

1 A8.2 **TYP. STRUCTURAL TUBE DETAIL**
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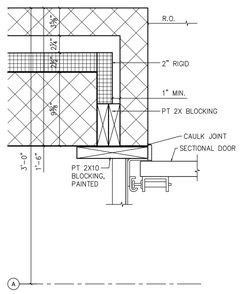
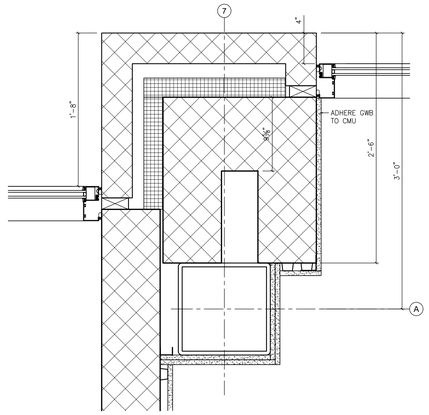
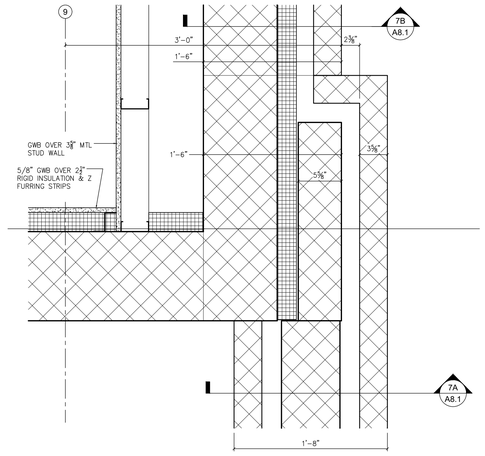


5 A8.2 **SECTIONAL DOOR JAMB**
SCALE: 1 1/2" = 1'-0"



2 A8.2 **PLAN DETAIL**
SCALE: 1 1/2" = 1'-0"



3 A8.2 **PLAN DETAIL**
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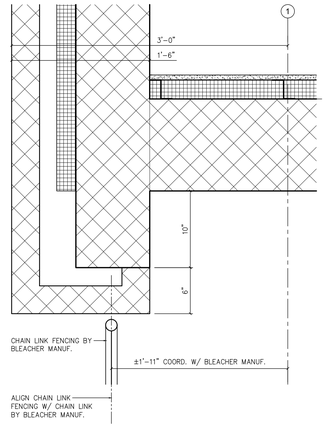
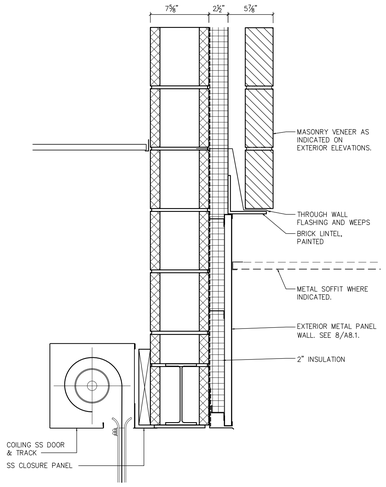


4 A8.2 **PLAN DETAIL**
SCALE: 1 1/2" = 1'-0"



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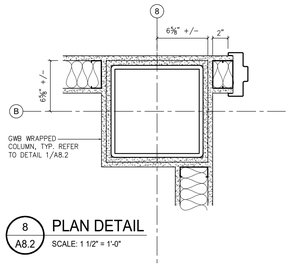
SCALE: 1 1/2" = 1'-0"



8 A8.2 **PLAN DETAIL**
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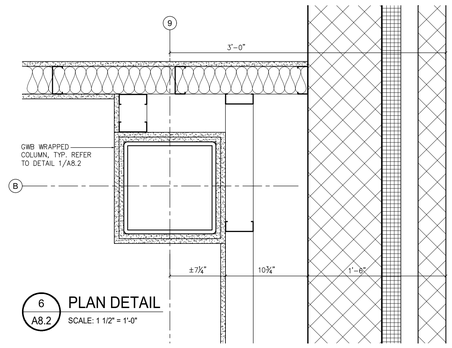
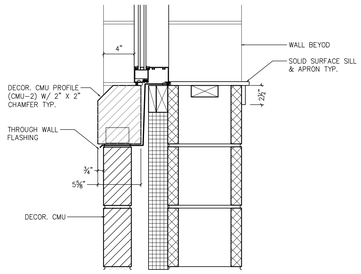
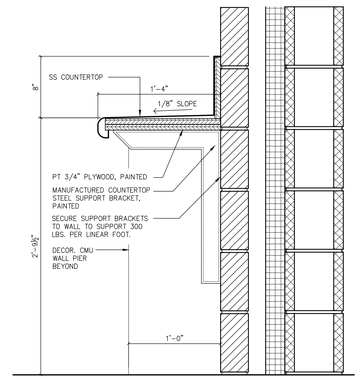


6 A8.2 **PLAN DETAIL**
SCALE: 1 1/2" = 1'-0"



B A8.2 **TYPICAL WINDOW SILL**
SCALE: 1 1/2" = 1'-0"



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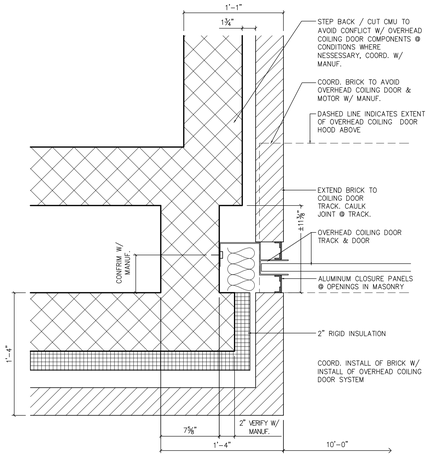
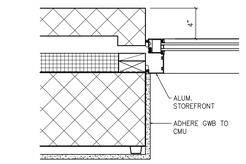
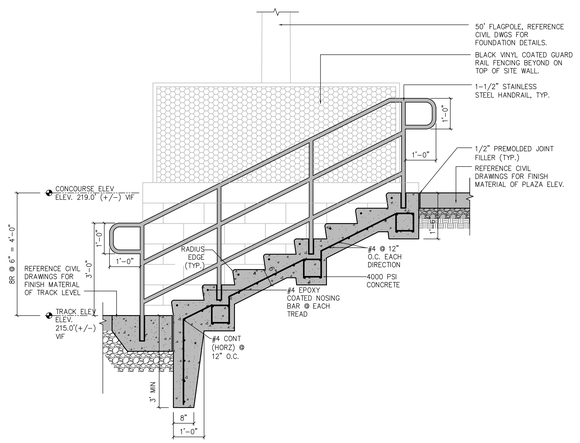
SCALE: 1 1/2" = 1'-0"



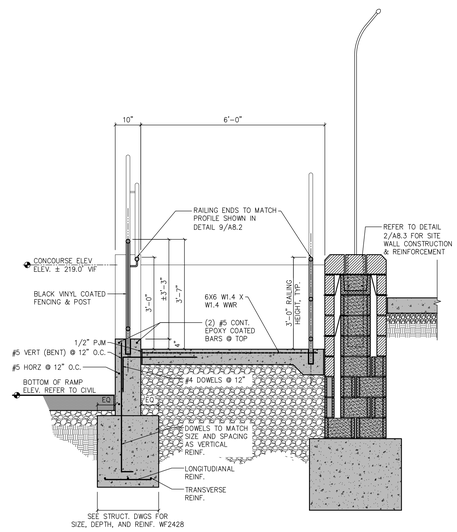
7 A8.2 **OVERHEAD COILING DOOR JAMB DETAIL**
SCALE: 1 1/2" = 1'-0"



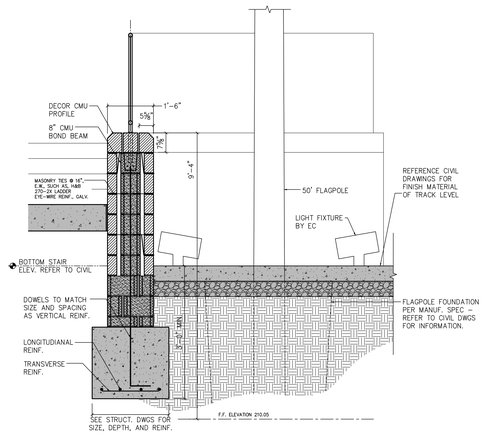
A A8.2 **TYPICAL WINDOW JAMB**
SCALE: 1 1/2" = 1'-0"



9 A8.2 **SITE STAIR DETAIL**
SCALE: 1/2" = 1'-0"



10 A8.2 **SITE RAMP DETAIL**
SCALE: 1/2" = 1'-0"



11 A8.2 **FLAG POLE ENCLOSURE**
SCALE: 1/2" = 1'-0"

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POTTSGROVE HIGH SCHOOL FACILITY AND ATHLETIC IMPROVEMENTS

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REVISIONS	
BID SET	10/21/2026
DRAWN BY	
REVIEWED BY	
JOB #	2665

SHEET TITLE

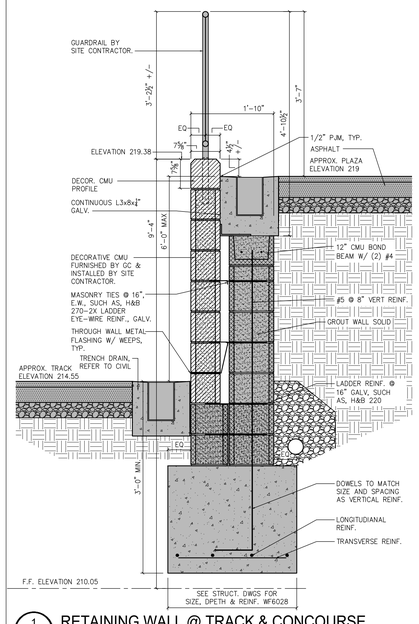
DETAILS

SHEET #

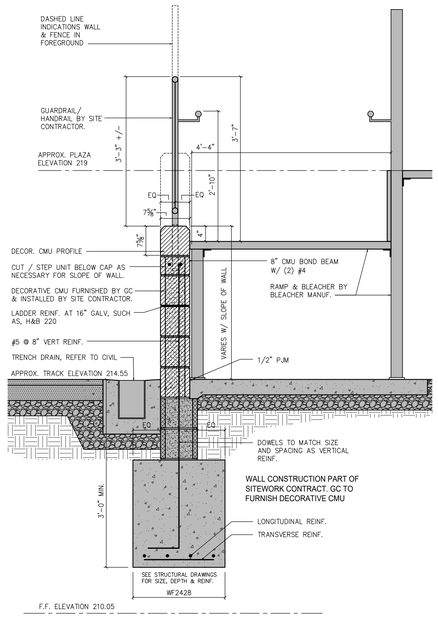
A8.2

SCALE	AS NOTED
DATE	10-21-2026

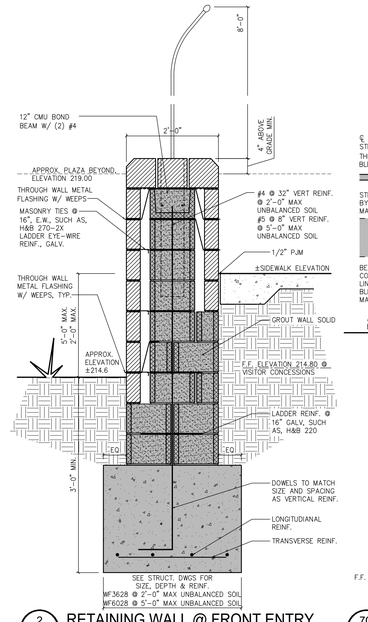
DRAWING SIZE: 30 X 42



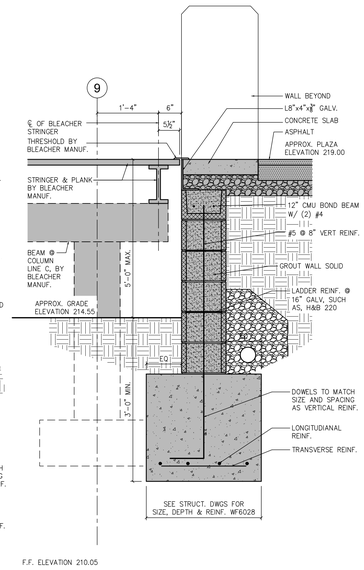
1 A8.3 **RETAINING WALL @ TRACK & CONCOURSE**
SCALE: 3/4" = 1'-0"
WALL CONSTRUCTION PART OF SITEWORK CONTRACT. GC TO FURNISH DECORATIVE CMU



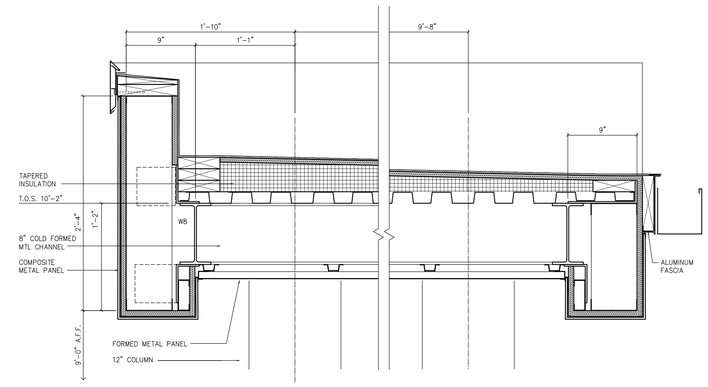
1A A8.3 **SITE WALL @ RAMP**
SCALE: 3/4" = 1'-0"



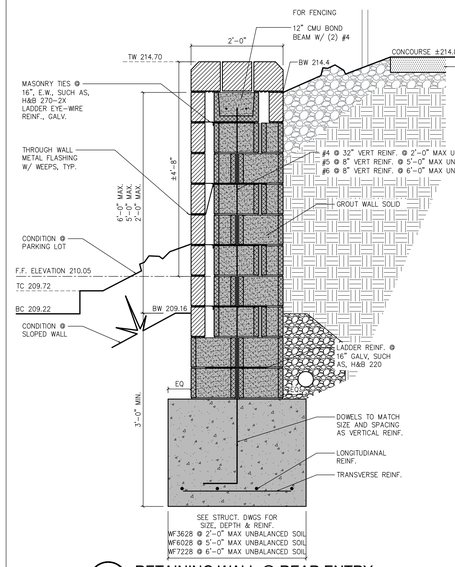
2 A8.3 **RETAINING WALL @ FRONT ENTRY**
SCALE: 3/4" = 1'-0"



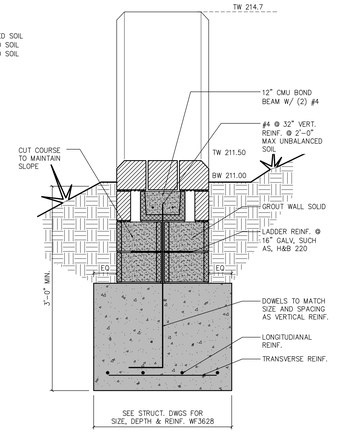
7C A8.3 **RETAINING WALL**
SCALE: 3/4" = 1'-0"



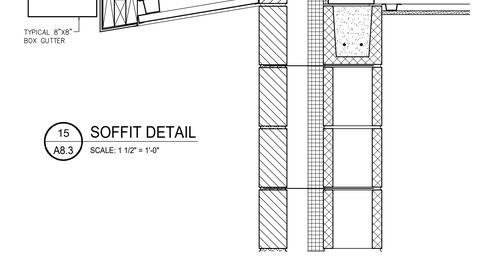
3 A8.3 **TYPICAL CANOPY FASCIA**
SCALE: 1 1/2" = 1'-0"



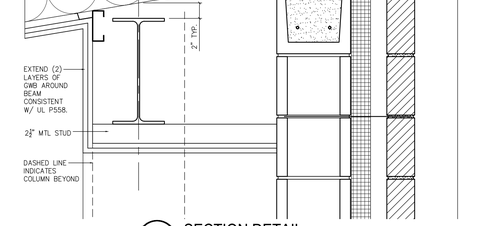
3A A8.3 **RETAINING WALL @ REAR ENTRY**
SCALE: 3/4" = 1'-0"



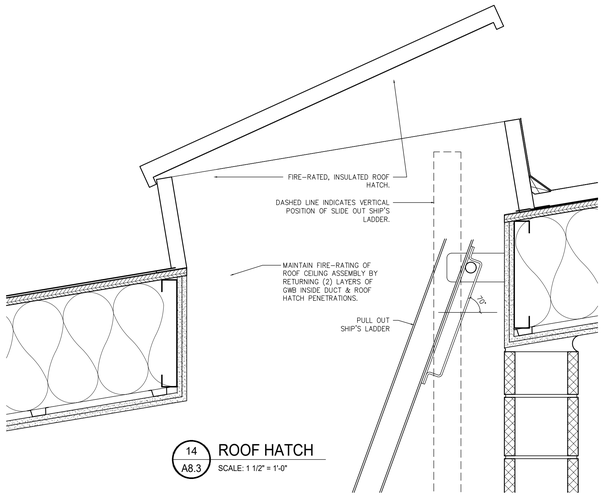
3B A8.3 **RETAINING WALL @ REAR ENTRY**
SCALE: 3/4" = 1'-0"



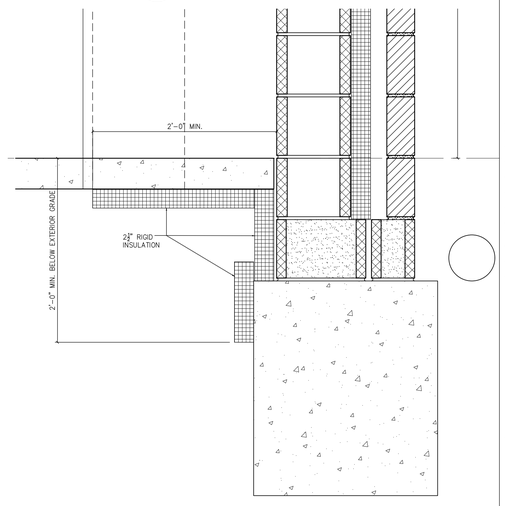
15 A8.3 **SOFFIT DETAIL**
SCALE: 1 1/2" = 1'-0"



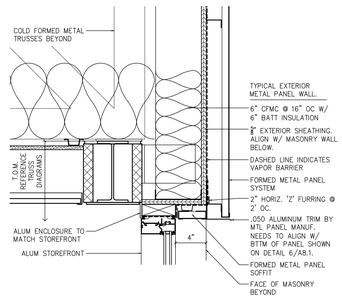
5B A8.3 **SECTION DETAIL**
SCALE: 1 1/2" = 1'-0"



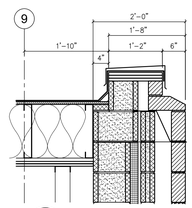
14 A8.3 **ROOF HATCH**
SCALE: 1 1/2" = 1'-0"



5A A8.3 **TYP. FOUNDATION DETAIL**
SCALE: 1 1/2" = 1'-0"



16 A8.3 **DETAIL @ METAL PANEL**
SCALE: 1 1/2" = 1'-0"



17 A8.3 **SECTION DETAIL**
SCALE: 3/4" = 1'-0"

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A8.3

SCALE	AS NOTED
DATE	10-21-2026

DRAWING SIZE: 30 X 42

GENERAL NOTES

GENERAL
All work was designed to and shall conform to the "2021 International Building Code."

Structural sections and details shall be considered typical for similar conditions that do not have a specific section indicated, and shall be provided at no additional cost to the owner.

Construction sequences shall allow for material movement due to temperature effects during the construction period prior to the building being enclosed and the environment controlled. Any frost heaving of foundations or slab on grade, cracking, adjustments, etc. due to thermal effects shall be corrected by the contractor at no additional cost to the owner.

Contractor shall be solely responsible for determining and verifying the existence and location of all utilities prior to the commencement of work.

Contractor shall be solely responsible for determining and verifying all site conditions including existing dimensions prior to the commencement of work and ordering materials.

The structure is designed to be self-supporting and stable after the structure is complete. It is the contractor's sole responsibility to determine erection procedures and sequence to ensure the safety of the structure and its components during construction. This includes the addition of necessary shoring, bracing, tie downs or any other safety measure required to stabilize and protect existing and adjacent structures and systems during the course of demolition and construction. These materials are considered to be the property of the contractor.

FOUNDATIONS
Foundations have been designed for an allowable bearing pressure of 4000 pounds per square foot.

Footings shall be placed on undisturbed earth or controlled fill and elevations shown may be adjusted up or down to suit existing conditions as directed by the Geotechnical Engineer.

Bottom of all exterior footings shall be 3'-0" minimum below adjacent finish grade.

Grout foundation walls solid to ground finish floor level.

General contractor shall coordinate with mechanical, plumbing and electrical contractors to sleeve all utilities that penetrate or interfere with foundations and walls.

Crushed stone sub-base shall be AASHTO classification 57 aggregate.

CONCRETE
Reinforced concrete shall be in accordance with "BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE," (ACI 318) latest edition.

A. Cold-Weather Placement: Comply with ACI 306.1 and as follows. Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing actions, or low temperatures.
   1. Maintain temperature of concrete as specified in Part 2 for "Ready-Mixed Concrete."
   2. Do not use frozen materials or materials containing ice or snow. Do not place concrete on frozen subgrade or on subgrade containing frozen materials.
   3. Do not use calcium chloride, salt, or other materials containing antifreeze agents or chemical accelerators, unless otherwise specified and approved in mix designs.

B. Hot-Weather Placement: Place concrete according to recommendations in ACI 305R and as follows, when hot-weather conditions exist:
   1. Cool ingredients before mixing to maintain concrete temperature below 90 deg F at time of placement. Chilled mixing water or chopped ice may be used to control temperature, provided water equivalent of ice is calculated to total amount of mixing water. Using liquid nitrogen to cool concrete is Contractor's option.
   2. Cover steel reinforcement with water-soaked burlap so steel temperature will not exceed ambient air temperature immediately before embedding in concrete.
   3. Fog-spray forms, steel reinforcement, and subgrade just before placing concrete. Keep subgrade moisture uniform without standing water, soft spots, or dry areas.
   4. Mixers, chutes, pump lines and other equipment in contact with the mix should be shaded or covered with wet burlap.
   5. On windy days, install windbreaks.
   6. Ensure each ready-mix truck carries additional superplasticizer for temperature related slump loss.
   7. Immediately following final finishing, begin the wet curing process, using specifications produced by the ACI 308R-01- Guide to Curing Concrete.

Cast-in-place concrete footings and piers shall be normal weight proportioned for 3000 psi in compression for 28 days.

Cast-in-place concrete slabs shall be normal weight proportioned for 4000 psi in compression for 28 days.

All concrete shall be mechanically vibrated (including footings). See foundation plan for concrete slab control joint locations.

Walls retaining fill shall be adequately braced until floor slabs are in place 7 days.

Reinforcing steel shall conform to ASTM A615 - Grade 60.

Reinforcing bars shall be lapped in accordance with ACI-318.

Minimum cover for reinforcing bars shall be 3" for footings, 1-1/2" for walls and piers, and 3/4" for slabs unless noted otherwise.

Horizontal bars in walls and footings shall be continuous thru column footings and around all corners.

All Welded Wire Reinforcing (WWR) shall conform to ASTM A1064. Welded Wire Reinforcing for slabs shall be lapped a minimum of 6".

All piers and footings are concentric with columns unless otherwise noted or shown.

Pipes conduits, etc. which penetrate concrete walls and footings shall be sleeved allowing 1" minimum differential movement.

MASONRY
Masonry shall be in accordance with "BUILDING CODE REQUIREMENTS and SPECIFICATIONS FOR MASONRY STRUCTURES," (ACI 530) latest edition.

A. Cold-Weather construction procedures: Comply with ACI 530.

B. Hot-Weather Placement: Place masonry according to recommendations in ACI 530 and as follows, when hot-weather conditions exist:
   1. Use cool water to mix mortar.
   2. Minimize exposure of materials and equipment to direct sunlight.
   3. Maintain sand piles in damp loose condition.
   4. Flush metal equipment and wooden mortar boards with cool water before contact with fresh mortar.
   5. Don't spread mortar too far ahead of work.
   6. Under extreme drying conditions, use windbreaks, fog sprays, or wall coverings to assure adequate moisture for curing of mortar.

All concrete masonry unit walls shall be in accordance with ASTM C90. Minimum compressive strength for average net area shall be as follows:
Average of 3 units 1900 psi
Individual units 1700 psi
Mortar shall be in accordance with ASTM C270, proportion specification, as follows:
Masonry below grade and in contact with earth, exterior above grade walls and reinforced masonry walls: Type S.
Non-load bearing masonry wall: Type N.

Grout for cores shall be pea gravel high slump mix having a 28 day compressive strength of 3000 psi.

Compressive strength of net cross-sectional area of load bearing masonry in each wythe shall equal or exceed
F'm = 1500 psi

Reinforcing steel shall conform to ASTM A615 - Grade 60. Reinforcing bars shall be spliced a minimum of 48 bar diameters and horizontal bars in walls shall be continuous around all corners.

Bearing and shear walls are those walls shown on the structural foundation plan.

Provide hot-dipped galvanized ladder type horizontal joint reinforcement (Min. 9 Ga.) at 16 inches on center vertical in all bearing, interior and exterior masonry walls. Refer to architectural drawings and typical details for ties.

Provide ties at masonry wall control joints, such as, Slip Set Stabilizers manufactured by Heckmann Building products at 16" O.C. vertically and horizontally.

All interior non-load bearing masonry walls shall be braced at the top, see typical detail.

All intersecting masonry walls shall be interconnected so that half of the units of each wall are embedded in the other wall or as shown on drawings.

Multiwythe block masonry walls, excluding exterior cavity walls, shall act compositely by transferring shear across the collar joint, which can range from 3/8" to 4", in width by either:
(a) Crossed connecting headers or
(b) Filled with mortar or grout and the ladder reinforcing bridging across the joint.

Provide lintels for masonry openings wider than 12", TMS 402/602-16, 14.5.1 Miscellaneous Requirements.

Do not cut holes in masonry walls directly below concentrated loads without a specified lintel.
Provide a minimum of 8" CMU between any MEP masonry openings.
Provide a minimum of 4" CMU between adjacent holes that range between 4" to 12" in diameter for more than 6'-0" or a 1/3 of the wall length.

Masonry control joints shall be located 24 feet maximum centers for exterior walls and 30 feet for interior walls, see architectural drawings for locations.

GC is to provide temporary shoring and/or bracing for all masonry work which is to remain in place until work is permanently stabilized. GC is to engage a professional engineer to design such system to ensure the structures stability.

Pipes conduits, etc. which penetrate masonry walls shall be sleeved allowing 1" minimum differential movement.

STEEL
Structural steel shall be in accordance with the following: Wide flange sections ASTM A992, Fy =50ksi, Rectangular and Square Tubes shall be ASTM A500, Grade B, Fy = 46 ksi, Round Pipes shall be ASTM A500, Grade B, Fy = 42 ksi, Standard Pipes, STD, ASTM A53, Grade B, Fy = 35 ksi and plates, angles and channels shall be ASTM A36, Fy = 36ksi.

Steel work shall be fabricated and erected in accordance with latest AISC, Specifications and Code of Standard Practice.

All steel shall have one coat of shop applied rust inhibitive paint except where steel is to receive sprayed-on fireproofing, concrete encasement or at locations of field welds or slip critical bolt connections.

All aluminum and steel members shall be treated or properly separated to prevent galvanic and corrosive effects by use of neoprene pads.

Connections not shown on drawings shall be designed by the steel fabricator. All connections shall be "Framed Beam Connections" designed in accordance with AISC, ASD, "Specification for Structural Joints Using ASTM A325 or A490 Bolts." Shop and field connections for structural steel shall be welded (E70XX) or bolted (ASTM A325 or ASTM A490). Connection between wide flange beams shall be made with double clip angles, L3-1/2"xL3"x5/16" minimum.

All steel to be left exposed shall be considered, "Architecturally Exposed Structural Steel, Category 2," AESS. This framing shall be fabricated and erected in accordance with the specifications of the 2016 AISC Code of Standard Practice for Steel Buildings and Bridges ANSI/AISC 303-16 (COSP), CATEGORY 2, unless designated on drawings as AESS 3 to indicate CATEGORY 3.

Structural Steel fabricator's connections, seat angles, brackets, ETC. shall clear architectural finishes.

Anchor bolts shall be ASTM F1554, Grade A36 or weldable Grade 55.

Steel work fabricator and erector shall coordinate all connection details and arrangements to facilitate fabrication and erection sequences. Any changes from design drawings shall be submitted for approval.

Furnish beam stiffeners for all beams at concentrated load points and were beams frame over columns.

GC to provide temporary shoring and /or bracing required to secure the steel framing against loads equal in intensity to design loads which is to remain in place until work is permanently stabilized. GC is to engage a professional engineer to design such system to ensure the structures stability.

Metal decking shall be fabricated and erected in accordance with, American Iron and Steel Institute's, Specification for the Design on Cold Formed Steel Structural Members and shall be certified by the Steel Deck Institute (SDI).

Pipes, conduits and ductwork shall not be supported from any type of steel roof deck.

Pipes, conduits and ductwork shall not be supported by post drilled expansion anchors in elevated concrete floor deck. Integral deck hanger tabs with 100 pound allowable load, piercing hanger tabs with 250 pound allowable load or non-piercing hanger tabs with 100 pound allowable load may be used in accordance with manufacturer's recommendations. Cast in anchors also may be used with prior approval by architect.

All roof opening dimensions and locations shall be verified and coordinated with mechanical and architectural drawings.

Roof deck openings up to 8" diameter with one rib removed no deck reinforcing is required. Roof deck openings greater than 8" up to 13" reinforce deck with (12ga.) steel plate extending 6" past each side of the opening and fasten to deck.
Roof deck openings greater than 13" up to 18" provide 1.5" (16ga.) reinforcing channels in each rib at each side of opening flush with top of deck and spanning from deck supports, in addition, provide (12ga.) steel plate extending 6" past each side of the opening and fasten to deck. Roof deck openings greater than 18" provide steel frames as indicated on drawings, see typical detail.

Metal roof deck shall have properties equal to or better than the following properties:
"S" min. = 0.186 in.3; "I" min. = 0.155 in.4; 22 Ga. Galvanized, Grade 33;
1-1/2" Type B Wide Rib Deck. Fastening pattern as follows: #12 screws 36/7 with #10 screws sides side laps at 12" o.c., perimeter 6" o.c.

All Cold Formed Metal Framing (CFMF) structural members shall be designed, manufactured and installed in accordance with the latest American Iron and Steel Institute (AISC) specifications. All members shall be formed from corrosion resistant steel, corresponding to the requirements of ASTM A653, with a minimum yield strength of 33 ksi for 43 mils and smaller and 50 ksi for 54 mils and larger for studs/joists and
33 ksi for runners, zinc coated meeting ASTM A924.

Openings in stud walls shall include on both sides of header a minimum, (1) jack and number of king suds to equal number of wall studs removed for the wall opening, equally divided with providing the same size as the wall studs, unless noted otherwise or required.

All multiple stud posts shall be welded together at 4'-0" max. O.C.

Provide continuous mechanical bridging with first row at 3'-0" above floor, then at 4'-0" intervals.

Make connections with self drilling, self tapping screws or welding so that the connections meet or exceed the design loads.

Cold formed metal roof trusses as shown on structural drawings are to be designed, manufactured and erected by a qualified cold formed metal truss fabricator. Manufacturer shall submit shop drawings and calculations, sealed by a licensed Professional Engineer, for review by the Architect. Shop drawings must clearly indicate size, gage, properties and connections of all truss members.

Metal joists shall be located directly over bearing studs.

Provide temporary bracing for all gage metal stud work which is to remain in place until work is permanently stabilized.

WOOD
All lumber shall be pressure treated, equal to or better than, visually graded dimension lumber of the Southern pine - No. 1 species conforming to the strength requirements of the "National Design Specifications" (NDS), by the National Forest Association.

Plywood shall be in accordance with the American Plywood Association (APA).

Roof: 23/32" APA 24" span rated, Exposure 1, Tounge and Grrove. Fastened with 1½" long Tek screws spaced 6" o.c. at the perimeter and 12" o.c. middle field.

Components and Cladding — h< 60 ft

Roof Fig. 30.3-5A pg 347
Walls Fig. 30.3-1, pg 335
Net Design Wind Pressures
Enclosed and Partially Enclosed Buildings — Walls and Roofs

Net Design Wind Pressure, Pnet =qh[(GCp)-(GCPi)] =(psf) ASCE 7-16

Roof to 10 degrees Monoslope Roof

Basic Wind Speed (MPH)	Effective Wind Area (sf)	Zones: Roofs Zone 1 positive	Roofs Zone 1 negative	Roofs Zone 2 positive	Roofs Zone 2 negative	Roofs Zone 2' positive	Roofs Zone 2' negative	Roofs Zone 3 positive	Roofs Zone 3 negative	Roofs Zone 3' positive	Roofs Zone 3' negative	Walls Zone 4 positive	Walls Zone 4 negative	Walls Zone 5 positive	Walls Zone 5 negative
121	10	13.76	-36.99	13.76	-42.44	13.76	-51.04	13.76	-56.77	13.76	-79.71	33.83	-36.70	33.83	-45.30
	20	12.62	-36.70	12.62	-41.29	12.62	-50.18	12.62	-51.04	12.62	-70.25	30.97	-34.98	30.97	-42.44
	50	11.47	-36.70	11.47	-40.72	11.47	-49.32	11.47	-45.30	11.47	-60.50	29.53	-32.97	29.53	-39.57
	100	10.90	-36.70	10.90	-39.57	10.90	-48.17	10.90	-39.57	10.90	-51.04	28.10	-30.97	28.10	-36.70
26.10.2 pg268	qh	28.673 psf													

DESIGN LOAD SCHEDULE
According to 2021 INTERNATIONAL BUILDING CODE
REFER TO ASCE 7-16

SNOW LOAD			
ITEM	SYMBOL	VALUE	REFERENCE
GROUND SNOW LOAD	Pg	30 PSF	ASCE 7-16 FIG. 7.2-1 PG. 53
FLAT-ROOF SNOW LOAD	Pf	0.7Ce Ct I Pg	ASCE 7-16 EQ. 7.3-1 PG. 51
SNOW EXPOSURE FACTOR	Ce	1	ASCE 7-16 TABLE 7.3-1 PG. 58
SNOW LOAD IMPORTANCE FACTOR	Is	1.1	ASCE 7-16 TABLE 1.5-2 PG. 5
SNOW THERMAL FACTOR	Ct	1.2	ASCE 7-16 TABLE 7.3-2 PG. 58
OCCUPANCY OF STRUCTURE	RISK CATEGORY	III	ASCE 7-16 TABLE 1.5-1 PG. 4

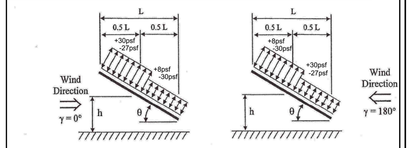
WIND LOAD			
ITEM	SYMBOL	VALUE	REFERENCE
BASIC WIND SPEED (3 SECOND GUST)	V3s	121 MPH	ASCE 7-16 FIG. 26.5-1 PG. 252-257
WIND IMPORTANCE FACTOR	Iw	1	ASCE 7-16 TABLE 1.5-2 PG. 5
EXPOSURE CATEGORY	-	C	ASCE 7-16 26.7.2, 26.7.3 PG. 266
INTERNAL PRESSURE COEFFICIENT	Gcpi	+/- 0.18	ASCE 7-16 TABLE 26.13-1 PG. 271

SEISMIC LOAD			
ITEM	SYMBOL	VALUE	REFERENCE
SPECTRAL RESPONSE ACCELERATION AT SHORT PERIODS (0.2 SEC.)	Ss	0.179	ASCE 7-16 FIG. 22-1 PG. 210
SPECTRAL RESPONSE ACCELERATION (1 SEC.)	S1	0.048	ASCE 7-16 FIG. 22-2 PG. 212
SEISMIC IMPORTANCE FACTOR	Ie	1.25	ASCE 7-16 TABLE 1.5-2 PG. 5
BASIC SEISMIC FORCE RESISTING SYSTEM	A. BEARING WALL SYSTEMS: 9.ORDINARY MASONRY SHEAR WALLS		ASCE 7-16 TABLE 12.2-1 PG. 90-92
RESPONSE MODIFICATION COEFFICIENT	R	2	ASCE 7-16 TABLE 12.2-1 PG. 90-92
DEFLECTION AMPLIFICATION FACTOR	Cd	1.75	ASCE 7-16 TABLE 12.2-1 PG. 90-92
SITE CLASS	-	A	ASCE 7-16 TABLE 20.3-1 PG. 204
SEISMIC DESIGN CATEGORY	-	A	ASCE 7-16 TABLE 11.6-1 & 2 PG. 85
SPECTRAL RESPONSE FOR SHORT PERIOD COEFFICIENT	SDS	0.095	ASCE 7-16 11.4-3 PG. 84
SPECTRAL RESPONSE FOR 1 SEC. PERIOD COEFFICIENT	SD1	0.025	ASCE 7-16 11.4-4 PG. 84
SEISMIC RESPONSE COEFFICIENT	Cs	0.06	ASCE 7-16 12.8 PG. 101
BASE SHEAR	V	Cs*Wt	ASCE 7-16 TABLE 12.8-1 PG. 101
ANALYSIS PROCEDURE	EQUIVALENT LATERAL FORCE		ASCE 7-16 TABLE 12.6-1 PG. 100

GRAVITY DESIGN LOAD SCHEDULE
ACCORDING TO 2021 INTERNATIONAL BUILDING CODE

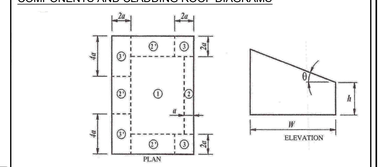
	OCCUPANCY OR USE	DEAD LOAD UNIFORM (PSF)	LIVE LOAD UNIFORM (PSF)	LIVE LOAD CONCENTRATED (POUNDS)	PARTITION UNIFORM (PSF)	TOTAL DEAD+ LIVE (PSF)
ROOF	METAL DECK ON CFS RAFTERS	20	30			50
	METAL DECK ON CFS TRUSSES	20	30			50
FLOOR	OFFICE	50	50			100
	RETAIL	50	100			150
	ASSEMBLY ROOMS	50	100			150
	CONCESSIONS	50	100			150
	TOILET	50	100			150
	STORAGE/MAINTENANCE	50	100			150

CANOPY COMPONENTS AND CLADDING WIND PRESSURE DIAGRAMS



Notation
L_h = Horizontal dimension of roof, measured in the along-wind direction, ft (m).
h = Mean roof height, ft (m).
γ = Direction of wind, degrees.
θ = Angle of plane of roof from horizontal, degrees.

COMPONENTS AND CLADDING ROOF DIAGRAMS



Notation
a = 10% of least horizontal dimension or 0.4h, whichever is smaller, but not less than either 4% of least horizontal dimension or 3 ft (0.9 m).
h = Eave height shall be used for $\theta \leq 10°$.
W = Building width, in ft (m).
θ = Angle of plane of roof from horizontal, in degrees.

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REVIEWED	MA
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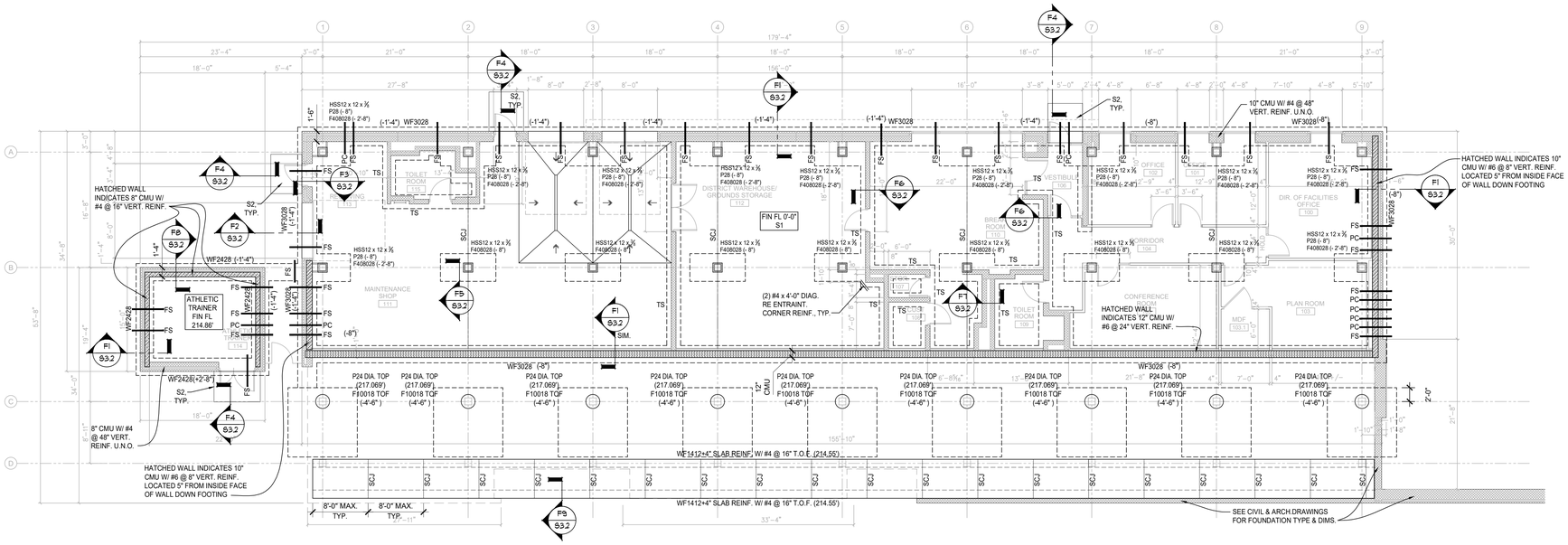
SHEET TITLE

NOTES & TABLES

SHEET #

S-0.1

SCALE	AS NOTED
DATE	10-21-2026

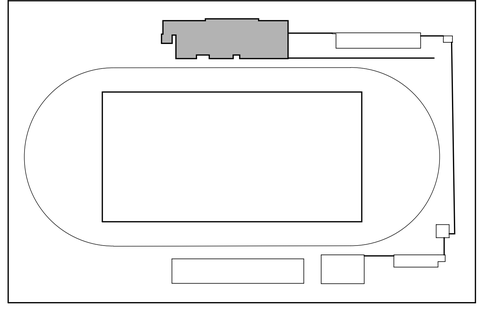


1 FND. PLAN - AREA UNDER BLEACHERS
1/8"=1'-0"
FIN. FLR. 0'-0" REFERENCES ELEVATION 210.05'

FOUNDATION NOTES

S1	4" CONCRETE SLAB REINF. W/ 6x6 W1.4 x W1.4 WWR ON 15 MIL VAPOR BARRIER SUPPORTED ON 4" ASHTOE 57 STONE.
S2	4" A/E CONCRETE SLAB REINF. W/ 6x6 W1.4 x W1.4 WWR SUPPORTED ON 4" ASHTOE 57 STONE.
( )	INDICATES TOP OF FOOTING REFERENCED FROM FINISH FLOOR ELEVATION.
	GC VERIFY TOP OF PIER ELEV. WITH BLEACHER MANUF. BEFORE ORDERING MATERIALS
P	INDICATES PIER W/ TOP OF PIER ELEVATION, SEE SCHEDULE.
WF	INDICATES WALL FOOTING, SEE SCHEDULE.
SCJ	INDICATES CONCRETE SLAB CONTROL JOINT.
TS	INDICATES THICKENED SLAB ON GRADE, SEE TYPICAL DETAIL.
NOTE:	FINISH FLOOR ELEVATION IS 210.05' REFERENCED ON PLAN AS (0'-0").
NOTE:	SEE ARCH. DRAWINGS FOR SLAB SLOPES TO DRAINS
NOTE:	MASONRY WALL SUPPORTED ON FOOTINGS TO BE REINFORCED WITH #4 AT 48" VERTICAL REINF. U.N.O.
PC	INDICATES PIPE CROSSING FOUNDATION, SEE TYP. DETAILS ON SHEET S3.1
FS	INDICATES FOOTING STEP, SEE TYP. DETAILS ON SHEET S3.1

KEY PLAN N.T.S.



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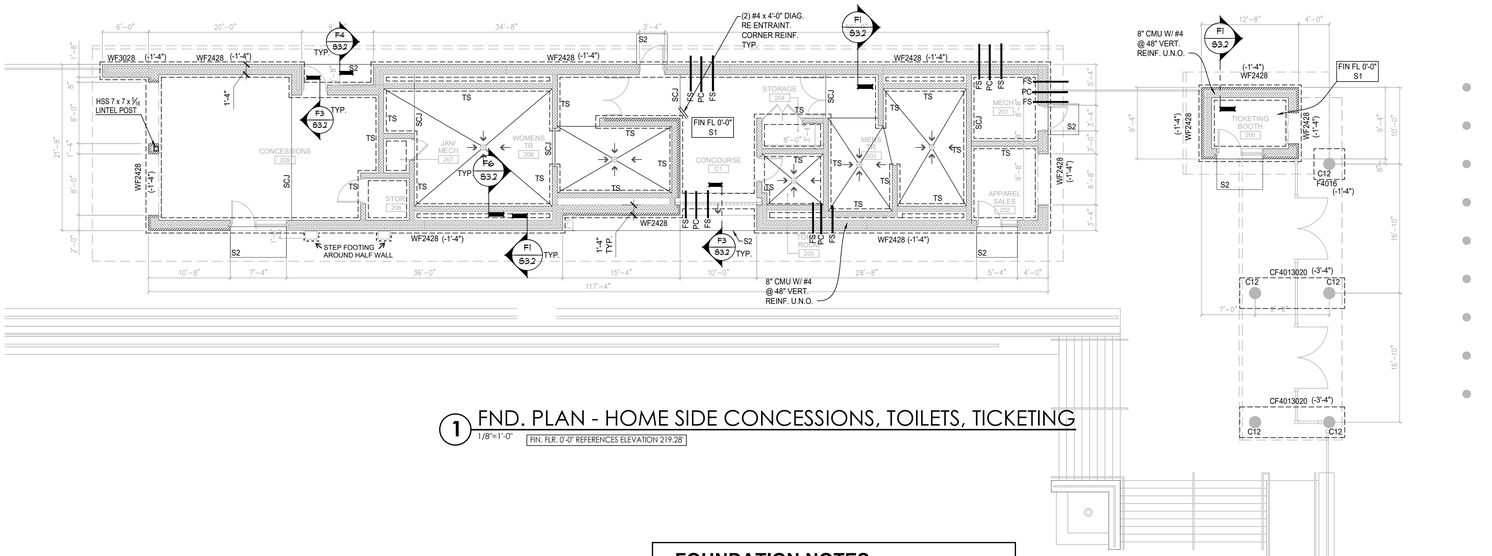
FOUNDATION PLAN AREA UNDER BLEACHER

SHEET #

S1.1

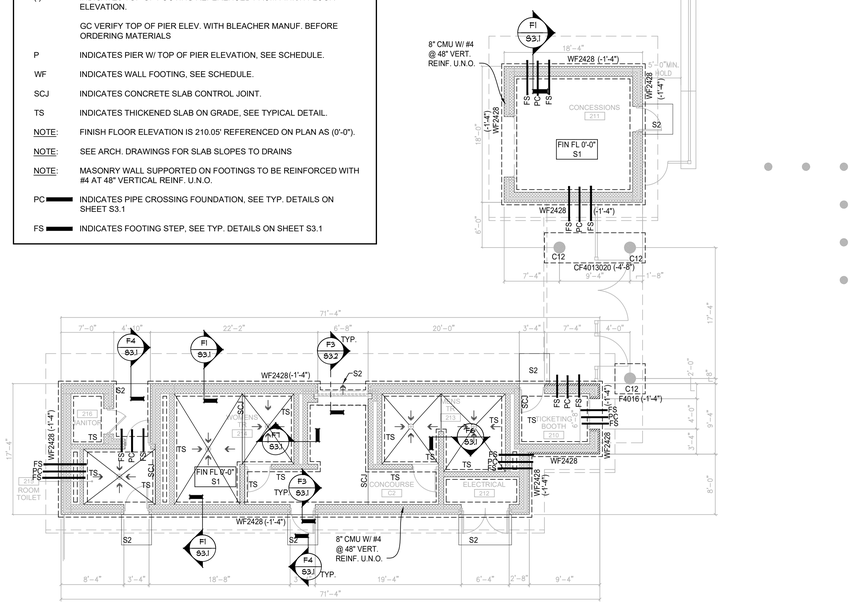
SCALE	AS NOTED
DATE	10-21-2026



1 FND. PLAN - HOME SIDE CONCESSIONS, TOILETS, TICKETING
1/8"=1'-0"
FIN. FLR. 0'-0" REFERENCES ELEVATION 219.28'

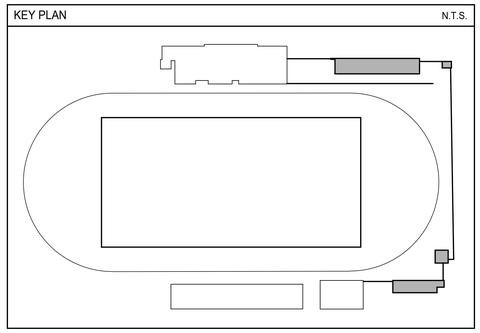
FOUNDATION NOTES

S1	4" CONCRETE SLAB REINF. W/ 6x6 W1.4 x W1.4 WWR ON 15 MIL VAPOR BARRIER SUPPORTED ON 4" ASHTOE 57 STONE.
S2	4" A/E CONCRETE SLAB REINF. W/ 6x6 W1.4 x W1.4 WWR SUPPORTED ON 4" ASHTOE 57 STONE.
( )	INDICATES TOP OF FOOTING REFERENCED FROM FINISH FLOOR ELEVATION.
	GC VERIFY TOP OF PIER ELEV. WITH BLEACHER MANUF. BEFORE ORDERING MATERIALS
P	INDICATES PIER W/ TOP OF PIER ELEVATION, SEE SCHEDULE.
WF	INDICATES WALL FOOTING, SEE SCHEDULE.
SCJ	INDICATES CONCRETE SLAB CONTROL JOINT.
TS	INDICATES THICKENED SLAB ON GRADE, SEE TYPICAL DETAIL.
NOTE:	FINISH FLOOR ELEVATION IS 210.05' REFERENCED ON PLAN AS (0'-0").
NOTE:	SEE ARCH. DRAWINGS FOR SLAB SLOPES TO DRAINS
NOTE:	MASONRY WALL SUPPORTED ON FOOTINGS TO BE REINFORCED WITH #4 AT 48" VERTICAL REINF. U.N.O.
PC	INDICATES PIPE CROSSING FOUNDATION, SEE TYP. DETAILS ON SHEET S3.1
FS	INDICATES FOOTING STEP, SEE TYP. DETAILS ON SHEET S3.1



2 FND. PLAN - VISITOR SIDE CONCESSIONS, TOILETS, TICKETING
1/8"=1'-0"
FIN. FLR. 0'-0" REFERENCES ELEVATION 214.80'

KEY PLAN N.T.S.



