

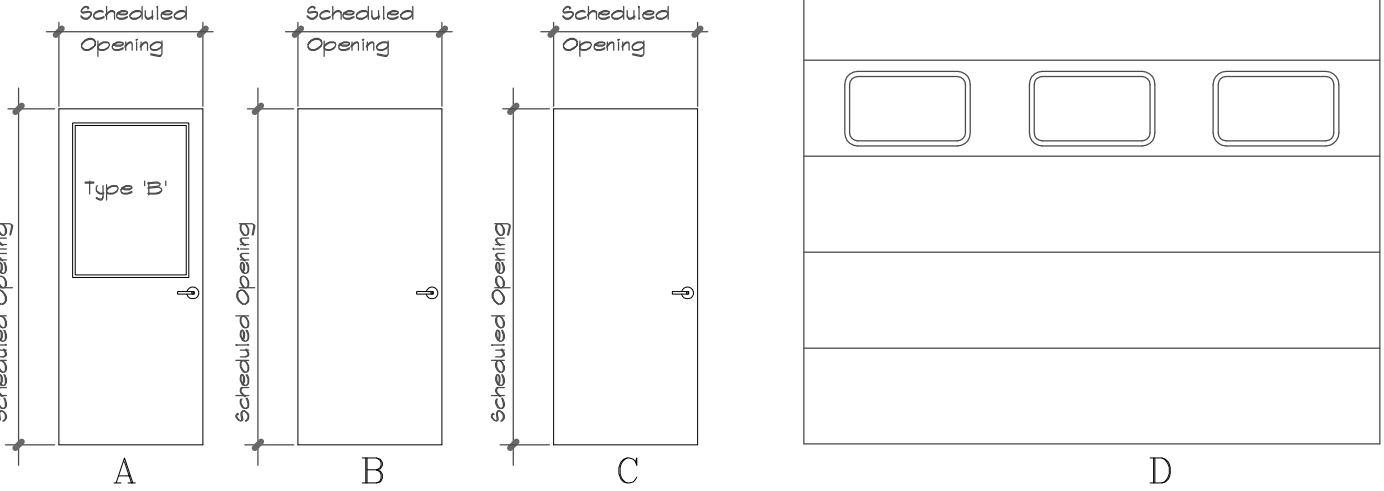
		DOOR SCHEDULE																
		DOOR DATA															FRAME DATA	
		HARDWARE															HARDWARE	
		DOOR SYMBOL	NEW	EXISTING	WIDTH	HEIGHT	THICKNESS	NUMBER OF LEAFS	DOOR TYPE	MATERIAL	GLASS TYPE	GLASS DETAILS	GLASS	GLASS	GLASS	GLASS	GLASS	GLASS
FLOOR	NO.	DOOR DATA															FRAME DATA	
		DOOR SYMBOL	NEW	EXISTING	WIDTH	HEIGHT	THICKNESS	NUMBER OF LEAFS	DOOR TYPE	MATERIAL	GLASS TYPE	GLASS DETAILS	GLASS	GLASS	GLASS	GLASS	GLASS	GLASS
First Floor	Ext/ Passage	001	◆		3'-0"	7'-0"	1 3/4"	1	A	IML	D	MB-1	SI	HM	16	1	◆	
	Passage / Bunk room	002	◆		3'-0"	7'-0"	1 3/4"	1	B	HM			MB-2	HM	16	4	◆	
	Passage / Locker Rm.	003	◆		3'-0"	7'-0"	1 3/4"	1	B	HM			MB-2	HM	16	4	◆	
	Locker Rm. / Shower	003A	◆		3'-0"	7'-0"	1 3/4"	1	B	HM			MB-2	HM	16	4	◆	
	Passage / Toilet	004	◆		3'-0"	7'-0"	1 3/4"	1	B	HM			MB-2	HM	16	4	◆	
	Passage / Office	005	◆		3'-0"	7'-0"	1 3/4"	1	C	HM	C		MB-2	HM	16	4	◆	
	Office / Meeting	006	◆		3'-0"	7'-0"	1 3/4"	1	C	HM	C		MB-2	HM	16	4	◆	
	Meeting / Breakroom	007	◆		3'-0"	7'-0"	1 3/4"	1	C	HM	C		MB-2	HM	16	4	◆	
	Breakroom / Garage	007A	◆		3'-0"	7'-0"	1 3/4"	1	C	HM	C		MB-2	HM	16	3	◆	
	Garage / Tool Crib	008	◆		3'-0"	7'-0"	1 3/4"	1	E									
	Garage / Ext. Overhead Door	009	◆		12'-0"	12'-0"	2"		D				MB-4					
	Garage / Ext. Overhead Door	010	◆		12'-0"	12'-0"	2"		D				MB-4					
	Garage / Ext. Overhead Door	011	◆		3'-0"	7'-0"	1 3/4"	1	A	IML	D	MB-1	SI	HM	16	1	◆	
	Garage / Ext. Overhead Door	012	◆		12'-0"	12'-0"	2"		D				MB-4					
	Garage / Ext. Overhead Door	013	◆		12'-0"	12'-0"	2"		D				MB-4					
	Garage / Ext. Overhead Door	014	◆		12'-0"	12'-0"	2"		D				MB-4					
	Garage / Ext. Overhead Door	015	◆		12'-0"	12'-0"	2"		D				MB-4					
Mezzanine																		

Abbreviations: IML - Insulated Metal  
UD - Uncoated Steel  
HM - Hollow Metal Painted

Keying: Architectural Hardware Consultant (AHC) to make contact with Owner and Develop keying system in full accordance with owner requirements.

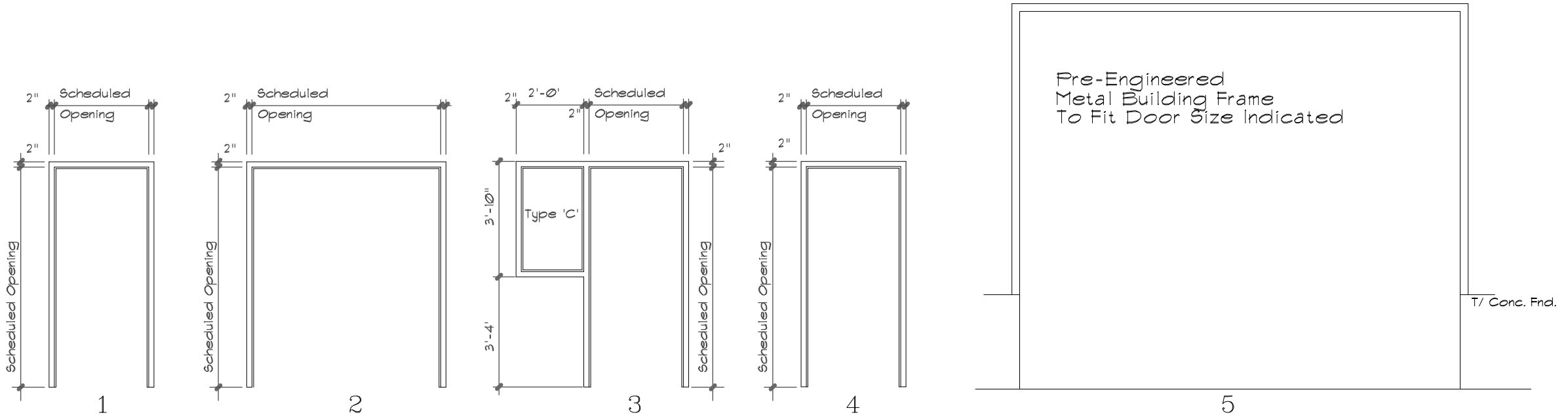
HARDWARE SCHEDULE:	
HU-1: (Typical Exterior Exit Doors)	
Hinges:	Stanley: FBB-193 x 4 1/2" x 4 1/2" x ANS1 A5111 (U532D)
Exit Device:	Corbin / Russwin: ED 3000, Rim Type, rated x Classroom F20 / Re-entry Newport N355 x 616 (push bar / lever set) x Standard Strike x
Closer:	Corbin / Russwin: DC 2610 Series Non-handed x A2 x 689 x M-15 x Through Bolts
Weatherstripping:	Fencko: Head & Jamb Weatherstripping - 303AS 4 514V Susep
Threshold:	Fencko: 2148A (set in full bed of sealant)
HU-2: (Typical Office/Entrance)	
Hinges:	Stanley: FBB-193 x 4 1/2" x 4 1/2" x ANS1 A5111 (U532D)
lockset:	Corbin / Russwin: CL3351 Entrance or Office F103 x Newport NZD x 626 x Standard Strike x Keyed to Owner's requirements.
Closer:	Corbin / Russwin: DC 6210 Series Non-handed x A2 x 689 x M-15 x Through Bolts
Bumper:	Rockwood (wall type) * 440 (for interior doors only)
Kick Plate:	Rockwood * K2060 x 36"0" Th. Kydex' x 1" less than door width x 12" high 1/2" above door bottom.
HU-3: (Privacy Set)	
Hinges:	Stanley: FBB-193 x 4 1/2" x 4 1/2" x ANS1 A5111 (U532D)
lockset:	Corbin / Russwin: CL3370 x Privacy Set, F16 x Newport NZD x 626 x Standard Strike x Keyed to Owner's requirements
Closer:	Corbin / Russwin: DC 6210 Series Non-handed x A2 x 689 x M-15 x Through Bolts
Kick Plate:	Rockwood * K2060 x 36"0" Th. Kydex' x 1" less than door width x 12" high 1/2" above door bottom.
HU-4: (Typical Passage)	
Hinges:	Stanley: FBB-193 x 4 1/2" x 4 1/2" x ANS1 A5111 (U532D)
lockset:	Corbin / Russwin: CL 3351 Storeroom, F86 x 626 x Newport NZD x Standard Strike
Closer:	Corbin / Russwin: DC 6210 Series Non-handed x A2 x 689 x M-15 x Through Bolts
Bumper:	Rockwood (floor type) * 442
Kick Plate:	Rockwood * K2060 x 36"0" Th. Kydex' x 1" less than door width x 12" high 1/2" above door bottom.
HU-5: (Store Room)	
Hinges:	Stanley: FBB-193 x 4 1/2" x 4 1/2" x ANS1 A5111 (U532D)
lockset:	Corbin / Russwin: CL 3351 Storeroom, F86 x 626 x Newport NZD x Standard Strike
Closer:	Corbin / Russwin: DC 6210 Series Non-handed x A2 x 689 x M-15 x Through Bolts
Bumper:	Rockwood (floor type) * 442

GLAZING:	
1	Clear Float Glass 1/4"
2	Unleaded Glass Type II - 1/4"
3	Tempered Safety Glass 1/4" Double Strength
4	Insulated Glass 1" overall thickness - Tempered Safety Glass
5	Insulated Glass 1" overall thickness - Heat Treated



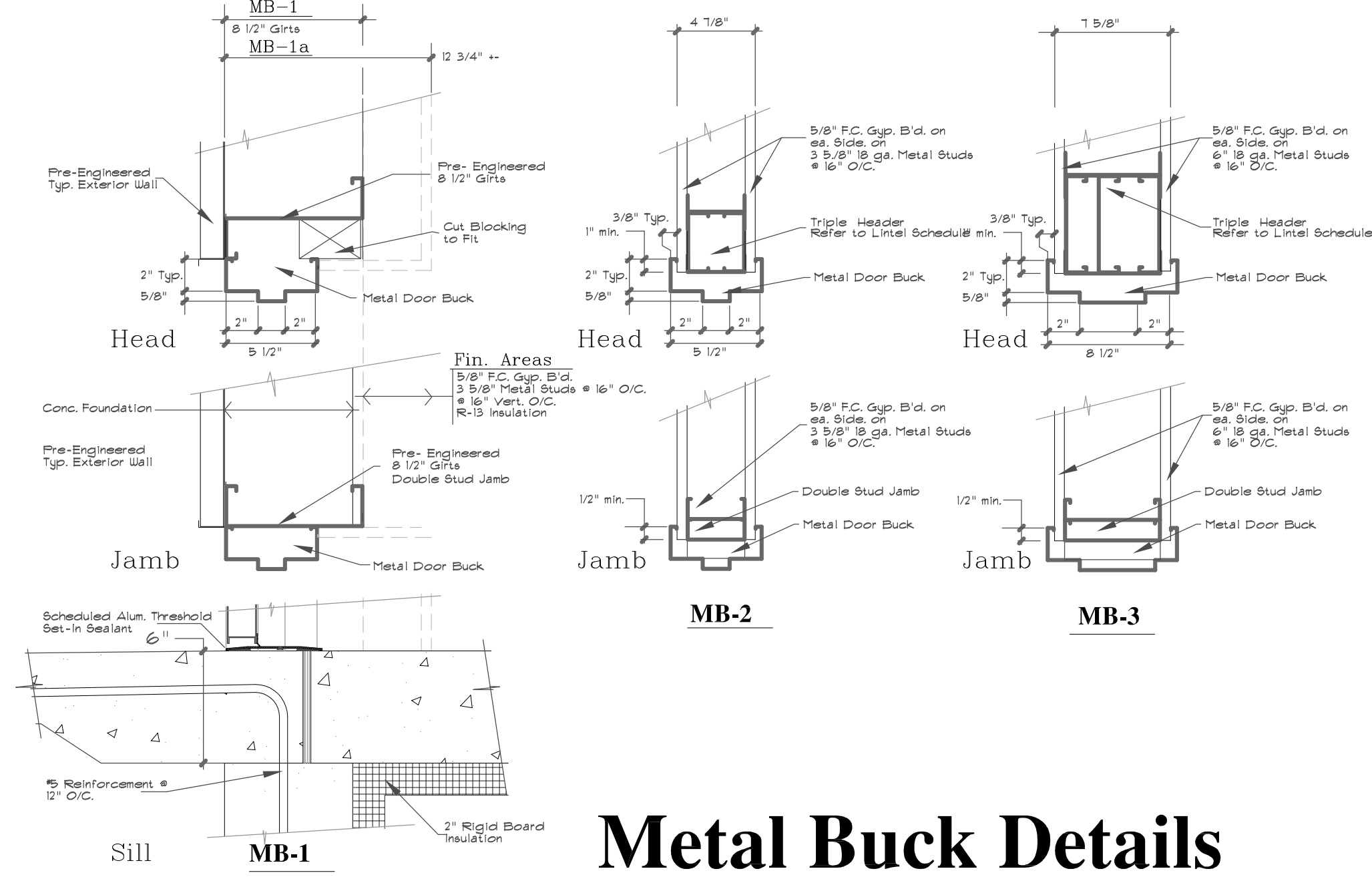
DOOR ELEVATIONS

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



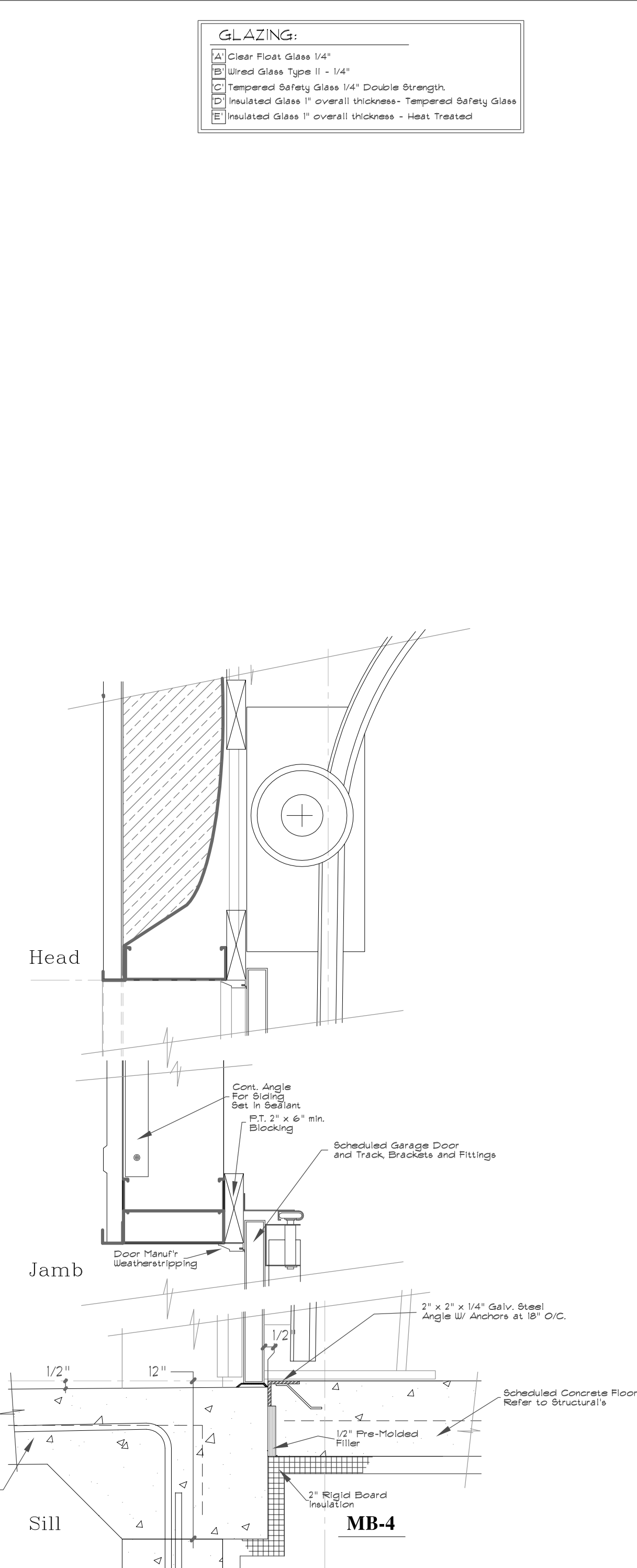
FRAME ELEVATIONS:

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



Metal Buck Details

SCALE: 1 1/2" = 1'-0"



ROOM FINISH SCHEDULE		FLOOR															BASE	
NO.	ROOM NAMES	FLOOR															BASE	
		Expanded Concrete	1" CT Polym. / 1" Gypsum	1" Gypsum	1" Gypsum	1" Gypsum	1" Gypsum	1" Gypsum	1" Gypsum	1" Gypsum	1" Gypsum	1" Gypsum	1" Gypsum	1" Gypsum	1" Gypsum	1" Gypsum	Expanded Concrete	Expanded Concrete
F101	Passage																	
F102	Bunk Rm.																	
F103	Locker Rm.																	
F103A	Shower																	
F104	Toilet																	
F105	Office																	
F106	Meeting																	
F107	Breakroom																	
F108	Tool Crib																	
F109	Garage																	
	Stairs to Mezzanine																	
M201	Storage Mezzanine																	

Contractor Note: All new miscellaneous metals, 2 Finish coats in addition to fabrication primer.

## Scheduled Window Specification:

The Window & system indicated is based on:

Kaunser Double-Hung AA 3350 IsoPort Thermally Separated DH  
Other window manufacturer's with matching shapes, dimensions,  
Performance characteristics and warranty may be considered equal  
once all equivalent information is provided.

Class / Grade: Class CW-FG50-H / AW- FG50 -H  
Testing Standard: AAMA-WDMA/GSA/01/1.9.2/ A440-08  
Frame Depth: 3 1/2" Overall Frame  
Typical Thickness: 0.70" Nominal  
Standard Infill: 1"  
Options: Mullins Between Glass  
Exterior and Interior Finning and Trims  
Strap Anchors

Fixed Window Product Performance  
Air-Infiltration NAFS-08  
Water Resistance NAFS-08  
Design Load NAFS-08  
Thermal Transmittance AAMA 501 NFRC 100  
Condensation Resistance AAMA 1503  
Condensation Performance Index GSA A440.2  
Sound Transmittance ASTM E 1425 ASTM E 1332

Finishes:  
Factory Applied Powder Coated in Manufacturer's Standard Line of Colors

Fabrication and Installation:

- Factory assembled and glazed
- Following all requirements for full warranty and performance requirements.
- Submit Full Set of shop drawings with all dimensions and clearance requirements.
- Minimum 4 sets of shop drawings and specification / warranty / installation methods.
- Provide color chart for selection by Owner.
- All Required fasteners for location and building materials / conditions.
- Provide General Contractor and Metal Building Fabricator All pertinent information needed, for Rough Openings and required support and anchorage.
- Contractor / Installer to follow all requirements for installation and warranty compliance, established by the Window Manufacturer.

## Interior Finishes and Trims

### Garage:

- Exposed metal building components  
Painted wood trims, in shapes indicated.  
Wood: Yellow Poplar, Min. 3/4" thick, by 1 1/2" to 2" in width  
Tight fitted jointry, filled and painted (1 primer - 2 finished Semi-gloss)

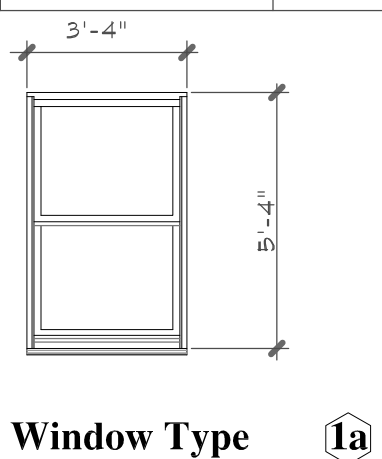
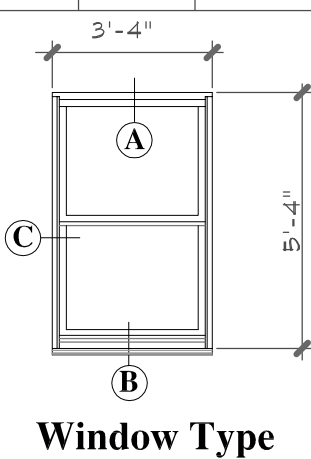
### Office Areas:

- Interior surfaces: Painted gypsum board  
Painted wood trims, in shapes indicated.  
Wood: Yellow Poplar, Min. 3/4" thick, by 1 1/2" to 2" in width  
Tight fitted jointry, filled and painted (1 primer - 2 finished Semi-gloss)

All connection between trim and metal building / gypsum board closed with continuous bead of sealant.

All voids between building construction and window / trim filled with low expansion type foam insulation.  
Low expansion foam sealant.

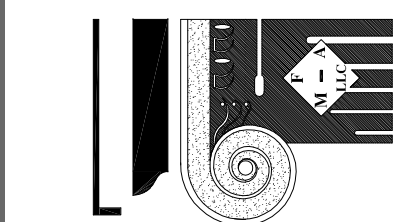
WINDOW SCHEDULE				
WINDOW TYPE	MATERIAL	TYPE	UNIT DIMENSION	REMARKS
1	Pre-Finished Aluminum	Double Hung w/ Mullin Bars	3'-0" u x 5'-0" H	In Garage Area
1a	Pre-Finished Aluminum	Double Hung w/ Mullin Bars	3'-0" u x 5'-0" H	In Office Area



## Window Details at At Garage & Office Area

Scale: 1 1/2" = 1'-0"

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Norwich, CT 06360  
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Town of Voluntown  
Public Works Garage  
96 Gate Street  
Voluntown, CT.

## Schedules & Details

### Door & Hardware Schedule & Details

### Room Finish Schedule Window Details

PROJECT NO.: 2015-10-08

SCALE: AS NOTED

DRAWN BY: FRED M.

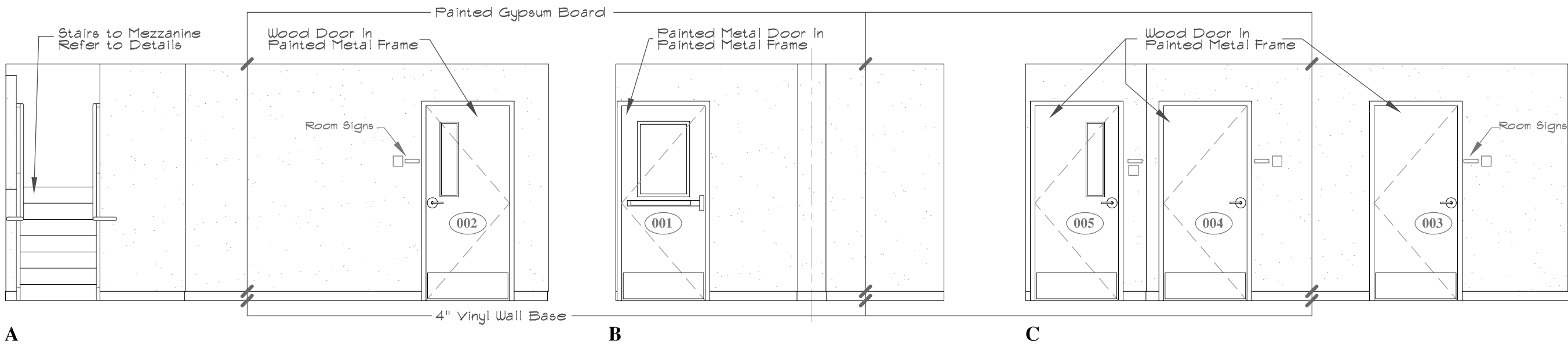
CHECKED BY:

DATE: Revised

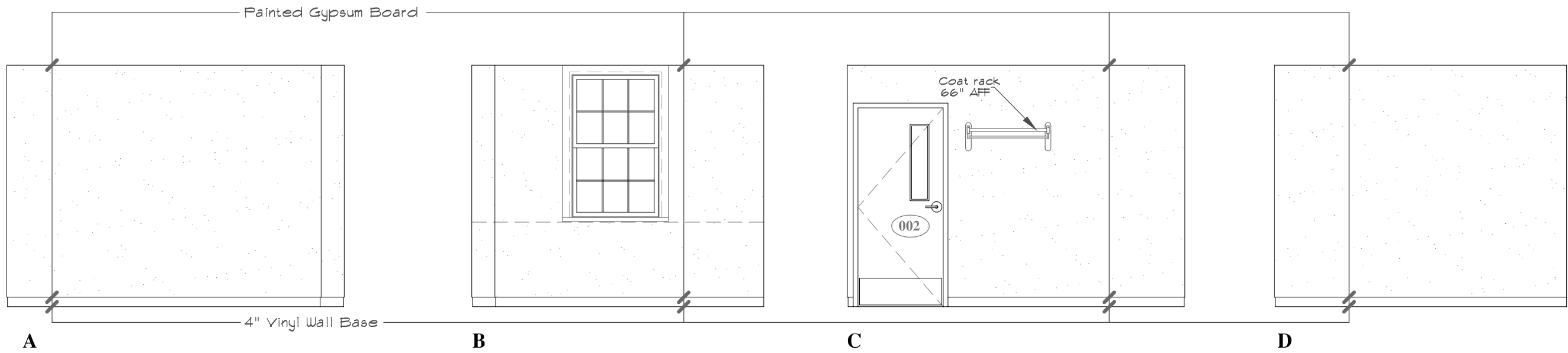
March 20, 2018

SHEET 1 OF 1

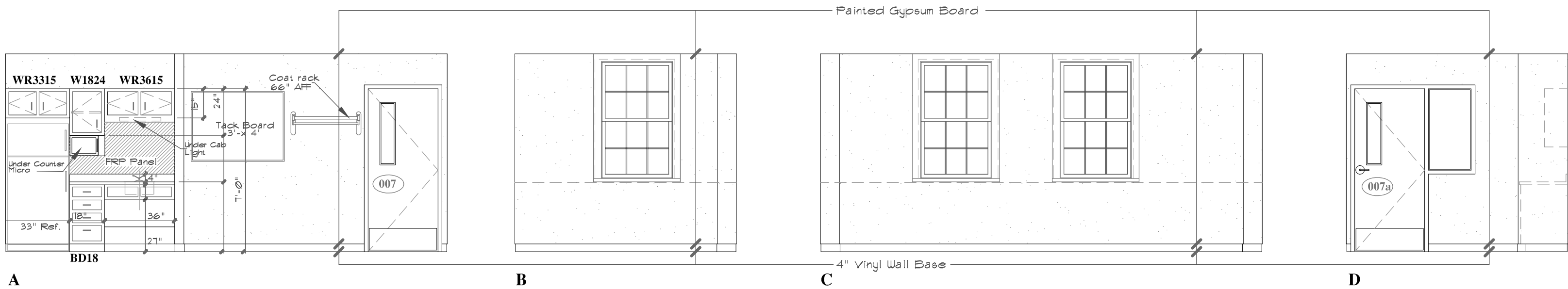
A3



Passage F01



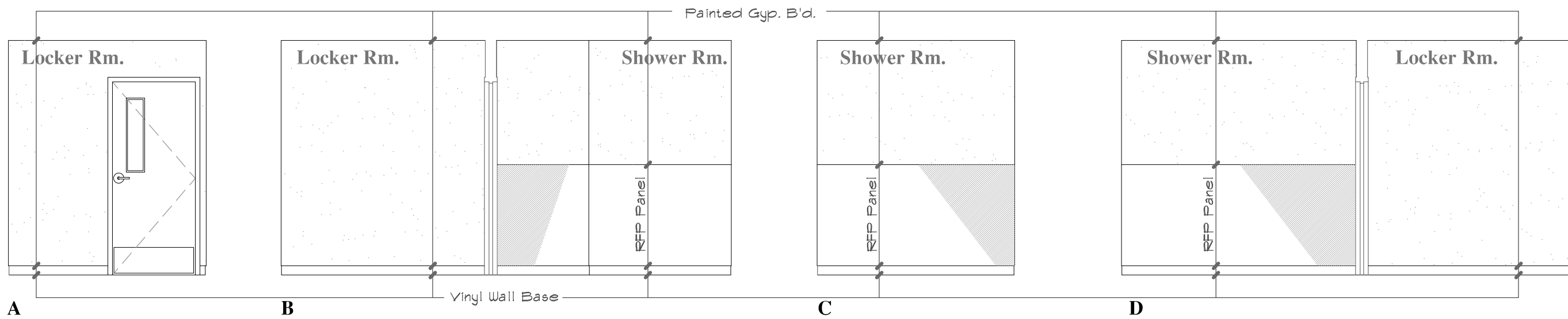
Bunk Room F02



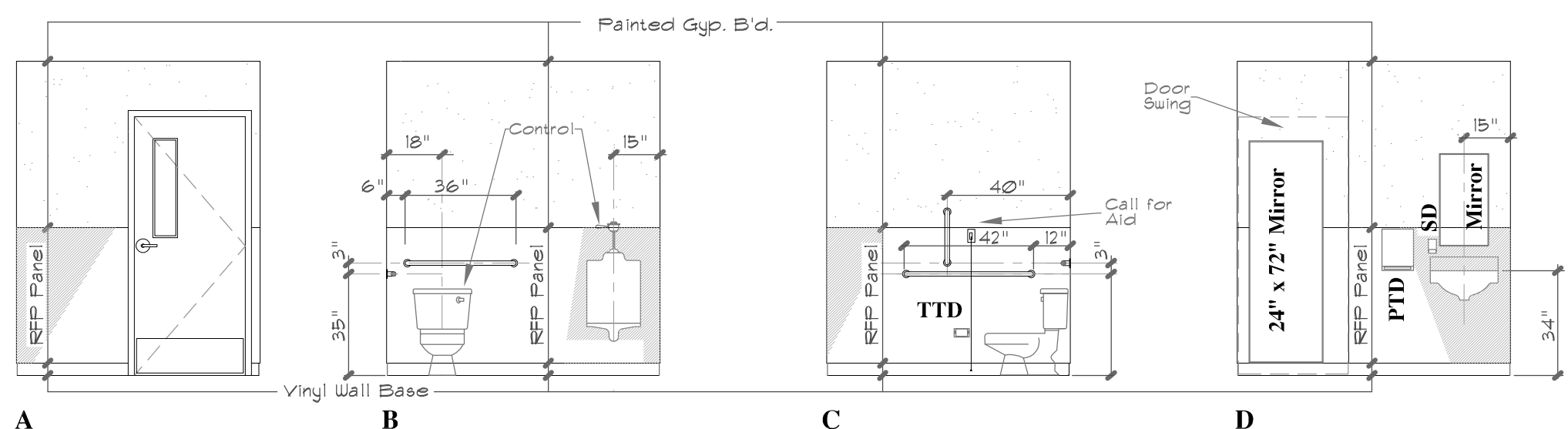
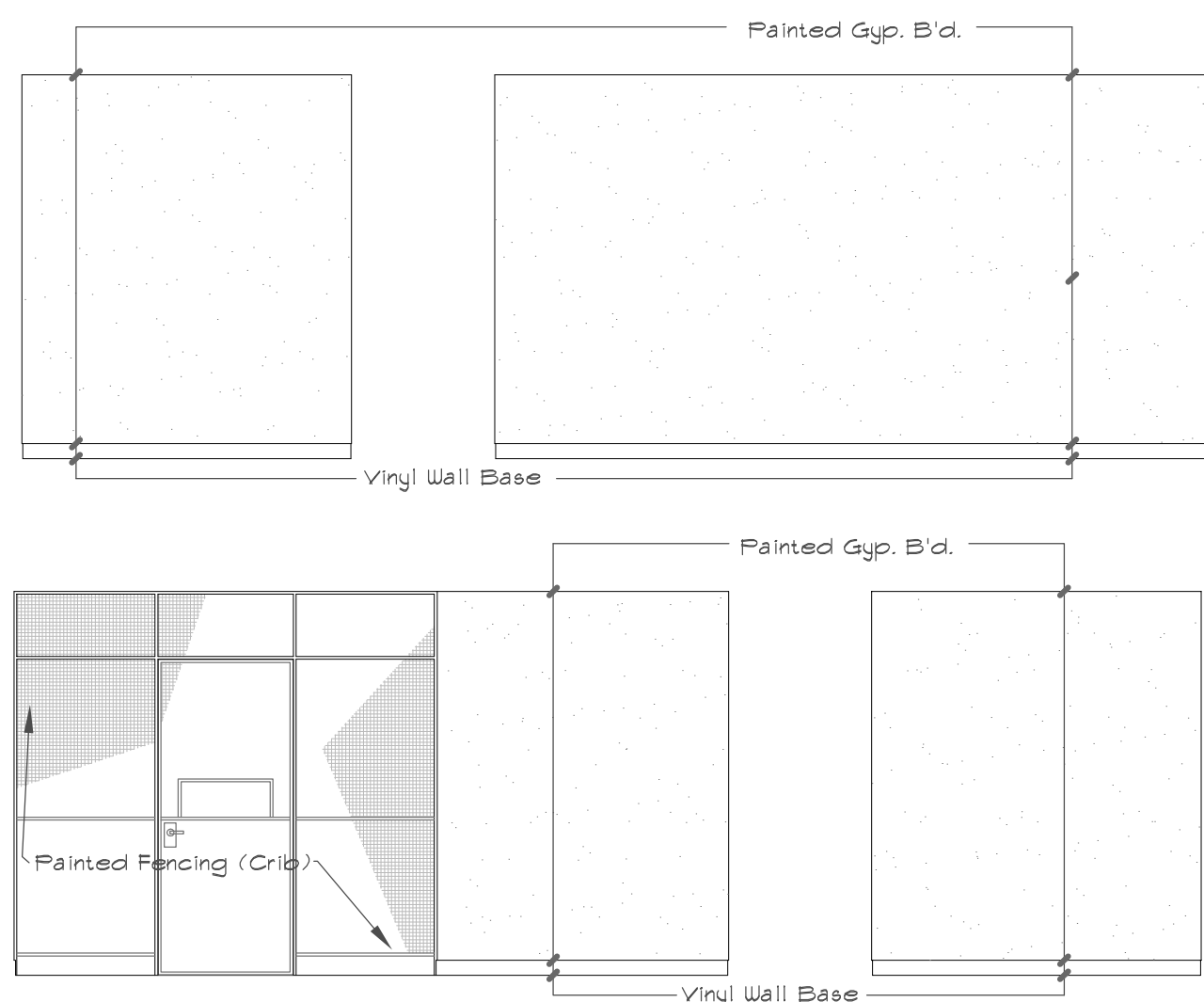
Breakroom F07

**Coat Rack**  
Equal to BEVCO 3' long, hat 4 coat  
Tubular Steel # 4342420

**Reinforced Fiberglass Panel (RFP):**  
Based on Marlite Artizan RFP w/ Sani-Coat,  
0.030" nominal thickness, install if full accordance w/  
manufacturer's requirements for Warranty.

