENT OF REINFORCEMENT AND CONNECTORS.	P	ACI 530 6.1, 6.2.1, 6.2.6, 6.2.7 ACI 530.1 3.2E, 3.4, 3.6A
D. PROPORTIONS OF SITE-PREPARED MORTAR AND GROUT.	P	ACI 530.1 2.4G.1b, 2.6B
E. CONSTRUCTION AND SIZE OF MORTAR JOINTS.	P	ACI 530.1 3.3B
6. DURING CONSTRUCTION, VERIFY COMPLIANCE FOR THE FOLLOWING:		
A. SIZE AND LOCATION OF STRUCTURAL ELEMENTS.	P	ACI 530.1 3.3F
B. TYPE, SIZE, AND LOCATION OF ANCHORS INCLUDING OTHER DETAILS OF ANCHORAGE OF MASONRY TO STRUCTURAL MEMBERS, FRAMES, OR OTHER CONSTRUCTION.	P	ACI 530 1.2.1(e), 6.1.4.3, 6.2.1
C. WELDING OF REINFORCEMENT.	C	ACI 530 8.1.6.7.2, 9.3.3.4(c), 11.3.3.4(b)
D. PREPARATION, CONSTRUCTION, AND PROTECTION OF MASONRY DURING COLD (< 40°F) WEATHER OR HOT (> 90°F) WEATHER.	P	ACI 530.1 1.8C, 1.8D
E. PLACEMENT OF GROUT.	C	ACI 530.1 3.5, 3.6C
F. PLACEMENT OF AAC MASONRY UNITS AND CONSTRUCTION OF THIN-BED MORTAR JOINTS. CONTINUOUS INSPECTION REQUIRED FOR FIRST 5,000 SF.	P	ACI 530.1 3.3B.9, 3.3F.1.b
7. OBSERVE PREPARATION OF GROUT SPECIMENS, MORTAR SPECIMENS, AND/OR PRISMS.	P	ACI 530.1 1.4B.2.a.3, 1.4B.2.b.3, 1.4B.2.c.3, 1.4B.3, 1.4B.4
LEVEL B INSPECTION IS REQUIRED FOR EMPIRICALLY/PRESCRIPTIVELY DESIGNED MASONRY IN RISK CATEGORY IV STRUCTURES. LEVEL B INSPECTION IS REQUIRED FOR ENGINEERED MASONRY IN RISK CATEGORY I, II, OR III STRUCTURES. ENGINEERED MASONRY STRUCTURES ARE THOSE DESIGNED IN ACCORDANCE WITH PORTIONS OF ACI 530 OTHER THAN PART 4 OR APPENDIX A		

IT-5: WOOD CONSTRUCTION		
INSPECTION TASK	FREQ	REFERENCE
1. FABRICATOR CERTIFICATION/VERIFICATION OF QUALITY CONTROL PROCEDURES FOR PREFABRICATED WOOD STRUCTURAL ELEMENTS AND ASSEMBLIES		
A. VERIFY FABRICATOR QUALIFICATIONS.	C	IBC 1704.2.5.1, 1705.5
B. COLLECT CERTIFICATES OF COMPLIANCE FROM THE FABRICATOR AT COMPLETION OF FABRICATION.	C	IBC 1704.5, 1705.5
2. FOR METAL-PLATE-CONNECTED TRUSSES CLEAR SPANNING 60 FEET OR MORE, VERIFY THAT THE TEMPORARY INSTALLATION RESTRAINT/BRACING AND THE PERMANENT INDIVIDUAL TRUSS MEMBER RESTRAINT/BRACING ARE INSTALLED IN ACCORDANCE WITH THE APPROVED TRUSS SUBMITTAL PACKAGE.	P	IBC 1705.5.2

IT-6: SOILS		
INSPECTION TASK	FREQ	REFERENCE
1. VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	P	IBC 1705.6
2. VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	P	IBC 1705.6
3. PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	P	IBC 1705.6
4. VERIFY USE OF PROPER MATERIALS, DENSITIES, AND LIFT HEIGHTS DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	C	IBC 1705.6
5. PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT THE SITE HAS BEEN PREPARED PROPERLY.	P	IBC 1705.6

IT-10: FABRICATED ITEMS		
INSPECTION TASK	FREQ	REFERENCE
1. INSPECT DURING FABRICATION: STRUCTURAL, LOAD-BEARING, OR LATERAL LOAD-RESISTING MEMBERS AND/OR ASSEMBLIES.	P	IBC 1704.2.5, 1705.10
INSPECTION IS NOT REQUIRED IF THE FABRICATOR MEETS THE EXCEPTIONS OF IBC 1704.2.5 #1 OR #2, OR IF THE FABRICATOR IS APPROVED PER IBC 1704.2.5.1.		

IT-12: SEISMIC RESISTANCE		
INSPECTION TASK	FREQ	REFERENCE
☒ 1. PRIOR TO ANY WORK TAKING PLACE, EACH CONTRACTOR RESPONSIBLE FOR THE CONSTRUCTION OF A SEISMIC FORCE-RESISTING SYSTEM (SFRS) OR COMPONENT SHALL SUBMIT A WRITTEN STATEMENT OF CONTRACTOR RESPONSIBILITY.	C	IBC 1704.4
2. PLUMBING, MECHANICAL, AND ELECTRICAL COMPONENTS		
☒ A. VERIFY ANCHORAGE OF ELECTRICAL EQUIPMENT FOR EMERGENCY AND STANDBY POWER SYSTEMS. [SDC ≥ C]	P	IBC 1705.12.6
☐ B. VERIFY INSTALLATION AND ANCHORAGE OF PIPE AND DUCT SYSTEMS CARRYING HAZARDOUS MATERIALS AND ASSOCIATED MECHANICAL UNITS. [SDC ≥ C]	P	IBC 1705.12.6
☐ C. CONFIRM THE INSTALLATION AND ANCHORAGE OF VIBRATION ISOLATION SYSTEMS WITH NOMINAL CLEARANCES ≤ 1/4". [SDC ≥ C]	P	IBC 1705.12.6
☐ D. INSPECT AND TEST SEISMIC ISOLATION SYSTEMS AT SEISMICALLY ISOLATED STRUCTURES. [SDC ≥ B]	P	IBC 1705.12.8, 1705.13.4 | ASCE 7 17.8
SEISMIC FORCE-RESISTING SYSTEMS AND COMPONENTS/CONNECTIONS SUBJECT TO INSPECTION INCLUDE: PLUMBING, MECHANICAL, AND ELECTRICAL COMPONENTS		

IT-17: FIRE-RESISTANT PENETRATIONS AND JOINTS		
INSPECTION TASK	FREQ	REFERENCE
1. INSPECT THROUGH-PENETRATION FIRESTOP SYSTEMS AT FIRE WALLS, FIRE BARRIERS, SMOKE BARRIERS AND FIRE PARTITION WALLS IN ACCORDANCE WITH ASTM E2174.	P	IBC 714.3.1.2, 1705.17.1
2. INSPECT PENETRATION FIRESTOP SYSTEMS AT PENETRATIONS THROUGH MEMBRANES THAT ARE PART OF A HORIZONTAL ASSEMBLY IN ACCORDANCE WITH ASTM E2174.		
A. VERIFY MATERIALS BEFORE INSTALLATION.	P	IBC 714.4.2, 1705.17.1
B. VERIFY INSTALLATION AGAINST THE CONTRACT DOCUMENTS AND APPROVED MATERIAL/INSTALLATION SUBMITTALS.	P	IBC 714.4.2, 1705.17.1
C. FOR EACH TYPE OF FIRESTOP, WITNESS 10% OF INSTALLATIONS – OR DESTRUCTIVE TESTING ON 2% OF INSTALLATIONS FOR 10,000 SF FLOOR AREA.	P	IBC 714.4.2, 1705.17.1
3. INSTALLATION OF FIRE-RESISTANT JOINT SYSTEMS IN ACCORDANCE WITH ASTM E2393		
A. VERIFY MATERIALS BEFORE INSTALLATION.	P	IBC 715.3, 715.4, 1705.17.2
B. VERIFY INSTALLATION AGAINST THE CONTRACT DOCUMENTS AND APPROVED MATERIAL/INSTALLATION SUBMITTALS.	P	IBC 715.3, 715.4, 1705.17.2
C. FOR EACH TYPE OF JOINT SYSTEM, WITNESS INSTALLATION OF A MINIMUM OF 5% OF THE TOTAL LINEAL FEET BEING INSTALLED – OR DESTRUCTIVE TESTING, DISASSEMBLY, OR VISUAL INSPECTION AT LEAST THE RATE OF 1 SAMPLE FOR EVERY 500 LINEAL FEET BEING INSTALLED.	P	IBC 715.3, 715.4, 1705.17.2
INSPECTION IS ONLY REQUIRED FOR HIGH-RISE BUILDINGS OR BUILDINGS ASSIGNED TO RISK CATEGORY III OR IV. ADDITIONS, CHANGES OF USE, EVALUATIONS PER CHAPTER 14 OF THE IEBC, AND LEVEL 3 ALTERATIONS WITHIN EXISTING HIGH-RISE BUILDINGS OR BUILDINGS ASSIGNED TO RISK CATEGORY III OR IV SHALL ALSO REQUIRE THESE INSPECTIONS.		

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Andrew S. Pordom
5/12/2023

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REVISIONS

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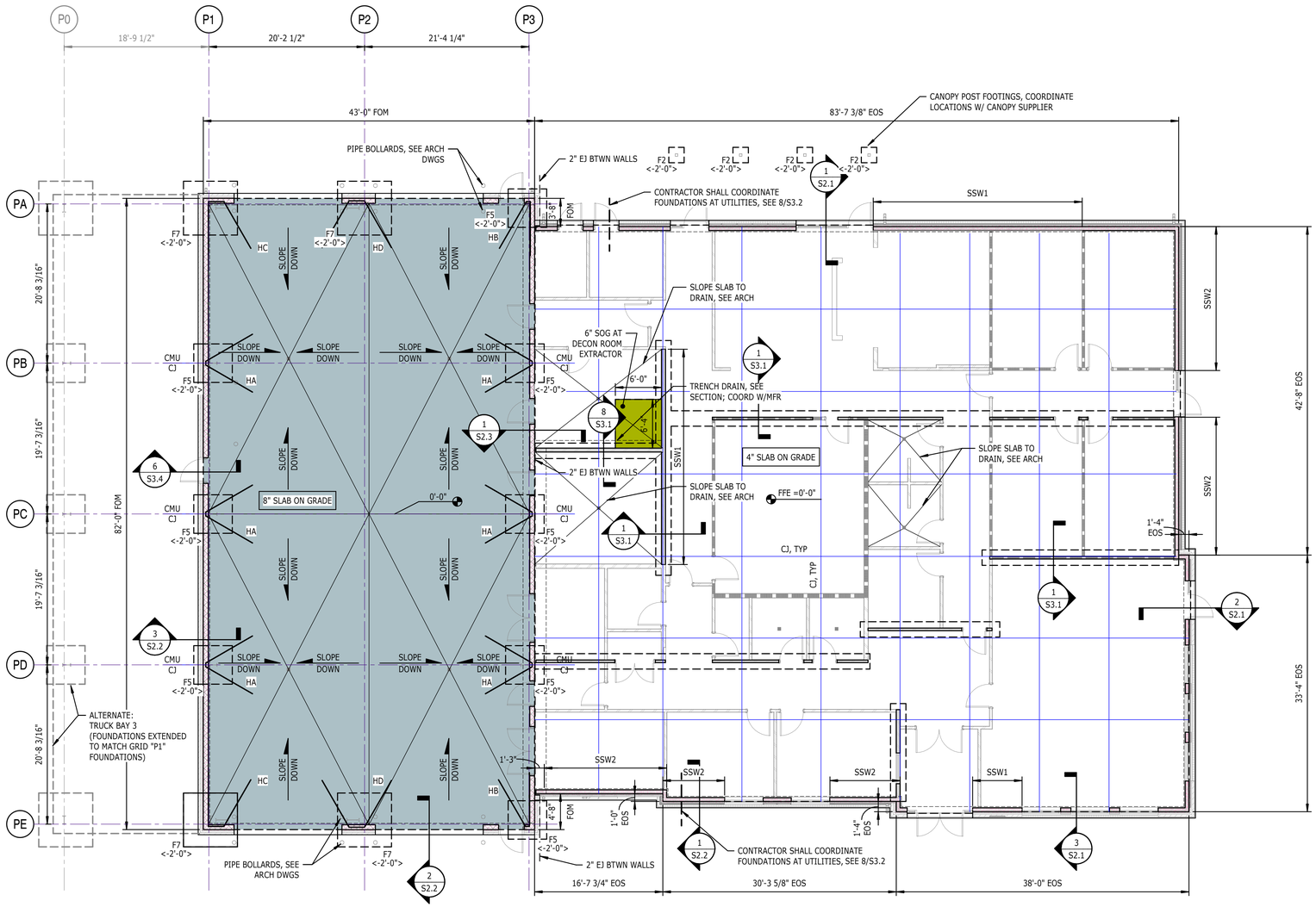
Date	Project No.
5/15/2023	22021.1
Drawn By: KAB	Sheet No.: S0.4
Checked By: ASP	

Sheet Title: SPECIAL INSPECTIONS



FOUNDATION PLAN

1/8" = 1'-0"

FOUNDATION PLAN NOTES:

1. SEE S0.1 AND S0.2 FOR GENERAL NOTES, ABBREVIATIONS, AND SYMBOL LEGEND.
2. REFERENCE FINISHED FLOOR ELEVATION = 0'-0". ACTUAL ELEVATION = 197'-0" (VERIFY W/ CIVIL DWGS)
3. SEE S3.1 FOR TYPICAL SLAB CONSTRUCTION DETAILS.
4. TOP OF FOOTING ELEVATION 2'-0" BELOW FINISHED FLOOR ELEVATION, UNO.
5. "H#" INDICATES HAIRPIN REINFORCING, SEE 1/S3.3.
6. DIMENSIONS ARE TO OUTSIDE FACE OF FRAMING, UNO. REFER TO ARCHITECTURAL DRAWINGS FOR ALL WALL LOCATIONS AND DIMENSIONS.
7. SLOPE EXTERIOR SLABS, SIDEWALKS, AND PAVING AS INDICATED ON THE ARCHITECTURAL DRAWINGS.
8. INSTALL INTERIOR BOLLARDS PRIOR TO POURING SLAB ON GRADE. SEE ARCH DWGS FOR DETAIL.
9. PEMB FOOTING SIZES ARE BASED ON PRELIMINARY REACTIONS. FINAL FOOTING SIZES WILL BE PROVIDED BASED ON THE SUBMITTED PEMB SHOP DRAWINGS. CONTRACTOR TO PROVIDE A UNIT PRICE AT BID FOR A BLENDED COST PER CUBIC YARD OF CONCRETE FOOTING ADDED OR REDUCED. BLENDED RATE TO INCLUDE ALL COSTS ASSOCIATED WITH THE CHANGE IN FOOTING SIZES INCLUDING CONCRETE, REINFORCING, AND EXCAVATIONS.

LOAD BEARING WALL LEGEND:

- INDICATES NON-LOAD BEARING METAL STUD WALL.
- INDICATES LOAD BEARING METAL STUD WALL AND/OR SHEAR WALL.
- INDICATES MASONRY WALL.

OAKLEY COLLIER ARCHITECTS
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FIRM LICENSE #C-1051
PROJECT #S22222

BID SET

TOWN OF NASHVILLE
FIRESTATION NO. 2
1200 EAST WASHINGTON ST
NASHVILLE, NC 27856

NORTH CAROLINA PROFESSIONAL SEAL 035283 ENGINEER ANDREW S. PORDOMINGO
Andrew S. Pordomingo
5/12/2023

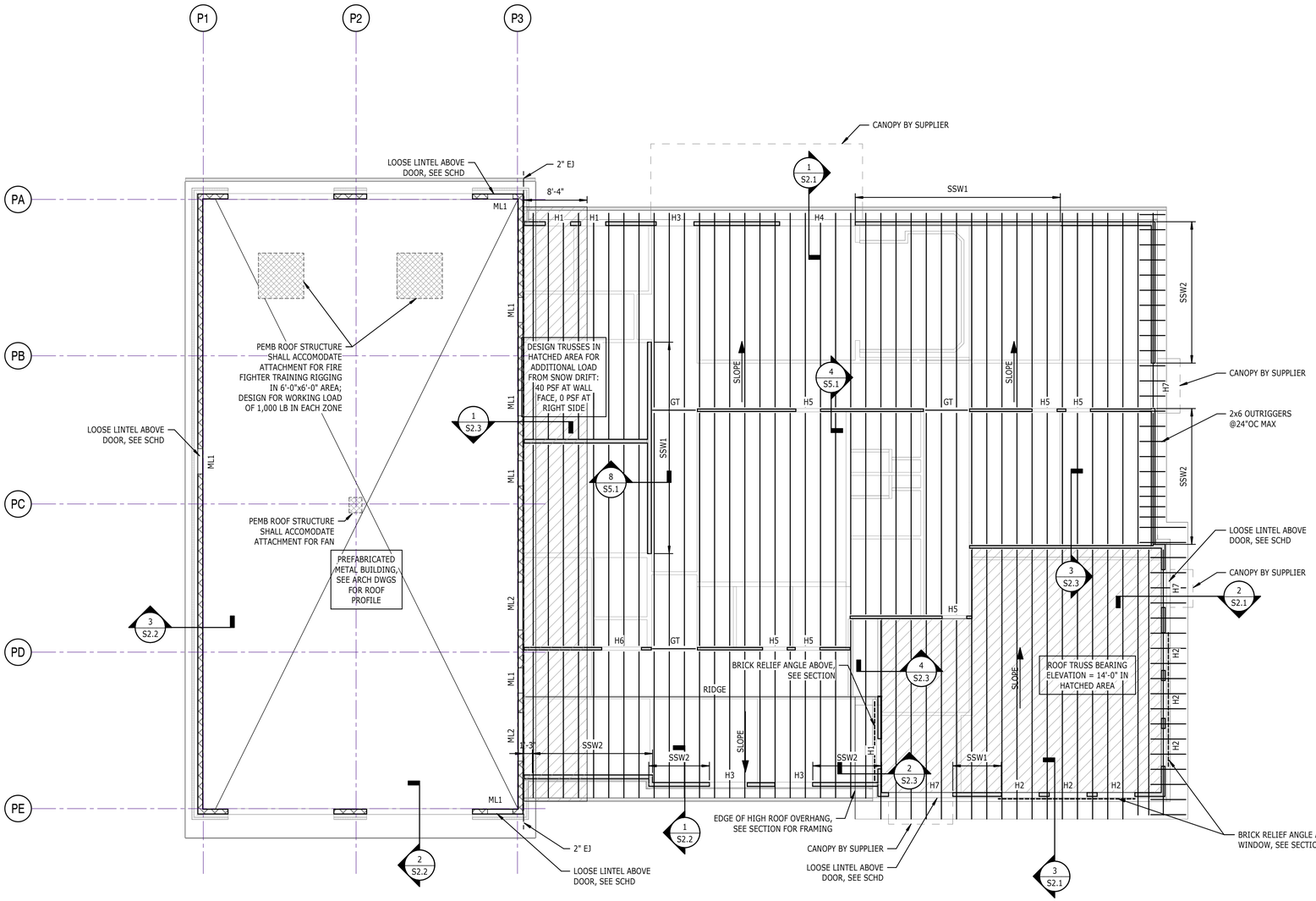
GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

Date	Project No.
5/15/2023	22021.1
Drawn By: KAB	Sheet No.: S1.1
Checked By: ASP	

Sheet Title: FOUNDATION PLAN



ROOF FRAMING PLAN

1/8" = 1'-0"

ROOF FRAMING PLAN NOTES:

1. SEE S0.1 AND S0.2 FOR GENERAL NOTES, ABBREVIATIONS, AND SYMBOL LEGEND.
2. SEE S5.1 FOR TYPICAL ROOF FRAMING DETAILS.
3. ——— INDICATES WOOD ROOF TRUSSES SPACED @24"OC MAX, UNO. ROOF TRUSS BEARING ELEVATION 12'-0" ABOVE REFERENCE FINISHED FLOOR ELEVATION, UNO.
4. PROVIDE JAMB STUDS UNDER ALL GIRDER TRUSS BEARING LOCATIONS, SEE 10/S6.1.
5. HUNG MECAHNICAL UNITS SHALL BE LOCATED SO THAT NO SINGLE WOOD TRUSS SUPPORTS MORE THAN A SINGLE UNIT AND THE WEIGHT OF THE INDIVIDUAL UNITS SHALL NOT EXCEED 200 POUNDS.
6. DIMENSIONS ARE TO OUTSIDE FACE OF FRAMING, UNO. REFER TO ARCHITECTURAL DRAWINGS FOR ALL WALL LOCATIONS AND DIMENSIONS.
7. SEE ARCHITECTURAL DRAWINGS FOR ALL ROOF SLOPES.
8. PEMB SUPPLIER SHALL DESIGN ROOF STRUCTURE TO SUPPORT HUNG MECHANICAL EQUIPMENT AND FAN(S) INDICATED ON MECHANICAL AND ARCHITECTURAL DRAWINGS. COORDINATE EQUIPMENT LOCATIONS AND WEIGHTS WITH THOSE DRAWINGS.

LOAD BEARING WALL LEGEND:
- INDICATES NON-LOAD BEARING METAL STUD WALL.
- INDICATES LOAD BEARING METAL STUD WALL AND/OR SHEAR WALL.
- INDICATES MASONRY WALL.

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RALEIGH, NC 27603 PROJECT #522222

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5/12/2023

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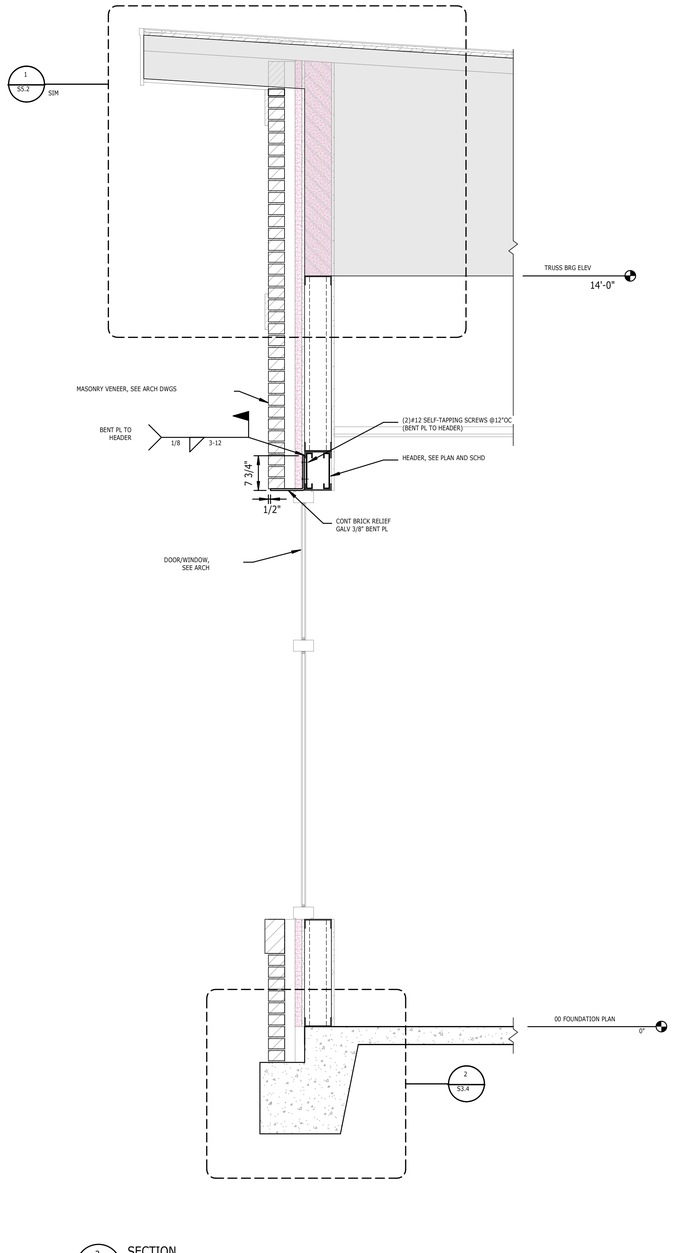
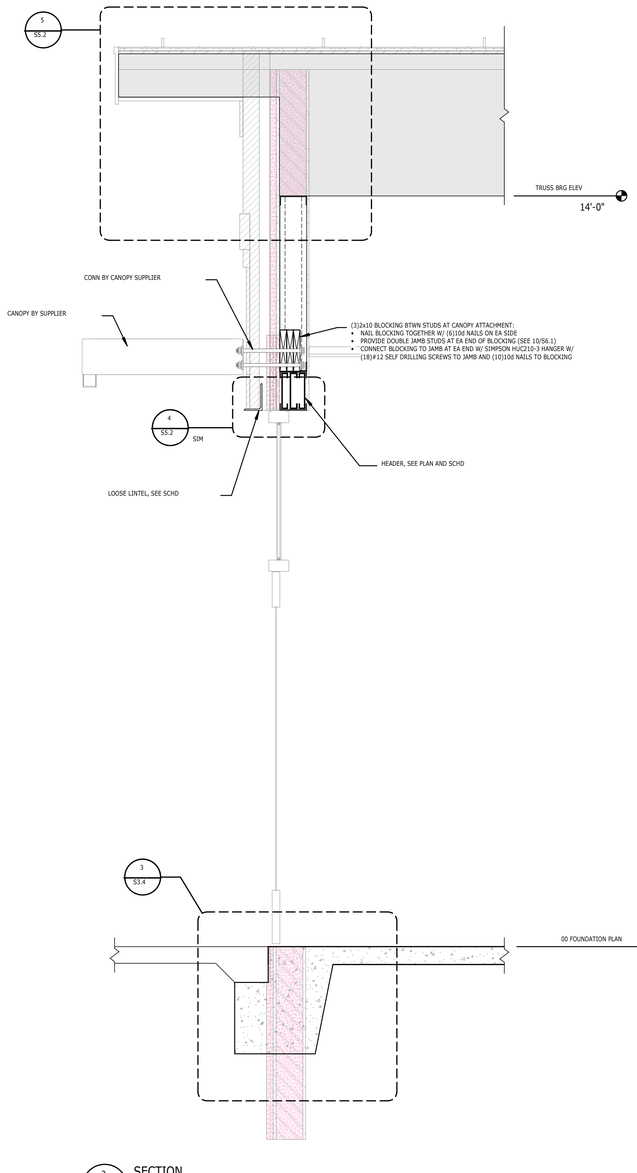
#	Description	Date

Date	Project No.
5/15/2023	22021.1
Drawn By: KAB	Sheet No.: S1.2
Checked By: ASP	

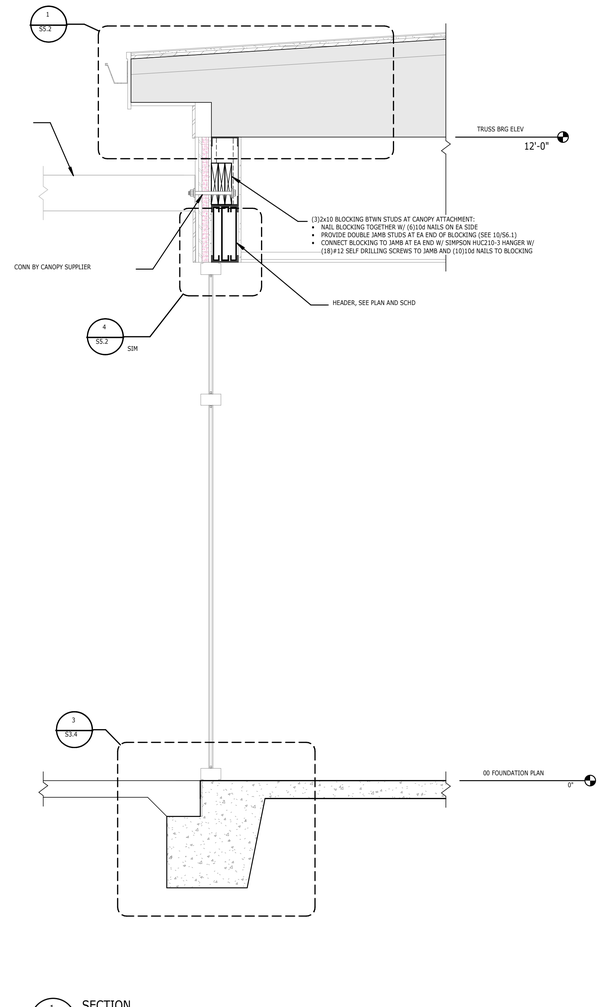
Sheet Title: ROOF FRAMING PLAN



3 S2.1 SECTION
3/4" = 1'-0"



2 S2.1 SECTION
3/4" = 1'-0"



1 S2.1 SECTION
3/4" = 1'-0"

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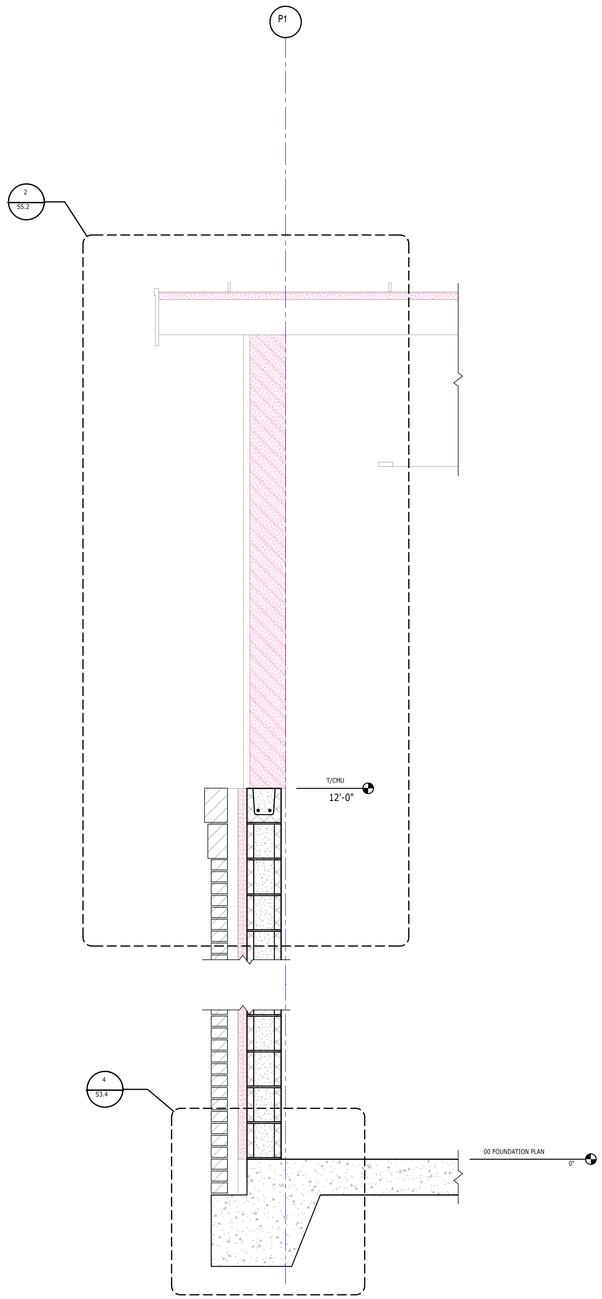
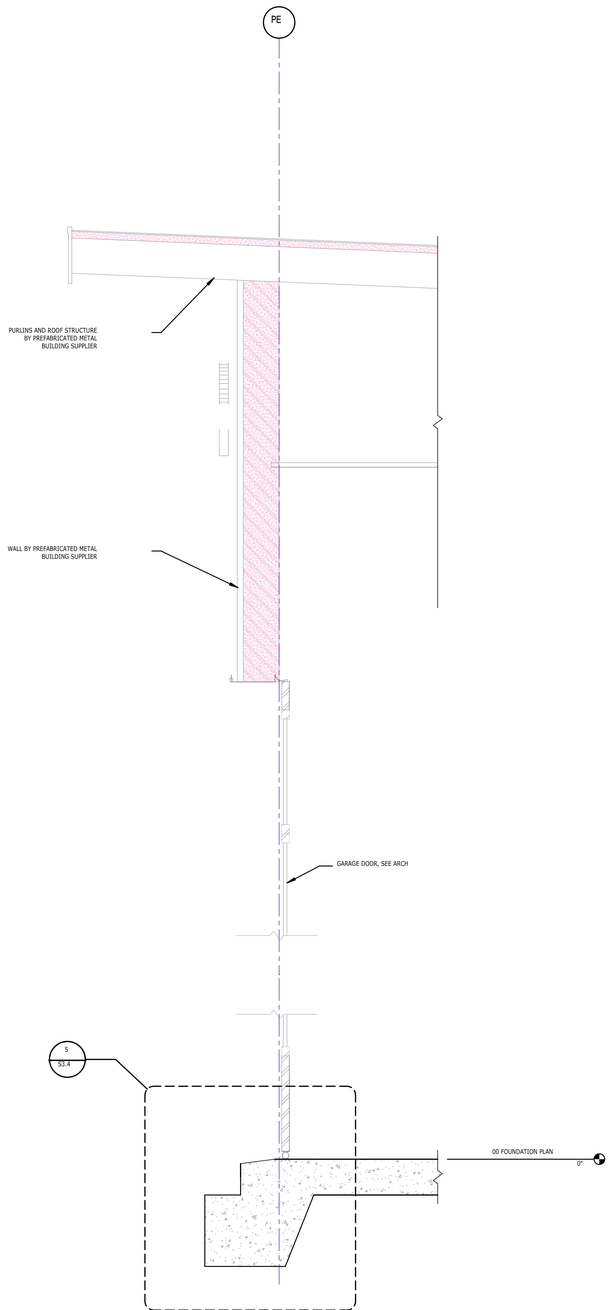
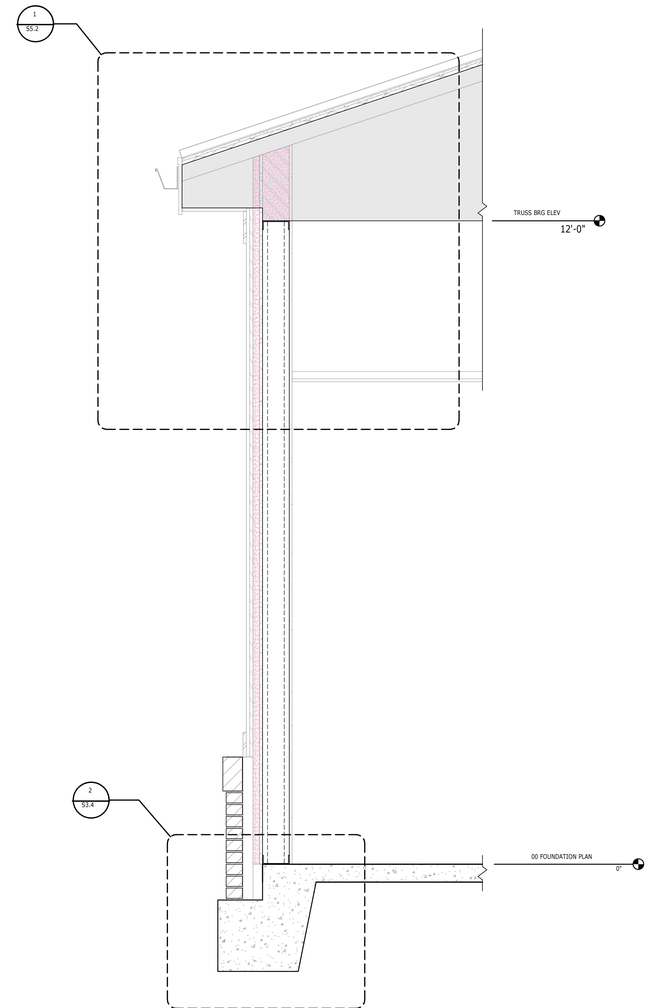
Sheet Title
WALL SECTIONS



3 S2.2 SECTION
3/4" = 1'-0"



2 S2.2 SECTION
3/4" = 1'-0"



1 S2.2 SECTION
3/4" = 1'-0"

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Andrew S. Podock
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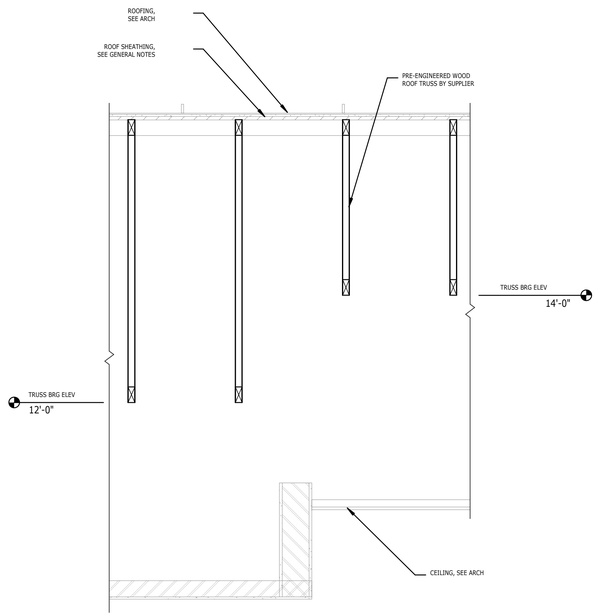
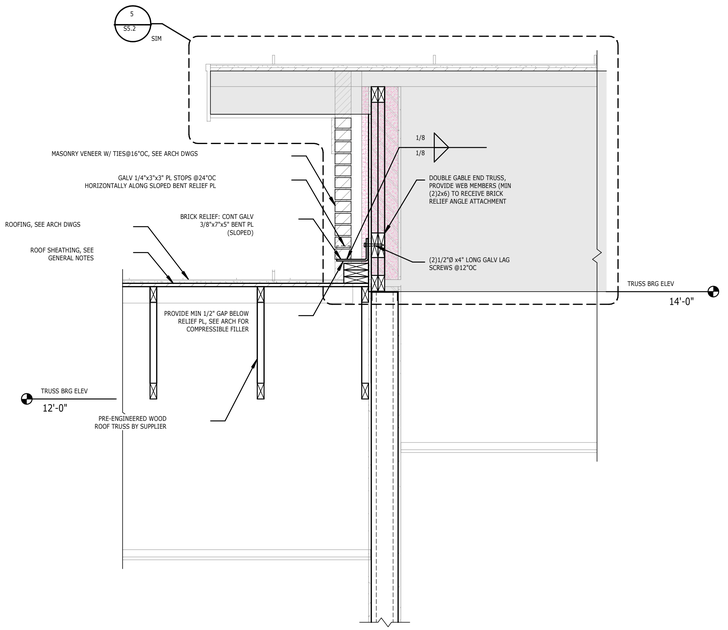
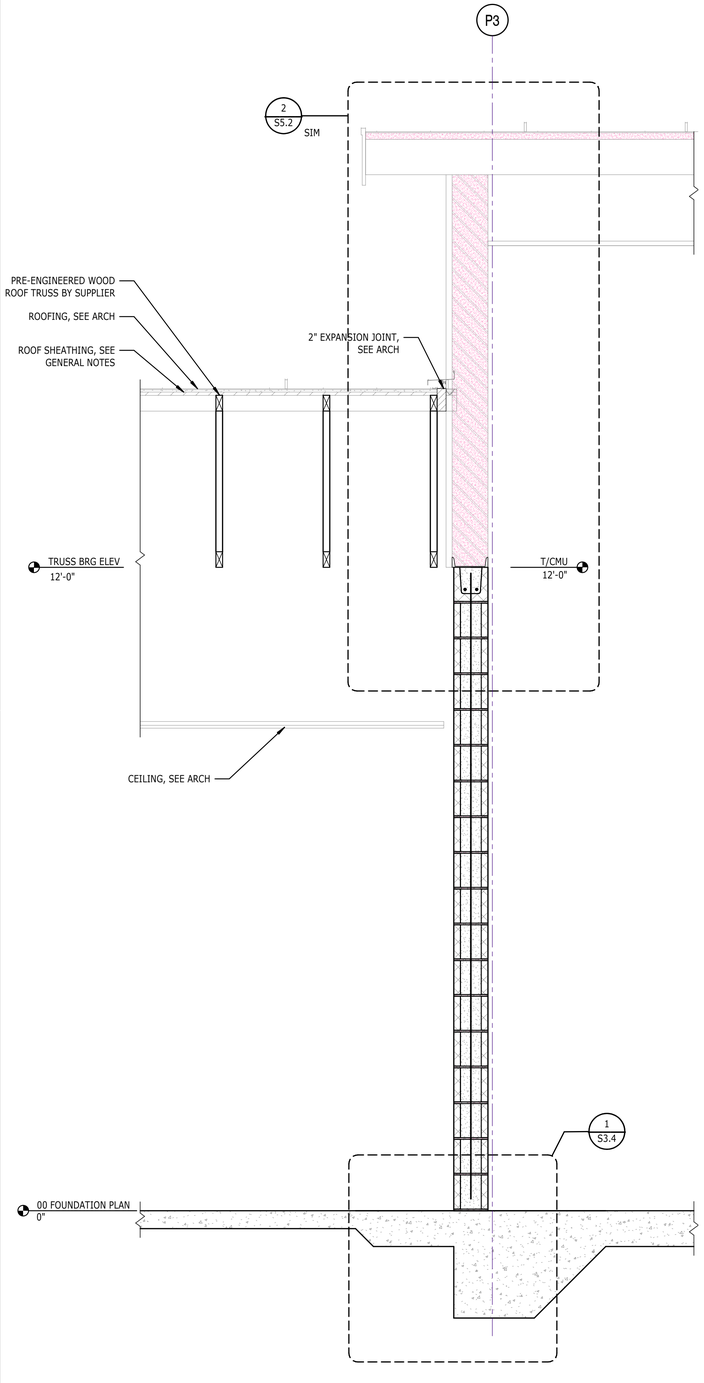
WALL SECTIONS

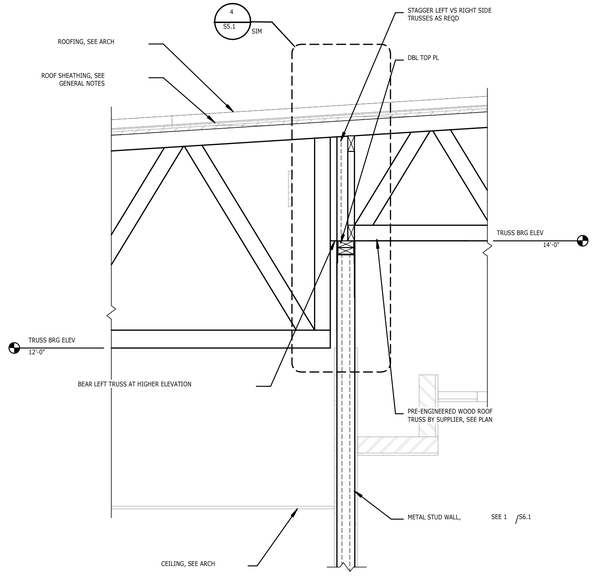


4 S2.3 SECTION 3/4" = 1'-0"



2 S2.3 SECTION 3/4" = 1'-0"





3 S2.3 SECTION 3/4" = 1'-0"

1 S2.3 SECTION 3/4" = 1'-0"

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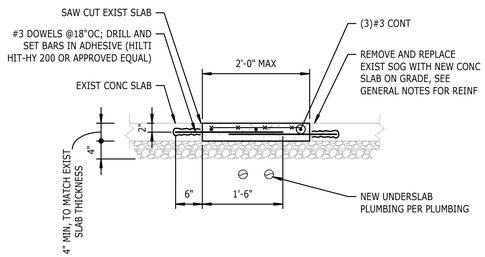
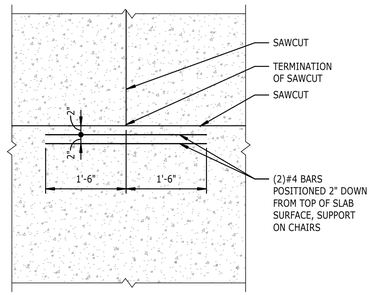
Checked By: ASP	

Sheet Title
WALL SECTIONS

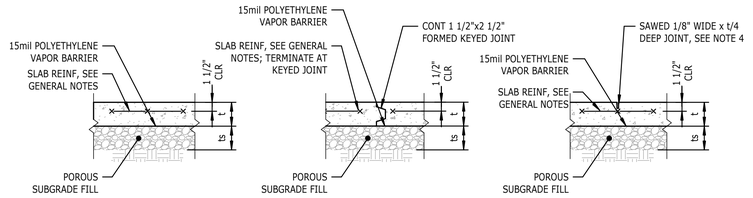


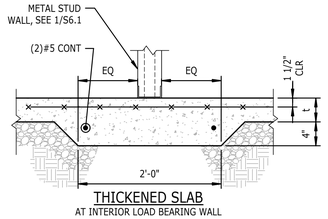
NOTES:
1. SEE ARCHITECTURAL AND PLUMBING DRAWINGS FOR LOCATIONS WHERE EXISTING SLAB REMOVAL AND REPLACEMENT IS REQUIRED.
2. INFILL ANY TRENCHES REQUIRED FOR UPFIT WITH COMPACTED #57 STONE PRIOR TO REPLACING SLAB ON GRADE.
3. SEAL JOINT IN NEW VAPOR BARRIER WITH EXISTING.

10 S3.1 TYPICAL SLAB ON GRADE REPAIR
NTS



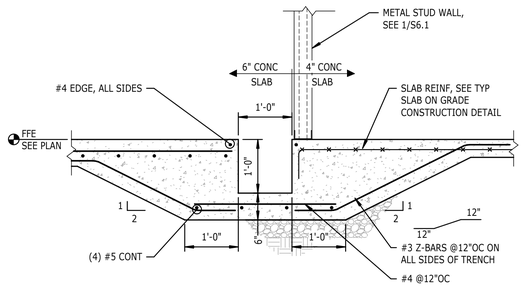
7 S3.1 TYPICAL AT CONTROL JOINT TERMINATION
NTS





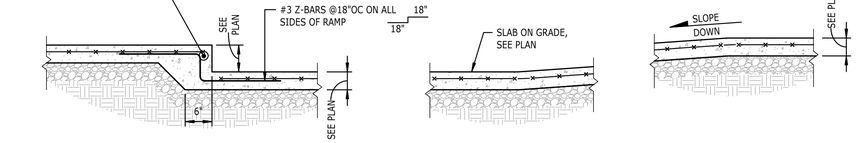
NOTES:
1. 't' DENOTES SLAB THICKNESS, SEE PLANS. 'ts' DENOTES POROUS SUBGRADE FILL THICKNESS, SEE "FOUNDATION" GENERAL NOTES.
2. LOCATION OF SLAB ON GRADE CONSTRUCTION JOINTS SHALL BE DETERMINED BY THE CONTRACTOR. JOINT LOCATIONS SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO CONSTRUCTION.
3. SEE PLANS FOR LOCATION OF CONTROL JOINTS. WHERE NOT SHOWN ON PLAN, CONTACT THE ENGINEER.
4. SAW CUT CONTROL JOINTS WITHIN 8 HOURS OF SLAB POUR.

1 S3.1 TYPICAL SLAB ON GRADE
NTS

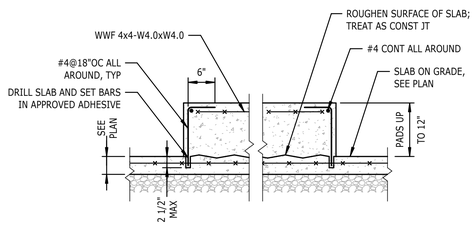


NOTE:
1. SEE ARCH FOR LENGTH OF TRENCH REQUIRED.
2. COORDINATE WITH MANUFACTURER.

8 S3.1 LAUNDRY TRENCH
NTS

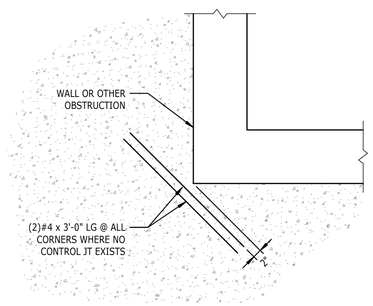


2 S3.1 TYPICAL RAMP ON GRADE
NTS

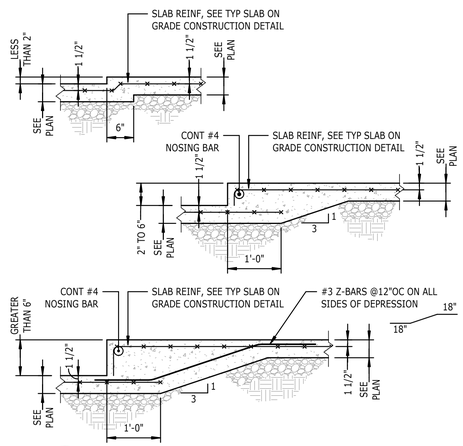


NOTES:
1. THE EXACT SIZE, SHAPE, AND LOCATION OF EQUIPMENT (HOUSEKEEPING) PAD(S) SHALL BE DETERMINED BY THE CONTRACTOR AFTER APPROVAL OF EQUIPMENT SHOP DRAWINGS. ANCHOR BOLTS WHERE REQUIRED SHALL BE SIZED AND LOCATED ACCORDING TO MANUFACTURER'S REQUIREMENTS.

9 S3.1 TYPICAL EQUIPMENT PAD
NTS



6 S3.1 TYPICAL SLAB AT CORNERS
NTS



3 S3.1 TYPICAL STEP IN SLAB ON GRADE
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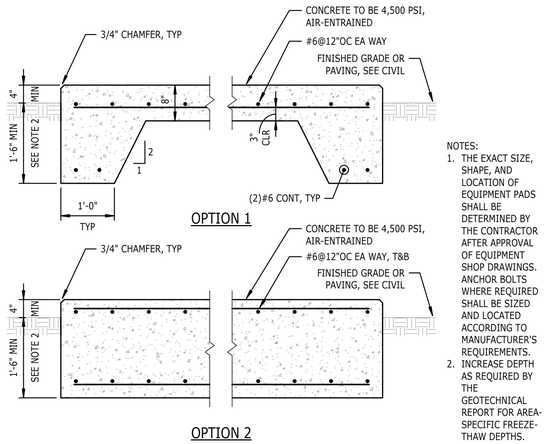
Sheet Title: SLAB ON GRADE DETAILS



NOTES:
1. THE EXACT SIZE, SHAPE, AND LOCATION OF EQUIPMENT PADS SHALL BE DETERMINED BY THE CONTRACTOR AFTER APPROVAL OF EQUIPMENT SHOP DRAWINGS. ANCHOR BOLTS WHERE REQUIRED SHALL BE SIZED AND LOCATED ACCORDING TO MANUFACTURER'S REQUIREMENTS.
2. INCREASE DEPTH AS REQUIRED BY THE GEOTECHNICAL REPORT FOR AREA-SPECIFIC FREEZE-THAW DEPTHS.

7 S3.2 TYPICAL EXTERIOR EQUIPMENT PAD
NTS

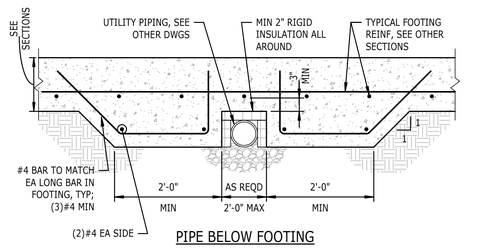
SPREAD FOOTING SCHEDULE					
MARK	SIZE			REINFORCEMENT (EACH WAY)	
	WIDTH	LENGTH	DEPTH	TOP	BOTTOM
F2	2'-0"	2'-0"	1'-0"	(3)#5	(3)#5
F5	5'-0"	5'-0"	1'-6"	(6)#5	(6)#5
F7	7'-0"	7'-0"	1'-8"	(8)#7	(8)#7

4 S3.2 SPREAD FOOTING SCHEDULE
NTS

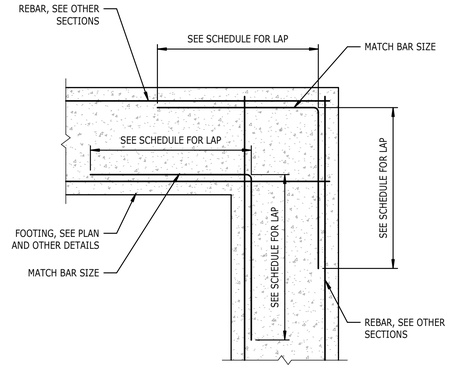
CONCRETE REINFORCING SPLICE LENGTH SCHEDULE												
BAR SIZE	f'c = 3,000 PSI				f'c = 4,000 PSI				f'c = 5,000 PSI			
	HORIZ BARS		OTHER BARS		HORIZ BARS		OTHER BARS		HORIZ BARS		OTHER BARS	
	CASE		CASE		CASE		CASE		CASE		CASE	
	I	II	I	II	I	II	I	II	I	II	I	II
#3	28"	42"	22"	32"	24"	36"	19"	28"	22"	33"	17"	25"
#4	37"	56"	29"	43"	32"	48"	25"	37"	29"	43"	22"	33"
#5	47"	70"	36"	54"	40"	60"	31"	47"	36"	54"	28"	42"
#6	56"	84"	43"	64"	48"	72"	37"	56"	43"	65"	33"	50"
#7	81"	122"	63"	94"	70"	106"	54"	81"	63"	94"	49"	73"
#8	93"	139"	72"	107"	80"	121"	62"	93"	72"	108"	55"	83"
#9	105"	157"	81"	121"	91"	136"	70"	105"	81"	122"	63"	94"
#10	118"	177"	91"	136"	102"	153"	79"	118"	91"	137"	70"	105"
#11	131"	196"	101"	151"	113"	170"	87"	131"	101"	152"	78"	117"
CATEGORY					CASE I				CASE II			
BEAMS AND COLUMNS					clr ≥ d_b, s ≥ $2d_b$, AND STIRRUPS PROVIDED OVER ENTIRE SPLICE LENGTH				clr < d_b AND s < $2d_b$			
OTHER MEMBERS					clr > d_b AND s ≥ $3d_b$				clr < d_b OR s < $3d_b$			

NOTES:
1. FOR CONCRETE STRENGTHS NOT PROVIDED, USE THE SPLICE LENGTH FOR THE LOWER CONCRETE STRENGTH AS SHOWN IN THE TABLE.
2. SPLICE LENGTHS BASED ON NORMAL WEIGHT CONCRETE. FOR LIGHT WEIGHT, INCREASE SPLICE LENGTH BY 30%.
3. AVOID SPLICES IN REGIONS OF MAXIMUM MOMENT. IF THIS IS NOT POSSIBLE STAGGER SPLICES SO THAT NOT MORE THAN 50% OF THE BARS ARE SPLICED WITHIN A REQUIRED SPLICE LENGTH. OTHERWISE INCREASE SPLICE LENGTH BY 30%.
4. "HORIZ" BARS ARE ANY HORIZONTAL BARS PLACED WITH MORE THAN 12" OF CONCRETE IN THE MEMBER BELOW THE SPLICE.
s = C-C SPACING OF BARS BEING DEVELOPED OR SPLICED.
clr = CLEAR COVER OF BARS.

1 S3.2 SPLICE AND EMBEDMENT LENGTH SCHEDULE
NTS

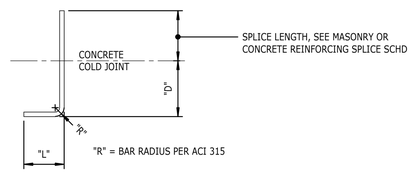


8 S3.2 TYPICAL UTILITY BELOW FOOTING
NTS



5 S3.2 TYPICAL FOOTING CORNER
NTS

CONCRETE REINFORCING DOWEL EMBEDMENT				
BAR SIZE	LEG DIM, "L"	EMBEDMENT, "D"		
		f'c = 3,000 PSI	f'c = 4,000 PSI	f'c = 5,000 PSI
#3	6"	6"	6"	6"
#4	8"	8"	7"	6"
#5	10"	10"	9"	8"
#6	12"	12"	10"	9"
#7	14"	14"	12"	11"
#8	16"	16"	14"	12"
#9	19"	18"	15"	14"
#10	22"	20"	17"	15"
#11	24"	22"	19"	17"



NOTES:
1. FOR CONCRETE STRENGTHS NOT PROVIDED, USE THE EMBEDMENT LENGTH FOR THE LOWER CONCRETE STRENGTH AS SHOWN IN THE TABLE.
2. DOWEL LENGTHS BASED ON NORMAL WEIGHT CONCRETE. FOR LIGHT WEIGHT, INCREASE DOWEL LENGTH "D" BY 30%.
3. SIDE COVER ON BARS MUST BE GREATER THAN 2 1/2". END COVER ON 90° HOOKED BARS MUST BE GREATER THAN 2".
4. FOR EPOXY-COATED BARS, INCREASE THE DOWEL LENGTH "D" BY 20%.

3 S3.2 DOWEL EMBEDMENT LENGTH SCHEDULE
NTS

OAKLEY COLLIER ARCHITECTS
109 Candlewood Road, Rocky Mount, NC 27804 (P) 252.937.2500
1111 Haynes Street, Suite 109, Raleigh, NC 27604 (P) 919.985.7700

STEWART
223 S. WEST STREET
SUITE 1100
RALEIGH, NC 27603
T 919.380.8750
FIRM LICENSE #C-1051
PROJECT #522222

BID SET
TOWN OF NASHVILLE
FIRESTATION NO. 2
1200 EAST WASHINGTON ST
NASHVILLE, NC 27856

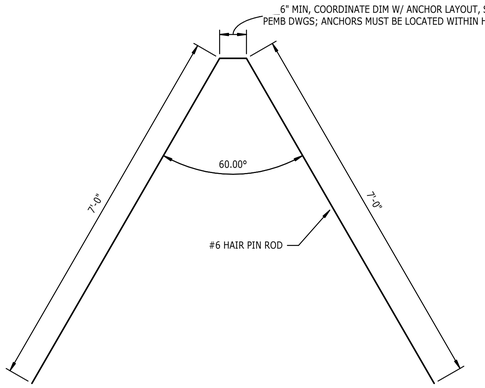
NORTH CAROLINA PROFESSIONAL SEAL 035263 ENGINEER ANDREW S. PORDON
5/12/2023

GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

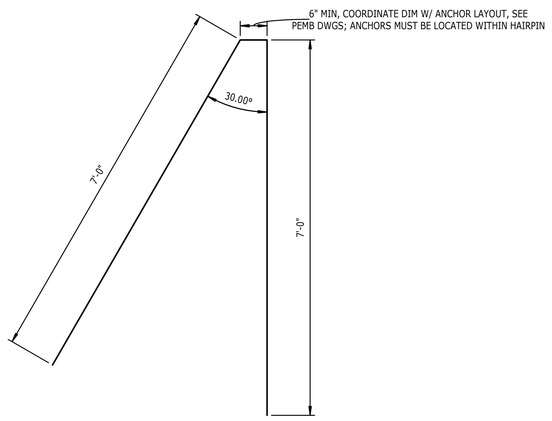
REVISIONS
#	Description	Date

Date	Project No.
5/15/2023	22021.1
Drawn By: KAB	Sheet No.: S3.2
Checked By: ASP	

Sheet Title: FOUNDATION DETAILS



HAIR PIN TYPE A



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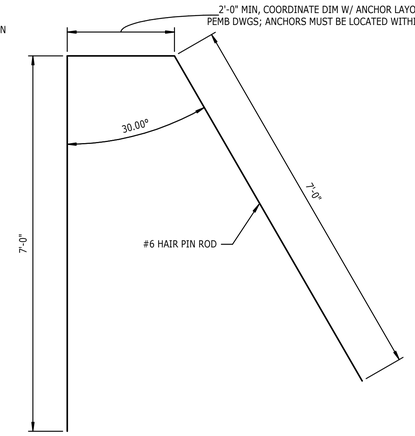
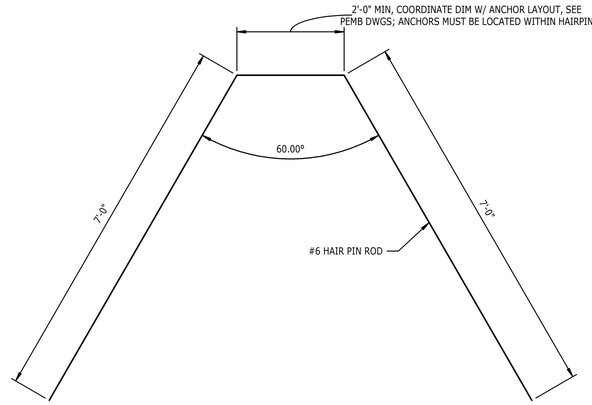
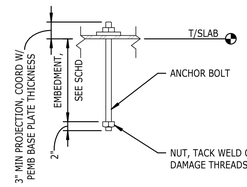


HAIR PIN TYPE C



HAIR PIN TYPE D

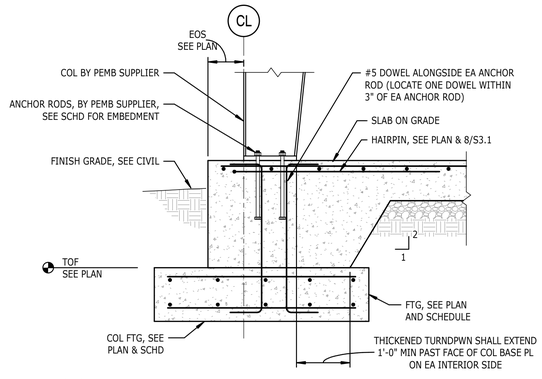
1 S3.3 HAIR PIN DETAILS
NTS



ANCHOR BOLT EMBEDMENT SCHEDULE AT PRE-ENGINEERED METAL BUILDING	
ANCHOR BOLT DIAMETER	FOOTING/PIER EMBEDMENT DEPTH (MIN)
3/4"	18"
1"	18"
1 1/4"	18"

NOTES:
1. ANCHOR BOLT DIAMETER, GRADE, LOCATION, AND PROJECTION BY BUILDING MANUFACTURER.

2 S3.3 ANCHOR BOLT EMBEDMENT SCHEDULE
NTS



NOTES:
1. PROVIDE STANDARD ACI 90 DEGREE HOOK AT BOTTOM AND TOP END OF ALL VERTICAL BARS IN PEDESTAL.
2. PROVIDE DOUBLE NUTS OR TACK WELD NUT AT ALL ANCHOR BOLTS.

3 S3.3 PEMB COLUMN FOOTING DETAIL
NTS

OAKLEY COLLIER ARCHITECTS
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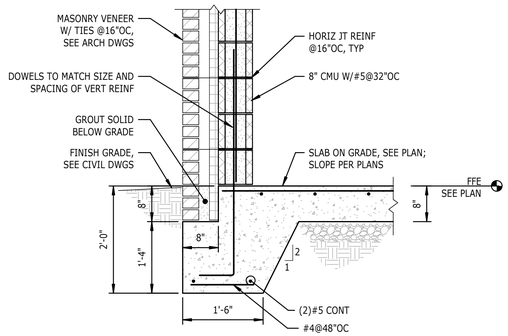
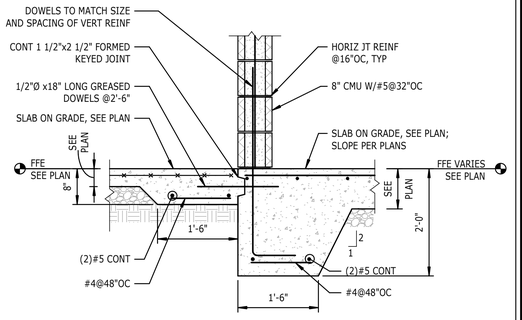
Checked By: ASP	

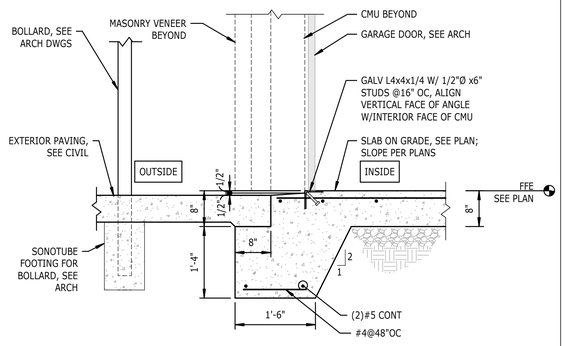
Sheet Title: PEMB FOUNDATION DETAILS



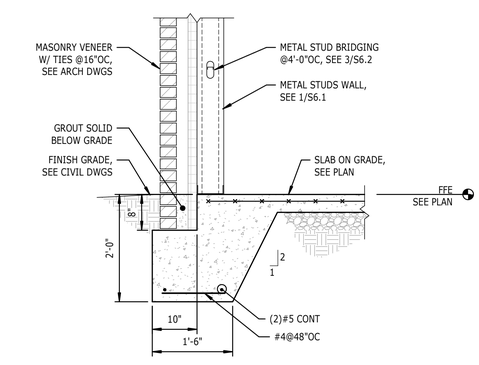
4 S3.4 TRUCK BAY EXTERIOR WALL FDN
NTS



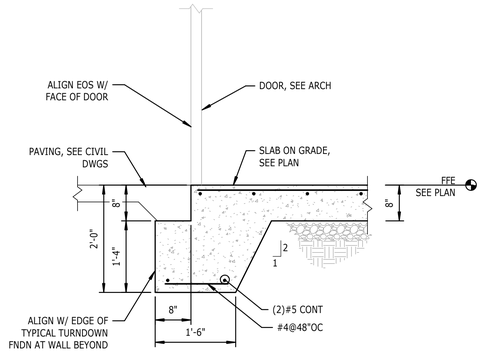
1 S3.4 TRUCK BAY INTERIOR WALL FOUNDATION
NTS



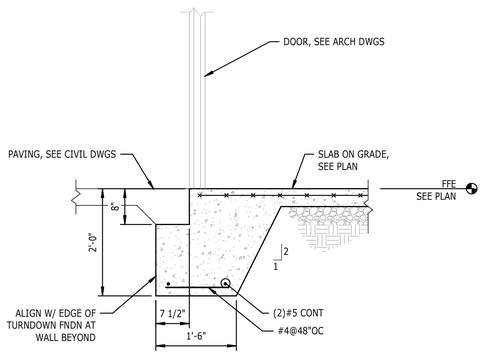
5 S3.4 TYPICAL AT GARAGE DOOR
NTS



2 S3.4 EXTERIOR WALL FDN
NTS



6 S3.4 TYPICAL AT TRUCK BAY SMALL DOOR
NTS



3 S3.4 TYPICAL AT DOOR
NTS

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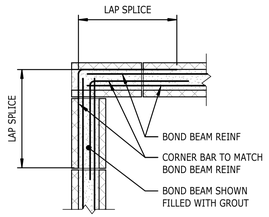
Checked By: ASP	

Sheet Title
FOUNDATION DETAILS

LOAD BEARING LINTEL SCHEDULE					
MARK	SIZE	REINFORCING	BEARING PLATE SIZE	# OF x6" LONG HEADED STUDS	NOTES
ML1	8"x16"	(2)#5	NA	NA	SEE 11/S4.1
ML2	8"x24"	(2)#5	NA	NA	SEE 11/S4.1

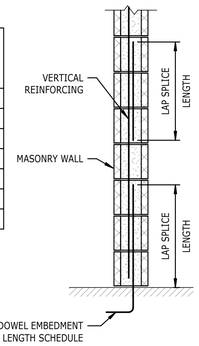
NOTES:
1. SEE PLAN FOR LINTEL LOCATIONS. SEE ARCHITECTURAL DRAWINGS FOR OPENING SIZES.
2. FOR LINTELS IN CMU WALLS, PROVIDE 1" MINIMUM CLEAR SPACE AROUND ALL REINFORCING.

10 S4.1 LOAD BEARING LINTEL SCHEDULE
NTS

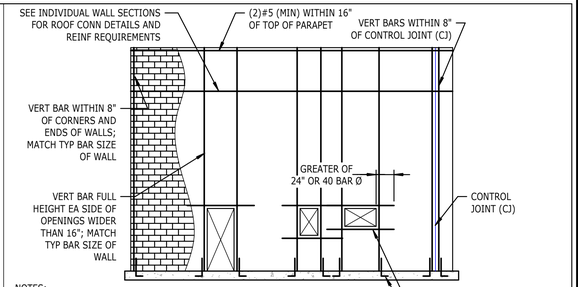


7 S4.1 TYPICAL BOND BEAM CORNER
NTS

MINIMUM SPLICE AND EMBEDMENT LENGTH SCHEDULE	
BAR SIZE	LAP SPLICE
#3	18"
#4	24"
#5	30"
#6	36"
#7	42"
#8	48"

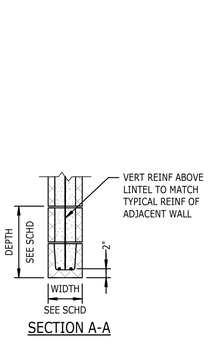


4 S4.1 MASONRY REINFORCING SPLICE SCHEDULE
NTS

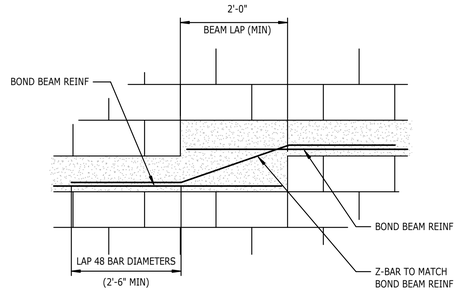


NOTES:
1. REINFORCING SHOWN IS A MINIMUM REQUIREMENT, INDIVIDUAL WALL SECTION REINFORCING REQUIREMENTS (SUCH AS NUMBER OR SIZE OF BARS) SHALL TAKE PRECEDENCE OVER THE REQUIREMENTS SHOWN HEREIN. SEE INDIVIDUAL WALL SECTIONS AND SCHEDULES FOR VERTICAL REINFORCING REQUIREMENTS.
2. ALL DISCONTINUOUS REINFORCEMENT SHALL BE LAPPED PER MINIMUM SPLICE AND EMBEDMENT LENGTH SCHEDULE.
3. VERTICAL STEEL MUST BE SECURED IN PLACE BEFORE THE BLOCKS ARE LAID. ALL VERTICAL REINFORCEMENT SHALL BE CONTINUOUS THROUGH MASONRY LINTELS AND BOND BEAMS, UNO.
4. AT OPENINGS WHERE STEEL BEAM LINTELS ARE PROVIDED, REINFORCE THE JAMB CELL TO THE BEARING ELEVATION OF THE LINTEL, AND REINFORCE THE NEXT ADJACENT CELL PAST THE END OF THE BEAM FULL HEIGHT AS SHOWN IN THIS DETAIL.
5. DETAIL DOES NOT APPLY TO INTERIOR NON-LOAD BEARING PARTITION WALLS.
6. PROVIDE MINIMUM (2) LEGS OF W1.7 HORIZONTAL JOINT REINFORCING @16"OC VERTICALLY.

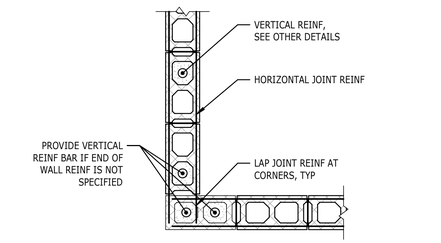
1 S4.1 MINIMUM WALL REINFORCING
NTS



SECTION A-A

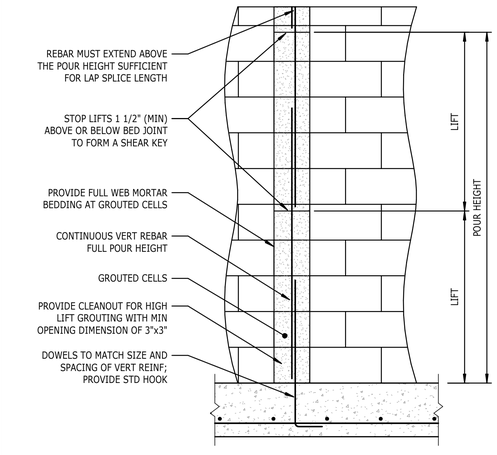


8 S4.1 TYPICAL STEP IN BOND BEAM
NTS



NOTES:
1. PROVIDE DOWELS TO FOUNDATION MATCHING SIZE OF VERTICAL REINFORCING, TYPICAL. SEE GENERAL NOTES OR MINIMUM SPLICE AND EMBEDMENT LENGTH SCHEDULE FOR LAP REQUIREMENTS.