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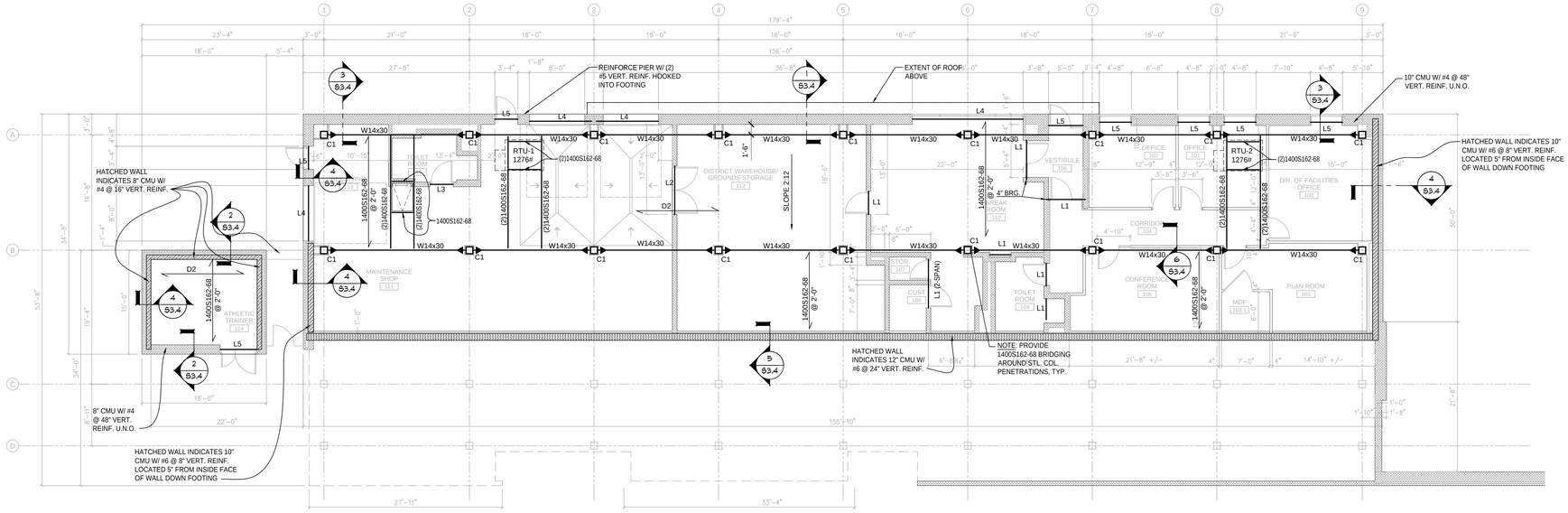
FOUNDATION PLANS CONCESSION, TOILETS & TICKETING

SHEET #

S1.2

SCALE	AS NOTED
DATE	10-21-2026



1 ROOF FRAMING PLAN - AREA UNDER BLEACHERS
1/8"=1'-0"

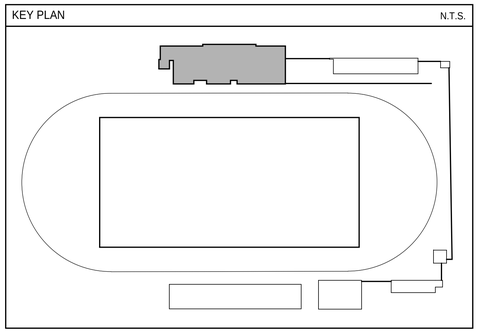
STRUCTURAL NOTES

C1	INDICATES HSS 12 x 12 x 3/8 COLUMN
D1	INDICATES 1½" METAL ROOF DECK
TRUSS A	INDICATES PRE-MANUFACTURED COLD FORMED METAL ROOF TRUSS
GIRDER TRUSS	INDICATES PRE-MANUFACTURED COLD FORMED METAL ROOF GIRDER TRUSS
D2	INDICATES 23/32 PLYWOOD

REFER TO ARCHITECTURAL DRAWINGS FOR TOP OF STEEL

REFER TO ARCHITECTURAL DRAWINGS FOR TOP OF MASONRY

KEY PLAN N.T.S.



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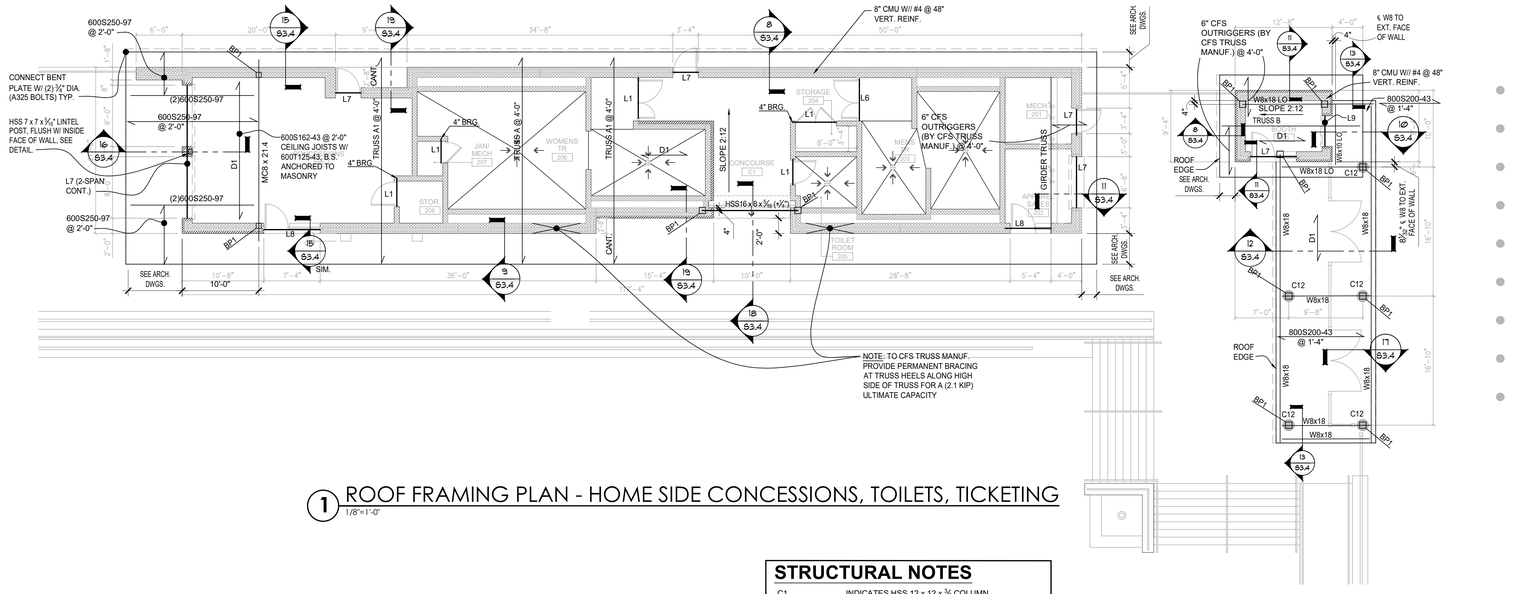
SHEET TITLE

ROOF FRAMING PLAN - AREA UNDER BLEACHER

SHEET #

S2.1

SCALE	AS NOTED
DATE	10-21-2026



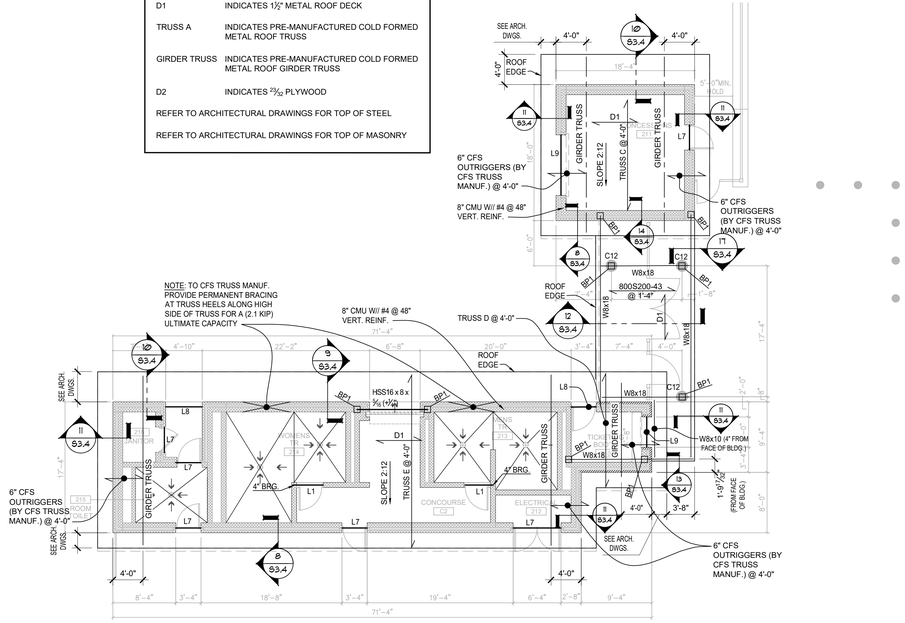
1 ROOF FRAMING PLAN - HOME SIDE CONCESSIONS, TOILETS, TICKETING
1/8"=1'-0"

STRUCTURAL NOTES

C1	INDICATES HSS 12 x 12 x 3/8 COLUMN
D1	INDICATES 1 1/2" METAL ROOF DECK
TRUSS A	INDICATES PRE-MANUFACTURED COLD FORMED METAL ROOF TRUSS
GIRDER TRUSS	INDICATES PRE-MANUFACTURED COLD FORMED METAL ROOF GIRDER TRUSS
D2	INDICATES 23/32 PLYWOOD

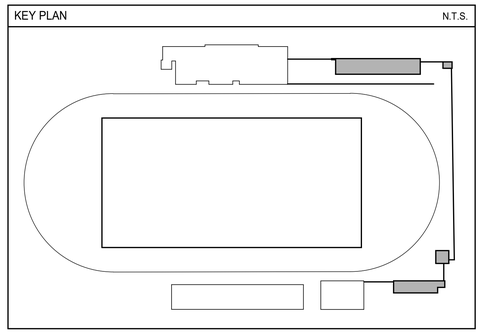
REFER TO ARCHITECTURAL DRAWINGS FOR TOP OF STEEL

REFER TO ARCHITECTURAL DRAWINGS FOR TOP OF MASONRY



2 ROOF FRAMING PLAN - VISITOR SIDE CONCESSIONS, TOILETS, TICKETING
1/8"=1'-0"

KEY PLAN N.T.S.



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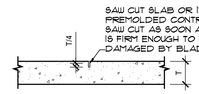
SHEET TITLE

ROOF PLANS CONCESSION, TOILETS & TICKETING

SHEET #

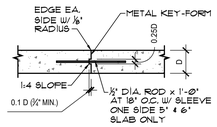
S-2.2

SCALE	AS NOTED
DATE	10-21-2026



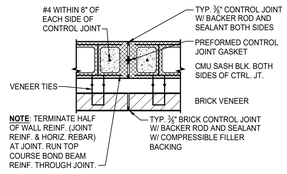
TYP. SLAB CONTROL JOINT

3"=1'-0" (NOTED AS CJ ON FOUNDATION PLANS)



TYP. SLAB CONSTRUCTION JOINT

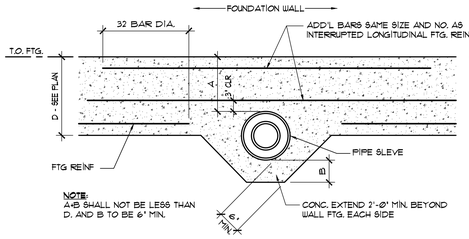
3"=1'-0" (LOCATE AT A CONTROL JOINT)



NOTES:
- LOCATE EXTERIOR CONTROL JOINTS @ 24'-0" MAX. U.N.O.
- LOCATE INTERIOR CONTROL JOINTS @ 30'-0" MAX. U.N.O.

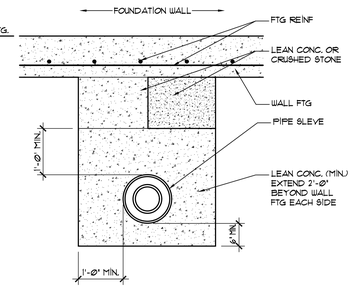
TYP. WALL CONTROL JOINTS

N.T.S. (SEE ARCH. PLANS & EXTERIOR ELEVATIONS FOR LOCATIONS)

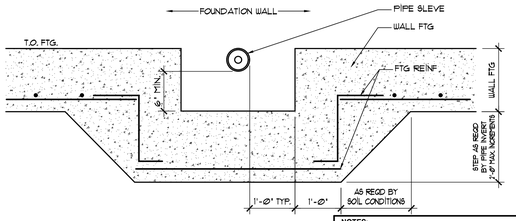


NOTE: A=B SHALL NOT BE LESS THAN D. AND B TO BE 6" MIN.

TYP. WALL FTG. WITH PIPE SLEEVE



TYP. PIPE CROSSING BELOW WALL FTG.

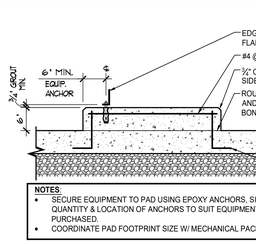


TYP. STEP FTG. AT PIPE CROSSING

NOTES:
- SEE PLUMBING DRAWINGS FOR SIZE LOCATION AND INV. ELEV. OF PIPE.
- PIPE SLEEVE FOR PLUMBING LINES LENGTH = FTG. WIDTH + 2'-0" EXTENSION B.S.
- PIPE SLEEVE DIA. = 2" GREATER THAN PIPE O.D.

TYPICAL PIPE CROSSING DETAILS

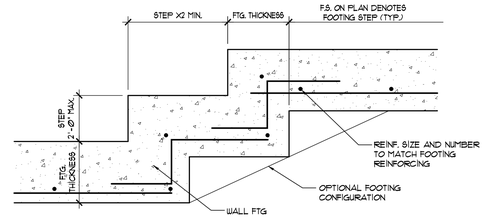
3/4"=1'-0"



NOTES:
- SECURE EQUIPMENT TO PAD USING EPOXY ANCHORS, SIZE, QUANTITY & LOCATION OF ANCHORS TO SUIT EQUIPMENT PURCHASED.
- COORDINATE PAD FOOTPRINT SIZE W/ MECHANICAL PACKAGE REQ'D.

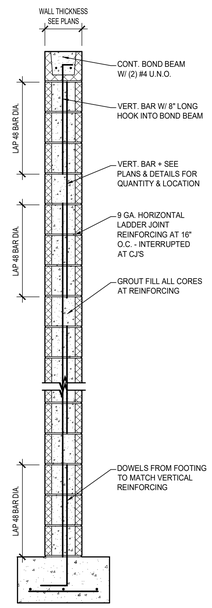
TYPICAL EQUIP. PAD DETAIL

3/4"=1'-0"



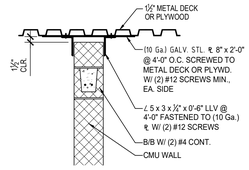
TYPICAL STEPPED FOOTING DETAIL

3/4"=1'-0" (ELEVATION VIEW)



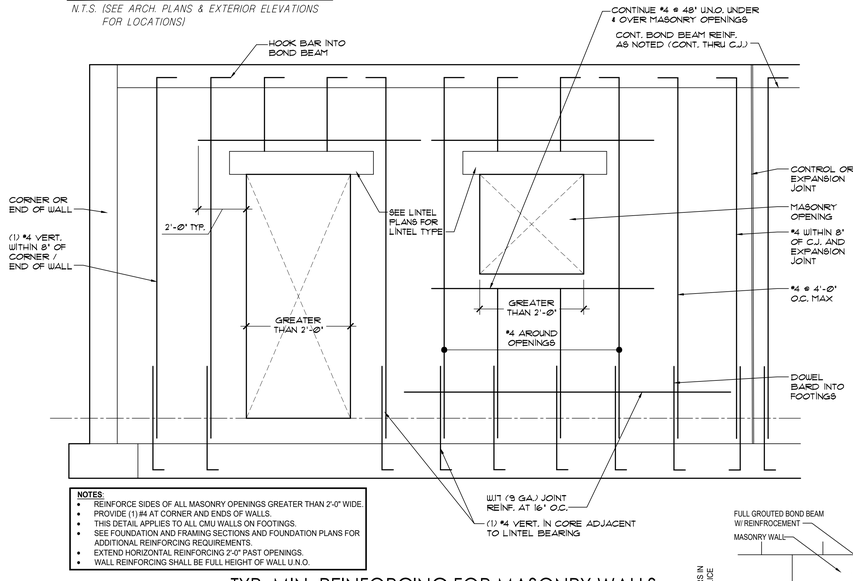
TYPICAL MASONRY WALL SECTION W/ FTG.

3/4"=1'-0"



TYP. TOP OF MASONRY WALL BRACING DET.

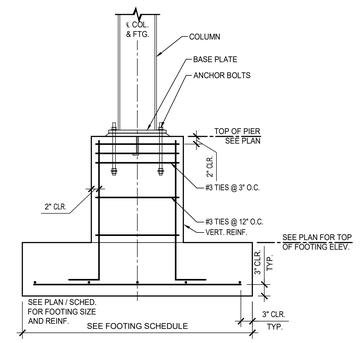
3/4"=1'-0"



NOTES:
- REINFORCE SIDES OF ALL MASONRY OPENINGS GREATER THAN 2'-0" WIDE.
- PROVIDE (1) #4 AT CORNER AND ENDS OF WALLS.
- THIS DETAIL APPLIES TO ALL CMU WALLS ON FOOTINGS.
- SEE FOUNDATION AND FRAMING SECTIONS AND FOUNDATION PLANS FOR ADDITIONAL REINFORCING REQUIREMENTS.
- EXTEND HORIZONTAL REINFORCING 2'-0" PAST OPENINGS.
- WALL REINFORCING SHALL BE FULL HEIGHT OF WALL U.N.O.

TYP. MIN. REINFORCING FOR MASONRY WALLS

NO SCALE



TYP. CONC. PIER & FOOTING

3/4"=1'-0"

FOOTING SCHEDULE

MARK	WIDTH	LENGTH	THICKNESS	REINF. EACH WAY	REMARKS
F4016	4'-0"	4'-0"	1'-4"	(5) #5	
F408028	8'-0"	8'-0"	2'-4"	(9) #8 TOP & BOT.	
F10018	10'-0"	10'-0"	1'-6"	(13) #5 TOP & BOT.	
CF4013020	4'-0"	13'-0"	1'-8"	(7) #6 LONG & (10) #6 SHORT, TOP & BOT.	

TRENCH AND WALL FOOTING SCHEDULE

MARK	WIDTH	THICKNESS	LONGITUDINAL REINF.	TRAVERSE REINF.	REFERENCE DETAIL
WF 2428	2'-0"	2'-4"	(4) #5	#4 AT 48"	
WF3028	2'-6"	2'-4"	(5) #5	#4 AT 48"	
WF3628	3'-0"	2'-4"	(6) #5	#4 AT 48"	
WF4228	3'-6"	2'-4"	(6) #5 TOP & BOT.	#5 AT 12" TOP & BOT.	
WF7228	6'-0"	2'-4"	(6) #5 TOP & BOT.	#5 AT 12" TOP & BOT.	
WF1412+4" SLAB REINF. W/ #4 @16"	1'-2"	1'-0"	(2) #5		9/S3.2

PEDESTAL SCHEDULE

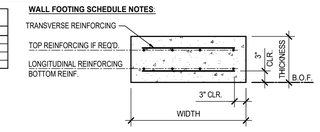
MARK	A x B SIZE	VERT. BARS	TIES	REMARKS
P16	1'-4" x 1'-4"	(8) #5	(3) AT 10"	
P24 DIA.	2'-0" DIAMETER	(10) #6	(3) AT 12"	
P28	2'-4" x 2'-4"	(8) #6	(3) AT 12"	
C12	1'-0" DIAMETER	(8) #5	(3) AT 10"	

PEDESTAL SCHEDULE NOTES:
- (2) ADDITIONAL TIE SETS AT 3" O.C. AT TOP AROUND ANCHOR BOLTS; SEE SECTIONS AND DETAILS FOR ADDITIONAL INFO.

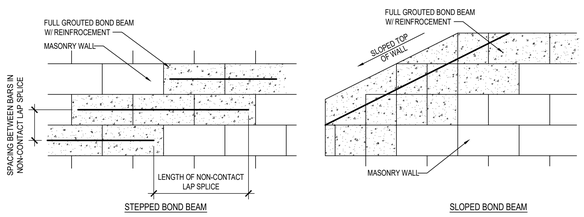
LAP SPLICE LENGTHS FOR REINFORCING BARS

	CONCRETE STRENGTH	
BAR SIZE	3000 PSI	4000 PSI
#3	22"	19"
#4	29"	25"
#5	36"	31"
#6	43"	37"
#7	63"	54"
#8	72"	62"

WALL FOOTING SCHEDULE NOTES:

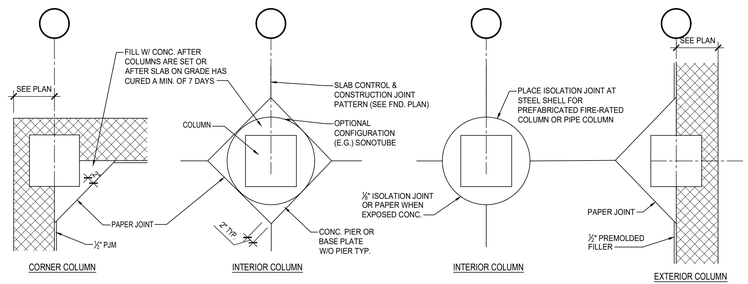


TYPICAL WALL FOOTING DETAIL



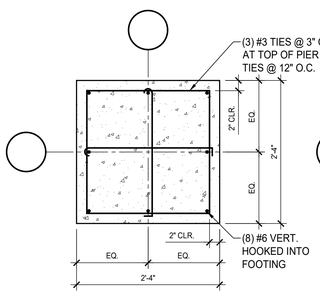
TYP. BOND BEAM DETAILS

NO SCALE



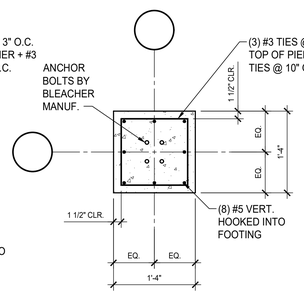
TYP. ISOLATION JOINT DETAILS

3/4"=1'-0"



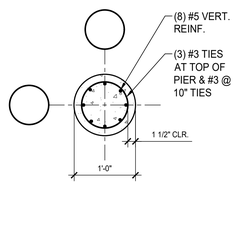
CONCRETE PIER P28

1"=1'-0"



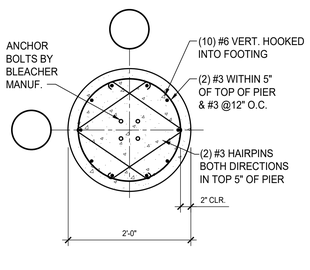
CONCRETE PIER P16

1"=1'-0"



CONCRETE COL. C12

1"=1'-0"



CONCRETE PIER P24 DIA.

1"=1'-0"

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REVIEWED	MA
JOB #	025-089

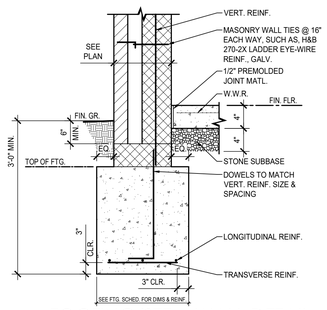
SHEET TITLE

TYPICAL STRUCTURAL FOUNDATION DETAILS

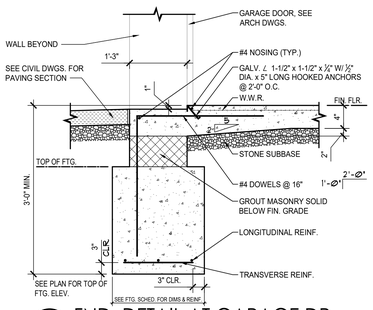
SHEET #

S3.1

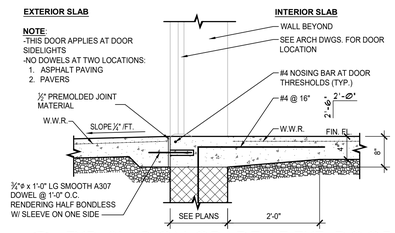
SCALE	AS NOTED
DATE	10-21-2026



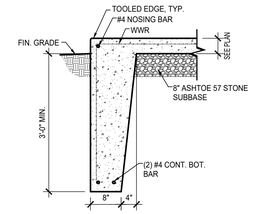
F1 FOOTING/STEM WALL DETAIL
3/4"=1'-0"



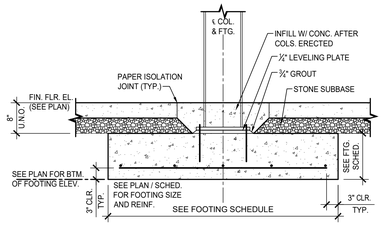
F2 FND. DETAIL AT GARAGE DR.
3/4"=1'-0"



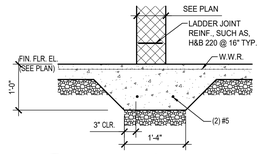
F3 TYP. SLAB ON GRADE AT EXT. DOOR
3/4"=1'-0"



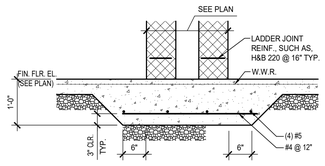
F4 TYP. TURNED DOWN SLAB DETAIL
3/4"=1'-0"



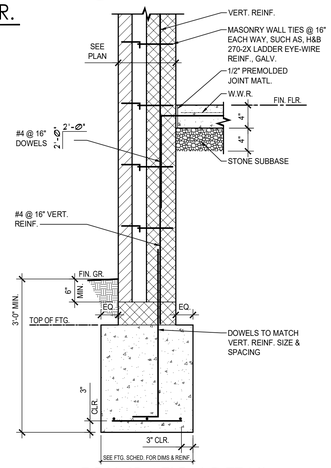
F5 COLUMN FOOTING W/O PIER
3/4"=1'-0" (EXCEPT AT STORMWATER / SANITARY RISER)



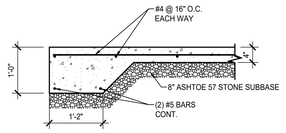
F6 TYP. THICKENED SLAB TS
3/4"=1'-0"



F7 TYP. THICKENED SLAB TS
3/4"=1'-0"



F8 FOUNDATION DETAIL
3/4"=1'-0"



F9 CONC. SLAB DET. @ ROW "D"
3/4"=1'-0"

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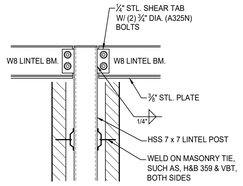
SHEET TITLE

STRUCTURAL FOUNDATION DETAILS

SHEET #

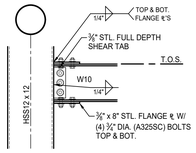
S3.2

SCALE	AS NOTED
DATE	10-21-2026



HSS7x7 COL. TO LINTEL BEAM CONN.

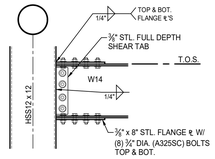
3/4"=1'-0"



TYP. W10 x 22 TO HSS COL. MOMENT CONN. DETAIL

3/4"=1'-0"

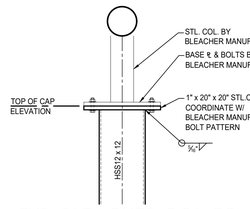
PLAN SYMBOL



TYP. W14 x 30 TO HSS COL. MOMENT CONN. DETAIL

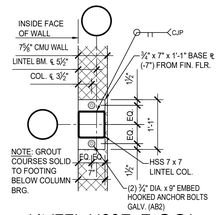
3/4"=1'-0"

PLAN SYMBOL



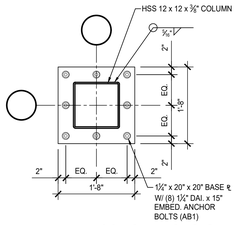
TYP. BLEACHER COL. TO BUILDING COL. DETAIL

3/4"=1'-0"



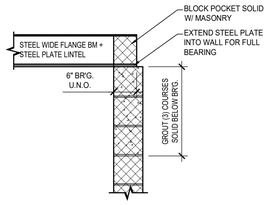
LINTEL HSS7x7 COL. BASE PLATE DETAIL

3/4"=1'-0"



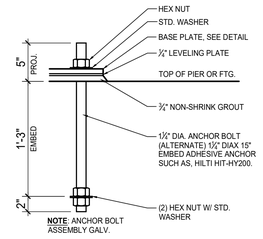
TYP. HSS12 x 12 COL. BASE PLATE

3/4"=1'-0"



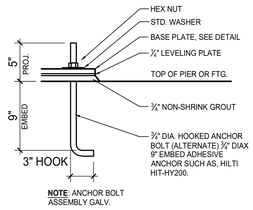
TYP. STEEL BM. + PLATE BEARING DET. W/O BEARING PLATE

3/4"=1'-0"



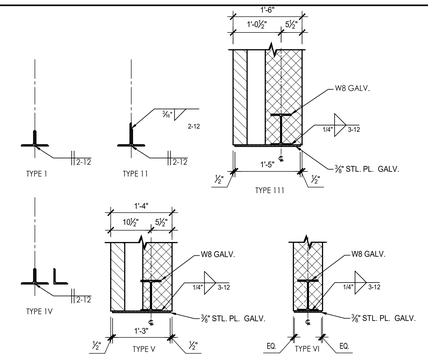
ANCHOR BOLT DET. AB1

1½"=1'-0"



ANCHOR BOLT DET. AB2

1½"=1'-0"



LINTELS

3/4"=1'-0"

LINTEL SCHEDULE

MARK	SIZE	TYPE	END BEARING (INCHES)
L1	(2) L4 x 3½" x ⁵⁄₁₆" LLV	I	6
L2	(2) L6 x 3½" x ⁵⁄₁₆" LLV	I	6
L3	L5 x 5 x ⁵⁄₁₆" LLV + L4 x 4 x ⁵⁄₁₆" LLV	II	6
L4	W8 x 35 + ⅜" x 1'-5" STL. PL.	III	6
L5	W8 x 18 + ⅜" x 1'-5" STL. PL.	III	6
L6	(3) L4 x 3½" x ⁵⁄₁₆" LLV	IV	6
L7	W8 x 18 x ⅜" x 1'-3" STL. PL.	V	6
L8	W8 x 18 + ½" x 7" PL.	VI	6
L9	W8 x 18 + ⅜" x 7" PL. + L 5X5X 5/16	VII	6

LOOSE LINTEL SCHEDULE FOR MISC./MECH., PLUMB., ELECT., & ARCH. OPENINGS IN MASONRY WALLS		
OPENING WIDTH	LINTEL SIZE FOR EACH 4" WALL THICKNESS	LINTEL SIZE FOR EACH 6" WALL THICKNESS
1'-0" TO 3'-0"	L3-1/2X3-1/2X5/16 (EXPOSED) OR 4X8 PC CONCRETE WITH (1) #4 BOT REINF. (CONCEALED)	(2)L3-1/2X2-1/2X5/16 LLV (EXPOSED) OR 6X8 PC CONCRETE WITH (1) #4 BOT REINF. (CONCEALED)
3'-0" TO 4'-0"	L4X3-1/2X5/16 (EXPOSED) OR 4X8 PC CONCRETE WITH (1) #4 BOT REINF. (CONCEALED)	(2)L3-1/2X2-1/2X5/16 LLV (EXPOSED) OR 6X8 PC CONCRETE WITH (1) #4 BOT REINF. (CONCEALED)
4'-0" TO 5'-0"	L5X3-1/2X5/16 (EXPOSED) OR 4X8 PC CONCRETE WITH (1) #4 BOT REINF. (CONCEALED)	(2)L5X5X5/16 LLV (EXPOSED) OR 6X8 PC CONCRETE WITH (1) #4 BOT REINF. (CONCEALED)
5'-0" TO 7'-0"	L6X3-1/2X5/16 (EXPOSED) OR 4X8 PC CONCRETE WITH (1) #5 BOT REINF. (CONCEALED)	(2)L6X3-1/2X5/16 LLV + L3X2X5/16 LLV (EXPOSED) OR 6X8 PC CONCRETE WITH (1) #5 BOT REINF. (CONCEALED)
GREATER THAN 7'-0"	CONTACT ARCHITECT	CONTACT ARCHITECT

PROVIDE MISCELLANEOUS LINTELS (PER SCHEDULE) U.N.O. ON DRAWINGS.
INCLUDED BUT NOT LIMITED TO THE FOLLOWING:
1. MECHANICAL: DUCT, CABINET HEATER OPENINGS, ETC.
2. PLUMBING: HOSE CABINETS, WATER AND GAS SERVICES, FIXTURES, ETC.
3. ELECTRICAL: PANEL BOXES, ETC.
4. ARCHITECTURAL: RECESSED CASEWORK, DOOR POCKETS, ETC.

ALL PRECAST (PC) CONCRETE LINTELS ARE TO BE NORMAL WEIGHT PROPORTIONED FOR F'c= 3000 PSI IN COMPRESSION FOR 28 DAYS.
REINFORCING TO BE ASTM A615, GRADE 60.

ALL STEEL LINTELS EXPOSED TO THE EXTERIOR ARE TO HAVE THE ENTIRE ASSEMBLY HOT DIPPED GALVANIZED IN ACCORDACE WITH ASTM A123.

OPENINGS LOCATED UNDER BEARING BEAMS ARE TO BE AVOIDED. CONTACT ARCHITECT IF CONFLICT.

PROVIDE 6" MINIMUM BEARING LENGTH U.N.O.

COORDINATE LINTEL ELEVATIONS WITH ARCHITECTURAL AND MPE DRAWINGS.

LINTEL NOTES:
1. ALL STEEL LINTELS SUPPORTING OR IN EXTERIOR WALLS SHALL BE HOT-DIPPED GALVANIZED, ENTIRE ASSEMBLY.
2. BEARING LENGTHS ARE TYPICAL AND ARE 6" MIN. UNLESS NOTED OTHERWISE ON PLANS.
3. SEE PLANS FOR TWO SPAN LINTELS
4. GROUT FILL CMU CORES THREE COURSES MIN. BELOW BEARING.
5. BOTTOM PLATES OF LINTELS SHALL BE CONTINUOUS THRU BEARING LENGTH UNLESS BEARING PLATES ARE SPECIFIED.
6. COORDINATE LINTEL ELEVATIONS WITH ARCHITECTURAL DRAWINGS.

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REVISIONS

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REVIEWED	MA
JOB #	025-089

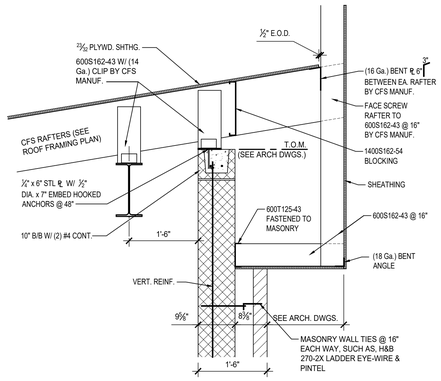
SHEET TITLE

TYPICAL STRUCTURAL DETAILS

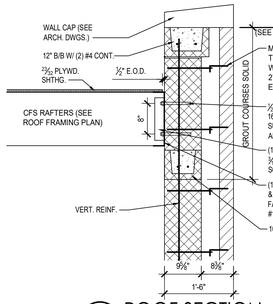
SHEET #

S3.3

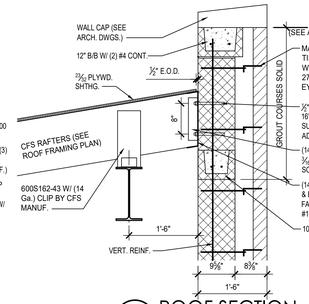
SCALE	AS NOTED
DATE	10-21-2026



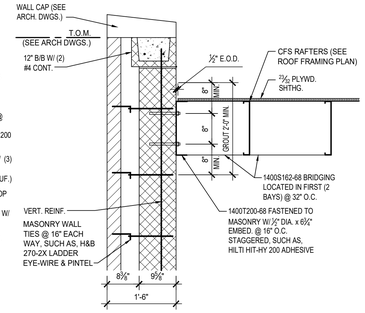
1 ROOF SECTION
3/4"=1'-0"



2 ROOF SECTION
3/4"=1'-0"



3 ROOF SECTION
3/4"=1'-0"



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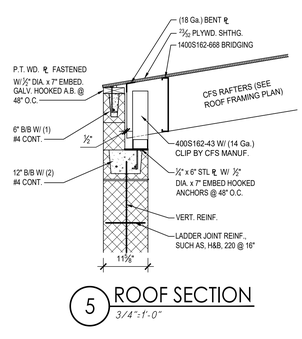

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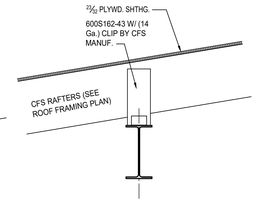
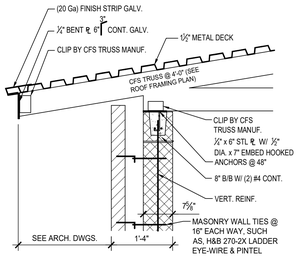
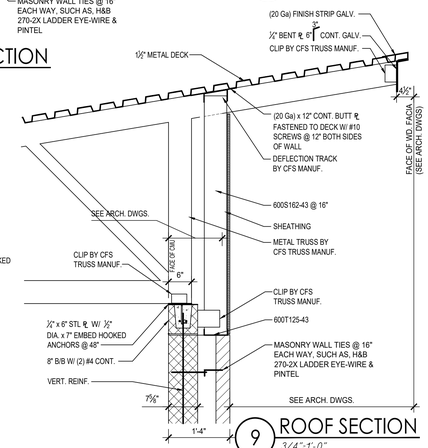


6 ROOF SECTION
3/4"=1'-0"

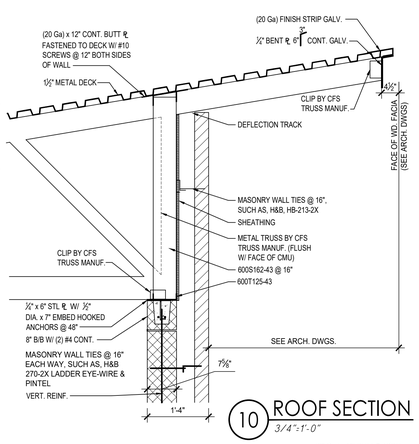
7 *NOT USED*
3/4"=1'-0"



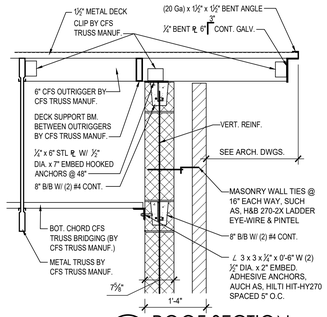
8 ROOF SECTION
3/4"=1'-0"



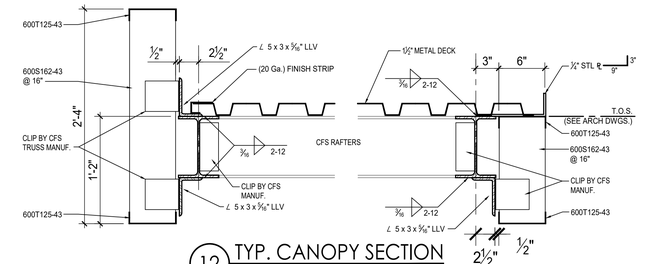
9 ROOF SECTION
3/4"=1'-0"



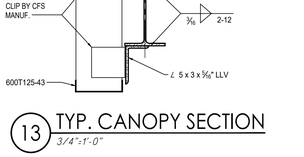
10 ROOF SECTION
3/4"=1'-0"



11 ROOF SECTION
3/4"=1'-0"



12 TYP. CANOPY SECTION
3/4"=1'-0"



13 TYP. CANOPY SECTION
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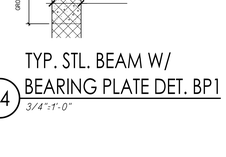
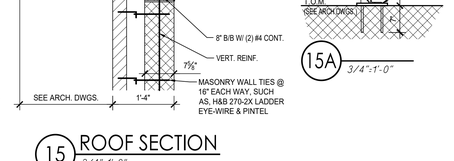
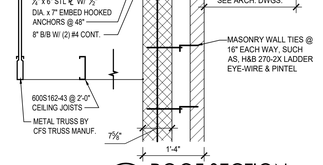


14 TYP. STL. BEAM W/ BEARING PLATE DET. BP1
3/4"=1'-0"

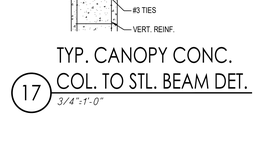


15 ROOF SECTION
3/4"=1'-0"

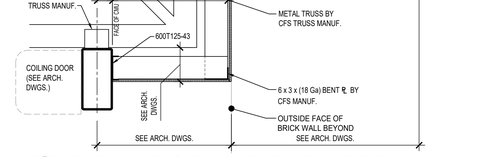
15A
3/4"=1'-0"



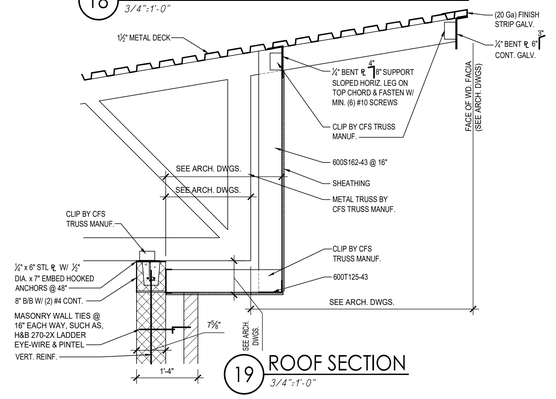
16 ROOF SECTION
3/4"=1'-0"



17 TYP. CANOPY CONC. COL. TO STL. BEAM DET.
3/4"=1'-0"



18 ROOF SECT. @ OVERHEAD COLING DOOR
3/4"=1'-0"



19 ROOF SECTION
3/4"=1'-0"

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
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ENGINEER
PE054473E
STAMP

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GKO ARCHITECTS

POTTSGROVE HIGH SCHOOL FACILITY AND ATHLETIC IMPROVEMENTS

1345 KAUFFMAN RD, POTTSTOWN, PA 19464

REVISIONS	
BID SET	10/21/2026

DRAWN BY	TH
REVIEWED	MA
JOB #	025-089

SHEET TITLE

STRUCTURAL FRAMING DETAILS

SHEET #

S3.4

SCALE	AS NOTED
DATE	10-21-2026

MECHANICAL GENERAL NOTES

A COORDINATE THE LOCATION OF DRAINS, THERMOSTATS, GAS OUTLETS, ETC., WITH ALL CASEWORK EQUIPMENT, MECHANICAL ROOM EQUIPMENT, ETC., PRIOR TO COMMENCING INSTALLATION. WORK NOT SO COORDINATED SHALL BE REMOVED AND PROPERLY INSTALLED AT THE EXPENSE OF THE CONTRACTOR.

B THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO ENSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE. FOR SAFETY PURPOSES, PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL LINES. VERIFY THE LOCATION, SIZE, TYPE, ETC., OF EACH UNDERGROUND OR OVERHEAD UTILITY. ALL WORK SHALL BE PERFORMED IN ACCORD WITH ALL FEDERAL, STATE AND/OR LOCAL RULES, REGULATIONS, STANDARD AND SAFETY REQUIREMENTS. UTILITIES SHALL BE INSTALLED IN ACCORD WITH THE APPLICABLE MUNICIPALITY OR UTILITY COMPANY STANDARDS. IN ALL CASES, THE MOST STRINGENT REQUIREMENT SHALL APPLY.

C WHERE WORK IS REQUIRED ABOVE EXISTING LAY-IN, PLASTER OR GYPSUM BOARD CEILINGS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND REINSTALLATION (OR REPLACEMENT, IF DAMAGED) OF ALL CEILING OR TILE AND GRID MEMBERS NECESSARY TO PERFORM HIS WORK. NEW TILE AND GRID SHALL MATCH THE SURROUNDING AREAS. ALL PATCHING WORK SHALL MATCH ADJACENT SURFACES.

D ALL NEW WORK SHALL BE HUNG FROM STRUCTURE; NOT FROM THE WORK OF OTHER TRADES, WHETHER EXISTING OR NEW.

E COORDINATE ALL WORK WITH PROJECT PHASING REQUIREMENTS.

F PATCH, REPAIR AND PAINT OR PROVIDE WALL COVERING FOR (TO OWNER'S STANDARDS) EXISTING WALLS, CEILINGS, ETC., THAT ARE TO REMAIN IF DAMAGED DURING CONSTRUCTION. REPAIRS SHALL MATCH ADJACENT SURFACES TO THE SATISFACTION OF THE ARCHITECT AND OWNER.

G OBSERVE ALL APPLICABLE CODES, RULES AND REGULATIONS THAT MAY APPLY TO THE WORK UNDER THIS CONTRACT. (CITY, COUNTY, LOCAL, FEDERAL, MUNICIPALITY, UTILITY COMPANY, COMMONWEALTH OF PENNSYLVANIA, ETC.)

H CONTRACTOR SHALL BE AWARE OF UNSEEN PLUMBING, HVAC AND ELECTRICAL WORK DURING DEMOLITION. IF ITEMS ARE UNCOVERED DURING DEMOLITION THEN FIELD VERIFY THE USE OF THE ITEMS AND PLAN AN ALTERNATE ROUTE TO RUN THESE ITEMS. THEN CONTACT THE ENGINEERS TO REVIEW THE ROUTING.

I IF AREA OF CONSTRUCTION HAS A POST TENSION FLOOR SLAB. CONTRACTOR SHALL USE ULTRA SOUND OR OTHER APPROVED METHODS TO SURVEY THE EXISTING FLOOR STRUCTURE BEFORE MAKING ANY AND ALL FLOOR PENETRATIONS.

J WHERE FIRE PROOFING IS SPRAYED ON EXISTING STRUCTURE ALL EXISTING CONDUITS, WATER, HYDRONIC, STEAM, CHILLED WATER, FIRE PROTECTION LINES, MED GAS, ETC. SHALL BE LOWERED TO BE BELOW FULL THICKNESS OF FIRE PROOFING WITH NO INTERFERENCE.

K ALL PENETRATIONS OF FIRE AND SMOKE RATED ASSEMBLIES SHALL BE APPROPRIATELY FIRE STOPPED PER AN APPROVED U.L. LISTED STANDARD. CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO INSULATED PIPING PENETRATIONS.

L ALL WORK REQUIRING DOWNTIME OF ANY AREA IN THE BUILDING SHALL BE SCHEDULED 2 WEEKS IN ADVANCE, AND SHALL COMPLY WITH INTERIM LIFE SAFETY MEASURES.

M ALL DUCTWORK, PIPING, CONDUITS, ETC. IN ROOMS WITH CEILINGS SHALL BE ABOVE CEILING EXCEPT AS NOTED.

N INSTALL AIR VENTS AT HIGH POINTS IN PIPING AND DRAINS IN LOW POINTS. USE CARE TO AVOID FREEZING OF EXTERIOR VENTS.

O LOCATIONS OF PIPING, DUCTS AND EQUIPMENT ARE APPROXIMATE AND SUBJECT TO MINOR ADJUSTMENTS IN THE FIELD. DO NOT SCALE THE DRAWINGS.

P ALL OFFSETS IN DUCTS AND PIPING ARE NOT NECESSARILY SHOWN. PROVIDE ADDITIONAL OFFSETS WHERE NECESSARY.

Q COORDINATE ALL HVAC WORK WITH ELECTRICAL, PLUMBING AND OTHER TRADES TO AVOID INTERFERENCE WITH PIPING, DUCTS, CONDUIT AND OTHER EQUIPMENT.

R INSTALL ALL PIPING, DUCTWORK AND EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTION. IF IN CONFLICT WITH THE DESIGN INDICATED IN CONTRACT DOCUMENTS, ADVISE THE ENGINEERS PRIOR TO INSTALLATION FOR CLARIFICATION. PROVIDE RECOMMENDED ACCESS AND SERVICE CLEARANCES FOR ALL EQUIPMENT.

S SEAL AIRTIGHT AROUND ALL DUCTS AND PIPING PENETRATIONS THROUGH WALLS, FLOORS AND ROOF. PROVIDE FIRE STOPPING IN FIRE PARTITION.

T SEAL ALL NEW DUCTWORK JOINTS WITH UNITED MCGILL, IRONGRIP 601 OR EQUAL WATER BASED SEALANT.

U ALL MOTOR DRIVEN EQUIPMENT SHALL BE INSTALLED WITH FLEXIBLE CONNECTIONS TO DUCTWORK, PIPING, ETC., UNLESS OTHERWISE NOTED.

V THE CONTRACTOR SHALL RELOCATE OR AVOID ANY EXISTING EQUIPMENT APPURTENANCES, ETC., THAT CONFLICT WITH NEW WORK.

W WHERE MOUNTING HEIGHTS ARE NOT INDICATED OR ARE IN CONFLICT WITH ANY OTHER BUILDING SYSTEM, CONTACT THE ENGINEERS BEFORE INSTALLATION. REFER ALSO TO ARCHITECTURAL WALL INTERIOR AND EXTERIOR WALL ELEVATIONS, CEILING HEIGHTS AND OTHER DETAIL OF THESE DOCUMENTS.

X DOUBLE WIDTH TURNING VANES SHALL BE INSTALLED IN ALL SUPPLY, RETURN, AND EXHAUST DUCTWORK ELBOWS. TURNING VANES NOT REQUIRED FOR KITCHEN EXHAUSTS.

Y ANY VIBRATING, OSCILLATING OR OTHER NOISE OR MOTION PRODUCING EQUIPMENT SHALL BE ISOLATED FROM SURROUNDING SYSTEMS IN AN APPROVED MANNER. NOISY OR STRUCTURALLY DAMAGING INSTALLATIONS SHALL BE SATISFACTORILY REPLACED OR REPAIRED AT THE INSTALLING CONTRACTOR'S EXPENSE. THE FINAL DECISION ON THE SUITABILITY OF A PARTICULAR INSTALLATION'S ACCEPTABILITY SHALL BE THAT OF THE ENGINEER.