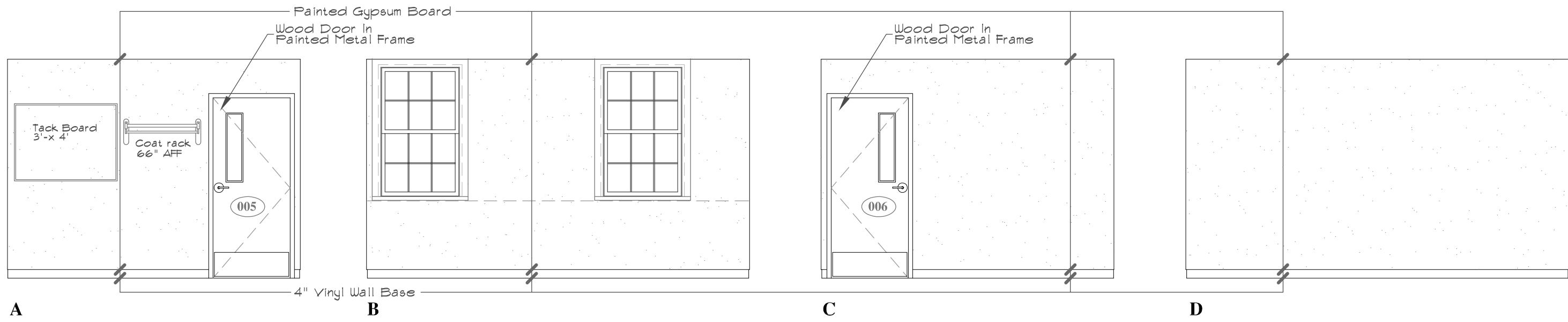


Locker Rm. F03 & Shower Rm. F03A

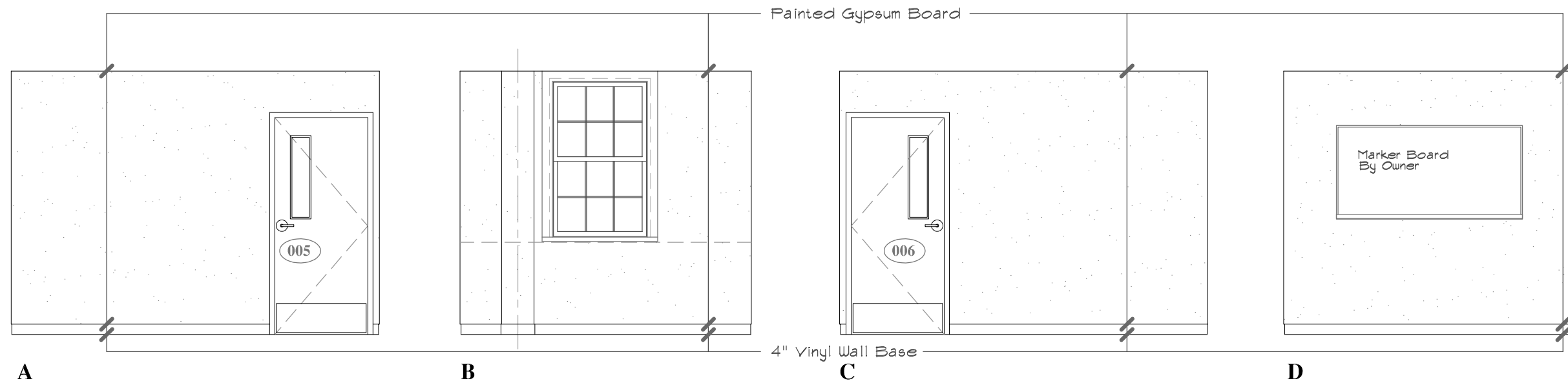


Toilet Rm. F04

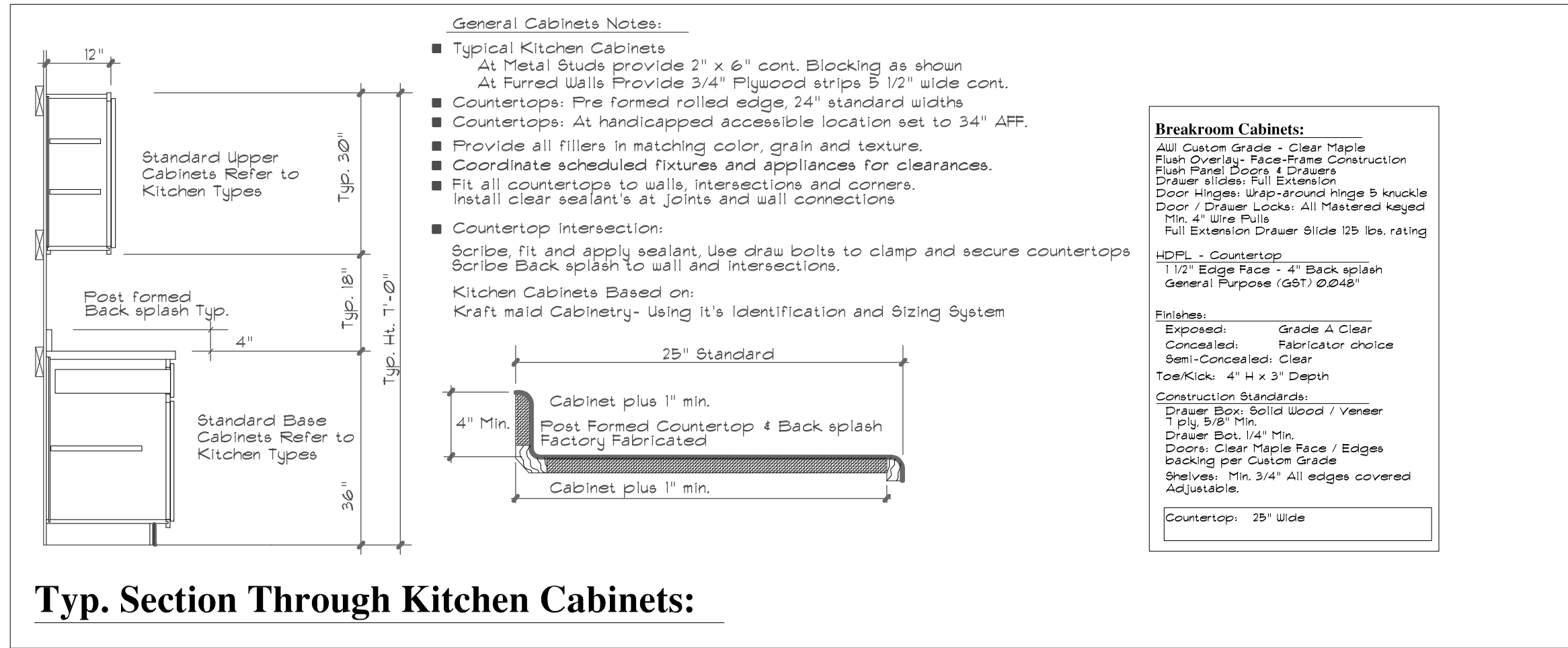
**Reinforced Fiberglass Panel (RFP):**  
Based on Marlite Artizan RFP w/ Sani-Coat,  
0.030" nominal thickness, install if full accordance w/  
manufacturer's requirements for Warranty.



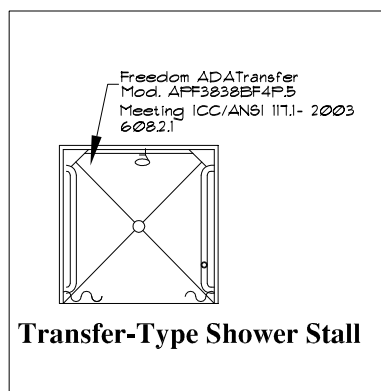
Office F05



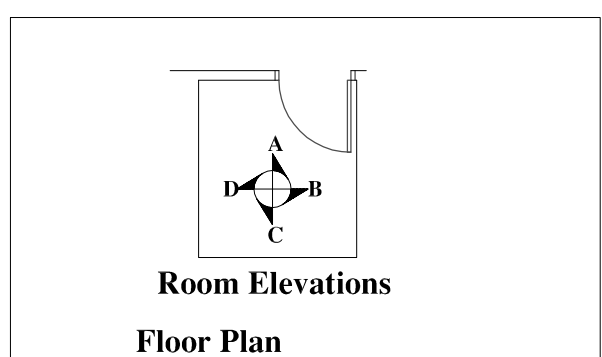
Meeting F06



Typ. Section Through Kitchen Cabinets:



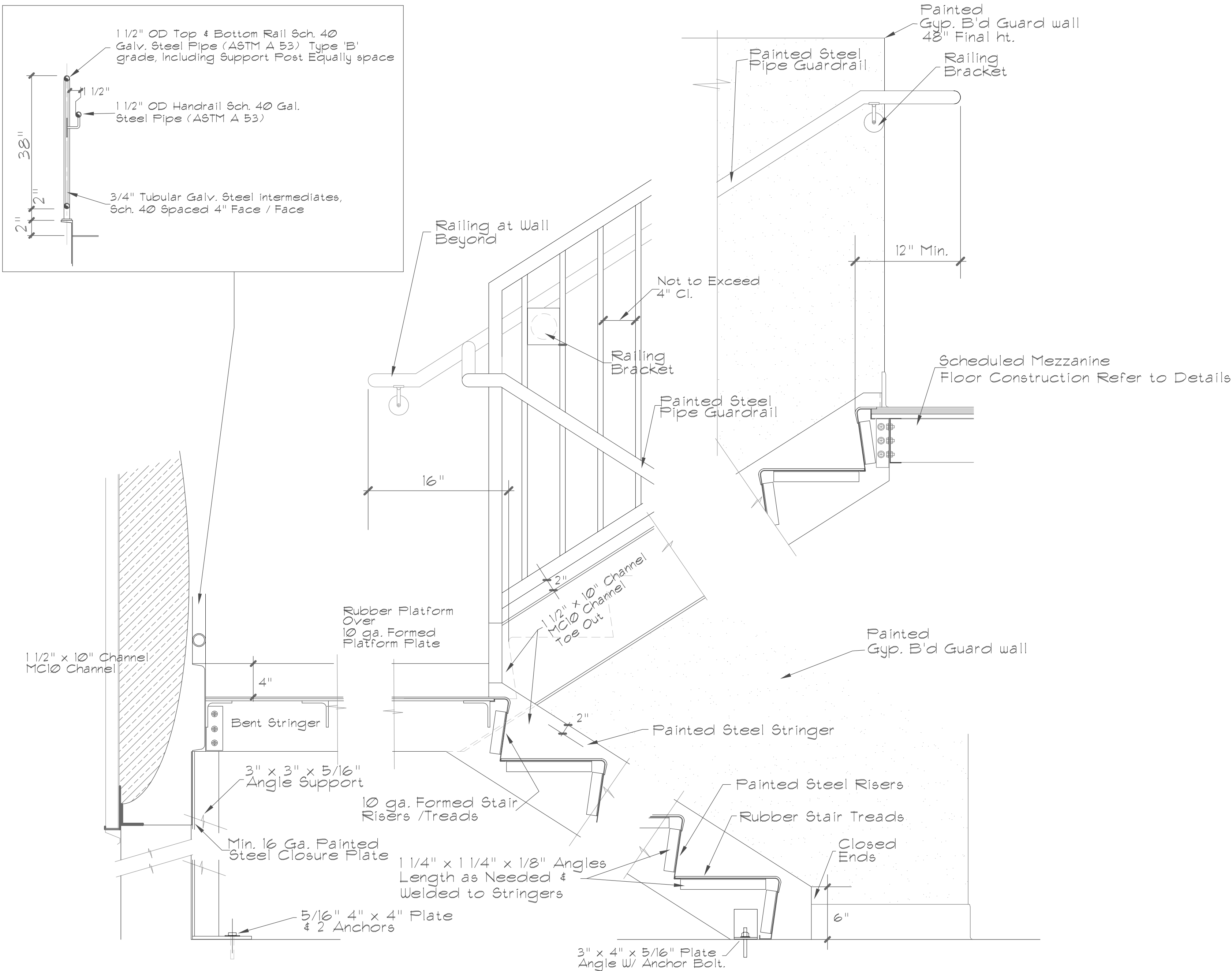
Transfer-Type Shower Stall



Blocking Requirements and Support Information

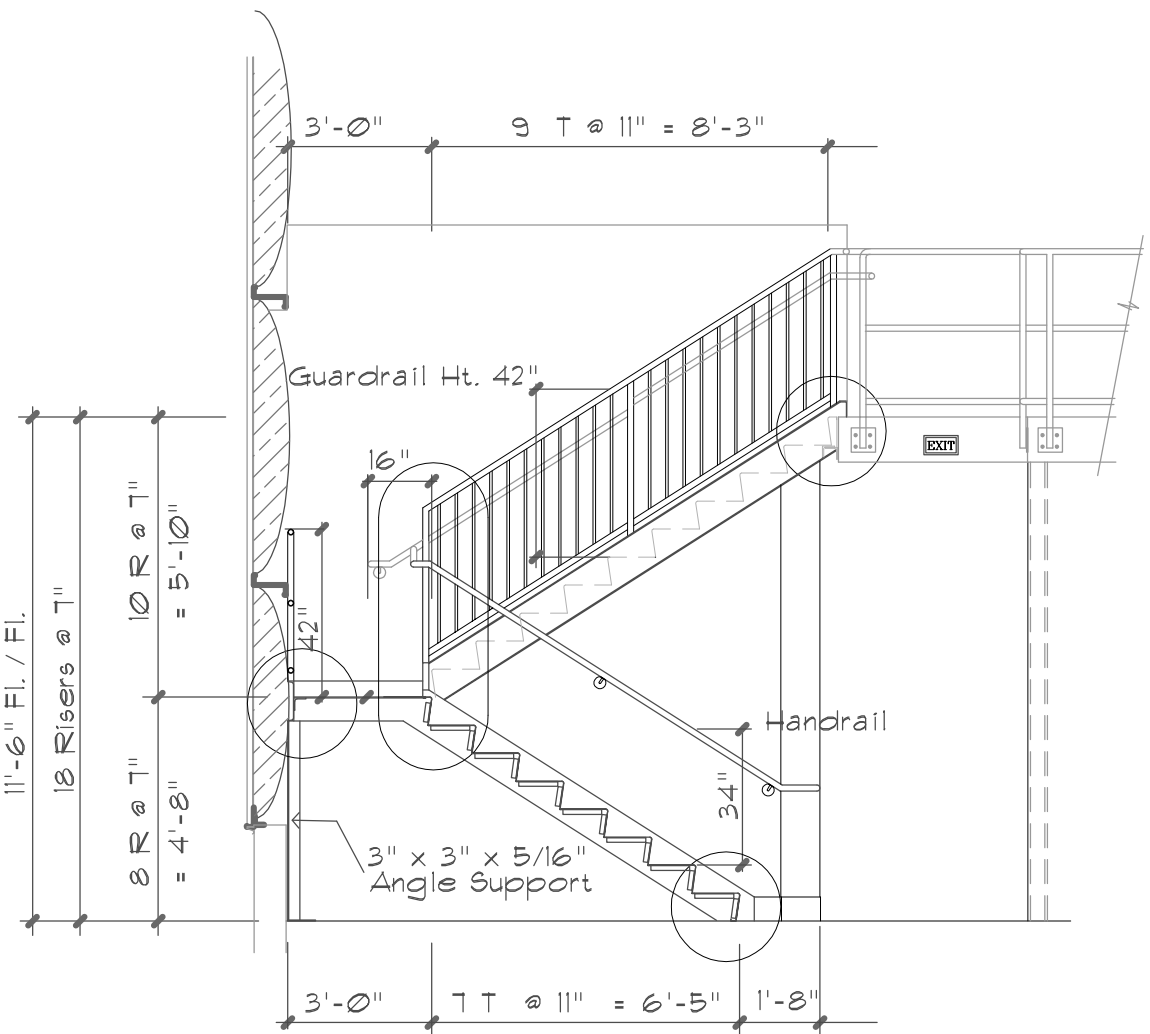
Review and coordinate all wall mounted equipment:  
Provided under this contract or by Owner and  
provide and install blocking for support of  
and anchoring to:  
10 lbs. 4 Under: 3/4" APA Plywood set flush to studs.  
10 lbs. 4 Greater: Min. 2" x 10" set flush to studs.  
Wall Cabinets: Min. 2" x 4" at cabinet top & bottom  
Set flush to studs. (Upper, Base and Shelving)  
Wall Shelves (Doors): Provide 2" x 10" Wood Blocking at  
proper height and location for door sets.

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## Stair Details

Scale: 1 1/2" = 1'-0"



### Section At Stairs

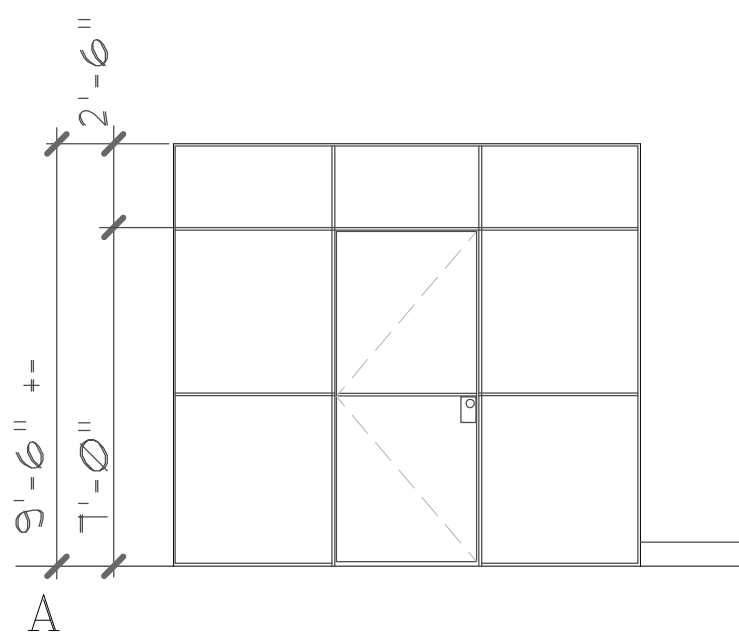
Scale: 1/4" = 1'-0"

### STAIR AND STAIR FINISH :

#### Metal Stairs and Railing

- All metal surface to be ground smooth, flush and clean to adjacent surfaces.
- All exposed metal surfaces to be shop primed, and field finished with 2 coats of Semi-gloss Enamel.
- Stair Treads: Muson 'Disc-O-Tred' • 181 stair treads / nosing
- In color selected by Owner.
- Stair risers to be painted.

- Platform and Landings: Muson Rubber Floor Tile 'Disc-O-Tile' • 188
- 24" square Format, dot pattern with Koroseal Vinyl Lap Nosing • 140.

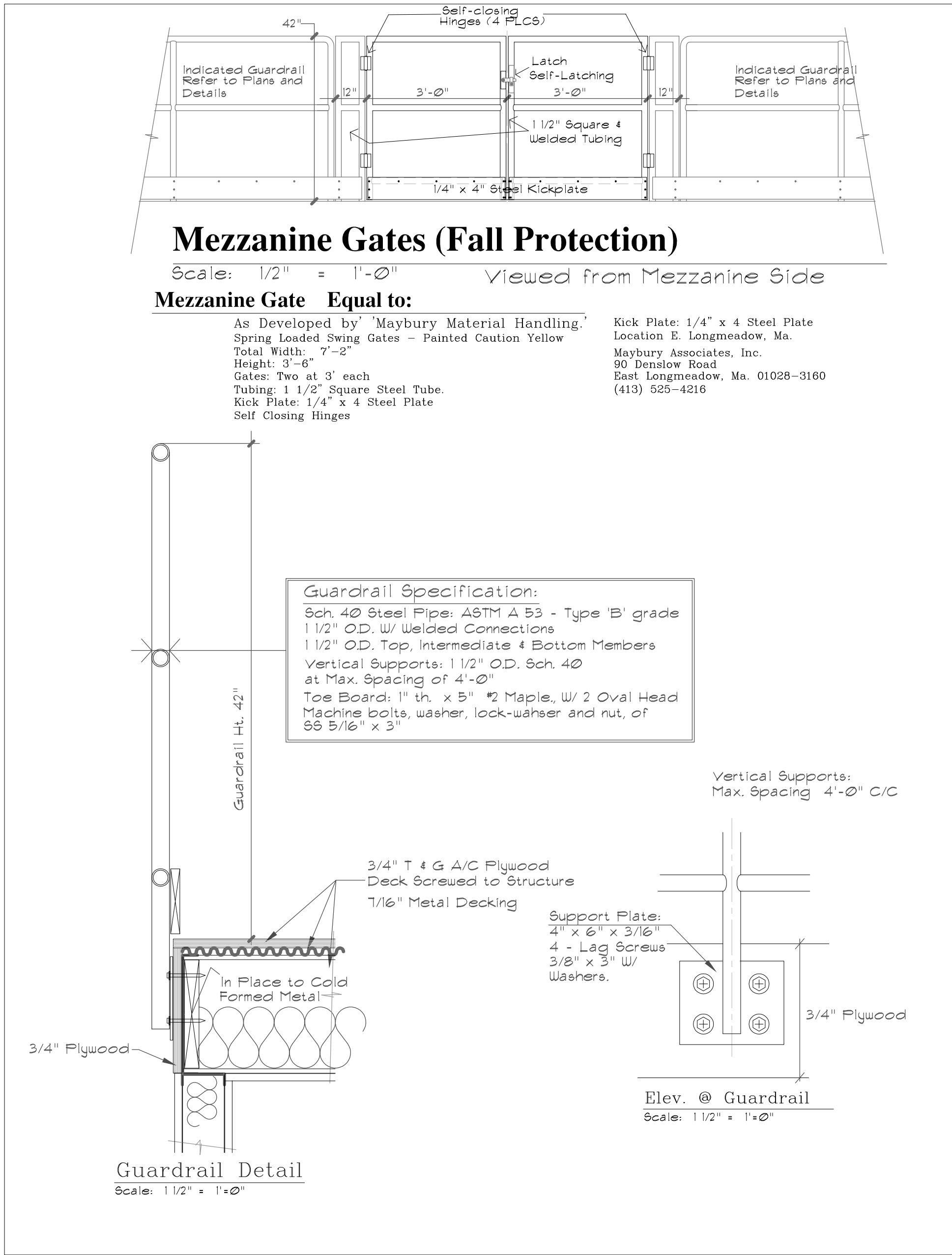


### Tool Crib

#### Tool Crib Enclosure:

Equal to: Miller Wire Works, Inc.  
No. 300M Heavy Duty Partition  
2" diamond mesh No. 6 gauge wire.  
1 1/2" x 3/4" Channel frame  
1 1/4" x 5/8" Center Reinforcement  
2 1/2" x 3/8" Flat bar intermediate post.  
3" x 4.1 LB. top capping channel with 'U' bolts.  
1 13/4" x 1 3/4" x 1/8" Angle Corner Post.  
2" square tube three way connection.  
3" Channel line post with base plate approx. 20" on center for free standing partitions.  
Mortise type lock keyed outside recess latch inside.  
Keyed to Owner's requirements.

Finish: In manufacturers line of standard colors.



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**Town of Voluntown**  
**Public Works Garage**  
96 Gate Street  
Voluntown, CT.

**Mezzanine Stair**  
**Sections and Details**  
**Guardrail and Details**  
**Tool Crib Design**

PROJECT NO.: 2015-10-08

SCALE: AS NOTED

DRAWN BY: FRED M.