5 S4.1 TYPICAL WALL CORNER
NTS

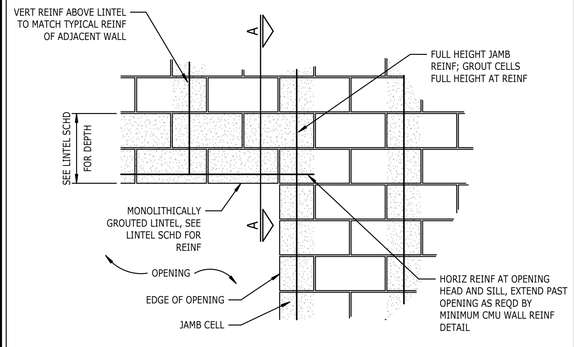


GENERAL GROUTING REQUIREMENTS:
1. ALL REINFORCED CELLS SHALL BE GROUTED SOLID.
2. REINFORCING BARS SHALL BE IN PROPER POSITION PRIOR TO PLACEMENT OF GROUT, NOT PUSHED DOWN INTO PREVIOUSLY PLACED GROUT. SAME REQUIREMENT APPLIES FOR EMBEDDED BOLTS AND FASTENERS.
3. MORTAR BEDDING UNDER THE FIRST COURSE OF BLOCK CELLS TO BE GROUTED SHALL PERMIT GROUT TO COME INTO DIRECT CONTACT WITH FOUNDATION.
4. PLACE MORTAR ON CROSS WEBS ADJACENT TO ALL GROUTED CELLS.
5. MORTAR THAT PROJECTS MORE THAN 1/2" INTO CELLS THAT ARE TO BE GROUTED SHALL BE REMOVED.
6. GROUTED CELLS SHALL BE MECHANICALLY VIBRATED DURING PLACEMENT OF GROUT. TEN MINUTES AFTER PLACING GROUT, EACH GROUTED CELL SHALL BE RECONSOLIDATED WITH A VIBRATOR.
7. METAL LATH SHALL BE PLACED UNDER ALL BOND BEAMS IN ORDER TO CONTAIN GROUT. FELT OR OTHER BOND BREAKING MATERIAL IS NOT PERMITTED. AS AN ALTERNATIVE TO THIS, "U"-SHAPED LINTEL BLOCKS MAY BE USED FOR BOND BEAMS.
8. EITHER LOW LIFT GROUTING OR HIGH LIFT GROUTING PROCEDURES MAY BE UTILIZED, AT THE CONTRACTOR'S OPTION.

LOW LIFT GROUTING PROCEDURE:
1. LAY WALL TO MAXIMUM OF 5'-0".
2. CLEAN MORTAR AND OTHER DEBRIS FROM CELLS TO BE GROUTED.
3. PLACE REINFORCING BARS IN PROPER POSITION.
4. PLACE GROUT UP TO LIFT HEIGHT AND VIBRATE.

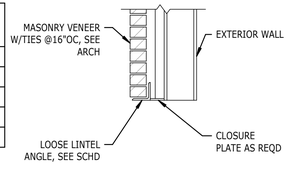
HIGH LIFT GROUTING PROCEDURE:
1. CLEANOUT OPENINGS SHALL BE PROVIDED IN THE FACE SHELLS OF THE BOTTOM COURSE OF ALL CELLS TO BE GROUTED. OPENINGS SHALL BE LARGE ENOUGH TO ALLOW REMOVAL OF DEBRIS.
2. LAY WALL TO MAXIMUM POUR HEIGHT AND CLEAN DEBRIS FROM OPENINGS. PLACE REINFORCING BARS IN PROPER POSITION.
3. CLEAN MORTAR AND OTHER DEBRIS FROM CELLS TO BE GROUTED.
4. MASONRY SHALL CURE A MINIMUM OF 4 HOURS PRIOR TO GROUTING.
5. PLACE GROUT TO THE FOLLOWING HEIGHTS: MAXIMUM LIFT HEIGHT IS 5'-0"; MAXIMUM POUR HEIGHT IS 12'-0" UNLESS EXPRESSLY COORDINATED WITH THE STRUCTURAL ENGINEER.
6. AFTER THE LIFT IS POURED, VIBRATE TO ELIMINATE ALL AIR VOIDS. WAIT BETWEEN 3 AND 10 MINUTES, THEN RECONSOLIDATE BY VIBRATING AGAIN. CONTINUE THIS PROCEDURE FOR FULL POUR HEIGHT. RECONSOLIDATE THE PRIOR LIFT BY EXTENDING THE VIBRATOR THROUGH THE CURRENT LIFT INTO THE PREVIOUS LIFT.
7. GROUT SLUMP MUST BE MAINTAINED BETWEEN 10 AND 11 INCHES FOR HIGH LIFT GROUTING.

2 S4.1 TYPICAL MASONRY GROUT REQUIREMENTS
NTS



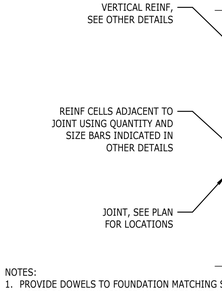
11 S4.1 TYPICAL LINTEL|JAMB CONSTRUCTION
NTS

STEEL LOOSE LINTEL ANGLE SUPPORTING MASONRY VENEER	
CLEAR OPENING	LOOSE LINTEL ANGLE
UP TO 5'-0"	L4x4x3/8
5'-1" TO 8'-0"	L6x4x3/8 (LLV)
8'-1" TO 10'-0"	L7x4x3/8 (LLV)
10'-1" TO 12'-0"	L8x4x1/2 (LLV)



NOTES:
1. ALL LOOSE LINTELS SHALL BE PAINTED OR GALVANIZED, SEE ARCHITECTURAL DRAWINGS.
2. PROVIDE 6" MINIMUM BEARING FOR OPENINGS UP TO 8'-0" WIDE. PROVIDE 8" MINIMUM BEARING FOR OPENINGS OVER 8'-0" WIDE.
3. SEE ARCHITECTURAL DRAWINGS FOR ANGLE PLACEMENT AND FLASHING.
4. LOOSE LINTEL ANGLES ARE NOT SHOWN ON THE STRUCTURAL DRAWINGS. SEE ARCHITECTURAL DRAWINGS FOR ALL LOCATIONS OF OPENINGS REQUIRING ANGLES.
5. FOR CLEAR OPENING DIMENSIONS GREATER THAN THOSE SHOWN IN THE SCHEDULE, SEE OTHER DETAILS OR CONTACT THE ENGINEER OF RECORD.

9 S4.1 STEEL LOOSE LINTEL SCHEDULE
NTS



NOTES:
1. PROVIDE DOWELS TO FOUNDATION MATCHING SIZE OF VERTICAL REINFORCING, TYPICAL. SEE GENERAL NOTES OR MINIMUM SPLICE AND EMBEDMENT LENGTH SCHEDULE FOR LAP REQUIREMENTS.
2. ALL CONTROL JOINT LOCATIONS SHALL BE COORDINATED WITH THE ARCHITECTURAL DRAWINGS. FOR INTERIOR PARTITION WALLS, JOINTS SHALL HAVE A MAXIMUM SPACING DETERMINED FROM THE LESSER OF 1 1/2 TIMES THE WALL HEIGHT AND 25 FEET. FOR STRUCTURAL WALLS, CONTACT THE ENGINEER OF RECORD IF JOINTS ARE NOT LOCATED ON PLAN.
3. MASONRY WALL CONTROL JOINTS SHALL NOT BE LOCATED WITHIN 24" OF THE EDGES OF WALL OPENINGS.
4. DO NOT INSTALL CONTROL JOINTS IN STAIR OR ELEVATOR CORE WALLS.
5. MASONRY WALL CONTROL JOINTS DO NOT NECESSARILY ALIGN WITH VENEER CONTROL JOINT LOCATIONS. DO NOT INSTALL MASONRY WALL CONTROL JOINTS ONLY AT VENEER JOINT LOCATIONS.
6. WHERE A CONTROL JOINT OCCURS WITHIN A MASONRY SHEAR WALL, END WALL REINFORCING MUST BE INSTALLED ON EACH SIDE OF THE JOINT.

6 S4.1 TYPICAL MASONRY WALL CONTROL JOINT
NTS

OAKLEY COLLIER ARCHITECTS
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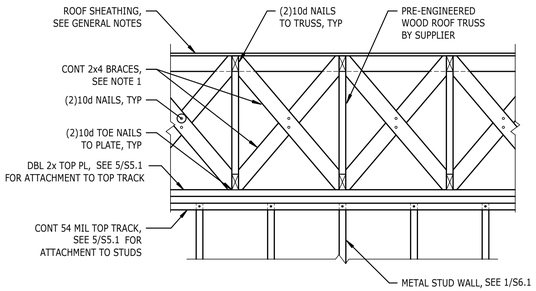
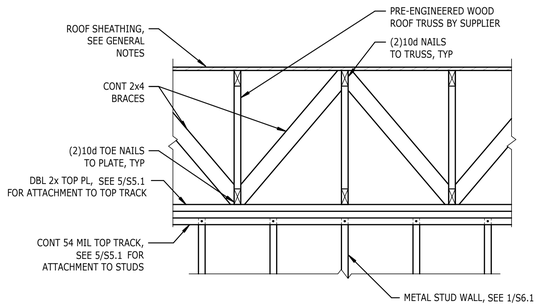
Sheet Title: CMU DETAILS

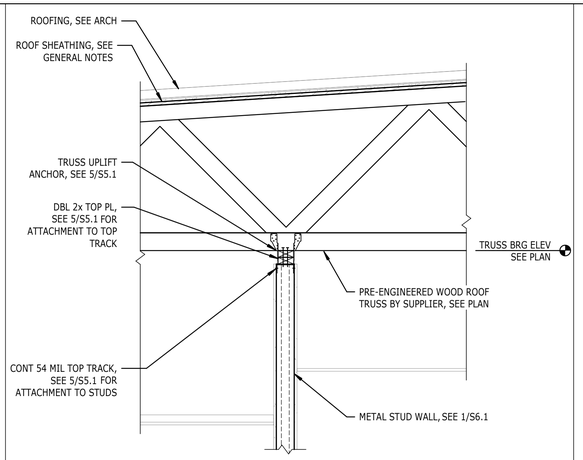


NOTES:
1. AT INTERIOR SHEAR WALL LOCATIONS, PROVIDE BRACES AS CLOSE TO 1 TO 1 SLOPE AS POSSIBLE. BRACE MAY NEED TO PASS THROUGH MULTIPLE TRUSSES (3 MAX) TO ACHIEVE SLOPE.
2. SEE S6.3 FOR ADDITIONAL SHEAR WALL REQUIREMENTS.

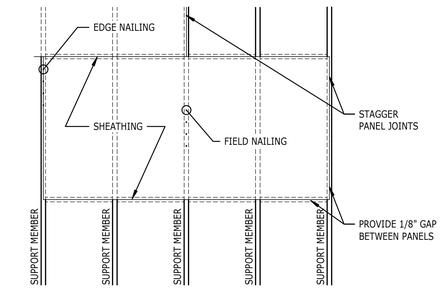
10 / S5.1 TYP BRACING BTWN ROOF TRUSSES AT SHEAR WALLS
NTS



7 / S5.1 TYPICAL BRACING BTWN ROOF TRUSSES AT BRG WALLS
NTS

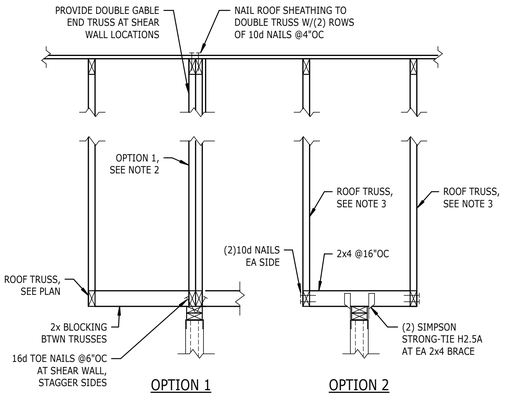


4 / S5.1 ROOF TRUSS AT INTERIOR BEARING WALL
NTS



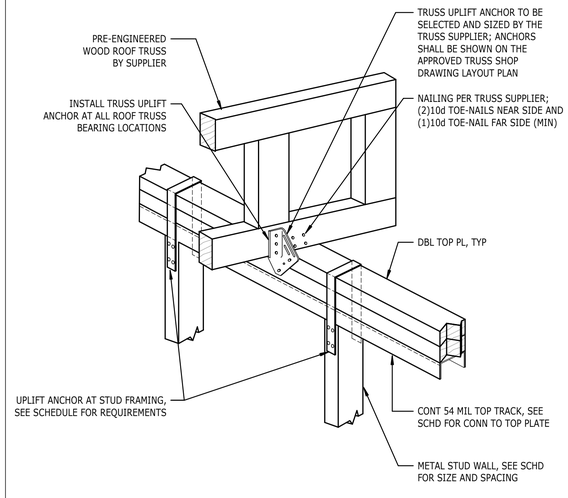
ELEMENT	NAILING		PANEL EDGE BLOCKING	SHEATHING EDGE DETAIL
	FIELD	EDGE		
ROOFS	10d @12"OC	10d @6"OC	NO	T&G/CLIPS

1 / S5.1 DETAIL
TYPICAL NAILING PATTERN FOR SHEATHING
NTS



NOTES:
1. CONTRACTOR TO PROVIDE OPTION 1 OR 2 AT ALL INTERIOR SHEAR WALL LOCATIONS.
2. FOR OPTION 1, TRUSS SUPPLIER SHALL DESIGN DOUBLE GABLE END TRUSS TO TRANSFER 268 PLF OVER LENGTH OF SHEAR WALL FROM TOP OF SHEAR WALL TO ROOF. FOR THIS OPTION, NO SHEATHING IS REQUIRED FROM TOP OF SHEAR WALL TO ROOF.
3. FOR OPTION 2, TRUSS SUPPLIER SHALL DESIGN TRUSSES FOR 134 PLF OVER LENGTH OF SHEAR WALL FROM TOP OF SHEAR WALL TO ROOF.
4. CONTRACTOR SHALL COORDINATE WITH TRUSS SUPPLIER TO DETERMINE WHICH OPTION IS USED. TRUSS SUPPLIER SHALL INDICATE TRUSSES DESIGNED FOR LATERAL LOADING ON TRUSS LAYOUT PLAN.

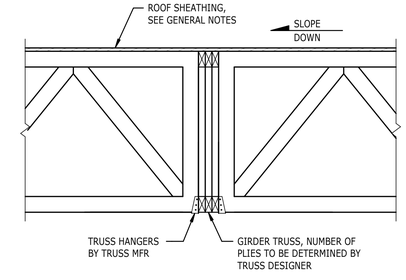
8 / S5.1 TYPICAL BRACING FOR INTERIOR SHEAR WALL
NTS



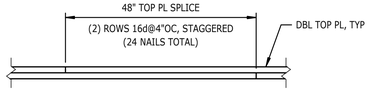
STUD UPLIFT ANCHOR REQUIREMENTS SPRUCE PINE FIR FRAMING, TRUSS SPACING @24"OC		
TRUSS REACTION	ANCHOR TYPE	TOP TRACK TO TOP PL CONNECTION
LESS THAN 660 LBS	(1)#10 EA TRACK LEG INTO STUD FLANGE	(2)#10x3" @16"OC
660 LBS TO 1,320 LBS	(2)#12 EA TRACK LEG INTO STUD FLANGE	(2)#12x3" @8"OC
1,321 LBS TO 3,000 LBS	SIMPSON CS22 W/(4)#10 SCREWS EA SIDE	(2)#12x3" @8"OC
GREATER THAN 3,000 LBS	CONTACT ENGR	CONTACT ENGR

NOTES:
1. DETAIL APPLIES TO BOTH INTERIOR AND EXTERIOR BEARING WALLS. MAXIMUM WALL STUD SPACING SHALL BE 16"OC.
2. CONTRACTOR TO SELECT STUD UPLIFT ANCHORS BASED ON THE MAXIMUM TRUSS UPLIFT REACTIONS/ANCHORS AS SHOWN ON THE APPROVED TRUSS SHOP DRAWINGS.
3. CONTRACTOR SHALL REQUEST FOR ADDITIONAL STUD UPLIFT ANCHORS AS REQUIRED AT TRUSS GIRDER, MULTI-PLY TRUSSES, JACK TRUSSES, AND HIP AND VALLEY TRUSSES. MULTIPLE ANCHORS MAY BE USED (PER SIMPSON STRONG-TIE RECOMMENDED CONSTRUCTION DETAILS) TO ACHIEVE HIGHER UPLIFT VALUES.

5 / S5.1 TYPICAL ROOF TRUSS CONNECTION
NTS



2 / S5.1 TYPICAL GIRDER ROOF TRUSS
NTS



3 / S5.1 TYPICAL TOP PLATE SPLICE
NTS

OAKLEY COLLIER ARCHITECTS
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109 Candlewood Road, Rocky Mount, NC 27804 (P) 252.937.2500
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STEWART
223 S. WEST STREET
SUITE 1100
RALEIGH, NC 27603
T 919.380.8750
FIRM LICENSE #C-1051
PROJECT #522222

BID SET
TOWN OF NASHVILLE
FIRESTATION NO. 2
1200 EAST WASHINGTON ST
NASHVILLE, NC 27856

NORTH CAROLINA PROFESSIONAL SEAL 035283 ENGINEER ANDREW S. PORDOM
Andrew S. Pordom
5/12/2023

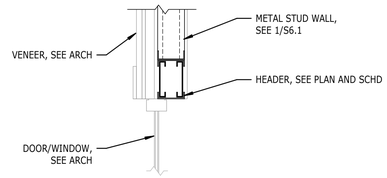
GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

REVISIONS

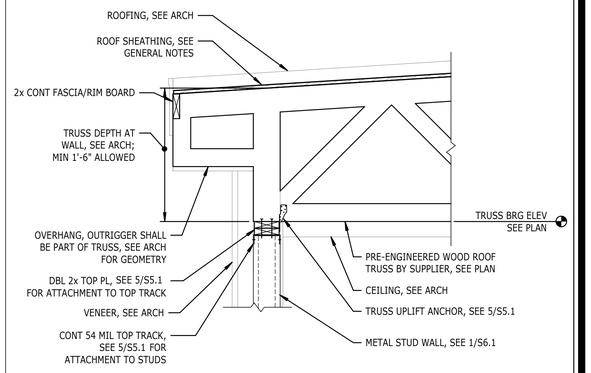
#	Description	Date

Date	Project No.
5/15/2023	22021.1
Drawn By: KAB	Sheet No.: S5.1
Checked By: ASP	

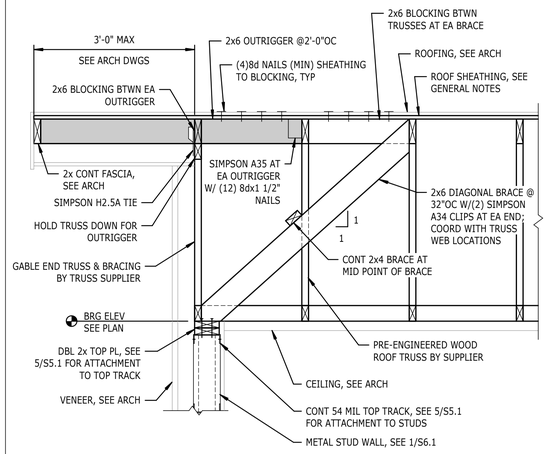
Sheet Title: ROOF FRAMING DETAILS



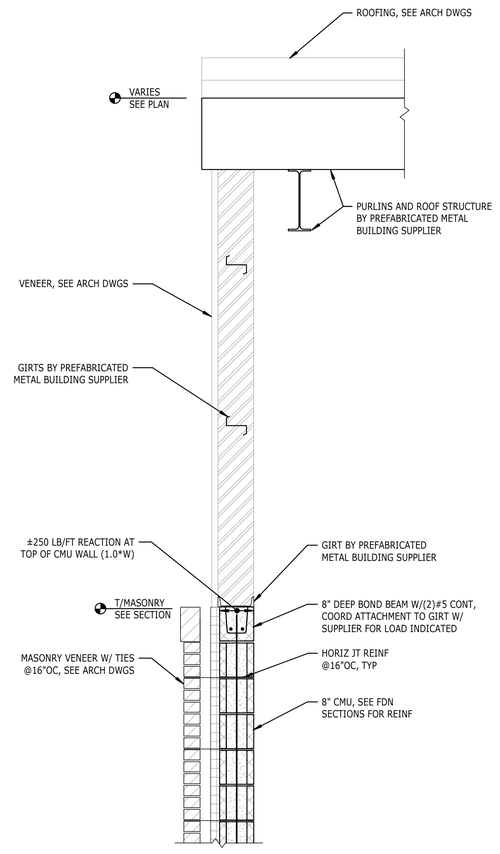
4 S5.2 SECTION
3/4" = 1'-0"



1 S5.2 SECTION
3/4" = 1'-0"



5 S5.2 TYPICAL GABLE END TRUSS BRACING
3/4" = 1'-0"



2 S5.2 SECTION
3/4" = 1'-0"

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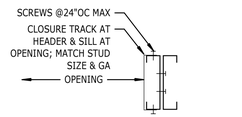
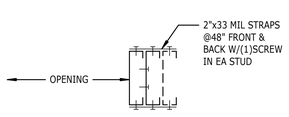
Date	Project No.
5/15/2023	22021.1
Drawn By: KAB	Sheet No.: S5.2
Checked By: ASP	

Sheet Title: ROOF FRAMING DETAILS

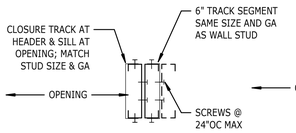
JAMB STUD SCHEDULE				
HEADER	H1, H3	H2, H4, H7	H5, H6	GT (GIRDER TRUSS)
JAMB STUDS	(2)600S200-68 + (1)600T1125-54	(3)600S200-68 + (1)600T125-54	(2)400S200-68 + (1)400T125-54	(2)400S200-68 + (1)400T125-54
CONNECTION AT BASE	(3)PAF (1-1/2" EMBED)	(5)PAF (1-1/2" EMBED)	(3)PAF (1-1/2" EMBED)	(3)PAF (1-1/2" EMBED)



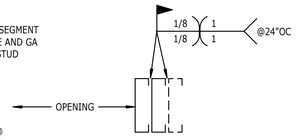
DOUBLE JAMB DETAIL



2 OR MORE JAMB STUDS



2 OR MORE JAMB STUDS

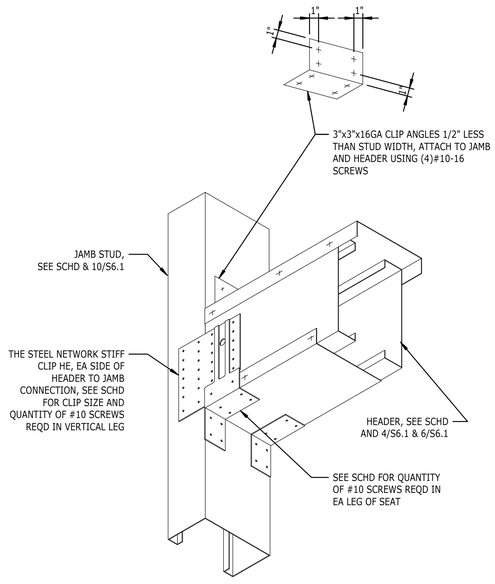


2 OR MORE JAMB STUDS

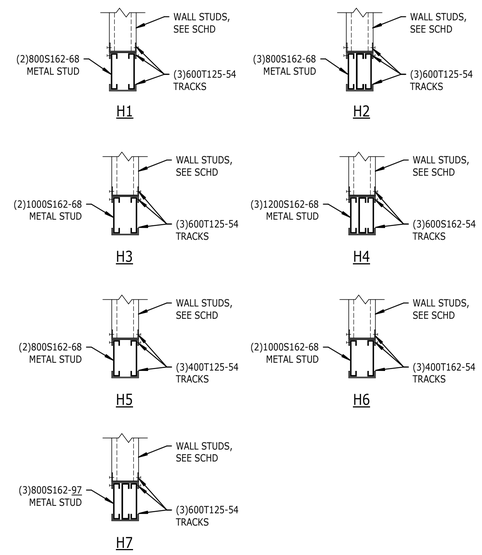
NOTES:
1. ERECTOR TO SELECT ONE OF JAMB OPTIONS FOR ATTACHMENT OF 2 OR MORE JAMB STUDS.
2. "PAF" DENOTES 0.157"Ø HILTI X-U POWDER ACTUATED FASTENERS OR APPROVED ALTERNATE.
3. ALL SCREWS INDICATED ARE #12 TEK SCREWS.
4. JAMB STUD APPLIES EACH SIDE OF OPENING. WHERE WINDOWS ARE SIDE BY SIDE, JAMB STUDS PER SCHEDULE ARE REQUIRED FOR EACH OPENING (NOT COMBINED).

10 S6.1 JAMB SCHEDULE
NTS

HEADER CONNECTION SCHEDULE			
HEADER	CLIP SIZE	SCREWS IN VERT LEG	SCREWS IN EA LEG OF SEAT
H1, H3	HE(L)	12	4
H2, H4, H7	HE(H)	20	8
H5, H6	HE(L)	20	4



7 S6.1 HEADER CONNECTION
NTS



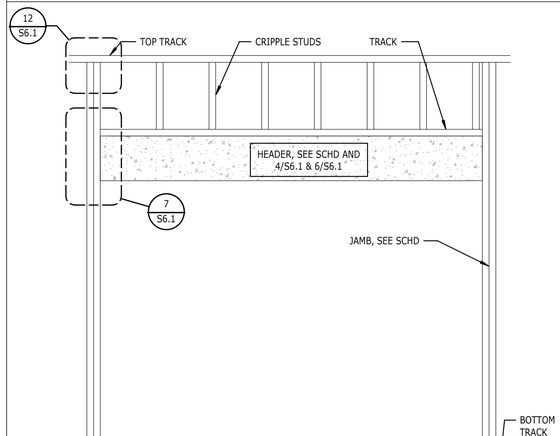
NOTES:
1. PROVIDE FULL HEIGHT JAMB STUDS AT EACH END OF COLD-ROLLED HEADERS PER 10/S6.1 SCHEDULE, TYPICAL.
2. PROVIDE WEB STIFFENERS AT POINT LOAD FROM GIRDER TRUSS AND ENDS OF HEADERS.
3. COLD ROLLED HEADER MEMBERS SHALL BE UNPUNCHED SECTIONS.
4. REFER TO ARCHITECTURAL DRAWINGS FOR OPENING DIMENSIONS AND EXACT LOCATIONS.

4 S6.1 LOAD BEARING HEADER SCHEDULE
NTS

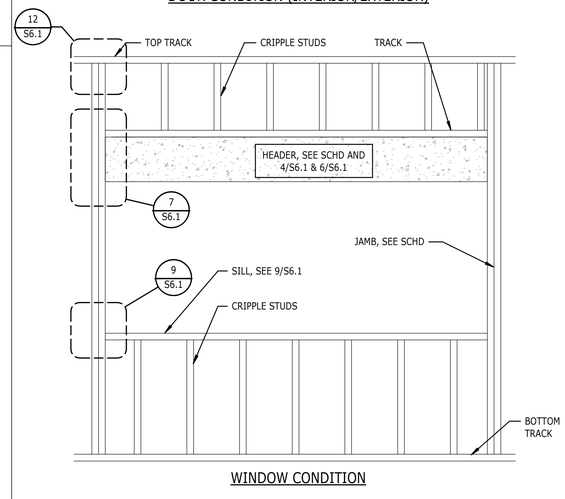
LOAD BEARING WALL CONSTRUCTION SCHEDULE								
STORY	TYPE	SIZE/GAUGE	Fy	SPACING	BRIDGING	BOT. TRACK	TOP TRACK	NOTES
FOUNDATION TO ROOF	INTERIOR, LOAD BEARING	400S162-54	33 KSI	16"OC	4'-0"OC MAX	400T125-54	400T200-54	-
	EXTERIOR	600S162-54	50 KSI	16"OC	4'-0"OC MAX	600T125-54	600T200-54	-
	EXTERIOR, CORNER ZONE	600S162-54	50 KSI	12"OC	4'-0"OC MAX	600T125-54	600T200-54	CORNER ZONE WIDTH IS 5'-3"

NOTES:
1. 600S 162 - 54
   - 54 = STUD GAUGE (MIL)
   - 162 = FLANGE WIDTH (IN)
   - 600 = STUD DEPTH (IN)
2. "Fy" INDICATES MINIMUM YIELD STRENGTH.
3. SEE S6.1 FOR TYPICAL DETAILS.

1 S6.1 WALL CONSTRUCTION SCHEDULE
NTS

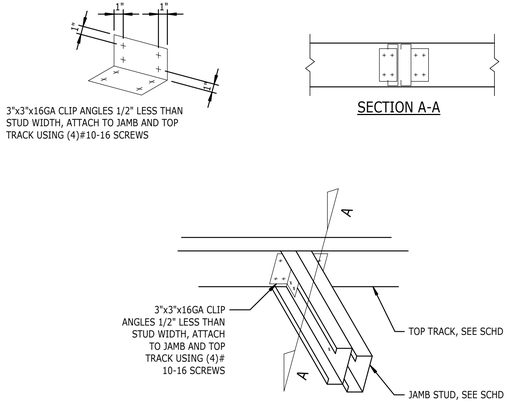


DOOR CONDITION (INTERIOR/EXTERIOR)

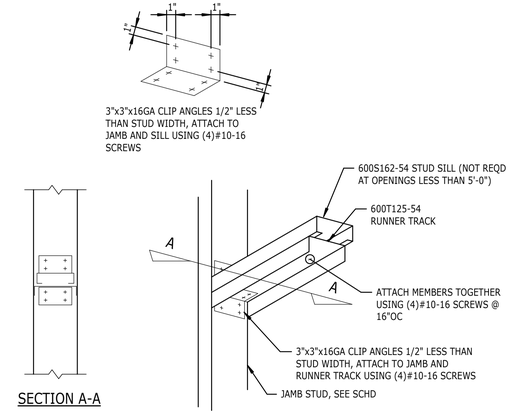


WINDOW CONDITION

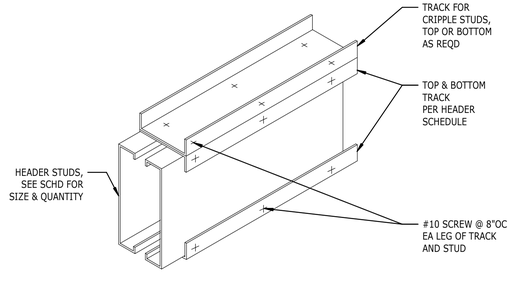
2 S6.1 ELEVATION - TYPICAL OPENING
NTS



12 S6.1 JAMB TO TOP TRACK CONNECTION
NTS



9 S6.1 SILL CONNECTION
NTS



6 S6.1 HEADER SCREWS DETAIL
NTS

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1111 Haynes Street, Suite 109, Raleigh, NC 27604 (P) 919.985.7700

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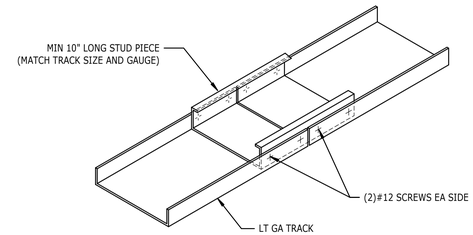
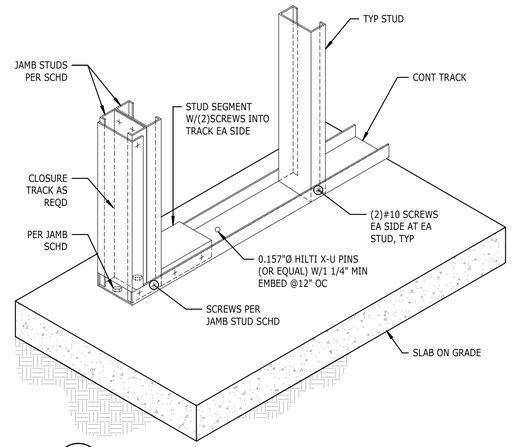
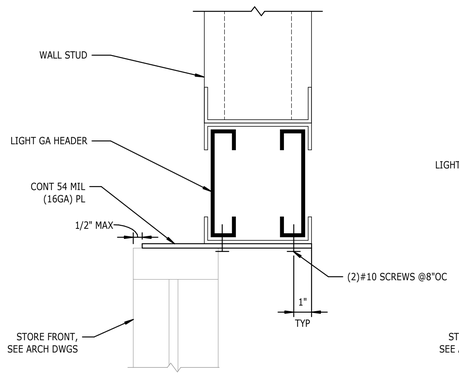
Sheet Title: METAL STUD DETAILS



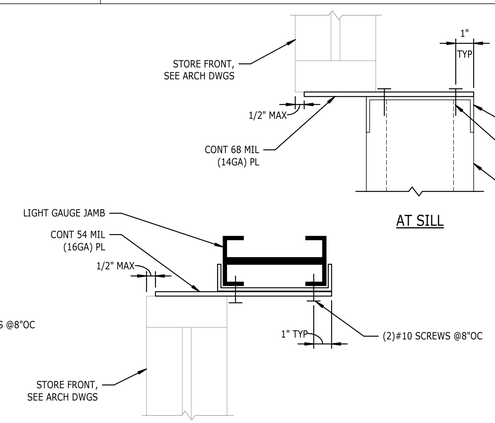
4 S6.2 DETAIL
NTS
NOTES:
1. SPLICE SHALL OCCUR OVER CENTERLINE OF VERTICAL STUD, TYP.



1 S6.2 DETAIL
NTS



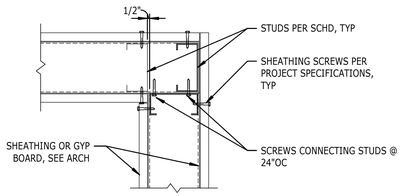
AT HEAD



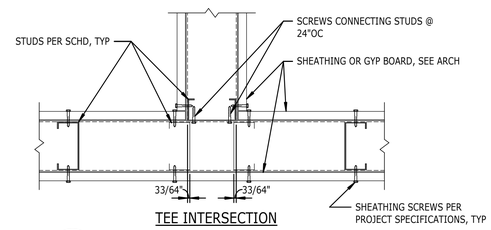
AT JAMB

AT SILL

5 S6.2 LIGHT GA PL AT STORE FRONT ATTACHMENT
3" = 1'-0"

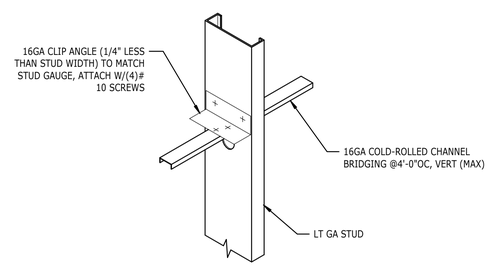


CORNER FRAMING



TEE INTERSECTION

2 S6.2 DETAIL
NTS



3 S6.2 DETAIL
NTS

OAKLEY COLLIER ARCHITECTS
OCA
109 Candlewood Road, Rocky Mount, NC 27804 (P) 252.937.2500
1111 Haynes Street, Suite 107, Raleigh, NC 27604 (P) 919.985.7700

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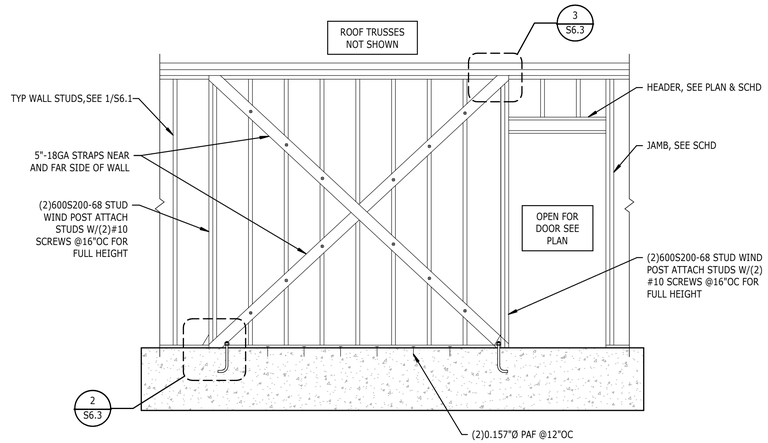
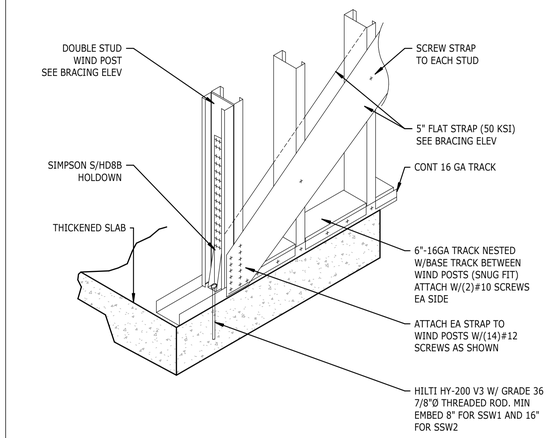
Sheet Title: METAL STUD DETAILS



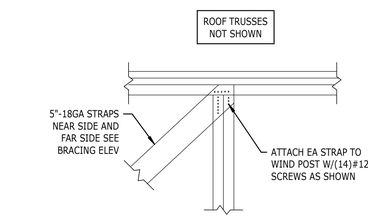
1 S6.3 TYPICAL METAL STUD STRAP WALL

NTS



2 S6.3 STRAP ANCHORAGE

NTS



3 S6.3 TOP OF METAL STRAP CONNECTION

NTS

OAKLEY COLLIER ARCHITECTS
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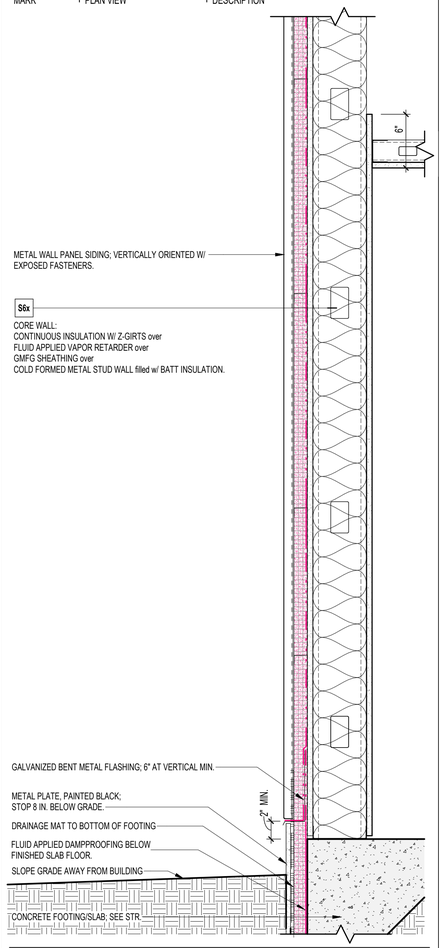
Checked By: ASP	

Sheet Title: METAL STUD DETAILS

A4 — ASSEMBLY 4

STEEL STUD | BATT + CI INSULATION | METAL WALL PANEL

MARK | PLAN VIEW | DESCRIPTION



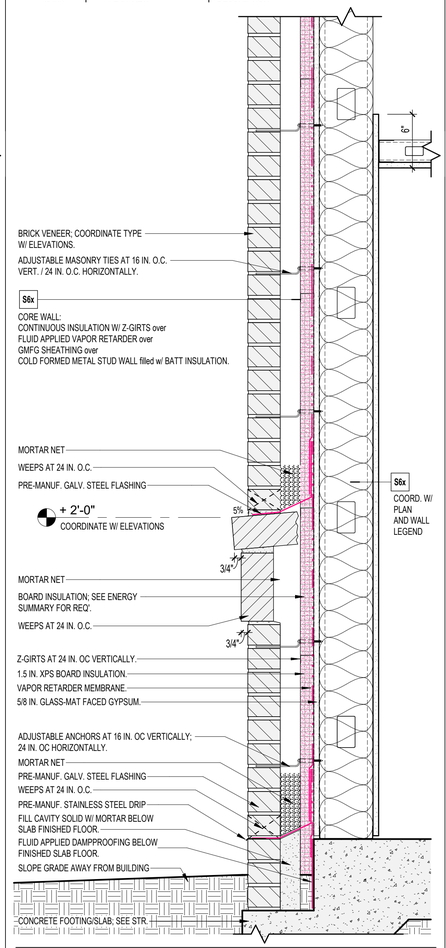
CORE WALL: METAL STUD FILLED WITH BATT INSULATION, CONT. BOARD INSULATION
CLADDING BASE: BRICK VENEER | CLADDING UPPER: CEMENTITIOUS PANEL BOARD/ SIDING/ B&B
SEE WALL SECTIONS FOR MORE DETAILS.

UL DESIGN: **N/A**

A3 — ASSEMBLY 3

STEEL STUD | BATT + CI INSULATION | BRICK VENEER

MARK | PLAN VIEW | DESCRIPTION



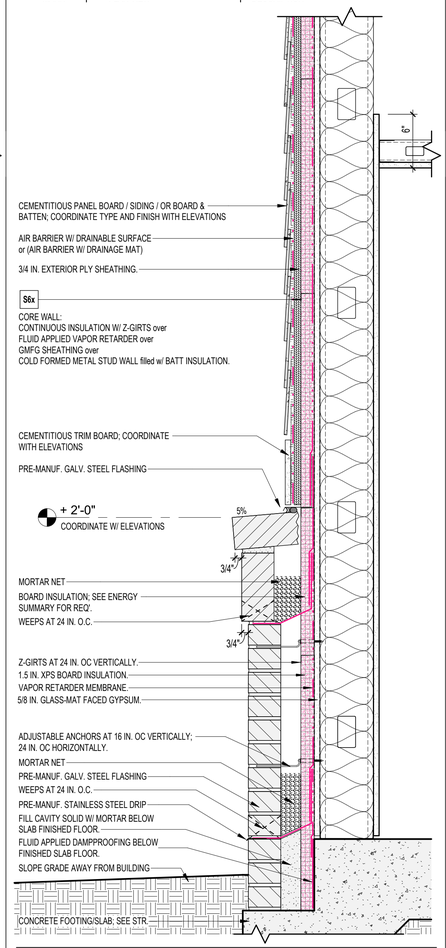
CORE WALL: METAL STUD FILLED WITH BATT INSULATION, CONT. BOARD INSULATION
CLADDING BASE: BRICK VENEER | CLADDING UPPER: CEMENTITIOUS PANEL BOARD/ SIDING/ B&B
SEE WALL SECTIONS FOR MORE DETAILS.

UL DESIGN: **N/A**

A2 — ASSEMBLY 2

STEEL STUD | BATT + CI INSULATION | BRICK VENEER | CEMENTITIOUS PLANK

MARK | PLAN VIEW | DESCRIPTION



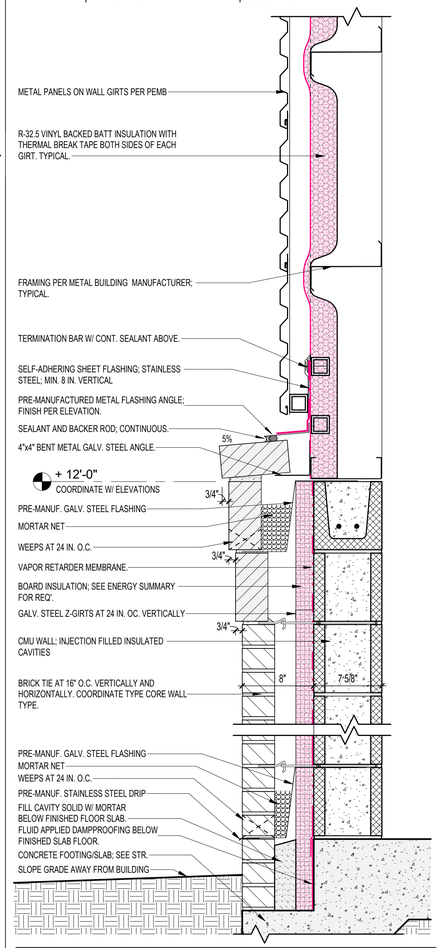
CORE WALL: METAL STUD FILLED WITH BATT INSULATION, CONT. BOARD INSULATION
CLADDING BASE: BRICK VENEER | CLADDING UPPER: CEMENTITIOUS PANEL BOARD/ SIDING/ B&B
SEE WALL SECTIONS FOR MORE DETAILS.

UL DESIGN: **N/A**

A1 — ASSEMBLY 1

PEMB OVER CMU W/ BRICK VENEER

MARK | PLAN VIEW | DESCRIPTION

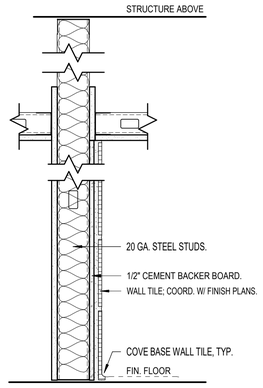


BASE WALL: CMU (INJECTED INSULATION), CONT. BOARD INSULATION, BRICK VENEER.
UPPER WALL: PRE-ENGINEERED METAL BUILDING CORE, INSULATION, AND CLADDING.
SEE WALL SECTIONS FOR MORE DETAILS.

UL DESIGN **#U905** (IF RATED) - BUILD TO UNDERSIDE OF RATED HORIZ. ASSEMBLY ABOVE.

WT — WALL TILE FINISH

MARK | PLAN VIEW | DESCRIPTION



METAL STUD WALL, WITH TILE FINISH ON ONE OR TWO SIDES

UL DESIGN: **N/A**

S#.1 — METAL STUD FURRING

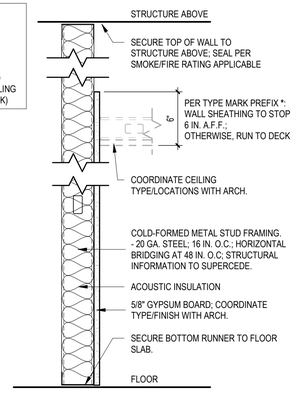
(FINISHED ONE SIDED)

MARK | PLAN VIEW | DESCRIPTION

TYPE MARK LEGEND:

WALL TYPE:
S3.1 = 3 5/8" STUD

PREFIX:
S#.1* = WALL SHEATHING TO FINISH 6" ABOVE CEILING (OTHERWISE TO DECK)



METAL STUD WALL, SHEATED ONE SIDE.

UL DESIGN: **N/A**

S# — METAL STUD

(FINISHED TWO SIDED)

MARK | PLAN VIEW | DESCRIPTION

TYPE MARK LEGEND:

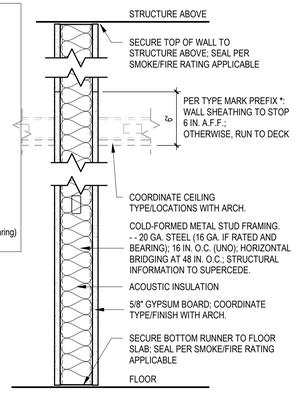
WALL TYPE:
S3 = 3-5/8" STUD
S4 = 4" STUD
S6 = 6" STUD

PREFIX:
S#* = WALL SHEATHING TO FINISH 6" ABOVE CLG. (OTHERWISE TO DECK)

S# **B** = STRUCTURAL BEARING

RATED WALL TYPES:
SEAL ALL PENETRATIONS AND PERIMETER W/ FIRE SEALANT

S# **0R** = 0.5 HR. RATED
Prescriptive - 721.13-1.1 (Non-Bearing)
Prescriptive - 721.13-1.3 (Bearing)



METAL STUD WALL, SHEATED TWO SIDE.

UL DESIGN: IF APPLICABLE, PRESCIRPTIVE FIRE RATING W/ SEALED PENETRATIONS AS NECESSARY.

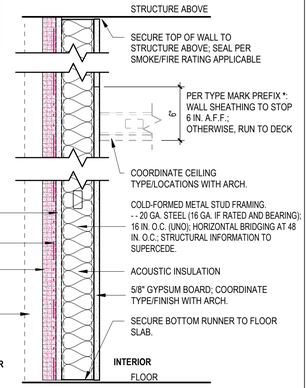
S#x — X CORE: METAL STUD

(METAL STUD W/ C.I. BOARD)

MARK | PLAN VIEW | DESCRIPTION

TYPE MARK LEGEND:

WALL TYPE:
S6x = 6" STUD



CORE EXTERIOR METAL STUD WALL; CONTINUOUS INSULATION.

UL DESIGN: **N/A**

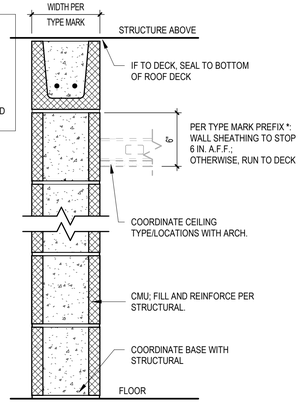
M# — CMU MASONRY

MARK | PLAN VIEW | DESCRIPTION

TYPE MARK LEGEND:

WALL TYPE:
M8 = 8"x8"x16" CMU

PREFIX:
M#* = BLOCK TO FINISH 6" ABOVE CEILING
M#**x** = INSULATION INJECTED CAVITIES.



CONCRETE MASONRY UNIT WALL

UL DESIGN **#U905** (IF RATED) - BUILD TO UNDERSIDE OF RATED HORIZ. ASSEMBLY ABOVE.

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BID SET

TOWN OF NASHVILLE FIRE STATION NO. 2

1200 EAST WASHINGTON ST.
NASHVILLE, NC 27856

OAKLEY COLLIER ARCHITECTS P.A. — CERT NO. 50681 — ROCKY MOUNT, NC

ANN W. COLLIER — REGISTERED ARCHITECT — NORTH CAROLINA — ROCKY MOUNT, NC — 05/15/23

GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By: JFK	Sheet No.: A0.0
Checked By: JFK	

Sheet Title: WALL LEGEND

GENERAL NOTES

1. DIMENSIONS ARE FROM:
   A. EXTERIOR WALLS TO FACE OF CMU
   B. INTERIOR WALLS TO FACE OF STUD.
   C. CURTAINWALL (CW) AND STOREFRONT (SF) DIMENSIONED TO CENTER OF CENTRAL MULLIONS AND FACE OF ROUGH OPENING AT THE PERIMETER, UNO.
   D. DOORS/OPENINGS IN MASONRY DIMENSIONED TO MASONRY OPENING.
   E. DOORS/OPENINGS IN METAL STUD WALLS DIMENSIONED TO CENTERLINE.
   F. "**<F**" DENOTES DIMENSION '**FROM FINISH**'
   G. "**F2F**" DENOTES DIMENSION FROM '**FINISH TO FINISH**'.
   H. "**EOS**" DENOTES '**EDGE OF SLAB**' AT FLOOR LEVEL.
2. VERIFY ALL DIMENSIONS AND SIZES PRIOR TO CONSTRUCTION.
3. SEE STRUCTURAL PLANS FOR ALL STRUCTURAL MEMBERS.
4. SEE DOOR AND WINDOW SCHEDULES FOR ALL DOOR AND WINDOW SIZES.
5. COORDINATE ALL SCHEDULES WITH THE OWNER PRIOR TO CONSTRUCTION.
6. OBTAIN ALL PERMITS REQUIRED.
7. SCHEDULE AND COORDINATE ALL INSPECTIONS REQUIRED.

FOUNDATION NOTES

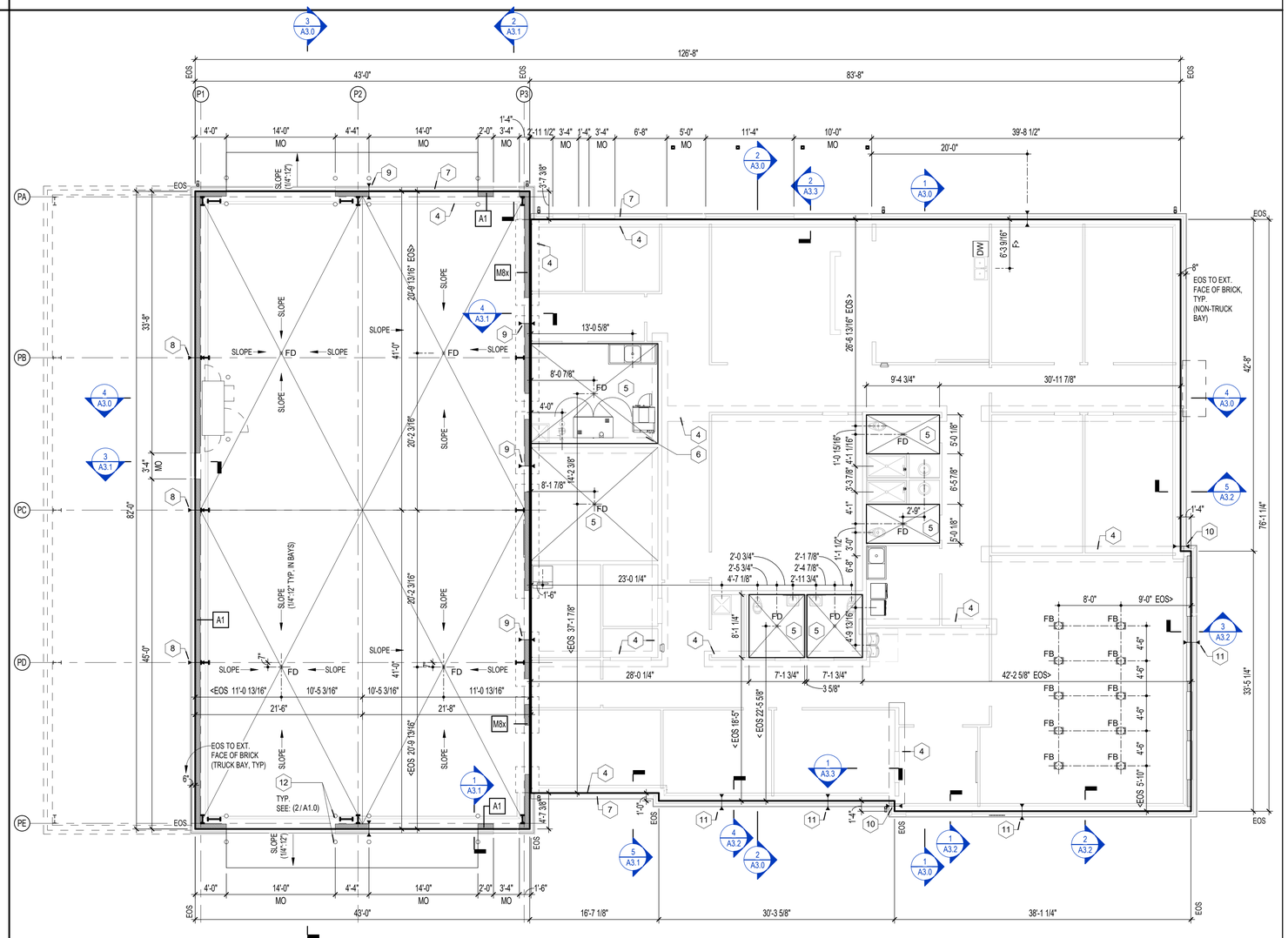
A. REFER STRUCTURAL FOR SOIL BEARING PRESSURE.
B. CLEAR ALL TOP SOIL, ROOTMAT, VEGETATION, DEBRIS, AND OTHER UNSUITABLE MATERIAL FROM CONSTRUCTION AREAS.
C. EXCAVATIONS SHALL BE INSPECTED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING FOUNDATION CONCRETE.
D. BACKFILLING: BOTH SIDES OF FOUNDATION WALLS SHALL BE BACKFILLED SIMULTANEOUSLY. NO FILL OR BACKFILL SHALL BE SETTLED BY THE USE OF WATER.
E. SEE ELECTRICAL PLANS FOR CONDUIT LOCATIONS.
F. SEE PLUMBING PLANS FOR LOCATIONS OF PIPING RUNS.
G. TREAT SOIL UNDER SLAB WITH PROPER TERMITE PROTECTION.
H. ALL WOOD IN CONTACT WITH CONCRETE OR MASONRY SHALL BE TREATED.
I. REFER TO SITE PLAN FOR LOCATIONS OF SIDEWALKS, CURBS, ACCESSIBLE RAMPS AND ALL OTHER SITE RELATED WORK.
J. "**TOP OF MASONRY**" REFERS TO HEIGHT OF CMU CORE WALL ABOVE FINISHED FLOOR.
K. CENTER ALL ELECTRICAL/DATA FLOOR BOXES IN THEIR ROOMS BOTH DIRECTIONS, UNO.

LEGEND

MASONRY CONTROL JOINT

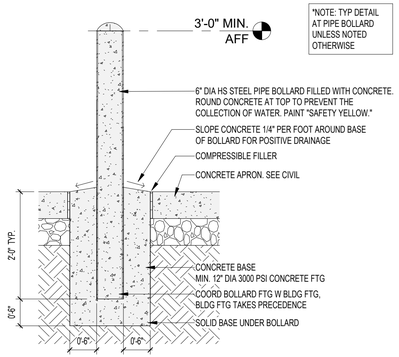
CJ CONTROL JOINT
FD FLOOR DRAIN
FB ELEC./DATA FLOOR BOX

WALL TYPES (REFER TO SHEET ***A0.0 - WALL TYPE LEGEND***):
M8X 8" CMU MASONRY EXTERIOR CORE WALL
S6X 6" METAL STUD EXTERIOR CORE WALL



KEYNOTES

MARK	DESCRIPTION
1	ALIGN MASONRY CONTROL JOINT WITH INTERNAL CORNER OF BRICK VENEER.
2	ALIGN MASONRY CONTROL JOINT WITH OPENING JAMB.
3	ALIGN SLAB CONTROL JOINT WITH RE-ENTRANT CORNER OF SLAB.
4	FOUNDATION PER STRUCTURAL
5	SLOPE ROOM TO DRAIN AT 1/4 IN. / 12 IN. SLOPE ALL SIDES
6	TRENCH DRAIN; COORDINATE W/ WASHER MANUFACTURER.
7	BRICK LEDGE; COORDINATE W/ STRUCTURAL.
8	MASONRY CONTROL JOINT AT COLUMN GRID.
9	MASONRY CONTROL JOINT AT JAMB, ABOVE HEADER.
10	MASONRY CONTROL JOINT AT INSIDE CORNER.
11	MASONRY CONTROL JOINT ALIGNED WITH JAMB ABOVE.
12	BOLLARDS; SEE DETAIL (2 / A1.0)



2 / A1.0 **BOLLARD**
3/4" = 1'-0"

1 / A1.0 **SLAB / FOUNDATION / MASONRY PLAN**
1/8" = 1'-0"

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ANN W. COLLIER
REGISTERED ARCHITECT
SOUTH CAROLINA
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05/15/23

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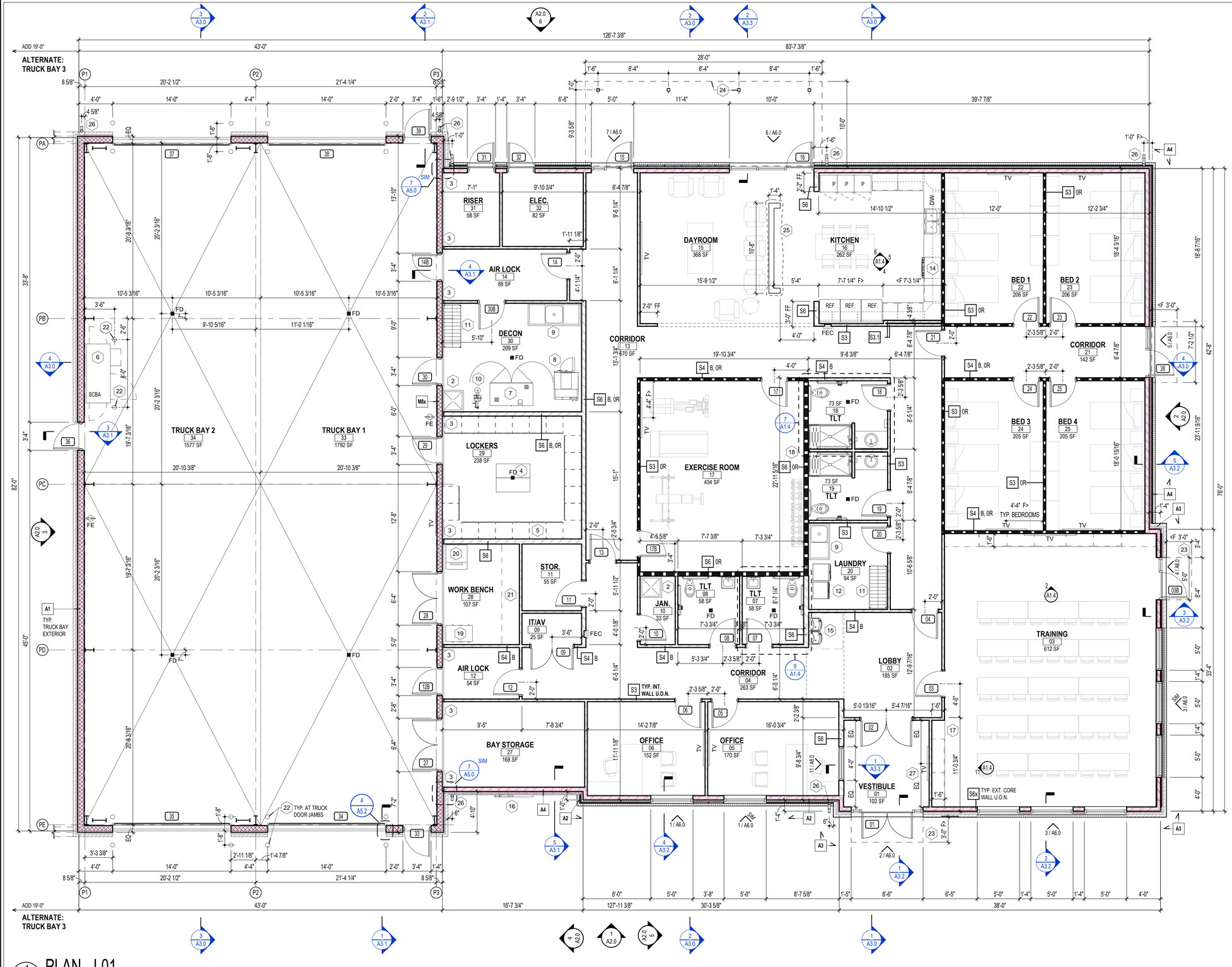
#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By: JFK	Sheet No. A1.0
Checked By: JFK	

Sheet Title: SLAB / FOUNDATION / MASONRY PLAN



PLAN - L01

1 / A1.1 — 3/16" = 1'-0"

GENERAL NOTES

1. DIMENSIONS ARE FROM:
   - A. EXTERIOR WALLS TO FACE OF CMU
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   - D. DOORS/OPENINGS IN MASONRY DIMENSIONED TO MASONRY OPENING.
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   - F. "<F" DENOTES DIMENSION FROM '**FINISH**'
   - G. '**FF**' DENOTES DIMENSION FROM '**FINISH TO FINISH**'.
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3. SEE STRUCTURAL PLANS FOR ALL STRUCTURAL MEMBERS.
4. SEE DOOR AND WINDOW SCHEDULES FOR ALL DOOR AND WINDOW SIZES.
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PLAN NOTES

1. DIMENSIONS ARE TYPICAL FOR HANDICAP ACCESSORY INSTALLATIONS. EQUIPMENT AND FIXTURE ORIENTATION MAY VARY REFER TO PLAN FOR TOILET LAYOUT.
2. PROVIDE BRACING BACK TO STRUCTURE FOR INTERIOR WALLS, TYPICAL.
3. ALL DRYWALL SHALL BE 5/8 IN. AND SHALL EXTEND 6 IN. MINIMUM ABOVE FINISH CEILING (U.N.O.)
4. INSTALL SOUND ATTENUATION BATT INSULATION FULL HEIGHT IN ALL INTERIOR STUDS FRAMED WALLS.
5. INSTALL SOUND ATTENUATION BATT INSULATION 48 IN. WIDE ABOVE CEILING PERIMETER OF ALL INTERIOR ROOMS WITH SOUND BATT IN WALLS.

BUILDING PLANS LEGEND

SYMBOL LEGEND

S3 — **WALL TAG**; SEE WALL LEGEND (A0.0)

TAG MARKS

FE	FIRE EXTINGUISHER
DW	DISHWASHER
REF.	REFRIGERATOR
TV	TELEVISION HUNG (CENTERED ON WALL U.N.O.)

PLAN LEGEND

OS/OI = OWNER SUPPLIED / OWNER INSTALLED
OS/CI = OWNER SUPPLIED / CONTRACTOR INSTALLED

MARK	DESCRIPTION
1	HOSE BIBB; COORDINATE WITH PLUMBING.
2	MOP SINK.
3	2 IN. EXPANSION JOINT PERPENDICULAR WALL CONNECTION.
4	LOCKER BENCHES; BOLTED TO SLAB
5	EQUIPMENT LOCKERS (OS/OI)
6	OXYGEN TANK FILLER
7	EQUIPMENT DRYER
8	EQUIPMENT WASHER
9	SS UTILITY SINK
10	EMERGENCY EYE WASH STATION
11	STORAGE RACKS (OS/OI)
12	RESIDENTIAL WASHER/DRYER (OS/OI)
13	REFRIGERATOR (OS/OI)
14	RESIDENTIAL GAS RANGE W/ HOOD ABOVE (OS/OI)
15	DRINKING FOUNTAINS
16	EXTERIOR BUILDING SIGNAGE; CENTER IN WALL
17	UNDER CABINET REFRIGERATOR (OS/OI)
18	MIRROR WALL
19	AIR COMPRESSOR (OS/OI)
20	ICE MACHINE (OS/OI)
21	WORKBENCH (OS/OI)
22	VEHICLE BOLLARD POST
23	PREMANUFACTURED METAL CANOPY (CANTILEVERED)
24	PREMANUFACTURED METAL CANOPY (COLUMN SUPPORTED); CONFIRM LOCATION OF STRUCTURE W/ MANUF.
25	42 IN. TALL HALF WALL W/ OS/CI COUNTERTOP
26	DOWNSPOUT; SEE ROOF PLAN FOR TYPE/SIZE
27	ALL TVs IN BUILDING TO BE (OS/OI)

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ANN W. COLLIER — REGISTERED ARCHITECT — NORTH CAROLINA — ROCKY MOUNT, NC — 05/15/23

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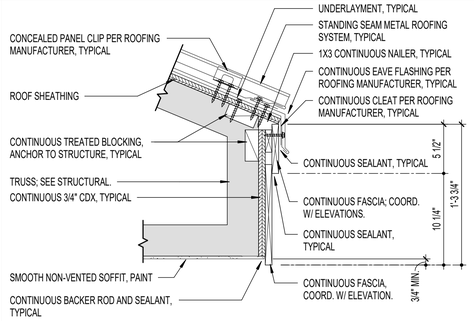
REVISIONS

#	Description	Date

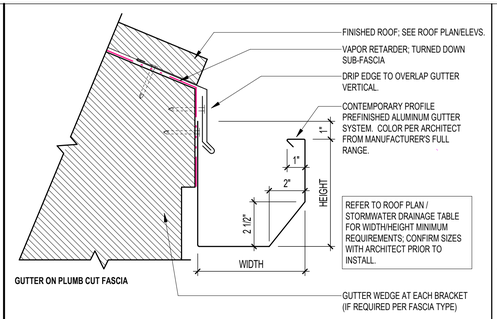
Date	Project No.
5/15/2023	22027
Drawn By: JFK	Sheet No.: A1.1
Checked By: JFK	

Sheet Title: FLOOR PLAN



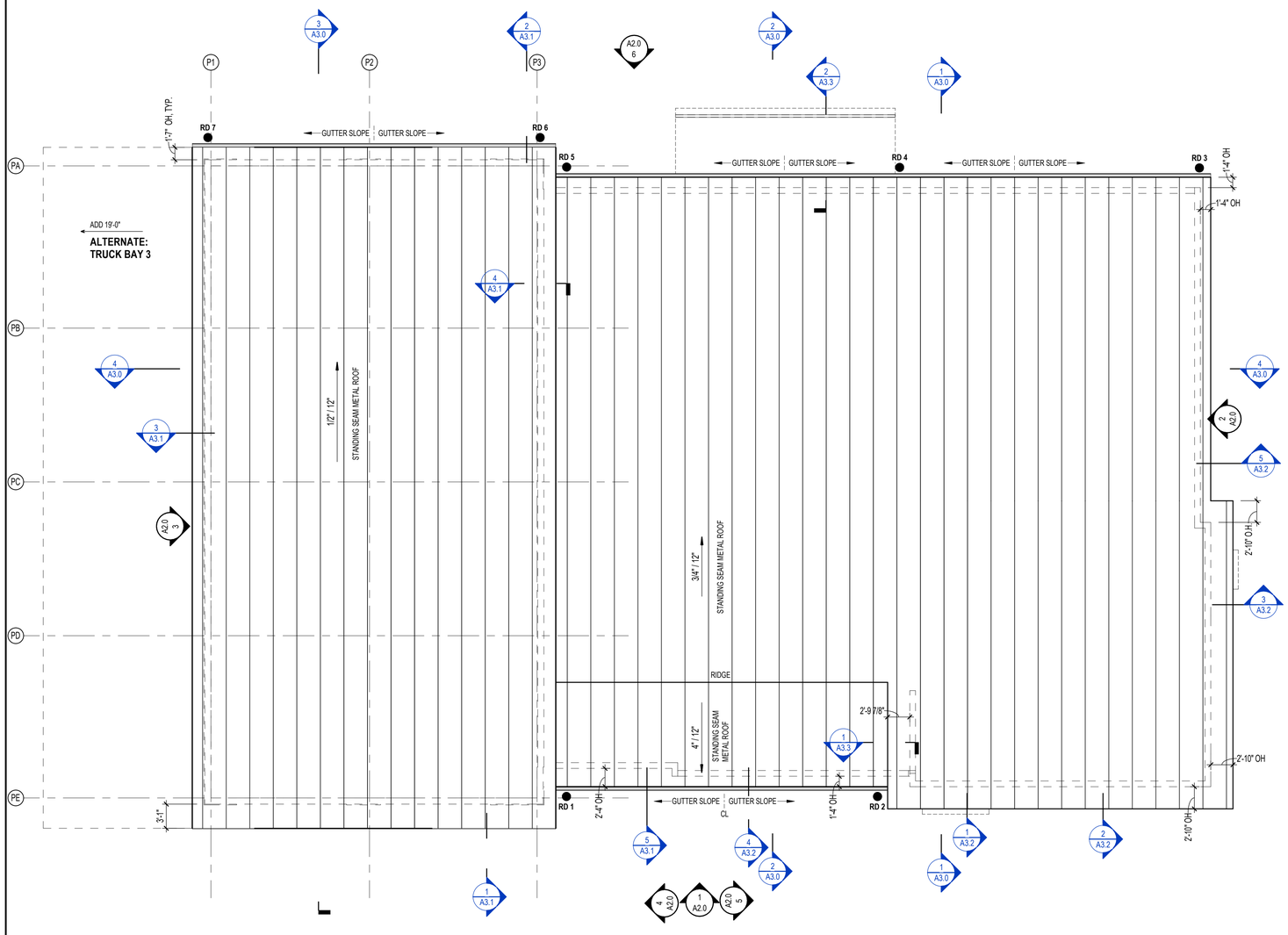
4 A1.2 **FASCIA/EAVE TRIM**

1 1/2" = 1'-0"



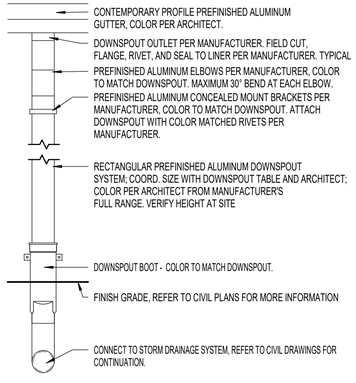
3 A1.2 **GUTTER DETAIL**

3" = 1'-0"



1 A1.2 **ROOF PLAN**

1/8" = 1'-0"



2 A1.2 **DOWNSPOUT (SUB-GRADE TERM.)**

3/4" = 1'-0"

GENERAL NOTES

1. DIMENSIONS ARE FROM:
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   - E. DOORS/OPENINGS IN METAL STUD WALLS DIMENSIONED TO CENTERLINE.
   - F. "**4'**" DENOTES DIMENSION '**FROM FINISH**'
   - G. "**F2'**" DENOTES DIMENSION FROM '**FINISH TO FINISH**'.
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ROOF NOTES

1. GUTTER AND DOWNSPOUTS SHALL BE FURNISHED AND INSTALLED BY ROOFING CONTRACTOR. LOCATE ACCORDING TO ELEVATIONS.
2. CONTRACTOR SHALL COORDINATE ALL ROOF MOUNTED EQUIPMENT AND PENETRATIONS REQUIRED AND MAKE ALL NECESSARY PROVISIONS FOR SAME.
3. GUTTERS, DOWNSPOUTS AND COMPONENTS SHALL BE PREFINISHED ALUMINUM COLOR - PER ARCHITECT.
4. ALL DOWNSPOUTS SHALL TURN INTO STORM DRAIN. REFER TO FLOOR PLAN MORE INFORMATION.
5. ALL ROOF MOUNTED ITEMS SHALL BE PAINTED, CLEAN PREPARE AND PRIME SURFACES AS REQUIRED - COLOR PER ARCHITECT.
6. FURNISH AND INSTALL 36" WIDE X LENGTH REQUIRED SELF ADHERED ICE AND WATER SHEILD ROOFING UNDERLAYMENT AT ALL EDGES, RIDGES, HIPS, AND VALLEYS.

ROOF LEGEND

→	INDICATES DIRECTION OF ROOF SLOPE ACHIEVED THRU STRUCTURE AND TAPERED INSULATION
*	INDICATES THICKNESS OF TAPERED INSULATION ABOVE PRIMARY ROOF INSULATION AND UNDERLAYMENT BOARD IF REQUIRED - REFER TO WALL SECTIONS AND STRUCTURAL FOR ACTUAL ELEVATIONS
RD	PRIMARY ROOF DRAIN, REFER TO PLUMBING PLANS FOR DESCRIPTION, TYPICAL
OD	SECONDARY (EMERGENCY) ROOF DRAIN, REFER TO PLUMBING PLANS FOR DESCRIPTION, TYPICAL
SC	THROUGH WALL SCUPPER SECONDARY (EMERGENCY) ROOF DRAIN, TYPICAL

ROOF DRAIN CALCULATIONS

RAINFALL RATE (PRIMARY/SECONDARY) = **3.5 / 7.2**

MARK	SQ.FT.	VERTICAL LEADER	GUTTER ⌀ (SLOPE)
RD1	308 SF	2"⌀ = 720 SF MAX. 2"x3" = 850 SF MAX.	4"⌀ (1/16") = 360 SF MAX.
RD2	308 SF	2"⌀ = 720 SF MAX. 2"x3" = 850 SF MAX.	4"⌀ (1/16") = 360 SF MAX.
RD3	2125 SF	3"⌀ = 2,200 SF MAX. 3"x4" = 3,300 SF MAX.	8"⌀ (1/8") = 3,340 SF MAX.
RD4	2150 SF	8"⌀ = 2,200 SF MAX. 3"x4" = 3,300 SF MAX.	8"⌀ (1/8") = 3,340 SF MAX.
RD5	1983 SF	8"⌀ = 2,200 SF MAX. 3"x4" = 3,300 SF MAX.	8"⌀ (1/8") = 3,340 SF MAX.
RD6	2009 SF	8"⌀ = 2,200 SF MAX. 3"x4" = 3,300 SF MAX.	8"⌀ (1/8") = 3,340 SF MAX.
RD7	2009 SF	8"⌀ = 2,200 SF MAX. 3"x4" = 3,300 SF MAX.	8"⌀ (1/8") = 3,340 SF MAX.

