

PROJECT DESCRIPTION

FOR

Public Safety Training Facility Multi-Purpose Training Area

BY

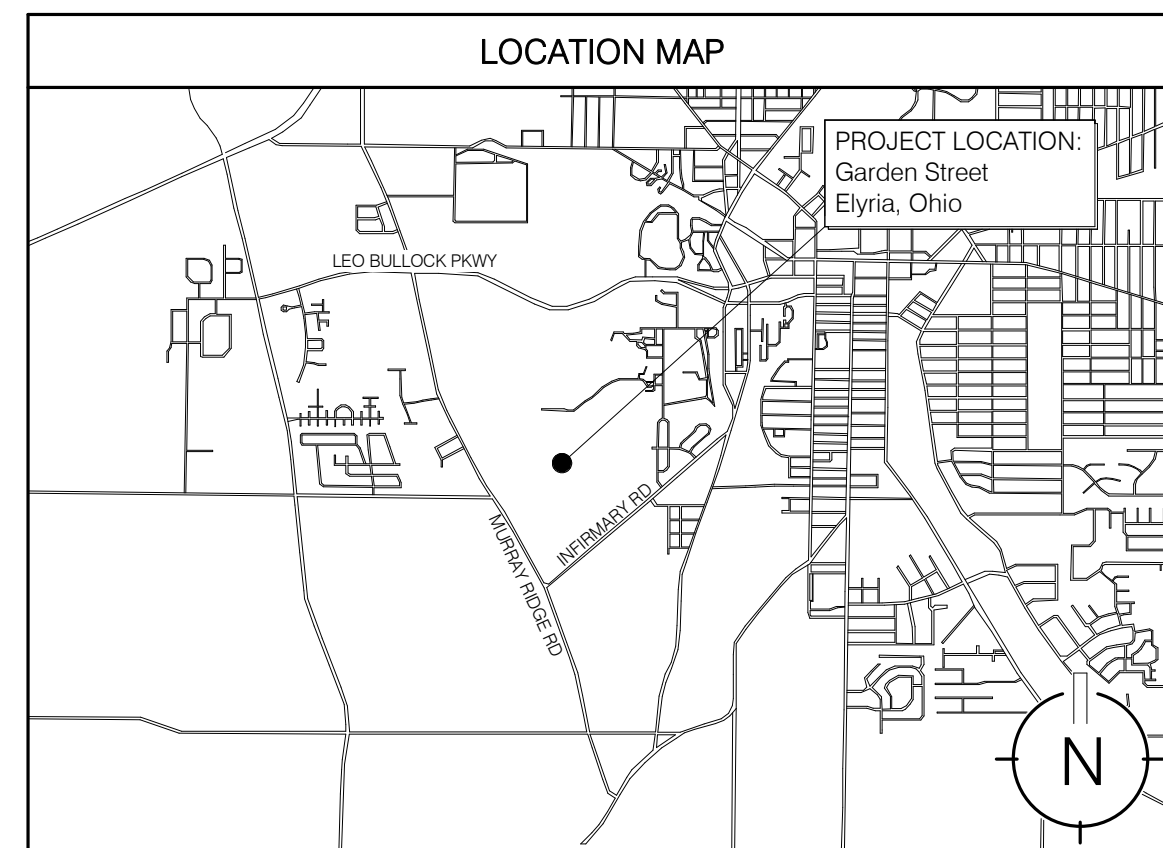
City of Elyria

AT

Garden Street
Elyria, Ohio 44035
For Construction

SYMBOL LEGEND			
X	CEILING MATERIAL	#	ROOM NUMBER
X-X'	CEILING HEIGHT		
○	DETAIL MARK	↻	SECTION CUT
#	DOOR MARK	⊕	TEMPERED GLASS
⊙	ELEVATION BENCHMARK	⊕	WALL SECTION CUT
⊕	ELEVATION MARK	X	WALL TYPE
X	KEYNOTE	#	WINDOW MARK

ABBREVIATIONS			
A	AMPERE	MO	MASONRY OPENING
AB	ANCHOR BOLT	MASY	MASONRY
AFF	ABOVE FINISH FLOOR	MAX	MAXIMUM
ALUM	ALUMINUM	MECH	MECHANICAL
AV	AUDIO VISUAL	MEP	MECHANICAL, ELECTRICAL, & PLUMBING
B/	BOTTOM OF	MFR	MANUFACTURER
B/DECK	BOTTOM OF DECK	MIN	MINIMUM
BD	BOARD	MO	MASONRY OPENING
BLDG	BUILDING	MTL	METAL
BOTT	BOTTOM		
BM	BEAM	NIC	NOT IN CONTRACT
		NFPA	NATIONAL FIRE PROTECTION ASSOCIATION
CO	CLEANOUT		
CAB	CABINET		
CFM	CUBIC FEET PER MINUTE	O/	OVER/OVER
CLG	CEILING	OC	ON CENTER
CLR	CLEAR	OZ	OUNCE
CMU	CONCRETE MASONRY UNIT	OA	OUTSIDE AIR
COL	COLUMN	OBC	OHIO BUILDING CODE
CONC	CONCRETE	OCC	OCCUPANT(S)
CONT	CONTINUOUS	OPP	OPPOSITE
CPT	CARPET		
		PT	PRESSURE TREATED
DS	DOWNSPOUT	PERIM	PERIMETER
DEMO	DEMOLITION/DEMOLISH	PERF	PERFORATED
DIA	DIAMETER	PLAM	PLASTIC LAMINATE
DN	DOWN	PLYWD	PLYWOOD
DR	DOOR	FR	PAIR
DWG	DRAWING	PSF	POUNDS PER SQUARE FOOT
		PTD	PAINTED
ETR	EXISTING TO REMAIN	PVC	POLYVINYL CHLORIDE
EA	EACH		
ELEV	ELEVATION	(R)	RELOCATE
ELV	ELECTRICAL METALLIC TUBING	RO	ROUGH OPENING
EO	EQUAL	RAG	RETURN AIR GRILLE
EXIST	EXISTING	RD	ROAD
EXT	EXTERIOR	REF	REFERENCE
		REQD	REQUIRED/REQUIREMENTS
FD	FLOOR DRAIN	RH	RIGHT HAND
FE	FIRE EXTINGUISHER	RM	ROOM
FFE	FINISH FLOOR ELEVATION	RTU	ROOF TOP UNIT
FRP	FIBERGLASS REINFORCED PLASTIC	SS	STAINLESS STEEL
FRT	FIRE RETARDANT TREATED	SAG	SUPPLY AIR GRILLE
FT	FEET/FOOT	SAN	SANITARY
FTG	FOOTING	SCHED	SCHEDULE
FWY	FREEWAY	SF	SQUARE FOOT/SQUARE FOOTAGE
		SIM	SIMILAR
GA	GAUGE	SS	STAINLESS STEEL
GAL	GALLON	STL	STEEL
GALV	GALVANIZED	STRUCT	STRUCTURE/ STRUCTURAL
GFCI	GROUND-FAULT CIRCUIT INTERRUPTER		
GWB	GYPSON WALL BOARD	T/	TOP OF
GYP	GYPSON	TYP	TYPICAL
		UL	UNDERWRITERS LABORATORIES
H	HIGH	UNO	UNLESS NOTED OTHERWISE
HDPE	HIGH DENSITY POLYETHYLENE		
HM	HOLLOW METAL	V	VOLT
HORIZ	HORIZONTAL	VB	VAPOR BARRIER
HR	HOUR	VIF	VERIFY IN FIELD
HSS	HOLLOW STEEL SECTION	VERT	VERTICAL
		VTR	VENT THROUGH ROOF
ICC	INTERNATIONAL CODE COUNCIL		
IECC	INTERNATIONAL ENERGY CONSERVATION CODE	W	WIDE
INSUL	INSULATION	W/	WITH
		WD	WOOD
		WWF	WELDED WIRE FABRIC
LAV	LAVATORY	@	AT
LG	LONGLENGTH	⊕	CENTERLINE
LH	LEFT HAND	∅	DIAMETER



PROJECT DESCRIPTION
The Scope of Work proposed as a part of this submittal includes a 2-story pre-engineered metal building for training/simulation with simulated ammunition.
BID ALTERNATE GC TO PROVIDE BID ALTERNATE OPTIONS FOR 144' OF RAMP FROM LEVEL 1 TO LEVEL 2 OPTION A - Internal Wood Ramp - 144' length of 1:12 slope with handrails and level landings every 30'-0" of run. OPTION B - External Metal Ramp - 144' length of 1:12 slope with handrails and level landings every 30'-0" of run around perimeter of building

GENERAL PROJECT NOTES
1. The work shall conform to all applicable local, state, and national codes.
2. Field verify existing conditions prior to performing any demolition, fabrication, or construction work.
3. Dimensions are to finished surfaces (not rough framing) except where noted otherwise.
4. All dimensions and elevations noted as "(REF)" are for reference only and shall be field verified by the contractor prior to using them for any demolition, or construction activities.
5. Contractor shall review and become familiar with all existing conditions prior to commencing work. Any conditions not documented on these drawings or observed to be different than those shown on these drawings are to be reported to the architect / engineer and owner prior to commencing the work.
6. Contractor shall submit all not already submitted permit documents, qualifications, etc. and be responsible for all fees associated with permits, utility extensions, tap-inspections, etc. The architect/engineer shall submit construction documents for owner's review and permit plan review; however, the contractor will be responsible for obtaining the permits, and all associated permit and inspection costs / fees.
7. The contractor shall be responsible for removal of all debris resulting from construction work on this project.
8. All contractors are responsible for familiarizing themselves with the entire set of contract documents. Trades work may be shown in various locations on various sheets of the drawing set.
9. Hazardous materials in the work area will be abated by the owner prior to construction. If a contractor encounters any materials believed to be hazardous, immediately stop work and notify the owner, general contractor, and architect. Do not resume work in the area in question until the area has been properly assessed.
10. Fire suppression contractors shall provide certified fire suppression drawings and hydraulic calculations to the authority having jurisdiction. The local fire official shall have the opportunity to review the construction documents.

DRAWING INDEX			
SHEET NUMBER	SHEET NAME	SHEET ISSUE DATE	CURRENT REVISION
T1.00	Title Sheet	11.07.2024	A
G1.00	Code Compliance and Energy Compliance	11.07.2024	A
G1.01	Life Safety Plan	11.07.2024	A
G2.00	Phase One Site Plan	11.07.2024	A
A1.00	First Floor Plan	11.07.2024	A
A1.10	Second Floor Plan	11.07.2024	A
A1.20	Reflected Ceiling Plans	11.07.2024	A
A2.00	Roof Plan	11.07.2024	A
A3.00	Exterior Elevations	11.07.2024	A
A3.10	Exterior Elevations Continued	11.07.2024	A
A4.00	Building Sections	11.07.2024	A
A5.00	Wall Sections	11.07.2024	A
A7.01	Details	11.07.2024	A
A7.02	Details	11.07.2024	A
A7.03	Details	11.07.2024	A
S0.00	General Notes	09.26.2024	
S0.10	Diagrams & Schedules	09.26.2024	
S1.00	Foundation Plan	11.07.2024	A
S2.00	Foundation Details & Sections	09.26.2024	
S5.00	Typical Masonry Details	09.26.2024	
P0.00	Plumbing Symbols, Notes & Abbreviations	11.07.2024	A
P1.01	Multi-Purpose Training Area First Floor Plumbing Plan	11.07.2024	A
P1.02	Multi-Purpose Training Area Second Floor Plumbing Plan	11.07.2024	A
P2.00	Plumbing Details and Diagrams	11.07.2024	A
P3.00	Plumbing Schedules	11.07.2024	A
M0.00	Mechanical Symbols, Notes & Abbreviations	11.07.2024	A
M1.01	Multi-Purpose Training Area First Floor Mechanical Plan	11.07.2024	A
M1.02	Multi-Purpose Training Area Second Floor Mechanical Plan	11.07.2024	A
M2.00	Mechanical Details and Diagrams	11.07.2024	A
M3.00	Mechanical Schedules	11.07.2024	A
E0.00	Electrical Symbols, Notes & Abbreviations	09.26.2024	
E1.01	Multi-Purpose Training Area First Floor Lighting Plan	11.07.2024	A
E1.02	Multi-Purpose Training Area Second Floor Lighting Plan	11.07.2024	A
E2.01	Multi-Purpose Training Area First Floor Power Plan	11.07.2024	A
E2.02	Multi-Purpose Training Area Second Floor Power Plan	09.26.2024	
E5.00	Electrical Details and Diagrams	11.07.2024	A
E6.00	Electrical One-Line Diagram & Panel Schedules	11.07.2024	A

Client:

City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:

Public Safety Training Facility
Multi-Purpose Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

A 11.07.2024 ADDENDUM A
0 09.26.2024 For Construction

Project Number: 5039 01 23
Drawn by: HLM
Checked by: GLP
Copyright: 2024

CIVIL

STRUCTURAL

MEP

ARCHITECT

CONSTRUCTION MANAGER

CLIENT

City of Elyria
131 Court Street
Elyria, Ohio 44035

Bill Forthofer
wforthofer@cityofelyria.org
440-326-1444

Triumph
1101 Auburn Avenue
Cleveland, Ohio 44113

Aaron Mitchell
aaron@triumphcompanies.com
216 - 767 - 5400 (ext. 104)

Triumph
1101 Auburn Avenue
Cleveland, Ohio 44113

Brandon Haber
bhaber@triumphservices.com
216 - 767 - 5400 (ext. 114)

Sixmo Architecture
1101 Auburn Avenue
Cleveland, Ohio 44113

Graham Post
gpost@sixmoarchitecture.com
216-767-5400 (ext. 113)

COMPANY NAME (TO BE DETERMINED)
STREET ADDRESS
CITY, STATE ZIP

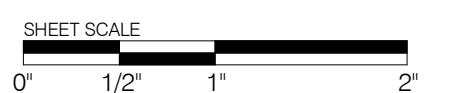
CONTACT NAME
EMAIL
PHONE NUMBER

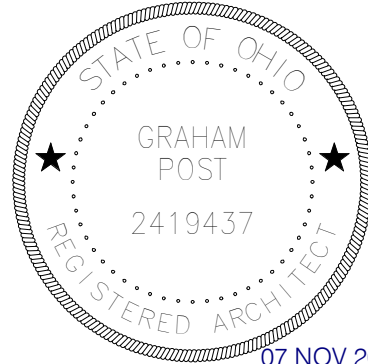
City of Elyria
131 Court Street
Elyria, Ohio 44035

Kathryn McKillips
kmckillips@cityofelyria.org
440-326-1444

Title Sheet

T1.00





07 NOV 2024
Graham Lochridge Post, License #2419437
Expiration Date 12/31/2025

Client:

City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:

Public Safety
Training Facility
Multi-Purpose
Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

Project Number: 5039 01 23
Drawn by: HLM
Checked by: GLP
Copyright: 2024

Code Compliance
and Energy
Compliance

G1.00

SHEET SCALE
0' 1/2' 1' 2'

CODE COMPLIANCE

<p>Applicable Codes: 2024 Ohio Building Code (OBC) 2024 Ohio Plumbing Code (OPC) 2024 Ohio Mechanical Code (OMC) 2023 National Electric Code (NEC) 2017 ICC A.117.1 (ADA) ASHRAE 90.1-2019</p> <p>General Building Information: Building Area: 10,000 GSF Occupant Load: 62</p> <p>Use and Occupancy Classification – OBC Chapter 3 B - Business</p> <p>General Building Heights and Areas – OBC Chapter 5 Allowable Area: 9,000 sf (OBC Allowable Area - OBC Table 506.2) Allowable Height: 2 stories (OBC Allowable Height - OBC Table 504.4) Actual Area: 10,000 square feet Actual Height: 2 Stories / 40 feet Frontage Increase Factor OBC Table 506.3.3 9,000 sf x 0.5 = 4,500 sf Total allowable area = 13,500 sf</p> <p>Types of Construction – OBC Chapter 6 Construction Type: 5B Table 601: Fire Resistance Rating Requirements for Building Elements Primary Structural Frame 0 Hours Exterior Bearing Walls 0 Hours Interior Bearing Walls 0 Hours Interior Non-Bearing Walls & Partitions 0 Hours Floor Construction and Secondary Members 0 Hours Roof Construction and Secondary Members 0 Hours</p> <p>Fire and Smoke Protection Features – OBC Chapter 7 Table 705.5: Exterior Walls Based on Fire Separation Distance X < 5' 1 Hour 5' ≤ X < 10' 1 Hour 10' ≤ X < 30' 0 Hours X ≥ 30' 0 Hours</p>	<p>Interior Finishes – OBC Chapter 8 Interior Wall and Ceiling Finish Requirements: Interior exit stairs, ramps, and passageways: Class A Corridors: Class B Rooms and Enclosed Spaces: Class C</p> <p>Fire Protection Systems – OBC Chapter 9 Building is not fully sprinklered. Building is not equipped with a fire alarm system per OBC 907.2.2.</p> <p>Means of Egress – OBC Chapter 10 Occupant Load = 62 Table 1006.2.1: Maximum Common Path of Egress Travel Distance shall be 75 feet in spaces with one exit or exit access doorway. Maximum Occupant Load shall be 49 for spaces with one exit or exit access doorway. Table 1017.2: Exit Access Travel Distance = 200 feet (without sprinkler system) 1020.4 Dead end corridors shall not exceed 20 feet.</p> <p>Accessibility - OBC Chapter 11 1109.2 Each toilet room shall be accessible. At least one of each fixture, element, control, or dispenser in each accessible toilet room and bathing room shall be accessible. Where there is one urinal provided in a toilet room, the urinal is not required to be accessible. 1109.2.2 At least 5% of the total number of compartments shall be wheelchair accessible. 1109.2.3 At least 5%, but not less than one, lavatory shall be accessible. 1109.3 Where sinks are provided, at least 5% but not less than one provided in accessible spaces shall be accessible. ANSI 117.1-2009 606.2 Exception 1: A parallel approach shall be permitted to a kitchen sink in a space where a cook top or conventional range is not provided. 1109.4 Where kitchens and kitchenettes are provided in accessible spaces or rooms, they shall be accessible. 1109.5.1 No fewer than two drinking fountains shall be provided, one for standing persons and one wheelchair accessible.</p>	<p>Plumbing Fixtures – OBC Chapter 29 Table 2902.1 The Minimum number of required plumbing fixtures are as follows:</p> <table border="1"> <tr> <th>Occupant Type</th> <th>Occupant Load</th> <th>Water Closets</th> <th>Lavatories</th> <th>Drinking Fountain</th> <th>Service Sink</th> </tr> <tr> <td>B</td> <td>62</td> <td>1 per 25 for first 50, 1 per 50 remainder</td> <td>1 per 40 for first 80, 1 per 80 remainder</td> <td>1 per 100</td> <td>1</td> </tr> </table> <p>Water Closets: Office: 31 @ per 25 = 2 Lavatories: Office: 31 @ per 40 = 1 Drinking Fountains: Office: 62 @ per 100 = 1</p> <table border="1"> <tr> <th>Fixture</th> <th>Required</th> <th>Provided</th> </tr> <tr> <td>Men's WC/Urinal</td> <td>2</td> <td>2 Unisex**</td> </tr> <tr> <td>Women's WC</td> <td>2</td> <td>2 Unisex**</td> </tr> <tr> <td>Men's Lav</td> <td>1</td> <td>2 Unisex**</td> </tr> <tr> <td>Women's Lav</td> <td>1</td> <td>2 Unisex**</td> </tr> <tr> <td>Drinking Fountain</td> <td>1</td> <td>1*</td> </tr> <tr> <td>Service Sink</td> <td>1</td> <td>1</td> </tr> </table> <p>*Water Dispenser provided per OBC 110.4 **Posted occupancy as required by Building Official per 2902.1</p>	Occupant Type	Occupant Load	Water Closets	Lavatories	Drinking Fountain	Service Sink	B	62	1 per 25 for first 50, 1 per 50 remainder	1 per 40 for first 80, 1 per 80 remainder	1 per 100	1	Fixture	Required	Provided	Men's WC/Urinal	2	2 Unisex**	Women's WC	2	2 Unisex**	Men's Lav	1	2 Unisex**	Women's Lav	1	2 Unisex**	Drinking Fountain	1	1*	Service Sink	1	1
Occupant Type	Occupant Load	Water Closets	Lavatories	Drinking Fountain	Service Sink																														
B	62	1 per 25 for first 50, 1 per 50 remainder	1 per 40 for first 80, 1 per 80 remainder	1 per 100	1																														
Fixture	Required	Provided																																	
Men's WC/Urinal	2	2 Unisex**																																	
Women's WC	2	2 Unisex**																																	
Men's Lav	1	2 Unisex**																																	
Women's Lav	1	2 Unisex**																																	
Drinking Fountain	1	1*																																	
Service Sink	1	1																																	

COMcheck Software Version COMcheckWeb
Envelope Compliance Certificate

Project Information

Energy Code: 90.1 (2019) Standard
Project Title: Simunitions Building
Location: Elyria, Ohio
Climate Zone: 5a
Project Type: New Construction
Vertical Glazing / Wall Area: 0%
Performance Sim. Specs: EnergyPlus 8.1.0.009 (EPW: USA_OH_Cleveland-Hopkins.Intl.AP.725240_TMY3.epw)

Construction Site: Elyria, Ohio 44035
Owner/Agent: City of Elyria
131 Court Street, Suite 101
Elyria, Ohio 44035
Designer/Contractor: Sixmo Architecture
1101 Auburn Avenue
Cleveland, Ohio 44113

Building Area	Floor Area
1-Office : Nonresidential	5000

Envelope Assemblies

Assembly	Gross Area or Perimeter	Cavity R-Value	Cont. R-Value	Proposed U-Factor	Budget U-Factor ^(a)
Roof: Metal Building, Standing Seam, Liner System with Thermal Blocks (c), [Bldg. Use 1 - Office]	5000	49.0	0.0	0.026	0.037
Floor: Unheated Slab-On-Grade, Horizontal with vertical 2 ft., [Bldg. Use 1 - Office] (b)	295	---	10.0	0.700	0.520
NORTH					
Ext. Wall: Metal Building Wall, Single Layer Mineral Fiber (in cavity, thermal block at girt), [Bldg. Use 1 - Office]	2120	30.0	0.0	0.052	0.050
Window: Metal Frame: Fixed, Perf. Type: Energy code default, Double Pane with Low-E, Clear, SHGC 0.68, VT 0.66, [Bldg. Use 1 - Office]	32	---	---	0.900	0.360
EAST					
Ext. Wall: Metal Building Wall, Single Layer Mineral Fiber (in cavity, thermal block at girt), [Bldg. Use 1 - Office]	1180	30.0	0.0	0.052	0.050
Door: Insulated Metal, Swinging, [Bldg. Use 1 - Office]	21	---	---	0.390	0.370
Door: Insulated Metal, Swinging, [Bldg. Use 1 - Office]	21	---	---	0.390	0.370
SOUTH					
Ext. Wall: Metal Building Wall, Single Layer Mineral Fiber (in cavity, thermal block at girt), [Bldg. Use 1 - Office]	2120	30.0	0.0	0.052	0.050
Door: Insulated Metal, Swinging, [Bldg. Use 1 - Office]	21	---	---	0.390	0.370
WEST					
Ext. Wall: Metal Building Wall, Single Layer Mineral Fiber (in cavity, thermal block at girt), [Bldg. Use 1 - Office]	1180	30.0	0.0	0.052	0.050
Door: Insulated Metal, Non-Swinging, [Bldg. Use 1 - Office]	64	---	---	0.390	0.310

(a) Budget U-factors are used for software baseline calculations ONLY, and are not code requirements.
(b) Slab-On-Grade proposed and budget U-factors shown in table are F-factors.

Project Title: Simunitions Building
Data filename: Report date: 06/07/24
Page 1 of 9

(c) Thermal spacer block with minimum R-3.5 must be installed above the purlin/batt, and the roof deck secured to the purlins.

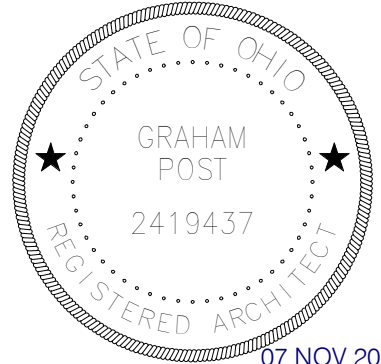
Envelope PASSES: Design 0.2% better than code

Envelope Compliance Statement

Compliance Statement: The proposed envelope design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed envelope systems have been designed to meet the 90.1 (2019) Standard requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Hallie Myers - Designer
Name - Title Signature Date 6/6/2024

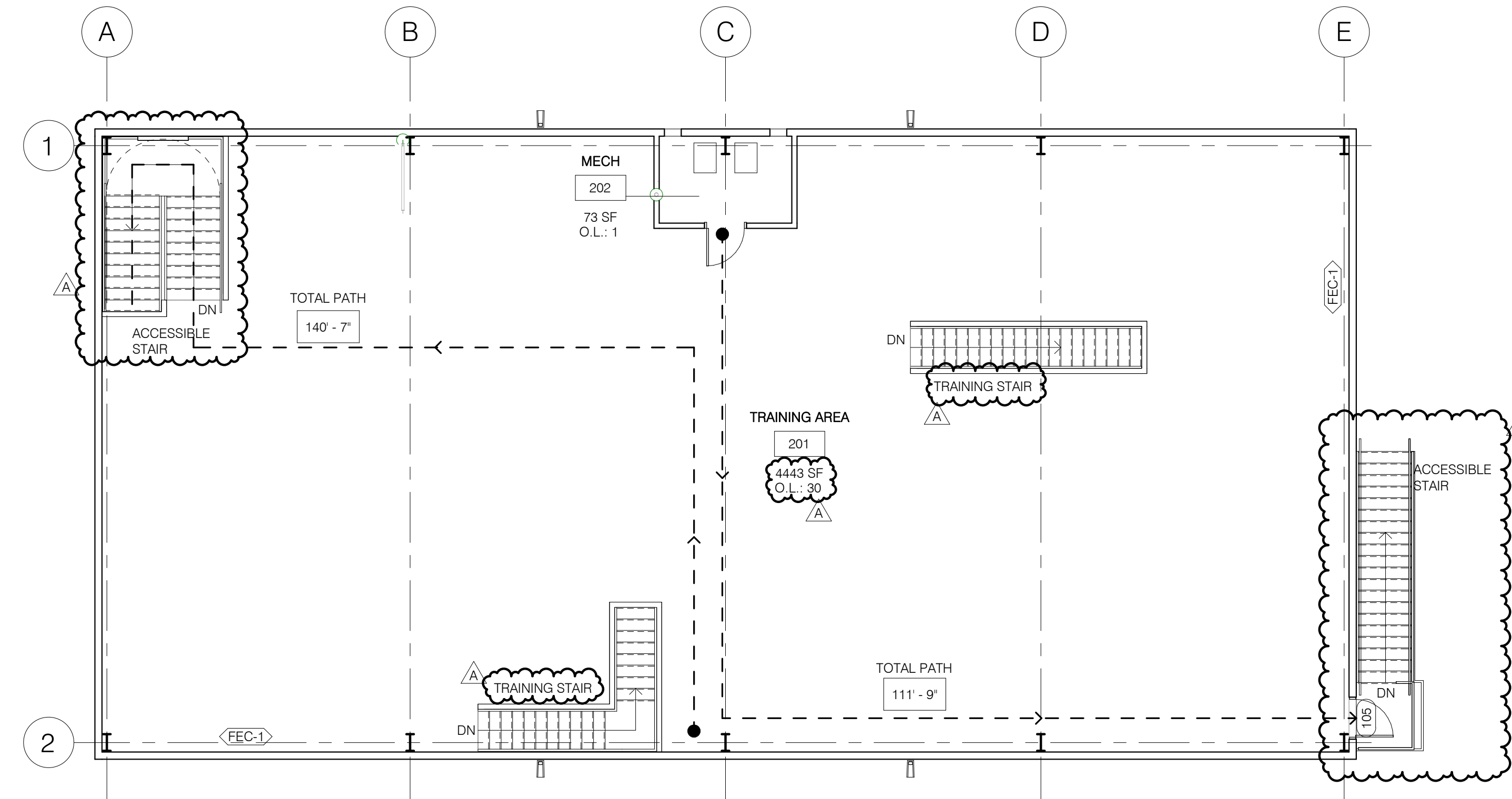
Project Title: Simunitions Building
Data filename: Report date: 06/07/24
Page 2 of 9



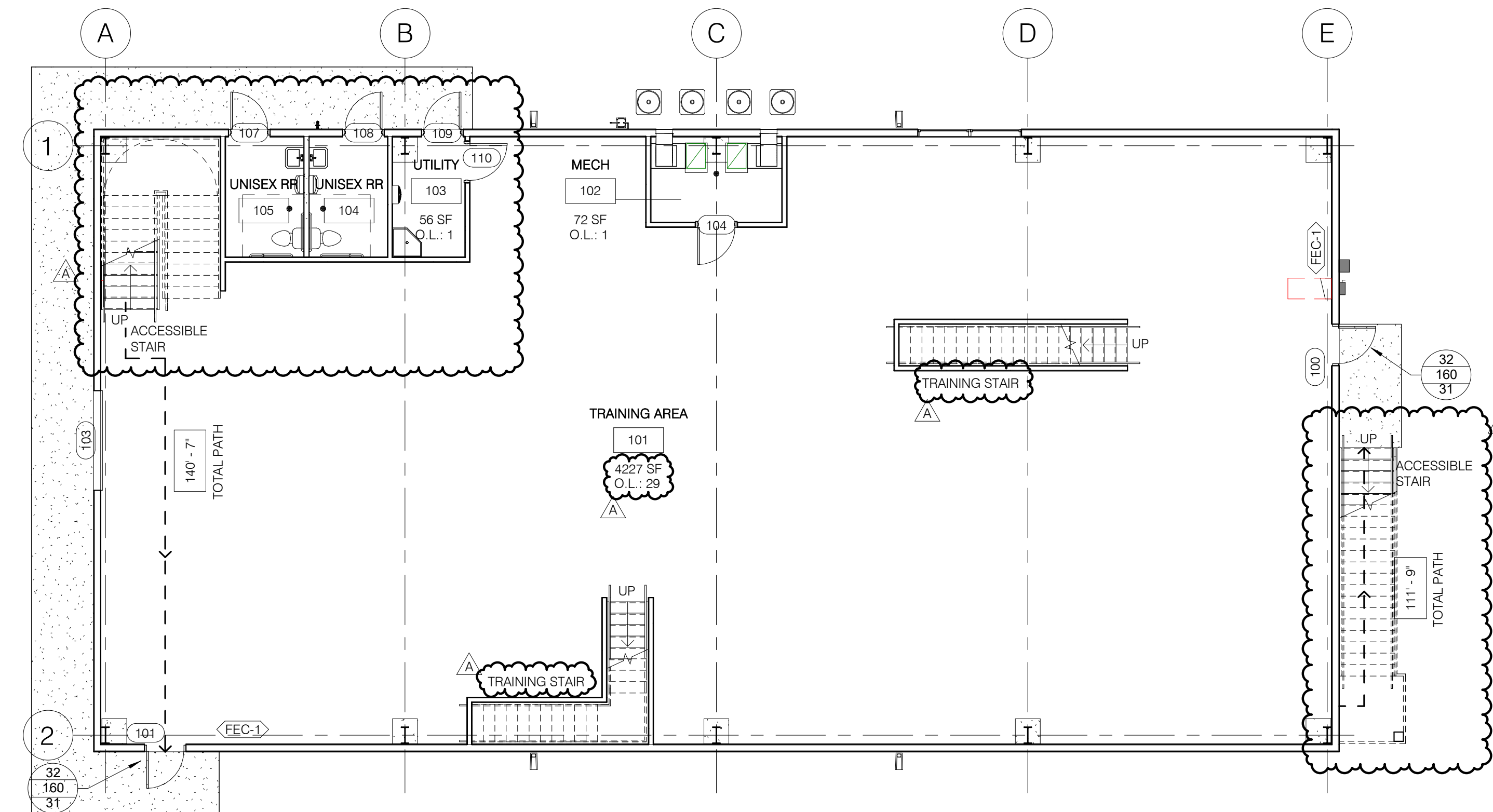
07 NOV 2024
Graham Lochridge Post, License #2419437
Expiration Date 12/31/2025

EGRESS LEGEND

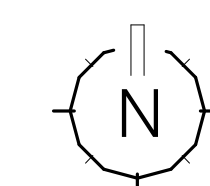
- WALL-MOUNTED, SEMI-RECESSED FIRE EXTINGUISHER CABINET & EXTINGUISHER WITH HANDLE @ 42" A.F.F. - MULTIPURPOSE
- INDICATES CLEAR WIDTH OF EGRESS DOOR (INCHES)
INDICATES MAXIMUM EXIT CAPACITY OF EGRESS DOOR (OCCUPANTS)
INDICATES ACTUAL EXIT CAPACITY OF EGRESS DOOR (OCCUPANTS)
- INDICATES 1-HOUR FIRE-RATED BARRIER
INDICATES 2-HOUR FIRE-RATED BARRIER
- INDICATES MAXIMUM TRAVEL DISTANCE W/ DISTANCE INDICATED



A2 SECOND FLOOR LIFE SAFETY PLAN
G1.01 1/8" = 1'-0"
A3.00



A1 FIRST FLOOR PLAN LIFE SAFETY PLAN
G1.01 1/8" = 1'-0"
A3.00



Client:

City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:

Public Safety
Training Facility
Multi-Purpose
Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

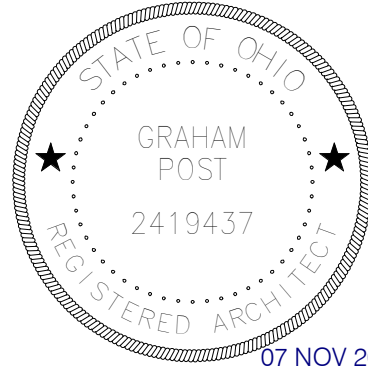
Project Number: 5039 01 23
Drawn by: HLM
Checked by: GLP
Copyright: 2024

Life Safety Plan

G1.01

SHEET SCALE
0' 1/2' 1' 2'

v2023 11/7/2024 3:11:53 PM C:\Users\MyersOneDrive - Sixmo Inc\Documents\60390123_Safety Facility Simulations Training Building_v2023_Central_IschuidG1HK6.rvt



07 NOV 2024
Graham Lochridge Post, License #2419437
Expiration Date 12/31/2025

Client:

City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:

Public Safety
Training Facility
Multi-Purpose
Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

Project Number: 5039 01 23
Drawn by: HLM
Checked by: GLP
Copyright: 2024

Phase One Site Plan

G2.00

SHEET SCALE
0' 1/2' 1' 2'

SITE INFORMATION

PROJECT NAME: PROJECT # 767072 (ABUTTING 7670028)

MUNICIPALITY: CITY OF ELYRIA
PROJECT ADDRESS: GARDEN STREET

APN / ACRE / AREA: 062400600011 / 35.55 ACRES / 1,548,616 SF
062400500039 / 2.29 ACRES / 99,939 SF
062400400031 / 21.20 ACRES / 923,626 SF

ZONING: R-MD RESIDENTIAL - MEDIUM DENSITY; NON-COMMERCIAL
ADJACENT ZONING: NORTH - R-MD
SOUTH - R-MD
EAST - H-1
WEST - R-MHL

SETBACKS: LOT FRONTAGE: 60 FT
FRONT YARD: 30 FT (ABUTTING STREETS)
SIDE YARD: 18 FT - 8 FT MIN
REAR YARD: 30 FT

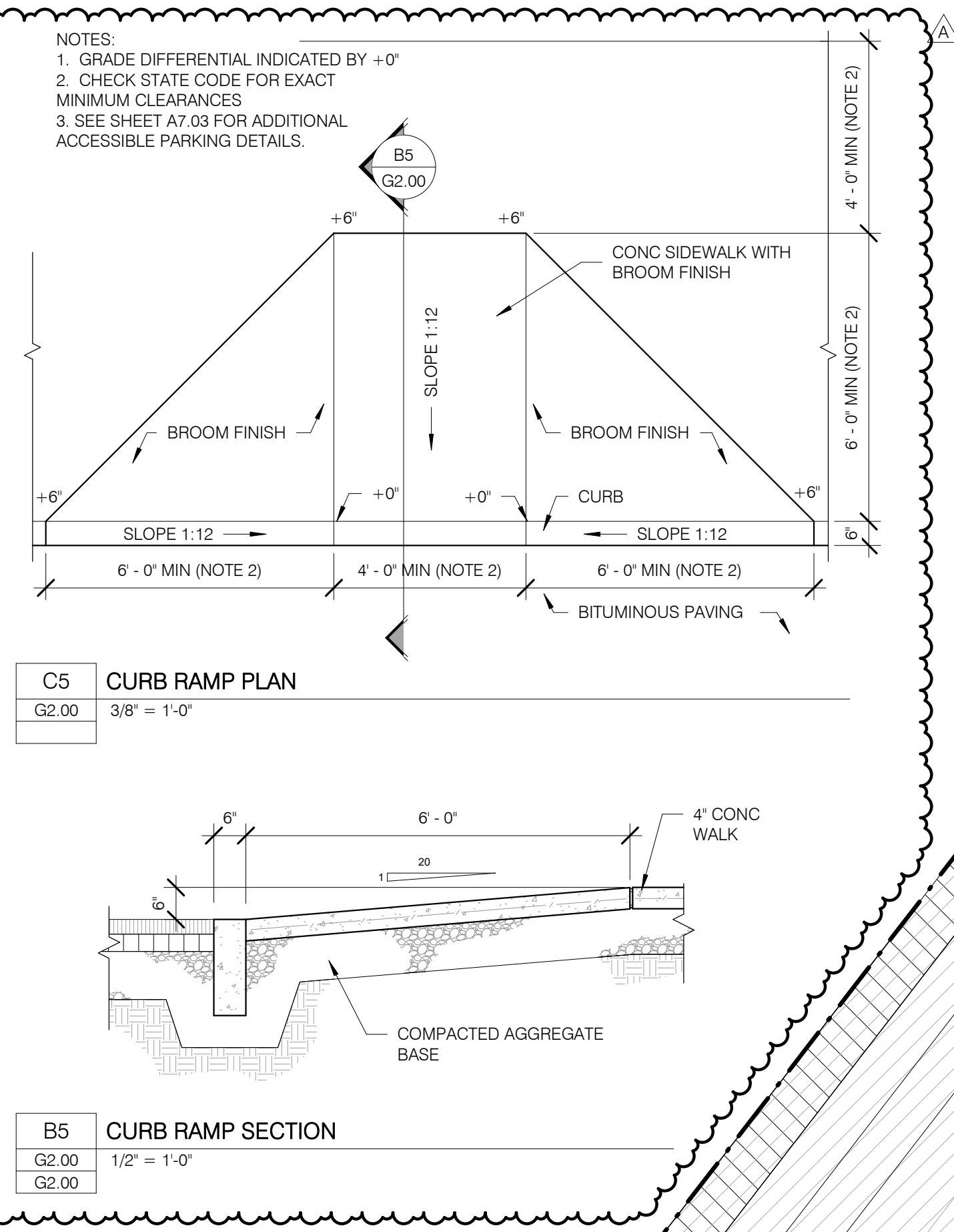
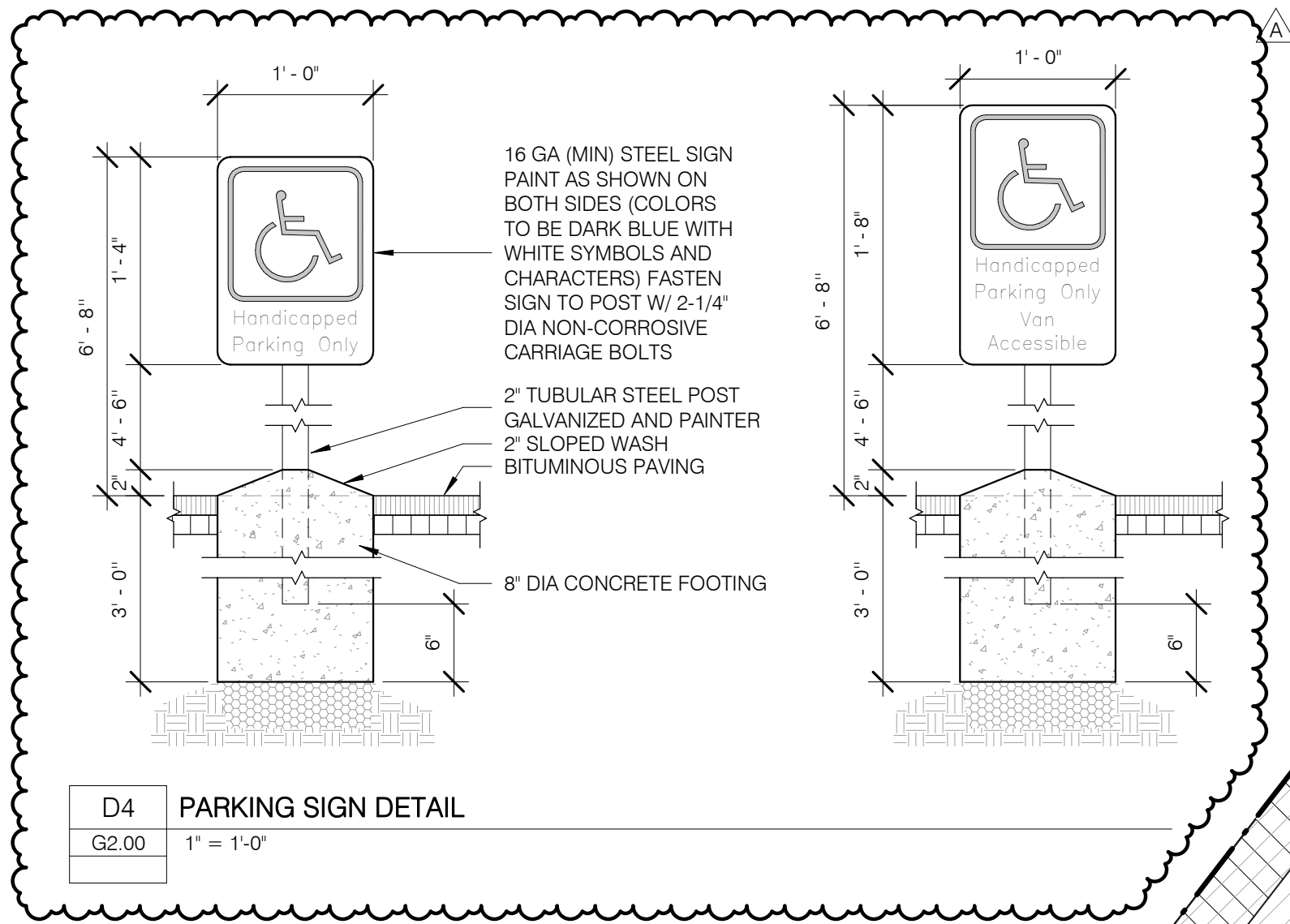
CORNER YARD: N/A
HEIGHT LINE: 35 FT

PARKING: GOVERNMENT = 1 SPACE FOR EACH 200 SF
- GRAVEL PARKING LOT

RANGE SUPPORT BUILDING: 4,183 SF
- 21 SPACES REQUIRED, 1 ACCESSIBLE STALL REQUIRED
- 22 SPACES PROVIDED, 2 ACCESSIBLE STALLS PROVIDED:
1 STANDARD AND 1 VAN

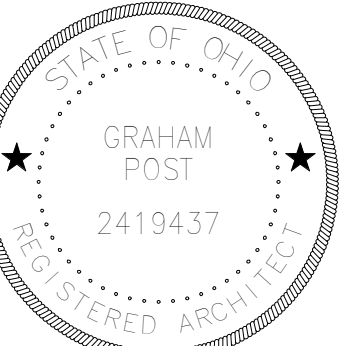
MULTI-PURPOSE TRAINING AREA BUILDING: 10,000 SF
- 50 SPACES REQUIRED
- 50 SPACES PROVIDED (30 SPACES AT STB,
20 SPACES AT RS)

NOTE: REFER TO CIVIL DRAWINGS FOR ALL SITEWORK AND DETAILS.



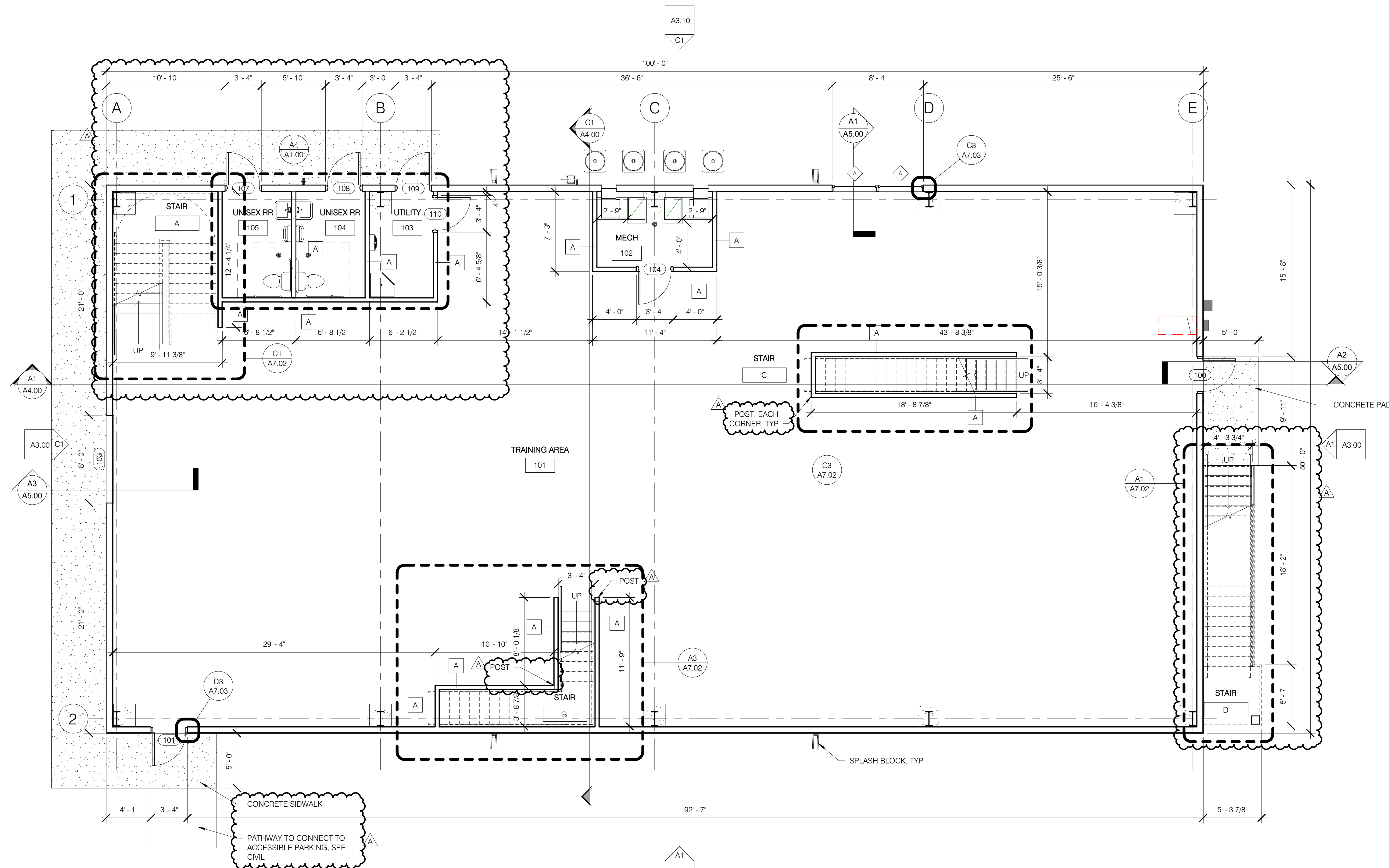
A1 PHASE 1 SITE PLAN
G2.00 1" = 80'-0"

v2023 11/7/2024 3:11:54 PM C:\Users\HMyers\OneDrive - Sixmo Inc\Documents\60390123 - Safety Facility Simulations\60390123 - Safety Facility Simulations\60390123_Central_Ischuid\G2.HKG.v1

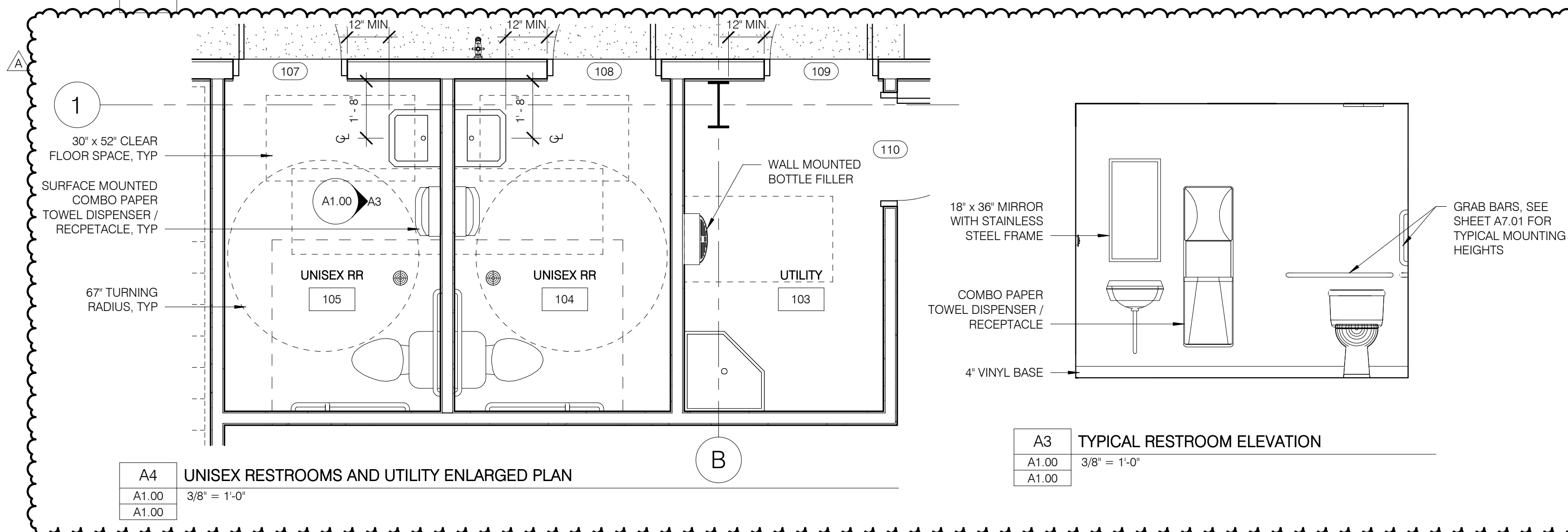


FLOOR PLAN GENERAL NOTES

1. FINISHED FLOOR ELEVATION OF 0'-0".
2. EXTERIOR WALL DIMENSIONS ARE TO FACE OF SHEATHING.
3. INTERIOR WALL DIMENSIONS ARE TO FINISHED FACE, EXCEPT WHERE NOTED OTHERWISE.
4. REFER TO ENLARGED PLANS FOR ADDITIONAL NOTES, DETAILS, AND DIMENSIONS.
5. REFER TO EXTERIOR ELEVATIONS FOR ADDITIONAL NOTES, DETAILS, AND DIMENSIONS.
6. FIELD VERIFICATION OF ALL EXISTING CONDITIONS AND DIMENSIONS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR TO NOTIFY THE ARCHITECT OF ANY DISCREPANCIES IMMEDIATELY.
7. ALL NEW WALL TYPES ARE TO BE TYPE A UNLESS NOTED OTHERWISE.
8. SECURITY AND ACCESS CONTROL TO BE PROVIDED AND INSTALLED BY OWNER.

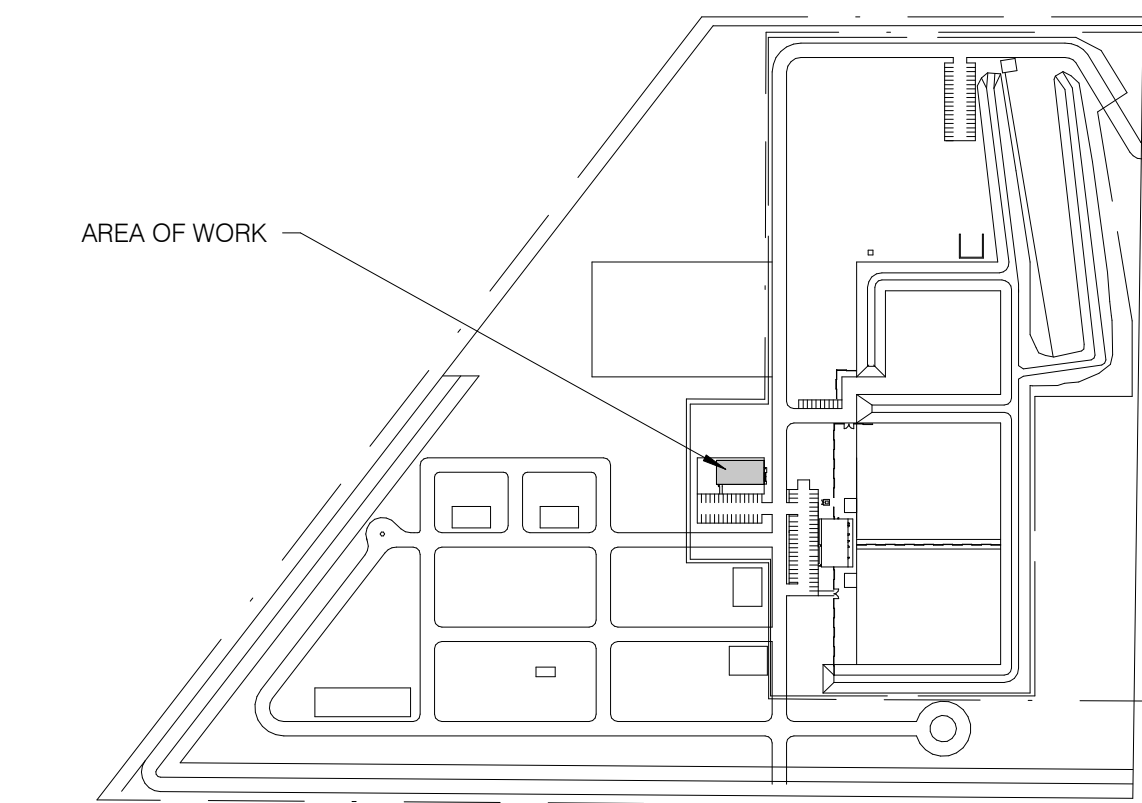


A1 FIRST FLOOR PLAN
A1.00 3/16" = 1'-0"

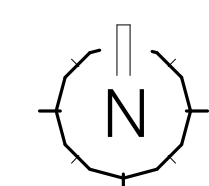


A4 UNISEX RESTROOMS AND UTILITY ENLARGED PLAN
A1.00 3/8" = 1'-0"
A1.00

A3 TYPICAL RESTROOM ELEVATION
A1.00 3/8" = 1'-0"
A1.00



A2 KEY PLAN
A1.00 N.T.S.



Client:
City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:
Public Safety
Training Facility
Multi-Purpose
Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

Project Number: 5039 01 23
Drawn by: HLM
Checked by: GLP
Copyright: 2024

First Floor Plan

A1.00

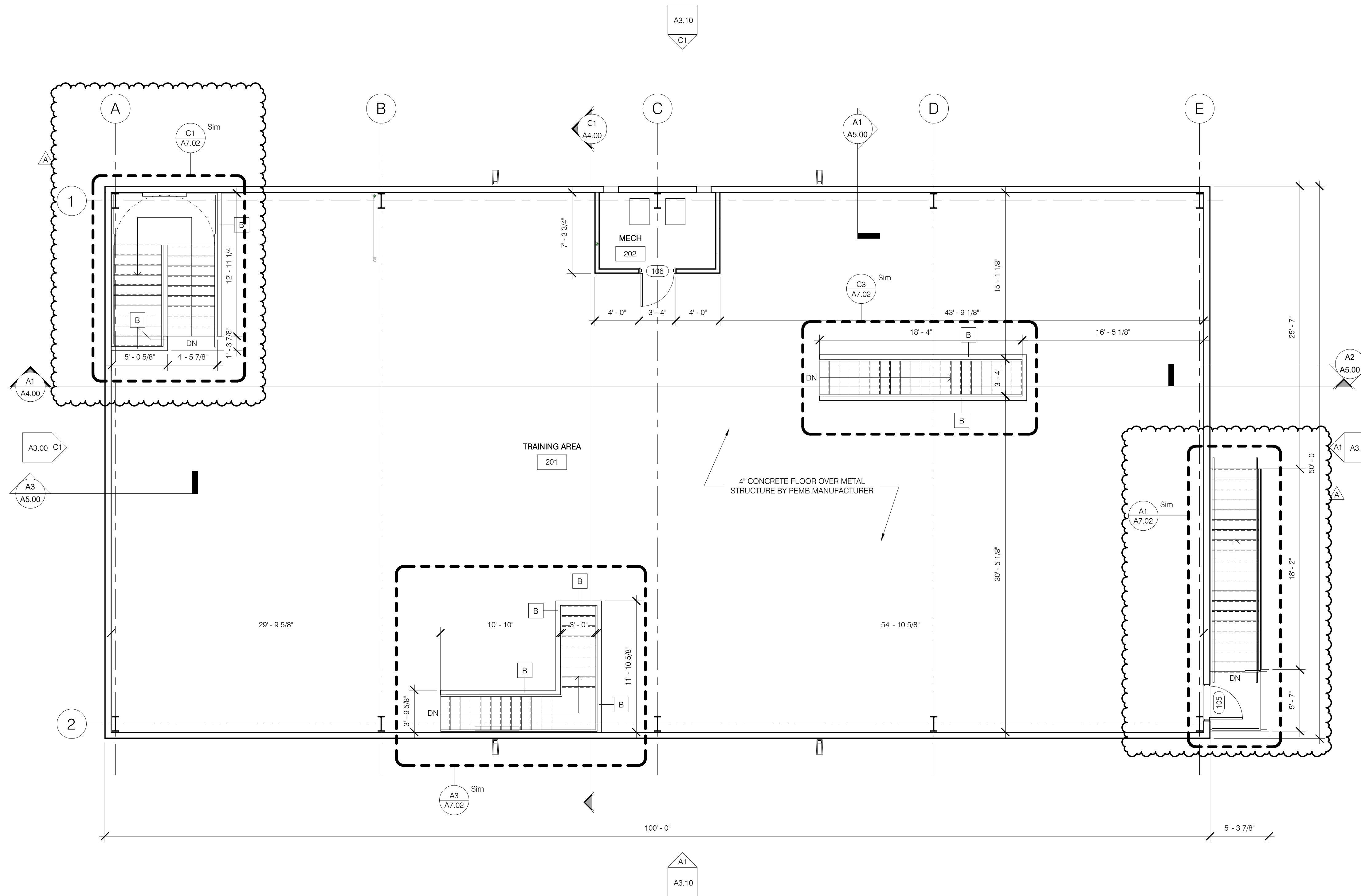
SHEET SCALE
0' 1/2' 1' 2'



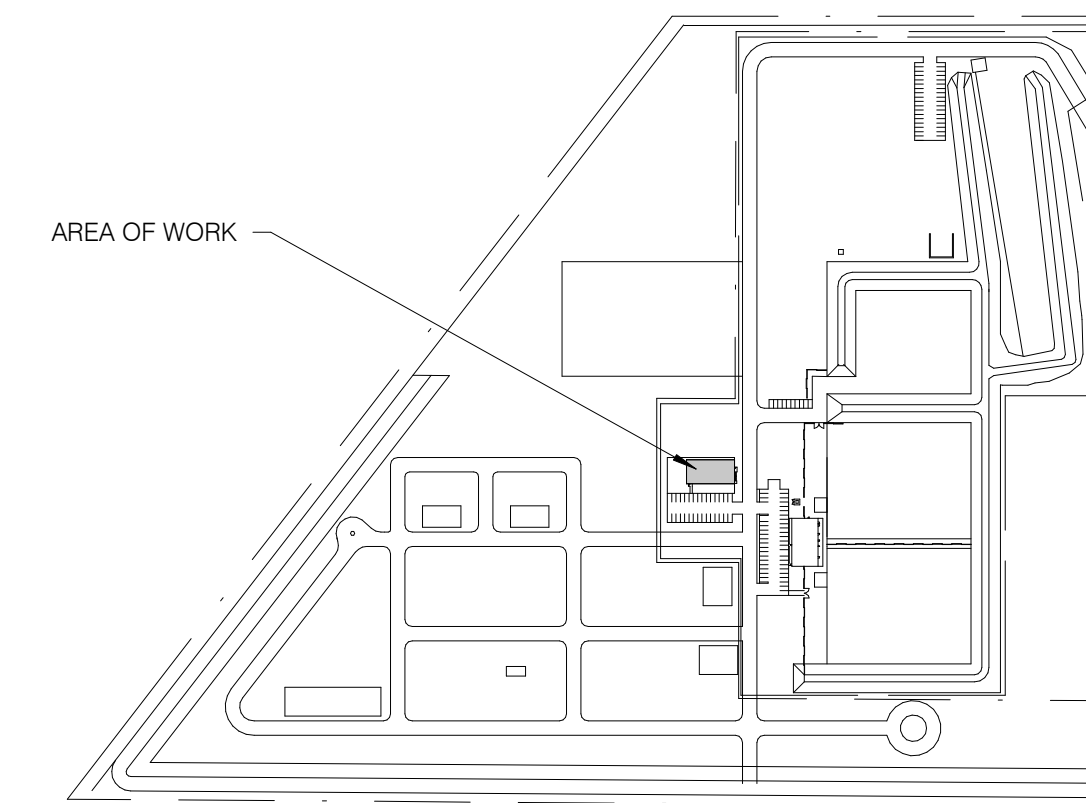
07 NOV 2024
Graham Lochridge Post, License #2419437
Expiration Date 12/31/2025

FLOOR PLAN GENERAL NOTES

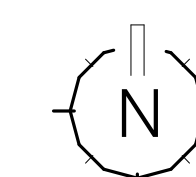
1. FINISHED FLOOR ELEVATION OF 0'-0".
2. EXTERIOR WALL DIMENSIONS ARE TO FACE OF SHEATHING.
3. INTERIOR WALL DIMENSIONS ARE TO FINISHED FACE, EXCEPT WHERE NOTED OTHERWISE.
4. REFER TO ENLARGED PLANS FOR ADDITIONAL NOTES, DETAILS, AND DIMENSIONS.
5. REFER TO EXTERIOR ELEVATIONS FOR ADDITIONAL NOTES, DETAILS, AND DIMENSIONS.
6. FIELD VERIFICATION OF ALL EXISTING CONDITIONS AND DIMENSIONS IS THE SOLE RESPONSIBILITY OF THE CONTRACTOR. CONTRACTOR TO NOTIFY THE ARCHITECT OF ANY DISCREPANCIES IMMEDIATELY.
7. ALL NEW WALL TYPES ARE TO BE TYPE A UNLESS NOTED OTHERWISE.
8. SECURITY AND ACCESS CONTROL TO BE PROVIDED AND INSTALLED BY OWNER.