CHECKED BY:

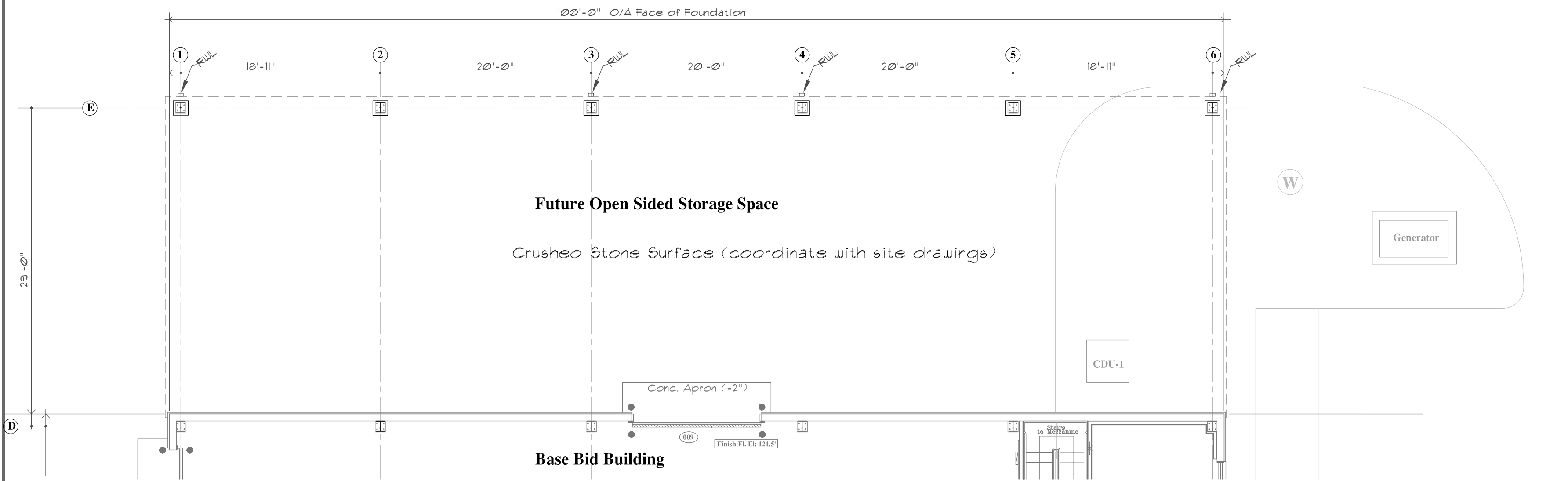
DATE: Revised

March 20, 2018

**A5**

SHEET 1 OF 1

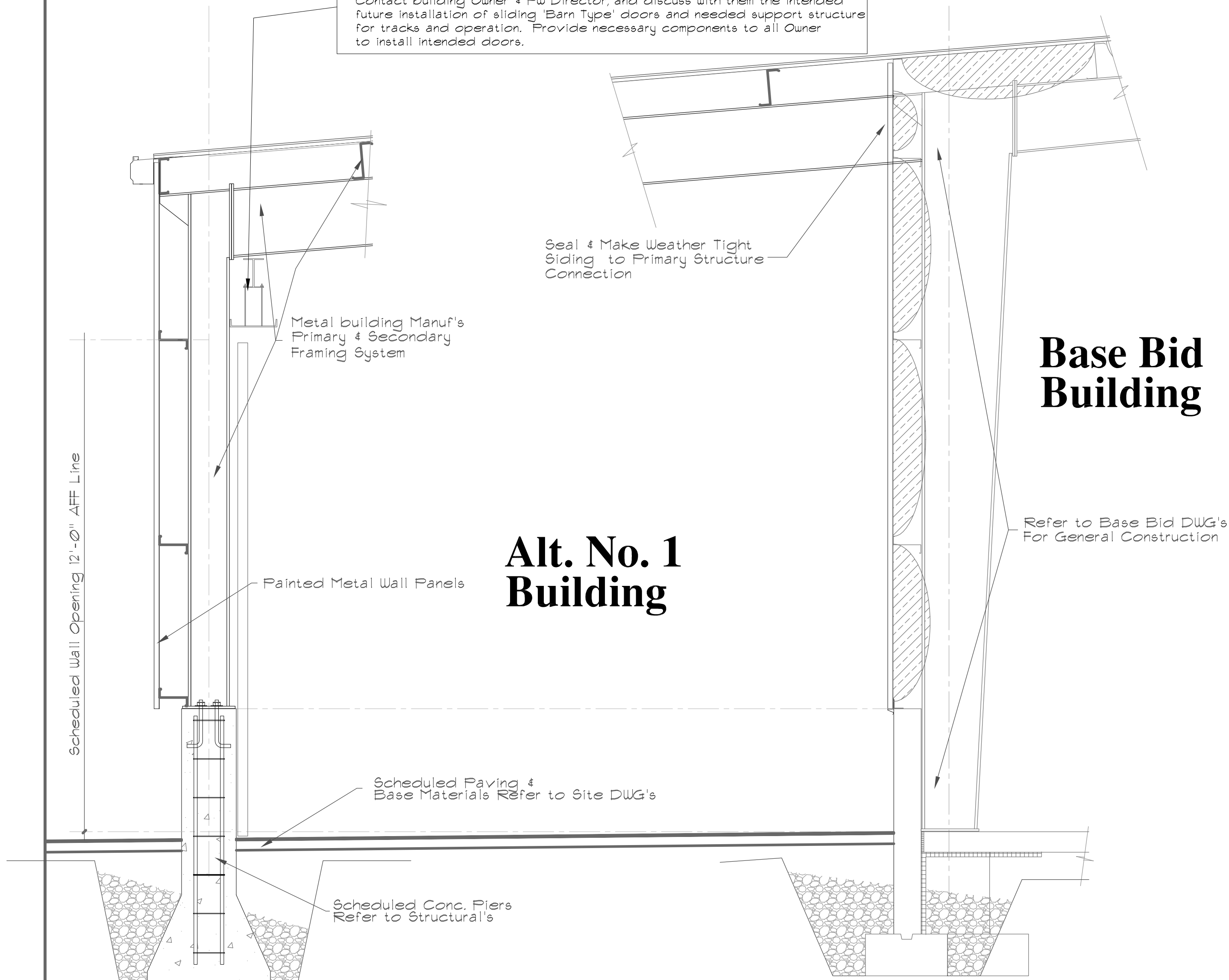




Architectural Floor Plan Alternate No. 1

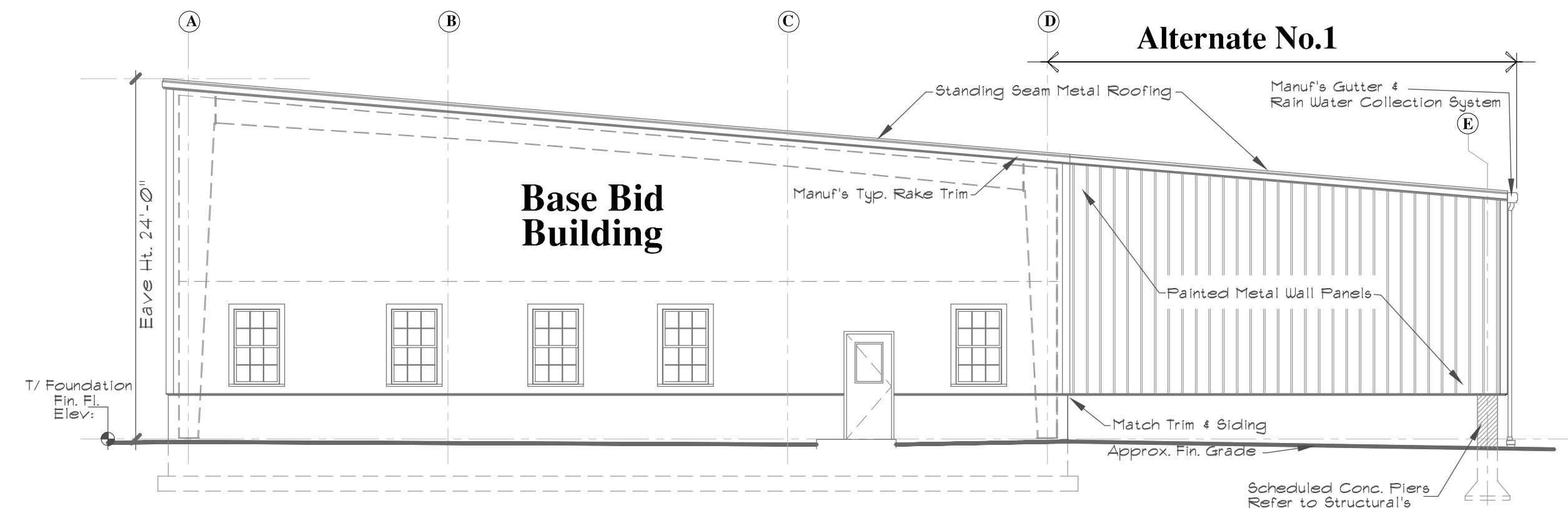
Scale: 1/8" = 1'-0"

CONTRACTOR / METAL BUILDING DESIGNER:  
Contact building Owner & PW Director, and discuss with them the intended future installation of sliding 'Barn Type' doors and needed support structure for tracks and operation. Provide necessary components to all Owner to install intended doors.



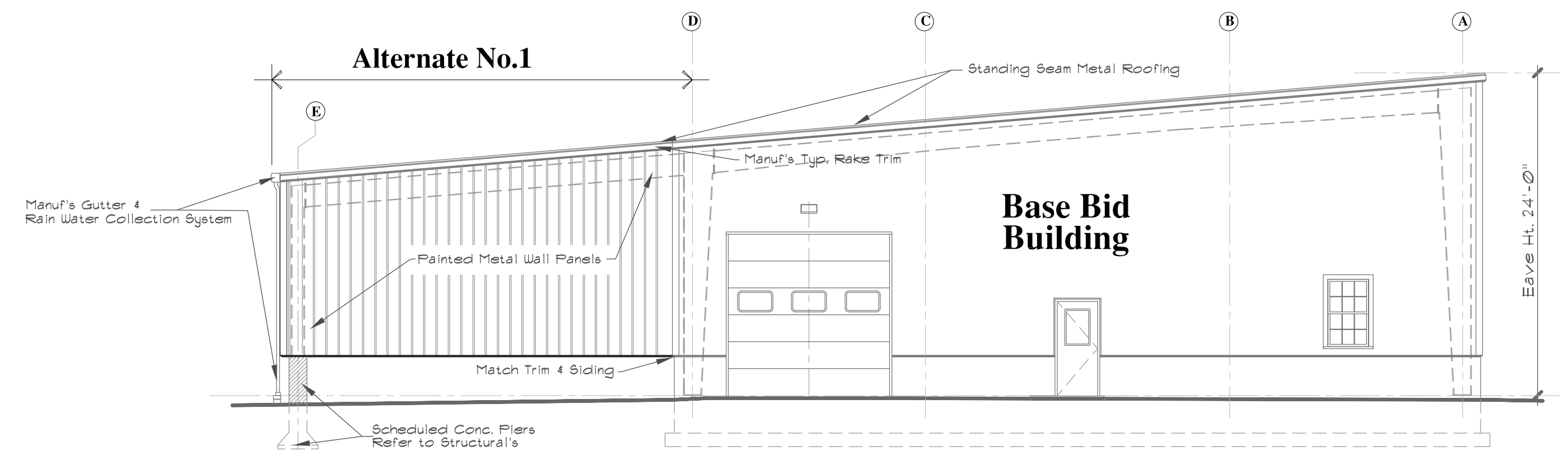
Section Through Roofed Storage

Scale: 1/2" = 1'-0"



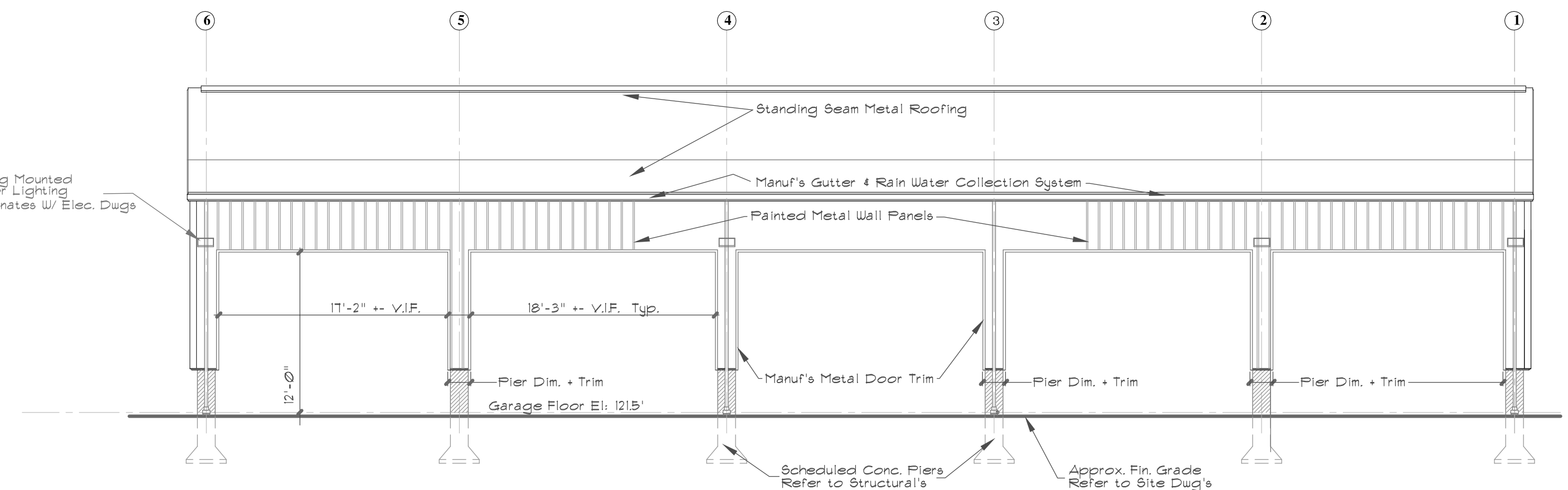
South Elevation

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



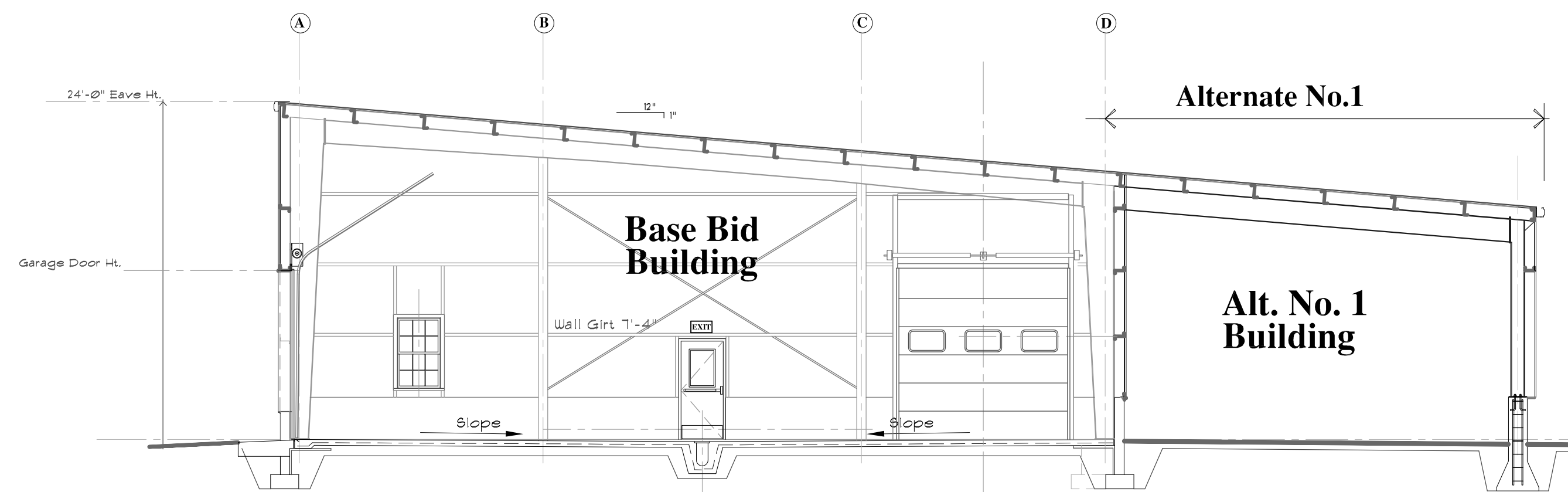
North Elevation

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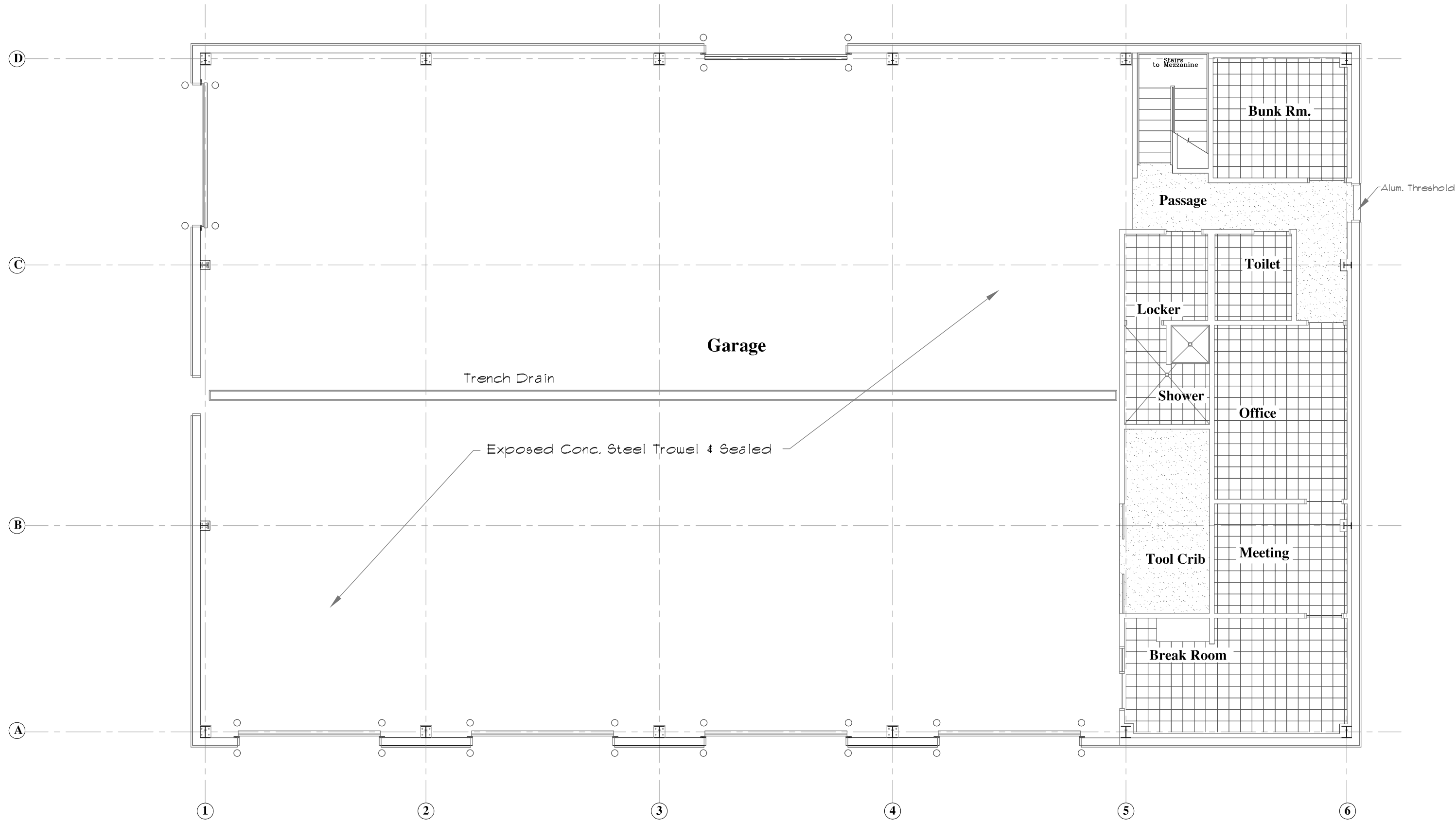
East Elevation

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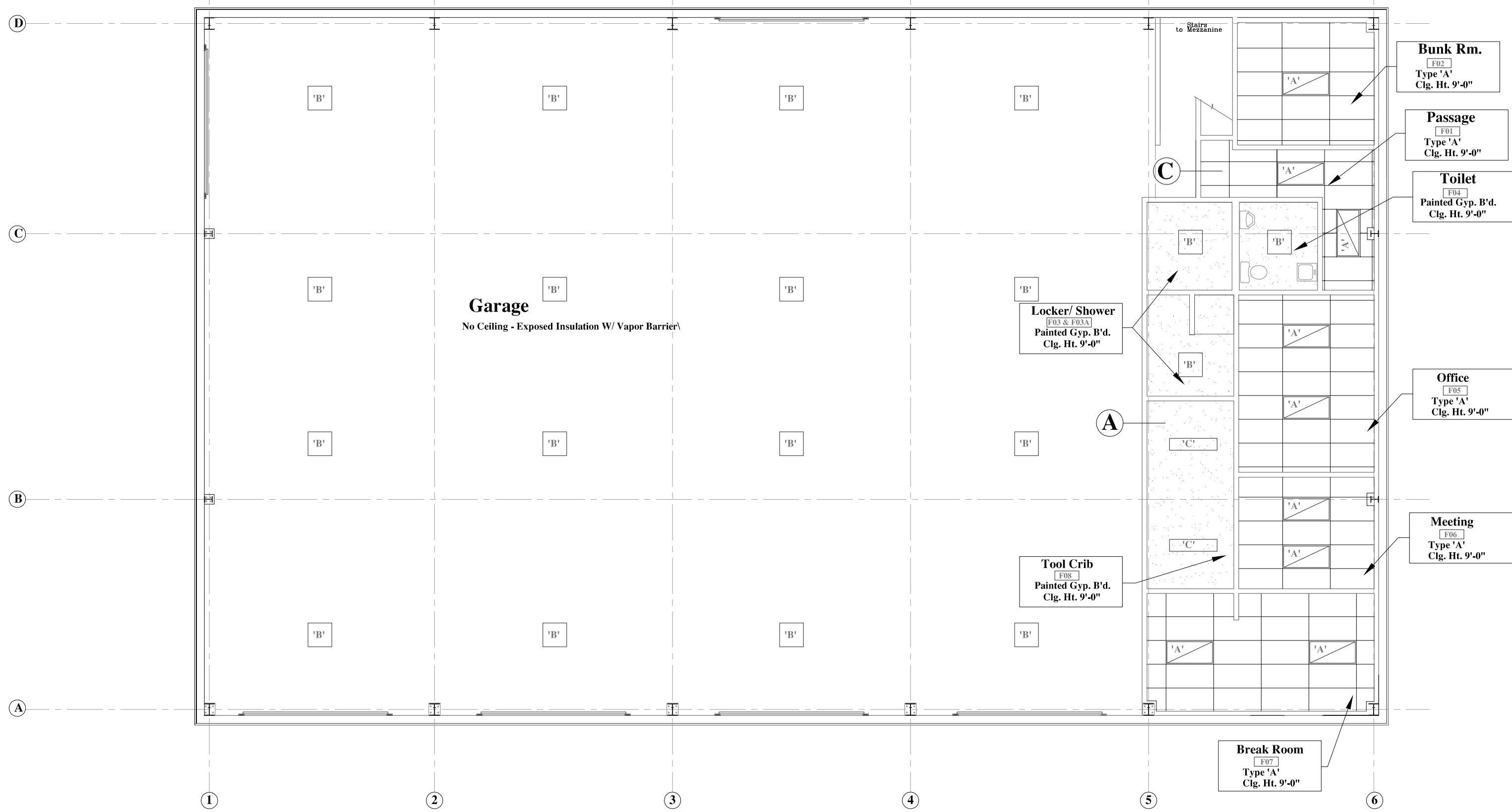
Building Section 'B'-B'

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



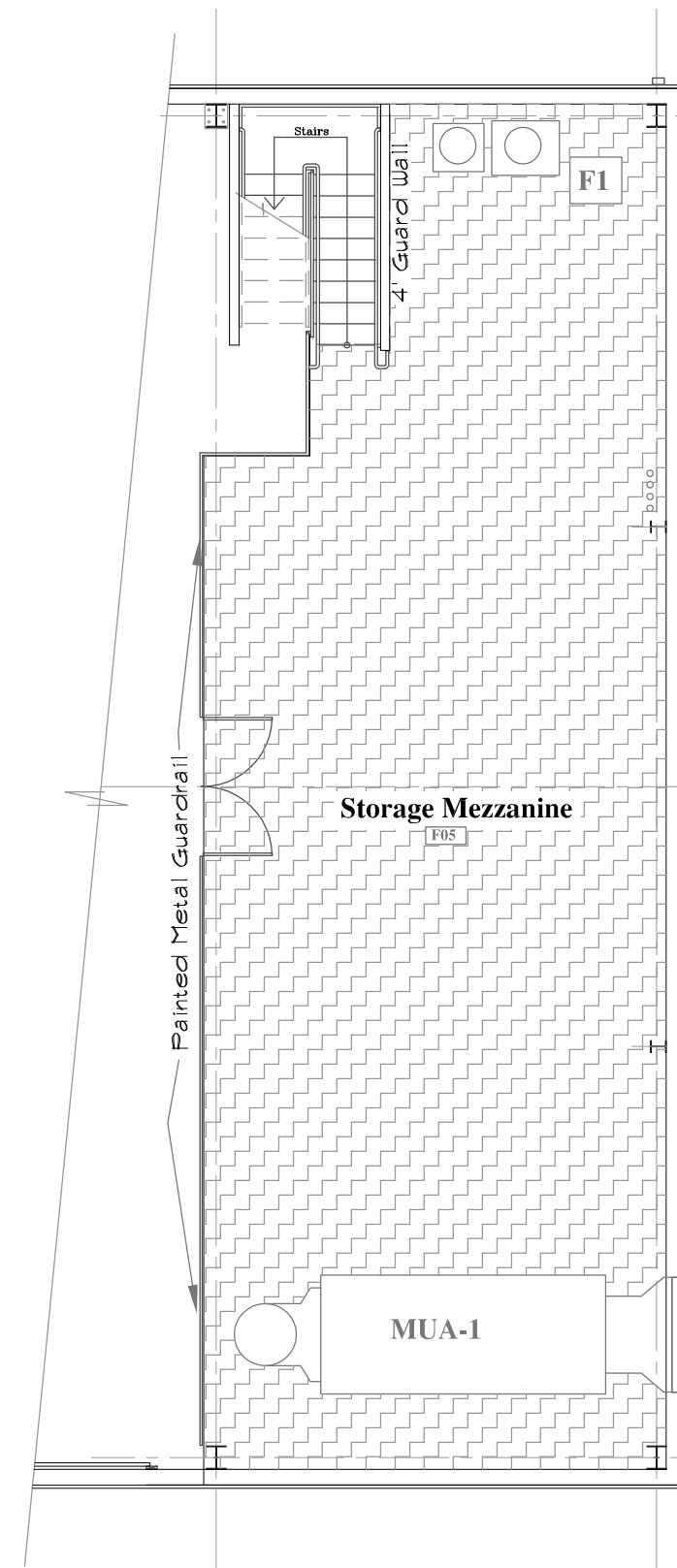
Floor Finish Plan

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



Reflected Ceiling Plan

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



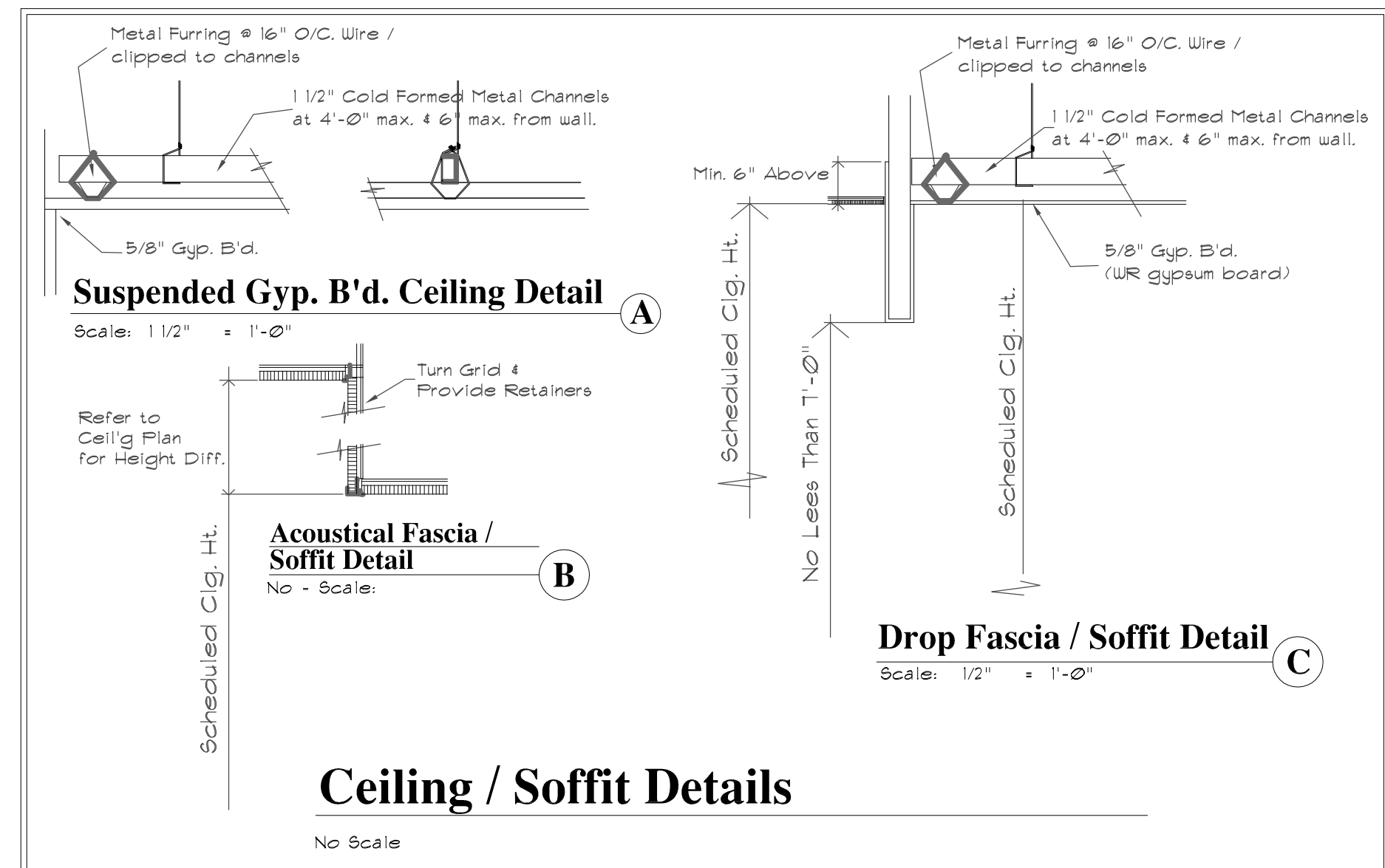
Mezzanine Finish Plan

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

Floor Finishes:

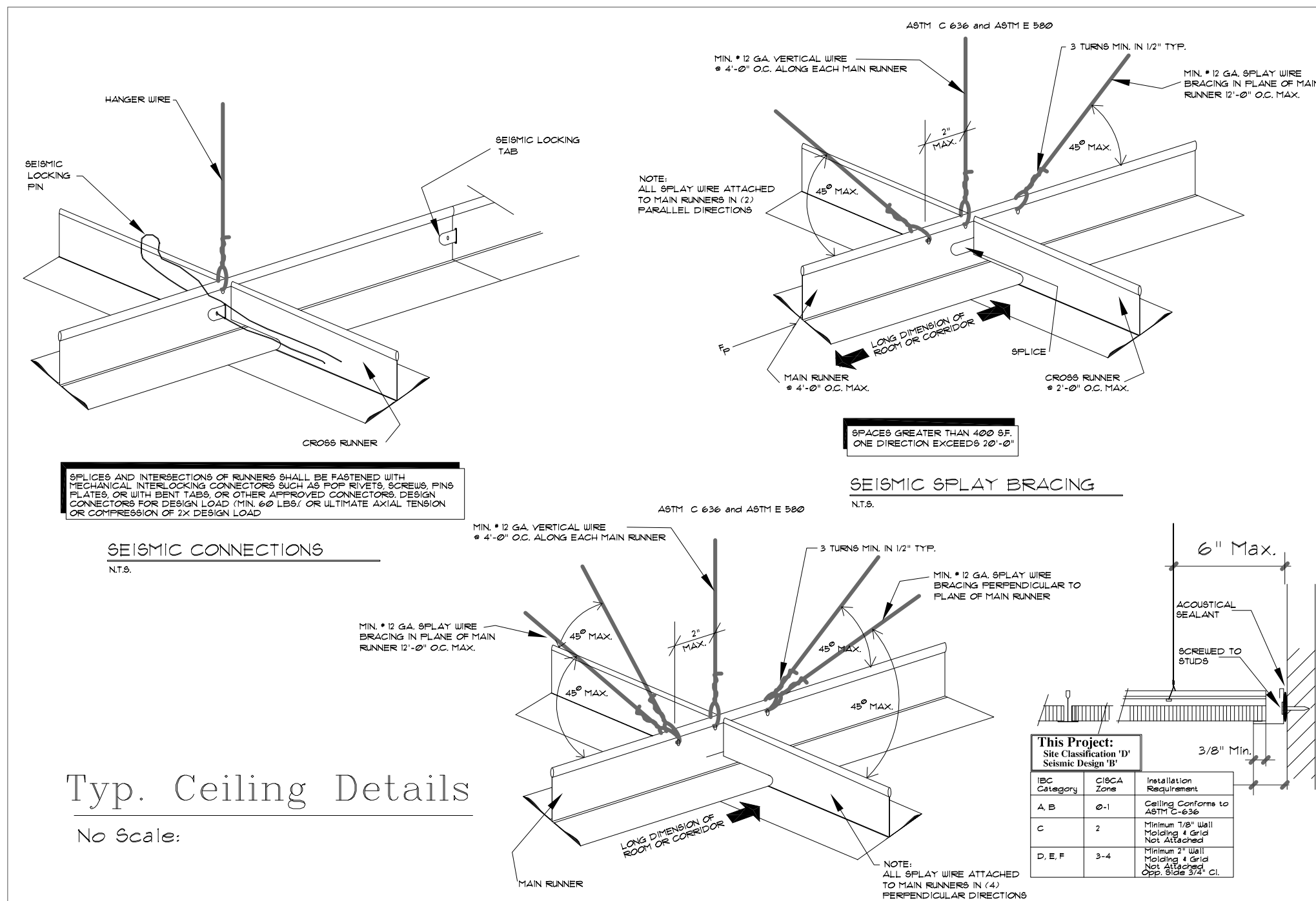
Indication	Description
[Pattern]	Exposed Conc. Steel Trowel & Sealed
[Pattern]	Painted Conc.
[Pattern]	Vinyl Composition Tile (VCT) 12" x 12" x 1/8" Glued in Place
[Pattern]	Sheet Vinyl Flooring, Welded Seams Min. 12' wide sheet
[Pattern]	Carpeted (Sheet / Carpet Squares)
[Pattern]	Painted APA Plywood / OSB Sub Floor Min. 12' wide sheet

Provide and install all recommended Transition Strips Thresholds, Tapered Strips, etc. Transitions occur under Center of Door Unless Otherwise Indicated (UOI)



Ceiling / Soffit Details

No Scale



Typ. Ceiling Details

No Scale:

Ceiling Materials Legend:

Indication	Description
[Pattern]	Existing Ceiling Assembly No Scheduled Work
[Pattern]	New 5/8" Gypsum Board Ceiling on RC-1 metal furring at 2'-0" o/c.
[Pattern]	Type 'A' Equal to: Armstrong 'Fine Fissured Open Plan' #1754 24" x 24" x 7/8" NRC .75 @ CAC-35 Class A, Avg. Light @.86 (weight 1.08 lbs/sf) 4 R-15 15/16" Prelude Grid & Suspension by local for Seismic Zone Requirements.
[Symbol]	Recessed Ceiling Light
[Symbol]	Surface Mounted Ceiling Light



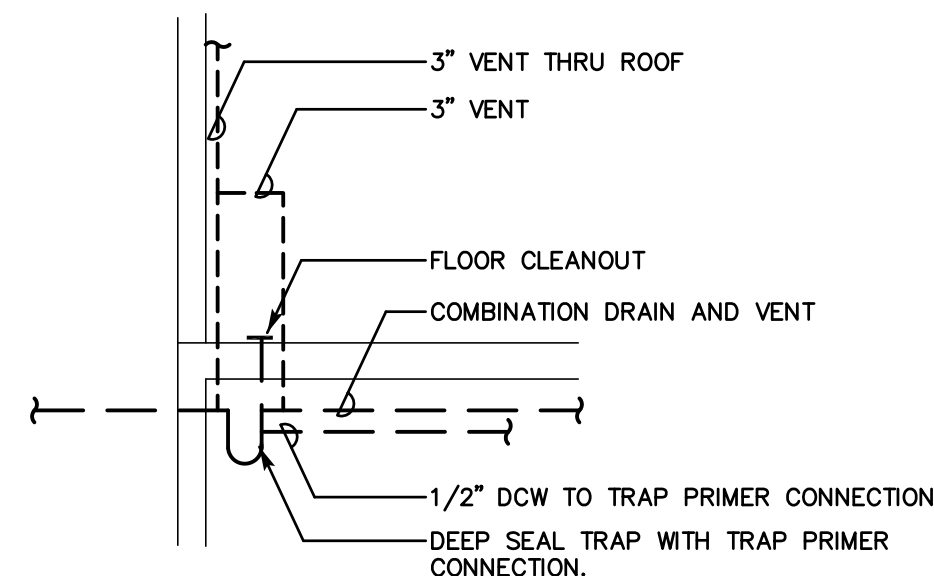
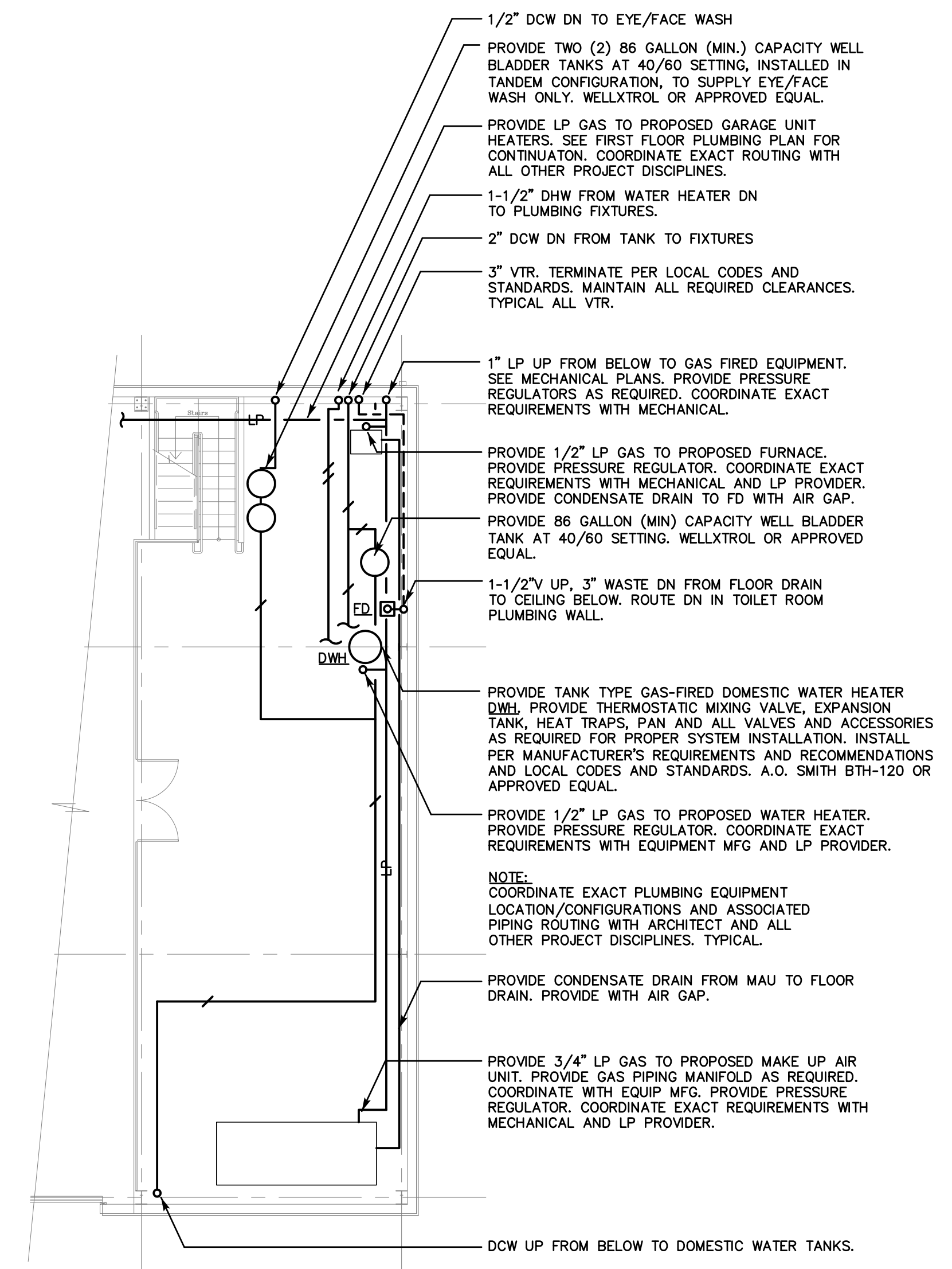
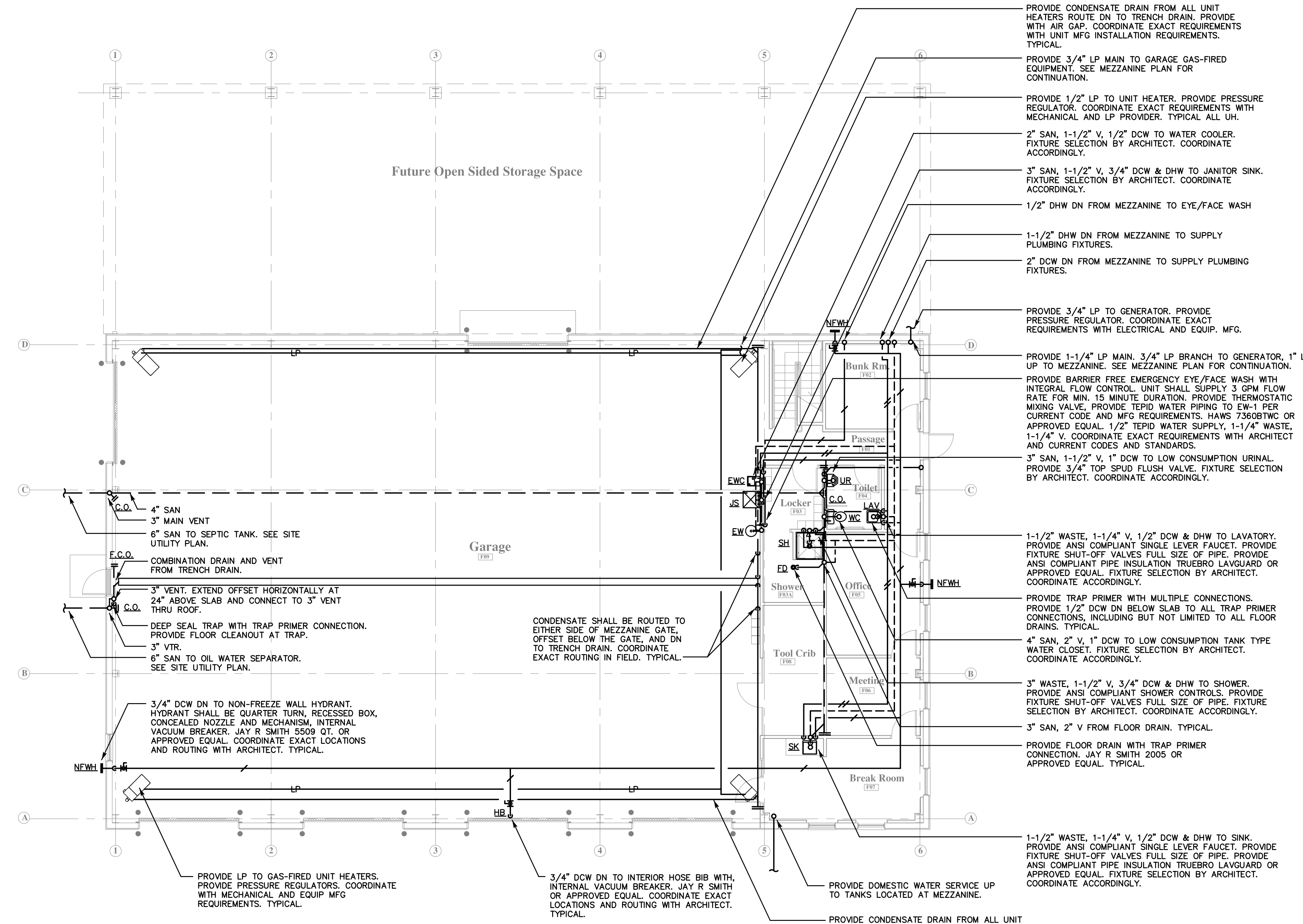


REVISION	DATE	NUMBER

**TOWN OF VOLUNTOWN  
PUBLIC WORKS GARAGE**  
96 GATE STREET, VOLUNTOWN, CT  
**First Floor & Mezzanine Plumbing Plans**

**CLA Engineers, Inc.**  
CIVIL - STRUCTURAL - SURVEYING  
317 Main Street, Norwalk, Connecticut  
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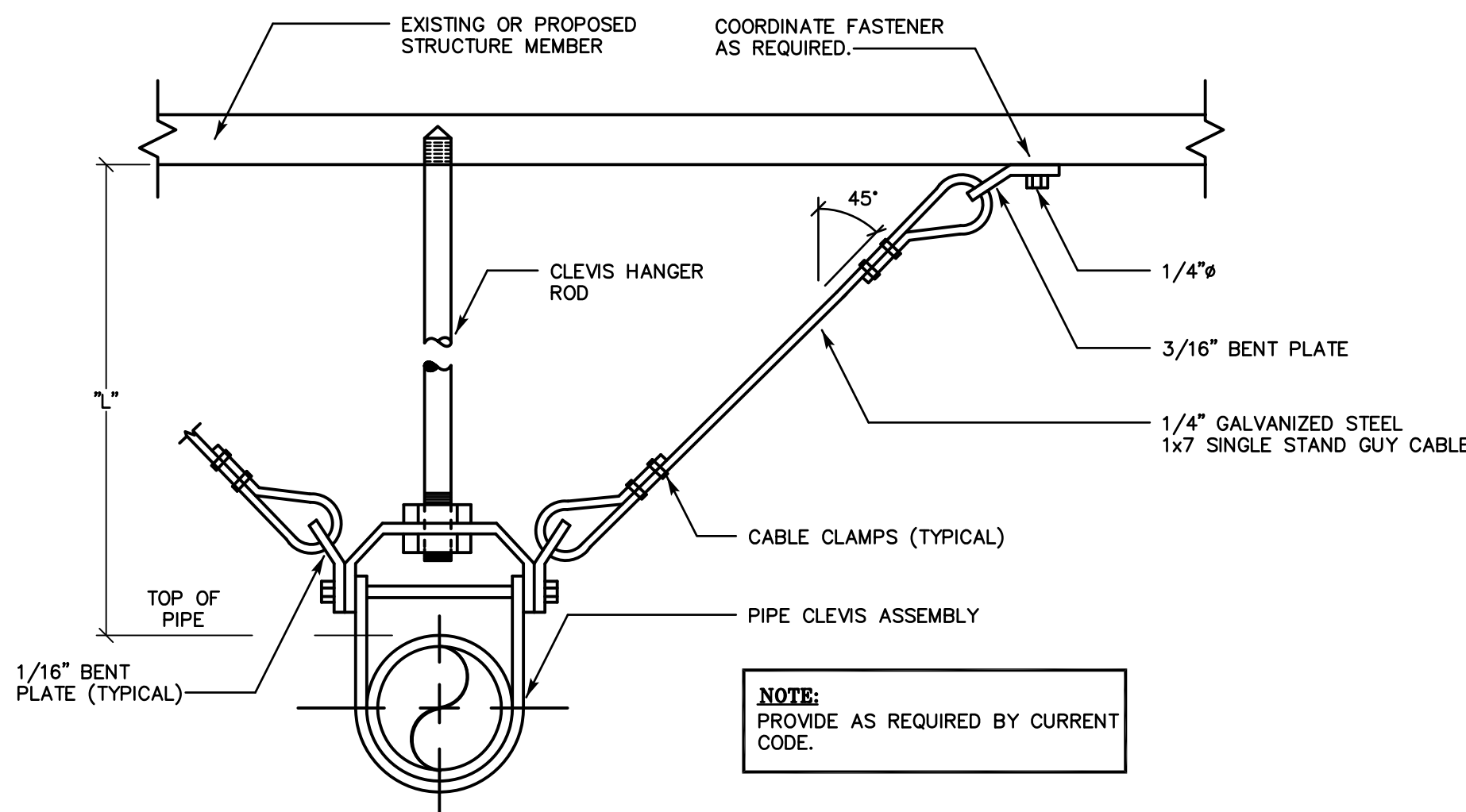
CLA PROJECT NO.	CLA-15-5598
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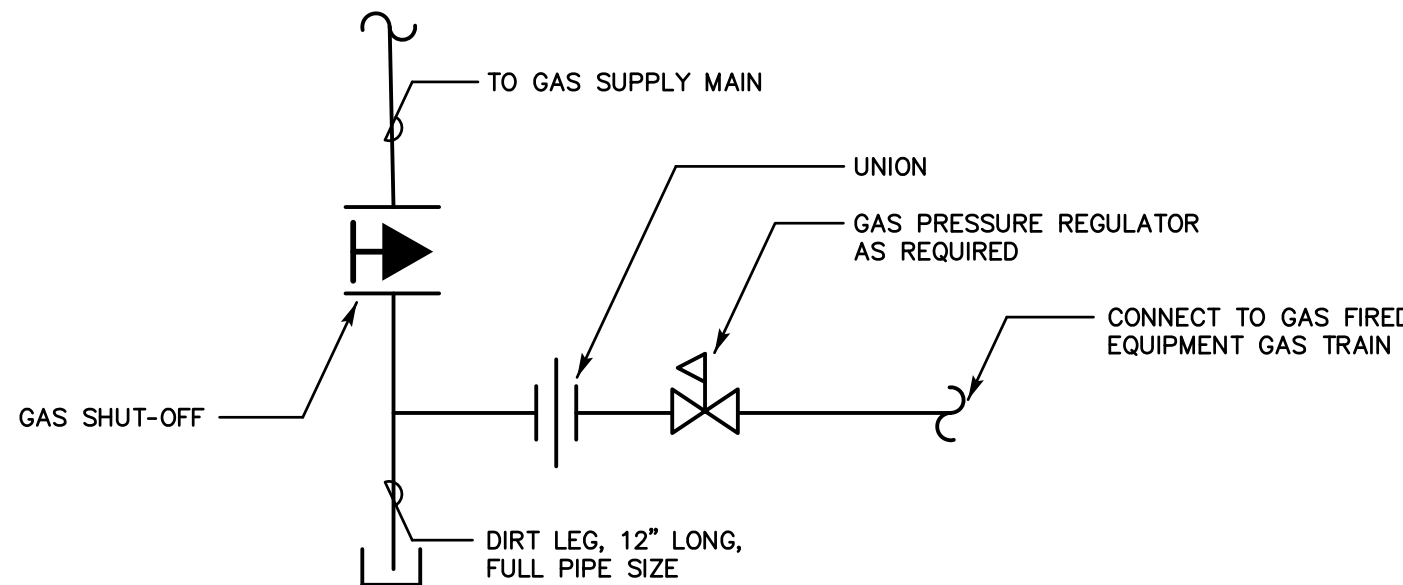
- PLUMBING NOTES:**
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK INCLUDING TOOLS, MATERIAL, MANPOWER, ETC. REQUIRED FOR COMPLETE AND PROPER INSTALLATION OF PROPOSED MATERIALS, FIXTURES AND/OR EQUIPMENT.
  - ALL WORK SHALL BE PERFORMED IN A SAFE AND ORDERLY MANNER WITH QUALIFIED AND LICENSED PERSONNEL IN ACCORDANCE WITH STATE AND LOCAL GOVERNING AUTHORITIES AND ALL APPLICABLE CODES AND STANDARDS. TYPICAL.
  - ALL SERVICE DISRUPTIONS MUST BE SCHEDULED A MINIMUM OF 72 HOURS IN ADVANCE WITH THE OWNER'S REPRESENTATIVE.
  - CONTRACTOR SHALL PROVIDE CLEANOUTS FOR PROPOSED SANITARY PIPING AS REQUIRED PER CURRENT APPLICABLE CODES AND STANDARDS. TYPICAL.
  - ROUTING OF ALL PIPING SHALL BE COORDINATED WITH STRUCTURAL FRAMING ELEMENTS AND ALL OTHER PROJECT DISCIPLINES. TYPICAL.
  - PROVIDE ALL PLUMBING FIXTURES AS SHOWN, PROVIDE ALL PIPING, FITTINGS AND ACCESSORIES AS REQUIRED FOR FULL AND PROPER INSTALLATION PER MANUFACTURER'S INSTRUCTIONS AND CURRENT APPLICABLE CODES AND STANDARDS. FIXTURES AS PER ARCHITECT. TYPICAL.
  - PROVIDE EARTHQUAKE SHUT OFF VALVE AND GAS REGULATORS AS REQUIRED ON GAS SERVICE. COORDINATE EXACT REQUIREMENTS WITH LP PROVIDER.
  - INSULATE DOMESTIC WATER AND WASTE PIPING PER CURRENT CODES AND STANDARDS. TYPICAL.

**LP NOTE:**  
LP PIPE SIZES INDICATED ON PLAN ARE BASED UPON TABLE 6.3 (C) OF THE NATIONAL FUEL GAS CODE. COORDINATE EXACT REQUIREMENTS AND SIZING WITH LP PROVIDER AND EQUIPMENT MFGS. PROVIDE AND INSTALL IN STRICT ACCORDANCE WITH NFPA 54 AND LOCAL AHJ

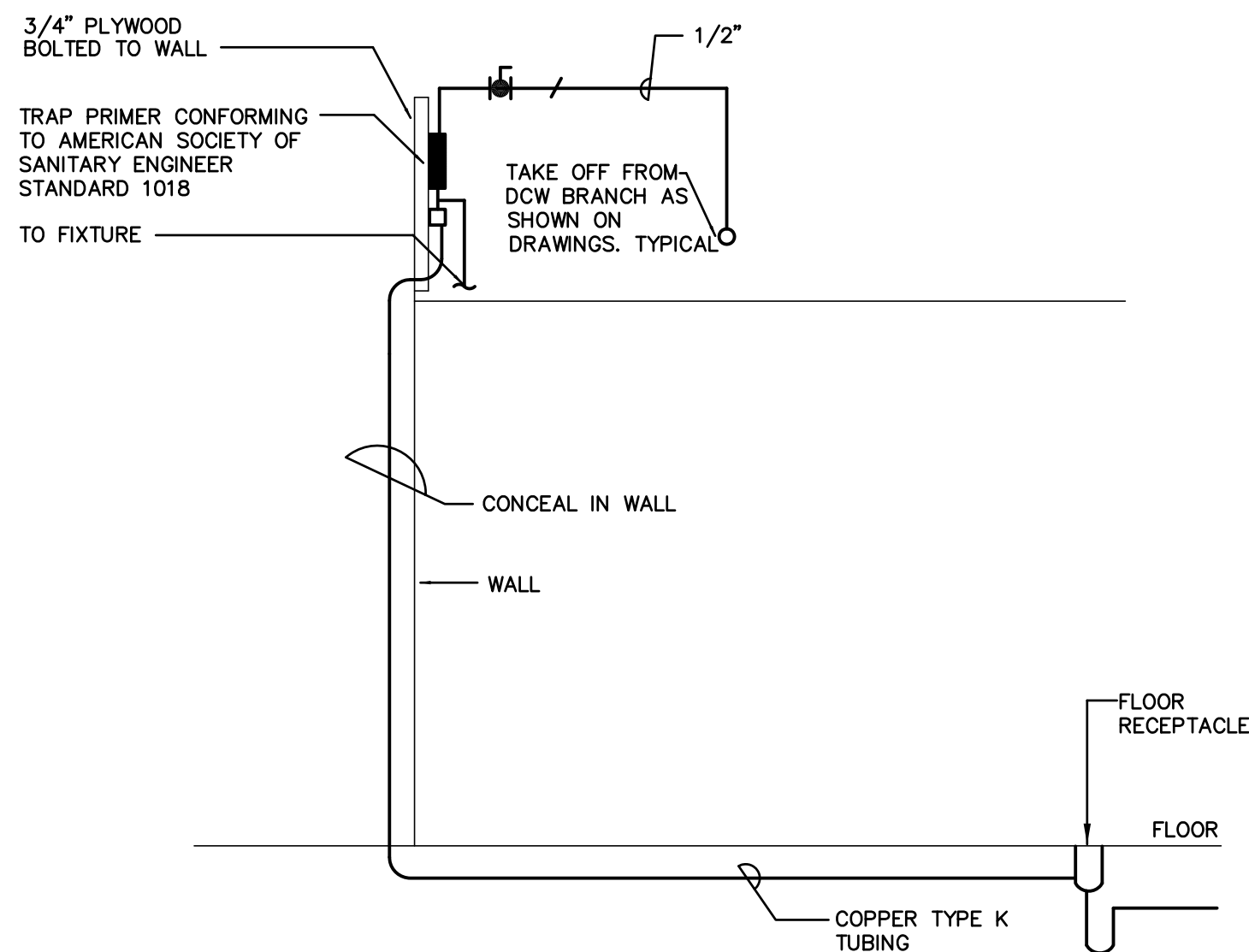
**NOTE:**  
CONTRACTOR SHALL COORDINATE/FINALIZE EXACT WELL BLADDER TANK REQUIREMENTS AND CAPACITIES WITH TANK MANUFACTURER/SUPPLIER AND WELL CONTRACTOR. PROVIDE AND INSTALL IN STRICT ACCORDANCE WITH MFG REQUIREMENTS AND RECOMMENDATIONS AND CURRENT LOCAL CODES AND STANDARDS. PROVIDE ALL PIPING, VALVES, FITTINGS, SWITCHES AND ACCESSORIES AS REQUIRED FOR FULL AND PROPER INSTALLATION. TYPICAL.



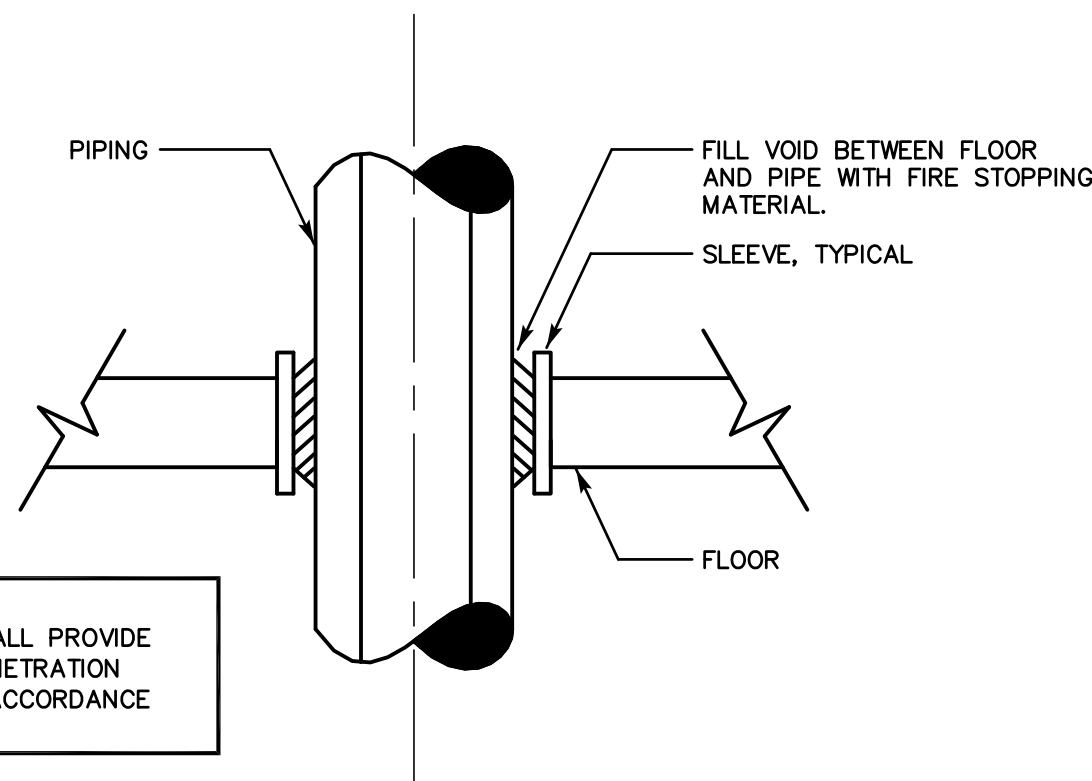
**TYPICAL SEISMIC RESTRAINT  
ASSEMBLY OF SUSPENDED PIPING**  
SCALE: N.T.S.



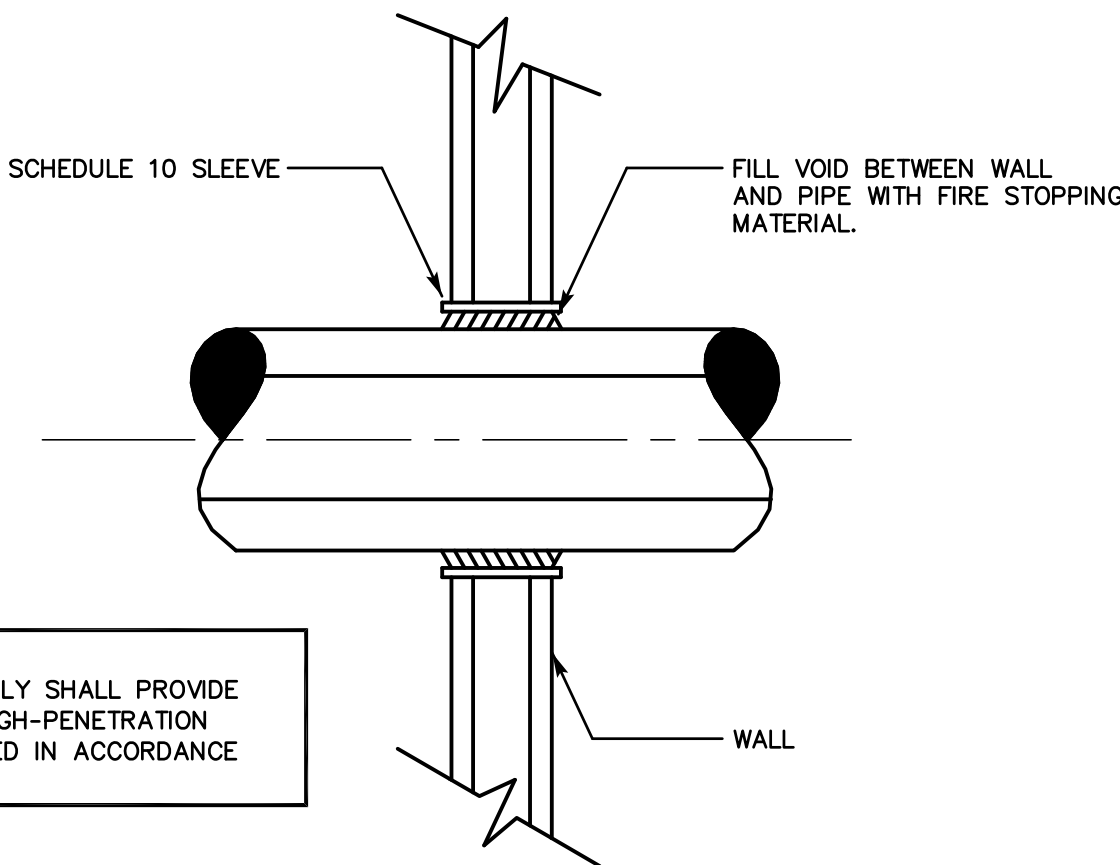
**TYPICAL CONNECTION TO  
GAS FIRED EQUIPMENT**  
SCALE: N.T.S.