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ANN W. COLLIER REGISTERED ARCHITECT NORTH CAROLINA ROCKY MOUNT, NC
05/15/23

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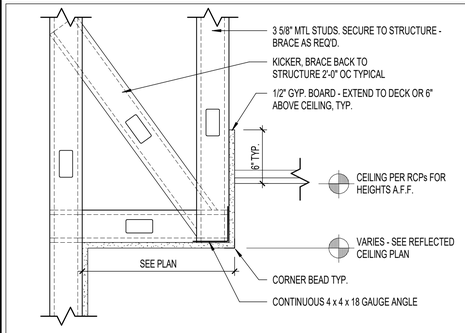
REVISIONS

#	Description	Date

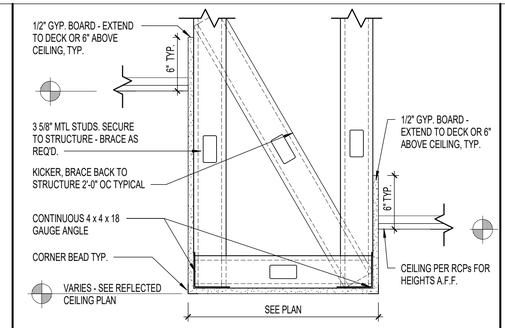
Date	Project No.
5/15/2023	22027
Drawn By: JFK	Sheet No.: A1.2
Checked By: JFK	

Sheet Title: ROOF PLAN



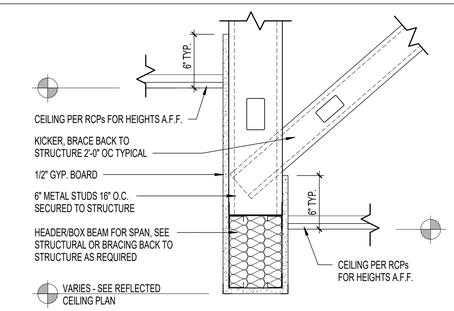
8 A1.3 CLG. DETAIL (BULKHEAD AT WALL)

1 1/2" = 1'-0"



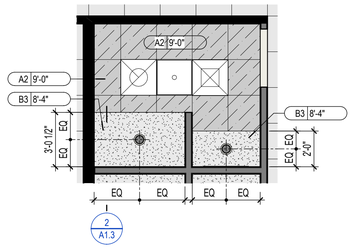
7 A1.3 CLG. DETAIL (BULKHEAD WIDE)

1 1/2" = 1'-0"



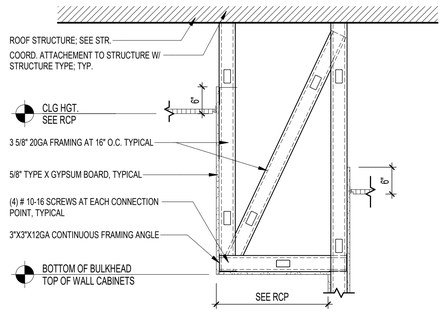
6 A1.3 CLG. DETAIL (BULKHEAD NARROW)

1 1/2" = 1'-0"



5 A1.3 XL RCP (SHOWER)

1/4" = 1'-0"

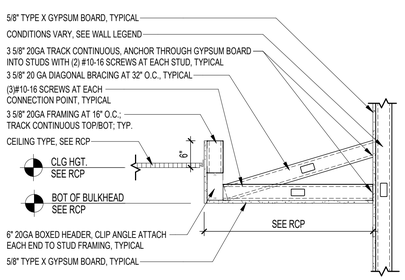


4 A1.3 CEILING (BULK OVER CABINETS)

3/4" = 1'-0"

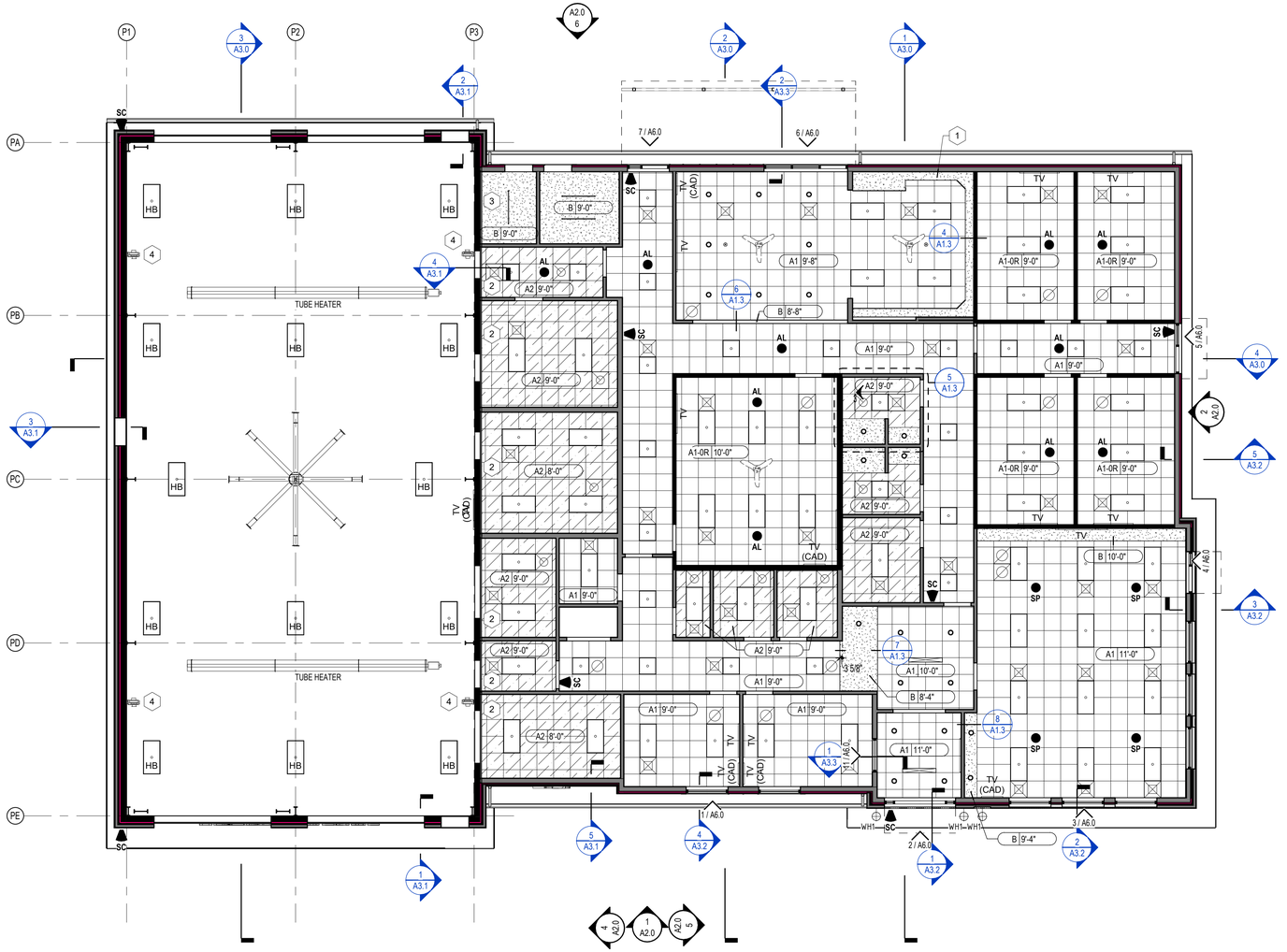
3 A1.3 RCP-RATED CEILING-PARALLEL

3/4" = 1'-0"



2 A1.3 CEILING (BULK AT SHOWER/VANITY)

3/4" = 1'-0"



1 A1.3 REFLECTED CEILING PLAN

1/8" = 1'-0"

GENERAL NOTES

1. DIMENSIONS ARE FROM:
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5. COORDINATE ALL SCHEDULES WITH THE OWNER PRIOR TO CONSTRUCTION.
6. OBTAIN ALL PERMITS REQUIRED.
7. SCHEDULE AND COORDINATE ALL INSPECTIONS REQUIRED.

RCP GENERAL NOTES

1. PROVIDE BRACING BACK TO STRUCTURE FOR INTERIOR WALLS, TYPICAL.
2. ALL DRYWALL SHALL BE 5/8 IN. AND SHALL EXTEND 4 IN. MINIMUM ABOVE FINISH CEILING (U.N.O.)
3. INSTALL SOUND ATTENUATION BATT INSULATION FULL HEIGHT IN ALL INTERIOR STUDS FRAMED WALLS.
4. INSTALL SOUND ATTENUATION BATT INSULATION 48 IN. WIDE ABOVE CEILING PERIMETER OF ALL INTERIOR ROOMS WITH SOUND BATT IN WALLS.
5. SEE MECHANICAL, ELECTRICAL, AND FIRE PROTECTION PLANS FOR FULL DESCRIPTION OF CEILING MOUNTED ITEMS/DEVICES.
6. ALL EXPOSED MECH. EQUIPMENT TO BE PAINTED WITH FINISH PNT-01, UNO.
7. ALL GRIDS ARE CENTERED IN A ROOM UNLESS NOTED OTHERWISE.
8. WHERE WALL MOUNTED TELEVISIONS ARE INDICATED ON PLAN PROVIDE SOLID BLOCKING IN WALL. COORDINATE LOCATION, MOUNTING HEIGHT, AND BLOCKING REQUIREMENTS WITH OWNER. TELEVISION WILL BE O.S.C.I.
9. REFER TO PMEFA FOR FURTHER INFORMATION.
10. CONTRACTOR TO REVIEW LAYOUT AND NOTIFY ARCHITECT OF ACOUSTICAL CEILING PANELS THAT ARE LESS THAN 3" IN WIDTH OR LENGTH.
11. ALL NEW LIGHT FIXTURES, EXIT SIGNS, SPRINKLER HEADS AND TERMINAL DEVICES TO BE CENTERED IN CEILING PANELS, UNLESS OTHERWISE INDICATED.
12. ALL CEILING TO BE CENTERED IN ROOMS UNLESS NOTED OTHERWISE.
13. SEE PME DRAWINGS FOR PME DEVICE LOCATIONS AND QUANTITIES. COORDINATE LOCATION OF ALL PME DEVICES WITH ARCHITECTURAL DRAWINGS.
14. PROVIDE SOUND MASKING THROUGOUT - DEVICES NOT SHOWN ON REFLECTED CEILING PLANS. ALSO SEE ELECTRICAL DRAWINGS.
15. FOR PENDANT MOUNTING HEIGHT REFER TO ELEVATIONS AND REFLECTED CEILING PLAN LEGEND
16. COORDINATE ALL GYPSUM CEILING BOARD CONTROL JOINTS WITH ARCHITECT.
17. STRUCTURAL MEMBERS PER STRUCTURAL DRAWINGS. COORDINATE LOCATION OF STRUCTURAL MEMBERS BASED ON ARCHITECTURALS.

RCP LEGEND

CEILING TYPES

A 10'-0" — CEILING TYPE / CEILING HEIGHT (AFF)

A1	2X2 LAY-IN CEILING SYSTEM
A2	2x2 ACOUSTICAL CEILING TILE (VINYL COATED) (4 WET)
A1-0R	TYPE A1 W/ 5/8 IN. GYPSUM BOARD ABOVE AT BOTTOM OF RAFTERS TO EQUAL 0.5 HOUR RATED CEILING (PERSCRIPTIVE): - 722.2.1.4(2); 2 LAYERS 1/2" GYPSUM; SEAL ALL PENETRATIONS AND PERIMETER W/ FIRE SEALANT.
B1	5/8 IN. GYPSUM BOARD
X1	CEMENTITIOUS SOFFIT BOARD

FIXTURE LEGEND

LAY-IN LIGHTING:

2x2 2x4 1x4

HB — HIGH BAY LED

RECESSED CAN:
- RC1 SURFACE MOUNTED LED
- RC2 EXTERIOR SIGNAGE SPOT

PENDANT:
- PC1 -

WH1 — WALL HUNG - EXTERIOR

CEILING FAN (PROVIDE JUNCTION BOX ONLY; COORD. W/ ELEC).

TV — TELEVISION (WALL MOUNTED AT 60" AFF)

TV (CAD) — COMPUTER AIDED DISPATCH MONITOR (WALL MOUNTED AT 12" BELOW CEILING HEIGHT)

LAY-IN AIR DIFFUSER (1x4)

LAY-IN AIR DIFFUSAL (2x2)

LAY-IN AIR RETURN (2x2)

LAY-IN AIR EXHAUST (2x2)

SC — SURVEILLANCE CAMERA (COORD. WITH ELECTRICAL)

AL — ALARM SYSTEM LIGHTING (COORD. WITH ELECTRICAL)

SP — SPEAKERS (COORD. WITH ELECTRICAL)

KEYNOTES (RCPs)

#	KEYNOTE	DETAIL REF.
1	CEILING FINISH AT TOP OF WALL CABINETRY	
2	2 IN. EXPANSION JOINT (ACT TO WALL TYPE)	(8 / A5.5)
3	2 IN. EXPANSION JOINT (DRYWALL CEILING TO WALL TYPE)	(8 / A5.5)
4	AIR COMPRESSOR HOSE REEL	

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BID SET

TOWN OF NASHVILLE FIRE STATION NO. 2

1200 EAST WASHINGTON ST.
NASHVILLE, NC 27856

OAKLEY COLLIER ARCHITECTS, P.A. — CERT. NO. 50681 — ROCKY MOUNT, NC

ANN W. COLLIER — REGISTERED ARCHITECT — NORTH CAROLINA — ROCKY MOUNT, NC — 05/15/23

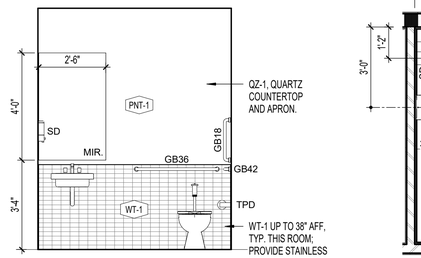
GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By: JFK	Sheet No.: A1.3
Checked By: JFK	

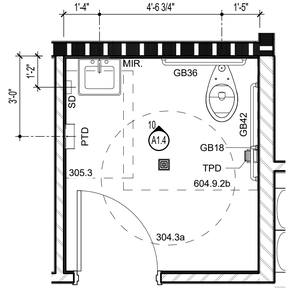
Sheet Title: REFLECTED CEILING PLAN



10 A1.4 TOILETS 2

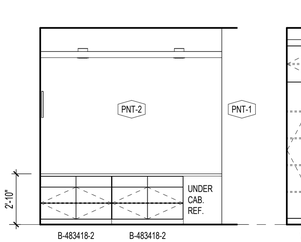
3/8" = 1'-0"

REFER TO STANDARD DETAIL: (1 / A1.5) FOR ANY ADDITONAL INFORMATION.



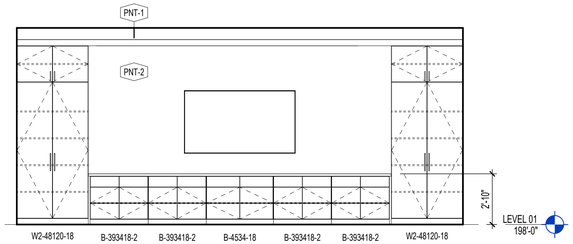
9 A1.4 XL PLAN (TOILETS)

3/8" = 1'-0"



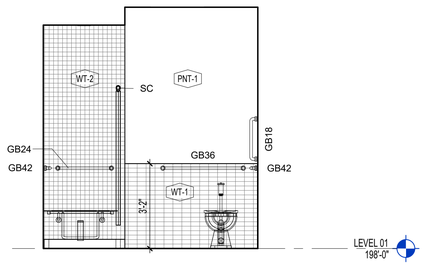
11 A1.4 TRAINING 2

1/4" = 1'-0"



2 A1.4 TRAINING (PRESENTATION WALL)

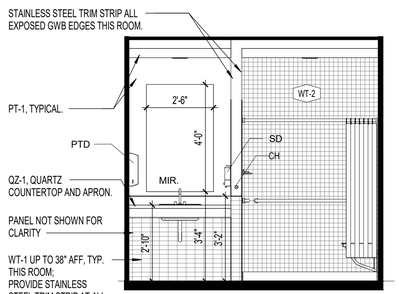
1/4" = 1'-0"



3 A1.4 SHOWER 1

3/8" = 1'-0"

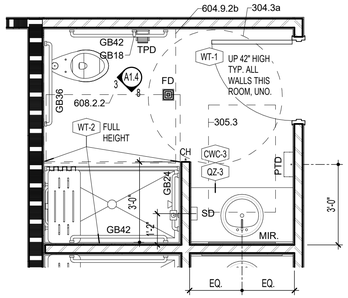
REFER TO STANDARD DETAILS: (1 / A1.5) FOR FIXTURE HEIGHTS.



8 A1.4 SHOWER 2

3/8" = 1'-0"

REFER TO STANDARD DETAILS: (1 / A1.5) FOR FIXTURE HEIGHTS.



7 A1.4 XL PLAN (SHOWERS)

3/8" = 1'-0"

1 A1.4 FINISH PLAN

1/8" = 1'-0"

6 A1.4 KITCHEN 3

1/4" = 1'-0"

5 A1.4 KITCHEN 2

1/4" = 1'-0"

4 A1.4 KITCHEN 1

1/4" = 1'-0"

CASEWORK LEGEND

"CASEWORK HEIGHT PER INTERIOR ELEVATION.

B1-#### (TYPE MARK / WIDTH/HEIGHT (INCHES))

TYPE	DESCRIPTION
B1	BASE ONE DOOR (SWING)
B2	BASE TWO DOOR (SWING BOTTOM, PULL TOP)
BD1	BASE DRAWER 1 DOOR (ALL PULL)
BD2	BASE DRAWER 2 DOOR (ALL PULL)
BD3	BASE DRAWER 3 DOOR (ALL PULL)
BC1	BASE CORNER 1 DOOR
BS	BASE SINK
BHC	BASE WITH ADA ACCESSIBLE WHEELCHAIR FRONT APPROACH
S1	OPEN SHELVING (# INDICATES NUMBER OF SHELVES)
WC	WALL CORNER ONE DOOR (SWING)
W1	WALL ONE DOOR (SWING)
W2	WALL TWO DOOR (SWING)
WS	WALL OPEN SHELVING
T1	FULL HEIGHT STORAGE CABINET ONE DOOR
T2	FULL HEIGHT STORAGE CABINET TWO DOOR

CABINETRY NOTES

1. FIELD VERIFY ALL DIMENSIONS, SQUARE AND PLUMB OF WALLS TO ENSURE PROPER FIT OF ALL CABINETRY, TYPICAL.
2. FURNISH AND INSTALL ALL BLOCKING AS REQUIRED FOR PROPER INSTALLATION OF ALL CABINETRY, COORDINATE INSTALLATION OF BLOCKING WITH CABINET SUPPLIER.
3. ALL APPLIANCES WILL BE FURNISHED BY THE OWNER AND INSTALLED BY THE CONTRACTOR. VERIFY APPLIANCE SIZES WITH MANUFACTURER'S CUT SHEETS. CUT SHEETS SHALL BE PROVIDED BY THE OWNER.
4. PROVIDE FIXED VERTICAL DIVIDER IN CABINET UNITS MORE THAN 36 IN. WIDE.
5. PROVIDE 1 ADJUSTABLE SHELF IN BASE CABINETS, UNO
6. PROVIDE 2 ADJUSTABLE SHELVES IN WALL CABINETS, UNLESS TALLER THAN 48 IN. PROVIDE 3 SHELVES.
7. PROVIDE 5 ADJUSTABLE SHELVES IN FULL HEIGHT CABINETS, UNO.
8. PROVIDE SUPPORT BRACKETS AS REQUIRED/RECOMMENED BY MANUFACTURER.
9. PROVIDE LOCKS ON CASEWORK WHERE NOTED IN ELEVATIONS.

ANSI A117.1 CLEARANCE LEGEND

A1

TYPE	DESCRIPTION
Miscellaneous Clearance Requirements per ANSI A117.1:	
304.3.1	60" DIAMETER TURNING SPACE
306.3	FRONT APPROACH WITH KNEE CLEARANCE (30X48)
604.9.2B	HC TOILET FLOOR MOUNTED TOILET (60X59)
604.9.2A	HC TOILET WALL MOUNTED TOILET (60X56)
305.3	CLEAR FLOOR SPACE (30x48)
608.2.1	TRANSFER SHOWER (36x48)
608.2.2	ROLL-IN SHOWER (30x60)
Door Clearance Requirements per ANSI A117.1 (404.2.3.2a):	
(a)	Front Approach - pull side
(b)	Front Approach - push side

GENERAL NOTES

1. DIMENSIONS ARE FROM:
   - A. EXTERIOR WALLS TO FACE OF CMU
   - B. INTERIOR WALLS TO FACE OF STUD.
   - C. CURTAINWALL (CW) AND STOREFRONT (SF) DIMENSIONED TO CENTER OF CENTRAL MULLIONS AND FACE OF ROUGH OPENING AT THE PERIMETER, UNO.
   - D. DOORS/OPENINGS IN MASONRY DIMENSIONED TO MASONRY OPENING.
   - E. DOORS/OPENINGS IN METAL STUD WALLS DIMENSIONED TO CENTERLINE.
   - F. "**4'**" DENOTES DIMENSION "**FROM FINISH**"
   - G. "**F2'**" DENOTES DIMENSION FROM "**FINISH TO FINISH**".
2. VERIFY ALL DIMENSIONS AND SIZES PRIOR TO CONSTRUCTION.
3. SEE STRUCTURAL PLANS FOR ALL STRUCTURAL MEMBERS.
4. SEE DOOR AND WINDOW SCHEDULES FOR ALL DOOR AND WINDOW SIZES.
5. COORDINATE ALL SCHEDULES WITH THE OWNER PRIOR TO CONSTRUCTION.
6. OBTAIN ALL PERMITS REQUIRED.
7. SCHEDULE AND COORDINATE ALL INSPECTIONS REQUIRED.

NOTES (FINISH SHEETS)

1. DIMENSIONS ARE TYPICAL FOR HANDICAP ACCESSORY INSTALLATIONS. EQUIPMENT AND FIXTURE ORIENTATION MAY VARY REFER TO PLAN FOR TOILET LAYOUT.
2. PROVIDE ALL NECESSARY BLOCKING AND ANCHORS AS REQUIRED FOR PROPER INSTALLATION AND OPERATION OF ALL TOILET FIXTURES AND EQUIPMENT.
3. SEE PLUMBING SCHEDULE / DETAILS FOR ALL FIXTURES AND MOUNTING HEIGHTS.
4. SEE FLOOR PLAN, INTERIOR ELEVATIONS, AND FINISH SCHEDULE ALL FINISHES. CONTRACTOR SHALL COORDINATE INSTALLATION OF ALL ITEMS WITH SPECIFIC WALL TYPES AND FINISHES.
5. ALL TOILET ACCESSORIES SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS FOR SPECIFIC APPLICATIONS IN COMPLIANCE WITH ALL APPLICABLE CODES.
6. TOILET ACCESSORY INSTALLATION SHALL COMPLY WITH NC ACCESSIBILITY CODE.
7. MANUFACTURER AND MODEL NUMBERS INDICATED REPRESENT BASIS OF DESIGN; APPROVED EQUALS WILL BE ACCEPTED.
8. ALL INTERIOR WALLS SHALL HAVE SOUND ATTENUATION BATTS.
9. ALL PAINTED SURFACES INSIDE OF WET ROOMS TO RECEIVE EPOXY COATED PAINT.
10. TS = FURNISH AND INSTALL TRANSITION STRIP AT ALL FLOOR MATERIAL CHANGES AS SHOWN OR AS REQUIRED.
    - A. HEIGHT AND PROFILE OF ALL TRANSITIONS STRIPS SHALL COMPLY WITH HANDICAP CODE.
    - B. COLOR FOR ALL TRANSITION STRIPS SHALL BE AS SELECTED BY OWNER FROM MANUFACTURER'S FULL RANGE.
    - C. COORDINATE LOCATION OF ALL TRANSITION STRIPS WITH EXISTING AND NEW CONDITIONS. WHERE POSSIBLE, LOCATE TRANSITION STRIPS UNDER DOOR SLABS. NO EXPOSED SLAB PERMITTED IN FINISHED AREAS.
11. COORDINATE SIZE OF ALL TRANSITION STRIPS WITH FINISH MATERIALS.
12. VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO INSTALLATION OF FINISHES.
13. ALL EXISTING QUARRY TILE SHALL BE THOROUGHLY CLEANED WITH NEUTRAL PH CONCENTRATED CLEANER AS RECOMMENDED BY THE FLOORING CONTRACTOR. FOLLOW MANUFACTURER'S RECOMMENDATIONS FOR CEANING PROCEDURE.
14. TILE INSTALLATION:
    - **A.** FLOOR AT TOILETS INSTALLED PER **F122**
    - **B.** FLOOR AT SHOWERS INSTALLED PER **F121**
    - **C.** WALLS AT TOILETS INSTALLED PER **W245**
    - **D.** WALLS AT SHOWERS INSTALLED PER **W245**
    - **E.** CEILINGS AT SHOWERS INSTALLED PER **C315**
    - F. REFER TO TILE COUNCIL OF AMERICA'S CURRENT "HANDBOOK FOR CERAMIC TILE INSTALLATION" FOR DESCRIPTION OF INSTALLATION METHODS.
    - G. REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION.
15. SEE ANSI A117.1 FOR ALL CLEARANCE REQUIREMENTS.
16. REFER CEILING TYPE REFERENCES TO CEILING TYPE LEGEND ON A7.0 SHEETS

FINISH SCHEDULE

PNT-1 (*FINISH MATERIAL*: Name Abbrev. 101 / PNT-1A | TRZ-1 | WBR-1; WALL FINISH (TYP, UNO) / FLOOR / WALL BASE)

*SEE FINISH SCHEDULE FOR FINISH TYPES AND SPECIFICATIONS

ROOM FINISHES TAG

MARK	DESCRIPTION
CASEWORK:	
CWC-1	CABINET FINISH TYPE-1
CWC-2	CABINET FINISH TYPE 2
CWC-3	CABINET FINISH TYPE 3
CWH-1	CABINET HARDWARE FINISH TYPE 1
COUNTERTOP:	
QZ-1	QUARTZ TYPE 1
QZ-2	QUARTZ TYPE 2
SS-1	SOLID SURFACE TYPE 1
CEILINGS:	
ACT-1	24" x 24" LAY-IN CEILING SYSTEM
A1-0R	TYPE A1 W/ 5/8 IN. GYPSUM BOARD ABOVE AT BOTTOM OF RAFTERS TO EQUAL 0.5 HOUR RATED CEILING (PERSCRIPTIVE) (SEAL ALL PENETRATIONS AND PERIMETER W/ FIRE SEALANT)
ACT-1	24" x 24" LAY-IN CEILING SYSTEM (MOISTURE RESISTANT)
GCB	5/8 IN. GYPSUM BOARD; PAINTED PER FINISH TYPE MARK.
CSP-1	CEMENTITIOUS SOFFIT BOARD; PAINTED PER FINISH TYPE MARK
FLOORING:	
CPT-1	CARPET TILE: 24" x 24"
CPT-2	CARPET TILE: 24" x 24"
LVT-1	LUXURY VINYL TILE: 7.5" x 48"
SC-1	SEALED CONCRETE
SC-2	SEALED CONCRETE WITH EPOXY COATING
PAINT:	
PNT-1	PAINT; BASE COLOR
PNT-2	PAINT; ACCENT COLOR 1
PNT-3	PAINT; ACCENT COLOR 2
PNT-4	PAINT; ACCENT COLOR 3 (FIRE TRUCK RED)
PNT-#X	EPOXY PAINT *(COLOR TYPE PER NON-EPOXY SCHEDULE).*
STAIN:	
WDS-1	WOOD STAIN; TYPE 1
WALL BASE:	
RB-1	RUBBER BASE; CHARCOAL
TILE:	
WT-1	WALL TILE (TOILET ROOM)
WT-2	WALL TILE (SHOWERS)
WT-3	WALL TILE (KITCHEN BACKSPLASH)

KEYNOTES (FINISHES)

(#)

1. ALIGN
2. ALIGN PER CL
3. FLOOR DRAIN; SLOPE FINISH FLOOR TO DRAIN. LOCATE CENTERED IN ROOM BOTH DIRECTIONS, UNO.
4. ROOM SIGNAGE; REFERENCE SHEET **A701+** FOR DETAILS.
5. ACCESSIBLE BENCH W/ BACK
6. ACCESSIBLE BENCH AFFIXED TO WALL.
7. FLOOR SLOPE TO START AT FRONT FACE OF LOCKER BASES.
8. LOCKERS.
9. LOCKABLE CABINET DOOR.

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BID SET

TOWN OF NASHVILLE FIRE STATION NO. 2

1200 EAST WASHINGTON ST.
NASHVILLE, NC 27856

OAKLEY COLLIER ARCHITECTS, P.A. — REGISTERED ARCHITECTURAL CORPORATION — CERT NO. 50681 — NORTH CAROLINA — ROCKY MOUNT, NC

ANN W. COLLIER — REGISTERED ARCHITECT — NORTH CAROLINA — ROCKY MOUNT, NC — 05/15/23

GENERAL NOTE: Prior to construction start, Contractor shall verify & be responsible for all Dimensions.

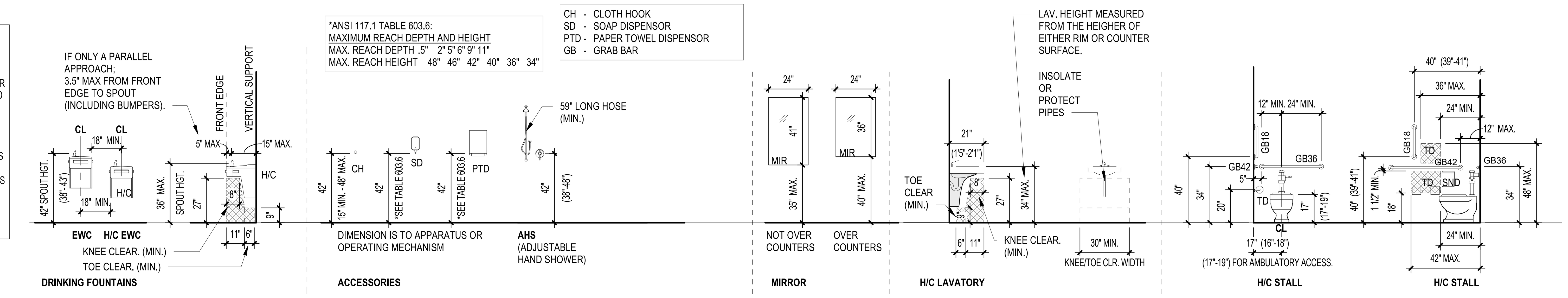
REVISIONS

#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By: JFK	Sheet No.: A1.4
Checked By: JFK	

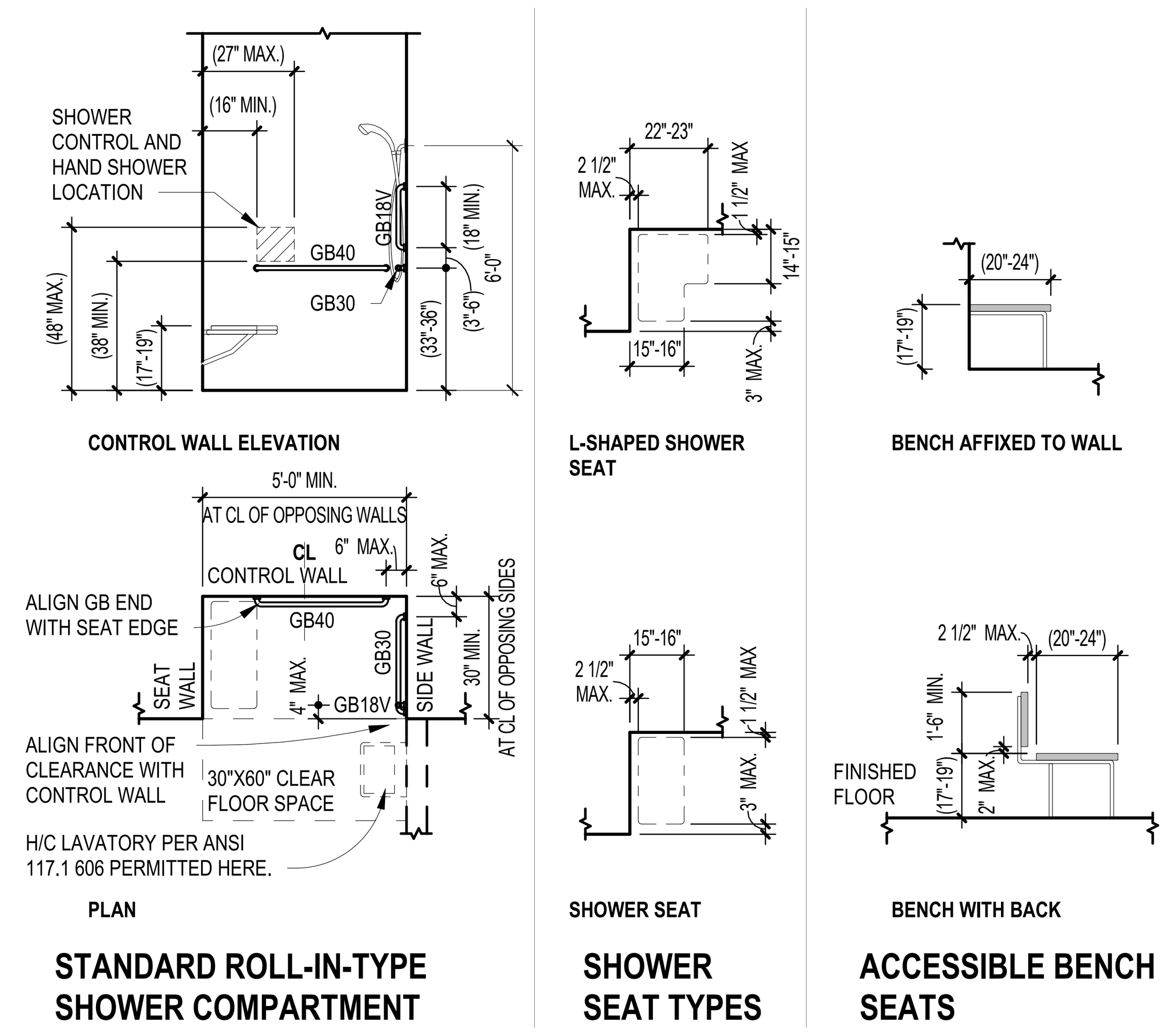
Sheet Title: FINISH PLAN

NOTES:
1. DIMENSIONS ARE TYPICAL FOR HANDICAP ACCESSORY INSTALLATIONS. EQUIPMENT AND FIXTURE ORIENTATION MAY VARY, SEE PLAN FOR ACTUAL LAYOUT.
2. PROVIDE ALL NECESSARY BLOCKING AND ANCHORS AS REQUIRED FOR PROPER INSTALLATION AND OPERATION OF ALL TOILET FIXTURES AND RELATED ACCESSORIES.
3. SEE PLUMBING SCHEDULE AND DETAILS FOR ALL FIXTURES AND MOUNTING HEIGHTS.
4. SEE FLOOR PLAN, AND FINISH SCHEDULE FOR WALL FINISHES. COORDINATE INSTALLATION OF ALL ITEMS WITH SPECIFIC WALL TYPES AND FINISHES.
5. ALL TOILET ACCESSORIES SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS FOR SPECIFIC APPLICATIONS IN COMPLIANCE WITH ALL APPLICABLE CODES.
6. WHERE INDICATED AND AS REQUIRED TOILET ACCESSORY INSTALLATION SHALL COMPLY WITH NC ACCESSIBILITY CODE.



1 / A1.5 — PLUMBING FIXTURE + ACCESSORY MOUTING HEIGHTS (ACCESSIBLE AND STANDARD)

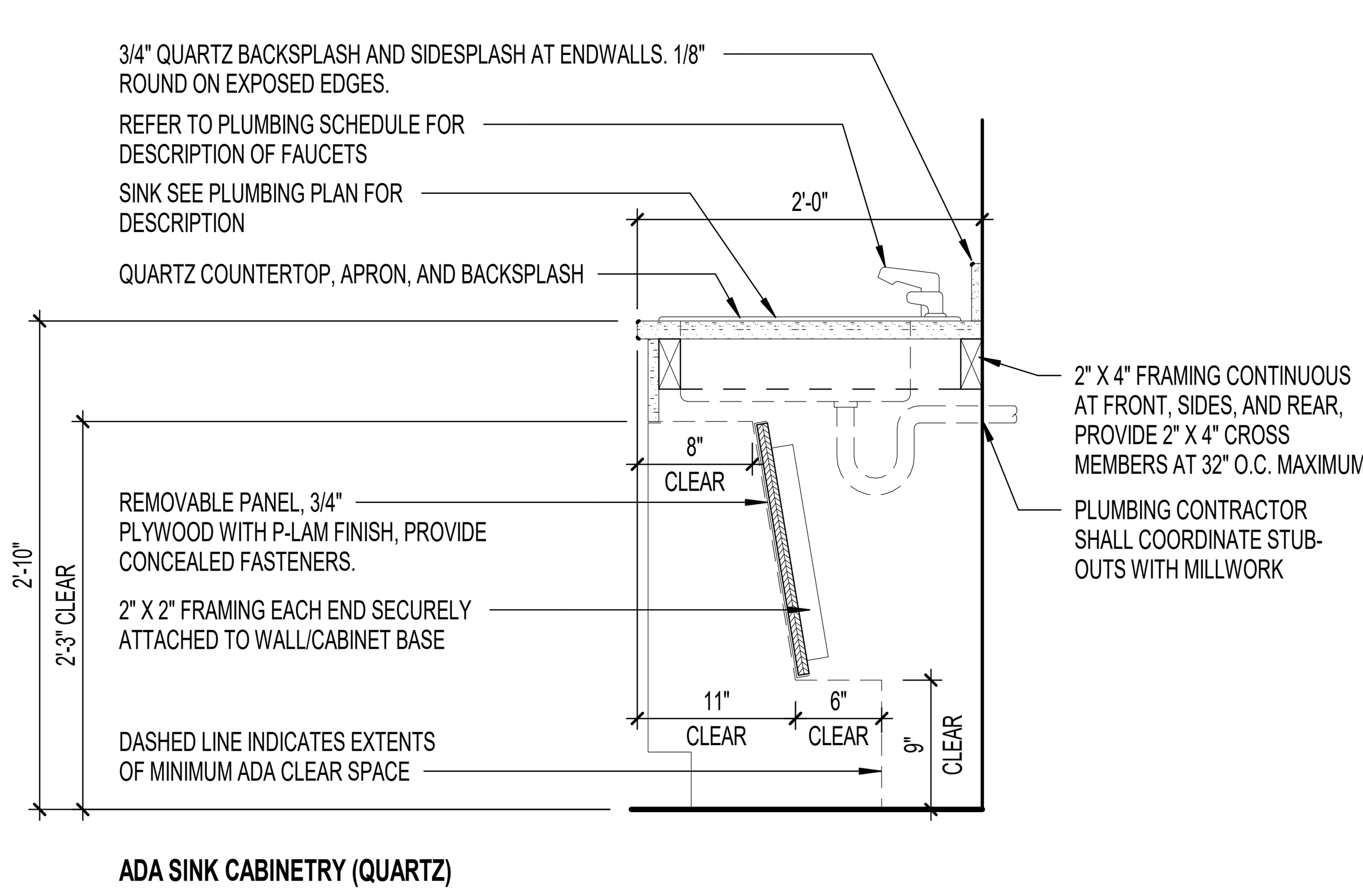
1/4" = 1'-0"



*NOTE: STANDARD ROLL-IN SHOWER AND SHOWER ELEMENT REQUIREMENTS TO MEET ANSI A117.1-2009 SECTION 608

2 / A1.5 — PLUMBING FIXTURE + ACCESSORY MOUTING HEIGHTS (ACCESSIBLE)

1/4" = 1'-0"



4 / A1.5 — PLUMBING DETAIL (ADA SINK CABINETRY)

1" = 1'-0"

TOILET NOTES

1. DIMENSIONS ARE TYPICAL FOR HANDICAP ACCESSORY INSTALLATIONS. EQUIPMENT AND FIXTURE ORIENTATION MAY VARY REFER TO PLAN FOR TOILET LAYOUT.
2. PROVIDE ALL NECESSARY BLOCKING AND ANCHORS AS REQUIRED FOR PROPER INSTALLATION AND OPERATION OF ALL TOILET FIXTURES AND RELATED EQUIPMENT.
3. REFER TO PLUMBING SCHEDULE AND DETAILS FOR ALL FIXTURES AND MOUNTING HEIGHTS.
4. REFER TO FLOOR PLAN, AND FINISH SCHEDULE FOR WALL FINISHES. CONTRACTOR SHALL COORDINATE INSTALLATION OF ALL ITEMS WITH SPECIFIC WALL TYPES AND FINISHES.
5. ALL TOILET ACCESSORIES SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS FOR SPECIFIC APPLICATIONS IN COMPLIANCE WITH ALL APPLICABLE CODES.
6. WHERE INDICATED AND AS REQUIRED TOILET ACCESSORY INSTALLATION SHALL COMPLY WITH NC ACCESSIBILITY CODE.
7. MANUFACTURER AND MODEL NUMBERS INDICATED REPRESENT BASIS OF DESIGN, APPROVED EQUALS WILL BE ACCEPTED.
8. PROVIDE CERAMIC TILE ALONG WET WALLS AS INDICATED. RUN CERAMIC TILE TO A HEIGHT OF 7'-0"

TOILET ACCESSORIES SCHEDULE

NUMBER	DESCRIPTION
CH	CLOTHING HOOK
MIR.	MIRROR - S.S. FRAMED
SD	SOAP DISPENSER
TPD	TOILET PAPER DISPENSER
PTD	PAPER TOWEL DISPENSER
GB30	GRAB BAR (30" LONG x 1-1/2" DIA.; S.S. PEENED)
GB36	GRAB BAR (36" LONG x 1-1/2" DIA.; S.S. PEENED)
GB40	GRAB BAR (40" LONG x 1-1/2" DIA.; S.S. PEENED)
GB42	GRAB BAR (42" LONG x 1-1/2" DIA.; S.S. PEENED)
GB18V	GRAB BAR VERTICAL (18" LONG x 1-1/2" DIA.; S.S. PEENED)

1. SEE 1/A1.7 FOR ALL TYPICAL INSTALLATION HEIGHTS AND ADJACENCY DISTANCES. ELEVATIONS ONLY SUPERCEDE IF DIMENSION FALLS WITHIN ANSI A117.1 REQUIREMENTS PER 1/A1.7.
2. ALL TOILET ACCESSORIES SHALL BE INSTALLED PER MANUFACTURER'S RECOMMENDATIONS FOR SPECIFIC APPLICATIONS IN COMPLIANCE WITH ALL APPLICABLE CODES.
3. WHERE INDICATED AND AS REQUIRED TOILET ACCESSORY INSTALLATION SHALL COMPLY WITH NC ACCESSIBILITY CODE.
4. FURNISH AND INSTALL ALL NECESSARY FRAMING AND BLOCKING AS REQUIRED FOR PROPER INSTALLATION AND OPERATION OF ALL ACCESSORIES.

3 / A1.5 — LEGEND (A7.0 GENERAL NOTES)

1/8" = 1'-0"

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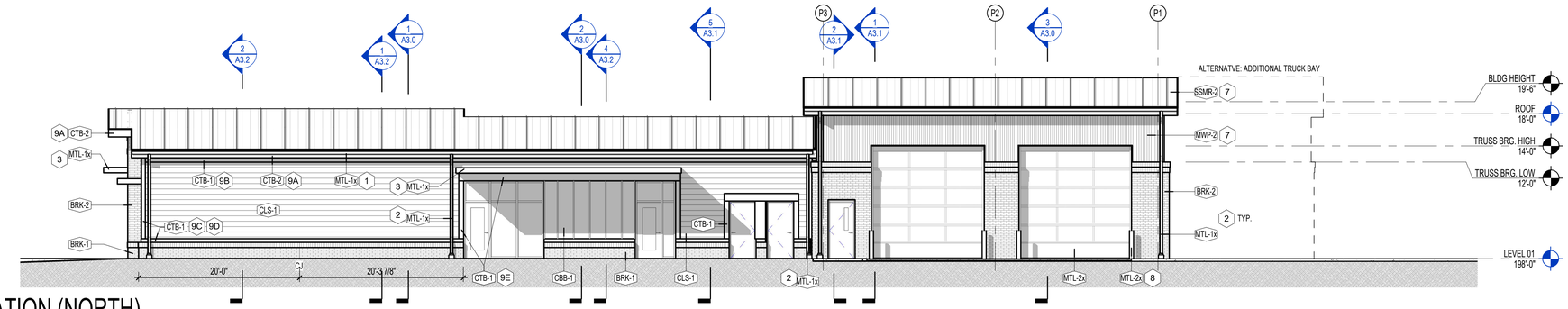
GENERAL NOTE: Prior to construction start, Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

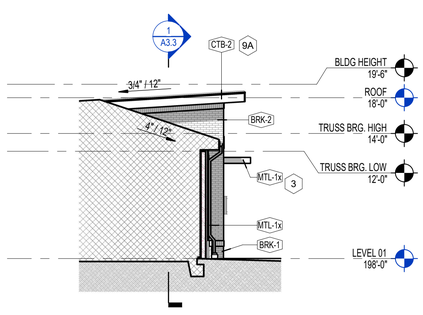
Date	Project No.
5/15/2023	22027
Drawn By: JFK	Sheet No.
Checked By: JFK	A1.5

Sheet Title: ENLARGED/ TOILET/ CASEWORK



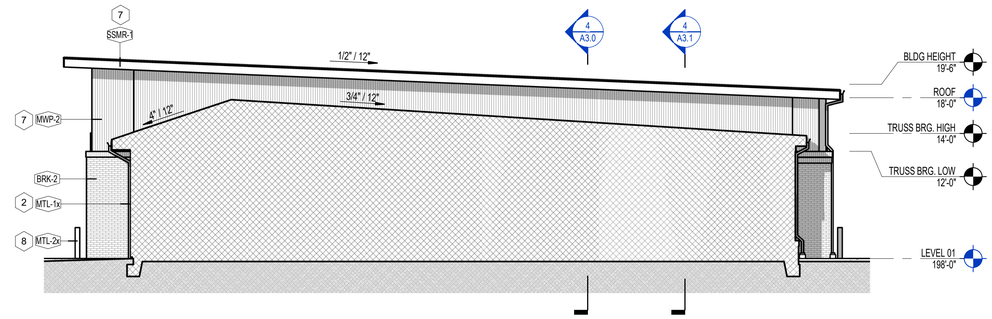
6 A2.0 REAR ELEVATION (NORTH)

1/8" = 1'-0"



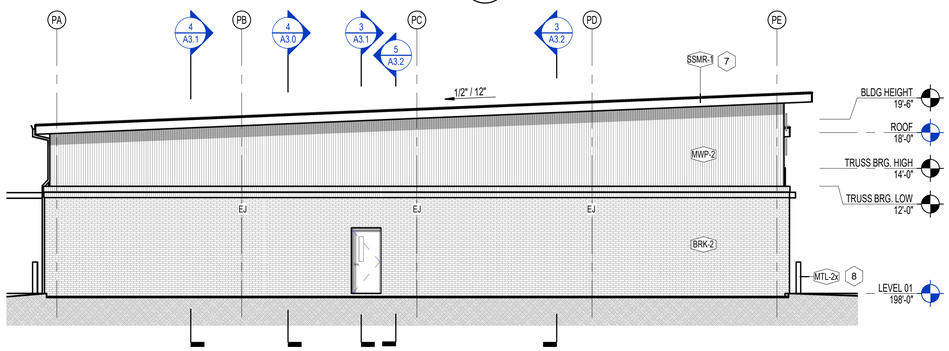
5 A2.0 FRONT INTERIOR (EAST FACING)

1/8" = 1'-0"



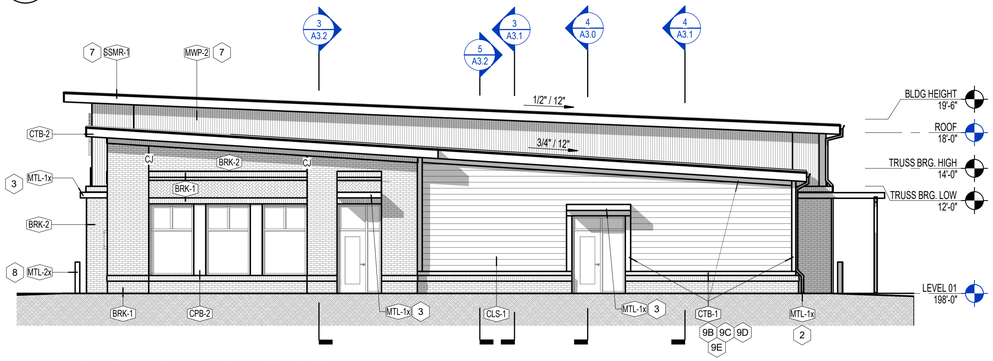
4 A2.0 FRONT INTERIOR (WEST FACING)

1/8" = 1'-0"



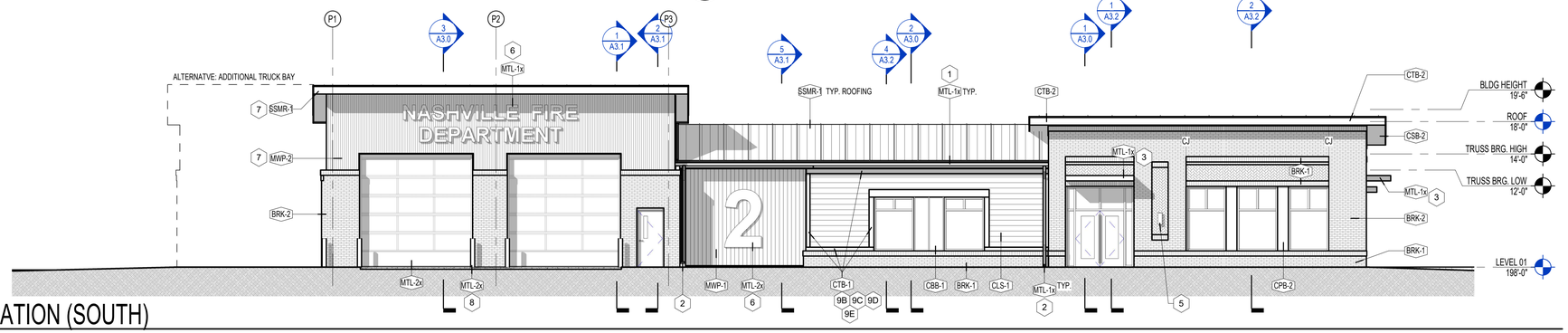
3 A2.0 LEFT ELEVATION (WEST)

1/8" = 1'-0"



2 A2.0 RIGHT ELEVATION (EAST)

1/8" = 1'-0"



1 A2.0 FRONT ELEVATION (SOUTH)

1/8" = 1'-0"

GENERAL NOTES

1. DIMENSIONS ARE FROM:
   - A. EXTERIOR WALLS TO FACE OF CMU
   - B. INTERIOR WALLS TO FACE OF STUD.
   - C. CURTAINWALL (CW) AND STOREFRONT (SF) DIMENSIONED TO CENTER OF CENTRAL MULLIONS AND FACE OF ROUGH OPENING AT THE PERIMETER, UNO.
   - D. DOORS/OPENINGS IN MASONRY DIMENSIONED TO MASONRY OPENING.
   - E. DOORS/OPENINGS IN METAL STUD WALLS DIMENSIONED TO CENTERLINE.
   - F. "**4**" DENOTES DIMENSION "**FROM FINISH**"
   - G. "**F2f**" DENOTES DIMENSION FROM "**FINISH TO FINISH**".
2. VERIFY ALL DIMENSIONS AND SIZES PRIOR TO CONSTRUCTION.
3. SEE STRUCTURAL PLANS FOR ALL STRUCTURAL MEMBERS.
4. SEE DOOR AND WINDOW SCHEDULES FOR ALL DOOR AND WINDOW SIZES.
5. COORDINATE ALL SCHEDULES WITH THE OWNER PRIOR TO CONSTRUCTION.
6. OBTAIN ALL PERMITS REQUIRED.
7. SCHEDULE AND COORDINATE ALL INSPECTIONS REQUIRED.

EXT. ELEVATION NOTES

1. ALL EXTERIOR SEALANT TO BE POLYURETHANE TYPE AND UV-RESISTANT, UNO. COLOR TO BE APPROVED BY ARCHITECT.
2. ALL FINISHES TO BE SELECTED BY ARCHITECT FROM FULL RANGE OF MANUFACTURER'S COLOR AND FINISH OPTIONS.

EXT. ELEVATION LEGEND

- X-1 — **FINISH TYPE SYMBOL**
- **SPOT ELEVATION**
- SF4-A — **CURTAINWALL/ STOREFRONT**
- **CL** CENTERLINE
- **CJ** CONTROL JOINT
- **EJ** EXPANSION JOINT

EXTERIOR FINISHES

*SEE FINISH LEGEND FOR FINISH TYPES AND SPECIFICATIONS

CLADDING:
- **BRK** BRICK VENEER MASONRY
- **MWP** METAL WALL PANEL
- **CBB** CEMENTITIOUS BOARD + BATTEN
- **CLS** CEMENTITIOUS LAP SIDING
- **CPB** CEMENTITIOUS PANEL BOARD
- **CTB** CEMENTITIUOS TRIM BOARD
- **CSB** CEMENTITIOUS SOFFIT BOARD

ROOFING:
- **SSMR** STAINDING SEAM METAL ROOFING

PAINT:
- **PNT** PAINT

MISCELLANEOUS:
- **SS** STAINLESS STEEL
- **WD** WOOD
- **MTL** METAL (FINISH)
- **IGU** INSULATED GLAZING UNIT
- **GL** GLASS
- **SC** SEALED CONCRETE

KEYNOTES (EXT. ELEVS)

1. FABRICATED METAL GUTTER.
2. FABRICATED METAL DOWNSPOUT. REF. TO DETAIL:
3. PREMANUFACTURED METAL CANOPY.
4. "L#" DENOTES MECHANICAL LOUVER; COORDINATE TYPE WITH MECHANICAL.
5. EXTERIOR LIGHTING; COORDINATE WITH ELECTRICAL.
6. EXTERIOR SIGNAGE; TO BE DETERMINED.
7. PRE-ENGINEERED METAL BUILDING; COORD. WITH PE(4/A5.0).
8. VEHICLE BOLLARD.
9. CEMENTITIOUS TRIM BOARD:
   - A. FASCIA BOARD; 8 IN. WIDE NOM., TYP. UNO.
   - B. FRIEZE BOARD; 12 IN. WIDE NOM., TYP. UNO.
   - C. BASE BOARD; 8 IN. WIDE NOM., TYP. UNO.
   - D. VERTICAL TRIM; 6 IN. WIDE NOM., TYP. UNO.
   - E. OPENING HEAD/JAMB TRIM; 8 IN. WIDE NOM., TYP. UNO.

FINISH SCHEDULE (EXTERIOR)

MARK	DESCRIPTION
CEMENTITIOUS CLADDING	
CBB-1	BOARD / BATTEN: COLOR 1
CLS-1	LAP SIDING: COLOR 1
CPB-1	PANEL BOARD; COLOR 1
CPB-2	PANEL BOARD; COLOR 2
CSB-2	SOFFIT BOARD; COLOR 1
CTB-1	TRIM BOARD; COLOR 1
CTB-2	TRIM BOARD; COLOR 2
EXTERIOR PAINT	
PNT-1x	POWDER COAT - BLACK
MASONRY VENEER	
BRK-1	MODULAR; RUNNING BOND; COLOR 1; GROUT 1
BRK-2	MODULAR; RUNNING BOND; COLOR 2; GROUT 2
METAL WALL PANEL	
MWP-1	PEMB TYPE; CORRUGATED; ZINC
MWP-2	CORRUGATED; VERTICAL; EXPSOED FASTENERS; ZINC
METALS	
MTL-1x	FINISH TYPE PER PRODUCT AND SPEC
MTL-2x	RED; FINISH TYPE PER PRODUCT AND SPEC
STANDING SEAM METAL ROOFING	
SSMR-1	1.5 IN. SEAMS W/ RIBS; COLOR 1
SSMR-2	PEMB TYPE; GALVALUME/GALVANIZED; TRIM TO MATCH SSMR-1

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BID SET

TOWN OF NASHVILLE FIRE STATION NO. 2

1200 EAST WASHINGTON ST.
NASHVILLE, NC 27856

OAKLEY COLLIER ARCHITECTS, P.A. — CERT NO. 50681 — ROCKY MOUNT, NC

ANN W. COLLIER — REGISTERED ARCHITECT — NORTH CAROLINA — ROCKY MOUNT, NC — 05/15/23

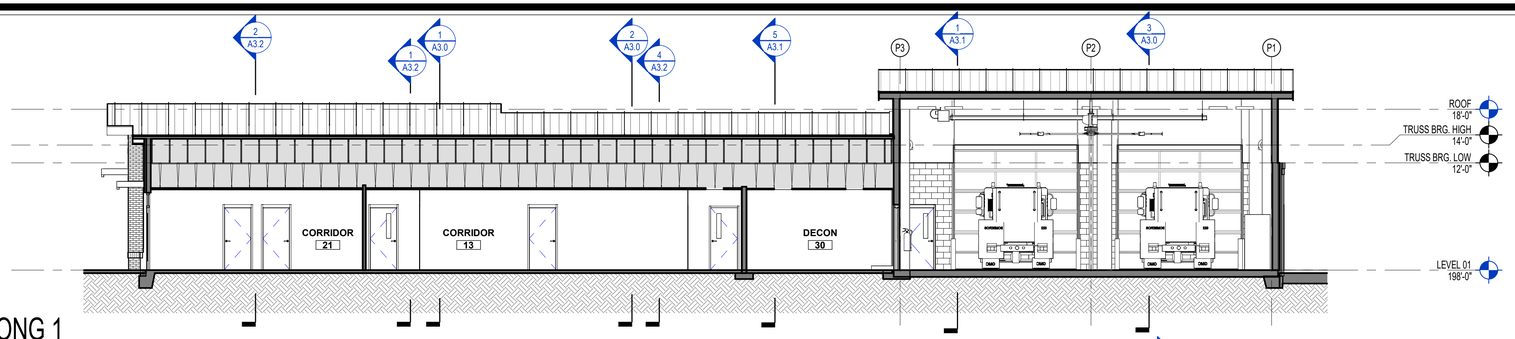
GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

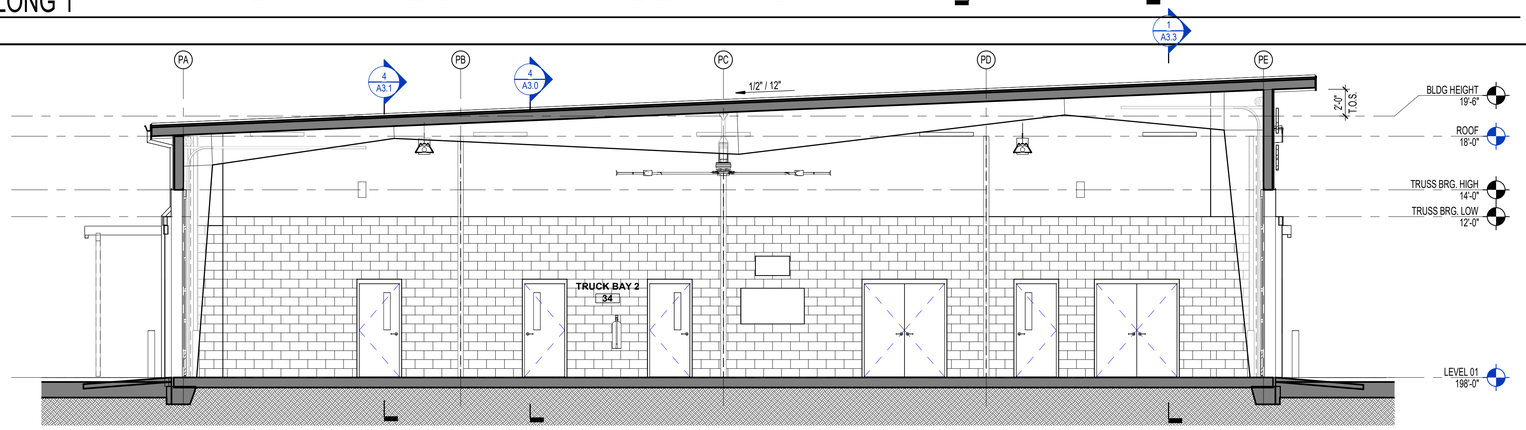
Date	Project No.
5/15/2023	22027
Drawn By: JFK	Sheet No.: A2.0
Checked By: JFK	

Sheet Title: BUILDING ELEVATIONS



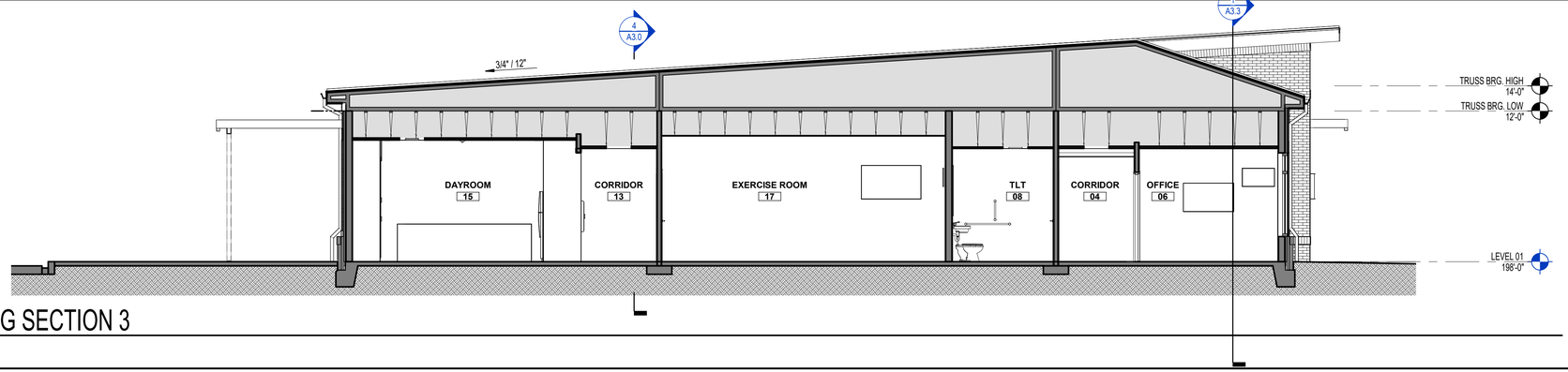
4 A3.0 BUILDING SECTION - LONG 1

1/8" = 1'-0"



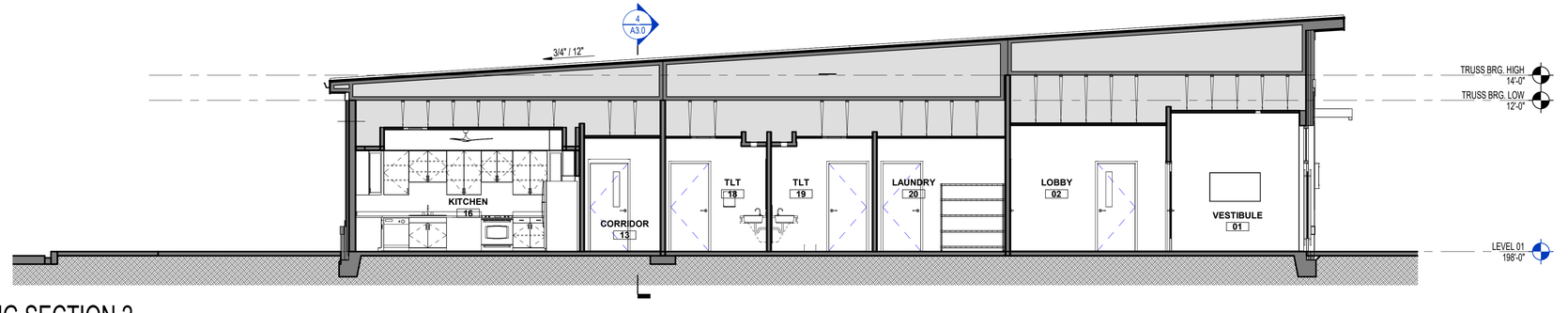
3 A3.0 BUILDING SECTION 4

3/16" = 1'-0"



2 A3.0 BUILDING SECTION 3

3/16" = 1'-0"



1 A3.0 BUILDING SECTION 2

3/16" = 1'-0"

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Date	Project No.
5/15/2023	22027
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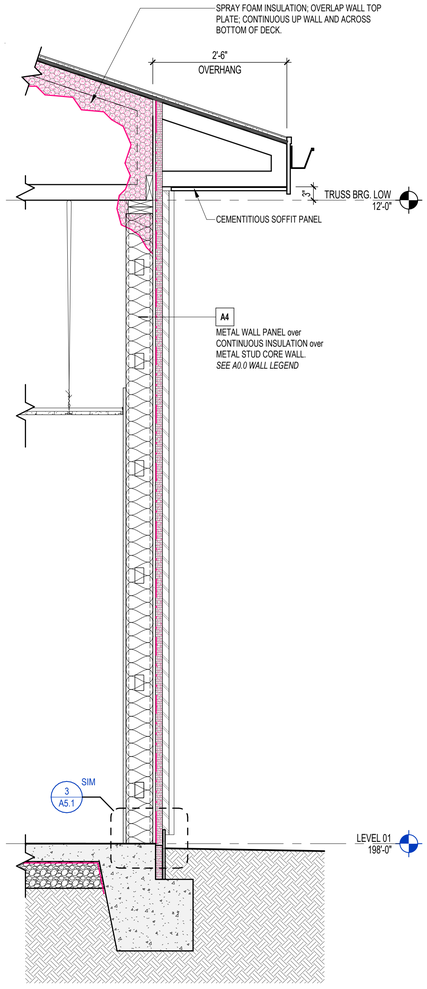
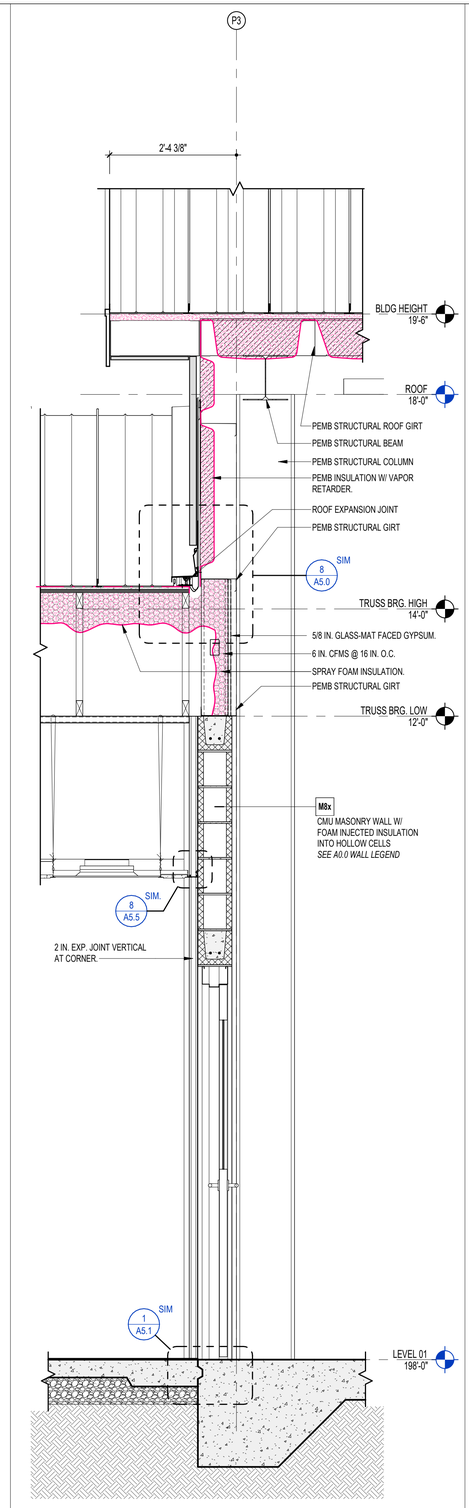
Checked By: JFK	

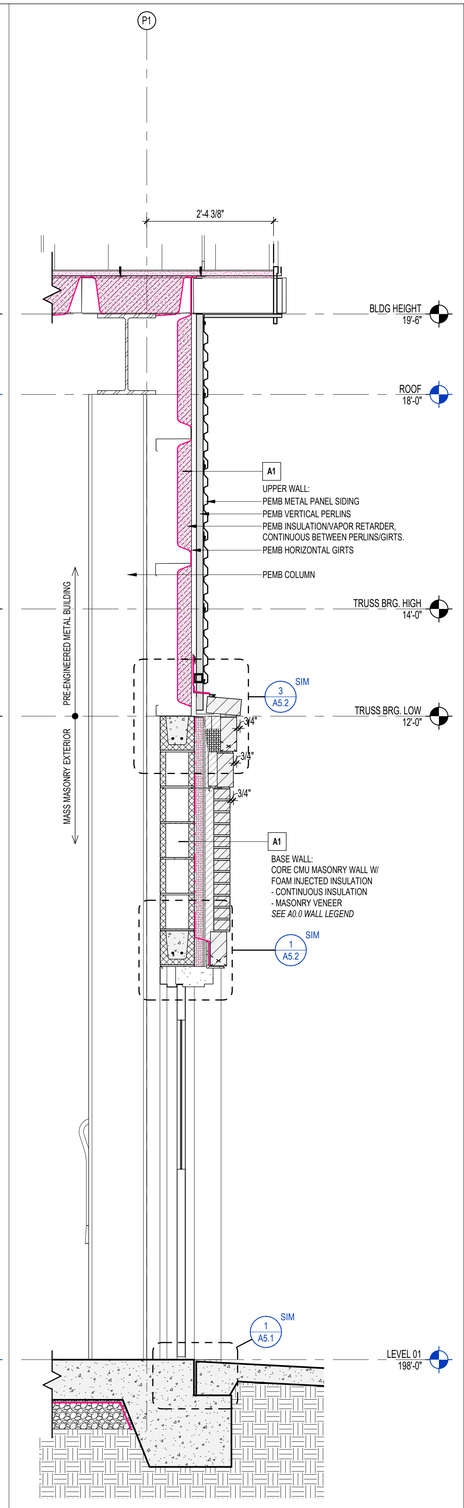
Sheet Title: BUILDING SECTIONS



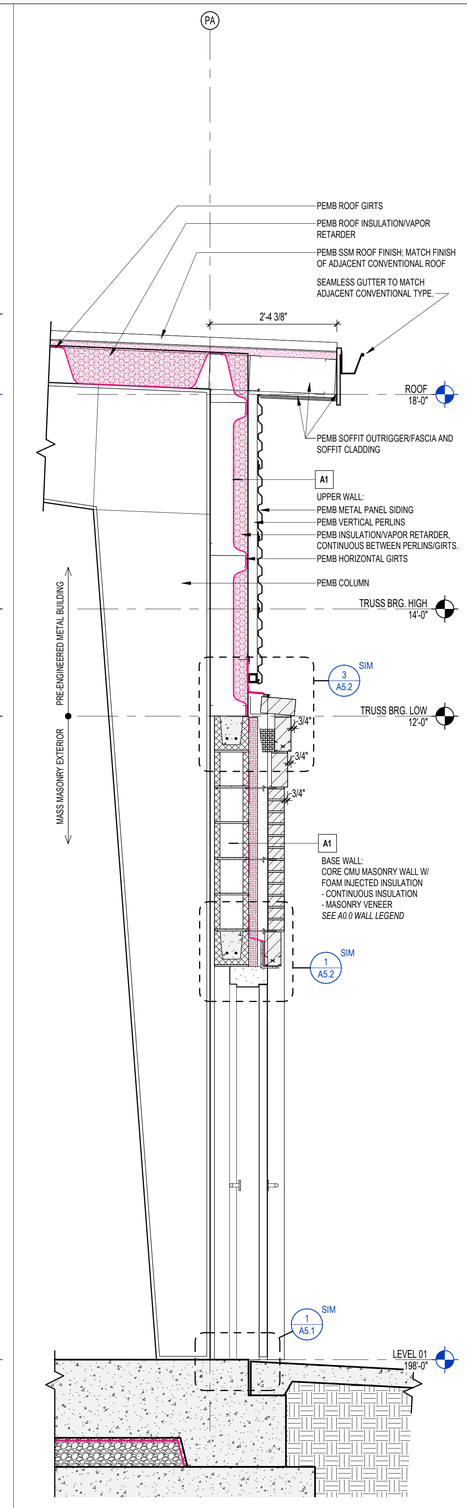
5 A3.1 SECT. 5 (STUD/B&B, LOW EAVE)
3/4" = 1'-0"