Z DEVIATIONS IN SIZE, CAPACITIES, FIT, FINISH, ETC. FOR EQUIPMENT FROM THAT USED AS BASIS OF DESIGN SHALL BE THE RESPONSIBILITY OF THE PURCHASER OF THAT EQUIPMENT. ANY PROVISIONS REQUIRED TO ACCOMMODATE A DEVIATION, WHETHER APPROVED BY THE ENGINEERS OR NOT, SHALL BE THE RESPONSIBILITY OF THE PURCHASER.

AA VALVES, BALANCING DAMPERS OR ANY MECHANICAL/ELECTRICAL ITEM REQUIRING ACCESS SHALL NOT BE LOCATED ABOVE A HARD CEILING. IF THIS IS NOT POSSIBLE, THEN AN APPROPRIATELY SIZED ACCESS DOOR SHALL BE PLACED UNDER THE ITEM TO ALLOW EASY MAINTENANCE AND ADJUSTMENT. ADDITIONALLY ALL SUCH ITEMS SHALL NOT BE LOCATED AN UNREASONABLE DISTANCE ABOVE THE CEILINGS. IN GENERAL ALL SUCH ITEMS UNLESS INDICATED OTHERWISE SHALL BE MOUNTED SIX TO TWELVE INCHES ABOVE THE CEILING. IF IN DOUBT, CONTACT ENGINEER PRIOR TO INSTALLING.

AB ALL MANHOLES, VAULTS AND SIMILAR UNDERGROUND STRUCTURES SHALL HAVE THE TOP ELEVATION SET FLUSH WITH FINISHED GRADE UNLESS SPECIFICALLY NOTED OTHERWISE.

AC PIPING SHALL NOT BE LOCATED UNDER A FOOTER OR IN THE ZONE OF INFLUENCE. THE ZONE OF INFLUENCE IS THE AREA UNDER THE FOOTER WITHIN A 45 DEGREE ANGLE PROJECTING DOWN FROM THE BOTTOM EDGE OF THE FOOTER OF ALL SIDES OF THE FOOTER. ADDITIONALLY, GREASE TRAPS, MANHOLES, VAULTS AND OTHER UNDERGROUND STRUCTURES SHALL BE HELD AWAY FROM BUILDING WALLS FAR ENOUGH TO BE OUTSIDE OF THE ZONE OF INFLUENCE.

AD THE DOCUMENTS COMPLY WITH 2021 IMC, 2021 PBC, AND 2021 IECC.

AE WORK IN CONFINED AREAS SHALL BE IN ACCORDANCE WITH THE OWNER'S SAFETY POLICY REQUIREMENTS.

MECHANICAL DEMOLITION NOTES

A THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR AREAS IN WHICH THE CEILING IS REMAINING. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE EXISTING CEILING AS REQUIRED AND REINSTALLATION. TEMPORARILY SUPPORT LIGHTS, DIFFUSERS, CEILING ETC. REPLACE BROKEN CEILING TILES WITH NEW AT NO ADDITIONAL COST TO OWNER. FIELED VERIFY EXACT REQUIREMENTS.

B DURING SPRINKLER SYSTEM OUTAGES THE CONTRACTORS SHALL PROVIDE FIRE WATCH OF AREAS WITH OUTAGES.

C ALL WALLS AND FLOOR SLABS SHALL BE REPAIRED TO MATCH EXISTING AND TO A LIKE NEW CONDITION. ALL RATED WALLS AND FLOOR SLABS SHALL BE PATCHED AND REPAIRED TO MAINTAIN RATING.

D ALL EXISTING BUILDING FINISHES SHALL BE PROTECTED DURING THE DEMOLITION PHASE.

E HEAVY DASHED LINES INDICATE ITEMS FOR REMOVAL (UON) AND LIGHT SOLID LINES INDICATE EXISTING ITEMS TO REMAIN.

F COORDINATE DISPOSAL OF ALL FIXTURES, DEVICES, ETC. (INDICATED FOR DEMOLITION) WITH THE OWNER.

G ALL OUTAGES SHALL BE SCHEDULED THROUGH THE PROJECT REPRESENTATIVE FOR PROPER COORDINATION. A REQUEST FOR AN OUTAGE SHALL BE SUBMITTED IN WRITING A MINIMUM OF TWO WEEKS IN ADVANCE.

H ALL DUCTWORK, PIPING, CONDUIT, ETC. SHALL BE INSTALLED A MINIMUM OF 4" ABOVE THE TOP OF THE CEILING GRID.

MECHANICAL PHASING NOTES

A THIS PROJECT INTERFACES EXTENSIVELY WITH EXISTING BUILDING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE AND PHASE ALL TIE-INS AND INTERRUPTIONS OF EXISTING SERVICES TO MINIMIZE OR ELIMINATE DOWNTIME. AS AN EXAMPLE, MAIN GAS SERVICE, WATER SERVICE, ELECTRICAL SERVICE, HVAC SERVICES, STEAM GENERATION, ETC., WILL BE AFFECTED AND REPLACED OR MOVED DURING THIS PROJECT. THE CONTRACTOR SHALL INSTALL ALL NEW SERVICES AND EQUIPMENT AND HAVE THEM TESTED AND FULLY AND RELIABLY FUNCTIONAL PRIOR TO INTERRUPTING, RELOCATING OR REMOVING ANY EXISTING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BARE ANY AND ALL COSTS ASSOCIATED WITH THIS PHASING, INCLUDING TEMPORARY SERVICES, TEMPORARY RELOCATION, PREMIUM TIME WORK, ETC. CONTRACTOR SHALL COORDINATE ALL SAID WORK WITH THE OWNER AND APPLICABLE UTILITIES PER THE CONTRACT DOCUMENTS.

MECHANICAL HAZARDOUS MATERIALS NOTES

A THE CONTRACTOR IT IS HEREBY ADVISED THAT IS POSSIBLE THAT ASBESTOS AND/OR OTHER HAZARDOUS MATERIALS ARE OR WERE PRESENT IN THIS BUILDING(S). ANY WORKER, OCCUPANT, VISITOR, ETC., WHO ENCOUNTERS ANY MATERIAL OF WHOSE CONTENT THEY ARE NOT CERTAIN SHALL PROMPTLY REPORT THE EXISTENCE AND LOCATION OF THAT MATERIAL TO THE OWNER. FURTHERMORE, THE CONTRACTOR SHALL INSURE THAT NO ONE COMES NEAR TO OR IN CONTACT WITH ANY SUCH MATERIAL OR FUMES THEREFROM UNTIL ITS CONTENT CAN BE ASCERTAINED TO BE NON-HAZARDOUS.

B CMTA, INC. HAS NO EXPERTISE IN THE DETERMINATION OF THE PRESENCE OF ANY HAZARDOUS MATERIAL. THEREFORE, NO ATTEMPT HAS BEEN MADE BY CMTA TO IDENTIFY THE EXISTENCE OR LOCATION OF ANY SUCH HAZARDOUS MATERIAL. FURTHERMORE, CMTA NOR ANY AFFILIATE HEREOF WILL NOT OFFER OR MAKE ANY RECOMMENDATIONS RELATIVE TO THE REMOVAL, HANDLING OR DISPOSAL OF SUCH MATERIAL.

C IF THE WORK WHICH IS TO BE PERFORMED INTERFACES, CONNECTS OR RELATES IN ANY PHYSICAL WAY WITH OR TO EXISTING COMPONENTS WHICH CONTAIN OR BEAR ANY HAZARDOUS MATERIAL, ASBESTOS BEING ONE, THEN IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO CONTACT THE OWNER AND SO ADVISE HIM IMMEDIATELY.

D THE CONTRACTOR BY EXECUTION OF THE CONTRACT FOR ANY WORK AND/OR BY THE ACCOMPLISHMENT OF ANY WORK THEREBY AGREE TO BRING NO CLAIM RELATIVE TO HAZARDOUS MATERIALS FOR NEGLIGENCE, BREACH OF CONTRACT, INDEMNITY, OR ANY OTHER SUCH ITEM AGAINST CMTA, ITS PRINCIPALS, EMPLOYEES, AGENTS OR CONSULTANTS. ALSO, THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD CMTA, ITS PRINCIPALS, EMPLOYEES, AGENTS AND CONSULTANTS HARMLESS FROM ANY SUCH RELATED CLAIMS WHICH MAY BE BROUGHT BY ANY SUBCONTRACTORS, SUPPLIERS OR ANY OTHER THIRD PARTIES.

E THE CONTRACTOR IS DIRECTED TO THE SPECIFICATIONS FOR FURTHER INFORMATION.

ABBREVIATIONS

AC	ALTERNATING CURRENT
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AFR	ABOVE FINISHED ROOF
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY
AHJ	AUTHORITY HAVING JURISDICTION
AMP	AMPERE (AMP, AMPS)
ANSI	AMERICAN NATIONAL STANDARD INSTITUTE
APD	AIR PRESSURE DROP
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR-CONDITIONING ENGINEERS
ATU	AIR TERMINAL UNIT
AVG	AVERAGE
BAS	BUILDING AUTOMATION SYSTEM
BHP	BREAK HORSEPOWER
BTU	BRITISH THERMAL UNIT
CAP	CAPACITY
CAV	CONSTANT AIR VOLUME
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
C.I.	CAST IRON
CLG	CEILING
CLR	CLEAR
CO	CARBON MONOXIDE
CO2	CARBON DIOXIDE
COND	CONDENS (-ER, -ING, -ATION, -ATE)
CONT	CONTINU (-ED, -OUS)
CU FT	CUBIC FEET
CU IN	CUBIC INCHES
CV	VALVE FLOW COEFFICIENT
dB	DECIBEL
DB	DRY BULB
DBT	DRY BULB TEMPERATURE
DC	DIRECT CURRENT
DD	DUCT SMOKE DETECTOR
DDC	DIRECT DIGITAL CONTROLS
DEG	DEGREE (-S)
DIA	DIAMETER (-S)
DN	DOWN
DWG	DRAWING
EAT	ENTERING AIR TEMPERATURE
EC	ELECTRICAL CONTRACTOR
ELEV	ELEVA (-TION, -TOR)
ENGR	ENGINEER
EQ	EQUAL
ESP	EXTERNAL STATIC PRESSURE
ETR	EXISTING TO REMAIN
EVAP	EVAPORAT (-E, -ING, -ED, -OR, -ION)
EWT	ENTERING WATER TEMPERATURE
EXP	EXPANSION
EXT	EXTERIOR
FA	FREE AREA

ABBREVIATIONS (CONTINUED)

FD	FIRE DAMPER
FL	FLOOR
FLA	FULL LOAD AMPS
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
FPC	FIRE PROTECTION CONTRACTOR
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FT	FEET **OR** FOOT
FUT	FUTURE
FV	FACE VELOCITY
GA	GAGE/GAUGE
GAL	GALLON (-S)
GC	GENERAL CONTRACTOR
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GR	GRAINS
H	HUMIDITY
HD	HEAD
HG	MERCURY
HORIZ	HORIZONTAL
HP	H (-ORSEPOWER, -EAT PUMP)
HR	HOUR (-S)
HVAC	HEATING, VENTILATING, & AIR-CONDITIONING
Hz	HERTZ
ID	I (-DENTIFICATION, -NSIDE DIAMETER, -NSIDE DIMENSION)
IN	INCH (-ES)
INSUL	INSULAT (-ED, -ION)
INT	INTER (-IOR, -ERVAL)
IPS	IRON PIPE SIZE
kW	KILOWATT
kWh	KILOWATT HOUR
LAT	LEAVING AIR TEMPERATURE
LBS	POUNDS
LF	LINEAR FEET/FOOT
LRA	LOCKED ROTOR AMPS
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MBH	BTU PER HOUR [THOUSANDS]
MCA	MINIMUM CIRCUIT AMPS
MFG	MANUFACTURER
MIN	MIN (-IMUM, -UTE)
MISC	MISCELLANEOUS
MOCP	MAXIMUM OVERCURRENT PROTECTION [AMPS]
MTG	MOUNTING
N/A	NOT APPLICABLE
NC	NOISE CRITERIA **OR** NORMALLY CLOSED
NEBB	NATIONAL ENVIRONMENTAL BALANCING BUREAU
NIC	NOT IN CONTRACT

ABBREVIATIONS (CONTINUED)

NO	NORMALLY OPEN **OR** NUMBER
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DI (-AMETER, -MENSION)
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED, OWNER INSTALLED
OR	OPEN RECEPTACLE
OZ	OUNCE (-S)
PC	PLUMBING CONTRACTOR
PD	PRESSURE DROP
PH	PHASE [ELECTRICAL]
PLBG	PLUMBING
PPM	PARTS PER MILLION
PRS	PRESSURE REDUCING STATION
PRV	PRESSURE REDUCING VALVE (STEAM, WATER, GAS)
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIG	PPSI GAUGE
RH	RELATIVE HUMIDITY [%]
RLA	RUNNING LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
SD	SMOKE DAMPER
SP	STATIC PRESSURE
SQ	SQUARE
SQ FT	SQUARE FEET **OR** FOOT
SQ IN	SQUARE INCH **OR** INCHES
TAB	TESTING AND BALANCING
TBD	TO BE DETERMINED
TE	TOP ELEVATION
TEMP	TEMPERATURE
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
V	VOLT (-AGE, -S)
VAR	VARI (-ABLE, -IES)
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY
VFD	VARIABLE FEQUENCY DRIVE
W	WATT (-AGE, -S)
WB	WET BULB
WBT	WET BULB TEMPERATURE
WPD	WATER PRESSURE DROP
WT	WEIGHT
W/	WITH
W/O	WITHOUT
%	PERCENT
ΔP	DIFFERENTIAL PRESSURE
ΔT	TEMPERATURE DIFFERENCE
℄	CENTERLINE

GENERAL SYMBOLS

(#)	TAGGED NOTE DESIGNATOR
	REVISION TRIANGLE
ROOM NAME (SM. 3)	ROOM TAG
TAG XXX-# INSTANCE XXXX	EQUIPMENT TAG
	POINT OF CONNECTION / CONNECT TO EXISTING
	POINT OF DEMOLITION

HVAC LEGEND

	SUPPLY AIR DIFFUSER
	RETURN AIR DIFFUSER
	EXHAUST AIR DIFFUSER
	TRANSFER AIR DIFFUSER W/ SOUND ATTENUATING BOOT
	SIDEWALL DIFFUSER/GRILLE
	SIDEWALL DIFFUSER/GRILLE
TAG XXX ABV/LOW W_###/###	AIR DEVICE TAG (REGISTER, GRILLE, DIFFUSER,LOUVER)
##x##	RECTANGULAR DUCT
#ø	ROUND/SPIRAL DUCT
##/##	FLAT OVAL DUCT
SA	SUPPLY AIR DUCT
RA	RETURN AIR DUCT
EA	EXHAUST AIR DUCT
OA	OUTSIDE AIR DUCT
TA	TRANSFER AIR DUCT
CAE	COMBUSTION AIR EXHAUST DUCT
CAI	COMBUSTION AIR INTAKE DUCT
SA	SA AIR DUCT TURNING UP
SA	SA AIR DUCT TURNING DOWN
RA	RA AIR DUCT TURNING UP
RA	RA AIR DUCT TURNING DOWN
EA	EA AIR DUCT TURNING UP
EA	EA AIR DUCT TURNING DOWN
E(XXX)	EXISTING DUCT - (XXX) DENOTES SYSTEM
D(XXX)	DUCT TO BE DEMOLISHED - (XXX) DENOTES SYSTEM
A(XXX)	DUCT TO BE ABANDONED IN PLACE - (XXX) DENOTES SYSTEM
	MITERED ELBOW WITH TURNING VANES
	FLEXIBLE DUCT
T	THERMOSTAT
T	TEMPERATURE SENSOR
H	HUMIDITY SENSOR
C	CARBON DIOXIDE SENSOR
TC	TEMPERATURE & CARBON DIOXIDE SENSOR
VERT. HORIZ.	MANUAL BALANCING/VOLUME DAMPER
VERT. HORIZ.	MOTORIZED DAMPER
VERT. HORIZ.	FIRE DAMPER
VERT. HORIZ.	SMOKE DAMPER
VERT. HORIZ.	COMBINATION FIRE & SMOKE DAMPER

MECHANICAL PIPING LEGEND

	PIPE ELBOW TURNING UP
	PIPE ELBOW TURNING DOWN
	PIPE TEE; CONNECTION ON TOP
	PIPE TEE; CONNECTION ON BOTTOM
	PIPE CAP
BFW	BOILER FEEDWATER
CAI/E	COMBUSTION AIR INTAKE/EXHAUST
CBS/R	CHILLED BEAM SUPPLY/RETURN
CD	CONDENSATE DRAIN
CHWS/R	CHILLED WATER SUPPLY/RETURN
CST	CLEAN STEAM PIPING
CWS/R	CONDENSER WATER SUPPLY/RETURN
DTS/R	DUAL TEMP. WATER SUPPLY/RETURN
GS/R	GEOTHERMAL WATER SUPPLY/RETURN
HPC	HIGH PRESSURE STEAM CONDENSATE
HPS(#)	HIGH PRESSURE STEAM; (#) DENOTES PRESSURE
HPS/R	HEAT PUMP WATER SUPPLY/RETURN
HRS/R	HEAT RECOVERY SUPPLY/RETURN PIPING
HWS/R	HEATING WATER SUPPLY/RETURN
LPC	LOW PRESSURE STEAM CONDENSATE
LPS(#)	LOW PRESSURE STEAM; (#) DENOTES PRESSURE
MPC	MEDIUM PRESSURE STEAM RETURN
MPS(#)	MEDIUM PRESSURE STEAM; (#) DENOTES PRESSURE
SPD	STEAM CONDENSATE PUMPED DISCHARGE
SVT	STEAM VENT PIPING
D(XXX)	PIPING TO BE DEMOLISHED - (XXX) DENOTES SYSTEM
E(XXX)	EXISTING PIPING - (XXX) DENOTES SYSTEM
A(XXX)	ABANDONED IN PLACE PIPING - (XXX) DENOTES SYSTEM
	TWO-WAY CONTROL VALVE
	THREE-WAY CONTROL VALVE
	AUTOMATIC AIR VENT (AAV)
	MANUAL AIR VENT (MAV)
	MANUAL BALANCING VALVE (BV)
	BALL VALVE
	BUTTERFLY VALVE
	TRIPLE DUTY VALVE (TDV)
	STRAINER
	MANUAL ISOLATION VALVE
	GLOBE VALVE
	OS&Y (GATE) VALVE
	PRESSURE REDUCING VALVE (STEAM, GAS, WATER, ETC.)
	AUTO-FLOW CONTROL VALVE
	CHECK VALVE
	DOUBLE CHECK VALVE ASSEMBLY
	FLEXIBLE PIPE CONNECTION
	FLOW METER (VENTURI)
	PIPING UNION
	FLOW SWITCH
	PRESSURE SWTICH
	TAMPER SWITCH
	THERMOMETER
	PETE'S PLUG; TEMPERATURE/PRESSURE PORT

NOTE: NOT ALL SYMBOLS AND ABBREVIATIONS MAY BE USED ON THIS PROJECT

APPLICABLE BUILDING CODES

APPLICABLE BUILDING CODES	DOCUMENT	YEAR
ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES	ANSI A117.1	2009
FIRE SPRINKLER CODE	NFPA 13	2019
INTERNATIONAL BUILDING CODE (IBC)	STATE EDITION	2021
INTERNATIONAL ENERGY CONSERVATION CODE (IECC)	STATE EDITION	2021
INTERNATIONAL FIRE CODE (IFC)	STATE EDITION	2021
INTERNATIONAL FUEL GAS CODE (IFGC)	STATE EDITION	2021
INTERNATIONAL MECHANICAL CODE (IMC)	STATE EDITION	2021
INTERNATIONAL PLUMBING CODE (IPC)	STATE EDITION	2021
INTERNATIONAL EXISTING BUILDING CODE (IEBC)	STATE EDITION	2021
NATIONAL ELECTRIC CODE (NEC)	NFPA 70	2020
NATIONAL FIRE ALARM & SIGNALING CODE	NFPA 72	2019
UNIFORM STATEWIDE BUILDING CODE		2021

Sheet List - Mechanical

SHEET #	SHEET NAME
M-001	MECHANICAL LEGEND
M-201	MECHANICAL PLAN - HOME SIDE PAVILION
M-202	MECHANICAL PLAN - VISITORS SIDE PAVILION
M-203	MECHANICAL ROOF PLANS
M-300	MECHANICAL DETAILS AND PIPING SCHEMATICS
M-400	MECHANICAL SCHEDULES

DRAWING SIZE: 30 X 42

STAMP

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER NICHOLAS FORD ROMEO ENGINEER No. PE059169

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REVISIONS	
BID SET	10/21/2026

DRAWN BY	JAH
REVIEWED BY	CMR
JOB #	2665

SHEET TITLE

MECHANICAL LEGEND

SHEET #

M-001

SCALE	AS NOTED
DATE	10-21-2026

TAGGED NOTES

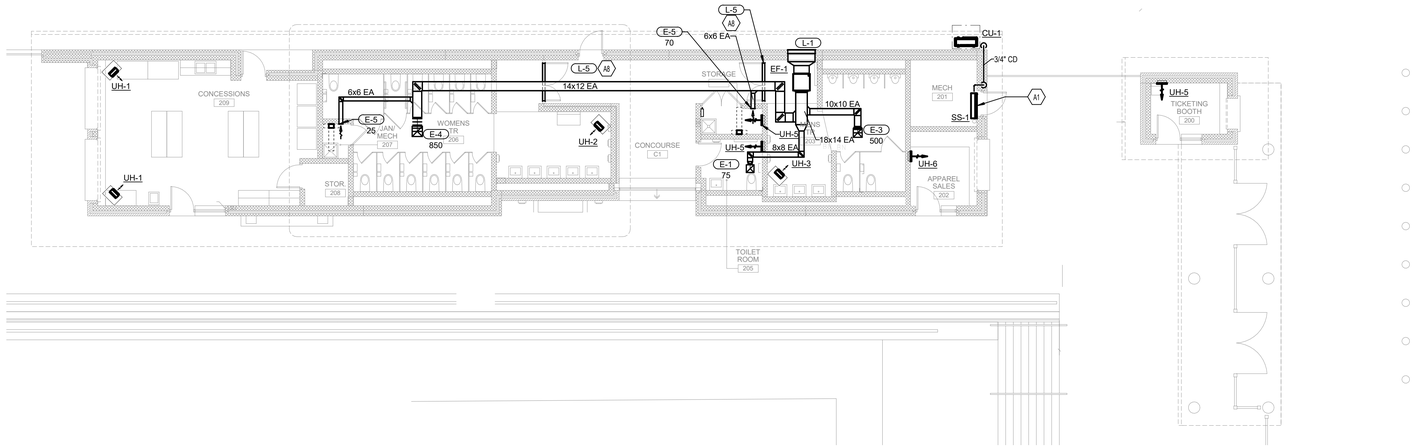
##

A1 UNIT TO BE MOUNTED 1'-0" ABOVE DOOR FRAME. CONDENSATE SHALL BE INSTALLED ACCORDING TO MANUFACTURER RECOMMENDATIONS AND ROUTED TO EXTERIOR WALL AS INDICATED. A BUG SCREEN SHALL BE INSTALLED AT THE END OF THE CONDENSATE PIPE.

A4 COMBINATION THERMOSTAT/HUMIDISTAT TO CONTROL RTU-1. REFER TO M-203 FOR LOCATION OF RTU-1.

A5 COMBINATION THERMOSTAT/HUMIDISTAT TO CONTROL RTU-2. REFER TO M-203 FOR LOCATION OF RTU-2.

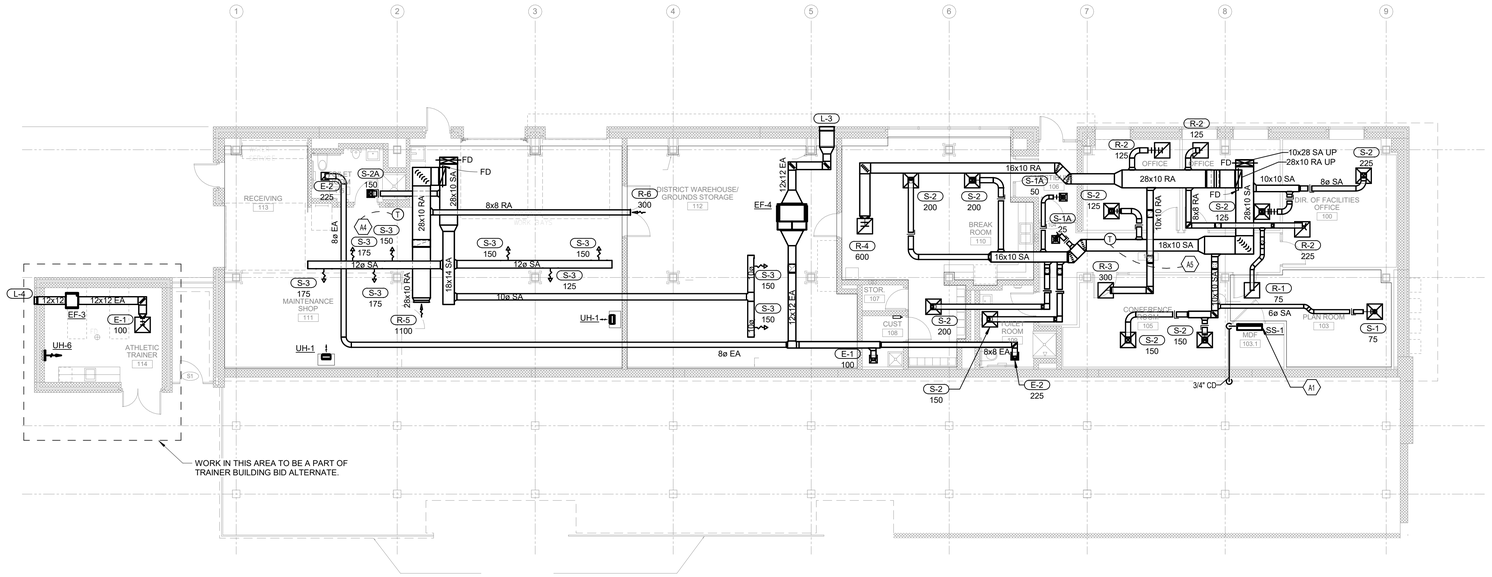
A8 CONTRACTOR TO MOUNT LOUVER AT WITHIN THE ARCHITECTURAL FRAMING LOCATED ABOVE THE DOOR. COORDINATE WITH ARCHITECTURAL DRAWINGS, SHEET A0.3, FOR EXACT ELEVATION.



1 MECHANICAL PLAN - HOME SIDE CONCESSIONS AND RESTROOM BUILDING

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

0 2' 4' 8' 16' 24' 32'



2 MECHANICAL PLAN - HOME SIDE UNDER BLEACHERS

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

0 2' 4' 8' 16' 24' 32'

STAMP

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SHEET TITLE

MECHANICAL PLAN - HOME SIDE PAVILION

SHEET #

M-201

SCALE	AS NOTED
DATE	10-21-2026

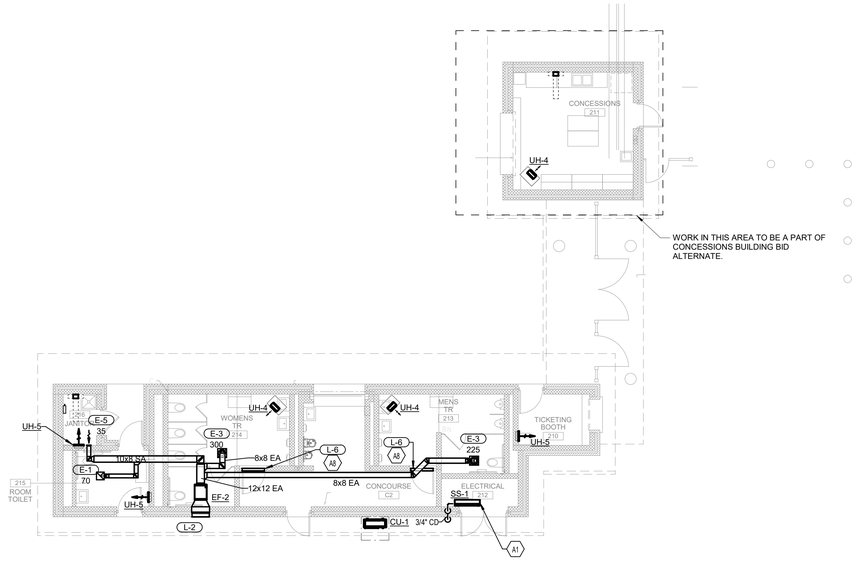
DRAWING SIZE: 30 X 42

TAGGED NOTES

##

A1 UNIT TO BE MOUNTED 1'-0" ABOVE DOOR FRAME. CONDENSATE SHALL BE INSTALLED ACCORDING TO MANUFACTURER RECOMMENDATIONS AND ROUTED TO EXTERIOR WALL AS INDICATED. A BUG SCREEN SHALL BE INSTALLED AT THE END OF THE CONDENSATE PIPE.

A8 CONTRACTOR TO MOUNT LOUVER AT WITHIN THE ARCHITECTURAL FRAMING LOCATED ABOVE THE DOOR. COORDINATE WITH ARCHITECTURAL DRAWINGS, SHEET A0.3, FOR EXACT ELEVATION.



MECHANICAL PLAN - VISITORS SIDE
CONCESSIONS AND RESTROOM BUILDING

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

0 2' 4' 8' 16' 24' 32'

STAMP

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SHEET TITLE

MECHANICAL PLAN - VISITORS SIDE PAVILION

SHEET #

M-202

SCALE	AS NOTED
DATE	10-21-2026

DRAWING SIZE: 30 X 42

TAGGED NOTES

##

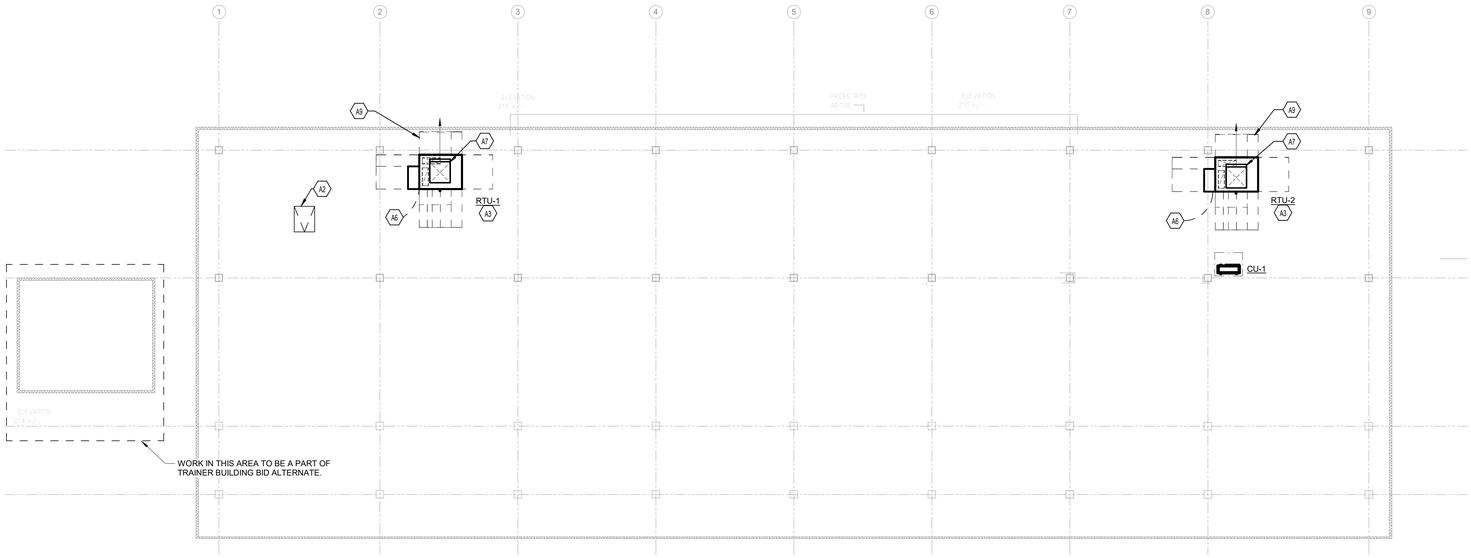
A2 REFER TO ARCHITECTURAL PLAN FOR EXACT ROOF HATCH LOCATION AND ADDITIONAL INFORMATION.

A3 RTU SHALL BE INSTALLED ON A 4 INCH ROOF CURB. REFER TO THE ARCHITECTURAL PLANS FOR ROOFING INFORMATION. ROOF CURB FLASHING AND INSTALLATION SHALL BE DONE IN ACCORDANCE TO THE ROOFING MANFACTURER REQUIREMENTS TO MAINTAIN WARRANTY.

A6 REFER TO SHEET M-201 FOR THE LOCATION OF CONTROLLING THERMOSTAT/HUMIDISTAT.

A7 CONTRACTOR SHALL INSTALL AN AIR DEFLECTOR HOOD ON THE CONDENSER FAN OUTLET. THIS HOOD SHALL BE 2 INCHES WIDER THAN THE FAN IN ALL DIRECTIONS, BOLTED TO THE UNIT. HOOD SHALL BE MADE OF A 12-GAUGE THICK, OR THICKER, SHEET METAL WITH ANGLE IRON SUPPORTS AS NECESSARY. COORDINATE WITH MANUFACTURER FOR RECOMMENDATIONS AND MOUNTING LOCATION.

A9 CONTRACTOR TO COORDINATE ALL RTU ACCESS REQUIREMENTS WITH BLEACHERS AND FENCING. IF THE MANUFACTURER ACCESS REQUIREMENTS INDICATED HERE DIFFER FROM THE BASIS OF DESIGN DAIKIN ACCESS REQUIREMENTS, THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR COORDINATING BETWEEN MECHANICAL EQUIPMENT, BLEACHERS, AND FENCING TO ENSURE THAT ALL REGULARLY REQUIRED MAINTENANCE ACCESS POINTS ARE MAINTAINED.



MECHANICAL PLAN - HOME SIDE UNDER BLEACHERS ROOF PLAN

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

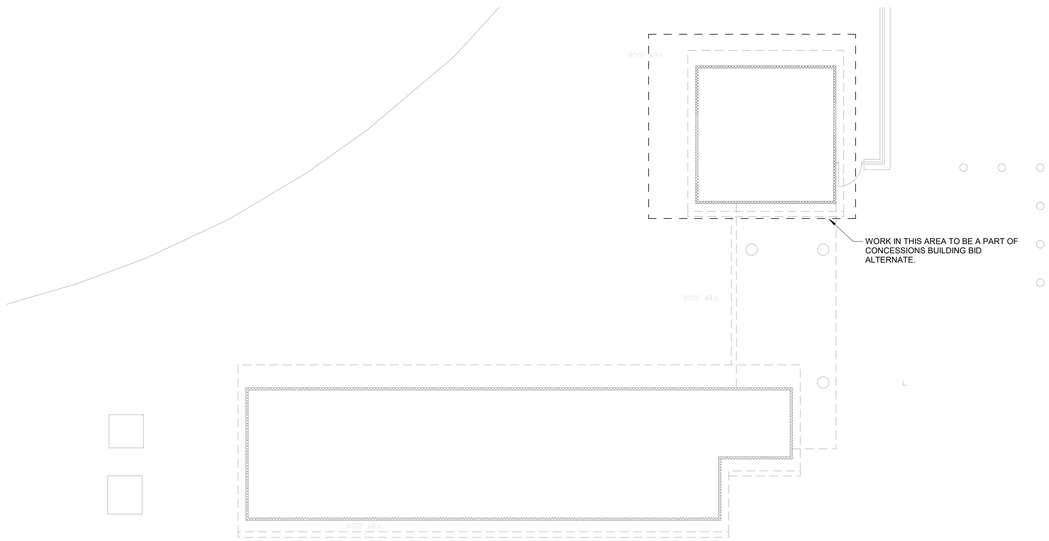
0 2' 4' 8' 16' 24' 32'



MECHANICAL PLAN - HOME SIDE CONCESSIONS AND RESTROOM BUILDING ROOF PLAN

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

0 2' 4' 8' 16' 24' 32'



MECHANICAL PLAN - VISITING SIDE CONCESSIONS AND RESTROOM BUILDING ROOF PLAN

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

0 2' 4' 8' 16' 24' 32'

STAMP

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SHEET TITLE

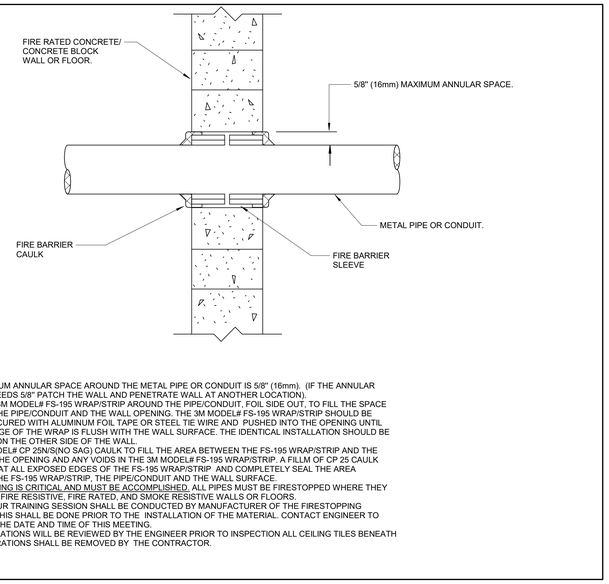
MECHANICAL ROOF PLANS

SHEET #

M-203

SCALE	AS NOTED
DATE	10-21-2026

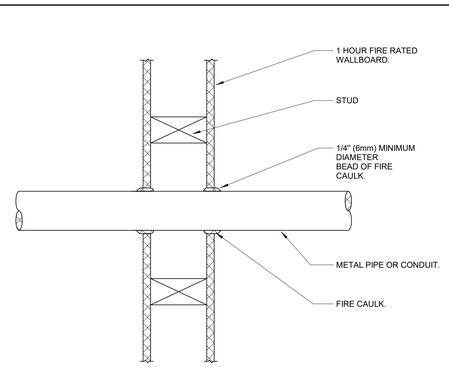
DRAWING SIZE: 30 X 42



NOTES

1. THE MAXIMUM ANNULAR SPACE AROUND THE METAL PIPE OR CONDUIT IS 5/8" (16mm). (IF THE ANNULAR SPACE EXCEEDS 5/8" PATCH THE WALL AND PENETRATE WALL AT ANOTHER LOCATION).
2. WRAP THE 3M MODEL# FS-195 WRAP/STRIP AROUND THE PIPE/CONDUIT, FOIL SIDE OUT, TO FILL THE SPACE BETWEEN THE PIPE/CONDUIT AND THE WALL OPENING. THE 3M MODEL# FS-195 WRAP/STRIP SHOULD BE TIGHTLY SECURED WITH ALUMINUM FOIL TAPE OR STEEL TIE WIRE AND PUSHED INTO THE OPENING UNTIL THE TOP EDGE OF THE WRAP IS FLUSH WITH THE WALL SURFACE. THE IDENTICAL INSTALLATION SHOULD BE INSTALLED ON THE OTHER SIDE OF THE WALL.
3. USE 3M MODEL# CP 25N/S(NO SAG) CAULK TO FILL THE AREA BETWEEN THE FS-195 WRAP/STRIP AND THE EDGES OF THE OPENING AND ANY VOIDS IN THE 3M MODEL# FS-195 WRAP/STRIP. A FILLM OF CP 25 CAULK SHOULD COAT ALL EXPOSED EDGES OF THE FS-195 WRAP/STRIP AND COMPLETELY SEAL THE AREA BETWEEN THE FS-195 WRAP/STRIP, THE PIPE/CONDUIT AND THE WALL SURFACE.
4. FIRE STOPPING IS CRITICAL AND MUST BE ACCOMPLISHED. ALL PIPES MUST BE FIRESTOPPED WHERE THEY PENETRATE FIRE RESISTIVE, FIRE RATED, AND SMOKE RESISTIVE WALLS OR FLOORS.
5. A FOUR-HOUR TRAINING SESSION SHALL BE CONDUCTED BY MANUFACTURER OF THE FIRESTOPPING MATERIAL. THIS SHALL BE DONE PRIOR TO THE INSTALLATION OF THE MATERIAL. CONTACT ENGINEER TO ADVISE OF THE DATE AND TIME OF THIS MEETING.
6. ALL PENETRATIONS WILL BE REVIEWED BY THE ENGINEER PRIOR TO INSPECTION ALL CEILING TILES BENEATH THE PENETRATIONS SHALL BE REMOVED BY THE CONTRACTOR.

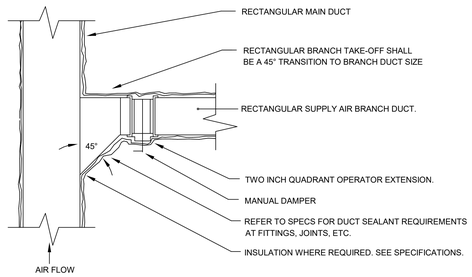
1 PENETRATION FIRESTOP FOR METAL PIPE/CONDUIT THROUGH A CONCRETE WALL
SCALE: NONE



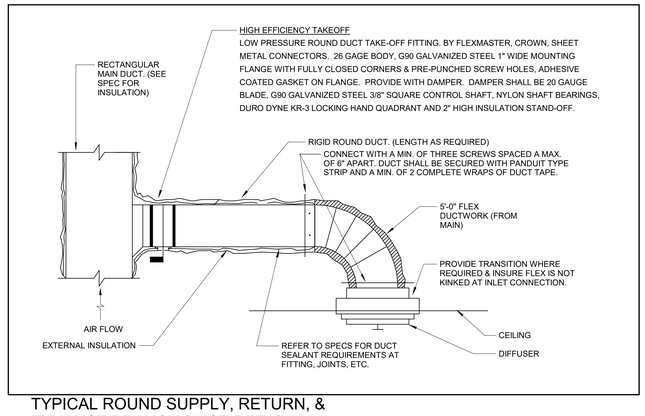
NOTES

1. FORCE THE CAULK INTO THE ANNULAR SPACE TO THE MAXIMUM EXTENT POSSIBLE, FLUSH WITH THE EXTERIOR OF THE PENETRATION SURFACE.
2. FINISH CAULKING WITH A 1/4" (6mm) MINIMUM BEAD CAULK APPLIED TO THE PERIMETER OF THE CONDUIT/PIPE AT ITS EGRESS FROM THE WALL.
3. THE MAXIMUM ANNULAR SPACE IS NOT TO EXCEED 3/16" (5mm). (IF IT DOES PATCH WALL AND PENETRATE WALL AT ANOTHER LOCATION).
4. INSTALL THE FIRESTOP ON BOTH SIDES OF THE WALL.
5. FIRE STOPPING IS CRITICAL AND MUST BE ACCOMPLISHED. ALL PIPES MUST BE FIRESTOPPED WHERE THEY PENETRATE FIRE RESISTIVE, FIRE RATED, AND SMOKE RESISTIVE WALLS OR FLOORS.
6. ALL PENETRATIONS WILL BE REVIEWED BY THE ENGINEER. PRIOR TO INSPECTION ALL CEILING TILES BENEATH THE PENETRATIONS SHALL BE REMOVED BY THE CONTRACTOR.

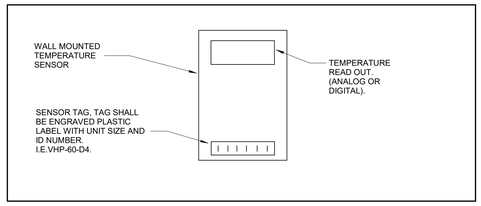
2 PENETRATION FIRESTOP FOR METAL PIPE/CONDUIT THROUGH ONE HOUR WALL
SCALE: NONE



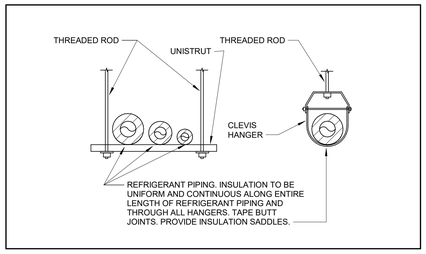
TYPICAL RECTANGULAR SUPPLY, RETURN, &
EXHAUST BRANCH DUCT TAKE OFF
NTS



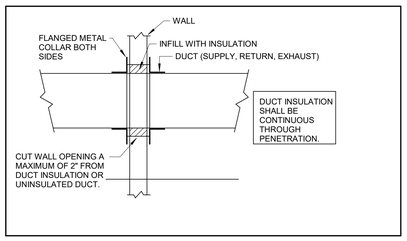
4 TYPICAL ROUND SUPPLY, RETURN, & EXHAUST BRANCH DUCT DETAIL
SCALE: NONE



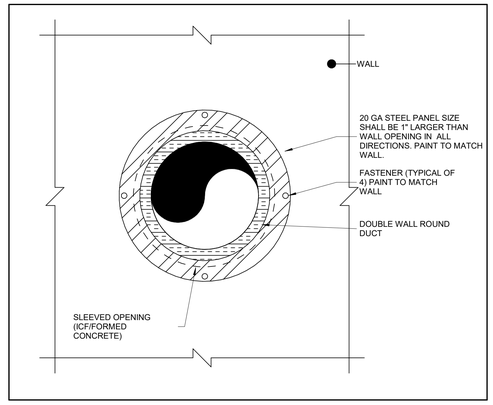
5 WALL MOUNTED TEMPERATURE SENSOR DETAIL
SCALE: NONE



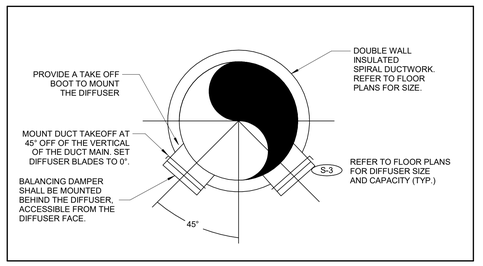
6 REFRIGERANT PIPING INSULATION DETAIL
SCALE: NONE



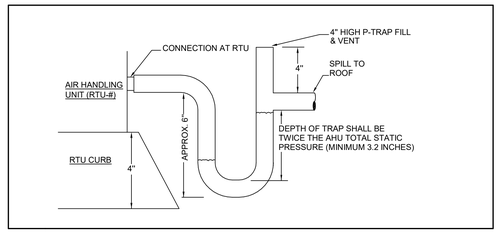
7 DUCT PENETRATION THROUGH NON-RATED WALL DETAIL
SCALE: NONE



8 EXPOSED DUCT WALL PENETRATION DETAIL
SCALE: NONE



9 REGISTER DUCT TAKEOFF DETAIL
SCALE: NONE



10 TYPICAL AIR HANDLER CONDENSATE DRAIN TRAP DETAIL
SCALE: NONE

DRAWING SIZE: 30 X 42

STAMP

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
NICHOLAS FORD KOMEO
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JOB #	2665

SHEET TITLE

MECHANICAL DETAILS AND PIPING SCHEMATICS

SHEET #

M-300

SCALE	AS NOTED
DATE	10-21-2026

AIR HANDLING UNIT SCHEDULE

MARK	MANUFACTURER	MODEL #	UNIT CONFIGURATION	SERVICE	LOCATION	PHYSICAL DATA				SUPPLY FAN														
						WIDTH (IN.)	LENGTH (IN.)	HEIGHT (IN.)	WEIGHT (LBS)	TOTAL SA CFM	MIN. OA CFM	FAN MOTOR TYPE	# OF FANS	FAN RPM	E.S.P. (" WC)	T.S.P. (" WC)	RATED H.P. (PER FAN)	B.H.P. (PER FAN)	VOLT.	PH.	MCA	MOCP	OP. FREQ.	REMARKS
RTU-1	DAIKIN	DPSH105B	PACKAGED ROOFTOP	FACILITIES STORAGE AND WORKSHOP	FACILITIES BUILDING ROOF	85	54	70	1276	1550	325	ECM	1	1781	1.00	1.6	1.7	0.59	480 V	3	45 A	50	60	ALL
RTU-2	DAIKIN	DPSH105B	PACKAGED ROOFTOP	FACILITIES STORAGE AND WORKSHOP	FACILITIES BUILDING ROOF	85	54	70	1276	1675	400	ECM	1	1856	1.00	1.6	1.7	0.67	480 V	3	45 A	50	60	ALL

AIR HANDLING UNIT SCHEDULE - PACKAGED AIR SOURCE

MARK	NO. OF ROWS	FIN SPACING (FINS/IN)	REFRIGERANT	COOLING PERFORMANCE											DX COIL HEATING PERFORMANCE			ELECTRIC HEATING				
				DX COIL								HOT GAS REHEAT COIL										
				TOTAL (MBH)	SENSIBLE (MBH)	EAT DB (°F)	EAT WB (°F)	LAT DB (°F)	LAT WB (°F)	FACE VELOCITY (FPM)	APD (IN. WG.)	EER	TOTAL CAPACITY (MBH)	LAT (°F)	HEATING CAPACITY (MBH)	EAT DB (°F)	LAT DB (°F)	TOTAL HEATING CAPACITY (MBH)	ELECTRIC CONSUMPTION (KW)	EAT (°F)	LAT (°F)	SCR CONTROL
RTU-1	4	14	R32	55.2	41.7	79	66	53	53	257	0.17	12.2	31.3	72	50.4	70	99.9	61.4	18 W	55	92	Yes
RTU-2	4	14	R32	56.7	43.8	80	66	55	55	277	0.19	12.2	31.5	72	50.6	70	99.9	61.4	18 W	55	89	Yes

AIR HANDLING UNIT SCHEDULE - CONDENSING SECTION

MARK	COMPRESSOR TYPE	COMPRESSOR QUANTITY	REFRIGERANT CHARGE LBS	CAPACITY CONTROL
RTU-1	INVERTER SCROLL	1	12.30	MODULATING CONTROL WITH INVERTER COMPRESSOR
RTU-2	INVERTER SCROLL	1	12.30	MODULATING CONTROL WITH INVERTER COMPRESSOR

AIR HANDLING UNIT SCHEDULE - FILTER SECTION

MARK	TYPE	NO OF FILTERS	WIDTH (IN)	HEIGHT (IN)	FACE VELOCITY (FPM)	PRESSURE DROP (CLEAN) ("WC)
RTU-1	2" MERV 8	4	16	16	236	0.09
RTU-2	2" MERV 8	4	16	16	236	0.09

REMARKS:
1. PROVIDE WITH SINGLE POINT POWER AND DISCONNECT.
2. PROVIDE WITH FACTORY MOUNTED CONTROLS WITH MORNING START UP, ECONOMIZER MODE, AND AN ADJUSTABLE OCCUPIED/UNOCCUPIED TIME SCHEDULE.
3. PROVIDE WITH 4" ROOF CURB.
4. PROVIDE WITH 1 YEAR ATTIC STOCK OF MERV 8 FILTERS.
5. PROVIDE WITH AIR DEFLECTOR HOOD ON TOP OF UNIT TO DELECT AIR AS INDICATED ON M-203.