**TYPICAL TRAP PRIMER DETAIL**  
SCALE: N.T.S.



**TYPICAL FLOOR PIPE PENETRATION  
FIRE STOPPING DETAIL**  
SCALE: N.T.S.



**TYPICAL WALL PIPE PENETRATION  
FIRE STOPPING DETAIL**  
SCALE: N.T.S.

## PLUMBING SYMBOL LIST

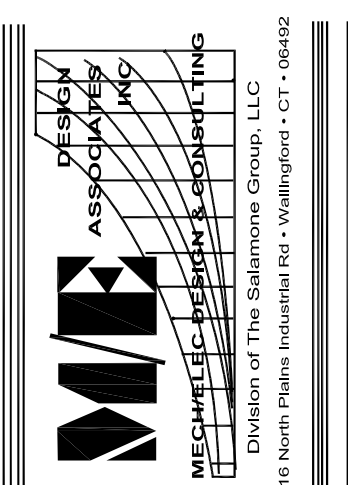
	BALL VALVE
	GATE VALVE
	CAP
	PIPE ELBOW, TURNED UP
	PIPE ELBOW, TURNED DOWN
	DOMESTIC COLD WATER SUPPLY PIPING
	DOMESTIC HOT WATER SUPPLY PIPING
	NATURAL GAS PIPING
	SANITARY VENT PIPING
	PIPING TO BE PROVIDED
	UNDER SLAB PIPING TO BE PROVIDED
	CLEAN OUT
	FLOOR DRAIN
	TRAP PRIMER
	NON-FREEZE WALL HYDRANT

## PLUMBING ABBREVIATIONS

C.O.	CLEANOUT
DCW	DOMESTIC COLD WATER SUPPLY
DHW	DOMESTIC HOT WATER SUPPLY
DN	DOWN
DWH	DOMESTIC WATER HEATER
ET	EXPANSION TANK
F.C.O.	FLOOR CLEANOUT
FD	FLOOR DRAIN
GAL	GALLON
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
JS	JANITOR'S SINK
LAV	LAVATORY
NFWH	NON-FREEZE WALL HYDRANT
NTS	NOT TO SCALE
SAN	SANITARY
SH	SHOWER
SK	SINK
TEMP	TEMPERATURE
TM	THERMOSTATIC MIXING VALVE
TYP	TYPICAL
UR	URINAL
V	SANITARY VENT
VTR	SANITARY VENT THROUGH ROOF
WC	WATER CLOSET
W.C.O.	WALL CLEAN OUT

## PLUMBING GENERAL NOTES

- NOTES BELOW ARE NOT INTENDED TO REPLACE SPECIFICATIONS. SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO GENERAL NOTES.
- PROVIDE FIXTURE SHUT-OFF VALVES AND P-TRAPS FOR ALL FIXTURES PROVIDED. PROVIDE SANITARY, WASTE AND DOMESTIC WATER PIPING AS REQUIRED FOR ALL FIXTURES PROVIDED.
- REFER TO AND CAREFULLY CHECK ARCHITECTURAL, ELECTRICAL AND MECHANICAL DRAWINGS AND DETAILS, NOTING LOCATIONS WHERE WALLS, PARTITIONS, CEILINGS AND OTHER SURFACES ARE FURRED; LOCATION OF PIPE SLEEVES, LOCATIONS OF PIPE SHAFTS AND CONFLICTS WITH WORK OF OTHER TRADES AND ARRANGE WORK ACCORDINGLY. FURNISH ALL OFFSETS, FITTINGS, VALVES, DRAINS, ETC., REQUIRED TO MEET SUCH CONDITIONS.
- DUE TO SCALE OF DRAWINGS, ALL REQUIRED OFFSETS, FITTINGS, VALVES, DRAINS, ETC., MAY NOT BE INDICATED.
- ALL PIPING PASSING THROUGH FIRE RATED WALLS SHALL BE PROVIDED WITH SCHEDULE 40 STEEL PIPE SLEEVES AND SPACE BETWEEN EXTERIOR OF PIPE AND INTERIOR OF PIPE SLEEVE PACKED WITH A FIRE RATED MATERIAL EQUAL TO THE RATING OF THE WALL.
- UNLESS OTHERWISE INDICATED, PROVIDE A COMPLETE AND OPERATIONAL MECHANICAL SYSTEM, INCLUDING ALL NECESSARY MATERIAL, LABOR AND EQUIPMENT.
- CONTRACTOR SHALL OBTAIN AND PAY FOR ALL REQUIRED PERMITS AND ARRANGE FOR ALL REQUIRED INSPECTIONS IN ACCORDANCE WITH STATE AND LOCAL GOVERNING CODES.
- THE TERM "PROVIDE" SHALL MEAN "TO FURNISH, INSTALL AND CONNECT COMPLETELY".
- WHERE THE CONTRACTOR PROPOSES TO USE AN ITEM OF EQUIPMENT OTHER THAN THAT SPECIFIED OR DETAILED ON THE DRAWINGS WHICH REQUIRES ANY REDESIGN OF THE STRUCTURE, PARTITIONS, FOUNDATIONS, PIPING, WIRING OR ANY OTHER PART OF THE MECHANICAL, ELECTRICAL OR ARCHITECTURAL LAYOUT, ALL SUCH REDESIGN, AND ALL NEW DRAWINGS AND DETAILING REQUIRED THEREFORE, SHALL BE PREPARED AT THE CONTRACTOR'S EXPENSE AND ARE SUBJECT TO THE REVIEW AND APPROVAL OF THE OWNER OR HIS AUTHORIZED REPRESENTATIVE. OWNER RESERVES THE RIGHT TO HAVE THE ARCHITECT OR ENGINEER OF HIS CHOICE PREPARE ANY REDESIGN WORK.
- CONTRACTOR SHALL COORDINATE ELECTRICAL REQUIREMENTS OF MECHANICAL EQUIPMENT WITH DIVISION 16.
- ALL WORK SHALL BE DONE WITH LICENSED WORKMEN IN ACCORDANCE WITH STATE AND LOCAL GOVERNING AUTHORITIES.
- CONTRACTOR SHALL MAKE ADEQUATE PROVISIONS FOR PIPE SLOPE AND ANCHORAGE.
- BEFORE CUTTING OR DRILLING INTO BUILDING ELEMENTS INSPECT AND LAYOUT WORK TO AVOID DAMAGING STRUCTURAL ELEMENTS AND BUILDING UTILITIES.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT RECOGNIZED:
  - INTERNATIONAL BUILDING CODE
  - CONNECTICUT BUILDING CODE AND SUPPLEMENT.
  - MECHANICAL CODE
  - ASTM & ANSI STANDARDS
  - PLUMBING CODE
  - LIFE SAFETY CODE
- CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIR AND PAYMENT FOR ALL UTILITIES DAMAGED DURING CONSTRUCTION.
- CONTRACTOR TO CONFIRM PIPE LOCATIONS, ELEVATIONS AND SIZES BEFORE ANY WORK IS STARTED. IF ANY DISCREPANCIES ARE FOUND, NOTIFY ENGINEER BEFORE PROCEEDING WITH WORK.
- PROVIDE WATER SERVICE SHUT-OFF VALVES ON WATER SUPPLY IMMEDIATELY ADJACENT TO PLUMBING FIXTURES.
- PROVIDE SEISMIC BRACING OF ALL PLUMBING PIPES PER THE CONNECTICUT BUILDING CODE.
- PROVIDE WATER HAMMER ARRESTERS FOR ALL FLUSH VALVES, SIZE AND LOCATE IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- FOLLOW MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS FOR INSTALLATION OF PROVIDED EQUIPMENT.
- ALL PIPES THAT PENETRATE WALL, FLOORS AND CEILINGS IN FINISHED AREAS SHALL RECEIVE CHROME PLATED METAL ESCUTCHEONS.
- ALL SHOP DRAWINGS OF INDIVIDUAL COMPONENTS ARE TO BE SUBMITTED AS A COMPLETE PACKAGE.
- ALL SHOP DRAWINGS OF RELATED COMPONENTS SHALL BE SUBMITTED AS A COMPLETE PACKAGE.
- ALL WORK IN INTERIOR FINISHED SPACES SHALL BE CONCEALED BEHIND WALLS, ABOVE CEILINGS OR UNDER THE FLOOR. PROVIDE ALL NECESSARY CUTTING, PATCHING, REPAINTING AND/OR REPLACEMENT OF FINISHES AS REQUIRED TO PERFORM WORK.
- WRITTEN REQUESTS FOR PLANNED SHUTDOWN OR INTERRUPTION OF BUILDING SERVICES, SYSTEMS OR EQUIPMENT SHALL BE MADE IN WRITING 72 HOURS PRIOR TO START OF THE REQUESTED SHUTDOWN PERIOD.
- SUPPORT PIPING ABOVE SUSPENDED CEILING, FROM CONSTRUCTION ABOVE, AS CLOSE AS POSSIBLE TO BOTTOM OF SLABS, BEAMS, MAINTAINING MAXIMUM HEADROOM AT ALL TIMES.
- PROVIDE CLEANOUTS PER PLUMBING CODE.
- ISLE AND CORRIDOR WAYS THROUGH CONSTRUCTION AREAS WHICH ARE REQUIRED FOR EGRESS (NORMAL OR EMERGENCY) SHALL BE KEPT CLEAR OF MATERIAL, EQUIPMENT AND DEBRIS.
- ALL WORK SHALL BE DONE BY LICENSED WORKMEN IN ACCORDANCE WITH STATE AND LOCAL GOVERNING AUTHORITIES.



**TOWN OF VOLUNTOWN  
PUBLIC WORKS GARAGE**  
96 GATE STREET, VOLUNTOWN, CT

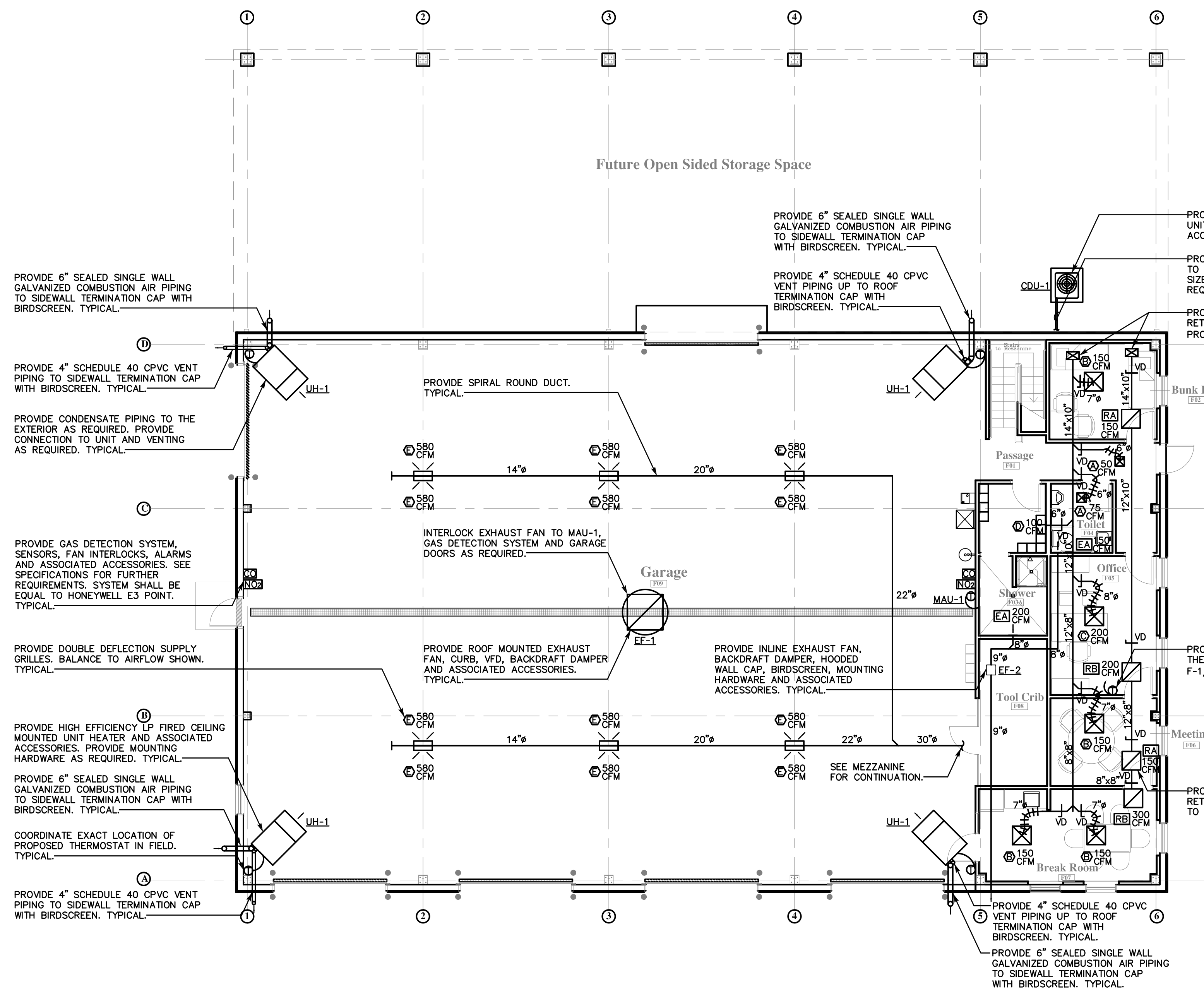
Plumbing Details, Symbols, Notes & Abbreviations

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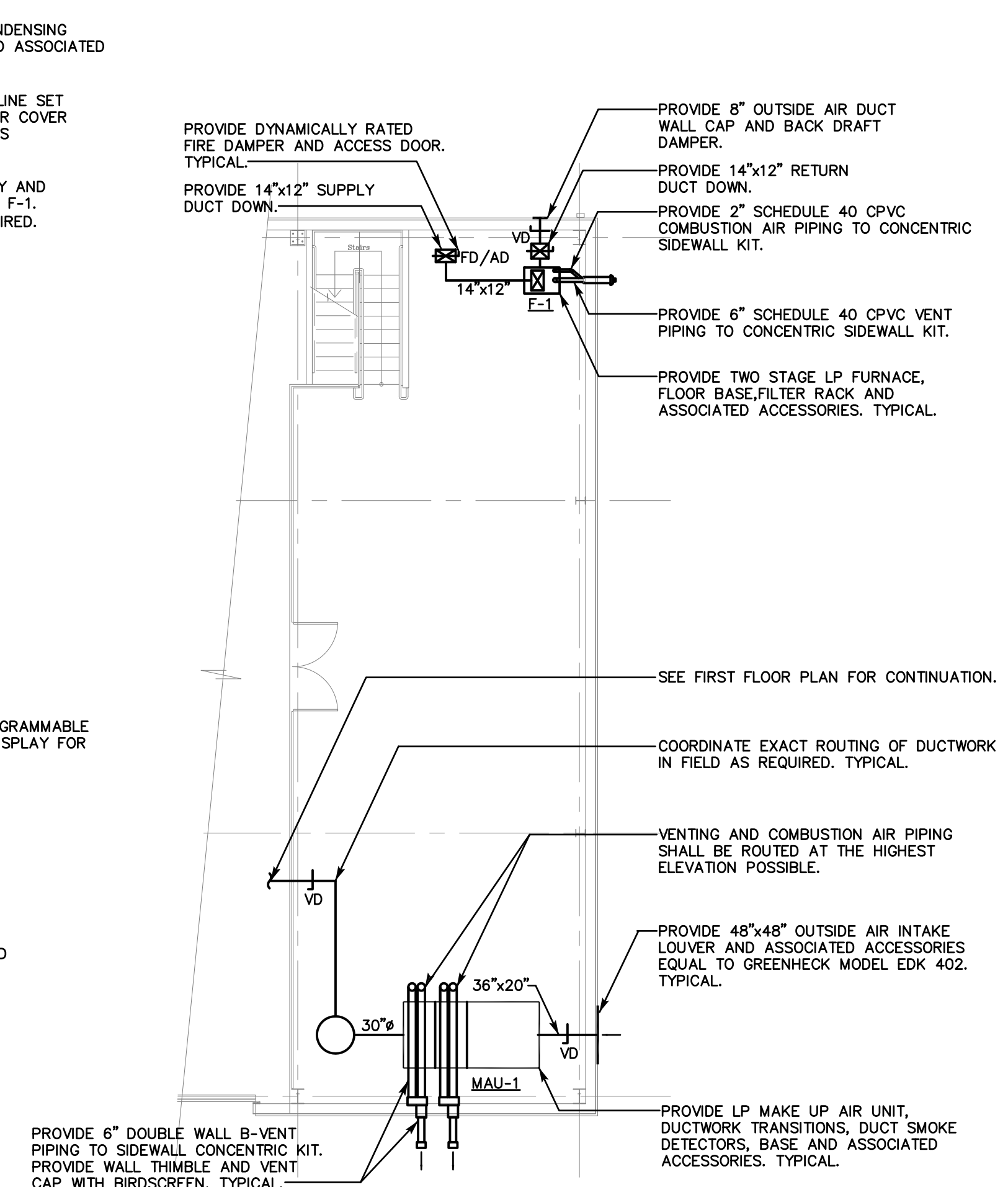
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**P-2**





**FIRST FLOOR MECHANICAL PLAN**  
SCALE: 1/8"=1'-0"



**MEZZANINE MECHANICAL PLAN**  
SCALE: 1/8"=1'-0"

- MECHANICAL NOTES:**
1. COORDINATE ALL WORK WITH ARCHITECTURAL AND STRUCTURAL DRAWINGS.
  2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK INCLUDING TOOLS, MATERIAL, MANPOWER, ETC. REQUIRED FOR COMPLETE AND PROPER INSTALLATION OF PROPOSED MATERIALS, FIXTURES, AND/OR EQUIPMENT.
  3. DRAWINGS ARE DIAGRAMMATIC. CONTRACTOR SHALL FIELD VERIFY ALL LOCATIONS, QUANTITIES AND DIMENSIONS OF PROPOSED MATERIALS, PIPING, CONDUIT, FIXTURES AND/OR EQUIPMENT WITHIN AND AFFECTING PROJECT SCOPE OF WORK.
  4. ALL WORK SHALL BE PERFORMED IN A SAFE AND ORDERLY MANNER WITH QUALIFIED AND LICENSED PERSONNEL IN ACCORDANCE WITH STATE AND LOCAL GOVERNING AUTHORITIES AND ALL APPLICABLE CODES AND STANDARDS. TYPICAL.
  5. PROVIDE ALL REQUIRED PENETRATIONS. COORDINATE WITH PROPOSED STRUCTURAL ELEMENTS. FIRE STOP ALL PENETRATIONS. TYPICAL.
  6. ROUTING OF ALL DUCTWORK/PIPING SHALL BE COORDINATED WITH PROPOSED CONDITIONS, STRUCTURAL FRAMING ELEMENTS AND ALL OTHER PROJECT DISCIPLINES. TYPICAL.

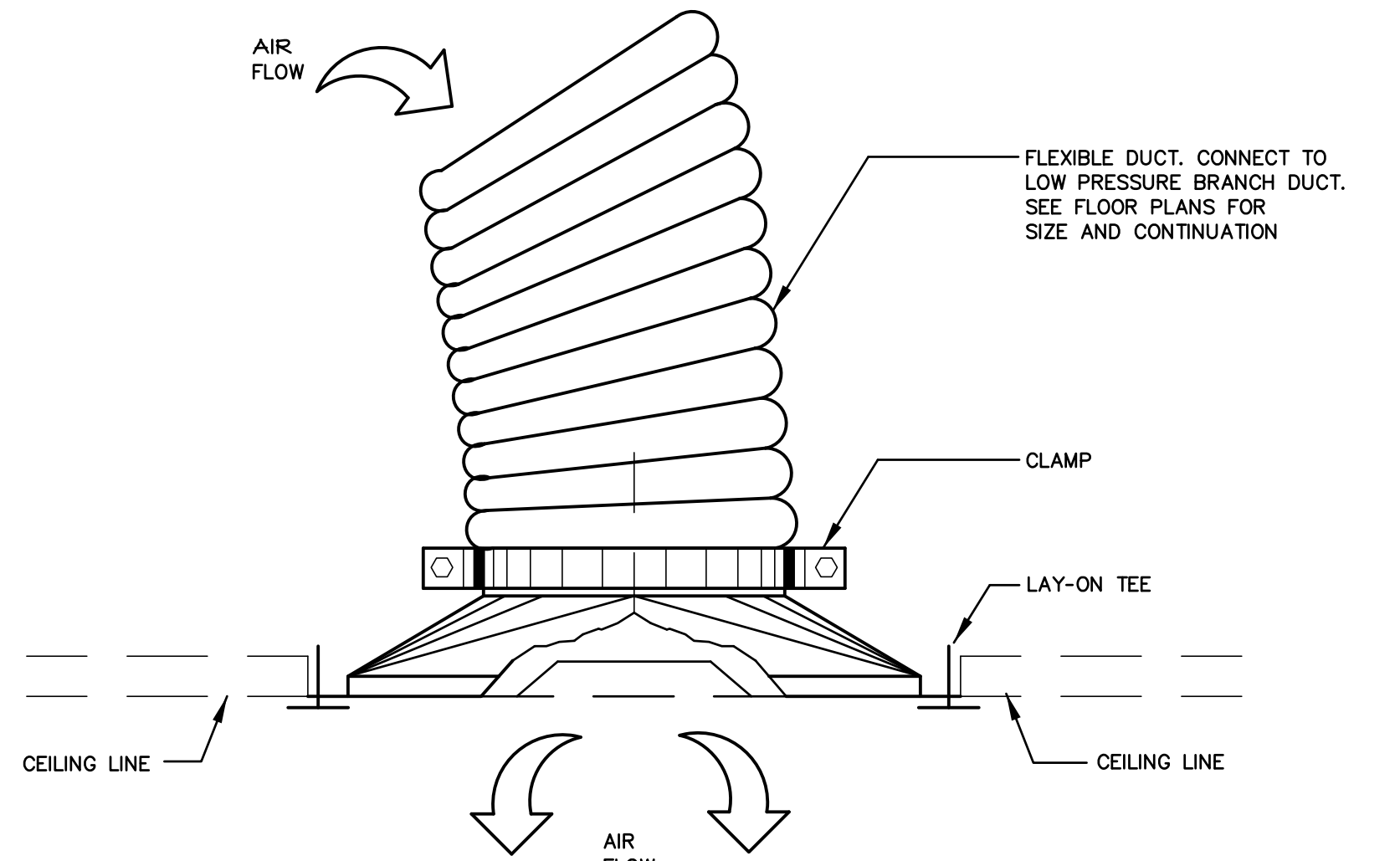
- MECHANICAL DUCTWORK NOTES:**
- MAU-1/F-1:**  
INTERNALLY INSULATE (FOR SOUND) ALL SUPPLY AND RETURN DUCTWORK TEN (10) FEET FROM UNIT. EXTERNAL INSULATE ALL SUPPLY AND RETURN DUCTWORK SHALL BE INSULATED AS REQUIRED BY CODE.
- INTERNAL INSULATION:**  
INSULATION SHALL BE INTERIOR DUCT SOUND ABSORBING INSULATION, GLUED AND PINNED PER MANUFACTURER'S REQUIREMENTS. PROVIDE INSULATION EQUAL TO SCHULLER PERMACOTE LINACOUSTIC HP. TYPICAL.
- FIRE DAMPERS:**  
PROVIDE DYNAMIC FIRE DAMPERS AND ACCESS DOORS AT ALL FIRE ASSEMBLY PENETRATIONS. TYPICAL.

REVISION	DATE	NUMBER

**TOWN OF VOLUNTOWN  
PUBLIC WORKS GARAGE**  
96 GATE STREET, VOLUNTOWN, CT  
**First Floor & Mezzanine Mech. Plans**

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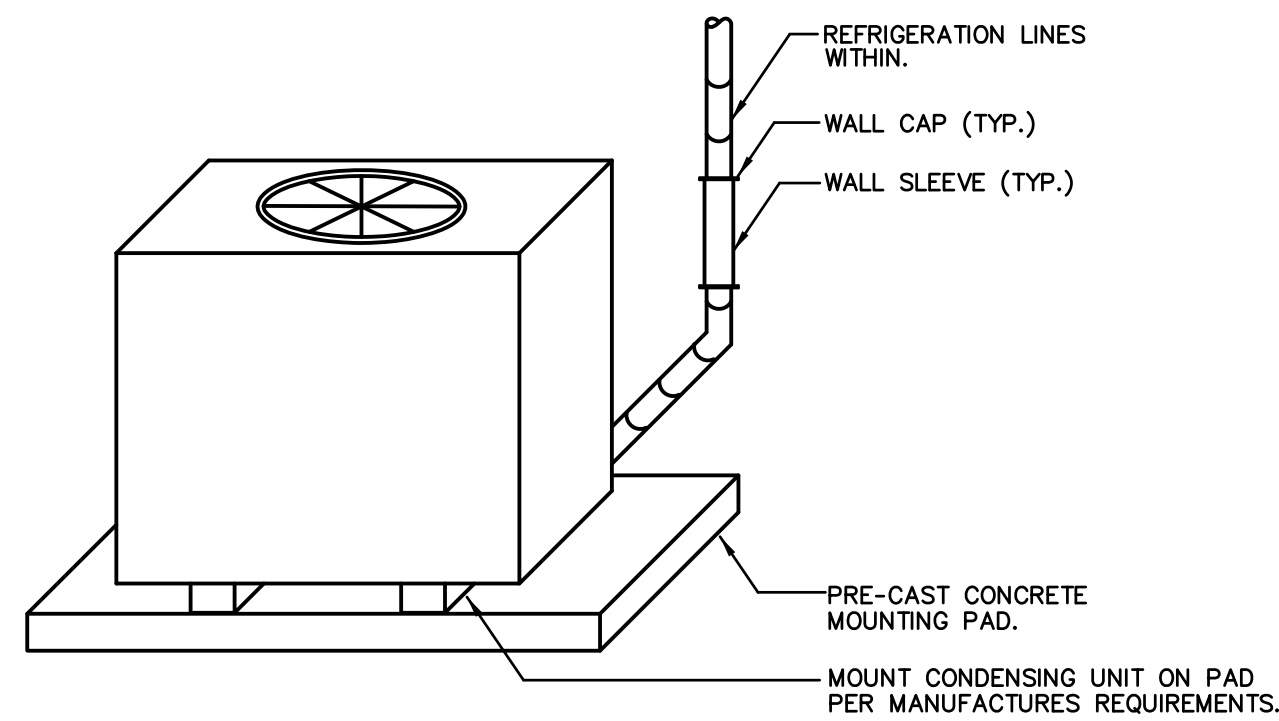


**NOTE:**  
SUPPLY DIFFUSERS SHALL BE EQUIPPED WITH OPPOSED BLADE DAMPERS.(TYP.)

**NOTE:**  
COORDINATE MOUNTING STYLE WITH PROPOSED CEILING TYPE. (TYPICAL)

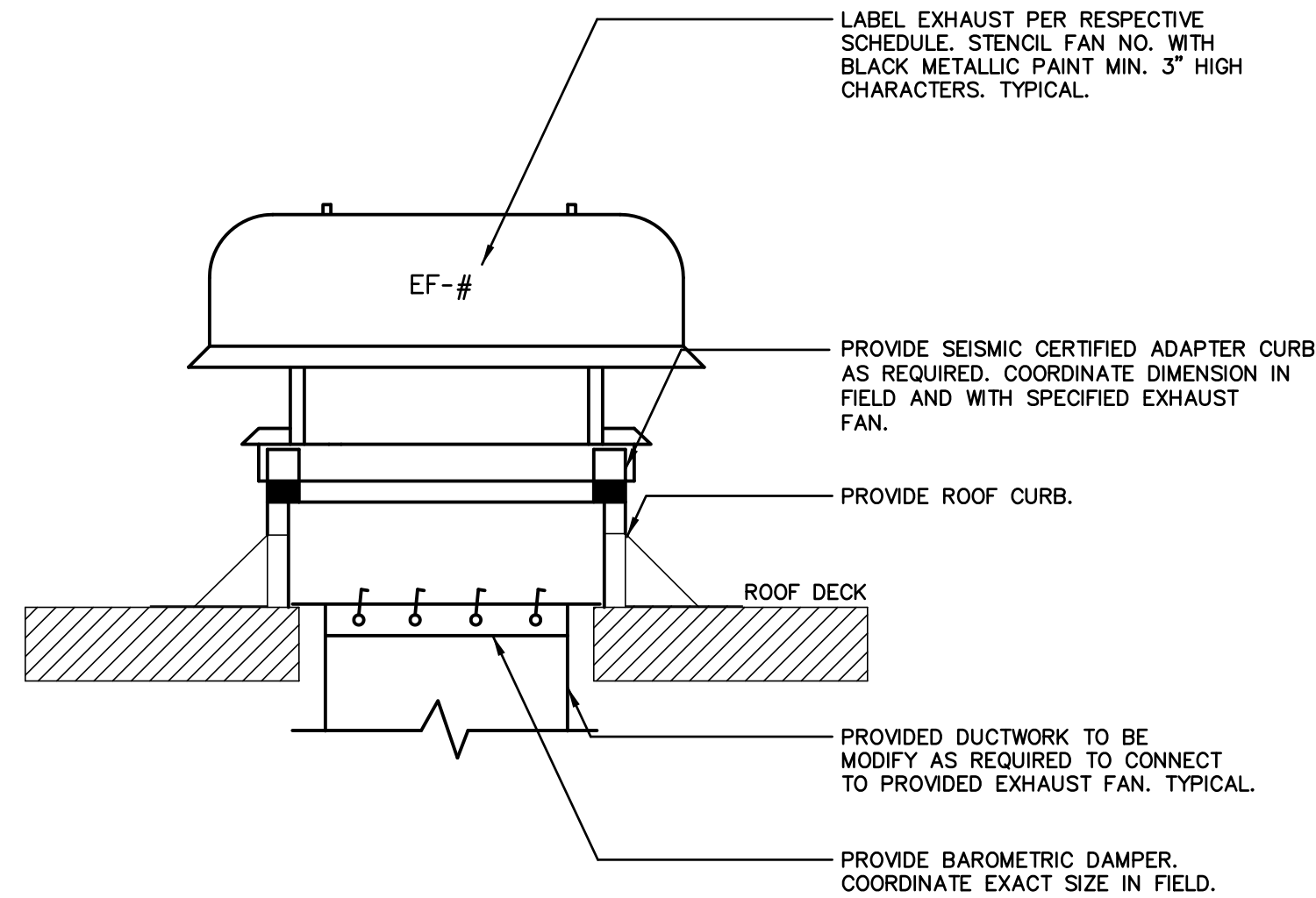
### SQUARE DIFFUSER DETAIL

SCALE: N.T.S.



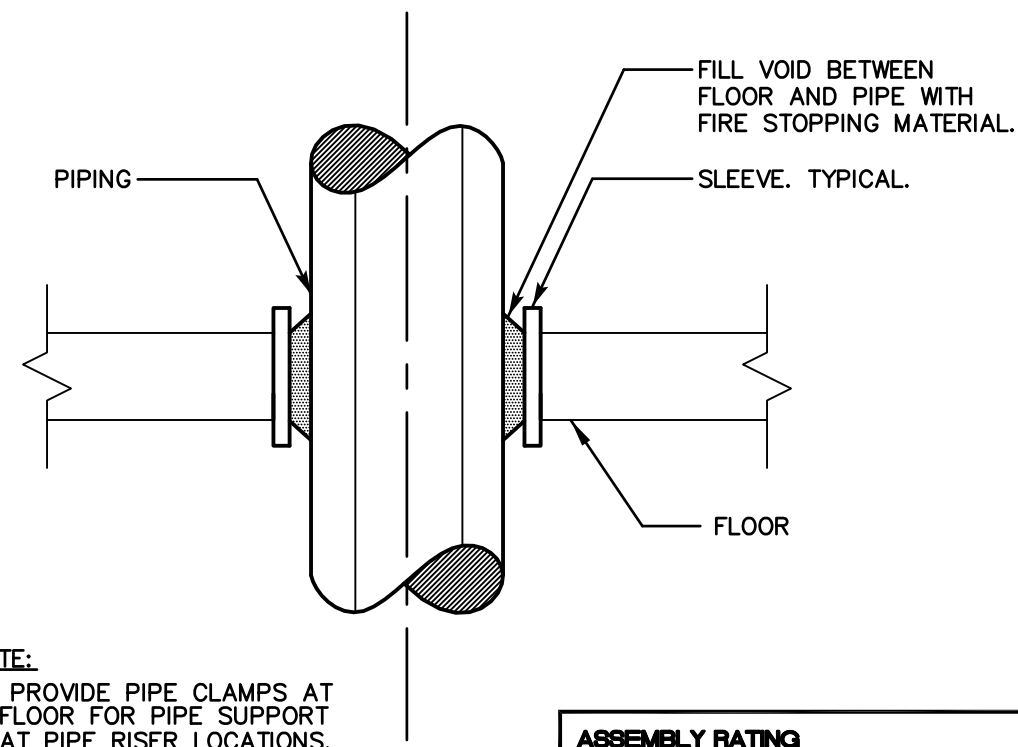
### CONDENSING UNIT DETAIL

SCALE: N.T.S.



### EXHAUST FAN DETAIL

SCALE: N.T.S.