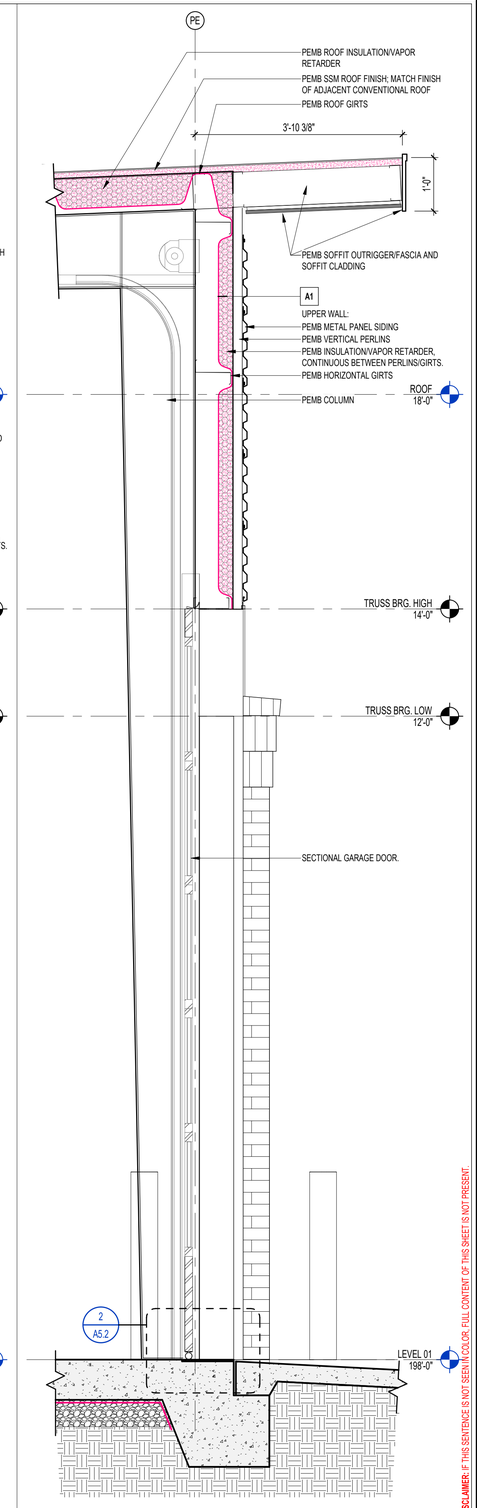
4 A3.1 SECT. 4 (BAY, INT. RAKE)
3/4" = 1'-0"



3 A3.1 SECT. 3 (BAY, EXT. RAKE)
3/4" = 1'-0"



2 A3.1 SECT.2 (BAY, LOW EAVE)
3/4" = 1'-0"



1 A3.1 SECT. 1 (BAY, HIGH EAVE)
3/4" = 1'-0"

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BID SET

TOWN OF NASHVILLE
FIRE STATION NO. 2
1200 EAST WASHINGTON ST.
NASHVILLE, NC 27856

ANN W. COLLIER
REGISTERED ARCHITECT
NORTH CAROLINA
ROCKY MOUNT, NC
05/15/23

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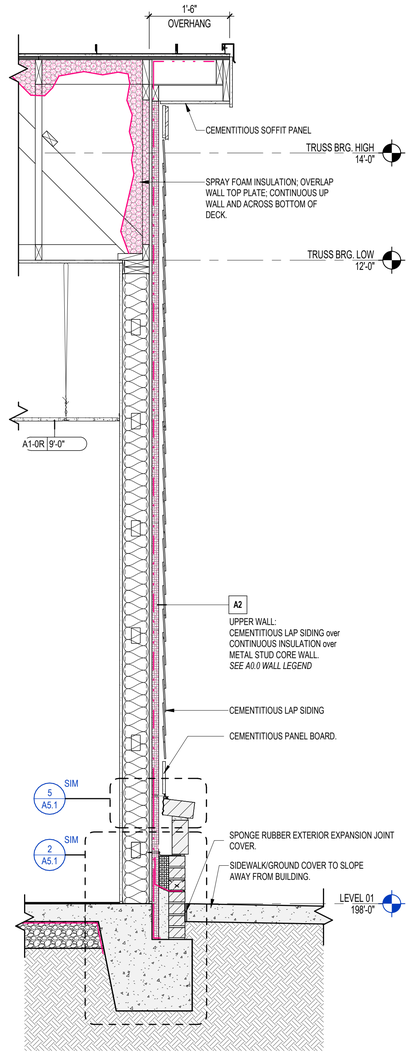
REVISIONS

#	Description	Date

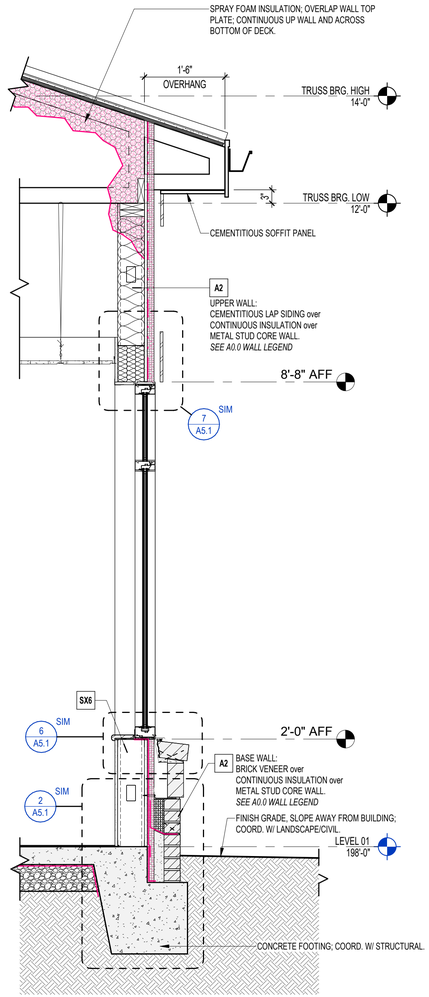
Date	Project No.
5/15/2023	22027
Drawn By: JFK	Sheet No.: A3.1
Checked By: JFK	

Sheet Title: WALL SECTIONS



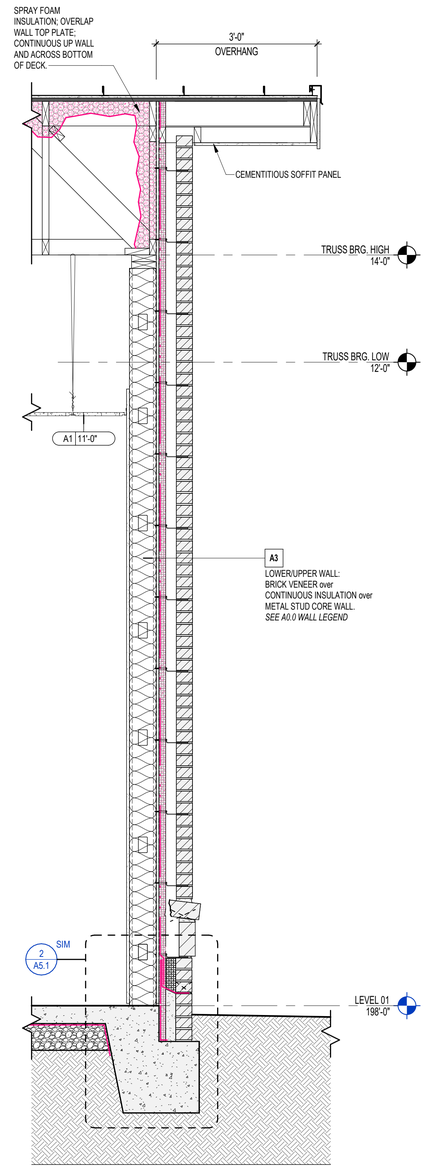
5 A3.2 SECT. 10 (CSP, RAKE)

3/4" = 1'-0"



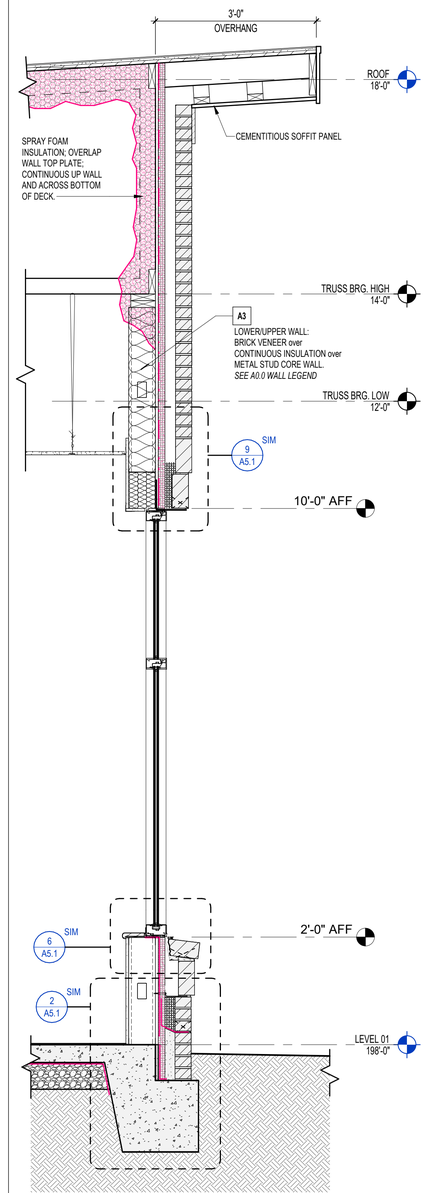
4 A3.2 SECT. 9 (CSP, LOW EAVE)

3/4" = 1'-0"



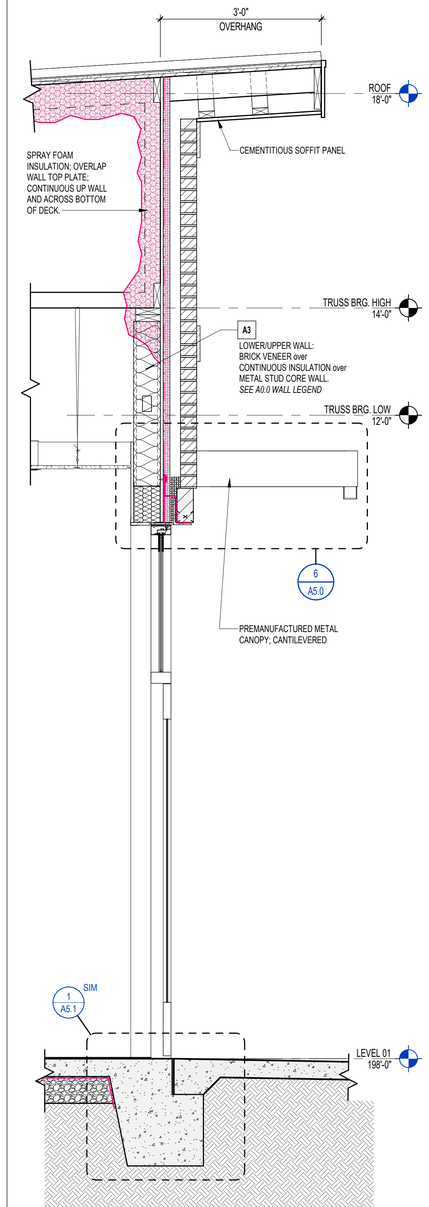
3 A3.2 SECT. 8 (BRICK, RAKE)

3/4" = 1'-0"



2 A3.2 SECT. 7 (BRICK, HIGH EAVE)

3/4" = 1'-0"



1 A3.2 SECT. 6 (BRICK, CANOPY)

3/4" = 1'-0"

COLOR CONTENT DISCLAIMER: IF THIS SENTENCE IS NOT SEEN IN COLOR, FULL CONTENT OF THIS SHEET IS NOT PRESENT

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BID SET

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NASHVILLE, NC 27856

OAKLEY COLLIER ARCHITECTS P.A. — NORTH CAROLINA ARCHITECTURAL CORPORATION — CERT NO. 50681 — ROCKY MOUNT, NC

ANN W. COLLIER — REGISTERED ARCHITECT — NORTH CAROLINA — ROCKY MOUNT, N.C. — 05/15/23

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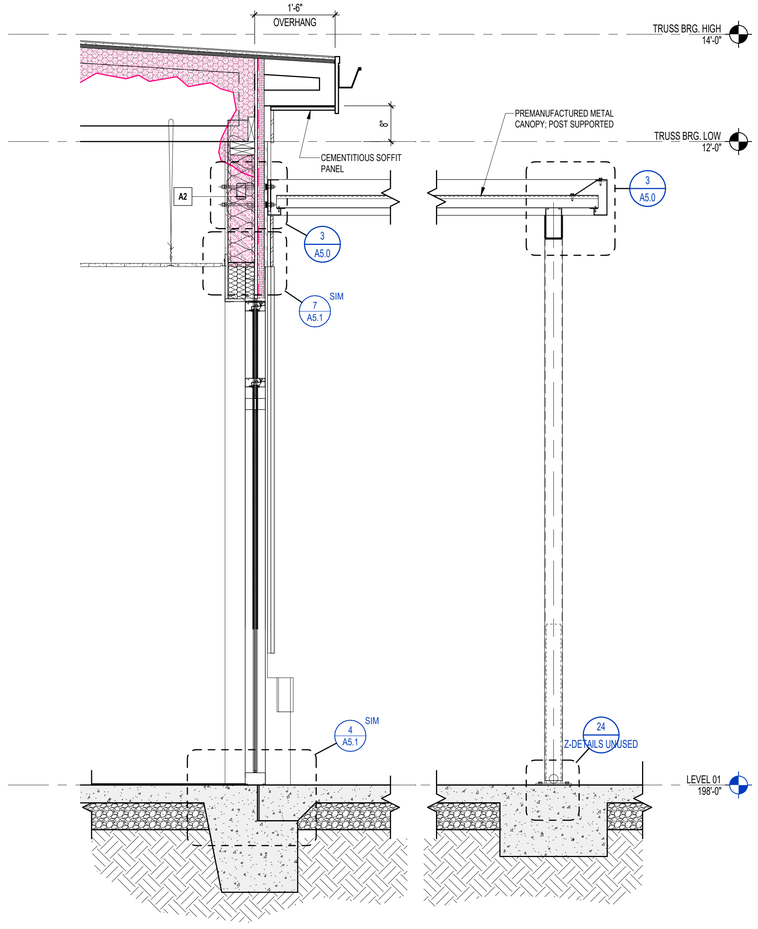
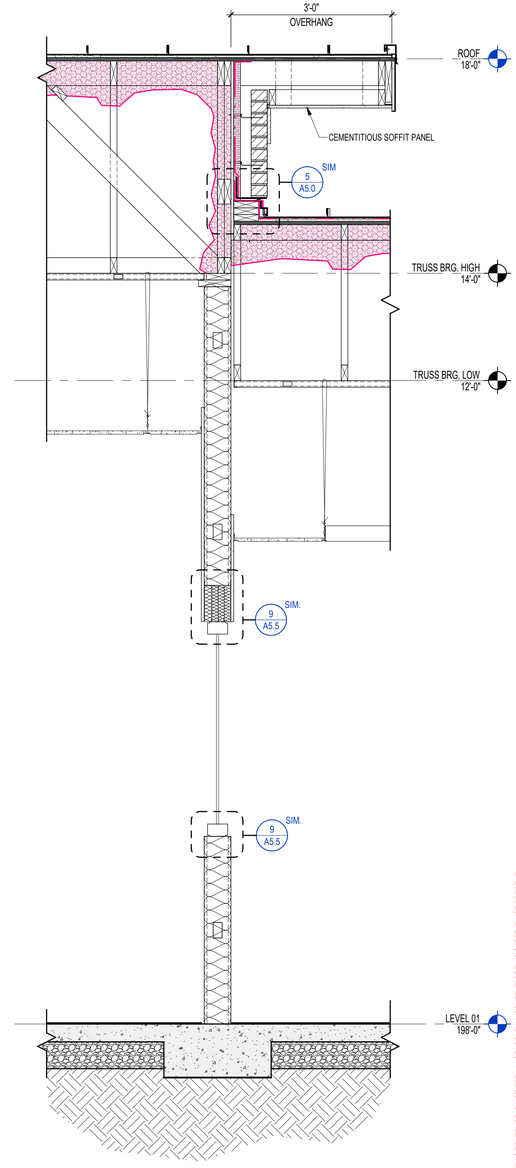
Date	Project No.
5/15/2023	22027
Drawn By: JFK	Sheet No.: A3.2
Checked By: JFK	

Sheet Title: WALL SECTIONS



2 A3.3 SECT. 12 (PREMANUF. CANOPY - POST SUPPORTED)

3/4" = 1'-0"



1 A3.3 SECT. 11 (BRICK LEDGER OVER ROOF)

3/4" = 1'-0"

COLOR CONTENT DISCLAIMER: IF THIS SENTENCE IS NOT SEEN IN COLOR, FULL CONTENT OF THIS SHEET IS NOT PRESENT.

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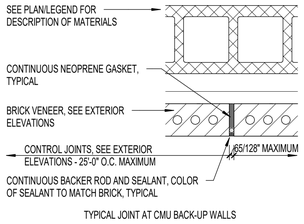
Checked By: JFK	

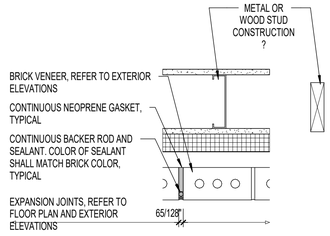
Sheet Title: WALL SECTIONS



TYPICAL JOINT AT CMU BACK-UP WALLS

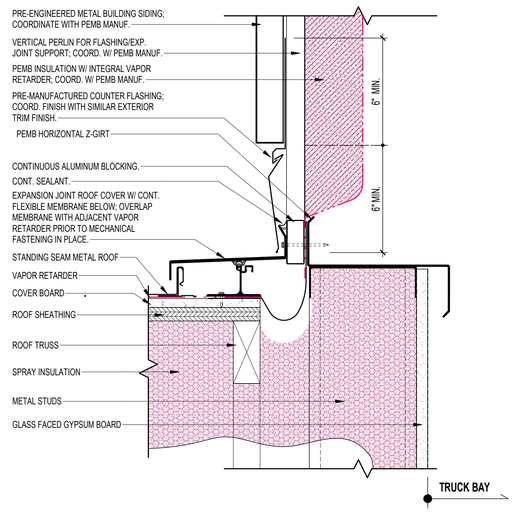
10 A5.0 EXT-BRICK CONTROL JOINT-CMU

1 1/2" = 1'-0"



9 A5.0 BRICK CONTROL JOINT

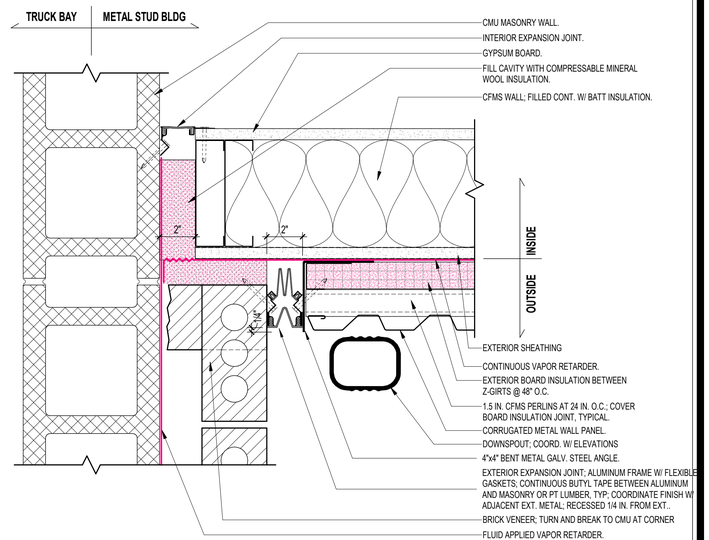
1 1/2" = 1'-0"



2 IN. AT ROOF (SSM OVER TRUSS / PEMB SIDING)

8 A5.0 EXP. JOINT HORIZ. (SSMR / PEMB)

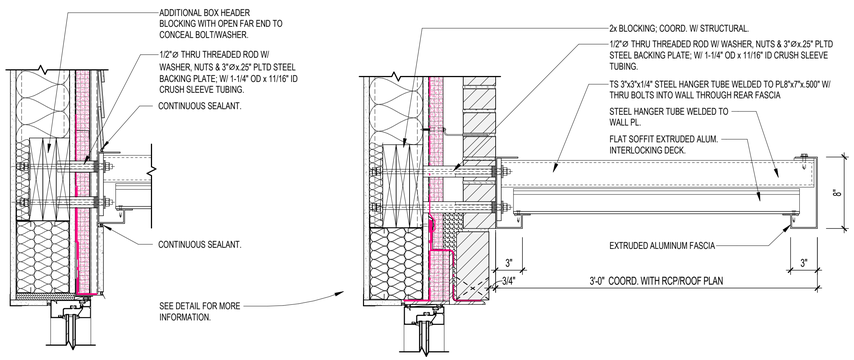
3" = 1'-0"



2 IN. AT CLADDING (BRICK VENEER AND METAL WALL PANEL)

7 A5.0 EXP. JOINT VERT. (BRICK / BRICK AT INSIDE CORNER)

3" = 1'-0"



AT CEMENTITIOUS SIDING

REFER TO DETAIL: (7 / A5.1) FOR ANY DETAIL
INFORMATION NOT ANNOTATED ON THIS DETAIL

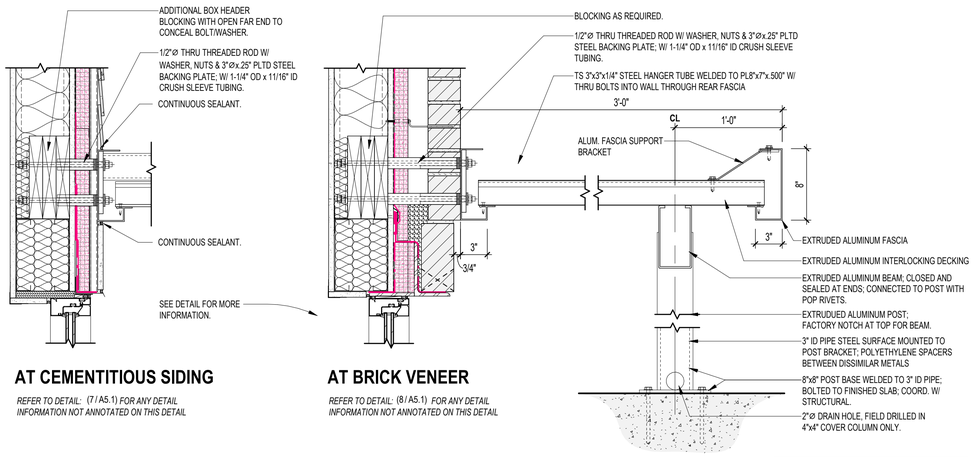
AT BRICK VENEER

REFER TO DETAIL: (8 / A5.1) FOR ANY DETAIL
INFORMATION NOT ANNOTATED ON THIS DETAIL

CANOPY BASIS OF DESIGN IS MAPES INDUSTRIES SUPERDECK LUMISHADE; COORDINATE ALL DETAIL WITH MANUF.

6 A5.0 PREMANUFACTURED CANOPY (CANTILEVER)

1 1/2" = 1'-0"



AT CEMENTITIOUS SIDING

REFER TO DETAIL: (7 / A5.1) FOR ANY DETAIL
INFORMATION NOT ANNOTATED ON THIS DETAIL

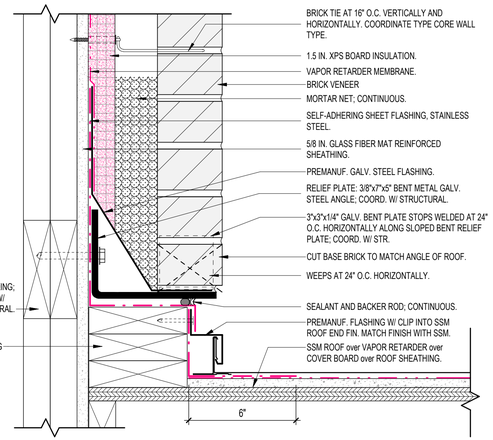
AT BRICK VENEER

REFER TO DETAIL: (8 / A5.1) FOR ANY DETAIL
INFORMATION NOT ANNOTATED ON THIS DETAIL

CANOPY BASIS OF DESIGN IS MAPES INDUSTRIES 8 IN. FASCIA POST SUPPORTED UNIT; COORDINATE ALL DETAIL WITH MANUF.

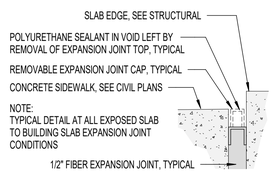
3 A5.0 PREMANUF. CANOPY (POST SUPPORT/CMNT. SIDING)

1 1/2" = 1'-0"



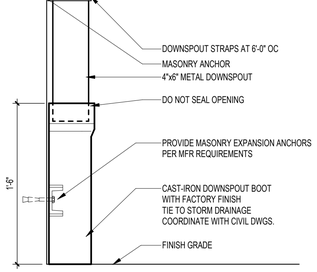
5 A5.0 CLADDING (BRICK RELIEF OVER SSM ROOF)

3" = 1'-0"



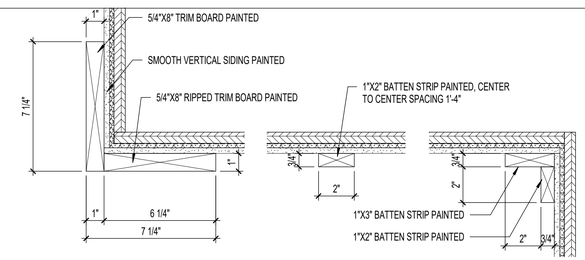
2 A5.0 CJ AT SLAB/SIDEWALK

6" = 1'-0"



4 A5.0 DOWNSPOUT BOOT

1 1/2" = 1'-0"



TYPICAL BOARD AND BATTEN SIDING DETAILS

1 A5.0 DETAIL

3" = 1'-0"

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REVISIONS

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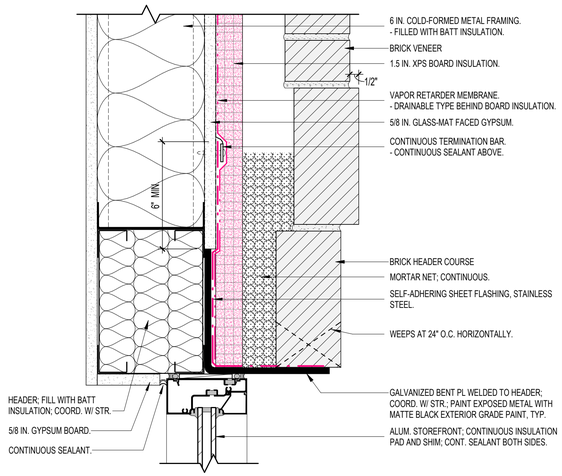
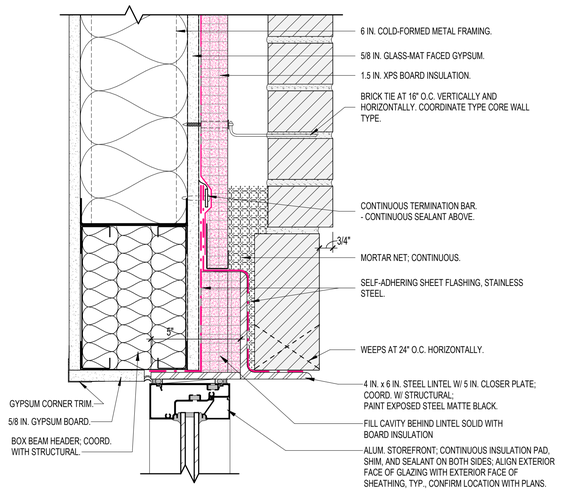
5/15/2023	22027
Drawn By: JFK	Sheet No.: A5.0
Checked By: JFK	

Sheet Title: EXTERIOR DETAILS



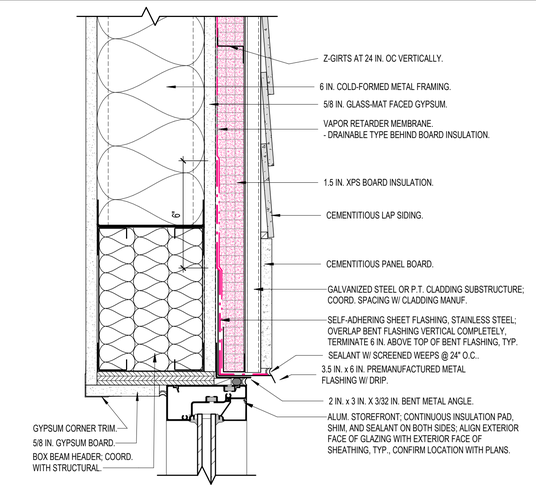
9 A5.1 SF DETAIL (HEAD AT WELDED ANGLE)

3" = 1'-0"



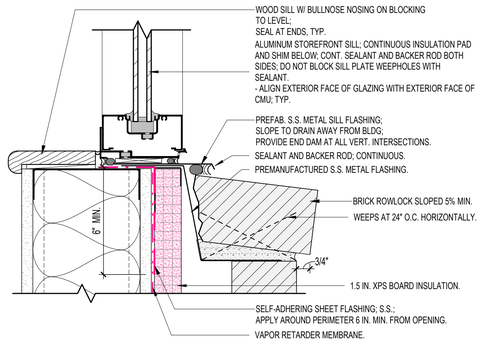
8 A5.1 SF DETAIL (HEAD W/ LOOSE LINTEL W/ CLSR)

3" = 1'-0"



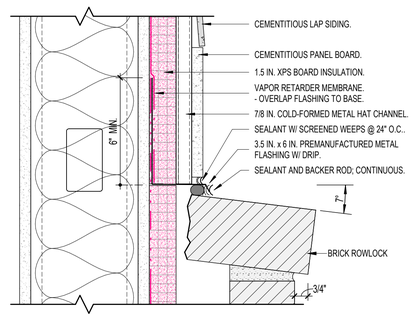
7 A5.1 SF DETAIL (HEAD AT CEMENTITIOUS SIDING)

3" = 1'-0"



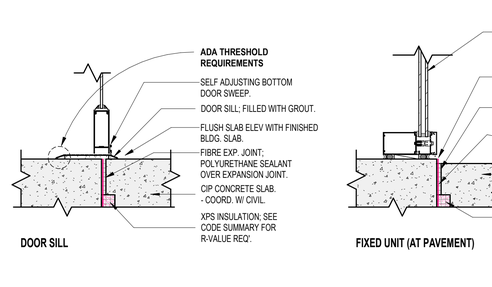
6 A5.1 CLADDING (SF SILL STUD/BRICK)

3" = 1'-0"



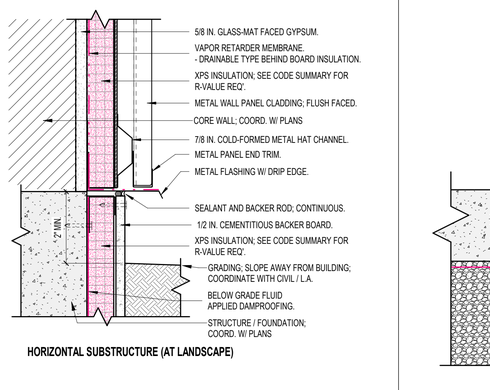
5 A5.1 CLADDING (STUD/LAP SIDING/BRICK)

3" = 1'-0"



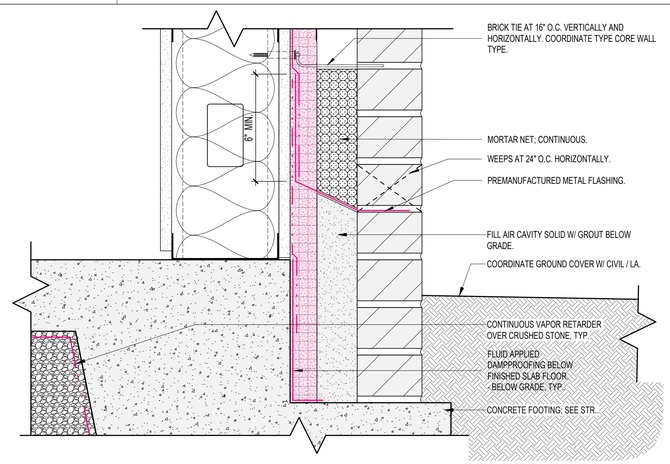
4 A5.1 CURTAINWALL/STOREFRONT DETAILS (SILL ON SLAB AT GRADE)

1 1/2" = 1'-0"



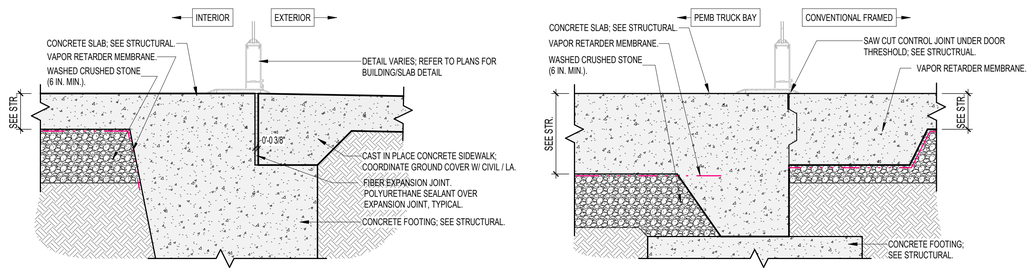
3 A5.1 CLADDING (MWP AT GRADE)

3" = 1'-0"



2 A5.1 FOUNDATION (TURNED SLAB / STUD / BRICK)

3" = 1'-0"



1 A5.1 FOUNDATION (TYPICAL AT SLAB EDGE / SIDEWALK)

1 1/2" = 1'-0"

COLOR CONTENT DISCLAIMER: IF THIS SENTENCE IS NOT SEEN IN COLOR, FULL CONTENT OF THIS SHEET IS NOT PRESENT

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BID SET

TOWN OF NASHVILLE FIRE STATION NO. 2

1200 EAST WASHINGTON ST.
NASHVILLE, NC 27856

OAKLEY COLLIER ARCHITECTS, P.A. — CERT NO. 50681 — NORTH CAROLINA — ROCKY MOUNT, NC

JOHN W. COLLIER — REGISTERED ARCHITECT — NORTH CAROLINA — ROCKY MOUNT, N.C. — 05/15/23

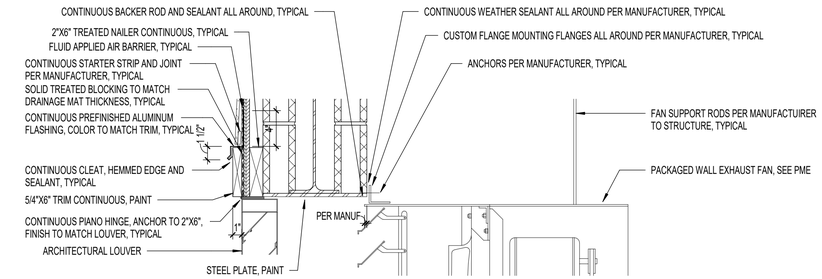
GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

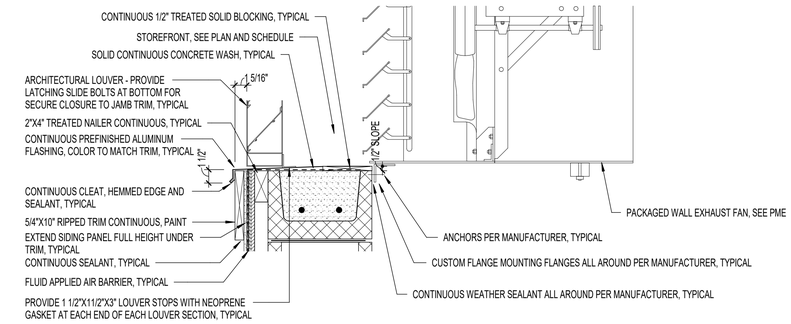
Date	Project No.
5/15/2023	22027
Drawn By: JFK	Sheet No.: A5.1
Checked By: DG	

Sheet Title: EXTERIOR DETAILS



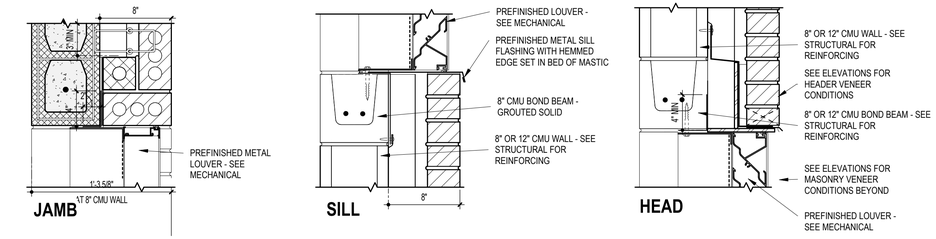
7 A5.2 HEAD DETAIL

1 1/2" = 1'-0"



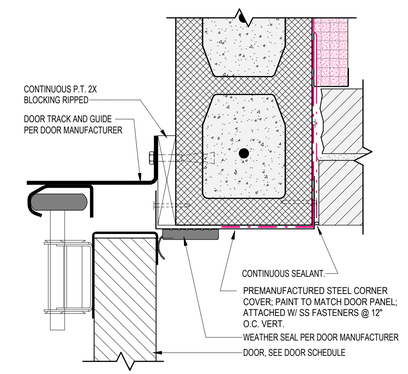
6 A5.2 SILL DETAIL

1 1/2" = 1'-0"



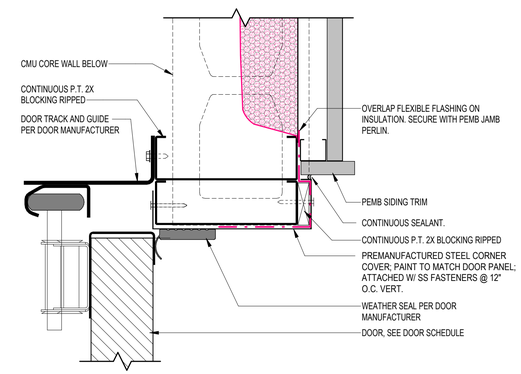
5 A5.2 LOUVER IN BRICK (SILL / JAMB / HEAD)

1 1/2" = 1'-0"

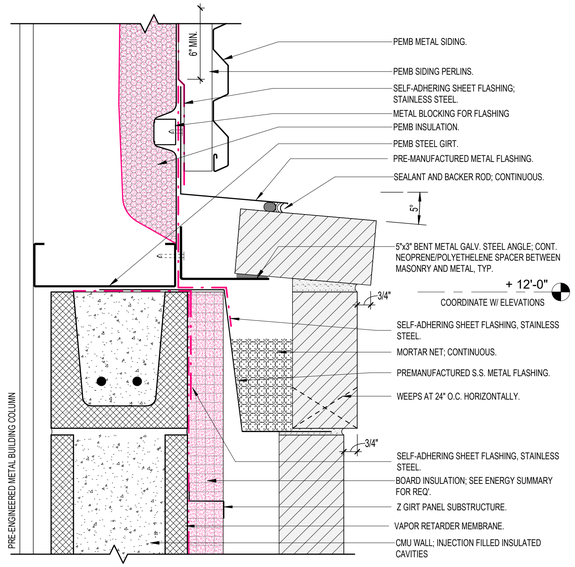


JAMB DETAIL AT BRICK VENEER

REFER TO TYPICAL MASONRY JAMB DETAIL: (1 / A5.2)
FOR ANNOTATION NOT ADDRESSED IN THIS DETAIL.

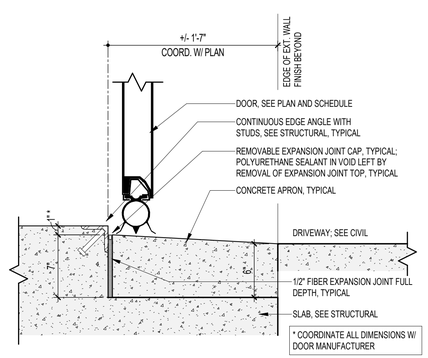


JAMB DETAIL AT PEMB



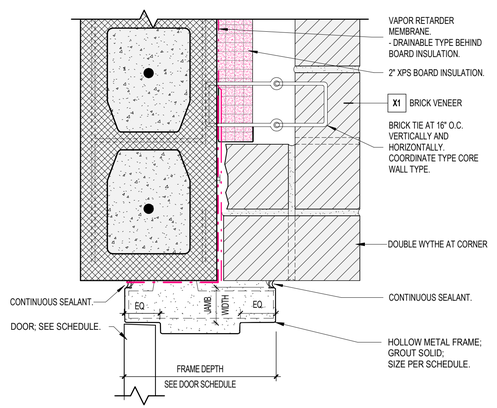
3 A5.2 CLADDING (CMU/BRICK VENEER/PEMB TRANSITION)

3" = 1'-0"

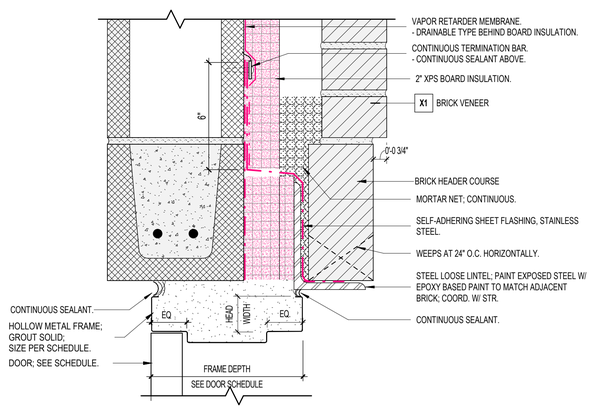


2 A5.2 DOOR SILL (OVERHEAD COILING)

1 1/2" = 1'-0"



JAMB DETAIL



HEAD DETAIL

4 A5.2 OVERHEAD DOOR JAMB DETAIL AT CMU/PEMB WALL

3" = 1'-0"

1 A5.2 HM DOOR (CMU/BRICK VENEER DETAILS)

3" = 1'-0"

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JOHN W. COLLIER — REGISTERED ARCHITECT — NORTH CAROLINA — ROCKY MOUNT, NC — 05/15/23

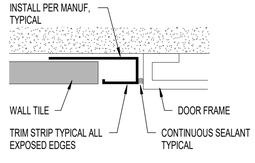
GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

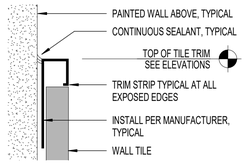
Date	Project No.
5/15/2023	22027
Drawn By: JFK	Sheet No.: A5.2
Checked By: DG	

Sheet Title: EXTERIOR DETAILS



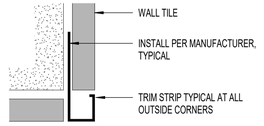
NOTE:
TYPICAL TILE EDGE JOINT ABUTTING AT ALL DOOR FRAMES.

TILE EDGE AT DOOR FRAME



NOTE:
TYPICAL TILE EXPOSED EDGE JOINT AT ALL TILE LOCATIONS.

TILE EDGE AT TERMINATION

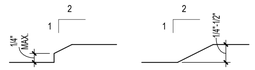


NOTE:
TYPICAL TILE OUTSIDE CORNER JOINT AT ALL LOCATIONS.

TILE EDGE AT OUTSIDE CORNER

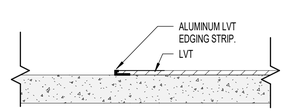
6 A5.4 TILE TERMINATION TRIM DETAILS

12" = 1'-0"

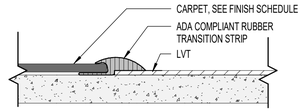


BEVEL W/ CANT **FULL CANT**

ADA THRESHOLD REQUIRMENTS



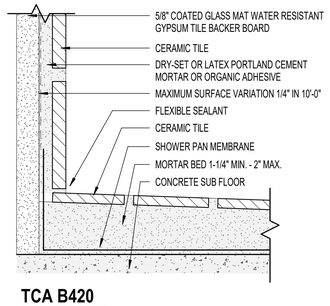
CARPET / LVT THRESHOLD



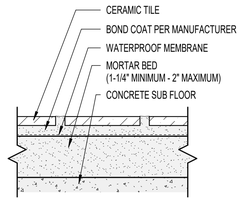
CARPET / LVT THRESHOLD

5 A5.4 FINISH DETAILS (THRESHOLDS)

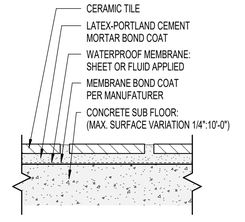
6" = 1'-0"



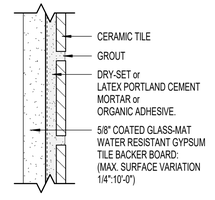
TCA B420
TILE SHOWER FLOOR/WALL



TCA F121
USE IN SHOWER FLOORS



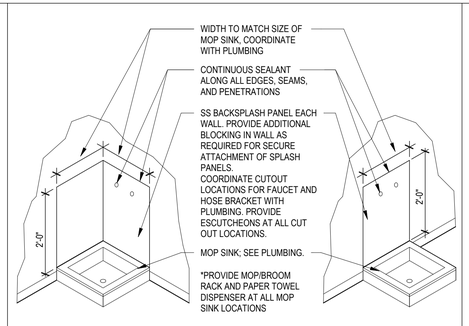
TCA F122
USE IN TOILET FLOORS



TCA W245
WALLS IN WET AREAS

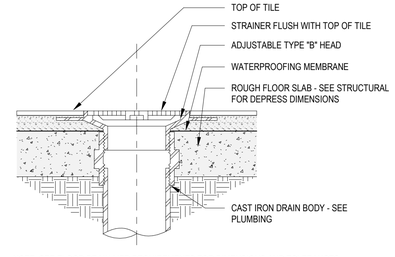
4 A5.4 TCA STANDARDS

6" = 1'-0"



2 A5.4 MOP SINK ISOMETRIC

3/8" = 1'-0"



NOTE: SEE FLOOR DRAIN MFR REQUIREMENTS FOR DIMENSIONS AND TOLERANCES

1 A5.4 FLOOR DRAIN DTL.

3" = 1'-0"

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ANN W. COLLIER — ARCHITECT — ROCKY MOUNT, NC — 05/15/23

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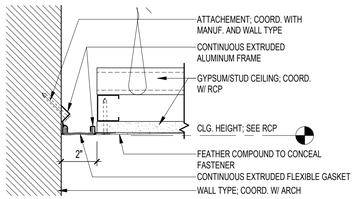
REVISIONS

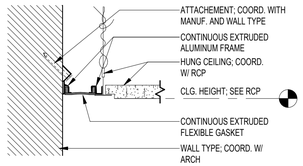
#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By: JFK	Sheet No.: A5.4
Checked By: JFK	

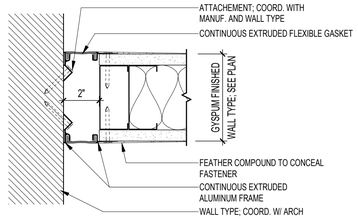
Sheet Title: INTERIOR DETAILS



2 IN. AT CEILING (GYPSUM) TO PERPENDICULAR WALL



2 IN. AT CEILING (ACT) TO PERPENDICULAR WALL

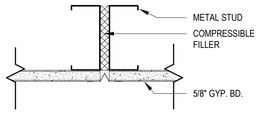


2 IN. AT WALL (GYPSUM FINISH) TO PERPENDICULAR WALL

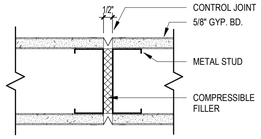
2 SIDES IF APPLICABLE; SEE PLAN.

8 A5.5 EXPANSION JOINT DETAILS (INTERIOR)

3" = 1'-0"



CEILING CONTROL JOINTS PLACED AS SHOWN ON RCP

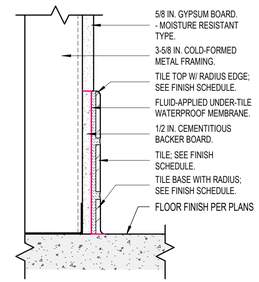


WALL CONTROL JOINTS PLACED @ 24'-0" MAX.

NOTE: ADDITIONAL FRAMING NOT REQUIRED FOR CONTROL JOINTS THAT ARE INSTALLED PERPENDICULAR TO THE FRAMING MEMBERS WITH FRAMING SPACING UP TO 24" OC. WHERE CONTROL JOINTS ARE INSTALLED PARALLEL TO FRAMING MEMBERS, A FRAMING MEMBER IS REQUIRED EACH SIDE OF THE OPENING

3 A5.5 GYPSUM (CONTROL JOINTS)

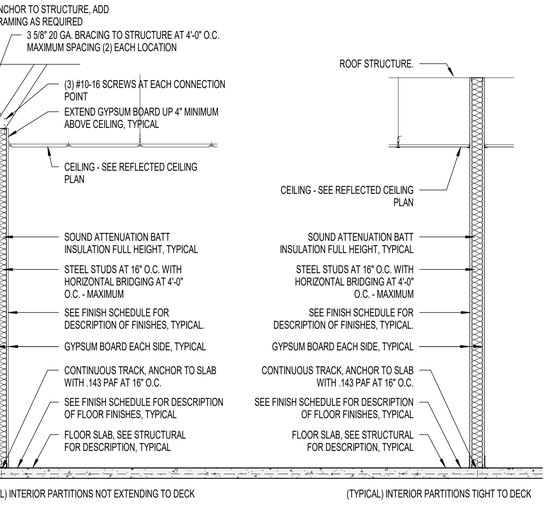
3" = 1'-0"



TILE BASE **RUBBER BASE**

6 A5.5 METAL STUD AT SLAB (BASE TRIM)

3" = 1'-0"

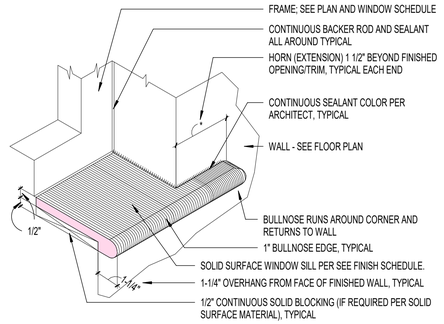


(TYPICAL) INTERIOR PARTITIONS NOT EXTENDING TO DECK

(TYPICAL) INTERIOR PARTITIONS TIGHT TO DECK

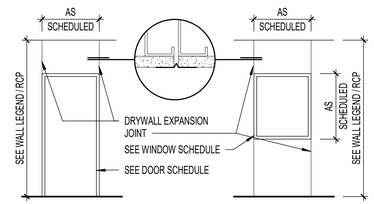
2 A5.5 INTERIOR PARTITION DETAIL (METAL STUD)

1/2" = 1'-0"



7 A5.5 WINDOW SILL DETAIL

3" = 1'-0"

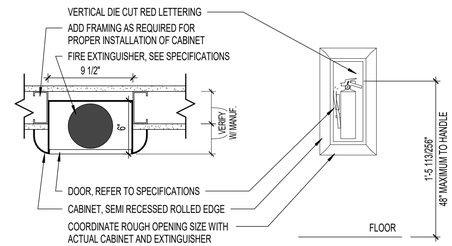


EXP. JOINT: LOCATE WHERE NOTED ON ELEVATIONS AND AT ALL DOOR AND WINDOW LOCATIONS AS ILLUSTRATED PER DETAIL.

4 A5.5 DRYWALL EXPANSION JOINT1

3" = 1'-0"

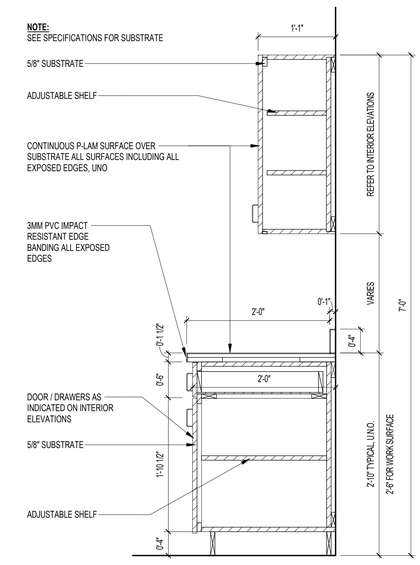
NOTE:
BASIS OF DESIGN ARCHITECTURAL SERIES MODEL AL2409-R4 SEMI RECESSED FULL PANEL DOOR WITH CLEAR ACRYLIC GLAZING. 31/2" ROLLED EDGE TRIM, VERTICAL DIE CUT RED LETTERING, WHITE BAKED ENAMEL INTERIOR BOX AS MANUFACTURED BY LARSEN'S MANUFACTURING COMPANY OR APPROVED EQUAL

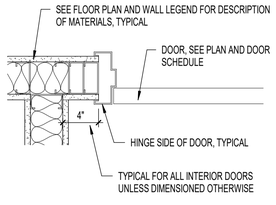


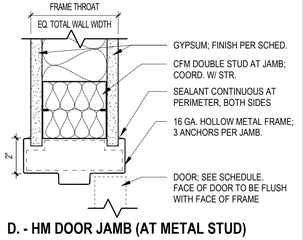
SEMI-RECESSED

5 A5.5 FEC (SEMI RECESSED)

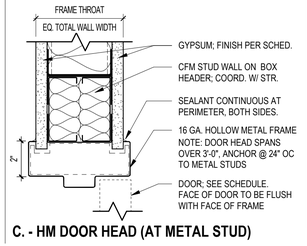
1 1/2" = 1'-0"



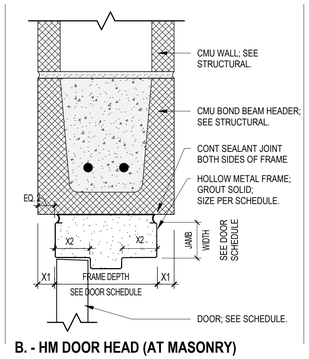




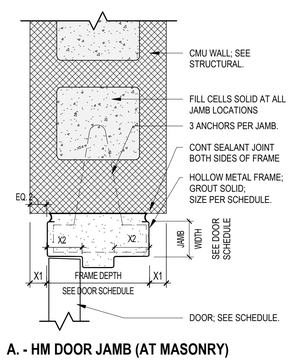
D. - HM DOOR JAMB (AT METAL STUD)



C. - HM DOOR HEAD (AT METAL STUD)



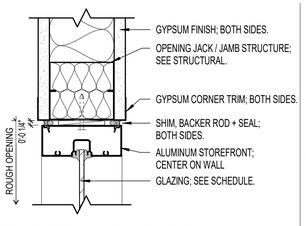
B. - HM DOOR HEAD (AT MASONRY)



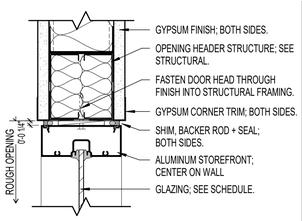
A. - HM DOOR JAMB (AT MASONRY)

9 A5.5 OPENING STANDARD DETAILS (INTERIOR STOREFRONT 4x2)

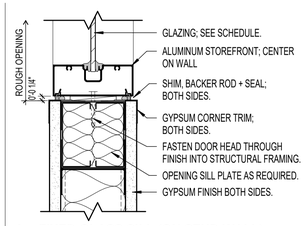
3" = 1'-0"



C. - FIXED GLASS JAMB (AT PARALL. WALL)



B. - FIXED GLASS HEAD



A. - FIXED GLASS SILL (ON STUD WALL)

10 A5.5 DOOR PLACEMENT AT CORNER

1 1/2" = 1'-0"

11 A5.5 OPENING STANDARD DETAILS (INTERIOR HOLLOW METAL DOOR FRAME)

3" = 1'-0"

1 A5.5 CASEWORK SECTION, U.O.N.1

1" = 1'-0"

OAKLEY COLLIER ARCHITECTS
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109 Candlewood Road, Rocky Mount, NC 27804 (P) 252.937.2500
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BID SET
TOWN OF NASHVILLE
FIRE STATION NO. 2
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NASHVILLE, NC 27856

OAKLEY COLLIER ARCHITECTS P.A. CERT. NO. 50681 ROCKY MOUNT, NC

ANN W. COLLIER REGISTERED ARCHITECT NORTH CAROLINA ROCKY MOUNT, NC 05/15/23

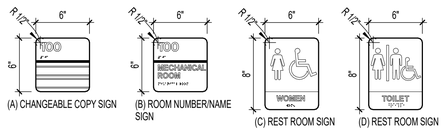
GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By: JFK	Sheet No.: A5.5
Checked By: DG	

Sheet Title: INTERIOR DETAILS



(A) CHANGEABLE COPY SIGN (B) ROOM NUMBER/NAME SIGN (C) REST ROOM SIGN (D) REST ROOM SIGN

9 A6.0 INTERIOR SIGNAGE VERSION 1

1 1/2" = 1'-0"

NOTES:

1. ALL ROOMS AND ENTRANCES TO A ROOM UNLESS NOTED OTHERWISE SHALL HAVE ONE SIGN.
2. SIGN TYPES INDICATED BY LETTER DESIGNATION, AS INDICATED, AND KEYED TO ROOM FINISH SCHEDULE.
3. ALL TOILETS SHALL HAVE A RESTROOM SIGN.
4. COORDINATE ROOM DESIGNATIONS AND NUMBERS WITH OWNER PRIOR TO ORDERING.
5. ALL SIGNAGE SHALL COMPLY WITH ALL APPLICABLE CODES.
6. CHANGEABLE COPY SIGNS SHALL HAVE TWO (2) LINES WITH NON-GLARE ACRYLIC FACES FOR OWNER INSERTS.
7. ALL COMPONENTS COLORS SHALL BE AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE.
8. ALL SIGNS SHALL BE LOCATED ON STRIKE SIDE OF DOOR AND SHALL BE 48 INCHES MINIMUM AND 60 INCHES MAXIMUM FROM FINISH FLOOR TO BASELINE OF ALL BRAILLE CELLS. A CLEAR SPACE OF 18X18 INCHES SHALL BE LOCATED IN FRONT OF THE SIGN, CENTERED ON THE RAISED TEXT.

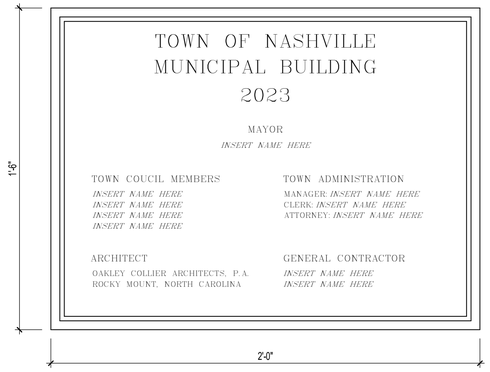
SS-C

SAFETY SIGNAGE NOTES

1. SAFETY SIGNAGE SHALL COMPLY WITH ALL APPLICABLE CODES.
2. COORDINATE INSTALLATION, COLOR, AND SIZE WITH FIRE MARSHAL PRIOR TO ORDERING.
3. EXTERIOR SIGNAGE SHALL BE DURABLE WEATHER RESISTANT MATERIAL.
4. SIGNS SHALL BE STANDARD SIZE WITH A 1" MINIMUM CHARACTER HEIGHT.

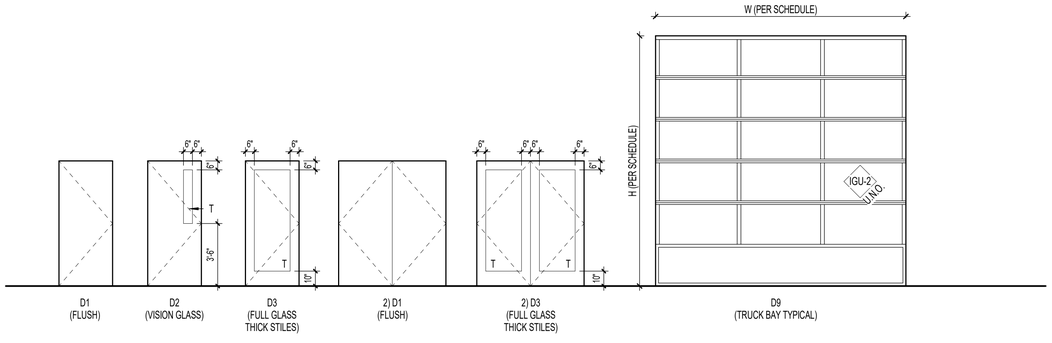
10 A6.0 SAFETY SIGNAGE

1 1/2" = 1'-0"



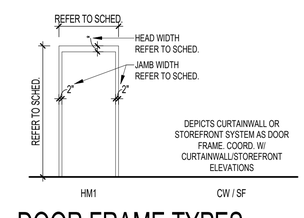
8 A6.0 SITE-SIGN - DEDICATION PLAQUE

3" = 1'-0"



DOOR PANEL TYPES

1/4" = 1'-0"

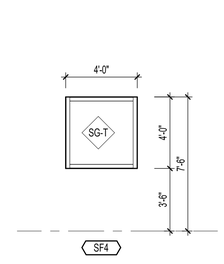


DOOR FRAME TYPES

1/4" = 1'-0"

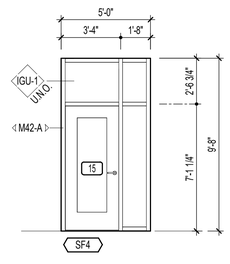
DOOR & FRAME SCHEDULE

DOOR NO.	SIZE			PANEL			FRAME					FIRE RATING	NOTES
	W.	H.	T.	TYPE	MATERIAL / FINISH	GLASS	TYPE	MATERIAL / FINISH	JAMB	HEAD	DEPTH		
01	6'-0"	7'-0"	0'-1 3/4"	2) D3	ALUM / SF	IGU-1	SF 03						
02	6'-0"	7'-0"	0'-1 3/4"	2) D3	WD / WDS-1	SG		HMS-I / PNT-2	0'-2"	0'-2"	0'-5 7/8"		
03	3'-0"	7'-0"	0'-1 3/4"	D2	WD / WDS-1	SG		HMS-I / PNT-2	0'-2"	0'-2"	0'-5 7/8"		
03B	3'-0"	7'-0"	0'-1 3/4"	D3	ALUM / SF	IGU-1	SF 05						
04	3'-0"	7'-0"	0'-1 3/4"	D2	WD / WDS-1	SG		HMS-I / PNT-2	0'-2"	0'-4"	0'-6 1/4"		
05	3'-0"	7'-0"	0'-1 3/4"	D1	WD / WDS-1			HMS-I / PNT-2	0'-2"	0'-2"	0'-5 7/8"		
06	3'-0"	7'-0"	0'-1 3/4"	D1	WD / WDS-1			HMS-I / PNT-2	0'-2"	0'-2"	0'-5 7/8"		
07	3'-0"	7'-0"	0'-1 3/4"	D1	WD / WDS-1			HMS-I / PNT-2	0'-2"	0'-4"	0'-6 1/4"		
08	3'-0"	7'-0"	0'-1 3/4"	D1	WD / WDS-1			HMS-I / PNT-2	0'-2"	0'-4"	0'-6 1/4"		
09	5'-0"	7'-0"	0'-1 3/4"	2) D1	WD / WDS-1			HMS-I / PNT-2	0'-2"	0'-2"	0'-6 1/4"		
10	3'-0"	7'-0"	0'-1 3/4"	D1	WD / WDS-1			HMS-I / PNT-2	0'-2"	0'-2"	0'-5 7/8"		
11	3'-0"	7'-0"	0'-1 3/4"	D1	WD / WDS-1			HMS-I / PNT-2	0'-2"	0'-2"	0'-8 1/4"		
12	3'-0"	7'-0"	0'-1 3/4"	D2	WD / WDS-1	SG		HMS-I / PNT-2	0'-2"	0'-2"	0'-5 3/4"		
12B	3'-0"	7'-0"	0'-1 3/4"	D2	HMS-X / PNT-2	SG		HMS-X / PNT-2	0'-2"	0'-4"	0'-5 3/4"		
13	3'-0"	7'-0"	0'-1 3/4"	D2	WD / WDS-1	SG		HMS-I / PNT-2	0'-2"	0'-2"	0'-5 7/8"		
14	3'-0"	7'-0"	0'-1 3/4"	D2	WD / WDS-1	SG		HMS-I / PNT-2	0'-2"	0'-4"	0'-5 3/4"		
14B	3'-0"	7'-0"	0'-1 3/4"	D2	HMS-X / PNT-2	SG		HMS-X / PNT-2	0'-2"	0'-4"	0'-5 3/4"		
15	3'-0"	7'-0"	0'-1 3/4"	D3	ALUM / SF	IGU-1	SF 07						
16	3'-0"	7'-0"	0'-1 3/4"	D3	ALUM / SF	IGU-1	SF 08						
17	3'-0"	7'-0"	0'-1 3/4"	D1	WD / WDS-1			HMS-I / PNT-2	0'-2"	0'-4"	0'-5 3/4"	20 MIN.	
17B	3'-0"	7'-0"	0'-1 3/4"	D1	WD / WDS-1			HMS-I / PNT-2	0'-2"	0'-4"	0'-5 3/4"	20 MIN.	
18	3'-0"	7'-0"	0'-1 3/4"	D1	WD / WDS-1			HMS-I / PNT-2	0'-2"	0'-2"	0'-5 7/8"		
19	3'-0"	7'-0"	0'-1 3/4"	D1	WD / WDS-1			HMS-I / PNT-2	0'-2"	0'-2"	0'-5 7/8"		
20	3'-0"	7'-0"	0'-1 3/4"	D1	WD / WDS-1			HMS-I / PNT-2	0'-2"	0'-2"	0'-5 7/8"		
21	3'-0"	7'-0"	0'-1 3/4"	D2	WD / WDS-1	SG		HMS-I / PNT-2	0'-2"	0'-4"	0'-5 3/4"		
22	3'-0"	7'-0"	0'-1 3/4"	D1	WD / WDS-1			HMS-I / PNT-2	0'-2"	0'-2"	0'-5 7/8"	20 MIN.	
23	3'-0"	7'-0"	0'-1 3/4"	D1	WD / WDS-1			HMS-I / PNT-2	0'-2"	0'-2"	0'-5 7/8"	20 MIN.	
24	3'-0"	7'-0"	0'-1 3/4"	D1	WD / WDS-1			HMS-I / PNT-2	0'-2"	0'-4"	0'-6 1/4"	20 MIN.	
25	3'-0"	7'-0"	0'-1 3/4"	D1	WD / WDS-1			HMS-I / PNT-2	0'-2"	0'-4"	0'-6 1/4"	20 MIN.	
26	3'-0"	7'-0"	0'-1 3/4"	D3	ALUM / SF		SF 06						
27	6'-0"	7'-0"	0'-1 3/4"	2) D1	HMS-I / PNT-2			HMS-I / PNT-2	0'-2"	0'-4"	0'-5 3/4"		
28	6'-0"	7'-0"	0'-1 3/4"	2) D1	HMS-I / PNT-2			HMS-I / PNT-2	0'-2"	0'-4"	0'-5 3/4"		
29	3'-0"	7'-0"	0'-1 3/4"	D2	HMS-I / PNT-2	SG		HMS-I / PNT-2	0'-2"	0'-4"	0'-5 3/4"		
30	3'-0"	7'-0"	0'-1 3/4"	D2	HMS-I / PNT-2	SG		HMS-I / PNT-2	0'-2"	0'-4"	0'-5 3/4"		
30B	3'-0"	7'-0"	0'-1 3/4"	D2	HMS-I / PNT-2	SG		HMS-I / PNT-2	0'-2"	0'-4"	0'-5 3/4"		
31	3'-0"	7'-0"	0'-1 3/4"	D1	HMS-X / PNT-2			HMS-X / PNT-2	0'-2"	0'-2"	0'-5 3/4"		
32	3'-0"	7'-0"	0'-1 3/4"	D1	HMS-X / PNT-2			HMS-X / PNT-2	0'-2"	0'-2"	0'-5 3/4"		
33	3'-0"	7'-0"	0'-1 3/4"	D2	HMS-X / PNT-4	SG		HMS-X / PNT-4	0'-2"	0'-4"	0'-5 3/4"		
34	14'-0"	14'-0"	0'-2"	D9	ALUM / PNT-4	IGU-2		STEEL / PNT-RED					OVERHEAD SECTIONAL
35	14'-0"	14'-0"	0'-2"	D9	-	IGU-2		STEEL / PNT-RED					OVERHEAD SECTIONAL
36	3'-0"	7'-0"	0'-1 3/4"	D2	HMS-X / PNT-2	SG		HMS-X / PNT-2	0'-2"	0'-4"	0'-5 3/4"		
37	14'-0"	14'-0"	0'-2"	D9	ALUM / PNT-4	IGU-2		STEEL / PNT-RED					OVERHEAD SECTIONAL
38	14'-0"	14'-0"	0'-2"	D9	ALUM / PNT-4	IGU-2		STEEL / PNT-RED					OVERHEAD SECTIONAL
39	3'-0"	7'-0"	0'-1 3/4"	D2	HMS-X / PNT-4	SG		HMS-X / PNT-4	0'-2"	0'-4"	0'-8 1/2"		



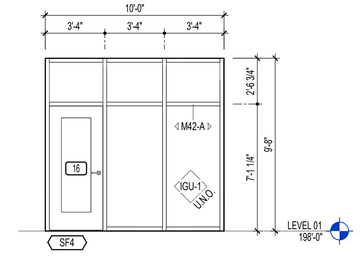
11 A6.0 SF 09

1/4" = 1'-0"



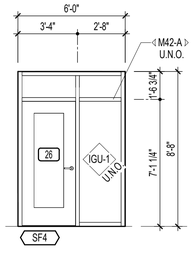
7 A6.0 SF 08

1/4" = 1'-0"



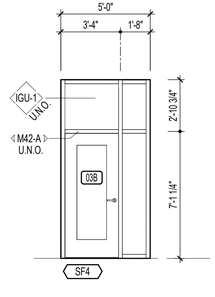
6 A6.0 SF 07

1/4" = 1'-0"



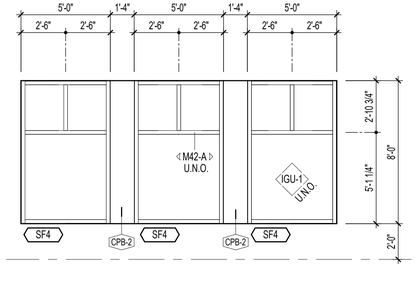
5 A6.0 SF 06

1/4" = 1'-0"



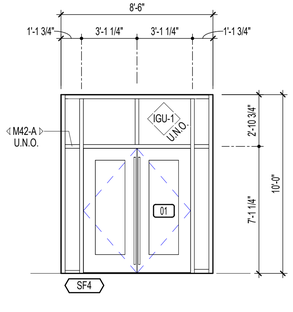
4 A6.0 SF 05

1/4" = 1'-0"



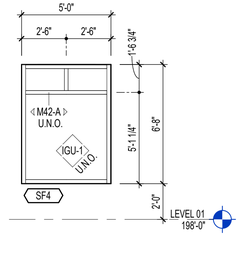
3 A6.0 SF 04

1/4" = 1'-0"



2 A6.0 SF 03

1/4" = 1'-0"



1 A6.0 SF 01

1/4" = 1'-0"

GENERAL NOTES

1. PROVIDE AND INSTALL WEATHERSTRIPPING AT ALL EXTERIOR DOORS.
2. PROVIDE AND INSTALL SILENCERS AT DOORS
3. ALL HARDWARE SHALL MEET ALL APPLICABLE HANDICAP CODES.
4. TEMPERED GLAZING SHALL BE USED AS NOTED AND AS REQUIRED BY CODE.
5. EXTERIOR DOOR GLAZING SHALL BE 5/8" TEMPERED INSULATING, TYPICAL, U.N.O.
6. EXTERIOR DOOR GLAZING SHALL BE TINTED TO MATCH CW / SF GLAZING.
7. FURNISH AND INSTALL DOOR CLOSERS AS SCHEDULED IN COMPLIANCE WITH ALL APPLICABLE CODES.
8. ALL HOLLOW METAL DOOR FRAMES SHALL BE FULLY WELDED TYPE, FACTORY PRIMED, AND FIELD PAINTED. COLOR PER ARCHITECT. INSTALL PER MANUFACTURER FOR PROPER INSTALLATION AND OPERATION FOR SPECIFIC APPLICATIONS.
9. ALL WOOD DOORS SHALL BE STAIN GRADE, SPECIES, AND COLOR PER ARCHITECT.
10. ALL ALUMINUM CURTAINWALL AND STOREFRONT AND DOORS SHALL BE PREFINISHED COLOR AS SELECTED BY ARCHITECT FROM MANUFACTURER'S FULL RANGE OF COLORS.
11. DOOR THRESHOLDS SHALL BE 1/2" MAXIMUM HEIGHT.
12. ALL PAINTED FRAMES AND PANELS TO HAVE EPOXY PAINT IN EXTERIOR AND WET LOCATIONS.
13. ALL WOOD PANELS TO HAVE CLEAR COAT POLYURETHANE STAIN IN EXTERIOR AND WET LOCATIONS.