A1 SECOND FLOOR PLAN
A1.10 3/16" = 1'-0"



A2 KEY PLAN
A1.10 N.T.S.



Client:
City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:
**Public Safety
Training Facility
Multi-Purpose
Training Area**

Garden Street
Elyria, Ohio 44035

Revisions:

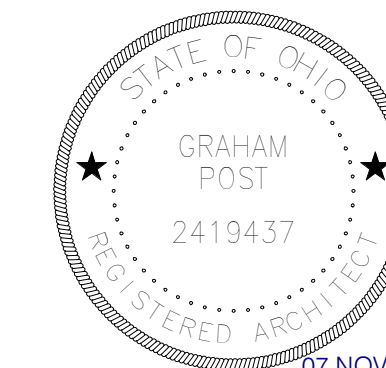
A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

Project Number: 5039 01 23
Drawn by: HLM
Checked by: GLP
Copyright: 2024

Second Floor Plan

A1.10

SHEET SCALE
0" 1/2" 1" 2"



07 NOV 2024
Graham Lochridge Post, License #2419437
Expiration Date 12/31/2025

REFLECTED CEILING PLAN LEGEND

4" STRIP LIGHT PROVIDED WITH EMERGENCY BATTERY BACKUP, SEE SHEET E1.01 FOR MORE INFORMATION

4" STRIP LIGHT, SEE SHEET E1.01 FOR MORE INFORMATION

EXIT SIGN, SEE ELECTRICAL

DUAL HEAD REMOTE EGRESS FIXTURE, SEE ELECTRICAL

CEILING TYPE
 CEILING HEIGHT

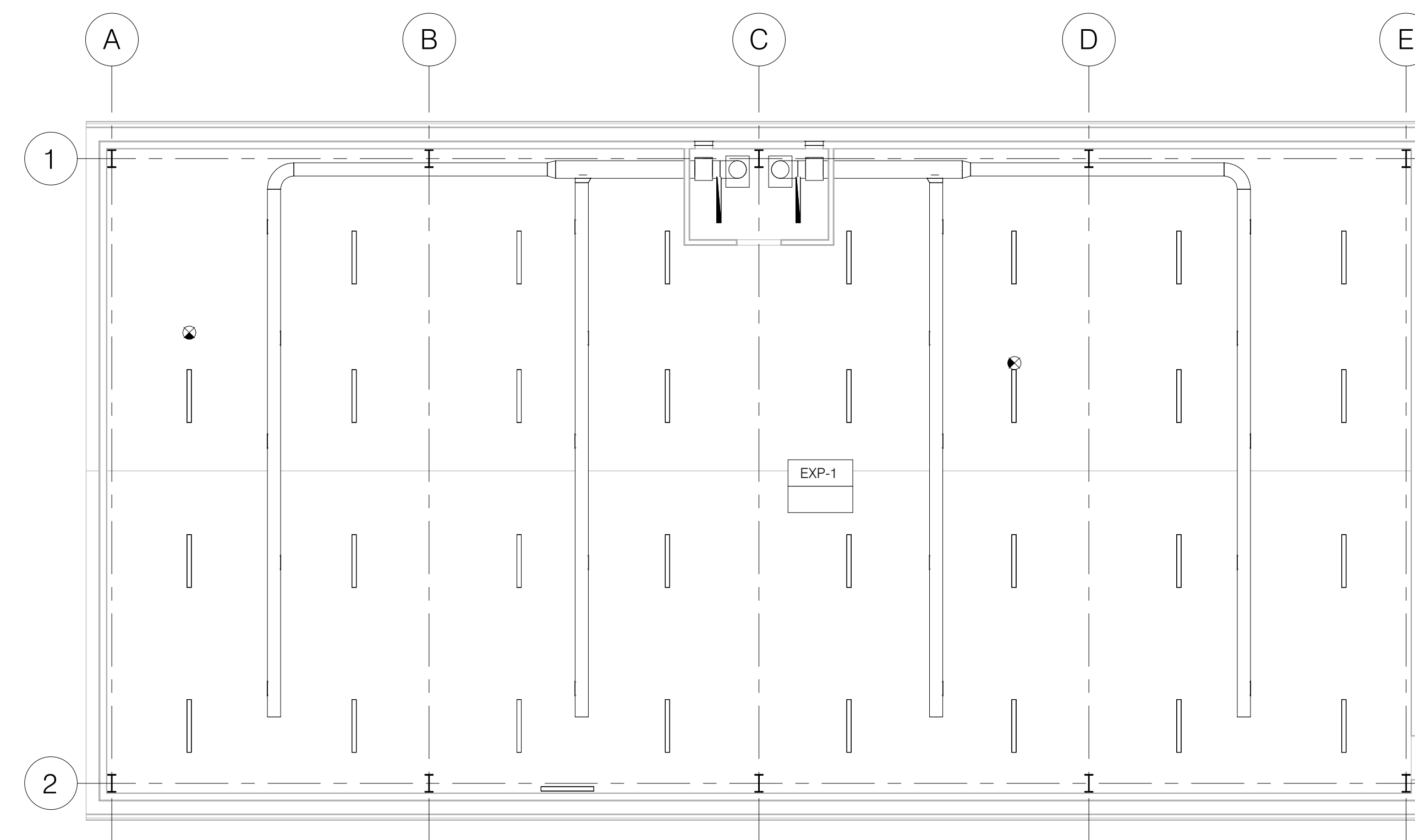
TROFFER LIGHT PROVIDED WITH EMERGENCY BATTERY BACKUP, SEE SHEET E1.01 FOR MORE INFORMATION

TROFFER LIGHT, SEE SHEET E1.01 FOR MORE INFORMATION

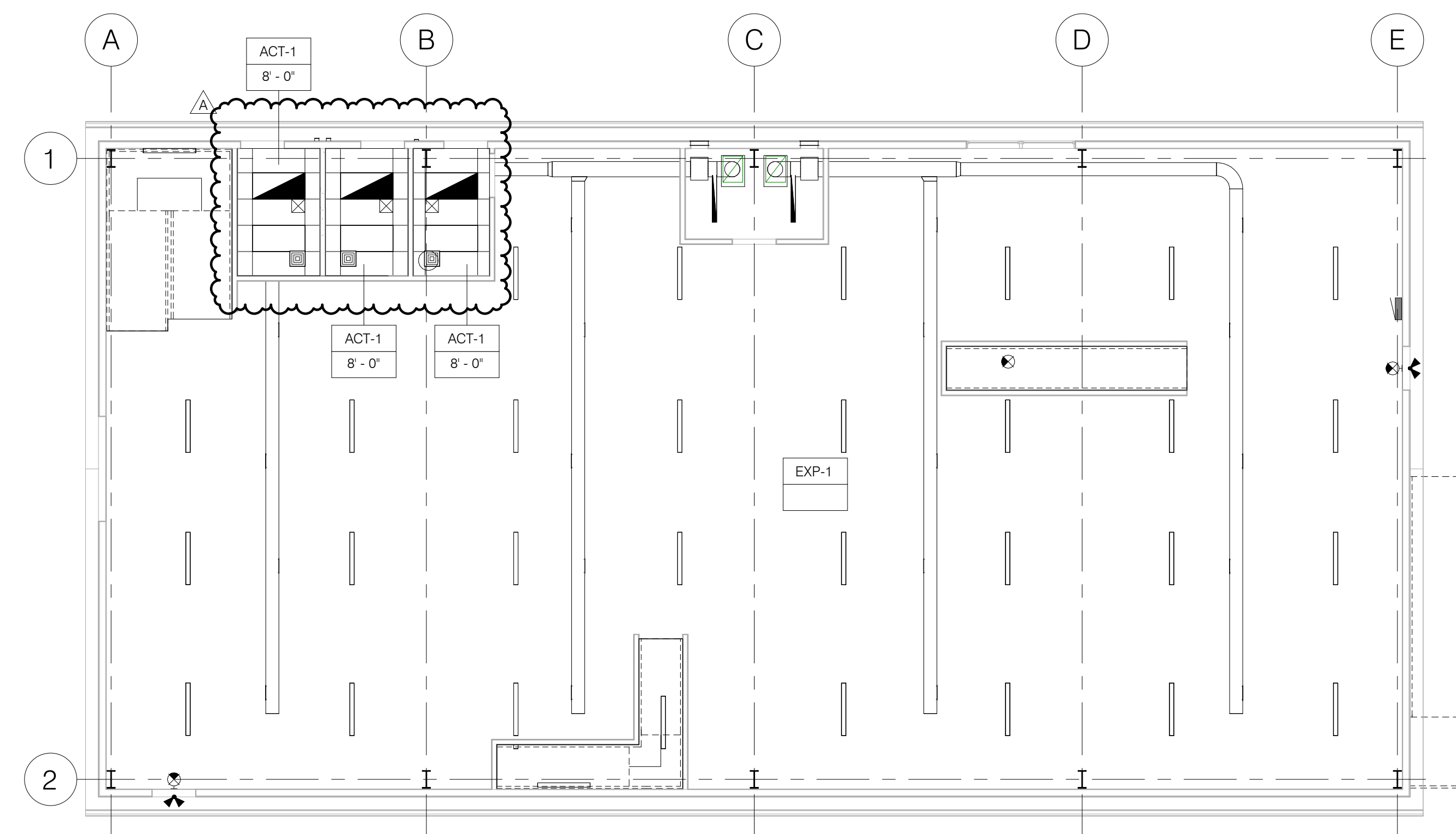
CEILING TYPES

EXP-1 EXPOSED CEILING - ALL STRUCTURE, DUCTWORK PAINTED COLOR TO BE SELECTED FROM MANUFACTURER'S STANDARD COLOR LINE

ACT-1 2x4 ACOUSTIC TILE CEILING - WATER REPELLENT AND WASHABLE



A2 SECOND FLOOR REFLECTED CEILING PLAN
A1.20 1/8" = 1'-0"
A3.00



A1 FIRST FLOOR REFLECTED CEILING PLAN
A1.20 1/8" = 1'-0"
A3.00

Client:

City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:

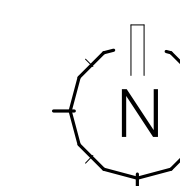
Public Safety
Training Facility
Multi-Purpose
Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

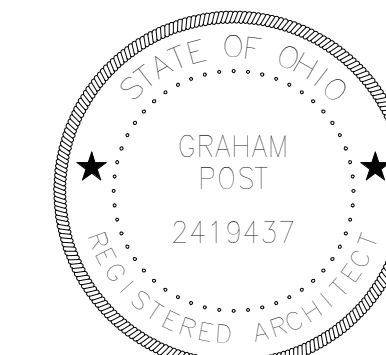
Project Number: 5039 01 23
Drawn by: HLM
Checked by: GLP
Copyright: 2024



Reflected Ceiling
Plans

A1.20

SHEET SCALE
0' 1/2' 1' 2'



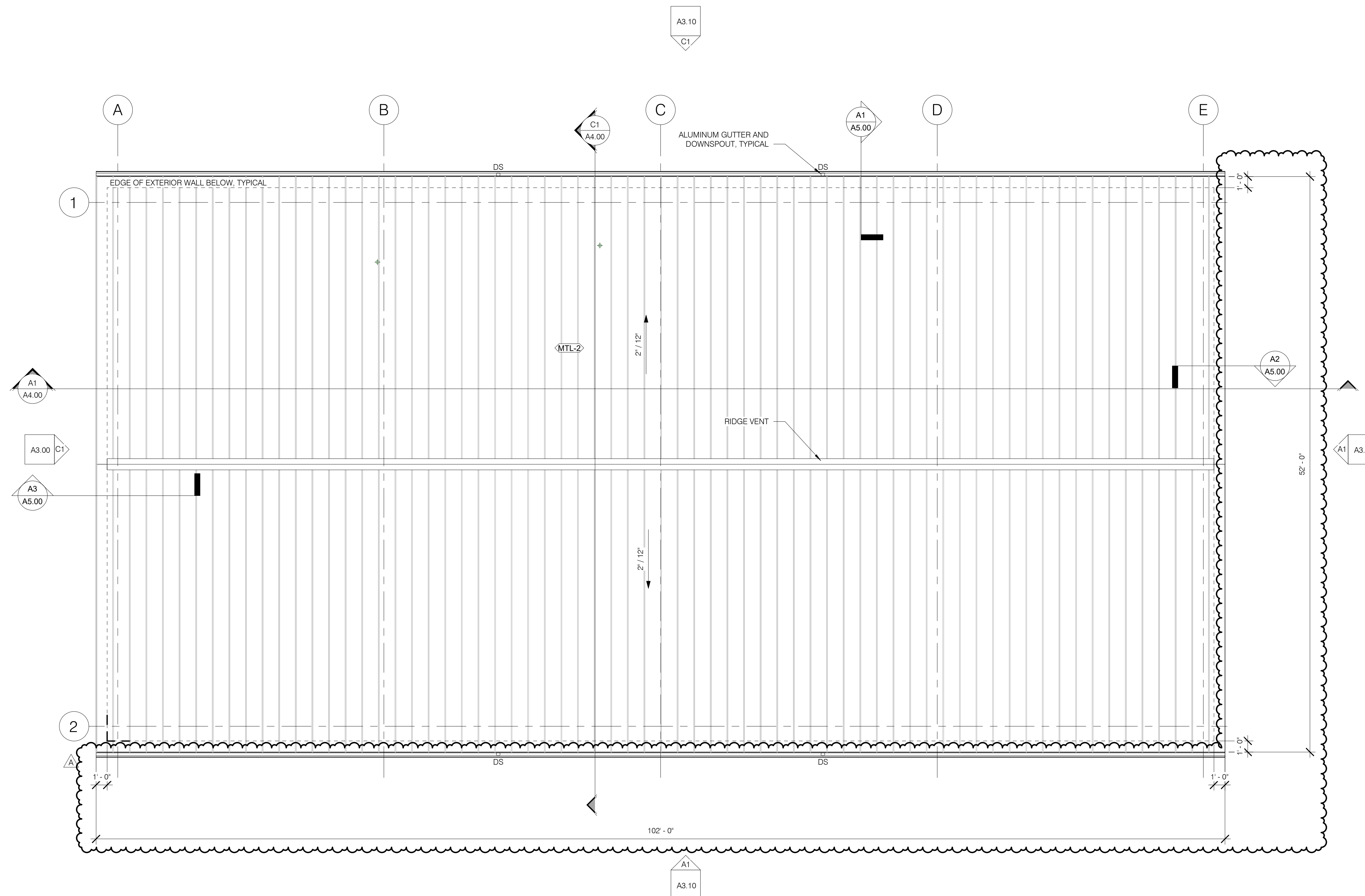
07 NOV 2024
Graham Lochridge Post, License #2419437
Expiration Date 12/31/2025

ROOF PLAN GENERAL NOTES

1. CONTRACTOR IS RESPONSIBLE FOR POSITIVE DRAINAGE AROUND EQUIPMENT AND PENETRATIONS.
2. PROVIDE WALKWAY PADS AROUND ALL REGULARLY SERVICED EQUIPMENT TO ROOF ACCESS POINT.
3. VENT THRU ROOF (VTR) SHALL BE A MIN. 10'-0" AWAY FROM OUTSIDE AIR INTAKE OPENINGS.
4. ATTICS SHALL BE VENTILATED WITH INTAKE VENTS AT OR NEAR THE SOFFIT WITH A MIN. NET FREE AREA OF 8 SQ. IN. PER LINEAR FOOT AND RIDGE VENTS WITH A MIN. NET FREE AREA OF 15 SQ. IN. PER LINEAR FOOT.

ROOF ASSEMBLY TYPES

MTL-2 METAL ROOF OR METAL ROOF STRUCTURE PER PEMB MANUFACTURER. PROVIDE ICE AND WATER GUARD FROM FASCIA TO 2'-0" FROM INSIDE FACE OF WALL.



A1 ROOF PLAN
A2.00 3/16" = 1'-0"

Client:
City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:
**Public Safety
Training Facility
Multi-Purpose
Training Area**

Garden Street
Elyria, Ohio 44035

Revisions:

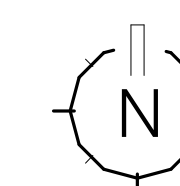
A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

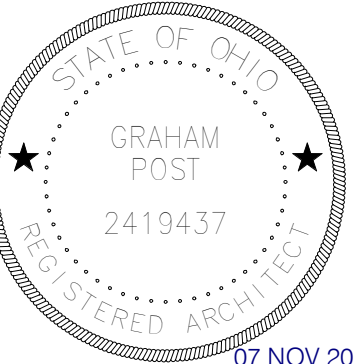
Project Number: 5039 01 23
Drawn by: HLM
Checked by: GLP
Copyright: 2024

Roof Plan

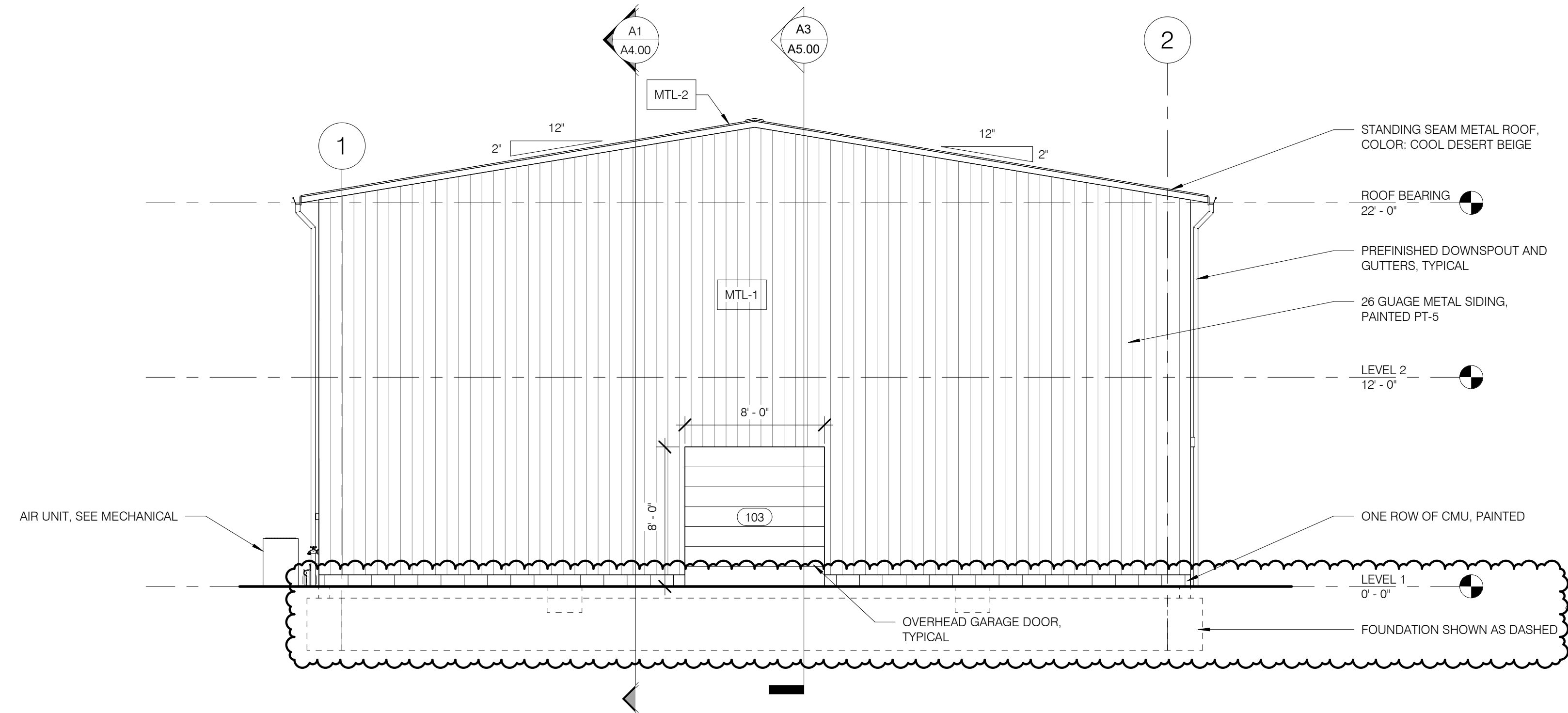
A2.00

SHEET SCALE
0" 1/2" 1" 2"

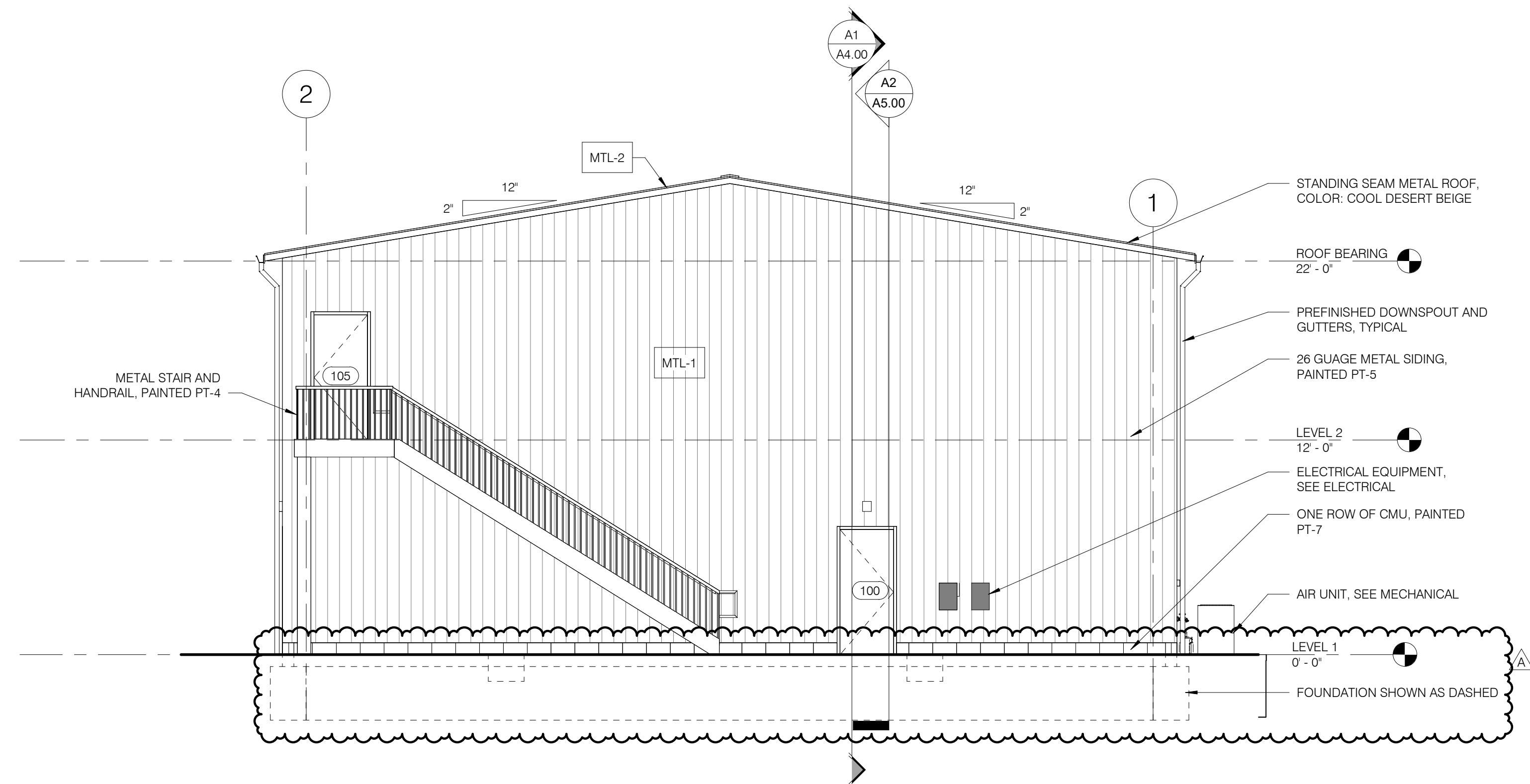




07 NOV 2024
Graham Lochridge Post, License #2419437
Expiration Date 12/31/2025



C1 WEST ELEVATION
A3.00 3/16" = 1'-0"
A1.00



A1 EAST ELEVATION
A3.00 3/16" = 1'-0"
A1.00

Client:
City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:
**Public Safety
Training Facility
Multi-Purpose
Training Area**

Garden Street
Elyria, Ohio 44035

Revisions:

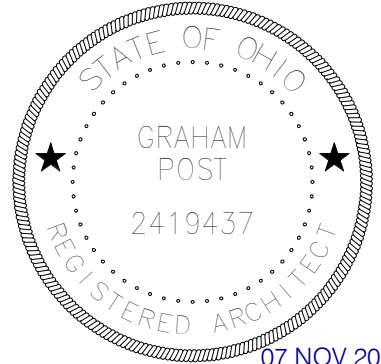
A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

Project Number: 5039 01 23
Drawn by: HLM
Checked by: GLP
Copyright: 2024

Exterior Elevations

A3.00

SHEET SCALE
0' 1/2' 1' 2'



07 NOV 2024
Graham Lochridge Post, License #2419437
Expiration Date 12/31/2025

Client:

City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:

Public Safety
Training Facility
Multi-Purpose
Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

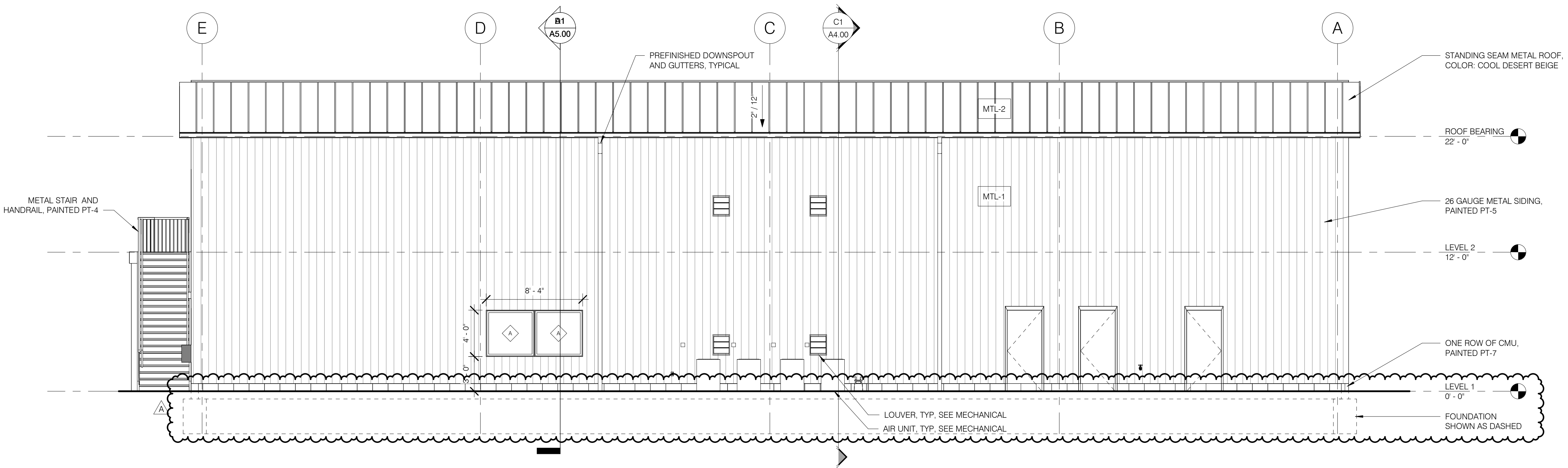
A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

Project Number: 5039 01 23
Drawn by: HLM
Checked by: GLP
Copyright: 2024

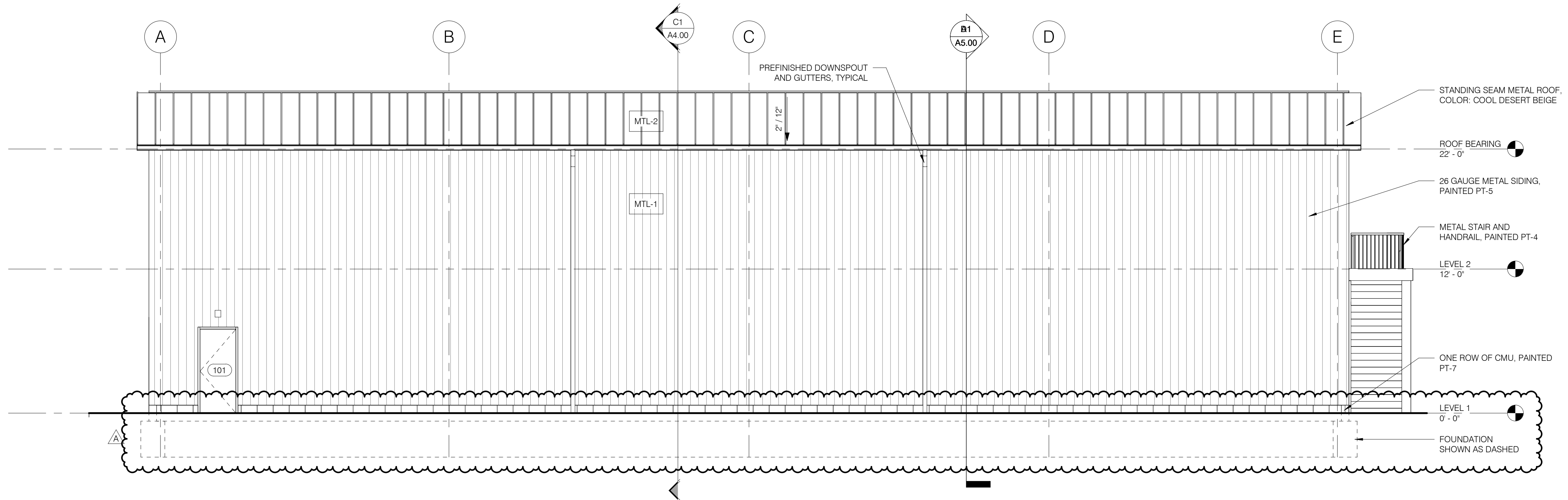
Exterior Elevations
Continued

A3.10

SHEET SCALE
0' 1/2' 1' 2'



C1 NORTH ELEVATION
A3.10 3/16" = 1'-0"
A1.00

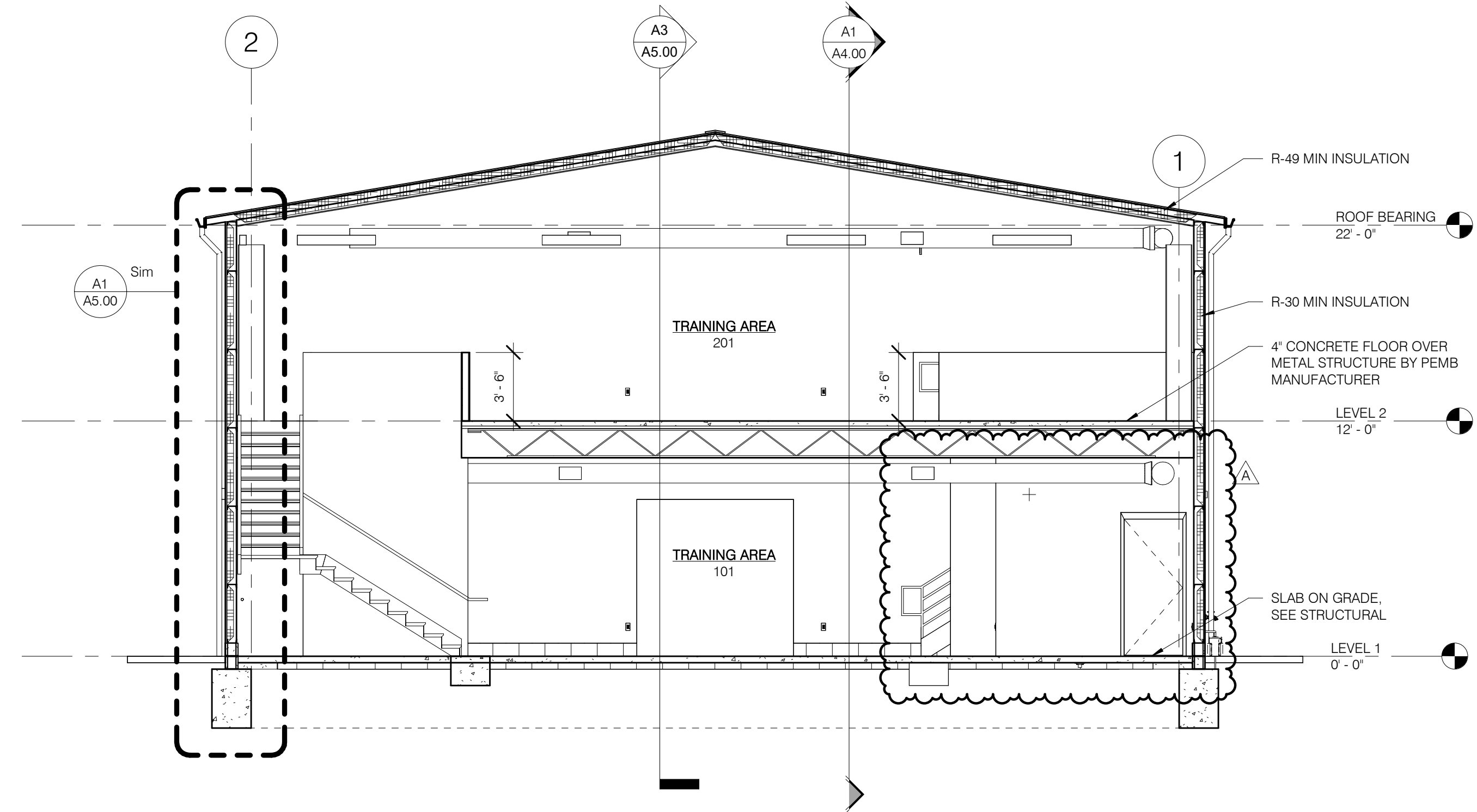


A1 SOUTH ELEVATION
A3.10 3/16" = 1'-0"
A1.00

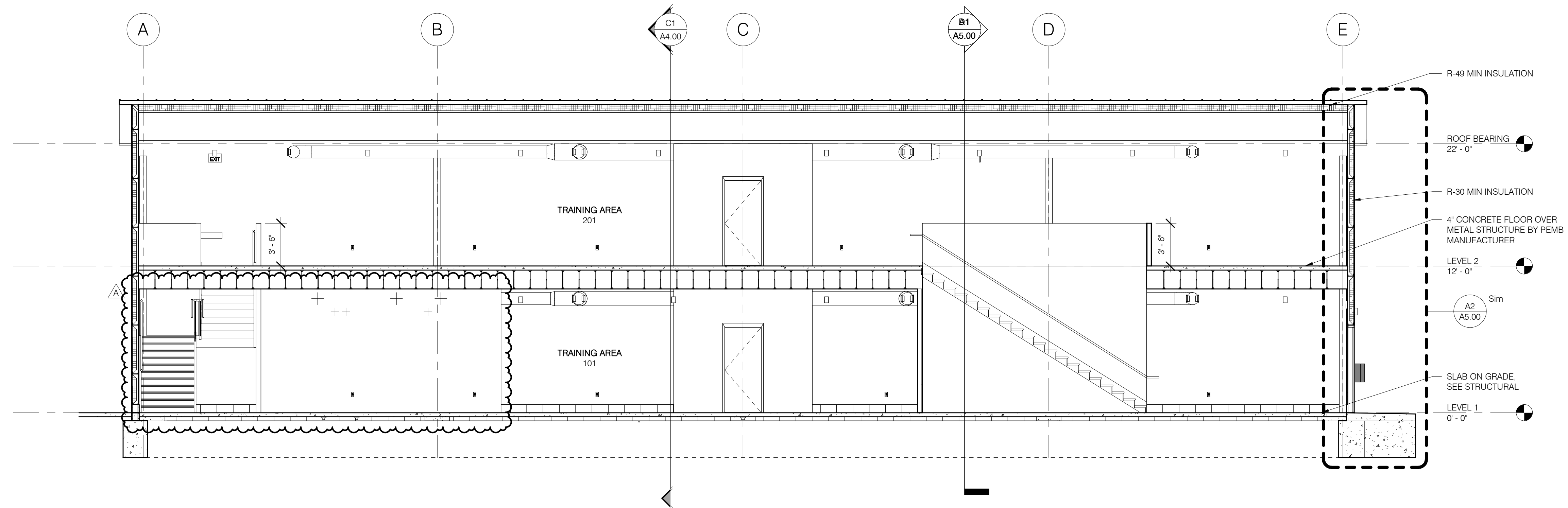
v2023 11/7/2024 3:11:57 PM C:\Users\HMyers\OneDrive - Sixmo Inc\Documents\60390123_Safety Facility Simulations Training Building_v2023_Central_Iscuid\GHRK.rvt



07 NOV 2024
Graham Lochridge Post, License #2419437
Expiration Date 12/31/2025



C1 BUILDING CROSS SECTION
A4.00 3/16" = 1'-0"
A1.00



A1 BUILDING SECTION
A4.00 3/16" = 1'-0"
A1.00

Client:

City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:

Public Safety
Training Facility
Multi-Purpose
Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

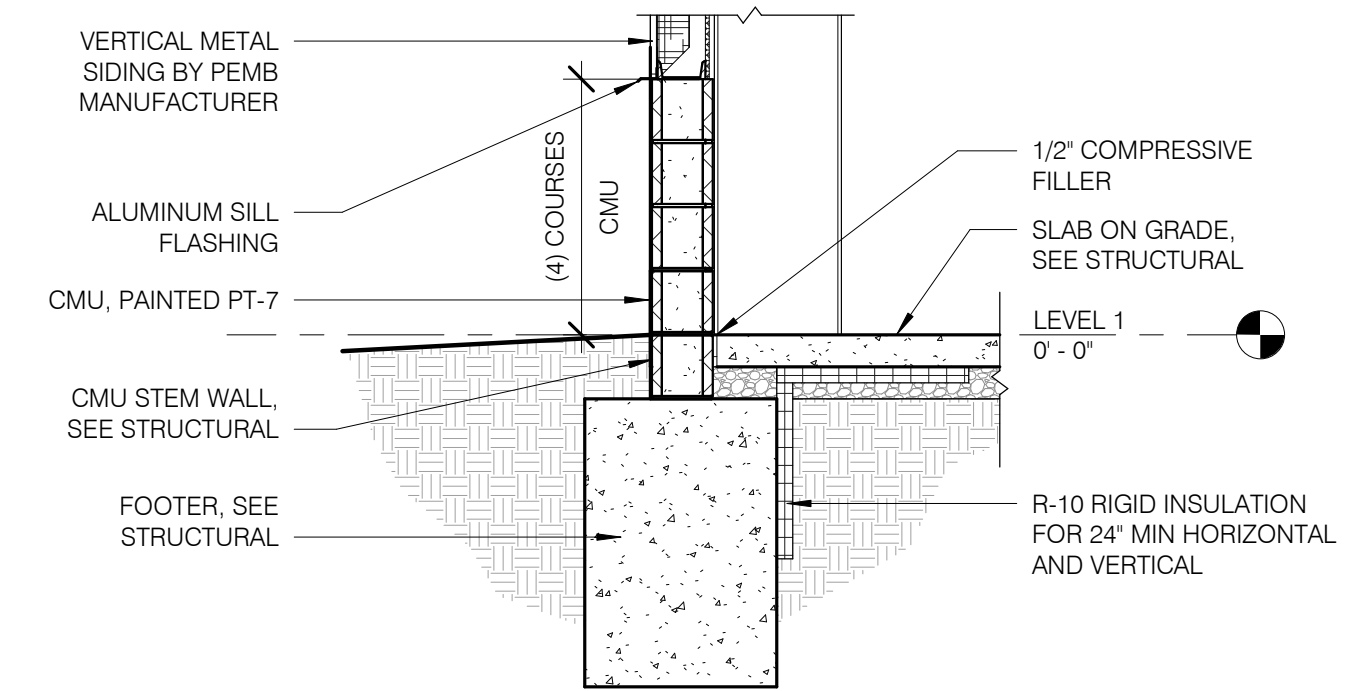
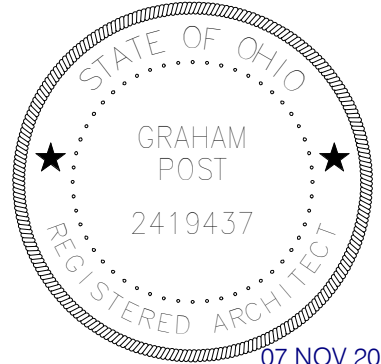
A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

Project Number: 5039 01 23
Drawn by: HLM
Checked by: GLP
Copyright: 2024

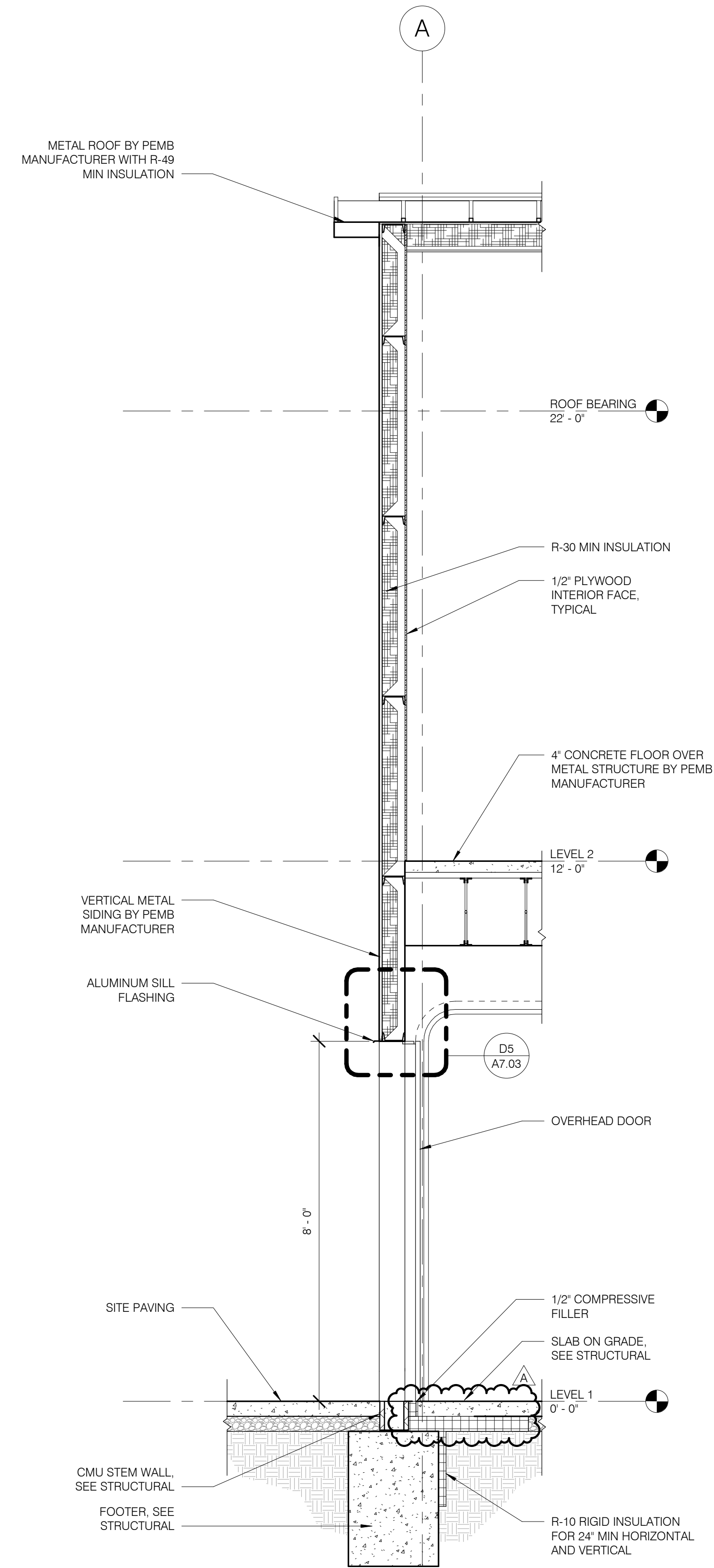
Building Sections

A4.00

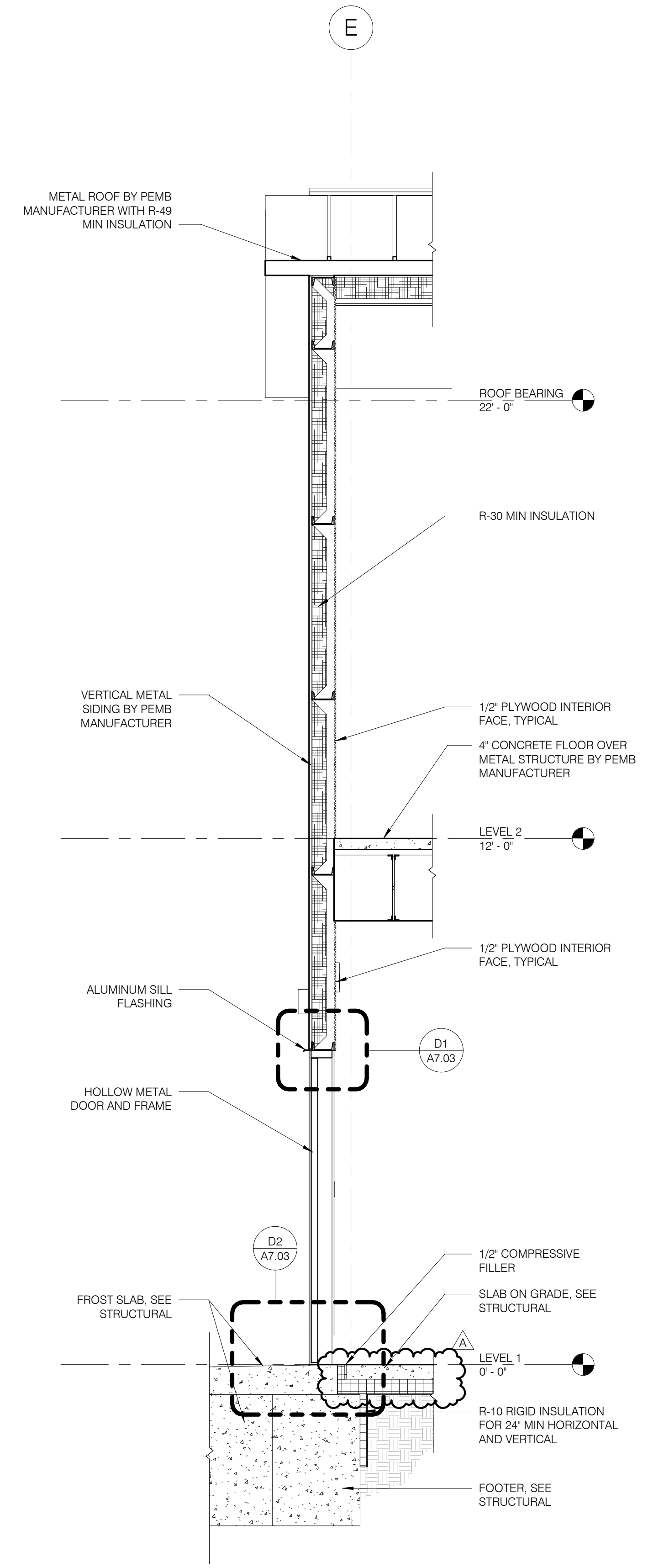
SHEET SCALE
0' 1/2' 1' 2'



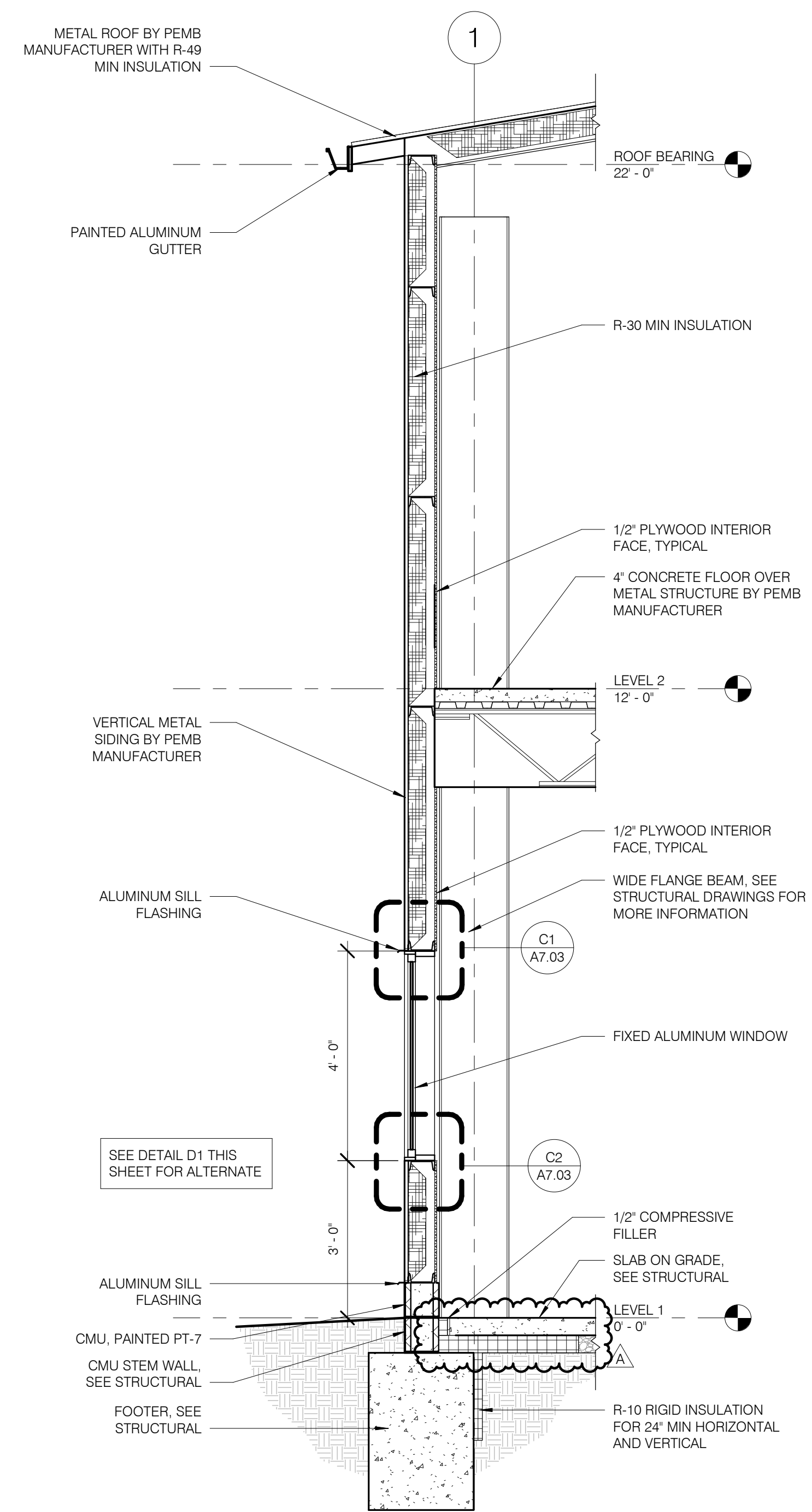
D1 ALTERNATE BASE DETAIL FOR ENTIRE BUILDING
A5.00 1/2" = 1'-0"
A3.10



A3 WALL SECTION @ OVERHEAD DOOR
A5.00 1/2" = 1'-0"
A1.00



A2 TYPICAL WALL SECTION
A5.00 1/2" = 1'-0"
A1.00



A1 WALL SECTION @ WINDOW
A5.00 1/2" = 1'-0"
A1.00

Client:

City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:

Public Safety
Training Facility
Multi-Purpose
Training Area
Elyria, Ohio 44035

Revisions:

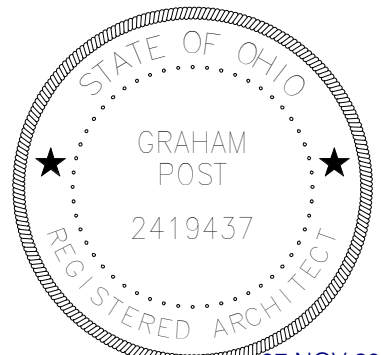
A 11.07.2024 ADDENDUM A
0 09.26.2024 For Construction

Project Number: 5039 01 23
Drawn by: HLM
Checked by: GLP
Copyright: 2024

Wall Sections

A5.00

SHEET SCALE
0' 1/2' 1' 2'



FINISH LEGEND EXTERIOR

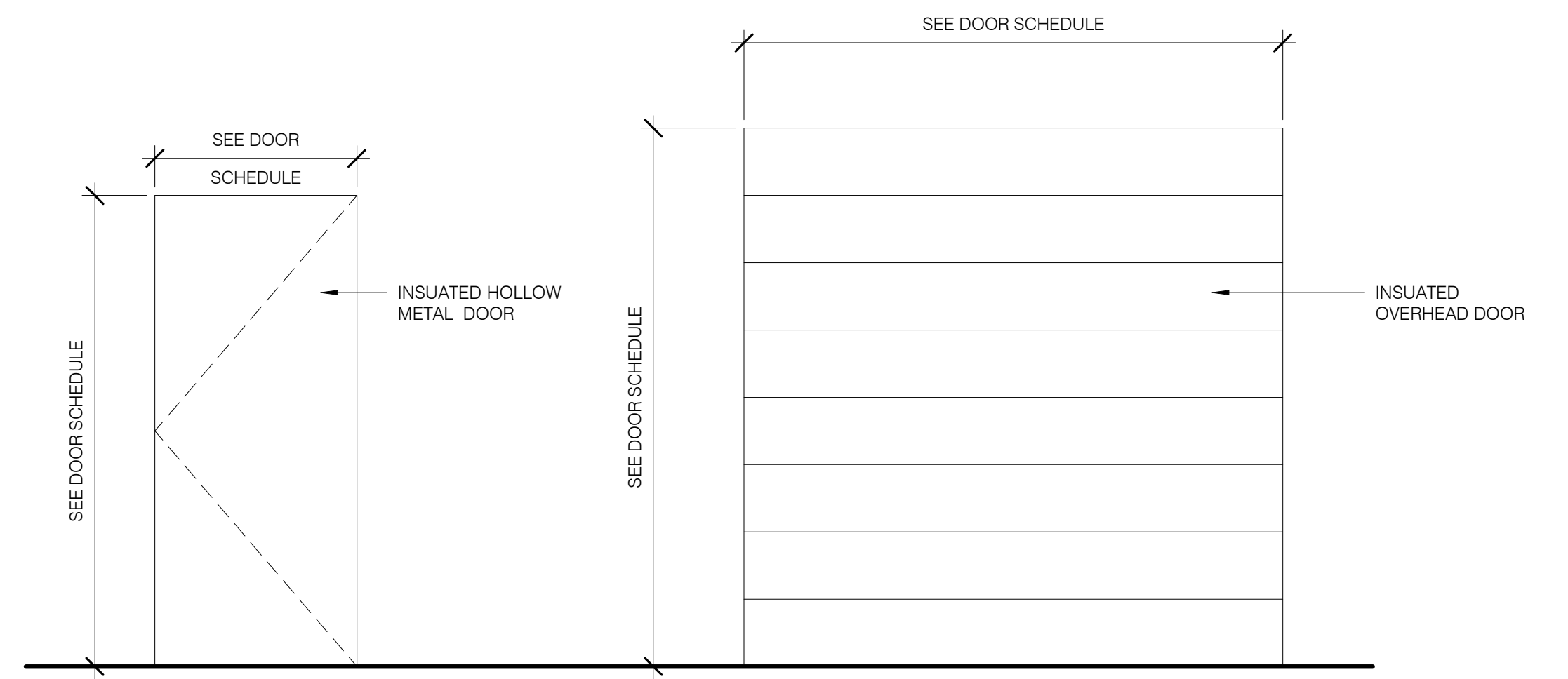
EXTERIOR FINISHES:			
PT	PAINT	MTL	METAL PANEL
PT-4	SHERWIN WILLIAMS, COLOR: SW 7674 PEPPERCORN (METAL STAIRS AND HANDRAILS)	MTL-1	ASC BUILDING PRODUCTS, METAL SIDING, COLOR: PAINTED PT-5
PT-5	SHERWIN WILLIAMS, COLOR: SW 6328 FIREWEED (METAL SIDING)	MTL-2	ASC BUILDING PRODUCTS, STANDING SEAM METAL PANEL, COLOR: DESERT BEIGE
PT-7	SHERWIN WILLIAMS, COLOR: HC 157 SANDSTONE		

DOOR SCHEDULE

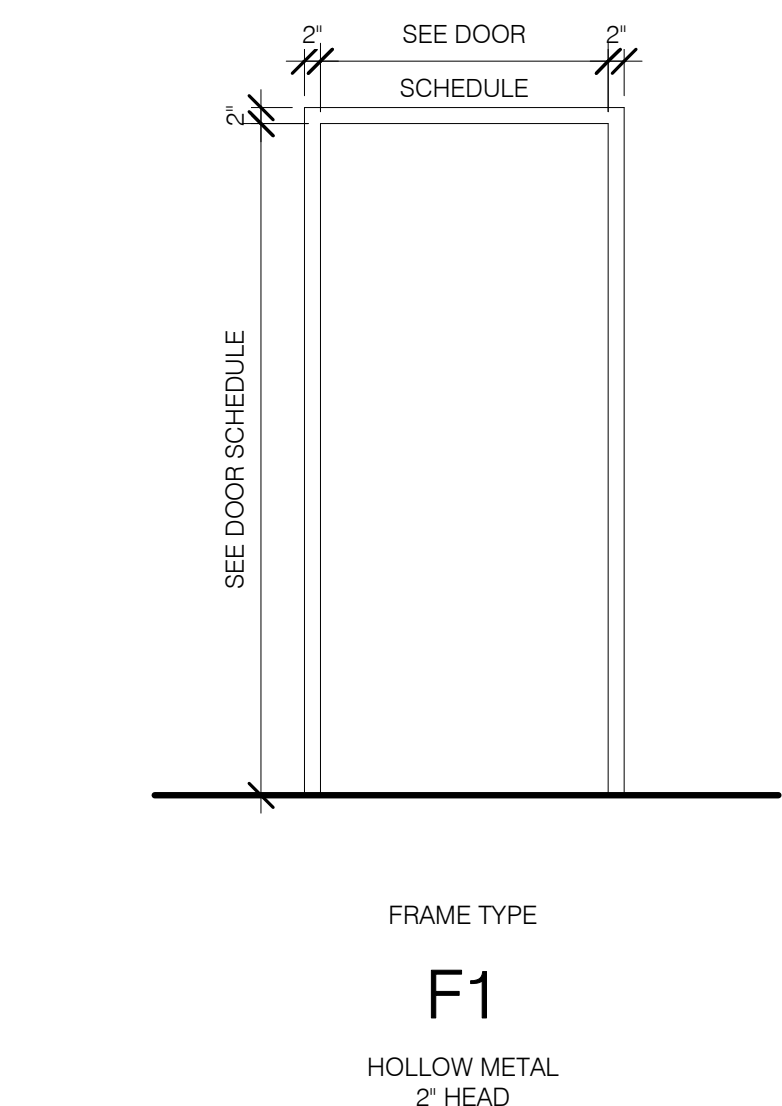
DOOR NUMBER	FIRE RATING	TYPE	DOOR		FRAME		NOTES	
			MATERIAL	WIDTH	HEIGHT	TYPE		MATERIAL
100	NONE	A	HM	3'-0"	7'-0"	F1	HM	HARDWARE SET 1.1, SEE SPECIFICATIONS
101	NONE	A	HM	3'-0"	7'-0"	F1	HM	HARDWARE SET 1.1, SEE SPECIFICATIONS
103	NONE	F	STL	8'-0"	8'-0"	-	-	HARDWARE SET 11.0, SEE SPECIFICATIONS
104	NONE	A	HM	3'-0"	7'-0"	F1	HM	HARDWARE SET 4.1, SEE SPECIFICATIONS
105	NONE	A	HM	3'-0"	7'-0"	F1	HM	HARDWARE SET 1.1, SEE SPECIFICATIONS
106	NONE	A	HM	3'-0"	7'-0"	F1	HM	HARDWARE SET 4.1, SEE SPECIFICATIONS
107	NONE	A	HM	3'-0"	7'-0"	F1	HM	HARDWARE SET 1.1, SEE SPECIFICATIONS
108	NONE	A	HM	3'-0"	7'-0"	F1	HM	HARDWARE SET 1.1, SEE SPECIFICATIONS
109	NONE	A	HM	3'-0"	7'-0"	F1	HM	HARDWARE SET 1.1, SEE SPECIFICATIONS
110	NONE	A	HM	3'-0"	7'-0"	F1	HM	HARDWARE SET 4.1, SEE SPECIFICATIONS

NOTES:

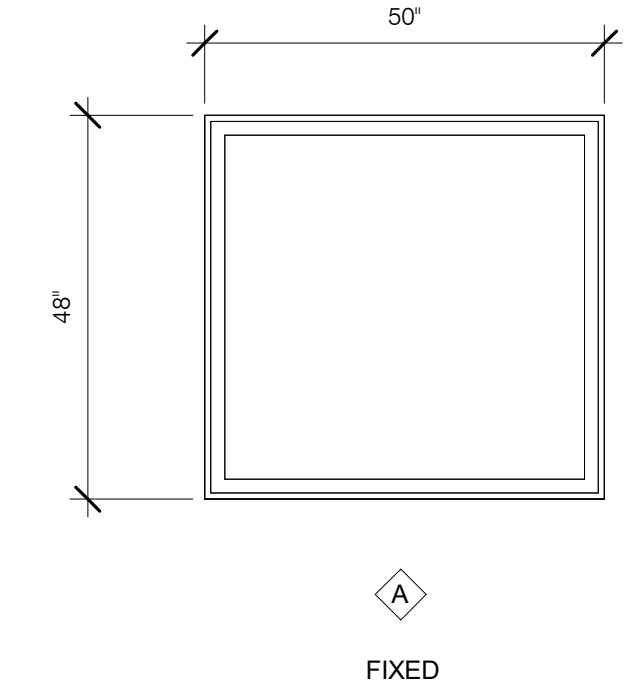
1. CONTRACTOR TO FIELD VERIFY ALL DOOR OPENING DIMENSIONS.
2. CARD READERS TO BE PROVIDED AND INSTALLED BY OWNER.
3. REFER TO SPECIFICATIONS FOR DOOR HARDWARE.
4. CORES AND KEYING TO BE PROVIDED BY OWNER.
5. DOOR FRAMES TO BE PAINTED TO MATCH ADJACENT WALL.
6. DOOR AND ROOM SIGNAGE TO BE PROVIDED BY OWNER.
7. MINIMUM U-FACTOR 0.22, TYP. FOR ALL EXTERIOR DOORS.
8. PROVIDE WEATHERSTRIPPING AT ALL EXTERIOR DOORS.