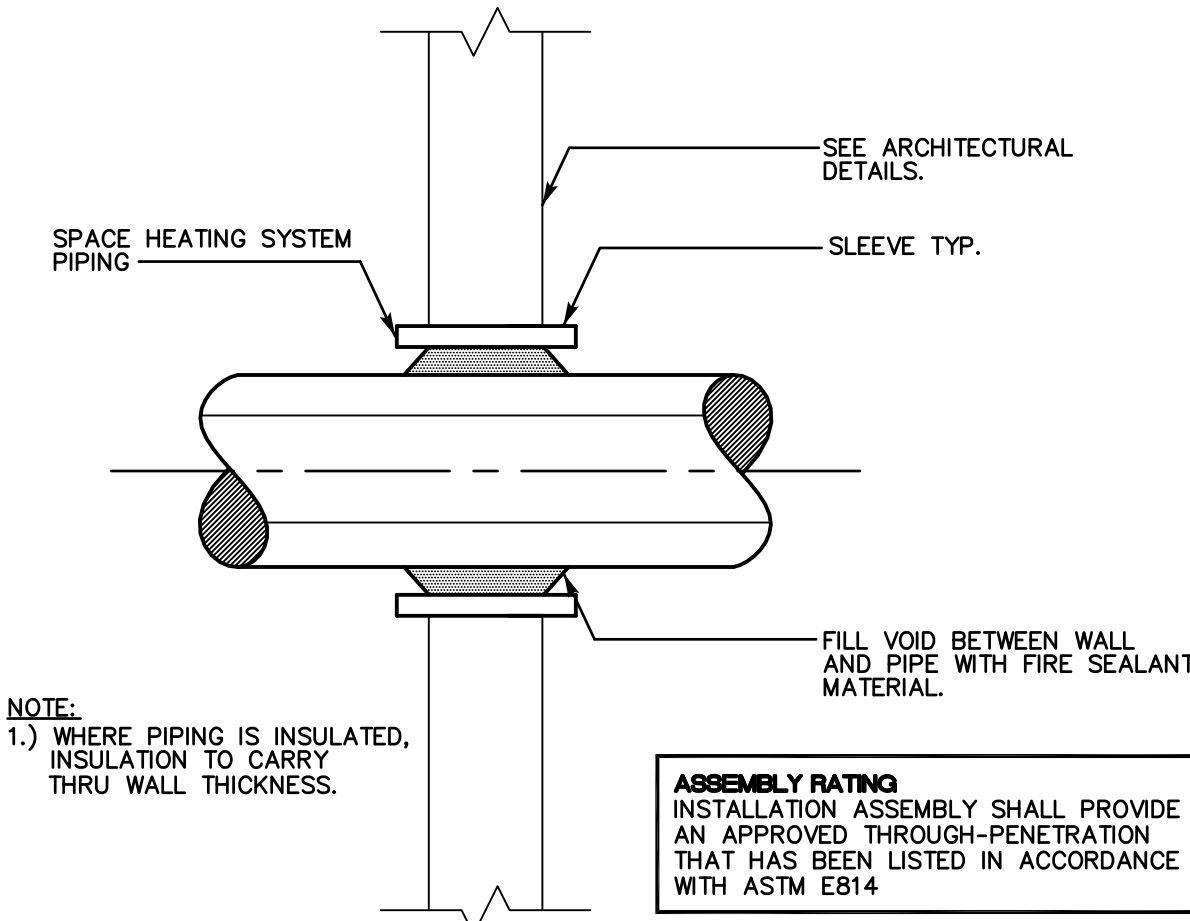


**NOTE:**  
1.) PROVIDE PIPE CLAMPS AT FLOOR FOR PIPE SUPPORT AT PIPE RISER LOCATIONS.

**ASSEMBLY RATING**  
INSTALLATION ASSEMBLY SHALL PROVIDE AN APPROVED THROUGH-PENETRATION THAT HAS BEEN LISTED IN ACCORDANCE WITH ASTM E814

### TYPICAL FLOOR PIPE PENETRATION FIRE STOPPING DETAIL

SCALE: N.T.S.

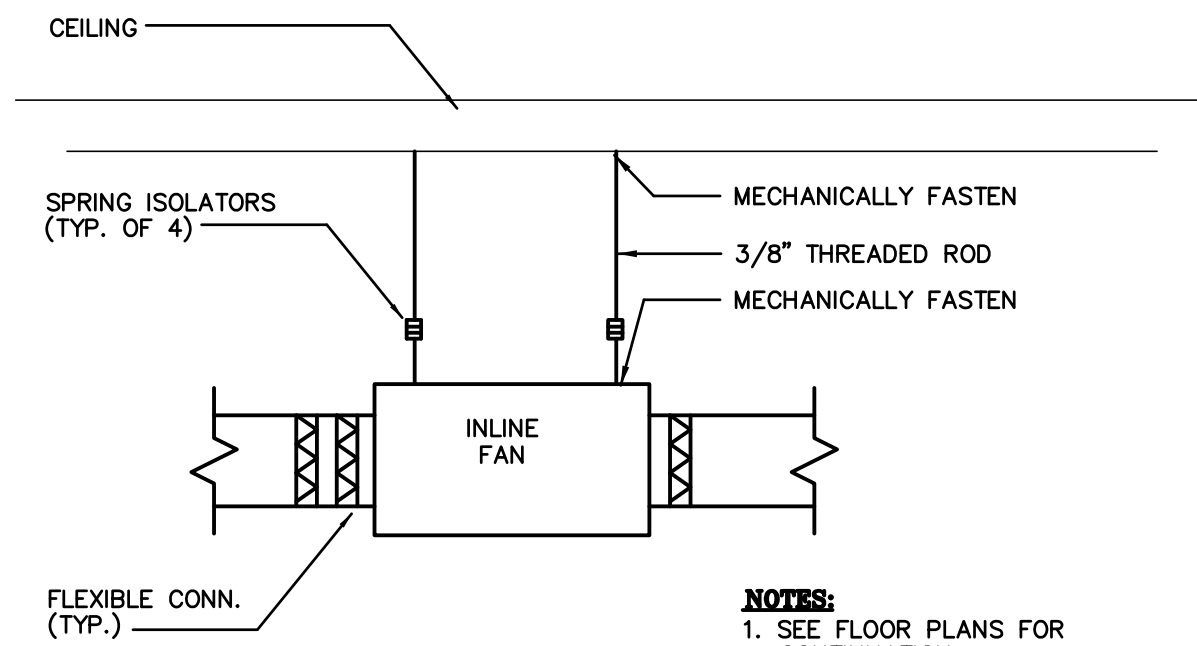


**NOTE:**  
1.) WHERE PIPING IS INSULATED, INSULATION TO CARRY THRU WALL THICKNESS.

**ASSEMBLY RATING**  
INSTALLATION ASSEMBLY SHALL PROVIDE AN APPROVED THROUGH-PENETRATION THAT HAS BEEN LISTED IN ACCORDANCE WITH ASTM E814

### TYPICAL WALL PIPE PENETRATION FIRE STOPPING DETAIL

SCALE: N.T.S.



**NOTES:**  
1. SEE FLOOR PLANS FOR CONTINUATION.  
2. INTERCONNECT WITH HVAC CONTROL PANEL TIME CLOCK.

### INLINE FAN DETAIL

SCALE: N.T.S.

AIR INLET/ OUTLINE TYPE	NECK SIZE	TYPE	MAX. CFM	MANUFACTURER	MODEL	FINISH	ACCESSORIES
<b>(A)</b>	6"	4-WAY	75	PRICE	ASCD	SEE NOTE 1	OBD
<b>(B)</b>	8"	4-WAY	150	PRICE	ASCD	SEE NOTE 1	OBD
<b>(C)</b>	10"	4-WAY	200	PRICE	ASCD	SEE NOTE 1	OBD
<b>(D)</b>	12"x6"	SIDEWALL	150	PRICE	620DAL	SEE NOTE 1	OBD
<b>(E)</b>	20"x10"	SPIRAL	580	PRICE	SDGE	SEE NOTE 1	OBD
<b>RA</b>	8"x8"	RETURN	150	PRICE	80	SEE NOTE 1	OBD
<b>RE</b>	12"x8"	RETURN	300	PRICE	80	SEE NOTE 1	OBD
<b>EA</b>	12"x8"	SIDEWALL	200	PRICE	630DAL	SEE NOTE 1	OBD

FURNACE SCHEDULE	
FURNACE UNIT NO.	F-1
LOCATION	MEZZANINE
FUEL	LIQUID PROPANE
CFM	1,000
ESP	0.5
LP INPUT (BTU) 1ST/2ND STAGE	65,000/100,000
LP OUTPUT (BTU) 1ST/2ND STAGE	52,855/96,700
EFFICIENCY AFUE	96.7
UNIT OPERATING WEIGHT(LBS)	185
VIBRATION ISOLATION	YES
LOCAL STARTER CONNECTION	YES
MOTOR HP	.75
ELECT. CHARACT.(V/PH/HZ)	115/1/60
APPROXIMATE WEIGHT (LBS)	51
DESIGN BASED MODEL	TUHC2100
DESIGN BASED MANUFACTURER	TRANE

CONDENSING UNIT SCHEDULE	
CONDENSING UNIT NO.	ODU-1
LOCATION	GRADE
SERVICE	F-1
REFRIGERANT TYPE	R410A
COOLING CAPACITY BTU	27,800
COMPRESSOR TYPE	SCROLL
NO. OF FANS	1
SEER	15
VIBRATION ISOLATION	YES
LOCAL STARTER CONNECTION	YES
ELECT. CHARACT.(V/PH/HZ)	230/1/60
DESIGN BASED MODEL	4TTR4031
DESIGN BASED MANUFACTURER	TRANE

UNIT HEATER NO.	UH-1
SERVICE	GARAGE
LOCATION	CEILING MOUNTED (18'-0" AFF)
FUEL TYPE	PROPANE
HEATING INPUT (BTU)	131,000
HEATING OUTPUT (BTU)	121,830
AIR FLOW (CFM)	2,256
MOTOR HP	1/4
THERMOSTAT	SEE FLOOR PLANS
ELEC. CHARAC. (V/PH/Hz)	115/1/60
DESIGN BASED MODEL	UEAS-130
DESIGN BASED MANUFACTURER	REZNOR

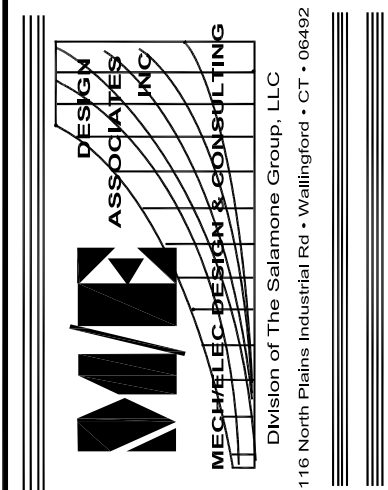
EXHAUST FAN SCHEDULE		
EXHAUST FAN NO.	EF-1	EF-2
SERVICE	GARAGE	RESTROOM/SHOWER
LOCATION	ROOF	CEILING
AIR FLOW (SCFM)	7,000 NORMAL 11,250 LOW ALARM 15,000 HIGH ALARM	350
EXT. STATIC PRESS. (WG)	0.5	0.2
WHEEL TYPE	CENTRIFUGAL	CENTRIFUGAL
WHEEL MATERIAL	ALUMINUM	ALUMINUM
WHEEL CONSTRUCTION	BACKWARD	BACKWARD
DRIVE TYPE	BELT	DIRECT
BEARING TYPE	BALL	BALL
LUBRICATION TYPE	PERMANENT	PERMANENT
MOTOR HP	5	1/6
ELECT. CHARAC. (V/PH/Hz)	230 1/60	115 1/60
LOCAL DISCONNECT	YES	YES
HOUSING MATERIAL	GALVANIZED STEEL	GALVANIZED STEEL
BACKDRIFT DAMPER	YES	YES
VIBRATION ISOLATION	YES	YES
ISOLATOR TYPE	SPRING	SPRING
DESIGN BASED MODEL	GB-330-S	GB-80 VC0-1/6
DESIGN BASED MANUFACTURER	GREENHECK	GREENHECK

MAKE UP AIR UNIT SCHEDULE	
UNIT NO.	MAU-1
SERVICE	GARAGE
LOCATION	MEZZANINE
CFM	7,000
ESP	1.5
LP INPUT (MBH)	700
LP OUTPUT (MBH)	560
TEMPERATURE RISE	73°F
MOTOR HORSEPOWER	5
NET WEIGHT	1,184
ELECT. CHARAC. (V/PH.HZ)	230/1/60
APPROXIMATE WEIGHT (LBS)	1,962
DESIGN BASED MODEL	SSCBL-700
DESIGN BASED MANUFACTURER	REZNOR

AD	ACCESS DOOR
AF	AIR FILTER
AF	ABOVE FINISHED FLOOR
AMP	AMPERE
BDD	BACK DRAFT DAMPER
BHP	BRAKE HORSE POWER
BTU	BRITISH THERMAL UNIT
BTUH	BRITISH THERMAL UNIT/HOUR
CENTRIF	CENTRIFUGAL
CFM	CUBIC FEET PER MINUTE
CUH	CABINET UNIT HEATER
DB	DRY BULB
EAT	ENTERING AIR TEMPERATURE
EF	EXHAUST FAN
ESP	EXTERNAL STATIC PRESSURE
EXH	EXHAUST
FD	FIRE DAMPER
FFF	FROM FINISHED FLOOR
FBM	FEET PER MINUTE
FPS	FEET PER SECOND
FEET	FEET
GPM	GALLONS PER MINUTE
HP	HORSEPOWER
HT	HEIGHT
ID	INSIDE DIAMETER
IN	INCHES
L	LENGTH
LAT	LEAVING AIR TEMPERATURE
LVR	LOUVER
MAU	MAKE UP AIR UNIT
MAX	MAXIMUM
MBH	THOUSAND BTU/HOUR
MIN	MINIMUM
LP	LIQUID PROPANE
NIS	NOT TO SCALE
OA	OUTSIDE AIR
ODD	OPPOSED BLADE DAMPER
PRV	PRESSURE RELIEF VALVE
PSIA	POUNDS PER SQUARE INCH ABSOLUTE
PSIG	POUNDS PER SQUARE INCH GAUGE
RH	RELATIVE HUMIDITY
RPM	REVOLUTIONS PER MINUTE
SENS	SENSOR
SF	SUPPLY FAN
S	SMOKE DETECTOR
SP	STATIC PRESSURE
TEMP	TEMPERATURE
TONS	TONS OF REFRIGERATION
UH	UNIT HEATER
VD	VOLUME DAMPER

	NEGATIVE PRESSURE OR AIR INLET DUCTWORK
	POSITIVE PRESSURE OR AIR OUTLET DUCTWORK
	DUCT WORK
	SUPPLY DIFFUSER GRILLE TYPE
	RETURN GRILLE TYPE
	EXHAUST GRILLE TYPE
	DIAMETER
	THERMOSTAT
FD/AD	FIRE DAMPER AND ACCESS DOOR

1. REFER TO SPECIFICATIONS AND BID DOCUMENTS FOR ADDITIONAL CONTRACT REQUIREMENTS.
2. MECHANICAL DRAWINGS TO BE USED IN CONJUNCTION WITH ARCHITECTURAL, STRUCTURAL, PLUMBING AND ELECTRICAL DRAWINGS.
3. NOTES BELOW ARE NOT INTENDED TO REPLACE SPECIFICATIONS; SEE SPECIFICATIONS FOR REQUIREMENTS IN ADDITION TO DRAWING NOTES.
4. MECHANICAL DRAWINGS DO NOT NECESSARILY SHOW ALL RELATED WORK CONTRACTOR TO USE ALL DRAWINGS IN CONTRACT DOCUMENTS FOR DIVISION 15 MECHANICAL WORK.
5. UNLESS OTHERWISE INDICATED, PROVIDE A COMPLETE AND OPERATIONAL MECHANICAL SYSTEM INCLUDING NECESSARY MATERIAL, LABOR AND EQUIPMENT.
6. MECHANICAL PLANS, DETAILS AND ONE LINE DIAGRAMS SHOW THE GENERAL CONCEPTS AND ARRANGEMENT OF THE SYSTEMS. THEY ARE DIAGNOSTIC AND DO NOT SHOW ALL BENDS, COUPLINGS, OFFSETS, VALVES, DRAINS, FITTINGS, HANGERS, CLEANOUTS AND ACCESS DOORS WHICH THE CONTRACTOR SHALL PROVIDE TO COMPLETE THE SYSTEM.
7. PLANS AND DETAILS DO NOT SHOW ALL INTERFERENCES AND CONDITIONS, VISIBLE AND/OR HIDDEN, THAT MAY EXIST; THUS REQUIRING THE CONTRACTOR TO INSPECT AND SURVEY THE SPACE BEFORE PERFORMING THE WORK.
8. BEFORE SELECTING MATERIAL AND EQUIPMENT AND PROCEEDING WITH WORK, CONTRACTOR SHALL WHERE MATERIALS AND EQUIPMENT ARE TO BE INSTALLED TO INSURE SUITABILITY, AND CHECK NEEDED SPACE FOR PLACEMENT AND CLEARANCES.
9. BEFORE CUTTING OR DRILLING INTO BUILDING ELEMENTS, INSPECT AND LAYOUT THE WORK TO AVOID DAMAGING STRUCTURAL ELEMENTS AND BUILDING UTILITIES.
10. LOCATE ALL EQUIPMENT WHICH REQUIRES SERVICING IN FULLY ACCESSIBLE POSITIONS, IF REQUIRED FOR BETTER ACCESSIBILITY, FURNISH ACCESS DOORS OR PLATFORMS FOR MINOR DEVICES. PROVIDE ACCESS TO ALL DEVICES FOR BETTER ACCESSIBILITY, ANY CHANGE SHALL BE SUBMITTED TO THE OWNER'S REPRESENTATIVE FOR APPROVAL.
11. COORDINATE WORK WITH OTHER DIVISIONS AND SPECIFICATIONS ON THIS PROJECT.
12. ALL WORK IN INTERIOR FINISHED SPACES IS TO BE CONCEALED BEHIND WALLS, ABOVE CEILINGS OR HUNG CEILINGS, OR UNDER THE FLOOR, PROVIDE ALL NECESSARY CUTTING, PATCHING, REPAIRING, AND/OR REPLACEMENT OF CEILING TILES AS REQUIRED TO PERFORM WORK.
13. ALL EQUIPMENT REQUIRED TO BE LISTED OR APPROVED BY A TESTING LABORATORY SHALL BEAR A LABEL OF SUCH LABORATORY.
14. THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND ARRANGE FOR ALL REQUIRED INSPECTIONS IN ACCORDANCE WITH STATE AND LOCAL GOVERNING AUTHORITIES.
15. ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE MOST CURRENT RECOGNIZED:
  - A. CONNECTICUT BASIC BUILDING CODE AND SUPPLEMENTS
  - B. INTERNATIONAL ENERGY CONSERVATION CODE
  - C. INTERNATIONAL PLUMBING CODE
  - D. INTERNATIONAL MECHANICAL CODE
  - E. NATIONAL ELECTRIC CODE
16. IF A MANUFACTURER OF EQUIPMENT REQUIRES LARGER CAPACITY CIRCUITRY AND/OR EQUIPMENT, THE CONTRACTOR SHALL PROVIDE SUCH CAPACITY AND/OR EQUIPMENT UNDER HIS CONTRACT AT NO COST TO THE OWNER.
17. IF A MANUFACTURER OF PROVIDED EQUIPMENT RECOMMENDS ACCESSORY(S) OR OPTION(S) FOR THE SUPPLIED EQUIPMENT, THE CONTRACTOR SHALL PROVIDE ACCESSORY(S) OR OPTION(S) UNDER HIS CONTRACT AT NO COST TO THE OWNER.
18. THE TERM "INDICATED" SHALL MEAN "AS SHOWN ON CONTRACT DOCUMENTS (SPECIFICATIONS, DRAWINGS AND RELATED ATTACHMENTS)".
19. THE TERM "PROVIDE" SHALL MEAN "TO FURNISH, INSTALL AND CONNECT COMPLETELY".
20. ISLE AND CORRIDOR WAYS THROUGH CONSTRUCTION AREAS WHICH ARE REQUIRED FOR EGRESS (NORMAL OR EMERGENCY) SHALL BE KEPT CLEAR OF MATERIAL, EQUIPMENT AND DEBRIS.
21. COORDINATE ALL WORK WITH THE OWNER'S REPRESENTATIVE.
22. PROVIDE ACCESS TO ALL AREAS, INCLUDING STAGING, AND TRAFFIC CONTROL, NEEDED TO INSTALL EQUIPMENT PROVIDED.
23. REFER TO ARCHITECTURAL REFLECTED CEILING PLANS FOR THE LOCATION OF MECHANICAL AND ELECTRICAL ITEMS TO BE INSTALLED IN THE CEILING.
24. UNLESS OTHERWISE INDICATED, PROVIDE CONTROL WIRING FOR ALL MECHANICAL SYSTEM EQUIPMENT.
25. CONTRACTOR SHALL COORDINATE ELECTRICAL REQUIREMENTS OF MECHANICAL EQUIPMENT WITH DIVISION 16.
26. UNLESS OTHERWISE INDICATED, SUPPORT PIPES WITH HANGER SPACING IN ACCORDANCE WITH THE BOCA NATIONAL MECHANICAL CODE.
27. CONTRACTOR SHALL MAKE ADEQUATE PROVISIONS FOR PIPE EXPANSION, CONTRACTION, SLOPE AND ANCHORAGE.
28. CONTRACTOR SHALL INSULATE ALL HVAC PIPING AND HVAC SYSTEM SUPPLY AND RETURN DUCTWORK.
29. UNLESS OTHERWISE INDICATED, ALL DUCTWORK, PIPING AND WIRING SHALL BE CONCEALED ABOVE CEILINGS AND/OR IN WALLS.
30. PLANS DO NOT SHOW ALL EQUIPMENT, VALVES, FITTINGS AND CONNECTIONS. SEE PIPING RISER DIAGRAMS, DETAILS, SCHEDULES AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
31. SUBMIT FOR REVIEW DETAILED SHOP DRAWINGS FOR ALL EQUIPMENT AND MATERIAL REQUIRED TO COMPLETE THE WORK. NO MATERIAL OR EQUIPMENT MAY BE DELIVERED TO THE JOB SITE OR INSTALLED UNTIL ACCEPTED SHOP DRAWINGS FOR EACH PARTICULAR ITEM HAVE BEEN RECEIVED AND APPROVED BY THE OWNER OR HIS AUTHORIZED REPRESENTATIVE WHERE THE CONTRACTOR PROPOSES TO USE AN ITEM OF EQUIPMENT OTHER THAN THAT INDICATED ON THE PLANS. ANY REDESIGN OF THE STRUCTURE, PARTITIONS, FOUNDATIONS, PIPING, WIRING OR ANY OTHER PART OF THE MECHANICAL, ELECTRICAL OR PLUMBING SYSTEMS, OR ANY REDESIGN OF THE SHOP DRAWINGS AND DETAILS, REQUIRED TO BE SHOWN, SHALL BE PREPARED AT THE CONTRACTOR'S EXPENSE AND IS SUBJECT TO THE OWNER'S REVIEW AND APPROVAL. THE OWNER OR HIS AUTHORIZED REPRESENTATIVE OWNER RESERVES THE RIGHT TO HAVE THE ARCHITECT OR ENGINEER OF HIS CHOICE PREPARE ANY REDESIGN WORK.
32. TURN OVER TO THE OWNER ALL MANUFACTURER'S WARRANTIES FOR EQUIPMENT PROVIDED.
33. THE CONTRACTOR MAY SUBSTITUTE EQUIPMENT OF ANOTHER MANUFACTURER IF IT IS OF EQUAL QUALITY AND RATING, SUBJECT TO OWNER'S AND ENGINEER'S REVIEW AND ACCEPTANCE. WHERE CONTRACTOR SUBSTITUTES EQUIPMENT OF A DIFFERENT TYPE, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING INSTALLATION SHOP DRAWINGS AND ALL RELATED ACCESSORY EQUIPMENT FOR A COMPLETE SYSTEM INSTALLATION.
34. ADVISE THE OWNER IN WRITING OF ANY DRAWING OR ANY TEMPORARY OPENINGS AND STRUCTURAL LOADING IN THE BUILDING REQUIRED FOR THE ADISSION OF APPARATUS PROVIDED UNDER THIS DIVISION. NOTIFY THE OWNER IMMEDIATELY IF CONTRACTOR'S EQUIPMENT OR MATERIALS ARE TO BE ASSEMBLY AND DISASSEMBLY OR EQUIPMENT AS REQUIRED TO PLACE EQUIPMENT IN ITS FINAL LOCATIONS.
35. UNLESS OTHERWISE INDICATED, PROVIDE 14 GAUGE GALVANIZED PIPE SLEEVES AND HANGERS LARGER THAN THE PIPE OR INSULATION WHERE SUCH ASSEMBLIES PENETRATE WALLS, PARTITIONS, FLOORS OR STRUCTURAL MEMBERS.
36. ALL VOIDS BETWEEN PIPES SHALL BE FILLED WITH A FIRE TESTED AND APPROVED ELASTOMERIC CAULKING MATERIAL.
37. THE WORK SHALL BE DONE WITH THE AID OF WORKMEN IN ACCORDANCE WITH STATE AND LOCAL GOVERNING AUTHORITIES.



REVISION

DATE \_\_\_\_\_

1BER

**TOWN OF VOLUNTOWN  
PUBLIC WORKS GARAGE**  
96 GATE STREET, VOLUNTOWN, CT

**CLA Engineers, Inc.**  
CIVIL • STRUCTURAL • SURVEYING

317 Main Street Norwich, Connecticut  
(860) 886-1966 Fax (860) 886-9165  
[www.claengineers.com](http://www.claengineers.com)

CLA PROJECT NO.  
C/A-15-5598

PROJ. ENGINEER

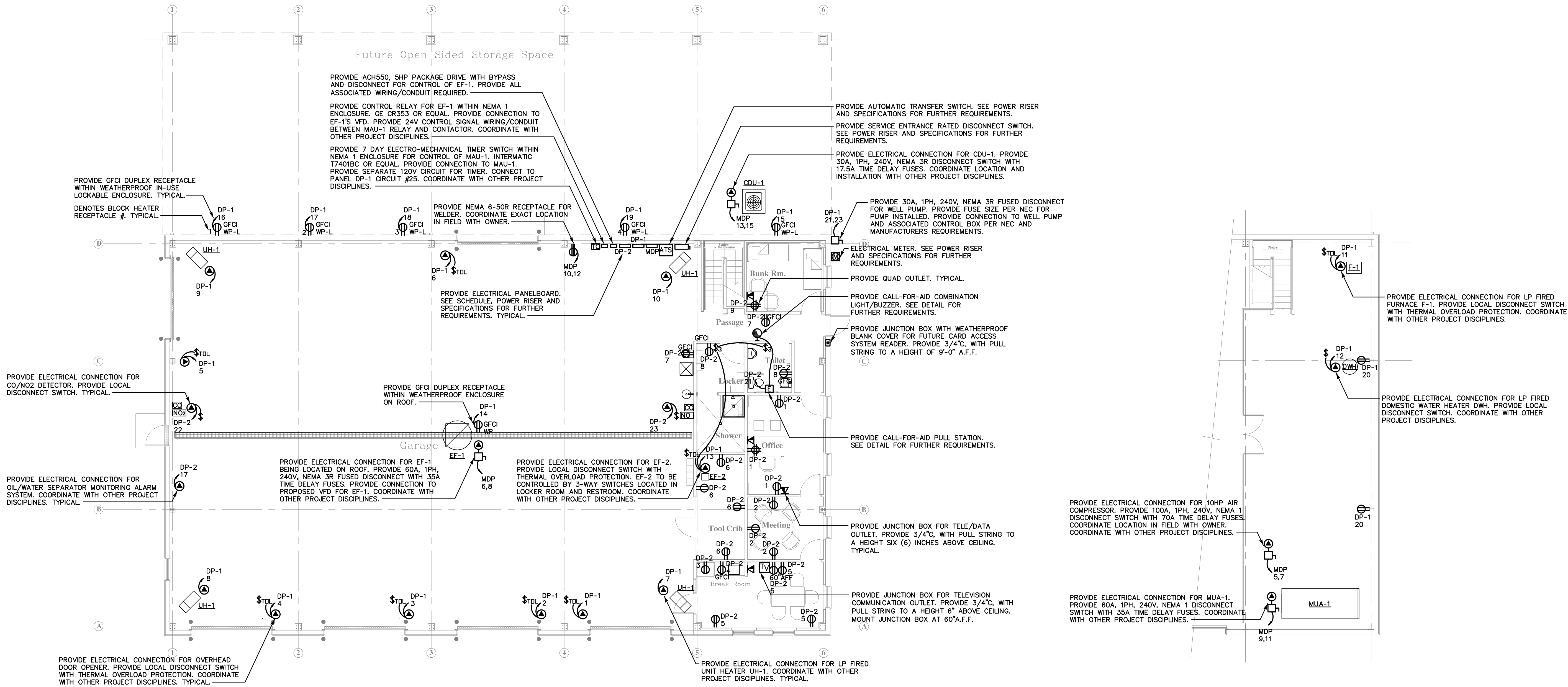
DATE: \_\_\_\_\_

SHEET NO.

# M-3



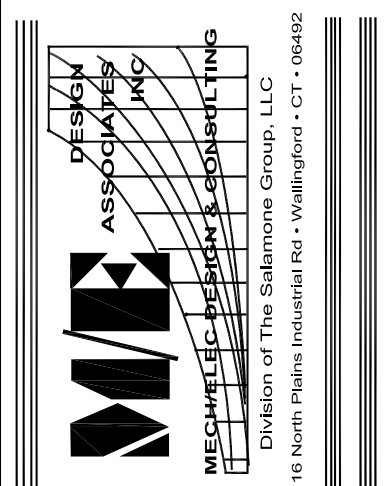
NOTES:  
UPON CO/NO2 DETECTORS HIGH ALERT LEVEL, CO/NO2 DETECTOR HIGH ALERT ALARM SHALL ACTIVATE AND ALL GARAGE BAY DOORS SHALL OPEN. CONTRACTOR SHALL PROVIDE ALL WIRING, CONDUIT, RELAYS, PROGRAMMING, ETC. REQUIRED. COORDINATE WITH OTHER PROJECT DISCIPLINES.



FIRST FLOOR ELECTRICAL PLAN  
SCALE: 1/8"=1'-0"

MEZZANINE ELECTRICAL PLAN  
SCALE: 1/8"=1'-0"

- GENERAL NOTES:
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK INCLUDING TOOLS, MATERIAL, MANPOWER, ETC. REQUIRED FOR COMPLETE AND PROPER INSTALLATION OF PROPOSED MATERIALS, FIXTURES AND/OR EQUIPMENT.
  2. DRAWINGS ARE DIAGRAMMATIC. CONTRACTOR SHALL VERIFY ALL LOCATIONS, QUANTITIES AND DIMENSIONS OF PROPOSED MATERIALS, FIXTURES AND/OR EQUIPMENT WITHIN AND AFFECTING PROJECT SCOPE OF WORK.
  3. ALL WORK SHALL BE PERFORMED IN A SAFE AND ORDERLY MANNER WITH QUALIFIED AND LICENSED PERSONNEL IN ACCORDANCE WITH STATE AND LOCAL GOVERNING AUTHORITIES AND ALL APPLICABLE CODES AND STANDARDS. TYPICAL.
  4. ROUTING OF ALL CONDUIT SHALL BE COORDINATED WITH STRUCTURAL FRAMING ELEMENTS AND ALL OTHER PROJECT DISCIPLINES. TYPICAL.
  5. PROVIDE ALL REQUIRED PENETRATIONS. COORDINATE WITH STRUCTURAL ELEMENTS. FIRE STOP ALL PENETRATIONS. TYPICAL.
  6. INSTALL ALL EQUIPMENT AND ASSOCIATED ACCESSORIES PER NEC AND MANUFACTURER'S REQUIREMENTS.