DOOR SCHEDULE LEGEND

**COLOR TO BE SELECTED BY ARCHITECT FROM FULL RANGE OF MFR'S COLORS.*

PANEL MATERIAL:
- **ALUM** ALUMINUM
- **HMS-I** HOLLOW METAL STEEL (COLD ROLLED, UNCOATED)
- **HMS-X** HOLLOW METAL STEEL - INSULATED (GALVANNEALED COATING)
- **WD** WOOD

FRAME MATERIAL:
- **HMS-I** HOLLOW METAL STEEL (COLD ROLLED, UNCOATED)
- **HMS-X** HOLLOW METAL STEEL (GALVANNEALED COATING)
- **SF-#** *REFERS TO STOREFRONT ASSEMBLY (SEE CW/SF ELEVATIONS)*

FINISHES
*REFER TO **INTERIOR FINISH SCHEDULE***

GLASS TYPES:
*SEE **GLAZING UNIT TYPES** IN LEGEND*

HARDWARE SETS:
1 *SEE SPECS FOR HARDWARE SETS PER DOOR*

SCHEDULE NOTES:
1. COORDINATE ALL SIZES, TYPES, MATERIALS, FINISHES, AND HARDWARE WITH ASSEMBLED GLASS MANUFACTURER.

STOREFRONT TYPES

SF4-A

CW/SF / SIZE
MULLION FINISH, TYP, UNO.

MARK	SIZE	DESCRIPTION
SF4-A	4.5" x 2"	STOREFRONT; CENTERSET GLAZING; BLACK ANNODIZED FINISH

GLAZING UNIT TYPES

IGU1

**COLOR TO BE SELECTED BY ARCHITECT FROM FULL RANGE OF MFR'S COLORS.*

GLASS TYPES:
(NON-INSULATED GLASS)
- **FG** ANNEALED FLOAT GLASS, 1/4" THICK SINGLE PANE, CLEAR.
- **SG** SAFETY GLASS - FULLY TEMPERED, 1/4" THICK SINGLE PANE, MATCH ADJACENT GLASS TINT.
- **SG-T** **SG** w/ 1 WAY SEE THROUGH TINT - CLEAR

(INSULATED GLASS UNITS)
- **IGU-1** 1" THICK DOUBLE PANE, LOW-E, AIR FILLED, FULLY TEMPERED SAFETY GLASS (OUTER PANEL: TBD) / (INNER PANEL: CLEAR FLOAT)
- **IGU-2** DBS INSULATED GLASS PER DOOR MANUFACTURER.

SF GENERAL NOTES

1. STOREFRONT OVERALL DIMENSIONS FROM ROUGH OPENING OR EXTERIOR EDGE OF CORNER MULLION. INTERNAL DIMENSIONS ARE CENTERLINE OF MULLION, UNO. GENERAL CONTRACTOR TO VERIFY ALL DIMENSIONS PER FIELD CONDITIONS PRIOR TO SHOP DRAWING APPROVAL.
2. CONTRACTOR SHALL AVOID THE USE OF DISSIMILAR METALS IN CONTACT WITH ONE ANOTHER AS MUCH AS POSSIBLE AND SHALL PROVIDE FELTS, BOND BREAKERS, TAPE, OR OTHER APPLICABLE MATERIAL SEPARATION WHERE SUCH CONTACT IS UNAVOIDABLE.
3. ALL EXTERIOR STOREFRONT GLAZING SHALL BE OUTSIDE GLAZED 1" INSULATING TINTED GLASS AS NOTED IN SCHEDULE, TYPICAL.
4. PROVIDE ALL NECESSARY FRAME ANCHORS AS REQUIRED FOR SPECIFIC INSTALLATIONS.
5. ALL GLAZING WITHIN 24" OF VERTICAL EDGE OF DOORS SHALL BE TEMPERED. TEMPERED GLAZING SHALL BE USED AS NOTED AND AS REQUIRED BY CODE.
6. ALL FRAMING SYSTEMS SHALL BE DESIGNED, ENGINEERED AND FABRICATED BY THE SYSTEM MANUFACTURER TO MEET ALL APPLICABLE CODES. SHOP DRAWINGS SHALL BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION.
7. ALL FRAMING DIMENSIONS AS SHOWN ARE ROUGH OPENING DIMENSIONS. CONTRACTOR SHALL VERIFY AND BE RESPONSIBLE FOR EXACT FINISH DIMENSION AT JOB SITE PRIOR TO FABRICATION.
8. HORIZONTAL LOUVER BLINDS SHALL BE FURNISHED AND INSTALLED ON ALL EXTERIOR WINDOWS.

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1111 Haynes Street, Suite 109, Raleigh, NC 27604 (P) 919.985.7700

BID SET

TOWN OF NASHVILLE FIRE STATION NO. 2

1200 EAST WASHINGTON ST.
NASHVILLE, NC 27856

OAKLEY COLLIER ARCHITECTS, P.A. — CERT. NO. 50681 — ROCKY MOUNT, NC

ANN W. COLLIER — REGISTERED ARCHITECT — NORTH CAROLINA — ROCKY MOUNT, NC — 05/15/23

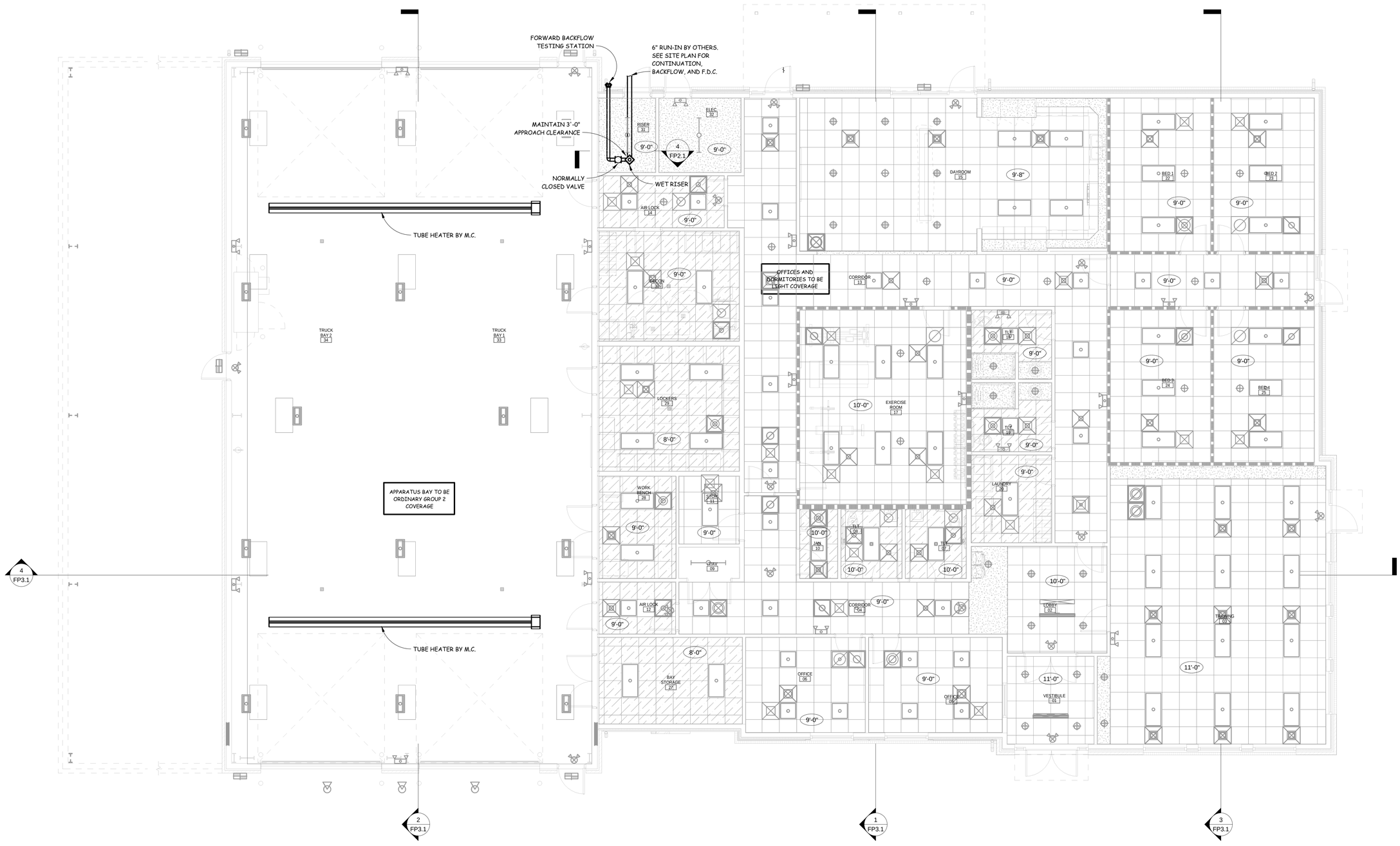
GENERAL NOTE: Prior to construction start, Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By: JFK	Sheet No.: A6.0
Checked By: JFK	

Sheet Title: DOOR SCHEDULE



1 FP1.1 FIRE PROTECTION PLAN

3/16" = 1'-0"

OAKLEY COLLIER ARCHITECTS
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BID SET

TOWN OF NASHVILLE FIRE STATION NO. 2

1200 EAST WASHINGTON ST.
NASHVILLE, NC 27856

ATLANTEC ENGINEERS PA No. C-961 NORTH CAROLINA PROFESSIONAL CORPORATION

DocuSigned by: Harrison Hall PROFESSIONAL ENGINEER SEAL 049754 NORTH CAROLINA HARRISON HALL

5/15/2023

GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By: JHH	Sheet No.: FP1.1
Checked By: JHH	

Sheet Title: FIRE PROTECTION PLAN

GENERAL NOTES

1. THE SPRINKLER CONTRACTOR SHALL COORDINATE HIS WORK WITH OTHER TRADES PRIOR TO INSTALLATION. (LIGHTS, PIPES, ETC.)
2. EACH SHUT-OFF VALVE SHALL BE EQUIPPED WITH A LISTED TAMPER SWITCH.
3. THE SPRINKLER CONTRACTOR SHALL COORDINATE SHUT-OFF TIMES WITH OWNER.
4. ALL WORK SHALL BE DONE IN ACCORDANCE WITH ALL NFPA CODES.
5. THE SPRINKLER CONTRACTOR SHALL BE A LICENSED SPRINKLER CONTRACTOR.
6. THE SPRINKLER CONTRACTOR SHALL REFER TO THE SITE PLAN FOR THE EXTENT OF THE UNDERGROUND SPRINKLER PIPING.
7. WIRING FROM ALL TAMPER SWITCHES AND FLOW SWITCHES TO FIRE ALARM PANEL SHALL BE BY THE ELECTRICAL CONTRACTOR.
8. FIRE DEPARTMENT CONNECTION THREADS SHALL MATCH LOCAL AUTHORITY.
9. ALL WATER FLOW ALARM SWITCHES SHALL BE DONE BY THE GENERAL CONTRACTOR UNLESS NOTED OTHERWISE.
10. ALL CUTTING AND PATCHING SHALL BE DONE BY THE GENERAL CONTRACTOR UNLESS NOTED OTHERWISE.
11. ALL PIPE UP TO 2" SHALL BE SCHEDULE 40 BLACK STEEL WITH THREADED FITTING. PIPING 2 1/2" AND LARGER SHALL BE SCHEDULE 10 BLACK STEEL WITH ROLLED GROOVE FITTING.
12. ALL HEADS ARE TO BE CENTERED IN TILES UNLESS OTHERWISE NOTED.
13. TESTING SHALL BE THE RESPONSIBILITY OF THE INSTALLING CONTRACTOR. PRESSURE TEST SHALL BE STATIC WATER AT TEST PRESSURE OF 200 PSIG FOR 2 HOURS DURATION WITHOUT LEAK FROM ANY JOINT OR SEGMENT OF THE PIPING SYSTEM FROM ANY EQUIPMENT OR DEVICE.
14. THE INSTALLING CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO BUILDING AND PROPERTY/MATERIALS OF OTHERS CAUSED BY LEAKS IN SPRINKLER EQUIPMENT, UNPLUGGED OR DISCONNECTED PIPES OR FITTINGS, AND SHALL PAY FOR NECESSARY REPLACEMENT OR REPAIR OF WORK OR ITEMS SO DAMAGED DURING THE INSTALLATION AND TESTING PERIODS OF THE STANDPIPE WORK.
15. TESTS PER SECTION 16 OF NFPA 13 TO BE WITNESSED BY THE OWNERS INSURANCE UNDERWRITER(S), THE INSTALLING CONTRACTOR AND THE AUTHORITY HAVING JURISDICTION. SPRINKLER CONTRACTOR TO SUBMIT 3 COPIES OF THE NFPA 13-2002"CONTRACTORS MATERIAL AND TEST CERTIFICATES".
16. FLUSH, TEST, AND INSPECT SPRINKLER PIPING SYSTEMS IN ACCORDANCE WITH NFPA 13.
17. REPLACE PIPING SYSTEM COMPONENTS WHICH DO NOT PASS THE TEST PROCEDURES SPECIFIED, AND RETEST REPAIRED PORTION OF THE SYSTEM. THE CONTRACTOR SHALL PROVIDE A UNIT COST TO ADD ADDITIONAL HEADS REQUIRED IN THE FIELD.
18. THE CONTRACTOR SHALL PROVIDE A UNIT COST TO ADD ADDITIONAL HEADS REQUIRED IN THE FIELD.
19. THE G.C. TO PAINT EXPOSED PIPING. COORDINATE ROUTING OF PIPING WITH G.C.

SYMBOL LEGEND

◈	SPRINKLER RISER
—	SPRINKLER MAIN

SEISMIC AND WIND REQUIREMENTS FOR MECHANICAL SYSTEMS (PER ASCE 7-05)

1. ALL ROOF CURBS/ROOF RAILS INCLUDING THEIR ATTACHMENT TO THE EQUIPMENT AND STRUCTURE MUST BE EVALUATED FOR WIND LOADING. WHERE SEISMIC RESTRAINT IS REQUIRED, THE MORE DEMANDING FORCE OF WIND AND SEISMIC MUST BE USED.
2. SEE SEISMIC INFORMATION CONTAINED ON STRUCTURAL DRAWINGS FOR SITE SPECIFIC INFORMATION ON SEISMIC DESIGN CATEGORY.
3. SEE TABLE BELOW FOR SPECIFIC COMPONENT RESTRAINT REQUIREMENTS.
4. FOR ALL COMPONENTS REQUIRING SEISMIC RESTRAINT, THE COMPONENT SUPPORTS AND ATTACHMENTS SHALL BE DESIGNED BY A REGISTERED DESIGN PROFESSIONAL. CONTRACTOR TO FURNISH AND INSTALL ALL SEISMIC BRACING AS NOTED HEREIN. CONTRACTOR SHALL FURNISH DESIGN CALCULATIONS AND SUBMITTAL FOR REVIEW.

SEISMIC DESIGN CATEGORY C. COMPONENT IMPORTANCE FACTOR 1.5

COMPONENT	RESTRAINT REQUIREMENT	ASCE 7-05 REFERENCE
SUSPENDED EQUIPMENT IN-LINE WITH DUCT/PIPE	RESTRAIN IF > 74 LBS (SEE NOTE 3, 4)	13.6.7
SUSPENDED EQUIPMENT NOT IN-LINE WITH DUCT/PIPE'	RESTRAIN ALL	13.6.3
DUCTILE PIPING	PIPE GREATER THAN 2" (SEE NOTE 5, 6)	13.6.8
SUSPENDED DUCTWORK	DUCTWORK GREATER THAN 6 SQFT OR LARGER THAN 28" IN DIAMETER (SEE NOTE 6)	13.6.7
COMPONENT CERTIFICATION (NOTE 7)	REQUIRED	13.2.2

NOTES:

1. EQUIPMENT >20 LBS OR LESS IS EXEMPT IF FLEXIBLE CONNECTIONS ARE PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT.
2. RESTRAINTS ARE NOT REQUIRED IF COMPONENT WEIGHS LESS THAN 400 POUNDS OR IS AT 4 FEET OR LESS ABOVE FINISHED FLOOR AND FLEXIBLE CONNECTIONS ARE PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT.
3. ITEMS WEIGHING LESS THAN 76 LBS. DO NOT NEED RESTRAINT IF THE ATTACHED DUCTWORK/PIPING IS RESTRAINED AND POSITIVELY ATTACHED TO THE EQUIPMENT.
4. FLEXIBLE CONNECTION REQUIRED FOR PIPE CONNECTIONS ONLY.
5. ALL NON-DUCTILE PIPING (PLASTIC, CAST IRON, CERAMIC) MUST BE RESTRAINED.
6. RESTRAINT IS NOT REQUIRED IF SUSPENDED 12" OR LESS FROM THE STRUCTURE AND THE HANGERS ARE DETAILED TO AVOID SIGNIFICANT BENDING OF THE HANGERS AND THEIR ATTACHMENTS AND PROVISIONS ARE MADE FOR PIPING TO ACCOMMODATE EXPECTED DEFLECTIONS.
7. COMPONENT CERTIFICATION MUST BE SUPPLIED BY THE EQUIPMENT MANUFACTURER AT TIME OF SUBMITTAL FOR REVIEW BY THE ENGINEER OF RECORD.
8. ALL SPRINKLER PIPING LARGER THAN 2" SHALL BE RESTRAINED IN ACCORDANCE WITH NFPA 13.
9. ALL DOMESTIC WATER, SEWER, VENT, AND NATURAL GAS PIPING LARGER THAN 2" SHALL BE RESTRAINED WITH CABLES AT 45° ANGLES AND SECURED TO STRUCTURE. PIPING INSTALLED WITHIN 12" OF STRUCTURE SHALL BE EXEMPT.

SPRINKLER DESIGN DATA

PROJECT NAME: Town of Nashville Fire Station No. 2		SYSTEM:	WET
PROJECT STREET ADDRESS: Oak Level Rd, Nashville, NC 27856		SYSTEM SQ. FT.:	8,970
SUITE:	FLOOR#	CEILING HEIGHT:	9'-0"
DESIGNED BY: ATLANTEC ENGINEERS	PHONE 919-571-1111	TOTAL BLDG. HGT:	18'
	HAZARD LIGHT/ORDINARY GROUP 2		

DESIGN SUMMARY

	SYSTEM #1	SYSTEM #2	SYSTEM #3	SYSTEM #	SYSTEM #
DESIGN METHOD	CALC'D	CALC'D	CALC'D		
SYSTEM I.D. #	1	2	2		
LOCATION	DORMITORY	TRUCK BAY	ATTIC		
TYPE OF SYS.	WET	WET	WET		
HAZARD CLASS	LIGHT HAZARD	ORDINARY HAZARD	LIGHT HAZARD		
CRITERIA FROM	NFPA 13	NFPA 13	NFPA 13		
DESIGN AREA	900 SQFT	1500 SQFT	900 SQFT		
SPACING	225 SQFT	130 SQFT	225 SQFT		
DENSITY	0.1	0.2	0.1		
K-FACTOR	5.6	8.0	5.6		
HOSE ALLOWANCE	100	250	100		
#SPRINKLERS DESIGN					
REQUIREMENTS@					
G.P.M REQ'D.					
P.S.I. REQ'D.					
NODE #					
SAFETY FACTOR					
G.P.M.					
P.S.I.					

WATER SUPPLY INFORMATION

TESTED BY	ASSOCIATED FIRE PROTECTION INC.		DATE/TIME	03/08/23	10:30 AM	PRESSURE HYDRANT		
HYDRANT ELEVATION	N/A	FT	FLOW HYDRANT	N/A	FT	STATIC		
STATIC	60	PSI	RESIDUAL	46	PSI	FLOW	2072	GPM

COPY OF WATER TEST DATA INCLUDED W/CALCS ARE REQUIRED

FIRE PUMP DATA

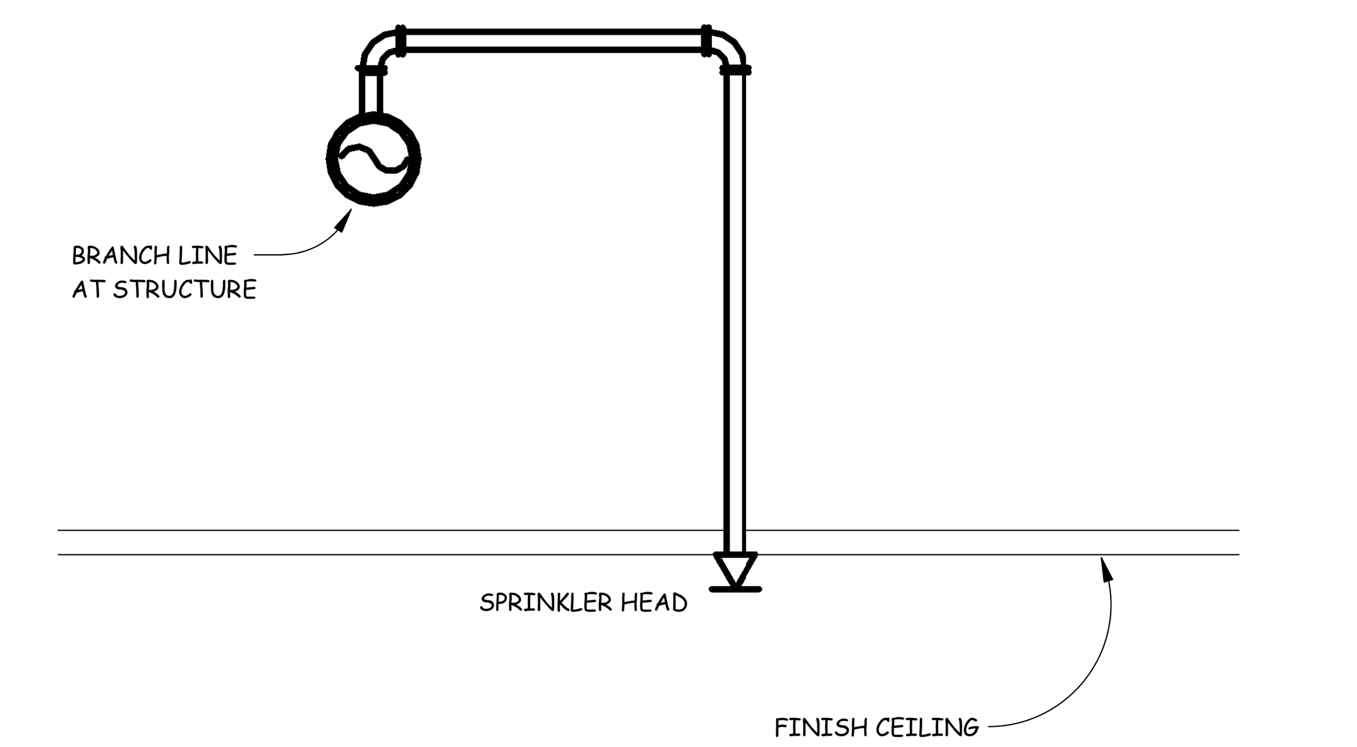
RATED G.P.M.	N/A	RATED PRESSURE	N/A	DIESEL Hp.	N/A
ELECTRIC VOLTS	N/A	BOOST PRESSURE	N/A	DISCHARGE FLOW	N/A
RESIDUAL(PSI)	N/A	FLOW (GPM)	N/A	COMBINED GPM	N/A

COMBINED STATIC	N/A	COMBINED RESIDUAL	N/A	SUCTION NODE	N/A	DISCHARGE NODE	N/A

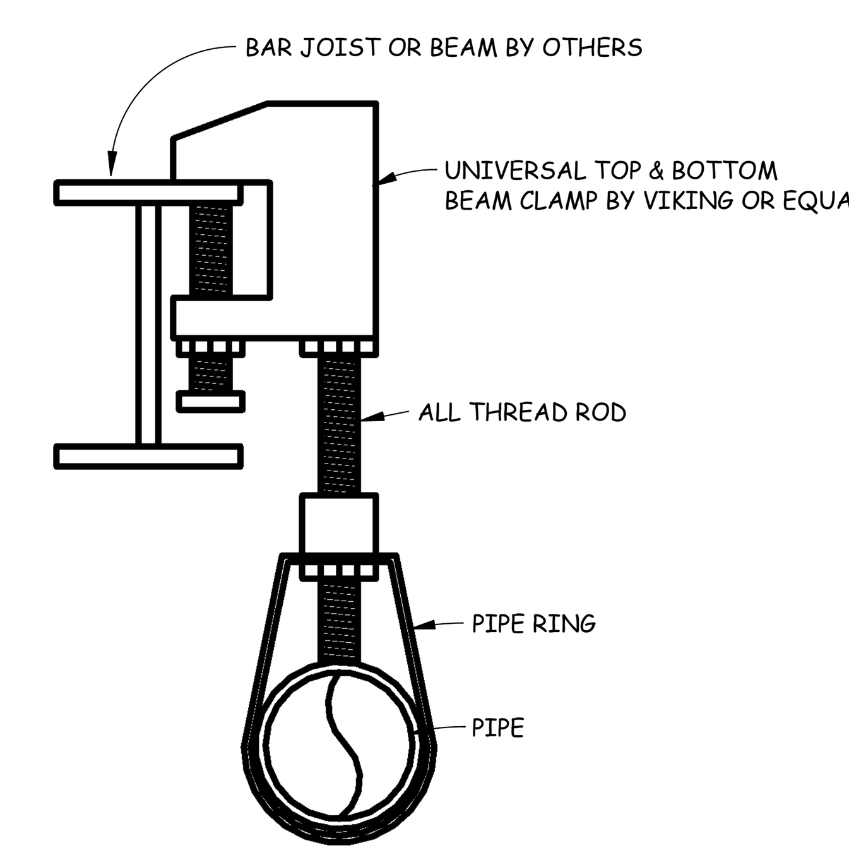
IF STORAGE IS GREATER THAN 12' COMPLETE COMMODITY STORAGE DESIGN INFO.

COMMODITY DESCRIPTION	N/A	STORAGE TYPE(RACK, BIN)	N/A		
COMMODITY CLASS	N/A	STORAGE HEIGHT	N/A	CLEARANCE	N/A
STABLE/UNSTABLE	N/A	OPEN/CLOSE ARRAY	N/A	WET/DRY SYSTEM	N/A

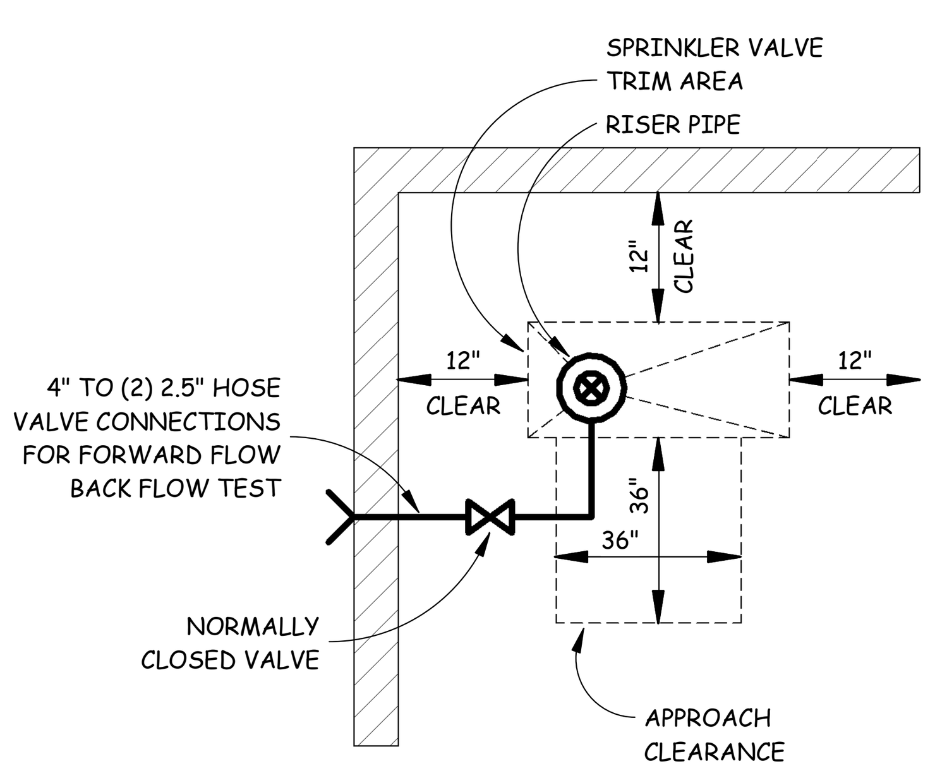
FIQURE#	CURVE#	AREA	DENSITY	HEIGHT FACTOR	CLEAR FACTOR	ARRAY FACTOR	DRY PENALTY	DESIGN	MINIMUM DESIGN	FINAL DESIGN
N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	INITIAL									
	SECOND-ARY									



1 FP2.1 ARM OVER DETAIL
NOT TO SCALE

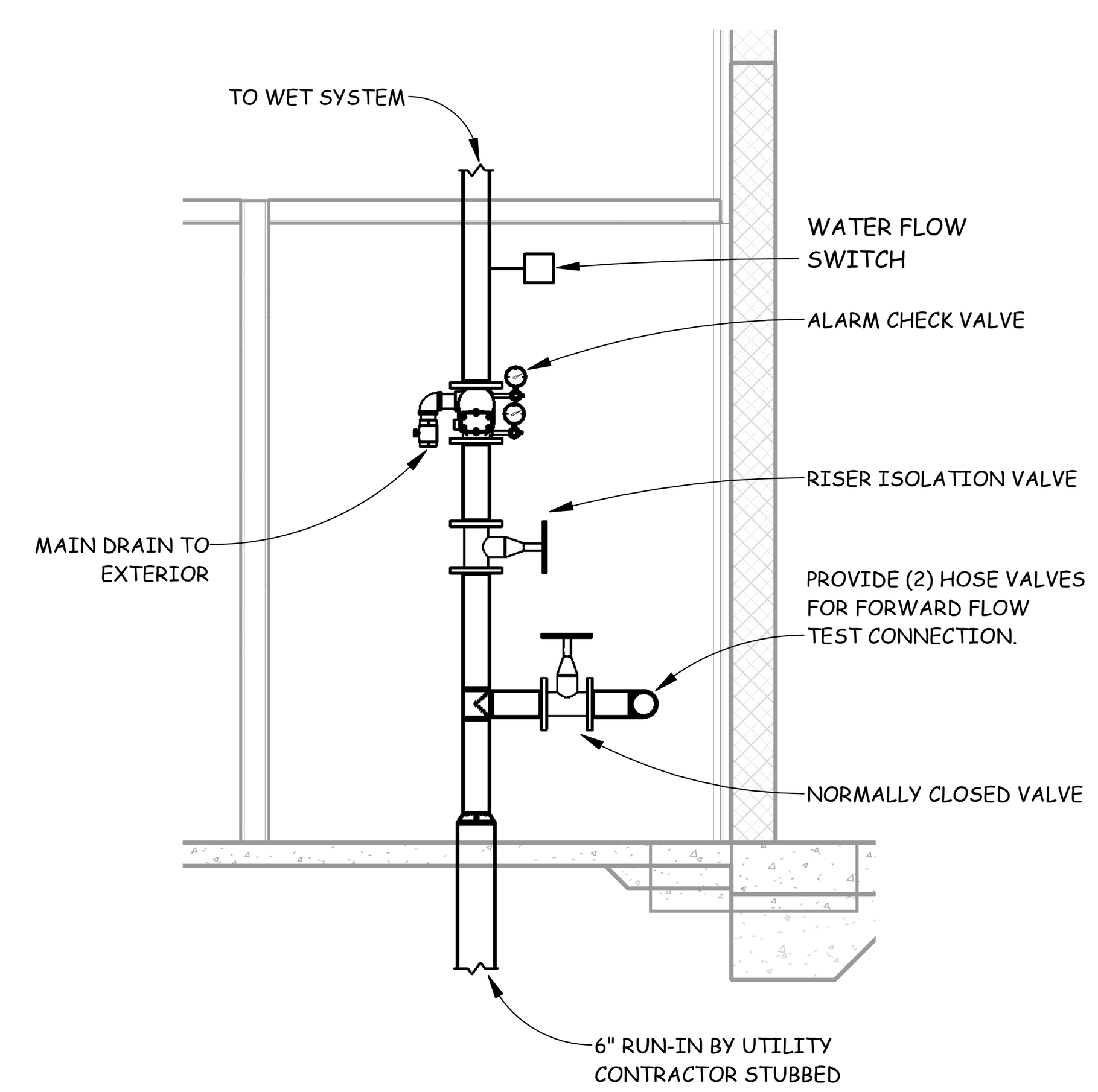


2 FP2.1 HANGER DETAIL
NOT TO SCALE



NOTE:
WHEN RISER IS LOCATED IN AN OPEN SPACE (i.e. WAREHOUSE, ETC.) MECHANICAL PROTECTION IS REQUIRED. (BOLLARDS, ETC.)

5 FP2.1 RISER CLEARANCE DETAIL
NOT TO SCALE



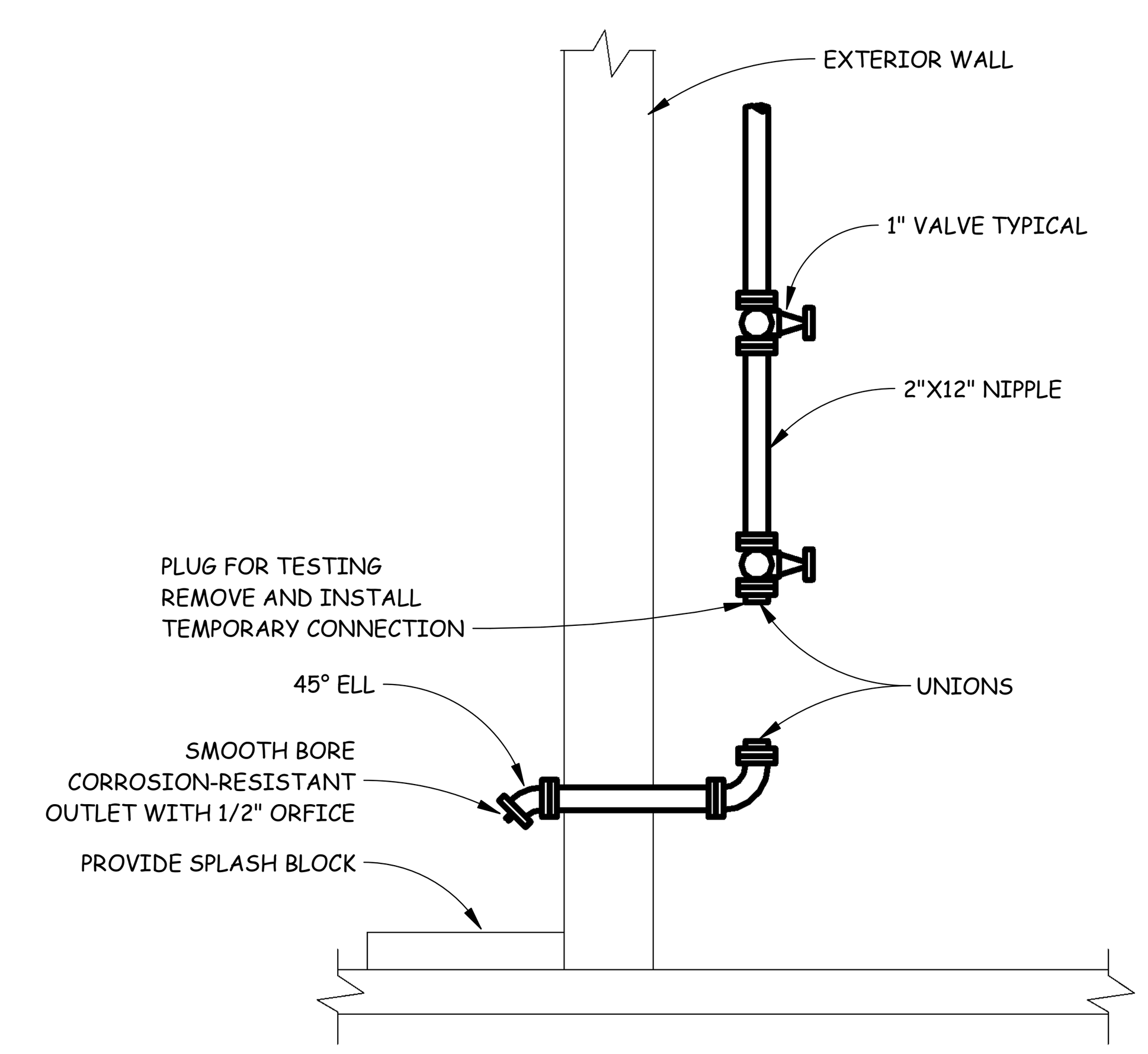
4 FP2.1 RISER DETAIL
3/8" = 1'-0"

DESIGN SUMMARY

THE FIRE SPRINKLER CONTRACTOR (FSC) SHALL PROVIDE A COMPLETE DESIGN IN ACCORDANCE WITH NFPA 13 FOR LIGHT HAZARD AND ORDINARY GROUP 2 OCCUPANCY. THE DESIGN SHALL BE A HYDRAULIC CALCULATION METHOD GENERATED BY A FIRE SPRINKLER COMPUTER PROGRAM. THE DESIGN SHALL BE PERFORMED BY A NICET LEVEL III TECHNICIAN OR A PROFESSIONAL ENGINEER EXPERIENCED IN FIRE SPRINKLER DESIGN. ALL DRAWINGS AND CALCULATIONS SHALL BE SUBMITTED ALONG WITH THE SPRINKLER EQUIPMENT AND MATERIALS TO THE PROJECT ENGINEER OF RECORD FOR REVIEW. FIRE SPRINKLER CONTRACTOR IS RESPONSIBLE FOR SIZING AND LOCATION OF HANGER SUPPORTS FOR SEISMIC RESTRAINT.

THE FOLLOWING SPECIFIC REQUIREMENTS SHALL BE INCORPORATED INTO THE DESIGN OF THE SYSTEM:

1. FIRE MAIN FROM THE TAP AT THE UTILITY SYSTEM WATER MAIN INTO THE BUILDING TO ONE FOOT ABOVE THE FINISHED FLOOR AT THE DESIGNATED RISER LOCATION SHALL BE INSTALLED BY THE SITE UTILITY CONTRACTOR.
2. SEE GENERAL NOTE 11 FOR PIPE SPECIFICATION.
3. SPRINKLER HEADS SHALL BE CENTERED IN ALL LAY-IN CEILING TILES.
4. SPRINKLER HEADS SHALL BE SEMI RECESSED PENDENT TYPE WITH CHROME ESCUTHEON.
5. PROVIDE ORDINARY GROUP 2 HAZARD COVERAGE IN THE APPARATUS BAY, RISER ROOM, AND ELECTRICAL ROOM WITH EXPOSED UPRIGHT HEADS.
6. PROVIDE LIGHT COVERAGE IN ALL OTHER ROOMS WITH SEMI RECESSED PENDANTS.
7. PROVIDE LIGHT COVERAGE IN ATTIC SPACE WITH EXPOSED UPRIGHT HEADS.
8. SPRINKLER SYSTEM PERFORMANCE SPECIFICATION IS PROVIDED UNDER THE ASSUMPTION THAT THERE WILL NOT BE A FIRE PUMP.
9. THE SPRINKLER CONTRACTOR SHALL COORDINATE WORK WITH OTHER TRADES PRIOR TO INSTALLATION OF ANY WORK.



3 FP2.1 AUXILIARY DRAIN DETAIL
NOT TO SCALE

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BID SET
TOWN OF NASHVILLE
FIRE STATION NO. 2
1200 EAST WASHINGTON ST.
NASHVILLE, NC 27856

NORTH CAROLINA PROFESSIONAL CORPORATION ATLANTEC ENGINEERS PA No. C-961

DocuSigned by: Harrison Holt
NORTH CAROLINA PROFESSIONAL SEAL 049754 ENGINEER HARRISON HOLT
5/15/2023

GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

Date 5/15/2023	Project No. 22027
Drawn By JHH	Sheet No.
Checked By JHH	FP2.1

Sheet Title
FIRE PROTECTION DETAILS

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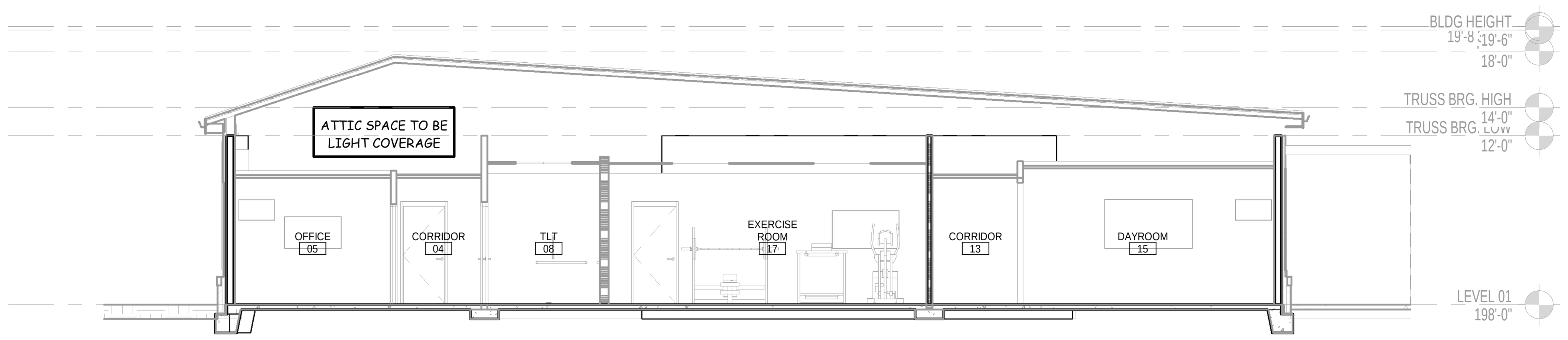
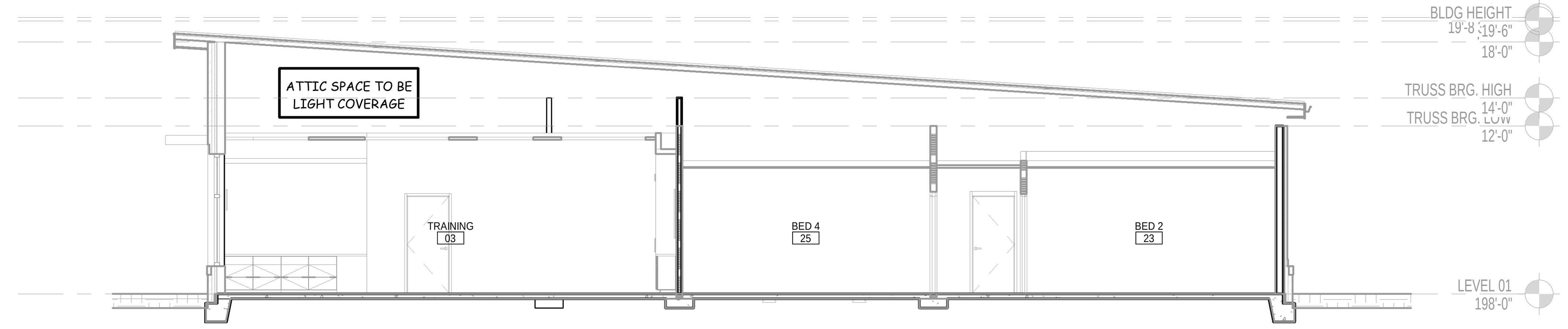
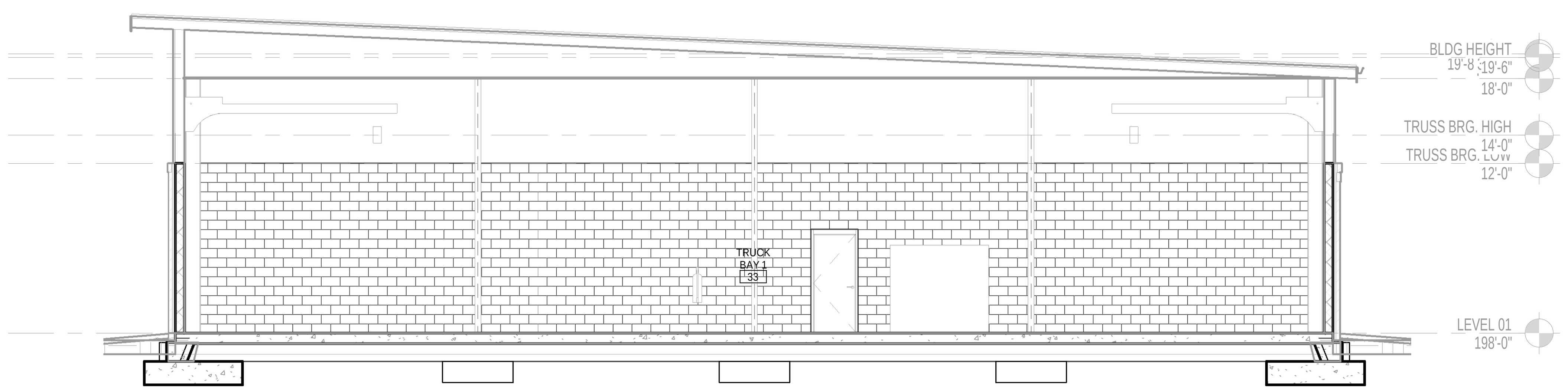


1 FP3.1 FIRE PROTECTION SECTION
1/8" = 1'-0"



3 FP3.1 FIRE PROTECTION SECTION
1/8" = 1'-0"



2 FP3.1 FIRE PROTECTION SECTION
1/8" = 1'-0"

4 FP3.1 FIRE PROTECTION SECTION
1/8" = 1'-0"

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#	Description	Date

Date: 5/15/2023	Project No.: 22027
Drawn By: JHH	Sheet No.: FP3.1
Checked By: JHH	

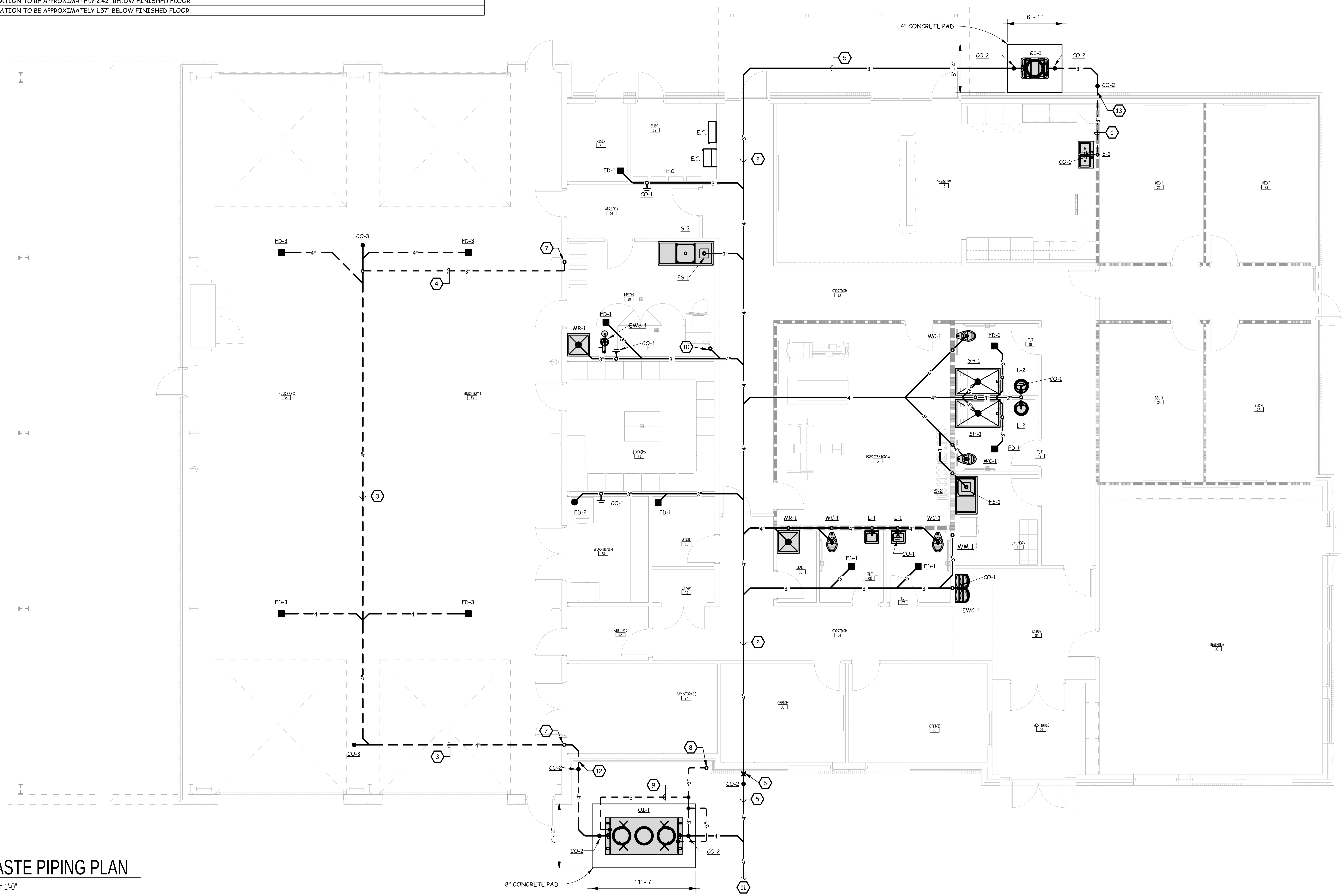
Sheet Title
FIRE PROTECTION BUILDING REFERENCE SECTIONS

P1.1 KEY NOTES	
1	GREASE WASTE PIPING LOCATED BELOW FINISHED FLOOR.
2	SANITARY SEWER PIPING LOCATED BELOW FINISHED FLOOR.
3	OIL/SOLIDS WASTE PIPING LOCATED BELOW FINISHED FLOOR.
4	VENT PIPING LOCATED BELOW FINISHED FLOOR.
5	SANITARY SEWER PIPING LOCATED BELOW FINISHED FLOOR.
6	INVERT ELEVATION TO BE APPROXIMATELY 2.78' BELOW FINISHED FLOOR.
7	VENT PIPING UP TO VENT THROUGH ROOF.
8	TERMINATE VENT PIPING 1'-0" ABOVE FINISHED GRADE WITH GOOSEHEAD VENT.
9	VENT PIPING LOCATED BELOW FINISHED GRADE.
10	PROVIDE 4" HUB DRAIN WITH REMOVABLE STRAINER BASKET IN CONCRETE TRENCH BEHIND EXTRACTOR. COORDINATE DIMENSIONS OF TRENCH WITH ARCHITECT.
11	4" SANITARY SEWER PIPE TO BE LOCATED BELOW FINISHED GRADE. SEE SITE PLAN FOR CONTINUATION.
12	INVERT ELEVATION TO BE APPROXIMATELY 2.42' BELOW FINISHED FLOOR.
13	INVERT ELEVATION TO BE APPROXIMATELY 1.57' BELOW FINISHED FLOOR.

SAND/OIL INTERCEPTOR SIZING CALCULATION:

3222 SQFT - 100 SQFT = 3122 SQFT / 100 SQFT = 31.22 CUFT + 6 CUFT = 37.22 CUFT * 7.48 GAL/CUFT = 278.4 GAL REQUIRED

SEE SHEET P4.2 FOR 562 GAL INTERCEPTOR SPECIFICATION.



1 P1.1 WASTE PIPING PLAN

3/16" = 1'-0"

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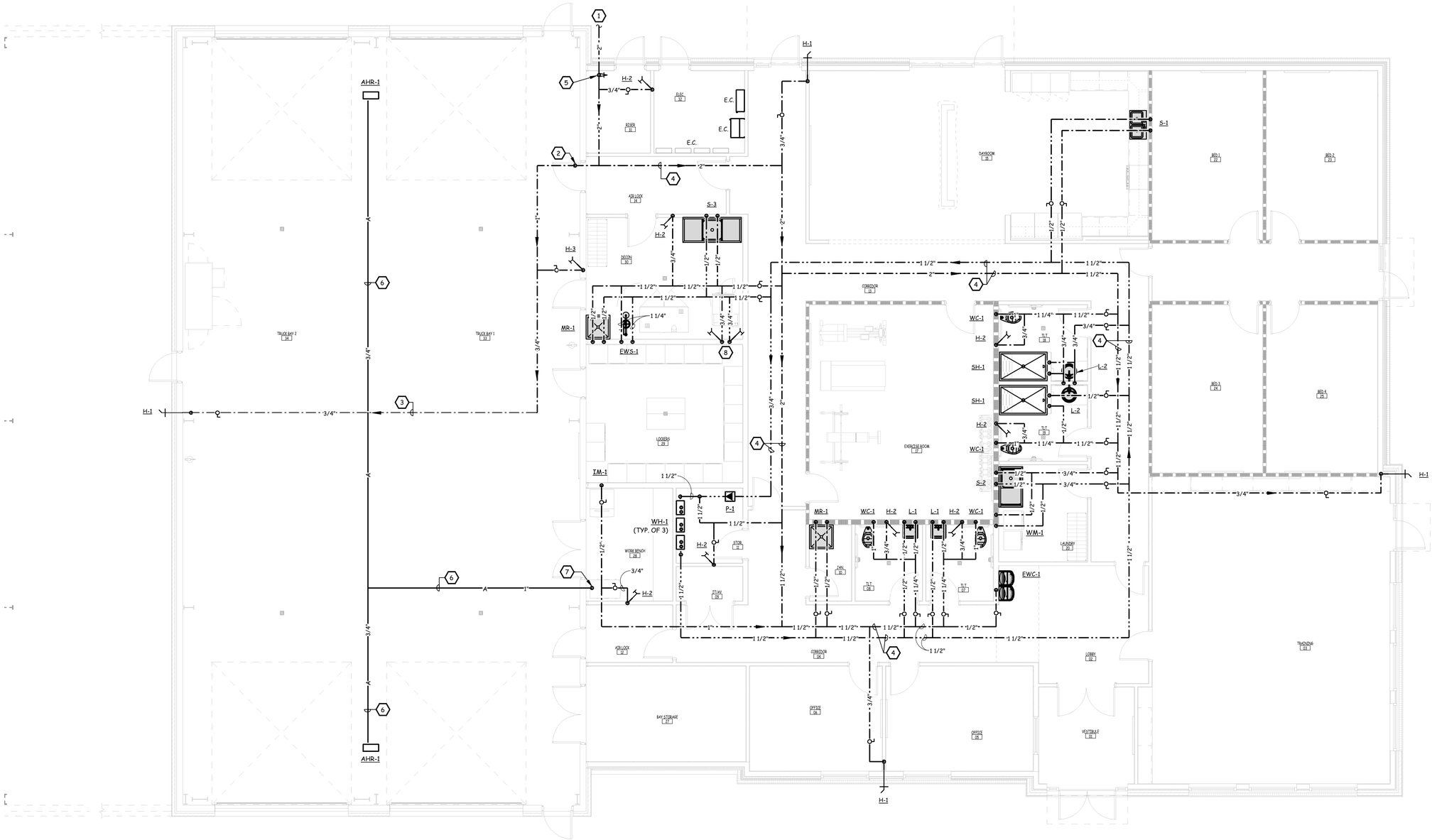
5/15/2023	22027
Drawn By: JHH	Sheet No.: P1.1
Checked By: JHH	
Sheet Title: WASTE PIPING PLAN	

P1.2 KEY NOTES

1	2" COLD WATER LOCATED BELOW FINISHED GRADE. PLUMBING CONTRACTOR WORK BEGINS 5'-0" OUTSIDE BUILDING. SEE SITE PLAN FOR CONTINUATION AND LOCATION/SPEC OF BACKFLOW PREVENTOR.
2	ROUTE 1" COLD WATER PIPING UP TO BOTTOM OF STRUCTURE.
3	ROUTE COLD WATER PIPING TIGHT TO BOTTOM OF STRUCTURE.
4	ROUTE COLD/HOT WATER PIPING ABOVE FINISHED CEILING.
5	2" RISE TO ABOVE FINISHED CEILING WITH MAIN SHUTOFF VALVE.
6	COMPRESSED AIR PIPING ROUTED TIGHT TO BOTTOM OF STRUCTURE.
7	CONNECT COMPRESSED AIR PIPING TO OWNER PROVIDED AIR COMPRESSOR AS REQUIRED.
8	PROVIDE (4) H-3 FOR EXTRACTOR (2) C.W. AND (2) H.W. PROVIDE ASSE 1052 BACKFLOW PREVENTOR ON HOSE CONNECTIONS.



1 P1.2 WATER PIPING PLAN

3/16" = 1'-0"

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DocuSigned by: Harrison Hall Harrison NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 049754 ENGINEER HARRISON HALL

5/15/2023

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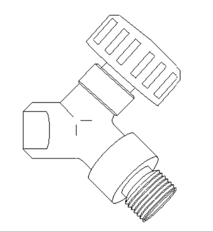
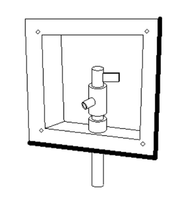
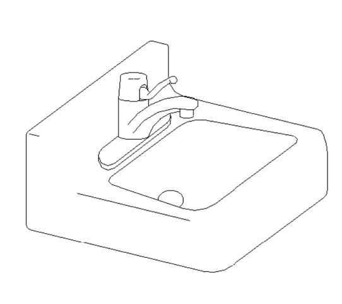
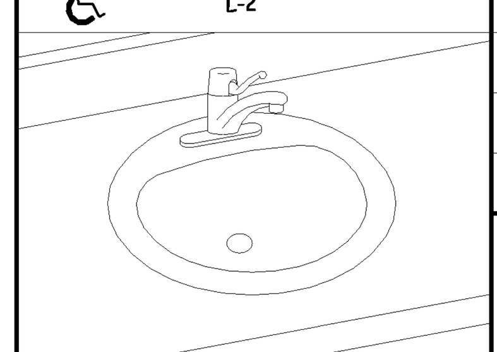
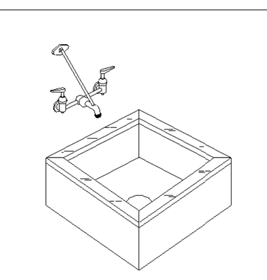
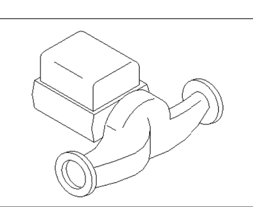
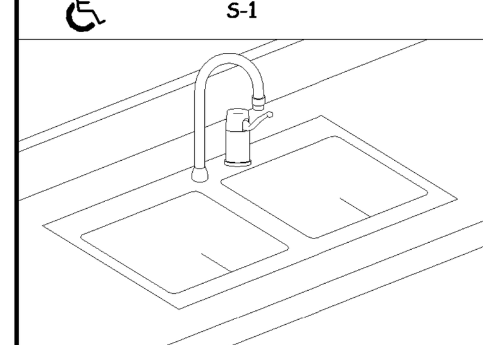
REVISIONS

#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By: JHH	Sheet No.: P1.2
Checked By: JHH	

Sheet Title: WATER PIPING PLAN

PLUMBING FIXTURE SCHEDULE

SYMBOL / IMAGE	DESCRIPTION	3 - EQUALS						PIPING CONNECTIONS		
		MANUFACTURER	MODEL NUMBER	MANUFACTURER	MODEL NUMBER	MANUFACTURER	MODEL NUMBER	COLD WATER	HOT WATER	SANITARY SEWER
H-3	HOSE BIBB	WOODFORD	24	MIFAB	MHY-9000-NPB	ZURN	195XL	3/4"	-	-
	HOSE BIBB SHALL HAVE AUTOMATIC DRAINING WITH ANTI-SIPHON VACUUM BREAKER. 3/4" INLET AND OUTLET. EXTERIOR FINISH TO BE CHROME. PROVIDE WITH LOOSE TEE KEY FOR EACH HOSE BIBB.									
IM-1	ICE MAKER BOX	OATEY CO.	38574	GUY GRAY	AB9700	SIOUX CHIEF	696-G1000MF	1/2"	-	-
	PLASTIC ICE MAKER BOX WITH 1/4 TURN BRASS BALL VALVE - COPPER SWEAT AND SUPPLY TUBE TO REFRIGERATOR. COORDINATE MOUNTING HEIGHT WITH ARCHITECT.									
GI-1	GREASE INTERCEPTOR	SCHIER	GB1	MIFAB		ZURN				-
NO IMAGE	POLYETHYLENE INTERIOR INTERCEPTOR. GRAVITY DRAINAGE APPLICATIONS ONLY. BUILT IN FLOW CONTROL. INLET AND OUTLET DIFFUSER. COVER SHALL PROVIDE WATER/GAS TIGHT SEAL. INLET/OUTLET SIZE 3", FLOW RATE OF 20 G.P.M. CAPACITIES: 10 GALLONS WATER, 70 POUNDS GREASE.									
L-1	LAVATORY	KOHLER	K-2032-0	AMERICAN STANDARD	0356.041	ZURN				
	FAUCET	DELTA	523LF-HGMHDF	CHICAGO FAUCETS	2200-4	MOEN	8470			
	TRAP	McGUIRE	8902	DEARBORN BRASS	702-1	KOHLER	K-8999			2"
	SUPPLY	McGUIRE	158LK	BRASS CRAFT	R1912AC	KOHLER	K-7605-P-CP	1/2"	1/2"	
	WALL HUNG LAVATORY SHALL BE MADE OF VITREOUS CHINA WITH A WHITE FINISH, HAVE 4" CENTERS, AN OVERFLOW. SEE ARCHITECTURAL DRAWINGS FOR MOUNTING HEIGHT. DECK MOUNTED FAUCET SHALL BE CHROME FINISH, SINGLE LEVER, 4" CENTERS, WITH 3/8" COPPER SUPPLY TUBE INLETS, AND PROVIDED WITH AN AERATOR. RIGID SUPPLY KIT SHALL INCLUDE CHROME PLATED BRASS STOPS WITH THREADED CONNECTIONS, FULL TURN BRASS STEM, REDUCER, AND FLANGE. INLET SHALL BE 3/8" IPS. OUTLET SHALL BE 3/8" IPS. P-TRAP SHALL BE CHROME PLATED CAST BRASS BODY WITH CLEANOUT, CAST BRASS ELBOW AND CAST BRASS SLIP NUT, AND FLANGE. PROVIDE WITH OFFSET DRAIN, TRUEBRO LAV SHIELD, WALL HANGER, AND WATER TEMPERATURE LIMITING DEVICE THAT CONFORMS TO ASSE 1070 OR CSA B125.3.									
L-2	LAVATORY	KOHLER	K-2196-4-0	SLOAN	SS-3002	AMERICAN STANDARD	0476.028			
	FAUCET	MOEN	8430F03	CHICAGO FAUCETS	2200-4	DELTA	523LF-HGMHDF			
	TRAP	McGUIRE	8902	DEARBORN BRASS	702-1	KOHLER	K-8999			2"
	SUPPLY	McGUIRE	158LK	BRASS CRAFT	R1912AC	KOHLER	K-7605-P-CP	1/2"	1/2"	
	SELF-RIMMING LAVATORY SHALL BE MADE OF VITREOUS CHINA WITH A WHITE FINISH, HAVE 4" CENTERS, AN OVERFLOW, AND INCLUDE SEALANT. FAUCET SHALL BE CHROME FINISH, SINGLE LEVER, 4" CENTERS, WITH 3/8" COPPER SUPPLY TUBE INLETS, AND PROVIDED WITH A 0.35 GPM AERATOR. RIGID SUPPLY KIT SHALL INCLUDE CHROME PLATED BRASS STOPS WITH THREADED CONNECTIONS, FULL TURN BRASS STEM, REDUCER, AND FLANGE. INLET SHALL BE 3/8" IPS. OUTLET SHALL BE 3/8" IPS. P-TRAP SHALL BE CHROME PLATED CAST BRASS BODY WITH CLEANOUT, CAST BRASS ELBOW, CAST BRASS SLIP NUT, AND FLANGE. PROVIDE WITH OFFSET STRAINER, McGUIRE PROWRAP INSULATOR, AND APPROVED WATER-TEMPERATURE LIMITING DEVICE THAT CONFORMS TO ASSE 1070 OR CSA B125.3.									
MR-1	MOP RECEPTOR	STERN WILLIAMS	SB-500	FIAT	TSB500					3"
	FAUCET	STERN WILLIAMS	T-10-VB	CHICAGO	897RCF	MOEN	8124	1/2"	1/2"	
	HOSE	STERN WILLIAMS	T-35	FIAT	832AA					
	MOP BRACKET	STERN WILLIAMS	T-40	FIAT	889CC					
	MOP RECEPTOR SHALL BE 36" x 36" x 12" DEEP WITH ONE PIECE STAINLESS STEEL CAP, NO FLANGES.									
OI-1	GREASE INTERCEPTOR	STRIEM	OT-500	MIFAB		ZURN				-
NO IMAGE	POLYETHYLENE EXTERIOR SAND/OIL INTERCEPTOR. GRAVITY DRAINAGE APPLICATIONS ONLY. BUILT IN FLOW CONTROL. INLET AND OUTLET DIFFUSER. COVER SHALL PROVIDE WATER/GAS TIGHT SEAL. INLET/OUTLET SIZE 4", FLOW RATE OF 314 G.P.M. CAPACITIES: 560 GALLONS LIQUID, 162 GALLONS SAND, 285 GALLONS OIL.									
P-1	RECIRCULATING PUMP	B & G	PL36							
	RECIRCULATING PUMP SHALL BE 1/6 HORSEPOWER, 120 VOLT, SINGLE PHASE. PROVIDE PUMP WITH MOUNTING BRACKET, TIMER, AQUASTAT AND DISCONNECT, DISCONNECT WIRING BY LICENSED ELECTRICAL CONTRACTOR.									
S-1	2-COMPARTMENT SINK	JUST	DL-ADA-1933-A-GR	ELKAY	LRAD-3319					
	FAUCET	MOEN	5923	DELTA	9659-DST	AMERICAN STANDARD	4332.650.002	1/2"	1/2"	
	TRAP	McGUIRE	8902	KOHLER	K8999	DEARBORN BRASS	702-1			2"
	SUPPLY	McGUIRE	170	KOHLER	K-76-6-P	BRASSCRAFT	CS400AC			
	STRAINER	JUST	JB-99	ELKAY	LK-99	DEARBORN	L7			
	SINK IS TO BE 18 GAUGE STAINLESS STEEL, SELF-RIMMING. DECK MOUNTED GOOSENECK FAUCET SHALL BE CHROME FINISHED, WITH 1/2" INLET AND PROVIDED WITH AN AERATOR. RIDGID SUPPLY KIT SHALL INCLUDE CHROME PLATED BRASS STOPS WITH THREADED CONNECTIONS AND FLANGE. INLET AND OUTLET SHALL BE 3/8" IPS. PROVIDE WITH McGUIRE PROWRAP INSULATOR.									
S-2	SCULLERY SINK	ELKAY	14-1C16X20-L-18X	JUST	SB-124-24L	EAGLE GROUP	414-22-1-24L			
	FAUCET	CHICAGO	631-L88VBE2-2CP	T&S BRASS	B-0230-166X-CRK	AMERICAN STANDARD	7298.252	1/2"	1/2"	
	TRAP	McGUIRE	8902	KOHLER	K8999	DEARBORN BRASS	702-1			2"
	SUPPLY	McGUIRE	170	KOHLER	K-76-6-P	BRASSCRAFT	CS400AC			
	STRAINER	JUST	JB-99	ELKAY	LK-99	DEARBORN	L7			
	SINGLE COMPARTMENT SINK WITH LEGS AND SELF LEVELING FEET. SINK TO HAVE DRAINBOARD ON LEFT SIDE. FAUCET TO BE WALL MOUNTED SWING SPOUT UTILITY FAUCET WITH 8" CENTERS AND CHROME PLATE FINISH.									

PLUMBING SCHEDULE NOTES AND LEGEND:

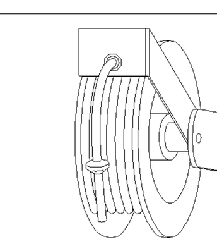
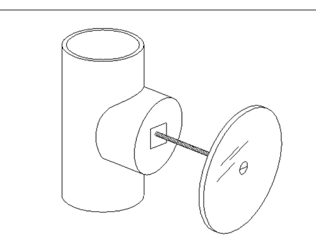
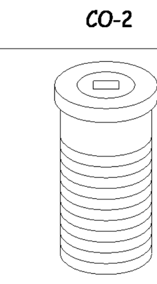
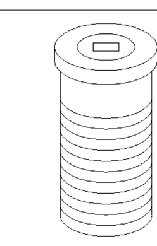
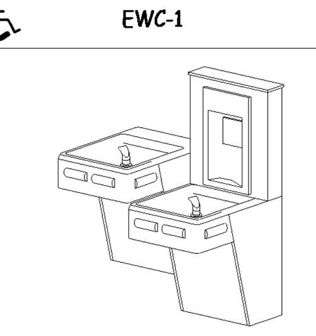
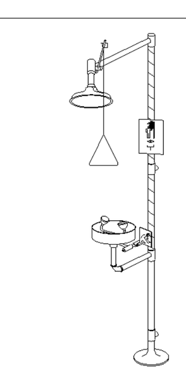
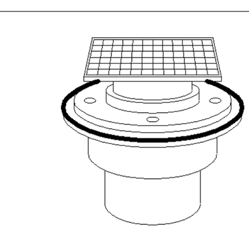
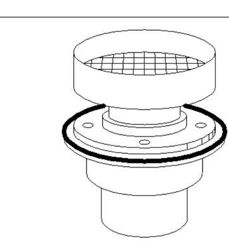
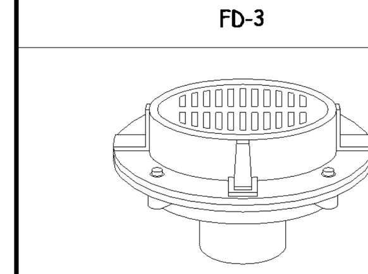
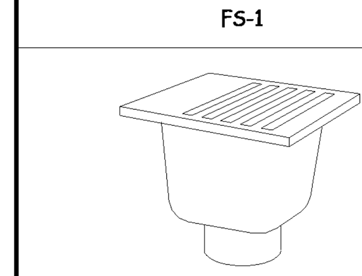
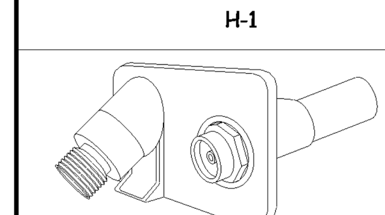
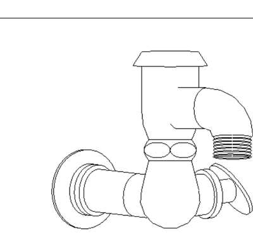
1. THE PLUMBING CONTRACTOR MAY SUBSTITUTE FIXTURES WITH OWNERS' APPROVAL.
2. SUBMIT CUT SHEETS FOR ALL PROPOSED FIXTURES TO ARCHITECT PRIOR TO BIDDING.
3. PROVIDE VACUUM BREAKER ON ALL EQUIPMENT REQUIRING PLUMBING.
4. REFER TO MANUFACTURERS WEB SITE FOR CUT SHEETS AND DATA ON THE FIXTURES AND APPURTENANCES USED IN THIS SCHEDULE.