DOOR TYPE	DOOR TYPE
A	F
SINGLE SOLID FLUSH	OVERHEAD

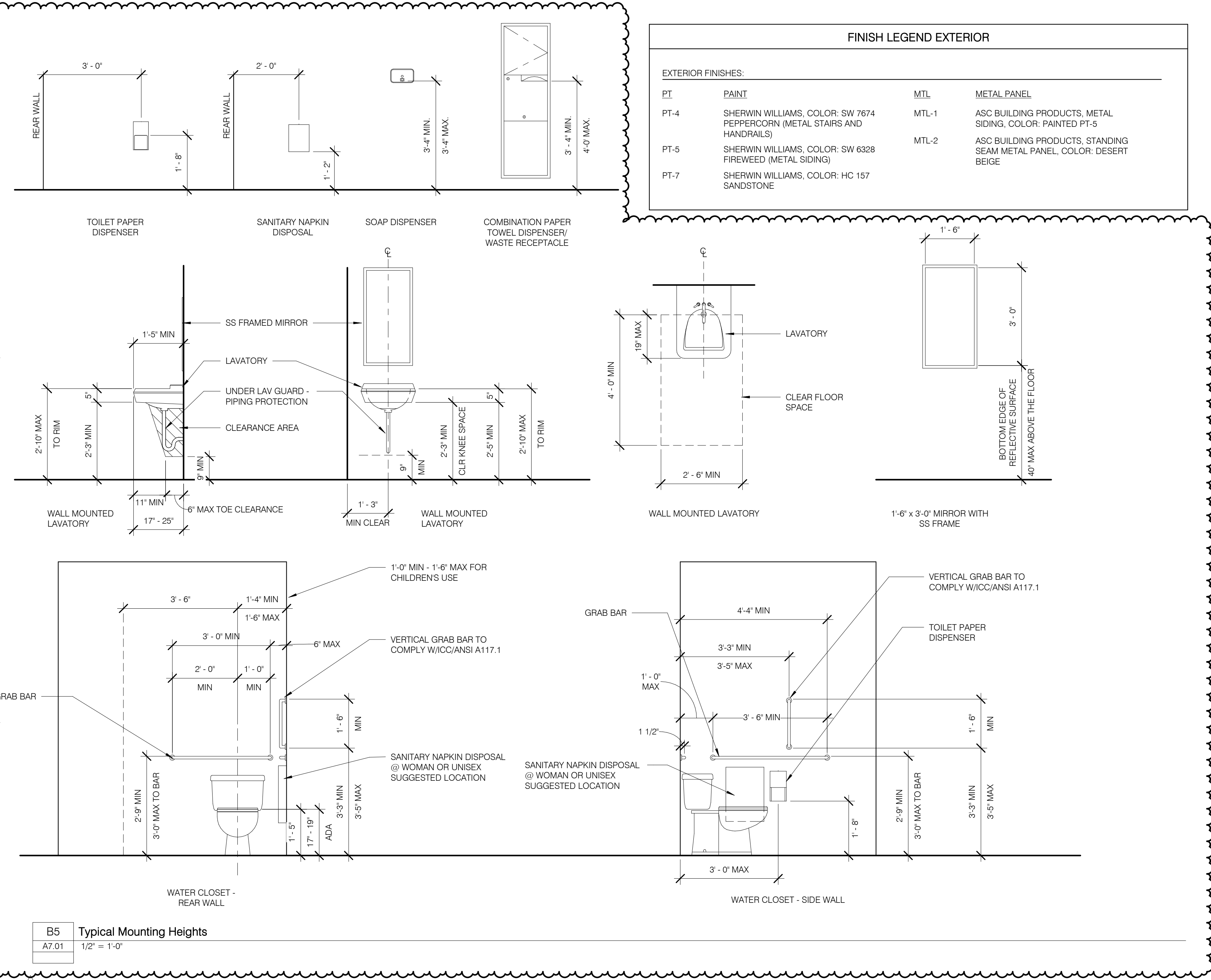


A2	FRAME TYPE
A7.01	1/2" = 1'-0"

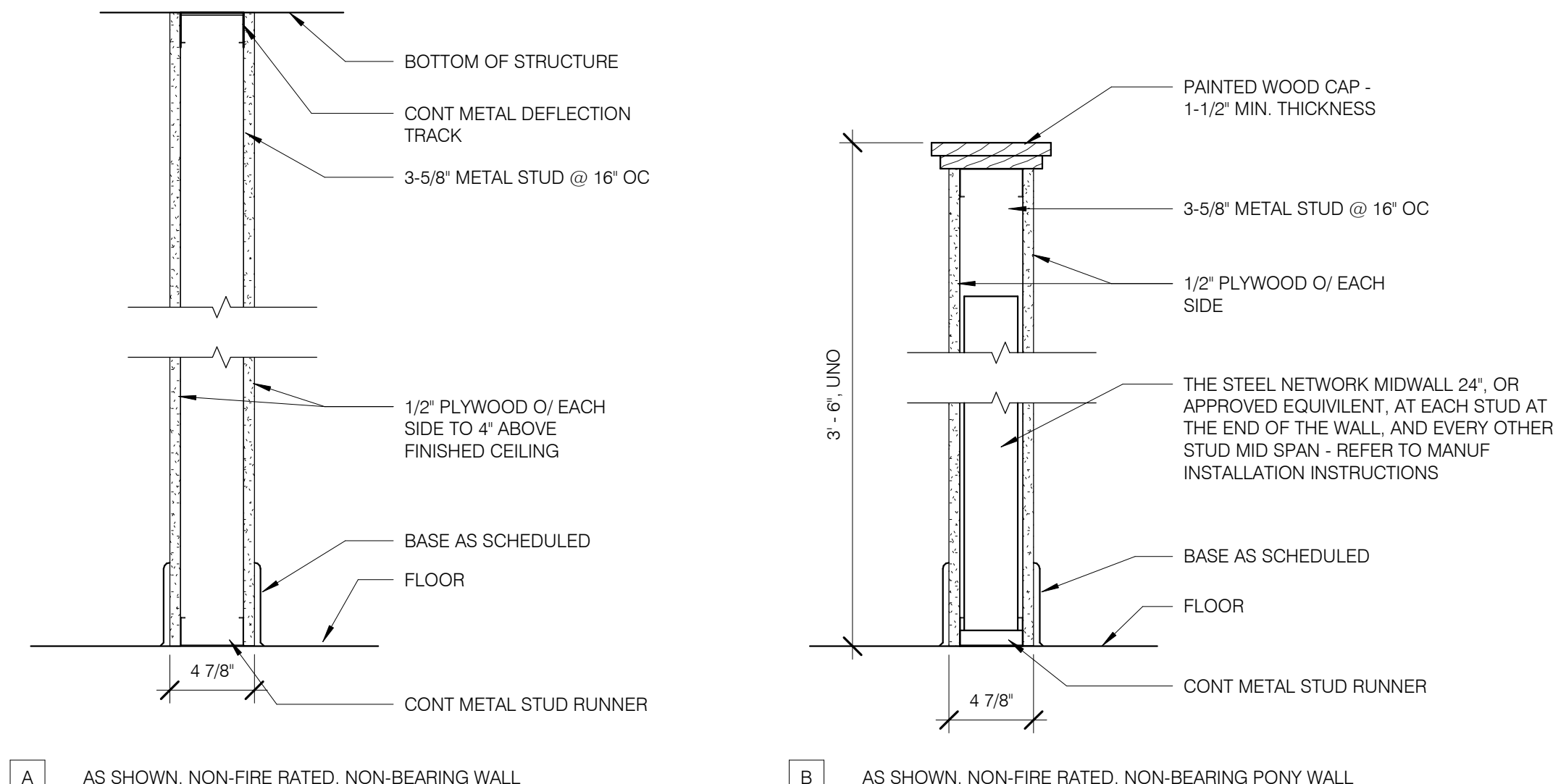


- WINDOW NOTES:**
1. ALL WINDOWS TO BE DOUBLE PANE LOW-E GLAZING.
 2. MINIMUM U-FACTOR 0.30, TYP.
 3. SIZES NOTED ARE ACTUAL.

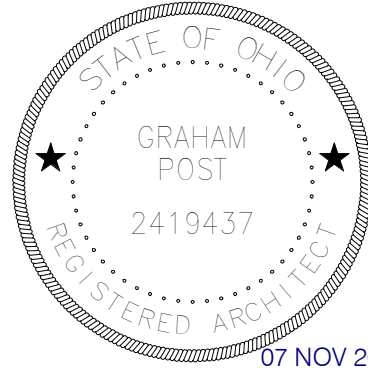
A1	WINDOW TYPE
A7.01	1/2" = 1'-0"



B5	Typical Mounting Heights
A7.01	1/2" = 1'-0"



A4	WALL TYPES
A7.01	1 1/2" = 1'-0"



Client:

City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:

Public Safety
Training Facility
Multi-Purpose
Training Area
Elyria, Ohio 44035

Revisions:

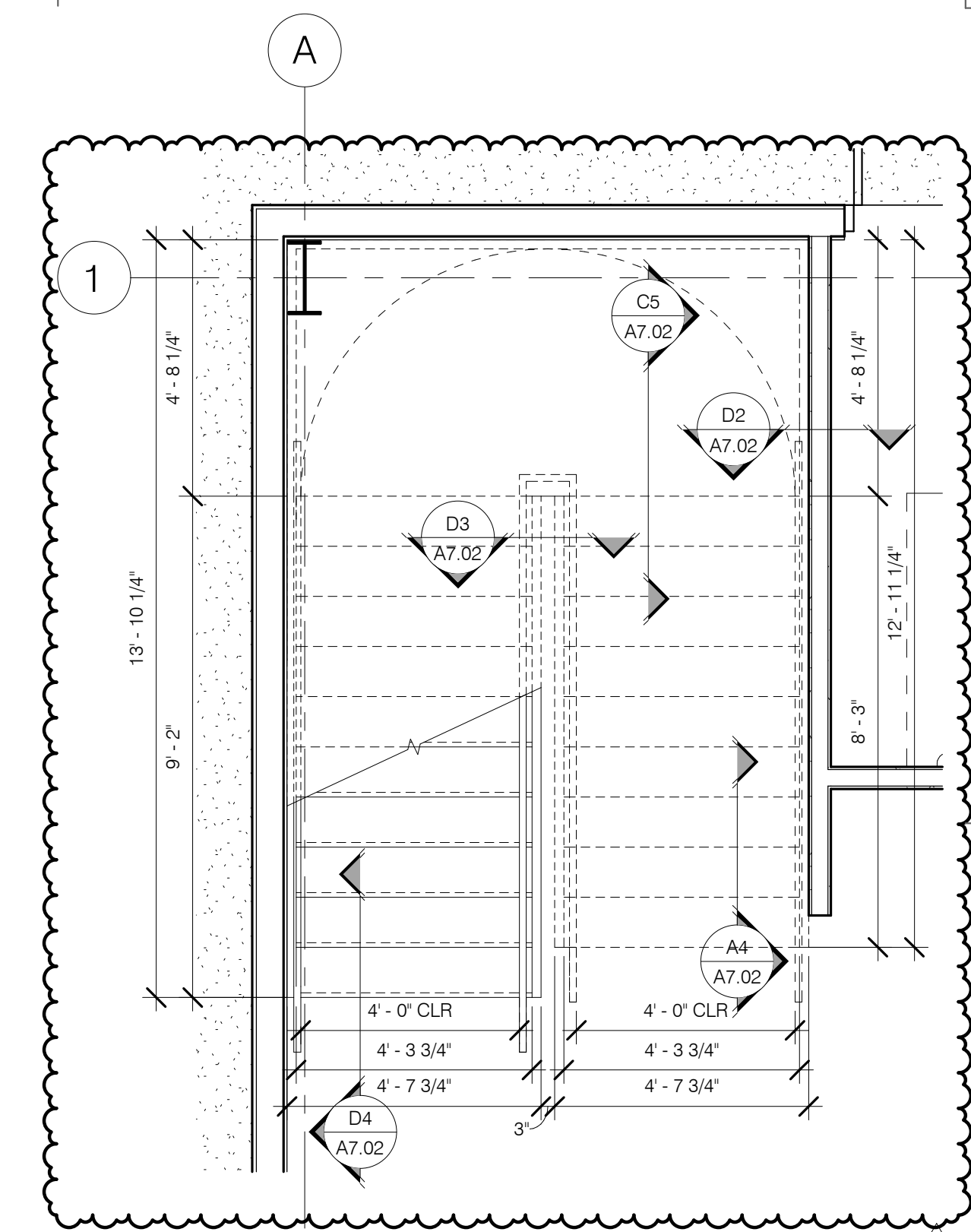
A 11.07.2024 ADDENDUM A
0 09.26.2024 For Construction

Project Number: 5039 01 23
Drawn by: HLM
Checked by: GLP
Copyright: 2024

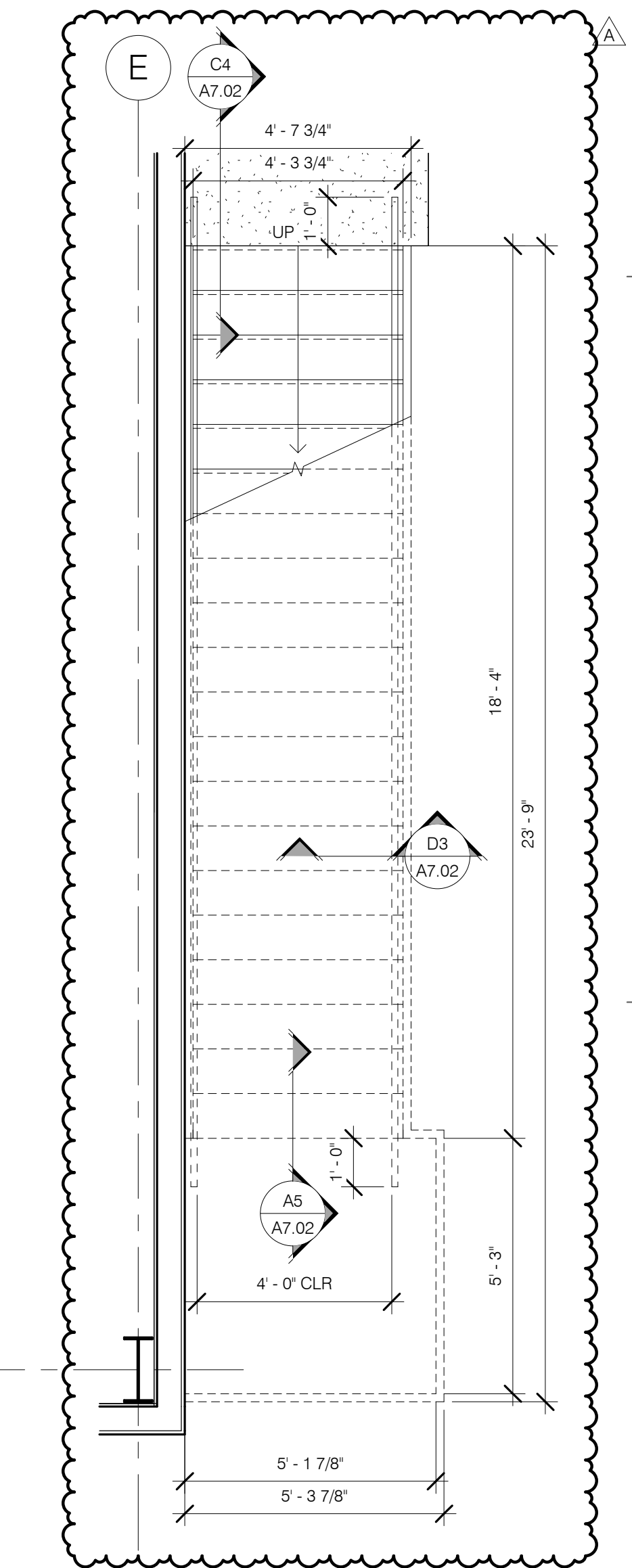
Details

A7.02

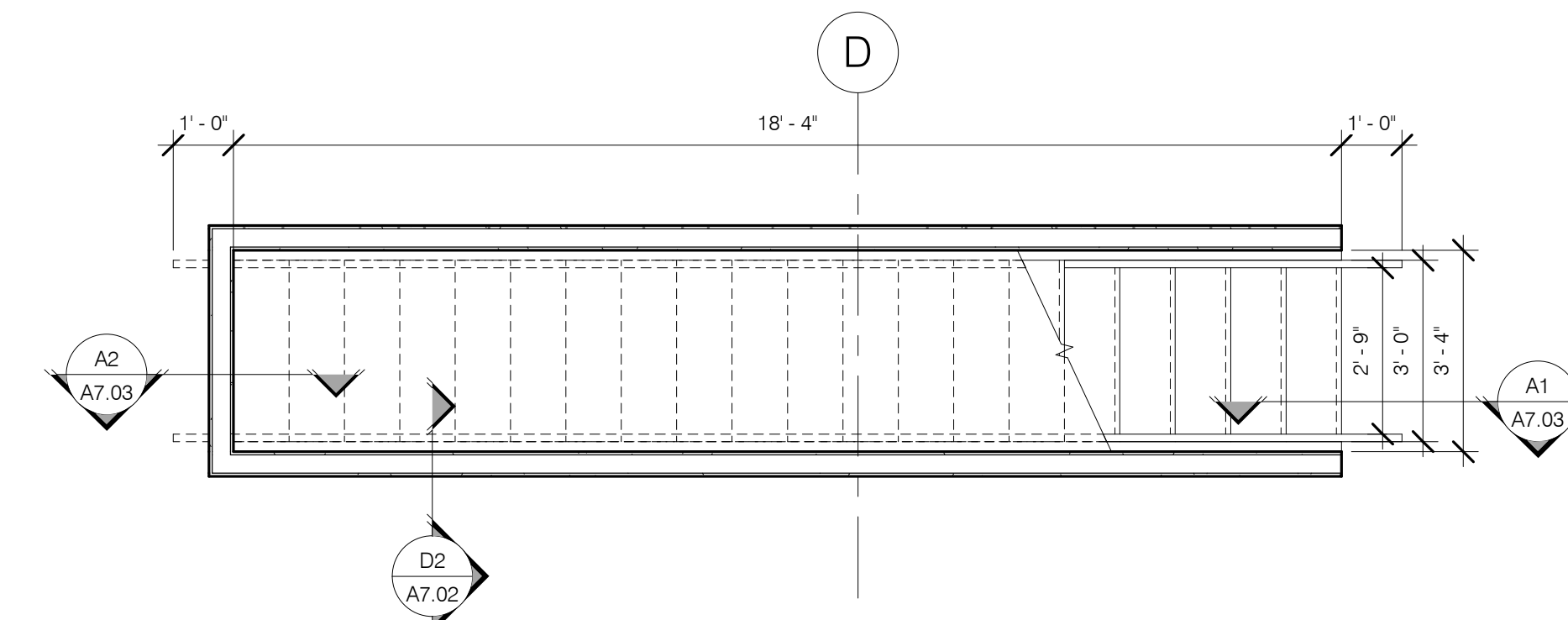
SHEET SCALE
0" 1/2" 1" 2"



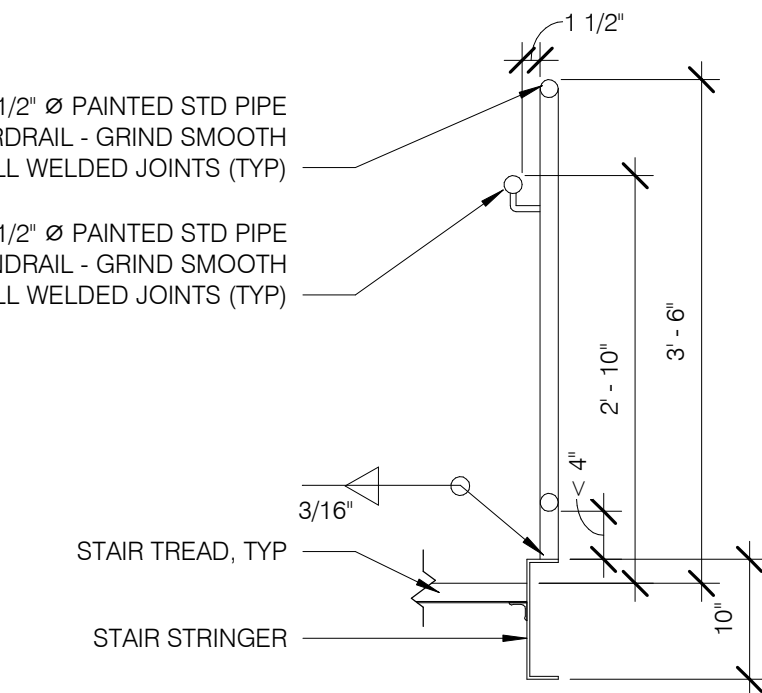
C1 STAIR A ENLARGED PLAN
A7.02 3/8" = 1'-0"
A1.00



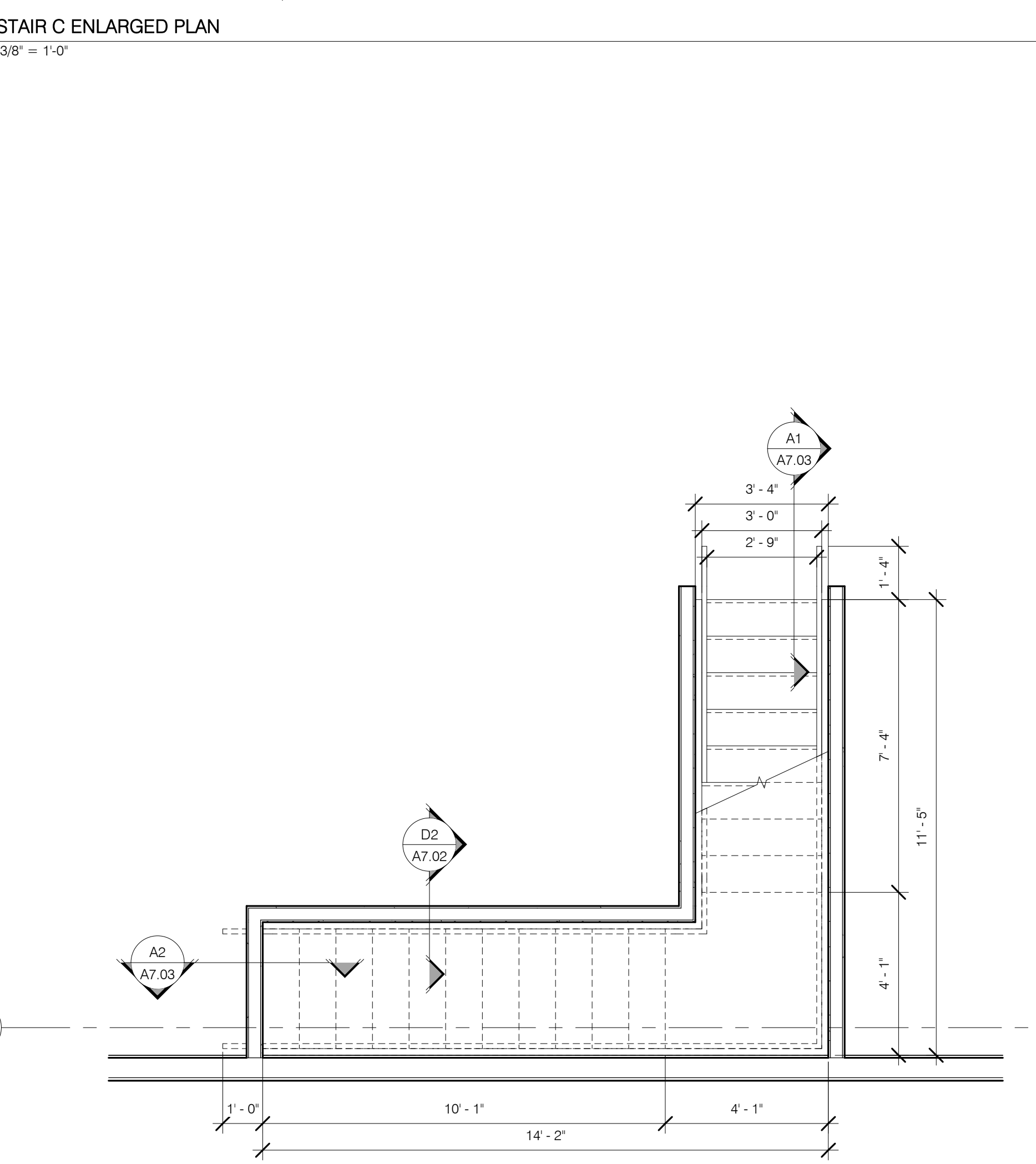
A1 STAIR D ENLARGED PLAN
A7.02 3/8" = 1'-0"
A1.00



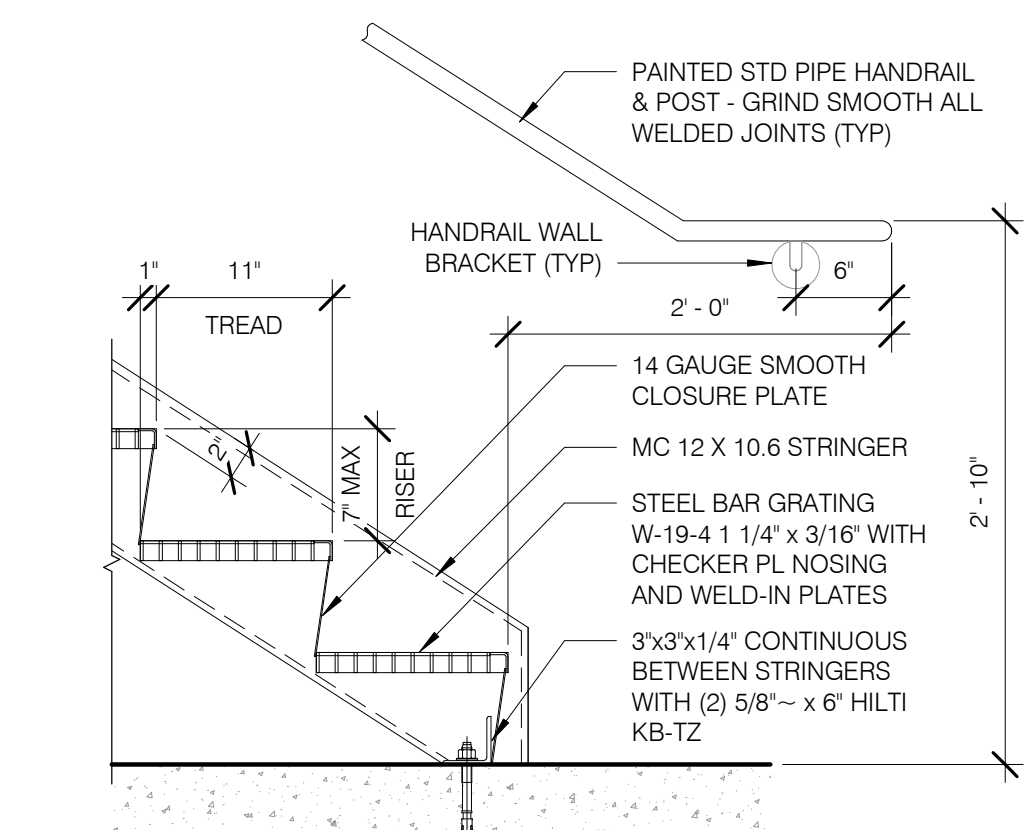
D2 TYPICAL WALL MOUNTED STAIR HANDRAIL SECTION
A7.02 1 1/2" = 1'-0"
A7.02



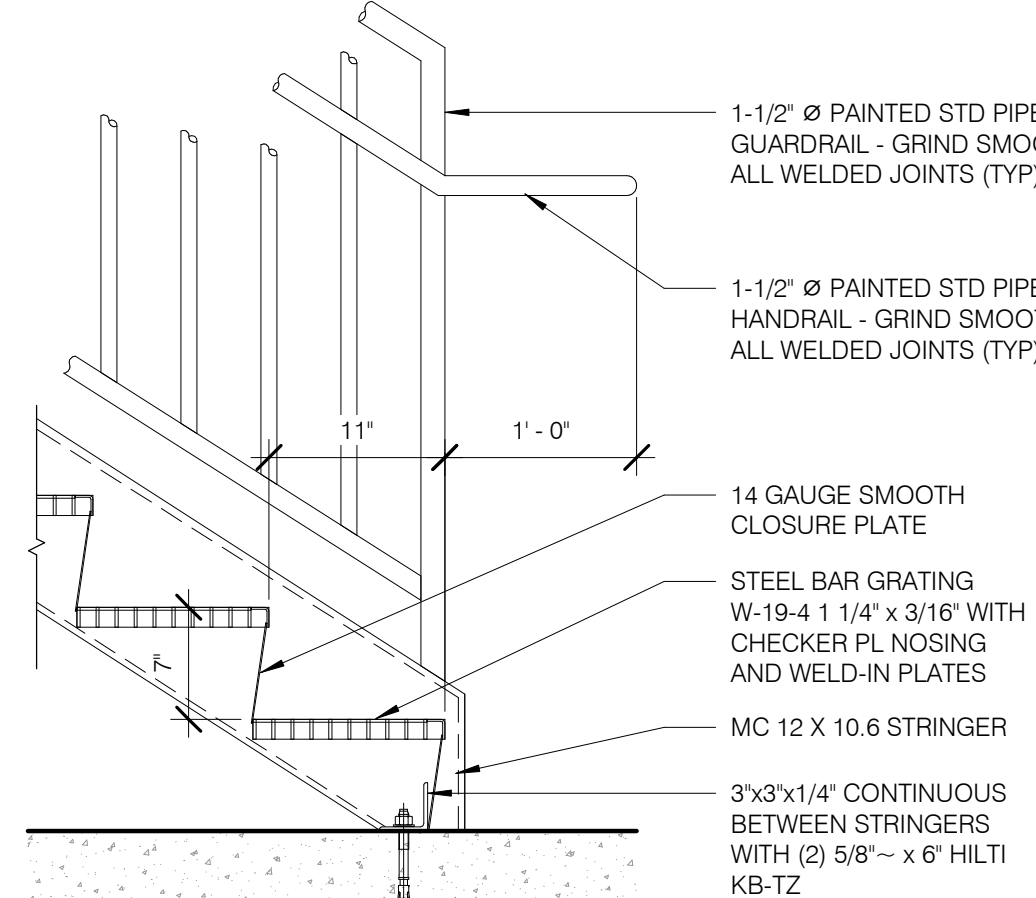
D3 TYPICAL STAIR HANDRAIL SECTION
A7.02 3/4" = 1'-0"
A7.02



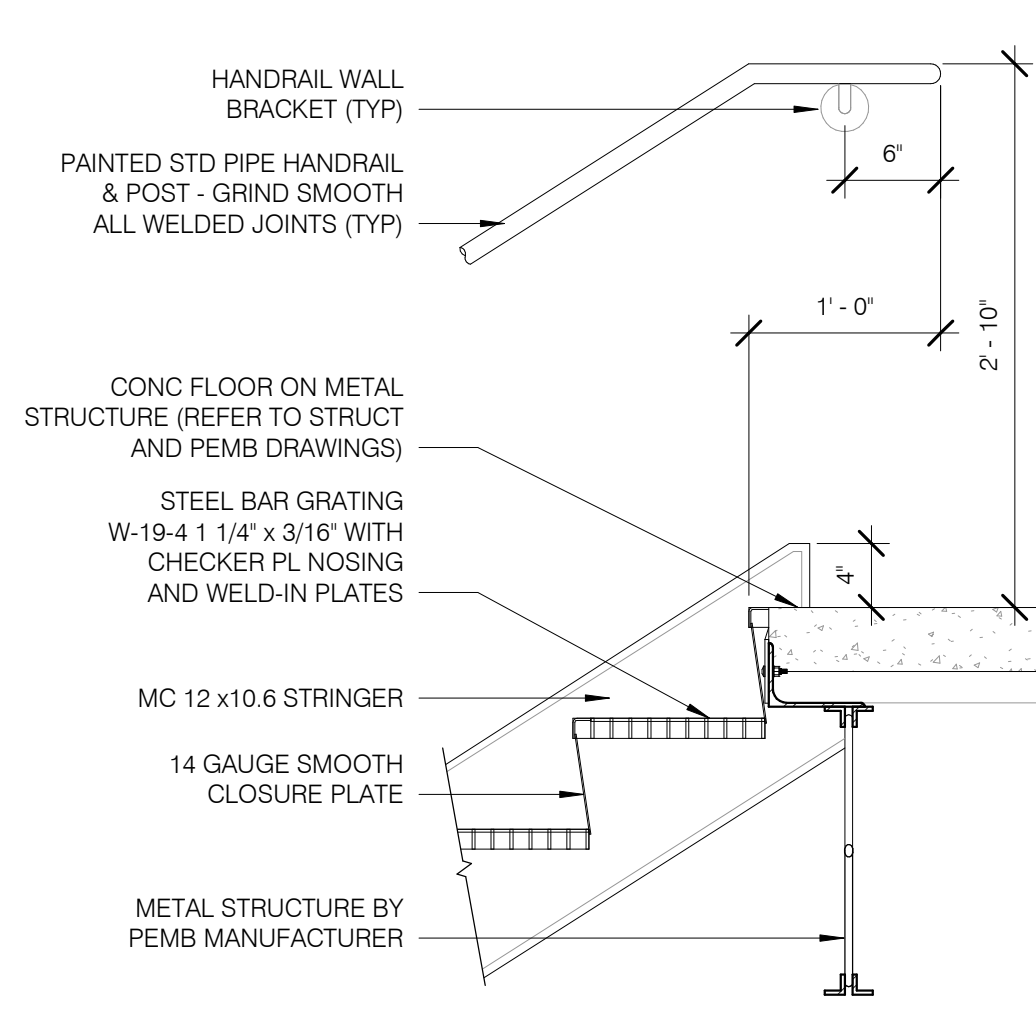
A3 STAIR B ENLARGED PLAN
A7.02 3/8" = 1'-0"
A1.00



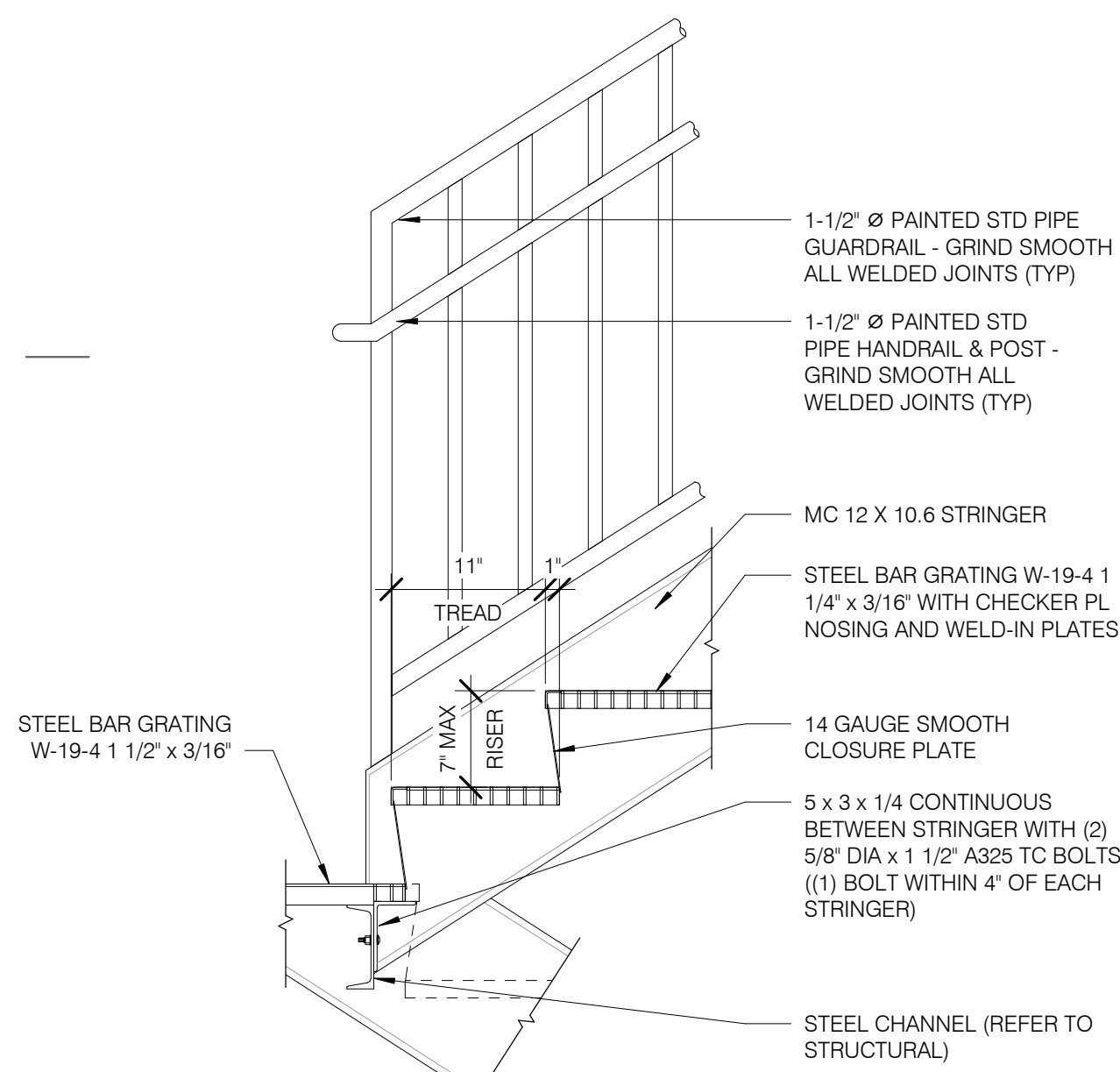
D4 STAIR LANDING @ WALL MOUNTED HANDRAIL - STAIR A
A7.02 1" = 1'-0"
A7.02



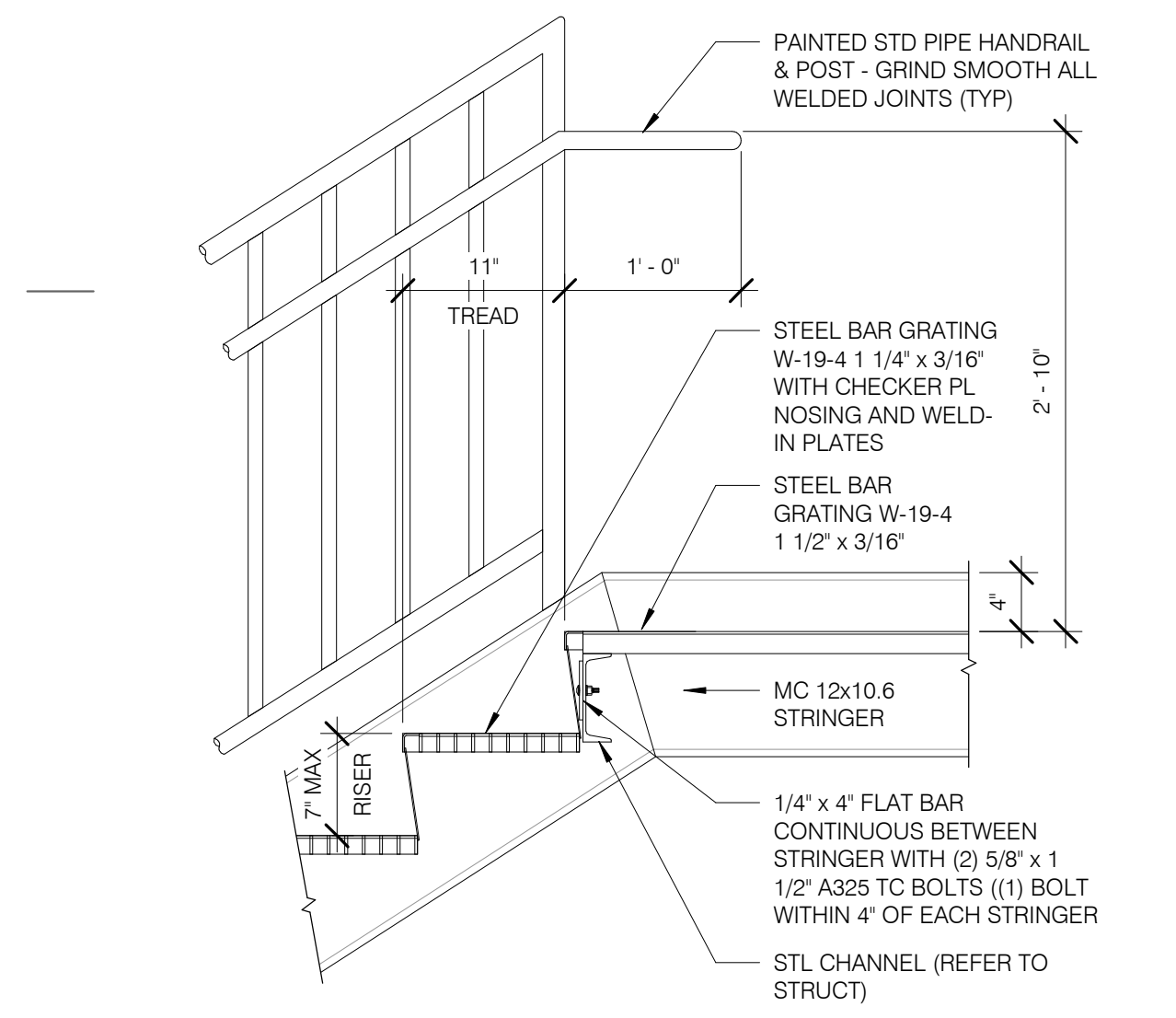
C4 STAIR LANDING @ HANDRAIL - STAIR A & D
A7.02 1" = 1'-0"
A7.02



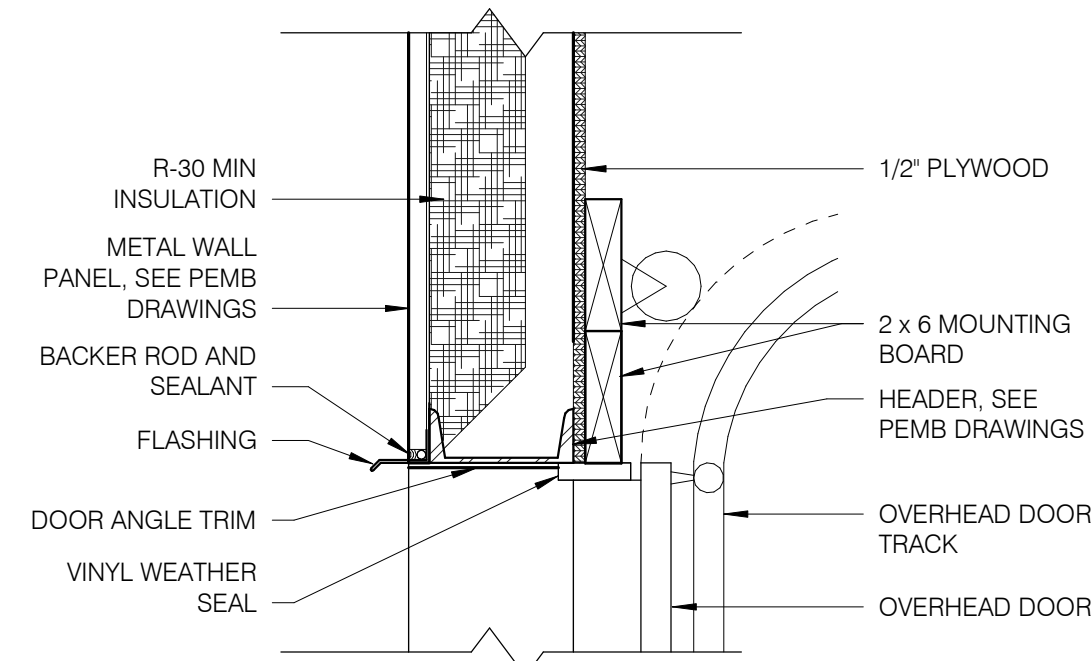
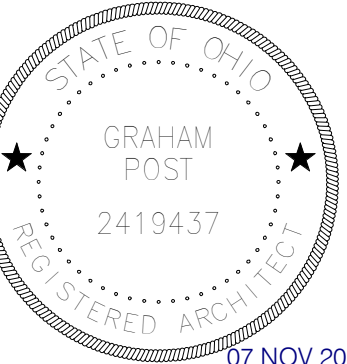
A4 STAIR TOP LANDING - STAIR A
A7.02 1" = 1'-0"
A7.02



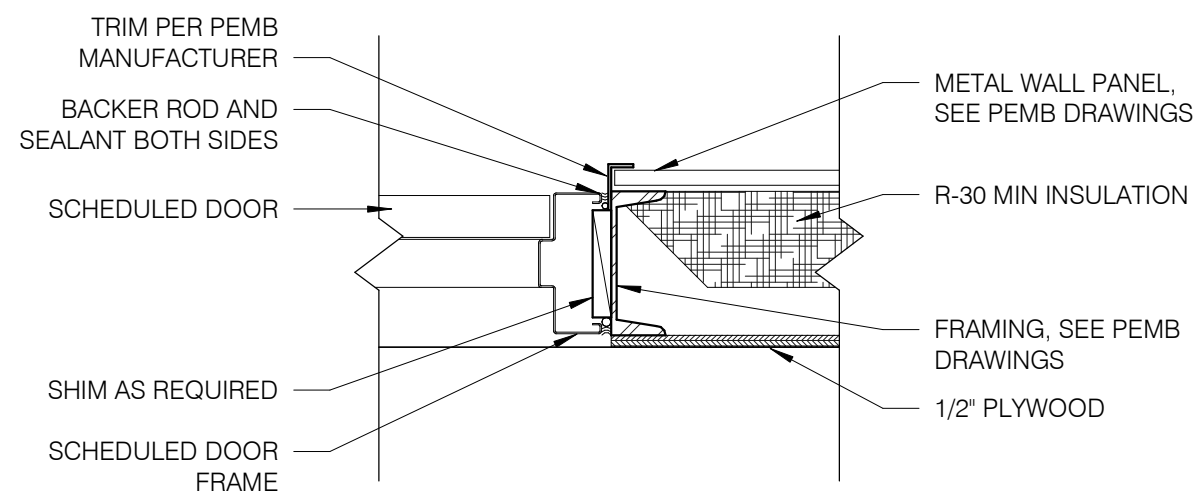
C5 STAIR INTERMEDIATE LANDING - STAIR A
A7.02 1" = 1'-0"
A7.02



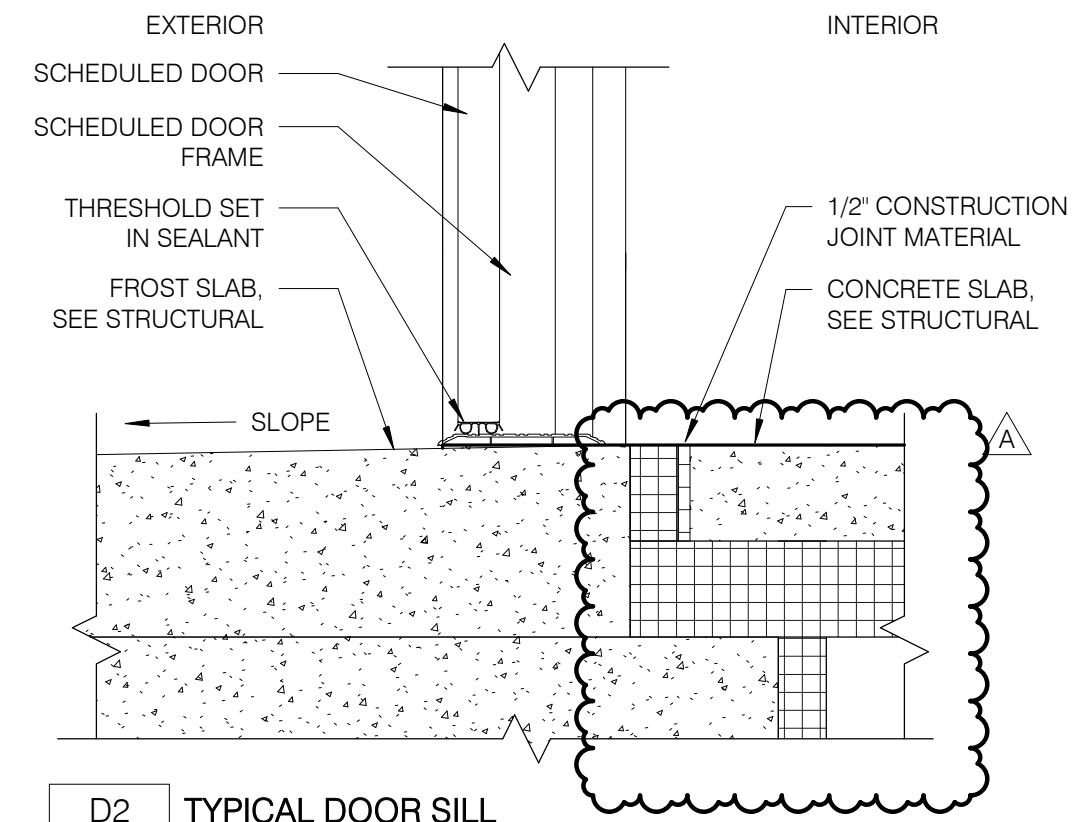
A5 STAIR TOP LANDING - STAIR D
A7.02 1" = 1'-0"
A7.02



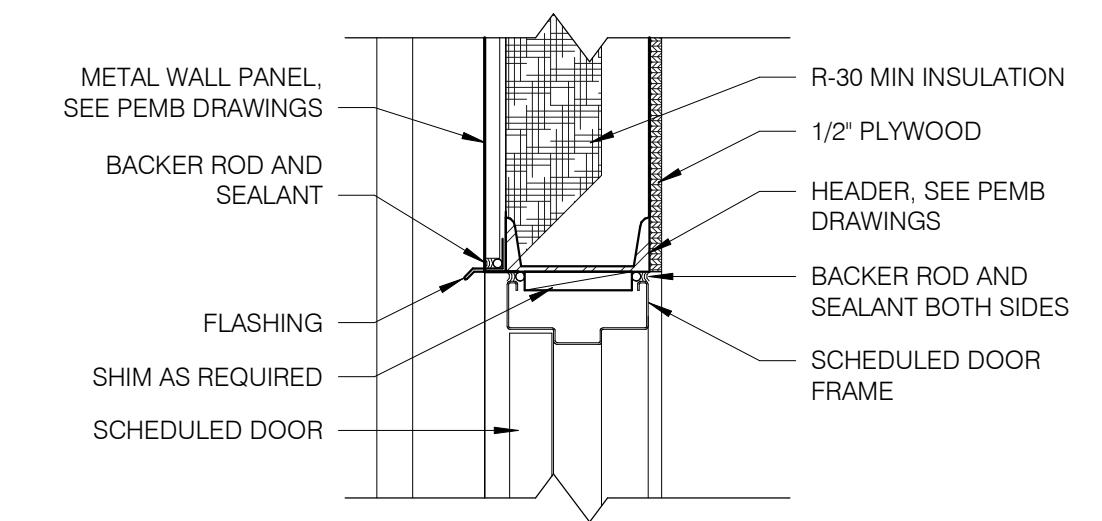
D5 TYPICAL OVERHEAD DOOR HEAD
A7.03 1 1/2" = 1'-0"
A5.00



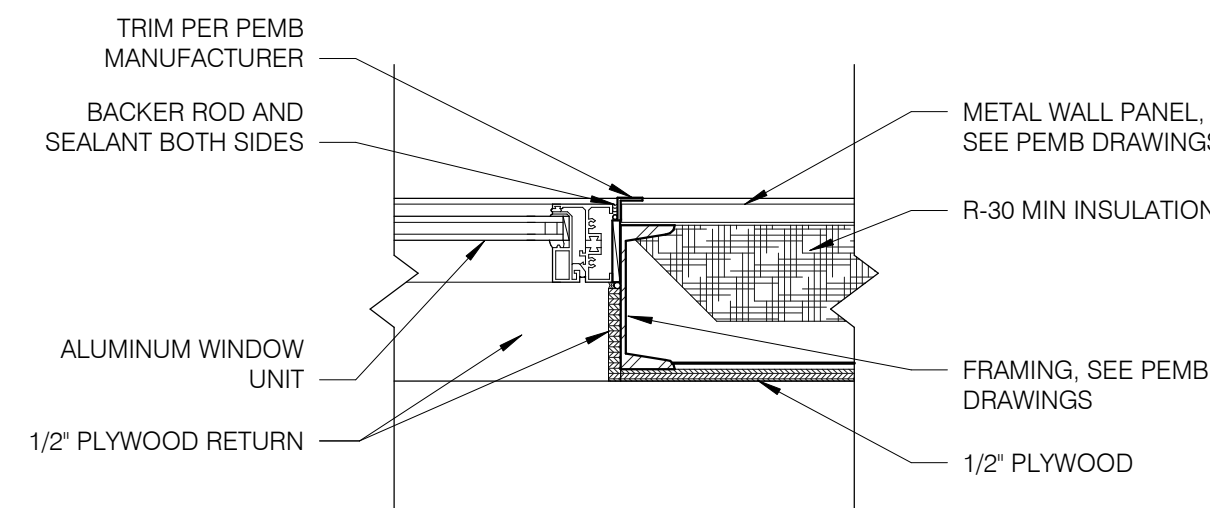
D3 TYPICAL DOOR JAMB
A7.03 1 1/2" = 1'-0"
A1.00



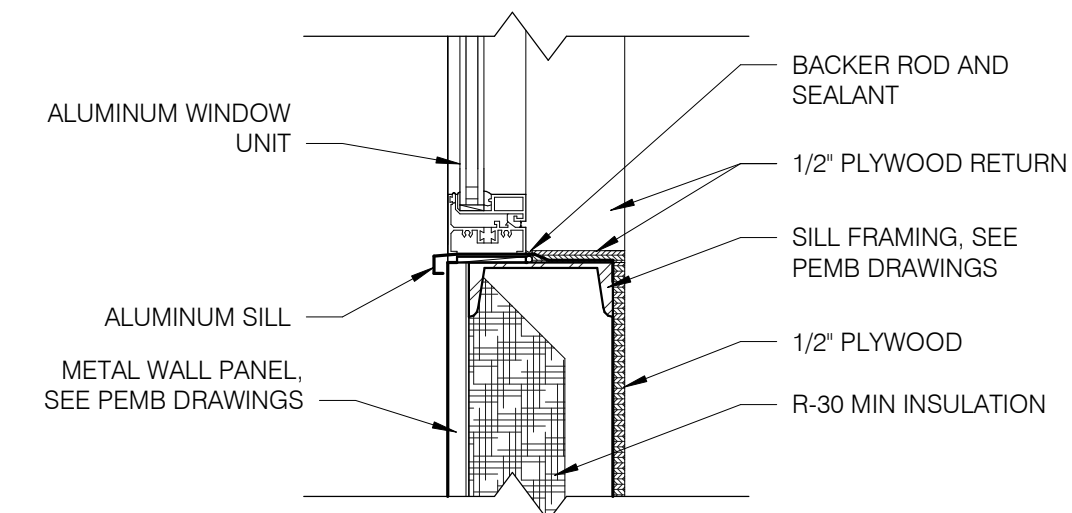
D2 TYPICAL DOOR SILL
A7.03 1 1/2" = 1'-0"
A5.00