EXHAUST FAN SCHEDULE

MARK	MANUFACTURER	MODEL #	SERVICE	TYPE	AIRFLOW (CFM)	E.S.P.	DRIVE	RPM	FAN HP	ELECTRICAL DATA			SONES	REMARKS
										VOLTAGE	PHASE	HZ		
EF-1	GREENHECK	SQ-120-VG	HOME SIDE CONCESSION AND WOMEN'S RESTROOM	INLINE CENTRIFUGAL	1500	0.50	DIRECT	1577	0.50	120 V	1	60	11.3	ALL
EF-2	GREENHECK	SQ-120-VG	VISITOR SIDE RESTROOMS	INLINE CENTRIFUGAL	650	0.30	DIRECT	690	0.50	120 V	1	60	2.2	ALL
EF-3	GREENHECK	CSP-A125	ATHLETIC TRAINER ROOM EXHAUST	INLINE CENTRIFUGAL	100	0.25	DIRECT	980	0.03	120 V	1	60	6.7	ALL
EF-4	GREENHECK	SQ-99-VG	FACILITIES DEPARTMENT BUILDING	INLINE CENTRIFUGAL	550	0.75	DIRECT	1602	0.25	120 V	1	60	11.9	ALL

REMARKS:
1. PROVIDE WITH ALL NECESSARY MOUNTING HARDWARE.
2. PROVIDE WITH SPEED CONTROLLER.
3. PROVIDE WITH MANUFACTURER PROGRAMMABLE TIMER SWITCH.

SPLIT SYSTEM OUTDOOR UNIT SCHEDULE

MARK	MANUFACTURER	MODEL #	DIMENSIONS (IN.)			WEIGHT (LBS)	TOTAL COOLING (MBH)	HEATING CAPACITY (MBH)	MINIMUM SEER	ELECTRICAL				REMARKS
			LENGTH	WIDTH	HEIGHT					MCA	MOCP	VOLTAGE	PHASE	
CU-1	LG	ZRUM048GSS0	38	13	28	130	24.0	27.0	13	31 A	40	208 V	1	ALL

SPLIT SYSTEM INDOOR UNIT SCHEDULE

MARK	MANUFACTURER	MODEL #	DIMENSIONS (IN.)			WEIGHT (LBS)	TOTAL COOLING MBH	TOTAL HEATING MBH	AIRFLOW (CFM)	ELECTRICAL		REMARKS
			LENGTH	WIDTH	HEIGHT					VOLTAGE	PHASE	
SS-1	LG	ZRNU243SKSA	40	9	14	29	24.2	27.3	537	208 V	1	ALL

REMARKS:
1. PROVIDE SINGLE POINT POWER CONNECTION AND DISCONNECT.
2. INDOOR UNIT SHALL BE POWERED BY THE OUTDOOR UNIT.

UNIT HEATER SCHEDULE - ELECTRIC

MARK	MANUFACTURER	MODEL #	TYPE	ELECTRICAL			REMARKS
				KW	VOLTAGE	PHASE	
UH-1	REZNOR	EUH-10	WALL MOUNTED	10.0	460 V	3	1, 2, 4
UH-2	REZNOR	EUH-15	WALL MOUNTED	15.0	460 V	3	1, 2, 4
UH-3	REZNOR	EUH-7	WALL MOUNTED	7.0	460 V	3	1, 2, 4
UH-4	REZNOR	EUH-5	WALL MOUNTED	5.0	208 V	3	1, 2, 4
UH-5	REZNOR	EHL-AK1E	WALL-MOUNTED FORCED-AIR HEATER	1.0	120 V	1	ALL
UH-6	REZNOR	EHL-AK1E	WALL-MOUNTED FORCED-AIR HEATER	1.5	120 V	1	ALL

REMARKS:
1. PROVIDE WITH UNIT MOUNTED THERMOSTAT WITH LOCKING COVER FOR THERMOSTAT.
2. PROVIDE WITH SINGLE POINT ELECTRICAL POWER AND DISCONNECT.
3. PROVIDE WITH COLOR-MATCHED SURFACE MOUNTING BOX, COLOR TO BE SELECTED BY ARCHITECT.
4. PROVIDE ALL REQUIRED MOUNTING HARDWARE.

LOUVER SCHEDULE

MARK	MANUFACTURER	MODEL #	SERVICE	DEPTH (IN)	CONSTRUCTION	CFM	WIDTH (IN)	HEIGHT (IN)	FREE AREA (SQFT)	VELOCITY (FPM)	APD (IN. WG.)	BIRD SCREEN	DRAINABLE BLADE	REMARKS
L-1	GREENHECK	EAD-635-44X20	EF-1	6	ALUMINUM	1525	44	20	3.0	559	0.04	Yes	Yes	1
L-2	GREENHECK	EAD-635-28X16	EF-2	6	ALUMINUM	650	28	16	1.1	573	0.04	Yes	Yes	1
L-3	GREENHECK	ESD-635-24X24	FACILITIES BUILDING EXHAUST AIR	6	ALUMINUM	550	24	24	1.8	330	0.01	Yes	Yes	1
L-4	GREENHECK	EAD-401-12X12	ATHLETIC TRAINER ROOM EXHAUST	4	ALUMINUM	100	12	12	0.2	647	0.05	Yes	Yes	1
L-5	GREENHECK	ESD-403-60X12	HOME SIDE MENS AND WOMENS RESTROOM INTAKE	4	ALUMINUM	800	60	12	1.8	438	0.03	Yes	Yes	1,2
L-6	GREENHECK	ESD-403-36X12	VISITORS SIDE MENS AND WOMENS RESTROOM INTAKE	4	ALUMINUM	400	36	12	1.1	367	0.02	Yes	Yes	1,2

REMARKS:
1. COLOR AND FINISH TO BE SELECTED BY ARCHITECT.
2. LOUVER TO BE PROVIDED WITH BUG SCREEN AND GLAZING FRAME.

REGISTERS, GRILLES, AND DIFFUSERS

MARK	MANUFACTURER	MODEL #	TYPE	GRILLE SIZE	PANEL SIZE	DUCT INLET SIZE	DUCT BRANCH SIZE	MAX CFM	P.D.	NOISE CRITERIA	THROW PATTERN	REMARKS
E-1	TITUS	50F	ALUMINUM 1/2" EGG CRATE	22"X22"	24"X24"	6"Ø	8"Ø	100	0.05	25	-	1
E-2	TITUS	50F	ALUMINUM 1/2" EGG CRATE	8"X8"	10"X10"	8"Ø	10"Ø	225	0.04	24	-	1
E-3	TITUS	50F	ALUMINUM 1/2" EGG CRATE	12"X12"	14"X14"	10"Ø	12"Ø	700	0.04	24	-	1
E-4	TITUS	50F	ALUMINUM 1/2" EGG CRATE	14"X14"	16"X16"	12"Ø	14"Ø	975	0.04	24	-	1
E-5	TITUS	350FL	ALUMINUM LOUVERED SIDEWALL	6"X6"	8"X8"	6"x8"	REFER TO PLANS	125	0.03	18	-	1
R-1	TITUS	50F	ALUMINUM 1/2" EGG CRATE	22"X22"	24"X24"	6"Ø	8"Ø	100	0.05	25	-	1
R-2	TITUS	50F	ALUMINUM 1/2" EGG CRATE	22"X22"	24"X24"	8"Ø	10"Ø	225	0.05	25	-	1
R-3	TITUS	50F	ALUMINUM 1/2" EGG CRATE	22"X22"	24"X24"	10"Ø	12"Ø	400	0.05	25	-	1
R-4	TITUS	50F	ALUMINUM 1/2" EGG CRATE	22"X22"	24"X24"	12"Ø	14"Ø	600	0.05	25	-	1
R-5	TITUS	50F	ALUMINUM 1/2" EGG CRATE	24"X12"	26"X14"	24"X12"	24"X12"	1300	0.05	25	-	1
R-6	TITUS	50F	ALUMINUM 1/2" EGG CRATE	8"X8"	10"X10"	8"X8"	8"X8"	300	0.05	24	-	1
S-1	TITUS	OMNI-AA	ALUMINUM SQUARE PLAQUE DIFFUSER	24"X24"	24"X24"	8"Ø	10"Ø	225	0.05	25	4-WAY	1
S-1A	TITUS	OMNI-AA	ALUMINUM SQUARE PLAQUE DIFFUSER	12"X12"	12"X12"	6"Ø	8"Ø	100	0.05	25	4-WAY	1
S-2	TITUS	OMNI-AA	ALUMINUM SQUARE PLAQUE DIFFUSER	24"X24"	24"X24"	8"Ø	10"Ø	225	0.05	25	4-WAY	1
S-2A	TITUS	OMNI-AA	ALUMINUM SQUARE PLAQUE DIFFUSER	12"X12"	12"X12"	8"Ø	10"Ø	225	0.05	25	4-WAY	1
S-3	TITUS	S300FL	ALUMINUM SPIRAL MOUNTED DOUBLE DEFLECTION GRILLE	10"X4"	12"X6"	REFER TO PLANS	REFER TO PLANS	150	0.10	22	4-WAY	1,2

REMARKS:
1. COLOR TO BE SELECTED BY ARCHITECT.
2. PROVIDE WITH FACE MOUNTED BALANCING DAMPER.

DRAWING SIZE: 30 X 42

STAMP

CONSULTANTS

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REVISIONS	
BID SET	10/21/2026

DRAWN BY	JAH
REVIEWED BY	CMR
JOB #	2665

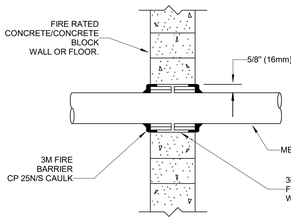
SHEET TITLE

MECHANICAL SCHEDULES

SHEET #

M-400

SCALE	AS NOTED
DATE	10-21-2026



NOTES:

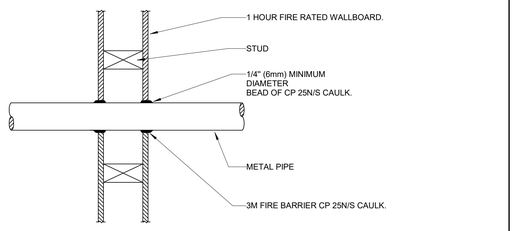
1. THE MAXIMUM ANNULAR SPACE AROUND THE METAL PIPE OR CONDUIT IS 5/8" (16mm). (IF THE ANNULAR SPACE EXCEEDS 5/8" PATCH THE WALL AND PENETRATE WALL AT ANOTHER LOCATION).
2. WRAP THE 3M MODEL# FS-195 WRAP/STRIP AROUND THE PIPE/CONDUIT, FOIL SIDE OUT, TO FILL THE SPACE BETWEEN THE PIPE/CONDUIT AND THE WALL OPENING. THE 3M MODEL# FS-195 WRAP/STRIP SHOULD BE TIGHTLY SECURED WITH ALUMINUM FOIL TAPE OR STEEL TIE WIRE AND PUSHED INTO THE OPENING UNTIL THE TOP EDGE OF THE WRAP IS FLUSH WITH THE WALL SURFACE. THE IDENTICAL INSTALLATION SHOULD BE INSTALLED ON THE OTHER SIDE OF THE WALL.
3. USE 3M MODEL# CP 25N/S(NO SAG) CAULK TO FILL THE AREA BETWEEN THE FS-195 WRAP/STRIP AND THE EDGES OF THE OPENING AND ANY VOIDS IN THE 3M MODEL# FS-195 WRAP/STRIP. A FILL OF CP 25 CAULK SHOULD COAT ALL EXPOSED EDGES OF THE FS-195 WRAP/STRIP AND COMPLETELY SEAL THE AREA BETWEEN THE FS-195 WRAP/STRIP, THE PIPE/CONDUIT AND THE WALL SURFACE.

PENETRATION FIRESTOP FOR METAL PIPE/CONDUIT THROUGH A CONCRETE WALL

NOT TO SCALE

FIRE STOPPING NOTES:

1. FIRE STOPPING IS CRITICAL AND MUST BE ACCOMPLISHED. ALL PIPES MUST BE FIRESTOPPED WHERE THEY PENETRATE FIRE RESISTIVE, FIRE RATED, AND SMOKE RESISTIVE WALLS OR FLOORS. ALL FLOORS CORRIDOR WALLS, STAIR WALLS, MECHANICAL ROOM WALLS, STORAGE ROOM WALLS AND OTHER HAZARDOUS ROOM WALLS ARE ONE HOUR RATED.
2. A FOUR-HOUR TRAINING SESSION SHALL BE CONDUCTED BY MANUFACTURER OF THE FIRESTOPPING MATERIAL. THIS SHALL BE DONE PRIOR TO THE INSTALLATION OF THE MATERIAL. CONTACT HOSPITAL ENGINEER AND CMTA TO ADVISE OF DATE AND TIME OF THIS MEETING.
3. ALL PENETRATIONS WILL BE REVIEWED BY THE HOSPITAL ENGINEER OR CMTA. PRIOR TO INSPECTION. ALL CEILING TILES BENEATH THE PENETRATIONS SHALL BE REMOVED BY THE CONTRACTOR.

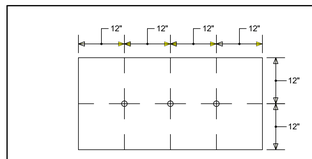


NOTES:

1. FORCE THE 3M MODEL# CP 25N/S CAULK INTO THE ANNULAR SPACE TO THE MAXIMUM EXTENT POSSIBLE, FLUSH WITH THE EXTERIOR OF THE PENETRATION SURFACE.
2. FINISH CAULKING WITH A 1/4" (6mm) MINIMUM BEAD OF CP 25N/S CAULK APPLIED TO THE PERIMETER OF THE CONDUIT/PIPE AT ITS EGRESS FROM THE WALL.
3. THE MAXIMUM ANNULAR SPACE IS NOT TO EXCEED 3/16" (5mm). (IF IT DOES PATCH WALL AND PENETRATE WALL AT ANOTHER LOCATION).
4. INSTALL THE 3M FIRESTOP ON BOTH SIDES OF THE WALL.

PENETRATION FIRESTOP FOR METAL PIPE/CONDUIT THROUGH ONE HOUR WALL

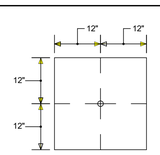
NOT TO SCALE



SPRINKLER HEADS MAY BE INSTALLED IN 2x4 CEILING TILES IN ANY OF THE THREE LOCATIONS INDICATED ABOVE. NO EXCEPTIONS!

2x4 CEILING TILE DETAIL

SCALE: NONE



SPRINKLER HEADS TO BE INSTALLED IN CENTER OF 2x2 CEILING TILES.

2x2 CEILING TILE DETAIL

SCALE: NONE

FIRE PROTECTION PHASING NOTES

A THIS PROJECT INTERFACES EXTENSIVELY WITH EXISTING BUILDING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE AND PHASE ALL TIE-INS AND INTERRUPTIONS OF EXISTING SERVICES TO MINIMIZE OR ELIMINATE DOWNTIME. AS AN EXAMPLE, MAIN GAS SERVICE, WATER SERVICE, ELECTRICAL SERVICE, HVAC SERVICES, STEAM GENERATION, ETC., WILL BE AFFECTED AND REPLACED OR MOVED DURING THIS PROJECT. THE CONTRACTOR SHALL INSTALL ALL NEW SERVICES AND EQUIPMENT AND HAVE THEM TESTED AND FULLY AND RELIABLY FUNCTIONAL PRIOR TO INTERRUPTING, RELOCATING OR REMOVING ANY EXISTING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BARE ANY AND ALL COSTS ASSOCIATED WITH THIS PHASING, INCLUDING TEMPORARY SERVICES, TEMPORARY RELOCATION, PREMIUM TIME WORK, ETC. CONTRACTOR SHALL COORDINATE ALL SAID WORK WITH THE OWNER AND APPLICABLE UTILITIES PER THE CONTRACT DOCUMENTS.

FIRE PROTECTION HAZARDOUS MATERIALS NOTES

A THE CONTRACTOR IT IS HEREBY ADVISED THAT IS POSSIBLE THAT ASBESTOS AND/OR OTHER HAZARDOUS MATERIALS ARE OR WERE PRESENT IN THIS BUILDING(S). ANY WORKER, OCCUPANT, VISITOR, ETC., WHO ENCOUNTERS ANY MATERIAL OF WHOSE CONTENT THEY ARE NOT CERTAIN SHALL PROMPTLY REPORT THE EXISTENCE AND LOCATION OF THAT MATERIAL TO THE OWNER. FURTHERMORE, THE CONTRACTOR SHALL INSURE THAT NO ONE COMES NEAR TO OR IN CONTACT WITH ANY SUCH MATERIAL OR FUMES THEREFROM UNTIL ITS CONTENT CAN BE ASCERTAINED TO BE NON-HAZARDOUS.

B CMTA, INC. HAS NO EXPERTISE IN THE DETERMINATION OF THE PRESENCE OF ANY HAZARDOUS MATERIAL. THEREFORE, NO ATTEMPT HAS BEEN MADE BY CMTA TO IDENTIFY THE EXISTENCE OR LOCATION OF ANY SUCH HAZARDOUS MATERIAL. FURTHERMORE, CMTA NOR ANY AFFILIATE HEREOF WILL NOT OFFER OR MAKE ANY RECOMMENDATIONS RELATIVE TO THE REMOVAL, HANDLING OR DISPOSAL OF SUCH MATERIAL.

C IF THE WORK WHICH IS TO BE PERFORMED INTERFACES, CONNECTS OR RELATES IN ANY PHYSICAL WAY WITH OR TO EXISTING COMPONENTS WHICH CONTAIN OR BEAR ANY HAZARDOUS MATERIAL, ASBESTOS BEING ONE, THEN IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO CONTACT THE OWNER AND SO ADVISE HIM IMMEDIATELY.

D THE CONTRACTOR BY EXECUTION OF THE CONTRACT FOR ANY WORK AND/OR BY THE ACCOMPLISHMENT OF ANY WORK THEREBY AGREE TO BRING NO CLAIM RELATIVE TO HAZARDOUS MATERIALS FOR NEGLIGENCE, BREACH OF CONTRACT, INDEMNITY, OR ANY OTHER SUCH ITEM AGAINST CMTA, ITS PRINCIPALS, EMPLOYEES, AGENTS OR CONSULTANTS. ALSO, THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD CMTA, ITS PRINCIPALS, EMPLOYEES, AGENTS AND CONSULTANTS HARMLESS FROM ANY SUCH RELATED CLAIMS WHICH MAY BE BROUGHT BY ANY SUBCONTRACTORS, SUPPLIERS OR ANY OTHER THIRD PARTIES.

E THE CONTRACTOR IS DIRECTED TO THE SPECIFICATIONS FOR FURTHER INFORMATION.

FIRE PROTECTION GENERAL NOTES

A COORDINATE THE LOCATION OF DRAINS, THERMOSTATS, GAS OUTLETS, ETC., WITH ALL CASEWORK EQUIPMENT, MECHANICAL ROOM EQUIPMENT, ETC., PRIOR TO COMMENCING INSTALLATION. WORK NOT SO COORDINATED SHALL BE REMOVED AND PROPERLY INSTALLED AT THE EXPENSE OF THE CONTRACTOR.

B THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO ENSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE. FOR SAFETY PURPOSES, PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL LINES. VERIFY THE LOCATION, SIZE, TYPE, ETC., OF EACH UNDERGROUND OR OVERHEAD UTILITY. ALL WORK SHALL BE PERFORMED IN ACCORD WITH ALL FEDERAL, STATE AND/OR LOCAL RULES, REGULATIONS, STANDARD AND SAFETY REQUIREMENTS. UTILITIES SHALL BE INSTALLED IN ACCORD WITH THE APPLICABLE MUNICIPALITY OR UTILITY COMPANY STANDARDS. IN ALL CASES, THE MOST STRINGENT REQUIREMENT SHALL APPLY.

C WHERE WORK IS REQUIRED ABOVE EXISTING LAY-IN, PLASTER OR GYPSUM BOARD CEILINGS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND REINSTALLATION (OR REPLACEMENT, IF DAMAGED) OF ALL CEILING OR TILE AND GRID MEMBERS NECESSARY TO PERFORM HIS WORK. NEW TILE AND GRID SHALL MATCH THE SURROUNDING AREAS. ALL PATCHING WORK SHALL MATCH ADJACENT SURFACES.

D ALL NEW WORK SHALL BE HUNG FROM STRUCTURE, NOT FROM THE WORK OF OTHER TRADES, WHETHER EXISTING OR NEW.

E COORDINATE ALL WORK WITH PROJECT PHASING REQUIREMENTS.

F PATCH, REPAIR AND PAINT OR PROVIDE WALL COVERING FOR (TO OWNER'S STANDARDS) EXISTING WALLS, CEILINGS, ETC., THAT ARE TO REMAIN IF DAMAGED DURING CONSTRUCTION. REPAIRS SHALL MATCH ADJACENT SURFACES TO THE SATISFACTION OF THE ARCHITECT AND OWNER.

G OBSERVE ALL APPLICABLE CODES, RULES AND REGULATIONS THAT MAY APPLY TO THE WORK UNDER THIS CONTRACT. (CITY, COUNTY, LOCAL, FEDERAL, MUNICIPALITY, UTILITY COMPANY, COMMONWEALTH OF PENNSYLVANIA, ETC.)

H CONTRACTOR SHALL BE AWARE OF UNSEEN PLUMBING WORK DURING DEMOLITION. IF ITEMS ARE UNCOVERED DURING DEMOLITION THEN FIELD VERIFY THE USE OF THE ITEMS AND PLAN AN ALTERNATE ROUTE TO RUN THESE ITEMS. THEN CONTACT THE ENGINEERS TO REVIEW THE ROUTING.

I IF AREA OF CONSTRUCTION HAS A POST TENSION FLOOR SLAB, CONTRACTOR SHALL USE ULTRA SOUND OR OTHER APPROVED METHODS TO SURVEY THE EXISTING FLOOR STRUCTURE BEFORE MAKING ANY AND ALL FLOOR PENETRATIONS.

J WHERE FIRE PROOFING IS SPRAYED ON EXISTING STRUCTURE ALL EXISTING CONDUITS, WATER, HYDRONIC, STEAM, CHILLED WATER, FIRE PROTECTION LINES, MED GAS, ETC. SHALL BE LOWERED TO BE BELOW FULL THICKNESS OF FIRE PROOFING WITH NO INTERFERENCE.

K ALL PENETRATIONS OF FIRE AND SMOKE RATED ASSEMBLIES SHALL BE APPROPRIATELY FIRE STOPPED PER AN APPROVED U.L. LISTED STANDARD. CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO INSULATED PIPING PENETRATIONS.

L ALL WORK REQUIRING DOWNTIME OF ANY AREA IN THE BUILDING SHALL BE SCHEDULED 2 WEEKS IN ADVANCE, AND SHALL COMPLY WITH INTERIM LIFE SAFETY MEASURES.

M ALL PIPING IN ROOMS WITH CEILINGS SHALL BE ABOVE CEILING EXCEPT AS NOTED.

N IN ACCORDANCE WITH P.R.S. ALL PLUMBING WORK SHALL BE CONSTRUCTED IN COMPLIANCE WITH PLANS APPROVED BY AND BEARING THE APPROVAL STAMP OF THE PENNSYLVANIA DIVISION OF PLUMBING AND/OR THE DIVISION OF WATER. THE CONTRACTOR SHALL NOT BEGIN WORK UNTIL HE HAS RECEIVED SUCH APPROVED PLANS.

O LOCATIONS OF PIPING AND EQUIPMENT ARE APPROXIMATE AND SUBJECT TO MINOR ADJUSTMENTS IN THE FIELD. DO NOT SCALE THE DRAWINGS.

P ALL OFFSETS IN PIPING ARE NOT NECESSARILY SHOWN. PROVIDE ADDITIONAL OFFSETS WHERE NECESSARY.

Q THE CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY COMPANY FEES OR OTHER COSTS THAT ANY UTILITY COMPANY MAY REQUIRE TO COMPLETE THEIR WORK. (GAS, SEWER, WATER, ETC.).

R INSTALL ALL PIPING AND EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTION, IF IN CONFLICT WITH THE DESIGN INDICATED IN CONTRACT DOCUMENTS, ADVISE THE ENGINEERS PRIOR TO INSTALLATION FOR CLARIFICATION. PROVIDE RECOMMENDED ACCESS AND SERVICE CLEARANCES FOR ALL EQUIPMENT.

S SEAL AIRTIGHT AROUND ALL DUCTS AND PIPING PENETRATIONS THROUGH WALLS, FLOORS AND ROOF. PROVIDE FIRE STOPPING IN FIRE PARTITION.

T THE CONTRACTOR SHALL RELOCATE OR AVOID ANY EXISTING EQUIPMENT APPURTENANCES, ETC., THAT CONFLICT WITH NEW WORK.

U WHERE MOUNTING HEIGHTS ARE NOT INDICATED OR ARE IN CONFLICT WITH ANY OTHER BUILDING SYSTEM, CONTACT THE ENGINEERS BEFORE INSTALLATION. REFER ALSO TO ARCHITECTURAL WALL INTERIOR AND EXTERIOR WALL ELEVATIONS, CEILING HEIGHTS AND OTHER DETAIL OF THESE DOCUMENTS.

V DOUBLE WIDTH TURNING VANES SHALL BE INSTALLED IN ALL SUPPLY, RETURN, AND EXHAUST DUCTWORK ELBOWS. TURNING VANES NOT REQUIRED FOR KITCHEN EXHAUSTS.

W ANY VIBRATING, OSCILLATING OR OTHER NOISE OR MOTION PRODUCING EQUIPMENT SHALL BE ISOLATED FROM SURROUNDING SYSTEMS IN AN APPROVED MANNER. NOISY OR STRUCTURALLY DAMAGING INSTALLATIONS SHALL BE SATISFACTORILY REPLACED OR REPAIRED AT THE INSTALLING CONTRACTOR'S EXPENSE. THE FINAL DECISION ON THE SUITABILITY OF A PARTICULAR INSTALLATION'S ACCEPTABILITY SHALL BE THAT OF THE ENGINEER.

X DEVIATIONS IN SIZE, CAPACITIES, FIT, FINISH, ETC. FOR EQUIPMENT FROM THAT USED AS BASIS OF DESIGN SHALL BE THE RESPONSIBILITY OF THE PURCHASER OF THAT EQUIPMENT. ANY PROVISIONS REQUIRED TO ACCOMMODATE A DEVIATION, WHETHER APPROVED BY THE ENGINEERS OR NOT, SHALL BE THE RESPONSIBILITY OF THE PURCHASER.

Y VALVES, BALANCING DAMPERS OR ANY MECHANICAL/ELECTRICAL ITEM REQUIRING ACCESS SHALL NOT BE LOCATED ABOVE A HARD CEILING. IF THIS IS NOT POSSIBLE, THEN AN APPROPRIATELY SIZED ACCESS DOOR SHALL BE PLACED UNDER THE ITEM TO ALLOW EASY MAINTENANCE AND ADJUSTMENT. ADDITIONALLY ALL SUCH ITEMS SHALL NOT BE LOCATED AN UNREASONABLE DISTANCE ABOVE THE CEILINGS. IN GENERAL ALL SUCH ITEMS UNLESS INDICATED OTHERWISE SHALL BE MOUNTED SIX TO TWELVE INCHES ABOVE THE CEILING. IF IN DOUBT, CONTACT ENGINEER PRIOR TO INSTALLING.

Z ALL MANHOLES, VAULTS AND SIMILAR UNDERGROUND STRUCTURES SHALL HAVE THE TOP ELEVATION SET FLUSH WITH FINISHED GRADE UNLESS SPECIFICALLY NOTED OTHERWISE.

AA WHEN RUNNING ANY TYPE OF PIPING BELOW A FOOTER, OR IN THE ZONE OF INFLUENCE THE PIPING SHALL BE BACKFILLED WITH CEMENTITIOUS FLOWABLE FILL PER SPECIFICATIONS. WHENEVER POSSIBLE, LOCATE PIPING OUTSIDE OF THE ZONE OF INFLUENCE. THE ZONE OF INFLUENCE IS THE AREA UNDER THE FOOTER WITHIN A 45 DEGREE ANGLE PROJECTING DOWN FROM THE BOTTOM EDGE OF THE FOOTER OF ALL SIDES OF THE FOOTER. ADDITIONALLY, GREASE TRAPS, MANHOLES, VAULTS AND OTHER UNDERGROUND STRUCTURES SHALL BE HELD AWAY FROM BUILDING WALLS FAR ENOUGH TO BE OUTSIDE OF THE ZONE OF INFLUENCE.

AB THE DOCUMENTS COMPLY WITH 2021 IMC, 2021 PBC, AND 2021 IECC.

AC WORK IN CONFINED AREAS SHALL BE IN ACCORDANCE WITH THE OWNER'S SAFETY POLICY REQUIREMENTS.

ABBREVIATIONS

ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AHJ	AUTHORITY HAVING JURISDICTION
ANSI	AMERICAN NATIONAL STANDARD INSTITUTE
CLG	CEILING
CLR	CLEAR
DN	DOWN
ENGR	ENGINEER
EQ	EQUAL
ETR	EXISTING TO REMAIN
EXT	EXTERIOR
FVC	FIRE VALVE CABINET
FL	FLOOR
FLA	FULL LOAD AMPS
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
FPC	FIRE PROTECTION CONTRACTOR
FT	FEET **OR** FOOT
FUT	FUTURE
GA	GAGE/GAUGE
GAL	GALLON (-S)
GC	GENERAL CONTRACTOR
HORIZ	HORIZONTAL
ID	I (-DENTIFICATION, -NSIDE DIAMETER, -NSIDE DIMENSION)
IN	INCH (-ES)
INT	INTER (-IOR, -ERVAL)
IPS	IRON PIPE SIZE
LBS	POUNDS
LF	LINEAR FEET/FOOT
MAX	MAXIMUM
MFG	MANUFACTURER
MIN	MIN (-IMUM, -UTE)
MISC	MISCELLANEOUS
MTG	MOUNTING
N/A	NOT APPLICABLE
NC	NOISE CRITERIA **OR** NORMALLY CLOSED
NIC	NOT IN CONTRACT
NO	NORMALLY OPEN **OR** NUMBER
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DI (-AMETER, -MENSION)
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED, OWNER INSTALLED
PC	PLUMBING CONTRACTOR
PLBG	PLUMBING
PRV	PRESSURE REDUCING VALVE (STEAM, WATER, GAS)
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIG	PPSI GAUGE
SQ FT	SQUARE FEET **OR** FOOT
TBD	TO BE DETERMINED

ABBREVIATIONS (CONTINUED)

TE	TOP ELEVATION
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
WT	WEIGHT
W/	WITH
W/O	WITHOUT
%	PERCENT
℄	CENTERLINE

GENERAL SYMBOLS

(#)	TAGGED NOTE DESIGNATOR
1	REVISION TRIANGLE
ROOM NAME (SEE A)	ROOM TAG
TAG XXX-# INSTANCE XXXX	EQUIPMENT TAG
	POINT OF CONNECTION / CONNECT TO EXISTING
	POINT OF DEMOLITION

MECHANICAL PIPING LEGEND

	PIPE ELBOW TURNING UP
	PIPE ELBOW TURNING DOWN
	PIPE TEE; CONNECTION ON TOP
	PIPE TEE; CONNECTION ON BOTTOM
	PIPE CAP
FP	FIRE PROTECTION PIPING
D(XXX)	PIPING TO BE DEMOLISHED - (XXX) DENOTES SYSTEM
E(XXX)	EXISTING PIPING - (XXX) DENOTES SYSTEM
A(XXX)	ABANDONED IN PLACE PIPING - (XXX) DENOTES SYSTEM
	STRAINER
	MANUAL ISOLATION VALVE
	GLOBE VALVE
	OS&Y (GATE) VALVE
	PRESSURE REDUCING VALVE (STEAM, GAS, WATER, ETC.)
	CHECK VALVE
	DOUBLE CHECK VALVE ASSEMBLY
	FLEXIBLE PIPE CONNECTION
	PIPING UNION
FS	FLOW SWITCH
PS	PRESSURE SWTICH
TS	TAMPER SWITCH
	PETE'S PLUG; TEMPERATURE/PRESSURE PORT
	SEMI-RECESSED SPRINKLER HEAD WITH REMOVABLE ESCUTCHEON PLATE
	UPRIGHT TYPE SPRINKLER HEAD
	SIDEWALL TYPE SPRINKLER HEAD

APPLICABLE BUILDING CODES

APPLICABLE BUILDING CODES	DOCUMENT	YEAR
ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES	ANSI A117.1	2009
FIRE SPRINKLER CODE	NFPA 13	2019
INTERNATIONAL BUILDING CODE (IBC)	STATE EDITION	2021
INTERNATIONAL ENERGY CONSERVATION CODE (IECC)	STATE EDITION	2021
INTERNATIONAL FIRE CODE (IFC)	STATE EDITION	2021
INTERNATIONAL FUEL GAS CODE (IFGC)	STATE EDITION	2021
INTERNATIONAL MECHANICAL CODE (IMC)	STATE EDITION	2021
INTERNATIONAL PLUMBING CODE (IPC)	STATE EDITION	2021
INTERNATIONAL EXISTING BUILDING CODE (IEBC)	STATE EDITION	2021
NATIONAL ELECTRIC CODE (NEC)	NFPA 70	2020
NATIONAL FIRE ALARM & SIGNALING CODE	NFPA 72	2019
UNIFORM STATEWIDE BUILDING CODE		2021

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REVISIONS	
SD SET	01/30/2026
DD SET	07/13/2026
75% CD SET	09/11/2026
90% CD SET	10/01/2026
BID SET	10/09/2026

DRAWN BY	JAH
REVIEWED BY	CMR
JOB #	2665

SHEET TITLE

FIRE PROTECTION LEGEND

SHEET #

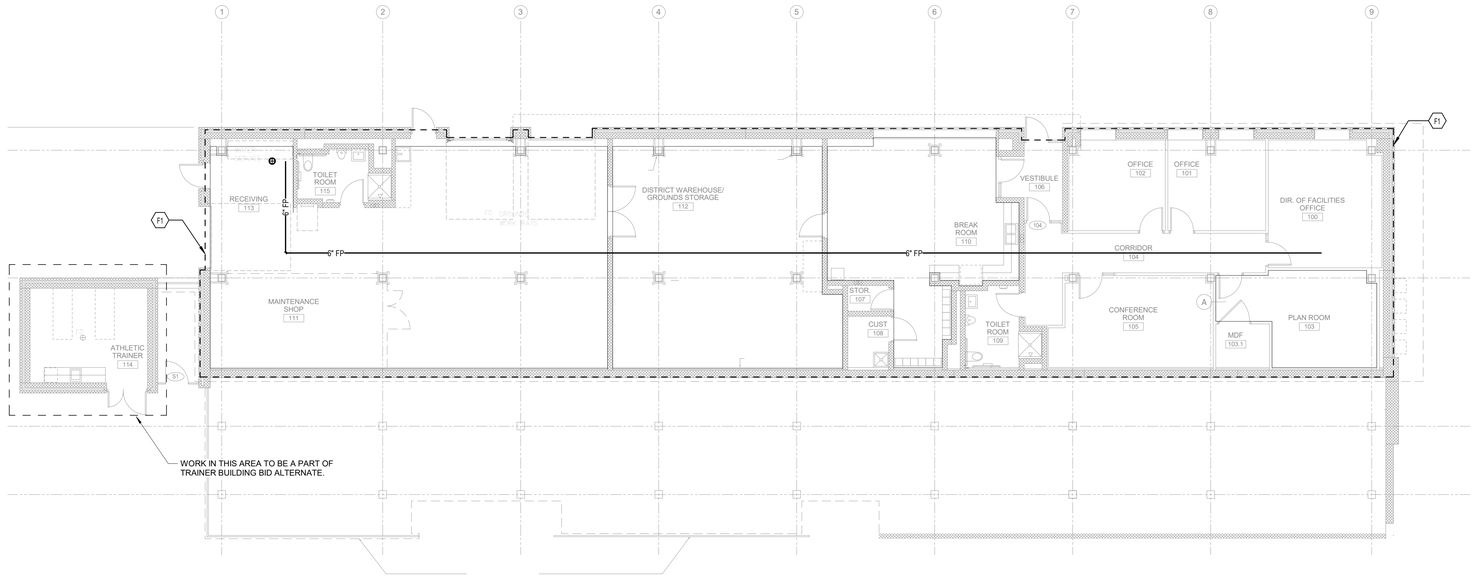
FP-001

SCALE	AS NOTED
DATE	10-21-2026

DRAWING SIZE: 30 X 42

TAGGED NOTES

F1 THE OUTLINED AREA SHALL BE PROVIDED WITH 100% WET PIPE SPRINKLER COVERAGE AS REQUIRED TO MEET NFPA-13 REQUIREMENTS. PROVIDE SEMI-CONCEALED TYPE SPRINKLER HEADS IN ALL AREAS WITH CEILINGS AND UPRIGHT HEADS IN ALL AREAS WITH NO CEILINGS.



1 FIRE PROTECTION PLAN - HOME SIDE UNDER BLEACHERS

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

0 2' 4' 8' 16' 24' 32'

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REVIEWED BY	CMR
JOB #	2665

SHEET TITLE

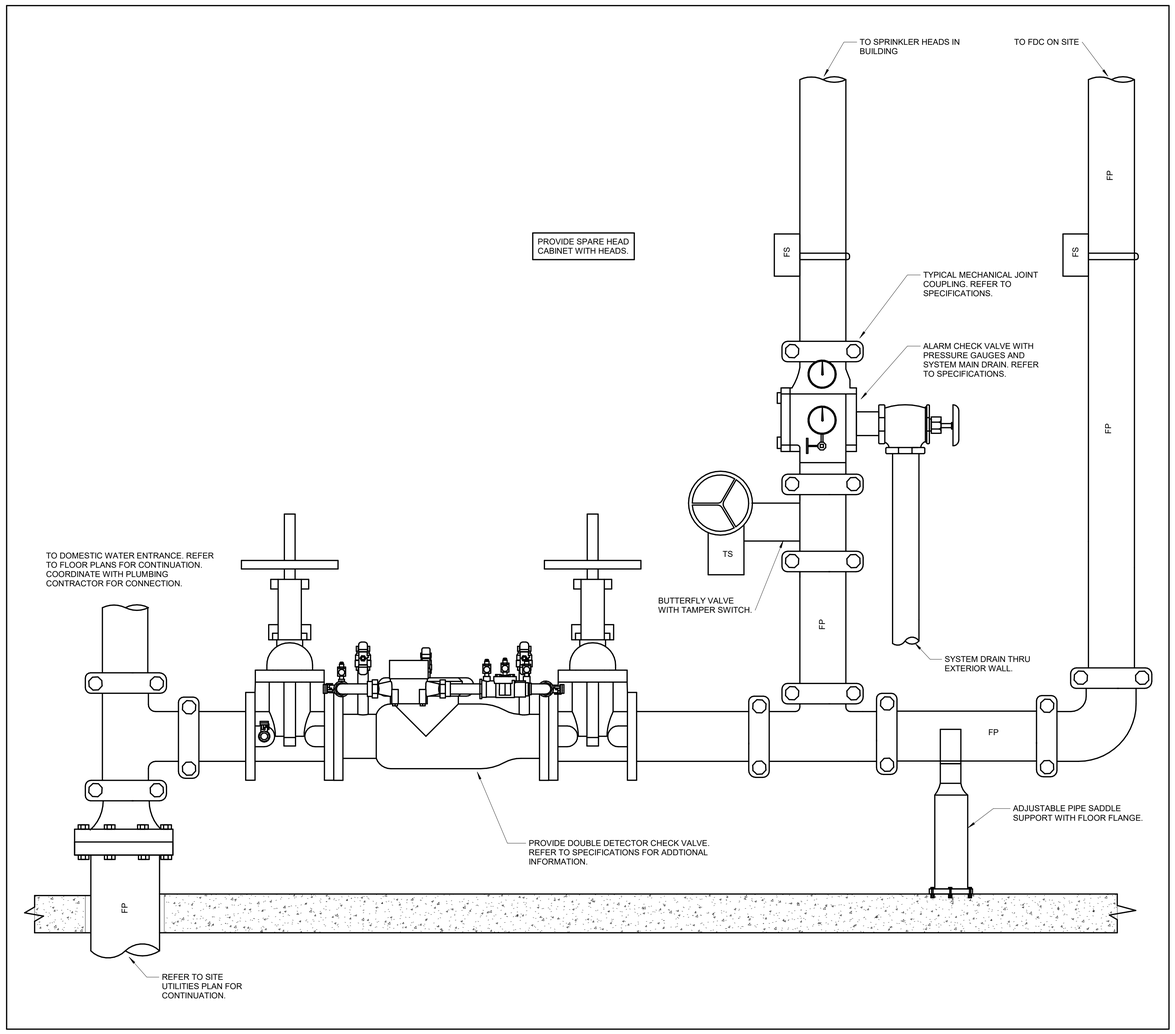
FIRE PROTECTION PLAN

SHEET #

FP-201

SCALE	AS NOTED
DATE	10-21-2026

DRAWING SIZE: 30 X 42



1 FIRE PROTECTION SYSTEM RISER
SCALE: NONE

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SHEET TITLE

FIRE PROTECTION DETAILS

SHEET #

FP-301

SCALE	AS NOTED
DATE	10-21-2026

DRAWING SIZE: 30 X 42

FIRE PROTECTION PIPE

WET SYSTEMS:
- NIPPLES AND FITTINGS SHALL BE OF SAME MATERIAL, COMPOSITION, AND WEIGHT CLASSIFICATION AS PIPE IN WHICH INSTALLED
- UP TO 2" (INTERIOR) SCHEDULE 40 ASTM A-53 BLACK STEEL; 125# CAST IRON SCREWED FITTINGS OR SCHEDULE 10, ASTM A-135 BLACK STEEL WITH VICTAULIC OR SIMILAR TYPE APPROVED FITTINGS.
- 2-1/2" AND LARGER (INTERIOR) SCHEDULE 40 BLACK STEEL WITH FLANGED, WELDED OR VICTAULIC (OR SIMILAR) TYPE APPROVED FITTINGS OR SCHEDULE 10, ASTM A-135 BLACK STEEL WITH VICTAULIC OR SIMILAR TYPE APPROVED FITTINGS.

DRY SYSTEMS:
- DRY PIPE SYSTEM PIPING: SAME AS WET SYSTEM EXCEPT SCHEDULE 10 PIPING IS NOT ACCEPTABLE.

DESIGNER NOTE: REVIEW AND EDIT FOR APPLICATION TO THE PROJECT. COORDINATE WITH THE PROJECTS SPECIFICATIONS.

SPRINKLER HEAD SELECTION

GEM, GRINNELL, STAR, VIKING, RELIABLE, CENTRAL OR APPROVED EQUIVALENT AS FOLLOWS:

- ALL SPRINKLER HEADS SHALL BE "QUICK ACTING" SEMI RECESSED SPRINKLER HEADS. EXTENDED RANGE SPRINKLER HEADS ARE NOT PERMITTED.
- PROVIDE "STANDARD UP RIGHT" SPRINKLERS WHERE PIPING IS EXPOSED.
- PROVIDE TWO PIECES, SEMI RECESSED, WHITE PLATED SPRINKLER HEADS WITH REMOVABLE ESCUTCHEON WHERE PIPING IS CONCEALED ABOVE FINISHED CEILINGS.
- PROVIDE SPRINKLER HEAD GUARDS WHERE HEADS ARE SUBJECT TO PHYSICAL ABUSE. HEADS LOCATED BELOW SEVEN (7) FEET ABOVE FLOOR, ETC.
- FLEXIBLE FIRE PROTECTION HEAD DROPS MAY BE PROVIDED AT THE CONTRACTORS OPTION. INSTALL IN ACCORDANCE WITH NFPA AND MANUFACTURER'S REQUIREMENTS.
- SPRINKLER HEAD DEGREE RATINGS SHALL BE DETERMINED BY THE AREA SERVICED IN ACCORD WITH CURRENT CODES AND STANDARD PRACTICES. INDICATE DEGREE RATINGS ON SUBMITTED SHOP DRAWINGS.
- THE CONTRACTOR SHALL SUBMIT TO THE ENGINEER FOR INSPECTION, ONE (1) SAMPLE OF EACH TYPE OF SPRINKLER HEAD, PROPOSED TO BE USED ON THE PROJECT.
- HEADS SHALL BE INSTALLED IN THE MIDDLE OF THE TILES, AT HALF OR QUARTER POINTS ALONG THE LENGTH OF THE TILES. INSTALL SPRINKLER HEADS AT QUARTER POINTS OF CENTER SCOURED 2' X 4' CEILING TILES.
- PROVIDE HIGH TEMPERATURE HEADS AROUND RANGE HOODS, KITCHEN EQUIPMENT, KILNS, BOILERS, WATER HEATERS AND OTHER HEAT PRODUCING EQUIPMENT.

DESIGNER NOTE: REVIEW AND EDIT FOR APPLICATION TO THE PROJECT. COORDINATE WITH THE PROJECTS SPECIFICATIONS.

BUILDING AREA CALCULATIONS

	AREA (SQ. FT)	NO. OF FIRE PROTECTION SYSTEM(S)
FACILITIES BLDG	5,526	1
TOTAL	5,526	1

NFPA 13-19 ALLOWS MAXIUMUM 52,000 SQUARE FEET PER FLOOR PER SYSTEM RISER.

EQUIVALENT LENGTH MODIFIER FOR NON-SCHEDULE 40 STEEL PIPE

$$\left(\frac{\text{ACTUAL INSIDE DIAMETER}}{\text{SCHEDULE 40 STEEL PIPE INSIDE DIAMETER}}\right)^{4.87} = \text{FACTOR}$$

FORMULA IS TAKEN FROM NFPA13-19 SECTION 27.2.3.1.3.1.

DESIGNER NOTE: THIS FORMULA CAN BE USED TO FIND THE EQUIVALENT LENGTH FOR PIPES THAT ARE NOT SCHEDULE 40 STEEL PIPE. THE FACTOR CAN BE FOUND AND MULTIPLIED WITH THE EQUIVALENT LENGTHS ON THE EQUIVALENT LENGTH CHART ABOVE.

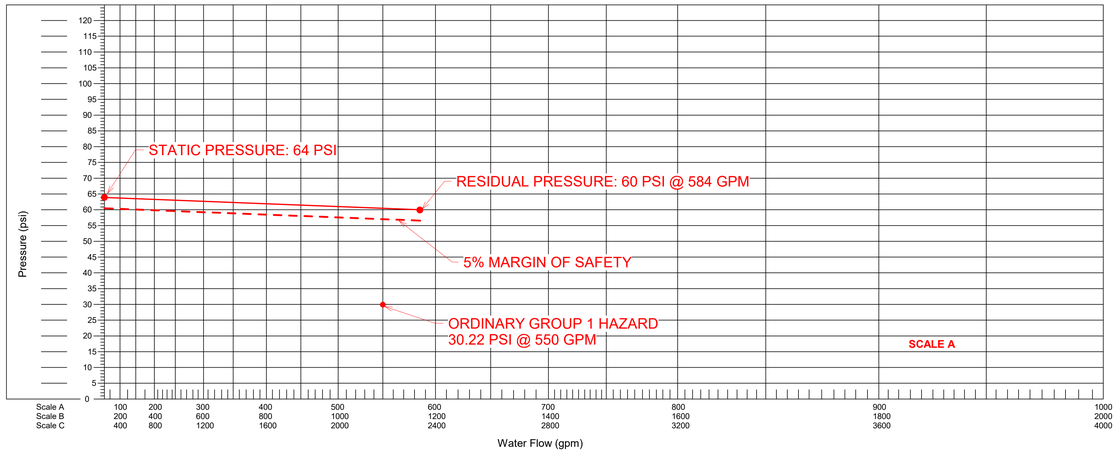
FLOW DATA

STATIC PSI:	64
RESIDUAL PSI:	60
FLOW:	584 GPM
DURATION:	CONTINUOUS
DATE & TIME:	07/02/2026
SOURCE OF WATER:	BOROUGH OF POTTSTOWN
SOURCE OF DATA:	PARKSIDE FIRE+SECURITY
HAZARD:	LIGHT & ORDINARY (OH2)
OCCUPANCY OF BUILDING:	BUSINESS

FIRE PROTECTION SEISMIC BRACING

- SEISMIC RESTRAINTS
  1. BUILDING CLASSIFICATION CATEGORY IS III (2013 KBC – TABLE 1604.5). (DESIGNER TO EDIT)
  2. SEISMIC DESIGN CATEGORY: D (DESIGNER TO EDIT)
  3. SEISMIC CALCULATIONS, DESIGN AND INSTALLATION FOR SYSTEMS SHALL BE PER ASCE STANDARD 7, MINIMUM DESIGN LOADS FOR BUILDINGS AND OTHER STRUCTURES, 2005 EDITION, CHAPTER 13.
  4. COMPONENT IMPORTANCE FACTOR IS 1.5 FOR ALL FIRE PROTECTION SYSTEMS.
- SEISMIC RESTRAINT QUALITY ASSURANCE
  1. PROFESSIONAL ENGINEER QUALIFICATIONS: CONTRATOR SHALL RETAIN THE SERVICES OF A PROFESSIONAL ENGINEER WHO IS LEGALLY QUALIFIED TO PRACTICE IN THE JURISDICTION WHERE THE PROJECT IS LOCATED AND WHO HAS A MINIMUM OF 5 YEARS EXPERIENCE IN PROVIDING ENGINEERING SERVICES OF THE KIND INDICATED. ENGINEERING SERVICES ARE DEFINED AS THOSE PERFORMED FOR INSTALLATIONS OF VIBRATION ISOLATION BASES AND SEISMIC RESTRAINTS THAT ARE SIMILAR TO THOSE INDICATED FOR THIS PROJECT IN MATERIAL, DESIGN, AND EXTENT.
- SUBMITTALS
  1. PRODUCT DATA: INDICATE TYPES, STYLES, MATERIALS, AND FINISHES FOR EACH TYPE OF ISOLATOR AND SEISMIC RESTRAINT SPECIFIED. INCLUDE LOAD DEFLECTION CURVES.
- SEISMIC RESTRAINT SUBMITTALS
  1. SHOP DRAWINGS: SHOW DESIGNS AND CALCULATIONS, PREPARED AND STAMPED BY A LICENSED PROFESSIONAL ENGINEER, FOR THE FOLLOWING:
     - A. DESIGN CALCULATIONS: CALCULATIONS FOR DESIGN AND SELECTION OF SEISMIC RESTRAINTS FOR EQUIPMENT (INCLUDING FIRE PUMP AND RELATED EQUIPMENT), PIPING SYSTEMS (INCLUDING RISERS), STAMPED BY A LICENSED PROFESSIONAL ENGINEER.
     - B. ANALYSIS MUST INCLUDE CALCULATED DEAD LOADS, STATIC SEISMIC LOADS AND CAPACITY OF MATERIALS UTILIZED FOR CONNECTIONS TO EQUIPMENT AND STRUCTURE. ANALYSIS MUST DETAIL ANCHORING METHODS, BOLT DIAMETER, EMBEDMENT AND/ OR WELDED LENGTH. ALL SEISMIC RESTRAINT DEVICES SHALL BE DESIGNED TO ACCEPT, WITHOUT FAILURE, THE FORCES DETAILED IN LISTED BUILDING CODES ACTING THROUGH THE EQUIPMENT CENTER OF GRAVITY. OVERTURNING MOMENTS MAY EXCEED FORCES AT GROUND LEVEL.
     - C. SEISMIC RESTRAINT DETAILS: DETAIL FABRICATION AND ATTACHMENT OF RESTRAINTS AND SNUBBERS.
     - D. CONCRETE PAD DETAILS: SHOW REQUIRED CONCRETE PAD SIZE AND LOCATION FOR EQUIPMENT. SHOW LOCATIONS OF REQUIRED PAD ANCHORS AND STUD WEDGE ANCHORS.
     - E. WHERE WALL, FLOORS, SLABS, OR SUPPLEMENTARY STEEL WORK ARE USED FOR SEISMIC RESTRAINT LOCATIONS, DETAILS OF ACCEPTABLE ATTACHMENT METHODS FOR DUCTS, CONDUIT AND PIPE MUST BE INCLUDED AND APPROVED BEFORE THE CONDITION IS ACCEPTED FOR INSTALLATION. RESTRAINT MANUFACTURERS' SUBMITTALS MUST INCLUDE SPACING, STATIC LOADS AND SEISMIC LOADS AT ALL ATTACHMENT AND SUPPORT POINTS.
- REFER TO SPECIFICATION SECTION (DESIGNER TO EDIT) FOR ADDITIONAL REQUIREMENTS AND PROVISIONS OF SEISMIC RESTRAINTS, ISOLATORS, CONTROLS, ETC.