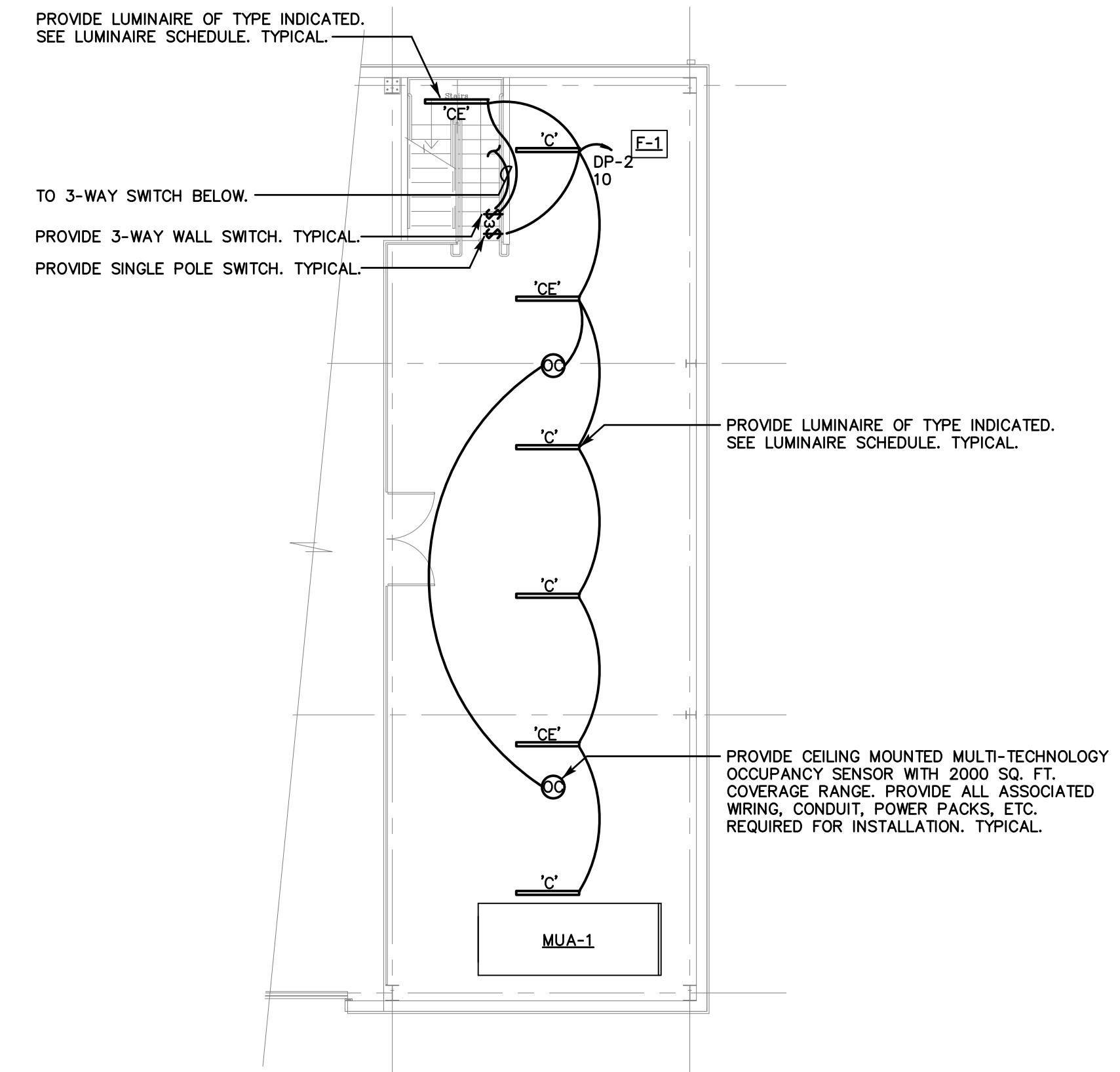


REVISION	DATE	NUMBER

TOWN OF VOLUNTOWN  
PUBLIC WORKS GARAGE  
96 GATE STREET, VOLUNTOWN, CT  
First Floor & Mezzanine Electrical Plans

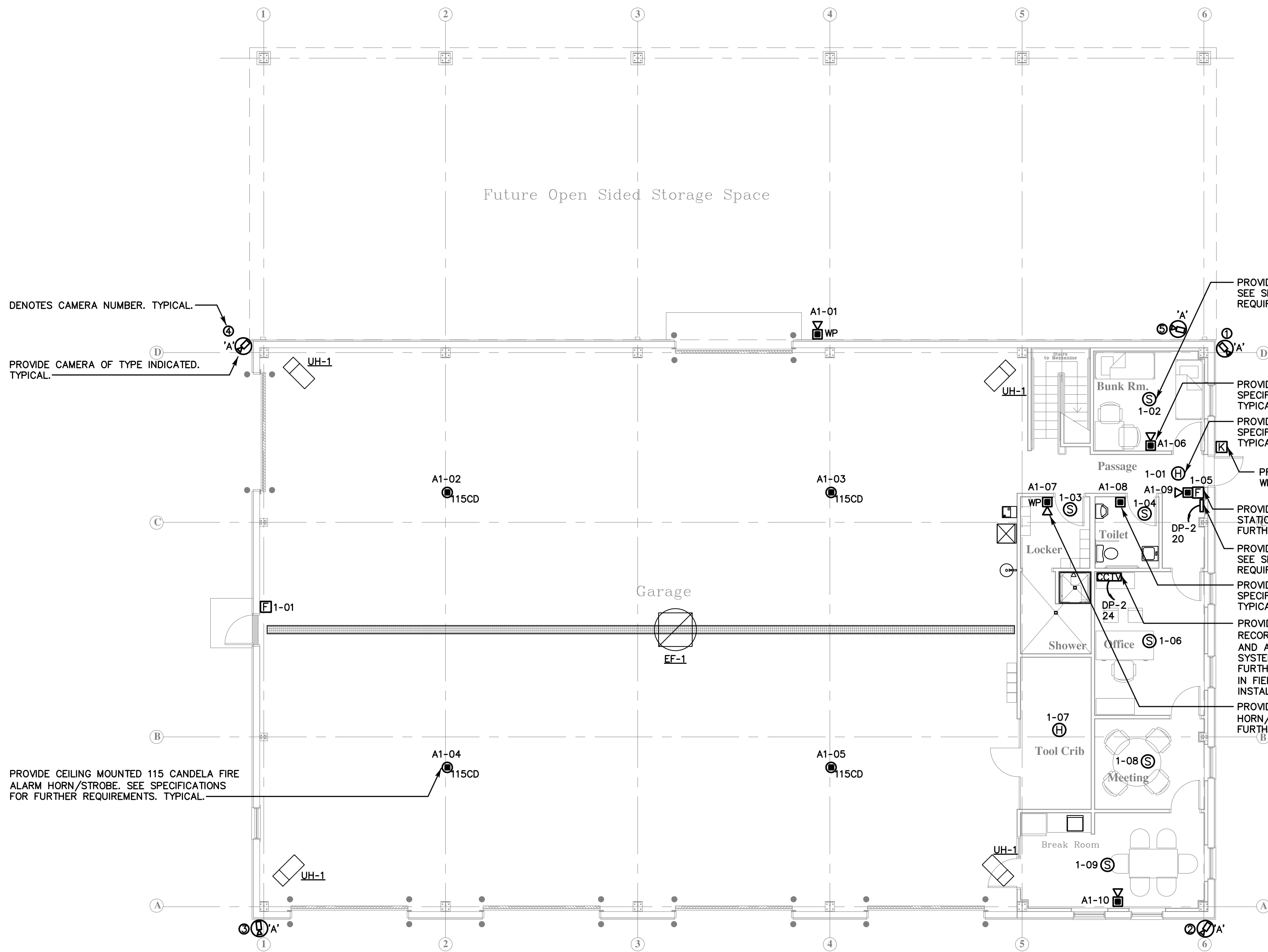
CLA Engineers, Inc.  
CIVIL - STRUCTURAL - SURVEYING  
317 Main Street, Norwich, Connecticut  
(860) 886-1986 Fax (860) 886-0165  
www.claengineers.com

CLA PROJECT NO. CLA-15-5598  
PROJ. ENGINEER FB  
DATE: 04/3/18  
SHEET NO. E-1



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

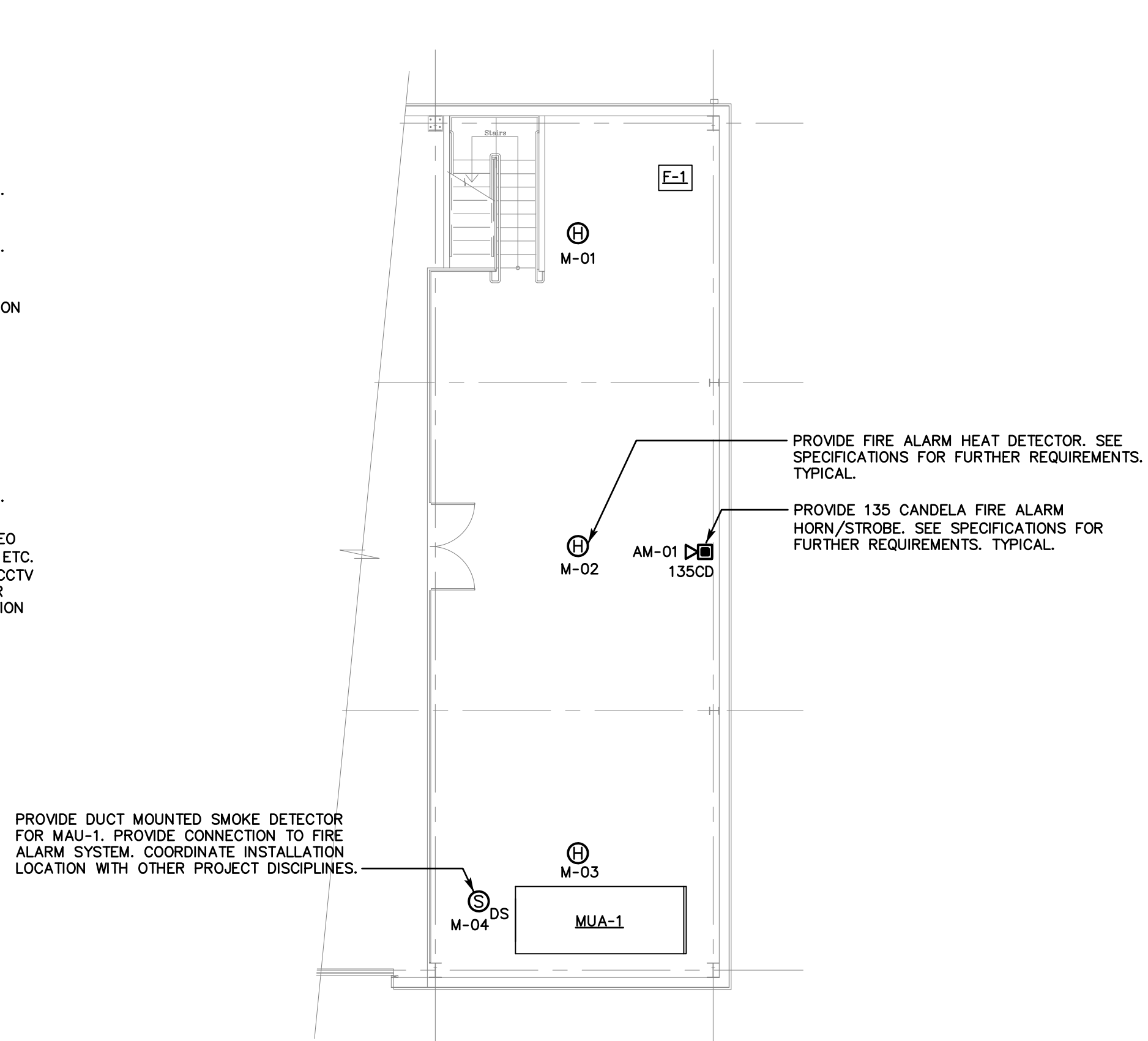
- GENERAL NOTES:**
1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK INCLUDING TOOLS, MATERIAL, MANPOWER, ETC. REQUIRED FOR COMPLETE AND PROPER INSTALLATION OF PROPOSED MATERIALS, FIXTURES AND/OR EQUIPMENT.
  2. DRAWINGS ARE DIAGRAMMATIC. CONTRACTOR SHALL VERIFY ALL LOCATIONS, QUANTITIES AND DIMENSIONS OF PROPOSED MATERIALS, FIXTURES AND/OR EQUIPMENT WITHIN AND AFFECTING PROJECT SCOPE OF WORK.
  3. ALL WORK SHALL BE PERFORMED IN A SAFE AND ORDERLY MANNER WITH QUALIFIED AND LICENSED PERSONNEL IN ACCORDANCE WITH STATE AND LOCAL GOVERNING AUTHORITIES AND ALL APPLICABLE CODES AND STANDARDS. TYPICAL.
  4. ROUTING OF ALL CONDUIT SHALL BE COORDINATED WITH STRUCTURAL FRAMING ELEMENTS AND ALL OTHER PROJECT DISCIPLINES. TYPICAL.
  5. PROVIDE ALL REQUIRED PENETRATIONS. COORDINATE WITH STRUCTURAL ELEMENTS. FIRE STOP ALL PENETRATIONS. TYPICAL.
  6. INSTALL ALL EQUIPMENT AND ASSOCIATED ACCESSORIES PER NEC AND MANUFACTURER'S REQUIREMENTS.



FIRST FLOOR FIRE ALARM & SECURITY PLAN

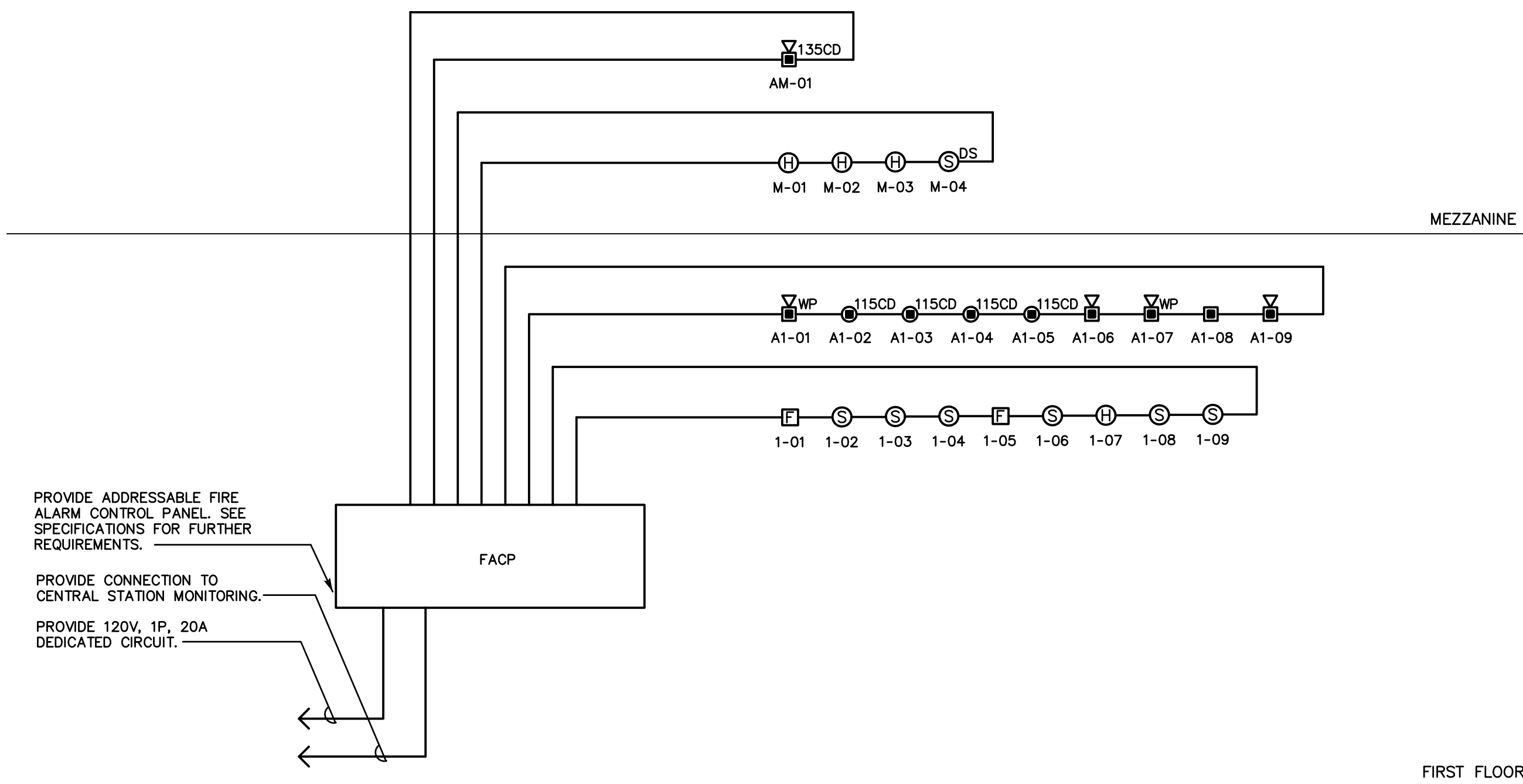
SCALE: 1/8"=1'-0"

ROOF



MEZZANINE FIRE ALARM & SECURITY PLAN

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



FIRE ALARM RISER DIAGRAM

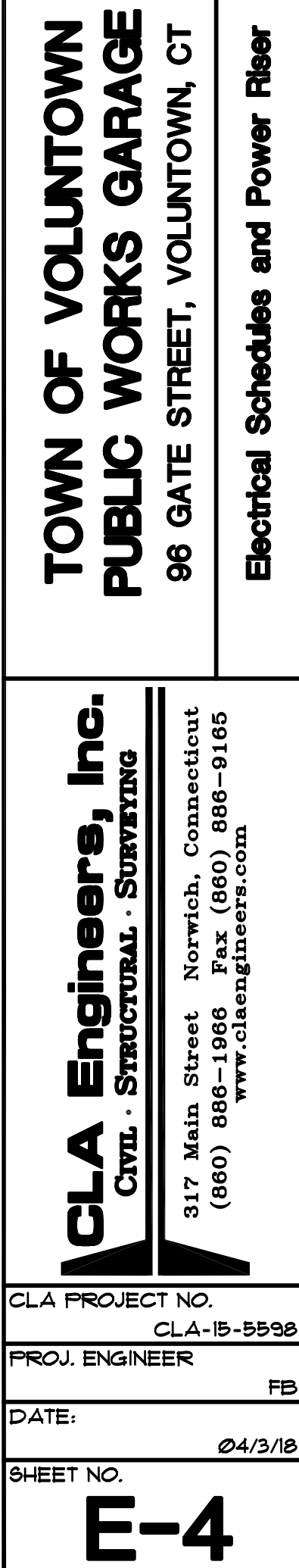
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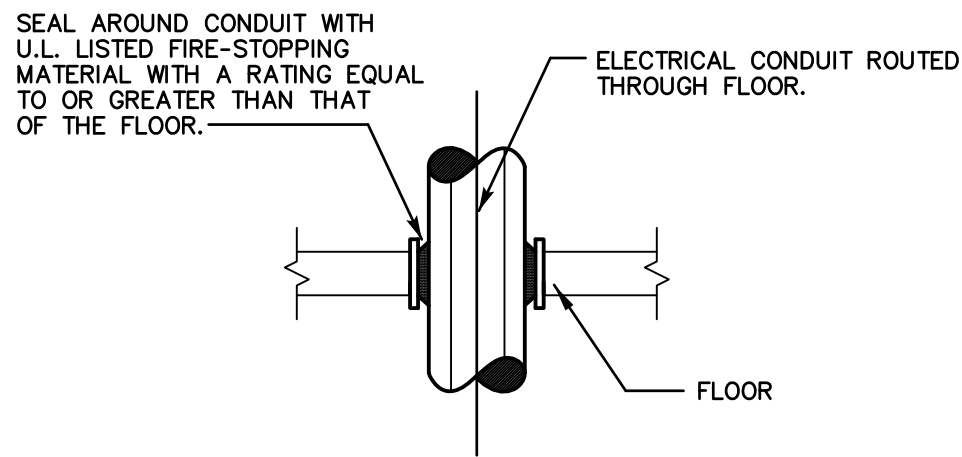
GENERAL NOTES:

1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL WORK INCLUDING TOOLS, MATERIAL, MANPOWER, ETC. REQUIRED FOR COMPLETE AND PROPER INSTALLATION OF PROPOSED MATERIALS, FIXTURES AND/OR EQUIPMENT.
2. DRAWINGS ARE DIAGRAMMATIC. CONTRACTOR SHALL VERIFY ALL LOCATIONS, QUANTITIES AND DIMENSIONS OF PROPOSED MATERIALS, FIXTURES AND/OR EQUIPMENT WITHIN AND AFFECTING PROJECT SCOPE OF WORK.
3. ALL WORK SHALL BE PERFORMED IN A SAFE AND ORDERLY MANNER WITH QUALIFIED AND LICENSED PERSONNEL IN ACCORDANCE WITH STATE AND LOCAL GOVERNING AUTHORITIES AND ALL APPLICABLE CODES AND STANDARDS. TYPICAL.
4. ROUTING OF ALL CONDUIT SHALL BE COORDINATED WITH STRUCTURAL FRAMING ELEMENTS AND ALL OTHER PROJECT DISCIPLINES. TYPICAL.
5. PROVIDE ALL REQUIRED PENETRATIONS. COORDINATE WITH STRUCTURAL ELEMENTS. FIRE STOP ALL PENETRATIONS. TYPICAL.
6. INSTALL ALL EQUIPMENT AND ASSOCIATED ACCESSORIES PER NEC AND MANUFACTURER'S REQUIREMENTS.



<b>PANEL BOARD</b> <b>DP-1</b>		<b>Class:</b> <b>Type:</b>			<b>Short Circuit Rating (Min.):</b> 22 K.A.I.C. <b>Remark:</b> SECTION 1		
<b>SERVICE</b>		240/120 Volts    1 Phase    3 Wire			S/E Label:NO		
<b>PANEL BOARD CONFIGURATION</b>		200 AMPERE MAIN BUS Trim: SURFACE			Entrance: TOP/BOTTOM Equipment Ground Bus: YES		
<b>MAIN</b>		<b>Type:</b> MLO <b>Wire Size:</b> SEE RISER			NEMA 1		
<b>BRANCH CIRCUITS</b>		Branch Protective Devices: (MOLDED CASE CIRCUIT BREAKERS)					
Circuit No	Circuit Designation	KVA Load	Pole	Trip Amps	Frame Amps	Wire (min.)	See Remark
1	OH DOOR OPENER-WEST/RIGHT	1.2	1	20	100	1/2"¢, 3-#10 AWG	
2	OH DOOR OPENER-WEST/CTR R	1.2	1	20	100	1/2"¢, 3-#10 AWG	
3	OH DOOR OPENER-WEST/CTR L	1.2	1	20	100	1/2"¢, 3-#10 AWG	
4	OH DOOR OPENER - WEST/LEFT	1.2	1	20	100	1/2"¢, 3-#10 AWG	
5	OH DOOR OPENER - NORTH	1.2	1	20	100	1/2"¢, 3-#10 AWG	
6	OH DOOR OPENER - EAST	1.2	1	20	100	1/2"¢, 3-#12 AWG	
7	HEATER - GARAGE SW CORNER	0.9	1	15	100	1/2"¢, 3-#10 AWG	
8	HEATER - GARAGE NW CORNER	0.9	1	15	100	1/2"¢, 3-#10 AWG	
9	HEATER - GARAGE NE CORNER	0.9	1	15	100	1/2"¢, 3-#10 AWG	
10	HEATER - GARAGE SE CORNER	0.9	1	15	100	1/2"¢, 3-#12 AWG	
11	FURNACE F-1 - IN MEZZANINE	1.9	1	20	100	1/2"¢, 3-#12 AWG	
12	WATER HEATER - IN MEZZANINE	0.6	1	20	100	1/2"¢, 3-#12 AWG	
13	EF-2	0.7	1	15	100	1/2"¢, 3-#12 AWG	
14	EXT GFCI - ROOF	0.2	1	20	100	1/2"¢, 3-#12 AWG	
15	EXT GFCI - AT CDU-1	0.2	1	20	100	1/2"¢, 3-#12 AWG	
16	BLOCK HEATER RECEPT 1	1.5	1	20	100	1/2"¢, 3-#10 AWG	
17	BLOCK HEATER RECEPT 2	1.5	1	20	100	1/2"¢, 3-#10 AWG	
18	BLOCK HEATER RECEPT 3	1.5	1	20	100	1/2"¢, 3-#12 AWG	
19	BLOCK HEATER RECEPT 4	1.5	1	20	100	1/2"¢, 3-#12 AWG	
20	RECEPT - MEZZANINE	0.4	1	20	100	1/2"¢, 3-#12 AWG	
21	WELL PUMP (1/2 HP)	0.9	2	15	100	3/4"¢, 3-#10 AWG	
22	FUTURE GATE OPERATOR	-	1	20	100	3/4"¢, 3-#10 AWG	
23	- - -	-	-	-	-	- - -	
24	FUTURE GATE OPERATOR	-	1	20	100	3/4"¢, 3-#10 AWG	
25	TIME CLOCK MAU-1	-	1	20	100	1/2"¢, 3-#12 AWG	
26	PREPARED SPACE	-	1	-	100	- - -	
27	PREPARED SPACE	-	1	-	100	- - -	
28	PREPARED SPACE	-	1	-	100	- - -	
29	PREPARED SPACE	-	1	-	100	- - -	
30	PREPARED SPACE	-	1	-	100	- - -	
31	PREPARED SPACE	-	1	-	100	- - -	
32	PREPARED SPACE	-	1	-	100	- - -	
33	PREPARED SPACE	-	1	-	100	- - -	
34	PREPARED SPACE	-	1	-	100	- - -	
35	PREPARED SPACE	-	1	-	100	- - -	
36	PREPARED SPACE	-	1	-	100	- - -	
37	PREPARED SPACE	-	1	-	100	- - -	
38	PREPARED SPACE	-	1	-	100	- - -	
39	PREPARED SPACE	-	1	-	100	- - -	
40	PREPARED SPACE	-	1	-	100	- - -	
41	PREPARED SPACE	-	1	-	100	- - -	
42	PREPARED SPACE	-	1	-	100	- - -	
TOTAL KVA:		21.7					

[illegible]



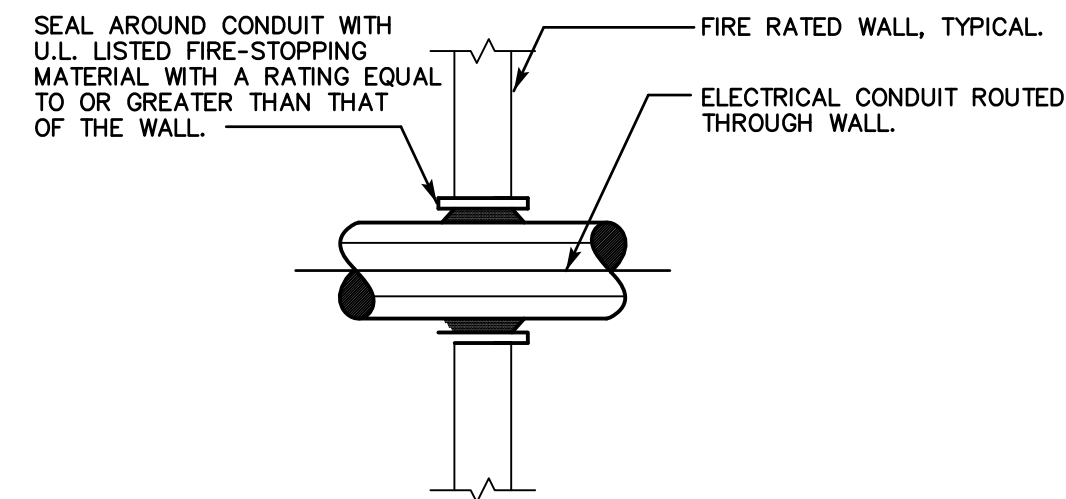
SEAL AROUND CONDUIT WITH U.L. LISTED FIRE-STOPPING MATERIAL WITH A RATING EQUAL TO OR GREATER THAN THAT OF THE FLOOR.

ELECTRICAL CONDUIT ROUTED THROUGH FLOOR.

FLOOR

### TYPICAL CONDUIT FLOOR PENETRATION DETAIL

SCALE: N.T.S.



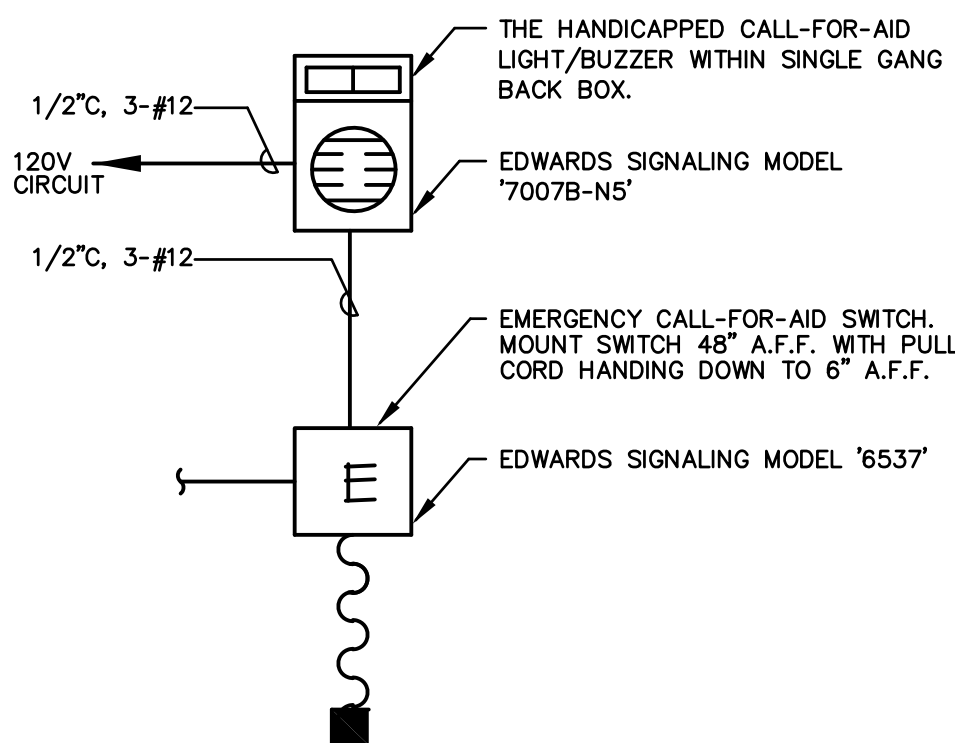
SEAL AROUND CONDUIT WITH U.L. LISTED FIRE-STOPPING MATERIAL WITH A RATING EQUAL TO OR GREATER THAN THAT OF THE WALL.

FIRE RATED WALL, TYPICAL.

ELECTRICAL CONDUIT ROUTED THROUGH WALL.