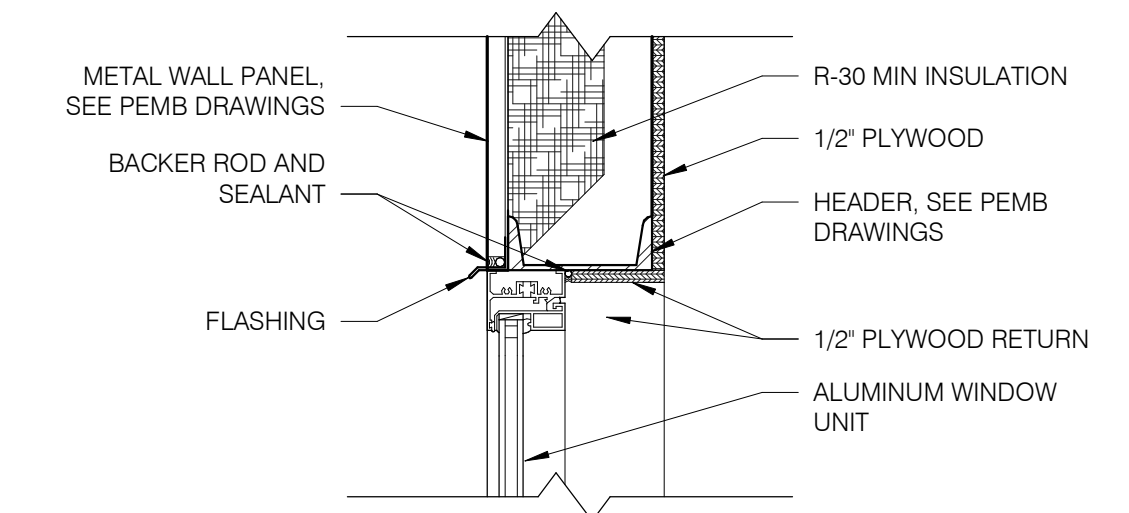
D1 TYPICAL DOOR HEAD
A7.03 1 1/2" = 1'-0"
A5.00



C3 TYPICAL WINDOW JAMB
A7.03 1 1/2" = 1'-0"
A1.00



C2 TYPICAL WINDOW SILL
A7.03 1 1/2" = 1'-0"
A5.00



C1 TYPICAL WINDOW HEAD
A7.03 1 1/2" = 1'-0"
A5.00

Client:
City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:
**Public Safety
Training Facility
Multi-Purpose
Training Area**
Elyria, Ohio 44035

Revisions:

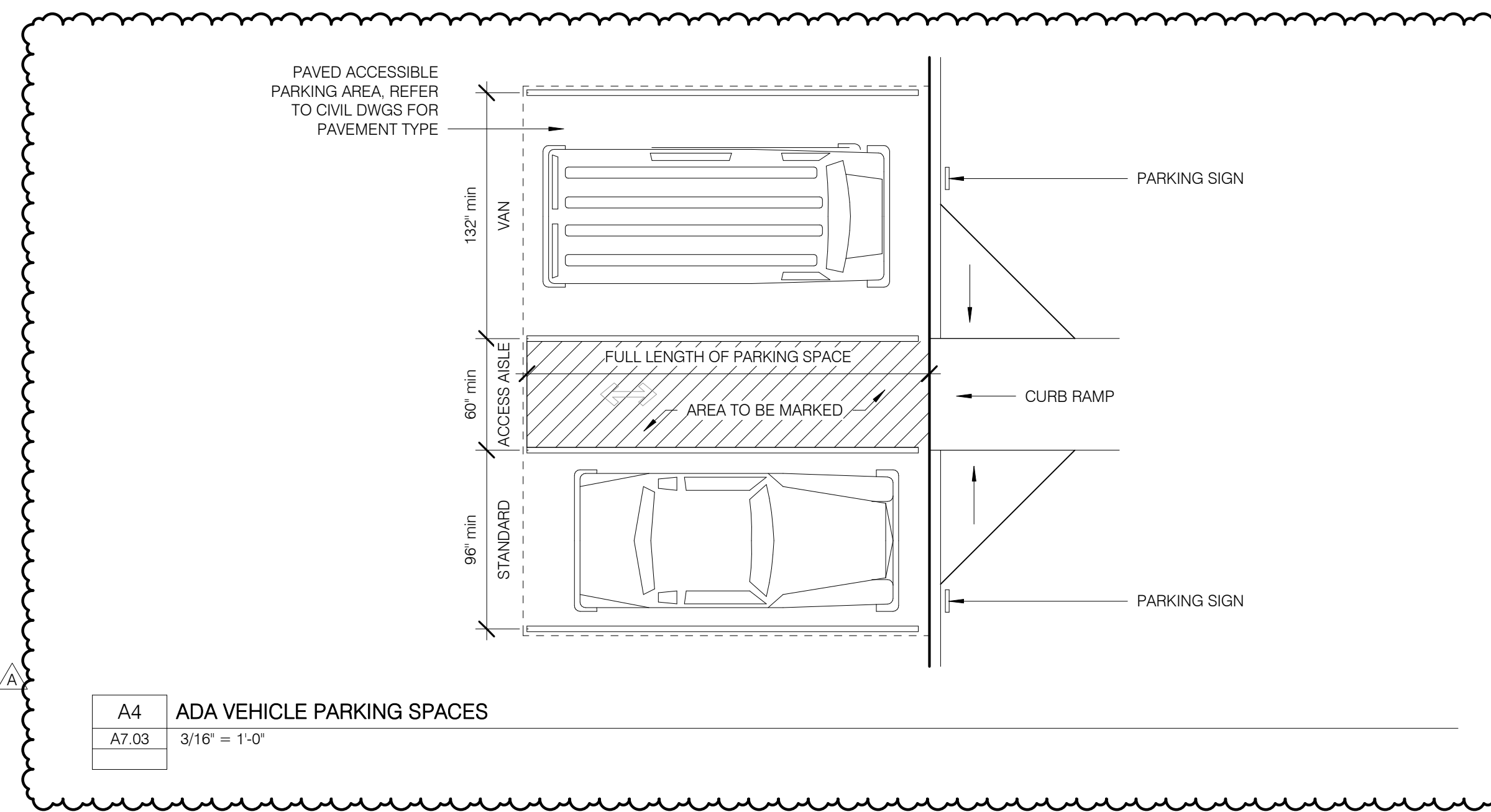
A 11.07.2024 ADDENDUM A
0 09.26.2024 For Construction

Project Number: 5039 01 23
Drawn by: HLM
Checked by: GLP
Copyright: 2024

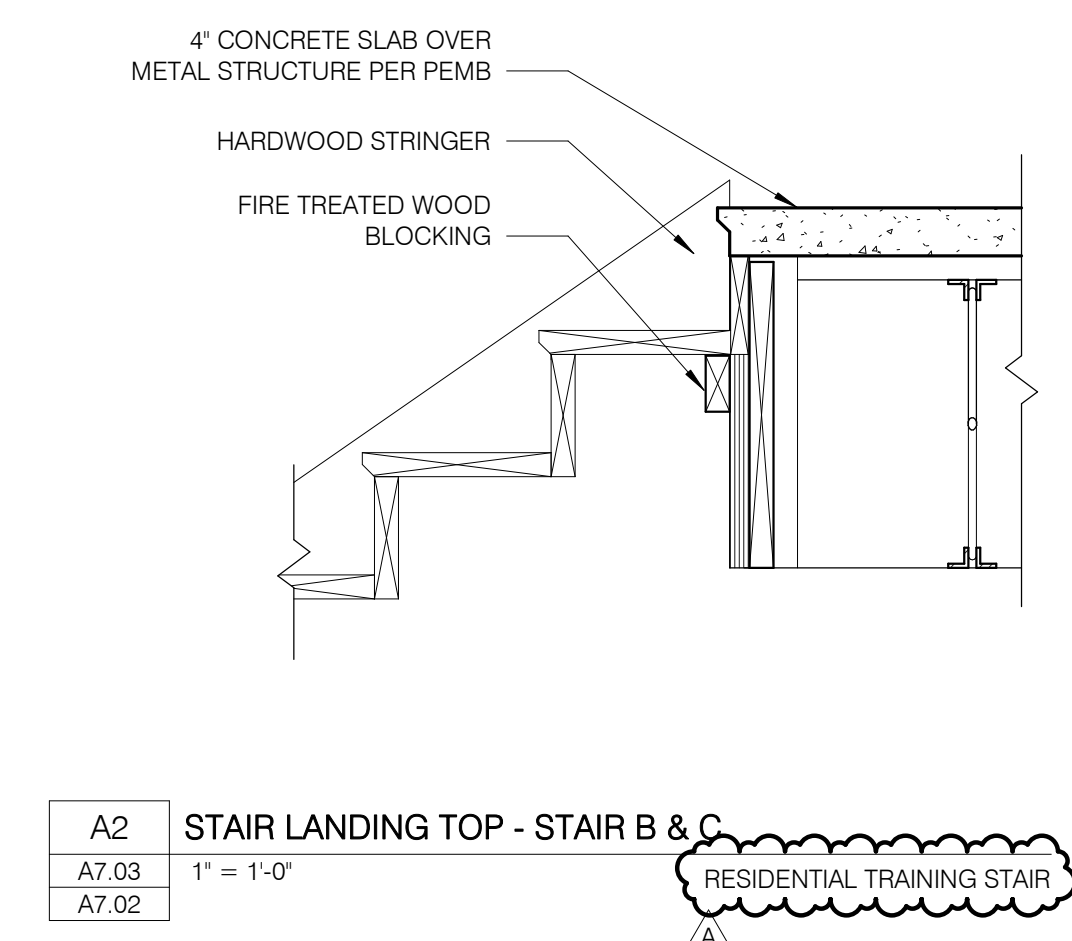
Details

A7.03

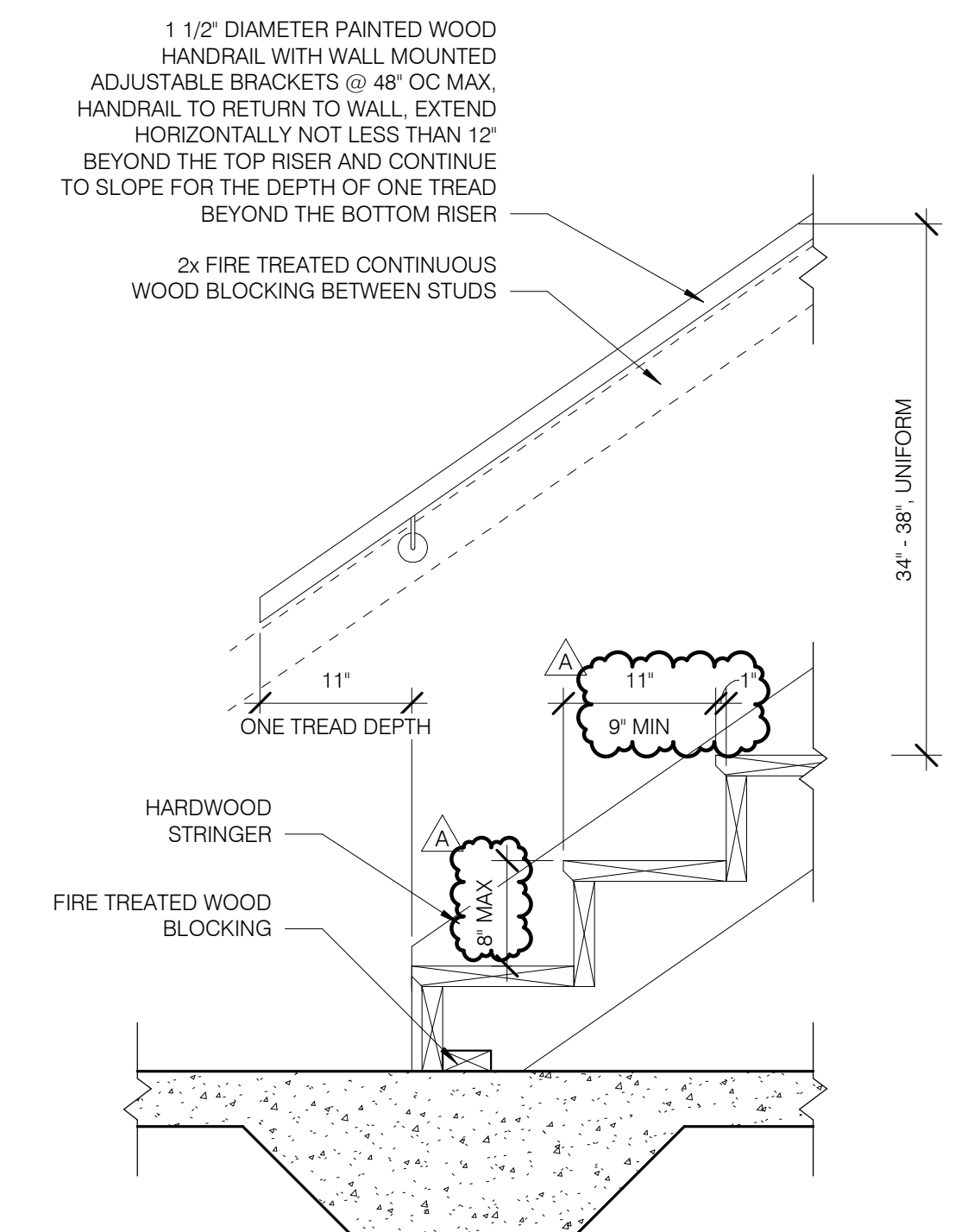
SHEET SCALE
0' 1/2' 1' 2'



A4 ADA VEHICLE PARKING SPACES
A7.03 3/16" = 1'-0"



A2 STAIR LANDING TOP - STAIR B & C
A7.03 1" = 1'-0"
A7.02



A1 STAIR LANDING BOTTOM - STAIR B & C
A7.03 1" = 1'-0"
A7.02

A. STRUCTURAL DESIGN

CODE | 2024 OHIO BUILDING CODE (OBC)

LIVE LOADS: ROOF: 20 PSF (REDUCIBLE)

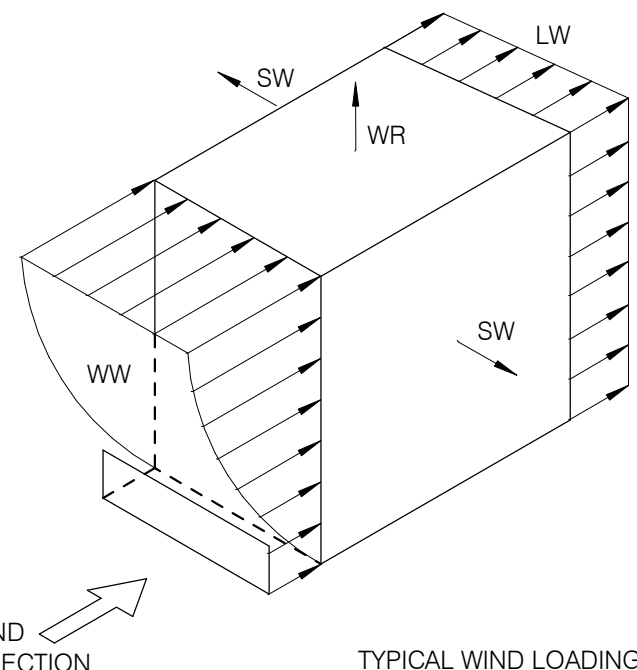
ROOF SNOW LOADS:
 DESIGN UNIFORM ROOF SNOW LOAD 20.0 PSF
 FLAT ROOF SNOW LOAD(Pf) 14.0 PSF
 GROUND SNOW LOAD (Pg) 20.0 PSF
 IMPORTANCE FACTOR (I) 1.0
 SNOW EXPOSURE FACTOR (Ce) 1.0
 THERMAL FACTOR(Ct) 1.0

STRUCTURAL ROOF MEMBERS DESIGNED FOR UNBALANCED LOAD CONDITIONS AS DETERMINED PER ASCE 7

WIND DESIGN DATA:
 ULTIMATE WIND SPEED 115 MPH
 RISK CATEGORY II
 MEAN ROOF HT (H) 26.7 FT
 EXPOSURE CATEGORY C
 ENCLOSURE CLASSIF. ENCLOSED BUILDING
 INTERNAL PRESSURE COEF. +/-0.18
 DIRECTIONALITY (Kd) 0.85

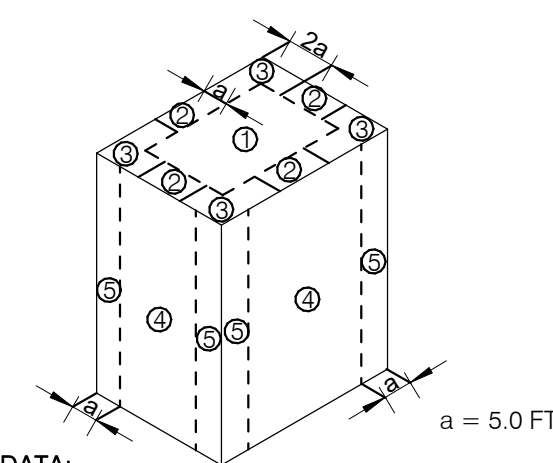
ULTIMATE MWFRS (PSF):

Z	Kz	Kzt	qzGCP	w+q/GCpi	w-q/GCpi	COMBINED WW+LW
0 TO 15'	0.85	1.00	16.6	11.6	21.6	23.6
20.0 FT	0.90	1.00	17.6	12.7	22.6	24.7
25.0 FT	0.95	1.00	18.5	13.5	23.5	25.5
26.7 FT	0.96	1.00	18.8	13.8	23.7	25.8
30.9 FT	0.99	1.00	19.3	14.4	24.3	26.4



COMPONENT AND CLADDING WIND PRESSURES (ULTIMATE LOADS):

Area	Surface Pressure (psf)	100 sf	50sf
Roof			
Negative Zone 1	-29.8	-27.9	-27.0
Negative Zone 2	-51.9	-42.2	-38.1
Negative Zone 3	-76.7	-65.1	-60.1
Positive Zone 1	18.8	17.1	16.0
Positive Zone 2&3	18.8	17.1	16.0
Overhang Zone 2	-60.7	-60.7	-60.7
Overhang Zone 3	-102.1	-78.9	-69.0
Wall			
Area	10 sf	100 sf	500 sf
Negative Zone 4	-32.3	-27.9	-24.8
Negative Zone 5	-39.7	-31.0	-24.8
Positive Zone 4&5	29.8	25.4	22.3



EARTHQUAKE DESIGN DATA:

RISK CATEGORY: II
 IMPORTANCE FACTOR (I): 1.00
 MAPPED SPECTRAL RESPONSE ACCELERATION
 Ss: 0.133
 S1: 0.055
 SITE CLASS C (PER GEOTECH REPORT)
 SPECTRAL RESPONSE COEFFICIENT
 Sps: 0.106
 Sp1: 0.062
 SEISMIC DESIGN CATEGORY: B
 BASIC STRUCTURAL SYSTEM: STRUCTURAL STEEL
 SEISMIC RESISTING SYSTEM: STEEL SYSTEM NOT SPECIFICALLY DETAILED FOR SEISMIC
 RESPONSE MODIFICATION FACTOR, (R): 3.0
 ANALYSIS PROCEDURE: EQUIV LATERAL-FORCE
 SEISMIC RESPONSE COEF. (Cs): 0.035
 DESIGN BASE SHEAR (V): 0.035W

B. GENERAL

- CONTRACTOR SHALL FIELD VERIFY ALL EXISTING DIMENSIONS AND EXISTING CONSTRUCTION PRIOR TO DEMOLITION, FABRICATION, AND CONSTRUCTION.
- THE STRUCTURE IS DESIGNED TO BE SELF-SUPPORTING AND STABLE AFTER IT IS FULLY COMPLETED. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO DETERMINE ERECTION PROCEDURES AND SEQUENCES AND ENSURE THE SAFETY OF THE CONSTRUCTION PERSONNEL, BUILDING AND ITS COMPONENT PARTS DURING ERECTION. THIS INCLUDES THE ADDITION OF WHATEVER SHORING, TEMPORARY BRACING, ETC. (BEYOND THAT DEPICTED HEREIN) THAT MAY BE NECESSARY.
- THE CONTRACTOR SHALL PERFORM ALL CONSTRUCTION ACTIVITIES FOR THE PROJECT IN A MANNER AND SEQUENCE THAT IS BASED ON ACCEPTED INDUSTRY STANDARDS THAT RECOGNIZE THE INTERACTION OF THE COMPONENTS THAT COMPRISE THE STRUCTURE WITHOUT CAUSING DISTRESS, UNANTICIPATED MOVEMENTS OR IRREGULAR LOAD PATHS AS A RESULT OF THE CONSTRUCTION MEANS AND METHODS EMPLOYED.
- THE CONTRACTOR SHALL NOTIFY THE OWNER IMMEDIATELY OF ANY INCONSISTENCIES BETWEEN THE DRAWINGS AND THE FIELD CONDITIONS THAT COULD AFFECT THE CONSTRUCTION.
- THE CONTRACTOR SHALL AT ALL TIMES KEEP THE WORK AREA AND SURROUNDING PREMISES FREE OF WASTE, SURPLUS MATERIALS, RUBBISH, AND DEBRIS RESULTING FROM THE WORK.
- MATERIALS AND EQUIPMENT NECESSARY TO COMPLETE THE WORK SHALL BE STORED AT OWNER DESIGNATED LOCATION(S).
- MATERIAL REMOVED AS PART OF ANY DEMOLITION WORK SHALL BE REMOVED AND DISPOSED OF LEGALLY OFF-SITE, UNLESS OTHERWISE DIRECTED BY THE OWNER.
- WHERE CONFLICTS ARISE BETWEEN NOTES, DRAWINGS, OR SPECIFICATIONS, THE CONTRACTOR SHALL NOT PROCEED WITH THE AFFECTED WORK UNTIL THE STRUCTURAL ENGINEER ISSUES A CLARIFICATION.

C. BUILDING PAD PREPARATION

- ALL TREES, BRUSH, ROOTS, TOPSOIL, RUBBLE, ORGANICALLY CONTAMINATED, OR OTHERWISE OBJECTIONABLE MATERIALS ENCOUNTERED ARE TO BE REMOVED FROM STRUCTURAL AREAS OF THE SITE.
- SUBGRADE SECTORS WHICH WILL EXIST IN CUT AND THOSE WHICH AREA TO SUPPORT FILL STRUCTURES ARE TO BE PROOF ROLLED. AREA EXHIBITING INSTABILITY ARE TO BE UNDERCUT AND BACKFILLED ON A LIFT-BY-LIFT BASIS WITH EACH LIFT CAREFULLY COMPACTED.
- IF UNSTABLE SUBGRADE SECTORS CANNOT BE STABILIZED BY EXCAVATION AND RE-COMPACTION, THEN CRUSHED STONE OR SIMILAR COARSE AGGREGATE MATERIALS SHALL BE ROLLED INTO THE SUBGRADE UNTIL A FIRM SUBGRADE REACTION IS ACHIEVED.
- ENGINEERED FILL SHALL BE DETERMINED BY A SOILS LABORATORY AND MATERIALS ARE TO BE PLACED IN LIFTS NOT EXCEEDING 8 INCHES IN LOOSE MEASURED THICKNESS. EACH LIFT IS TO BE COMPACTED WITHIN 2% OF THE OPTIMUM MOISTURE CONTENT AS FOLLOWS (UNLESS DIRECTED OTHERWISE BY GEOTECHNICAL REPORT):
 SLAB ON GRADE: MINIMUM OF 98% MAXIMUM DENSITY BY ASTM D696
 FOOTING BEARING ON FILL: MINIMUM OF 98% MAXIMUM DENSITY BY ASTM D696
- THE EARTH-WORK PROGRAM SHOULD BE CONDUCTED UNDER THE SUPERVISION OF A SOILS LABORATORY. THE IN-PLACE DENSITIES ACHIEVED ARE TO BE VERIFIED BY FIELD TESTING.

D. FOUNDATIONS

- FOUNDATION DESIGN BASED ON NET ALLOWABLE BEARING PRESSURE OF 3000 PSF ON UNDISTURBED SOIL OR ENGINEERED FILL. PER GEOTECHNICAL INVESTIGATION REPORT BY CTL ENGINEERING, 3065 INTERSTATE PARKWAY, BRUNSWICK, OH 44121; (330)-220-8900, REPORT DATED DECEMBER 4, 2020. BEARING PRESSURE IS TO BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO PLACEMENT OF FOUNDATIONS.
- CONTRACTOR SHALL BECOME FAMILIAR WITH THE GEOTECHNICAL REPORT PRIOR TO BUILDING PAD PREPARATION, EXCAVATION, AND CONSTRUCTION OF FOUNDATIONS. WHERE ANY CONFLICTS OCCUR BETWEEN THE SOILS REPORT AND THE DRAWINGS THE CONTRACTOR SHALL NOT PROCEED WITH THE AFFECTED WORK UNTIL THE STRUCTURAL ENGINEER ISSUES A CLARIFICATION.
- INUNDATION AND LONG TERM EXPOSURE OF BEARING SURFACES WHICH WILL RESULT IN DETERIORATION OF BEARING FORMATIONS SHALL BE PREVENTED. FOOTINGS SHALL BE PLACED IMMEDIATELY FOLLOWING FOOTING EXCAVATIONS AND BEARING SURFACE INSPECTION.
- ALL FILL MATERIALS SHALL BE ENGINEERED STRUCTURAL FILL FREE OF ORGANIC CONTAMINANTS AND OTHER DELETERIOUS MATTER.
- THE CONTRACTOR SHALL NOTIFY THE STRUCTURAL ENGINEER OF ANY UNUSUAL SOIL CONDITIONS.
- PRIOR TO THE START OF EXCAVATIONS THE CONTRACTOR SHALL MEET WITH THE OWNER TO DETERMINE THE LOCATION OF ANY EXISTING UNDERGROUND UTILITIES OR STRUCTURES.
- WHERE FOOTINGS ARE IN CLOSE PROXIMITY OF SEWERS, DRAINS, UNDERGROUND CONDUITS AND FLOOR PIPES, BOTTOM OF ALL FOOTINGS SHALL BE AT OR BELOW INVERT ELEVATIONS OF ELEMENTS. SEE TYPICAL FOUNDATION DETAIL.
- ALL EXTERIOR SPREAD AND CONTINUOUS FOOTINGS SHALL BEAR A MINIMUM OF #4 BELOW THE FINAL EXTERIOR GRADE TO PROVIDE ADEQUATE FROST PROTECTION.
- ALL INTERIOR SPREAD AND CONTINUOUS FOOTINGS SHALL BEAR A MINIMUM OF #4 BELOW THE FINISHED FLOOR ELEVATION TO PROVIDE ADEQUATE BEARING.

E. CONCRETE

- CONCRETE WORK SHALL CONFORM WITH THE LATEST EDITION OF THE FOLLOWING ACI CODES:
 ACI 301 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS
 ACI 305R HOT WEATHER CONCRETING
 ACI 306 COLD WEATHER CONCRETING
 ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
 ACI 117 STANDARD SPECIFICATION TOLERANCES FOR CONCRETE CONSTRUCTION AND MATERIALS

F. MASONRY

- ALL MASONRY MATERIALS AND CONSTRUCTION SHALL COMPLY WITH THE REQUIREMENTS OF ACI 530, LATEST EDITION.
- CONCRETE MASONRY UNITS SHALL BE NORMAL WEIGHT HOLLOW CORE UNITS LAID IN RUNNING BOND CONFORMING TO ASTM C90 WITH MINIMUM 2000 PSI NET AREA COMPRESSIVE STRENGTH AND fm = 2000 PSI.
- GROUT SHALL CONFORM TO ASTM C476 WITH A MINIMUM 2000 PSI 28 DAY COMPRESSIVE STRENGTH.
- MORTAR SHALL BE TYPE M OR S CONFORMING TO ASTM C270 WITH A MINIMUM 1800 PSI COMPRESSIVE STRENGTH FOR ALL LOAD-BEARING, EXTERIOR, AND REINFORCED WALLS.
- PROVIDE 9 GAGE STANDARD LADDER WIRE JOINT REINFORCING CONFORMING TO ASTM A951 AT EVERY OTHER COURSE OF BLOCK.
- REINFORCING STEEL SHALL BE GRADE 60 CONFORMING TO ASTM A615. LAP BARS 52 BAR DIAMETERS (U.N.O.)
- LAY MASONRY UNITS WITH FULL MORTAR BEDDING ON HORIZONTAL AND VERTICAL FACES.
- ALL CORNERS ARE TO BE TIED IN MASONRY BOND.

G. PRE-ENGINEERED METAL BUILDING NOTES

- THE ENTIRE PRE-ENGINEERED METAL BUILDING SYSTEM SHALL BE DESIGNED BY THE METAL BUILDING MANUFACTURER IN CONFORMANCE WITH THE PROVISIONS OF THE REFERENCED BUILDING CODE AND THE "LOW-RISE BUILDING SYSTEMS MANUAL" PUBLISHED BY THE METAL BUILDING MANUFACTURERS ASSOCIATION. WHERE THESE CRITERIA CONFLICT, THE MORE STRINGENT CRITERION SHALL APPLY.
- IT IS THE PRE-ENGINEERED METAL BUILDING MANUFACTURER'S RESPONSIBILITY TO DESIGN THE COMPLETE BUILDING SYSTEM (STEEL FRAMING, ANCHOR BOLTS, PURLINS, GIRTS, BRACINGS, CONNECTIONS, ROOFING, WALL PANELS, COMPONENTS, ATTACHMENTS, ETC.). THE MANUFACTURER SHALL SUBMIT A CERTIFICATION LETTER BEARING THE SEAL OF A LICENSED PROFESSIONAL ENGINEER, REGISTERED IN THE STATE HAVING JURISDICTION, STATING THAT THE BUILDING SYSTEM DESIGN MEETS THE INDICATED CODE, PERFORMANCE, AND LOADING REQUIREMENTS.
- THE PRE-ENGINEERED METAL BUILDING MANUFACTURER SHALL BE CERTIFIED BY THE AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC), CATEGORY MB. THE MANUFACTURER SHALL MEET THE EXCEPTIONS NOTED IN THE SPECIAL INSPECTIONS FABRICATION SECTION, WHICH SPECIFIES QUALITY CONTROL REQUIREMENTS OF THE MANUFACTURER PERTAINING TO SPECIAL INSPECTIONS.
- THE CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE ENTIRE METAL BUILDING SYSTEM FOR REVIEW. THE CONTRACTOR SHALL ALSO SUBMIT A COMPLETE STRUCTURAL DESIGN ANALYSIS OF THE BUILDING SYSTEM, FOR RECORD PURPOSES ONLY. THE SHOP DRAWING SUBMITTAL SHALL INCLUDE ALL ANCHOR BOLT REQUIREMENTS AND FOUNDATION REACTIONS. ALL SHOP DRAWINGS AND CALCULATION SUBMITTALS SHALL BEAR THE SEAL OF A LICENSED PROFESSIONAL ENGINEER REGISTERED IN THE STATE HAVING JURISDICTION.
- THE PRE-ENGINEERING METAL BUILDING MANUFACTURER SHALL PROVIDE ALL GIRTS, PURLINS, AND OTHER COMPONENTS REQUIRED FOR A COMPLETE STRUCTURAL SYSTEM. ALL WALL SYSTEMS, SUCH AS METAL STUDS, STOREFRONTS, ETC. SHALL BE SUPPORTED BY THE METAL BUILDING SYSTEM. ALLOWABLE DEFLECTIONS OF COMPONENTS SHALL BE IN ACCORDANCE WITH THE REFERENCED BUILDING CODE.
- THE SIZE, NUMBER, GRIP LENGTH ABOVE BEARING CONCRETE ELEVATION, AND PLACEMENT PATTERN OF ALL ANCHOR BOLTS SHALL BE DETERMINED BY THE PRE-ENGINEERED METAL BUILDING MANUFACTURER. ANCHOR BOLT EMBEDMENT LENGTHS ARE INDICATED ON THE STRUCTURAL DRAWINGS. ANCHOR BOLT LENGTHS SHALL BE DETERMINED BY THE CONTRACTOR BASED ON FOUNDATION AND PRE-ENGINEERING METAL BUILDING DRAWINGS.
- THE METAL BUILDING ERECTOR SHALL PROVIDE ALL TEMPORARY GUYING AND BRACING. SEE GENERAL NOTES.
- UNLESS OTHERWISE NOTED OR SPECIFIED, ALL STEEL MEMBERS SHALL BE CLEANED AND PAINTED IN ACCORDANCE WITH THE MANUFACTURER'S STANDARD PROCEDURES.

H. STRUCTURAL DEFERRED SUBMITTALS

- DEFERRED SUBMITTALS SHALL CONFORM TO CHAPTER 17 OF THE GOVERNING BUILDING CODE.
- THE FOLLOWING ARE STRUCTURAL DEFERRED SUBMITTAL ITEMS:
 STEEL STAIRS
 PRE-ENGINEERED METAL BUILDING FRAMING
- THE SUBMITTALS SHALL INCLUDE BUT SHALL NOT BE LIMITED TO LAYOUT DRAWING, ANY NECESSARY SECTIONS AND/OR DETAILS, AND DESIGN CALCULATIONS STAMPED AND SIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE GOVERNING STATE.
- SUBMITTAL DOCUMENTS FOR DEFERRED SUBMITTAL ITEMS SHALL BE SUBMITTED TO THE ARCHITECT OR ENGINEER OF RECORD FOR REVIEW PRIOR TO SUBMISSION TO THE BUILDING OFFICIAL.
- TEN WORKING DAYS SHALL BE ALLOWED FOR THE ARCHITECT OR THE ENGINEER TO REVIEW EACH DEFERRED SUBMITTAL.
- THE DEFERRED SUBMITTAL ITEMS SHALL NOT BE INSTALLED UNTIL THEIR DESIGN AND SUBMITTAL DOCUMENTS HAVE BEEN APPROVED BY THE BUILDING OFFICIAL.
- DEFERRED SUBMITTALS SHALL BE MADE FAR ENOUGH IN ADVANCE SUCH THAT NO DELAY IN CONSTRUCTION OCCURS.

J. SPECIAL INSPECTION

- A REGISTERED ENGINEER OR TEST AGENCY WITH EXPERIENCED TECHNICIANS UNDER THE DIRECT SUPERVISION OF A REGISTERED ENGINEER TO PERFORM THE DUTIES OF THE SPECIAL INSPECTOR SHALL BE EMPLOYED. THE SPECIAL INSPECTOR SHALL BE A REGISTERED DEPUTY INSPECTOR & SHALL MEET ALL OTHER QUALIFICATIONS AS STATED IN THE GOVERNING CODE.
- THE SPECIAL INSPECTOR SHALL OBSERVE THE WORK ASSIGNED FOR THE CONFORMANCE WITH THE APPROVED DESIGN DRAWINGS AND SPECIFICATION, AND THE FOLLOWING TABLE:

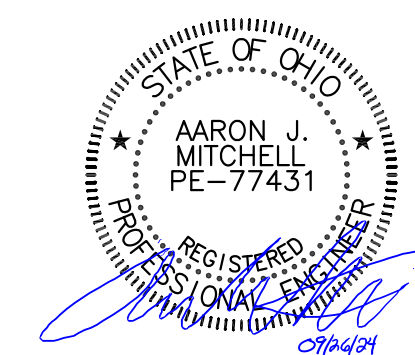
ITEM	SPECIAL INSPECTION REQUIRED	CODE SECTION
FABRICATION	YES*	1704.2.5
CONCRETE CONSTRUCTION	YES	1705.3
WOOD CONSTRUCTION	NO	1705.5
SOIL	YES	1705.6
WIND RESISTANCE	NO	1705.11
SEISMIC RESISTANCE	NO	1705.12

*SPECIAL INSPECTION IS NOT REQUIRED WHERE THE WORK IS DONE ON THE PREMISES OF A FABRICATOR REGISTERED AND APPROVED TO PERFORM SUCH WORK WITHOUT SPECIAL INSPECTIONS PER SECTION 1704.2.5.1 OF THE GOVERNING CODE.

- THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION REPORTS TO THE BUILDING OFFICIAL, THE ENGINEER OR ARCHITECT OF RECORD, AND OTHER DESIGNED PERSONS. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION, THEN, IF UNCORRECTED, TO THE PROPER DESIGN AUTHORITY AND TO THE BUILDING OFFICIAL.
- THE SPECIAL INSPECTOR SHALL SUBMIT A FINAL SIGNED REPORT STATING WHETHER THE WORK REQUIRING SPECIAL INSPECTIONS, TO THE BEST OF THE INSPECTOR'S KNOWLEDGE, WAS IN CONFORMANCE WITH THE APPROVED PLANS AND SPECIFICATIONS AND THE APPLICABLE WORKMANSHIP PROVISION OF THE GOVERNING BUILDING CODE. REPORTS SHALL COMPLY WITH THE REQUIREMENTS OF SECTION 1704.2.4 OF THE GOVERNING BUILDING CODE.

K. ABBREVIATIONS

BLK	BLOCKING	FOW	FACE OF WALL
BM	BEAM	FS	FAR SIDE (OR FOOTING STEP)
B.N.	BOUNDARY NAILING	(FV)	FIELD VERIFY
BOTT	BOTTOM	GA	GAGE
BRG	BEARING	HD	HEADER
BTWN	BETWEEN	HR	HANDRAIL
CJ	CONTROL JOINT (OR CONSTRUCTION JOINT)	LG	LONG
COL	COLUMN	LT	LIGHT
COM	COMMON	NS	NEAR SIDE
CONC	CONCRETE	PL	PLATE
CONN	CONNECTION	PLCS	PLACES
CONT	CONTINUOUS/CONTINUITY	(P.T.)	PRESSURE TREATED
(E)	EXISTING	REF	REFERENCE
EA	EACH	REQD	REQUIRED
EF	EACH FACE	SCHD	SCHEDULE
EL	ELEVATION	STL	STEEL
E.N.	EDGE NAILING	T&B	TOP AND BOTTOM
EW	EACH WAY	THD	THREADED
EQUIP	EQUIPMENT	TYP	TYPICAL
FDTN	FOUNDATION	UNO	UNLESS NOTED OTHERWISE
FLG	FLANGE	WD	WOOD
F.N.	FIELD NAILING	WP	WORK POINT
FOS	FACE OF SHEATHING	WWF	WELDED WIRE FABRIC



Client:

City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:

Public Safety
Training Facility
Multi-Purpose
Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

09/26/2024 For Construction

Project Number: 5039 01 23
Drawn by: DLS
Checked by: DJC
Copyright: 2024

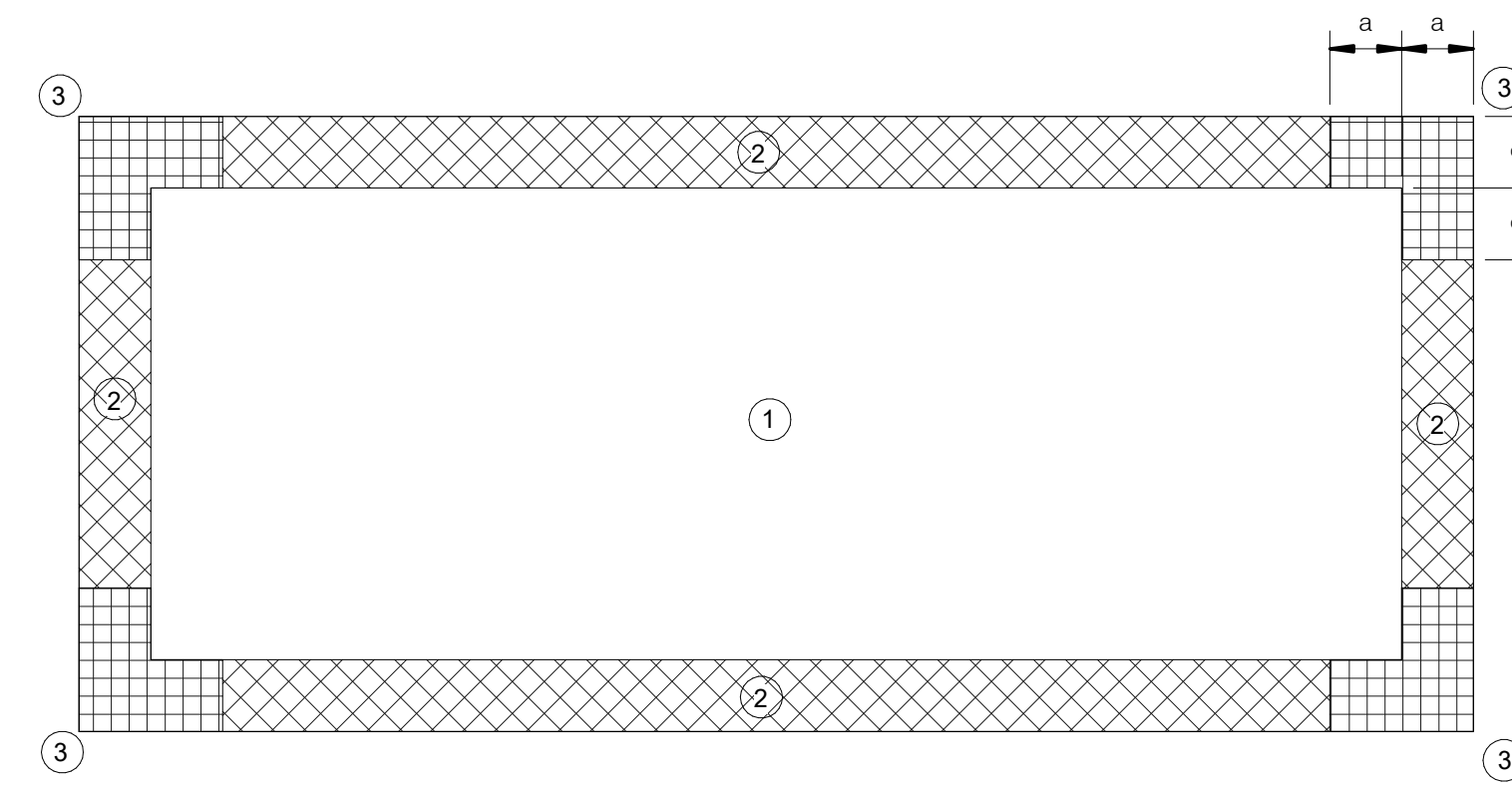
General Notes

SO.00

SHEET SCALE
0' 1/2' 1' 2'



FOOTING SCHEDULE		
MARK	FTG SIZE (L x W x D)	FTG REINFORCING
WF2.0	CONT. x 2'-0" x 3'-0"	(3) #5 T&B CONT.
F5.0	5'-0" x 5'-0" x 3'-0"	(6) #5 EW T&B
F7.0	7'-0" x 7'-0" x 3'-0"	(8) #5 EW T&B



1 Wind Uplift Diagram
S0.10 3/4" = 1'-0"

GROSS WIND PRESSURE		NET UPLIFT
	ZONE 1: +18.8 PSF / -29.8 PSF	-28.6 PSF
	ZONE 2: +17.1 PSF / -51.9 PSF	-50.7 PSF
	ZONE 3: +16.0 PSF / -76.7 PSF	-75.5 PSF

h = 26.7FT a = 5.0FT

Client:
City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:
**Public Safety
Training Facility
Multi-Purpose
Training Area**

Garden Street
Elyria, Ohio 44035

Revisions:

09.26.2024 For Construction

Project Number: 5039 01 23
Drawn by: DLS
Checked by: DJC
Copyright: 2024

Diagrams &
Schedules

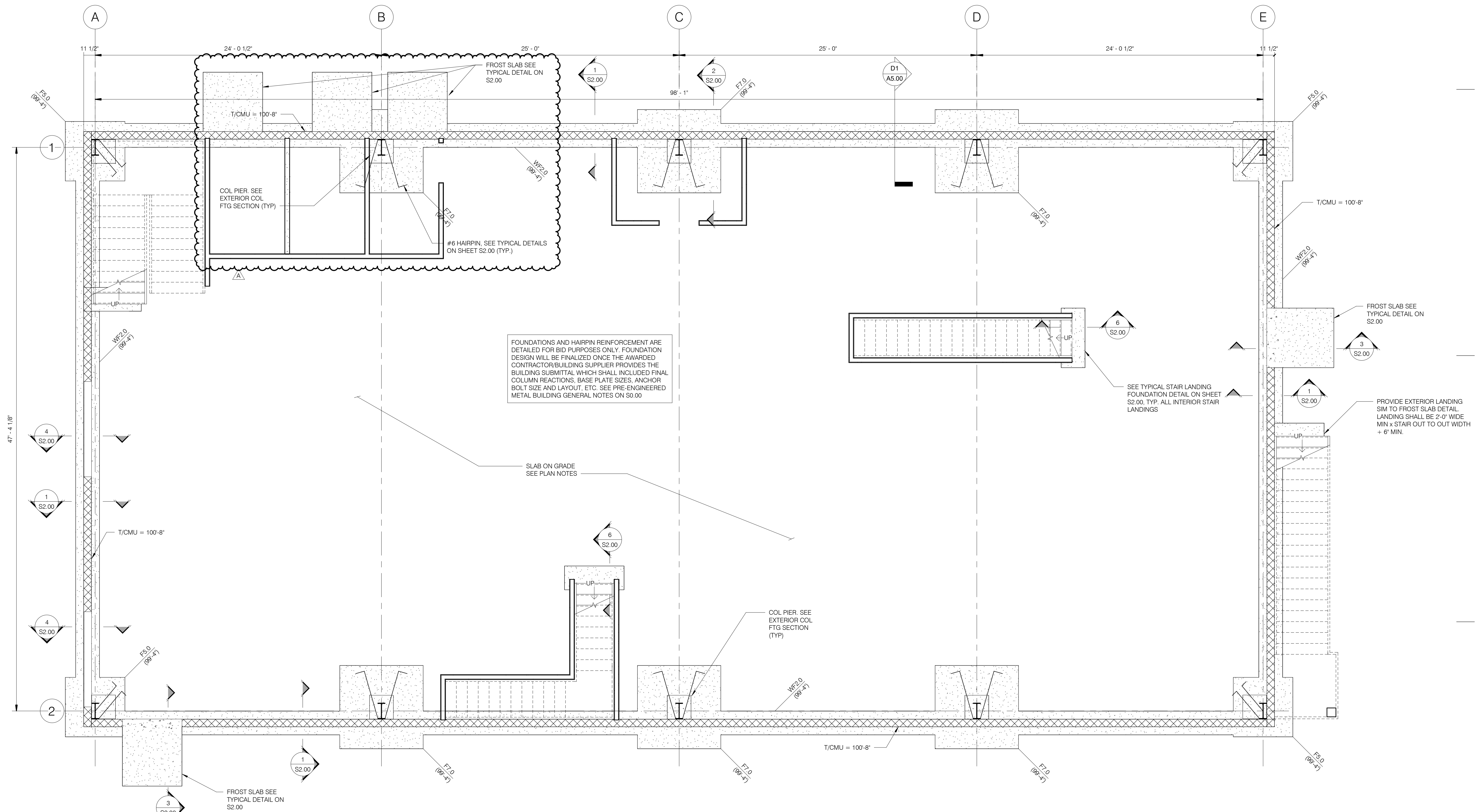
S0.10

SHEET SCALE
0" 1/2" 1" 2"



PLAN NOTES

- FOR GENERAL NOTES SEE DRAWING S0.00.
- FOR TYPICAL FOUNDATION DETAILS SEE DRAWING S2.00.
- FOR TYPICAL MASONRY DETAILS SEE SHEET S5.00.
- T/SLAB AT FIRST FLOOR = 100'-0" (REFERENCE ELEVATION VARIES, SEE CIVIL).
- TOP OF CONCRETE AT WALL FOOTINGS SHALL MATCH ADJACENT TOP OF SLAB ELEVATION.
- ALL SLAB ON GRADE CONSTRUCTION SHALL BE 4" THICK SLAB-ON-GRADE REINF. w/ 6x6-W2 1xW2.1 WWF OVER 10 MIL POLY VAPOR RETARDER OVER 6" OF WELL COMPACTED GRANULAR MATERIAL ON WELL COMPACTED SUB-GRADE. CONTRACTION JOINTS SHALL BE SPACED @ 10'-0" OC MAX.
- CONTRACTION JOINTS (CJ) SHALL BE SAWN AS SOON AS POSSIBLE. TIMING OF SAW CUTS SHALL BE PER THE CONCRETE CONTRACTOR'S EXPERIENCE AND EMPLOYED MEANS AND METHODS. PROVIDE JOINT SEALER POST SAWCUT.
- CONSTRUCTION JOINTS SHALL BE PROVIDED AT THE END OF ANY SINGLE POUR. A CONSTRUCTION JOINT MAY REPLACE A CONTRACTION JOINT.
- FOR WALL OPENINGS AND ADDITIONAL DIMENSIONS SEE ARCHITECTURAL DRAWINGS.
- FOOTING DESIGNATION IS AS FOLLOWS: MARK (T/FTG ELEV)
- FX X DENOTES SPREAD FOOTING
WFX X DENOTES WALL FOOTING
SEE SHEET S0.10 FOR FOOTING SCHEDULES
- PROVIDE (1) #4 x 4'-0" BAR PLACED 1" DOWN FROM T/SLAB FROM FACE OF ALL RE-ENTRANT CORNERS.



Client:
City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:
Public Safety Training Facility Multi-Purpose Training Area

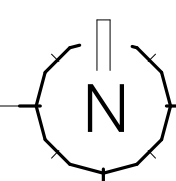
Garden Street
Elyria, Ohio 44035

Revisions:

A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

Project Number: 5039 01 23
Drawn by: DLS
Checked by: DJC
Copyright: 2024

1 Multi-Purpose Training Area Foundation Plan
S1.00 1/4" = 1'-0"
A3.00



Foundation Plan

S1.00

SHEET SCALE
0' 1/2' 1' 2'



Client:

City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:

Public Safety
Training Facility
Multi-Purpose
Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

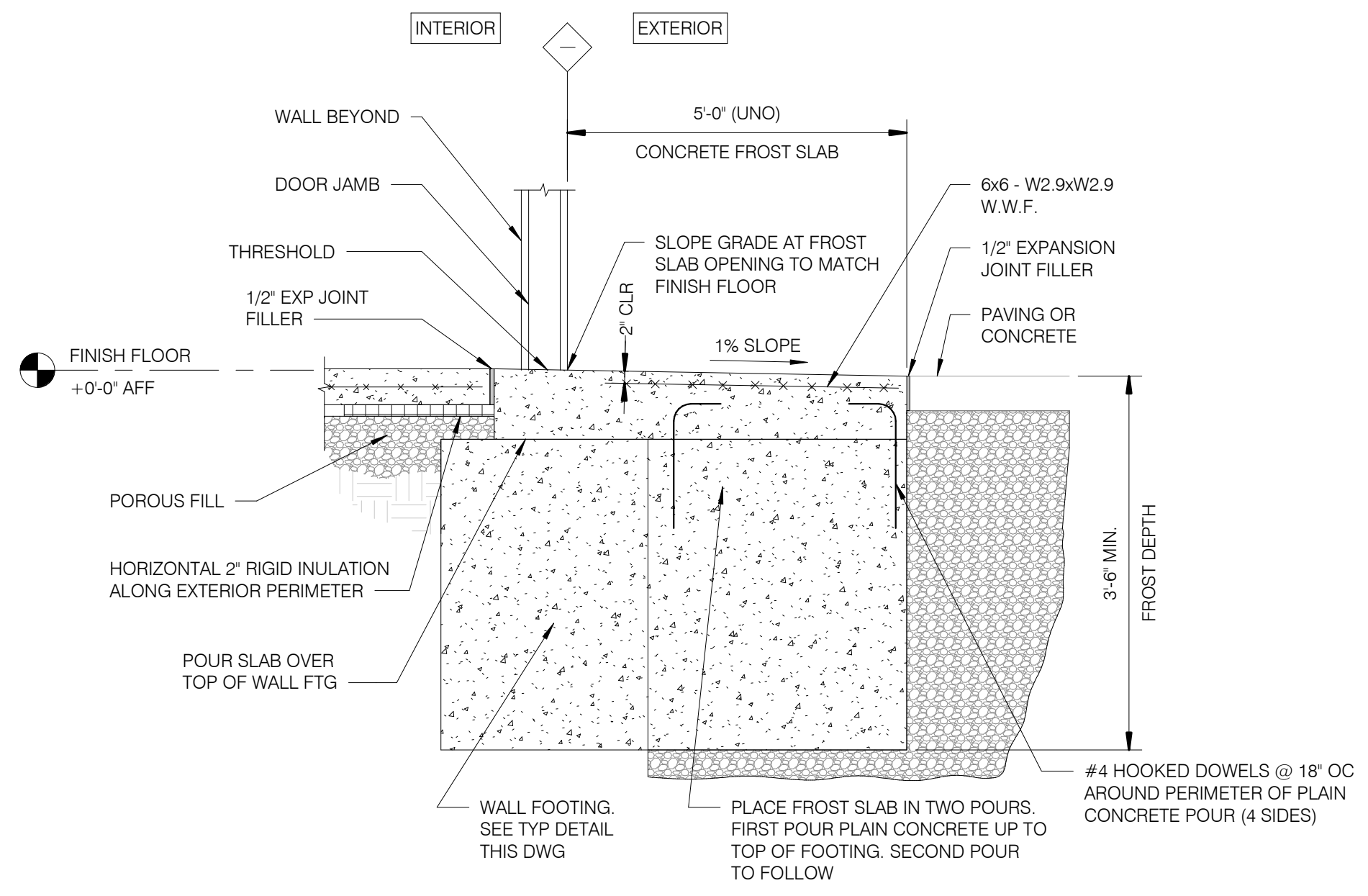
09.26.2024 For Construction

Project Number: 5039 01 23
Drawn by: DLS
Checked by: DJC
Copyright: 2024

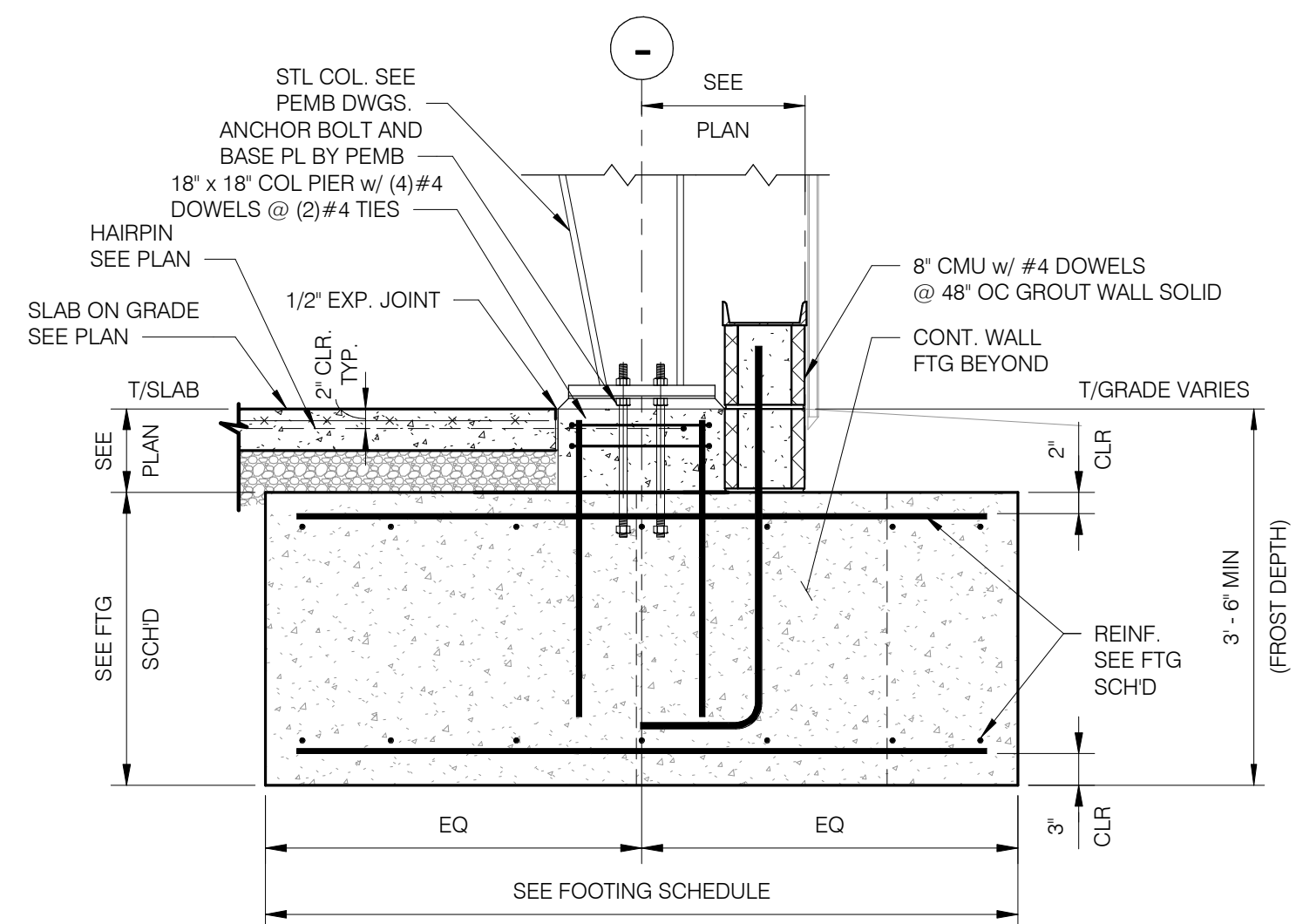
Foundation Details &
Sections

S2.00

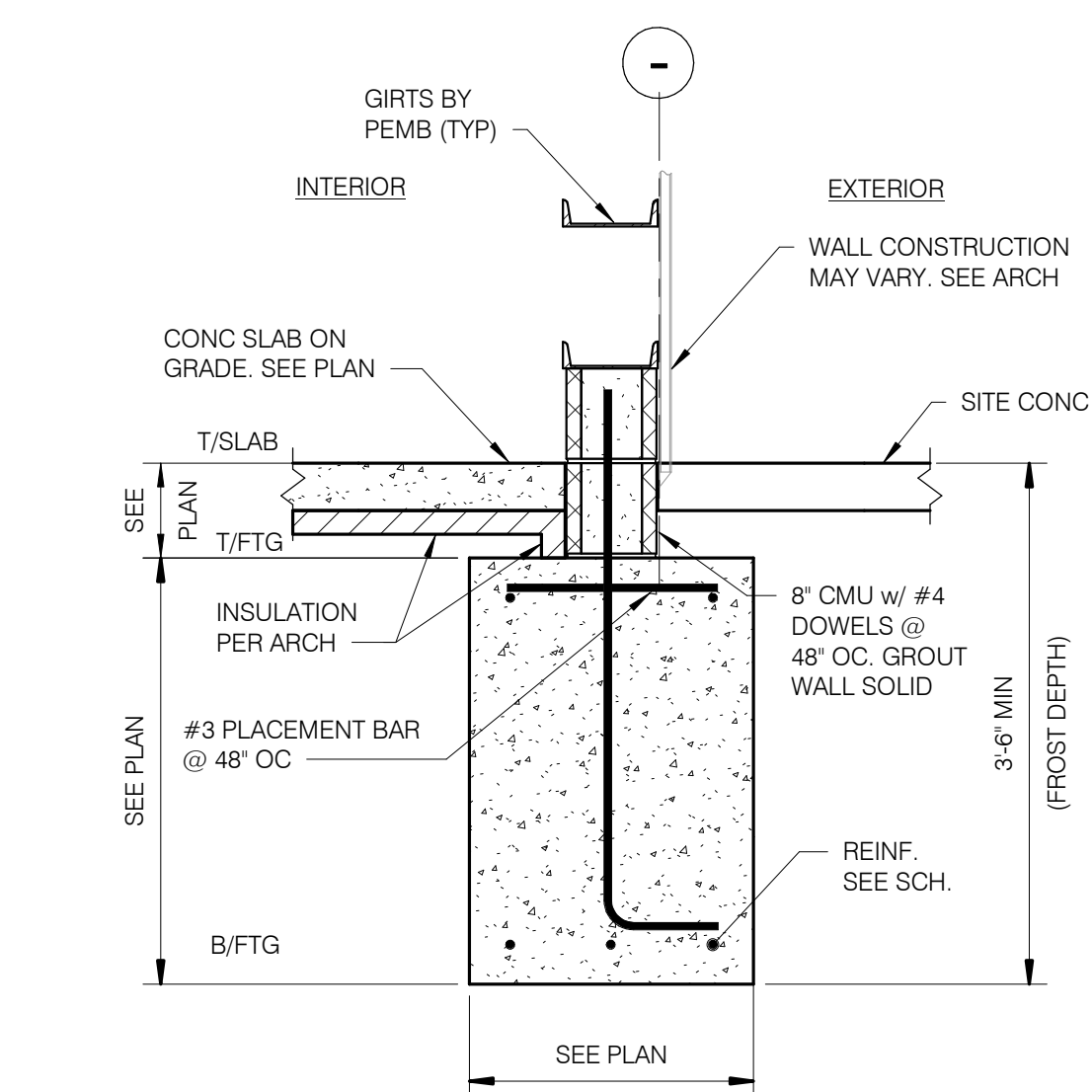
SHEET SCALE
0' 1/2' 1' 2'