DESIGNER NOTE: REVIEW AND EDIT FOR APPLICATION TO THE PROJECT. COORDINATE WITH THE PROJECTS SPECIFICATIONS.



REMOTE AREA FIRE FLOW CALCULATION MATRIX

BUILDING LIGHT HAZARD FLOW

NFPA 13 HOSE STREAM TABLE 5-2.3	LIGHT HAZARD	TOTAL INSIDE AND OUTSIDE HOSE	100 GPM
NFPA 13 AREA/DENSITY CURVE TABLE 5-2.3	LIGHT HAZARD	REMOTE SPRINKLER DEMAND 0.10 GPM/FT^2 X 1,500 SQ. FT	150 GPM
		TOTAL	250 GPM

BUILDING ORDINARY GROUP 1 HAZARD FLOW

NFPA 13 HOSE STREAM TABLE 19.3.3.1.2	ORDINARY GROUP 1	TOTAL INSIDE AND OUTSIDE HOSE	250 GPM
NFPA 13 AREA/DENSITY CURVE TABLE 19.3.3.1.1	ORDINARY GROUP 1	REMOTE SPRINKLER DEMAND 0.15 GPM/FT^2 X 1,500 SQ. FT	225 GPM
		TOTAL	475 GPM

HIGH STACK STORAGE ORDINARY GROUP 2 HAZARD FLOW

NFPA 13 HOSE STREAM TABLE 19.3.3.1.2	ORDINARY GROUP 2	TOTAL INSIDE AND OUTSIDE HOSE	250 GPM
NFPA 13 AREA/DENSITY CURVE TABLE 19.3.3.1.1	ORDINARY GROUP 2	REMOTE SPRINKLER DEMAND 0.20 GPM/FT^2 X 1,500 SQ. FT	300 GPM
		TOTAL	550 GPM

STANDPIPE FLOW

NFPA 14-19 SECTION 7.10.1.1.1 & 7.10.1.1.3	CLASS 1	MOST REMOTE STANDPIPE	500 GPM FOR THE 1ST + 250 GPM FOR EACH AFTER
NFPA 14-19 SECTION 7.10.2.1.1 & 7.10.2.1.2	CLASS 2	MOST REMOTE STANDPIPE	100 GPM
NFPA 14-19 SECTION 7.10.1.1.1 & 7.10.1.1.3	CLASS 3	MOST REMOTE STANDPIPE	500 GPM FOR THE 1ST + 250 FOR EACH AFTER
		TOTAL	(500 + X*250) GPM

FLOW CALCULATIONS BASED ON NFPA 13-19 FIGURE 19.3.3.1.1 DENSITY/AREA CURVES AND TABLE 19.3.3.1.2 HOSE STREAM ALLOWANCE FOR HYDRAULICALLY CALCULATED SYSTEMS.

REMOTE AREA PRESSURE LOSS CALCULATION

BUILDING LIGHT HAZARD PRESSURE LOSS AT 250 GPM

	HEAD LOSS	COMPONENT PRESSURE LOSS
SITE PIPE FRICTION	900' (3.4'/100') = 30.6' HD	13.25 PSI
SITE PIPE ELBOW EQUIVALENT LENGTH	100' (3.4'/100') = 3.4' HD	1.47 PSI
SITE ELEVATION HEAD LOSS	5'	2.17 PSI
BACKFLOW PREVENTION LOSS		5 PSI
BUILDING PIPE FRICTION LOSS	175' (3.4'/100') = 5.95' HD	2.58 PSI
BUILDING ELBOW FRICTION LOSS	170' (3.4'/100') = 5.78' HD	2.50 PSI
BUILDING ELEVATION HEAD LOSS	12'	5.20 PSI
REMOTE SPRINKLER HEAD LOSS		15 PSI
	TOTAL	47.17 PSI

BUILDING ORDINARY GROUP 2 HAZARD PRESSURE LOSS AT 550 GPM

	HEAD LOSS	COMPONENT PRESSURE LOSS
SITE PIPE FRICTION	900' (0.45'/100') = 4.05' HD	1.75 PSI
SITE PIPE ELBOWS EQUIVALENT LENGTH	150' (0.45'/100') = 0.68' HD	0.29 PSI
SITE ELEVATION HEAD LOSS	5'	2.17 PSI
BACKFLOW PREVENTION LOSS		5 PSI
BUILDING PIPE FRICTION LOSS	175' (0.45'/100') = 0.79' HD	0.34 PSI
BUILDING ELBOW FRICTION LOSS	240' (0.45'/100') = 1.08' HD	0.47 PSI
BUILDING ELEVATION HEAD LOSS	12'	5.20 PSI
REMOTE SPRINKLER HEAD LOSS		15 PSI
	TOTAL	30.22 PSI

PIPE AND ELBOW FRICTION COEFFICIENT WAS TAKEN FROM NFPA 13-19. TABLE 27.2.3.1.1.

EQUIVALAENT SCHEDULE 40 STEEL PIPE LENGTH CHART

	FITTINGS AND VALVES EXPRESSED IN EQUIVALENT FEET OF PIPE									
	3/4"	1"	1-1/4"	1-1/2"	2"	2-1/2"	3"	4"	6"	8"
45° ELBOW	1	1	1	2	2	3	3	4	7	9
90° STANDARD ELBOW	2	2	3	4	5	6	7	10	14	18
90° LONG-TURN ELBOW	1	2	2	2	3	4	7	6	9	13
TEE OR CROSS	4	5	6	8	10	12	15	20	30	35
BUTTERFLY VALVE	-	-	-	-	6	7	10	12	10	12
GATE VALVE	-	-	-	-	1	1	1	2	3	4
VANE TYPE FLOW SWITCH	-	6	9	10	14	17	22	30	16	22
SWING CHECK	-	5	7	9	11	14	16	22	32	45

TABLE IS TAKEN FROM NFPA13-19 SECTION 27.2.3.1.1.

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SHEET TITLE

FIRE PROTECTION DETAILS

SHEET #

FP-302

SCALE	AS NOTED
DATE	10-21-2026

DRAWING SIZE: 30 X 42

PLUMBING GENERAL NOTES

A COORDINATE THE LOCATION OF DRAINS, THERMOSTATS, GAS OUTLETS, ETC., WITH ALL CASEWORK EQUIPMENT, MECHANICAL ROOM EQUIPMENT, ETC., PRIOR TO COMMENCING INSTALLATION. WORK NOT SO COORDINATED SHALL BE REMOVED AND PROPERLY INSTALLED AT THE EXPENSE OF THE CONTRACTOR.

B THE CONTRACTOR SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO ENSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE. FOR SAFETY PURPOSES, PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL LINES. VERIFY THE LOCATION, SIZE, TYPE, ETC., OF EACH UNDERGROUND OR OVERHEAD UTILITY. ALL WORK SHALL BE PERFORMED IN ACCORD WITH ALL FEDERAL, STATE AND/OR LOCAL RULES, REGULATIONS, STANDARD AND SAFETY REQUIREMENTS. UTILITIES SHALL BE INSTALLED IN ACCORD WITH THE APPLICABLE MUNICIPALITY OR UTILITY COMPANY STANDARDS. IN ALL CASES, THE MOST STRINGENT REQUIREMENT SHALL APPLY.

C WHERE WORK IS REQUIRED ABOVE EXISTING LAY-IN, PLASTER OR GYPSUM BOARD CEILINGS, THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVAL AND REINSTALLATION (OR REPLACEMENT, IF DAMAGED) OF ALL CEILING OR TILE AND GRID MEMBERS NECESSARY TO PERFORM HIS WORK. NEW TILE AND GRID SHALL MATCH THE SURROUNDING AREAS. ALL PATCHING WORK SHALL MATCH ADJACENT SURFACES.

D ALL NEW WORK SHALL BE HUNG FROM STRUCTURE, NOT FROM THE WORK OF OTHER TRADES, WHETHER EXISTING OR NEW.

E COORDINATE ALL WORK WITH PROJECT PHASING REQUIREMENTS.

F PATCH, REPAIR AND PAINT OR PROVIDE WALL COVERING FOR (TO OWNER'S STANDARDS) EXISTING WALLS, CEILINGS, ETC., THAT ARE TO REMAIN IF DAMAGED DURING CONSTRUCTION. REPAIRS SHALL MATCH ADJACENT SURFACES TO THE SATISFACTION OF THE ARCHITECT AND OWNER.

G OBSERVE ALL APPLICABLE CODES, RULES AND REGULATIONS THAT MAY APPLY TO THE WORK UNDER THIS CONTRACT. (CITY, COUNTY, LOCAL, FEDERAL, MUNICIPALITY, UTILITY COMPANY, COMMONWEALTH OF PENNSYLVANIA, ETC.)

H CONTRACTOR SHALL BE AWARE OF UNSEEN PLUMBING WORK DURING DEMOLITION. IF ITEMS ARE UNCOVERED DURING DEMOLITION THEN FIELD VERIFY THE USE OF THE ITEMS AND PLAN AN ALTERNATE ROUTE TO RUN THESE ITEMS. THEN CONTACT THE ENGINEERS TO REVIEW THE ROUTING.

I IF AREA OF CONSTRUCTION HAS A POST TENSION FLOOR SLAB, CONTRACTOR SHALL USE ULTRA SOUND OR OTHER APPROVED METHODS TO SURVEY THE EXISTING FLOOR STRUCTURE BEFORE MAKING ANY AND ALL FLOOR PENETRATIONS.

J WHERE FIRE PROOFING IS SPRAYED ON EXISTING STRUCTURE ALL EXISTING CONDUITS, WATER, HYDRONIC, STEAM, CHILLED WATER, FIRE PROTECTION LINES, MED GAS, ETC. SHALL BE LOWERED TO BE BELOW FULL THICKNESS OF FIRE PROOFING WITH NO INTERFERENCE.

K ALL PENETRATIONS OF FIRE AND SMOKE RATED ASSEMBLIES SHALL BE APPROPRIATELY FIRE STOPPED PER AN APPROVED U.L. LISTED STANDARD. CONTRACTOR SHALL PAY PARTICULAR ATTENTION TO INSULATED PIPING PENETRATIONS.

L ALL WORK REQUIRING DOWNTIME OF ANY AREA IN THE BUILDING SHALL BE SCHEDULED 2 WEEKS IN ADVANCE, AND SHALL COMPLY WITH INTERIM LIFE SAFETY MEASURES.

M ALL PIPING IN ROOMS WITH CEILINGS SHALL BE ABOVE CEILING EXCEPT AS NOTED.

N IN ACCORDANCE WITH P.R.S. ALL PLUMBING WORK SHALL BE CONSTRUCTED IN COMPLIANCE WITH PLANS APPROVED BY AND BEARING THE APPROVAL STAMP OF THE PENNSYLVANIA DIVISION OF PLUMBING AND/OR THE DIVISION OF WATER. THE CONTRACTOR SHALL NOT BEGIN WORK UNTIL HE HAS RECEIVED SUCH APPROVED PLANS.

O LOCATIONS OF PIPING AND EQUIPMENT ARE APPROXIMATE AND SUBJECT TO MINOR ADJUSTMENTS IN THE FIELD. DO NOT SCALE THE DRAWINGS.

P ALL OFFSETS IN PIPING ARE NOT NECESSARILY SHOWN. PROVIDE ADDITIONAL OFFSETS WHERE NECESSARY.

Q THE CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY COMPANY FEES OR OTHER COSTS THAT ANY UTILITY COMPANY MAY REQUIRE TO COMPLETE THEIR WORK. (GAS, SEWER, WATER, ETC.)

R INSTALL ALL PIPING AND EQUIPMENT IN STRICT ACCORDANCE WITH MANUFACTURER'S INSTALLATION INSTRUCTION. IF IN CONFLICT WITH THE DESIGN INDICATED IN CONTRACT DOCUMENTS, ADVISE THE ENGINEERS PRIOR TO INSTALLATION FOR CLARIFICATION. PROVIDE RECOMMENDED ACCESS AND SERVICE CLEARANCES FOR ALL EQUIPMENT.

S SEAL AIRTIGHT AROUND ALL DUCTS AND PIPING PENETRATIONS THROUGH WALLS, FLOORS AND ROOF. PROVIDE FIRE STOPPING IN FIRE PARTITION.

T THE CONTRACTOR SHALL RELOCATE OR AVOID ANY EXISTING EQUIPMENT APPURTENANCES, ETC., THAT CONFLICT WITH NEW WORK.

U WHERE MOUNTING HEIGHTS ARE NOT INDICATED OR ARE IN CONFLICT WITH ANY OTHER BUILDING SYSTEM, CONTACT THE ENGINEERS BEFORE INSTALLATION. REFER ALSO TO ARCHITECTURAL WALL INTERIOR AND EXTERIOR WALL ELEVATIONS, CEILING HEIGHTS AND OTHER DETAIL OF THESE DOCUMENTS.

V DOUBLE WIDTH TURNING VANES SHALL BE INSTALLED IN ALL SUPPLY, RETURN, AND EXHAUST DUCTWORK ELBOWS. TURNING VANES NOT REQUIRED FOR KITCHEN EXHAUSTS.

W ANY VIBRATING, OSCILLATING OR OTHER NOISE OR MOTION PRODUCING EQUIPMENT SHALL BE ISOLATED FROM SURROUNDING SYSTEMS IN AN APPROVED MANNER. NOISY OR STRUCTURALLY DAMAGING INSTALLATIONS SHALL BE SATISFACTORILY REPLACED OR REPAIRED AT THE INSTALLING CONTRACTOR'S EXPENSE. THE FINAL DECISION ON THE SUITABILITY OF A PARTICULAR INSTALLATION'S ACCEPTABILITY SHALL BE THAT OF THE ENGINEER.

X DEVIATIONS IN SIZE, CAPACITIES, FIT, FINISH, ETC. FOR EQUIPMENT FROM THAT USED AS BASIS OF DESIGN SHALL BE THE RESPONSIBILITY OF THE PURCHASER OF THAT EQUIPMENT. ANY PROVISIONS REQUIRED TO ACCOMMODATE A DEVIATION, WHETHER APPROVED BY THE ENGINEERS OR NOT, SHALL BE THE RESPONSIBILITY OF THE PURCHASER.

Y VALVES, BALANCING DAMPERS OR ANY MECHANICAL/ELECTRICAL ITEM REQUIRING ACCESS SHALL NOT BE LOCATED ABOVE A HARD CEILING. IF THIS IS NOT POSSIBLE, THEN AN APPROPRIATELY SIZED ACCESS DOOR SHALL BE PLACED UNDER THE ITEM TO ALLOW EASY MAINTENANCE AND ADJUSTMENT. ADDITIONALLY ALL SUCH ITEMS SHALL NOT BE LOCATED AN UNREASONABLE DISTANCE ABOVE THE CEILINGS. IN GENERAL ALL SUCH ITEMS UNLESS INDICATED OTHERWISE SHALL BE MOUNTED SIX TO TWELVE INCHES ABOVE THE CEILING. IF IN DOUBT, CONTACT ENGINEER PRIOR TO INSTALLING.

Z ALL MANHOLES, VAULTS AND SIMILAR UNDERGROUND STRUCTURES SHALL HAVE THE TOP ELEVATION SET FLUSH WITH FINISHED GRADE UNLESS SPECIFICALLY NOTED OTHERWISE.

AA WHEN RUNNING ANY TYPE OF PIPING BELOW A FOOTER, OR IN THE ZONE OF INFLUENCE THE PIPING SHALL BE BACKFILLED WITH CEMENTITIOUS FLOWABLE FILL PER SPECIFICATIONS. WHENEVER POSSIBLE, LOCATE PIPING OUTSIDE OF THE ZONE OF INFLUENCE. THE ZONE OF INFLUENCE IS THE AREA UNDER THE FOOTER WITHIN A 45 DEGREE ANGLE PROJECTING DOWN FROM THE BOTTOM EDGE OF THE FOOTER OF ALL SIDES OF THE FOOTER. ADDITIONALLY, GREASE TRAPS, MANHOLES, VAULTS AND OTHER UNDERGROUND STRUCTURES SHALL BE HELD AWAY FROM BUILDING WALLS FAR ENOUGH TO BE OUTSIDE OF THE ZONE OF INFLUENCE.

AB THE DOCUMENTS COMPLY WITH 2021 IMC, 2021 PBC, AND 2021 IECC.

AC WORK IN CONFINED AREAS SHALL BE IN ACCORDANCE WITH THE OWNER'S SAFETY POLICY REQUIREMENTS.

ABBREVIATIONS

AC	ALTERNATING CURRENT
ADJ	ADJUSTABLE
AFF	ABOVE FINISHED FLOOR
AFR	ABOVE FINISHED ROOF
AFUE	ANNUAL FUEL UTILIZATION EFFICIENCY
AHJ	AUTHORITY HAVING JURISDICTION
AMP	AMPERE (AMP, AMPS)
ANSI	AMERICAN NATIONAL STANDARD INSTITUTE
APD	AIR PRESSURE DROP
ASHRAE	AMERICAN SOCIETY OF HEATING, REFRIGERATION, AND AIR-CONDITIONING ENGINEERS
AVG	AVERAGE
BAS	BUILDING AUTOMATION SYSTEM
BHP	BRAKE HORSEPOWER
BTU	BRITISH THERMAL UNIT
CAP	CAPACITY
CD	CONDENSATE DRAIN
CFM	CUBIC FEET PER MINUTE
C.I.	CAST IRON
CLG	CEILING
CLR	CLEAR
CO	CARBON MONOXIDE
COND	CONDENS (-ER, -ING, -ATION, -ATE)
CONT	CONTINU (-ED, -OUS)
CU FT	CUBIC FEET
CU IN	CUBIC INCHES
CV	VALVE FLOW COEFFICIENT
dB	DECIBEL
DB	DRY BULB
DC	DIRECT CURRENT
DD	DUCT SMOKE DETECTOR
DDC	DIRECT DIGITAL CONTROLS
DEG	DEGREE (-S)
DIA	DIAMETER (-S)
DN	DOWN
DWG	DRAWING
EC	ELECTRICAL CONTRACTOR
ELEV	ELEVA (-TION, -TOR)
ENGR	ENGINEER
EQ	EQUAL
ESP	EXTERNAL STATIC PRESSURE
ETR	EXISTING TO REMAIN
EVAP	EVAPORAT (-E, -ING, -ED, -OR, -ION)
EWT	ENTERING WATER TEMPERATURE
EXP	EXPANSION
EXT	EXTERIOR
FA	FREE AREA

ABBREVIATIONS (CONTINUED)

FL	FLOOR
FLA	FULL LOAD AMPS
FOB	FLAT ON BOTTOM
FOT	FLAT ON TOP
FPC	FIRE PROTECTION CONTRACTOR
FPM	FEET PER MINUTE
FPS	FEET PER SECOND
FT	FEET **OR** FOOT
FUT	FUTURE
FV	FACE VELOCITY
GA	GAGE/GAUGE
GAL	GALLON (-S)
GC	GENERAL CONTRACTOR
GPD	GALLONS PER DAY
GPH	GALLONS PER HOUR
GPM	GALLONS PER MINUTE
GR	GRAINS
H	HUMIDITY
HD	HEAD
HG	MERCURY
HORIZ	HORIZONTAL
HP	H (-ORSEPOWER, -EAT PUMP)
HR	HOUR (-S)
HVAC	HEATING, VENTILATING, & AIR-CONDITIONING
Hz	HERTZ
ID	I (-DENTIFICATION, -NSIDE DIAMETER, -NSIDE DIMENSION)
IN	INCH (-ES)
INSUL	INSULAT (-ED, -ION)
INT	INTER (-IOR, -ERVAL)
IPS	IRON PIPE SIZE
kW	KILOWATT
kWh	KILOWATT HOUR
LBS	POUNDS
LF	LINEAR FEET/FOOT
LRA	LOCKED ROTOR AMPS
LWT	LEAVING WATER TEMPERATURE
MAX	MAXIMUM
MBH	BTU PER HOUR [THOUSANDS]
MCA	MINIMUM CIRCUIT AMPS
MFG	MANUFACTURER
MIN	MIN (-IMUM, -UTE)
MISC	MISCELLANEOUS
MOCP	MAXIMUM OVERCURRENT PROTECTION [AMPS]
MTG	MOUNTING
N/A	NOT APPLICABLE
NC	NOISE CRITERIA **OR** NORMALLY CLOSED
NEBB	NATIONAL ENVIRONMENTAL BALANCING BUREAU
NIC	NOT IN CONTRACT

ABBREVIATIONS (CONTINUED)

NO	NORMALLY OPEN **OR** NUMBER
NTS	NOT TO SCALE
OC	ON CENTER
OD	OUTSIDE DI (-AMETER, -MENSION)
CFCI	CONTRACTOR FURNISHED, CONTRACTOR INSTALLED
OFCI	OWNER FURNISHED, CONTRACTOR INSTALLED
OFOI	OWNER FURNISHED, OWNER INSTALLED
OR	OPEN RECEPTACLE
OZ	OUNCE (-S)
PC	PLUMBING CONTRACTOR
PD	PRESSURE DROP
PH	PHASE [ELECTRICAL]
PLBG	PLUMBING
PPM	PARTS PER MILLION
PRS	PRESSURE REDUCING STATION
PRV	PRESSURE REDUCING VALVE (STEAM, WATER, GAS)
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PSIG	PSI GAUGE
RLA	RUNNING LOAD AMPS
RPM	REVOLUTIONS PER MINUTE
SQ	SQUARE
SQ FT	SQUARE FEET **OR** FOOT
SQ IN	SQUARE INCH **OR** INCHES
TAB	TESTING AND BALANCING
TBD	TO BE DETERMINED
TE	TOP ELEVATION
TEMP	TEMPERATURE
TPA	TRAP PRIMER ADAPTER
TSP	TOTAL STATIC PRESSURE
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
V	VOLT (-AGE, -S)
VAR	VARI (-ABLE, -IES)
VAV	VARIABLE AIR VOLUME
VEL	VELOCITY
VFD	VARIABLE FEQUENCY DRIVE
W	WATT (-AGE, -S)
WB	WET BULB
WBT	WET BULB TEMPERATURE
WPD	WATER PRESSURE DROP
WT	WEIGHT
W/	WITH
W/O	WITHOUT
%	PERCENT
ΔP	DIFFERENTIAL PRESSURE
ΔT	TEMPERATURE DIFFERENCE
℄	CENTERLINE

GENERAL SYMBOLS

#	TAGGED NOTE DESIGNATOR
1	REVISION TRIANGLE
	ROOM TAG
TAG XXX-# / INSTANCE XXXX	EQUIPMENT TAG
XXX / ##	DOMESTIC WATER RISER TAG
XXX / ##	SANITARY, WASTE, & VENT RISER TAG
XXX / ##	FIRE SUPPRESSION RISER TAG
	POINT OF CONNECTION / CONNECT TO EXISTING
	POINT OF DEMOLITION
--D(XXX)--	PIPING TO BE DEMOLISHED - (XXX) DENOTES SYSTEM
—E(XXX)—	EXISTING PIPING - (XXX) DENOTES SYSTEM
—A(XXX)—	ABANDONED IN PLACE PIPING - (XXX) DENOTES SYSTEM

VALVE SYMBOL LEGEND

	TWO-WAY CONTROL VALVE
	THREE-WAY CONTROL VALVE
	AUTOMATIC AIR VENT (AAV)
	MANUAL AIR VENT (MAV)
	MANUAL BALANCING VALVE (BV)
	BALL VALVE
	BUTTERFLY VALVE
	TRIPLE DUTY VALVE (TDV)
	STRAINER
	MANUAL ISOLATION VALVE
	GLOBE VALVE
	OS&Y (GATE) VALVE
	PRESSURE REDUCING VALVE (STEAM, GAS, WATER, ETC.)
	AUTO-FLOW CONTROL VALVE
	CHECK VALVE
	DOUBLE CHECK VALVE ASSEMBLY

PLUMBING PIPING LEGEND

	PIPE ELBOW TURNING UP
	PIPE ELBOW TURNING DOWN
	PIPE TEE; CONNECTION ON TOP
	PIPE TEE; CONNECTION ON BOTTOM
	PIPE CAP
—AVT—	ACID VENT
—AW—	ACID WASTE
—CA—	COMPRESSED AIR
—CAI/E—	COMBUSTION AIR INTAKE/EXHAUST
—CBS/R—	CHILLED BEAM SUPPLY/RETURN
—CD—	CONDENSATE DRAIN
—CO2—	CARBON DIOXIDE
—CST—	CLEAN STEAM PIPING
– – DCW – –	DOMESTIC COLD WATER (DCW)
—DHW— —DHW(#°F)—	DOMESTIC HOT WATER (DHW)
·DHR· —DHR(#°F)—	RECIRCULATED DOMESTIC HOT WATER (DHR)
—HPC—	HIGH PRESSURE STEAM CONDENSATE
—HPS(#)—	HIGH PRESSURE STEAM; (#) DENOTES PRESSURE
—HPS/R—	HEAT PUMP WATER SUPPLY/RETURN
—HRS/R—	HEAT RECOVERY SUPPLY/RETURN PIPING
—HWS/R—	HEATING WATER SUPPLY/RETURN
—LPC—	LOW PRESSURE STEAM CONDENSATE
—LPS(#)—	LOW PRESSURE STEAM; (#) DENOTES PRESSURE
—MPC—	MEDIUM PRESSURE STEAM RETURN
—MPS(#)—	MEDIUM PRESSURE STEAM; (#) DENOTES PRESSURE
—SPD—	STEAM CONDENSATE PUMPED DISCHARGE
—SVT—	STEAM VENT PIPING

PLUMBING SYMBOL LEGEND

	FLEXIBLE PIPE CONNECTION
	FLOW METER (VENTURI)
	PIPING UNION
FS	FLOW SWITCH
PS	PRESSURE SWTICH
TS	TAMPER SWITCH
	THERMOMETER
	PETE'S PLUG; TEMPERATURE/PRESSURE PORT

PLUMBING HAZARDOUS MATERIALS NOTES

A THE CONTRACTOR IT IS HEREBY ADVISED THAT IS POSSIBLE THAT ASBESTOS AND/OR OTHER HAZARDOUS MATERIALS ARE OR WERE PRESENT IN THIS BUILDING(S). ANY WORKER, OCCUPANT, VISITOR, ETC., WHO ENCOUNTERS ANY MATERIAL OF WHOSE CONTENT THEY ARE NOT CERTAIN SHALL PROMPTLY REPORT THE EXISTENCE AND LOCATION OF THAT MATERIAL TO THE OWNER. FURTHERMORE, THE CONTRACTOR SHALL INSURE THAT NO ONE COMES NEAR TO OR IN CONTACT WITH ANY SUCH MATERIAL OR FUMES THEREFROM UNTIL ITS CONTENT CAN BE ASCERTAINED TO BE NON-HAZARDOUS.

B CMTA, INC. HAS NO EXPERTISE IN THE DETERMINATION OF THE PRESENCE OF ANY HAZARDOUS MATERIAL. THEREFORE, NO ATTEMPT HAS BEEN MADE BY CMTA TO IDENTIFY THE EXISTENCE OR LOCATION OF ANY SUCH HAZARDOUS MATERIAL. FURTHERMORE, CMTA NOR ANY AFFILIATE HEREOF WILL NOT OFFER OR MAKE ANY RECOMMENDATIONS RELATIVE TO THE REMOVAL, HANDLING OR DISPOSAL OF SUCH MATERIAL.

C IF THE WORK WHICH IS TO BE PERFORMED INTERFACES, CONNECTS OR RELATES IN ANY PHYSICAL WAY WITH OR TO EXISTING COMPONENTS WHICH CONTAIN OR BEAR ANY HAZARDOUS MATERIAL, ASBESTOS BEING ONE, THEN IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO CONTACT THE OWNER AND SO ADVISE HIM IMMEDIATELY.

D THE CONTRACTOR BY EXECUTION OF THE CONTRACT FOR ANY WORK AND/OR BY THE ACCOMPLISHMENT OF ANY WORK THEREBY AGREE TO BRING NO CLAIM RELATIVE TO HAZARDOUS MATERIALS FOR NEGLIGENCE, BREACH OF CONTRACT, INDEMNITY, OR ANY OTHER SUCH ITEM AGAINST CMTA, ITS PRINCIPALS, EMPLOYEES, AGENTS OR CONSULTANTS. ALSO, THE CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD CMTA, ITS PRINCIPALS, EMPLOYEES, AGENTS AND CONSULTANTS HARMLESS FROM ANY SUCH RELATED CLAIMS WHICH MAY BE BROUGHT BY ANY SUBCONTRACTORS, SUPPLIERS OR ANY OTHER THIRD PARTIES.

E THE CONTRACTOR IS DIRECTED TO THE SPECIFICATIONS FOR FURTHER INFORMATION.

PLUMBING DEMOLITION NOTES

A THE CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS FOR AREAS IN WHICH THE CEILING IS REMAINING. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THE EXISTING CEILING AS REQUIRED AND REINSTALLATION. TEMPORARILY SUPPORT LIGHTS, DIFFUSERS, CEILING ETC. REPLACE BROKEN CEILING TILES WITH NEW AT NO ADDITIONAL COST TO OWNER. FIELED VERIFY EXACT REQUIREMENTS.

B DURING SPRINKLER SYSTEM OUTAGES THE CONTRACTORS SHALL PROVIDE FIRE WATCH OF AREAS WITH OUTAGES.

C ALL WALLS AND FLOOR SLABS SHALL BE REPAIRED TO MATCH EXISTING AND TO A LIKE NEW CONDITION. ALL RATED WALLS AND FLOOR SLABS SHALL BE PATCHED AND REPAIRED TO MAINTAIN RATING.

D ALL EXISTING BUILDING FINISHES SHALL BE PROTECTED DURING THE DEMOLITION PHASE.

E HEAVY DASHED LINES INDICATE ITEMS FOR REMOVAL (UON) AND LIGHT SOLID LINES INDICATE EXISTING ITEMS TO REMAIN.

F COORDINATE DISPOSAL OF ALL FIXTURES, DEVICES, ETC. (INDICATED FOR DEMOLITION) WITH THE OWNER.

G ALL OUTAGES SHALL BE SCHEDULED THROUGH THE OWNER'S PROJECT REPRESENTATIVE FOR PROPER COORDINATION. A REQUEST FOR AN OUTAGE SHALL BE SUBMITTED IN WRITING A MINIMUM OF TWO WEEKS IN ADVANCE.

H ALL DUCTWORK, PIPING, CONDUIT, ETC. SHALL BE INSTALLED A MINIMUM OF 4" ABOVE THE TOP OF THE CEILING GRID.

PLUMBING PHASING NOTES

A THIS PROJECT INTERFACES EXTENSIVELY WITH EXISTING BUILDING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE AND PHASE ALL TIE-INS AND INTERRUPTIONS OF EXISTING SERVICES TO MINIMIZE OR ELIMINATE DOWNTIME. AS AN EXAMPLE, MAIN GAS SERVICE, WATER SERVICE, ELECTRICAL SERVICE, HVAC SERVICES, STEAM GENERATION, ETC., WILL BE AFFECTED AND REPLACED OR MOVED DURING THIS PROJECT. THE CONTRACTOR SHALL INSTALL ALL NEW SERVICES AND EQUIPMENT AND HAVE THEM TESTED AND FULLY AND RELIABLY FUNCTIONAL PRIOR TO INTERRUPTING, RELOCATING OR REMOVING ANY EXISTING SERVICES. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO BARE ANY AND ALL COSTS ASSOCIATED WITH THIS PHASING, INCLUDING TEMPORARY SERVICES, TEMPORARY RELOCATION, PREMIUM TIME WORK, ETC. CONTRACTOR SHALL COORDINATE ALL SAID WORK WITH THE OWNER AND APPLICABLE UTILITIES PER THE CONTRACT DOCUMENTS.

APPLICABLE BUILDING CODES

APPLICABLE BUILDING CODES	DOCUMENT	YEAR
ACCESSIBLE AND USEABLE BUILDINGS AND FACILITIES	ANSI A117.1	2009
FIRE SPRINKLER CODE	NFPA 13	2019
INTERNATIONAL BUILDING CODE (IBC)	STATE EDITION	2021
INTERNATIONAL ENERGY CONSERVATION CODE (IECC)	STATE EDITION	2021
INTERNATIONAL FIRE CODE (IFC)	STATE EDITION	2021
INTERNATIONAL FUEL GAS CODE (IFGC)	STATE EDITION	2021
INTERNATIONAL MECHANICAL CODE (IMC)	STATE EDITION	2021
INTERNATIONAL PLUMBING CODE (IPC)	STATE EDITION	2021
INTERNATIONAL EXISTING BUILDING CODE (IEBC)	STATE EDITION	2021
NATIONAL ELECTRIC CODE (NEC)	NFPA 70	2020
NATIONAL FIRE ALARM & SIGNALING CODE	NFPA 72	2019
UNIFORM STATEWIDE BUILDING CODE		2021

Sheet List - Plumbing

SHEET #	SHEET NAME
P-001	PLUMBING LEGEND
P-002	PLUMBING SCHEDULES AND DETAILS
P-003	PLUMBING SCHEDULES AND DETAILS
P-201	UNDERSLAB PLUMBING PLAN - HOME SIDE PAVILION
P-202	UNDERSLAB PLUMBING PLAN - VISITORS SIDE PAVILION
P-301	PLUMBING PLAN - HOME SIDE PAVILION
P-302	PLUMBING PLAN - VISITORS SIDE PAVILION
P-303	PLUMBING PLAN - ROOF PLAN
P-400	SANITARY AND VENT RISER

STAMP

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REVISIONS	
SD SET	01/30/2026
DD SET	07/13/2026
75% CD SET	09/11/2026
90% CD SET	10/01/2026
BID SET	10/09/2026
DRAWN BY	JAH
REVIEWED BY	CMR
JOB #	2665

SHEET TITLE

PLUMBING LEGEND

SHEET #

P-001

SCALE	AS NOTED
DATE	10-21-2026

DRAWING SIZE: 30 X 42

WATER HEATER SCHEDULE - ELECTRIC

MARK	MANUFACTURER	MODEL #	SERVICE	STORAGE (GAL)	RECOVERY @ 100°F RISE (GPH)	KW	VOLTAGE	PHASE	REMARKS
WH-1	AO SMITH	DRE-52-9	FACILITIES DEPARTMENT BUILDING	50.00	37.0	9	460 V	3	ALL

REMARKS:
1. PROVIDE WITH SINGLE POINT ELECTRICAL POWER AND DISCONNECT.
2. PROVIDE DRAIN PAN FOR UNIT.
3. PROVIDE ISOLATION VALVE FOR DRAIN.

POINT OF USE ELECTRIC WATER HEATER SCHEDULE

MARK	MANUFACTURER	MODEL #	SERVICE	STORAGE (GAL)	GPH @ 80°F RISE	KW	VOLTAGE	PHASE	REMARKS
EWH-2	AO SMITH	UPVA-55E	HOME SIDE CONCESSION AND WOMEN'S RESTROOM	0.00	23.4	5.5	208 V	1	ALL
EWH-3	AO SMITH	UPVA-35K	HOME SIDE MEN'S RESTROOMS	0.00	14.4	3.5	208 V	1	ALL
EWH-4	AO SMITH	UPVA-24K	VISITOR SIDE CONCESSIONS	0.00	10.0	2.4	120 V	1	ALL
EWH-5	AO SMITH	UPVA-35K	VISITOR SIDE RESTROOMS	0.00	17.4	3.5	208 V	1	ALL

REMARKS:
1. PROVIDE WITH SINGLE POINT ELECTRICAL POWER AND DISCONNECT.
2. PROVIDE ALL NECESSARY MOUNTING HARDWARE.
3. PROVIDE DRAIN PAN FOR UNIT.
4. PROVIDE ISOLATION VALVE FOR DRAIN.

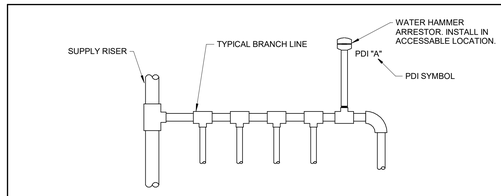
PLUMBING FIXTURE SCHEDULE

TAG	DESCRIPTION	CW	HW	VENT	WASTE/DRAIN
FD-1	FLOOR DRAIN - 6" DIA. : ZURN, ZN-415 OR EQUAL FLOOR DRAIN WITH 6" DIAMETER TOP, TYPE "B" NICKEL BRONZE STRAINER, 4" DRAIN OUTLET AND TRAP PRIMER CONNECTION.	-	-	2"	4"
FPWH	FREEZE-PROOF WALL HYDRANT : ZURN 1300 OR EQUIVALENT, 3/4", ENCASED, FLUSH, NON-FREEZE WALL HYDRANT WITH KEY LOCK AND COMBINATION BACKFLOW PREVENTER/VACUUM BREAKER. MOUNT HYDRANT AT A MINIMUM OF 20" ABOVE FINISHED GRADE. REFER TO MECHANICAL SPECIFICATION FOR ADDITIONAL REQUIREMENTS.	3/4"	-	-	-
HB	HOSE BIBB : ZURN MODEL Z1350 OR EQUAL ENCASED MODERATE CLIMATE WALL HYDRANT FOR NARROW WALL INSTALLATION. WITH ALL BRONZE BODY, ALL BRONZE INTERIOR PARTS, REPLACEABLE SEAT WASHER, LOOSE KEY OPERATED CONTROL VALVE, VACUUM BREAKER AND 3/4" MALE HOSE CONNECTION. ADJUSTABLE STAINLESS STEEL BOX FURNISHED WITH HINGED COVER CYLINDER LOCK AND "WATER" STAMPED ON THE COVER. MOUNTED WITH HOSE CONNECTION AT 18" ABOVE FINISHED FLOOR ELEVATION OF AREA SERVED.	1/2"	-	-	-
P-1	WATER CLOSET - FLOOR MOUNTED - BATTERY SENSOR FLUSH VALVE : VITREOUS CHINA, 15" HIGH ELONGATED BOWL, SIPHON JET, 1-1/2" TOP SPUD INLET, CHINA BOLT CAPS AND WHITE OPEN FRONT PLASTIC SEAT WITH SELF-SUSTAINING CHECK HINGES. PROVIDE WITH A BATTERY POWERED, SIDE MOUNT SENSOR OPERATED 1.6 GPF FLUSH VALVE WITH OVERRIDE BUTTON AND CHROME PLATED HOUSING.	1-1/2"	-	2"	4"
P-1A	WATER CLOSET - FLOOR MOUNTED - BATTERY SENSOR FLUSH VALVE - ADA COMPLIANT : VITREOUS CHINA, 18" HIGH ELONGATED BOWL, SIPHON JET, 1-1/2" TOP SPUD INLET, CHINA BOLT CAPS AND WHITE OPEN FRONT PLASTIC SEAT WITH SELF-SUSTAINING CHECK HINGES. PROVIDE WITH A BATTERY POWERED, SIDE MOUNT SENSOR OPERATED 1.6 GPF FLUSH VALVE WITH OVERRIDE BUTTON AND CHROME PLATED HOUSING. OVERRIDE BUTTON SHALL A MAXIMUM OF 31" AFF.	1-1/2"	-	2"	4"
P-2	LAVATORY - WALL HUNG W/GOOSENECK FAUCET : VITREOUS CHINA, 20" X 18", WALL HUNG LAVATORY WITH 4" FAUCET CENTER CENTERS, CONCEALED ARMS AND A 4" HIGH BACKSLASH. PROVIDE WITH A 8" HIGH CHROME PLATED GOOSENECK FAUCET WITH 4" LONG WRIST BLADE HANDLES, GRID DRAIN, 3/8" ANGLE SUPPLIES WITH STOPS, KENTUCKY CODE P-TRAP, TAILPIECE AND ESCUTCHEONS. MOUNT WITH LAVATORY AT A HEIGHT LEAVING A CLEARANCE OF 29-1/2" FROM THE FLOOR TO THE BOTTOM OF THE APRON AND THE RIM AT 33-7/8" AFF. PROVIDE WITH FLOOR MOUNTED WALL CARRIER.	1/2"	1/2"	2"	2"
P-2A	LAVATORY - WALL HUNG W/GOOSENECK FAUCET - ADA COMPLIANT : VITREOUS CHINA, 20" X 18", WALL HUNG LAVATORY WITH 4" FAUCET CENTER CENTERS, CONCEALED ARMS AND A 4" HIGH BACKSLASH. PROVIDE WITH A 8" HIGH CHROME PLATED GOOSENECK FAUCET WITH 4" LONG WRIST BLADE HANDLES, GRID DRAIN, 3/8" ANGLE SUPPLIES WITH STOPS, PENNSYLVANIA CODE P-TRAP, TAILPIECE AND ESCUTCHEONS. MOUNT WITH LAVATORY AT A HEIGHT LEAVING A CLEARANCE OF 29-1/2" FROM THE FLOOR TO THE BOTTOM OF THE APRON AND THE RIM AT 33-7/8" AFF. PROVIDE ON THE EXPOSED WASTE PIPE AND WATER SUPPLY LINES A TRAP-WRAP INSULATION KIT WITH A VINYL PLASTIC COVERING. PROVIDE WITH FLOOR MOUNTED WALL CARRIER.	1/2"	1/2"	2"	2"
P-3	SHOWER UNIT (42"X38") - ADA COMPLIANT : AQUARIUS MODEL G3682BF ALCOVE ONE-PIECE SHOWER WITH CENTER DRAIN; 42"x38"x82" O.D., 40"X36"X81-1/2" I.D., 5/8" THRESHOLD - BARIER FREE - ADA/ANSI COMPLIANT, ADA COMPLIANT GRAB BAR, CURTAIN ROD AND SHOWER CUTRAIN, AND FOLD UP PHENOLIC SLAT SEAT. WHITE IN COLOR. PROVIDE SYMMON'S MODEL 25-500-B30-V-X-CHKS TEMPTROL 2000 OR EQUAL PRESSURE-BALANCING MIXING VALVE WITH ADJUSTABLE STOP SCREW TO LIMIT HANDLE TURN. SHALL HAVE INTEGRAL VOLUME CONTROL, CLEARFLO SHOWER HEAD WITH ARM AND FLANGE AND PROVIDE WALL/HAND SHOWER, FLEXIBLE METAL HOSE, IN-LINE VACUUM BREAKER, WALL CONNECTION AND FLANGE AND A 30" SLIDE BAR FOR HAND SHOWER MOUNTING. HAND SHOWER SHALL BE CAPABLE OF DISCONNECT FROM SLIDE BAR. PROVIDE CHECK VALVES IN THE HOT AND COLD WATER SUPPLIES.	3/4"	3/4"	2"	2"
P-4	URINAL - BATTERY POWERED SENSOR FLUSH VALVE : VITREOUS CHINA WASHDOWN URINAL WITH 3/4" TOP SPUD INLET AND 2" I.P.S. OUTLET. PROVIDE WITH BATTERY POWERED SIDE MOUNT SENSOR OPERATED 1.0 GPF FLUSH VALVE WITH OVERRIDE BUTTON AND CHROME PLATED HOUSING AND VANDAL RESISTANT OUTLET STRAINER. PROVIDE WITH FLOOR MOUNTED WALL CARRIER. MOUNT WITH LIP AT 24" AFF. BOWL SHALL EXTEND NO FURTHER THAN 16 INCHES OFF THE MOUNTED WALL.	3/4"	-	2"	2"
P-4A	URINAL - BATTERY POWERED SENSOR FLUSH VALVE - ADA COMPLIANT : VITREOUS CHINA WASHDOWN URINAL WITH 3/4" TOP SPUD INLET AND 2" I.P.S. OUTLET. PROVIDE WITH BATTERY POWERED SIDE MOUNT SENSOR OPERATED 1.0 GPF FLUSH VALVE WITH OVERRIDE BUTTON AND CHROME PLATED HOUSING AND VANDAL RESISTANT OUTLET STRAINER. PROVIDE WITH FLOOR MOUNTED WALL CARRIER. MOUNT WITH LIP AT 16" AFF. BOWL SHALL EXTEND NO FURTHER THAN 16 INCHES OFF THE MOUNTED WALL.	3/4"	-	2"	2"
P-5	SINGLE COMPARTMENT SINK - ADA COMPLIANT : SINGLE COMPARTMENT STAINLESS STEEL SINK, 17"X20" O.D., 14"X15" I.D., 6-1/2" DEEP, 18 GAUGE, WITH 8" CENTERS. PROVIDE WITH 8" RIGID SPOUT GOOSENECK FAUCET WITH 4" WRIST BLADE CONTROL HANDLES, REAR CENTERED CRUMB CUP STRAINER DRAIN, 3/8" ANGLE SUPPLIES WITH STOPS, PENNSYLVANIA CODE P-TRAP. TAILPIECE AND ESCUTCHEONS.	1/2	1/2"	2"	2"
P-6	DRINKING FOUNTAIN - ADA COMPLIANT : ELECTRIC WATER COOLER; 7.5 GPH OF 50°F WATER AT 90°F ROOM TEMPERATURE AND 80°F ENTERING WATER; 18 GAUGE STAINLESS STEEL BASIN, 1/5 HP COMPRESSOR, WITH FRONT AND SIDE PUSH BUTTON BAR OPERATOR, WALL MOUNTED WITH BUBBLER 35" AFF. ELKAY MODEL EDFP214FC OR EQUIVALENT.	1/2"	-	2"	2"
P-6A	DRINKING FOUNTAIN WITH BOTTLE FILLER - ADA COMPLIANT - ELKAY LZLMSN-EDFPVM214DK OR EQUIVALENT. AMBIENT, VANDAL RESISTANT. RECEPTOR WITH SANITARY SENSOR ACTIVATION BOTTLE FILLER, BARRIER FREE DRINKING FOUNTAIN, 18 GAUGE STAINLESS STEEL BASIN, WITH FRONT PUSH BUTTON OPERATOR, WALL MOUNTED WITH CARRIER. REFER TO ARCHECHTURAL PLANS FOR MOUNTING HEIGHTS.	1/2"	-	2"	2"
P-6B	ELECTRIC WATER COOLER - BI LEVEL - ADA COMPLIANT : BI-LEVEL BARRIER FREE WATER COOLER WITH SINGLE COMPRESSOR, WATER SUPPLY, DRAIN AND ELECTRICAL CONNECTION. 8.0 GPH OF 50°F WATER AT 90°F AMBIENT AND 80°F INLET WATER, 18.8 GAUGE STAINLESS STEEL BASIN, 1/5 HP COMPRESSOR, 115V/1PH, SURFACE MOUNTED TO THE WALL WITH CHILLER BELOW BOWL AND SIDE AND FRONT PUSH BAR OPERATORS. MOUNT SO THE BOTTOM OF THE LOWER COOLER IS AT 9" MINIMUM AFF WITH A CLEARANCE OF 27" MINIMUM FROM THE BOTTOM OF THE APRON OF THE BOWL TO THE FINISHED FLOOR. THE DIMENSION TO THE CENTERLINE OF THE LOWER COOLER BUBBLER SHALL BE 35". PROVIDE WITH STAINLESS STEEL CANE TOUCH APRON ATTACHED TO THE HI COOLER. ELKAY MODEL LZLMSN-EDFPVM217DK OR EQUIVALENT.	1/2"	-	2"	2"
P-7	MOP BASIN : 24"X24"X10" HIGH MOLDED STONE MOP SERVICE BASIN, IN WHITE DRIFT COLOR, 3" DRAIN, SERVICE FAUCET, HOSE AND HOSE BRACKET, VINYL BUMPERGUARD AND STAINLESS STEEL WALL GUARDS. THE DRAIN SHALL BE LOCATED 12" TO THE CENTER. PROVIDE A CHECK VALVE IN THE HOT AND COLD WATER SUPPLIES.	3/4"	3/4"	2"	3"
P-8	3 STATION LAVATORY SYSTEM : ACORN MERIDIAN MODEL 3713-1-SO-BAT-DMJ-TZ OR EQUAL THREE STATION LAVATORY SYSTEM - ADA COMPLIANT, WALL HUNG WITH RIM AT 31" AFF, WITH STAINLESS STEEL FRONT THREE HOLE TRAPEZOIDAL BASIN OFF-FLOOR, WALL OUTLET WITH SENSOR OPERATED, BATTERY POWERED DECK MOUNTED 'J' SPOUTS. PROVIDE WITH THERMOSTATIC MIXING VALVE ASSEMBLY. PROVIDE WITH CHROME PLATED SUPPLIES, ANGLE STOPS, P-TRAP AND ESCUTCHEONS. 72" MAX. WIDTH.	1/2"	1/2"	2"	2"
P-9	DOUBLE COMPARTMENT SINK W/ GOOSENECK FAUCET : DOUBLE COMPARTMENT STAINLESS STEEL SINK, 20"X33" O.D., 14"X15" I.D., 18 GAUGE, 6-1/2" DEEP, REAR FAUCET LEDGE WITH 8" CENTERS. PROVIDE WITH CHROME PLATED GOOSENECK FAUCET WITH 4" BLADES AND SWING SPOUT. PROVIDE WITH CHROME SUPPLIES, STOPS, TAILPIECE, PENNSYLVANIA CODE P-TRAP, CRUMB CUP STRAINER DRAINS, CONTINUOUS WASTE AND ESCUTCHEONS.	1/2"	1/2"	2"	2"
P-10	SINK : 18 GAUGE 304 STAINLESS STEEL SINK 22"X25" O.D., 20"x20"X 14-1/2" DEEP I.D., REAR FAUCET LEDGE, SINGLE LEVER GOOSENECK RIGID SPOUT FAUCET, AERATOR, CRUMB CUP STRAINER, CHROME SUPPLIES, STOPS, PENNSYLVANIA CODE P-TRAP AND ESCUTCHEONS. PROVIDE WITH MODEL ZURN Z-1180 PLASTER TRAP.	1/2"	1/2"	2"	2"
P-11	WATER SUPPLY WALL BOX : 10"X 8-1/2" RECESSED WATER VALVE BOX, 18 GAUGE STEEL BOX WITH A SINGLE 1/2" WATER SUPPLY INLET, ANGLE STOP AND 1/4" COMPRESSION OUTLET.	1/2"	-	-	-
TD-1	TRENCH DRAIN W/ SANDTRAP : TRENCH DRAINS SHALL BE ECONODRAIN AS MANUFACTURED BY MULTI-DRAIN CORPORATION. GRATING WIDTH SHALL BE 5-1/4" WITH A 3/4" DEPTH. ALL GRATING SHALL BE STAINLESS STEEL. TRENCH WIDTH SHALL BE 4" WITH A DEPTH OF 6" AT THE SHALLOW END WITH A SLOPE OF 1/4" PER FOOT. DRAIN SHALL BE 8 FEET LONG. PROVIDE 4" BOTTOM DRAIN, P-TRAP AND 24"x24" ECONODRAIN CATCH BASIN. REFER TO THE DRAWINGS FOR TOTAL LENGTH OF TRENCH DRAIN. TRENCH DRAINS SHALL BE INSTALLED PER MANUFACTURER'S INSTRUCTIONS AND IN A CODE APPROVED MANNER.	-	-	-	4"
TP-2	TRAP PRIMER TYPE-2 : PRECISIONS PLUMBING PRODUCTS MINI-PRIME OR EQUAL ELECTRONIC TRAP PRIMING MANIFOLD, WITH ATMOSPHERIC VACUUM BREAKER, PRE-SET 24 HOUR CLOCK, MANUAL OVERRIDE SWITCH, 120 VOLT SOLENOID VALVE WITH 120V/3WIRE CONNECTION. PROVIDE IN 12" X 12" X 4" SURFACE MOUNTED METAL CABINET. PROVIDE WITH DISTRIBUTION UNIT. INSTALL UNITED AS REQUIRED BY MANUFACTURER.	3/4"	-	-	-

DOMESTIC HOT WATER RECIRCULATION PUMP SCHEDULE

MARK	MANUFACTURER	MODEL	SERVICE	GPM	PRESS DROP (FT HEAD)	MOTOR HP	VOLTAGE	PHASE	REMARKS
RP-1	BELL & GOSSETT	LR-158WR	DOMESTIC HOT WATER	2	10.00	0.17	120 V	1	ALL

REMARKS:
1. PROVIDE WITH SINGLE POINT ELECTRICAL POWER..
2. BRONZE LEAD FREE BODY FOR POTABLE WATER APPLICATION.
3. PROVIDE WITH AQUASTAT CONTROLLER WITH ADJUSTABLE THERMOSTAT SETTING FOR AUTOMATIC CIRCULATION.