ADA COMPLIANT

ELECTRICAL POWER

GAS FIRED

PLUMBING FIXTURE SCHEDULE

SYMBOL / IMAGE	DESCRIPTION	3 - EQUALS						PIPING CONNECTIONS		
		MANUFACTURER	MODEL NUMBER	MANUFACTURER	MODEL NUMBER	MANUFACTURER	MODEL NUMBER	COLD WATER	HOT WATER	SANITARY SEWER
AHR-1	COMPRESSED AIR HOSE REEL	REELCRAFT	7650-OLP	HANNAY REELS	N515-19-20-10.5J	GRACO	HEL010			-
	PROVIDE WITH 50', 3/8" HOSE.									
CO-1	WALL CLEANOUT	ZURN	CO-2413-PVC	MIFAB		JR SMITH		-	-	SEE PLUMB. DRAWINGS
	ACCESS COVER	ZURN	CO-2530-SS	MIFAB		JR SMITH				
	PVC CLEANOUT BODY AND PLUG TO BE GAS AND WATER TIGHT. PLUG TO HAVE A BRASS THREADED INSERT TO RECEIVE SECURING SCREW FOR STAINLESS STEEL ROUND ACCESS COVER.									
CO-2	EXTERIOR CLEANOUT	ZURN	Z-1449-BP	WATTS	CO-380-34B	JR SMITH	4283	-	-	SEE PLUMB. DRAWINGS
	CLEANOUT FERRULE WITH CAST IRON BODY, WITH GAS AND WATERTIGHT BRONZE PLUG, MOUNT IN CONCRETE.									
CO-3	FLOOR CLEANOUT	ZURN	Z-1400-HD	WATTS	CO-200-RX-4-34	JR SMITH	4243	-	-	SEE PLUMB. DRAWINGS
	CLEANOUT HOUSING	ZURN	Z-1474	WATTS	CO-300-MF	JR SMITH	4263-L			
	HEAVY DUTY FLOOR CLEANOUT WITH CAST IRON BODY, EXTRA HEAVY DUTY TOP, AND GAS AND WATERTIGHT ABS TAPERED THREAD PLUG. SEE DETAIL 7/P4.1.									
EWC-1	WATER COOLER	OASIS	P8SBFSL	ELKAY	LZSTL8WS	HALSEY TAYLOR	HTHB-HACDBLPV-WF	1/2"	-	2"
	PROVIDE WITH FRONT AND SIDE CONTROLS, SHUT-OFF VALVE, CARRIER, AND TRAP. PROVIDE STAINLESS STEEL FINISH. PROVIDE WITH BOTTLE FILLER.									
EWS-1	EMERGENCY EYEWASH SHOWER	BRADLEY	S19-314SB	SPEAKMAN	SE-697	GUARDIAN	G1902	1 1/4"	1 1/4"	-
	MIXING VALVE	BRADLEY	S19-2100	SPEAKMAN	SE-356	GUARDIAN	G380OLF			
	COMBINATION SHOWER AND EYEWASH WITH SHOWERHEAD, RECEPTOR, TWIN ANTI-SURGE SOFT-FLO EYEWASH HEADS, PULL ROD ACTIVATED SHOWER, AND PUSH FLAG ACTIVATED EYEWASH. PROVIDE WITH FLOOR DRAIN AND WITH TEPID WATER THROUGH A MIXING VALVE.									
FD-1	FLOOR DRAIN	ZURN	ZN415S	WATTS	FD-100-M	MIFAB	F11000-1	1/2"	-	3"
	FLOOR DRAIN TO HAVE A 3" WASTE BOTTOM OUTLET, CAST IRON BODY WITH ADJUSTABLE COLLAR, POLISHED 6" x 6" NICKEL BRONZE SQUARE HEELPROOF STRAINER, AND 1/2" TRAP PRIMER CONNECTION.									
FD-2	FLOOR DRAIN	ZURN	ZN415I	WATTS	FD-100-ER	MIFAB	F100-CC-DD	1/2"	-	3"
	FLOOR DRAIN TO HAVE A CAST IRON BODY WITH 3" BOTTOM OUTLET, ADJUSTABLE COLLAR, POLISHED 7" DIAMETER NICKEL BRONZE STRAINER, AND 1/2" TRAP PRIMER CONNECTION.									
FD-3	FLOOR DRAIN	ZURN	ZN508	WATTS	FD-320-Y-1-21	MIFAB	F1320C-Y	1/2"	-	3"
	HEAVY DUTY FLOOR DRAIN WITH CAST IRON BODY AND 3" WASTE BOTTOM OUTLET, HEAVY DUTY POLISHED NICKEL BRONZE SLOTTED GRATE, STRAINER, AND 1/2" TRAP PRIMER CONNECTION.									
FS-1	FLOOR SINK	ZURN	ZN1901-3-33	WATTS	FS-740-1-175	MIFAB	FS1730-175	-	-	3"
	12" x 12" x 8" DEEP CAST IRON BODY AND SQUARE SLOTTED MEDIUM DUTY 3/4 GRATE, AND ANTI-SPLASH INTERIOR BOTTOM DOME STRAINER.									
H-1	ANTIFREEZE HOSE BIBB	WOODFORD	65	WATTS	HY-420	MIFAB	MHY-15	3/4"	-	-
	ANTIFREEZE HOSE BIBB SHALL HAVE AUTOMATIC DRAINING WITH ANTI-SIPHON VACUUM BREAKER. 3/4" INLET AND OUTLET. EXTERIOR FINISH TO BE CHROME. PROVIDE WITH LOOSE TEE KEY FOR EACH HOSE BIBB. MOUNT 12" ABOVE FINISHED GRADE.									
H-2	HOSE BIBB	CHICAGO	952	WOODFORD	21	ZURN	Z875L7	3/4"	-	-
	HOSE BIBB SHALL HAVE AUTOMATIC DRAINING WITH ANTI-SIPHON VACUUM BREAKER. 3/4" INLET AND OUTLET. EXTERIOR FINISH TO BE CHROME. PROVIDE WITH LOOSE TEE KEY FOR EACH HOSE BIBB. MOUNT 12" ABOVE FINISHED FLOOR.									

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OAKLEY COLLIER ARCHITECTS
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ATLANTEC ENGINEERS, PA
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22242

BID SET
TOWN OF NASHVILLE
FIRE STATION NO. 2
1200 EAST WASHINGTON ST.
NASHVILLE, NC 27856

NORTH CAROLINA PROFESSIONAL CORPORATION ATLANTEC ENGINEERS PA No. C-961

DocuSigned by: Harrison Holt
NORTH CAROLINA PROFESSIONAL SEAL 049754 ENGINEER J. HARRISON HOLT
5/15/2023

GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By JHH	Sheet No.
Checked By JHH	P2.1

Sheet Title
PLUMBING FIXTURE SCHEDULE

PLUMBING FIXTURE SCHEDULE

SYMBOL / IMAGE	DESCRIPTION	3 - EQUALS						PIPING CONNECTIONS		
		MANUFACTURER	MODEL NUMBER	MANUFACTURER	MODEL NUMBER	MANUFACTURER	MODEL NUMBER	COLD WATER	HOT WATER	SANITARY SEWER
S-3	SCULLERY SINK	ELKAY	14-1C16X20-2-18X	JUST	SB-124-24RL	EAGLE GROUP	414-24-1-24			
	FAUCET	CHICAGO	631-L88VBE2-2CP	T&S BRASS	B-0230-166X-CRK	AMERICAN STANDARD	7298.252	1/2"	1/2"	
	TRAP	McGUIRE	8902	KOHLER	K8999	DEARBORN BRASS	702-1			2"
	SUPPLY	McGUIRE	170	KOHLER	K-76-6-P	BRASSCRAFT	CS400AC			
	STRAINER	JUST	JB-99	ELKAY	LK-99	DEARBORN	L7			
	SINGLE COMPARTMENT SINK WITH LEGS AND SELF LEVELING FEET. SINK TO HAVE DRAINBOARDS ON LEFT AND RIGHT SIDES. FAUCET TO BE WALL MOUNTED SWING SPOUT UTILITY FAUCET WITH 8" CENTERS AND CHROME PLATE FINISH.									
SA-1	SHOCK ABSORBER	JOSAM	75000	ZURN	Z1700	WADE	4480			
	SHOCK ABSORBERS SHALL HAVE A STAINLESS STEEL CASING, FLEXIBLE MECHANICAL BELLOWS, PRESSURIZED INERT GAS CHAMBER AND CERTIFICATION STAMP AS CONFORMING TO STANDARD PDI WH-201 OF THE PLUMBING AND DRAINAGE INSTITUTE.									
										SEWER
SH-1	HAND SHOWER/VALVE	CLEVELAND FAUCET	42018GR5 W/ INTERNAL STOPS 45311	DELTA	52672-15-BG	MOEN	6399EBPL			2"
	VALVE AND HEAD	CLEVELAND FAUCET	42018GR5 W/ INTERNAL STOPS 45311	DELTA	52672-15-BG	MOEN	6399EBPL	1/2"	1/2"	
	VALVE TO BE ANTI-SCALD PER NORTH CAROLINA BUILDING CODE. SHOW IS TO BE RATED "WATER SENSE". PROVIDE WITH TRIM AND 1.75 GPM FLOW RATE RESTRICTOR. PROVIDE LEVEL HANDLE, CONTROL VALVE 45311 WITH INTERNAL STOPS AND TRIM FOR BOTH HAND SHOWER AND FIXED SHOWER. PROVIDE HOT/COLD WATER DIVERTER VALVE AND ROUTE PIPING IN WALL TO HAND SHOWER CONTROL VALVE.									
WC-2	WATER CLOSET	KOHLER	K-96057-0	SLOAN	ST-2029	AMERICAN STANDARD	2305.100			4"
	SEAT	BEMIS	1655SSC	KOHLER	K-4670-C-0	CHURCH	9500C			
	VALVE	SLOAN	111	DELANY	F402-1	ZURN	Z6000-WS1	1"	-	
	TOILET SHALL BE MADE OF VITREOUS CHINA WITH A WHITE FINISH AND A 12" ROUGH-IN AND 1 1/2" TOP SPUD. SEAT SHALL BE EXTRA HEAVY WEIGHT SOLID PLASTIC WITH OPEN FRONT LESS COVER FOR ELONGATED BOWL. EXPOSED CHROME PLATED DUAL FLUSH VALVE WITH 1 1/2" CHROME PLATED SPUD COUPLING AND FLANGE. DUAL FLUSH VALVE TO HAVE A HIGH/LOW FLOW FLUSH RATE OF 1.6/1.1 G.P.F. THE FLUSH VALVE MECHANISM SHALL BE PLACED ON THE WIDE SIDE OF THE STALL.									
WH-1	WATER HEATER	RHEEM	RTGH-C95DVLN	RINNAI		LOCHINVAR		3/4"	3/4"	
	INTERIOR, GAS FIRED, INSTANTANEOUS, ULTRA HIGH EFFICIENCY, WATER HEATER SHALL HAVE AN INPUT OF 199 MBH AND A DELIVERY OF 13.51 GPM AT 100°F RISE. PROVIDE WITH AN EXPANSION TANK. WIRING BY LICENSED ELECTRICAL CONTRACTOR. PROVIDE WITH WALL HANGING SYSTEM KIT. PROVIDE WITH PRE-SIZED GAS AND WATER MANIFOLD. PROVIDE WITH UNIT MOUNTED CONTROL MANIFOLD.									
WM-1	WASHING MACHINE BOX	OATEY CO.	38108	GUY GRAY		SIOUX CHIEF		1/2"	1/2"	2"
	PLASTIC WASHING MACHINE BOX WITH 1/4 TURN BRASS BALL VALVES - COPPPER SWEAT AND DRAIN. MOUNT 42" ABOVE FINISHED FLOOR.									

PLUMBING SCHEDULE NOTES AND LEGEND:

1. THE PLUMBING CONTRACTOR MAY SUBSTITUTE FIXTURES WITH OWNERS' APPROVAL.
2. SUBMIT CUT SHEETS FOR ALL PROPOSED FIXTURES TO ARCHITECT PRIOR TO BIDDING.
3. PROVIDE VACUUM BREAKER ON ALL EQUIPMENT REQUIRING PLUMBING.
4. REFER TO MANUFACTURERS WEB SITE FOR CUT SHEETS AND DATA ON THE FIXTURES AND APPURTENANCES USED IN THIS SCHEDULE.

ADA COMPLIANT

ELECTRICAL POWER

GAS FIRED

OAKLEY COLLIER ARCHITECTS
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NORTH CAROLINA ATLANTEC ENGINEERS PA No. C-961 PROFESSIONAL CORPORATION

DocuSigned by: Harrison Hill PE NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 049754 HARRISON HILL

5/15/2023

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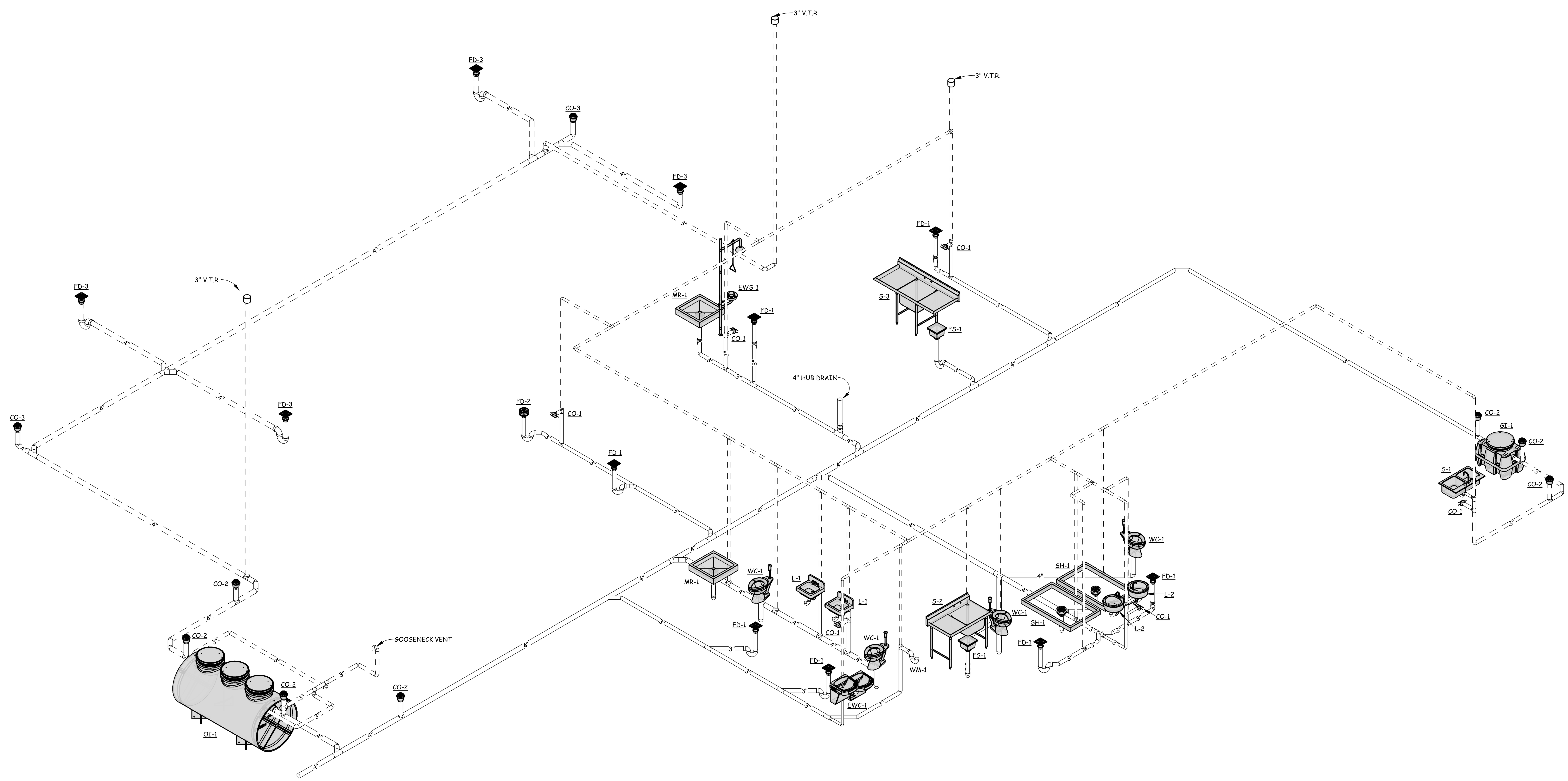
REVISIONS

#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By: JHH	Sheet No. P2.2
Checked By: JHH	

Sheet Title: PLUMBING FIXTURE SCHEDULE



WASTE PIPING RISER

1 P3.1

NOT TO SCALE

OCA OAKLEY COLLIER ARCHITECTS

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NORTH CAROLINA PROFESSIONAL SEAL 049754 ENGINEER J. HARRISON HOLT

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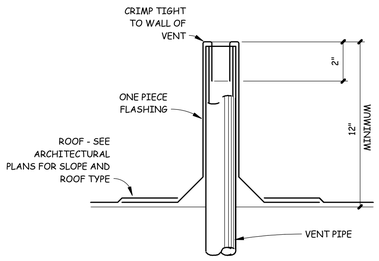
Date	Project No.
5/15/2023	22027
Drawn By: JHH	Sheet No.
Checked By: JHH	P3.1

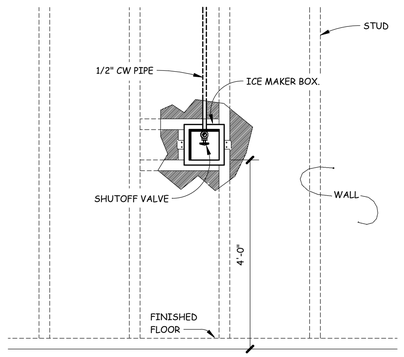
Sheet Title

WASTE PIPING RISER



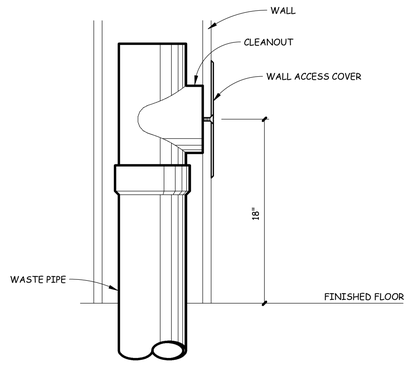
5 P4.1 VENT THROUGH FLAT ROOF DETAIL

NOT TO SCALE



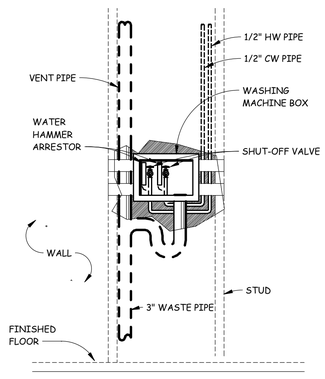
2 P4.1 ICE MAKER BOX DETAIL

NOT TO SCALE



6 P4.1 WALL CLEANOUT DETAIL

NOT TO SCALE



3 P4.1 WASHING MACHINE BOX DETAIL

NOT TO SCALE

PLUMBING LOAD SUMMARY

SANITARY SEWER DEMAND FU	WATER DEMAND FU	WATER DEMAND GPM
71.5	122.7	73.8

SEISMIC AND WIND REQUIREMENTS FOR MECHANICAL SYSTEMS (PER ASCE 7-05)

1. ALL ROOF CURBS/ROOF RAILS INCLUDING THEIR ATTACHMENT TO THE EQUIPMENT AND STRUCTURE MUST BE EVALUATED FOR WIND LOADING. WHERE SEISMIC RESTRAINT IS REQUIRED, THE MORE DEMANDING FORCE OF WIND AND SEISMIC MUST BE USED.
2. SEE SEISMIC INFORMATION CONTAINED ON STRUCTURAL DRAWINGS FOR SITE SPECIFIC INFORMATION ON SEISMIC DESIGN CATEGORY.
3. SEE TABLE BELOW FOR SPECIFIC COMPONENT RESTRAINT REQUIREMENTS.
4. FOR ALL COMPONENTS REQUIRING SEISMIC RESTRAINT, THE COMPONENT SUPPORTS AND ATTACHMENTS SHALL BE DESIGNED BY A REGISTERED DESIGN PROFESSIONAL. CONTRACTOR TO FURNISH AND INSTALL ALL SEISMIC BRACING AS NOTED HEREIN. CONTRACTOR SHALL FURNISH DESIGN CALCULATIONS AND SUBMITTAL FOR REVIEW.

SEISMIC DESIGN CATEGORY C. COMPONENT IMPORTANCE FACTOR 1.5

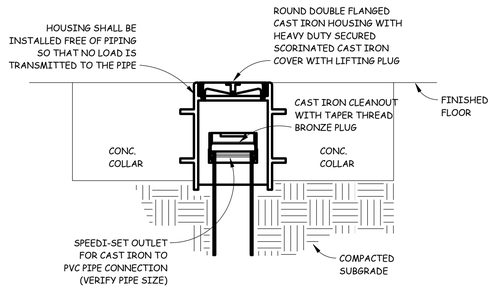
COMPONENT	RESTRAINT REQUIREMENT	ASCE 7-05 REFERENCE
SUSPENDED EQUIPMENT IN-LINE WITH DUCT/PIPE	RESTRAIN IF > 74 LBS (SEE NOTE 3, 4)	13.6.7
SUSPENDED EQUIPMENT NOT IN-LINE WITH DUCT/PIPE'	RESTRAIN ALL	13.6.3
DUCTILE PIPING	PIPE GREATER THAN 2" (SEE NOTE 5, 6)	13.6.8
SUSPENDED DUCTWORK	DUCTWORK GREATER THAN 6 SQFT OR LARGER THAN 28" IN DIAMETER (SEE NOTE 6)	13.6.7
COMPONENT CERTIFICATION (NOTE 7)	REQUIRED	13.2.2

NOTES:

1. EQUIPMENT >20 LBS OR LESS IS EXEMPT IF FLEXIBLE CONNECTIONS ARE PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT.
2. RESTRAINTS ARE NOT REQUIRED IF COMPONENT WEIGHS LESS THAN 400 POUNDS OR IS AT 4 FEET OR LESS ABOVE FINISHED FLOOR AND FLEXIBLE CONNECTIONS ARE PROVIDED BETWEEN THE COMPONENT AND ASSOCIATED DUCTWORK, PIPING, AND CONDUIT.
3. ITEMS WEIGHING LESS THAN 76 LBS. DO NOT NEED RESTRAINT IF THE ATTACHED DUCTWORK/PIPING IS RESTRAINED AND POSITIVELY ATTACHED TO THE EQUIPMENT.
4. FLEXIBLE CONNECTION REQUIRED FOR PIPE CONNECTIONS ONLY.
5. ALL NON-DUCTILE PIPING (PLASTIC, CAST IRON, CERAMIC) MUST BE RESTRAINED.
6. RESTRAINT IS NOT REQUIRED IF SUSPENDED 12" OR LESS FROM THE STRUCTURE AND THE HANGERS ARE DETAILED TO AVOID SIGNIFICANT BENDING OF THE HANGERS AND THEIR ATTACHMENTS AND PROVISIONS ARE MADE FOR PIPING TO ACCOMMODATE EXPECTED DEFLECTIONS.
7. COMPONENT CERTIFICATION MUST BE SUPPLIED BY THE EQUIPMENT MANUFACTURER AT TIME OF SUBMITTAL FOR REVIEW BY THE ENGINEER OF RECORD.
8. ALL SPRINKLER PIPING LARGER THAN 2" SHALL BE RESTRAINED IN ACCORDANCE WITH NFPA 13.
9. ALL DOMESTIC WATER, SEWER, VENT, AND NATURAL GAS PIPING LARGER THAN 2" SHALL BE RESTRAINED WITH CABLES AT 45° ANGLES AND SECURED TO STRUCTURE. PIPING INSTALLED WITHIN 12" OF STRUCTURE SHALL BE EXEMPT.

PLUMBING GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE CODE, ALL LOCAL AND OTHER APPLICABLE CODES.
2. ANY PERMITS AND INSPECTION FEES SHALL BE SECURED AND PAID FOR BY THE PLUMBING CONTRACTOR.
3. ALL WORK SHALL BE PERFORMED BY EXPERIENCED AND SKILLED CRAFTSMAN. THE PLUMBING CONTRACTOR SHALL COORDINATE ALL OF HIS WORK WITH ALL OTHER CONTRACTORS.
4. THE PLUMBING PLANS AND SPECIFICATIONS SHALL BE THOROUGHLY REVIEWED PRIOR TO PURCHASING MATERIALS AND INSTALLATION. ALL DISCREPANCIES OR INTERFERENCE'S SHALL BE BROUGHT TO THE ENGINEERS ATTENTIONS.
5. THESE PLANS ARE DIAGRAMMATIC AND MAY NOT SHOW MINOR DETAILS AND LOCATIONS. FOR DIMENSIONS, REFER TO THE ARCHITECTURAL PLANS.
6. THE PLUMBING CONTRACTOR SHALL PROVIDE ALL OPENINGS REQUIRED FOR THE PLUMBING WORK. THE PATCHING SHALL BE BY THE PLUMBING CONTRACTOR AND FINISHING BY GENERAL CONTRACTOR.
7. WATER PIPING BELOW GRADE SHALL BE TYPE "K" COPPER (NO JOINTS BELOW GRADE) AND ABOVE GRADE TYPE "L" COPPER. SUPPORTED AS REQUIRED AND SHALL BE HYDROSTATIC ALLY TESTED FOR ONE HOUR AT 150 PSI. TEST TO COMPLY WITH ALL EPA STANDARDS. THE ENTIRE WATER DISTRIBUTION SYSTEM SHALL BE DISINFECTED PRIOR TO PLACING IN SERVICE.
8. WATER PIPING LOCATED ABOVE CEILINGS AND IN EXTERIOR WALLS SHALL BE ROUTED ON HEATED SIDE OF CEILING INSULATION (UNDERSIDE) AND WALL INSULATION (INSIDE).
9. COLD/HOT WATER PIPING SHALL BE INSULATED. INSULATE WASTE PIPING AS DESIGNATED ON PLUMBING DRAWINGS. INSULATION SHALL BE 1" FIBERGLASS, OUTDOOR PIPING TO BE WRAPPED WITH ALUMINUM JACKET.
10. DO NOT SUPPORT PIPING FROM BAR JOIST BRIDGING AND/OR ROOF DECK.
11. WATER SHUT - OFF VALVES ABOVE FINISHED CEILING ARE TO BE FREE FROM OBSTRUCTIONS SUCH AS DUCTWORK, LIGHTS, WIRING AND OTHER PIPING SO AS TO PROVIDE EASY ACCESS. MOUNT NO MORE THAN 2'-0" ABOVE FINISHED CEILING.
12. IF THE WATER PRESSURE EXCEEDS 80 PSI A PRESSURE REDUCING VALVE SHALL BE INSTALLED WHERE THE WATER ENTERS THE BUILDING.
13. PLUMBING CONTRACTOR SHALL PROVIDE A DIELECTRIC UNION WHEN CONNECTING DISSIMILAR MATERIAL.
14. WATER HEATERS SHALL HAVE AND EFFICIENCY MEETING REQUIREMENTS OF THE NORTH CAROLINA BUILDING CODE.
15. THE PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR ALL ELECTRICAL AND CONTROL CONNECTIONS TO THE EQUIPMENT FURNISHED UNDER HIS CONTRACT.
16. SANITARY SEWER AND VENT PIPING SHALL BE SCHEDULE 40 PVC. SANITARY SEWER AND VENT PIPING SHALL BE GAS AND AIR TIGHT.
17. THE PLUMBING CONTRACTOR SHALL COORDINATE ALL WORK WITH OTHER TRADES PRIOR TO INSTALLATION OF ANY WORK.
18. THE PLUMBING CONTRACTOR SHALL REVIEW ALL UTILITY SITE PLANS FOR WORK BY OTHERS. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE HIS WORK WITH WORK BY OTHERS AND AVOID ALL CONFLICTS.
19. LOCATIONS OF UTILITIES (WASTE AND WATER PIPING, ETC..) PROVIDED BY OTHERS, THAT ARE TO BE CONNECTED TO ARE ASSUMED. IT SHALL BE THE RESPONSIBILITY OF THE PLUMBING CONTRACTOR TO VERIFY THESE LOCATIONS AND MAKE FINAL CONNECTIONS AS REQUIRED.
20. VERIFY THE LOCATION OF ALL EQUIPMENT SUPPLIED BY OTHERS.
21. ALL EQUIPMENT DIRECTLY CONNECTED TO THE WATER SYSTEM SHALL BE PROVIDED WITH A DOUBLE CHECK VALVE AS APPROVED BY THE CITY OF RALEIGH.
22. ALL VENT PIPING THROUGH THE ROOF SHALL BE A MINIMUM OF 15'-0" FROM ALL MAKE-UP AIR INLETS OR A MINIMUM OF 2'-0" ABOVE THE TOP OF ALL MAKE-UP AIR INLETS. VENTS THROUGH ROOF ARE TO BE ON REAR OF BUILDING.
23. ALL INDIRECT WASTE IS TO BE PROVIDED WITH AN AIR GAP 2 TIMES THE SIZE OF THE WASTE INLET.
24. THE PLUMBING CONTRACTOR SHALL VERIFY BUILDING FLOOR ELEVATION IS ABOVE MANHOLE RIM ELEVATION OR PROVIDE A BACKWATER VALVE AS REQUIRED.
25. THE PLUMBING CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A SET OF AS-BUILT DRAWINGS UPON COMPLETION OF PROJECT.

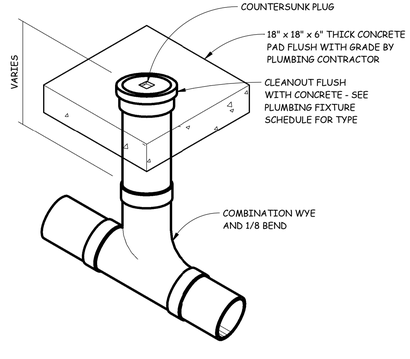


NOTES:

1. CLEANOUT AND CLEANOUT COVER SHALL BE MODEL 4263-L BY J.R. SMITH MANUFACTURING OR EQUALS BY JOSAM OR ZURN.
2. THIS DETAIL SHALL APPLY WHERE SHOWN ON DRAWINGS.
3. CONCRETE SHALL BE 4,000 PSI CONCRETE.

7 P4.1 TRAFFIC RATED CLEANOUT DETAIL

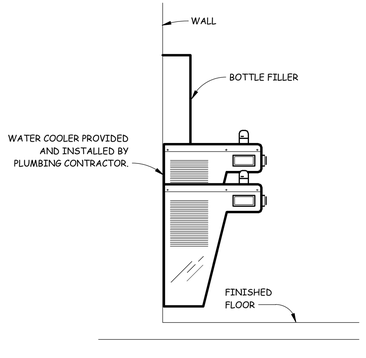
NOT TO SCALE



NOTE: SEE SITE AND/OR UTILITY PLAN FOR LOCATION AND FINISH GRADE ELEVATION

4 P4.1 EXTERIOR CLEANOUT DETAIL

NOT TO SCALE



1 P4.1 ELECTRIC WATER COOLER DETAIL

NOT TO SCALE

PLUMBING SYMBOL LEGEND

SYMBOL	DESCRIPTION
	COLD WATER PIPING
	WATER PIPING DIRECTION OF FLOW
	COLD WATER PIPING BELOW FINISHED FLOOR
	HOT WATER PIPING
	HOT WATER PIPING BELOW FINISHED FLOOR
	HOT WATER RETURN PIPING
	BALL VALVE
	WATER PIPING TURNED DOWN
	WATER PIPING TURNED UP
	PIPING SIDE CONNECTION
	SANITARY SEWER / WASTE PIPING
	GREASE WASTE PIPING
	VENT PIPING
	VENT PIPE UP
	NON FREEZE WALL HYDRANT
	HOSE BIBB
	PLUMBING FIXTURE PROVIDED AND INSTALLED BY PLUMBING CONTRACTOR
	PLUMBING FIXTURE PROVIDED BY OTHERS AND INSTALLED BY PLUMBING CONTRACTOR
	FLOOR CLEANOUT
	WALL CLEANOUT
	FLOOR DRAIN
A.A.V.	AIR ADMITTANCE VALVE
S.T.	SANITARY TEE
V.T.R.	VENT THRU ROOF

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RALEIGH, NC 27612
(919) 571-1111
22242

BID SET

TOWN OF NASHVILLE FIRE STATION NO. 2

1200 EAST WASHINGTON ST.
NASHVILLE, NC 27856

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 049754 HARRISON

DocuSigned by: Harrison Hall

5/15/2023

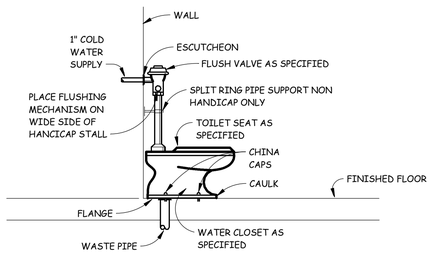
GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

REVISIONS

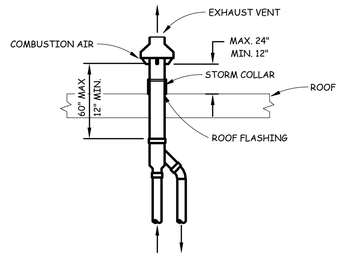
#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By: JHH	Sheet No.: P4.1
Checked By: JHH	

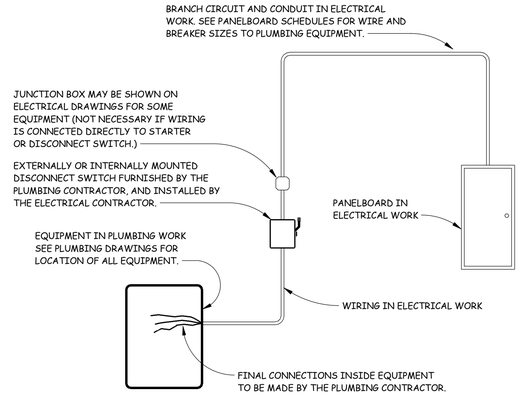
Sheet Title: PLUMBING NOTES, LEGEND, AND DETAILS



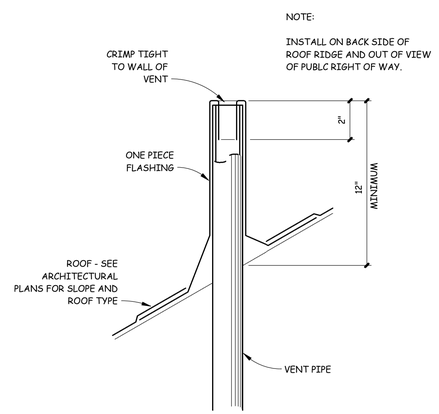
6 P4.2 WATER CLOSET DETAIL
NOT TO SCALE



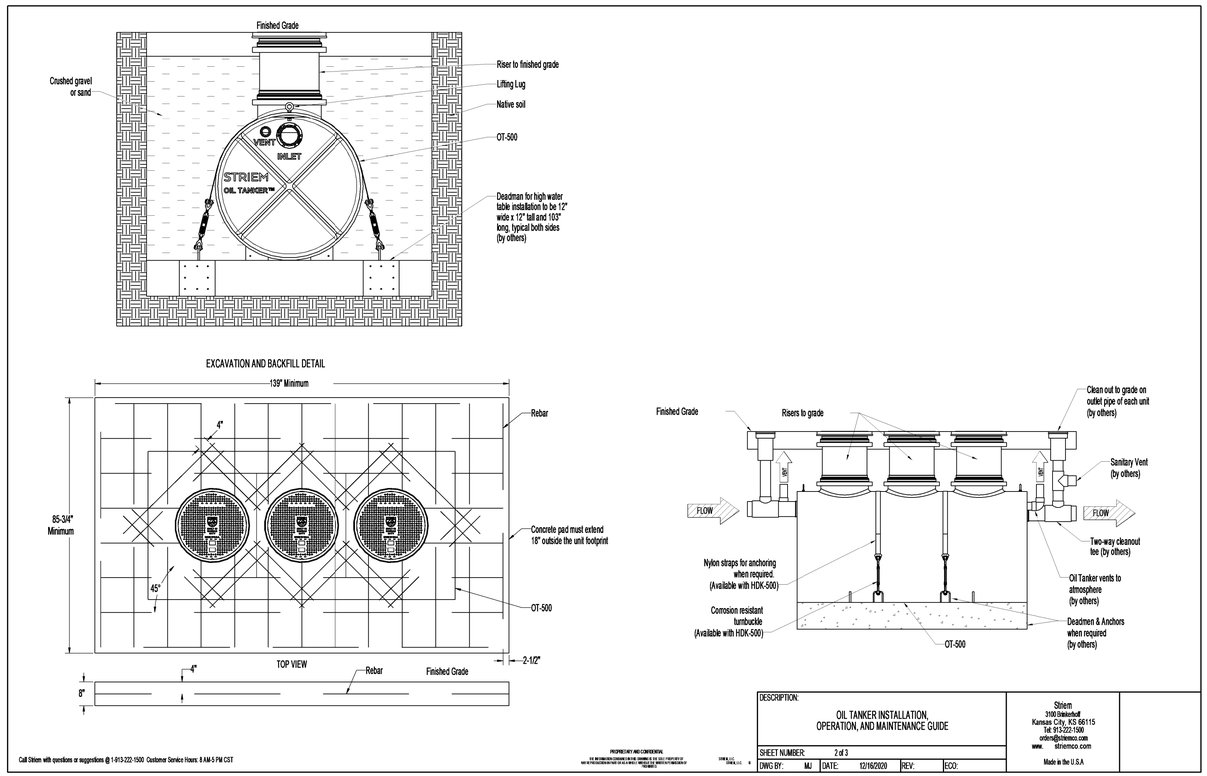
4 P4.2 CONCENTRIC VENT DETAIL
NOT TO SCALE



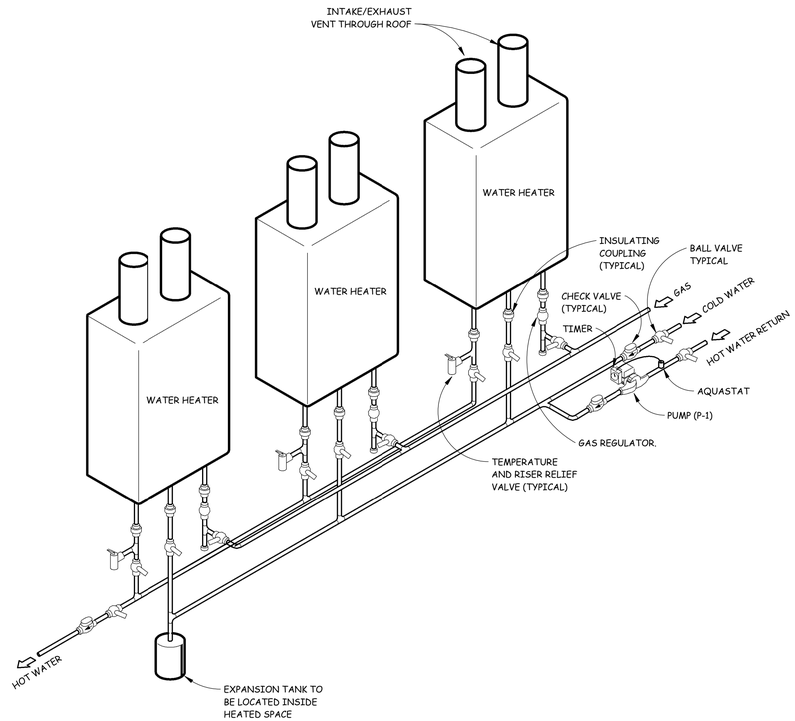
3 P4.2 TYPICAL WIRING DETAIL
NOT TO SCALE



1 P4.2 VENT THROUGH SLOPED ROOF DETAIL
NOT TO SCALE



5 P4.2 SAND/OIL SEPARATOR DETAIL
NOT TO SCALE



2 P4.2 TANKLESS HOT WATER HEATER DETAIL
NOT TO SCALE

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TOWN OF NASHVILLE
FIRE STATION NO. 2
1200 EAST WASHINGTON ST.
NASHVILLE, NC 27856

NORTH CAROLINA ENGINEERING CORPORATION ATLANTEC ENGINEERS PA No. C-961

DocuSigned by: Harrison Holt Harrison
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 049754 ENGINEER HOLT HARRISON, JR.
5/15/2023

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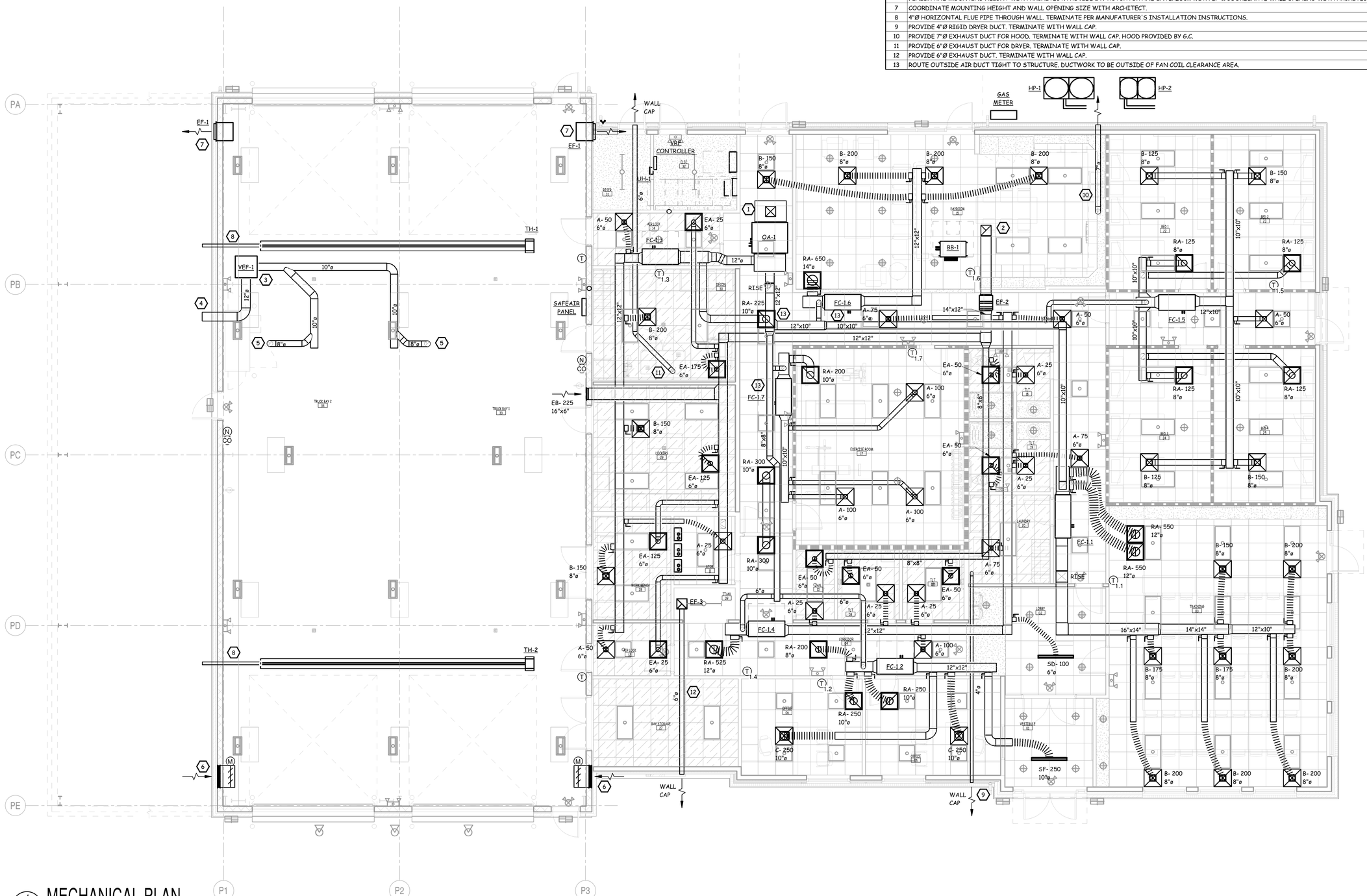
#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By: JHH	Sheet No.: P4.2
Checked By: JHH	

Sheet Title: PLUMBING DETAILS

M1.1 KEY NOTES

1	14X14 OUTSIDE AIR DUCT DOWN FROM INTAKE HOOD EQUAL TO GREENHECK FGI-14X14 ON ROOF.
2	14X14 EXHAUST AIR DUCT UP TO EXHAUST HOOD EQUAL TO GREENHECK FGR-14X14 ON ROOF.
3	PLYMOVENT FAN SUSPENDED FROM STRUCTURE.
4	TERMINATE 12"Ø EXHAUST DUCT WITH OUTLET PROVIDED BY FAN MANUFACTURER.
5	8"Ø DUCT DOWN WITH VOLUME DAMPER TO PLYMOVENT RAIL.
6	PROVIDE OUTSIDE AIR LOUVER (30X54) EQUAL TO POTTORFF EXD-437 FOR 4.69 SQFT OF FREE AREA. PROVIDE WITH KYNAR FINISH AND INSECT SCREEN. COORDINATE FINISH AND MOUNTING HEIGHT WITH ARCHITECT. PROVIDE 24V ACTUATOR AND INTERLOCK WITH EF-1. COORDINATE WALL OPENING WITH ARCHITECT.
7	COORDINATE MOUNTING HEIGHT AND WALL OPENING SIZE WITH ARCHITECT.
8	4"Ø HORIZONTAL FLUE PIPE THROUGH WALL. TERMINATE PER MANUFATURER'S INSTALLATION INSTRUCTIONS.
9	PROVIDE 4"Ø RIGID DRYER DUCT. TERMINATE WITH WALL CAP.
10	PROVIDE 7"Ø EXHAUST DUCT FOR HOOD. TERMINATE WITH WALL CAP. HOOD PROVIDED BY G.C.
11	PROVIDE 6"Ø EXHAUST DUCT FOR DRYER. TERMINATE WITH WALL CAP.
12	PROVIDE 6"Ø EXHAUST DUCT. TERMINATE WITH WALL CAP.
13	ROUTE OUTSIDE AIR DUCT TIGHT TO STRUCTURE. DUCTWORK TO BE OUTSIDE OF FAN COIL CLEARANCE AREA.



1 M1.1 MECHANICAL PLAN

3/16" = 1'-0"

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NASHVILLE, NC 27856

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 051195 PATRICK J. MOORE

5/15/23

GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

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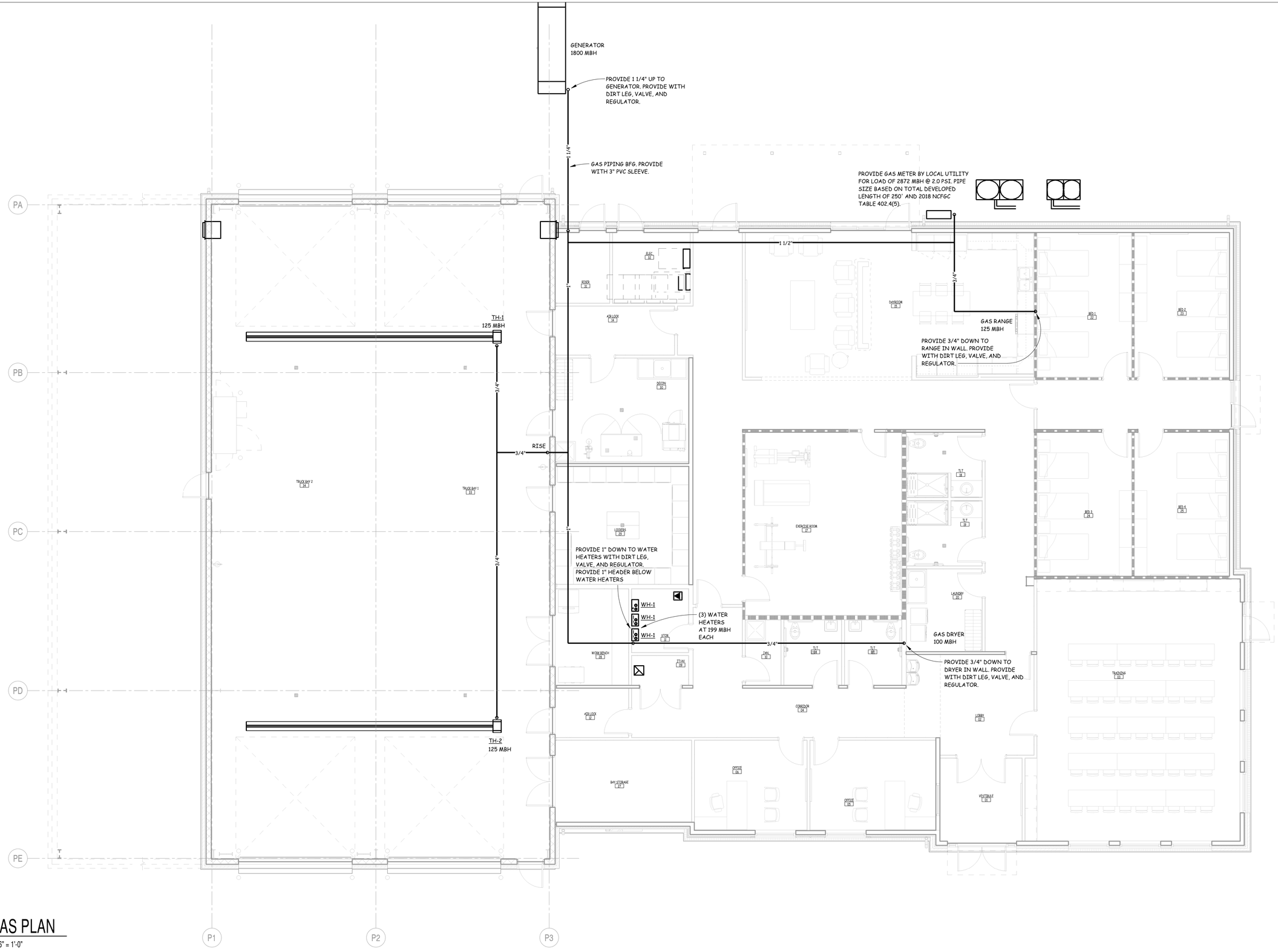
#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By: PJM	Sheet No.: M1.1
Checked By: PJM	

Sheet Title: MECHANICAL PLAN



1 M1.2 GAS PLAN
3/16" = 1'-0"

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NORTH CAROLINA PROFESSIONAL CORPORATION ATLANTEC ENGINEERS PA No. C-961

5/15/23
NORTH CAROLINA PROFESSIONAL SEAL 051195 ENGINEER PATRICK J. MCGEE
Patrick McGee

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#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By: PJM	Sheet No.: M1.2
Checked By: PJM	

Sheet Title: GAS PLAN

MECHANICAL SYSTEMS, SERVICE SYSTEMS AND EQUIPMENT METHOD OF COMPLIANCE

PRESCRIPTIVE ☒ ENERGY COST BUDGET ☐

THERMAL ZONE 3A

EXTERIOR DESIGN CONDITIONS
winter dry bulb: 22°F
summer dry bulb: 96°F
relative humidity: 46%

INTERIOR DESIGN CONDITIONS
winter dry bulb: 70°F
summer dry bulb: 74°F
relative humidity: 50%

BUILDING HEATING LOAD: BLOCK LOAD = 113.8 MBH

BUILDING COOLING LOAD: BLOCK LOAD = 154.0 MBH (12.9 TONS)

MECHANICAL SPACING CONDITIONING SYSTEM

Unitary:
description of unit:
heating efficiency:
cooling efficiency:
heat output of unit:
cooling output of unit:
} SEE SCHEDULES ON SHEET(S) THIS SHEET

Boiler: N/A
total boiler capacity. If oversized state reason.

Chiller: N/A
total chiller capacity. If oversized state reason.

LIST EQUIPMENT EFFICIENCIES: SEE SCHEDULES ON SHEET(S) THIS SHEET

EQUIPMENT SCHEDULES WITH MOTORS (MECHANICAL SYSTEMS)

motor horsepower:
number of phases:
minimum efficiency:
motor type:
# of poles:
} SEE SCHEDULES ON SHEET(S) THIS SHEET

DESIGNER STATEMENT

To the best of my knowledge and belief, the design of this building complies with the mechanical systems, service systems and equipment requirements of the North Carolina State Energy Code,

SIGNED: Patrick McCabe

NAME: Patrick J. McCabe, PE

TITLE: Professional Engineer

HEAT PUMP SCHEDULE

MARK	MANUFACTURER	MODEL	TOTAL COOLING CAPACITY	SENSIBLE COOLING CAPACITY	HEATING CAPACITY	POWER	PHASE	MCA	MOCP	EER	COP	NOTES
HP-1	MITSUBISHI	PURY-P168TNU-A	168.0 MBH	126.0 MBH	188.0 MBH	208 V	3	61.0 A	100 A	10.6	3.3	1-4
HP-2	MITSUBISHI	PUHY-P96TNU-A	96.0 MBH	75.0 MBH	108.0 MBH	208 V	3	33.0 A	50 A	13.8	4.0	1-4

NOTES:

1. PROVIDE WITH HEAVY DUTY FUSIBLE DISCONNECT.
2. PROVIDE WITH LOW AMBIENT CONTROLS FOR OPERATION DOWN TO 0 DEGREES FAHRENHEIT.
3. CONTROL VIA VRF SMART CONTROLLER.
4. SEE SHEET M4.1 FOR REFRIGERANT PIPING INFORMATION.

100% OUTSIDE AIR UNIT SCHEDULE

MARK	MANUFACTURER	MODEL	CFM	S.P.	POWER	PHASE	MCA	MOCP	NOTES
OA-1	MITSUBISHI	PEFY-P96NMHU-E-OA	1200	1.0"	208 V	1	4.8 A	15 A	1-4

NOTES:

1. PROVIDE WITH MOTOR RATED DISCONNECT SWITCH.
2. CONTROL VIA VRF SMART CONTROLLER. SET TO RUN WHEN OCCUPIED.
3. ROUTE CONDENSATE TO EXTERIOR SPLASH BLOCK.
4. PROVIDE WITH 2" DISPOSABLE MERV 13 FILTERS.

FAN COIL SCHEDULE

MARK	MANUFACTURER	MODEL	CFM	S.P.	POWER	PHASE	MCA	MOCP	NOTES
FC-1.1	MITSUBISHI	PVFY-P54NAMU-E1	1500	0.8"	208 V	1	5.6 A	15 A	1-5
FC-1.2	MITSUBISHI	PVFY-P24NAMU-E1	750	0.8"	208 V	1	3.0 A	15 A	1-5
FC-1.3	MITSUBISHI	PVFY-P18NAMU-E1	600	0.8"	208 V	1	3.0 A	15 A	1-5
FC-1.4	MITSUBISHI	PVFY-P18NAMU-E1	600	0.8"	208 V	1	3.0 A	15 A	1-5
FC-1.5	MITSUBISHI	PVFY-P18NAMU-E1	600	0.8"	208 V	1	3.0 A	15 A	1-5
FC-1.6	MITSUBISHI	PVFY-P24NAMU-E1	750	0.8"	208 V	1	3.0 A	15 A	1-5
FC-1.7	MITSUBISHI	PVFY-P12NAMU-E1	400	0.8"	208 V	1	3.0 A	15 A	1-5

NOTES:

1. PROVIDE WITH MOTOR RATED DISCONNECT SWITCH.
2. SEE OUTSIDE AIR SUMMARY FOR OUTSIDE AIR INTAKE FLOW SETTINGS
3. ROUTE CONDENSATE TO EXTERIOR SPLASH BLOCK.
4. PROVIDE WITH 2" DISPOSABLE MERV 13 FILTERS.
5. PROVIDE WITH WALL MOUNTED TEMPERATURE SENSOR FOR CONTROL VIA VRF SMART CONTROLLER.

BRANCH BOX SCHEDULE

MARK	MANUFACTURER	MODEL	POWER	PHASE	MCA	MOCP	NOTES
BB-1	MITSUBISHI	CMB-P108NU-JA1	208 V	1	0.8 A	20 A	1-4

NOTES:

1. PROVIDE WITH DISCONNECT SWITCH.
2. PROVIDE WITH CONDENSATE DRAIN FOR MULTIPORT BOX WITH CONDENSATE PUMP. ROUTE DISCHARGE TO EXTERIOR AS REQUIRED.
3. SEE PIPING SCHEMATIC FOR ADDITIONAL PIPING DETAILS.
4. UNUSED PORTS SHALL BE CAPPED FOR FUTURE USE.

VRF NOTE:

INSTALL PIPING IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. CONTRACTOR MUST BE FACTORY TRAINED TO INSTALL EQUIPMENT. CONTRACTOR SHALL INCLUDE FACTORY START-UP AND FIELD SUPERVISION OF INSTALL BY QUALIFIED FACTORY TECHNICIAN. SEE SHEET M4.1 FOR PIPING AND ELECTRICAL WIRING.

EQUAL SYSTEMS BY DAIKIN, CARRIER, AND TRANE ARE ACCEPTABLE. CONTRACTOR IS RESPONSIBLE FOR ALTERNATE SYSTEM DESIGN OF PIPING AND ELECTRICAL CONNECTIONS IF DIFFERENT FROM THESE DOCUMENTS. CONTRACTOR SHALL PROVIDE PROOF OF SUCCESSFUL INSTALLATION AND TRAINING WITH SUBMITTALS.

GENERAL NOTES

1. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE LATEST EDITION OF THE STATE CODE, ALL LOCAL AND OTHER APPLICABLE CODES
2. ANY PERMITS AND INSPECTION FEES SHALL BE SECURED AND PAID FOR BY THE MECHANICAL CONTRACTOR (M.C).
3. ALL WORK SHALL BE PERFORMED BY EXPERIENCED AND SKILLED CRAFTSMAN. THE M.C. SHALL COORDINATE ALL OF HIS WORK WITH ALL OTHER CONTRACTORS.
4. THE MECHANICAL PLANS AND SPECIFICATIONS SHALL BE THOROUGHLY REVIEWED PRIOR TO PURCHASING MATERIALS AND INSTALLATION. ALL DISCREPANCIES OR INTERFERENCES SHALL BE BROUGHT TO THE ENGINEERS' ATTENTION.
5. THESE PLANS ARE DIAGRAMMATIC AND MAY NOT SHOW MINOR DETAILS AND LOCATIONS. FOR DIMENSIONS, REFER TO THE ARCHITECTURAL PLANS.
6. THE M.C. SHALL BE RESPONSIBLE FOR ALL ELECTRICAL STARTERS, INTERLOCKS, CONTROL WIRING. THE ELECTRICAL CONTRACTOR SHALL PROVIDE POWER WIRING CONDUIT FROM THE DISCONNECT TO M.C. EQUIPMENT. THE M.C. SHALL BE RESPONSIBLE FOR ALL FINAL CONNECTION TO HIS EQUIPMENT.
7. INSTALL FLEXIBLE CONNECTORS ON SUPPLY AND RETURN DUCTWORK AT ALL AIR HANDLING UNITS.
8. INSTALL TURNING VANES IN SUPPLY DUCTS AT ELBOWS. PROVIDE BALANCING AND SPLITTER DAMPERS WHERE SHOWN AND AS REQUIRED FOR SYSTEM BALANCING.
9. ALL THERMOSTATS, WIRING AND CONDUIT ARE TO BE FURNISHED BY THE M.C. MOUNT THERMOSTATS 4'-0" ABOVE THE FLOOR, UNLESS OTHERWISE NOTED.
10. THE M.C. SHALL INSURE THAT ALL MECHANICAL EQUIPMENT INSTALLED UNDER HIS CONTRACT SHALL OPERATE FREE OF OBJECTIONABLE NOISE AND VIBRATION.
11. THE M.C. SHALL KEEP THE PREMISES CLEAR OF DEBRIS FROM HIS WORK DURING CONSTRUCTION AND LEAVE THE AREA AND BUILDING CLEAN AT THE COMPLETION OF HIS WORK. HE SHALL ALSO LEAVE CLEAN ALL EXPOSED EQUIPMENT IN HIS CONTRACT.
12. FLEXIBLE DUCT RUNOUTS SHALL BE A MAXIMUM OF 10'-0".
13. ALL FLEXIBLE DUCT RUNOUTS SHALL INCLUDE INSULATED DAMPERED BOOTS AT THE POINT OF CONNECTION WITH RECTANGULAR DUCT. PROVIDE ALL FLEXIBLE DUCTWORK WITH FOIL-BACKED, EXTERNALLY WRAPPED INSULATION FOR A MINIMUM OF R-8.
14. ALL DUCTWORK SIZES SHOWN ARE ACTUAL SHEET METAL DIMENSIONS. EXTERNALLY WRAP ALL DUCT WITH 3" FOIL-BACKED INSULATION FOR A MINIMUM OF R-8..
15. ALL GAS PIPING SHALL BE SCHEDULE 40 BLACK STEEL INSTALLED IN ACCORDANCE WITH ALL CODES. THE M.C. SHALL COORDINATE GAS PIPE CONNECTION SIZE WITH EQUIPMENT.
16. MECHANICAL CONTRACTOR SHALL WORK WITH TEST AND BALANCE CONTRACTOR TO REMEDY ANY DIFFERENCES TO INCLUDE FAN DRIVE CHANGES, INSTALLATION OF DAMPERS OR OTHER MINOR DUCT MODIFICATIONS TO PROVIDE AIRFLOW TO WITHIN +/- 10% OF THE DESIGN VALUES LISTED ON THESE PLANS.
17. CONTRACTOR SHALL PROVIDE TESTING OF ALL FIRE DAMPERS PRIOR TO SUBSTANTIAL COMPLETION. ENGINEER SHALL WITNESS TESTING OF FIRE DAMPER BY CONTRACTOR. CONTRACTOR SHALL SHUT ALL DAMPERS AND REOPEN TO ENSURE ALL DAMPERS ARE CAPABLE OF CLOSING. CONTRACTOR SHALL PROVIDE ACCESS DOORS AS REQUIRED TO ACCESS DAMPER FOR TESTING.
18. THE AIR HANDLING UNIT SHALL OPERATE AT ALL TIMES DURING OCCUPIED HOURS.
19. THE MECHANICAL CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A SET OF AS-BUILT DRAWINGS UPON COMPLETION OF JOB.
20. THE MECHANICAL CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A SET OF DUCT SHOP DRAWINGS FOR APPROVAL.
21. THE MECHANICAL CONTRACTOR SHALL PROVIDE THE ENGINEER WITH A BALANCE REPORT BY A CERTIFIED TEST AND BALANCE COMPANY.
22. PROVIDE PERMIT LABEL ENGRAVED PLASTIC LAMINATE MECHANICALLY FASTENED TO OUTDOOR UNITS.
23. LABEL CEILING GRID WHERE EQUIPMENT IS LOCATED ABOVE LAY-IN CEILING. WITH EQUIPMENT IDENTIFIER. ALSO LABEL ALL TEMPERATURE SENSORS AND THERMOSTATS WITH EQUIPMENT IDENTIFIER.

TUBE HEATER SCHEDULE

MARK	MANUFACTURER	MODEL	GAS INPUT	FLA	POWER	PHASE	NOTES
TH-1	DETROIT RADIANT	HL3-30-125	125 MBH	5 A	120 V	1	1-5
TH-2	DETROIT RADIANT	HL3-30-125	125 MBH	5 A	120 V	1	1-5

NOTES:

1. PROVIDE WITH POWER DISCONNECT SWITCH
2. PROVIDE WITH WALL MOUNTED THERMOSTAT.
3. PROVIDE WITH HANGING KIT.
4. PROVIDE WITH AUTOMATIC DOOR SWITCH TO SHUT DOWN WHEN BY DOOR IS OPEN.
5. PROVIDE WITH GAS REGULATOR, DIRT LEG, AND VALVE AT CONNECTION.

GRILLE & DIFFUSER SCHEDULE

MARK	MANUFACTURER	MODEL	SERVICE	TYPE	MAX FLOW	FACE SIZE	NECK SIZE	NOTES
A	PRICE	SCD 4 CONE	SUPPLY	LOUVERED LAY-IN	100 CFM	24x24	6"ø	1-3
B	PRICE	SCD 4 CONE	SUPPLY	LOUVERED LAY-IN	200 CFM	24x24	8"ø	1-3
C	PRICE	SCD 4 CONE	SUPPLY	LOUVERED LAY-IN	300 CFM	24x24	10"ø	1-3
EA	PRICE	530	EXHAUST	LOUVERED LAY-IN	1000 CFM	24x24	SEE DWG	1-3
EB	PRICE	530	EXHAUST	SIDEWALL	225 CFM	18x8	16x6	1-6
RA	PRICE	530	RETURN	LOUVERED LAY-IN	1000 CFM	24x24	SEE DWG	1-3
SD	PRICE	TBD3 1" WIDTH	SUPPLY	LINEAR SLOT	100 CFM	48" - 1 SLOT	6"ø	1,2
SF	PRICE	TBD3 1" WIDTH	SUPPLY	LINEAR SLOT	325 CFM	48" - 2 SLOT	10"ø	1,2

NOTES:

1. COORDINATE FINISH WITH ARCHITECT.
2. GRILLE TO HAVE FULLY LOUVERED FACE.
3. PROVIDE WITH INSULATED SHEET METAL PLENUM.
4. PROVIDE FRAME FOR SURFACE MOUNTING.
5. PROVIDE WITH OPPOSED BLADE DAMPER.
6. COORDINATE MOUNTING HEIGHT WITH ARCHITECT.

UNIT HEATER SCHEDULE

MARK	MANUFACTURER	MODEL	AIRFLOW	HEAT OUTPUT	FLA	HEAT	POWER	PHASE	NOTES
UH-1	QMARK	CWH115IDSF	65 CFM	5120 BTU	13 A	1.5 kW	120 V	1	1-3

NOTES:

1. PROVIDE WITH DISCONNECT SWITCH
2. PROVIDE WITH INTEGRAL THERMOSTAT.
3. PROVIDE WITH SURFACE MOUNTING KIT.

EXHAUST FAN SCHEDULE

MARK	MANUFACTURER	MODEL	SERVICE	TYPE	CFM	RPM	HP/AMPS	S.P.	POWER	PHASE	NOTES
EF-1	COOK	18XP34D-EC	TRUCK BAY	SIDEWALL	3750	1725	1.0 HP	0.25"	120 V	1	2,4,6
EF-1	COOK	18XP34D-EC	TRUCK BAY	SIDEWALL	3750	1725	1.0 HP	0.25"	120 V	1	2,4,6
EF-2	COOK	120SQND	EXHAUST	INLINE FAN	950	1725	1/4 HP	0.75"	120 V	1	1-3
VEF-1	PLYMOVENT	TEV-559	TRUCK BAY	UTILITY	-		5 HP	-	208 V	3	1,2,4
EF-3	COOK	GC-140	IT/AV	CABINET	100	1500	67 Watts	0.25"	120 V	1	1,2,5

NOTES:

1. PROVIDE WITH DISCONNECT SWITCH.
2. PROVIDE WITH BACKDRAFT DAMPER.
3. FAN TO RUN CONTINOUSLY.
4. CONTROL FAN VIA TOXIC GAS MONITORING SYSTEM. SEE M4 SHEETS FOR MORE INFORMATION.
5. PROVIDE WITH WALL MOUNTED THERMOSTAT.
6. PROVIDE WITH STARTER/DISCONNECT FOR INTERLOCK.

OUTSIDE AIR SUMMARY

REQUIRED:

TRAINING = 820 SQFT * 0.06 CFM/SQFT + 45 PERSONS * 7.5 CFM/PERSON = 387 CFM
OFFICE = 1278 SQFT * 0.06 CFM/SQFT + 5 PERSONS * 5 CFM/PERSON = 102 CFM
MULTIPURPOSE = 418 SQFT * 0.06 CFM/SQFT + 3 PERSONS * 20 CFM/PERSON = 85 CFM
LIVING = 2243 SQFT * 0.06 CFM/SQFT + 14 PERSONS * 5 CFM/PERSON = 205 CFM
DECON = 672 SQFT * 0.06 CFM/SQFT + 7 PERSONS * 5 CFM/PERSON = 75 CFM

TOTAL REQUIRED = 854 CFM

PROVIDED:

FC-1.1 = 400 CFM
FC-1.2 = 50 CFM
FC-1.3 = 375 CFM
FC-1.4 = 75 CFM
FC-1.5 = 100 CFM
FC-1.6 = 100 CFM
FC-1.7 = 100 CFM

TOTAL PROVIDED = OA-1 = 1200 CFM

SYMBOL LEGEND

SYMBOL	DESCRIPTION
	SHEET METAL DUCT
	FLEXIBLE DUCT
	SUPPLY DIFFUSER - LETTER & NUMBER INDICATES TYPE & CFM
	RETURN GRILLE - LETTER & NUMBER INDICATES TYPE & CFM
	EXHAUST GRILLE - LETTER & NUMBER INDICATES TYPE & CFM
	EXHAUST FAN
T	THERMOSTAT - MOUNTED 48" ABOVE FINISHED FLOOR
BD	BALANCING DAMPER
	ELBOW WITH TURNING VANES
H	HUMIDISTAT - MOUNTED 48" ABOVE FINISHED FLOOR
S	TEMPERATURE SENSOR - MOUNTED 48" ABOVE FINISHED FLOOR
M	MOTOR OPERATED DAMPER
CO	WALL MOUNTED CARBON DIOXIDE SENSOR
C	CONDENSATE DRAIN
	FIRE DAMPER
	PIPING TURNED DOWN
	PIPING TURNED UP
	PIPING SIDE CONNECTION
G	GAS PIPING
N	WALL MOUNTED NO2 SENSOR

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NORTH CAROLINA PROFESSIONAL CORPORATION
ATLANTEC ENGINEERS PA No. C-981

5/15/23
NORTH CAROLINA PROFESSIONAL SEAL 051195 ENGINEER PATRICK J. MCCABE
Patrick McCabe

GENERAL NOTE: Prior to construction start, Contractor shall verify & be responsible for all Dimensions.

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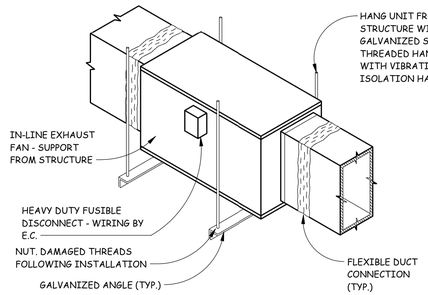
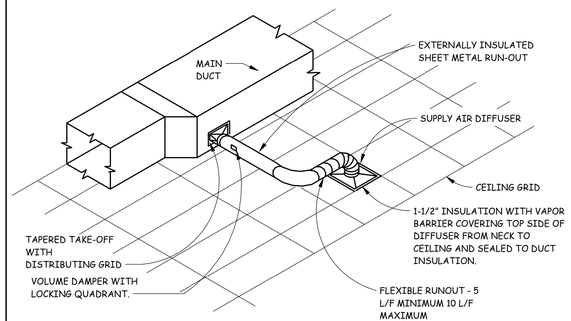
#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By: PJM	Sheet No.: M2.1
Checked By: PJM	

Sheet Title: MECHANICAL NOTES, LEGEND, AND SCHEDULES



9 M3.1 INLINE FAN DETAIL
NOT TO SCALE



6 M3.1 LAYIN DIFFUSER DETAIL
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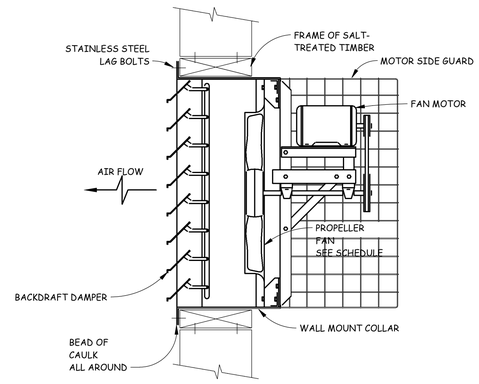
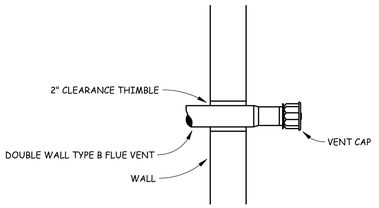
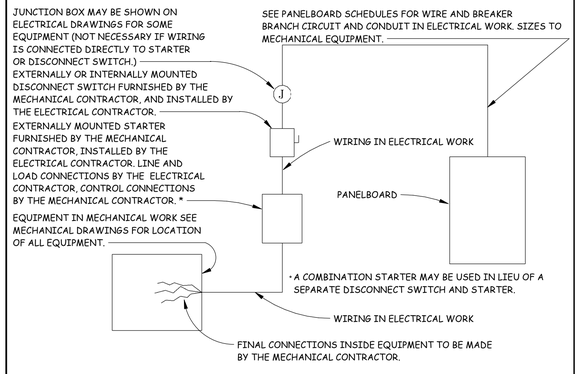


3 M3.1 SIDEWALL FAN DETAIL
NOT TO SCALE



NOTE: VENT SHALL EXTEND AT LEAST 6" FROM WALL AND 36" BELOW ANY OVERHANG

11 M3.1 FLUE DETAIL
NOT TO SCALE



8 M3.1 TYPICAL WIRING DETAIL
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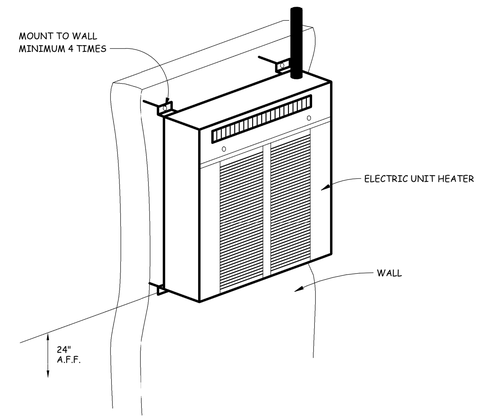
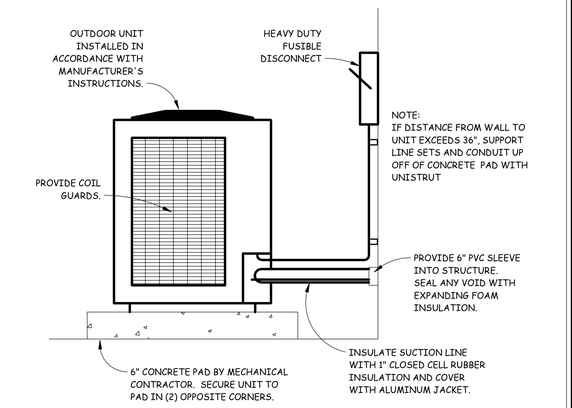
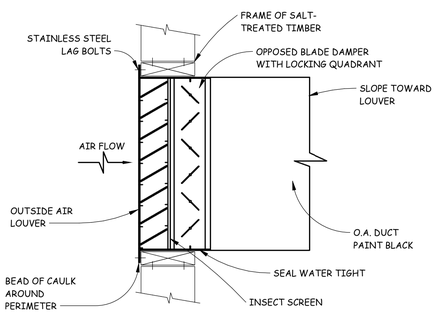


5 M3.1 WALL MOUNTED UNIT HEATER DETAIL
NOT TO SCALE

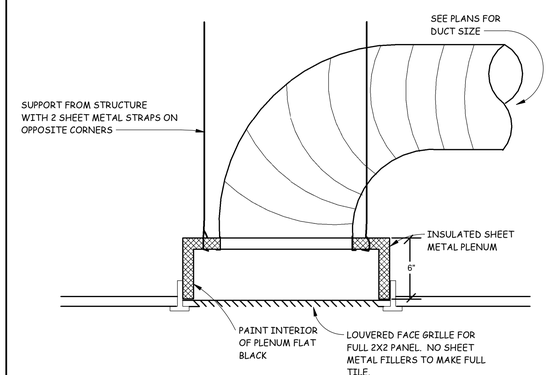


2 M3.1 GROUND MOUNTED OUTDOOR UNIT
NOT TO SCALE

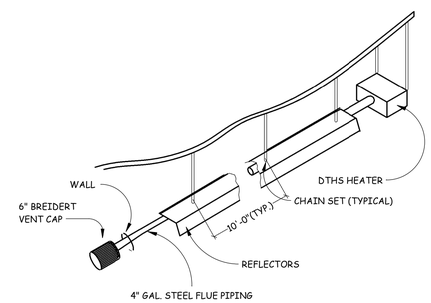


NOTE: OPENING AND FRAME PROVIDED BY THE G.C.