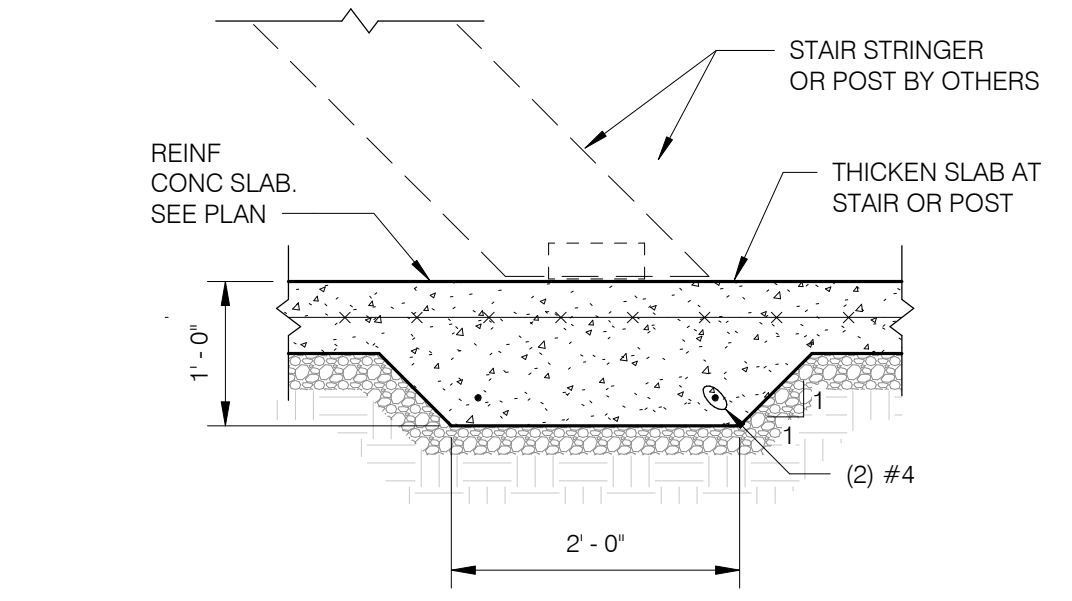
3 Typical Frost Slab Detail
S2.00 3/4\"/>



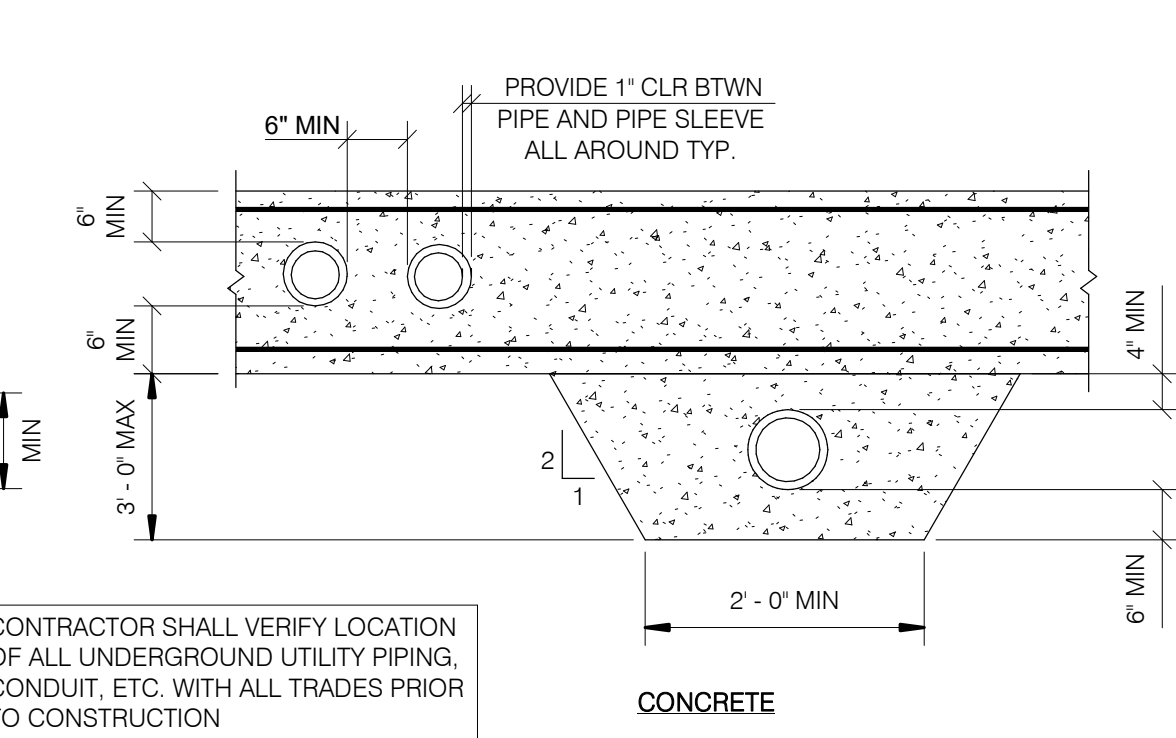
2 Typical Exterior Column Footing
S2.00 3/4\"/>



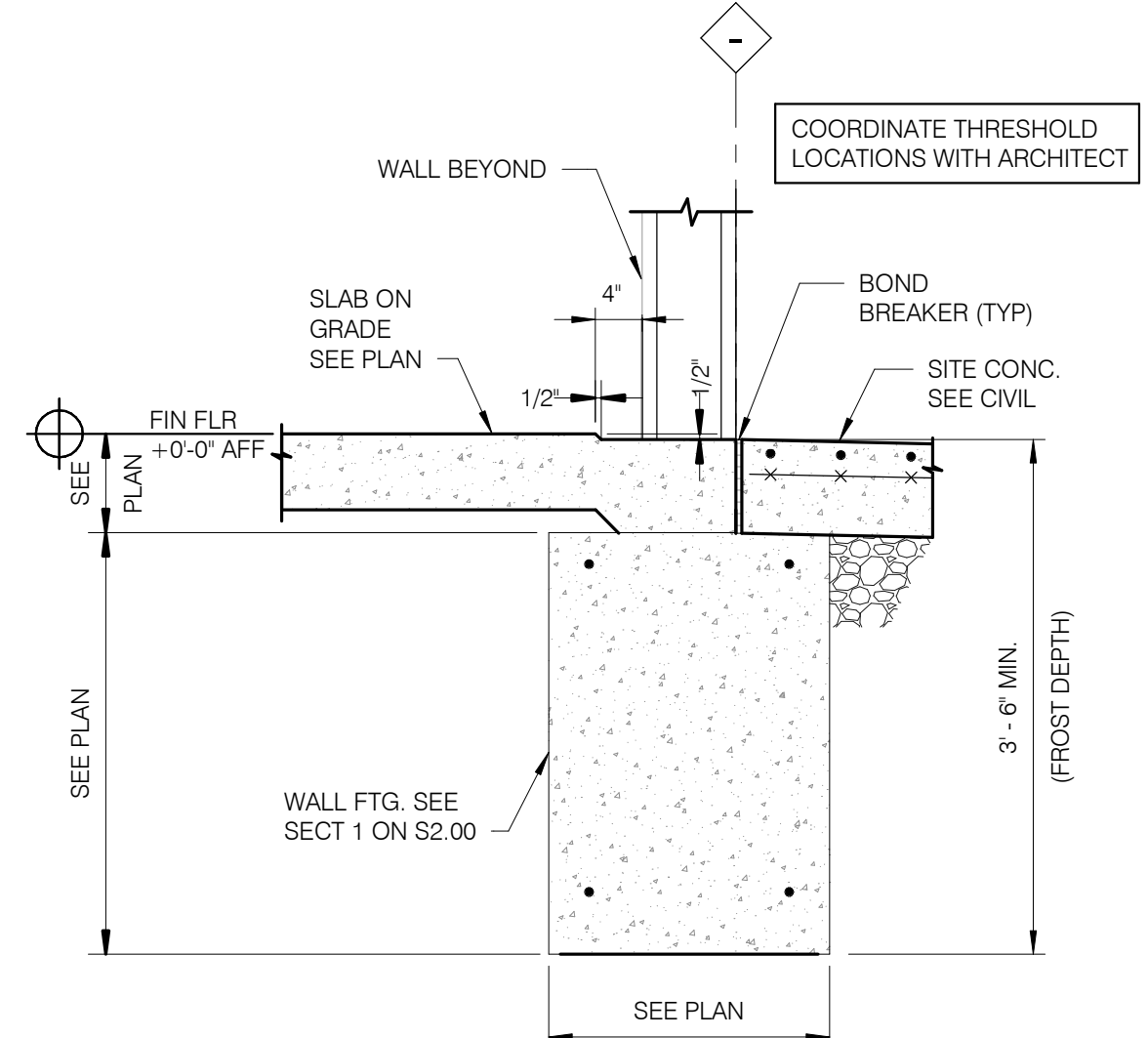
1 Typical Wall Footing Detail
S2.00 3/4\"/>



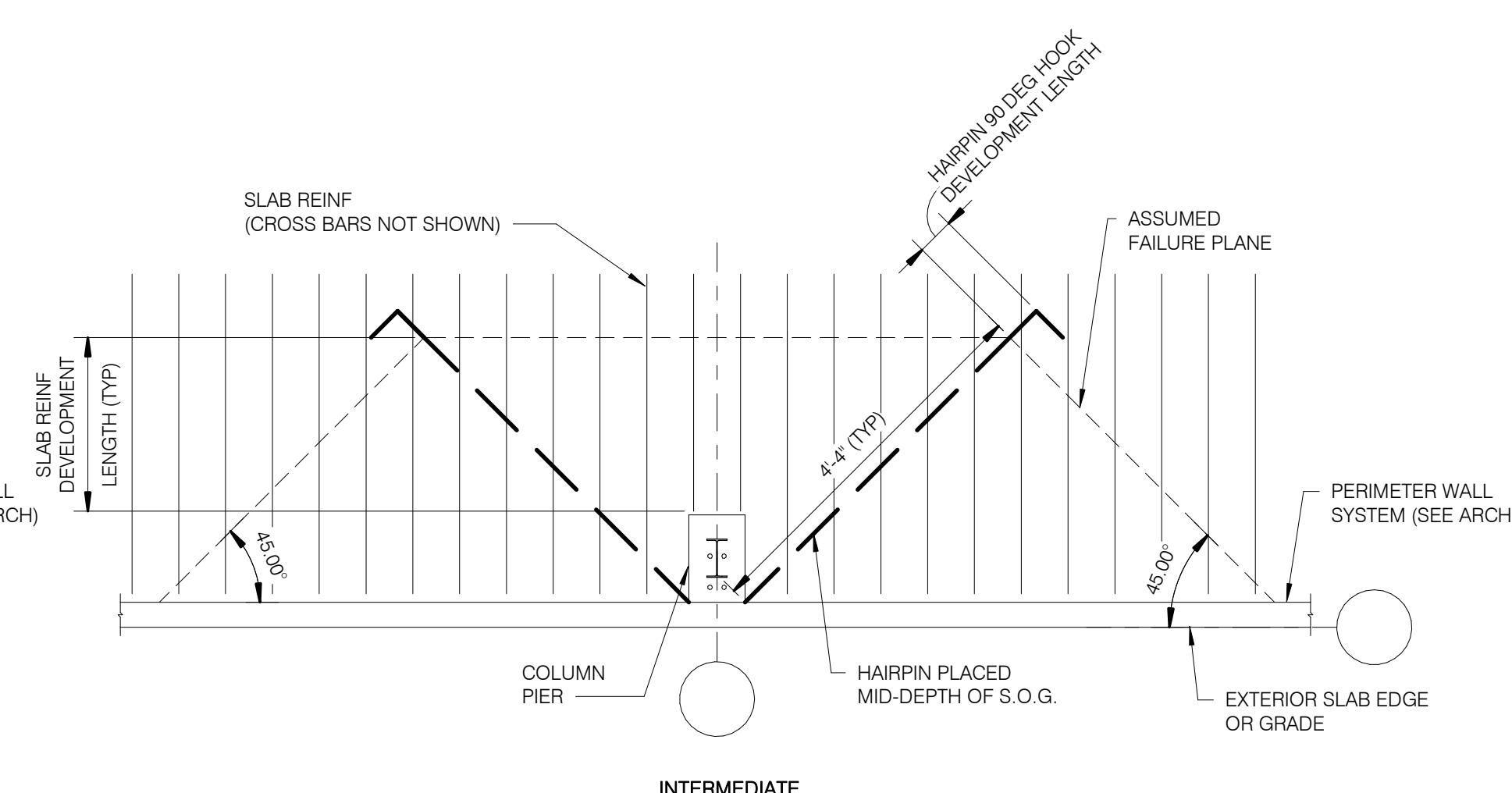
6 STAIR LANDING DETAIL
S2.00 NONE



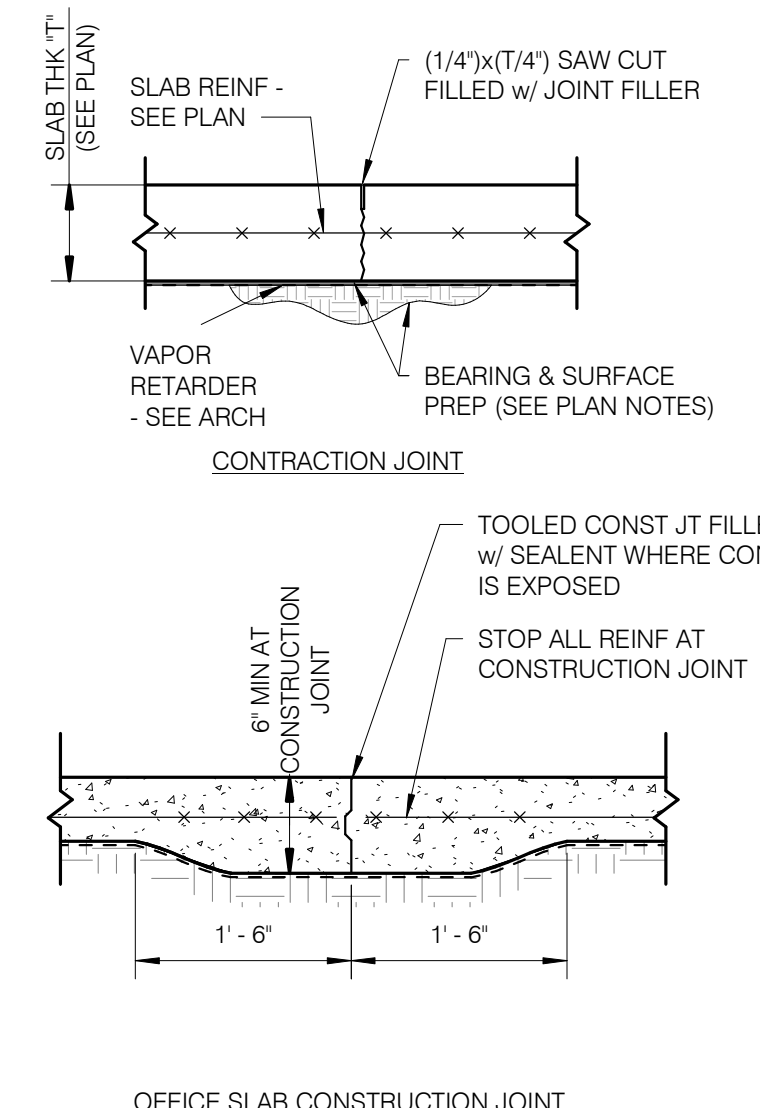
5 Typical Utility Line Penetration Detail
S2.00 1/2\"/>



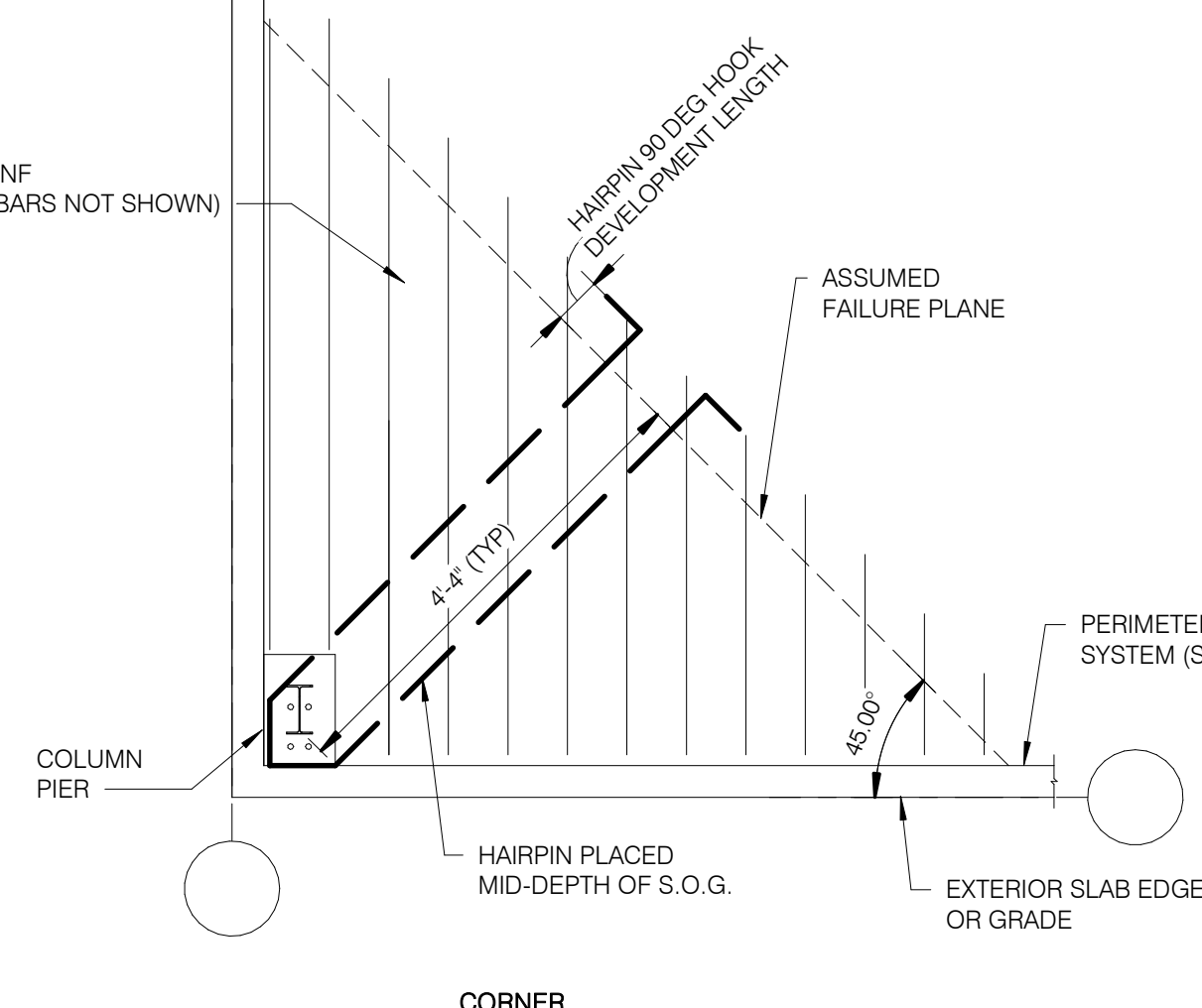
4 Overhead Door Threshold Detail
S2.00 3/4\"/>



7 TYPICAL HAIRPIN DETAIL
S2.00 NONE

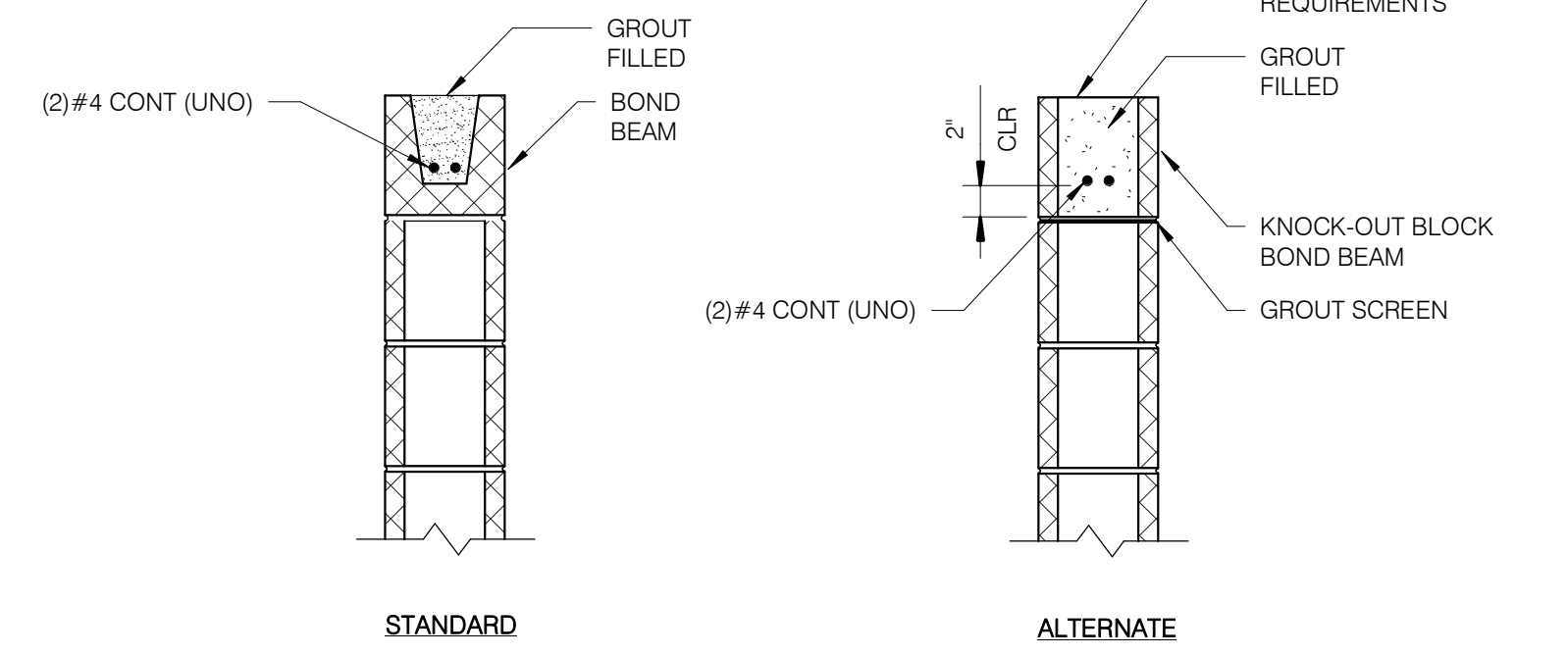


8 Typical Slab On Grade Detail
S2.00 NONE

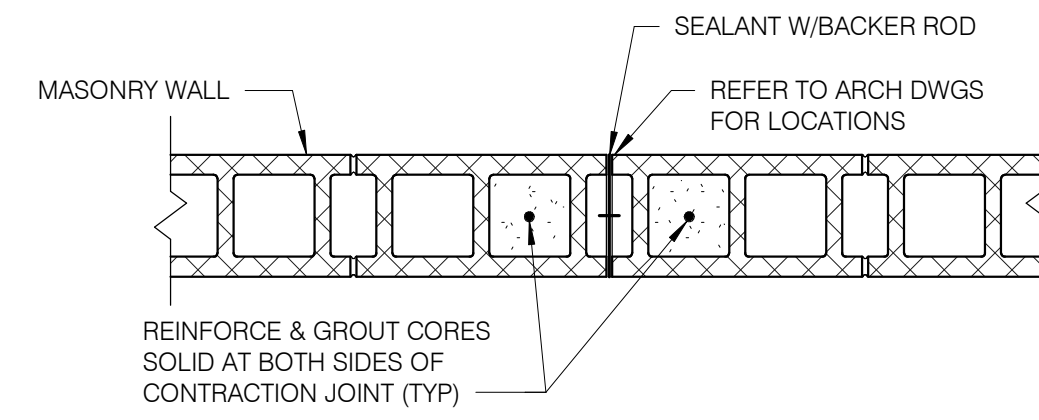


C:\Users\dsturm\Documents\50390123_Safety Facility\Simulations\Training Building_v2023_CentiaL_datum\SCDF\F1

9/24/2024 2:39:47 PM

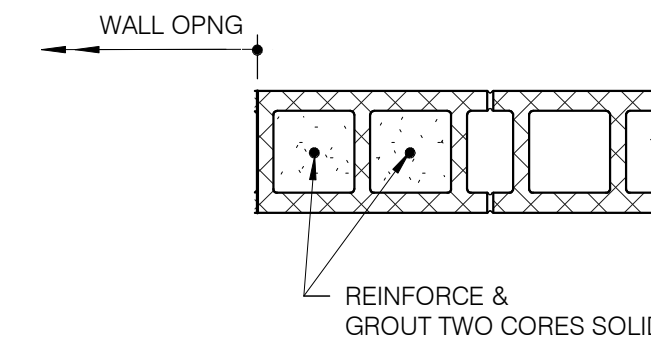


1 Typical Bond Beam Detail
S5.00 1" = 1'-0"

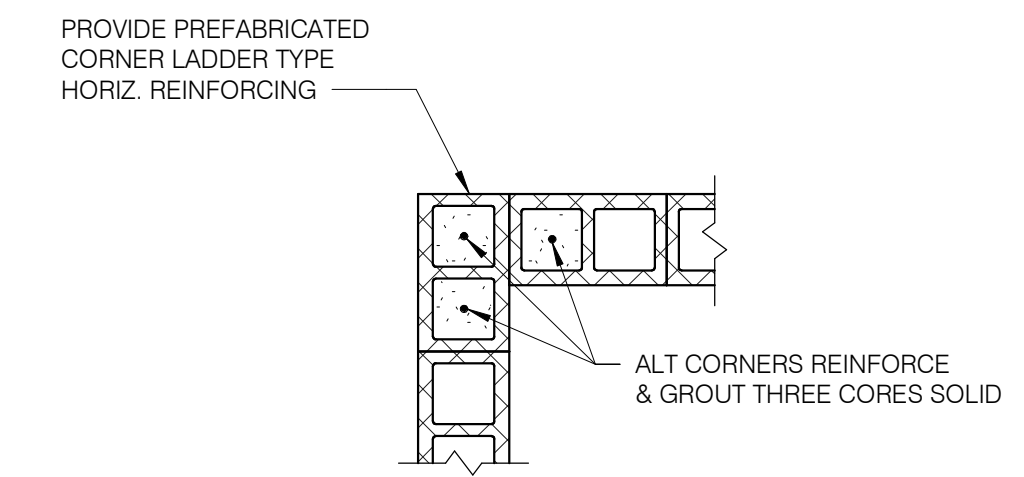


- DO NOT CONTINUE CONTRACTION JOINT THRU BOND BEAM AT FLOOR OR ROOF LEVEL. SCORE MASONRY AT T/WALL BOND BEAM. REINFORCEMENT IN BOND BEAM TO BE CONTINUOUS ACROSS CONTRACTION JOINT.
- DISCONTINUE HORIZONTAL JOINT REINFORCING AT CONTRACTION JOINTS.
- CONTRACTION JOINTS SHALL BE PLACED WITHIN 12'-0" OF CORNERS, AND SPACED NOT TO EXCEED 25'-0" OC

2 MASONRY CONTRACTION JOINT DETAIL
S5.00 SCALE: NONE



3 Typical Wall Opng Detail
S5.00 1" = 1'-0"



4 CMU Corner Detail
S5.00 3/4" = 1'-0"

Client:

City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:

Public Safety
Training Facility
Multi-Purpose
Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

09.26.2024 For Construction

Project Number: 5039 01 23
Drawn by: DLS
Checked by: DJC
Copyright: 2024

Typical Masonry
Details

S5.00

SHEET SCALE
0" 1/2" 1" 2"



Client:

City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:

Public Safety
Training Facility
Multi-Purpose
Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

Project Number: 5039 01 23
Drawn by: BMH
Checked by: BMH
Copyright: 2024

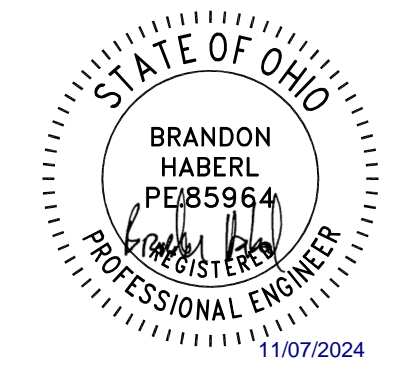
Plumbing Symbols,
Notes &
Abbreviations

P0.00

0' 1/2' 1' 2'

PLUMBING DRAWING INDEX	
SHEET NUMBER	SHEET NAME
P0.00	Plumbing Symbols, Notes & Abbreviations
P1.01	Multi-Purpose Training Area First Floor Plumbing Plan
P1.02	Multi-Purpose Training Area Second Floor Plumbing Plan
P2.00	Plumbing Details and Diagrams
P3.00	Plumbing Schedules

ABBREVIATIONS (ALL ABBREVIATIONS ARE NOT NECESSARILY USED)	PLUMBING SYMBOLS (ALL SYMBOLS SHOWN ARE NOT NECESSARILY USED ON THE DRAWINGS)	GENERAL NOTES																														
AG ABOVE GRADE ADD ADDENDUM ADDL ADDITIONAL ADJ ADJUSTABLE AFF ABOVE FINISH FLOOR AFG ABOVE FINISH GRADE ALT ALTERNATE BFF BELOW FINISH FLOOR BFG BELOW FINISH GRADE BG BELOW GRADE CA COMPRESSED AIR CO CLEANOUT CO2 CARBON DIOXIDE COL COLUMN CONT CONTINUATION CW COLD WATER DN DOWN DW DISHWASHER EC ELECTRICAL CONTRACTOR EQ EQUAL FCO FLOOR CLEANOUT FD FLOOR DRAIN FLR FLOOR FT FOOT, FEET F FURNACE G GAS GAL GALLON GC GENERAL CONTRACTOR GD GARBAGE DISPOSAL GPM GALLONS PER MINUTE GW GREASY WASTE HW HOT WATER HWR HOT WATER RETURN IE INVERT ELEVATION LA LABORATORY AIR LP LIQUID PROPANE MA MEDICAL AIR MANUF MANUFACTURER MC MECHANICAL CONTRACTOR MECH MECHANICAL MIN MINIMUM MV MEDICAL VACUUM N NITROGEN NG NATURAL GAS NPCW NON POTABLE COLD WATER NPHW NON POTABLE HOT WATER NTS NOT TO SCALE O2 OXYGEN OS OPEN SITE DRAIN PC PLUMBING CONTRACTOR PLBG PLUMBING PRES PRESSURE QTY QUANTITY REG REGULATOR RO REVERSE OSMOSIS SAN SANITARY SCH SCHEDULE SCW SOFT COLD WATER SHW SOFT HOT WATER SPEC SPECIFICATIONS SS STAINLESS STEEL TEMP TEMPORARY TW TEPID WATER TYP TYPICAL UNO UNLESS NOTED OTHERWISE V VENT VTR VENT THRU ROOF W WITH WO WITHOUT WA WASTE ANESTHESIA WCO WALL CLEANOUT WC WATER CLOSET WC WATER COLUMN X EXISTING	EXISTING PLUMBING NEW PLUMBING CONNECT NEW TO EXISTING. VERIFY FIELD CONDITIONS. CIRCUIT SETTER BALL VALVE OR SHUT-OFF VALVE SPRING CHECK VALVE PRESSURE REDUCING VALVE (PRV) RPZ VALVE OR BACKFLOW PREVENTER HAMMER ARRESTOR (PISTON TYPE) HAMMER ARRESTOR (BELLOWS TYPE) PIPE REDUCER FITTING END CAP PIPE CONNECTION FLOW DIRECTION ARROW PIPING ELBOW DOWN PIPING ELBOW UP OR PIPING RISER UP & DOWN PIPING TEE DOWN PIPING TEE UP OR PIPING RISER UP & DOWN HOSE BIB OR WALL HYDRANT FLOW METER PRESSURE REGULATOR CIRCULATING PUMP (HOT WATER RETURN) NEW TO EXISTING PIPE CONNECTION KEYNOTE SYMBOL REVISION MARK	<ol style="list-style-type: none"> THE WORK SHALL CONFORM TO ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES. FIELD VERIFY EXISTING CONDITIONS PRIOR TO PERFORMING ANY DEMOLITION, FABRICATION, OR CONSTRUCTION WORK. ALL DIMENSIONS AND ELEVATIONS NOTED AS "REF" ARE FOR REFERENCE ONLY AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO USING THEM FOR ANY CONSTRUCTION ACTIVITIES. CONTRACTOR SHALL REVIEW AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK. ANY CONDITIONS NOT DOCUMENTED ON THESE DRAWINGS OR OBSERVED TO BE DIFFERENT THAN THOSE SHOWN ON THESE DRAWINGS ARE TO BE REPORTED TO THE ENGINEER AND OWNER PRIOR TO COMMENCING THE WORK. CONTRACTOR SHALL CONTACT LOCAL UTILITIES AS REQUIRED. SUBMIT ALL NOT PRIOR SUBMITTED PERMIT DOCUMENTS, QUALIFICATIONS, ETC. AND BE RESPONSIBLE FOR ALL FEES ASSOCIATED WITH PERMITS, UTILITY EXTENSIONS, TAP-INSPECTIONS, ETC. THE ENGINEER SHALL SUBMIT CONSTRUCTION DOCUMENTS FOR OWNERS REVIEW AND PERMIT PLAN REVIEW; HOWEVER, THE CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING THE PERMITS, AND ALL ASSOCIATED PERMIT AND INSPECTION COSTS/FEES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ALL DEBRIS RESULTING FROM DEMOLITION AND/OR CONSTRUCTION WORK ON THIS PROJECT. EACH SUB-CONTRACTOR IS RESPONSIBLE TO COORDINATE AND SCHEDULE THEIR WORK WITH THE GENERAL CONTRACTOR AND ALL OTHER CONTRACTORS WHOSE WORK WILL BE AFFECTED BY THEIR WORK. PARKING AT THE SITE BY CONSTRUCTION PERSONNEL SHALL BE LIMITED TO THE LOCATIONS DESIGNATED BY THE OWNER/OWNERS REPRESENTATIVE. 																														
		LINETYPE LEGEND																														
		SANITARY - SAN SANITARY BELOW GRADE- SAN VENT - V NATURAL GAS - NG HOT WATER - HW HOT WATER RETURN - HWR COLD WATER - CW																														
		FIRESTOP SCHEDULE																														
		<table border="1"> <thead> <tr> <th>PENETRATION</th> <th>RATING</th> <th>U.L. SYSTEM</th> </tr> </thead> <tbody> <tr> <td>INSULATED METAL PIPE THROUGH GYPSUM BOARD</td> <td>1 OR 2 HOUR</td> <td>HILTI UL #WL5029 OR APPROVED EQUAL</td> </tr> <tr> <td>INSULATED METAL PIPE THROUGH MASONRY/CONCRETE</td> <td>2 HOUR</td> <td>HILTI UL #CAJ5091 OR APPROVED EQUAL</td> </tr> <tr> <td>INSULATED METAL PIPE THROUGH POURED CONCRETE FLOOR SLAB</td> <td>2 HOUR</td> <td>HILTI UL #CAJ5091 OR APPROVED EQUAL</td> </tr> <tr> <td>METAL PIPE THROUGH GYPSUM BOARD</td> <td>1 OR 2 HOUR</td> <td>HILTI UL #WL1054 OR APPROVED EQUAL</td> </tr> <tr> <td>METAL PIPE THROUGH MASONRY/CONCRETE</td> <td>2 HOUR</td> <td>HILTI UL #CAJ1291 OR APPROVED EQUAL</td> </tr> <tr> <td>METAL PIPE THROUGH POURED CONCRETE FLOOR SLAB</td> <td>3 HOUR</td> <td>HILTI UL #FA1017 OR APPROVED EQUAL</td> </tr> <tr> <td>PLASTIC PIPE THROUGH GYPSUM BOARD</td> <td>1 OR 2 HOUR</td> <td>HILTI UL #WL2078 OR APPROVED EQUAL</td> </tr> <tr> <td>PLASTIC PIPE THROUGH MASONRY/CONCRETE</td> <td>2 HOUR</td> <td>HILTI UL #CAJ2271 OR APPROVED EQUAL</td> </tr> <tr> <td>PLASTIC PIPE THROUGH POURED CONCRETE FLOOR SLAB</td> <td>3 HOUR</td> <td>HILTI UL #FA2054 OR APPROVED EQUAL</td> </tr> </tbody> </table>	PENETRATION	RATING	U.L. SYSTEM	INSULATED METAL PIPE THROUGH GYPSUM BOARD	1 OR 2 HOUR	HILTI UL #WL5029 OR APPROVED EQUAL	INSULATED METAL PIPE THROUGH MASONRY/CONCRETE	2 HOUR	HILTI UL #CAJ5091 OR APPROVED EQUAL	INSULATED METAL PIPE THROUGH POURED CONCRETE FLOOR SLAB	2 HOUR	HILTI UL #CAJ5091 OR APPROVED EQUAL	METAL PIPE THROUGH GYPSUM BOARD	1 OR 2 HOUR	HILTI UL #WL1054 OR APPROVED EQUAL	METAL PIPE THROUGH MASONRY/CONCRETE	2 HOUR	HILTI UL #CAJ1291 OR APPROVED EQUAL	METAL PIPE THROUGH POURED CONCRETE FLOOR SLAB	3 HOUR	HILTI UL #FA1017 OR APPROVED EQUAL	PLASTIC PIPE THROUGH GYPSUM BOARD	1 OR 2 HOUR	HILTI UL #WL2078 OR APPROVED EQUAL	PLASTIC PIPE THROUGH MASONRY/CONCRETE	2 HOUR	HILTI UL #CAJ2271 OR APPROVED EQUAL	PLASTIC PIPE THROUGH POURED CONCRETE FLOOR SLAB	3 HOUR	HILTI UL #FA2054 OR APPROVED EQUAL
PENETRATION	RATING	U.L. SYSTEM																														
INSULATED METAL PIPE THROUGH GYPSUM BOARD	1 OR 2 HOUR	HILTI UL #WL5029 OR APPROVED EQUAL																														
INSULATED METAL PIPE THROUGH MASONRY/CONCRETE	2 HOUR	HILTI UL #CAJ5091 OR APPROVED EQUAL																														
INSULATED METAL PIPE THROUGH POURED CONCRETE FLOOR SLAB	2 HOUR	HILTI UL #CAJ5091 OR APPROVED EQUAL																														
METAL PIPE THROUGH GYPSUM BOARD	1 OR 2 HOUR	HILTI UL #WL1054 OR APPROVED EQUAL																														
METAL PIPE THROUGH MASONRY/CONCRETE	2 HOUR	HILTI UL #CAJ1291 OR APPROVED EQUAL																														
METAL PIPE THROUGH POURED CONCRETE FLOOR SLAB	3 HOUR	HILTI UL #FA1017 OR APPROVED EQUAL																														
PLASTIC PIPE THROUGH GYPSUM BOARD	1 OR 2 HOUR	HILTI UL #WL2078 OR APPROVED EQUAL																														
PLASTIC PIPE THROUGH MASONRY/CONCRETE	2 HOUR	HILTI UL #CAJ2271 OR APPROVED EQUAL																														
PLASTIC PIPE THROUGH POURED CONCRETE FLOOR SLAB	3 HOUR	HILTI UL #FA2054 OR APPROVED EQUAL																														
		<p>NOTES: 1. FIRESTOP ASSEMBLY TYPE SHALL BE DETERMINED BY THE WALL OR FLOOR/CEILING ASSEMBLY AND PENETRATION TYPE AND SHALL BE UL LISTED AND TESTED IN ACCORDANCE WITH ASTM E814. FIRE RATING OF THE ASSEMBLY SHALL BE EQUIVALENT TO THE WALL OR FLOOR/CEILING ASSEMBLY RATING. 2. ACCEPTABLE FIRE BARRIER PRODUCTS: HILTI 'FS-ONE', NELSON 'FLAMESEAL' OR APPROVED EQUAL AS MANUFACTURED BY SM. 3. IF REQUESTED, THE CONTRACTOR SHALL SHOW PROOF OF COMPLIANCE BY PROVIDING THE APPROPRIATE UL FIRESTOPPING SYSTEM NUMBER TO THE AHJ OR THE ARCHITECT/ENGINEER.</p>																														



PLUMBING GENERAL NOTES

1. THE PLUMBING CONTRACTOR SHALL COORDINATE FINAL ELECTRICAL REQUIREMENTS OF EQUIPMENT PRIOR TO ORDERING.
2. PVC PIPING SHALL NOT BE ALLOWED WITHIN A RETURN AIR PLENUM. ALL PIPING UTILIZED IN A RETURN AIR PLENUM IS TO BE LABELED BY THE MANUFACTURER WITH A FLAME-SPREAD INDEX OF 25 OR LESS AND A SMOKE DEVELOPED INDEX OF 50 OR LESS AS TESTED UNDER ASTM E 84.
3. REFER TO ARCHITECTURAL PLANS AND DETAILS FOR EXACT DIMENSIONS, ELEVATIONS AND LOCATIONS OF EQUIPMENT, FIXTURES, OPENINGS, FIRE AND SMOKE WALL AND RATED STRUCTURES.
4. PIPING INSTALLATION SHALL BE COORDINATED WITH OTHER TRADES AS TO NOT HINDER ACCESS TO EQUIPMENT. INSTALLATION OF PIPING SHALL ENABLE ACCESS TO VALVES ABOVE CEILING WHILE ALLOWING MINIMUM OF 8" CLEAR FOR CEILING REMOVAL.
5. PLUMBING VENTS SHALL BE LOCATED A MINIMUM OF 10'-0" FROM ALL OUTDOOR AIR INTAKES.
6. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR DESIGN REQUIREMENTS OF PENETRATIONS. CONTRACTOR TO TAKE EXTRA CARE AS TO NOT CORE THROUGH EXISTING STRUCTURAL MEMBERS.
7. THE PLUMBING CONTRACTOR SHALL COORDINATE WITH THE MECHANICAL CONTRACTOR THE EXACT LOCATIONS OF FLOOR DRAINS REQUIRED TO SERVE MECHANICAL EQUIPMENT.
8. REFER TO PLUMBING ISOMETRICS FOR ANY SANITARY AND VENT PIPING AND SIZES NOT INDICATED ON THE PLANS.

PLUMBING PLAN KEYNOTES

- 1 PROVIDE 3/4" NATURAL GAS PIPING TO EACH FURNACE. PROVIDE ISOLATION VALVE, REGULATOR (IF REQUIRED), DIRT LEG AND UNION. (60 MBH)
- 2 PROVIDE NATURAL GAS METER AND APPURTENANCES PER LOCAL GAS COMPANY. ROUTE PIPING FROM METER INTO BUILDING THROUGH WEATHERPROOF SLEEVE ABOVE BUILDING FOUNDATION. CEE CIVIL UTILITY PLANS FOR UNDERGROUND PIPING CONTINUATION.
- 3 SEE CIVIL UTILITY PLANS FOR PIPING CONTINUATION.
- 4 PROVIDE DOMESTIC WATER METER AND APPURTENANCES PER LOCAL WATER COMPANY. PROVIDE ASSE 1013 BACKFLOW PREVENTER. ROUTE ASSE 1013 DRAIN TO ADJACENT MOP SINK.

Client:
City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:
**Public Safety
Training Facility
Multi-Purpose
Training Area**

Garden Street
Elyria, Ohio 44035

Revisions:

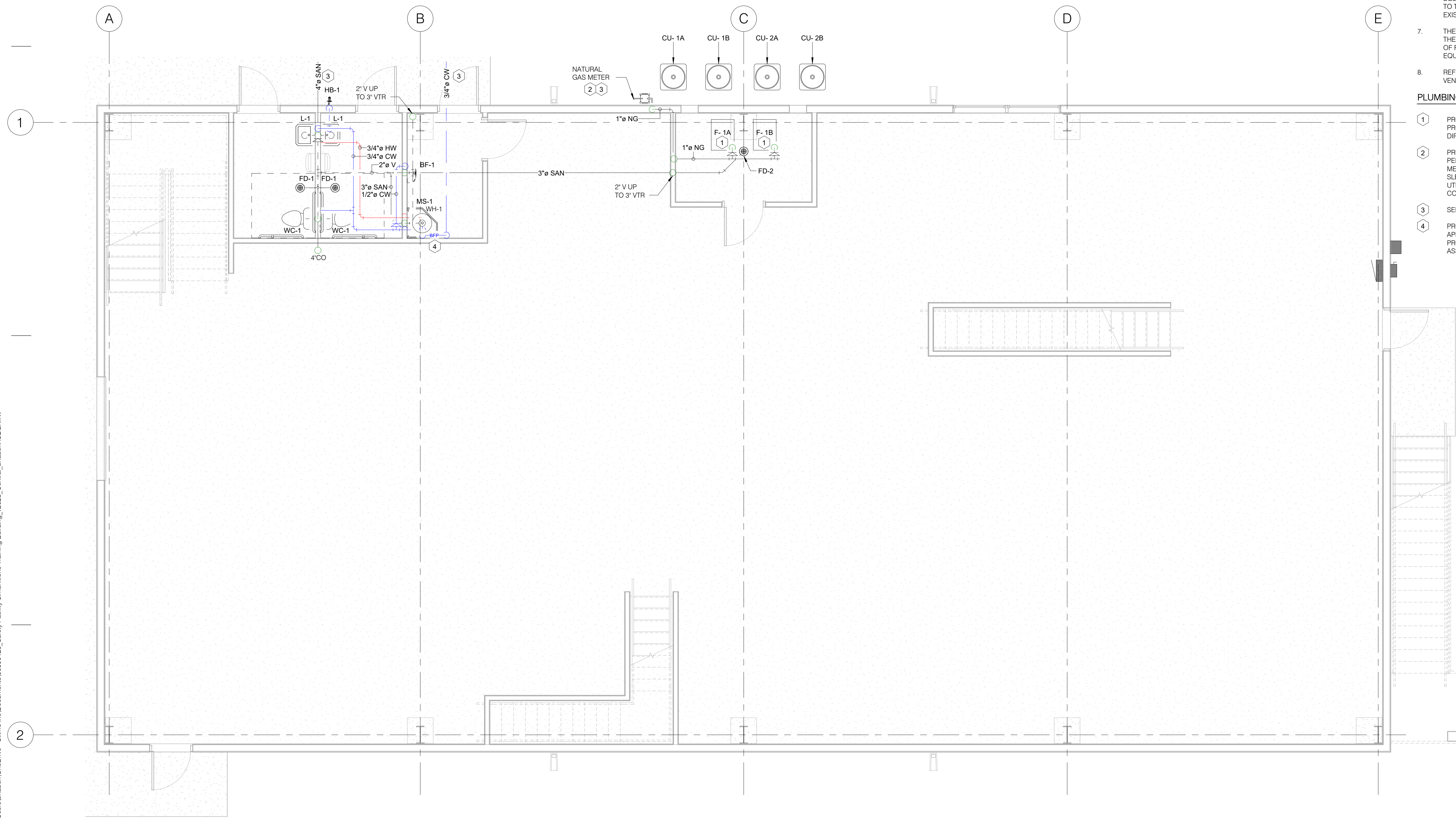
A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

Project Number: 5039 01 23
Drawn by: BMH
Checked by: BMH
Copyright: 2024

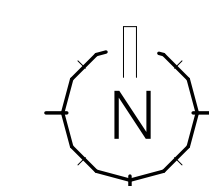
Multi-Purpose
Training Area First
Floor Plumbing Plan

P1.01

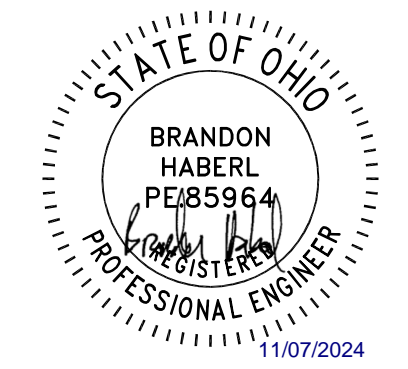
SHEET SCALE
0" 1/2" 1" 2"



1 Multi-Purpose Training Area First Floor Mechanical Plan Copy 1
1/4" = 1'-0"



v2023 11/6/2024 2:26:50 PM C:\Users\shaberi\OneDrive - Sixmo Inc\Documents\50390123_Safety Facility Simulations Training Building_v2023_Cemial_haberb\PSDN.rvt

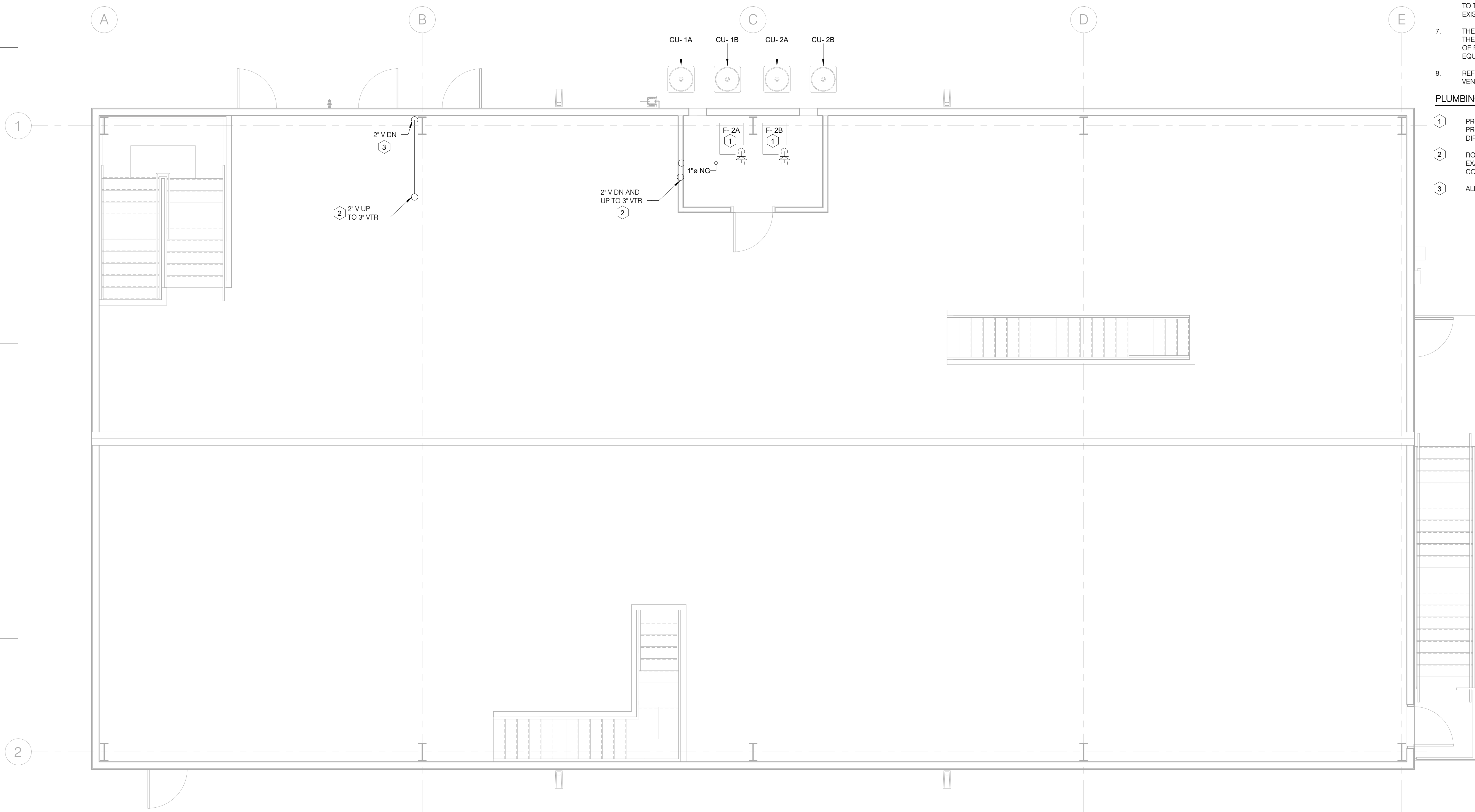


PLUMBING GENERAL NOTES

1. THE PLUMBING CONTRACTOR SHALL COORDINATE FINAL ELECTRICAL REQUIREMENTS OF EQUIPMENT PRIOR TO ORDERING.
2. PVC PIPING SHALL NOT BE ALLOWED WITHIN A RETURN AIR PLENUM. ALL PIPING UTILIZED IN A RETURN AIR PLENUM IS TO BE LABELED BY THE MANUFACTURER WITH A FLAME-SPREAD INDEX OF 25 OR LESS AND A SMOKE DEVELOPED INDEX OF 50 OR LESS AS TESTED UNDER ASTM E 84.
3. REFER TO ARCHITECTURAL PLANS AND DETAILS FOR EXACT DIMENSIONS, ELEVATIONS AND LOCATIONS OF EQUIPMENT, FIXTURES, OPENINGS, FIRE AND SMOKE WALL AND RATED STRUCTURES.
4. PIPING INSTALLATION SHALL BE COORDINATED WITH OTHER TRADES AS TO NOT HINDER ACCESS TO EQUIPMENT. INSTALLATION OF PIPING SHALL ENABLE ACCESS TO VALVES ABOVE CEILING WHILE ALLOWING MINIMUM OF 8" CLEAR FOR CEILING REMOVAL.
5. PLUMBING VENTS SHALL BE LOCATED A MINIMUM OF 10'-0" FROM ALL OUTDOOR AIR INTAKES.
6. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR DESIGN REQUIREMENTS OF PENETRATIONS. CONTRACTOR TO TAKE EXTRA CARE AS TO NOT CORE THROUGH EXISTING STRUCTURAL MEMBERS.
7. THE PLUMBING CONTRACTOR SHALL COORDINATE WITH THE MECHANICAL CONTRACTOR THE EXACT LOCATIONS OF FLOOR DRAINS REQUIRED TO SERVE MECHANICAL EQUIPMENT.
8. REFER TO PLUMBING ISOMETRICS FOR ANY SANITARY AND VENT PIPING AND SIZES NOT INDICATED ON THE PLANS.

PLUMBING PLAN KEYNOTES

- 1 PROVIDE 3/4" NATURAL GAS PIPING TO EACH FURNACE. PROVIDE ISOLATION VALVE, REGULATOR (IF REQUIRED), DIRT LEG AND UNION. (80 MBH)
- 2 ROUTE NEW VTR UP THROUGH ROOF. COORDINATE EXACT LOCATION AND PENETRATION WITH PEMB ROOF CONTRACTOR.
- 3 ALL EXPOSED VENT PIPING SHALL BE CAST IRON.