NOTES:

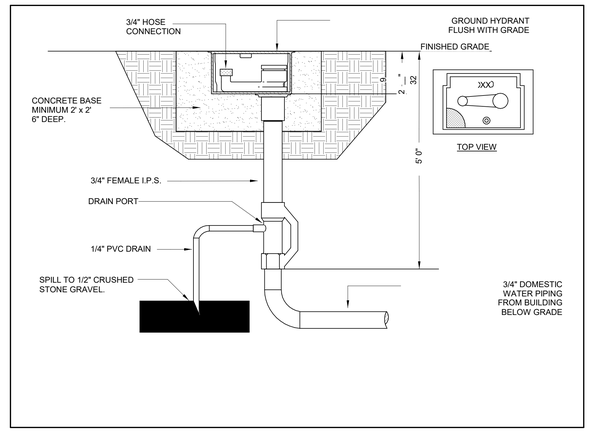
1. PREFERRED INSTALL WATER HAMMER ARRESTORS AT THE END OF BRANCH LINE BETWEEN THE LAST TWO FIXTURES SERVED.

2. ONE WATER HAMMER ARRESTOR PER 20' LINE, AND ANOTHER FOR BRANCHES OVER 20' IN LENGTH.

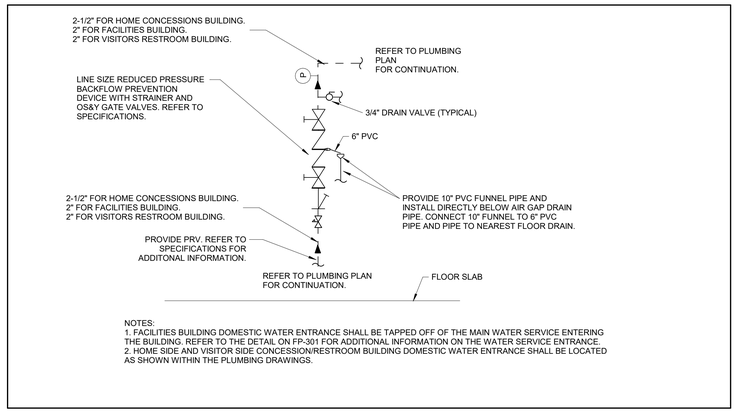
3. THE SUM OF FIXTURE UNIT RATING OF UNITS OVER 20' IN LENGTH SHALL BE EQUAL TO OR GREATER THAN THE DEMAND OF THE RANCHES.

WATER HAMMER ARRESTOR SCHEDULE						
PDI SYMBOL	A	B	C	D	E	F
FIXTURE UNIT RATING	1-11	12-32	33-60	61-113	114-154	155-330

3 WATER HAMMER ARRESTOR INSTALLATION DETAIL
SCALE: NONE

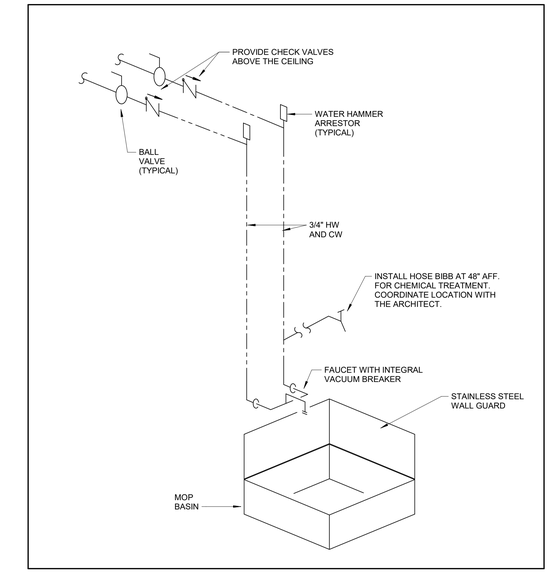


1 FREEZE PROOF GROUND HYDRANT DETAIL
SCALE: NONE

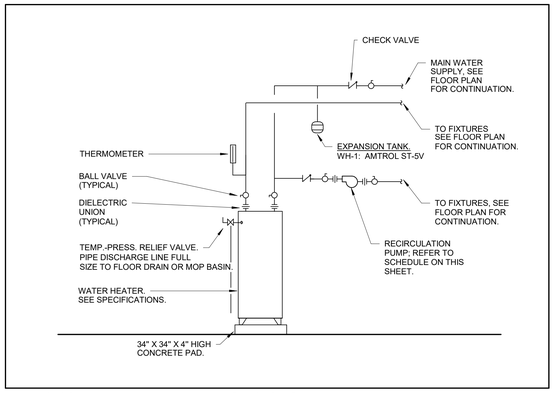


NOTES:
1. FACILITIES BUILDING DOMESTIC WATER ENTRANCE SHALL BE TAPPED OFF OF THE MAIN WATER SERVICE ENTERING THE BUILDING. REFER TO THE DETAIL ON FP-301 FOR ADDITIONAL INFORMATION ON THE WATER SERVICE ENTRANCE.
2. HOME SIDE AND VISITOR SIDE CONCESSION/RESTROOM BUILDING DOMESTIC WATER ENTRANCE SHALL BE LOCATED AS SHOWN WITHIN THE PLUMBING DRAWINGS.

5 DOMESTIC WATER ENTRANCE SCHEMATIC
SCALE: NONE



2 MOP BASIC DETAIL
SCALE: NONE



TYPICAL WATER HEATERS PIPING SCHEMATIC
6 SCALE: NONE

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REVIEWED BY	CMR
JOB #	2665

SHEET TITLE

PLUMBING SCHEDULES AND DETAILS

SHEET #

P-002

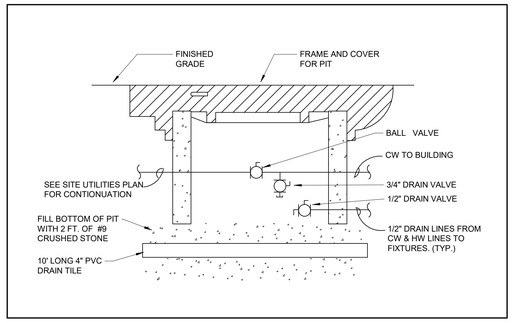
SCALE	AS NOTED
DATE	10-21-2026

DRAWING SIZE: 30 X 42

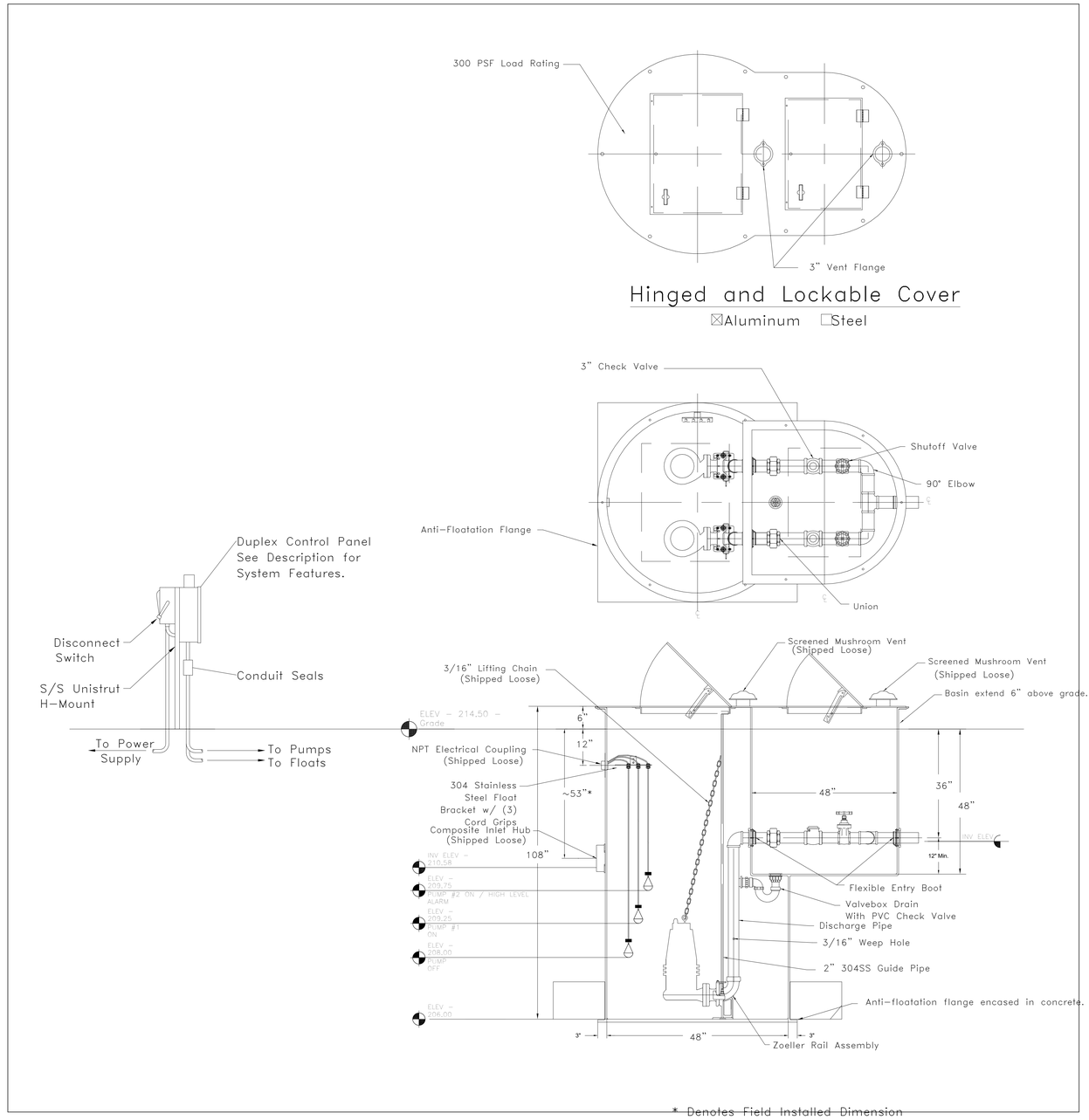
SEWAGE GRINDER PUMP SCHEDULE

MARK	MANUFACTURER	MODEL	TYPE	SERVICE	DIMENSION (IN)		INLET PIPE DIA (IN)	OUTLET PIPE DIA (IN)	GPM	PRESS DROP (FT HEAD)	MOTOR HP	ELECTRICAL			REMARKS
					DIAMETER	HEIGHT						FLA	VOLTAGE	PHASE	
SGP-1	ZOELLER	7110	DUPLEX GRINDER	SANITARY	48	108	6	3	55	17.00	3	17 A	208 V	3	ALL

REMARKS:
1. PROVIDE WITH HIGH WATER ALARM WITH LIGHT AND HORN.



2 DOMESTIC WATER DRAINAGE PIT
SCALE: NONE



1 GRINDER PUMP DETAIL
SCALE: NONE

DRAWING SIZE: 30 X 42

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SHEET TITLE

PLUMBING SCHEDULES AND DETAILS

SHEET #

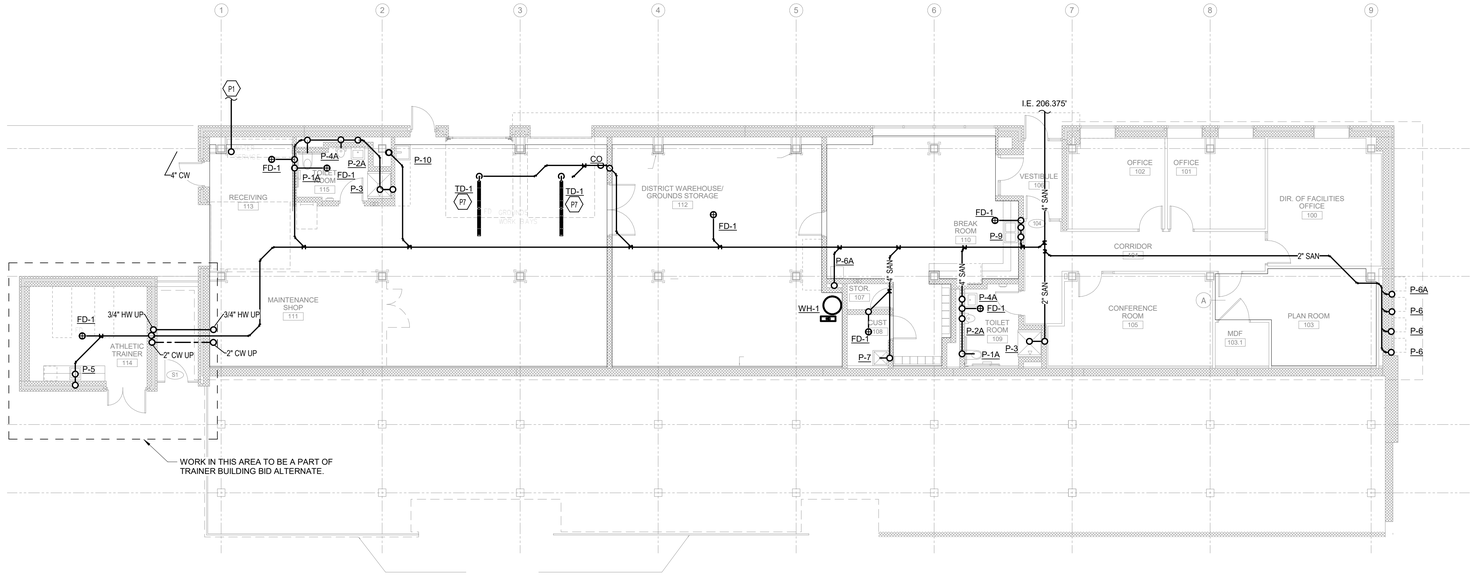
P-003

SCALE	AS NOTED
DATE	10-21-2026

TAGGED NOTES

(##)

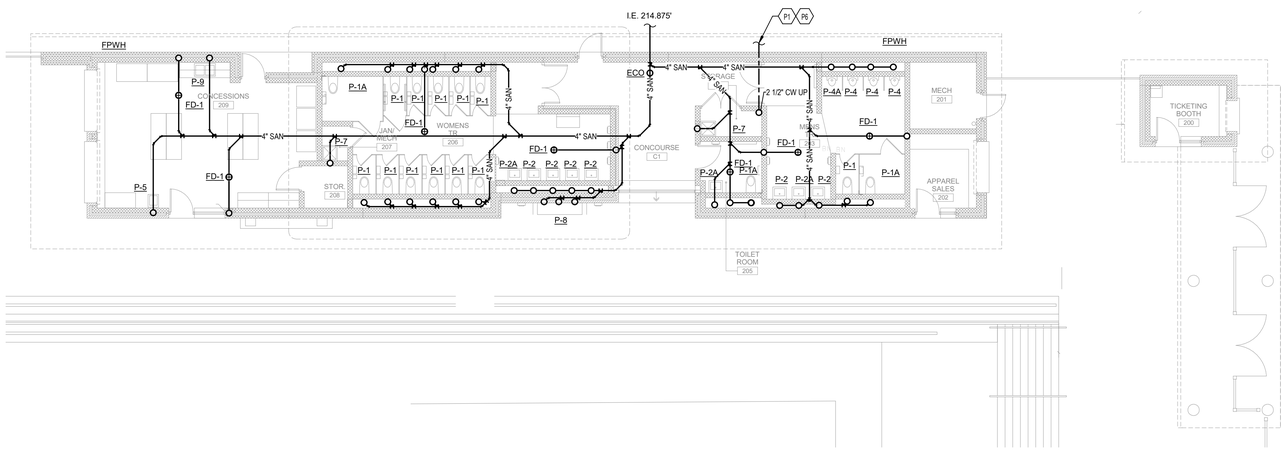
- P1 DOMESTIC WATER ENTRANCE. REFER TO CIVIL PLANS FOR CONTINUATION.
- P2 REFER TO PAGE P-202 FOR CONTINUATION OF FORCE MAIN SYSTEM.
- P3 REFER TO CIVIL SITE UTILITY FOR CONTINUATION OF FORCE MAIN SYSTEM TO 8 INCH SANITARY MAIN.
- P6 CONTRACTOR SHALL INSTALL A DOMESTIC WATER DRAINAGE PIT AT THE DOMESTIC WATER EXIT POINT OF THE BUILDING. REFER TO DETAIL NUMBER 2 ON SHEET P-003 FOR ADDITIONAL INFORMATION AND REQUIREMENTS.
- P7 PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR POURING THEIR OWN FOUNDATION AROUND THE TRENCH DRAIN. THIS POUR AND CURING SHALL OCCUR PRIOR TO THE GENERAL CONTRACTOR POURING THE REMAINING SLAB. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR EXACT TRENCH DRAIN LOCATION AND SIZING. CONTRACTOR SHALL BE RESPONSIBLE FOR SLOPING THE AREA AROUND THE DRAIN IN ACCORDANCE WITH THE DRAWINGS.



UNDERSLAB PLUMBING PLAN - HOME SIDE
UNDER BLEACHERS

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

0 2' 4' 8' 16' 24' 32'



UNDERSLAB PLUMBING PLAN - HOME SIDE
CONCESSIONS AND RESTROOM BUILDING

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

0 2' 4' 8' 16' 24' 32'



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SHEET TITLE

UNDERSLAB PLUMBING PLAN - HOME SIDE PAVILION

SHEET #

P-201

SCALE	AS NOTED
DATE	10-21-2026

DRAWING SIZE: 30 X 42

TAGGED NOTES

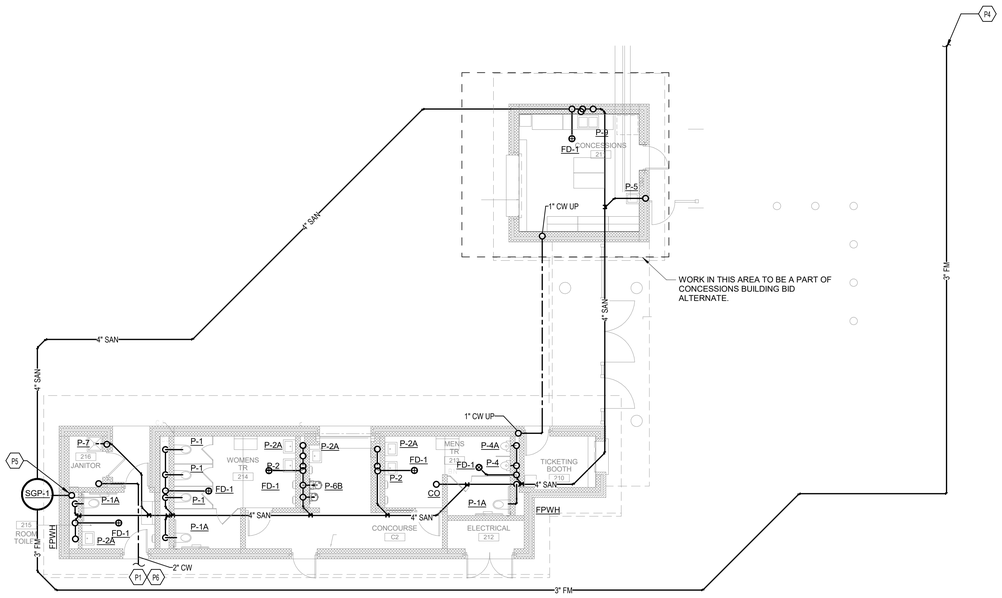
##

P1 DOMESTIC WATER ENTRANCE. REFER TO CIVIL PLANS FOR CONTINUATION.

P4 REFER TO PAGE P-201 FOR CONTINUATION OF FORCE MAIN SYSTEM.

P5 4" WET WELL VENT. VENT SHALL EXTEND THROUGH ROOF AND TERMINATE NOT LESS THAN 15" ABOVE GRADE. TERMINATE PER GRINDER PUMP AND WET WELL MANUFACTURER RECOMMENDATIONS.

P6 CONTRACTOR SHALL INSTALL A DOMESTIC WATER DRAINAGE PIT AT THE DOMESTIC WATER EXIT POINT OF THE BUILDING. REFER TO DETAIL NUMBER 2 ON SHEET P-003 FOR ADDITIONAL INFORMATION AND REQUIREMENTS.



A3.1

UNDERSLAB PLUMBING PLAN - VISITORS SIDE CONCESSIONS AND BLEACHERS

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

0 2' 4' 8' 16' 24' 32'

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SHEET TITLE

UNDERSLAB PLUMBING PLAN - VISITORS SIDE PAVILION

SHEET #

P-202

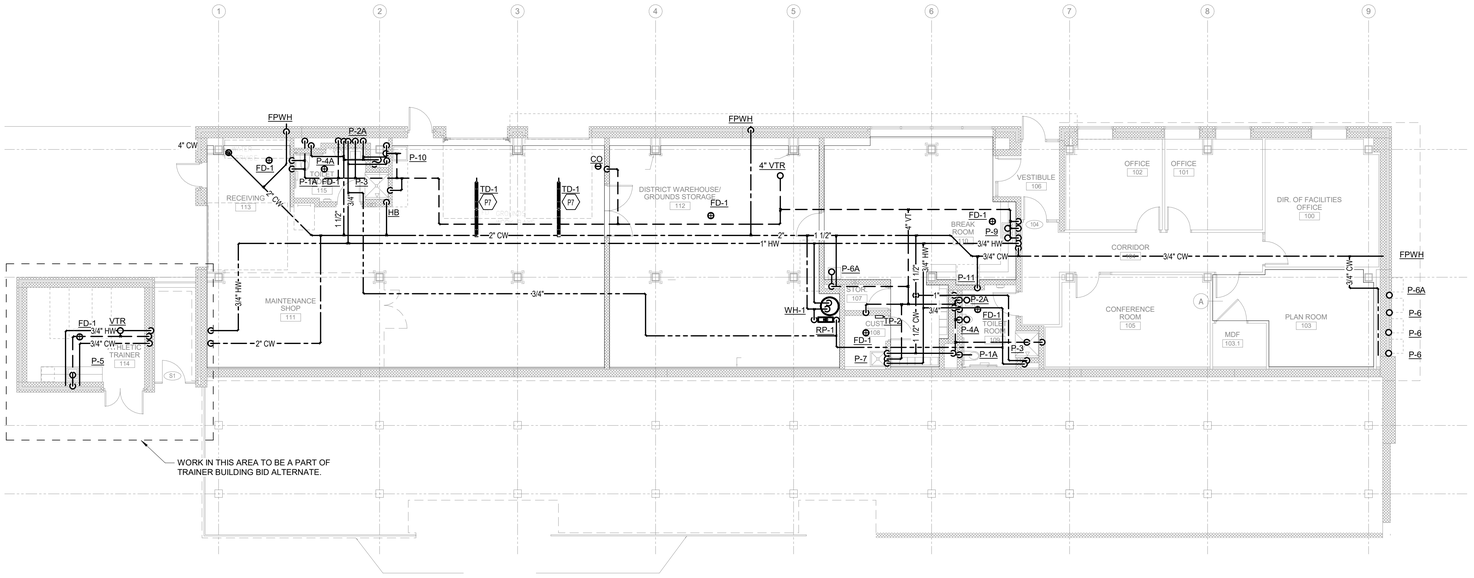
SCALE	AS NOTED
DATE	10-21-2026

DRAWING SIZE: 30 X 42

TAGGED NOTES

(##)

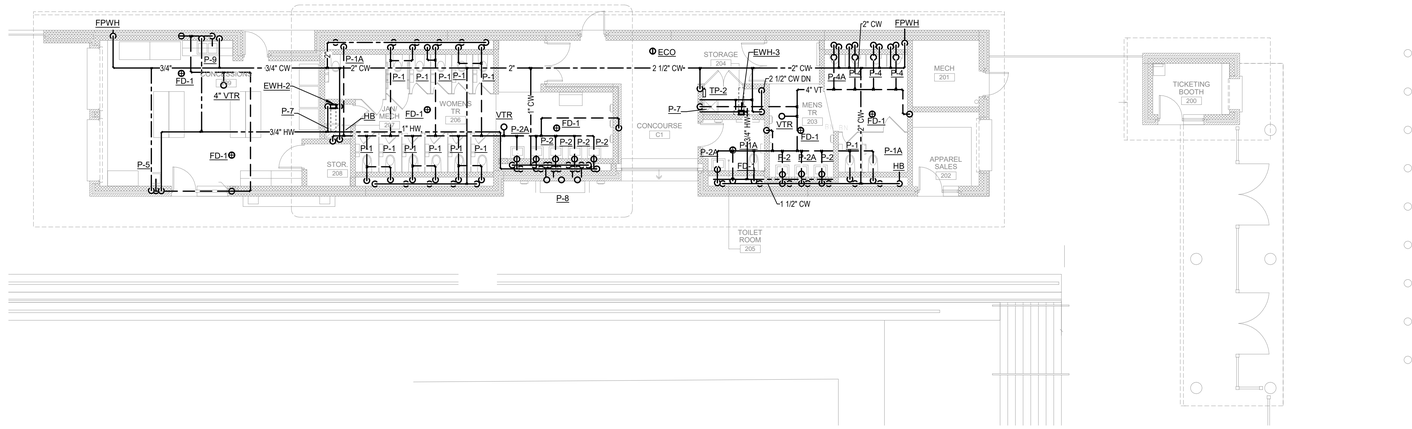
P7 PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR POURING THEIR OWN FOUNDATION AROUND THE TRENCH DRAIN. THIS POUR AND CURING SHALL OCCUR PRIOR TO THE GENERAL CONTRACTOR POURING THE REMAINING SLAB. REFER TO ARCHITECTURAL AND STRUCTURAL DRAWINGS FOR EXACT TRENCH DRAIN LOCATION AND SIZING. CONTRACTOR SHALL BE RESPONSIBLE FOR SLOPING THE AREA AROUND THE DRAIN IN ACCORDANCE WITH THE DRAWINGS.



PLUMBING PLAN - HOME SIDE UNDER BLEACHERS

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

0 2' 4' 8' 16' 24' 32'



PLUMBING PLAN - HOME SIDE CONCESSIONS AND RESTROOM BUILDING

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

0 2' 4' 8' 16' 24' 32'

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SHEET TITLE

PLUMBING PLAN - HOME SIDE PAVILION

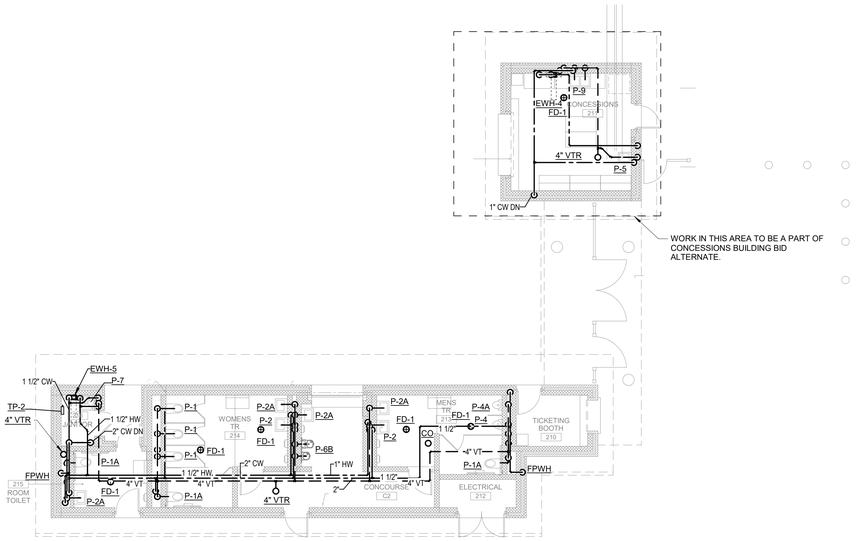
SHEET #

P-301

SCALE	AS NOTED
DATE	10-21-2026

DRAWING SIZE: 30 X 42

TAGGED NOTES



PLUMBING PLAN - VISITORS SIDE CONCESSIONS AND BLEACHERS

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

0 2' 4' 8' 16' 24' 32'

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SHEET TITLE

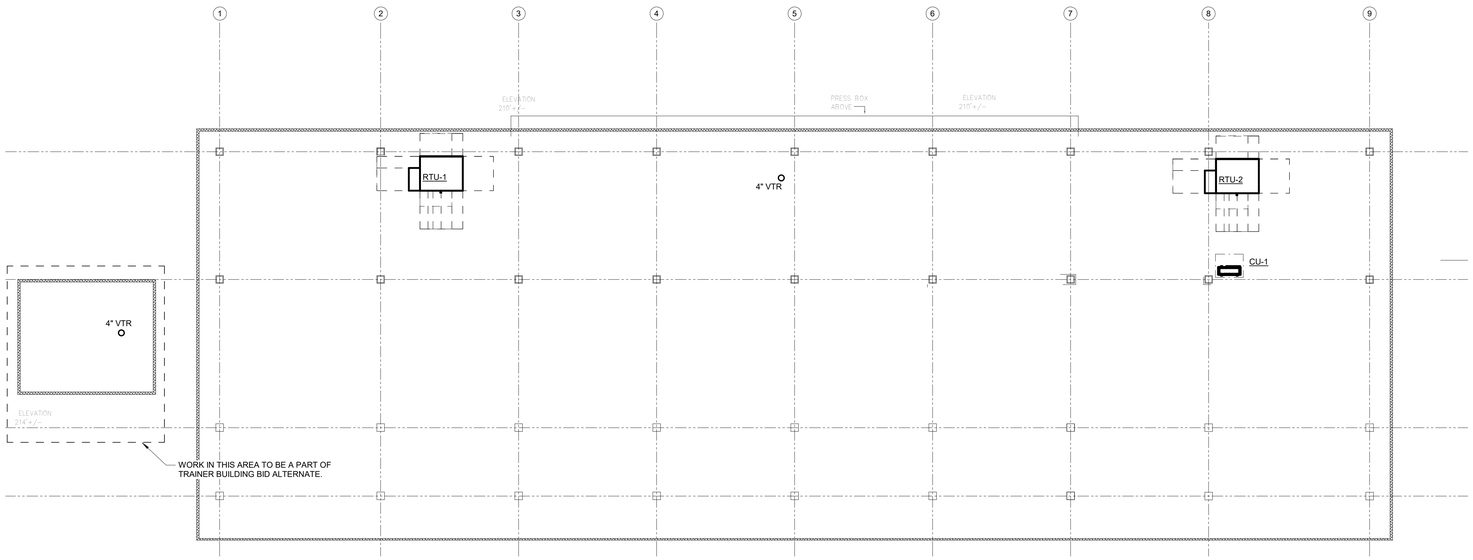
PLUMBING PLAN - VISITORS SIDE PAVILION

SHEET #

P-302

SCALE	AS NOTED
DATE	10-21-2026

DRAWING SIZE: 30 X 42



PLUMBING PLAN - HOME SIDE UNDER BLEACHERS ROOF PLAN

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

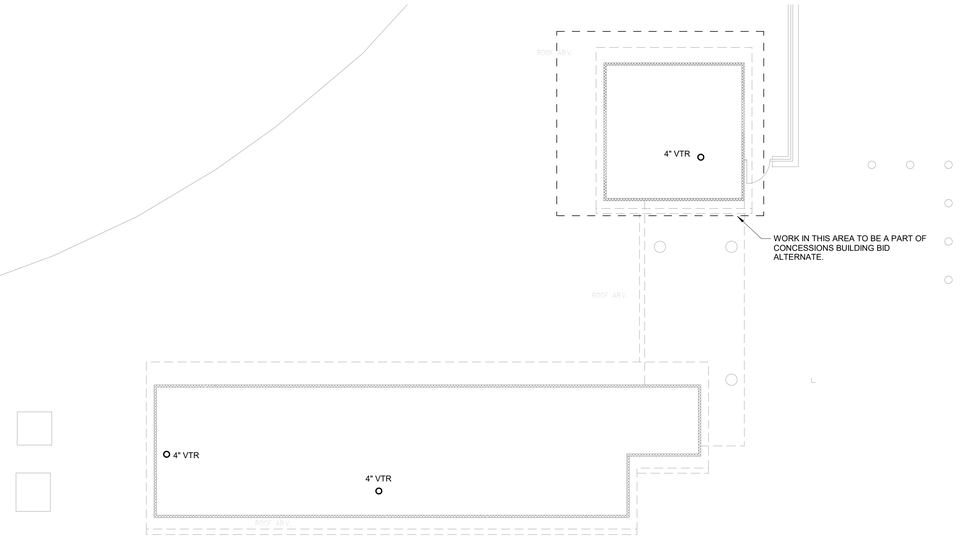
0 2' 4' 8' 16' 24' 32'



PLUMBING PLAN - HOME SIDE CONCESSIONS AND RESTROOM BUILDING ROOF PLAN

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

0 2' 4' 8' 16' 24' 32'



PLUMBING PLAN - VISITING SIDE CONCESSIONS AND RESTROOM BUILDING ROOF PLAN

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

0 2' 4' 8' 16' 24' 32'

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REGISTERED PROFESSIONAL
NICHOLAS FORD ROMEO
ENGINEER
No. PE059169

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SHEET TITLE

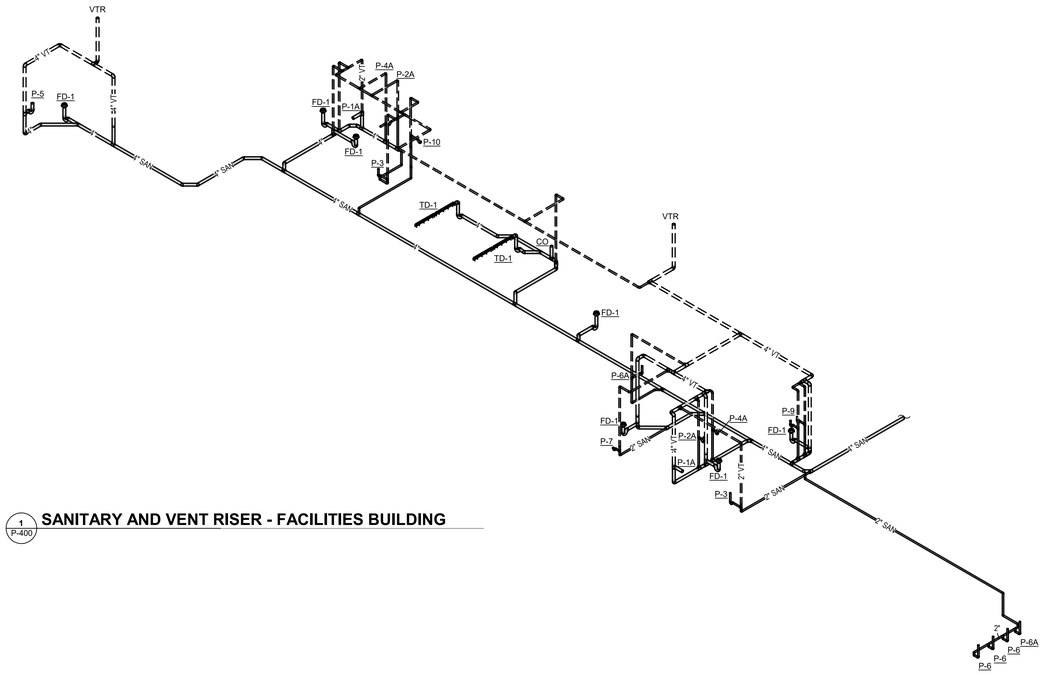
PLUMBING PLAN - ROOF PLAN

SHEET #

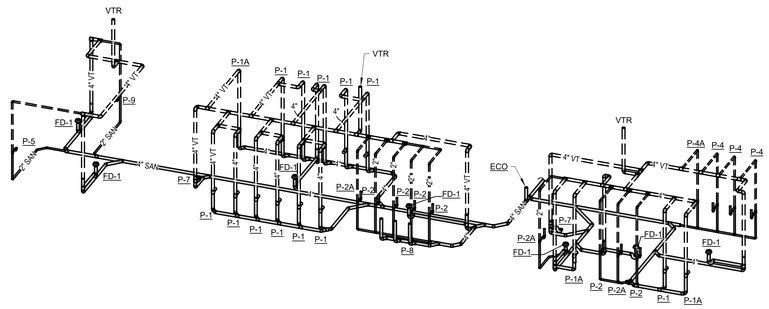
P-303

SCALE	AS NOTED
DATE	10-21-2026

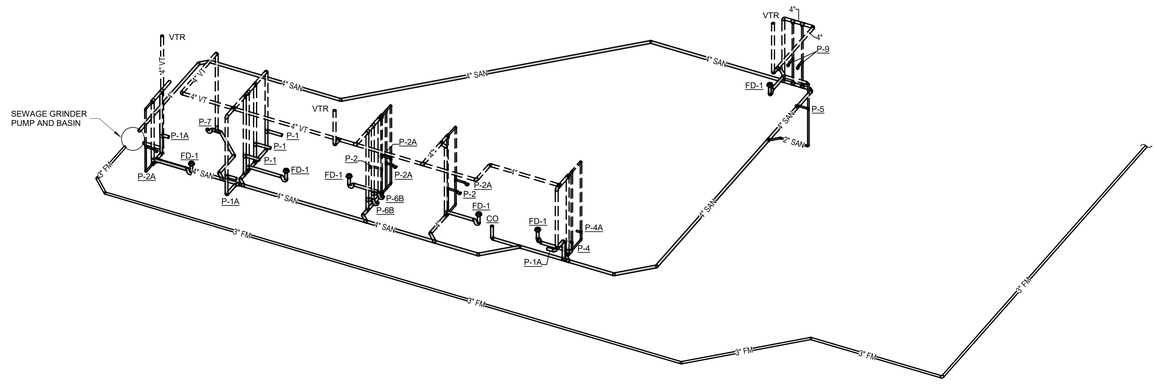
DRAWING SIZE: 30 X 42



1 P-400 **SANITARY AND VENT RISER - FACILITIES BUILDING**



2 P-400 **SANITARY AND VENT RISER - HOME SIDE CONCESSIONS AND RESTROOMS**



3 P-400 **SANITARY AND VENT RISER - VISITOR SIDE CONCESSIONS AND RESTROOMS**

STAMP

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REVISIONS	
SD SET	01/30/2026
DD SET	07/13/2026
75% CD SET	09/11/2026
90% CD SET	10/01/2026
BID SET	10/09/2026

DRAWN BY	JAH
REVIEWED BY	CMR
JOB #	2665

SHEET TITLE

SANITARY AND VENT RISER

SHEET #

P-400

SCALE	AS NOTED
DATE	10-21-2026

DRAWING SIZE: 30 X 42

DESCRIPTION	MOUNTING HEIGHT	SYMBOL
LIGHTING CONTROLS		
LIGHT SWITCH: LOW VOLTAGE (WHEN PRESENT, # INDICATES QUANTITY OF CHANNELS)	46"	$ #
LOW VOLTAGE DIMMER SWITCH (WHEN PRESENT, # INDICATES QUANTITY OF CHANNELS)	46"	$ D#
LINE VOLTAGE SWITCH	46"	$ LV
LINE VOLTAGE THREE-WAY, FOUR-WAY SWITCH	46"	$ LV3 $ LV4
LINE VOLTAGE THREE-WAY, FOUR-WAY DIMMER SWITCH	46"	$ LV3D $ LV4D
KEYED SWITCH	46"	$ K
OCCUPANCY OR VACANCY SENSOR SWITCH	46"	$ OS $ VS
OCCUPANCY OR VACANCY SENSOR SWITCH WITH DIMMING	46"	$ DOS
LIGHT SWITCH FOR UNDER-CABINET LIGHTS	46"	$ U
OCCUPANCY OR VACANCY SENSOR, CEILING MOUNT	CLG	OS VS
OCCUPANCY SENSOR, CORNER MOUNT	CLG	OS
DAYLIGHT SENSOR	AS NOTED	DS
PHOTOCELL	AS NOTED	PC
LIGHTING RELAY	AS NOTED	LR
EMERGENCY AUTOMATIC TRANSFER SWITCH FOR LIGHTING CONTROLS (REFER TO DETAIL)	CLG	ES
POWER OUTLETS		
ALL RECEPTACLES IN PROJECT ARE TO BE TAMPER RESISTANT TYPE UNLESS NOTED OTHERWISE ON PLANS		
SIMPLEX RECEPTACLE (WHERE PRESENT, TEXT INDICATES RECEPTACLE TYPE)	1'-6"	
DUPLEX RECEPTACLE	1'-6"	
SLASH THROUGH ANY DEVICE INDICATES MOUNTING ABOVE COUNTERTOP 4" ABOVE BACKSPLASH (WHERE PRESENT, TEXT INDICATES RECEPTACLE TYPE)		
'G' INDICATES INTEGRAL GROUND FAULT PROTECTION (GFCI)	1'-6"	
DEAD FRONT GFCI DEVICE, LABEL AND INSTALL IN READILY ACCESSIBLE LOCATION		
DUPLEX RECEPTACLE WITH TWO INTEGRAL USB CHARGING PORTS	1'-6"	
DUPLEX RECEPTACLE. CEILING MOUNTED	CLG	
QUADRUPLEX RECEPTACLE	1'-6"	
JUNCTION BOX, CEILING OR WALL		
VOLTAGE/2 POLE RECEPTACLE, TEXT INDICATES NEMA TYPE	1'-6"	
VOLTAGE/3 POLE RECEPTACLE, TEXT INDICATES NEMA TYPE	1'-6"	
'T' INDICATES SAFETY TYPE, TAMPER RESISTANT OUTLET(S)		
GROUND FAULT PROTECTED DUPLEX WITH WEATHER-PROOF "WHILE IN USE" TYPE DIE-CAST METAL COVERPLATE WITH LOCKABLE ENCLOSURE AT OUTLET - SEE SPECIFICATIONS	2'-2"	WP
DUPLEX FOR ELECTRIC WATER COOLER: COORDINATE EXACT LOCATION WITH PLUMBING CONTRACTOR TO CONCEAL OUTLET BEHIND COOLER. PROVIDE READILY ACCESSIBLE GFI DEVICE AT 18" ADJACENT TO WATER COOLER		EWC
BOX ON ANY DEVICE INDICATES SURFACE MOUNTED BACKBOX/WIREMOLD		
CIRCLE ON ANY DEVICE INDICATES DEVICE FED FROM STUB UP CONDUIT		
FIRE ALARM		
MAIN CONTROL PANEL CENTRAL PROCESSING UNIT (CPU)	6'-6" TO TOP	FACP
POWER SUPPLY/CONTROL FOR AUDIO/VISUAL DEVICES	46"	NAC
POST INDICATOR VALVE		PIV
PULL STATION ; DOUBLE ACTION	46" TO LEVER	
AUDIO/VISUAL NOTIFICATION APPLIANCE	WALL, CLG	
AUDIO-ONLY NOTIFICATION APPLIANCE	WALL, CLG	
VISUAL-ONLY NOTIFICATION APPLIANCE	WALL, CLG	
PHOTO-ELECTRIC SMOKE DETECTOR	CLG	SD
HEAT DETECTOR	CLG	HD
CARBON MONOXIDE DUCT DETECTOR	ABOVE CEILING	COD
CARBON MONOXIDE ALARM: SINGLE STATION W/SOUNDER BASE	CLG	CO
CARBON MONOXIDE AUDIO/VISUAL NOTIFICATION APPLIANCE	WALL	CM
DUCT SMOKE DETECTOR	ABV CLG	DD
CONNECTION TO SPRINKLER FLOW SWITCH WITH ADDRESSABLE MODULE		FS
CONNECTION TO SPRINKLER TAMPER SWITCH WITH ADDRESSABLE MODULE		TS
PRESSURE SWITCH		PS
ISOLATION MODULE	WALL	I
ZONE ADDRESSABLE MODULE		Z
H.V.A.C. SMOKE DAMPER CONNECTION		SM
FLUSH MOUNTED REMOTE ALARM INDICATING STATION/TEST SWITCH	7'-6"	RT
FIREMAN'S PHONE JACK	4'-6"	FP
FIREMAN'S KNOX BOX CONNECTION		KB
ADDRESSABLE RELAY MODULE		R
INDICATES VANDAL-PROOF POLYCARBONATE COVER, VANDAL PROOF COVERS SHALL BE UL LISTED FOR USE WITH THE SPECIFIC DEVICE THEY ARE PROTECTING		VR
INDICATES CHIME AUDIBLE NOTIFICATION		CH
DEVICE USED FOR ELEVATOR CONTROL		EL

DESCRIPTION	MOUNTING HEIGHT	SYMBOL
LIGHTING FIXTURES AND EQUIPMENT		
REFER TO LUMINAIRE SCHEDULE FOR EXACT FIXTURE SPECIFICATIONS, MOUNTING HEIGHTS, ETC.		
SURFACE OR SUSPENDED CEILING FIXTURE		
RECESSED CEILING FIXTURE		
POLE MOUNTED AREA LIGHT WITH CONCRETE BASE		
LIGHTED BOLLARD WITH CONCRETE BASE		
EMERGENCY BATTERY WALL-PACK		
WALL MOUNT FIXTURE		
TRACK COMPLETE WITH POWER SUPPLIES AND FIXTURE HEADS		
FLOODLIGHT		
EXIT LIGHT (CEILING, END, WALL MOUNT) WITH OR WITHOUT DIRECTIONAL ARROWS, WITH OR WITHOUT EGRESS HEADS		
STRIP FIXTURE		
CROSS-HATCHING INDICATES LIGHT IS POWERED FROM THE EMERGENCY-CRITICAL BRANCH		
PARALLEL-HATCHING INDICATES LIGHT IS POWERED FROM THE EMERGENCY-LIFE SAFETY BRANCH		
REMOTE LIGHT FIXTURE DRIVER	AS NOTED	RD
REMOTE BATTERY BACKUP	AS NOTED	RB
CENTRAL BATTERY INVERTER	AS NOTED	INV
MISCELLANEOUS		
CONDUIT CONCEALED IN WALLS OR IN CEILING SPACE: ARROW(S) INDICATE(S) HOME RUN & # OF CIRCUITS : HASHMARKS INDICATE # OF CONDUCTORS.		PHASE NEUTRAL GROUND
NON-REVERSING MOTOR STARTER SNAP SWITCH	AS NOTED	$ M
HAND-OFF-AUTO 3-POSTION SWITCH	46"	$ HOA
DISCONNECT SWITCH	5'-0"	
MAGNETIC STARTER	5'-0"	
MAGNETIC COMBINATION STARTER	5'-0"	
VARIABLE FREQUENCY DRIVE	5'-0"	
ENCLOSED FLUSH MTD. CIRCUIT BREAKER	5'-0"	
MUSHROOM SWITCH	46"	
PUSHBUTTON STATION WITH 1, 2, OR 3 BUTTONS.	46"	
PANELBOARD, SURFACE OR FLUSH MOUNTED, HATCHING INDICATES EMERGENCY	6'-6" TO TOP	
TRANSFORMER	AS NOTED	
EQUIPMENT HARDWIRE CONNECTION (SEE DETAIL)		
MOTOR CONNECTION, REFER TO EQUIPMENT CONNECTION SCHEDULE		
PLUMBING FIXTURE SOLENOID VALVE/ELECTRIC EYE SENSOR CONNECTION. COORDINATE EXACT CONNECTION REQUIREMENTS WITH MANUFACTURER.		
PLUMBING FIXTURE ELECTRIC EYE TRANSFORMER CONNECTION. TRANSFORMER SHALL BE 120V-24V. MOUNT ABOVE SUSPENDED ACCESSIBLE CEILING IN J-BOX. PROVIDE ADDITIONAL TRANSFORMERS OF SAME TYPE AS/IF REQ'D		
PROVIDE CONNECTION TO HAND DRYER (SEE ARCHITECTURAL SPECIFICATIONS)	VERIFY WITH ARCHITECT	
SURGE PROTECTION DEVICE (SURFACE OR FLUSH MOUNTED)		SPD
CONDUIT UP		
CONDUIT DOWN		
FLEXIBLE CONDUIT		
GROUND BUS BAR ON INSULATED STANDOFFS	2'-0"	
BUS DUCT, AMPERAGES AS NOTED	AS SHOWN	
WIREWAY WITH REMOVABLE COVER (SIZE AS NOTED)	AS SHOWN	
TRENCH DUCT (SIZE AS NOTED)	AS SHOWN	
WIRE BASKET CABLE TRAY, SIZE AS NOTED	AS SHOWN	
LADDER CABLE TRAY, SIZE AS NOTED	AS SHOWN	
SOLID BOTTOM CABLE TRAY. SIZE AS NOTED	AS SHOWN	
J-HOOK PATHWAY		
EQUIPMENT TAG, REFER TO EQUIPMENT SCHEDULE		EQUIP-#
MECHANICAL EQUIPMENT DESIGNATOR (SEE MECH. SCHEDULES)		EQUIP-#
TAGGED NOTE		
REVISION TAG		
KITCHEN EQUIPMENT ID TAG		
TYPICAL ROOM CIRCUITING TAG, PROVIDES PANEL AND CIRCUIT NUMBER FOR TYPICAL CIRCUIT DENOTED BY "(X)" AS SHOWN IN THE REFERENCED LAYOUT.		PNL-CKT# (X)