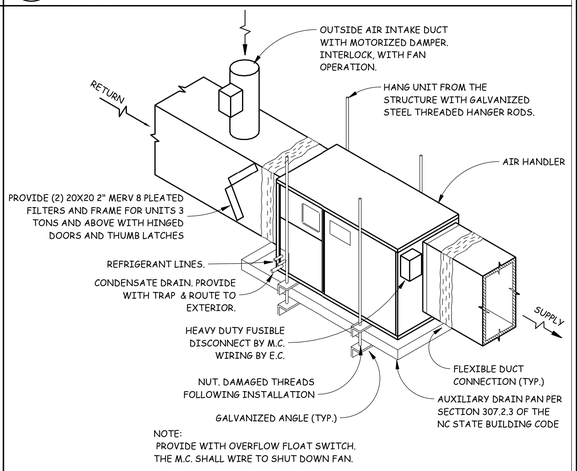
10 M3.1 OUTSIDE AIR INTAKE LOUVER DETAIL
NOT TO SCALE



7 M3.1 RETURN DIFFUSER DETAIL
NOT TO SCALE



4 M3.1 TUBE HEATER DETAIL
NOT TO SCALE



NOTE:
PROVIDE WITH OVERFLOW FLOAT SWITCH. THE M.C. SHALL WIRE TO SHUT DOWN FAN.

1 M3.1 FAN COIL DETAIL
NOT TO SCALE

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NORTH CAROLINA PROFESSIONAL ENGINEER SEAL ATLANTEC ENGINEERS PA No. C-961

5/15/23
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 051195 PATRICK J. MCGEE
Patrick J. McGee

GENERAL NOTE: Prior to construction start, Contractor shall verify & be responsible for all Dimensions.

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#	Description	Date

Date	Project No.
5/15/2023	22027
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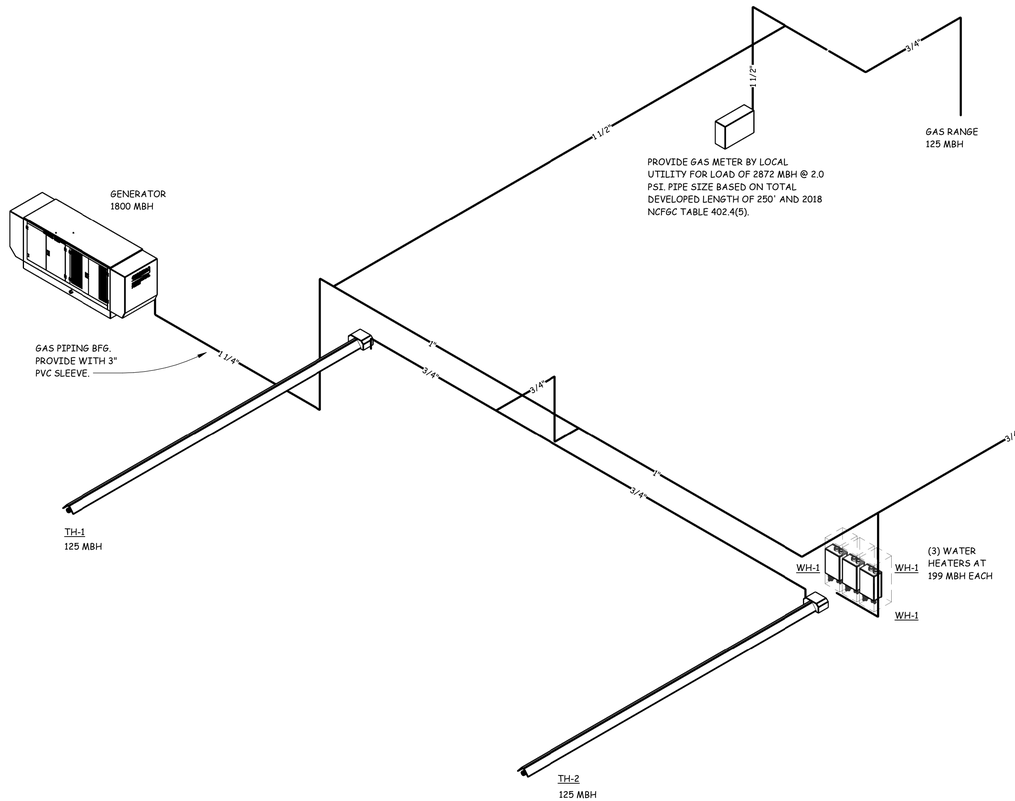
Sheet Title: MECHANICAL DETAILS



1 M3.2 GAS RISER

NOT TO SCALE

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Date	Project No.
5/15/2023	22027
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Sheet Title: GAS RISER

DIAGRAM SYMBOL LEGEND	
DISPLAY	DESCRIPTION
///	POWER WIRE
	CONTROL WIRE
	REF. PIPE

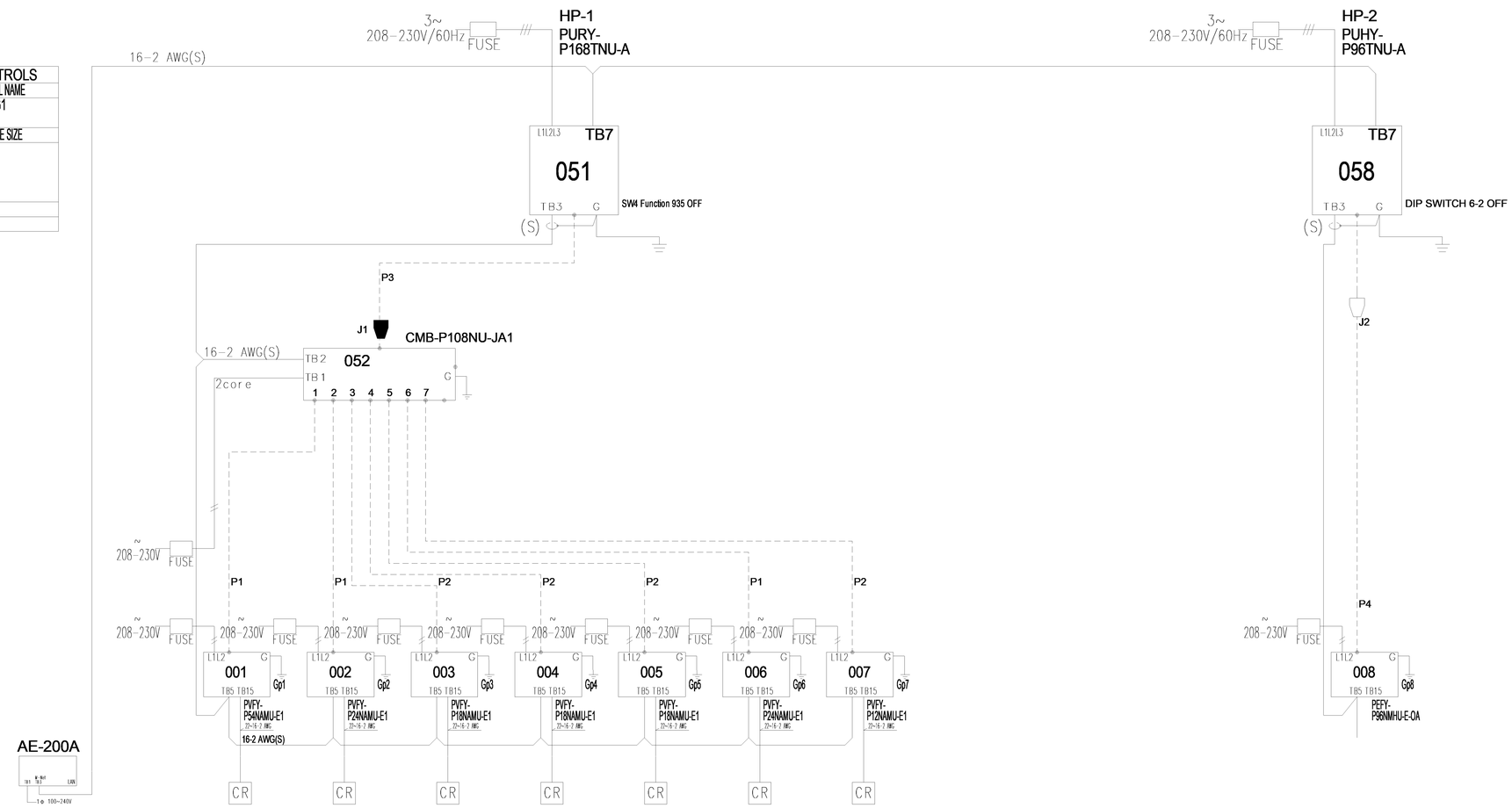
CONT.No		PAGE	

CITY MULTI
SYSTEM SCHEMATIC DWG.

This drawing is schematic in nature. Final routing of piping & wiring shall be determined by the installing contractor and/or designer of record

Additional refrigerant charge is needed depending on the size and length of extended piping. Please refer the amount of pre-charge and the formula of calculation which is mentioned on the data book.
1.25mm²(16 AWG) : 1.25mm²(16 AWG) or more.
0.75mm²(20 AWG) : between 0.5mm²(24 AWG) and 0.75mm²(20 AWG).

PIPING AND CONTROLS	
SYMBOL	BRANCH PIPE MODEL NAME
J1	CMY-R302S-G1
J2	Reducer
SYMBOL	LIQUID PIPE/GAS PIPE SIZE
P1	3/8 / 5/8
P2	1/4 / 1/2
P3	7/8 / 1-1/8
P4	3/8 / 7/8
SYMBOL	MODEL NUMBER
CR	PAC-YT53CRAU-J



TRAINING	OFFICES	DECON	INTERIOR	BEDS	DAYROOM	MULTIPURPOSE

OUTSIDE AIR

REMARKS
Comments:

Diamond System Builder
sw: 4.4.3.44
db: 4.4.3.16
3/3/2023
8:13 AM

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Date	Project No.
5/15/2023	22027
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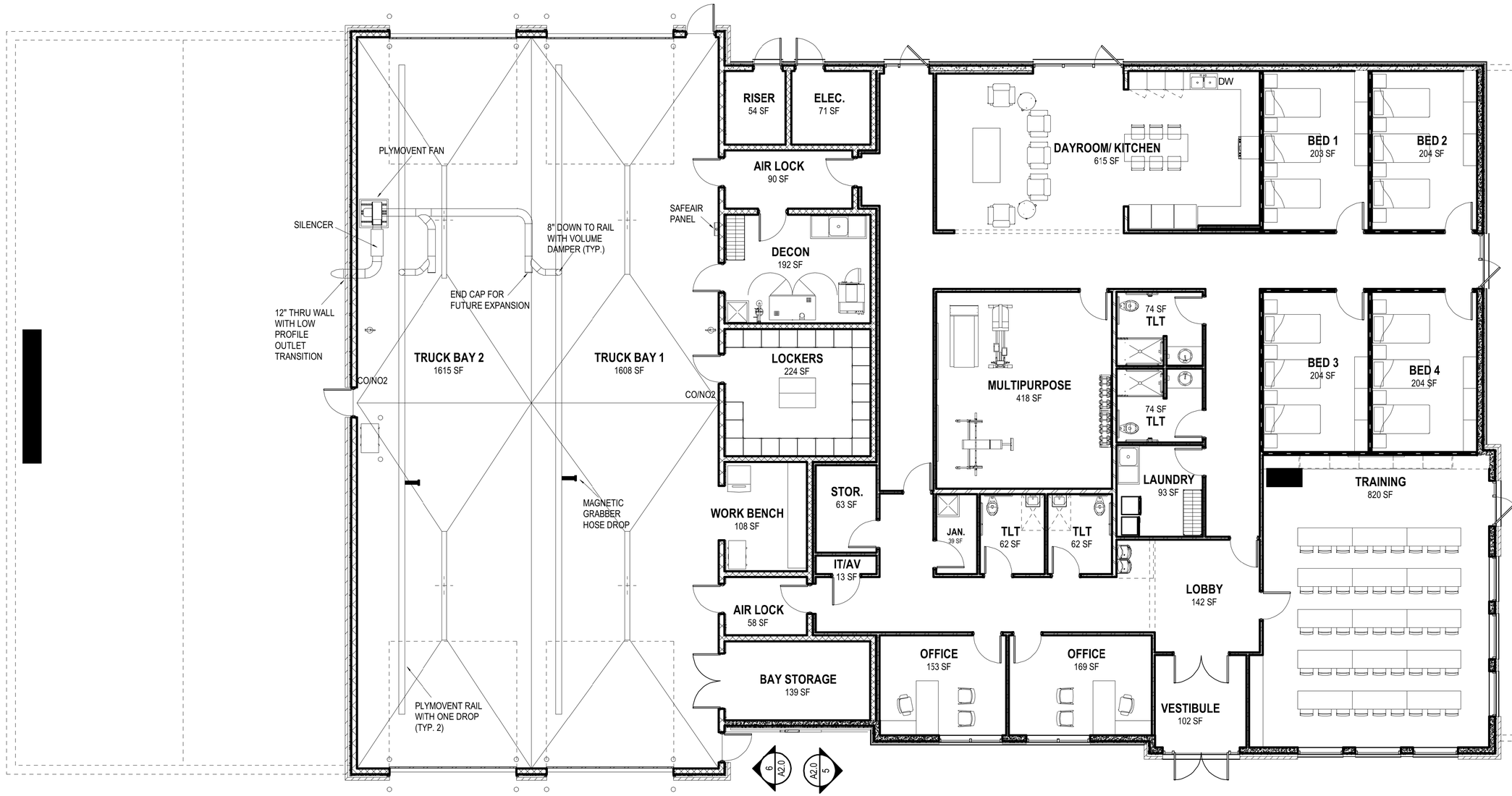
Sheet Title
VRF INFORMATION



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ATLANTEC ENGINEERS PA No. C-961

5/15/23
NORTH CAROLINA PROFESSIONAL SEAL 051195 ENGINEER PATRICK J. MCGUIRE

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#	Description	Date

Date	Project No.
5/15/2023	22027
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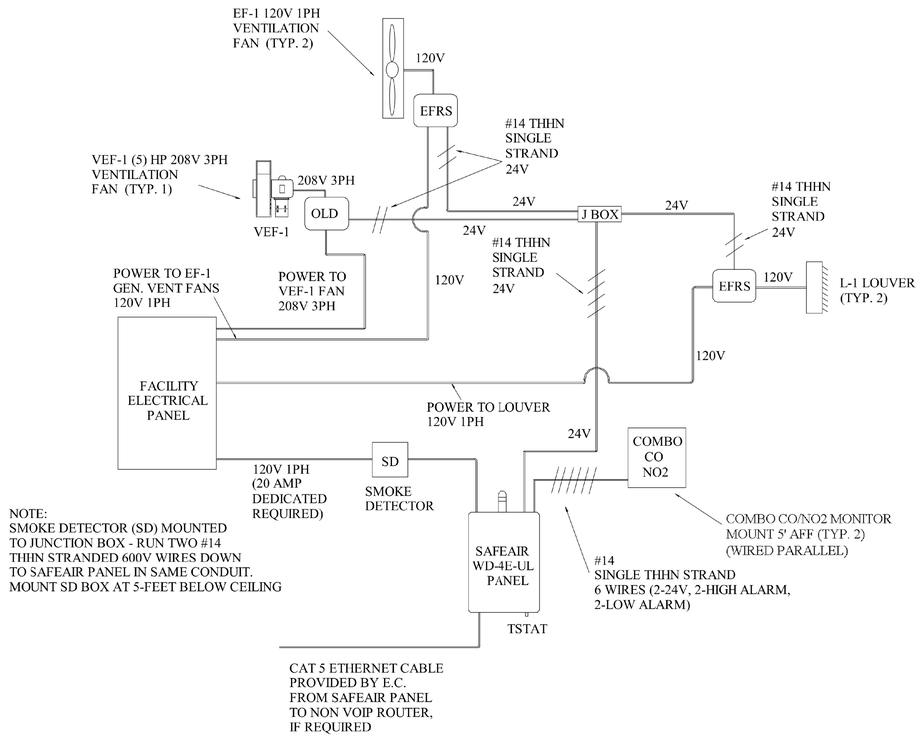
Checked By: PJM	

Sheet Title
SAFE AIR INFORMATION



NOTES:

EQUIPMENT PROVIDED BY MC:

(1) WD-4E-UL SAFEAIR CONTROL PANEL 120V -1PH (20 AMP)
(4) EFRS FOR VENTILATION FAN AND LOUVER
(1) OLD RELAY FOR PLYMOVENT FAN VEF-1
(2) CO/NO2 COMBO TOXIC GAS MONITOR UNITS
(1) SMOKE DETECTOR (SD)
*FINAL TERNMINATION OF WIRES INSIDE SAFEAIR PANEL
*SAFEAIR CO/NO2 TESTING AND COMMISSIOING

EQUIPMENT INSTALLED AND PROVIDED BY ELECTRICAL CONTRACTOR:

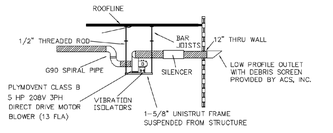
*MOUNTING OF OLD RELAYS, EFRS, SD, WD-4E-UL SAFEAIR PANEL, CO/NO2 COMBO UNITS
*ALL WIRE AND CONDUIT FOR CONTROL WIRE FROM THE SAFEAIR PANEL TO THE FOLLOWING: TO OLDS, TO EFRS, TO SD, TO CO/NO2 COMBO UNITS
*ALL 208V 1PH AND 120V, 1PH POWER TO RESPECTIVE SYSTEMS; TO INCLUDE CONDUIT AND WIRE
*WIRING OF SAFEAIR PANEL, OLD RELAYS, EFRS, SD, AND E3 POINT CO AND NO2 SENSORS
*FINAL TERNMINATION OF OLDS, SD, AND CO/NO2 COMBO UNITS
*FURNISHING AND INSTALLING CAT 5 WIRE FOR SAFEAIR NON-VOIP ROUTER CONNECTION FOR EMAIL DIALER, IF REQUIRED
*FURNISHING AND INSTALLING WIRE FOR FACP INTEGRATION

VEHICLE EXHAUST VENTILATION SCHEDULE

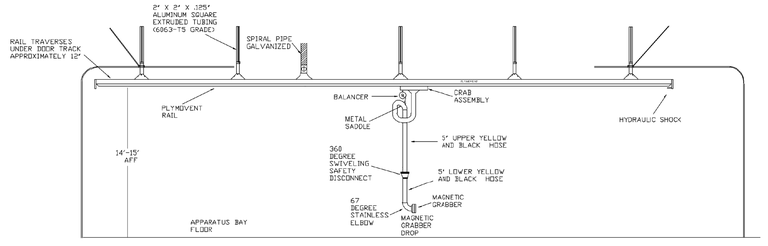
MARK	TYPE	HP	V	PHASE	AMPERAGE	MODEL NUMBER	NOTES
WD-4E-UL	SAFEAIR		120V	SINGLE	20 FLA	WD-4E-UL	1-9
VEF-1	PLYMOVENT	5	208V	THREE	13.1 FLA	TEV-559	10

(1) VEHICLE EXHAUST VENTILATION SYSTEM BASED ON SAFEIR AND PLYMOVENT- CONTACT ACS, INC. 919.255.9344
(2) REFER TO SAFEAIR ELECTRICAL FLOW DIAGRAM AND NOTES FOR SYSTEM WIRING
(3) THE PURPOSE OF THE CENTRAL VENTILATION CONTROLLER IS TO CONTROL UP TO THREE DIFFERENT SETS OF BLOWERS, GENERAL VENTILATION FANS, AND FILTER ASSEMBLIES FOR THE PURPOSE OF MAINTAINING THE HIGHEST AIR QUALITY IN MANUFACTURING FACILITIES, WAREHOUSES, AND GARAGES.
(4) THE CONTROL UNIT CONSISTS OF A KEY-LOCKABLE NEMAX FIBERGLASS CONTROL ENCLOSURE WHICH HOUSES A 24VAC CONTROL TRANSFORMER, MICROPROCESSOR BASED CIRCUIT BOARD, RADIO RECEIVER, A BACKUP BATTERY AND MISCELLANEOUS FUSES, TERMINALS, ETC. LOCATED ON THE OUTSIDE OF THE ENCLOSURE SHALL BE A SELF-ADHESIVE MEMBRANE KEYPAD/INDICATOR OVERLAY WITH ALL INDICATORS AND BUTTONS, A STACK LIGHT/ALARM WITH YELLOW AND RED INDICATORS AND A 94DB ALARM HORN. THE CONTROL BOX WILL MAINTAIN UL508A APPROVAL AND SHALL HAVE A UL/ETL SEAL.
(5) THE VEHICLE EXHAUST VENTILATION SYSTEM IS DESIGNED TO AUTOMATICALLY ENERGIZE EXHAUST FANS AND LOUVERS UPON THE ACTIVATION OF THE TOXIC GAS MONITORS AND SHALL REMAIN ACTIVATED UNTIL THE TOXIC GAS LEVEL FALLS BELOW THE TOXIC GAS PPM PROGRAMMED. THE CO ACTIVATION THRESHOLD SHALL BE PROGRAMMED TO 25 PPM.
(6) ACS, INC SHALL SUPPLY CO AND NO2 SENSORS PER CONSTRUCTION DOCUMENTS. QUANTITIES ARE LOCATED ON DRAWINGS AND ON SAFEAIR FLOW DIAGRAM
(7) ACS, INC SHALL SUPPLY PLYMOVENT FAN OLD SWITCHES. QUANTITIES ARE LOCATED ON SAFEAIR FLOW DIAGRAM
(8) ACS, INC SHALL SUPPLY EF-1 AND LOUVER (L-1) EXHAUST FAN EFRS SWITCHES (EFRS). QUANTITIES ARE LOCATED ON SAFEAIR FLOW DIAGRAM
(9) SYSTEM SHALL INCLUDE ALL CO/NO2 BOTTLE TESTING AND CALIBRATION
(10) THE VEHICLE EXHAUST VENTILATION SYSTEM IS DESIGNED TO AUTOMATICALLY ENERGIZE PLYMOVENT EXHAUST FAN VIA A PRESSURE TRANSMITTER LOCATED ON EACH DROP

SAFEAIR CONTROL PANEL ELECTRICAL FLOW DIAGRAM (VEF-1)



PLYMOVENT FAN DETAIL



TYPICAL PLYMOVENT RAIL DETAIL WITH ONE DROP

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FIRE STATION NO. 2
1200 EAST WASHINGTON ST.
NASHVILLE, NC 27856

NORTH CAROLINA PROFESSIONAL ENGINEER CORPORATION
ATLANTEC ENGINEERS PA No. C-961

5/15/23
NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 051195 PATRICK J. MCGEE

GENERAL NOTE: Prior to construction start, Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By: PJM	Sheet No.: M5.2
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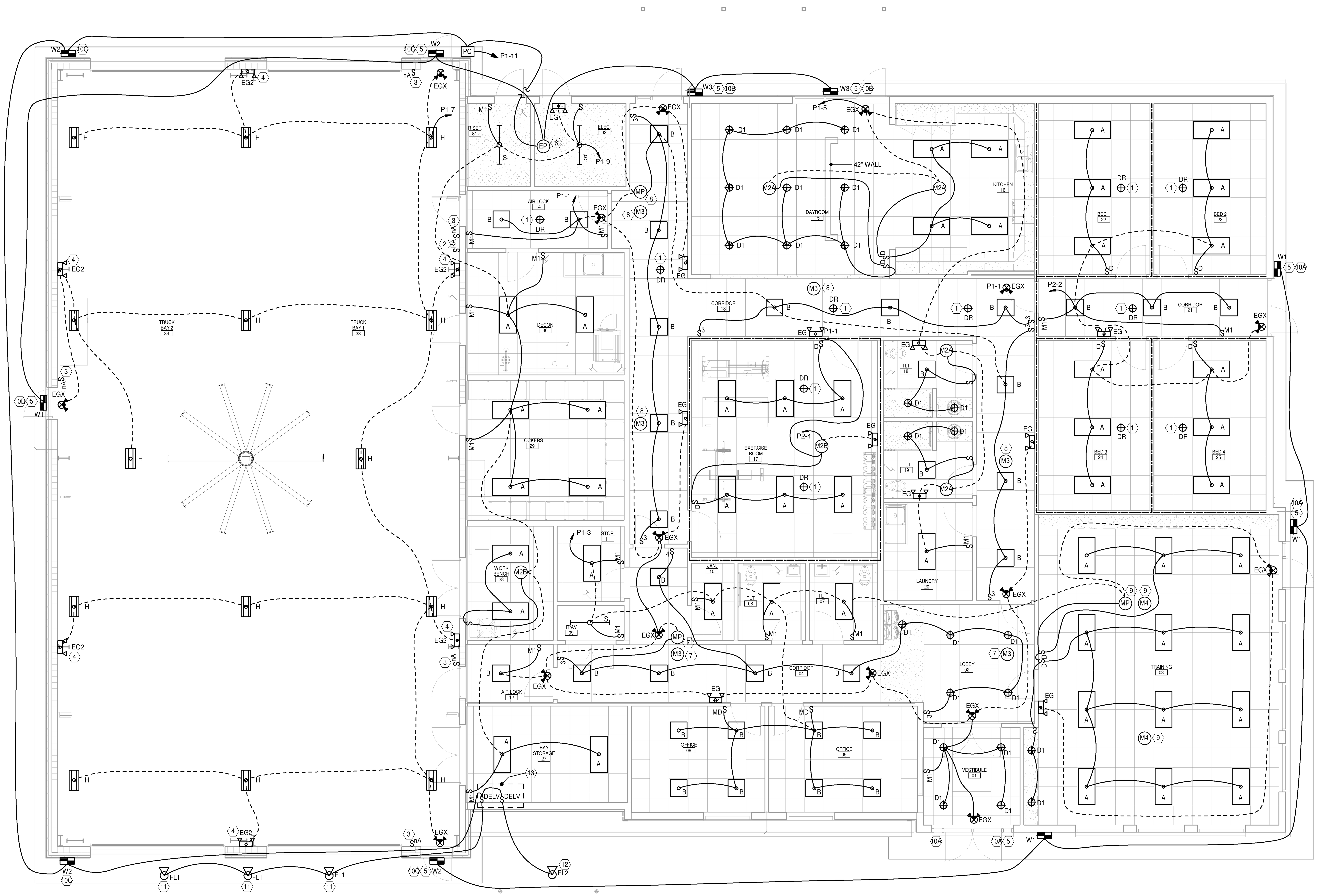
Sheet Title
SAFE AIR INFORMATION



1 LIGHTING PLAN
E1.1
3/16" = 1'-0"

KEY NOTES:

1. RADIO ACTIVATED RED LIGHT FIXTURE. FURNISHED AND INSTALLED BY OWNER RADIO CONTRACTOR.
2. PUSH BUTTON TO CANCEL THE RADIO ACTIVATED LIGHT. FURNISHED AND INSTALLED BY OWNER RADIO CONTRACTOR.
3. nLIGHT WIRELESS ON/OFF SWITCH FOR ALL TYPE H FIXTURES IN TRUCK BAY 33/34. PROGRAM SWITCH WITH DESIGNATED LIGHT FIXTURES AS REQUIRED.
4. EMERGENCY LIGHT IN TRUCK BAY 33/34. MOUNT BOTTOM ON WALL AT 14' A.F.F.
5. EXTERIOR LIGHT FIXTURE TO BE USED AS EXTERIOR EMERGENCY LIGHT. CONTROLLED BY EMERGENCY BATTERY BACKUP UNIT PER KEY NOTE #6.
6. EMERGENCY BATTERY BACKUP UNIT FOR EXTERIOR EMERGENCY LIGHT.
   - CONNECT EMERGENCY CIRCUIT UNSWITCHED TO CKT# P1-11.
   - CONNECT SWITCHED CIRCUIT VIA PHOTOCELL.
7. MOTION SENSORS AND POWER PACK FOR LOBBY 02 AND CORRIDOR 04.
   - PROVIDE LOW VOLTAGE WIRING TO CONNECT ALL DEVICES TOGETHER PER MANUFACTURER INSTRUCTION.
   - CONNECT POWER PACK AHEAD ALL WALL SWITCHES IN THIS AREA.
8. MOTION SENSORS AND POWER PACK FOR CORRIDOR 13.
   - PROVIDE LOW VOLTAGE WIRING TO CONNECT ALL DEVICES TOGETHER PER MANUFACTURER INSTRUCTION.
   - CONNECT POWER PACK AHEAD ALL WALL SWITCHES IN THIS AREA.
9. MOTION SENSORS AND POWER PACK FOR TRAINING 03.
   - PROVIDE LOW VOLTAGE WIRING TO CONNECT ALL DEVICES TOGETHER PER MANUFACTURER INSTRUCTION.
   - CONNECT POWER PACK AHEAD ALL WALL SWITCHES IN THIS AREA.
10. EXTERIOR WALL MOUNT FIXTURE MOUNTING HEIGHT:
    - 10A MOUNT BOTTOM 7' A.F.F.
    - 10B MOUNT TO SPACE ABOVE WINDOW FRAME AND BOTTOM OF METAL CANOPY PER ARCHITECT INSTRUCTION. APPROX. 10' A.F.F.
    - 10C MOUNT BOTTOM 13' A.F.F.
    - 10D MOUNT BOTTOM 9' A.F.F.
11. MOUNT FIXTURE TO UNDERSIDE OF OVDERHANG. ADJUST FIXTURE TO ILLUMINATE WALL PER ARCHITECT INSTRUCTION. FIELD VERIFY EXACT LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN.
12. MOUNT FIXTURE TO GROUND. ADJUST FIXTURE TO ILLUMINATE WALL PER ARCHITECT INSTRUCTION. FIELD VERIFY EXACT LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN.
13. DIMMING SWITCHES FOR TYPE FL1 AND FL2 FIXTURES.
    CONNECT TO LOAD SIDE OF PHOTOCELL.
    FIELD VERIFY LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN.
    LABEL ' FLOOD LIGHT DIMMING SWITCH'.

NOTES:

1. ALL WIRING IN AREA WITH EXPOSED TO STRUCTURE SHALL BE IN CONDUIT. THESE AREAS ARE:
   A. 33 TRUCK BAY 1
   B. 34 TRUCK BAY 2
2. TYPE A FIXTURE LUMEN SETTING:
   A. 4000 LUMEN: 07, 08, 10, 11, 17, 22, 23, 24, 25, 28, 29
   B. 5000 LUMEN: 03, 16
   C. 6000 LUMEN: 20, 27, 30
3. TYPE B FIXTURE LUMEN SETTING:
   A. 2400 LUMEN: 04, 13, 14, 18, 19, 21
   B. 3300 LUMEN: 12
   C. 4400 LUMEN: 05, 06
4. TYPE D1 FIXTURE LUMEN SETTING:
   A. 1000 LUMEN: 03, 18, 19
   B. 1500 LUMEN: 01, 02
   C. 2000 LUMEN: 15

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NORTH CAROLINA PROFESSIONAL CORPORATION ATLANTEC ENGINEERS PA No. C-961

NORTH CAROLINA PROFESSIONAL SEAL 027479 ENGINEER
5/16/2023

GENERAL NOTE: Prior to construction start, Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

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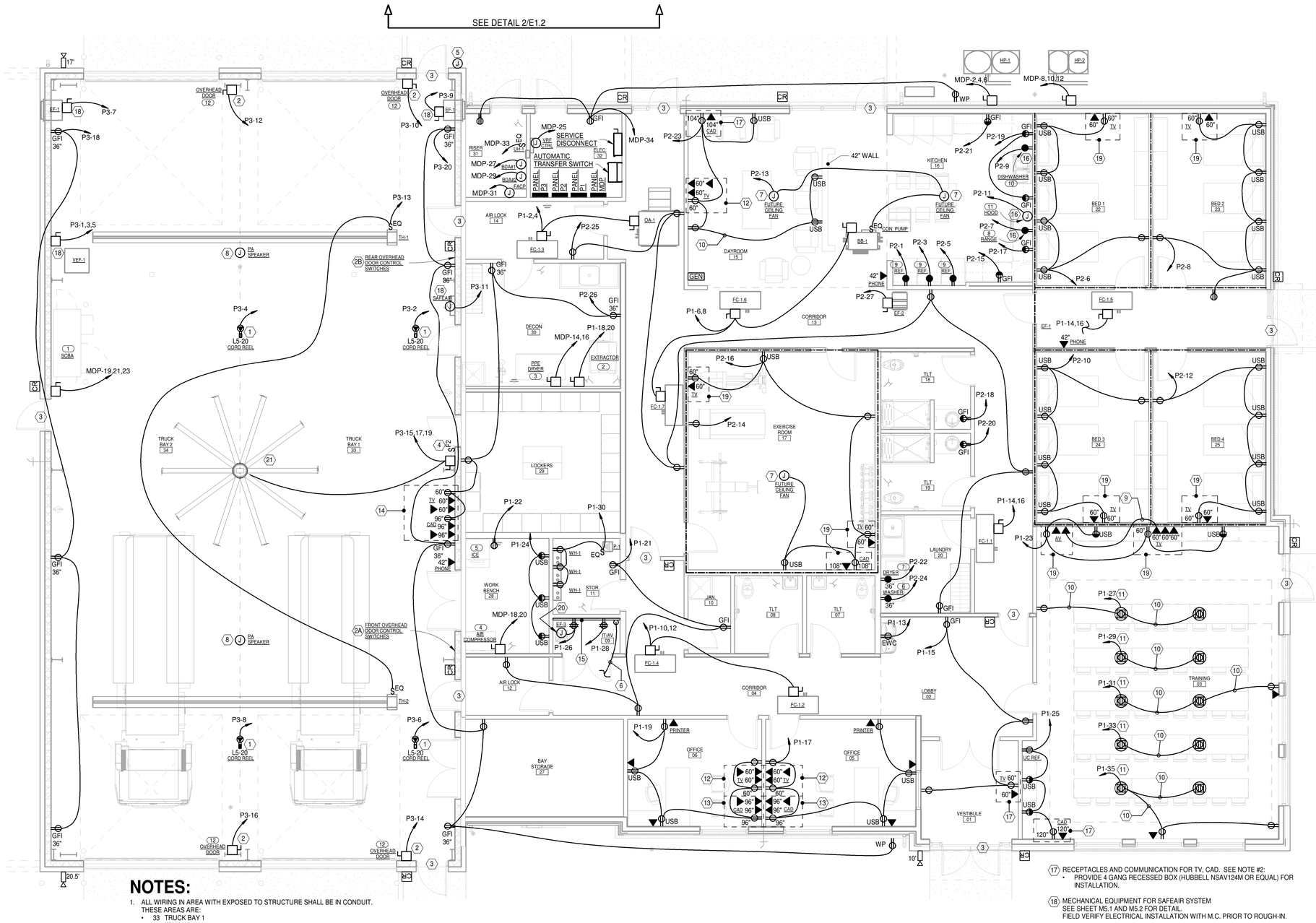
Checked By: SP	

Sheet Title: LIGHTING PLAN



NOTES:

1. ALL WIRING IN AREA WITH EXPOSED TO STRUCTURE SHALL BE IN CONDUIT. THESE AREAS ARE:
   - 33 TRUCK BAY 1
   - 34 TRUCK BAY 2
2. FOR RECEPTACLES AND COMMUNICATION OUTLETS DESIGNATED FOR TV, CAD AND AV, E.C. SHALL FIELD VERIFY EXACT LOCATIONS WITH ARCHITECT PRIOR TO ROUGH-IN.
3. 4 GANG RECESSED BOX (HUBBELL NSAV12M OR EQUAL) SHALL NOT BE INSTALLED IN FIRE RATED WALL.

1 E1.2 POWERPLAN

3/16" = 1'-0"

2 E1.2 POWER PLAN - EXTENSION

3/16" = 1'-0"

KEY NOTES:

(1) RECEPTACLE AND CORD REEL AT ROOF DECK.
   a. PROVIDE 20A 120VAC TWISTED LOCK RECEPTACLE AT ROOF DECK FOR CORD REEL TO PLUG-IN.
   b. PROVIDE CORD REEL ADJACENT TO RECEPTACLE.
      - INPUT: NEMA L5-20P TWIST LOCK PLUG WITH 5 FT. CORD.
      - OUTPUT: 45 FT. #12/3 CABLE WITH 20A RECEPTACLE TO MATCH FIRE TRUCK
      - CORD REEL SHALL BE REELCRAFT L4545 123. FIELD VERIFY WITH THE OWNER PRIOR TO ORDERING.
   c. MOUNT BOTH TO ROOF STRUCTURE. FIELD VERIFY INSTALLATION AND LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN.

(2) DISCONNECTS FOR OVERHEAD DOORS:
   a. DOORS ARE FURNISHED AND INSTALLED BY G.C. WIRED BY E.C. PER MANUFACTURER INSTRUCTION.
   b. EACH DOOR IS WITH 2 CONTROL SWITCHES. SWITCHES SHALL BE LOCATED AS FOLLOWS:
      - FIRST CONTROL SWITCH SHALL BE LOCATED NEAR DOOR.
      - SECOND CONTROL SWITCH SHALL BE LOCATED:

      (2A) FRONT: NEAR DOOR TO AIR LOCK 12.

      (2B) REAR: NEAR DOOR TO AIR LOCK 14.

(3) SECURED DOOR.
PROVIDE 1/2"C FROM DOOR FRAME TO ACCESSIBLE CEILING SPACE PER ARCHITECT INSTRUCTION. PROVIDE WITH PULL WIRE.

(4) PROVIDE LOW VOLTAGE WIRES FROM FAN CONTROL SWITCH TO LARGE CEILING FAN CONTROLLER PER MANUFACTURER INSTRUCTION.

(5) J BOX ON WALL FOR RADIO ANTENNA INSTALLATION:
   - FIELD VERIFY BOX SIZE, LOCATION AND HEIGHT WITH ARCHITECT PRIOR TO ROUGH-IN.
   - PROVIDE 2" EMPTY CONDUIT FROM BOX TO IT /AV 09. PROVIDE WITH PULL WIRES.
   - TOTAL TURN FOR EACH SECTION SHALL NOT EXCEED 180 DEGREE. PROVIDE ACCESIBLE PULL BOX AS REQUIRED.

(6) PROVIDE 2 - 2" EMPTY CONDUIT FROM IT/V 09 TO PROPERTY LINE FOR COMMUNICATION SERVICE.
   - TERMINATE 12" A.F.F. IN IT/AV 09.
   - FIELD VERIFY TERMINATION WITH COMMUNICATION SERVICE PROVIDER AT PROPERTY LINE.

(7) PROVIDE J-BOX FOR FUTURE CEILING FAN. J-BOX SHALL BE LISTED FOR CEILING FAN INSTALLATION.

(8) J-BOX FOR PA SPEAKER IN TRUCK BAY 33/34.
   - FIELD VERIFY LOCATION AND HEIGHT WITH ARCHITECT PRIOR TO ROUGH-IN.
   - PROVIDE 3/4"C TO ACCESSIBLE CEILING SPACE. PROVIDE WITH PULL WIRE.
   - SPEAKER AND WIRING BY OTHERS.

(9) PROVIDE 1"C BETWEEN COMMUNICATION OUTLET.

(10) CONDUIT RUN UNDER SLAB.

(11) CONDUIT HOME RUN UNDER SLAB TO PANEL BOARD.

(12) RECEPTACLES AND COMMUNICATION FOR TV, SEE NOTE #2:
   - PROVIDE 4 GANG RECESSED BOX (HUBBELL NSAV124M OR EQUAL) FOR INSTALLATION AT 60" A.F.F.
   - AT COMM. OUTLET AT 16" A.F.F., PROVIDE 1"C TO COMM. OUTLET AT 60" A.F.F.

(13) RECEPTACLES AND COMMUNICATION FOR CAD MONITOR, SEE NOTE #2:
   - PROVIDE 4 GANG RECESSED BOX (HUBBELL NSAV124M OR EQUAL) FOR INSTALLATION AT 96" A.F.F.
   - AT COMM. OUTLET AT 16" A.F.F., PROVIDE 1"C TO COMM. OUTLET AT 96" A.F.F.

(14) RECEPTACLES AND COMMUNICATION FOR STACKED TV/CAD MONITORS. SEE NOTE #2:
   - AT TV COMM. OUTLET AT 16" A.F.F., PROVIDE 1"C TO COMM. OUTLET AT 60" A.F.F.
   - AT CAD COMM. OUTLET AT 16" A.F.F., PROVIDE 1"C TO COMM. OUTLET AT 96" A.F.F.

(15) COMMUNICATION BOARDS:
   - PROVIDE 3/4"THICK FIREPROOF PLYBOARD ON THIS WALL FROM FLOOR TO 8 FT. A.F.F.
   - PROVIDE GROUND BAR AND 1-#6G CU IN 1/2"C TO MAIN GROUNDING.

(16) RECEPTACLE OR POWER CONNECTION FOR EQUIPMENT IN CASE WORK. FIELD VERIFY LOCATION AND HEIGHT WITH ARCHITECT PRIOR TO ROUGH-IN.

(17) RECEPTACLES AND COMMUNICATION FOR TV, CAD. SEE NOTE #2:
   - PROVIDE 4 GANG RECESSED BOX (HUBBELL NSAV124M OR EQUAL) FOR INSTALLATION.

(18) MECHANICAL EQUIPMENT FOR SAFEAIR SYSTEM
SEE SHEET M5.1 AND M5.2 FOR DETAIL.
FIELD VERIFY ELECTRICAL INSTALLATION WITH M.C. PRIOR TO ROUGH-IN.

(19) SEE NOTE #2 AND #3.

(20) CONNECTION FOR EXHAUST FAN.PROVIDE WITH DISCONNECT SWITCH. WIRE TO THERMOSTAT PER M.C. INSTRUCTION.

(21) HANG BOTTOM OF FAN 16 FT. A.F.F.

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BID SET

TOWN OF NASHVILLE FIRE STATION NO. 2

1200 EAST WASHINGTON ST.
NASHVILLE, NC 27856

NORTH CAROLINA PROFESSIONAL ENGINEER SEAL 027479 STEPHEN PRATT

5/16/2023

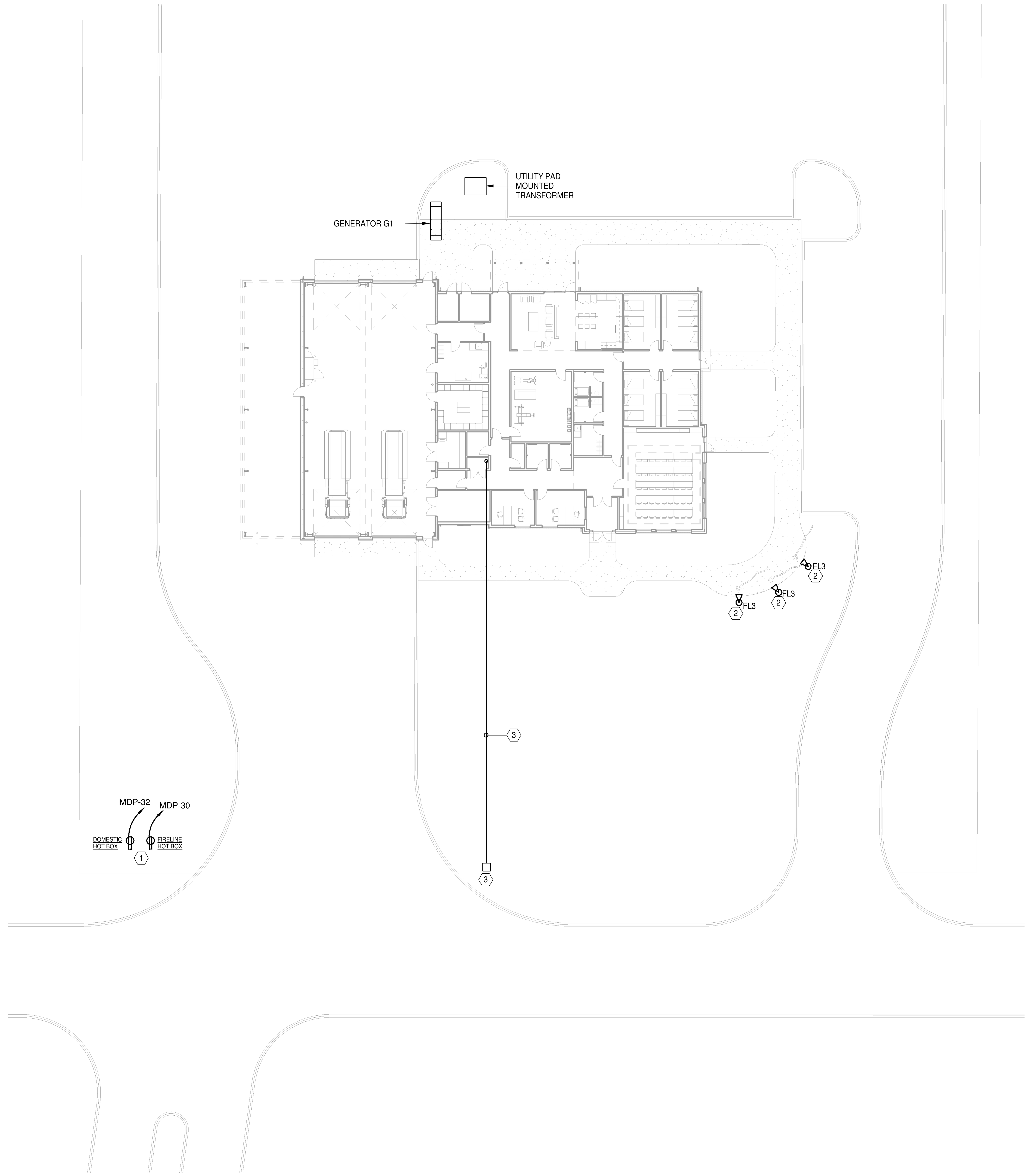
GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By: SP	Sheet No.: E1.2
Checked By: SP	

Sheet Title: POWER PLAN



KEY NOTES:

1. HOT BOXES:
   - RECEPTACLES TO BE INSTALLED INSIDE HOT BOX.
   - SEE SITE PLAN FOR LOCATION.
   - FIELD VERIFY INSTALLATION WITH CIVIL CONTRACTOR PRIOR TO ROUGH-IN.

2. GROUND FLOOD LIGHT:
   - CONNECT TO CKT#P1-11 VIA PHOTOCELL.
   - MOUNT FIXTURE TO GROUND. ADJUST FIXTURE TO ILLUMINATE FLAG POLE PER ARCHITECT INSTRUCTION.
   - FIELD VERIFY EXACT LOCATION WITH ARCHITECT PRIOR TO ROUGH-IN.

3. 2-2" EMPTY CONDUITS FOR COMMUNICATION SERVICE.
   - CONDUITS RUN UNDERGROUND FROM IT/AV 09 TO PROPERTY LINE.
   - FIELD VERIFY LOCATION AT PROPERTY LINE WITH COMMUNICATION SERVICE COMPANY.
   - SEE KEY NOTE #6 IN 1/E1.2.
   - TERMINATE AT PROPERTY LINE WITH IN-GROUND BOX.

1 / E1.3 ELECTRICAL SITE PLAN
1" = 20'-0"

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NORTH CAROLINA PROFESSIONAL SEAL 027479 ENGINEER
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#	Description	Date

Date	Project No.
5/15/2023	22027
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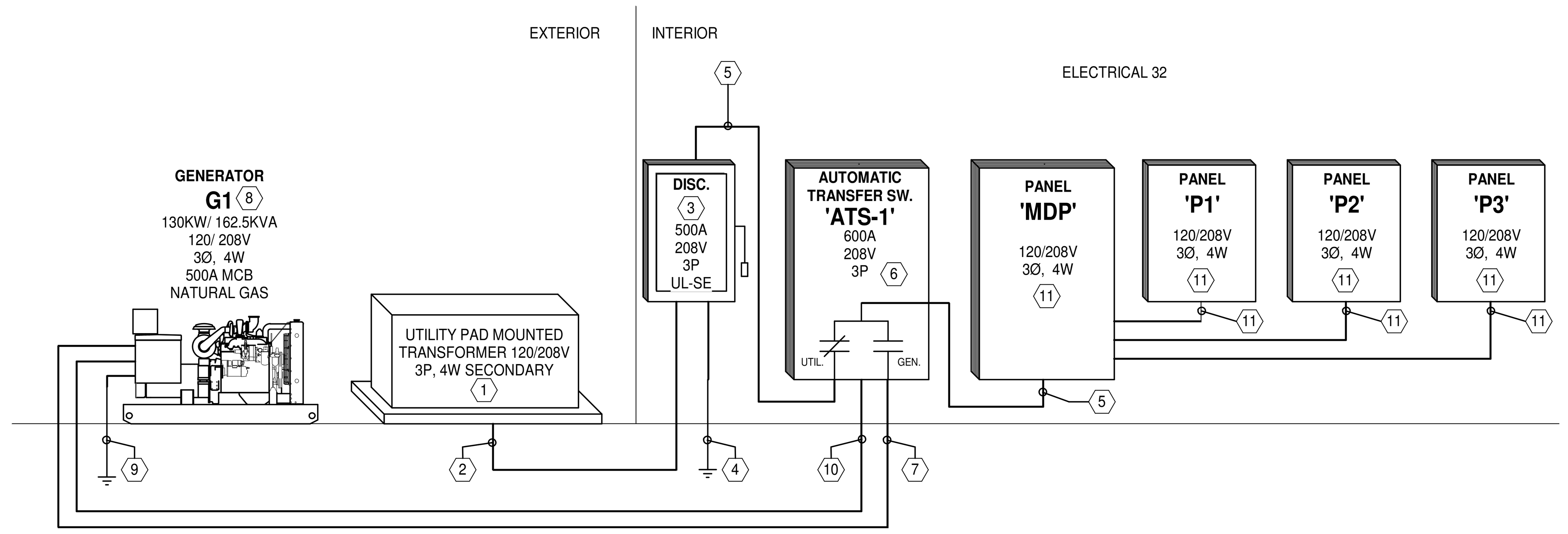
Checked By: SP	E1.3

Sheet Title
ELECTRICAL SITE PLAN



KEY NOTES:

1. UTILITY PAD MOUNTED TRANSFORMER WITH C.T. AND METER. PAD BY E.C. PER UTILITY SPEC. FIELD VERIFY EXACTLOCATION WITH UTILITY, CIVIL ENGINEER AND ARCHITECT.
2. UNDERGROUND SERVICE FEEDER BY E.C. 2 SETS OF 4-#250 KCMIL IN 3"C. FIELD VERIFY ROUTING WITH ARCHITECT PRIOR TO ROUGH-IN.
3. BUILDING SERVICE DISCONNECT.
   - 600A, 240VAC, 3P NEMA 1 FUSIBLE DISCONNECT.
   - PROVIDE 500A FUSES, MIN. AIC RATING OF 32KA. FUSE SHALL BE PEAK LET-THRU TYPE. PEAK LET-THRU CURRENT SHALL NOT EXCEED 22KA WHERE THE AVAILABLE LINE SIDE FAULT CURRENT IS 32KA.
   - UL LISTED FOR USE AS SERVICE EQUIPMENT.
   - PROVIDE PLAQUE 'SERVICE DISCONNECT'.
4. GROUNDING ELECTRODE CONDUCTORS PER NEC 250.
   - 1-#1/0G CU IN 3/4"C TO BUILDING STEEL, C.W. MAIN, GAS PIPE AND SPRINKLER MAIN.
   - 1-#4G CU IN 1/2"C TO REINFORCE STEEL AT CONCRETE FOOTING.
   - 1-#6G CU IN 1/2"C TO 2 DRIVEN RODS.
5. 2 SETS OF 4-#250 KCMIL, 1-#2G IN 3"C
6. AUTOMATIC TRANSFER SWITCH.
   - 600A, 3P, 208V, MIN. AIC RATING OF 22KA.
   - NEMA 1 ENCLOSURE.
   - SEISMIC RATED. ATTACH SECURELY TO WALL AND FLOOR.
7. GENERATOR FEEDER. 2 SETS OF 4-#250 KCMIL, 1-#2G IN 3"C
8. OPTIONAL STANDBY NATURAL GAS GENERATOR
   - 130KW/162.5KVA, 120/208V 3ϕ, 4W
   - 500A MAIN BREAKER (100% DUTY RATING)
   - NEMA 3R LEVEL 1 SOUND ATTENUATED ENCLOSURE
   - PROVIDE A 6" HIGH CONCRETE PAD OF SUFFICIENT SIZE AND STRUCTURE TO SUPPORT GENERATOR AND ENCLOSURE. PAD SHALL BE EXTEND A MIN. 6" FROM THE BASE OF THE GENERATOR.
   - PROVIDE EMERGENCY SHUTDOWN SWITCH AT THE EXTERIOR OF ENCLOSURE. LABEL 'GENERATOR EMERGENCY SHUTDOWN'.
   - PROVIDE WITH REMOTE ANNUNICATOR LOCATED INSIDE BUILDING. FIELD VERIFY WITH ARCHITECT PRIOR TO ROUGH-IN.
   - DO NOT BOND NEUTRAL TO GROUND BAR.
   - BOLT GENERATOR TO PAD.
9. GROUNDING ELECTRODE CONDUCTORS PER NEC 250.
   - 1-#1/0G CU BOND FROM GROUND BAR TO GENERATOR CHASSIS AND GAS PIPE.
   - 1-#4G CU IN 1/2"C TO REINFORCE STEEL AT CONCRETE FOOTING.
   - 1-#6G CU IN 1/2"C TO 2 DRIVEN RODS.
10. GENERATOR CONTROL AND ANNUNCIATOR WIRING IN CONDUIT BETWEEN GENERATOR AND ATS.
11. SEE PANEL SCHEDULE FOR DETAIL.

NOTES:

1. FAULT CURRENTS:
   A. E.C. SHALL OBTAIN AVAILABLE FAULT CURRENT AT TRANSFORMER FROM UTILITY AND PROVIDE INFORMATION TO ENGINEER TO CALCULATE AVAILABLE FAULT CURRENTS FOR ALL SERVICE DISCONNECTS AND PANEL BOARDS.
   B. E.C. SHALL PROVIDE LABEL INDICATING FAULT CURRENTS ON ALL SERVICE DISCONNECTS AND PANEL BOARDS PER ENGINEER INSTRUCTION.

1/E2.1 POWER RISER DIAGRAM
NOT TO SCALE

PANEL P1 — 120/208V, 3Ø, 4W

CKT	CIRCUIT DESCRIPTION	TRIP	POLE	A	A	B	B	C	C	POLE	TRIP	CIRCUIT DESCRIPTION	CKT
1	LIGHTS 01, 02, 04, 12-14	20	1	1.2	0.3					2	15	OA-1, FC-1.3	2
3	LIGHTS 03, 05 - 11	20	1			1.5	0.3						4
5	LIGHTS 15, 16, 18 - 20	20	1					0.7	0.7	2	15	BB-1, FC-1.6, 1.7	6
7	LIGHTS 33, 34	20	1	1.4	0.7								8
9	LIGHTS 27 - 32	20	1			0.7	0.6			2	15	FC-1.2, 1.4	10
11	LIGHTS - EXTERIOR	20	1					0.4	0.6				12
13	EWC 02	20	1	0.5	0.9					2	15	FC-1.1, 1.5	14
15	REC 01, 02	20	1			0.7	0.9						16
17	REC 05	20	1					1.1	1.0	2	15	EXTRACTOR 30	18
19	REC 06	20	1	1.1	1.0								20
21	REC 04, 10 - 12	20	1			0.7	1.1			1	20	ICE MACHINE 28	22
23	REC 03	20	1					0.7	0.5	1	20	REC 28	24
25	REC 03	20	1	0.7	0.5					1	20	REC 09	26
27	REC 03	20	1			0.9	0.4			1	20	REC 09	28
29	REC 03	20	1					0.7	0.4	1	20	P-1, (3) WH-1 11	30
31	REC 03	20	1	0.9	--					1	--	SPACE	32
33	REC 03	20	1			0.7	--			1	--	SPACE	34
35	REC 03	20	1					1.1	--	1	--	SPACE	36
37	SPACE	--	1	--	--					1	--	SPACE	38
39	SPACE	--	1			--	--			1	--	SPACE	40
41	SPACE	--	1					--	--	1	--	SPACE	42
			TOTAL LOAD:	9.0 kVA		8.4 kVA		7.9 kVA					
			TOTAL AMPS:	75 A		70 A		66 A					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	DEMAND
MOTOR/COOLING	5171 VA	105.63%	5462 VA
EQUIPMENT	4036 VA	70.00%	2825 VA
LIGHTING	5889 VA	125.00%	7362 VA
RECEPTACLE	10620 VA	97.08%	10310 VA

TOTAL LOAD	
CONNECTED LOAD:	25 kVA
DEMAND LOAD:	25 kVA
DEMAND	70 A

PANEL INFORMATION			
LOCATION:	Space 110	BUS SIZE:	100 A
SUPPLY FROM:	MDP	MAIN TYPE:	Main Lug Only
MOUNTING:	Surface	AIC RATING:	22kA
ENCLOSURE	1		
FEED-THRU:			
ISOLATED GND:			

NOTES:
1. SQUARE D NQ

PANEL P2 — 120/208V, 3Ø, 4W

CKT	CIRCUIT DESCRIPTION	TRIP	POLE	A	A	B	B	C	C	POLE	TRIP	CIRCUIT DESCRIPTION	CKT
1	REFRIGERATOR 16	20	1	1.0	0.9					1	20	LIGHTS - DORMS	2
3	REFRIGERATOR 16	20	1			1.0	0.4			1	20	LIGHTS - 17 (FUTURE DORM)	4
5	REFRIGERATOR 16	20	1					1.0	1.1	1	20	REC 22	6
7	RANGE 16	20	1	0.6	1.1					1	20	REC 23	8
9	DISHWASHER 16	20	1			1.4	1.1			1	20	REC 24	10
11	HOOD 16	15	1					0.2	1.1	1	20	REC 25	12
13	CEILING FANS, COND. PUMP 15, 16	20	1	0.4	0.2					1	20	REC 17	14
15	REC 16	20	1			0.2	1.1			1	20	REC 17	16
17	REC 16	20	1					0.2	0.2	1	20	REC 18	18
19	REC 16	20	1	0.4	0.2					1	20	REC 19	20
21	REC 16	20	1			0.2	1.0			1	20	DRYER 20	22
23	REC 15	20	1					1.1	1.4	1	20	WASHER 20	24
25	REC 13, 14, 20	20	1	1.1	0.9					1	20	REC 29, 30, 33	26
27	EF-2	15	1			0.7	--			1	--	SPACE	28
29	SPACE	--	1					--	--	1	--	SPACE	30
31	SPACE	--	1	--	--					1	--	SPACE	32
33	SPACE	--	1			--	--			1	--	SPACE	34
35	SPACE	--	1					--	--	1	--	SPACE	36
37	SPACE	--	1	--	--					1	--	SPACE	38
39	SPACE	--	1			--	--			1	--	SPACE	40
41	SPACE	--	1					--	--	1	--	SPACE	42
			TOTAL LOAD:	6.6 kVA		7.0 kVA		6.3 kVA					
			TOTAL AMPS:	55 A		58 A		53 A					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	DEMAND
EQUIPMENT	2760 VA	70.00%	1932 VA
LIGHTING	1251 VA	125.00%	1564 VA
RECEPTACLE	12960 VA	88.58%	11480 VA
CONTINUOUS LOAD	696 VA	125.00%	870 VA
KITCHEN EQUIP.	2280 VA	70.00%	1596 VA

TOTAL LOAD	
CONNECTED LOAD:	20 kVA
DEMAND LOAD:	17 kVA
DEMAND	48 A

PANEL INFORMATION			
LOCATION:	Space 110	BUS SIZE:	100 A
SUPPLY FROM:	MDP	MAIN TYPE:	Main Lug Only
MOUNTING:	Surface	AIC RATING:	22kA
ENCLOSURE	1		
FEED-THRU:			
ISOLATED GND:			

NOTES:
1. SQUARE D NQ

PANEL MDP — 120/208V, 3Ø, 4W

CKT	CIRCUIT DESCRIPTION	TRIP	POLE	A	A	B	B	C	C	POLE	TRIP	CIRCUIT DESCRIPTION	CKT
1				9.0	7.3								2
3	PANEL P1 4W+G	100	3			8.4	7.3			3	100	HP-1	4
5								7.9	7.3				6
7				6.6	4.0								8
9	PANEL P2 4W+G	100	3			7.0	4.0			3	50	HP-2	10
11								6.3	4.0				12
13				8.6	2.9					2	35	PPE DRYER 30	14
15	PANEL P3 4W+G	100	3			7.3	2.9						16
17								5.3	3.2	2	60	AIR COMPRESSOR 28	18
19				3.7	3.2								20
21	SCBA 34	60	3			3.7	0.2			1	20	REC GENERATOR	22
23								3.7	1.2	1	20	BATTERY CHARGER GENERATOR	24
25	VRF CTRL 32	20	1	0.6	0.7					2	15	JACKET HEATER GENERATOR	26
27	BDA #1 31	20	1			0.6	0.7						28
29	BDA #2 31	20	1					0.6	1.2	1	20	HOT BOX	30
31	FACP 31	20	1	0.4	1.2					1	20	HOT BOX	32
33	UH-1 31	20	1			0.0	0.5			1	20	REC 31, 32, EXTERIOR	34
35	SPACE	--	1					--	--	1	--	SPACE	36
37				0.0	--					1	--	SPACE	38
39	SURGE PROTECTION	60	3			0.0	--			1	--	SPACE	40
41								0.0	--	1	--	SPACE	42
			TOTAL LOAD:	48.0 kVA		42.5 kVA		40.7 kVA					
			TOTAL AMPS:	403 A		357 A		339 A					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	DEMAND
MOTOR/COOLING	68835 VA	108.36%	74589 VA
EQUIPMENT	25176 VA	70.00%	17623 VA
HEATING	1200 VA	100.00%	1200 VA
LIGHTING	7140 VA	125.00%	8926 VA
RECEPTACLE	26640 VA	68.77%	18320 VA
CONTINUOUS LOAD	696 VA	125.00%	870 VA
KITCHEN EQUIP.	2280 VA	70.00%	1596 VA

TOTAL LOAD	
CONNECTED LOAD:	131 kVA
DEMAND LOAD:	122 kVA
DEMAND	339 A

PANEL INFORMATION			
LOCATION:	Space 110	BUS SIZE:	600 A
SUPPLY FROM:		MAIN TYPE:	Main Lug Only
MOUNTING:	Surface	AIC RATING:	22kA
ENCLOSURE	1		
FEED-THRU:			
ISOLATED GND:			

NOTES:
1. SQUARE D NQ, NF OR I-LINE

KEY NOTES:

1. PROVIDE INTERNAL SURGE PROTECTION MODULE L-L, L-N, L-G, N-G PROTECTION WITH MIN. 240KA WITH SURGE COUNTER. 60A/3P BREAKER IS NOT REQUIRED IF BREAKER IS FURNISHED WITH THE MODULE.
2. PROVIDE WITH CIRCUIT BREAKER LOCK.
3. PROVIDE GFCI BREAKER. DO NOT SHARE NEUTRAL.
4. PROVIDE AFCI BREAKER. DO NOT SHARE NEUTRAL.
5. PROVIDE 2-#8, 1-#8G IN 1"C. PROVIDE CIRCUIT BREAKER LOCK.

PANEL P3 — 120/208V, 3Ø, 4W

CKT	CIRCUIT DESCRIPTION	TRIP	POLE	A	A	B	B	C	C	POLE	TRIP	CIRCUIT DESCRIPTION	CKT
1				2.0	0.2					1	20	CORD REEL 33 REAR	2
3	PLYMOVENT FAN 34	30	3			2.0	0.2			1	20	CORD REEL 34 REAR	4
5								2.0	0.2	1	20	CORD REEL 33 FRONT	6
7	EF-1 34	20	1	1.9	0.2					1	20	CORD REEL 34 FRONT	8
9	EF-1 33	20	1			1.9	1.2			1	20	OVERHEAD DOOR-REAR 33	10
11	SAFEAIR 33	20	1					0.6	1.2	1	20	OVERHEAD DOOR-REAR 34	12
13	TH-1, TH-2 33/34	15	1	1.2	1.2					1	20	OVERHEAD DOOR-FRONT 33	14
15						0.9	1.2			1	20	OVERHEAD DOOR-FRONT 34	16
17	LARGE CEILING FAN 33/34	15	3					0.9	0.5	1	20	REC 34	18
19				0.9	1.1					1	20	REC 33	20
21	SPACE	--	1			--	--			1	--	SPACE	22
23	SPACE	--	1					--	--	1	--	SPACE	24
25	SPACE	--	1	--	--					1	--	SPACE	26
27	SPACE	--	1			--	--			1	--	SPACE	28
29	SPACE	--	1					--	--	1	--	SPACE	30
			TOTAL LOAD:	8.6 kVA		7.3 kVA		5.3 kVA					
			TOTAL AMPS:	74 A		64 A		45 A					

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	DEMAND
MOTOR/COOLING	12343 VA	113.92%	14061 VA
EQUIPMENT	5400 VA	70.00%	3780 VA
HEATING	1200 VA	100.00%	1200 VA
RECEPTACLE	2340 VA	100.00%	2340 VA

TOTAL LOAD	
CONNECTED LOAD:	21 kVA
DEMAND LOAD:	21 kVA
DEMAND	59 A

PANEL INFORMATION			
LOCATION:	Space 110	BUS SIZE:	100 A
SUPPLY FROM:	MDP	MAIN TYPE:	Main Lug Only
MOUNTING:	Surface	AIC RATING:	22kA
ENCLOSURE	1		
FEED-THRU:			
ISOLATED GND:			

NOTES:
1. SQUARE D NQ

FEEDER AND BRANCH CIRCUIT WIRE SIZE AND CONDUIT TABLE

BREAKER AMPERE RATING	WIRE SIZE BASED UPON 75° RATING	GROUND WIRE	CONDUIT FOR 2W & G (L-N-G) (L-L-G)	CONDUIT FOR 3W & G (L-L-N-G) (L-L-L-G)	CONDUIT FOR 4W & G (L-L-L-N-G)
15	#12	#12	1/2"	1/2"	1/2"
20	#12	#12	1/2"	1/2"	1/2"
25	#10	#10	1/2"	1/2"	3/4"
30	#10	#10	1/2"	1/2"	3/4"
35	#8	#10	3/4"	3/4"	1"
40	#8	#10	3/4"	3/4"	1"
45	#8	#10	3/4"	3/4"	1"
50	#8	#10	3/4"	3/4"	1"
60	#6	#10	3/4"	1"	1"
70	#4	#8	1"	1-1/4"	1-1/4"
80	#4	#8	1"	1-1/4"	1-1/4"
90	#3	#8	1"	1-1/4"	1-1/4"
100	#3	#8	1"	1-1/4"	1-1/4"
110	#2	#6	1-1/4"	1-1/2"	1-1/2"
125	#1	#6	1-1/4"	1-1/2"	2"
150	#1/0	#6	1-1/2"	2"	2"
175	#2/0	#6	1-1/2"	2"	2"
200	#3/0	#6	2"	2"	2"
225	#4/0	#4	2"	2-1/2"	2-1/2"
250	#250 kcmil	#4	2"	2-1/2"	3"
275	#300 kcmil	#4	2-1/2"	3"	3"
300	#350 kcmil	#4	2-1/2"	3"	3"
350	#500 kcmil	#3	3"	3-1/2"	3-1/2"
400	(2) #3/0	(2) #3	(2) 2"	(2) 2"	(2) 2-1/2"
450	(2) #4/0	(2) #2	(2) 2"	(2) 2-1/2"	(2) 2-1/2"
500	(2) #250 kcmil	(2) #2	(2) 2"	(2) 2-1/2"	(2) 3"
600	(2) #350 kcmil	(2) #1	(2) 2-1/2"	(2) 3"	(2) 3"
700	(2) #500 kcmil	(2) #1/0	(2) 3"	(2) 3-1/2"	(2) 3-1/2"
800	(2) #600 kcmil	(2) #1/0	(2) 3"	(2) 4"	(2) 4"
900	(3) #350 kcmil	(3) #2/0	(3) 2-1/2"	(3) 3"	(3) 3"
1000	(3) #400 kcmil	(3) #2/0	(3) 2-1/2"	(3) 3-1/2"	(3) 3-1/2"
1200	(4) #350 kcmil	(4) #3/0	(4) 2-1/2"	(4) 3"	(4) 3"

NOTES:

1. BREAKER: SHOWN SIZES ARE BASED ON STANDARD AMPERE RATINGS SHOWN IN NEC TABLE 240.6(A).
2. WIRE SIZES: SHOWN SIZES ARE FOR PHASE AND NEUTRAL WIRES. AMPACITY IS BASED ON THWN COPPER WIRES AT 75°C RATING AS SHOWN NEC TABLE 310.15(B)(16).
   - IF THERE ARE MORE THAN 1 SET OF FEEDER, ('X') PREFIX INIDCATES NUMBER OF FEEDER AND CONDUIT SETS.
3. GROUND WIRE: SHOWN SIZES ARE COPPER WIRES IN ACCORDING TO NEC TABLE 250.122.
   - IF THERE ARE MORE THAN 1 SET OF FEEDER, ('X') PREFIX INIDCATES NUMBER OF FEEDER AND CONDUIT SETS.
4. CONDUIT:
   - IF THERE ARE MORE THAN 1 SET OF FEEDER, ('X') PREFIX INIDCATES NUMBER OF FEEDER AND CONDUIT SETS.
   - CONDUIT SIZES ARE BASED ON THWN WIRES. FOR OTHER TYPE OF WIRES, IT IS E.C. RESPONSIBIITY TO ADJUST CONDUIT FILL IN COMPLIANCE WITH NEC.