Client:
City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:
**Public Safety
Training Facility
Multi-Purpose
Training Area**

Garden Street
Elyria, Ohio 44035

Revisions:

A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

Project Number: 5039 01 23
Drawn by: BMH
Checked by: BMH
Copyright: 2024

Multi-Purpose
Training Area
Second Floor
Plumbing Plan

P1.02





Client:

City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:

Public Safety
Training Facility
Multi-Purpose
Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

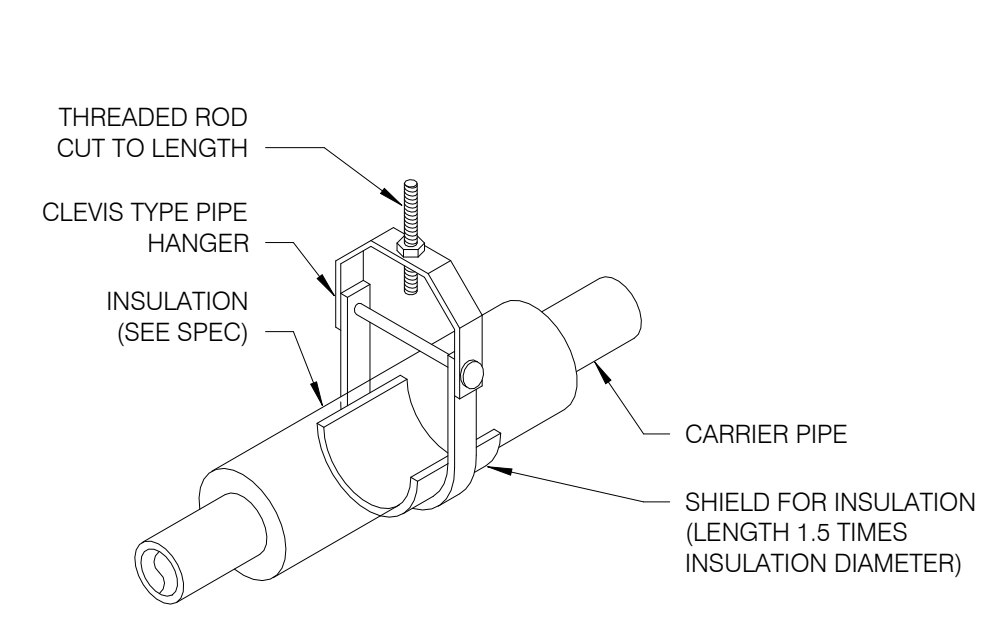
Project Number: 5039 01 23
Drawn by: BMH
Checked by: BMH
Copyright: 2024

Plumbing Details
and Diagrams

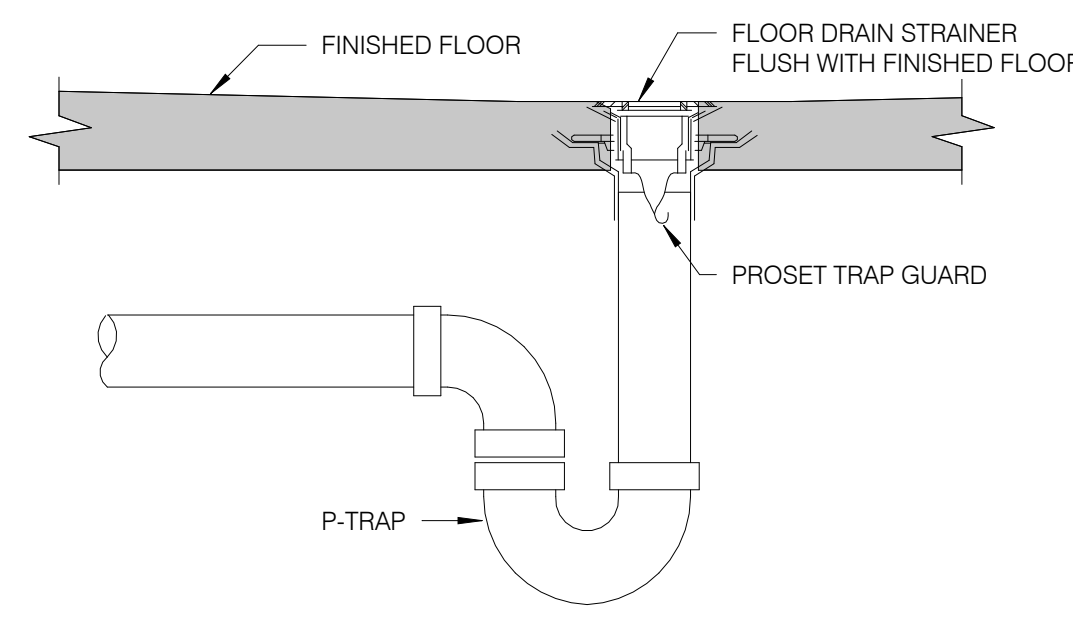
P2.00

SHEET SCALE
0" 1/2" 1" 2"

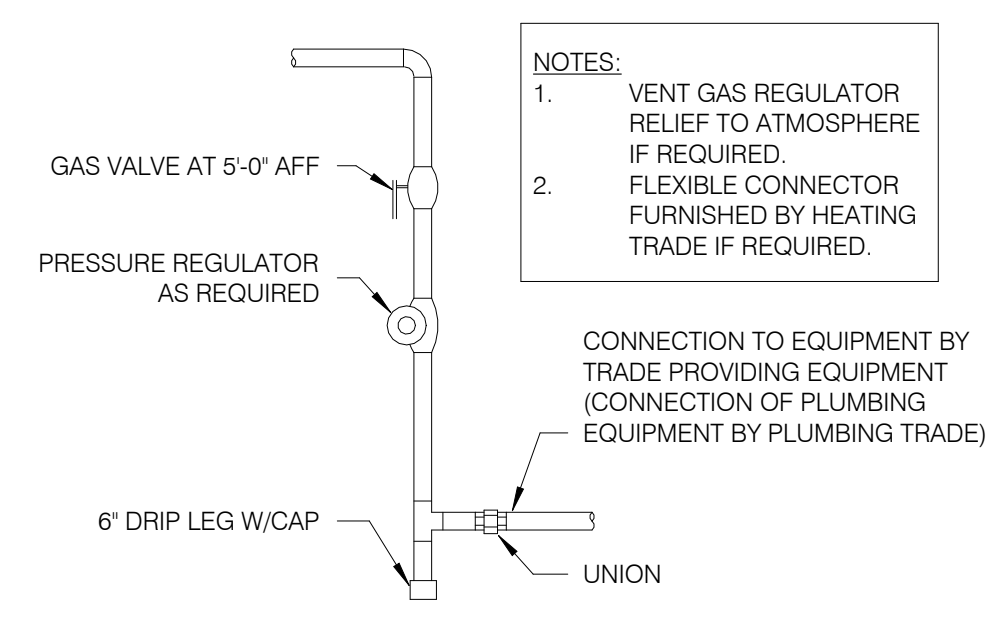
1 Clevis Type Pipe Hanger Detail
P2.00 NO SCALE



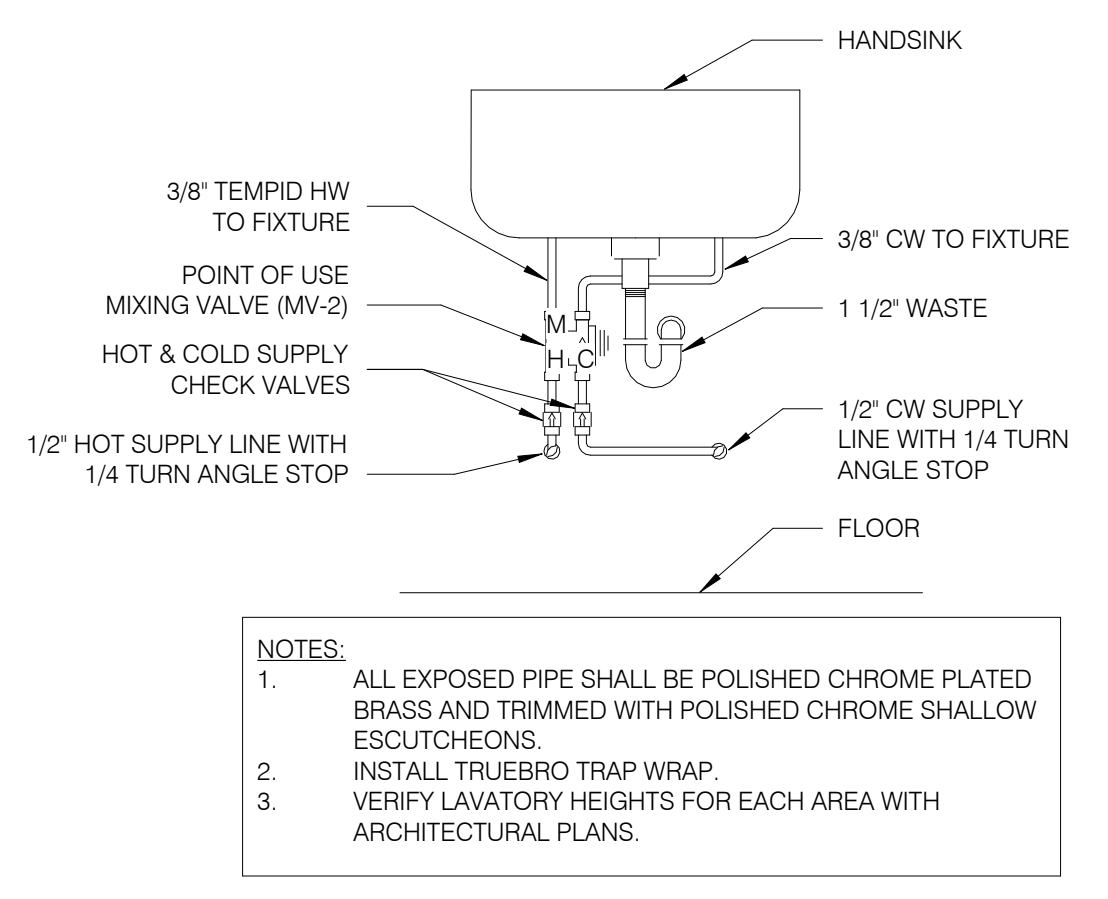
2 Floor Drain Detail
P2.00 NO SCALE



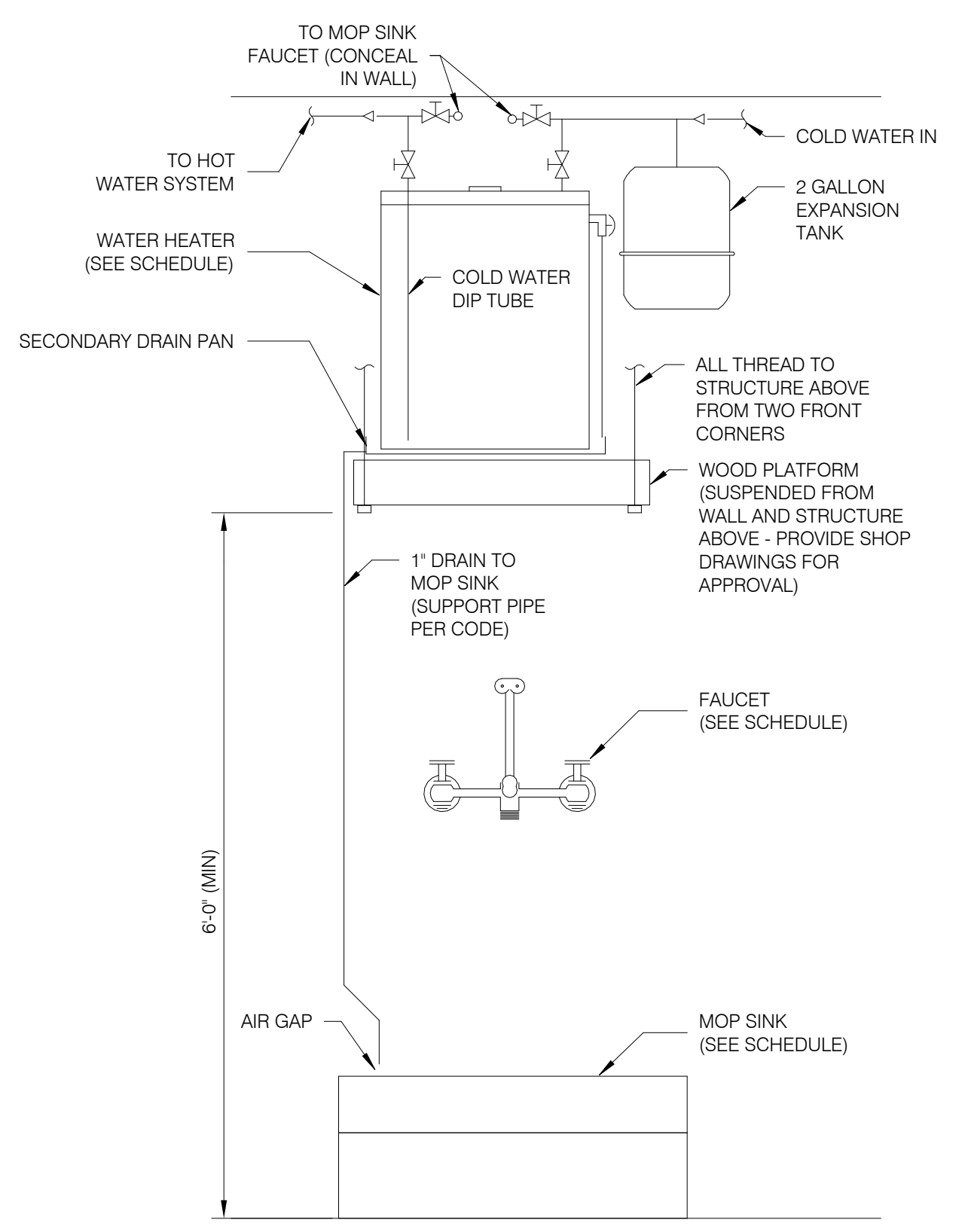
3 Typical Gas Connection Detail
P2.00 NO SCALE



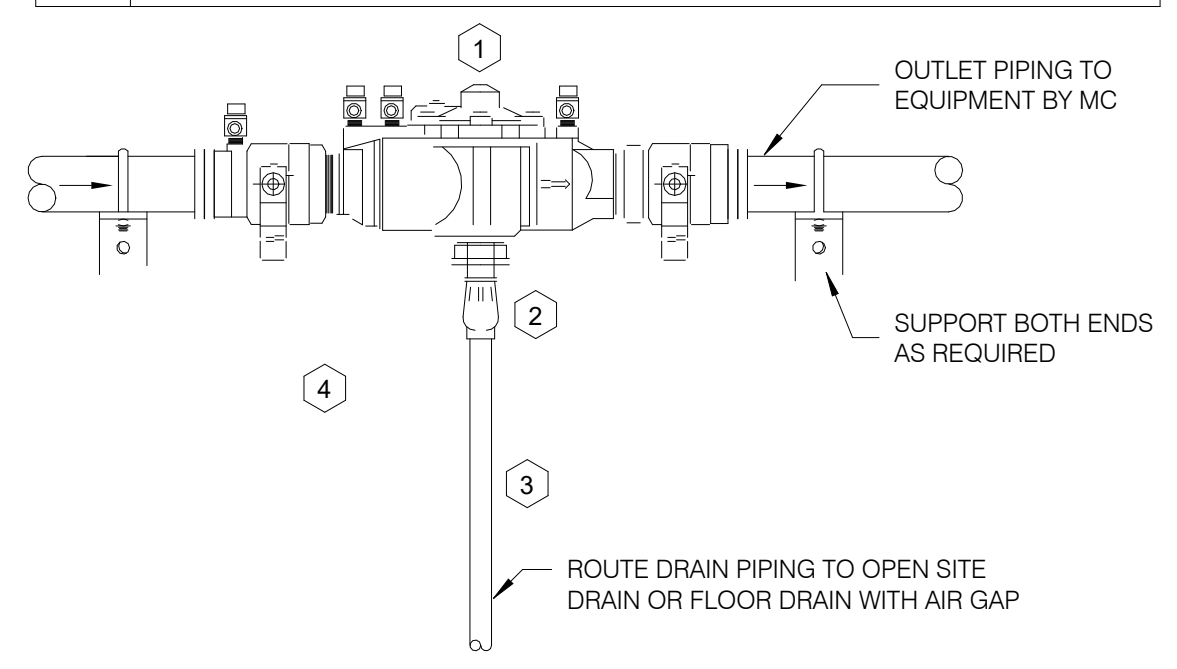
5 Point of Use Mixing Valve Detail
P2.00 NO SCALE



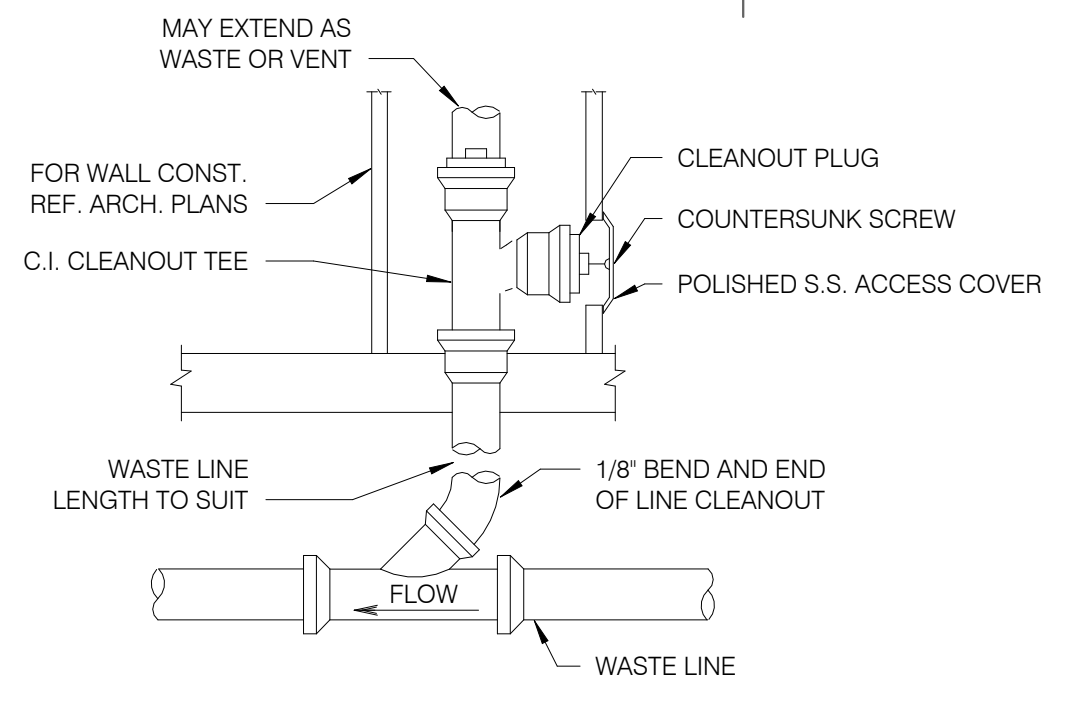
6 Typical Wall Mounted Water Heater Detail
P2.00 12" = 1'-0"



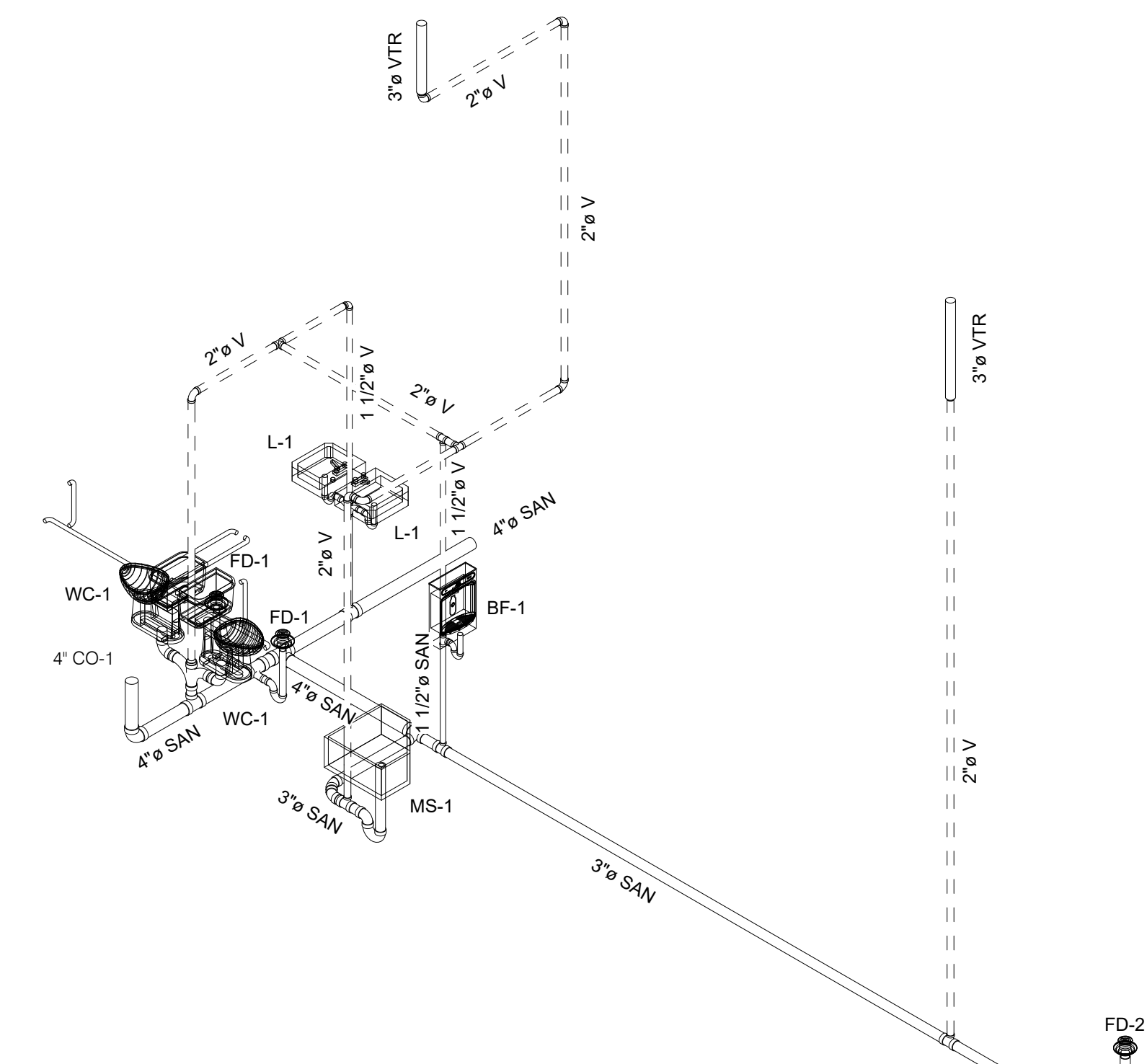
7 Reduced Pressure Backflow Preventer Detail
P2.00 NO SCALE



4 Wall Cleanout Detail
P2.00 NO SCALE



8 Waste and Vent Isometric
P2.00



v2023 11/6/2024 2:36:53 PM C:\Users\shaberi\OneDrive - Sixmo Inc\Documents\50390123_Safety Facility Simulations Training Building_v2023_Cemal_haberi\FSDN.rvt



NG LOAD SCHEDULE

TAG	EQUIPMENT TYPE	LOAD (CFH)
F-1	FURNACE	60
F-2	FURNACE	60
F-3	FURNACE	80
F-3	FURNACE	80
TOTAL CONNECTED LOAD (CFH)		280
ESTIMATED DEVELOPED LENGTH (FT)		50
REQUESTED NATURAL GAS PRESSURE*		7 IN WC

NOTES:
 1. NATURAL GAS PIPE SIZING BASED ON 2018 INTERNATIONAL FUEL GAS CODE, SECTION 402.4.2 BRANCH LENGTH METHOD AND TABLE 402.4 FOR SCHEDULE 40 METALLIC PIPE.
 2. CONTRACTOR SHALL INSTALL GAS METER, PRESSURE REGULATOR, AND ALL ASSOCIATED VALVING AS PER THE LOCAL NATURAL GAS COMPANY REQUIREMENTS.
 3. OWNER IS REQUIRED TO SUBMIT FINAL APPLICATION TO NATURAL GAS UTILITY FOR SERVICE. OWNER/CONTRACTOR SHALL NOTIFY ARCHITECT AND ENGINEER IMMEDIATELY IF THERE IS AN ISSUE WITH THE REQUESTED SERVICE.
 *THE ABOVE REQUESTED PRESSURE INDICATED IS FOR THE AFTER METER HOUSELINE.

PLUMBING FIXTURE SCHEDULE

TAG	FIXTURE	MANUFACTURER	MODEL	MOUNT	COLD	HOT	WASTE	VENT	DESCRIPTION	NOTES
L-1	WALL MOUNT LAVATORY (ADA)	SLOAN	SS-3003	WALL	-	-	1-1/2"	1-1/2"	ADA COMPLIANT INSTALLATION, 18-1/4" X 20-3/4" X 12-1/4" VITREOUS CHINA WALLMOUNT RECTANGULAR LAVATORY. PROVIDE WITH ALL MOUNTING HARDWARE. PROVIDE WITH P-TRAP, TAILPIECE, ANGLE VALVES AND TRUEBRO ADA LAV GUARD.	1,2
	FAUCET	SLOAN	EBF-650	DECK	1/2"	1/2"	-	-	ADA COMPLIANT, DECK MOUNTED, BATTERY POWERED SENSOR FAUCET, 0.5 GPM. PROVIDE WITH ASSE 1070 BELOW DECK THERMOSTATIC MIXING VALVE SIMILAR TO SLOAN MIX-135-A.	1,2,3
WC-1	ADA WATER CLOSET	SLOAN	WETS-8029	FLOOR	1/2"	-	4"	2"	ADA COMPLIANT INSTALLATION, VITREOUS CHINA FLOOR MOUNTED WATER CLOSET, 1.28 GPF, ELONGATED BOWL, TANK STYLE INLET. PROVIDE WITH BEMIS 1955CT OPEN FRONT TOILET SEAT. CONTRACTOR SHALL COORDINATE LEFT OR RIGHT FLUSH HANDLE	1,2
FD-1	EMERGENCY FLOOR DRAIN	ZURN	Z5XX	FLOOR	-	-	2"	-	DUCO-COATED CAST IRON BODY WITH GALVANIZED STEEL COVER, VANDAL PROOF, PROVIDE WITH ZURN MODEL Z1072 ASSE 1072 TRAP SEAL DEVICE	1
FD-2	FLOOR DRAIN	ZURN	Z5XX	FLOOR	-	-	3"	-	DUCO-COATED CAST IRON BODY WITH GALVANIZED STEEL COVER, VANDAL PROOF, PROVIDE WITH ZURN MODEL Z1072 ASSE 1072 TRAP SEAL DEVICE	1
MS-1	MOP SINK	FIAT	MSB 2424	FLOOR	3/4"	3/4"	3"	1-1/2"	MOLDED STONE. PROVIDE WITH 830-AA SERVICE FAUCET-CHROME PLATED WITH VACUUM BREAKER, INTEGRAL STOPS, ADJUSTABLE WALL BRACE. PAIL HOOK AND 3/4" HOSE THREAD ON SPOUT	1
BF-1	BOTTLE FILLER	ELKAY	LZ8WSSSMC	WALL	1/2"	-	1-1/2"	1-1/2"	REFRIGERATED SURFACE MOUNT BOTTLE FILLING STATION, FILTERED, 8 GALLONS PER HOUR CHILLING CAPACITY. 115V/1PH/60HZ. INSTALL PER ADA REQUIREMENTS.	1,2
CO-1	INTERIOR CLEANOUT	ZURN	ZS14XX	WALL/FLOOR	-	-	SEE PLANS	SEE PLANS	DUCO-COATED CAST IRON BODY WITH STAINLESS STEEL COVER, VANDAL PROOF	1
CO-2	EXTERIOR CLEANOUT	EAST JORDAN	#3675	FLOOR	-	-	SEE PLANS	SEE PLANS	CLEANOUT BOX AND HEAVY DUTY COVER ENGRAVE LID SANITARY OR STORM. FLUSH RISER CAPPED WITH DOUBLE GASKETED CAP.	1
MV-1	MIXING VALVE	SLOAN	MIX-135-A	-	1/2"	1/2"	-	-	LEAD FREE, UNDER SINK THERMOSTATIC MIXING VALVE, DUAL CHECK VALVES, INTEGRAL STRAINER	1
HB-1	HOSE BIBB	MIFAB	MHY-20-WC	WALL	3/4"	-	-	-	LEAD FREE, NON-FREEZE WALL HYDRANT WITH NICKEL BRONZE BOX. KEY OPERATED, INTEGRAL VACUUM BREAKER. FINAL SELECTION TO BE APPROVED BY OWNER.	1

NOTES:
 1. ACCEPTABLE MANUFACTURERS: KOHLER, AMERICAN STANDARD, SLOAN, CHICAGO FAUCETS, TOTO, WATTS, STERLING, MOEN, ZURN
 2. UNIT TO CONFORM TO ICC/ANSI A 117.1 - 2009.
 3. PROVIDE ASSE 1070 COMPLIANT THERMOSTATIC MIXING VALVE.

ELECTRIC DOMESTIC WATER HEATER SCHEDULE

TAG	MANUFACTURER	MODEL	GALLONS	UEF	RECOVER @ 90 DEG RISE (GPH)	MAX WATTAGE	V	PH	PRESSURE RELIEF (PSIG)	SIZE (ØxH")	WEIGHT FULL (LBS)	NOTES
WH-1	AO SMITH	DEL-10	10	NA	27	2.5KW	240	1	150	18"x19"	150	1,2

NOTES:
 1. ALTERNATE MANUFACTURERS SHALL BE APPROVED BY OWNER AND ENGINEER.
 2. PROVIDE WITH WALL MOUNT STAND AND DRAIN PAN. ROUTE DRAIN TO MOP SINK.

EXPANSION TANK SCHEDULE

MARK	LOCATION	GALLONS	MANUFACTURER & MODEL NUMBER	FULL WEIGHT (LBS)	NOTES
ET-1	MECHANICAL ROOM	2	WESSELS T-5	-	1

NOTES:
 1. ACCEPTABLE MANUFACTURERS: AMTROL, ARMSTRONG, BELL & GOSSETT, TACO, THRUSH.

Client:
City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:
Public Safety
Training Facility
Multi-Purpose
Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

Project Number: 5039 01 23
 Drawn by: BMH
 Checked by: BMH
 Copyright: 2024

Plumbing Schedules

P3.00

SHEET SCALE
0" 1/2" 1" 2"



Client:

City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:

Public Safety
Training Facility
Multi-Purpose
Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

Project Number: 5039 01 23
Drawn by: BMH
Checked by: BMH
Copyright: 2024

Mechanical
Symbols, Notes &
Abbreviations

M0.00

SHEET SCALE
0" 1/2" 1" 2"

ABBREVIATIONS (ALL ABBREVIATIONS ARE NOT NECESSARILY USED)	MECHANICAL SYMBOLS (ALL SYMBOLS SHOWN ARE NOT NECESSARILY USED ON THE DRAWINGS)	GENERAL NOTES
AABC ASSOCIATED AIR BALANCE COUNCIL ASHRAE AMERICAN SOCIETY OF HEATING, REFRIGERATING, & AIR CONDITION ENGINEERS	— EXISTING HVAC	1. THE WORK SHALL CONFORM TO ALL APPLICABLE LOCAL, STATE AND NATIONAL CODES.
ASTM AMERICAN SOCIETY FOR TESTING AND MATERIALS	— NEW HVAC	2. FIELD VERIFY EXISTING CONDITIONS PRIOR TO PERFORMING ANY DEMOLITION, FABRICATION, OR CONSTRUCTION WORK.
CFM CUBIC FEET PER MINUTE	⊗ CONNECT NEW TO EXISTING. VERIFY FIELD CONDITIONS.	3. ALL DIMENSIONS AND ELEVATIONS NOTED AS "REF" ARE FOR REFERENCE ONLY AND SHALL BE FIELD VERIFIED BY THE CONTRACTOR PRIOR TO USING THEM FOR ANY CONSTRUCTION ACTIVITIES.
D OR Ø DIAMETER	⊙ ROUND SUPPLY DIFFUSER	4. CONTRACTOR SHALL REVIEW AND BECOME FAMILIAR WITH ALL EXISTING CONDITIONS PRIOR TO COMMENCING WORK. ANY CONDITIONS NOT DOCUMENTED ON THESE DRAWINGS OR OBSERVED TO BE DIFFERENT THAN THOSE SHOWN ON THESE DRAWINGS ARE TO BE REPORTED TO THE ENGINEER AND OWNER PRIOR TO COMMENCING THE WORK.
DN DOWN	⊠ SQUARE SUPPLY DIFFUSER	5. CONTRACTOR SHALL CONTACT LOCAL UTILITIES AS REQUIRED. SUBMIT ALL NOT PRIOR SUBMITTED PERMIT DOCUMENTS, QUALIFICATIONS, ETC. AND BE RESPONSIBLE FOR ALL FEES ASSOCIATED WITH PERMITS, UTILITY EXTENSIONS, TAP-INSPECTIONS, ETC. THE ENGINEER SHALL SUBMIT CONSTRUCTION DOCUMENTS FOR OWNER'S REVIEW AND PERMIT PLAN REVIEW; HOWEVER, THE CONTRACTOR WILL BE RESPONSIBLE FOR OBTAINING THE PERMITS, AND ALL ASSOCIATED PERMIT AND INSPECTION COSTS/FEES.
EA EXHAUST AIR	⊠ SQUARE SUPPLY DIFFUSER WITH BLANK OFF	6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL OF ALL DEBRIS RESULTING FROM DEMOLITION AND/OR CONSTRUCTION WORK ON THIS PROJECT.
FG FLOOR GRILLE	⊠ SQUARE RETURN GRILLE	7. EACH SUB-CONTRACTOR IS RESPONSIBLE TO COORDINATE AND SCHEDULE THEIR WORK WITH THE GENERAL CONTRACTOR AND ALL OTHER CONTRACTORS WHOSE WORK WILL BE AFFECTED BY THEIR WORK.
HVAC HEATING, VENTILATION, & AIR CONDITIONING	⊠ SQUARE EXHAUST GRILLE	8. PARKING AT THE SITE BY CONSTRUCTION PERSONNEL SHALL BE LIMITED TO THE LOCATIONS DESIGNATED BY THE OWNER/OWNERS REPRESENTATIVE.
IECC INTERNATIONAL ENERGY CONSERVATION CODE	⊠ MANUAL BALANCE DAMPER	
MAX MAXIMUM	⊙ THERMOSTAT	
MERV MINIMUM EFFICIENCY REPORTING	⊙ CARBON DIOXIDE SENSOR	
NEBB NATIONAL ENVIRONMENTAL BALANCING BUREAU	⬠ KEYNOTE SYMBOL	
NEC NATIONAL ELECTRIC CODE	⚠ REVISION MARK	
NFPA NATIONAL FIRE PROTECTION ASSOCIATION	→ AIRFLOW DIRECTION	
NG NATURAL GAS	⊕ CONTINUATION	
NPT NATURAL PIPE THREAD		
OA OUTSIDE AIR		
OCC OCCUPANCY		
OH OHIO		
OMC OHIO MECHANICAL CODE		
OSHA OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION		
POF POUND-FORCE PER CUBIC FOOT		
PVC POLYVINYL CHLORIDE		
R RADIUS		
RA RETURN AIR		
REF REFERENCE		
REQ REQUIRED		
SA SUPPLY AIR		
SAN SANITARY WASTE		
SCH SCHEDULE		
SD SUPPLY DIFFUSER		
SF SQUARE FEET		
SMACNA SHEET METAL AND AIR CONDITIONING CONTRACTORS NATIONAL ASSOCIATION		
UL UNDERWRITERS LABORATORIES		
UV ULTRAVIOLET		
WG WATER GAUGE		

MECH DRAWING INDEX	
SHEET NUMBER	SHEET NAME
M0.00	Mechanical Symbols, Notes & Abbreviations
M1.01	Multi-Purpose Training Area First Floor Mechanical Plan
M1.02	Multi-Purpose Training Area Second Floor Mechanical Plan
M2.00	Mechanical Details and Diagrams
M3.00	Mechanical Schedules



COMcheck Software Version COMcheckWeb
Mechanical Compliance Certificate

Project Information

Energy Code: 90.1 (2019) Standard
Project Title: Simunitions Building
Location: Elyria, Ohio
Climate Zone: 5a
Project Type: New Construction

Construction Site: Elyria, Ohio 44035
Owner/Agent: City of Elyria
131 Court Street, Suite 101
Elyria, Ohio 44035
Designer/Contractor: Sixmo Architecture
1101 Auburn Avenue
Cleveland, Ohio 44113

Mechanical Systems List

Quantity	System Type & Description
1	F-1A (Single Zone): Heating: 1 each - Central Furnace, Gas, Capacity = 60 kBtu/h Proposed Efficiency = 96.00% Et, Required Efficiency: 80.00 % Et (or 80% AFUE) Cooling: 1 each - Split System, Capacity = 36 kBtu/h, Air-Cooled Condenser Proposed Efficiency = 17.00 SEER2, Required Efficiency = 13.40 SEER2 Proposed Part Load Efficiency = 0.00, Required Part Load Efficiency = 0.00 Fan System: F-1 and F-2 -- Compliance (Motor nameplate HP and fan efficiency method) : Passes Fans: F-1 and F-2 Supply, Constant Volume, 1200 CFM, 0.5 motor nameplate hp, 1.00 fan energy index, fan exception: Single fan < 1 HP or < 0.89 kW
1	F-1B (Single Zone): Heating: 1 each - Central Furnace, Gas, Capacity = 60 kBtu/h Proposed Efficiency = 96.00% Et, Required Efficiency: 80.00 % Et (or 80% AFUE) Cooling: 1 each - Split System, Capacity = 36 kBtu/h, Air-Cooled Condenser Proposed Efficiency = 17.00 SEER2, Required Efficiency = 13.40 SEER2 Proposed Part Load Efficiency = 0.00, Required Part Load Efficiency = 0.00 Fan System: F-1 and F-2 -- Compliance (Motor nameplate HP and fan efficiency method) : Passes Fans: F-1 and F-2 Supply, Constant Volume, 1200 CFM, 0.5 motor nameplate hp, 1.00 fan energy index, fan exception: Single fan < 1 HP or < 0.89 kW
1	F-2A (Single Zone): Heating: 1 each - Central Furnace, Gas, Capacity = 80 kBtu/h Proposed Efficiency = 96.00% Et, Required Efficiency: 80.00 % Et (or 80% AFUE) Cooling: 1 each - Split System, Capacity = 48 kBtu/h, Air-Cooled Condenser Proposed Efficiency = 17.00 SEER2, Required Efficiency = 13.40 SEER2 Proposed Part Load Efficiency = 0.00, Required Part Load Efficiency = 0.00 Fan System: F-3 AND F-4 -- Compliance (Motor nameplate HP and fan efficiency method) : Passes Fans: F-3 AND F-4 Supply, Constant Volume, 1400 CFM, 1.0 motor nameplate hp, 1.00 fan energy index
1	F-2B (Single Zone): Heating: 1 each - Central Furnace, Gas, Capacity = 80 kBtu/h Proposed Efficiency = 96.00% Et, Required Efficiency: 80.00 % Et (or 80% AFUE) Cooling: 1 each - Split System, Capacity = 48 kBtu/h, Air-Cooled Condenser Proposed Efficiency = 17.00 SEER2, Required Efficiency = 13.40 SEER2 Proposed Part Load Efficiency = 0.00, Required Part Load Efficiency = 0.00 Fan System: F-3 AND F-4 -- Compliance (Motor nameplate HP and fan efficiency method) : Passes Fans: F-3 AND F-4 Supply, Constant Volume, 1400 CFM, 1.0 motor nameplate hp, 1.00 fan energy index

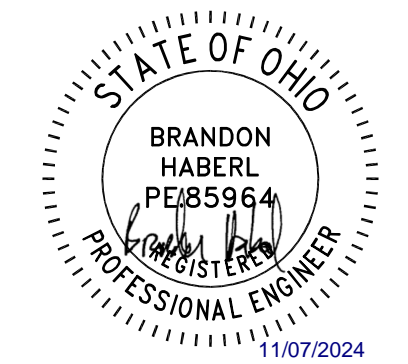
Project Title: Simunitions Building
Data filename: Report date: 11/06/24
Page 5 of 18

Mechanical Compliance Statement

Compliance Statement: The proposed mechanical design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed mechanical systems have been designed to meet the 90.1 (2019) Standard requirements in COMcheck Version COMcheckWeb and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Brandon Habert - Senior Mechanical Engineer
Name - Title Signature Date 11.06.2024

Project Title: Simunitions Building
Data filename: Report date: 11/06/24
Page 6 of 18

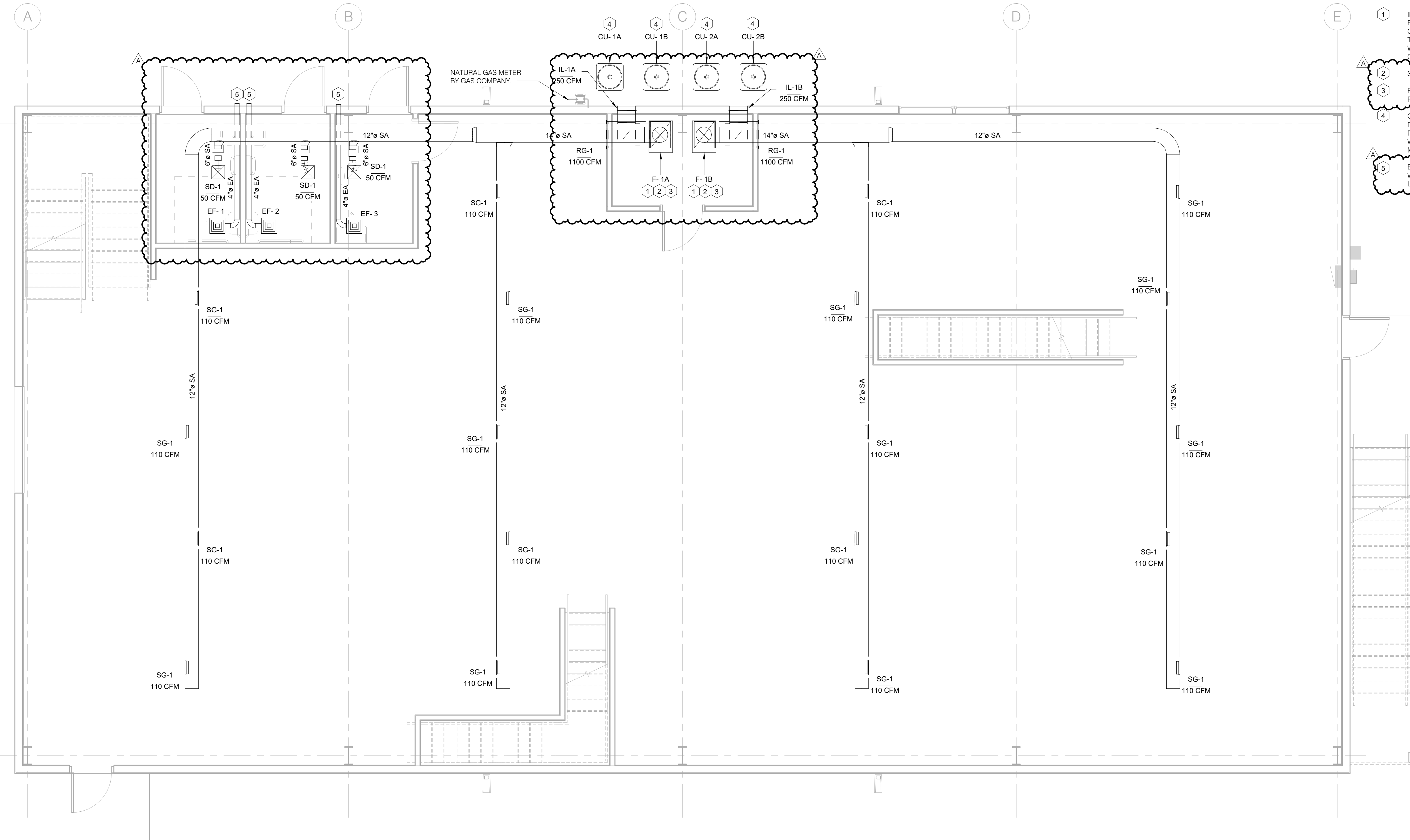


MECHANICAL GENERAL NOTES

1. THE MECHANICAL CONTRACTOR SHALL COORDINATE FINAL ELECTRICAL REQUIREMENTS OF EQUIPMENT PRIOR TO ORDERING.
2. REFER TO ARCHITECTURAL PLANS AND DETAILS FOR EXACT DIMENSIONS, ELEVATIONS AND LOCATIONS OF EQUIPMENT, FIXTURES, OPENINGS, FIRE AND SMOKE WALL AND RATED STRUCTURES.
3. DUCTWORK AND PIPING INSTALLATION SHALL BE COORDINATED WITH OTHER TRADES AS TO NOT HINDER ACCESS TO EQUIPMENT. INSTALLATION OF PIPING SHALL ENABLE ACCESS TO VALVES ABOVE CEILING WHILE ALLOWING MINIMUM OF 8" CLEAR FOR CEILING REMOVAL.
4. RETURN AIR DUCTWORK EXTENDING FROM EQUIPMENT SERVING A RETURN AIR PLENUM SHALL BE INTERNALLY INSULATED WITH 1/2" DUCT LINER FOR THE ENTIRE LENGTH OF THE DUCT FROM THE UNIT TO THE OUTLET.
5. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR DESIGN REQUIREMENTS OF PENETRATIONS.

MECHANICAL PLAN KEYNOTES

1. INSTALL FURNACE PER MANUFACTURERS RECOMMENDATIONS. ROUTE FURNACE FLUE AND COMBUSTION AIR PIPING UP THROUGH ROOF AND TERMINATE WITH CONCENTRIC VENT. PROVIDE FURNACE WITH MIXING BOX/ECONOMIZER SIMILAR TO MICROMETL CURE WITH INTEGRAL CONTROLS.
2. SEE PLUMBING PLANS FOR NATURAL GAS PIPING.
3. PROVIDE PRIMARY AND SECONDARY CONDENSATE AND ROUTE TO ADJACENT FLOOR DRAIN.
4. CONDENSING UNIT TO BE MOUNTED LEVEL IN ALL DIRECTIONS ON ROOF WITH EQUIPMENT STAND. EXTEND R/RS LINES THROUGH WALL WITH SLEEVE AND SEAL WEATHERTIGHT. R/RS LINES SHALL BE SIZED PER MANUFACTURERS RECOMMENDATIONS.
5. EXTEND EXHAUST DUCT THROUGH WALL AND TERMINATE WITH SEIHO MODEL SX OR EQUAL ALUMINUM VENT LOUVER. SEE PLANS FOR DUCT INLET SIZE.



Client:
City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:
Public Safety
Training Facility
Multi-Purpose
Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

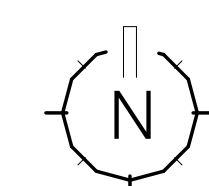
Project Number: 5039 01 23
Drawn by: BMH
Checked by: BMH
Copyright: 2024

Multi-Purpose
Training Area First
Floor Mechanical
Plan

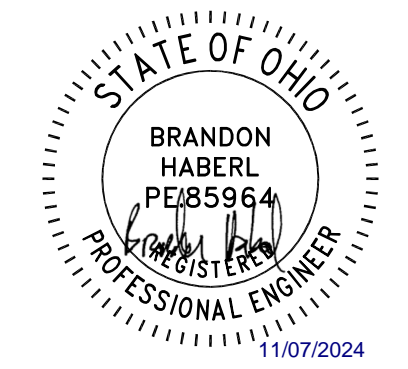
M1.01

SHEET SCALE
0" 1/2" 1" 2"

1 Multi-Purpose Training Area First Floor Mechanical Plan
1/4" = 1'-0"



v2023 11/6/2024 2:26:56 PM C:\Users\shaber\OneDrive - Sixmo Inc\Documents\5039 01 23_Safety Facility Simulations Training Building_v2023_Cemial_bhaber\BSDN.rvt

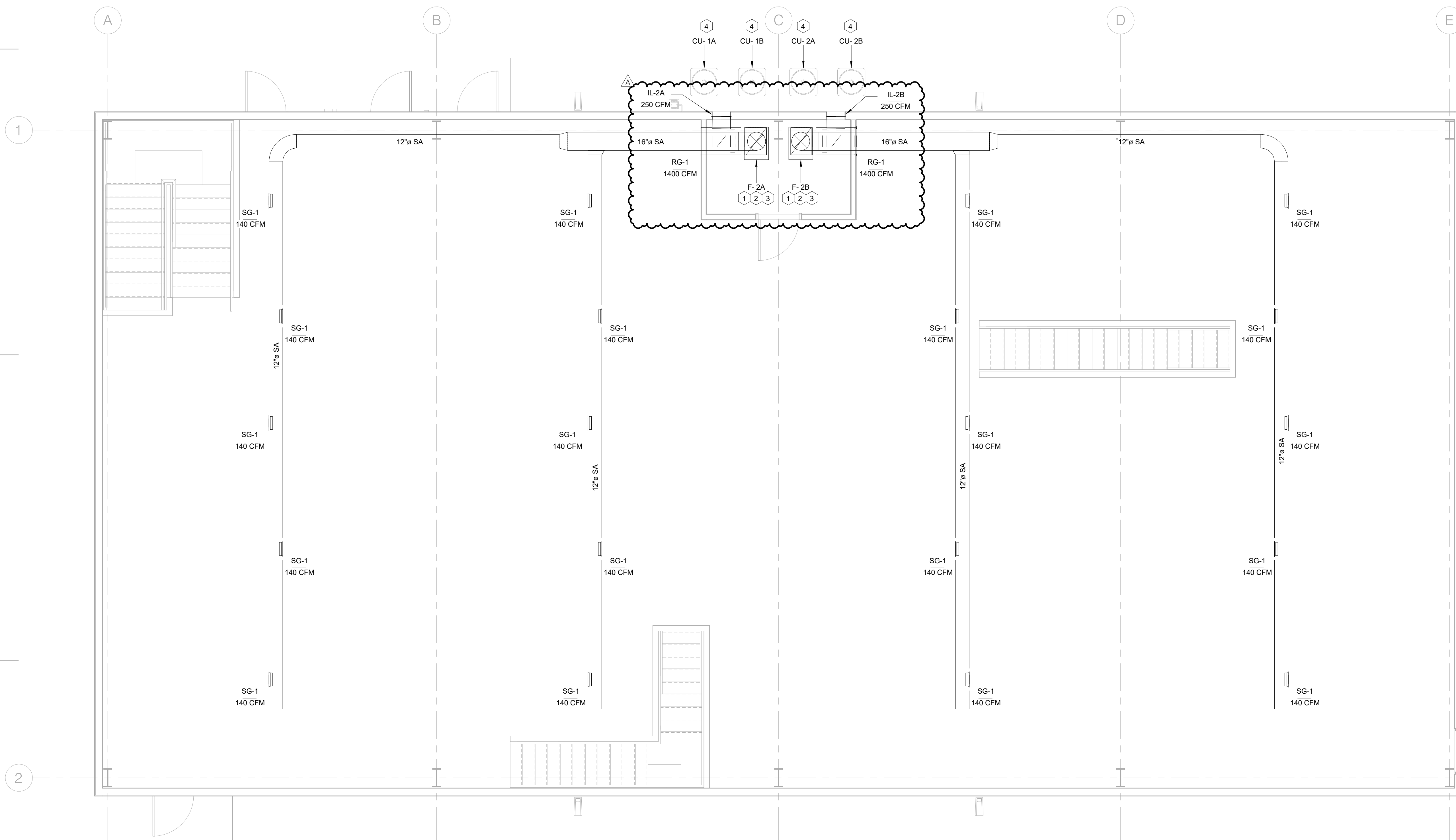


MECHANICAL GENERAL NOTES

1. THE MECHANICAL CONTRACTOR SHALL COORDINATE FINAL ELECTRICAL REQUIREMENTS OF EQUIPMENT PRIOR TO ORDERING.
2. REFER TO ARCHITECTURAL PLANS AND DETAILS FOR EXACT DIMENSIONS, ELEVATIONS AND LOCATIONS OF EQUIPMENT, FIXTURES, OPENINGS, FIRE AND SMOKE WALL AND RATED STRUCTURES.
3. DUCTWORK AND PIPING INSTALLATION SHALL BE COORDINATED WITH OTHER TRADES AS TO NOT HINDER ACCESS TO EQUIPMENT. INSTALLATION OF PIPING SHALL ENABLE ACCESS TO VALVES ABOVE CEILING WHILE ALLOWING MINIMUM OF 8" CLEAR FOR CEILING REMOVAL.
4. RETURN AIR DUCTWORK EXTENDING FROM EQUIPMENT SERVING A RETURN AIR PLENUM SHALL BE INTERNALLY INSULATED WITH 1/2" DUCT LINER FOR THE ENTIRE LENGTH OF THE DUCT FROM THE UNIT TO THE OUTLET.
5. REFER TO ARCHITECTURAL AND STRUCTURAL PLANS FOR DESIGN REQUIREMENTS OF PENETRATIONS.

MECHANICAL PLAN KEYNOTES

1. INSTALL FURNACE PER MANUFACTURERS RECOMMENDATIONS. ROUTE FURNACE FLUE AND COMBUSTION AIR PIPING UP THROUGH ROOF AND TERMINATE WITH CONCENTRIC VENT. PROVIDE FURNACE WITH MIXING BOX/ECONOMIZER SIMILAR TO MICROMETL CUBE WITH INTEGRAL CONTROLS.
2. SEE PLUMBING PLANS FOR NATURAL GAS PIPING.
3. PROVIDE PRIMARY AND SECONDARY CONDENSATE AND ROUTE TO FLOOR DRAIN ON FLOOR BELOW.
4. CONDENSING UNIT TO BE MOUNTED LEVEL IN ALL DIRECTIONS ON ROOF WITH EQUIPMENT STAND. EXTEND RL/RS LINES THROUGH WALL WITH SLEEVE AND SEAL WEATHERTIGHT. RL/RS LINES SHALL BE SIZED PER MANUFACTURERS RECOMMENDATIONS.



Client:
City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:
**Public Safety
Training Facility
Multi-Purpose
Training Area**

Garden Street
Elyria, Ohio 44035

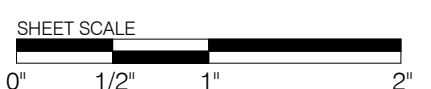
Revisions:

A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

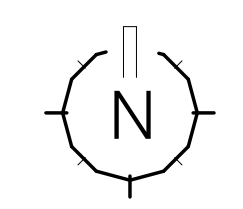
Project Number: 5039 01 23
Drawn by: BMH
Checked by: BMH
Copyright: 2024

**Multi-Purpose
Training Area
Second Floor
Mechanical Plan**

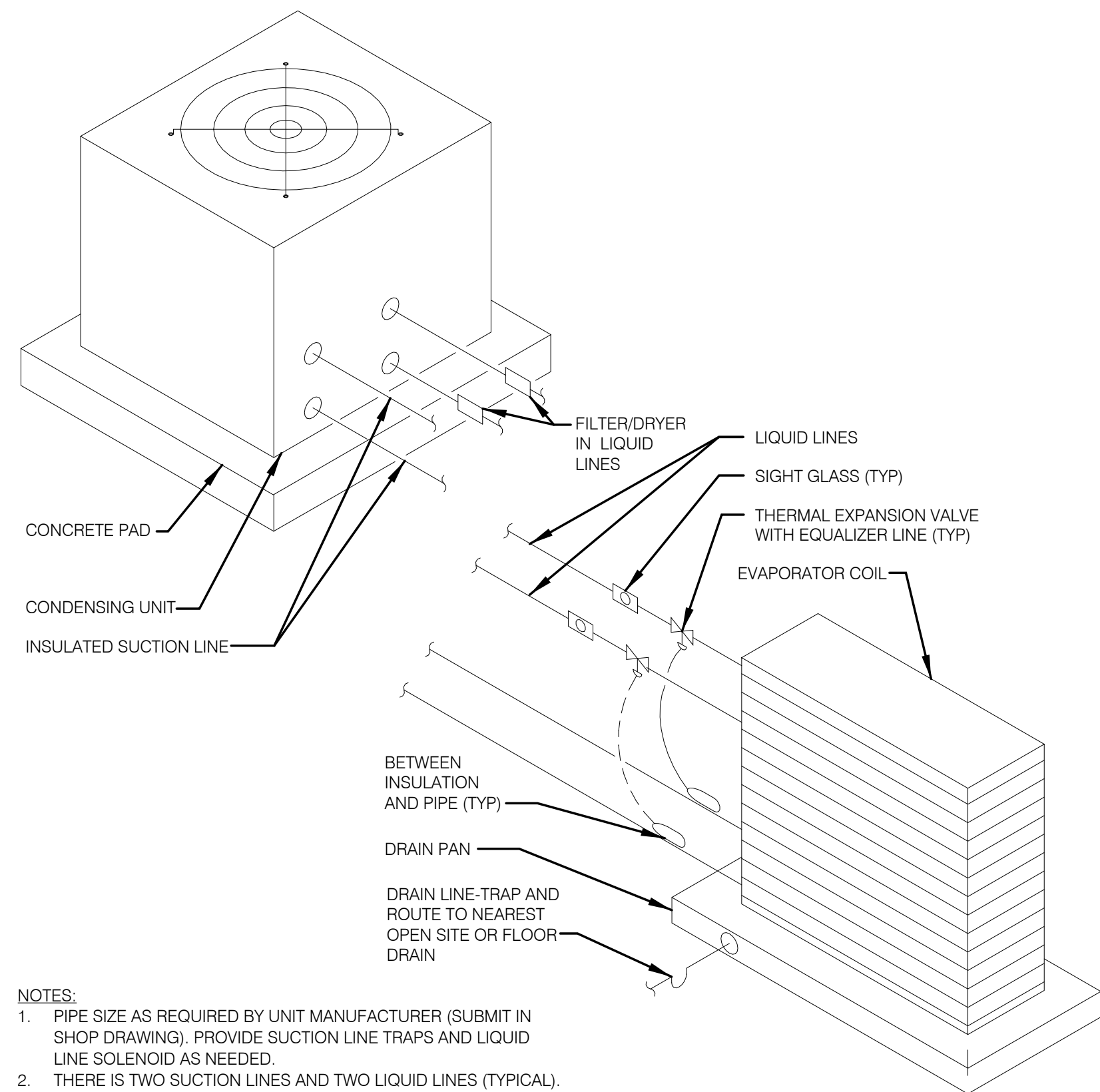
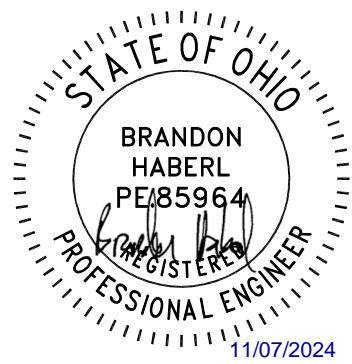
M1.02



1 Multi-Purpose Training Area Second Floor Mechanical Plan
1/4" = 1'-0"

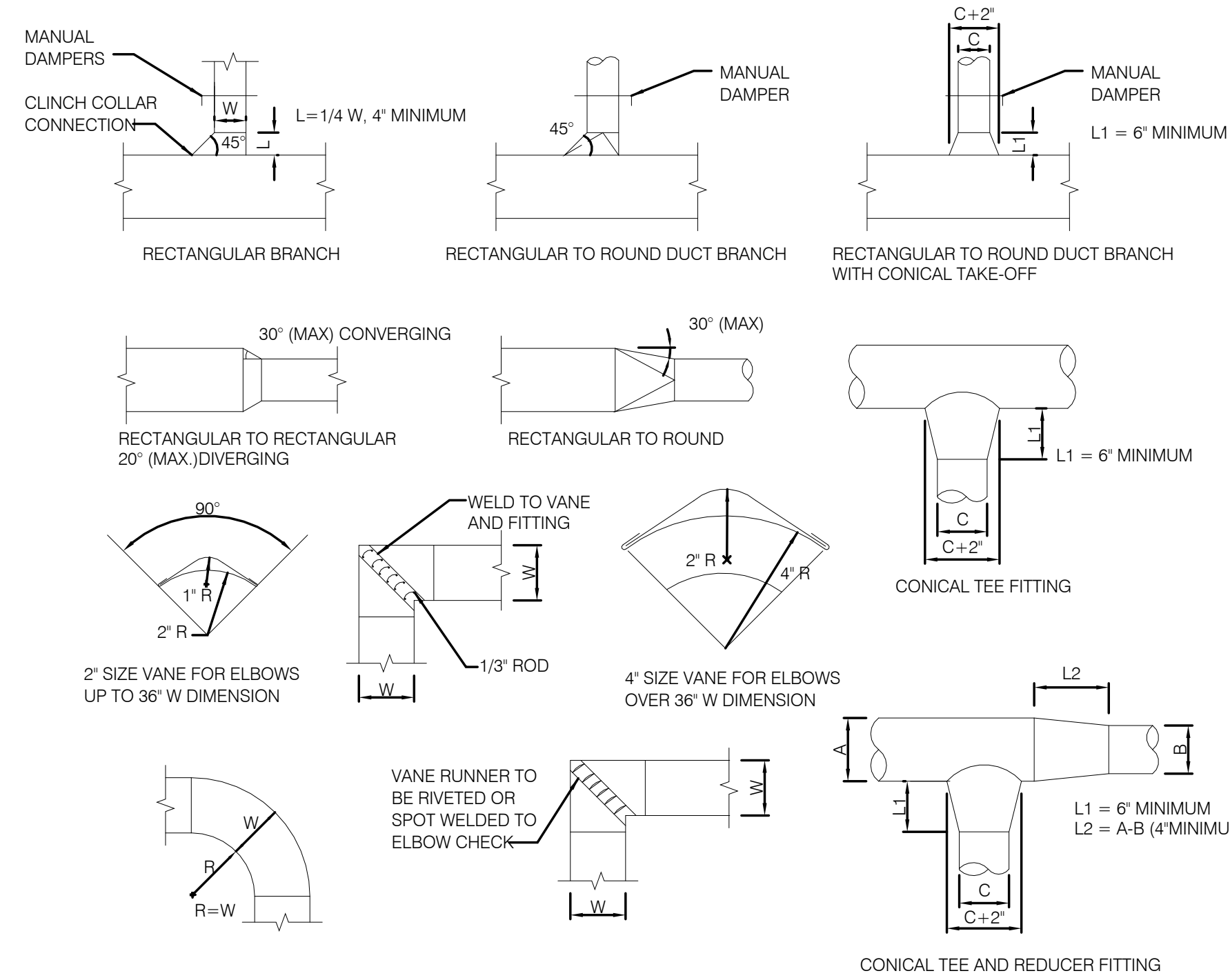


v2023 11/6/2024 2:36:56 PM C:\Users\shaber\OneDrive - Sixmo Inc\Documents\50390123_Safety Facility Simulations Training Building_v2023_Cemial_bhaber\BSDM.rvt



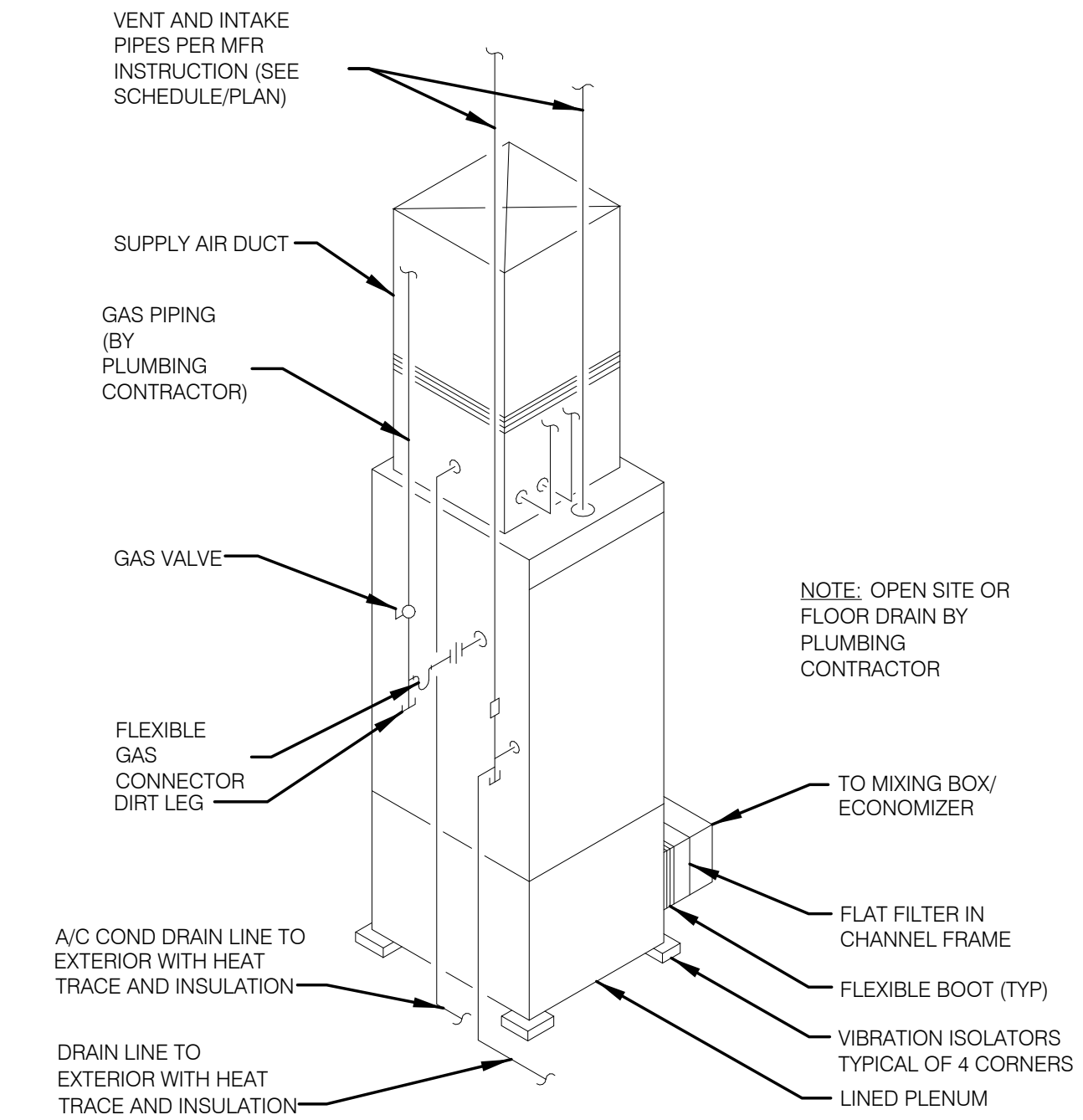
NOTES:
1. PIPE SIZE AS REQUIRED BY UNIT MANUFACTURER (SUBMIT IN SHOP DRAWING). PROVIDE SUCTION LINE TRAPS AND LIQUID LINE SOLENOID AS NEEDED.
2. THERE IS TWO SUCTION LINES AND TWO LIQUID LINES (TYPICAL).