ABBREVIATIONS	
UNLESS OTHERWISE NOTED	UON
OWNER FURNISHED CONTRACTOR INSTALLED	OFCI
OWNER FURNISHED OWNER INSTALLED	OFOI
CONTRACTOR FURNISHED CONTRACTOR INSTALLED	CFCI
CONTRACTOR FURNISHED OWNER INSTALLED	CFOI
INDICATES EMERGENCY POWER	EM
WIREGUARD - PROVIDE MANUFACTURER'S SPECIFIC GUARD FOR DEVICE NOTED	WG
WEATHERPROOF - NEMA-3R, WET LOCATION LISTED. PROVIDE COVERS, RATINGS, ETC, AS SUITABLE FOR OUTDOORS.	WP
EXPLOSION PROOF - PROVIDE WIRING METHODS, ENCLOSURES, RATINGS, ETC. AS SUITABLE FOR HAZARDOUS LOCATION.	XP
REFRIGERATOR	REF
FREEZER	FRZ
PRINTER	PNT
ICE MAKER	ICE
MICROWAVE	MW
COFFEE MAKER	COF
AUTOMATIC DOOR OPENER	ADO

LINETYPE LEGEND	
	EXISTING
	DEMOLISHED
	NEW

DESCRIPTION	MOUNTING HEIGHT	SYMBOL
SPECIAL OUTLETS		
FLOORBOX, WIREMOLD RFB-4, 2 DATA DROPS AND ONE QUAD OUTLET, WITH PASS-THROUGH FACEPLATE FOR FUTURE AV	FLOOR	FBT
POKE-THRU, AS SCHEDULED	FLOOR	PW
WALLBOX, AS SCHEDULED	WALL	WBX
AUDIO/VISUAL SYSTEM OUTLET WITH DUPLEX RECEPTACLE, REFER TO ASSOCIATED DETAIL FOR ADDITIONAL INFORMATION	1'-6"	AV
COMBINATION POWER AND DATA OUTLET LOCATION, REFER TO ASSOCIATED DETAIL FOR ADDITIONAL INFORMATION	1'-6"	
OVERHEAD PROJECTOR: PROVIDE DUPLEX RECEPTACLE, ONE DATA, HDMI, 3.5mm AUDIO, AND VGA OUTLET ON (3) PLATES	CLG	
SPECIAL VIDEO SYSTEM SIGNAL INPUT		-NA-
POWER POLE AS NOTED		PP
AV SYSTEMS		
PROJECTOR WITH MOUNT (CEILING OR WALL AS INDICATED)	REFER TO DRAWINGS	P
LOCAL SOUND SPEAKER: CEILING	CLG	LS
WIRELESS MICROPHONE ANTENNA	CLG	MA
LOCAL SOUND SPEAKER: WALL	REFER TO SPECS.	LS
MICROPHONE INPUT: # INDICATES NUMBER OF INPUTS (MOUNTING PER DRAWINGS)	1'-6", CLG	M
WIRELESS MICROPHONE ANTENNA, WALL MOUNT	REFER TO SPECS.	MA
AV INPUT (OR OUTPUT) WALL PLATE. REFER TO DRAWINGS AND SPECIFICATIONS FOR TYPE AND QUANTITY OF CONNECTIONS.	1'-6"	AV
BLUETOOTH INPUT MODULE	1'-6"	BT
AV TOUCHSCREEN CONTROL STATION	46"	TP
LOCAL SOUND SYSTEM HEADEND	REFER TO SPECS.	LS

DESCRIPTION	MOUNTING HEIGHT	SYMBOL
SECURITY ACCESS CONTROL		
ALL CONNECTIONS SHOWN UNDER 'SECURITY ACCESS CONTROL BELOW ARE INFRASTRUCTURE ONLY. CONTRACTOR SHALL PROVIDE CONDUIT/ PATHWAYS AS SHOWN ON DETAIL 4, SHEET E-501.		
DOOR POSITION SWITCH	DOOR FRAME	DP
MAGNETIC LOCK(S)	ABV DOOR	ML
ELECTRIC LOCKSET	AT LATCH	EL
DOOR DELAYED EGRESS/ELECTRIFIED PANIC MECHANISM	ABV DOOR	DE
ELECTRIC STRIKE	AT LATCH	ES
DOOR RELEASE PUSH-PLATE / INFRA-RED OPERATOR STATION. PROVIDE ANY ADDITIONAL ROUGH-IN FOR "EMERGENCY RELEASE" OPERATOR STATIONS AS REQUIRED.	46"	RP
DOOR RELEASE KEYSWITCH STATION	6'-0"	KS
DOOR RELEASE KEYPAD STATION	46"	KP
DOOR RELEASE PROXIMITY READER STATION. PROVIDE ANY ADDITIONAL ROUGH-IN FOR "EMERGENCY RELEASE" OPERATOR STATIONS AS REQUIRED.	46"	RP
SAME AS "PR" EXCEPT MULLION MOUNT	46"	RP M
MOTION SENSOR DOOR CONTROL	CLG	MS
PUSH-TO-EXIT BUTTON	46"	PE
REMOTE DOOR RELEASE PUSH-BUTTON	8" ACT	RP
RECESSED JUNCTION BOX	SEE DRAWINGS	JB
ACCESS CONTROL HEADEND	5'-0"	SDC-A
SECURITY CCTV VIDEO SURVEILLANCE		
FOR ALL CCTV CAMERAS, CONTRACTOR SHALL PROVIDE ONE CATEGORY 6 CABLE IN 1" CONDUIT. FOR RECESSED AREAS, TERMINATE IN BISCUIT BOX ABOVE CEILING WITH 20' SPARE CABLING. FOR EXTERIOR CAMERAS, PROVIDE CONDUIT STUB THROUGH WALL WITH 20' SPARE COIL OF CABLING INSIDE BUILDING. FOR EXPOSED AREAS, PROVIDE ALL CABLING IN CONDUIT.	SEE DRAWINGS	
CCTV CAMERA: CEILING MOUNT DOME (TEXT INDICATES TYPE) REFER TO SCHEDULE FOR TYPES	CLG	###
CCTV CAMERA: WALL MOUNT DOME (TEXT INDICATES TYPE) REFER TO SCHEDULE FOR TYPES	WALL	C1
INDICATES EXTERIOR CAMERA RATED FOR CONDITIONS, WET LOCATION LISTED, WITH AUXILLARY HEATER		WP
INDICATES CAMERA WITH PAN/TILT/ZOOM FUNCTION		PTZ
DATA / VOICE		
DATA OUTLET : NUMBER BESIDE OUTLET INDICATES NUMBER OF DATA JACKS. NO NUMBER INDICATES 1 JACK.	1'-6"	2D
VOICE OUTLET : NUMBER BESIDE OUTLET INDICATES NUMBER OF VOICE JACKS. NO NUMBER INDICATES 1 JACK.	1'-6"	
COMBINATION OUTLET : NUMBER BESIDE OUTLET INDICATES NUMBER OF DATA/VOICE JACKS	1'-6"	2D/1V
SLASH THROUGH ANY DEVICE INDICATES MOUNTING ABOVE COUNTERTOP 4" ABOVE BACKSPLASH		
OUTLET (VOICE ONLY) : PAYPHONE TYPE	AS REQ'D.	PAY
DATA RACK: TWO POST. REFER TO COMMUNICATIONS RISERS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.		
DATA RACK: FOUR POST. REFER TO COMMUNICATIONS RISERS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.		
TELECOMMUNICATIONS SYSTEM BACKBOARD. PROVIDE 96"H x 3/4"D FIRE-RETARDENT PLYWOOD BACKBOARD WITH TWO (2) COATS OF NON-CONDUCTIVE, FIRE-RETARDANT LIGHT GRAY PAINT. #3/0 TO GROUND BAR AT MAIN SERVICE SWITCHBOARD, 30-PT GROUND BAR AND A 6'-0", #3 AWG PIGTAIL AT BACKBOARD. INSTALL BOARD AT 2' AFF. (LENGTH OF BOARD AS INDICATED ON FLOOR PLAN)		
WIRELESS ACCESS POINT OUTLET: FOR RECESSED AREAS, TERMINATE IN BISCUIT BOX ABOVE CEILING WITH 20' SPARE CABLING. FOR EXTERIOR LOCATIONS, PROVIDE CONDUIT STUB THROUGH WALL WITH 20' SPARE COIL OF CABLING INSIDE BUILDING. FOR EXPOSED AREAS, PROVIDE ALL CABLING IN CONDUIT.	CEILING WALL	WAP WAP

ELECTRICAL GENERAL NOTES

A EACH CONTRACTOR, PROPOSER, SUPPLIER AND/OR MANUFACTURER SHALL REFER TO ALL DOCUMENTS PERTAINING TO THIS PROJECT AND COORDINATE ACCORDINGLY SO AS TO ENSURE ADEQUACY OF FIT, COMPLIANCE WITH SPECIFICATIONS, PROPER VOLTAGE AND CURRENT CHARACTERISTICS TO AVOID CONFLICT WITH ANY OTHER BUILDINGS SYSTEMS. VERIFY SAME WITH SHOP DRAWINGS.

B ADDITIONAL ELECTRICAL REQUIREMENTS MAY BE SHOWN ON PLANS FROM OTHER DISCIPLINES IN THIS SET. IT IS THE CONTRACTOR 'S RESPONSIBILITY TO REVIEW ALL PLANS AND SPECIFICATIONS FOR A COMPLETE UNDERSTANDING OF THE PROJECT REQUIREMENTS.

C WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITION OF ALL LOCAL, STATE, AND NATIONAL CODES. INCLUDING BUT NOT LIMITED TO NFPA 70 (NEC), NFPA 72, INTERNATIONAL BUILDING CODES, ETC.

D CONTRACTOR SHALL FOLLOW SEISMIC RESTRAINT AND DESIGN REQUIREMENTS CONTAINED IN LATEST ADOPTED STATE AND INTERNATIONAL BUILDING CODES, WITH ALL AMENDMENTS AS ADOPTED BY THE CURRENT LEGISLATION. REFER TO ELECTRICAL AND STRUCTURAL SPECIFICATIONS FOR ADDITIONAL INFORMATION.

E ALL OFFSETS, TURNS, FITTINGS, TRIM, DETAIL, ETC. MAY NOT BE INDICATED, BUT SHALL BE PROVIDED AS REQUIRED. ADDITIONAL ALLOWANCES SHALL BE INCLUDED FOR SAME AT EACH PROPOSER 'S DISCRETION.

F INSTALL NO PIPING, CONDUIT, DUCTWORK, ETC. IN A LOCATION OR IN A MANNER WHICH WILL ALLOW FREEZING OR THE COLLECTION OF CONDENSATION THEREON. IF IN DOUBT, CONTACT THE ENGINEER.

G ADVISE THE ENGINEER OF ANY CONFLICTS, ERRORS, OMISSIONS, ETC. AT LEAST TEN DAYS PRIOR TO BID DATE, TO ALLOW CLARIFICATION BY WRITTEN ADDENDUM.

H WHERE CONFLICTS ARE FOUND BETWEEN DRAWINGS, DETAILS, OR SPECIFICATIONS, THE MORE STRINGENT REQUIREMENT SHALL APPLY. NOTIFY ARCHITECT OF DISCREPANCY IN WRITING.

I DEVIATION FROM SPECIFICATIONS OR PLANS REQUIRES PRIOR WRITTEN APPROVAL FROM THE ENGINEERS AND MUST BE SUBMITTED IN WRITING NO LATER THAN TEN DAYS PRIOR TO THE BID DATE.

J OBSERVE ALL APPLICABLE CODES, RULES AND REGULATIONS THAT MAY APPLY TO THE WORK UNDER THIS CONTRACT. (CITY, COUNTY, LOCAL, STATE, FEDERAL, MUNICIPALITY, UTILITY COMPANY, OSHA, ETC.).

K MOUNTING HEIGHTS FOR WALL MOUNTED DEVICES INDICATED ABOVE FINISHED FLOOR ARE TO CENTER OF DEVICE UON. MOUNTING HEIGHTS TO CEILING SUSPENDED DEVICES ARE TO BOTTOM OF DEVICE UON.

L INSTALL EQUIPMENT, MATERIALS, ETC. IN STRICT ACCORDANCE WITH MANUFACTURER 'S RECOMMENDATIONS AND DIRECTIONS. IF IN CONFLICT WITH THE DESIGN INDICATED IN CONTRACT DOCUMENTS, ADVISE THE ENGINEER PRIOR TO INSTALLATION FOR CLARIFICATION.

M DO NOT RECESS PANELBOARD TUBS OR OTHER FLUSH-MOUNTED EQUIPMENT IN WALLS THAT HAVE A FIRE RATING. NO INSTALLATION SHALL DIMINISH OR VOID FIRE RESISTIVE RATINGS IN ANYWAY.

N THE PURPOSE AND INTENT OF ALL OF THE DOCUMENTS PERTAINING TO THIS PROJECT IS TO PROVIDE A COMPLETE, FUNCTIONAL, SAFE, LIKE-NEW FACILITY. ANYTHING LESS SHALL BE UNACCEPTABLE.

O ALL SYSTEMS, EQUIPMENT AND MATERIALS ARE TO BE INSTALLED IN A NEAT AND WORKMANLIKE MANNER. WORK NOT MEETING THIS CRITERION SHALL BE REMOVED AND REINSTALLED SATISFACTORILY. FINAL DETERMINATION OF THE ACCEPTABILITY OF THE QUALITY OF WORK RESIDES WITH THE ENGINEER

P ALL WORK, MATERIALS, EQUIPMENT, ETC. SHALL BE FULLY GUARANTEED FOR ONE FULL CALENDAR YEAR FROM THE DATE OF SUBSTANTIAL COMPLETION AS DOCUMENTED BY THE ENGINEER, UNLESS LONGER WARRANTY PERIODS FOR EQUIPMENT ARE SPECIFIED.

Q UNLESS OTHERWISE SPECIFIED OR INDICATED, ALL EQUIPMENT AND/OR MATERIALS WITHIN OCCUPIED SPACES OR EXPOSED TO VIEW ON THE BUILDING EXTERIOR SHALL BE PRIMED AND FINISHED SO AS TO COMPLEMENT ADJACENT SURFACE, UNLESS OTHERWISE NOTED. COORDINATE WORK AND COLORS WITH ARCHITECT.

R WHERE PENETRATING ROOFING MEMBRANE OR OTHER MATERIALS USED FOR WEATHERPROOFING THE BUILDING, MAKE SUCH PENETRATION IN A WAY THAT WILL NOT VOID OR DIMINISH THE ROOFING WARRANTY OR INTEGRITY IN ANYWAY. COORDINATE ALL SUCH PENETRATIONS WITH THE ROOFING MANUFACTURER AND ARCHITECT.

S THE CONTRACTOR IS RESPONSIBLE FOR ALL UTILITY COMPANY FEES, CASH CONTRIBUTIONS OR OTHER COSTS THAT THE UTILITY COMPANY MAY REQUIRE TO COMPLETE THEIR WORK. (ELECTRIC, TELEPHONE, TELEVISION, DATA, ETC.).

T COORDINATE WITH ARCHITECTURAL FLOOR PLANS, ELEVATIONS AND CASEWORK DETAILS FOR LOCATION OF ADDITIONAL RECEPTACLES, UTILITY OUTLETS, ELECTRICAL DEVICES, ETC.

U CEILING-MOUNTED ELECTRICAL DEVICES SHALL BE CENTERED IN 2'X2' CEILING TILE AND INSTALLED CENTERED ON 2' DIMENSION OF 2'X4' TILE AND ON CENTERLINE OR A QUARTER POINT ON 4' DIMENSION.

V ANY VIBRATING, OSCILLATING OR OTHER NOISE OR MOTION PRODUCING EQUIPMENT SHALL BE ISOLATED FROM SURROUNDING SYSTEMS IN AN APPROVED MANNER. NOISY OR STRUCTURALLY DAMAGING INSTALLATIONS SHALL BE SATISFACTORILY REPLACED OR REPAIRED AT THE INSTALLING CONTRACTORS' EXPENSE. THE FINAL DECISION ON THE SUITABILITY OF A PARTICULAR INSTALLATIONS ACCEPTABILITY SHALL BE THAT OF THE ENGINEER.

W CHECK ALL THREE PHASE MOTORS WITH A PHASE ROTATION METER, PRIOR TO PLACING IN SERVICE.

X PROVIDE DETAILED SHOP DRAWINGS TO ENGINEER PRIOR TO PURCHASING OR INSTALLING ANY EQUIPMENT

Y DEVIATIONS IN SIZES, CAPACITIES, FIT, FINISH, ETC. FOR EQUIPMENT FROM THAT PRIME SPECIFIED SHALL BE THE RESPONSIBILITY OF THE PURCHASER OF THAT EQUIPMENT. ANY PROVISIONS REQUIRED TO ACCOMMODATE A DEVIATION, WHETHER APPROVED BY THE ENGINEER OR NOT, SHALL BE THE RESPONSIBILITY OF THE PURCHASER.

Z THE CONSTRUCTION MANAGER, GENERAL CONTRACTOR, OR WHOMEVER HOLDS THE PRIME CONTRACT(S) FOR THIS CONSTRUCTION IS RESPONSIBLE FOR THE COORDINATION, APPEARANCE, SCHEDULING AND TIMELINESS OF THE WORK OF ALL TRADES, CONTRACTORS, SUPPLIERS, INSTALLERS, ETC. POOR OR UNTIMELY WORK ON THE PART OF ANY SUBCONTRACTOR SHALL BE RESOLVED BY THE PARTY WHO ENGAGED THEM ON THIS PROJECT.

AA WHERE MOUNTING HEIGHTS ARE NOT INDICATED OR ARE IN CONFLICT WITH ANY OTHER BUILDING SYSTEM, CONTACT THE ENGINEER BEFORE AFFECTING INSTALLATION. REFER ALSO TO ARCHITECTURAL INTERIOR AND EXTERIOR ELEVATIONS, CEILING HEIGHTS AND OTHER DETAILS OF THESE DOCUMENTS, AS APPLICABLE

AB WHERE FIRE-RATED CEILING ASSEMBLIES ARE NOTED, PROVIDE UL-LISTED FIRE-RATED GYPSUM BOARD OR PRE-MANUFACTURED ENCLOSURES ABOVE LUMINAIRES, CEILING DEVICES, ETC. IN OR ON CEILING, AS REQUIRED TO MAINTAIN CEILING RATINGS.

AC COORDINATE THE LOCATION OF DRAINS, ELECTRICAL OUTLETS, GAS OUTLETS, ETC. WITH ALL CASEWORK, KITCHEN EQUIPMENT, MECHANICAL ROOM EQUIPMENT, ETC. PRIOR TO COMMENCING INSTALLATION. WORK NOT SO COORDINATED SHALL BE REMOVED AND PROPERLY INSTALLED AT THE EXPENSE OF THE RESPONSIBLE CONTRACTOR(S).

AD ALL ELECTRICAL COMPONENTS OR EQUIPMENT SHALL BE LISTED AND LABELED BY UNDERWRITER'S LABORATORIES OR OTHER APPROVED LISTING AGENCY. APPROVAL AND LABELING OF INDIVIDUAL COMPONENTS ON AN ASSEMBLY IS NOT ACCEPTABLE AS MEETING THIS REQUIREMENT, UNLESS WAIVED BY THE ENGINEER IN WRITING.

AE ALL WIRING SYSTEMS SHALL BE INSTALLED WITH A MINIMUM OF SPLICES. CONDUCTORS, WHETHER SINGLE OR MULTI-PAIR, SHALL BE INSTALLED CONTINUOUS INSOFAR AS POSSIBLE FROM TERMINAL POINT TO TERMINAL POINT.

AF NO CONDUIT, SUPPORTS, ETC. SHALL BE RUN THROUGH ACCESS CLEARANCES OF EQUIPMENT BY OTHER TRADES (I.E. VAV BOXES). COORDINATE WITH ALL TRADES PRIOR TO CONSTRUCTION.

AG ALL CONTRACTORS SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO ENSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE OR SUBSERVICE FOR SAFETY PURPOSES. PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL LINES. VERIFY THE LOCATION, SIZE, TYPE, ETC. OF EACH UNDERGROUND OR OVERHEAD UTILITY. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL FEDERAL, STATE AND/OR LOCAL RULES, REGULATIONS, STANDARD AND SAFETY REQUIREMENTS. UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE MUNICIPALITY OR UTILITY COMPANY STANDARDS. IN ALL CASES, THE MOST STRINGENT REQUIREMENT SHALL APPLY.

AH ALL SUPPORTS FOR EQUIPMENT, DEVICES OR FIXTURES SHALL BE UNIQUE, DIRECTLY FROM THE BUILDING STRUCTURE. DO NOT SUPPORT WORK FROM OTHER TRADES EQUIPMENT OR SUPPORTS WITHOUT WRITTEN PERMISSION FROM THE ENGINEER AND CONSENT OF THE OTHER TRADE, IN WRITING.

AI WHERE INTERRUPTING AN EXISTING UTILITY OR SERVICE DELIBERATELY OR ACCIDENTALLY, THE RESPONSIBLE CONTRACTOR SHALL WORK CONTINUOUSLY AS NEEDED TO RESTORE SAME, PROVIDING PREMIUM TIME AS NEEDED.

AJ REFER TO ARCHITECTURAL WALL ELEVATIONS (WHERE GIVEN) FOR HEIGHTS AND MOUNTING RELATIONSHIP OF OUTLETS AND EQUIPMENT. IF IN DOUBT, CONTACT ENGINEER FOR DIRECTION PRIOR TO ROUGH IN.

AK FLUSH OR PEDESTAL TYPE FLOOR OUTLETS/BOXES, AS INDICATED ON PLAN, SHALL BE LOCATED BY DIMENSIONS PROVIDED BY THE ARCHITECT, UNLESS OTHERWISE SHOWN ON PLANS. IF IN DOUBT, CONTACT THE ENGINEER PRIOR TO ROUGHING-IN ANY WORK.

AL AS APPLICABLE, REFER TO ARCHITECTURAL PHASING PLANS AND PHASING BOUNDARIES ON THESE DRAWINGS FOR SEQUENCING OF WORK, FULL EXTENT OF AREAS INVOLVED, EXTENT OF CEILING WORK, ETC. PROVIDE TEMPORARY CONNECTIONS FOR CIRCUITS AND WORK AS REQUIRED TO MAINTAIN SEQUENCE OF THE WORK FROM PHASE TO PHASE.

AM THIS CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CUTTING AND PATCHING REQUIRED FOR HIS WORK. ALL CUTTING AND PATCHING SHALL BE IN ACCORDANCE WITH THE ARCHITECT'S STANDARDS FOR SUCH WORK.

AN ALL WORK SHALL BE CONCEALED UNLESS SPECIFICALLY INDICATED TO BE EXPOSED, OR REQUIRED TO BE EXPOSED. IF IN DOUBT, CONTACT THE ENGINEER FOR CLARIFICATIONS PRIOR TO INSTALLING ANY SUCH WORK.

AO INTERRUPTION OF ANY EXISTING SERVICES SHALL BE COORDINATED WITH THE OWNER, GENERAL CONTRACTOR, UTILITY COMPANY AS NECESSARY, AND THE ARCHITECT, AT LEAST TWO WEEKS IN ADVANCE OF ANTICIPATED INTERRUPTION. A SCHEDULE FOR THESE OUTAGES SHALL BE DEVELOPED AND AGREED UPON BETWEEN THE PARTIES MENTIONED TO AVOID UNNECESSARY INCONVENIENCE TO THE OWNER OR ANY AFFECTED PARTY. NOTIFY THE UTILITY COMPANY OF ANY ANTICIPATED SERVICES REQUIRED TWO WEEKS IN ADVANCE, IN WRITING. IF UTILITY COMPANY REQUIRES A LONGER NOTIFICATION PERIOD, SO PROVIDE.

AP WHERE BACKBOXES ARE LOCATED IN THE SAME VERTICAL CHANNEL/STUD SPACE ON OPPOSITE SIDES OF THE SAME WALL, PROVIDE SOUND-INSULATING PUTTY AROUND BOXES AS REQUIRED TO ELIMINATE SOUND TRANSMISSION FROM ROOM TO ROOM.

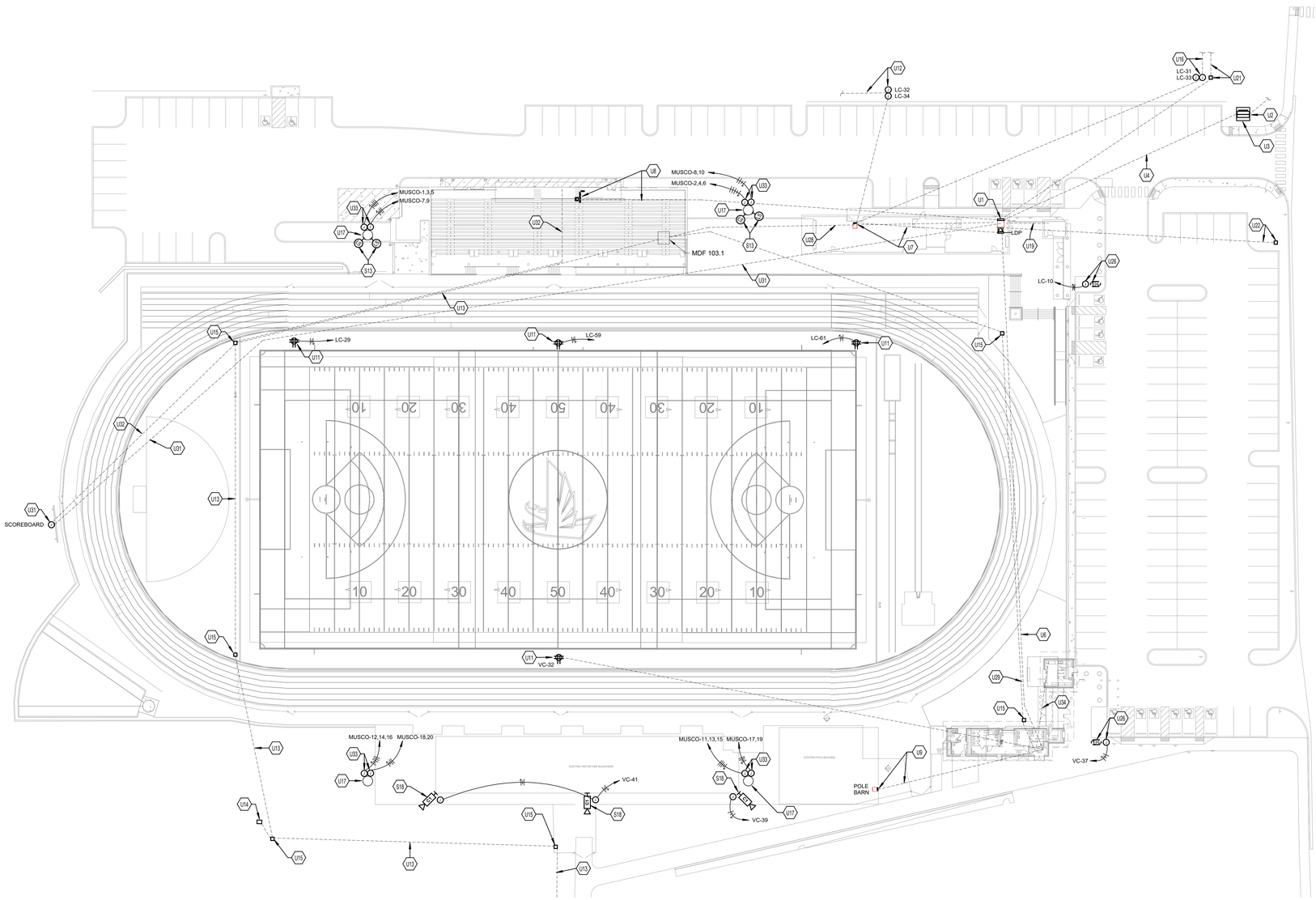
AQ JUNCTION BOXES LOCATED ABOVE ACCESSIBLE CEILINGS SHALL BE LOCATED NO MORE THAN 36 " ABOVE CEILING LEVEL. LABEL EACH BOX IN AREA OF WORK WITH A PERMANENT MARKER OR IN ACCORDANCE WITH SPECIFICATIONS, WHICHEVER IS MORE STRINGENT.

AR ALL MATERIALS FURNISHED AND ALL WORK INSTALLED SHALL COMPLY WITH THE CURRENT EDITION OF THE NATIONAL ELECTRICAL CODES, NATIONAL FIRE CODES OF THE NATIONAL FIRE PROTECTION ASSOCIATION, THE REQUIREMENTS OF LOCAL UTILITY COMPANIES, AND WITH THE REQUIREMENTS OF ALL GOVERNMENTAL AGENCIES OR DEPARTMENTS HAVING JURISDICTION. IF ANY CONFLICTS OR DISCREPANCIES OCCUR THE MOST STRINGENT SHALL APPLY.

AS DO NOT SCALE FROM DRAWINGS, AS PRINTING DISTORTS SCALE. WORK SHALL BE LAID OUT FROM DIMENSIONED DRAWINGS, OR DIMENSIONS SUPPLIED TO THE CONTRACTOR.

AT NOISY WORK, WORK OUTSIDE CONSTRUCTION BARRIERS, WORK IN OCCUPIED AREAS, ETC. SHALL BE PERFORMED AFTER HOURS OR ON WEEKENDS. COORDINATE EXACT SCHEDULING WITH FACILITY PRIOR TO CONSTRUCTION.

AU ALL ITEMS HAVING KEYED LOCKS/OPERATORS SHALL HAVE CORED LOCKS/OPERATORS. ALL KEYING SHALL MATCH THE OWNER'S EXISTING KEY-WAYS. COORDINATE EXACT REQUIREMENTS WITH OWN



1 SITE UTILITY PLAN - NORTH

SCALE: 1" = 30'-0"

0 15' 30' 60' 90' 120'

ELECTRICAL SITE NOTES

A DO NOT SCALE FROM MECHANICAL AND ELECTRICAL DRAWINGS. FIELD VERIFY REQUIRED DIMENSIONS AND COORDINATE WITH CIVIL DRAWINGS AND SURVEYS.

B REFER ALSO TO ALL OTHER PLANS AND THE SPECIFICATION, BUT ESPECIALLY TO: THE SITE SURVEY, THE ARCHITECTURAL SITE PLAN, THE SITE GRADING PLAN, THE PLANTING PLAN (WHERE AVAILABLE), FOUNDATION PLAN(S), APPROPRIATE MECHANICAL & ELECTRICAL FLOOR PLANS FOR SERVICE CONTINUATIONS, THE SITE UTILITY PLAN - MECHANICAL & ELECTRICAL. WHERE THERE ARE CONFLICTS AMONG THESE PLANS AND/OR RELATED SPECIFICATIONS, ADVISE THESE ENGINEERS AT LEAST TEN DAYS PRIOR TO SUBMISSION OF BIDS.

C ALL FEES AND ANY OTHER COSTS TO UTILITY COMPANIES, MUNICIPALITIES, INSPECTORS, REVIEWING AGENCIES, ETC. ARE TO BE INCLUDED AS A PART OF THIS CONTRACT.

D FEDERAL, STATE, LOCAL, MUNICIPALITY AND UTILITY COMPANY CODES, RULES, REGULATIONS AND REQUIREMENTS APPLY UNLESS EXCEEDED BY THIS DESIGN.

E WHEN INTERRUPTION OF AN EXISTING UTILITY OR SERVICE IS PLANNED OR OCCURS ACCIDENTALLY, THE CONTRACTOR(S) SHALL WORK CONTINUOUSLY AS NEEDED TO RESTORE SAME PROVIDING PREMIUM TIME AS NEEDED AT NO INCREASE IN THE CONTRACT PRICE.

F LOCATIONS, DEPTHS, MATERIAL TYPES, ELEVATIONS, ETC. OF ALL APPURTENANCES, LINES, BUILDINGS, ETC., INDICATED ON THESE DRAWINGS WERE TAKEN FROM VARIOUS SOURCES, ARE DIAGRAMMATIC ONLY AND ARE SUBJECT TO SUBSTANTIAL VARIATION FROM EXISTING CONDITIONS, EXISTING UTILITIES LOCATIONS MAY VARY. CONSEQUENTLY ALL CONTRACTORS SHALL EXERCISE EXTREME CARE IN THE COURSE OF THEIR WORK SO AS TO ENSURE THAT THEY DO NOT INTERRUPT ANY EXISTING SERVICE. FOR SAFETY PURPOSES, PAY PARTICULAR ATTENTION TO THIS PRECAUTION RELATIVE TO NATURAL GAS AND ELECTRICAL LINES. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL FEDERAL, STATE, AND/OR LOCAL RULES, REGULATIONS, STANDARDS AND SAFETY REQUIREMENTS.

G PROVIDE LONG RADIUS ELBOWS FOR UNDERGROUND CONDUIT BENDS. WHERE SERVING A UTILITY OWNED TRANSFORMER, THE UTILTY STANDARDS SHALL TAKE PRECEDENCE.

H UTILITIES SHALL BE INSTALLED IN ACCORDANCE WITH THE APPLICABLE MUNICIPALITY OR UTILITY COMPANY STANDARDS. IN ALL CASES, THE MOST STRINGENT REQUIREMENT SHALL APPLY. IF ANY VARIATION OCCURS, CONSULT THE ENGINEER. CONTRACTOR SHALL VISIT THE SITE AND FIELD VERIFY THE ROUTING OF ALL UTILITIES NEW AND EXISTING PRIOR TO SUBMISSION OF BIDS. SUBMISSION OF A BID PROPOSAL INDICATES THAT THE CONTRACTOR IS FULLY AWARE OF ALL OBSTRUCTIONS AND WILL INSTALL ALL OF THE NEW UTILITIES WITHOUT REQUESTS FOR ANY ADDITIONAL CHANGES.

I PROVIDE GALVANIZED RIGID CONDUIT FOR EXTERIOR UNDERGROUND TRANSITIONS TO ABOVE GRADE; EXTEND CONDUIT A MINIMUM OF 6" ABOVE GRADE.

J CONTRACTOR SHALL PERFORM A SMOKE TEST ON ALL CONDUITS INSTALLED ON SITE AND SHALL TAKE ALL NECESSARY CORRECTIVE ACTION IF NOT FOUND IN COMPLIANCE WITH FACILITY STANDARDS.

K CONTRACTOR SHALL CONTACT ENGINEER FOR INSPECTION OF TRENCHES PRIOR TO INSTALLATION OF CONDUITS OR RACEWAYS. PROVIDE PHOTOS UPON REQUEST.

L CONTRACTOR SHALL CUT AND PATCH ALL PAVEMENT, CURBING, ETC. AS REQUIRED FOR WORK. CONTRACTOR SHALL REPAIR ALL LANDSCAPING THAT IS DAMAGED FOR WORK. FINISH GRADE, SEED AND STRAW ALL DISTURBED GREEN SPACES. ALL PATCH AND REPAIR WORK SHALL BE IN ACCORDANCE WITH BOTH CIVIL AND LANDSCAPE DRAWINGS AND SPECIFICATIONS.

M COORDINATE UNDERGROUND ELECTRICAL WITH ALL LANDSCAPING AND FENCING, ADJUST ELECTRICAL LINES TO AVOID CONFLICTS. REFER TO LANDSCAPING PLANS FOR FURTHER INFORMATION. AVOID ROUTING UNDERGROUND CONDUITS UNDER ROADWAYS OR PARKING LOTS, CROSS ROADWAYS WITH UNDERGROUND CONDUITS AT 90 ANGLES WHERE POSSIBLE.

N PLANNED INTERRUPTION OF ANY SERVICE SHALL BE COORDINATED WITH THE APPROPRIATE MUNICIPALITY OR UTILITY COMPANY, THE ARCHITECT, AND THE BUILDING OPERATORS AT LEASTE ONE WEEK IN ADVANCE OF ANTICIPATED INTERRUPTION. A SCHEDULE FOR THESE OUTAGES SHALL BE DEVELOPED AND AGREED UPON BETWEEN THE PARTIES MENTIONED TO AVOID UNNECESSARY INCONVENIENCE TO THE OWNER OR ANY AFFECTED PARTY. NOTIFY THE UTILITY COMPANY OF ANY ANTICIPATED SERVICES REQUIRED FROM THEM AT LEAST TWO WEEKS IN ADVANCE IN WRITING AND INSURE THAT THEY DO NOT DELAY WORK.

O THE LOCATIONS OF UTILITIES SHOWN WITHIN THESE DRAWINGS ARE APPROXIMATE ONLY.

P THE CONTRACTOR WILL BE RESPONSIBLE FOR ANY EXCAVATION WORK REQUIRED TO LOCATE UNDERGROUND UTILITIES. THE CONTRACTOR IS ALSO REQUIRED TO NOTIFY ANY OTHER AFFECTED UTILITY OWNERS PRIOR TO DIGGING. IN THE EVENT OF ACCIDENTAL INTERRUPTION OF SERVICE, CONTRACTOR WILL IMMEDIATELY NOTIFY THE OTHER UTILITY OWNERS.

Q THE CONTRACTOR WILL PROVIDE ALL NECESSARY PROTECTIVE MEASURES TO SAFEGUARD OTHER EXISTING UTILITIES FROM DAMAGE DURING CONSTRUCTION OF THIS PROJECT. IN THE EVENT THAT SPECIAL EQUIPMENT IS REQUIRED TO WORK OVER AND AROUND THE OTHER UTILITIES. THE UTILITY WILL BE REQUIRED TO FURNISH SUCH EQUIPMENT.

R CONTRACTOR SHALL PAY ALL TAP FEES, UTILITY COST, UTILITY CONNECTION COSTS, METER FEES, EXTENSION AND DEVELOPMENT CHARGES. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

S THE UTILITY WILL PROVIDE STAKING DATA INCLUDING NORTHING AND EASTING DATA AS REQUIRED OR SHOWN ON DRAWINGS.

T REATTACH ALL TAPS AND TRANSFORMERS AS TO MAINTAIN EXISTING PHASE CONNECTIONS.

U CONTRACTOR RESPONSIBLE FOR MAINTAINING DOWNSTREAM SERVICE FROM REMOVED EQUIPMENT ON SITE, INCLUDING BUT NOT LIMITED TO SITE LIGHTING, TRANSFORMERS, ETC.

V WHEN DEMOLITION OF AN ELECTRICAL DEVICE (OR CIRCUIT) IS INDICATED ON THE DRAWINGS: THE CONTRACTOR SHALL ENSURE THAT OTHER DEVICES OR EQUIPMENT "UPSTREAM" OR "DOWNSTREAM" ON THE CIRCUITS SHALL REMAIN IN "PRE-DEMOLITION" WORKING ORDER. "LEFT-OVER" CIRCUIT BREAKERS SHALL REMAIN, BE SWITCHED TO OFF POSITION, AND BE LABELED AS SPARES IN THEIR PANELS. PROVIDE NEW TYPEWRITTEN DIRECTORIES FOR ALL PANELS AFFECTED.

W REMOVE ALL ASSOCIATED BACKBOXES, CONDUIT AND CONDUCTORS FOR DEVICES/FIXTURES/ETC. BEING REMOVED (BACK TO SOURCE), WHETHER INDICATED OR NOT (UON).

X COORDINATE DISPOSAL OF ALL FIXTURES, DEVICES, ETC. (INDICATED FOR DEMOLITION) WITH OWNER. TURN OVER ITEMS REMOVED TO OWNER AT THEIR OPTION.

Y COORDINATE WITH OTHER TRADES FOR THE REMOVAL AND/OR RELOCATION OF ELECTRICAL DEVICES AND CONNECTIONS ASSOCIATED WITH THEIR EQUIPMENT.

TAGGED NOTES

S13 SOUND SYSTEM SPEAKERS TO BE MOUNTED VIA STRAP SYSTEM TO POLE IN LOCATIONS SHOWN AT 45' AFG. SPEAKERS ARE FURNISHED AND INSTALLED BY OTHERS. CONTRACTOR SHALL PROVIDE 1.5" CONDUIT WITH PULL WIRE FROM SOUND SYSTEM RACK IN MDF 103.1 AND ROUTE INTO LIGHT POLE.

S18 SITE CAMERA BY OTHERS. PROVIDE 120V POWER AT EACH LOCATION AS INDICATED. PROVIDE ONE 6 STRAND SINGLE MODE FIBER OPTIC CABLE TO ELEC RM 212 AND TERMINATE IN CCTV RACK. PROVIDE FIBER OPTIC ENCLOSURE AT CAMERA LOCATION TO TERMINATE FIBER OPTIC CABLING.

U1 600A 480/277V, 3PH, 4W MAIN DISTRIBUTION PANEL. REFER TO ONELINE FOR ADDITIONAL INFORMATION.

U2 PROVIDE PRIMARY TO UTILITY TRANSFORMER PER PECO'S REQUIREMENTS.

U3 UTILITY TRANSFORMER PER PECO'S STANDARDS. COORDINATE SERVICE SHUTDOWNS AND CONNECTIONS WITH UTILITY AND OWNER PRIOR TO WORK.

U4 PROVIDE SERVICE SECONDARY FROM SERVICE TRANSFORMER TO 600A 480/277V, 3PH, 4W MAIN DISTRIBUTION PANEL. COORDINATE ALL SHUTDOWNS AND WORK WITH PECO AND OWNER. REFER TO ONELINE FOR ADDITIONAL INFORMATION.

U6 PROVIDE FEED TO VISITOR SIDE CONCESSION PANEL. REFER TO ONELINE FOR ADDITIONAL INFORMATION.

U7 PROVIDE FEED TO HOME SIDE CONCESSION PANEL. REFER TO ONELINE FOR ADDITIONAL INFORMATION.

U8 PROVIDE FEED TO OFFICE PANEL. REFER TO ONELINE FOR ADDITIONAL INFORMATION.

U9 PROVIDE FEED TO EXISTING POLE BARN PANEL. REFER TO ONELINE FOR ADDITIONAL INFORMATION.

U11 PROVIDE COMBOX CBIT-1830 WITH SYNTHETIC TURF INFILL. MOUNT DUPLEX RECEPTACLE INSIDE BOX IN ACCESSIBLE LOCATION.

U12 MAINTAIN EXISTING HANDHOLE THAT FEEDS EXISTING SCOREBOARD AND ASSOCIATED RECEPTACLES FOR BASEBALL FIELD. INTERCEPT AND EXTEND EXISTING FEEDER AND REROUTE TO PANEL INDICATED.

U13 PROVIDE 4" CONDUIT WITH 6 CELL FABRIC MESH INNERDUCTS AND ROUTE ONE 24 STRAND FIBER OPTIC CABLE FROM SCHOOL TERMINATION POINT TO MDF 103.1 LOCATED IN HOME SIDE BELOW BLEACHERS. COORDINATE ROUTING WITH OWNER FROM MDP LOCATED WITHIN HIGH SCHOOL. REFER TO NOTE U18.

U14 BID ALTERNATE: PROVIDE 12 STRAND SINGLE MODE FIBER OPTIC CABLE TO SOCCER FIELD PRESSBOX. PROVIDE WALL MOUNTED CABINET IN PRESSBOX. REFER TO SPECIFICATIONS FOR REQUIREMENTS. ASSUME 50' ADDITIONAL DISTANCE TO PRESSBOX. CONDUIT SHALL BE ROUTED INTO PRESSBOX AND TERMAINTED IN FIBER OPTIC PATCH PANEL IN WALL MOUNTED CABINET. PROVIDE 120V OUTLET FROM PRESSBOX POWER PANEL TO AND MOUNT AT RACK LOCATION.

U15 PROVIDE 24"X24"X24" DEEP HANDHOLE FOR TELECOM FEEDS.

U16 MAINTAIN EXISTING HANDHOLE THAT FEEDS EXISTING BASEBALL BACKSTOP AND BATTING CAGE RECEPTACLES FOR BASEBALL FIELD. INTERCEPT AND EXTEND EXISTING FEEDER AND REROUTE TO PANEL INDICATED.

U17 APPROXIMATE LOCATION OF MUSCO STADIUM POLE LIGHTS. REFER TO MUSCO DRAWINGS FOR ADDITIONAL INFORMATION.

U19 PROVIDE 4" CONDUIT WITH 12 STRAND SINGLE MODE FIBER OPTIC CABLE FROM CONCESSIONS BUILDING MECH ROOM 201 TO TICKET BOOTH WALL RACK.

U21 PROVIDE HANDHOLE AND 4" CONDUIT TO EXISTING BASEBALL BACKSTOP FOR BASEBALL FIELD TELECOM FEED.

U22 PROVIDE 4" CONDUIT WITH 12 STRAND SINGLE MODE FIBER OPTIC CABLE FROM RESTROOM BUILDING ELEC RM 212 TO CONCESSION 211 WALL RACK.

U26 PROVIDE 24"X24"X24" DEEP HANDHOLE TO SERVE CAMERA POLE. POLE AND CAMERA ARE TO BE INSTALLED BY OTHERS. ROUTE 120V POWER INTO OWNER PROVIDED POLE AND TERMINATE IN LOCATED PROVIDED BY OWNER. ADDITIONALLY, PROVIDE ONE 6 STRAND SINGLE MODE FIBER OPTIC CABLE AND TERMINATE AT CCTV RACK IN MDF 103.1.

U28 PROVIDE 4" CONDUIT WITH 12 STRAND SINGLE MODE FIBER OPTIC CABLE TO CONCESSIONS BUILDING MECH ROOM 201 FROM MDF 103.1 LOCATED IN HOME SIDE BELOW BLEACHERS.

U29 PROVIDE 4" CONDUIT WITH 12 STRAND SINGLE MODE FIBER OPTIC CABLE TO RESTROOM BUILDING 212 FROM MDF 103.1 LOCATED IN HOME SIDE BELOW BLEACHERS.

U31 PROVIDE 3#2, 1#4G IN 1.5"C FROM DISTRIBUTION PANEL HDP FOR SCOREBOARD.

U32 PROVIDE 6 STRAND SINGLE MODE FIBER OPTIC CABLE BETWEEN SCOREBOARD AND PRESS BOX BUILDING. IN PRESS BOX, ROUTE FIBER AND CONDUIT TO SOUND RACK AND TERMINATE IN OWNER PROVIDED SOUND CABINET. PROVIDE ALL TERMINATIONS AT SCOREBOARD.

U33 POWER FOR MUSCO FOOTBALL AND POLE ACCENT LIGHTING. REFER TO MUSCO DRAWINGS FOR ADDITIONAL INFORMATION.

U34 PROVIDE 4" CONDUIT WITH 12 STRAND SINGLE MODE FIBER OPTIC CABLE FROM ELEC 212 TO CONCESSION 211.

BEFORE YOU DIG

THE CONTRACTOR AND ALL SUBCONTRACTORS SHALL CONTACT "BUD (BEFORE YOU DIG)" AT 1-800-752-6007 TO OBTAIN UNDERGROUND UTILITY LOCATIONS PRIOR TO ANY CONSTRUCTION. ANY CONTRACTOR OR SUBCONTRACTOR PERFORMING ANY TYPE OF EXCAVATION ON THIS PROJECT SHALL CALL "BUD" TO OBTAIN AN AUTHORIZATION NUMBER.

UTILITY COMPANY CONTACTS

POWER
EXELON
WO#: 21124609 RICHARD LANG 610.310.9980

IT IS THE CONTRACTORS RESPONSIBILITY TO MEET ALL LOCAL ORDINANCE AND MUNICIPAL REQUIREMENTS RELATED TO UTILITY INSTALLATION, INSPECTIONS, MATERIALS, FEES, ETC.

DRAWING SIZE: 30 X 42

STAMP

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ROBERT A. HANS ENGINEER No. PE074180

CONSULTANTS

CMTA A LEGENCE Company

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GKO ARCHITECTS

POTTSGROVE HIGH SCHOOL FACILITY AND ATHLETIC IMPROVEMENTS

1345 KAUFFMAN RD, POTTSTOWN, PA 19464

REVISIONS	
BID SET	10/21/2026

DRAWN BY	TRR
REVIEWED BY	RC
JOB #	2665

SHEET TITLE

ELECTRICAL SITE UTILITY PLAN - NORTH

SHEET #

EU-101

SCALE	AS NOTED
DATE	10-21-2026



1 EU-102 **SITE UTILITY PLAN - SOUTH**
1" = 30'-0"

ELECTRICAL SITE NOTES

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B REFER ALSO TO ALL OTHER PLANS AND THE SPECIFICATION, BUT ESPECIALLY TO: THE SITE SURVEY, THE ARCHITECTURAL SITE PLAN, THE SITE GRADING PLAN, THE PLANTING PLAN (WHERE AVAILABLE), FOUNDATION PLAN(S), APPROPRIATE MECHANICAL & ELECTRICAL FLOOR PLANS FOR SERVICE CONTINUATIONS, THE SITE UTILITY PLAN - MECHANICAL & ELECTRICAL. WHERE THERE ARE CONFLICTS AMONG THESE PLANS AND/OR RELATED SPECIFICATIONS, ADVISE THESE ENGINEERS AT LEAST TEN DAYS PRIOR TO SUBMISSION OF BIDS.