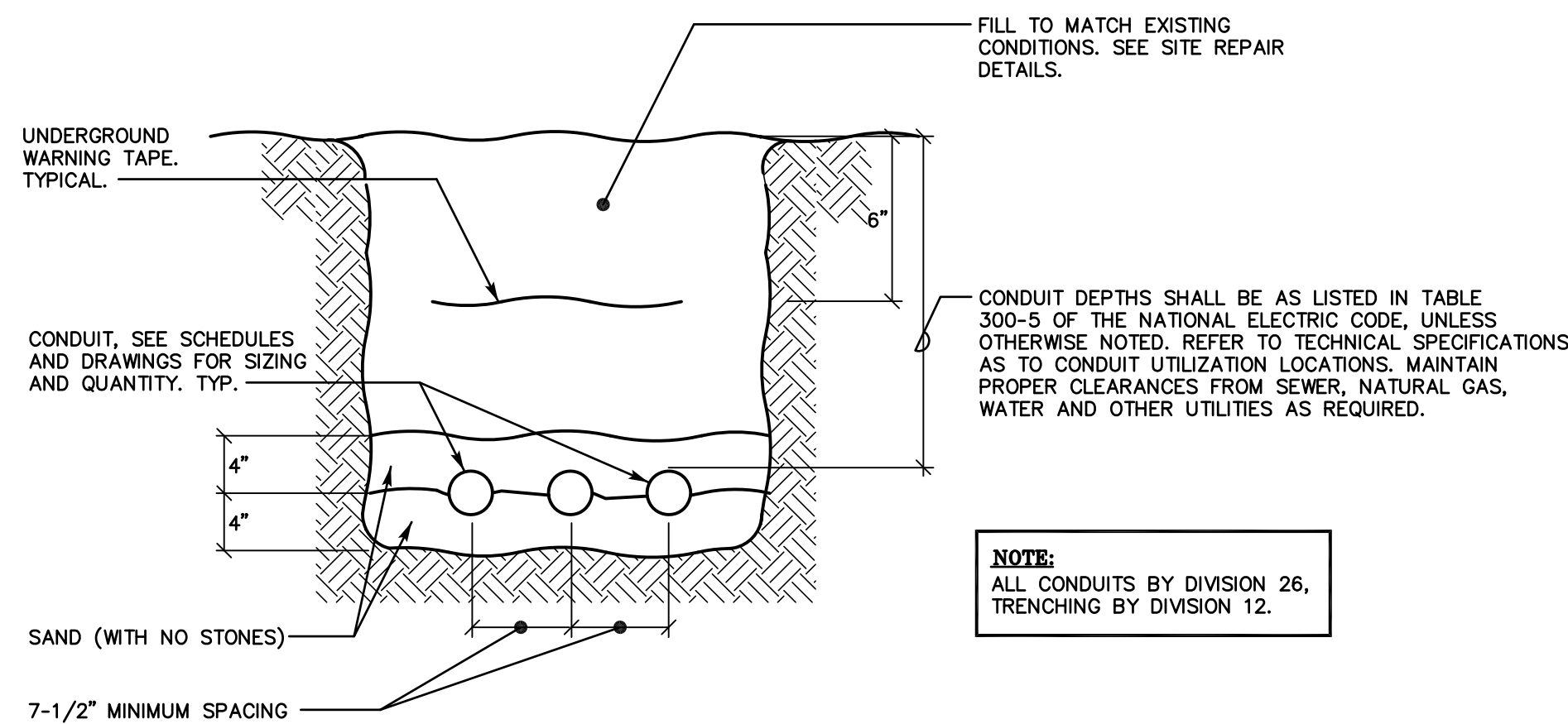
### TYPICAL CONDUIT WALL PENETRATION DETAIL

SCALE: N.T.S.



### CALL-FOR-AID DETAIL

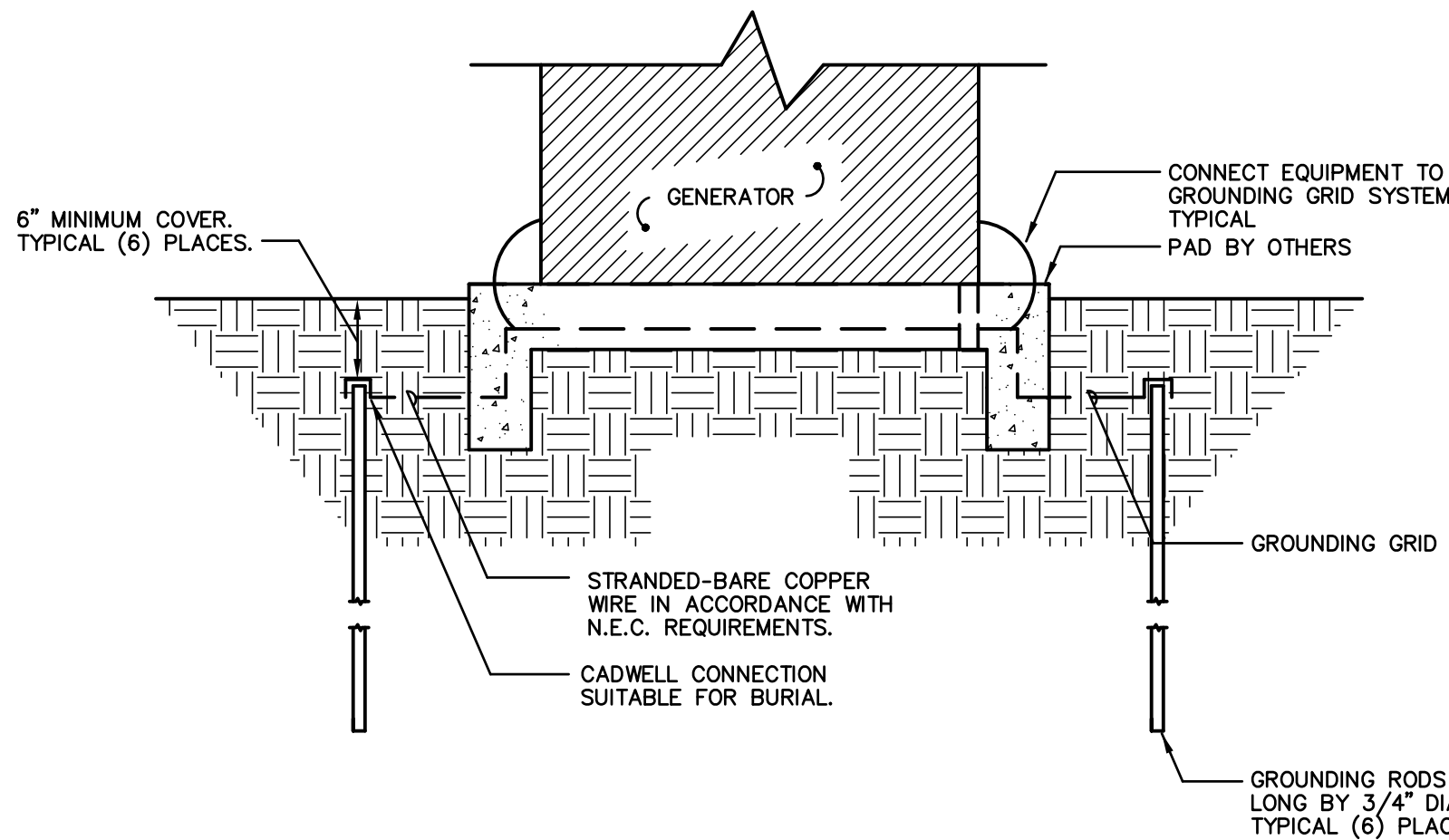
SCALE: N.T.S.



### TYPICAL TRENCH DETAIL

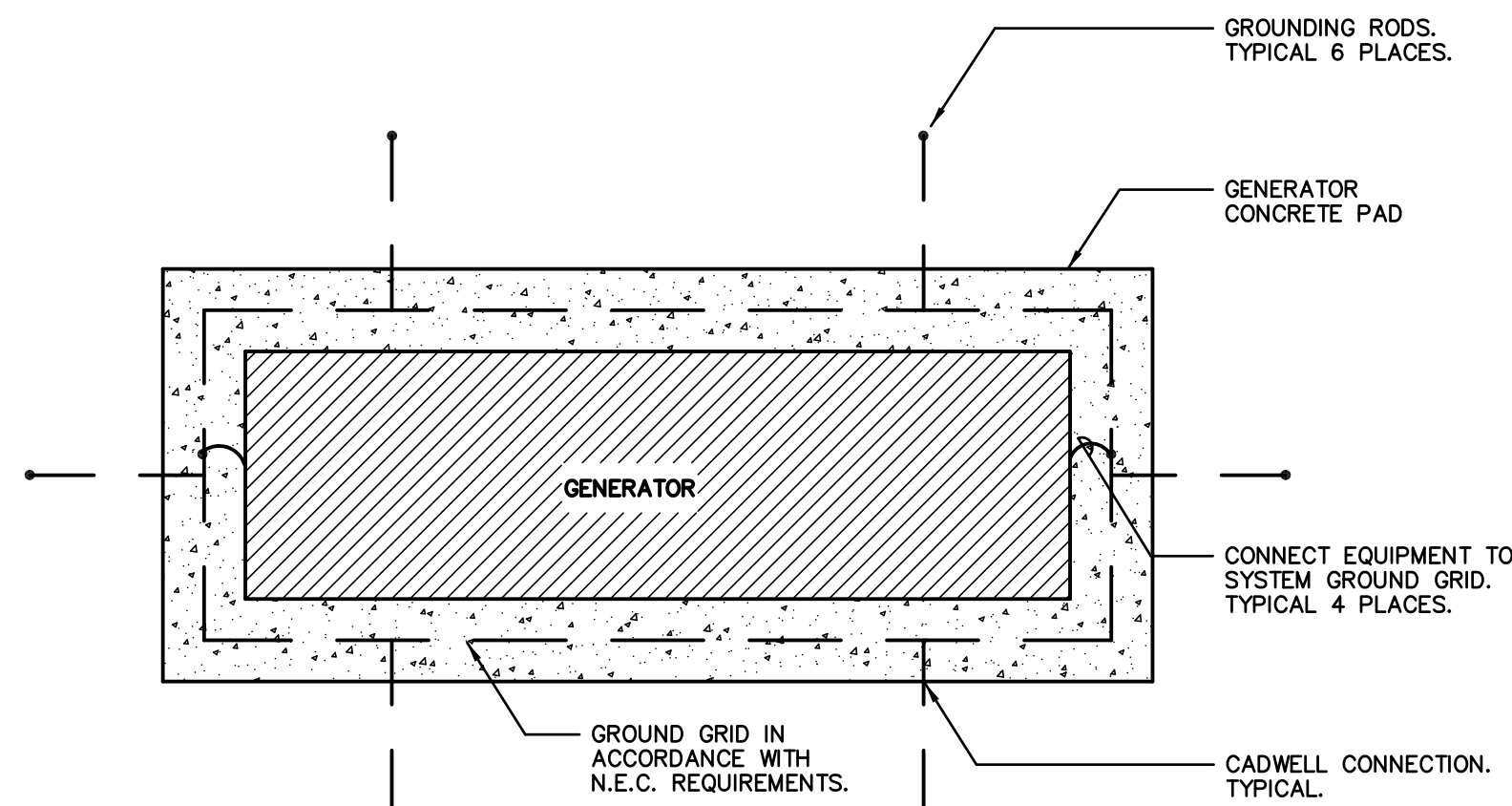
SCALE: N.T.S.

LUMINAIRE SCHEDULE					
LTG. CODE	DESCRIPTIONS	VOLTS	CATALOG NO./MANUFACTURER	MOUNTING	LAMP (G.E. OR EQUAL)
'A'	2'X4' HIGH EFFICIENCY, ARCHITECTURAL LOW PROFILE RECESSED LED LUMINAIRE, 4,900 NOMINAL LUMENS DELIVERED, 3500K COLOR, WHITE FINISH, FIVE YEAR WARRANTY, DLC AND UL LISTED.	UNV	2DLG49L835-4-D-UNV-DIM PHILIPS DAYBRITE	RECESSED/CEILING	LED
'B'	2'X2' HIGH EFFICIENCY, ARCHITECTURAL LOW PROFILE RECESSED LED LUMINAIRE, 3,800 NOMINAL LUMENS DELIVERED, 3500K COLOR, WHITE FINISH, FIVE YEAR WARRANTY, DLC AND UL LISTED.	UNV	2DLG38L835-2-D-UNV-DIM PHILIPS DAYBRITE	RECESSED/CEILING	LED
'C'	3'X4' HIGH EFFICIENCY, LOW PROFILE LED STRIP LIGHT, 3,800 NOMINAL LUMENS DELIVERED, 4000K COLOR, ENCLOSED LENS, WHITE FINISH, FIVE YEAR WARRANTY, DLC AND UL LISTED.	UNV	LF4FR3940UDTZ PHILIPS DAYBRITE	SURFACE - SUSPENDED/CEILING	LED
'CE'	SAME AS 'C' WITH 1,100 LUMEN EMERGENCY BATTERY PACK.	UNV	LF4FR3940UDTZ-EMLED PHILIPS DAYBRITE	SURFACE - SUSPENDED/CEILING	LED
'D'	2'X2' HIGH EFFICIENCY, LED HIGH BAY, 16,000 NOMINAL LUMENS DELIVERED, 4000K COLOR, GENERAL DISTRIBUTION, WHITE ACRYLIC LENS, WHITE FINISH, 54" CHAIN KIT, FIVE YEAR WARRANTY, DLC AND UL LISTED.	UNV	FBX16LL40-UNV-LCA-EMLED PHILIPS DAYBRITE	SUSPENDED/CEILING	LED
'DE'	SAME AS 'D' WITH 2,400 LUMEN EMERGENCY BATTERY PACK.	UNV	FBX16LL40-UNV-LCA FBX CHAIN KIT PHILIPS DAYBRITE	SUSPENDED/CEILING	LED
'EM'	DUAL HEAD FULLY ADJUSTABLE EMERGENCY LIGHTING UNIT WITH 90 MINUTE MAINTENANCE FREE SEALED LEAD CALCIUM BATTERY, FLAME RATED UV STABLE, THERMOPLASTIC HOUSING, WHITE FINISH, FIVE YEAR WARRANTY, UL LISTED.	120	CTX6 PHILIPS CHLORIDE	SURFACE/WALL	(2) 5.4W
'F'	1,800 LUMEN LED WALL SCONCE WITH LOW TEMPERATURE EMERGENCY DRIVER AND PHOTOCELL, TYPE III DISTRIBUTION, BRONZE FINISH, UL LISTED WET LOCATIONS, DLC LISTED.	UNV	VMPV-LED18/740-T3-DB2-PC-EM/BSL722LT-EDD4N-UNV H.E. WILLIAMS	BUILDING/WALL	LED
'G'	7'X4' HIGH EFFICIENCY, ENCLOSED AND GASKETED LED LUMINAIRE, NON-CONDUCTIVE, NON-CORROSIVE HOUSING, POLYCARBONATE LENS, 7,000 NOMINAL LUMENS DELIVERED, 4000K COLOR, 0-10V DIMMING, WHITE FINISH, MOUNTING BRACKETS, FIVE YEAR WARRANTY, DLC AND UL LISTED WET LOC.	UNV	DWPE70L840-4-UNV PHILIPS DAYBRITE	SURFACE/CEILING	LED
'H'	LED WALL PACK, FULL CUT-OFF OPTICS, (-40°C TO 40°C) OPERATING RANGE, 6,900 LUMENS, 4000K COLOR, TYPE III DISTRIBUTION, PHOTOCELL, BRONZE FINISH, UL LISTED WET LOCATIONS.	120	LPW32-71BZPCB PHILIPS STONCO	BUILDING/WALL	LED
'X'	LED EXIT SIGN, IMPACT RESISTANT THERMOPLASTIC WHITE HOUSING, RED FACE PLATES WITH UNIVERSAL CHEVRONS AND MOUNTING, LOW ENERGY CONSUMPTION, 90 MINUTE NICKEL CADMIUM BATTERY, UL LISTED.	120	VERWEM PHILIPS CHLORIDE	UNIVERSAL	LED



### GENERATOR GROUNDING GRID ELEVATION DETAIL

SCALE: N.T.S.



### GENERATOR GROUNDING GRID PLAN VIEW

ELECTRICAL ABBREVIATIONS		
A	AMPERES	
A.F.F.	ABOVE FINISHED FLOOR	
AWG	AMERICAN WIRE GAUGE	
C	CONDUIT	
CIR	CIRCUIT	
FA	FIRE ALARM	
FAAP	FIRE ALARM ANNUNCIATOR PANEL	
FACP	FIRE ALARM CONTROL PANEL	
FT	FEET	
G	GROUND	
HP	HORSEPOWER	
KAIC	INTERRUPTING CAPACITY (KILOAMPERE)	
KVA	KILOVOLT-AMPERE	
KW	KILOWATT	
NEC	NATIONAL ELECTRIC CODE	
NEMA	NATIONAL ELECTRICAL MANUFACTURERS ASS.	
NIC	NOT IN CONTRACT	
P	POLE	
RM	ROOM	
S	SMOKE DETECTOR	
UC	UNDERGROUND CONDUIT	
UL	UNDERWRITER'S LABORATORY	
UTIL	UTILITY	
V	VOLTS	
VA	VOLT-AMPERES	
W	WATTS	
#	WIRE SIZE IN AWG, OR MCM WHEN INDICATED	

ELECTRICAL SYMBOL LIST	
	DUPLEX RECEPTACLE GFCI - GROUND FAULT CIRCUIT INTERRUPTER IG - ISOLATED GROUND WP - WEATHERPROOF L - LOCKABLE COVER
	SPECIAL PURPOSE CONNECTION
	SWITCH (NONE) - SINGLE POLE 2 - TWO POLE 3 - THREE WAY 4 - FOUR WAY D - DIMMER TOL - THERMAL OVERLOAD PROTECTION DEVICE
	COMBINATION STARTER/DISCONNECT SWITCH
	DISCONNECT SWITCH
	BRANCH CIRCUIT HOMERUN (ARROWS INDICATE CIRCUIT NUMBERS)

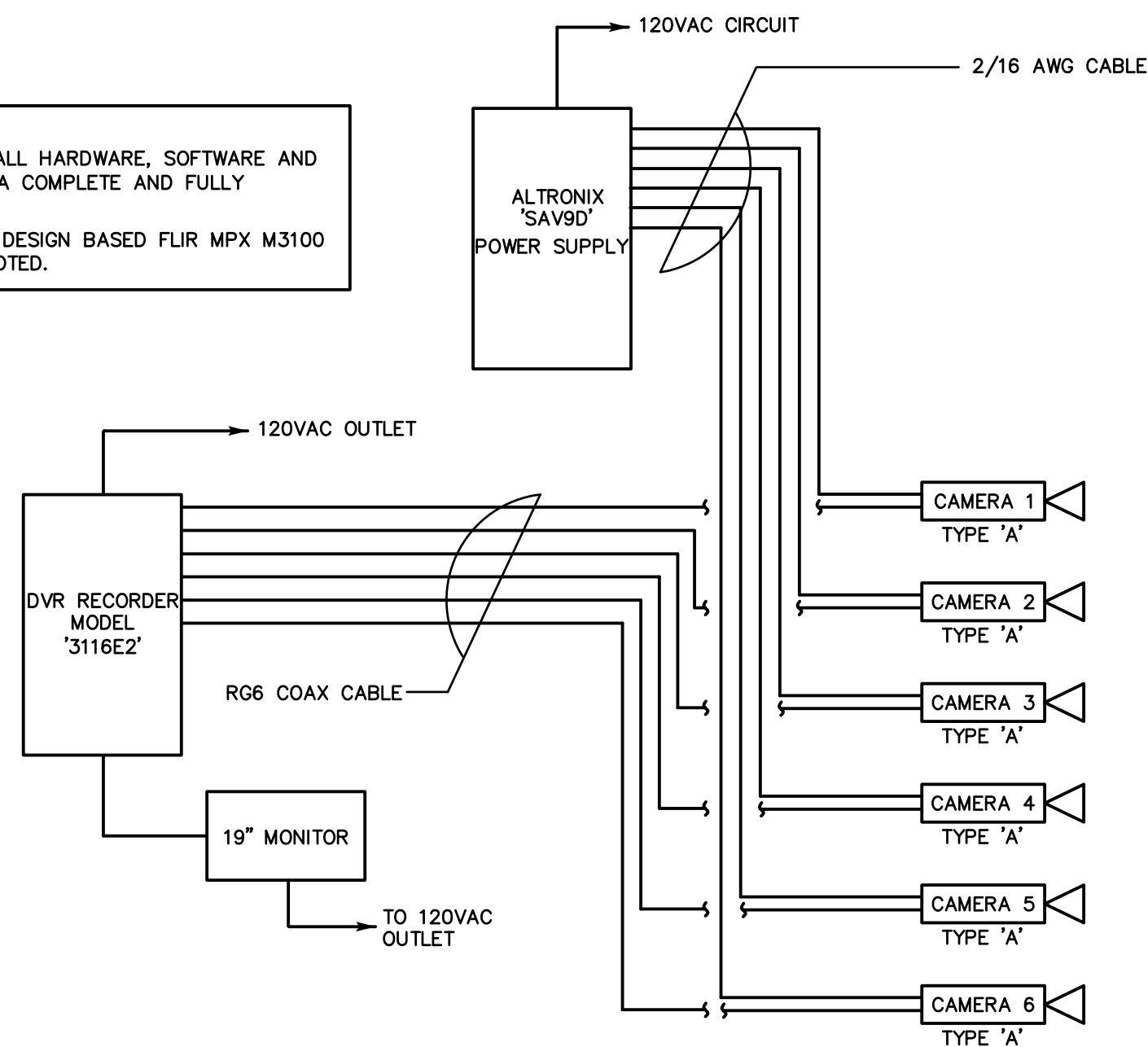
ELECTRICAL GENERAL NOTES	
1.	SEE SPECIFICATIONS, DIVISION 26 ELECTRICAL.
2.	UNLESS OTHERWISE INDICATED, PROVIDE A COMPLETE AND OPERATIONAL ELECTRICAL SYSTEM INCLUDING ALL NECESSARY MATERIAL, LABOR AND EQUIPMENT.
3.	ELECTRICAL PLANS AND DETAILS AND ONE LINE DIAGRAMS SHOW THE GENERAL LOCATION AND ARRANGEMENT OF THE ELECTRICAL SYSTEM. THEY ARE DIAGRAMMATIC AND DO NOT SHOW ALL CONDUIT BODIES, CONNECTORS, BENDS, FITTINGS, HANGERS AND ADDITIONAL PULL AND JUNCTION BOXES.
4.	ALL EQUIPMENT AND MATERIAL SHALL BE LABELED, LISTED AND INSTALLED IN ACCORDANCE WITH THEIR LISTING.
5.	THE CONTRACTOR SHALL OBTAIN ALL REQUIRED PERMITS AND ARRANGE FOR ALL REQUIRED INSPECTIONS IN ACCORDANCE WITH STATE AND LOCAL GOVERNING AUTHORITIES.
6.	ALL WORK SHALL BE DONE WITH LICENSED WORKMEN IN ACCORDANCE WITH STATE AND LOCAL GOVERNING AUTHORITIES.
7.	THE DEFINITION OF ELECTRICAL TERMS USED SHALL BE AS DEFINED IN THE 2014 NATIONAL ELECTRICAL CODE (NEC) WITH CONNECTICUT AMENDMENTS.
8.	THE TERM "INDICATED" SHALL MEAN "AS SHOWN ON CONTRACT DOCUMENTS (SPECIFICATIONS, DRAWINGS AND RELATED ATTACHMENTS)".
9.	THE TERM "PROVIDE" SHALL MEAN "TO FURNISH, INSTALL AND CONNECT COMPLETELY".
10.	THE TERM "SIZE" SHALL MEAN ONE OR MORE OF THE FOLLOWING: "LENGTH, CURRENT AND VOLTAGE RATING, NUMBER OF POLES, NEMA SIZE AND OTHER SIMILAR ELECTRICAL CHARACTERISTICS".
11.	THE TERM "SPACE" ON PANELBOARD AND SWITCHBOARD SCHEDULES SHALL MEAN "THE SPACE REQUIRED TO INSTALL THE NUMBER OF POLES AND SIZE OF THE PROTECTIVE DEVICE INDICATED WITH ALL NECESSARY BUS AND FITTINGS TO INSTALL THE DEVICE AT SOME FUTURE DATE".
12.	ELECTRICAL PLANS AND DETAILS DO NOT SHOW ALL INTERFERENCES AND CONDITIONS, VISIBLE AND/OR HIDDEN, THAT MAY EXIST; THUS REQUIRING THE CONTRACTOR TO INSPECT AND SURVEY THE SPACE BEFORE PERFORMING THE WORK.
13.	COORDINATE ELECTRICAL WORK WITH OWNER.
14.	COORDINATE ELECTRICAL WORK WITH OTHER DIVISIONS OF THIS PROJECT.
15.	TURN OVER TO THE OWNER ALL MANUFACTURERS WARRANTIES FOR EQUIPMENT AND MATERIAL PROVIDED.
16.	UNLESS OTHERWISE INDICATED, ALL ELECTRICAL EQUIPMENT HAS BEEN BASED ON GENERAL ELECTRIC PRODUCTS.
17.	THE CONTRACTOR MAY SUBSTITUTE EQUIPMENT OF ANOTHER MANUFACTURER IF SAID MANUFACTURER IS AN ACCEPTABLE MANUFACTURER LISTED WITHIN SPECIFICATIONS AND EQUIPMENT IS OF EQUAL QUALITY AND RATING, SUBJECT TO OWNER'S AND ENGINEER'S REVIEW AND ACCEPTANCE.
18.	UNLESS OTHERWISE INDICATED, ALL ENCLOSURES FOR EQUIPMENT PROVIDED SHALL BE NEMA TYPE 3R.
19.	UNLESS OTHERWISE INDICATED, ALL CONDUCTORS TO BE COPPER THHN/THWN.
20.	UNLESS OTHERWISE INDICATED, ALL OUTLET AND SWITCH BOXES TO BE CAST IRON WITH THREADED HUBS.
21.	BEFORE SELECTING MATERIAL AND EQUIPMENT, AND PROCEEDING WITH WORK, INSPECT AREAS WHERE MATERIAL AND EQUIPMENT ARE TO BE INSTALLED TO INSURE SUITABILITY, AND CHECK NEEDED SPACE FOR PLACEMENT, CLEARANCES AND INTERCONNECTIONS.
22.	BEFORE CUTTING OR DRILLING INTO BUILDING ELEMENTS, INSPECT AND LAYOUT WORK TO AVOID DAMAGING STRUCTURAL ELEMENTS AND BUILDING UTILITIES.
23.	ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE NATIONAL ELECTRIC CODE (NEC) ANSI/NFPA 70 AND NFPA 110.
24.	THE MEASUREMENT FROM ABOVE FINISHED FLOOR (AFF) SHALL BE TAKEN FROM THE FINISHED FLOOR SURFACE TO THE TOP OF WALL RECEPTABLES AND SWITCH BOXES, TO THE CENTER LINE OF WALL LIGHTING OUTLET BOXES, TO THE BOTTOM OF WALL MOUNTED EQUIPMENT ENCLOSURES, TO THE CENTER LINE OF THE TOP MOST SWITCH HANDLE, OR TO THE LOWEST SURFACE OF CEILING LIGHTING FIXTURES OR OTHER CEILING MOUNTED EQUIPMENT.
25.	UNLESS OTHERWISE INDICATED, ALL CONDUCTORS ARE NO. 12 AWG.
26.	CONDUIT SIZE FOR INDICATED CONDUCTORS SHALL BE BASED ON CHAPTER 9 OF NEC.
27.	THE CONTRACTOR MAY GROUP BRANCH CIRCUIT HOME RUN CONDUCTORS IN A SINGLE RACEWAY IN ACCORDANCE WITH NEC ARTICLE 300-17, AND ARTICLE 310, NOTE 8 OF NOTES TO TABLES 310-16 THROUGH 310-19.

CAMERA SCHEDULE					
TYPE	MANUFACTURER	DESCRIPTION	VOLTS	MODEL NO.	MOUNTING
'A'	FLIR	1/2.8" 2.1 MEGAPIXEL FIXED CAMERA WITH 2.8-12MM VARI-FOCAL MOTORIZED LENS, HIGH RESOLUTION, VANDAL RESISTANT DOME ENCLOSURE, MOUNTING BRACKET.	12VDC	C237VD/P SSWF2G	OUTDOOR SURFACE WALL

NOTES:

1. CONTRACTOR SHALL PROVIDE ALL HARDWARE, SOFTWARE AND PROGRAMMING REQUIRED FOR A COMPLETE AND FULLY FUNCTIONAL SYSTEM.

2. ALL PART NUMBERS ARE FOR DESIGN BASED FLIR MPX M3100 SYSTEM UNLESS OTHERWISE NOTED.



### CCTV SYSTEM RISER

SCALE: N.T.S.

TOWN OF VOLUNTOWN  
PUBLIC WORKS GARAGE  
96 GATE STREET, VOLUNTOWN, CT

Electrical CCTV Riser, Schedules, Details, Symbols, Notes and Abbreviations

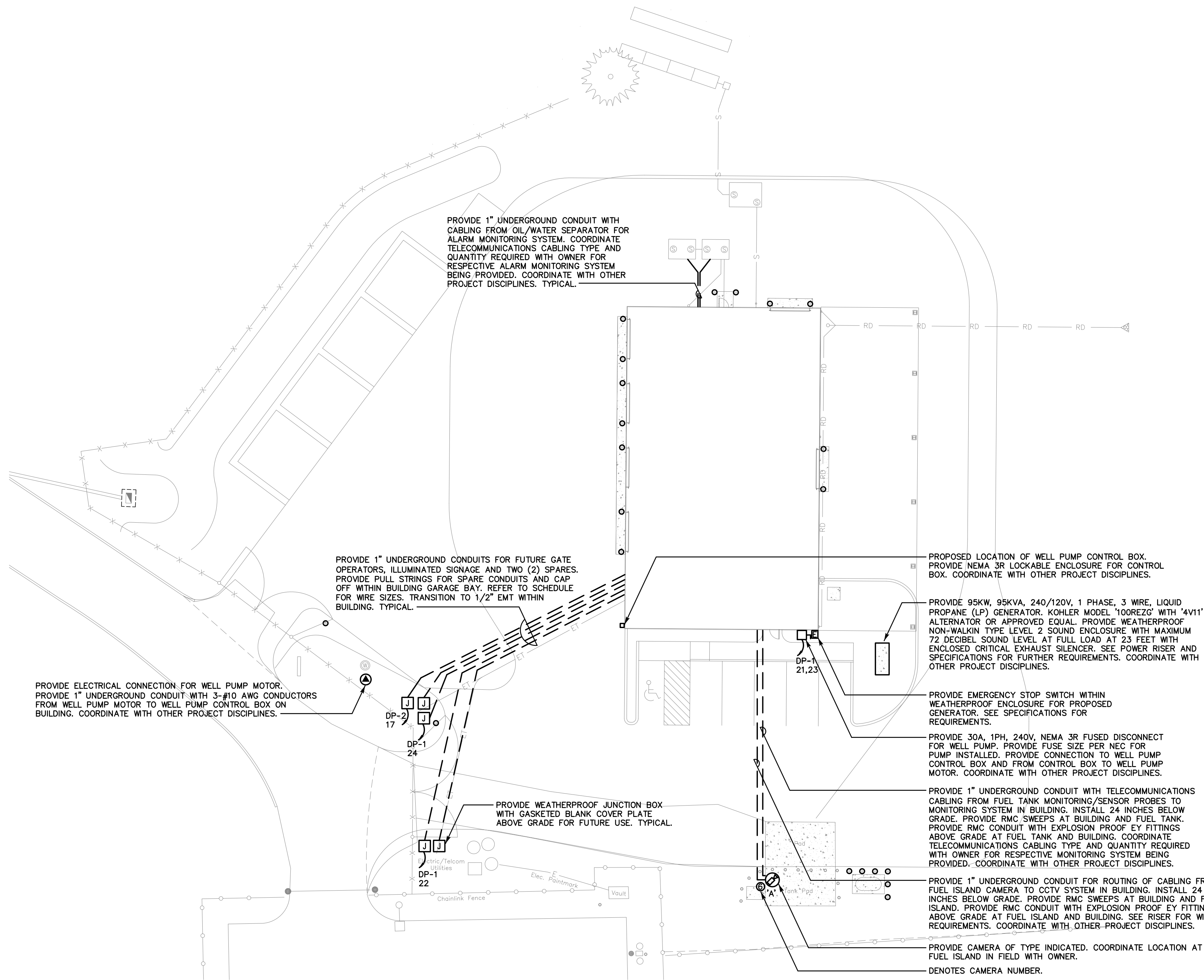
CLA Engineers, Inc.  
CIVIL - STRUCTURAL - SURVEYING  
317 Main Street, Norwich, Connecticut  
(860) 886-1986 Fax (860) 886-9165  
www.claengineers.com

CLA PROJECT NO. CLA-15-5598

PROJ. ENGINEER FB

DATE: 04/3/18

SHEET NO. E-5



**SITE ELECTRICAL PLAN**

SCALE: 1"=20'-0"

REVISION	DATE	NUMBER

**TOWN OF VOLUNTOWN  
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