C REFRIGERANT PIPING COMPONENT DIAGRAM
SCALE: NONE

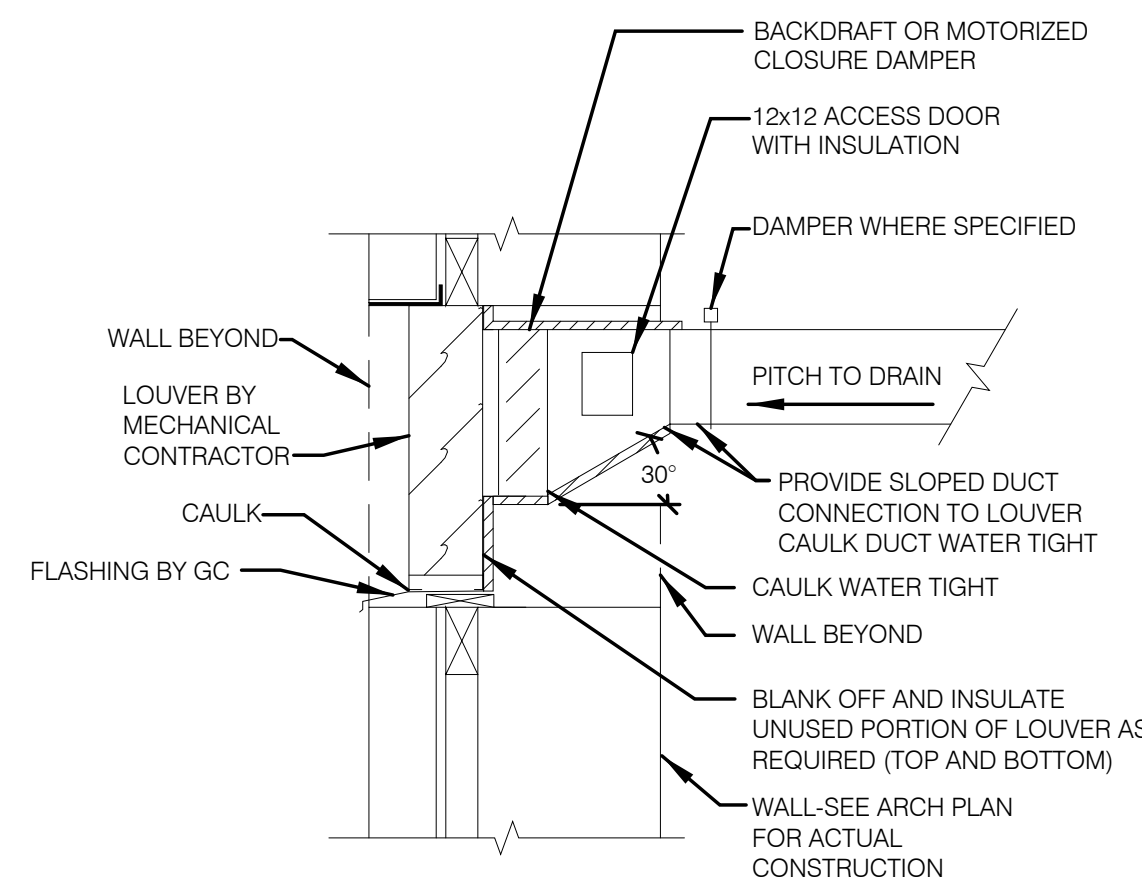


NOTES:
1. ALL DUCTWORK TO BE CONSTRUCTED TO MEET S.M.A.C.N.A. STANDARDS
2. REMOVE EVERY OTHER TURNING VANE IN RETURN/EXHAUST DUCTS.

B TYPICAL DUCTWORK DETAILS
SCALE: NONE

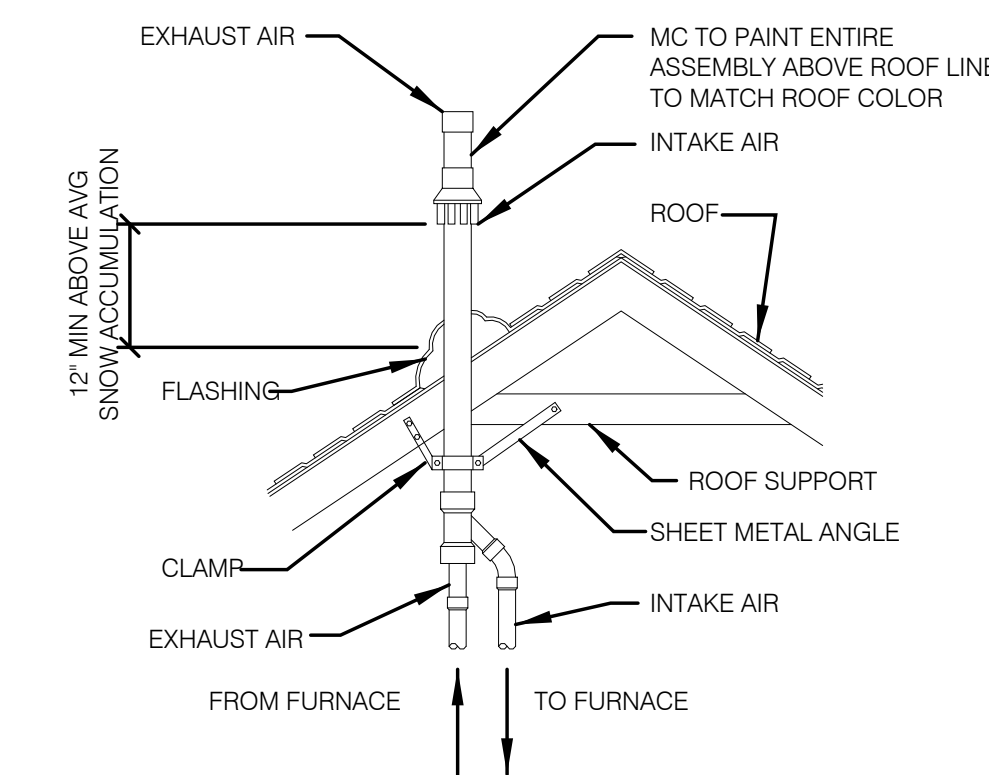


A GAS FURNACE DETAIL
SCALE: NONE

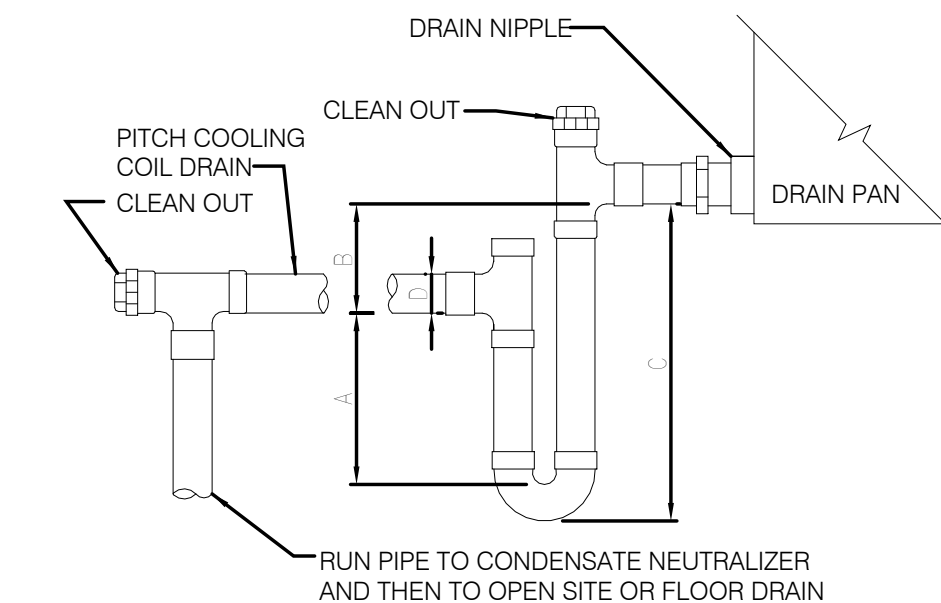


NOTES:
1. BIRD SCREEN FOR OUTSIDE AIR INTAKE LOUVER TO BE REMOVABLE OR HINGED AT TOP TO SWING
2. DUCT MAY ATTACH TO BOTTOM OF FRAME IF LOUVER IS DRAINABLE.

F LOUVER CONNECTION DETAIL
SCALE: NONE



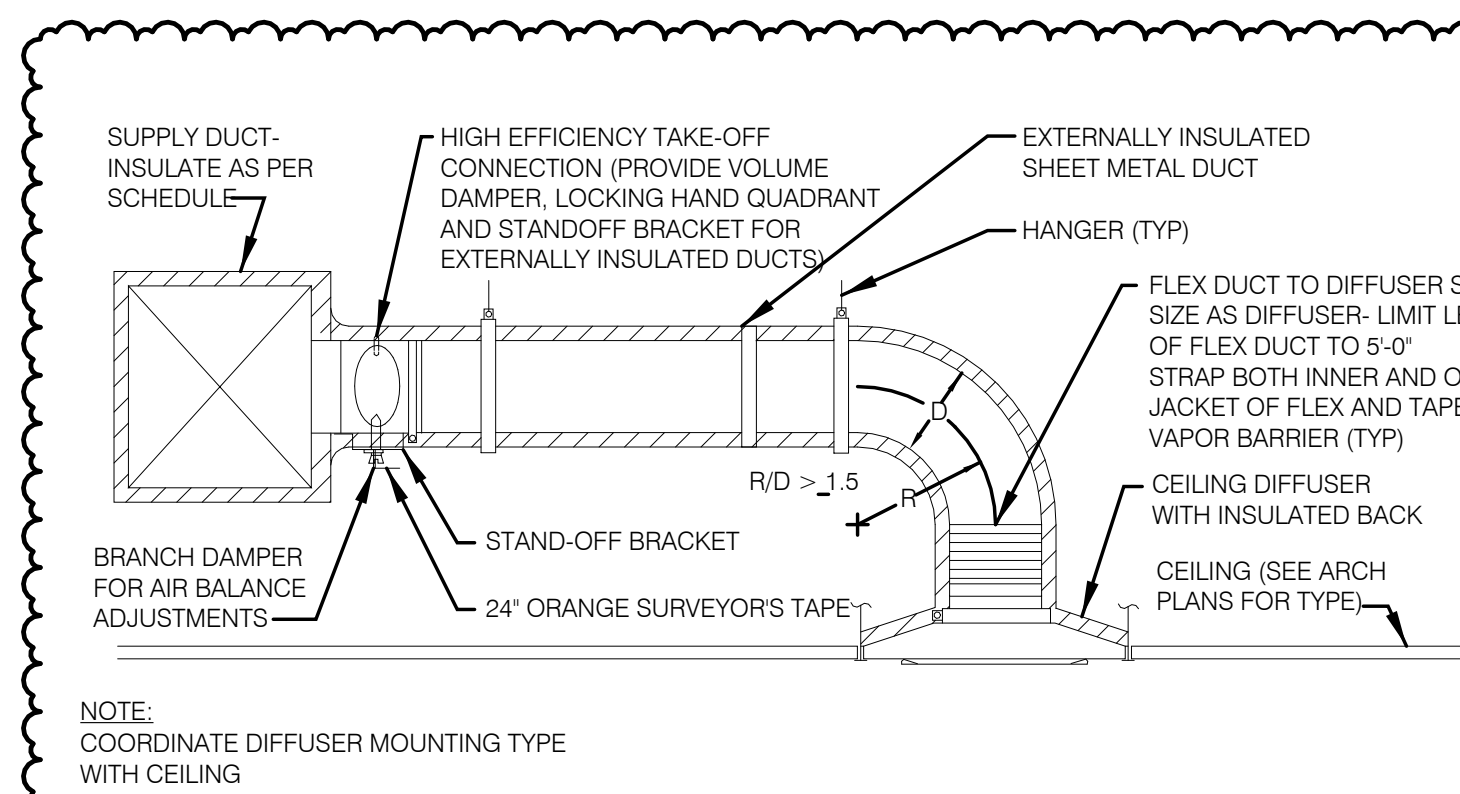
E VENT TERMINATION DETAIL
SCALE: NONE



BLOW-THROUGH (POSITIVE PRESSURE)		DRAW-THROUGH (NEGATIVE PRESSURE)	
A = SP* + 1/2'	A = 1/2B		
B = 1/2' (MIN)	B = SP* + 1'		
C = A + B + D	C = A + B + D		
COOLING TONS	D	COOLING TONS	D
- UP TO 5 TONS	1" PIPE	- UP TO 5 TONS	1" PIPE
- 5 TONS-30 TONS	1 1/4" PIPE	- 5 TONS-30 TONS	1 1/4" PIPE
- 30 TONS-50 TONS	1 1/2" PIPE	- 30 TONS-50 TONS	1 1/2" PIPE
- 50 TONS-UP	2" PIPE	- 50 TONS-UP	2" PIPE

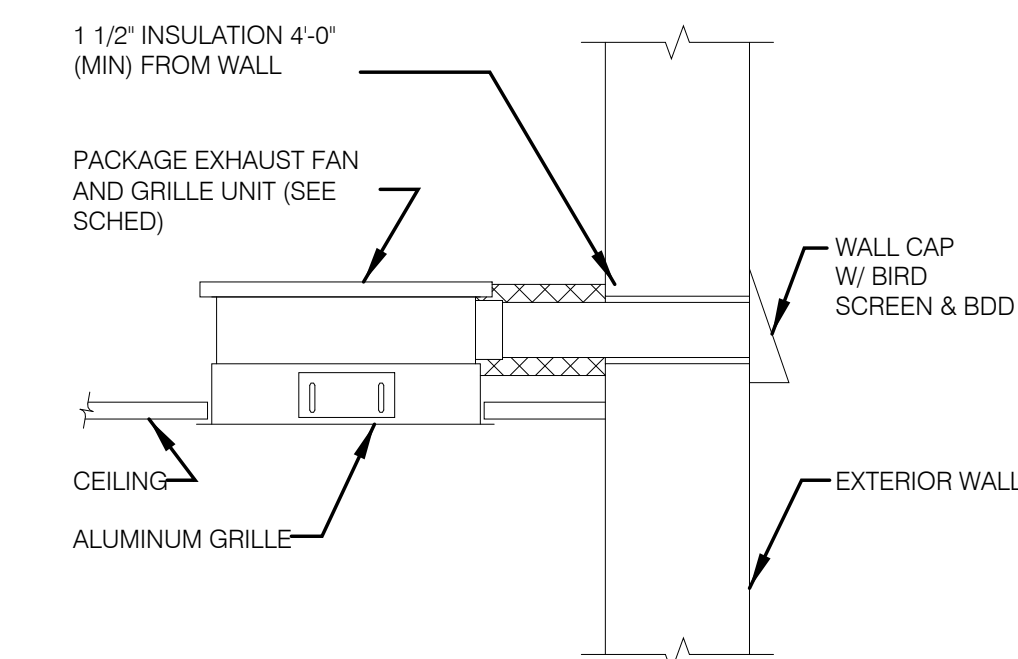
NOTE:
* SP EQUALS POSITIVE STATIC PRESSURE AT FAN DISCHARGE FOR BLOW THROUGH AIR HANDLING UNIT.
NOTE:
* SP EQUALS ABSOLUTE VALUE OF NEGATIVE STATIC PRESSURE AT FAN SUCTION FOR DRAW THROUGH AIR HANDLING UNIT.

D CONDENSATE DRAIN DETAIL
SCALE: NONE



NOTE:
COORDINATE DIFFUSER MOUNTING TYPE WITH CEILING TYPE

H CEILING DIFFUSER DETAIL
SCALE: NONE



G CEILING EXHAUST FAN DETAIL
SCALE: NONE

Client:
City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:
Public Safety Training Facility
Multi-Purpose Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

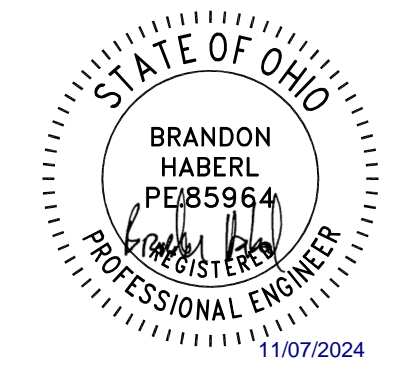
A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

Project Number: 5039 01 23
Drawn by: BMH
Checked by: BMH
Copyright: 2024

Mechanical Details and Diagrams

M2.00

0' 1/2' 1' 2'



NATURAL GAS FURNACE SCHEDULE

TAG	SERVES	INPUT MBH	OUTPUT MBH	CAPACITY STAGES	TEMP RISE	NOMINAL COOLING TONS	TOTAL CFM	EXTERNAL SP (IN)	BLOWER MOTOR (HP)	ELECTRICAL				WEIGHT	MANUFACTURER & MODEL NO.	NOTES	
										VOLTS	PHASE	HZ	AMPS				
F-1A	SEE PLANS	60	58	2	44.5	3	1200	0.5	1/2	115	1	60	-	9.3	200	CARRIER 59TN6B	1-11
F-1B	SEE PLANS	60	58	2	44.5	3	1200	0.5	1/2	115	1	60	-	9.3	200	CARRIER 59TN6B	1-11
F-2A	SEE PLANS	80	78	2	51.3	4	1400	0.5	1	115	1	60	-	13.6	260	CARRIER 59TN6B	1-11
F-2B	SEE PLANS	80	78	2	51.3	4	1400	0.5	1	115	1	60	-	13.6	260	CARRIER 59TN6B	1-11

- NOTES:
- ACCEPTABLE MANUFACTURERS: CARRIER, BRYANT, JCI, LENNOX, RUUD, TRANE.
 - PROVIDE WITH DOUBLE WALL INSULATED CABINET AND CASED EVAPORATOR COIL.
 - PROVIDE 7-DAY PROGRAMMABLE, AUTO-CHANGEOVER, DIGITAL THERMOSTAT.
 - PROVIDE MERV-6 AIR FILTER.
 - PROVIDE THERMAL EXPANSION VALVE.
 - PROVIDE WITH LITTLE GIANT MODEL ACS-2 OVERFLOW CONDENSATE SWITCH.
 - PROVIDE WITH PVC FLUE AND INTAKE PIPING. PROVIDE CONCENTRIC TERMINATION KIT.
 - EXTEND 1" CONDENSATE FROM FLUE CONDENSATE DRAIN LINES (WITH P-TRAP) TO EXTERIOR. PROVIDE FLUE CONDENSATE WITH ACID NEUTRALIZATION KIT. PROVIDE HEAT TRACE PIPING AND INSULATION OVER ANY EXTERIOR CONDENSATE PIPING AND PIPING WHERE POTENTIAL FOR FREEZING EXISTS.
 - E.C. TO PROVIDE AND INSTALL DISCONNECT SWITCH.
 - UNIT SHALL BE ASHRAE 90.1 COMPLIANT.
 - PROVIDE UNIT WITH MICROMETL MIXING BOX CUBE WITH INTEGRAL ENTHALPY CONTROLLER.

AIR COOLED CONDENSING UNIT SCHEDULE

TAG	UNITS	SYSTEM	NOMINAL TONS	TOTAL (MBH)	SENS. (MBH)	SEER AT ARI	REFRIG	CONDENSER FAN				ELECTRICAL				WEIGHT	MANUFACTURER & MODEL NO.	NOTES		
								TYPE	CFM	RPM	AMPS	MOTOR HP	VOLTS	PHASE	HZ				AMPS	
CU-1A	SEE PLANS	F-1A	3	35.8	27.2	17	PURON	PROP	-	-	-	-	208	1	60	-	19.8	216	CARRIER 24ACB	1-8
CU-1B	SEE PLANS	F-1B	3	35.8	27.2	17	PURON	PROP	-	-	-	-	208	1	60	-	19.8	216	CARRIER 24ACB	1-8
CU-2A	SEE PLANS	F-2A	4	47.5	34.3	17	PURON	PROP	-	-	-	-	208	1	60	-	27.8	277	CARRIER 24ACB	1-8
CU-2B	SEE PLANS	F-2B	4	47.5	34.3	17	PURON	PROP	-	-	-	-	208	1	60	-	27.8	277	CARRIER 24ACB	1-8

- NOTES:
- ACCEPTABLE MANUFACTURERS: CARRIER, BRYANT, JCI, LENNOX, RUUD, TRANE.
 - PROVIDE WITH HI/LO PRESSURE CONTROL, CONDENSER COIL HAIL GUARDS, AND CRANKCASE HEATER.
 - MOUNT ON DIVERSITECH MODEL ACB OR EQUAL EQUIPMENT PLATFORM WITH VIBRATION ISOLATOR PADS.
 - PROVIDE WITH 2-STAGE COMPRESSOR AND COMPRESSOR FAN.
 - PROVIDE WITH COMPLETE REFRIGERANT LINES SET SIZED BY MANUFACTURER.
 - E.C. TO PROVIDE AND INSTALL DISCONNECT SWITCH.
 - UNIT SHALL BE ASHRAE 90.1 COMPLIANT.
 - UNIT SHALL BE SAME MANUFACTURER AS PAIRED INDOOR UNIT.

GRILLE, REGISTER, AND DIFFUSER SCHEDULE

TAG	DESCRIPTION	MATERIAL	FINISH	MAX NOISE CRITERIA	MANUFACTURER & MODEL NO.	NOTES
SG-1	12X4, DIRECT SPIRAL DUCT MOUNTED DOUBLE DEFLECTION SUPPLY	ALUMINUM	NOTE 2	25	TITUS US300FL	1
SD-1	12X12, ALUMINUM PLAQUE DIFFUSER, SEE PLANS FOR NECK SIZE	ALUMINUM	NOTE 2	25	TITUS OMNI-AA	1
RG-1	24X16 STEEL RETURN GRILLE, 3" BLADE SPRING, 35 DEGREE DEFLECTION, BLADES PARALLEL TO LONG DIMENSION	STEEL	NOTE 2	25	TITUS 350 RL	1

- NOTES:
- ACCEPTABLE MANUFACTURERS: TITUS, PRICE, ANEMOSTAT, HART & COOLEY, KRUEGER, TUTTLE & BAILEY.
 - SHALL BE COLOR #2 BRITISH WHITE.

LOUVER SCHEDULE

TAG	DESCRIPTION	MATERIAL	VOLUME (CFM)	FREE AREA VELOCITY (FPM)	FREE AREA (SQ. FT)	MANUFACTURER & MODEL NO.	NOTES
IL-1A	16 W X 20 H LOUVER FOR F-1A VENTILATION AIR	ALUMINUM	250	336	0.7	GREENHECK ESD-635-16X20	1-4
IL-1B	16 W X 20 H LOUVER FOR F-1B VENTILATION AIR	ALUMINUM	250	336	0.7	GREENHECK ESD-635-16X20	1-4
IL-2A	16 W X 20 H LOUVER FOR F-2A VENTILATION AIR	ALUMINUM	250	336	0.7	GREENHECK ESD-635-16X20	1-4
IL-2B	16 W X 20 H LOUVER FOR F-2B VENTILATION AIR	ALUMINUM	250	336	0.7	GREENHECK ESD-635-20X16	1-4

- NOTES:
- ACCEPTABLE MANUFACTURERS: TITUS, PRICE, ANEMOSTAT, HART & COOLEY, KRUEGER, TUTTLE & BAILEY.
 - PROVIDE WITH BIRD SCREEN.
 - PROVIDE WITH MOTORIZED DAMPER AND INTERLOCK WITH CORRESPONDING FURNACE.
 - LOUVER SHALL BE DRAINABLE.

EXHAUST FAN SCHEDULE

TAG	LOCATION	SYSTEM	CFM	ESP	RPM	BHP	ELECTRICAL			BDD	DRIVE	FAN TYPE	WEIGHT (LBS)	MANUFACTURER & MODEL NO.	NOTES
							VOLTS/Ø	WATTS	MOCPP						
EF-1	RR	GENERAL EXHAUST	75	.5	773	-	120 / 1	17	15	YES	DIRECT	CABINET	16	GREENHECK SP-LP0511-1	1-3
EF-2	RR	GENERAL EXHAUST	75	.5	773	-	120 / 1	17	15	YES	DIRECT	CABINET	16	GREENHECK SP-LP0511-1	1-3
EF-3	RR	UTILITY	75	.5	773	-	120 / 1	17	15	YES	DIRECT	CABINET	16	GREENHECK SP-LP0511-1	1-3

- NOTES:
- ACCEPTABLE MANUFACTURERS: BROAN-NUTONE, GREENHECK, LOREN COOK, PANASONIC.
 - PROVIDE WITH VIBRATION ISOLATORS, INTEGRAL DISCONNECT SWITCH AND BACKDRAFT DAMPER.
 - UNIT SHALL BE CONTROLLED BY SWITCH.

Client:

City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:

Public Safety
Training Facility
Multi-Purpose
Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

Project Number: 5039 01 23
Drawn by: BMH
Checked by: BMH
Copyright: 2024

Mechanical
Schedules

M3.00

SHEET SCALE
0" 1/2" 1" 2"

ELECTRICAL SYMBOL LEGEND	
SYMBOL	DESCRIPTION
	PANELBOARD SURFACE MOUNTED 6-6" TO TOP. SEE PANEL SCHEDULES AND ONE-LINE DIAGRAM.
	CONDUIT WITH WIRING RUN CONCEALED IN OR ABOVE CEILING OR WALL OR RUN EXPOSED IN UNFINISHED AREAS. CROSS HATCHING INDICATES NUMBER OF CONDUCTORS (#12 AWG - MINIMUM). PROVIDE A CODE-SIZED GROUND WIRE IN ALL CONDUITS IN ADDITION TO THE CONDUCTORS SHOWN.
	CONDUIT WITH WIRING RUN CONCEALED BELOW FLOOR. CROSS HATCHING INDICATES NUMBER OF CONDUCTORS (#12 AWG - MINIMUM). PROVIDE A CODE-SIZED GROUND WIRE IN ALL CONDUITS IN ADDITION TO THE CONDUCTORS SHOWN.
	RECEPTACLE NOTES AND DESIGNATIONS:
	<ul style="list-style-type: none"> RATED 125V, 20A UON MOUNTED AT 18" AFF UON
++##"	MOUNTED AT ##"
AC	INSTALLED 8" ABOVE COUNTERTOP
C	RECESSED MOUNTED FLUSH IN FINISHED CEILING. RECEPTACLE AND FACEPLATE FINISH TO MATCH CEILING FINISH
GFI	GROUND FAULT INTERRUPTING TYPE
H	HORIZONTAL
IG	ISOLATED GROUND
T	TAMPER RESISTANT LISTED
UC	BELOW COUNTER
USB	DUPLEX RECEPTACLE WITH (1) USB TYPE A AND (1) USB TYPE C PORTS
WP	WEATHER RESISTANT LISTED WITH DIE-CAST ALUMINUM "WHILE IN-USE COVER"
	20A - 125V GROUNDING TYPE DUPLEX RECEPTACLE MOUNTED 18" AFF TO CENTER OF BOX, UNLESS NOTED OTHERWISE.
	20A - 125V GROUNDING TYPE QUADRAPLEX RECEPTACLE MOUNTED 18" AFF TO CENTER OF BOX, UNLESS NOTED OTHERWISE.
\$	LIGHT SWITCH NOTES AND DESIGNATIONS:
	<ul style="list-style-type: none"> RATED 120/277V, 20A UON MOUNTED AT 48" AFF TO CENTERLINE OF DEVICE UON SWITCHES SHALL BE GANGED TOGETHER WHERE APPLICABLE. E.C. SHALL DERATE GANGED SWITCHES PER MANUFACTURER SHOP DRAWINGS. BASIS OF DESIGN LUTRON MAESTRO NO SUBSCRIPT INDICATES SINGLE POLE SWITCH SUBSCRIPT 'D' INDICATES DIMMING AND MAY BE COMBINED WITH OTHER SWITCH TYPE SUBSCRIPTS. COORDINATE DIMMING REQUIREMENTS WITH ASSOCIATED FIXTURE TYPE LOWER CASE SUBSCRIPTS INDICATE LIGHTING CONTROL ZONE.
3	THREE POLE TOGGLE SWITCH
4	FOUR POLE TOGGLE SWITCH
OC	OCCUPANCY SENSOR SWITCH
VS	VACANCY SENSOR SWITCH
F	FAN CONTROL AND LIGHT DIMMER
H	HORIZONTAL
OR	VERRIDE SWITCH - SWEEP OFF ALL LIGHTING
KOR	KEYED OVERRIDE SWITCH WITH WEATHERPROOF COVER - SWEEP OFF ALL LIGHTING
	DISCONNECT SWITCH - TYPE AND RATING AS INDICATED ON PLANS
	20A - 125V GROUNDING TYPE DUPLEX RECEPTACLE MOUNTED TO UNDERSIDE OF UNISTRUT

ELECTRICAL DEMOLITION NOTES	
1.	THESE DRAWINGS ARE DIAGRAMMATIC ONLY AND ARE TO BE USED AS A GUIDELINE ONLY FOR THE SCOPE OF DEMOLITION WORK. THE CONTRACTOR SHALL VISIT THE PROJECT SITE DURING THE BID PHASE TO VERIFY THE EXACT CONDITIONS AND SCOPE OF WORK REQUIRED FOR A COMPLETE AND INCLUSIVE DEMOLITION PACKAGE.
2.	THE CONTRACTOR SHALL BE HELD TO HAVE EXAMINED THE PREMISES AND SITE SO AS TO COMPARE THEM WITH THE CONTRACT DOCUMENTS AND TO HAVE SATISFIED HIMSELF AS TO THE CONDITIONS OF THE PREMISES, THE SITE, ANY OBSTRUCTIONS, THE ACTUAL LEVELS, ACCESS PANELS, AND ALL OTHER EXISTING CONDITIONS. THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS IN THE FIELD. SHALL CHECK LOCATION OF AND CONNECTION TO EXISTING FACILITIES, AND SHALL ASSUME ALL RESPONSIBILITY FOR SAME. IT SHALL BE THE ELECTRICAL CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL EXISTING UTILITIES IN WORK AREA PRIOR TO INITIATION OF DEMOLITION ACTIVITIES. BEGINNING OF DEMOLITION SHALL SIGNIFY CONTRACTORS ACCEPTANCE OF EXISTING CONDITIONS AND THE COST OF REWORKING ANY EXISTING SYSTEMS DUE TO CONFLICTS WITH EXISTING CONDITIONS SHALL BE PAID BY CONTRACTOR. THE CONTRACTOR IS RESPONSIBLE FOR ALL REQUIRED DEMOLITION WHETHER SHOWN ON THE PLANS OR NOT.
3.	THE CONTRACTOR SHALL COORDINATE WITH THE TENANT AND/OR BUILDING MANAGEMENT ALL INTERRUPTION OF ELECTRICAL SERVICES WITHIN THE TENANT SPACE AND/OR BUILDING.
4.	THE CONTRACTOR SHALL COORDINATE WITH THE ARCHITECTURAL, MECHANICAL HVAC, AND PLUMBING DEMOLITION DRAWINGS FOR ALL EQUIPMENT BEING DEMOLISHED, AND SHALL DISCONNECT AND REMOVE COMPLETE THE ELECTRICAL SERVICES TO ALL EQUIPMENT AND WIRING DEVICES. DEMOLITION DRAWINGS OF ALL DISCIPLINES MUST BE CHECKED AND ALL ASSOCIATED ELECTRICAL DEVICES OF EQUIPMENT REMOVED BY OTHERS MUST BE REMOVED.
5.	ALL EXISTING LUMINAIRES AND ASSOCIATED CONTROLS, ELECTRICAL EQUIPMENT, WIRING DEVICES, FIRE ALARM DEVICES, ETC. NOT INDICATED ON THIS PLAN SHALL BE EXISTING TO REMAIN, UNLESS SPECIFICALLY NOTED OTHERWISE. FOR ALL RENOVATION/REMODELING WORK, INCLUDING ALL AREAS OF NO OR MINIMAL WORK, EXISTING ELECTRICAL SERVICES SHALL BE MAINTAINED TO LUMINAIRES, EQUIPMENT, WIRING DEVICES, ETC. (POWER, LIGHTING, ETC.), THAT ARE REQUIRED TO BE MAINTAINED. THE CONTRACTOR SHALL BE RESPONSIBLE TO MAINTAIN THESE SERVICES, EQUIPMENT, WIRING DEVICES THAT ARE EXISTING TO REMAIN, WHETHER OR NOT INDICATED ON THE PLANS.
6.	DISCONNECT AND REMOVE ALL EXISTING ELECTRICAL EQUIPMENT, WIRING DEVICES, TELECOM DEVICES, BLANK COVER PLATES, ETC. LOCATED IN WALLS/PARTITIONS LABELED AS "TO BE REMOVED". REMOVE ALL EXISTING BRANCH CIRCUITING (CONDUCTORS AND CONDUIT) BACK TO LAST ACTIVE DEVICE (OR SOURCE IF NO ACTIVE DEVICES REMAIN).
7.	ALL ELECTRICAL LUMINAIRES, EQUIPMENT, WIRING DEVICES, TELECOMMUNICATIONS VOICE/DATA CABLING, ETC. SHALL BE REMOVED COMPLETE, BACK TO SOURCE, (PANELBOARD, TERMINAL BOARDS, ETC.), INCLUDING ALL BRANCH CIRCUITING, (CONDUCTORS AND CONDUIT), FEEDERS, SUPPORTS, JUNCTION BOXES, PULL BOXES, ETC.
8.	PROVIDE AND MAINTAIN TEMPORARY ELECTRICAL SERVICES, SUCH AS LIGHTING AND POWER IN ALL AREAS OF DEMOLITION AND SURROUNDING AREAS NOT IN DEMOLITION FOR THE DURATION OF THE PROJECT. COORDINATE ALL TEMPORARY ELECTRICAL SERVICES WITH OWNERS SITE REPRESENTATIVE AND/OR LOCAL ELECTRIC UTILITY.
9.	EQUIPMENT AND WIRING DEVICES IDENTIFIED AS (RL) - EXISTING TO BE RELOCATED, SHALL BE STORED FOR RE-USE AND RELOCATED TO NEW LOCATION AS INDICATED ON NEW PLAN DRAWINGS. DEVICES SHALL BE CLEANED, LUMINAIRES RE-LAMPED PER SPECIFICATIONS, AND BALLAST REPLACED WHERE FOUND TO BE INOPERABLE.
10.	EXISTING FIRE ALARM DEVICES THAT ARE LABELED (E) - EXISTING TO REMAIN, SHALL BE PROTECTED FROM CONSTRUCTION DAMAGE AND DIRT. THE FIRE ALARM SYSTEM SHALL BE KEPT OPERABLE DURING CONSTRUCTION.
11.	ANY CIRCUITS FEEDING THROUGH EQUIPMENT OR DEVICES THAT ARE BEING DEMOLISHED, REWORKED, OR RELOCATED, AND FEEDING OTHER EQUIPMENT/DEVICES THAT REMAIN ARE TO BE MAINTAINED.
12.	ALL CUTTING AND PATCHING OF WALLS, CEILINGS, OR FLOORS THAT ARE DISTURBED BY DEMOLITION SHALL BE RETURNED TO THEIR ORIGINAL CONDITION. REFER TO THE ARCHITECTURAL DOCUMENTS FOR EXACT SPECIFICATION REQUIREMENTS. PATCH FLOOR TO ORIGINAL CONSTRUCTION SPECIFICATIONS AND U.L. FIRE RATING LISTINGS FOR ALL FLOOR MOUNTED DEVICES SUCH AS FLOOR BOXES, (FIRE RATED) POKE-THROUGHS, ETC. WHICH HAVE BEEN REMOVED.
13.	ALL EQUIPMENT AND/OR DEVICES THAT ARE REMOVED AND NOT RE-USED SHALL BE TURNED OVER TO THE TENANT AND/OR BUILDING MANAGEMENT OR DISPOSED OF PER THEIR DIRECTION. MATERIAL OF NO SALVAGEABLE VALUE INCLUDING CONDUIT, WIRE AND TRASH RESULTING FROM THE DEMOLITION WORK SHALL BE REMOVED BY THE ELECTRICAL CONTRACTOR PROMPTLY FROM THE JOB SITE AND PROPERLY DISPOSED OF IN A LEGAL MANNER. NO BURNING SHALL BE PERMITTED ON THE SITE.
14.	IT SHALL BE THE ELECTRICAL CONTRACTORS RESPONSIBILITY TO CONDUCT ALL DEMOLITION IN ACCORDANCE WITH OSHA, EPA, AND ALL OTHER APPLICABLE CODES AND REGULATIONS FOR TYPE OF WORK.
15.	ANY AND ALL ABANDONED CONDUIT AND/OR WIRING FOUND DURING DEMOLITION SHALL BE REMOVED BY THE ELECTRICAL CONTRACTOR AT NO ADDITIONAL EXPENSE.
16.	REMOVE ALL ELECTRICAL EQUIPMENT, DEVICES, BOXES, CONDUIT AND WIRE IN THE AREA OF NEW CONSTRUCTION UNLESS OTHERWISE NOTED. CONDUIT, WIRE AND ELECTRIC DEVICES WHICH MAY PASS THRU THE AREA OF NEW CONSTRUCTION AND/OR MAY BE AFFECTED BY DEMOLITION SHALL REMAIN OR, IF REQUIRED, SHALL BE RE-WORKED TO KEEP THOSE ITEMS OPERATIONAL.
17.	AREAS AND SERVICES ADJACENT TO DEMOLITION AREAS SHALL BE PROTECTED FROM THE DEMOLITION PROCESS. PROTECTIVE MEASURES SHALL BE THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR FOR ALL ELECTRICAL WORK AND SHALL BE MAINTAINED CONTINUOUSLY UNTIL DEMOLITION IS COMPLETED.
18.	ALL DEMOLITION AND MATERIAL REMOVAL OPERATIONS SHALL BE CAREFULLY AND SAFELY CARRIED OUT. ELECTRICAL CONTRACTOR SHALL BE TOTALLY RESPONSIBLE FOR HIS SAFE PRACTICES AND OPERATIONS.
19.	PROTECTIVE MEASURES SHALL BE TAKEN DURING DEMOLITION TO KEEP THE INTERIOR OF THE REMAINING BUILDING WEATHERTIGHT. ANY OPENINGS IN THE BUILDING SHELL RESULTING FROM THE DEMOLITION PROCESS SHALL BE PROMPTLY SEALED.
20.	ANY ITEM INTENDED TO BE REMOVED BUT NOT SHOWN SHALL BE VERIFIED AND REMOVED BY THE ELECTRICAL CONTRACTOR AT NO ADDITIONAL COST ALL EXISTING CONDUITS PENETRATING FLOORS OR WALLS NOT REQUIRED TO BE REMOVED AND ALL NEW CONDUITS SHALL BE SEALED WITH FIRESTOPPING SEALANT.
21.	SHIFT AND REROUTE (IF REQUIRED) ANY EXISTING CONDUIT WHICH MAY INTERFERE WITH NEW CONSTRUCTION. ALL DEVICES REMAINING MUST BE LEFT IN A CLEAN AND OPERATING CONDITION.
22.	ALL BELOW SLAB CONDUIT BEING ABANDONED SHALL BE CUT FLUSH WITH FLOOR AFTER CONDUCTOR REMOVAL AND GROUTED FLUSH WITH FINISHED FLOOR.
23.	ALL DEMOLITION WORK SHALL BE PERFORMED IN AN ORDERLY FASHION WITHOUT ANY DAMAGE TO EXISTING STRUCTURE AND SYSTEMS.
24.	EC SHALL FURNISH AND INSTALL ADDITIONAL CONDUIT AND WIRE AS REQUIRED AND EXTEND EXISTING CIRCUITING TO FIXTURES AND DEVICES WHICH REMAIN BUT WHICH MAY BE AFFECTED BY EXISTING FIXTURES AND DEVICES BEING REMOVED AND/OR RELOCATED. FULL EXTENT OF WORK REQUIRED SHALL BE FIELD VERIFIED.

ELECTRICAL GENERAL NOTES	
1.	ELECTRICAL DRAWINGS ARE GENERALLY DIAGRAMMATIC. ARE INTENDED TO CONVEY THE SCOPE OF WORK, AND INDICATE GENERAL ARRANGEMENT OF LIGHTING FIXTURES, DEVICES, CONTROLS, ELECTRICAL FIXTURES, MOTORS, PANELBOARDS, EQUIPMENT, ETC. THE LOCATIONS OF ALL ITEMS SHOWN ON ELECTRICAL DRAWINGS OR CALLED FOR IN THE SPECIFICATIONS THAT ARE NOT EXPLICITLY FIXED BY DIMENSIONS ARE APPROXIMATE. THE EXACT LOCATIONS NECESSARY TO SECURE THE BEST CONDITIONS AND RESULTS MUST BE DETERMINED AT THE PROJECT. ALL LOCATIONS OF WORK EXPOSED TO VIEW ARE SUBJECT TO APPROVAL OF THE ARCHITECT PRIOR TO ROUGH-INS.
2.	ALL DEVICES, EQUIPMENT, FIXTURES, ETC., MUST BE GROUNDED BY USE OF A PROPERLY SIZED GROUNDING CONDUCTOR. MECHANICAL/ELECTRICAL BONDS OF THE METALLIC RACEWAY SYSTEM SHALL ALSO BE MAINTAINED.
3.	REFER TO MECHANICAL, PLUMBING, AND FIRE PROTECTION PLANS FOR EXACT LOCATION OF MECHANICAL AND PLUMBING EQUIPMENT. COORDINATE LOCATION OF DISCONNECT SWITCH ASSOCIATED WITH EACH PIECE OF EQUIPMENT WITH RESPECTIVE CONTRACTOR AND INSTALL IN ACCORDANCE WITH THE NEC.
4.	REFER TO DIVISION 15 (21, 22 & 23) SPECIFICATIONS, HVAC, PLUMBING & FIRE PROTECTION PLANS FOR ADDITIONAL ELECTRICAL WORK REQUIREMENTS & COORDINATION.
5.	ALL RECEPTACLES SHOWN BACK-TO-BACK IN WALLS SHALL BE SEPARATED HORIZONTALLY BY 8" MINIMUM.
6.	WHERE OPEN WIRING METHODS FOR LOW VOLTAGE SYSTEMS ARE PERMITTED BY THE CONTRACT DOCUMENTS, OWNER AND LOCAL AUTHORITY, THE CABLE/CONDUCTOR INSULATION SHALL BE RATED PER NEC FOR ENVIRONMENT (I.E. PLENUM RATED, ETC.) BEING INSTALLED.
7.	BRANCH CIRCUIT CONDUCTOR SIZES (& CONDUITS) SHALL BE INCREASED FROM THOSE INDICATED ON THE PLANS TO PREVENT EXCESSIVE VOLTAGE DROP. BRANCH CIRCUITS SHALL BE INSTALLED WITH WIRES OF SUFFICIENT SIZE SO THAT VOLTAGE DROP BETWEEN THE PANEL & THE LOADS DO NOT EXCEED A LIMIT OF 3%.
8.	REGARDLESS OF THE TEMPERATURE RATING OF THE CONDUCTOR INSULATION, ALL CONDUCTOR AMPACITY RATINGS FOR THIS PROJECT SHALL BE DETERMINED FROM THE 75°C CONDUCTOR TEMPERATURE RATINGS INDICATED IN THE NEC TABLES. WHERE EQUIPMENT OR DEVICES ARE PROVIDED WITH TERMINALS/LUGS RATED FOR 60°C, THE AMPACITY RATING OF THE 75°C CONDUCTOR SHALL BE LIMITED TO ITS ASSOCIATED 60°C RATING AS INDICATED IN THE NEC TABLES. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO INCREASE THE CONDUCTORS AND CONDUIT SIZE AS REQUIRED.
9.	ALL 120V AND 277V BRANCH CIRCUITS SHALL BE PROVIDED WITH SEPARATE NEUTRAL CONDUCTORS. SHARED NEUTRALS WILL NOT BE PERMITTED FOR MULTI-CIRCUIT INSTALLATIONS. WHERE MULTIPLE CIRCUITS ARE RUN IN A COMMON RACEWAY, THE AMPACITY OF THE CONDUCTORS SHALL BE PROPERLY DERATED & CONDUIT SHALL BE SIZED PER CODE. UNDER NO CIRCUMSTANCES SHALL MORE THAN SIX (6) CURRENT CARRYING CONDUCTORS BE RUN IN A SINGLE CONDUIT. REFERENCE NEC ARTICLE AND TABLE 910.15(B)(3)(ii).
10.	ALL CONDUITS SHALL CONTAIN A GROUND CONDUCTOR SIZED PER NEC TABLE #250.122. IN ADDITION, WHERE AN ISOLATED, INSULATED GROUND IS REQUIRED, A SEPARATE GROUND CONDUIT WITH GREEN INSULATION SHALL BE RUN FROM THE PANEL GROUND BUS TO THE ISOLATED GROUND CONNECTION OF THE DEVICE. IN NO CASE SHALL THE SYSTEM GROUND (CONDUCTOR & ASSOCIATED OUTLET BOXES, CONDUIT & BUILDING STEEL) BE ALLOWED TO CONTACT THE ISOLATED GROUND (CONDUCTOR DEVICE) WHERE CIRCUIT CONDUCTORS ARE INCREASED IN SIZE FOR ANY REASON (I.E. VOLTAGE DROP, DERATING, ETC.). THE GROUND CONDUCTOR SIZE SHALL BE INCREASED PROPORTIONATELY (ACCORDING TO CIRCULAR MIL AREA) FROM THE SIZE REQUIRED BY NEC TABLE #250.122.
11.	ELECTRICAL INSTALLATION REQUIREMENTS FOR ALL HVAC, PLUMBING, FIRE PROTECTION, SPECIAL SYSTEMS AND OWNER EQUIPMENT BEING FURNISHED BY OTHERS SHALL BE REVIEWED AND COORDINATED WITH OTHER TRADES PRIOR TO ROUGH-IN. OBTAIN EQUIPMENT SHOP DRAWINGS FROM INSTALLER/SUPPLIER/CONTRACTOR/OWNER FURNISHING EQUIPMENT, AS REQUIRED. FOR REVIEW AND COORDINATION. CONTACT ARCHITECT/ENGINEER WITH ANY DISCREPANCIES FOUND BETWEEN CONSTRUCTION DRAWINGS AND EQUIPMENT BEING FURNISHED PRIOR TO ROUGH-IN.
12.	THE ELECTRICAL CONTRACTOR SHALL FURNISH ALL ACCESS PANELS, AS REQUIRED FOR SERVICING AND TESTING. FOR EQUIPMENT AND/OR DEVICES FURNISHED UNDER HIS CONTRACT, THE GENERAL CONTRACTOR SHALL INSTALL ACCESS PANELS. THE ELECTRICAL CONTRACTOR SHALL COORDINATE THE SIZE AND LOCATION OF EACH ACCESS PANEL WITH THE ARCHITECT AND GENERAL CONTRACTOR PRIOR TO ROUGH-IN.
13.	ELECTRICAL CONTRACTOR SHALL INCLUDE IN HIS BID ALL CUTTING, TRENCHING AND PATCHING ASSOCIATED WITH THE ELECTRICAL INSTALLATION.
14.	ALL PENETRATIONS IN OR THROUGH FIRE RATED ASSEMBLIES ASSOCIATED WITH THE ELECTRICAL INSTALLATION SHALL BE FIRE-STOPPED USING A UL APPROVED METHOD. FURNISH AND INSTALL UL LISTED FIRE RATED MATERIALS AND EQUIPMENT SUCH AS BOXES, PUDDY PADS, ENDOTHERMIC MAT, LIGHT FIXTURES WITH RATED ENCLOSURES, ETC. TO COMPLY WITH CODE FOR PROJECT CONDITIONS. FURNISH AND INSTALL SLEEVES, WHERE REQUIRED. UL APPROVED METHOD FOR FIRE STOPPING SHALL MEET OR EXCEED FIRE RATING OF STRUCTURE BEING PENETRATED. REFERENCE ARCHITECTURAL PLANS FOR FIRE RATED STRUCTURES.
15.	NO CONDUIT, BOXES, WIRING, OR CABLES SHALL BE INSTALLED WITHIN 1 1/2" OF THE LOWEST POINT OF THE UNDERSIDE OF THE ROOF DECKING, NOR SHALL THEY BE INSTALLED CONCEALED WITHIN METAL-CORRUGATED ROOF DECKING. FOR EXISTING INSTALLATIONS, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE AND/OR REWORK EXISTING CONDUIT, BOXES, WIRING, AND CABLING THAT IS NOT IN COMPLIANCE WITH THIS REQUIREMENT.
16.	ALL ELECTRICAL EQUIPMENT AND DEVICES FOR THIS PROJECT MUST BE UL LISTED. DEVICES, EQUIPMENT, SYSTEMS SHALL BE INSTALLED PER N.E.C. REQUIREMENTS AND MANUFACTURERS INSTRUCTIONS.
17.	THE DESIGN INTENT IS ALL DEVICES SHALL BE RECESSED MOUNTED, UNLESS OTHERWISE NOTED. THE DEVICE BACK-BOX AND RACEWAY BEING FURNISHED SHALL BE RATED TO COMPLY WITH NEC PER THE APPLICATION. WHERE MOUNTED WITHIN A FIRE RATED WALL OR STRUCTURE, FURNISH AND INSTALL UL APPROVED FIRE STOPPING ASSEMBLIES AND MATERIALS TO MAINTAIN RATING OF WALL OR STRUCTURE. WHEN THERE IS NO AVAILABLE OPTION BUT TO INSTALL A SURFACE MOUNTED DEVICE, CONSULT ARCHITECT/ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
18.	THE DESIGN INTENT IS ALL CONDUIT, CABLES, RACEWAYS AND PATHWAYS SHALL BE CONCEALED FROM SIGHT WITHIN THE BUILDING CONSTRUCTION, UNLESS OTHERWISE NOTED. THE CONDUIT, CABLES, RACEWAYS AND PATHWAYS BEING FURNISHED SHALL BE RATED TO COMPLY WITH NEC PER THE APPLICATION. WHEN THERE IS NO AVAILABLE OPTION BUT TO INSTALL A VISIBLE CONDUIT, CABLE, RACEWAY OR PATHWAY, CONSULT ARCHITECT/ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
19.	ALL CONDUIT AND CABLING SHALL BE PROPERLY SUPPORTED AS REQUIRED BY THE NATIONAL ELECTRICAL CODE. FOR EXISTING INSTALLATIONS, THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE TO REPLACE AND/OR REWORK EXISTING CONDUIT AND/OR CABLING THAT IS NOT IN COMPLIANCE WITH THIS REQUIREMENT.
20.	CONTRACTOR SHALL FIELD VERIFY SLAB ON GRADE FLOOR CONSTRUCTION TYPE PRIOR TO CUTTING. UNDER NO CIRCUMSTANCES SHALL THE CONTRACTOR CUT A STRUCTURAL FLOOR SLAB THICKER THAN FOUR (4) INCHES WITHOUT PRIOR WRITTEN APPROVAL FROM ENGINEER OF RECORD. NOTIFY ENGINEER OF RECORD OF ANY SLAB THICKNESS GREATER THAN FOUR (4) INCHES PRIOR TO PROCEEDING WITH ANY SAW CUTTING.
21.	IN OTHER THAN DWELLING UNITS, ALL 125-VOLT THROUGH 250-VOLT RECEPTACLES SUPPLIED BY SINGLE PHASE BRANCH CIRCUITS RATED 150 VOLTS OR LESS TO GROUND, 50 AMPERES OR LESS, AND ALL RECEPTACLES SUPPLIED BY THREE PHASE BRANCH CIRCUITS RATED 150 VOLTS OR LESS TO GROUND, 100 AMPERES OR LESS, INSTALLED IN LOCATIONS IDENTIFIED IN 210-8(B) SHALL HAVE GROUND-FAULT CIRCUIT-INTERRUPTER PROTECTION FOR PERSONNEL. WHERE DEVICE IS READILY ACCESSIBLE, THE DEVICE SHALL BE PROVIDED WITH INTEGRAL GROUND FAULT PROTECTION. WHERE DEVICE IS NOT READILY ACCESSIBLE AND/OR NOT AVAILABLE WITH INTEGRAL GROUND FAULT PROTECTION, THE BRANCH CIRCUIT BREAKER SERVING THE DEVICE(S) SHALL BE GROUND FAULT TYPE.
22.	ANY AND ALL "BUILDING STANDARDS" AND/OR "BUILDING SPECIFICATIONS" SHALL BE CONSIDERED AN INTEGRAL PART OF THESE DOCUMENTS AND THE CONTRACTOR SHALL BE RESPONSIBLE TO OBTAIN A COPY OF THESE DOCUMENTS AND COMPLY WITH ALL REQUIREMENTS AND STANDARDS CONTAINED WITHIN.

ELECTRICAL ABBREVIATIONS	
A	AMPERES, AMPERAGE
A/C	AIR CONDITIONING
ADA	AMERICANS WITH DISABILITIES ACT
AFCI	ARC FAULT CURRENT INTERRUPTER
AFB	ABOVE FINISHED FLOOR
AFG	ABOVE FINAL GRADE
AIC	AVAILABLE INTERRUPTING CURRENT
AL	ALUMINUM
ANSI	AMERICAN NATL. STANDARDS INSTITUTE
ARCH	ARCHITECT, ARCHITECTURAL
AUX	AUXILIARY
AWG	AMERICAN WIRE GAUGE
AV	AUDIO/VISUAL
BD	BUS DUCT
BKR	BREAKER
BLDG	BUILDING
°C	CELSIUS DEGREES
C	CIRCUIT BREAKER
C/B	CIRCUIT BREAKER
CKT	CIRCUIT
CLG	CEILING
CRI	COLOR RENDERING INDEX
CT	CURRENT TRANSFORMER
CU	COPPER
dB	DECIBEL
DISC.DS	DISCONNECT SWITCH
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
EF	EXISTING FAN
ETR	EXISTING TO REMAIN
EMT	ELECTRICAL METALLIC TUBING
EX	EXISTING
EXT	EXTERIOR
°F	FAHRENHEIT DEGREES
FA	FIRE ALARM
FACP	FIRE ALARM CONTROL PANEL
FARA	FIRE ALARM REMOTE ANNUNCIATOR
FPC	FIRE PUMP CONTROL PANEL
FT	FOOT, FEET
GND	GROUND
GC	GENERAL CONTRACTOR
GFI,GFCI	GROUND FAULT CIRCUIT INTERRUPTER
HP	HORSEPOWER
HVAC	HEATING, VENTILATING, & A/C
IBC	INTERNATIONAL BUILDING CODE
IG	ISOLATED GROUND
KVA	KILOVOLT-AMPS
KW	KILOWATTS
KWH	KILOWATT-HOUR
LED	LIGHT EMITTING DIODE
LTG	LIGHTING
MAX	MAXIMUM
MC	MECHANICAL CONTRACTOR
MCA	MINIMUM CIRCUIT AMPACITY
MCS	MAIN CIRCUIT BREAKER
MEP	MECHANICAL, ELECTRICAL, PLUMBING
MFR	MANUFACTURER
MIN	MINIMUM
MISC	MISCELLANEOUS
MOCPP	MAXIMUM OVERCURRENT PROTECTION
MTD	MOUNTED
N/A	NOT APPLICABLE
N.C.	NORMALLY CLOSED
NEC	NATIONAL ELECTRICAL CODE
NEMA	NATIONAL ELECTRICAL MFRS ASSOC.
NFPA	NATIONAL FIRE PROTECTION ASSOC.
NIB	NOT IN CONTRACT
N.O.	NORMALLY OPEN
NTS	NOT TO SCALE
O/C	ON CENTER
O/H	OVERHEAD
OBC	OHIO BUILDING CODE
OSHA	OCCUPATIONAL SAFETY & HEALTH ADMIN.
P	POLE
PC	PLUMBING CONTRACTOR
PH.Ø	PHASE
PNL	PANEL
PVC	POLYVINYL CHLORIDE
QTY	QUANTITY
RCP	REFLECTED CEILING PLAN
REC	RECEPTACLE
RL	REMOVE AND RELOCATE
REQD	REQUIRED
REV	REVISION
RM	REMOVE EXISTING
RGS	RIGID GALVANIZED STEEL
RM	ROOM
RTU	ROOFTOP UNIT
SER	SERVICE ENTRANCE RATED
SF	SQUARE FOOT, SQUARE FEET
T/C,TC	TIME CLOCK
THRU	THROUGH
TYP	TYPICAL
UC	UNDERCOUNTER
UG	UNDERGROUND
UL	UNDERWRITERS LABORATORIES, INC.
USB	UNIVERSAL SERIAL BUS
UON	UNLESS OTHERWISE NOTED
UPS	UNINTERRUPTED POWER SUPPLY
VA	VOLT-AMPERE
V	VOLTS, VOLTAGE
W	WATT, WATTS
W/	WITH
WP	WEATHERPROOF
XFMR	TRANSFORMER



Client:

City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:

Public Safety
Training Facility
Multi-Purpose
Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

09.26.2024 For Construction

Project Number: 5039 01 23
Drawn by: ACG
Checked by: ACG
Copyright: 2024

Electrical Symbols,
Notes &
Abbreviations

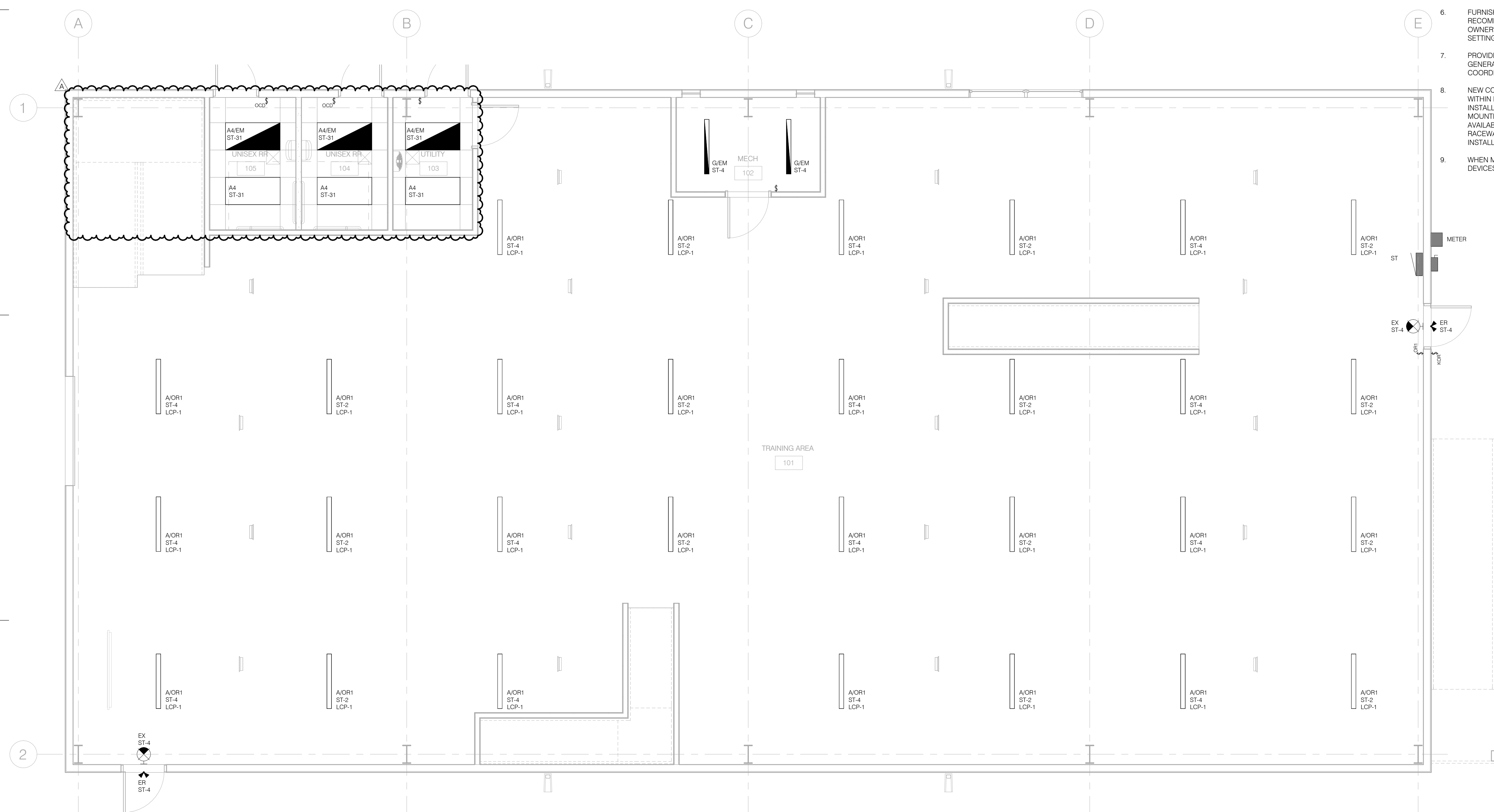
E0.00

SHEET SCALE
0" 1/2" 1" 2"



GENERAL NOTES:

- ALL ELECTRICAL ROOMS, TECHNOLOGY/DATA CLOSETS, EXIT STAIRWELLS, AND ELEVATOR EQUIPMENT ROOMS, UNDER NO CIRCUMSTANCES SHALL PIPING, DUCTWORK, OR EQUIPMENT BE INSTALLED IN OR ROUTED THROUGH THESE ROOMS OR AREAS EXCEPT FOR BRANCH PIPING OR DUCTWORK SPECIFICALLY SERVING THE ROOM OR AREA. DEDICATED SPACE SHALL EXTEND VERTICALLY FROM FLOOR TO STRUCTURAL CEILING.
- REFERENCE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION RELATED TO THE ELECTRICAL INSTALLATION. COORDINATE LIGHT FIXTURE LOCATIONS AND MOUNTING OPTIONS WITH CEILING TYPE BEING INSTALLED.
- ARCHITECTURAL DRAWINGS HAVE PRIORITY OVER MEP DRAWINGS WITH REGARD TO LOCATIONS OF ALL VISIBLE ELEMENTS AND DEVICES. COORDINATE EXACT DEVICE LOCATION WITH ARCHITECTURAL DRAWINGS.
- REFERENCE MECHANICAL, PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION. COORDINATE ELECTRICAL CONDUIT, WIRE, LIGHT FIXTURE AND EQUIPMENT LOCATIONS WITH MECHANICAL AND PLUMBING EQUIPMENT.
- WHERE EMERGENCY AND EXIT FIXTURES WITH AN INTEGRAL BATTERY PACK ARE USED, WIRE FIXTURES AHEAD OF ALL SWITCHING ON CIRCUIT INDICATED. EMERGENCY BATTERY BALLASTS ASSOCIATED WITH THE LIGHT FIXTURES SHALL BE WIRED FOR SWITCHED OPERATION, UNLESS INDICATED OTHERWISE. PROVIDE AN ADDITIONAL HOT WIRE TO EMERGENCY BALLAST FOR SWITCHED OPERATION.
- FURNISH AND INSTALL OCCUPANCY SENSORS PER MANUFACTURER'S RECOMMENDATIONS. COORDINATE WITH THE G.C., OWNER AND/OR OWNERS REPRESENTATIVE TO COMMISSION AND ADJUST THE SETTINGS OF EACH SENSOR.
- PROVIDE TEMPORARY POWER AND TEMPORARY EMERGENCY, EXIT AND GENERAL LIGHTING FOR ALL AREAS OF CONSTRUCTION AS REQUIRED. COORDINATE REQUIREMENTS WITH GENERAL CONTRACTOR.
- NEW CONDUIT/RACEWAY BEING INSTALLED SHALL BE CONCEALED WITHIN NEW AND EXISTING CONSTRUCTION, WHERE REQUIRED. INSTALL MC CABLE IN EXISTING STUD WALLS AND INSTALL SURFACE MOUNTED RACEWAY ON EXISTING BLOCK WALLS. WHEN THERE IS NO AVAILABLE OPTION BUT TO SURFACE MOUNT A VISIBLE CONDUIT/RACEWAY, CONSULT ARCHITECT/ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
- WHEN MULTIPLE DEVICES ARE ADJACENT TO EACH OTHER, GANG DEVICES TOGETHER WITHIN COMMON COVERPLATE.