2/E2.1 FEEDER AND BRANCH CIRCUIT WIRE SIZE AND CONDUIT TABLE
NOT TO SCALE

OAKLEY COLLIER ARCHITECTS
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1111 Haynes Street, Suite 109, Raleigh, NC 27604 (P) 919.985.7700

ATLANTEC ENGINEERS, PA
3221 BLUE RIDGE ROAD, SUITE 113
RALEIGH, NC 27612
(919) 571-1111
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BID SET
TOWN OF NASHVILLE
FIRE STATION NO. 2
1200 EAST WASHINGTON ST.
NASHVILLE, NC 27856

NORTH CAROLINA PROFESSIONAL CORPORATION ATLANTEC ENGINEERS PA No. C-961

NORTH CAROLINA PROFESSIONAL SEAL 027479 ENGINEER SUJAN PRAMOJANEY 5/16/2023

GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By: SP	Sheet No.
Checked By: SP	E2.1

Sheet Title
POWER RISER DIAGRAM
PANEL SCHEDULES

LIGHT FIXTURE SCHEDULE

TYPE	DESCRIPTION	CATALOG	ELECTRICAL DATA	NOTES
A	2X4 LED FLAT PANEL RECESSED MOUNTING 4000/5000/6000 LUMEN	LITHONIA: CPANL-2X4-AL06-SWW7-M2	4000/5000/6000 LUMEN LED 35/40/50K 0-10V DIMMING ELECTRONIC DRIVER 36/45/55 WATTS - 40/50/60 VA, 120-277V	SET COLOR TO 3500K SEE NOTE ON PLAN FOR LUMEN SETTING
B	2X2 LED FLAT PANEL RECESSED MOUNTING 2400/3300/4400 LUMEN	LITHONIA: CPANL-2X2-AL01-SWW7-M4	2400/3300/4400 LUMEN LED 35/40/50K 0-10V DIMMING ELECTRONIC DRIVER 22/31/41 WATTS - 26/35/45 VA, 120-277V	SET COLOR TO 3500K SEE NOTE ON PLAN FOR LUMEN SETTING
D1	6" LED CAN LIGHT FIXTURE RECESSED MOUNTING 1000/1500/2000 LUMEN LISTED FOR WET LOCATION	LITHONIA LIGHTING: LDN6-ALO2-SWW1-MVOLT-UGZ-HSG	1000/1500/2000 LUMEN LED 30K/35/40/50K 0-10V DIMMING ELECTRONIC DRIVER 12/19/25 WATTS - 15/23/30 VA, 120-277V	SET COLOR TO 3500K SEE NOTE ON PLAN FOR LUMEN SETTING
DR	RADIO ACTIVATED RED CAN LIGHT	FURNISHED AND INSTALLED BY OWNER RADIO CONTRACTOR	LOW VOLTAGE	
FL1	FLOOD LIGHT FOR STATION SIGN MOUNTED UNDER OVER HANG 2700 LUMEN, 70° DISTRIBUTION YOKE MOUNT	HYDREL: SAF7-LED-P1-80CRI-40K-MVOLT-70DEG-CWL-YM-L1-ELV-**	2700 LUMEN LED, 4000K ELV DIMMING ELECTRONIC DRIVER 33 WATTS - 37 VA, 120-277V	** FINISHED COLOR PER ARCHITECT INSTRUCTION.
FL2	GROUND MOUNTED FLOOD LIGHT FOR WALL SIGN 2700 LUMEN, 15°V x 60°H DISTRIBUTION YOKE MOUNT	HYDREL: SAF7-LED-P1-80CRI-40K-MVOLT-15VX60H-CWL-YM-L1-ELV-**	2700 LUMEN LED, 4000K ELV DIMMING ELECTRONIC DRIVER 33 WATTS - 37 VA, 120-277V	** FINISHED COLOR PER ARCHITECT INSTRUCTION. PROVIDE 12"X12"X12" CONCRETE BASE AS REQUIRED.
FL3	GROUND MOUNTED FLOOD LIGHT FOR FLAG POLE 2700 LUMEN, 60°V x 15°H DISTRIBUTION YOKE MOUNT	HYDREL: SAF7-LED-P1-80CRI-40K-MVOLT-15VX60H-CWL-YM-L1-ELV-**	2700 LUMEN LED, 4000K ELV DIMMING ELECTRONIC DRIVER 33 WATTS - 37 VA, 120-277V	** FINISHED COLOR PER ARCHITECT INSTRUCTION. PROVIDE 12"X12"X12" CONCRETE BASE AS REQUIRED.
H	LED HI-BAY LIGHT FIXTURE nLIGHT AIR CONTROL MODULE nLIGHT MOTION SENSOR 15000 LUMEN	LITHONIA: CPHB-12000LM-SEF-GCL-MD-MVOLT-GZ10-80CRI-NLTAIR2-RLSXR6	12000 LUMEN LED, 3500K ELECTRONIC DRIVER 75 WATTS - 85 VA, 120-277V	HANG BOTTOM 16 FT. A.F.F. nLIGHT AIR IS A WIRELESS CONTROL SYSTEM. SEE NOTE #4
S	4 FT. LED STRIP LIGHT SURFACE/PENDANT MOUNTED 3000/4000/5000 LUMEN	LITHONIA: CSS-L48-AL03-MVOLT-SWW3-80CRI	3000/4000/5000 LUMEN LED 35/40/50K DIMMING ELECTRONIC DRIVER 28/36/44 WATTS - 32/40/49 VA, 120-277V	SET COLOR TO 3500K SET LUMEN TO 4000 LUMEN
W1	EXTERIOR CUT-OFF WALL PACK 800/1000/1200/1600 LUMEN LISTED FOR WET LOCATION AND 0°F WITH PHOTOCELL	LITHONIA: WPX0-LED-AL0-SWW2-MVOLT-PE-DDBXD	800/1000/1200/1600 LUMEN LED, 30/40/50K, ELECTRONIC DRIVER 6.4/7.8/9.2/13 WATTS - 7/9/10/15 VA, 120-277V	SET COLOR TO 4000K SET LUMEN TO 800 LUMEN (AL0-1) SET PHOTOCELL TO OFF SEE NOTE ON PLAN FOR MOUNTING HEIGHT.
W2	EXTERIOR CUT-OFF WALL LIGHT ARM MOUNTED 4500 LUMEN, FORWARD THROW MEDIUM DISTRIBUTION LISTED FOR WET LOCATION AND 0°F	LITHONIA: DSX0-LED-P1-40K-80CRI-TFTM-MVOLT-SPA-WBA-**	4500 LUMEN LED, 4000K ELECTRONIC DRIVER 33 WATTS - 36 VA, 120-277V	** FINISH PER ARCHITECT INSTRUCTION SEE NOTE ON PLAN FOR MOUNTING HEIGHT.
W3	EXTERIOR CUT-OFF WALL PACK 1500 LUMEN LISTED FOR WET LOCATION AND 0°F 5" HEIGHT	LITHONIA: ARC1-LED-P1-40K-MVOLT-**	1500 LUMEN LED, 40K ELECTRONIC DRIVER 11 WATTS - 15 VA, 120-277V	** FINISH PER ARCHITECT INSTRUCTION SEE NOTE ON PLAN FOR MOUNTING HEIGHT. FIXTURE HEIGHT TO FIT BETWEEN TOP OF WINDOWS FRAME AND METAL CANOPY.
EG	EMERGENCY LIGHT	LITHONIA: EU2L-M12	(2) 0.75W LED HEADS 0.33 WATTS - 6 VA, 120/277V	MOUNT BOTTOM 8 FT. A.F.F.
EG2	EMERGENCY LIGHT IN TRUCK BAYS 1100 LUMEN SELF DIAGNOSTIC	LITHONIA: ELM6L-UVOLT-LTP-SDRT	(2) 5.3W LED HEADS 3 WATTS - 6 VA, 120/277V	SEE NOTE ON PLAN FOR MOUNTING HEIGHT.
EGX	EMERGENCY WITH EXIT LIGHT 1 SIDE RED LETTER	LITHONIA: ECC-R	(2) 0.75W LED HEADS, LED FOR PANEL 1 WATTS - 11 VA, 120/277V	MOUNT BOTTOM 8 FT. A.F.F. OR MOUNT TO CEILING PANEL PER ARCHITECT INSTRUCTION.

NOTES:

1. SEE ARCHITECTURAL PLAN FOR MOUNTING LOCATION AND HEIGHT. FIELD COORDINATE MOUNTING HEIGHT WITH ARCHITECT IF NOT SHOWN ON ARCHITECTURAL PLAN.
2. E.C. SHALL SUBMIT CATALOG TO ARCHITECT FOR APPROVAL PRIOR TO ORDERING. FINISH COLOR/TRIM SUBJECT TO BE CHANGED PER ARCHITECT.
3. LED COLOR:
   A. INTERIOR: 3500K UNLESS OTHERWISE NOTED.
   B. EXTERIOR: 4000K UNLESS OTHER WISE NOTED.
   C. FIELD VERIFY LED COLOR WITH ARCHITECT PRIOR TO ORDERING.
4. FOR EQUAL PRODUCT, E.C. SHALL PROVIDE S_{nA} WIRELESS LIGHT SWITCH TO MATCH FIXTURE

1 / E2.2 LIGHT FIXTURE SCHEDULE
NOT TO SCALE

EQUIPMENT LIST

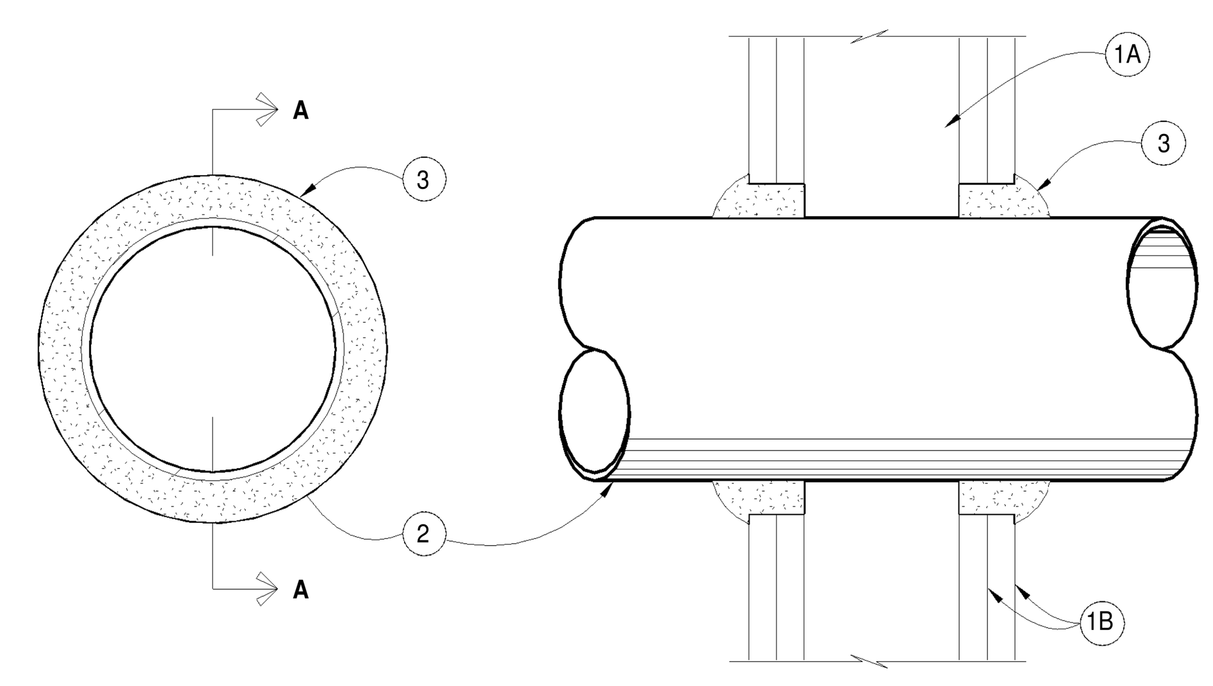
ITEM NO.	DESCRIPTION	QTY.	VOLT	PHASE	AMPS	HP	CONNECTION	NOTES
1	SCBA (OXYGEN)	1	208	3	30.8	10	DISCONNECT	
2	EXTRACTOR	1	208	1	10		DISCONNECT	
3	PPE DRYER	1	208	1	27.5		DISCONNECT	35A/2P BREAKER
4	AIR COMPRESSOR	1	208	1	30.8	5	DISCONNECT	
5	ICE MACHINE	1	120	1	9.3		5-15P	
6	RESIDENTIAL WASHER	1	120	1	12		5-15P	
7	RESIDENTIAL GAS DRYER	1	120	1	8		5-15P	
8	RESIDENTIAL GAS RANGE	1	120	1	5		5-15P	
9	RESIDENTIAL REFRIGERATOR	1	120	1	8.5		5-15P	
10	RESIDENTIAL DISHWASHER	1	120	1	10		5-15P	
11	RESIDENTIAL KITCHEN HOOD	1	120	1	2		HARDWIRE	
12	OVERHEAD DOOR	4	120	1	9.8	1/2	DISCONNECT	

EQUIPMENT NOTES:

1. EQUIPMENT INFORMATION IS PER ARCHITECT AND BUILDING OWNER.
2. E.C. SHALL FIELD VERIFY ACTUAL POWER REQUIREMENTS WITH ARCHITECT PRIOR TO PROCURE ELECTRICAL EQUIPMENT. NOTIFY ENGINEER IF THE REQUIREMENTS ARE NOT AS SHOWN IN ABOVE TABLE.
3. FOR EQUIPMENT REQUIRING 208V, E.C. SHALL FIELD VERIFY NEUTRAL REQUIREMENT WITH EQUIPMENT MANUFACTURER MANUAL AND PROVIDE NEUTRAL IF REQUIRED.

2 / E2.2 EQUIPMENT LIST
NOT TO SCALE

SYSTEM NO. WL1001
F RATINGS - 1, 2, 3 AND 4 HOUR (SEE ITEMS 2 AND 3)
T RATINGS - 0, 1, 2, 3 AND 4 HOUR (SEE ITEM 3)
L RATING AT AMBIENT - LESS THAN 1 CFM/SQ FT
L RATING AT 400 F - LESS THAN 1 CFM/SQ FT



SECTION A - A

(1) **WALL ASSEMBLY** – THE 1, 2, 3 OR 4 HR FIRE-RATED GYPSUM WALLBOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300 OR U400 SERIES WALL OR PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:

A. **STUDS** – WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS (MAXIMUM 2 HOUR FIRE RATED ASSEMBLIES) OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOMINAL 2" X 4" LUMBER SPACED 16" ON CENTER WITH NOMINAL 2" X 4" LUMBER END PLATES AND CROSS BRACES. STEEL STUDS TO BE MIN 3-5/8" WIDE X 1 3/8" DEEP CHANNELS SPACED MAXIMUM 24" ON CENTER.

B. **GYPSUM BOARD*** – NOMINAL 1/2" OR 5/8" THICK, 4' WIDE WITH SQUARE OR TAPERED EDGES. THE GYPSUM WALLBOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL U300 OR U400 SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAXIMUM DIAMETER OF OPENING IS 26".

(2) **THROUGH PENETRANT** – ONE METALLIC PIPE, CONDUIT OR TUBING INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN PIPE, CONDUIT OR TUBING AND PERIPHERY OF OPENING SHALL BE MINIMUM OF 0" (POINT CONTACT) TO MAXIMUM 2" PIPE, CONDUIT OR TUBING TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, CONDUITS OR TUBING MAY BE USED:

A. **STEEL PIPE** – NOMINAL 24" DIAMETER (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE.

B. **IRON PIPE** – NOMINAL 24" DIAMETER (OR SMALLER) SERVICE WEIGHT (OR HEAVIER) CAST IRON SOIL PIPE, NOMINAL 12" DIAMETER (OR SMALLER) OR CLASS 50 (OR HEAVIER) DUCTILE IRON PRESSURE PIPE.

C. **CONDUIT** – NOMINAL 6" DIAMETER (OR SMALLER) STEEL CONDUIT OR NOMINAL 4" DIAMETER (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING

D. **COPPER TUBING** – NOMINAL 6" DIAMETER (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING

E. **COPPER PIPE** – NOMINAL 6" DIAMETER (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.

F. **THROUGH PENETRATING PRODUCT* – FLEXIBLE METAL PIPING** – THE FOLLOWING TYPES OF STEEL FLEXIBLE METAL GAS PIPING MAY BE USED:

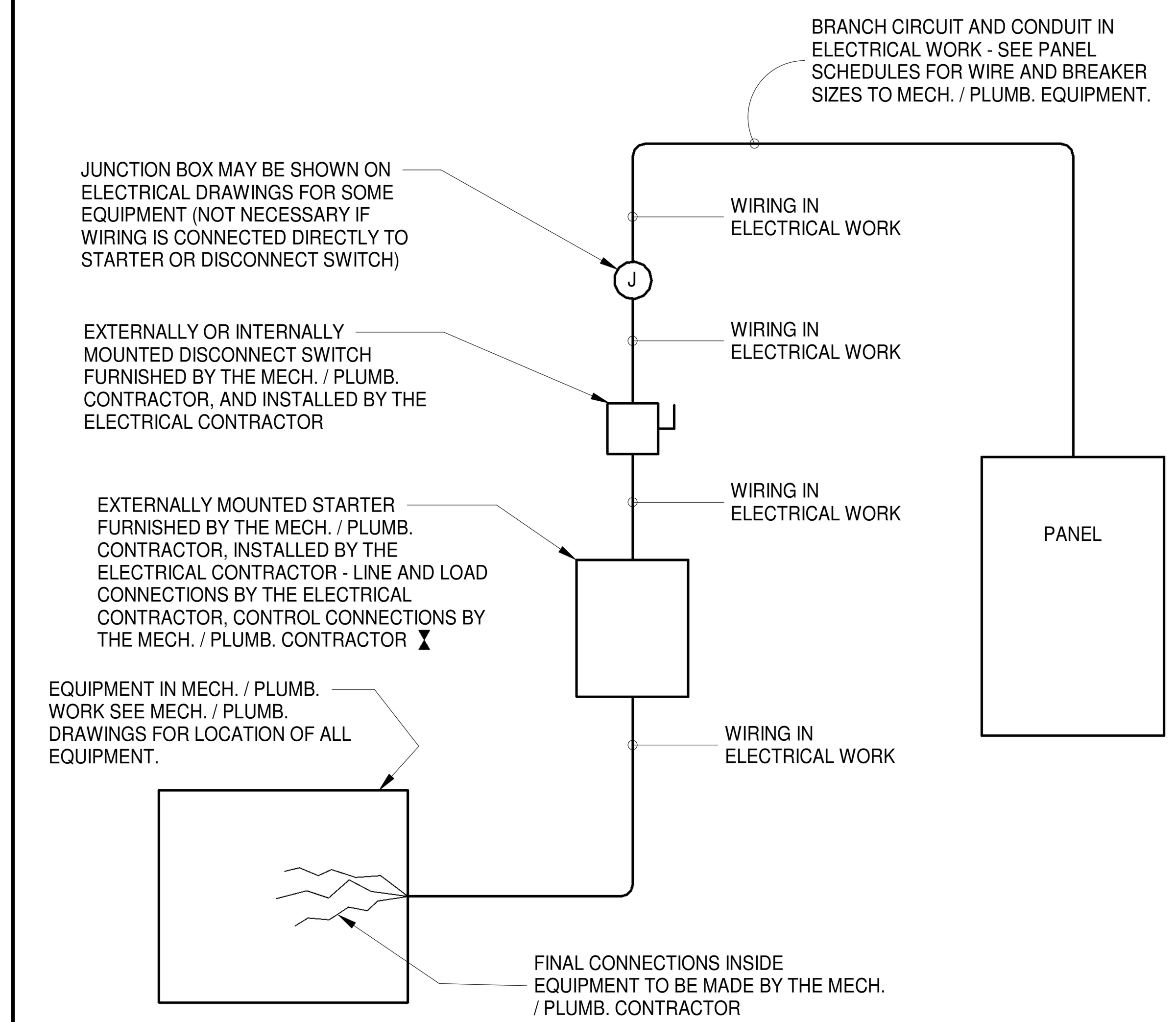
1. NOMINAL 2" DIAMETER (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.
   OMEGA FLEX INC
2. NOMINAL 1" DIAMETER (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY.
   TITEFLEX CORP
   A BUNDY CO
3. NOMINAL 1" DIAMETER (OR SMALLER) STEEL FLEXIBLE METAL GAS PIPING. PLASTIC COVERING ON PIPING MAY OR MAY NOT BE REMOVED ON BOTH SIDES OF FLOOR OR WALL ASSEMBLY
   WARD MFG INC

(3) **FILL, VOID OR CAVITY MATERIAL* – CAULK OR SEALANT** – MINIMUM 5/8", 1-1/4",1-7/8" AND 2-1/2" THICKNESS OF CAULK FOR 1, 2, 3 AND 4 HR RATED ASSEMBLIES, RESPECTIVELY, APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. MIN 1/4 IN. (6 MM) DIAM BEAD OF CAULK APPLIED TO GYPSUM BOARD/PENETRANT INTERFACE AT POINT CONTACT LOCATION ON BOTH SIDES OF WALL. THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS SHOWN IN THE FOLLOWING TABLE. THE HOURLY T RATING OF THE FIRESTOP SYSTEM IS DEPENDENT UPON THE TYPE OR SIZE OF THE PIPE OR CONDUIT AND THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED, AS TABULATED BELOW:

MAXIMUM PIPE OR CONDUIT DIAMETER INCHES	F RATING HOUR	T RATING HOUR
1	1 OR 2	O+, 1 OR 2
1	3 OR 4	3 OR 4
4	1 OR 2	0
4	3 OR 4	0
12	1 OR 2	0

+WHEN COPPER PIPE IS USED, T RATING IS 0 HOUR.
3M COMPANY - CP 25WB+ CAULK OR FB-3000 WT SEALANT.
*BEARING THE UL CLASSIFICATION MARKING

3 / E2.2 FIRE PENETRATION (TYPICAL)
NOT TO SCALE



NOTES:

1. A COMBINATION STARTER MAY BE USED IN LIEU OF A SEPARATE DISCONNECT SWITCH AND A STARTER.
2. E.C. SHALL FURNISH ALL REQUIRED FUSES.

4 / E2.2 WIRING TO MECH./PLUMB. EQUIPMENT
NOT TO SCALE

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NORTH CAROLINA PROFESSIONAL CORPORATION ATLANTEC ENGINEERS PA No. C-961

NORTH CAROLINA PROFESSIONAL SEAL 027479 ENGINEER SUJIN PRAMOJANEY
5/16/2023

GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

Date	Project No.
5/15/2023	22027

Drawn By	Checked By	Sheet No.
SP	SP	E2.2

Sheet Title
FIXTURE SCHEDULE
EQUIPMENT LIST
DEATILS

SYMBOL LEGEND

SYMBOL	DESCRIPTION	REMARKS
	2 X 4 LAY-IN FIXTURE - LETTER DESIGNATES TYPE	SEE FIXTURE SCHED.
	2 X 2 LAY-IN FIXTURE - LETTER DESIGNATES TYPE	SEE FIXTURE SCHED.
	LED HIGH BAY FIXTURE FIXTURE - LETTER DESIGNATES TYPE	SEE FIXTURE SCHED.
	LINEAR STRIP FIXTURE - LETTER DESIGNATES TYPE	SEE FIXTURE SCHED.
	CAN LIGHT FIXTURE - LETTER DESIGNATES TYPE	SEE FIXTURE SCHED.
	EXTERIOR WALL LIGHT FIXTURE - LETTER DESIGNATES TYPE	SEE FIXTURE SCHED.
	EMERGENCY WITH EXIT LIGHT - CONNECT UNSWITCHED	SEE FIXTURE SCHED.
	BATTERY BACKUP EMERGENCY LIGHT - CONNECT UNSWITCHED	SEE FIXTURE SCHED.
PC	PHOTOCELL, 105-305VAC, 50/60HZ, 1800VA BALLAST LOAD 1000W TUNGSTEN LOAD, 8A LED LOAD (UP TO 2220W @277V)	TORK: ZSS124
EP	EMERGENCY POWER UNIT (INVERTER) FOR EMERGENCY LIGHT FIXTURES. 120V INPUT, 120V OUTPUT, 220W WITH 90 MIN. BACKUP TIME.	EELP: PS-220-HP
	16' INDUSTRIAL CEILING FAN FAN SHALL BE WITH CIRCUITRY SUITABLE FOR CONNECTION TO LOW VOLTAGE FAN CONTROLLER AND WITH DRY CONTACT TO CONNECT TO SPRINKLER ALARM CONTROL PANEL FOR FAN SHUT DOWN UPON SPRINKLER ACTIVIATION.	BIG ASS FANS: POWERFOIL X4 - PFX-16
S_{F2}	LOW VOLTAGE FAN CONTROLLER FOR INDUSTRIAL FAN. TOUCH SCREEN. SEE NOTE ON PLAN FOR WIRING. MOUNT 42" A.F.F.	BIG ASS FANS TO MATCH FAN
S	SINGLE POLE TOGGLE SWITCH. MOUNT 42" A.F.F. UNLESS NOTED OTHERWISE.	HUBBELL 1221-** WITH S1 COVER PLATE
S_3	THREE WAY TOGGLE SWITCH. MOUNT 42" A.F.F. UNLESS NOTED OTHERWISE.	HUBBELL 1223-** WITH S1 COVER PLATE
S_4	FOUR WAY TOGGLE SWITCH. MOUNT 42" A.F.F. UNLESS NOTED OTHERWISE.	HUBBELL 1224-** WITH S1 COVER PLATE
S_D	DIMMING SWITCH WITH PRESET TO MATCH TYPE 'A', 'D1' FIXTURES. 0-10V DIMMING. MOUNT 42" A.F.F. UNLESS NOTED OTHERWISE. PROVIDE SWITCHED WIRE AND 0-10V CONTROL WIRE TO FIXTURE AS REQUIRED.	SYNERGY ISD-BC-120/277-** S26 COVER PLATE
S_{DELV}	DIMMING SWITCH WITH PRESET TO MATCH TYPE 'FL1', 'FL2' FIXTURES. ELECTRONIC LOW VOLTAGE. MOUNT 42" A.F.F. UNLESS NOTED OTHERWISE.	SYNERGY ISD-400-ELV-120-** S26 COVER PLATE
S_{M1}	WALL MOUNTED OCCUPANCY SENSOR SWITCH. PASSIVE INFRARED MOUNT 42" A.F.F UNLESS NOTED OTHERWISE. 800W/120VAC	SENSORSWITCH WSX-** S26 COVER PLATE
S_{MD}	WALL MOUNTED 0-10V DIMMING SWITCH WITH OCCUPANCY SENSOR. DUAL TECHNOLOGIES. 1000W/120VAC OR 1200W/277VAC MOUNT 42" A.F.F. UNLESS NOTED OTHERWISE. PROVIDE SWITCHED WIRE AND 0-10V CONTROL WIRE TO FIXTURE AS REQUIRED.	SENSORSWITCH WSX-PDT-D-** S26 COVER PLATE
M2A	CEILING MOUNTED OCCUPANCY SENSOR, DUAL TECHNOLOGIES 800W/120VAC OR 1200W/277VAC, 12 FT. RADIUS	SENSORSWITCH CMR-PDT-9
M2B	CEILING MOUNTED OCCUPANCY SENSOR, DUAL TECHNOLOGIES 800W/120VAC OR 1200W/277VAC, 28 FT. RADIUS	SENSORSWITCH CMR-PDT-10
M3	CEILING MOUNTED OCCUPANCY SENSOR, PASSIVE INFRERED LOW VOLTAGE. PROVIDE LOW VOLTAGE WIRING TO POWER PACK AS REQUIRED.	SENSORSWITCH CM-10
M4	CEILING MOUNTED OCCUPANCY SENSOR, DUAL TECHNOLIGIES LOW VOLTAGE. PROVIDE LOW VOLTAGE WIRING TO POWER PACK AS REQUIRED.	SENSORSWITCH CM-PDT-10
MP	POWER PACK FOR LOW VOLTAGE OCCUPANCY SENSOR. 120VAC, 20A 1P CONTACTOR.	SENSORSWITCH PP-20
S_{nA}	nLIGHT-AIR: 1 CHANNEL ON/OFF WALL MOUNTED LOW VOLTAGE SWITCH FOR TYPE 'H' FIXTURES IN TRUCK BAYS 33/34. MOUNT 42" A.F.F UNLESS NOTED OTHERWISE. THIS IS A BATTERY OPERATED WIRELESS SWITCH. SEE NOTE #2.	nLIGHT: RPOB-**-G2 S26 COVER PLATE
S_{RA}	PUSH BUTTON TO CANCEL THE RADIO ACTIVATED LIGHT. MOUNT 42" A.F.F. UNLESS NOTED OTHERWISE. DEVICE AND WIRING BY OWNER CONTRACTOR. SEE KEY NOTE #2 IN 1/E1.1.	SINGLE GANG BOX WITH STAINLESS COVER.
▼	COMMUNICATION OUTLET. MOUNT 16" A.F.F. UNLESS OTHERWISE NOTED. SINGLE GANG BOX WITH 1"C STUB CONDUIT TO ACCESSIBLE CEILING SPACE. JACK AND WIRING BY OWNER CONTRACTOR.	SINGLE GANG BOX WITH STAINLESS COVER.
	SECURITY CAMERA SEE NOTE ON PLAN FOR MOUNTING HEIGHT SINGLE GANG BOX WITH 1"C STUB CONDUIT TO ACCESSIBLE CEILING SPACE. CAMERA AND WIRING BY OWNER CONTRACTOR.	SINGLE GANG BOX WITH STAINLESS COVER.
CR	SECURITY CARD READER. MOUNT 42" A.F.F. SINGLE GANG BOX WITH 3/4"C STUB CONDUIT. DEVICE AND WIRING BY OWNER CONTRACTOR.	SINGLE GANG BOX WITH STAINLESS COVER.

SYMBOL	DESCRIPTION	REMARKS
	SPECIFICATION GRADE TAMPER RESISTANT DUPLEX RECEPTACLE. MOUNT 16" A.F.F. UNLESS OTHERWISE NOTED.	HUBBELL HBL5362-**-TR WITH S8 COVER PLATE
GFI	SPECIFICATION GRADE TAMPER RESISTANT GFCI DUPLEX RECEPTACLE. MOUNT 16" A.F.F. UNLESS OTHERWISE NOTED.	HUBBELL GFTRST20-** WITH S26 COVER PLATE
WP	SPECIFICATION GRADE TAMPER RESIATANT AND WEATHER RESISTANT GFCI DUPLEX RECEPTACLE WITH IN-USE WEATHER PROOF COVER. MOUNT 16" A.F.F. UNLESS OTHERWISE NOTED.	HUBBELL GFTWRST20-** WITH WP26M COVER PLATE
EWC	SPECIFICATION GRADE DUPLEX RECEPTACLE FOR WATER COOLER. MOUNT 24" A.F.F. FOR CONCEALMENT OF CORD. LOCATED IN EWC COVER. FED FROM GFCI CIRCUIT BREAKER.	HUBBELL HBL5362-** WITH S8 COVER PLATE
	SPECIFICATION GRADE TAMPER RESISTANT DUPLEX RECEPTACLE. MOUNT 16" A.F.F. UNLESS OTHERWISE NOTED. FED FROM GFCI CIRCUIT BREAKER OR GROUND FAULT PROTECTION UNIT.	HUBBELL HBL5362-**-TR WITH S8 COVER PLATE
	SPECIFICATION GRADE TAMPER RESISTANT DUPLEX RECEPTACLE MOUNT 4" ABOVE COUNTER/BACKSPLASH	HUBBELL HBL5362-**-TR WITH S8 COVER PLATE
GFI	SPECIFICATION GRADE TAMPER RESISTANT GFCI DUPLEX RECEPTACLE. MOUNT 4" ABOVE COUNTER/BACKSPLASH	HUBBELL GFTRST20-** WITH S26 COVER PLATE
USB	SPECIFICATION GRADE TAMPER RESISTANT DUPLEX RECEPTACLE WITH (2) TYPE A USB PORTS. 5A 5V USB OUTPUT. MOUNT 4" ABOVE COUNTER/BACKSPLASH	HUBBELL USB20A-** WITH S26 COVER PLATE
	SPECIFICATION GRADE TAMPER RESISTANT QUAD RECEPTACLE. MOUNT 16" A.F.F. UNLESS OTHERWISE NOTED.	HUBBELL (2) HBL5362-**-TR WITH S82 COVER PLATE
USB	SPECIFICATION GRADE TAMPER RESISTANT DUPLEX RECEPTACLE WITH (2) TYPE A USB PORTS. 5A 5V USB OUTPUT. MOUNT 16" A.F.F. UNLESS NOTED OTHERWISE.	HUBBELL USB20A-** WITH S26 COVER PLATE
'XX'	POWER RECEPTACLE, 'XX' DESIGNATES TYPE OR RATING FIELD VERIFY NUMBER OF POLE AND NEUTRAL TO MATCH CIRCUIT AND EQUIPMENT. MOUNT 16" A.F.F. UNLESS OTHERWISE NOTED. SEE KEY NOTE # 1 IN 1/E103 FOR CORD REEL REQUIREMENTS.	HUBBELL TO MATCH EQUIPMENT AND CIRCUIT.
RR	2 GANG ROUND RECESSED CONCRETE FLOOR BOX WITH FLAP COVER. WITH QUAD TAMPER RESISTANT RECEPTACLE. PROVIDE COVER TO MATCH FLOOR TYPE PER ARCHITECT INSTRUCTION.	HUBBELL: BOX: S1PFB COVER: S1CFC-** (CARPET) PLATES: S1SPDU REC: 5362TR-**
J	JUNCTION BOX SIZED PER N.E.C	PER N.E.C.
	DISCONNECT SWITCH SEE PLANS FOR SIZE AND TYPE	SQUARE D HEAVY DUTY
S_{EQ}	20A 120VAC SNAP SWITCH FOR EQUIPMENT DISCONNECT. MOUNT ADJACENT TO EQUIPMENT.	HUBBELL 1221-** WITH METAL COVER PLATE
	NEW CONCEALED WIRING	PER N.E.C.
	UNSWITCHED LIGHTING CONDUCTOR	PER N.E.C.
	HOME RUN TO PANEL BOARD	PER N.E.C.
	120/208V 3Ø, 4W PANEL BOARD - SEE PANEL SCHEDULES	SQUARE D: NQ, NF OR I-LINE
GEN	GENERATOR REMOTE ANNUNCIATOR MOUNT 42" A.F.F.	TO MATCH GENERATOR
	30 MIN. WALL. SEE ARCHITECTURAL PLAN FOR DETAIL	
A.F.C.	ABOVE FINISHED CEILING	
A.F.F.	ABOVE FINISHED FLOOR - NOTE ALL MOUNTING DIMENSIONS GIVEN ARE TO THE BOTTOM OF THE OUTLET BOX	
B.F.F.	BELOW FINISHED FLOOR	
B.F.G.	BELOW FINISHED GRADE	

NOTE:

1. E.C. SHALL SUBMIT CATALOG SHEETS FOR COLOR AND MATERIAL APPROVAL OF ALL SWITCH, RECEPTACLE AND WALL PLATE TO ARCHITECT PRIOR PURCHASING ANY.
2. FOR EQUAL PRODUCT THAT REQUIRES 120V POWER CONNECTION, E.C. IS REPONSIBLE TO PROVIDE 120V POWER CONNECTION TO THE SAME CIRCUIT AS TYPE 'H' FIXTURE.

GENERAL NOTES

1. THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR FLOOR PLAN DIMENSIONS. DO NOT SCALE THESE DRAWINGS.
2. THE ELECTRICAL CONTRACTOR SHALL COORDINATE ANY AND ALL WORK WITH OTHER TRADES INVOLVED IN THE PROJECT, PRIOR TO THE INSTALLATION OF HIS EQUIPMENT SO AS TO AVOID CONFLICTS DURING CONSTRUCTION AND TO ALLOW FOR OPTIMUM MAINTENANCE AND WORKING SPACE.
3. USE OF THE CONDUIT SYSTEM FOR EQUIPMENT GROUNDING SHALL NOT BE ACCEPTABLE. A SEPARATE GREEN GROUND WIRE SHALL BE RUN WITH THE CIRCUIT CONDUCTORS IN EACH CONDUIT.
4. ALL BREAKER SIZES, SHOWN FOR MECHANICAL EQUIPMENT, SHALL BE VERIFIED BEFORE THE PURCHASE OR INSTALLATION OF SAID EQUIPMENT, WITH THE EQUIPMENT SUPPLIER AND THE MECHANICAL CONTRACTOR.
5. ALL WORK AND MATERIAL SHALL BE PROVIDED IN ACCORDANCE WITH THE STATE, LOCAL AND NATIONAL CODES, ORDINANCES AND 2020 NATIONAL ELECTRICAL CODE (NFPA 70).
6. EACH CONTRACTOR SHALL PROVIDE HIS OWN SUPPORT OF ALL DEVICES AND EQUIPMENT PROVIDED BY HIM AND SHALL SUPPORT SUCH EQUIPMENT PER APPROVED GOVERNING CODES OR PER APPROVAL OF THE ENGINEER. UNACCEPTABLE WORKMANSHIP OR MATERIALS SHALL BE REPLACED AT THE REQUEST OF THE ENGINEER AT THE CONTRACTOR'S EXPENSE.
7. THE MOUNTING HEIGHTS AND LOCATIONS OF ALL WALL MOUNTED OUTLETS AND JUNCTION BOXES SHALL BE REVIEWED AND COORDINATED WITH THE ARCHITECT, PRIOR TO INSTALLATION FOR USE WITH THE ACTUAL EQUIPMENT, CASEWORK, AND MILLWORK TO BE FURNISHED.
8. THE ELECTRICAL CONTRACTOR SHALL PROVIDE ALL NECESSARY DISCONNECTS, SWITCHES, AND RECEPTACLES UNDER THE ELECTRICAL BID AND SHALL INCLUDE ALL NECESSARY CIRCUITS TO AND FINAL CONNECTIONS TO THE EQUIPMENT PROVIDED BY ALL SUPPLIERS. SEE DETAILS FOR CONNECTION TO EQUIPMENT PROVIDED BY MECHANICAL AND PLUMBING CONTRACTORS
9. PENETRATION:
   - WHERE ELECTRICAL EQUIPMENT PENETRATES RATED WALLS AND CEILINGS, EXTERIOR WALLS, THEY SHALL BE PROPERLY SEALED PER APPROVED UL METHODS.
   - WHERE ELECTRICAL EQUIPMENT PENETRATES EXTERIOR WALLS, THEY SHALL BE PROPERLY SEALED WITH METHODS APPROVED BY THE ENGINEER. SUBMIT DETAIL OF PROPOSED SEALING METHODS.
10. ALL PERMITS AND INSPECTION FEES SHALL BE SECURED AND PAID BY THE ELECTRICAL CONTRACTOR.
11. ALL WORK SHALL BE PERFORMED BY A LICENSED ELECTRICAL CONTRACTOR.
12. THE CONTRACTOR SHALL PROVIDE COMPLETE UPDATED TYPEWRITTEN PANEL SCHEDULES FOR ALL PANELBOARDS.
13. AS BUILT DRAWINGS SHALL BE GIVEN TO THE OWNER AT THE COMPLETION OF THE PROJECT.
14. THE CONTRACTOR SHALL VERIFY THE CEILING TYPES WITH THE GENERAL CONTRACTOR PRIOR TO THE PURCHASE OF ANY LIGHT FIXTURES SO THAT THE PROPER TRIM WILL BE PROVIDED FOR ALL FIXTURES. ANY DIFFERENCES WILL BE THE RESPONSIBILITY OF THIS CONTRACTOR.
15. ALL WIRE SIZES INDICATED ON THE PANEL SCHEDULES ARE BASED ON 75 DEGREE COPPER THHN/THWN WIRE. ALL WIRE TERMINALS AND EQUIPMENT SHALL BE LISTED AND APPROVED FOR 75°C. ONLY THWN-2 WIRE SHALL BE INSTALLED IN WET AND EXTERIOR LOCATION.
16. MINIMUM CONDUIT SIZE SHALL BE 1/2" AND MINIMUM WIRE SIZE SHALL BE #12 AWG.
17. ARMORED CABLE (TYPE AC) AND METAL-CLAD CABLE (TYPE MC) ARE ACCEPTABLE WIRING METHODS SUBJECTED TO THE FOLLOWING RESTRICTIONS:
   - SEE NEC 320 AND 330 FOR RESTRICTION.
   - PENETRATIONS OF RATED WALLS SHALL BE IN ACCORDANCE WITH APPROVED UL PENETRATION METHODS.
   - CABLE SHALL NOT BE USED FOR HOME RUN TO PANEL BOARD.
   - CABLE SHALL ONLY BE INSTALLED IN CONCEALED SPACE, ACCESIBLE CEILING SPACE AND FURRED AREAS.
18. THE MAXIMUM NUMBER OF HOMERUNS IN A CONDUIT SHALL NOT EXCEED THREE (3). FEEDING CIRCUITS WITH SHARED NEUTRAL SHALL BE SWITCHED TOGETHER.
19. WHERE OUTLETS ARE SHOWN BACK TO BACK ON RATED WALLS, STAGGER OUTLETS SO THAT THEY ARE SEPARATED BY A MINIMUM OF 24".
20. ALL DISCONNECTS SHALL HAVE SEPARATE NEUTRAL AND GROUND BARS.
21. ALL PANELS SHALL BE THREE PHASE, FOUR WIRE UNLESS OTHERWISE NOTED.
22. BOXES AND CONDUITS SHALL NOT BE INSTALLED RECESSED IN A 3-HOUR OR HIGHER RATED WALL. WHEN OUTLETS ARE INDICATED ON THESE WALLS, FIELD COORDINATE CONDUIT AND BOX INSTALLATION.
23. FOR ALL RECEPTACLES LOCATED ABOVE COUNTER TOP, MOUNTING HEIGHT SHALL COMPLY WITH ANSI A117.1, SECTION 308. E.C. SHALL FIELD VERIFY CASEWORK DETAIL WITH ARCHITECT PRIOR TO ROUGH-IN.
24. ELECTRICAL IDENTIFICATION
   - FURNISH AND INSTALL ENGRAVED LAMINATED PHENOLIC NAMEPLATES FOR ALL SAFETY SWITCHES, PANEL BOARDS, TRANSFORMERS, SWITCHBOARDS, MOTOR CONTROL CENTERS AND OTHER ELECTRICAL EQUIPMENT SUPPLIED FOR THE PROJECT FOR IDENTIFICATION.
   - FURNISH AND INSTALL SELF-ADHESIVE PLASTIC TAPE FOR ALL RECEPTACLE AND WALL SWITCH COVER PLATES INDICATING CIRCUIT NUMBERS.
25. THE ELECTRICAL CONTRACTOR SHALL FIELD COORDINATE THE INSTALLATION OF THE NEW UNDERGROUND ELECTRICAL SERVICE WITH THE LOCAL UTILITY. THE OWNER SHALL PAY ALL CHARGES FOR THE INSTALLATION OF THE NEW UNDERGROUND UTILITY SERVICE.
26. THE ELECTRICAL CONTRACTOR SHALL FIELD COORDINATE THE LOCATION OF HIS COMMUNICATION CONDUIT STUB OUTS WITH THE LOCAL COMMUNICATION SERVICE COMPANY PRIOR TO HIS INSTALLING ANY CONDUITS.

ELECTRICAL DESIGN SUMMARY

ELECTRICAL SYSTEMS AND EQUIPMENT

METHOD OF COMPLIANCE: **Energy Code:** ☒ **Prescriptive** ☐ **Performance**

ASHRAE 90.1: ☐ **Prescriptive** ☐ **Performance**

LIGHTING SCHEDULE

LAMP TYPE REQUIRED IN FIXTURE: SEE FIXTURE SCHEDULE

NUMBER OF LAMPS IN THE FIXTURE: SEE FIXTURE SCHEDULE

BALLAST TYPE USED IN THE FIXTURE: SEE FIXTURE SCHEDULE

NUMBER OF BALLASTS IN THE FIXTURE: SEE FIXTURE SCHEDULE

TOTAL WATTAGE PER FIXTURE: SEE FIXTURE SCHEDULE

TOTAL INTERIOR WATTAGE: 5734 VS 6030
SPECIFIED VS. ALLOWED (WHOLE BUILDING OR SPACE BY SPACE)

TOTAL EXTERIOR WATTAGE: 450 VS 750
SPECIFIED VS. ALLOWED

ADDITIONAL EFFICIENCY PACKAGE OPTIONS
(WHEN USING THE 2018 NCECC; NOT REQUIRED FOR ASHRAE 90.1)

- ☐ C406.2 MORE EFFICIENT HVAC EQUIPMENT PERFORMANCE
- ☒ C406.3 REDUCED LIGHTING POWER DENSITY
- ☐ C406.4 ENHANCED DIGITAL LIGHTING CONTROLS
- ☐ C406.5 ON-SITE RENEWABLE ENERGY
- ☐ C406.6 DEDICATED OUTDOOR AIR SYSTEM
- ☐ C406.7 REDUCED ENERGY USE IN SERVICE WATER HEATING

DESIGNER STATEMENT:
TO THE BEST OF MY KNOWLEDGE AND BELIEF, THE DESIGN OF THIS BUILDING COMPLIES WITH THE ELECTRICAL SYSTEM AND EQUIPMENT REQUIREMENTS OF THE NORTH CAROLINA STATE BUILDING CODE, 2018 - ENERGY.

SIGNED:
NAME: SUJIN PRAMOJANEY, P.E.
TITLE: ENGINEER

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BID SET

TOWN OF NASHVILLE
FIRE STATION NO. 2
1200 EAST WASHINGTON ST.
NASHVILLE, NC 27856

NORTH CAROLINA ATLANTEC ENGINEERS PA No. C-961 PROFESSIONAL CORPORATION

5/16/2023
NORTH CAROLINA PROFESSIONAL SEAL 027479 ENGINEER SUJIN PRAMOJANEY

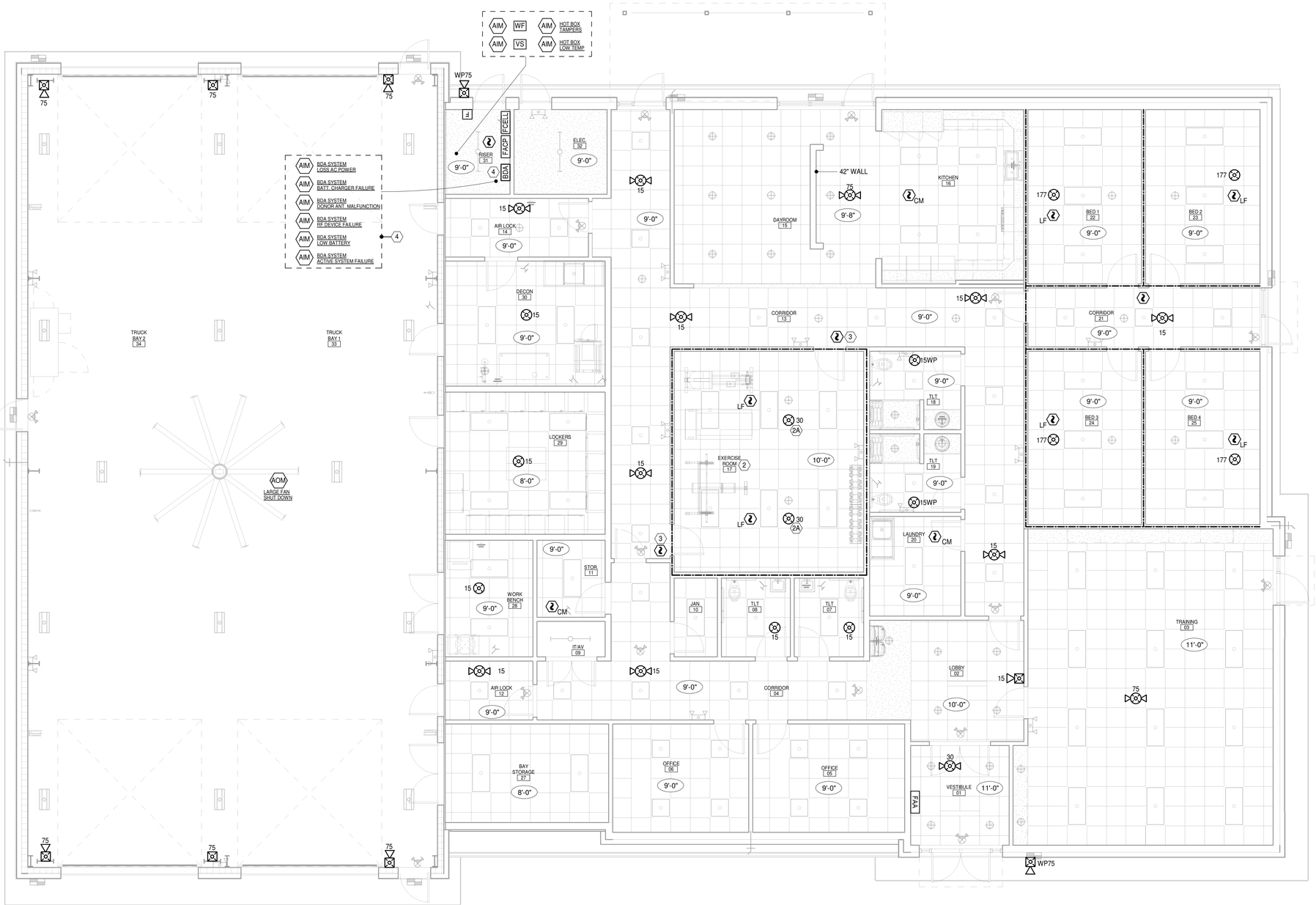
GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By: SP	Sheet No.: E3.1
Checked By: SP	

Sheet Title: LEGEND, NOTES



KEY NOTES:

1. SEE SITE PLAN FOR LOCATION.
   - FIELD VERIFY EXACT LOCATION WITH CIVIL CONTRACTOR PRIOR TO ROUGH-IN.
   - PROVIDE WIRING IN UNDERGROUND CONDUIT TO MONITOR MODULE LOCATED IN RISER 31 AS REQUIRED. SEE FIRE ALARM RISER DIAGRAM.
2. EXCERCISE ROOM:
   ROOM WILL BE UPFITTED FOR FUTURE BED ROOM (R-2 OCCUPANCY). SMOKE DETECTORS AND STROBES ARE INSTALLED FOR FUTURE BED ROOM.

   2A. STROBE SHALL BE ADJUSTABLE TYPE WITH RATING UP TO 177 CD. CONTRACTOR SHALL PROVIDE WIRING SUCH THAT THE VOLTAGE DROP IS BASED ON 177 CD RATING.
3. SMOKE DETECTORS ARE INSTALLED FOR FUTURE BED ROOM PER KEY NOTE #2.
4. PROVIDE INSTALLATION IF REQUIRED.
   SEE DETAIL 1/FA2.2.

NOTES:

1. ALL WIRING IN AREA WITH EXPOSED TO STRUCTURE SHALL BE IN CONDUIT. THESE AREAS ARE:
   - 33 TRUCK BAY 1
   - 34 TRUCK BAY 2

VS VS
LT FIRELINE HOT BOX
1

1 FA1.1 FIRE ALARM PLAN
3/16" = 1'-0"

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NORTH CAROLINA ENGINEERING CORPORATION
ATLANTEC ENGINEERS PA No. C-961

5/16/2023
NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER SEAL 027479 ENGINEERING IN PRACTICE

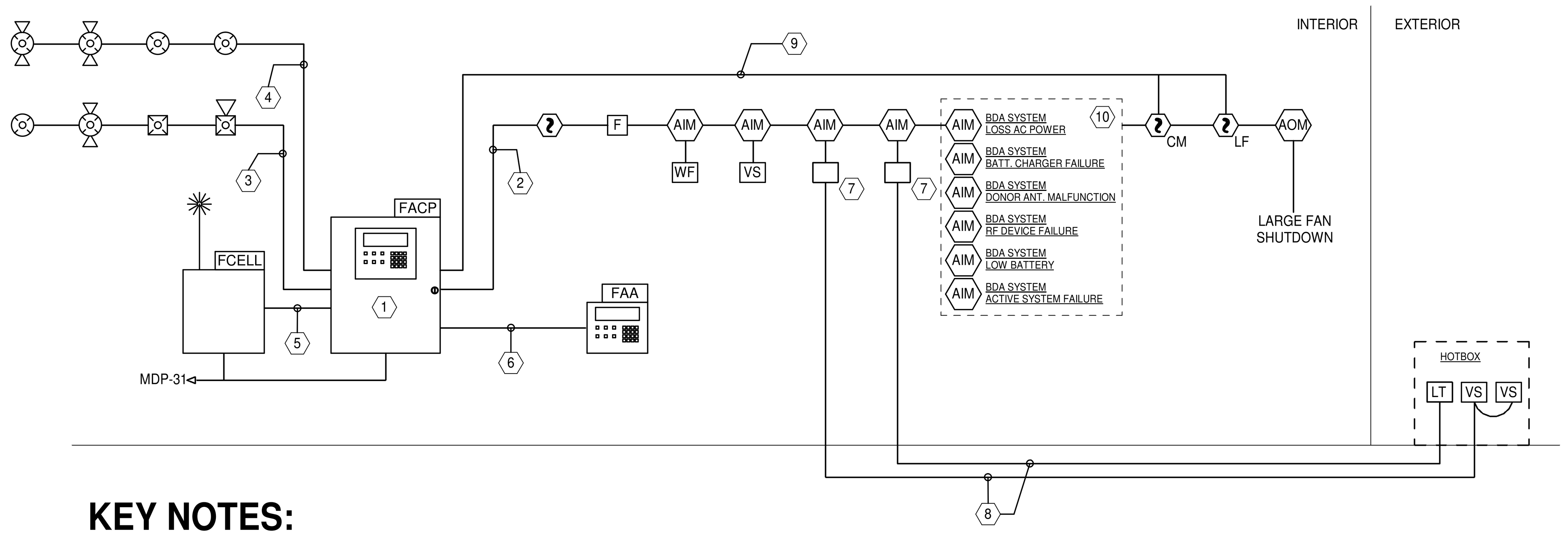
GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By: SP	Sheet No.: FA1.1
Checked By: SP	

Sheet Title: FIRE ALARM PLAN



KEY NOTES:

1. ADDRESSABLE FACP
   PROVIDE ADDITIONAL NAC PANEL AS REQUIRED.
2. ADDRESSABLE CIRCUIT.
3. NOTIFICATION APPLIANCE CIRCUIT AS REQUIRED.
4. NOTIFICATION APPLIANCE CIRCUIT FOR BED 1 (22), BED 2 (23), BED 3 (24), BED 4 (25), EXCERCISE (17), CORRIDOR (13), CORRIDOR (31). SEE NOTE #15.
5. COMMUNICATION WIRES IN CONDUIT.
6. REMOTE ANNUNCIATOR CIRCUIT.
7. PROVIDE SURGE PROTECTION DEVICE AS REQUIRED.
8. WIRING IN 1" UNDERGROUND CONDUIT. MIN. DEPTH OF 24" B.F.G.
9. 24VDC SUPERVISED CIRCUIT FOR SOUNDER BASE AND CARBON MONOXIDE DETECTOR.
10. MONITOR MODULES FOR BDA SYSTEM. PROVIDE INSTALLATION IF REQUIRED. SEE DETAIL 1/FA2.2.

FIRE ALARM NOTES

1. SEE PLANS FOR QUANTITY AND LOCATION OF ALL EQUIPMENT.
2. CONTRACTOR SHALL PROVIDE COMPLETE DOCUMENT PER 2018 FIRE CODE SECTION 907.1.1 AND 907.1.2 TO TO ENGINEER FOR APPROVAL PRIOR TO SUBMIT TO AND TESTING BY TOWN OF NASHVILLE FIRE MARSHAL'S OFFICE.
3. PLACARD THE ENTIRE FIRE ALARM SYSTEM. PROVIDE PANEL AND CIRCUIT NUMBERS ON A NAME PLATE AFFIXED TO THE FACE OF THE FIRE ALARM CONTROL PANEL.
4. CONTRACTOR SHALL PROVIDE ZONE MAPS COMPLETE WITH ADDRESSES FOR EACH FIRE ALARM DEVICE IN WOODEN FRAME ADJACENT TO THE NEW FIRE ALARM CONTROL PANEL.
5. ELECTRICAL CONTRACTOR SHALL PROVIDE BATTERY CALCULATIONS AND CUT SHEETS FOR FIRE ALARM SYSTEM TO ENGINEER FOR APPROVAL.
6. ALL WIRING SHALL BE SUPERVISED.
7. ALL WIRING SHALL BE PER MANUFACTURER'S SPECIFICATIONS.
8. ALL WIRING IN WALLS OR FURRED SPACES SHALL BE IN CONDUIT.
9. WHERE PERMITTED BY CODE, WIRING ABOVE ACCESSIBLE CEILINGS MAY BE RUN EXPOSED AND THE FOLLOWING REQUIREMENTS SHALL BE MET:
   A. WIRING SHALL BE PLENUM RATED WHERE APPLICABLE.
   B. PROVIDE BRIDLE RINGS FOR INDEPENDENT FIRE ALARM CABLE SUPPORT UNLESS SPECIFICALLY NOTED OTHERWISE. ANALOG LOOP WIRING INCOMING AND OUTGOING SHALL NOT BE SUPPORTED IN THE SAME BRIDLE RING.
10. ADDRESSABLE SLC CIRCUIT REQUIREMENTS:
    A. WIRING SHALL BE 'CLASS B'
    B. MINIMUM CAPACITY OF ANALOG SENSORS PER LOOP SHALL BE 48.
    C. MINIMUM CAPACITY OF ADDRESSABLE MONITORING DEVICES PER LOOP SHALL BE 48.
    D. MINIMUM CAPACITY OF ADDRESSABLE CONTROL RELAY MODULES PER LOOP SHALL BE 48.
11. NOTIFICATION CIRCUIT REQUIREMENTS:
    A. WIRING SHALL BE 'CLASS B'.
    B. PROVIDE WITH 'SYNC MODULE' AS REQUIRED PER NFPA 72.
    C. FURNISH NOTIFICATION CIRCUITS AS REQUIRED TO ACCOMMODATE CIRCUIT LOADING. NO NOTIFICATION CIRCUIT SHALL BE LOADED TO MORE THAN 80% CAPACITY.
12. NOTIFICATION APPLIANCE RATINGS:
    A. PROVIDE SOUND (dB) AND CANDELA (Cd) RATINGS FOR ALL HORN/STROBE DEVICES PER NFPA 72. ALL VISIBLE NOTIFICATION APPLIANCES SHALL BE SYNCHRONIZED PER NFPA 72, 18.5.5.5.7 AND 18.5.3.6.
    B. A DECIBEL LEVEL OF (15 dB ABOVE AMBIENT ON NFPA 72, TABLE A.18.4.3) SHALL BE MAINTAINED IN ALL GENERAL AREAS AND 100 dB (15 dB ABOVE AN AMBIENT OF 85 dB IN NFPA 72, 18.4.3.1) SHALL BE MAINTAINED IN ALL MECHANICAL EQUIPMENT ROOMS PER NFPA 72 AND THE 2018 NORTH CAROLINA STATE BUILDING CODE (SECTION 907.6.2).
13. DIGITAL ALARM COMMUINCATOR:
    A. FIRE ALARM SYSTEM SHALL BE WITH DIGITAL ALARM COMMUNICATOR (DACT).
    B. WHERE SINGLE COMMUNICATION PATH WITH CELLULAR NETWORK IS ACCEPTABLE BY THE LOCAL FIRE MARSHAL, PROVIDE WITH THE COMMUNICATOR IN LIEU OF 2 LINE TELEPHONE IN COMPLIANCE WITH NFPA 72 26.6.3.1.5.
    C. FIELD COORDINATE TYPE MATCH MONITORING COMPANY.
14. FOR SPRINKLER SYSTEM:
    A. FIELD COORDINATE QUANTITY AND LOCATION OF FLOW AND TAMPER SWITCHES WITH SPRINKLER'S FINAL DRAWINGS AND/OR CIVIL FINAL DRAWING FOR TAMPER SWITCH FOR PIV VALVE.
    B. PROVIDE MONITORING MODULES AS REQUIRED FOR SPRINKLER SYSTEM.
15. SMOKE ALARM PER 2018 FIRE CODE SECTION 9072.11.2: SMOKE DETECTION BY ANY SMOKE DETECTORS IN BED 1 (22), BED 2 (23), BED 3 (24), BED 4 (25), EXCERCISE (17). SHALL
    A. SOUND THE SOUNDER BASE AND ACTIVATE STROBES ONLY IN BED 1 (22), BED 2 (23), BED 3 (24), BED 4 (25), EXCERCISE (17) AND STROBE/HORN IN CORRIDOR 13 AND 21.
    B. ALARM SHALL BE SOUND AT FACP AND FAA.
    C. FACP SHALL SEND SUPERVISORY SIGNAL TO CENTRAL STATION.
16. CARBON MONOXIDE DETECTION BY ANY DETECTOR SHALL:
    A. SOUND THE SOUNDER BASE.
    B. ALARM SHALL BE SOUND AT FACP AND FAA.
    C. FACP SHALL SEND SUPERVISORY SIGNAL TO CENTRAL STATION.
17. UPON SPRINKLER WATER FLOW, FACP SHALL SHUTDOWN LARGE CEILING FAN.
18. IF BDA SYSTEM IS REQUIRED PROVIDE MONITOR MODULE AS REQUIRED. SEE DETAIL 1/FA2.2.

FIRE ALARM SYSTEM INPUT/OUTPUT MATRIX

SYSTEM OUTPUTS — FACP ANNUNCIATION / NOTIFICATION / REQUIRED FIRE SAFETY CONTROL

A. ACTUATE COMMON ALARM SIGNAL INDICATOR
B. ACTUATE AUDIBLE ALARM SIGNAL
C. ACTUATE COMMON SUPERVISORY SIGNAL INDICATOR
D. ACTUATE AUDIBLE SUPERVISORY SIGNAL
E. ACTUATE COMMON TROUBLE SIGNAL INDICATOR
F. ACTUATE AUDIBLE TROUBLE SIGNAL
G. ACTUATE ZONE OR DEVICE ADDRESS ALARM INDICATOR
H. ACTUATE GENERAL EVACUATION SIGNAL
I. DISPLAY CHANGE OF STATUS
J. TRANSMIT FIRE ALARM SIGNAL TO CENTRAL STATION
K. TRANSMIT SUPERVISORY SIGNAL TO CENTRAL STATION
L. TRANSMIT TROUBLE SIGNAL TO CENTRAL STATION
W. SHUT DOWN LARGE CEILING FAN
X. ACTIVATE SOUNDER BASE AND STROBE IN THE SLEEPING AREA
Y. ACTIVATE DETECTOR SOUNDER BASE

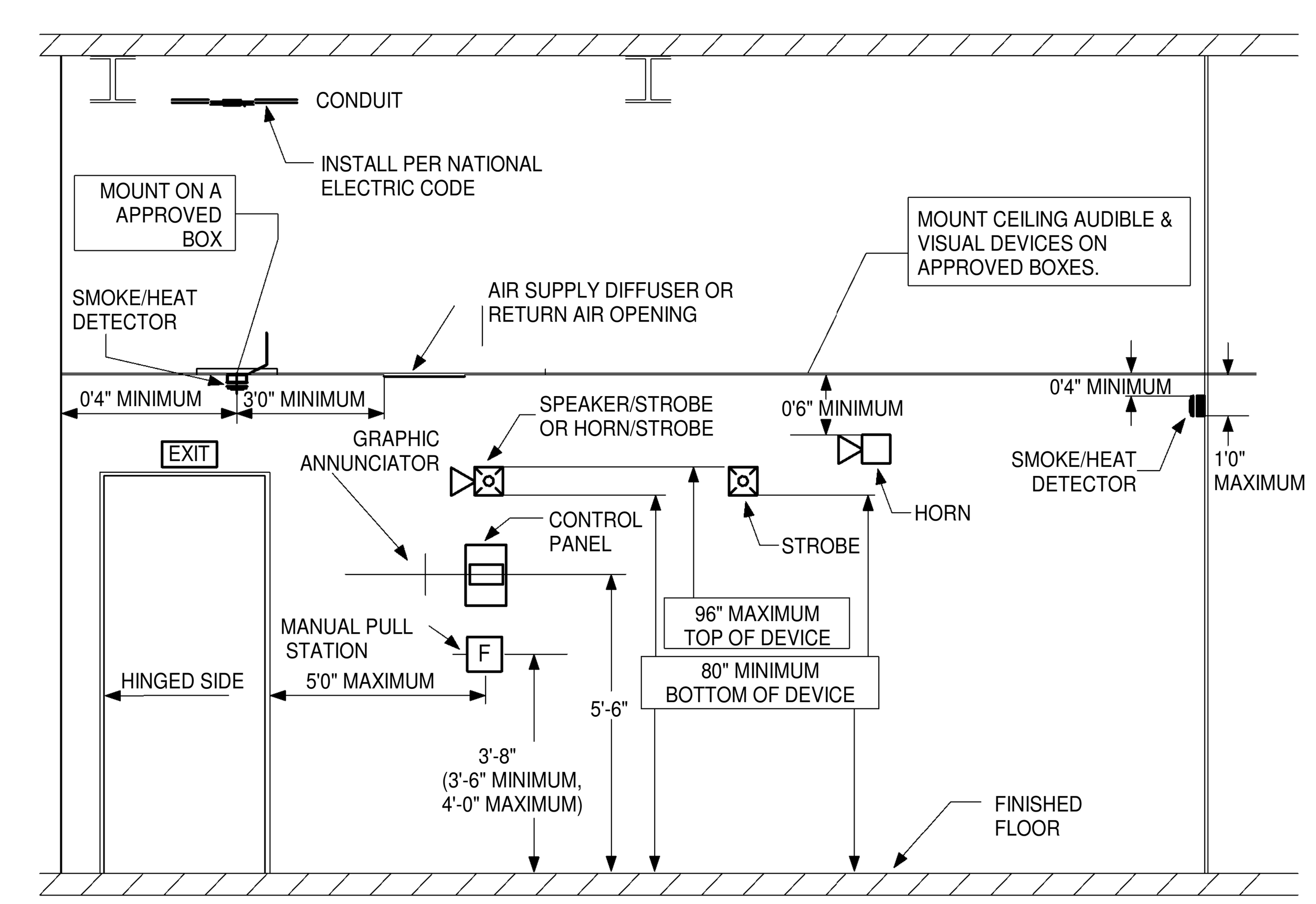
	SYSTEM INPUTS	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	
1	FIRE ALARM SYSTEM AC POWER FAILURE			●	●							●															1
2	FIRE ALARM SYSTEM LOW BATTERY					●	●						●														2
3	OPEN CIRCUIT					●	●						●														3
4	GROUND FAULT					●	●						●														4
5	NOTIFICATION APPLIANCE CIRCUIT SHORT					●	●						●														5
6	BUILDING MANUAL PULL STATIONS	●	●					●	●	●	●														●		6
7	AREA SMOKE DETECTORS OTHER THAN SLEEPING AREA	●	●					●	●	●	●														●		7
8	SMOKE DETECTION IN SLEEPING AREA			●	●			●				●													●		8
9	AREA HEAT DETECTORS	●	●					●	●	●	●														●		9
10	SPRINKLER TAMPER SWITCH			●	●			●				●															10
11	SPRINKLER WATER FLOW IN BUILDING	●	●					●	●	●	●													●	●		11
13	HOT BOX LOW TEMPERATURE			●	●			●				●															12
14	CARBON MONOXIDE DETECTION IN NON-SLEEPING AREA			●	●			●				●														●	13
15																											13
		A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	V	W	

1/FA2.1 FIRE ALARM RISER AND NOTES
NOT TO SCALE

SYMBOL LEGEND

SYMBOL	DESCRIPTION	REMARKS
(smoke detector)	SMOKE DETECTOR, PHOTOELECTRIC ADDRESSABLE.	FIRELITE, EST, SIEMENS, SIMPLEX, POTTER SIGNAL
LF	SMOKE DETECTOR, PHOTOELECTRIC ADDRESSABLE. LOW FREQUENCY SOUNDER BASE	FIRELITE, EST, SIEMENS, SIMPLEX, POTTER SIGNAL
CM	SMOKE/HEAT DETECTOR, PHOTOELECTRIC WITH CARBON MONOXIDE DETECTOR ADDRESSABLE WITH SOUNDER BASE	FIRELITE, EST, SIEMENS, SIMPLEX, POTTER SIGNAL
F	FIRE ALARM PULL STATION. MOUNT 42" A.F.F. ADDRESSABLE.	FIRELITE, EST, SIEMENS, SIMPLEX, POTTER SIGNAL
'XX'	FIRE ALARM STROBE/HORN. MOUNT 80" A.F.F. 75 dBA SOUND LEVEL, 'XX' INDICATES CANDELA RATING. 'WP' INDICATES WEATHERPROOF TYPE	FIRELITE, EST, SIEMENS, SIMPLEX, POTTER SIGNAL
'XX'	FIRE ALARM CEILING STROBE/HORN. 75 dBA SOUND LEVEL, 'XX' INDICATES CANDELA RATING.	FIRELITE, EST, SIEMENS, SIMPLEX, POTTER SIGNAL
'XX'	FIRE ALARM STROBE. MOUNT 80" A.F.F. 'XX' INDICATES CANDELA RATING.	FIRELITE, EST, SIEMENS, SIMPLEX, POTTER SIGNAL
'XX'	FIRE ALARM CEILING STROBE. 'XX' INDICATES CANDELA RATING. 'WP' INDICATES WEATHERPROOF TYPE	FIRELITE, EST, SIEMENS, SIMPLEX, POTTER SIGNAL
AOM	RELAY CONTROL MODULE ADDRESSABLE.	FIRELITE, EST, SIEMENS, SIMPLEX, POTTER SIGNAL
AIM	MONITOR MODULE ADDRESSABLE.	FIRELITE, EST, SIEMENS, SIMPLEX, POTTER SIGNAL
FACP	FIRE ALARM CONTROL PANEL, SURFACE MOUNTED. ADDRESSABLE WITH DACT	FIRELITE, EST, SIEMENS, SIMPLEX, POTTER SIGNAL
FAA	FIRE ALARM REMOTE ANNUNCIATOR, FLUSH MOUNTED. ADDRESSABLE. SEE DETAIL 2/FA2.1 FOR MOUNTING.	FIRELITE, EST, SIEMENS, SIMPLEX, POTTER SIGNAL
FCELL	FIRE ALARM CELLULAR COMMUNICATOR WITH BATTERY BACKUP 2 PATH COMMUNICATIONS: CELLULAR AND IP (INTERNET) SURFACE MOUNTED.	HONEYWELL: HWF2-**-COM OR EQUAL
BDA	BI-DIRECTIONAL ANTENNA SYSTEM SURFACE MOUNTED. PROVIDE INSTALLATION IF REQUIRED. SEE DETAIL 1/FA2.2 FOR INFORMATION.	HONEYWELL OR EQUAL
WF	FIRE SPRINKLER WATER FLOW SWITCH.	BY SPRINKLER CONTRACTOR.
VS	FIRE SPRINKLER VALVE SUPERVISORY SWITCH (TAMPER SWITCH).	BY SPRINKLER CONTRACTOR.
LT	LOW TEMP SENSOR. TEMP SETTING 40°F. NORMALLY OPEN ROOM TEMPERATURE.	POTTER: RTS-0
A.F.F.	ABOVE FINISHED FLOOR - NOTE ALL MOUNTING DIMENSIONS GIVEN ARE TO THE BOTTOM OF THE OUTLET BOX	
A.F.C	ABOVE FINISHED CEILING	
B.F.G.	BELOW FINISHED GRADE	
—·—·—	30 MINUTE WALL	

NFPA 72 AND ADA DEVICE INSTALLATION REQUIREMENTS



2/FA2.1 FIRE ALARM DEVICE INSTALLATION DETAIL
NOT TO SCALE

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NORTH CAROLINA PROFESSIONAL SEAL 027479 ENGINEER SUJIN PRAMOJANEY
5/16/2023

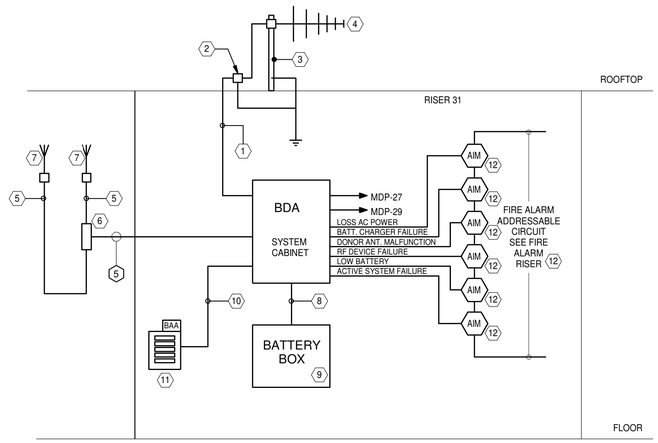
GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

REVISIONS

#	Description	Date

Date	Project No.
5/15/2023	22027
Drawn By SP	Sheet No. FA2.1
Checked By SP	

Sheet Title
FIRE ALARM RISER, NOTES AND DETAILS



KEY NOTES

1. DONOR ANTENNAS CABLE IN CONDUIT.
2. PROVIDE LIGHTNING ARRESTOR, GROUNDED AS REQUIRED.
3. DONOR ANTENNA MAST. TO BE BONDED TO BUILDING STEEL.
4. DONOR ANTENNA.
5. DISTRIBUTED ANTENNA SYSTEM (DAS) CABLE IN CONDUIT.
6. PROVIDE SIGNAL SPLITTER AS REQUIRED.
7. PROVIDE DAS ANTENNA(S) AS REQUIRED FOR COVERAGE. FIELD VERIFY LOCATION AND INSTALLATION OUTSIDE RISER 31 WITH ARCHITECT PRIOR TO ROUGH-IN.
8. BATTERY CABLE IN CONDUIT.
9. BATTERY BOX: 24VDC
10. REMOTE ANNUNCIATOR CIRCUIT IN CONDUIT.
11. REMOTE ANNUNCIATOR. LOCATE ADJACENT TO FACP REMOTE ANNUNCIATOR IN RISER 31.
12. FIRE ALARM DEVICE AND WIRING. SEE FIRE ALARM RISER DIAGRAM.

NOTES

1. CONTRACTOR SHALL PROVIDE PRICES FOR BI-DIRECTIONAL ANTENNA SYSTEM (BDA) AS FOLLOWS:
   - A. SYSTEM REQUIREMENT EVALUATION:
     - a. PROVIDE RF SURVEY AND MAP THE EMERGENCY RESPONDER RADIO SIGNAL STRENGTH (OUTSIDE) AT THE PROPERTY (RAW SURVEY)
     - b. A REGISTERED DESIGN PROFESSIONAL SHALL REVIEW THE EMERGENCY RESPONDER RADIO SIGNAL STRENGTH OUTSIDE (ER-RSS OUTISDE) SURVEY AND BUILDING CONSTRUCTION PLANS TO DETERMINE THAT THE MINIMUM EMERGENCY RESPONDER RADIO SIGNAL STRENGTH INSIDE (ER-RSS INSIDE) WILL LIKELY BE AVAILABLE IN THE PROPOSED BUILDING.
     - c. WHEN THE DESIGN PROFESSIONAL DETERMINES THAT A BDA OR RCS SYSTEM WILL NOT BE REQUIRED, SUBMIT EVALUATION TO THE TOWN OF NASHVILLE FIRE MARSHAL OFFICE FOR APPROVAL. DO NOT INSTALL THE BDA SYSTEM PER PLAN
     - d. WHEN THE DESIGN PROFESSIONAL DETERMINES THAT A BDA OR RCS SYSTEM WILL BE REQUIRED, SEE SYSTEM INSTALLATION.
   - B. SYSTEM INSTALLATION:
     - a. FURNISH SHOP DRAWINGS INCLUDING THE RADIO WAVE PROPAGATION PLAN TO THE TOWN OF NASHVILLE FIRE MARSHAL OFFICE FOR APPROVAL.
     - b. PROVIDE INSTALLATION PLAN.
     - c. PRIOR TO FINAL INSPECTION, AN ER-RSS INSIDE SURVEY SHALL BE PERFORMED AND MAPPED. THIS SHALL BE SUBMITTED TO THE ENGINEER AND THE TOWN OF NASHVILLE FIRE MARSHAL OFFICE.
2. SHOWN DIAGRAM IS A GUIDE LINE. IF THE INSTALLATION IS REQUIRED UPON SURVEY, CONTRACTOR SHALL PROVIDE INSTALLATION PER SPECIFICATIONS AND MANUFACTURER INSTRUCTION.
3. INSTALLATION SHALL COMPLY WITH 2018 NC FIRE CODE, 2013 NFPA 72 AND 2019 NFPA 1221.

1 FA2.2 BI-DIRECTIONAL ANTENNA SYSTEM
NOT TO SCALE

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5/16/2023
NORTH CAROLINA REGISTERED PROFESSIONAL ENGINEER
SEAL 027479
ENGINEERING PRINCIPAL

GENERAL NOTE: Prior to construction start. Contractor shall verify & be responsible for all Dimensions.

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Sheet Title: BI-DIRECTIONAL ANTENNA SYSTEM