Client:
City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:
Public Safety
Training Facility
Multi-Purpose
Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

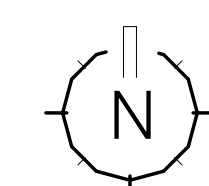
Project Number: 5039 01 23
Drawn by: ACG
Checked by: ACG
Copyright: 2024

Multi-Purpose
Training Area First
Floor Lighting Plan

E1.01

SHEET SCALE
0" 1/2" 1" 2"

1 Multi-Purpose Training Area First Floor Lighting Plan
1/4" = 1'-0"

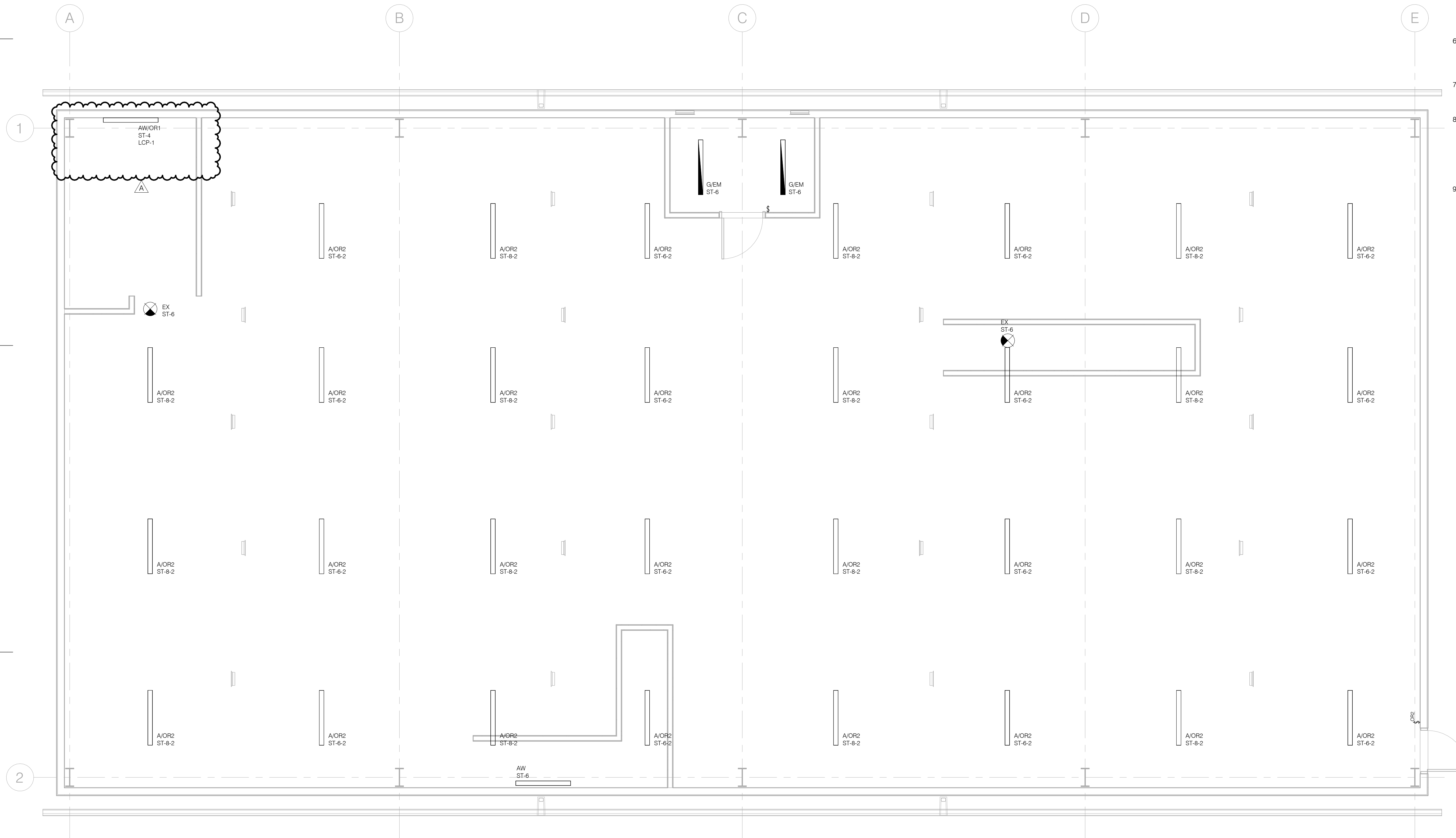


v2023 11/07/24 3:25:30 PM C:\Users\agilleland\OneDrive - Sixmo Inc\Documents\50390123_Safety Facility Simulations Training Building_v2023_Central_agilleland\64581.rvt



GENERAL NOTES:

- ALL ELECTRICAL ROOMS, TECHNOLOGY/DATA CLOSETS, EXIT STAIRWELLS, AND ELEVATOR EQUIPMENT ROOMS, UNDER NO CIRCUMSTANCES SHALL PIPING, DUCTWORK, OR EQUIPMENT BE INSTALLED IN OR ROUTED THROUGH THESE ROOMS OR AREAS EXCEPT FOR BRANCH PIPING OR DUCTWORK SPECIFICALLY SERVING THE ROOM OR AREA. DEDICATED SPACE SHALL EXTEND VERTICALLY FROM FLOOR TO STRUCTURAL CEILING.
- REFERENCE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION RELATED TO THE ELECTRICAL INSTALLATION. COORDINATE LIGHT FIXTURE LOCATIONS AND MOUNTING OPTIONS WITH CEILING TYPE BEING INSTALLED.
- ARCHITECTURAL DRAWINGS HAVE PRIORITY OVER MEP DRAWINGS WITH REGARD TO LOCATIONS OF ALL VISIBLE ELEMENTS AND DEVICES. COORDINATE EXACT DEVICE LOCATION WITH ARCHITECTURAL DRAWINGS.
- REFERENCE MECHANICAL, PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION. COORDINATE ELECTRICAL CONDUIT, WIRE, LIGHT FIXTURE AND EQUIPMENT LOCATIONS WITH MECHANICAL AND PLUMBING EQUIPMENT.
- WHERE EMERGENCY AND EXIT FIXTURES WITH AN INTEGRAL BATTERY PACK ARE USED, WIRE FIXTURES AHEAD OF ALL SWITCHING ON CIRCUIT INDICATED. EMERGENCY BATTERY BALLASTS ASSOCIATED WITH THE LIGHT FIXTURES SHALL BE WIRED FOR SWITCHED OPERATION, UNLESS INDICATED OTHERWISE. PROVIDE AN ADDITIONAL HOT WIRE TO EMERGENCY BALLAST FOR SWITCHED OPERATION.
- FURNISH AND INSTALL OCCUPANCY SENSORS PER MANUFACTURERS RECOMMENDATIONS. COORDINATE WITH THE G.C., OWNER AND/OR OWNERS REPRESENTATIVE TO COMMISSION AND ADJUST THE SETTINGS OF EACH SENSOR.
- PROVIDE TEMPORARY POWER AND TEMPORARY EMERGENCY, EXIT AND GENERAL LIGHTING FOR ALL AREAS OF CONSTRUCTION AS REQUIRED. COORDINATE REQUIREMENTS WITH GENERAL CONTRACTOR.
- NEW CONDUIT/RACEWAY BEING INSTALLED SHALL BE CONCEALED WITHIN NEW AND EXISTING CONSTRUCTION, WHERE REQUIRED. INSTALL MC CABLE IN EXISTING STUD WALLS AND INSTALL SURFACE MOUNTED RACEWAY ON EXISTING BLOCK WALLS. WHEN THERE IS NO AVAILABLE OPTION BUT TO SURFACE MOUNT A VISIBLE CONDUIT/RACEWAY, CONSULT ARCHITECT/ENGINEER FOR APPROVAL PRIOR TO INSTALLATION.
- WHEN MULTIPLE DEVICES ARE ADJACENT TO EACH OTHER, GANG DEVICES TOGETHER WITHIN COMMON COVERPLATE.



Client:
City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:
Public Safety
Training Facility
Multi-Purpose
Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

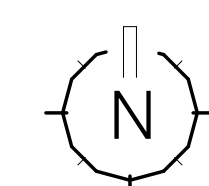
Project Number: 5039 01 23
Drawn by: ACG
Checked by: ACG
Copyright: 2024

Multi-Purpose
Training Area
Second Floor
Lighting Plan

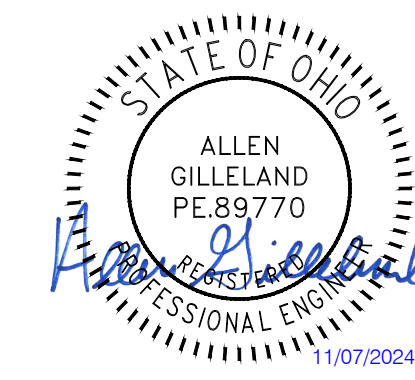
E1.02

SHEET SCALE
0" 1/2" 1" 2"

1 Multi-Purpose Training Area Second Floor Lighting Plan
1/4" = 1'-0"

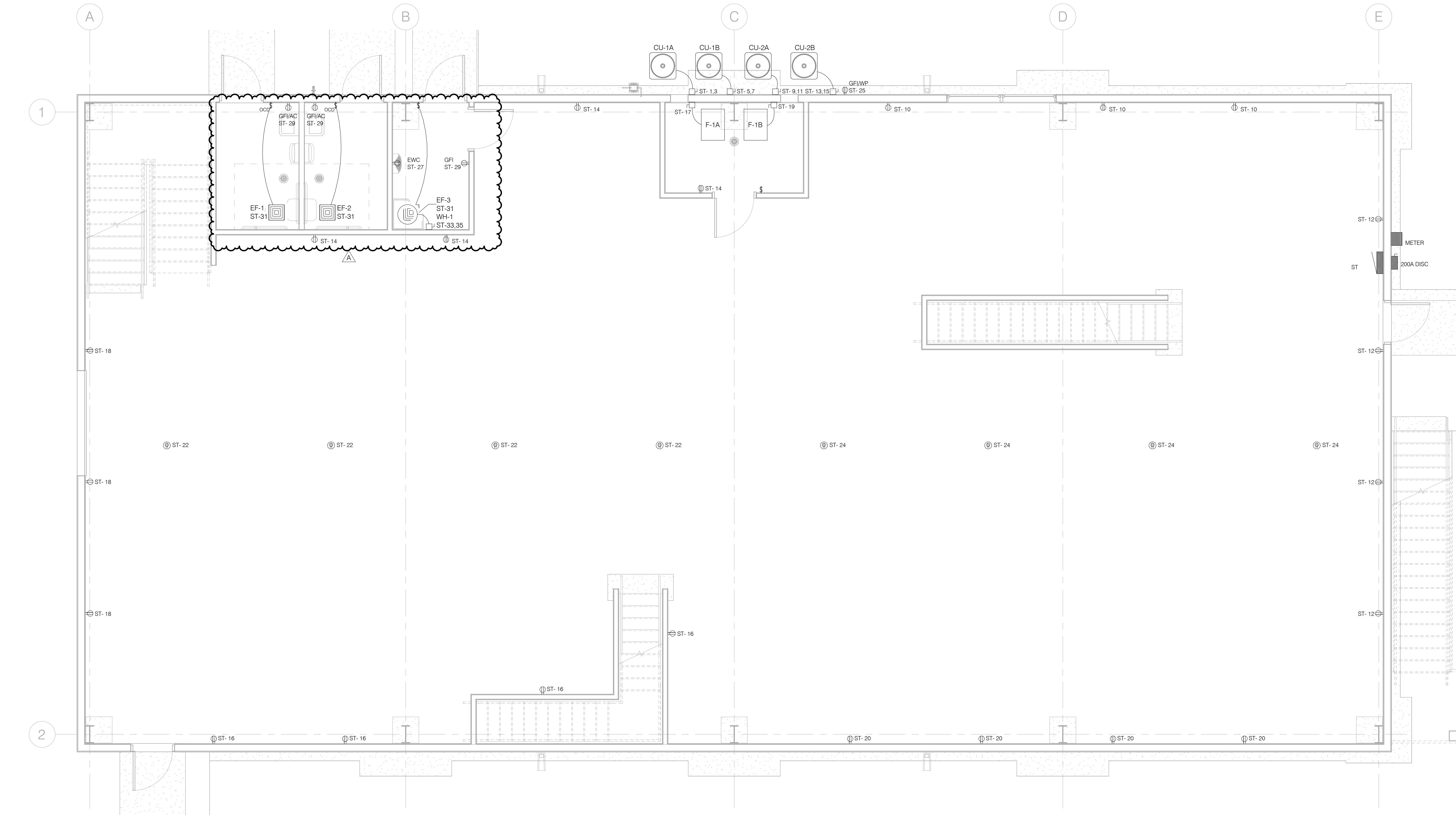


v2023 11/07/24 3:25:31 PM C:\Users\agilleland\OneDrive - Sixmo Inc\Documents\50390123_Safety Facility Simulations Training Building_v2023_Central_agilleland\6456TX1.rvt



POWER GENERAL NOTES:

1. ALL ELECTRICAL ROOMS, TECHNOLOGY/DATA CLOSETS, EXIT STAIRWELLS, AND ELEVATOR EQUIPMENT ROOMS. UNDER NO CIRCUMSTANCES SHALL PIPING, DUCTWORK, OR EQUIPMENT BE INSTALLED IN OR ROUTED THROUGH THESE ROOMS OR AREAS EXCEPT FOR BRANCH PIPING OR DUCTWORK SPECIFICALLY SERVING THE ROOM OR AREA. DEDICATED SPACE SHALL EXTEND VERTICALLY FROM FLOOR TO STRUCTURAL CEILING.
2. REFERENCE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION RELATED TO THE ELECTRICAL INSTALLATION. COORDINATE DEVICE LOCATIONS WITH FURNITURE AND EQUIPMENT BEING PROVIDED.
3. ARCHITECTURAL DRAWINGS HAVE PRIORITY OVER MEP DRAWINGS WITH REGARD TO LOCATIONS OF ALL VISIBLE ELEMENTS AND DEVICES. COORDINATE EXACT DEVICE LOCATIONS WITH DIMENSIONS INDICATED ON ARCHITECTURAL DRAWINGS. REFERENCE ARCHITECTURAL ELEVATIONS AND TYPICAL DEVICE MOUNTING DETAILS AND NOTES.
4. REFERENCE MECHANICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION. COORDINATE ELECTRICAL CONDUIT, WIRE, LIGHT FIXTURES, DEVICES AND EQUIPMENT LOCATIONS WITH MECHANICAL AND PLUMBING EQUIPMENT.
5. PRIOR TO ROUGH-IN, COORDINATE EXACT POWER REQUIREMENTS AND LOW VOLTAGE ROUGH-IN REQUIREMENTS FOR ALL EQUIPMENT AND SYSTEMS BEING FURNISHED BY OWNER AND OTHER TRADES.
6. PROVIDE TEMPORARY POWER AND TEMPORARY, EMERGENCY, EXIT AND GENERAL LIGHTING FOR AREAS OF CONSTRUCTION, AS REQUIRED.
7. WHEN MULTIPLE DEVICES ARE ADJACENT TO EACH OTHER, GANG DEVICES TOGETHER WITHIN COMMON COVERPLATE.



Client:
City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:
Public Safety
Training Facility
Multi-Purpose
Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

A 11.07.2024 ADDENDUM A
09.26.2024 For Construction

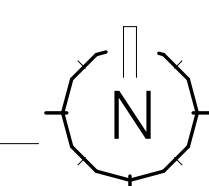
Project Number: 5039 01 23
Drawn by: ACG
Checked by: ACG
Copyright: 2024

Multi-Purpose
Training Area First
Floor Power Plan

E2.01

SHEET SCALE
0" 1/2" 1" 2"

1 Multi-Purpose Training Area First Floor Power Plan
1/4" = 1'-0"

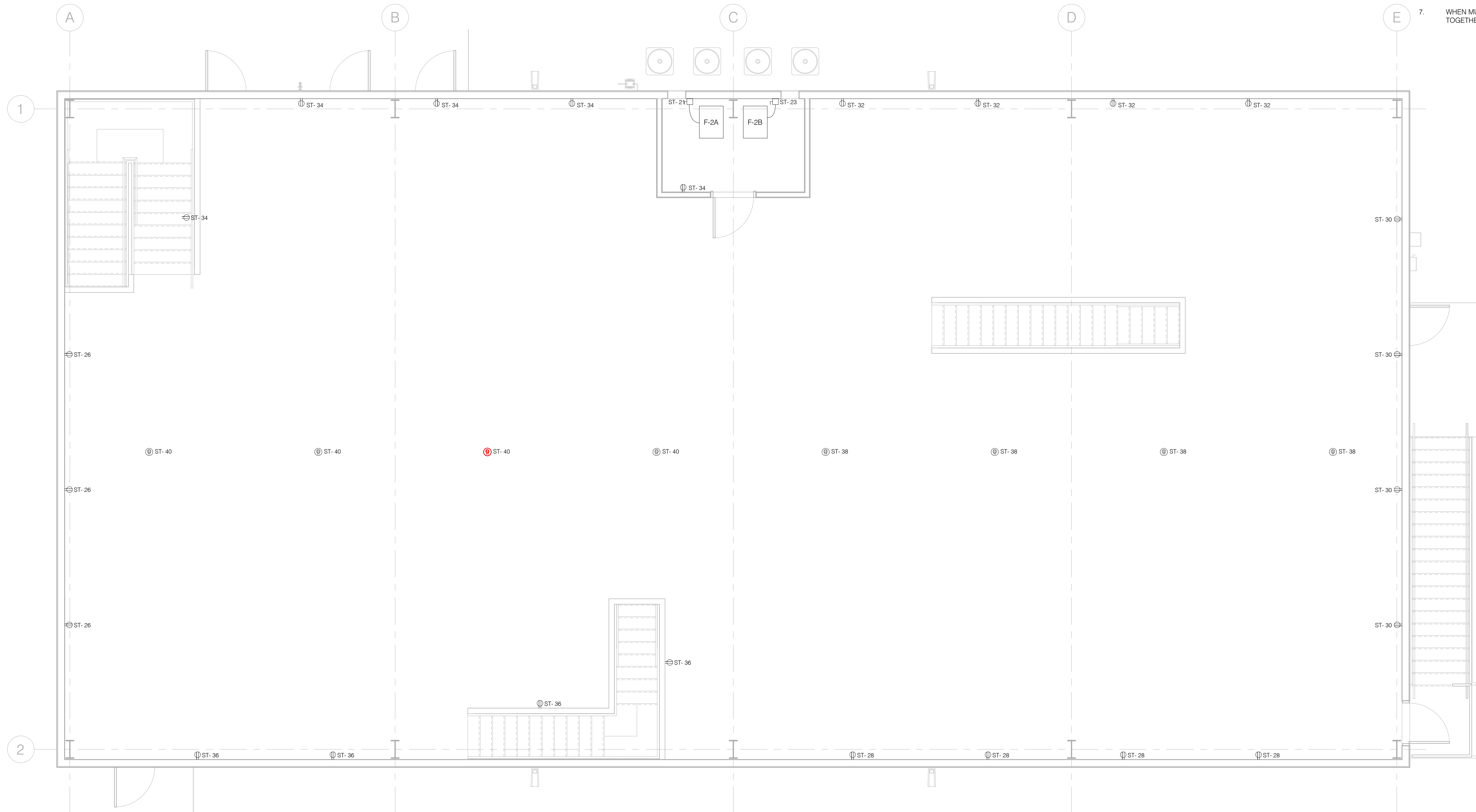


v2023 11/07/24 3:25:32 PM C:\Users\agilleland\OneDrive - Sixmo Inc\Documents\50390123_Safety Facility Simulations Training Building_v2023_Central_agilleland\64581.rvt



POWER GENERAL NOTES:

1. ALL ELECTRICAL ROOMS, TECHNOLOGY/DATA CLOSETS, EXIT STAIRWELLS, AND ELEVATOR EQUIPMENT ROOMS. UNDER NO CIRCUMSTANCES SHALL PIPING, DUCTWORK, OR EQUIPMENT BE INSTALLED IN OR ROUTED THROUGH THESE ROOMS OR AREAS EXCEPT FOR BRANCH PIPING OR DUCTWORK SPECIFICALLY SERVING THE ROOM OR AREA. DEDICATED SPACE SHALL EXTEND VERTICALLY FROM FLOOR TO STRUCTURAL CEILING.
2. REFERENCE ARCHITECTURAL DRAWINGS FOR ADDITIONAL INFORMATION RELATED TO THE ELECTRICAL INSTALLATION. COORDINATE DEVICE LOCATIONS WITH FURNITURE AND EQUIPMENT BEING PROVIDED.
3. ARCHITECTURAL DRAWINGS HAVE PRIORITY OVER MEP DRAWINGS WITH REGARD TO LOCATIONS OF ALL VISIBLE ELEMENTS AND DEVICES. COORDINATE EXACT DEVICE LOCATIONS WITH DIMENSIONS INDICATED ON ARCHITECTURAL DRAWINGS. REFERENCE ARCHITECTURAL ELEVATIONS AND TYPICAL DEVICE MOUNTING DETAILS AND NOTES.
4. REFERENCE MECHANICAL AND PLUMBING DRAWINGS FOR ADDITIONAL INFORMATION. COORDINATE ELECTRICAL CONDUIT, WIRE, LIGHT FIXTURES, DEVICES AND EQUIPMENT LOCATIONS WITH MECHANICAL AND PLUMBING EQUIPMENT.
5. PRIOR TO ROUGH-IN, COORDINATE EXACT POWER REQUIREMENTS AND LOW VOLTAGE ROUGH-IN REQUIREMENTS FOR ALL EQUIPMENT AND SYSTEMS BEING FURNISHED BY OWNER AND OTHER TRADES.
6. PROVIDE TEMPORARY POWER AND TEMPORARY, EMERGENCY, EXIT AND GENERAL LIGHTING FOR AREAS OF CONSTRUCTION, AS REQUIRED.
7. WHEN MULTIPLE DEVICES ARE ADJACENT TO EACH OTHER, GANG DEVICES TOGETHER WITHIN COMMON COVERPLATE.



1 Multi-Purpose Training Area Second Floor Power Plan
1/4" = 1'-0"

Client:
City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:
Public Safety
Training Facility
Multi-Purpose
Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

09.26.2024 For Construction

Project Number: 5039 01 23
Drawn by: ACG
Checked by: ACG
Copyright: 2024

Multi-Purpose
Training Area
Second Floor Power
Plan

E2.02

SHEET SCALE
0" 1/2" 1" 2"



Client:

City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:

Public Safety
Training Facility
Multi-Purpose
Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

A 11.07.2024 ADDENDUM A
09.26.2024 For Construction
Project Number: 5039 01 23
Drawn by: ACG
Checked by: ACG
Copyright: 2024

Electrical Details and
Diagrams

E5.00

SHEET SCALE
0" 1/2" 1" 2"

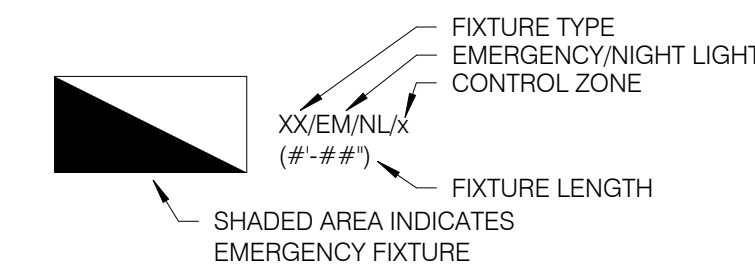
MECHANICAL EQUIPMENT ELECTRICAL CONNECTIONS SCHEDULE													
TYPE	MARK	VOLTAGE	PHASE	LOAD	MCA	MOCF	HP	LOAD CLASSIFICATION	PANEL	CKT #	CONNECTION	FEEDER SIZE	COMMENTS
CU	1A	208 V	1	4118 VA	20 A	25 A		Motor	ST	1.3	NEMA 3R 30A/2P DISCONNECT SWITCH	(2)#10 & (1)#10 GND IN 3/4"C	
CU	1B	208 V	1	4118 VA	20 A	25 A		Motor	ST	5.7	NEMA 3R 30A/2P DISCONNECT SWITCH	(2)#10 & (1)#10 GND IN 3/4"C	
CU	2A	208 V	1	5782 VA	28 A	30 A		Motor	ST	9.11	NEMA 3R 30A/2P DISCONNECT SWITCH	(2)#10 & (1)#10 GND IN 3/4"C	
CU	2B	208 V	1	5782 VA	28 A	30 A		Motor	ST	9.11	NEMA 3R 30A/2P DISCONNECT SWITCH	(2)#10 & (1)#10 GND IN 3/4"C	
EF	1	120 V	1	62 VA	17 A	15 A		Motor	ST	31	DIRECT	(2)#12 & (1)#12 GND IN 3/4"C	INTERLOCK TO LOCAL LIGHTING CONTROL
EF	2	120 V	1	62 VA	17 A	15 A		Motor	ST	31	DIRECT	(2)#12 & (1)#12 GND IN 3/4"C	INTERLOCK TO LOCAL LIGHTING CONTROL
EF	3	120 V	1	62 VA	17 A	15 A		Motor	ST	31	DIRECT	(2)#12 & (1)#12 GND IN 3/4"C	INTERLOCK TO LOCAL LIGHTING CONTROL
F	1B	120 V	1	1116 VA	9 A	15 A		Motor	ST	19	NEMA 1 30A/1P FUSED DISCONNECT	(2)#12 & (1)#12 GND IN 3/4"C	PROVIDE PATHWAY AND WIRE TO REMOTE THERMOSTAT
F	2A	120 V	1	1632 VA	14 A	20 A		Motor	ST	21	NEMA 1 30A/1P FUSED DISCONNECT	(2)#12 & (1)#12 GND IN 3/4"C	PROVIDE PATHWAY AND WIRE TO REMOTE THERMOSTAT
F	2B	120 V	1	1632 VA	14 A	20 A		Motor	ST	21	NEMA 1 30A/1P FUSED DISCONNECT	(2)#12 & (1)#12 GND IN 3/4"C	PROVIDE PATHWAY AND WIRE TO REMOTE THERMOSTAT
WH	1	208 V	1	2500 VA	12 A	15 A		Misc. Power	ST	33.35	NEMA 1 30A/2P FUSED DISCONNECT SWITCH. FUSE SIZE PER NAMEPLATE DETAIL.	(2)#12 & (1)#12 GND IN 3/4"C	

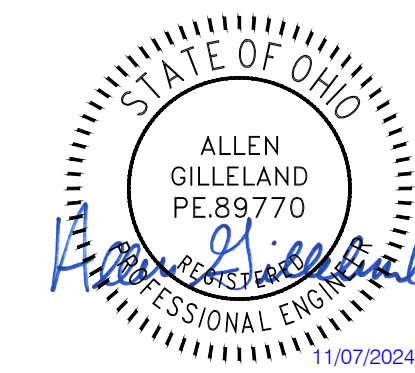
LIGHTING FIXTURE SCHEDULE												
TYPE	LOAD	VOLTAGE	LAMP(S) NO.	LAMP(S) TYPE	LUMENS	COLOR TEMP	CRI	MANUFACTURER	CATALOG NUMBER	DESCRIPTION	FINISH	
A	42 VA	120 V	-	LED	6000	4000 K	80	ORACLE LIGHTING	4 OV1R LED 6000L DIM10 MVOLT 40K 85	4 VANDAL RESISTANT LINEAR STRIP. MOUNT TO UNISTRUT.	WHITE	
A4	65 VA	120 V	-	LED	5500	3500 K	80	CURRENT	CBT24-75CS *ELL10	2X4 BACKLIT TROFFER WITH SWITCHABLE LUMENS. PROVIDE WITH EMERGENCY BATTERY BACKUP WHERE 'EM' IS INDICATED ON PLANS.	WHITE	
AV	42 VA	120 V	-	LED	6000	4000 K	80	ORACLE LIGHTING	4 OV1R LED 6000L DIM10 MVOLT 40K 85 *O-EMG-LED	4 VANDAL RESISTANT LINEAR STRIP. MOUNT TO WALL.	WHITE	
ER	1 VA	120 V	2	LED		0 K	-	COMPASS LIGHTING	CWRD	DUAL HEAD REMOTE EGRESS FIXTURE	GREY	
EX	2 VA	120 V		LED		0 K		COMPASS LIGHTING	CERRC	THERMOPLASTIC EXIT SIGN WITH RED LETTERS AND CHEVRONS. NI-CAD BATTERY WITH REMOTE CAPACITY AND SELF TEST/DIAGNOSTIC BUTTON. COORDINATE QUANTITY OF FACES. CHEVRON ARROWS AND MOUNTING WITH DRAWINGS.	WHITE	
G	42 VA	120 V	-	LED	3600	3500 K	80	CURRENT	MPS 4 40 MW F W ED U *ELL14 CSHC	4 LINEAR SUSPENDED STRIP WITH FLAT LENS AND MEDIUM DISTRIBUTION. PROVIDE WITH CHAIN MOUNTING KIT. PROVIDE WITH EMERGENCY BATTERY BACKUP WHERE 'EM' IS INDICATED ON PLANS.	WHITE	

LIGHTING FIXTURE SCHEDULE NOTES:

- LUMINAIRE INDICATED IN SCHEDULE IS BASIS OF DESIGN. CONTRACTOR MAY SUBMIT ALTERNATE, EQUIVALENT OR BETTER, FIXTURES FOR REVIEW BY OWNER, ARCHITECT AND ENGINEER. FOR ANY LUMINAIRES SUBMITTED OTHER THAN BASIS OF DESIGN LUMINAIRES, A POINT-BY-POINT PHOTOMETRIC PLAN SHALL BE PROVIDED FOR THE PROPOSED LUMINAIRE AS PART OF THE SHOP DRAWING SUBMITTAL. POINT-BY-POINT CALCULATIONS SHALL FOLLOW IESNA RECOMMENDED PRACTICES AND INCLUDE LIGHT LOSS FACTOR (LLF) USED FOR ALL LUMINAIRE TYPES, SURFACE REFLECTANCES, AVERAGE FOOTCANDLE LEVEL, MINIMUM FOOTCANDLE LEVEL(S), AND MAXIMUM-TO-MINIMUM RATIO FOR ALL AREAS WHERE ALTERNATE PROPOSED LUMINAIRE IS TO BE INSTALLED (ONE CALCULATION FOR TYPICAL AREAS IS ACCEPTABLE).
- ALL LUMINAIRES SHALL BE IN ACCORDANCE AND SHALL CONFORM TO THE CONTENTS OF THE LUMINAIRE SCHEDULE AND ALL PROVISIONS OF THE CONTRACT DOCUMENTS.
- THE ELECTRICAL CONTRACTOR SHALL VERIFY ALL CEILING TYPES, LUMINAIRE COLORS, LENGTHS, TRIMS, FINISHES, MOUNTING HARDWARE, CONFIGURATIONS AND HEIGHTS OF SUSPENDED LUMINAIRES, ETC. WITH ARCHITECT PRIOR TO ANY ROUGH-INS AND PLACING FINAL PURCHASE ORDERS.
- VERIFY FINAL LUMINAIRE LOCATIONS WITH OTHER CEILING MOUNTED EQUIPMENT SUCH AS DIFFUSERS, FIRE ALARM DEVICES, SPEAKERS, ETC. WITH ARCHITECTURAL RCP (REFLECTED CEILING PLANS).
- VERIFY EXACT HEIGHT AND LOCATIONS OF ALL WALL MOUNTED AND PENDANT/CABLE MOUNTED LUMINAIRES WITH ARCHITECTURAL ELEVATIONS PRIOR TO ANY ROUGH-IN.
- LUMINAIRES SHALL NOT BE SUPPORTED FROM SUSPENDED CEILING SUPPORTS UNLESS ADDITIONAL CEILING FRAMING AND SUPPORTS ARE ADDED BY THE CEILING CONTRACTOR ACCORDING TO MANUFACTURER'S RECOMMENDATIONS, U.L. LISTINGS, AND ANY APPLICABLE STATE OR LOCAL CODES.
- CONNECTIONS TO RECESSED LUMINAIRES SHALL BE MADE WITH MINIMUM 1/2" FLEXIBLE METAL CONDUIT (FMC) FROM FIXTURE TO OUTLET BOX. LENGTH OF FMC SHALL NOT EXCEED 6'.
- AT THE CONCLUSION OF THE WORK, EACH LUMINAIRE MUST BE CLEANED PER MANUFACTURER'S INSTRUCTIONS, EQUIPPED WITH THE PROPER TYPE, NUMBER OF LAMPS, INCLUDING KELVIN TEMPERATURE AND WATTAGE, AND ALL IN GOOD OPERATING CONDITION.
- FINAL COLOR SELECTION BY ARCHITECT/OWNER AT FIXTURE SUBMITTAL.
- LENSED FIXTURES SHALL HAVE A MINIMUM OF 0.125" THICK ACRYLIC LENS UNLESS OTHERWISE NOTED.

LIGHTING FIXTURE LEGEND





Client:

City of Elyria

131 Court St - Suite 101
Elyria, Ohio 44035

Project:

Public Safety
Training Facility
Multi-Purpose
Training Area

Garden Street
Elyria, Ohio 44035

Revisions:

A 11.07.2024 ADDENDUM A
09.26.2024 For Construction
Project Number: 5039 01 23
Drawn by: ACG
Checked by: ACG
Copyright: 2024

Electrical One-Line
Diagram & Panel
Schedules

E6.00

SHEET SCALE
0" 1/2" 1" 2"

ONE-LINE DIAGRAM NOTES

- THE ELECTRICAL CONTRACTOR SHALL VERIFY ALL POWER COMPANY REQUIREMENTS PRIOR TO BIDDING & INCLUDE THE COST OF ALL ASSOCIATED LABOR, MATERIALS, & CHARGES IN THEIR BID.
- THE ELECTRICAL CONTRACTOR SHALL VERIFY THE AVAILABLE FAULT CURRENT WITH THE UTILITY COMPANY PRIOR TO BIDDING AND PROVIDE EQUIPMENT RATED ACCORDINGLY. SUBMIT FAULT CURRENT CALCULATIONS WITH SHOP DRAWING SUBMITTAL.
- CONDUCTORS SHALL BE COPPER, UNLESS NOTED OTHERWISE.
- ALL BUSSING SHALL BE COPPER.
- GROUNDING ELECTRODE SYSTEM CONDUCTORS SHALL BE COPPER.
- PROVIDE FULL LENGTH VERTICAL BUSSING IN ALL SWITCHBOARDS, DISTRIBUTION PANELS & PANELBOARDS.
- PROVIDE FULL SIZE HORIZONTAL BUSSING IN ALL SWITCHBOARDS.
- ALL CIRCUIT BREAKERS SHALL BE BOLT-ON TYPE. ALL WALL-MOUNTED EQUIPMENT SHALL BE MOUNTED ON 3/4" FIRE RATED BACKBOARD.
- ALL FLOOR-MOUNTED EQUIPMENT SHALL BE MOUNTED ON 4" HIGH CONCRETE HOUSEKEEPING PAD.
- DRY TYPE TRANSFORMERS SHALL BE GROUNDED TO THE BUILDING GROUNDING ELECTRODE SYSTEM PER NEC.
- EXTERIOR MOUNTED ELECTRICAL EQUIPMENT SHALL BE NEMA 3R RATED AND BE FURNISHED WITH HEATERS, THERMOSTAT AND DISCONNECTING MEANS INTEGRAL TO EQUIPMENT.
- PROVIDE NAMEPLATES INDICATING EQUIPMENT DESIGNATION AND DESIGNATION OF SOURCE SUPPLYING THE DISCONNECTING MEANS FOR ALL SWITCHBOARDS, DISTRIBUTION PANELS, PANELBOARDS, ENCLOSURES AND ELECTRICAL CABINETS, ACCESS DOORS/PANELS FOR CONCEALED ELECTRICAL EQUIPMENT, ENCLOSED SWITCHES/CIRCUIT BREAKERS/CONTROLLERS, POWER-TRANSFER DEVICES, PUSH-BUTTONS, CONTACTORS, LIGHTING CONTROL SYSTEMS, INVERTERS, GENERATORS, UPS, MONITORING EQUIPMENT, STARTERS, DISCONNECT SWITCHES, METER SOCKETS, RELAYS, TRANSFORMERS, AND JUNCTION BOXES GREATER THAN 4 11/16" SQUARE. PROVIDE NAMEPLATES ON BRANCH SWITCHES/BREAKERS OF SWITCHBOARDS AND DISTRIBUTION PANELS. NAMEPLATES SHALL BE ENGRAVED LAMACOID, 5/32" LETTERS CENTERED AT TOP OF PANEL AND SECURED WITH ADHESIVE TYPE FASTENERS. NORMAL POWER SHALL BE LABELED WITH WHITE BACKGROUND, BLACK LETTERS; EMERGENCY POWER AND MAIN SERVICE NAMEPLATE DISCONNECTS WITH RED BACKGROUND, WHITE LETTERING.
- COORDINATE SPACE WITH ALL OTHER TRADES TO MAINTAIN ALL CODE-REQUIRED CLEARANCES.
- REFER TO ELECTRICAL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
- THE ELECTRICAL CONTRACTOR SHALL PROVIDE FINAL SETTINGS REQUIRED FOR ALL ADJUSTABLE/ELECTRONIC TYPE CIRCUIT BREAKERS WITH LONGTIME, SHORT TIME, GF, INSTANTANEOUS, ETC. THE ELECTRICAL CONTRACTOR SHALL PROVIDE FINAL COORDINATION STUDY.
- PROPER CLEARANCE MUST BE MAINTAINED ABOUT ELECTRICAL EQUIPMENT PER NEC. FIELD VERIFY EXACT MOUNTING SPACE AVAILABLE IN ELECTRICAL ROOM / AREA PRIOR TO INSTALLATION OF ELECTRICAL EQUIPMENT.
- ELECTRICAL CONTRACTOR SHALL BALANCE PANELS AND ELECTRICAL EQUIPMENT TO ±10% BETWEEN PHASES: A/B, B/C, A/C REGARDLESS OF CIRCUITING INDICATED.
- HVAC CIRCUIT BREAKERS TO BE "HACR" TYPE WHERE REQUIRED BY EQUIPMENT NAMEPLATE PER NEC.
- FEEDER ROUTING IS DIAGRAMMATIC ONLY. ACTUAL ROUTING OF FEEDERS (OVERHEAD OR UNDERGROUND) IS THE RESPONSIBILITY OF THE ELECTRICAL CONTRACTOR.
- PROVIDE ARC ENERGY REDUCTION AS APPLICABLE:
 - WHERE BREAKERS ARE UTILIZED WITHIN ELECTRICAL DISTRIBUTION EQUIPMENT, THE ELECTRICAL CONTRACTOR SHALL PROVIDE BREAKERS EQUIPPED WITH ADJUSTABLE INSTANTANEOUS TRIP SETTING TO COMPLY WITH NEC 240.87 ARC ENERGY REDUCTION. THE ADJUSTABLE INSTANTANEOUS TRIP SETTING OPTION SHALL BE PROVIDED WHERE THE HIGHEST CONTINUOUS TRIP SETTING FOR WHICH THE ACTUAL OVERCURRENT DEVICE INSTALLED IN A CIRCUIT BREAKER IS RATED OR CAN BE ADJUSTED IS 1200A OR HIGHER.
 - WHERE FUSES ARE UTILIZED WITHIN ELECTRICAL DISTRIBUTION EQUIPMENT, THE ELECTRICAL CONTRACTOR SHALL PROVIDE FUSES EQUIPPED WITH CLEARING TIME OF 0.7 SECONDS OR LESS AT AVAILABLE ARCING CURRENT TO COMPLY WITH NEC 240.67 ARC ENERGY REDUCTION. THIS SHALL BE PROVIDED WHERE THE FUSE IS RATED AT 1200A OR HIGHER.
 - PROVIDE PERFORMANCE TESTING PER NEC FOR ARC ENERGY REDUCTION SYSTEM. ENGAGE A FACTORY AUTHORIZED SERVICE REPRESENTATIVE TO PERFORM TESTING AND PROVIDE REQUIRED DOCUMENTATION. PROVIDE COPY OF TESTING AND DOCUMENTATION TO EOR AND LOCAL AHJ.
 - THE ELECTRICAL CONTRACTOR SHALL COMPLY WITH NEC ARTICLE 110.16 FOR LABELING OF PANELS FOR ARC FLASH HAZARD WARNING AS WELL AS FOLLOWING REQUIRED SAFETY PRECAUTIONS WHEN SERVICING OR MAINTAINING ELECTRICAL EQUIPMENT.
 - PROVIDE SURGE-PROTECTIVE DEVICE (SPD) FOR ALL DWELLING UNIT SERVICES. INSTALLATION SHALL COMPLY WITH NEC 230.67.

FEEDER NOTES

- ALL FEEDER AND BRANCH CIRCUIT CONDUCTORS INDICATED ON THE PLANS AND ONE-LINE DIAGRAM ARE BASED UPON THE USE OF COPPER CONDUCTORS, UNLESS NOTED OTHERWISE. "AL" - WITHIN THE FEEDER SIZE INDICATES ALUMINUM CONDUCTORS SPECIFIED. IF APPROVED FOR USE BY THE OWNER, THE CONTRACTOR MAY FURNISH AND INSTALL ALUMINUM CONDUCTORS FOR THE FOLLOWING:
 - SECONDARY ELECTRIC SERVICE LATERALS
 - FEEDERS RATED 100A AND LARGER.
- ALL FEEDERS AND BRANCH CIRCUIT CONDUCTORS SHALL BE COPPER, UNLESS OTHERWISE INDICATED.
- ALUMINUM CONDUCTORS ARE PROHIBITED FROM BEING USED TO SERVE ANY EQUIPMENT THAT SPECIFICALLY CALLS FOR THE USE OF COPPER CONDUCTORS OR PROHIBITS THE USE OF ALUMINUM CONDUCTORS WITHIN THE EQUIPMENT'S RESPECTIVE WRITTEN INSTALLATION INSTRUCTIONS.
- ALUMINUM FEEDER SIZES, INDICATED ON PLANS AND ONE-LINE DIAGRAM, ARE BASED ON STABILOYE TYPE XHHW-2 COMPACT STRANDED ALUMINUM CONDUCTORS (AA-8000 SERIES ALUMINUM ALLOY).
- ALL LUG TERMINATIONS ASSOCIATED WITH ALUMINUM CONDUCTORS SHALL BE "HI-PRESS" COMPRESSION TYPE AS MANUFACTURED PER THE ELECTRICAL DISTRIBUTION EQUIPMENT MANUFACTURERS WRITTEN INSTRUCTIONS FOR THE INSTALLATION OF COMPRESSION CONNECTIONS.
- ELECTRICAL DISTRIBUTION EQUIPMENT AND OVERCURRENT DEVICES (NEW OR EXISTING) SHALL BE MANUFACTURED (NEW) OR MODIFIED IN FIELD (EXISTING) USING AN APPROVED MANUFACTURERS KIT TO ACCEPT THE APPROPRIATELY RATED, QUANTITY, TYPE AND SIZE OF COMPRESSION LUGS FOR THE INSTALLATION OF THE ALUMINUM CONDUCTORS BEING FURNISHED AND INSTALLED.
- WHERE RECOMMENDED BY WIRE AND/OR TERMINATION MANUFACTURERS, FURNISH AND INSTALL OXIDE INHIBITOR AT TERMINATIONS.
- THE GROUNDING ELECTRODE SYSTEM SHALL UTILIZE COPPER CONDUCTORS.
- IF ALUMINUM CONDUCTORS ARE UTILIZED, BASED ON THE ABOVE CRITERIA, THE ALUMINUM CONDUCTOR SIZES BEING FURNISHED SHALL BE INCREASED TO MEET OR EXCEED THE RATINGS OF THE SPECIFIED COPPER FEEDER CHARACTERISTICS, SUCH AS AMPERAGE AND VOLTAGE DROP. THE CONDUIT, ASSOCIATED WITH EACH OF THE FURNISHED ALUMINUM FEEDERS, SHALL ALSO BE INCREASED IN SIZE TO COMPLY WITH CODE FOR THE QUANTITY AND SIZE OF ALUMINUM CONDUCTORS BEING UTILIZED. THE SHORT CIRCUIT RATINGS OF THE ELECTRICAL DISTRIBUTION EQUIPMENT SHALL BE INCREASED, AS REQUIRED, TO ACCOMMODATE THE HIGHER AVAILABLE SHORT CIRCUIT RATING AT THE RESPECTIVE EQUIPMENT'S TERMINALS DUE TO ALUMINUM CONDUCTORS BEING UTILIZED.

PANELBOARD DESIGNATION: ST														
Location: TRAINING AREA 101				Volts: 120/208 Wye				A.I.C. Rating: 22K AIC; PER STUDY						
Supply From:				Phases: 3				Mains Type: MLO						
Mounting: SURFACE				Wires: 4				Mains Rating: 200 A						
Enclosure: NEMA 3R								Bus Rating: 200 A						
Notes:														
Notes	CKT	Circuit Description	Trip	Poles	Load Class	A	B	C	Load Class	Poles	Trip	Circuit Description	CKT	Notes
	1	CU-1A	25	2	M	2.1	0.7		L	1	20	LTG - 1ST FLOOR	2	
--	3	--	--	--	--			2.1	0.8			LTG - 1ST FLOOR	4	
	5	CU-1B	25	2	M			2.1	0.9			LTG - 2ND FLOOR	6	
--	7	--	--	--	--	2.1	0.7					LTG - 2ND FLOOR	8	
	9	CU-2A	30	2	M			2.9	0.5			REC - 1ST FLOOR	10	
--	11	--	--	--	--			2.9	0.7			REC - 1ST FLOOR	12	
	13	CU-2B	30	2	M	2.9	0.7					REC - 1ST FLOOR	14	
--	15	--	--	--	--			2.9	0.7			REC - 1ST FLOOR	16	
	17	F-1A	15	1	M			1.1	0.5			REC - 1ST FLOOR	18	
	19	F-1B	15	1	M	1.1	0.7					REC - 1ST FLOOR	20	
	21	F-2A	20	1	M			1.6	0.7			REC - 1ST FL CEILING	22	
	23	F-2B	20	1	M			1.6	0.7			REC - 1ST FL CEILING	24	
	25	REC - EXTERIOR	20	1	R	0.2	0.5					REC - 2ND FLOOR	26	
	27	EWG	20	1	R			0.1	0.7			REC - 2ND FLOOR	28	
	29	REC-RESTROOM	20	1	R			0.5	0.7			REC - 2ND FLOOR	30	
	31	LTG-RESTROOMS	20	1	M, L	0.6	0.7					REC - 2ND FLOOR	32	
	33	WH-1	20	2	X			1.3	0.9			REC - 2ND FLOOR	34	
--	35	--	--	--	--			1.3	0.7			REC - 2ND FLOOR	36	
	37	SPARE	20	1	--	0.0	0.7					REC - 2ND FL CEILING	38	
	39	SPARE	20	1	--	0.0	0.7					REC - 2ND FL CEILING	40	
	41	SPARE	20	1	--			0.0	0.0			SPARE	42	
VA:						13665	15969	13771						
Amps:						114	133	115						
Load Classification	Connected Load	NEC Demand Factor	Estimated Demand	Panel Totals										
Lighting	3441 VA	100.00%	3441 VA	Connected Load:	43404 VA									
Motor	25484 VA	100.00%	25484 VA	Estimated Demand Load:	42414 VA									
Misc. Power	2500 VA	100.00%	2500 VA	Connected Current:	120 A									
Receptacle	11980 VA	91.74%	10990 VA	Estimated Demand Current:	118 A									

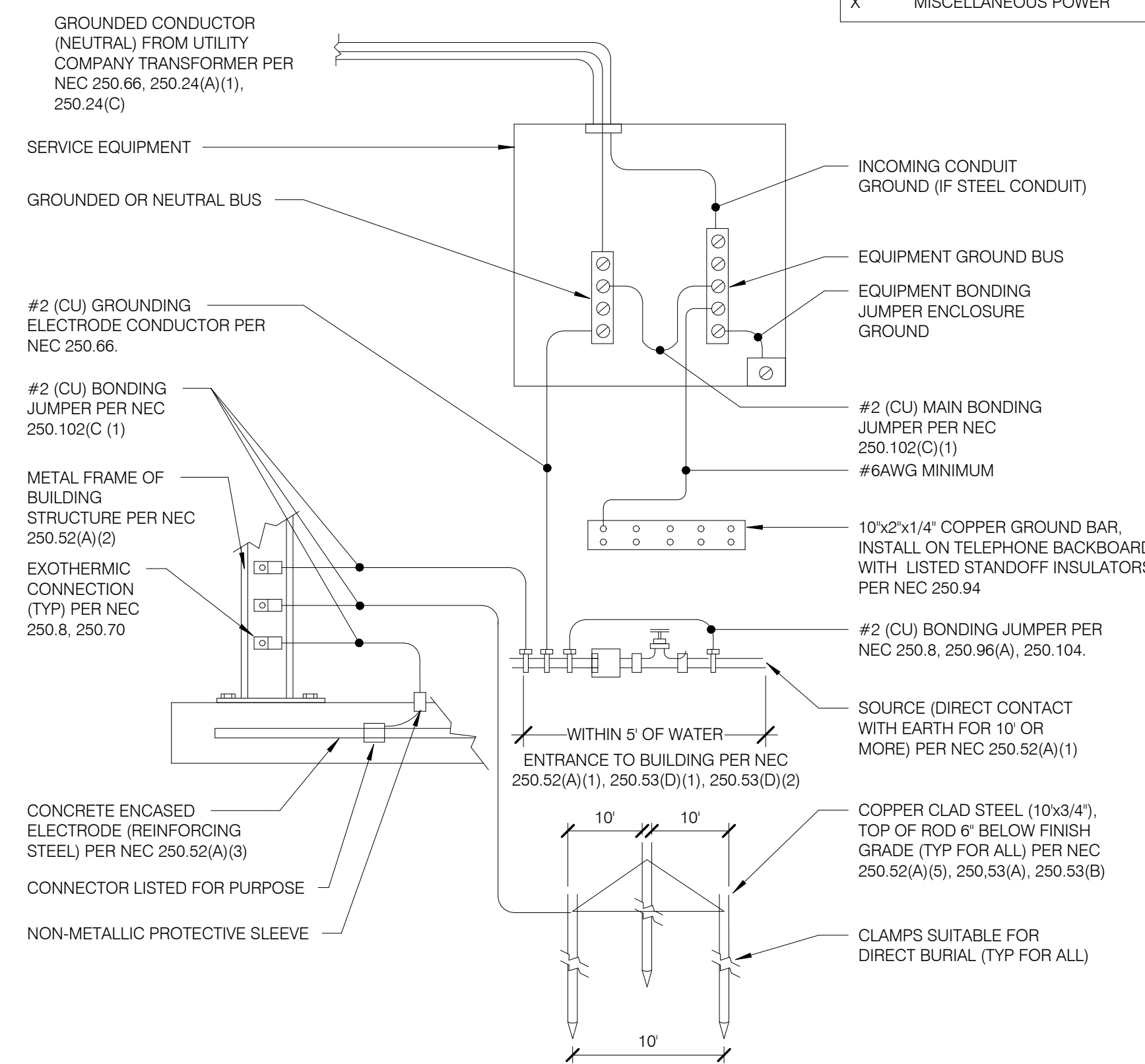
PANELBOARD NOTES:

ALL BREAKERS SHALL BE 20A/1P, HACR RATED, UNLESS OTHERWISE NOTED.

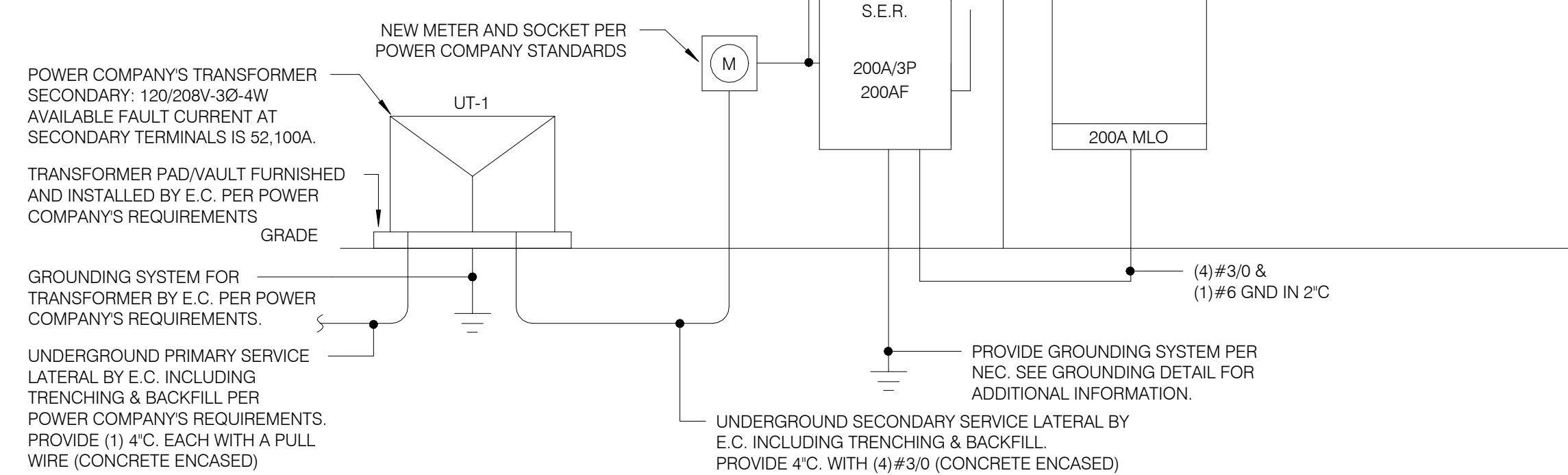
- SWD RATED
- ARC FAULT
- GFI - 5mA FOR PERSONNEL - 30mA FOR EQUIPMENT
- SHUNT-TRIP TYPE
- COMBINATION ARC FAULT/GFI
- LOCK-ON CLIP
- LOCK-ON CLIP WITH RED MARKING
- REMOTE GFI MODULE MOUNTED ADJACENT TO PANELBOARD
- CIRCUIT ROUTED THROUGH LIGHTING CONTROL PANEL
- HANDLE TIES FOR MULTIPLEXED CIRCUITS
- NEW BRANCH CIRCUIT USING EXISTING BREAKER
- NEW CIRCUIT BREAKER IN EXISTING PANEL

LOAD CLASSIFICATION ABBREVIATIONS:

A	APPLIANCE
C	COOLING
EL	ELEVATOR
H	HEATING
HVAC	HVAC
K	KITCHEN
L	LIGHTING
M	MOTOR
R	RECEPTACLE
V	VENTILATION
X	MISCELLANEOUS POWER



1 One-Line Diagram
12" = 1'-0"



2 Grounding & Bonding Detail
12" = 1'-0"