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J CONTRACTOR SHALL PERFORM A SMOKE TEST ON ALL CONDUITS INSTALLED ON SITE AND SHALL TAKE ALL NECESSARY CORRECTIVE ACTION IF NOT FOUND IN COMPLIANCE WITH FACILITY STANDARDS.

K CONTRACTOR SHALL CONTACT ENGINEER FOR INSPECTION OF TRENCHES PRIOR TO INSTALLATION OF CONDUITS OR RACEWAYS. PROVIDE PHOTOS UPON REQUEST.

L CONTRACTOR SHALL CUT AND PATCH ALL PAVEMENT, CURBING, ETC. AS REQUIRED FOR WORK. CONTRACTOR SHALL REPAIR ALL LANDSCAPING THAT IS DAMAGED FOR WORK. FINISH GRADE, SEED AND STRAW ALL DISTURBED GREEN SPACES. ALL PATCH AND REPAIR WORK SHALL BE IN ACCORDANCE WITH BOTH CIVIL AND LANDSCAPE DRAWINGS AND SPECIFICATIONS.

M COORDINATE UNDERGROUND ELECTRICAL WITH ALL LANDSCAPING AND FENCING, ADJUST ELECTRICAL LINES TO AVOID CONFLICTS. REFER TO LANDSCAPING PLANS FOR FURTHER INFORMATION. AVOID ROUTING UNDERGROUND CONDUITS UNDER ROADWAYS OR PARKING LOTS, CROSS ROADWAYS WITH UNDERGROUND CONDUITS AT 90 ANGLES WHERE POSSIBLE.

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R CONTRACTOR SHALL PAY ALL TAP FEES, UTILITY COST, UTILITY CONNECTION COSTS, METER FEES, EXTENSION AND DEVELOPMENT CHARGES. REFER TO THE SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS .

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U CONTRACTOR RESPONSIBLE FOR MAINTAINING DOWNSTREAM SERVICE FROM REMOVED EQUIPMENT ON SITE. INCLUDING BUT NOT LIMITED TO SITE LIGHTING, TRANSFORMERS, ETC.

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W REMOVE ALL ASSOCIATED BACKBOXES, CONDUIT AND CONDUCTORS FOR DEVICES/FIXTURES/ETC. BEING REMOVED (BACK TO SOURCE), WHETHER INDICATED OR NOT (UON).

X COORDINATE DISPOSAL OF ALL FIXTURES, DEVICES, ETC. (INDICATED FOR DEMOLITION) WITH OWNER. TURN OVER ITEMS REMOVED TO OWNER AT THEIR OPTION.

Y COORDINATE WITH OTHER TRADES FOR THE REMOVAL AND/OR RELOCATION OF ELECTRICAL DEVICES AND CONNECTIONS ASSOCIATED WITH THEIR EQUIPMENT.

TAGGED NOTES

(##)

U10 PROVIDE HANDHOLE TO INTERCEPT AND EXTEND EXISTING FEED TO NEW PANEL LOCATION OF PANEL PREVIOUSLY LOCATED IN DEMOLISHED SHED. PANEL SHALL BE MOUNTED WITH UNISTRUT BELOW EXISTING SCOREBOARD LOCATED NEXT TO SOCCER FIELD. MAINTAIN AND PROTECT EXISTING CIRCUITS IN PANEL. INTERCEPT AND EXTEND FEEDS TO EXISTING CIRCUITS.

U15 PROVIDE 24"X24"X24" DEEP HANDHOLE FOR TELECOM FEEDS.

U35 CONTRACTOR SHALL TRENCH ACROSS PAVEMENT IN THIS AREA AND THEN PATCH AND REPAIR TRENCHING. REFER TO CIVIL SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.

U36 CONTRACTOR SHALL STUB UP CONDUIT AND ENTER EXTERIOR WALL OF EXISTING SCHOOL BUILDING WITH 4" CONDUIT FOR FIBER OPTIC FEED. ROUTE INSIDE BUILDING WILL BE AS SHOWN. 75' OF THE RUN WILL BE PIPED IN CONDUIT THROUGH A BOILER ROOM, WITH THE REMAINING RUN ROUTING THROUGH THE SCHOOL IN NEW J-HOOKS IN AREAS WITH AN ACT CEILING. ROUTE TO HEADEND ROOM IN EXISTING SCHOOL. PROVIDE NEW FIBER OPTIC PATCH PANEL IN EXISTING RACK AND TERMINATE CABLING.

STAMP

ROBERT A. HANS
ENGINEER
No. PE074150

CONSULTANTS

CMTA
A LEGENCE Company

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GKO ARCHITECTS

POTTSGROVE HIGH SCHOOL
FACILITY AND ATHLETIC IMPROVEMENTS
1345 KAUFFMAN RD, POTTSTOWN, PA 19464

REVISIONS	
BID SET	10/21/2026

DRAWN BY	Designer
REVIEWED BY	Checker
JOB #	2665

SHEET TITLE

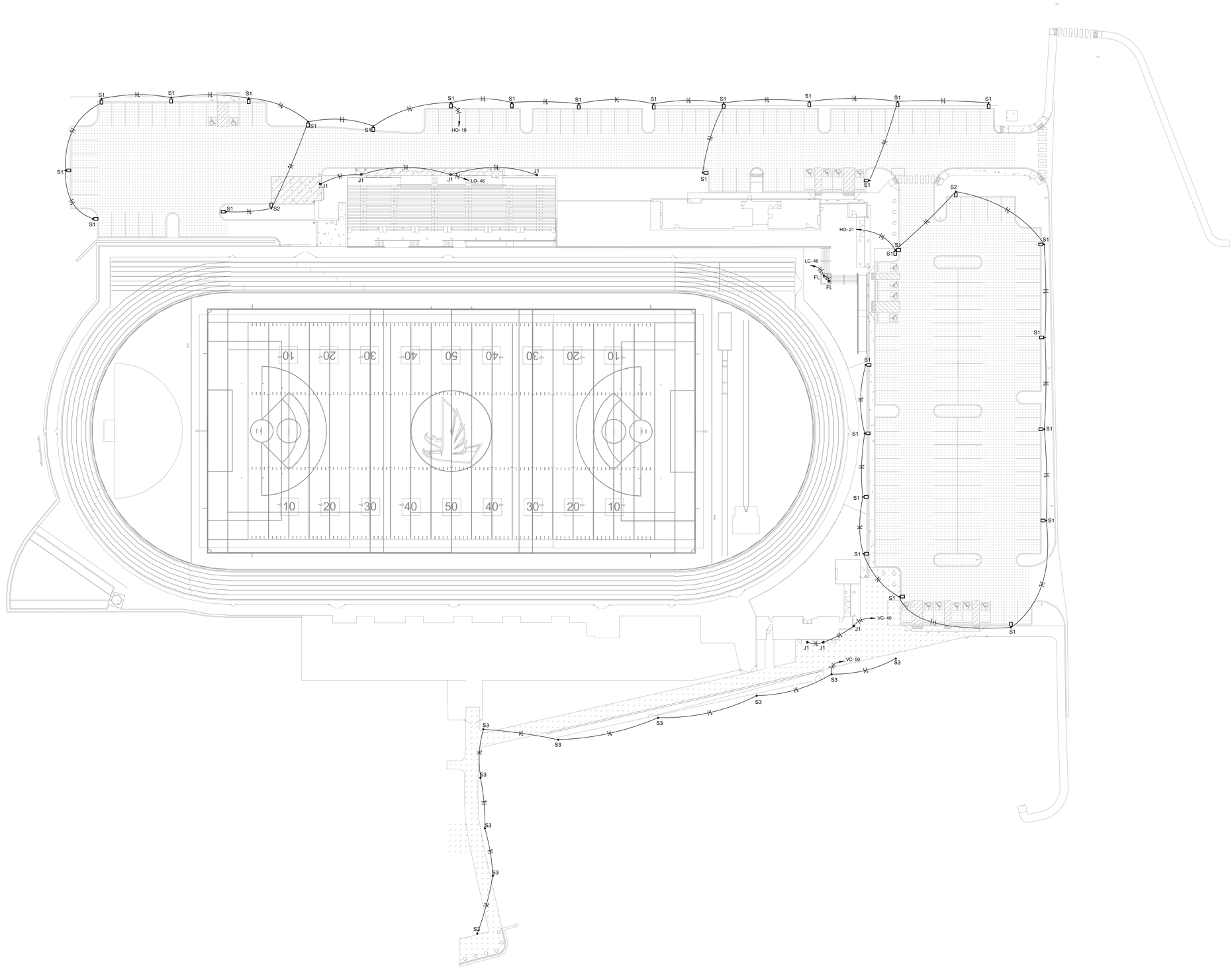
ELECTRICAL SITE UTLITY PLAN - SOUTH

SHEET #

EU-102

SCALE	AS NOTED
DATE	10-21-2026

DRAWING SIZE: 30 X 42



1 SITE PHOTOMETRIC PLAN

SCALE: 1" = 30'-0"

0 15' 30' 60' 90' 120'

STAMP

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ROBERT A. HANS ENGINEER No. PE074154

CONSULTANTS

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POTTSGROVE HIGH SCHOOL FACILITY AND ATHLETIC IMPROVEMENTS

1345 KAUFFMAN RD, POTTSTOWN, PA 19464

REVISIONS	
BID SET	10/21/2026

DRAWN BY	TRR
REVIEWED BY	RC
JOB #	2665
SHEET TITLE	

ELECTRICAL SITE PHOTOMETRIC PLAN

SHEET #

EU-200

SCALE	AS NOTED
DATE	10-21-2026

DRAWING SIZE: 30 X 42

TAGGED NOTES

##

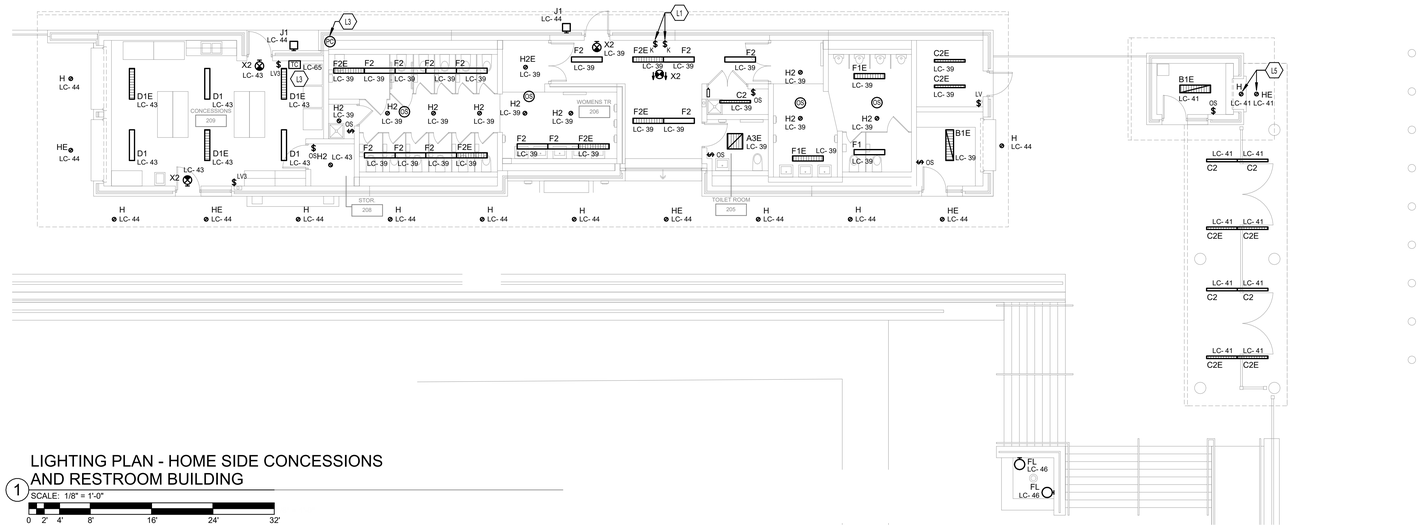
L1 KEY SWITCHES FOR CONTROL OF RESTROOMS. COORDINATE LOCATION OF SWITCHES WITH OWNER PRIOR TO ROUGH-IN.

L2 LIGHTING PROVIDED IN PRESS BOX DESIGN. REFER TO PRESS BOX DRAWINGS FOR ADDITIONAL INFORMATION. LIGHTING SHALL BE POWERED FROM PRESS BOX PANEL.

L3 PROVIDE PHOTOCELL ON ROOF FACING NORTH AND TIMECLOCK FOR EXTERIOR LIGHTING CONTROL. COORDINATE FINAL LOCATION OF TIMECLOCK WITH OWNER PRIOR TO ROUGH-IN.

L4 PROVIDE UNISTRUT OR PENDANT MOUNT LIGHT FIXTURE BELOW DUCTWORK AND TO PREVENT LIGHT FIXTURES FROM SWAYING INTO GARAGE DOORS.

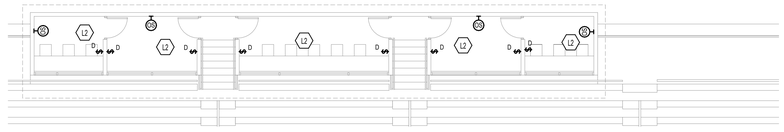
L5 LIGHTING FIXTURES ARE MOUNTED IN TWO SEPARATE CANOPIES STACKED ON TOP OF EACH OTHER. LIGHT FIXTURE 'H' IS MOUNTED IN CANOPY ABOVE AND LIGHT FIXTURE 'HE' IS MOUNTED IN CANOPY ABOVE TICKET BOOTH WINDOW. THE LIGHT FIXTURES ARE ALIGNED ON TOP OF EACH OTHER AND ARE NOT MOUNTED AS SHOWN ON DRAWING. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL INFORMATION.



1 LIGHTING PLAN - HOME SIDE CONCESSIONS AND RESTROOM BUILDING

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

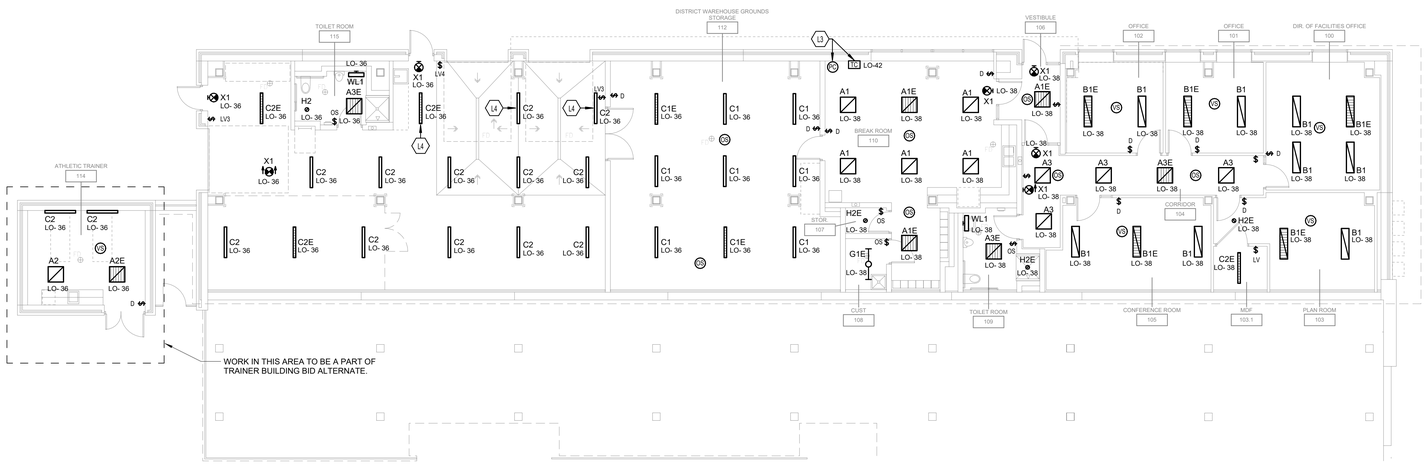
0 2' 4' 8' 16' 24' 32'



2 LIGHTING PLAN - HOME SIDE BLEACHERS COACHES BOX

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

0 2' 4' 8' 16' 24' 32'



3 LIGHTING PLAN - HOME SIDE UNDER BLEACHERS

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

0 2' 4' 8' 16' 24' 32'

STAMP

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ROBERT A. HANS ENGINEER No. PE074544

CONSULTANTS

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POTTSGROVE HIGH SCHOOL FACILITY AND ATHLETIC IMPROVEMENTS

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REVISIONS

BID SET	10/21/2026

DRAWN BY	TRR
REVIEWED BY	RC
JOB #	2665

SHEET TITLE

LIGHTING PLAN - HOME SIDE PAVILION

SHEET #

E-101

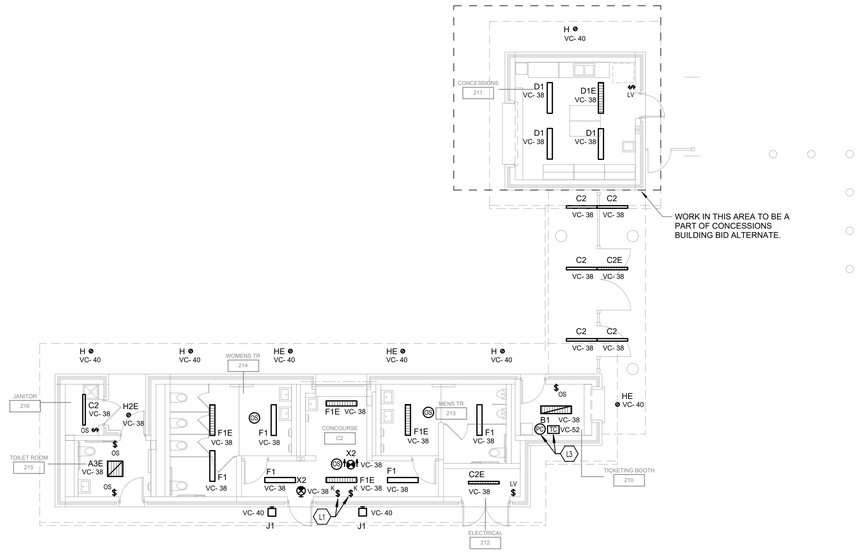
SCALE	AS NOTED
DATE	10-21-2026

DRAWING SIZE: 30 X 42

TAGGED NOTES

L1 KEY SWITCHES FOR CONTROL OF RESTROOMS. COORDINATE LOCATION OF SWITCHES WITH OWNER PRIOR TO ROUGH-IN.

L3 PROVIDE PHOTOCELL ON ROOF FACING NORTH AND TIMECLOCK FOR EXTERIOR LIGHTING CONTROL. COORDINATE FINAL LOCATION OF TIMECLOCK WITH OWNER PRIOR TO ROUGH-IN.



LIGHTING PLAN - VISITORS SIDE CONCESSIONS AND BLEACHERS

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

0 1" 2' 4' 8' 12' 16'

DRAWING SIZE: 30 X 42

STAMP

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER ROBERT A. HANS No. PE074494

CONSULTANTS

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POTTSGROVE HIGH SCHOOL FACILITY AND ATHLETIC IMPROVEMENTS

1345 KAUFFMAN RD, POTTSTOWN, PA 19464

REVISIONS	
BID SET	10/21/2026

DRAWN BY	TRR
REVIEWED BY	RC
JOB #	2665

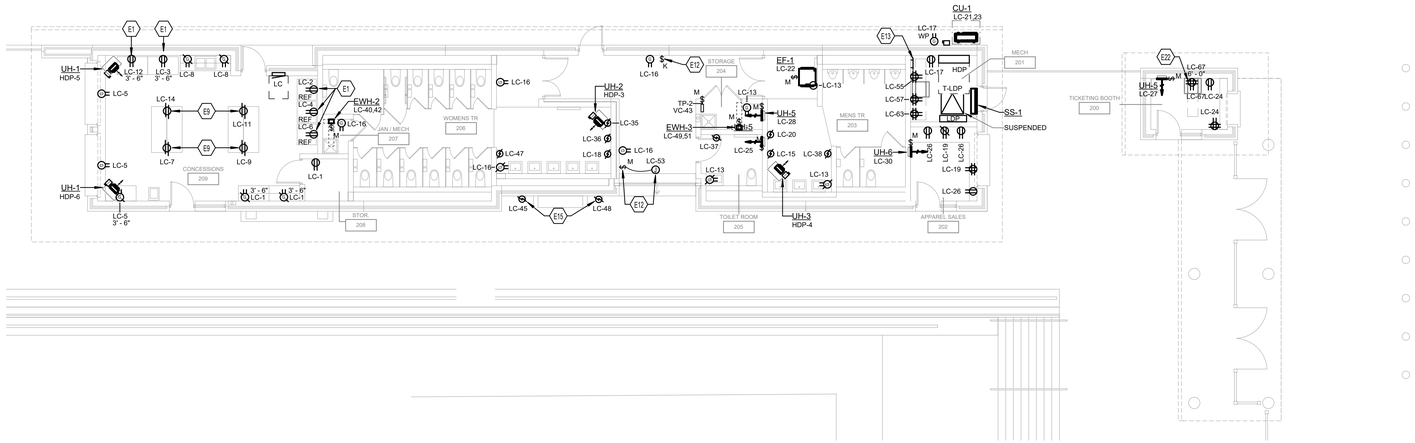
SHEET TITLE

LIGHTING PLAN - VISITORS SIDE PAVILION

SHEET #

E-102

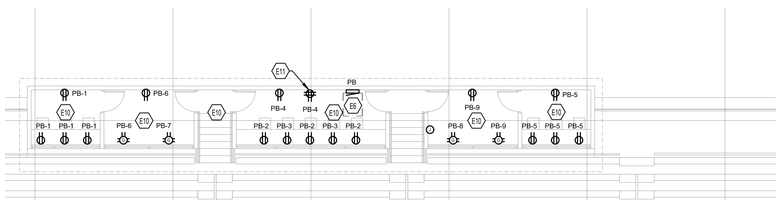
SCALE	AS NOTED
DATE	10-21-2026



POWER PLAN - HOME SIDE CONCESSIONS AND RESTROOM BUILDING

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

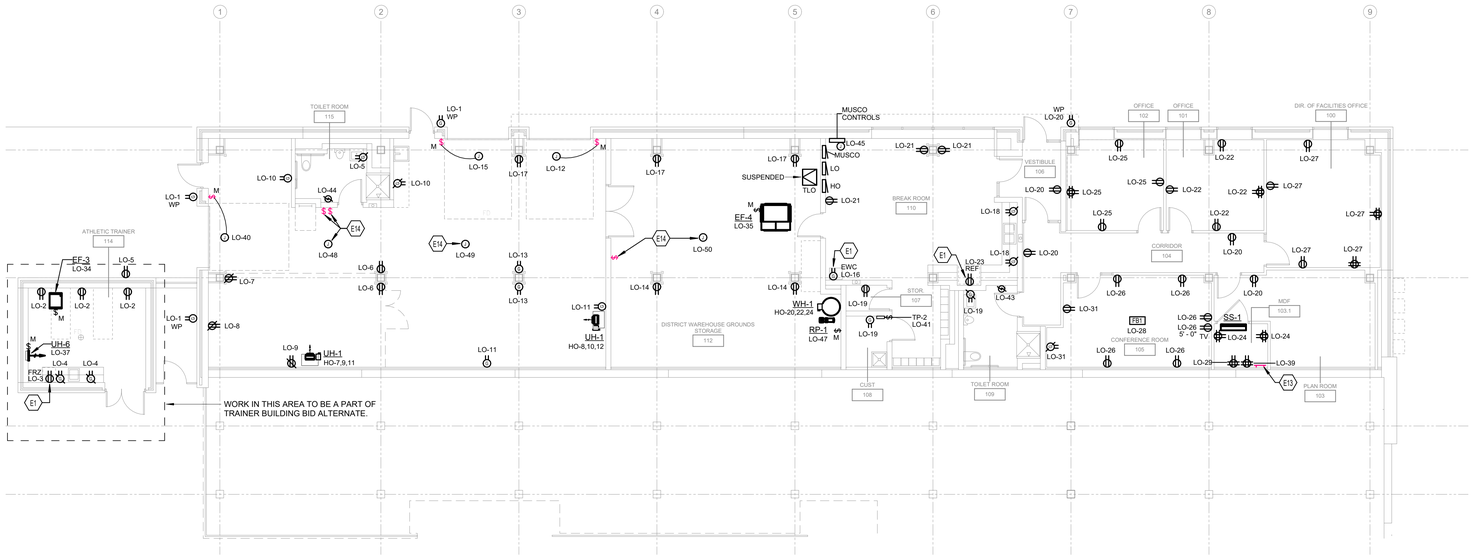
0 2' 4' 8' 16' 24' 32'



POWER PLAN - HOME SIDE BLEACHERS COACHES BOX

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

0 2' 4' 8' 16' 24' 32'



POWER PLAN - HOME SIDE UNDER BLEACHERS

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

0 2' 4' 8' 16' 24' 32'

TAGGED NOTES

##

- E1 PROVIDE EQUIPMENT WITH A GFCI CIRCUIT BREAKER.
- E6 PRESS BOX PANEL - PROVIDED BY PRESS BOX VENDOR. PROVIDE FEEDER FROM OFFICE PANEL LOCATED IN OFFICE SPACE BELOW. REFER TO ONE LINE DIAGRAM FOR ADDITIONAL INFORMATION.
- E9 PROVIDE CEILING MOUNTED RECEPTACLE FOR HUBBELL CORD REEL HBL25123GF20M1. WHITE INDUSTRIAL REEL WITH BLACK BOX, GFCI MODULE AND (2) 20A DUPLEX RECEPTACLE, UL TYPE 1, 25FT, #12/3 SJO, 20A, 125VAC. IF A CORD REEL EQUAL IS PROVIDED, REEL AND RECEPTACLE FINISHES SHALL NOT BE YELLOW AND COORDINATED WITH ARCHITECT.
- E10 PRESS BOX DESIGN BY OTHERS. REFER TO PRESS BOX DRAWINGS FOR ADDITIONAL INFORMATION. DEVICES SHALL BE POWERED FROM PRESS BOX PANEL.
- E11 PROVIDED DEDICATED RECEPTACLE FOR SOUND RACK. SOUND RACK PROVIDED AND INSTALLED BY OTHERS.
- E12 OVERHEAD DOOR POWER SHALL BE PROVIDED WITH A LOCKABLE NON-REVERSING MOTOR STARTER SWITCH IN PROTECTIVE ENCLOSURE. KEY SWITCH WILL BE PROVIDED FOR CONTROL FOR OVERHEAD DOOR. COORDINATE LOCATION OF SWITCH WITH OWNER PRIOR TO ROUGH-IN.
- E13 PROVIDE TMGB GROUND BAR. REFERT TO SYSTEMS ONE-LINE DIAGRAM FOR REQUIREMENTS.
- E14 PROVIDE POWER FOR OWNER PROVIDED CEILING FAN. COORDINATE LOCATION OF CEILING FAN WITH LIGHTING, CONTROLS, AND FINAL LOCATIONS WITH OWNER PRIOR TO ROUGH-IN.
- E15 EXTERIOR HAND DRYER SHALL BE MOUNTED IN NEMA 3R ENCLOSURE WITH OPENING FOR OPERATION OF HAND DRYER.
- E22 PROVIDE POWER FOR WALL MOUNTED DATA RACK. COORDINATE FINAL LOCATION WITH DATA RACK PRIOR TO ROUGH-IN.

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ROBERT A. HAINS ENGINEER No. PE074164

STAMP

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POTTSGROVE HIGH SCHOOL FACILITY AND ATHLETIC IMPROVEMENTS

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REVISIONS	
BID SET	10/21/2026

DRAWN BY	TRR
REVIEWED BY	RC
JOB #	2665

SHEET TITLE

POWER PLAN - HOME SIDE PAVILION

SHEET #

E-201

SCALE	AS NOTED
DATE	10-21-2026

DRAWING SIZE: 30 X 42

TAGGED NOTES

##

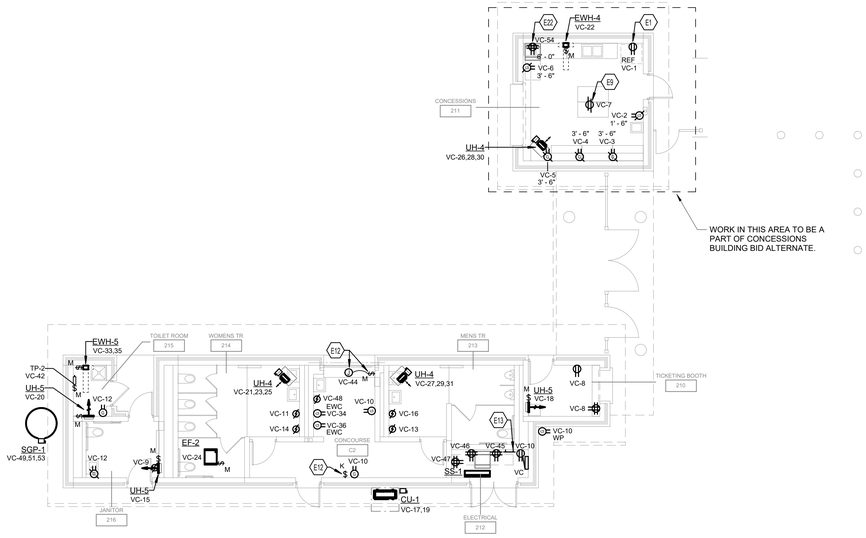
E1 PROVIDE EQUIPMENT WITH A GFCI CIRCUIT BREAKER.

E9 PROVIDE CEILING MOUNTED RECEPTACLE FOR HUBBELL CORD REEL HBLI25123GF220M1. WHITE INDUSTRIAL REEL WITH BLACK BOX, GFCI MODULE AND (2) 20A DUPLEX RECEPTACLE, UL TYPE 1, 25FT, #12/3 SJO, 20A, 125VAC. IF A CORD REEL EQUAL IS PROVIDED, REEL AND RECEPTACLE FINISHES SHALL NOT BE YELLOW AND COORDINATED WITH ARCHITECT.

E12 OVERHEAD DOOR POWER SHALL BE PROVIDED WITH A LOCKABLE NON-REVERSING MOTOR STARTER SWITCH IN PROTECTIVE ENCLOSURE. KEY SWITCH WILL BE PROVIDED FOR CONTROL FOR OVERHEAD DOOR. COORDINATE LOCATION OF SWITCH WITH OWNER PRIOR TO ROUGH-IN.

E13 PROVIDE TMGB GROUND BAR. REFERT TO SYSTEMS ONE-LINE DIAGRAM FOR REQUIREMENTS.

E22 PROVIDE POWER FOR WALL MOUNTED DATA RACK. COORDINATE FINAL LOCATION WITH DATA RACK PRIOR TO ROUGH-IN.



POWER PLAN - VISITORS SIDE CONCESSIONS AND BLEACHERS

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

0 1' 2' 4' 8' 12' 16'

STAMP

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ROBERT A. HANS ENGINEER No. PE074554

CONSULTANTS

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POTTSGROVE HIGH SCHOOL FACILITY AND ATHLETIC IMPROVEMENTS

1345 KAUFFMAN RD, POTTSTOWN, PA 19464

REVISIONS	
BID SET	10/21/2026

DRAWN BY	TRR
REVIEWED BY	RC
JOB #	2665

SHEET TITLE

POWER PLAN - VISITORS SIDE PAVILION

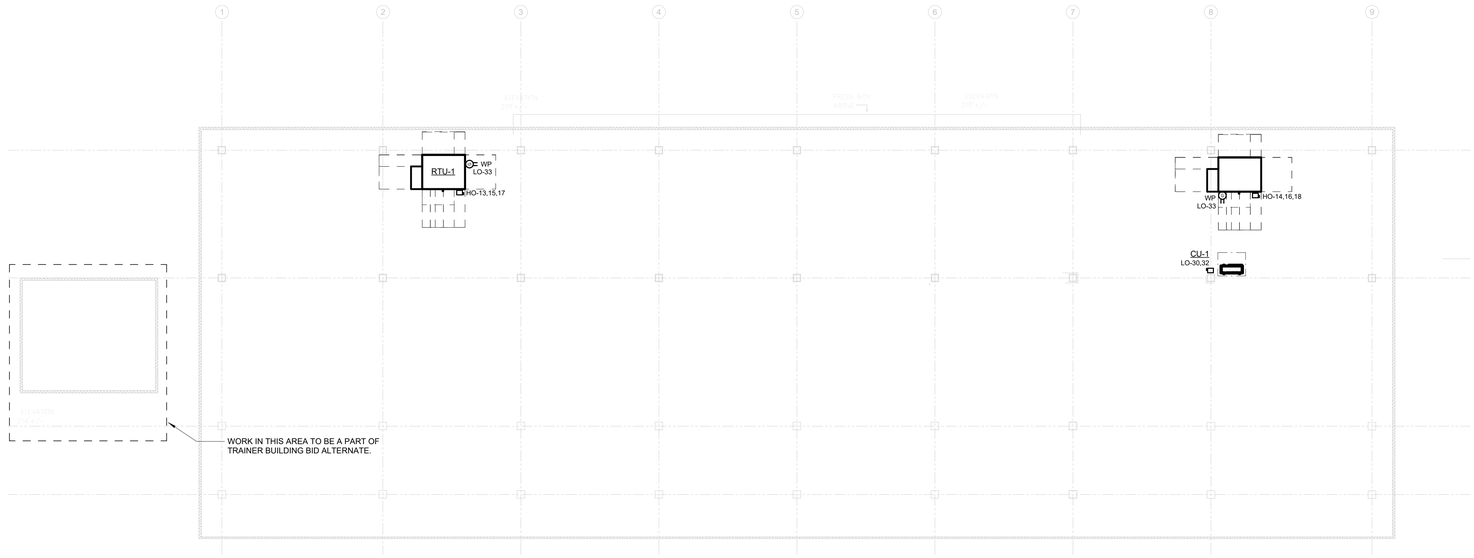
SHEET #

E-202

SCALE	AS NOTED
DATE	10-21-2026

DRAWING SIZE: 30 X 42

TAGGED NOTES



ELECTRICAL PLAN - HOME SIDE UNDER BLEACHERS ROOF PLAN

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

0 2' 4' 8' 16' 24' 32'

STAMP

CONSULTANTS

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POTTSGROVE HIGH SCHOOL FACILITY AND ATHLETIC IMPROVEMENTS

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REVISIONS	
BID SET	10/21/2026

DRAWN BY	TRR
REVIEWED BY	RC
JOB #	2665

SHEET TITLE

ELECTRICAL ROOF PLANS

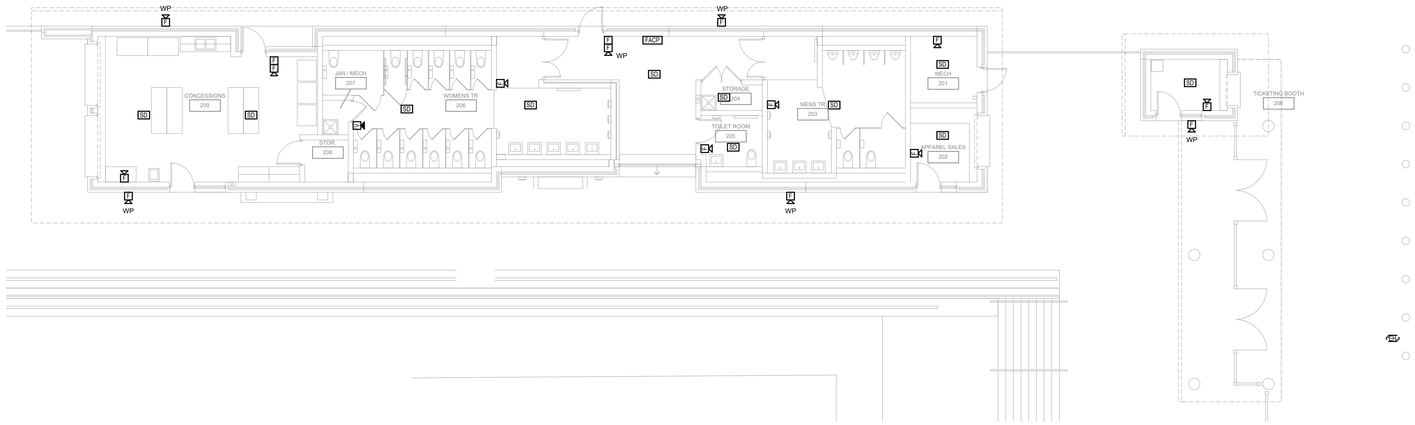
SHEET #

E-203

SCALE	AS NOTED
DATE	10-21-2026

DRAWING SIZE: 30 X 42

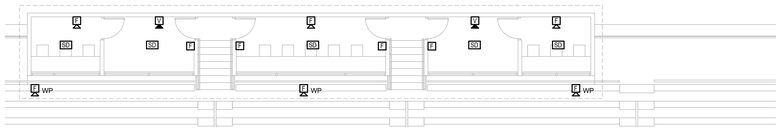
TAGGED NOTES



1 FIRE ALARM PLAN - HOME SIDE CONCESSIONS AND RESTROOM BUILDING

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

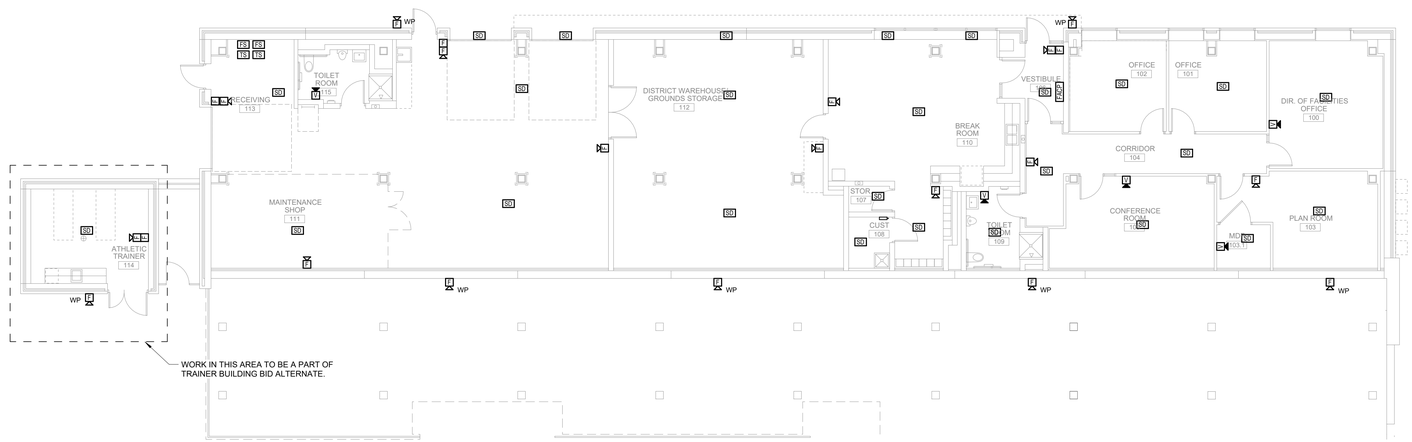
0 2' 4' 8' 16' 24' 32'



2 FIRE ALARM PLAN - HOME SIDE BLEACHERS COACHES BOX

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

0 2' 4' 8' 16' 24' 32'



3 FIRE ALARM PLAN - HOME SIDE UNDER BLEACHERS

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

0 2' 4' 8' 16' 24' 32'

STAMP

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ROBERT A. HANS ENGINEER No. PE074104

CONSULTANTS

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POTTSGROVE HIGH SCHOOL FACILITY AND ATHLETIC IMPROVEMENTS

1345 KAUFFMAN RD, POTTSTOWN, PA 19464

REVISIONS

BID SET	10/21/2026

DRAWN BY	TRR
REVIEWED BY	RC
JOB #	2665

SHEET TITLE

FIRE ALARM PLAN - HOME SIDE PAVILION

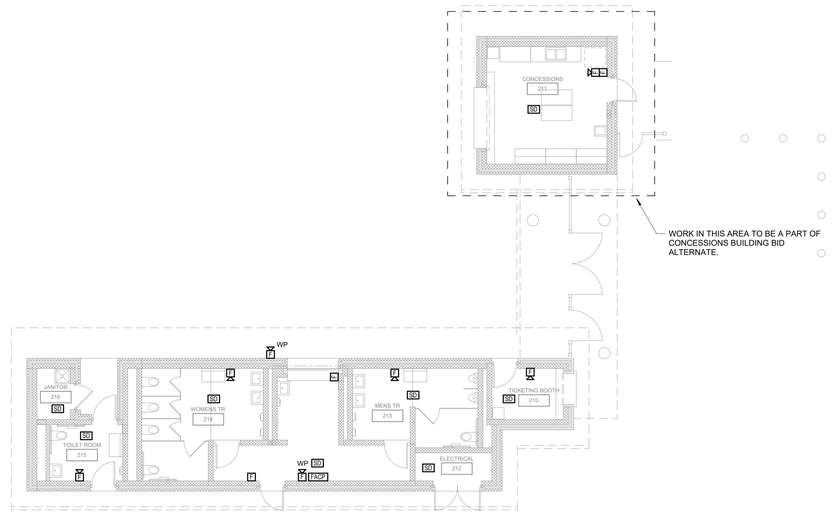
SHEET #

E-301

SCALE	AS NOTED
DATE	10-21-2026

DRAWING SIZE: 30 X 42

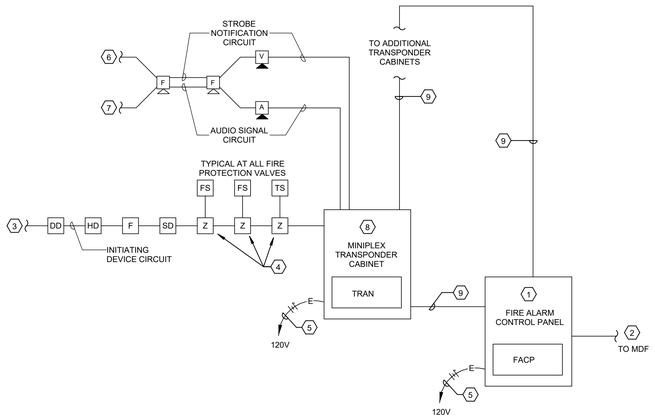
TAGGED NOTES



1 FIRE ALARM PLAN - VISITORS SIDE CONCESSIONS AND BLEACHERS

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

0 1' 2' 4' 8' 12' 16'



TAGGED NOTES :

1. FIRE ALARM CONTROL PANEL WITH INTEGRAL MICROPHONE.
2. COMMUNICATIONS LINE TO MDF.
3. TO ADDITIONAL INITIATION DEVICES, REFER TO FLOOR PLANS FOR ALL DEVICE LOCATIONS.
4. PROVIDE A MONITOR "IAM" (INDIVIDUAL ADDRESSABLE MODULE) FOR ADDRESSABLE SUPERVISION OF FIRE PROTECTION VALVES AND FIXED TEMPERATURE HEAT DETECTORS. MONITOR "IAM" SHALL BE SURFACE MOUNTED, IN NEMA-1 ENCLOSURE, ABOVE SUSPENDED CEILING OR ON WALL AS REQUIRED.
5. DEDICATED 120V POWER CIRCUITS FOR FIRE ALARM SYSTEM COMPONENTS AS INDICATED. REFER TO FLOOR PLANS FOR CIRCUIT NUMBERS. PAINT BREAKER SERVING EQUIPMENT RED.
6. TO ADDITIONAL VISUAL NOTIFICATION DEVICES, REFER TO FLOOR PLANS FOR ALL DEVICE LOCATIONS.
7. TO ADDITIONAL AUDIBLE NOTIFICATION DEVICES, REFER TO FLOOR PLANS FOR ALL DEVICE LOCATIONS.
8. PROVIDE MINIPLEX TRANSPONDER CABINET WITH LOCAL MODE CONTROLLER COMPATIBLE WITH FIRE ALARM CONTROL PANEL. REFER TO FLOOR PLANS FOR LOCATIONS. PROVIDE QUANTITY AS REQUIRED TO SERVE ALL INITIATING AND NOTIFICATIONS DEVICES WITH 20% SPARE CAPACITY FOR SYSTEM GROWTH.
9. AUDIO RISER WIRING AND DIGITAL COMMUNICATION WIRING, CONDUCTORS PER MANUFACTURER IN 1"C.

2 FIRE ALARM RISER DIAGRAM - VOICE EVAC

SCALE: NONE

STAMP

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ROBERT A. HANS ENGINEER No. PE074554

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REVISIONS

BID SET	10/21/2026

DRAWN BY	Designer
REVIEWED BY	RC
JOB #	2665

SHEET TITLE

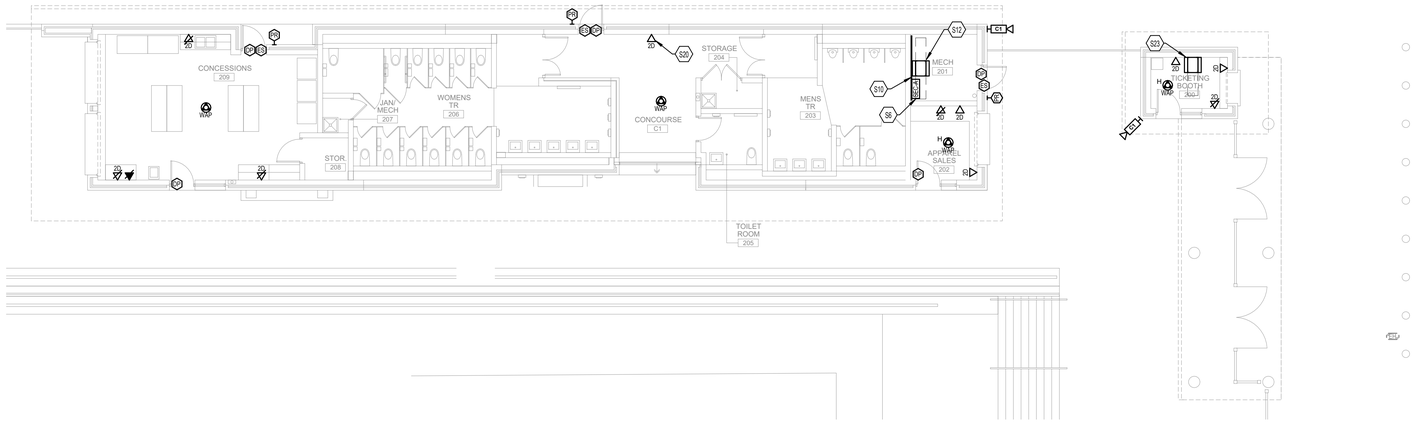
FIRE ALARM PLAN - VISITORS SIDE PAVILION

SHEET #

E-302

SCALE	AS NOTED
DATE	10-21-2026

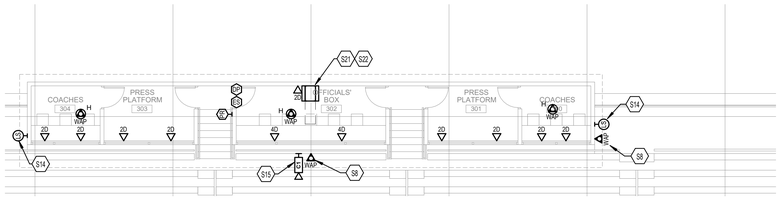
DRAWING SIZE: 30 X 42



1 SYSTEMS PLAN - HOME SIDE CONCESSIONS AND RESTROOM BUILDING

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

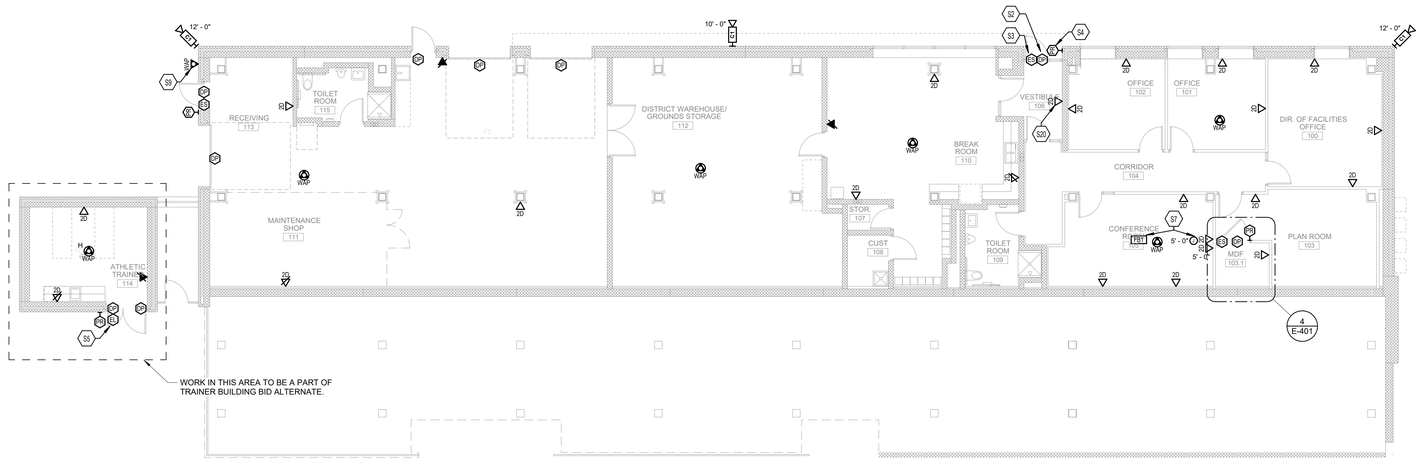
0 2' 4' 8' 16' 24' 32'



2 SYSTEMS PLAN - HOME SIDE BLEACHERS COACHES BOX

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

0 2' 4' 8' 16' 24' 32'



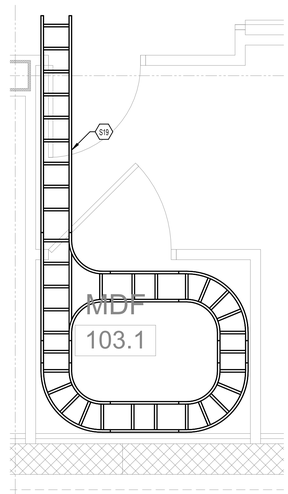
3 SYSTEMS PLAN - HOME SIDE UNDER BLEACHERS

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

0 2' 4' 8' 16' 24' 32'

TAGGED NOTES

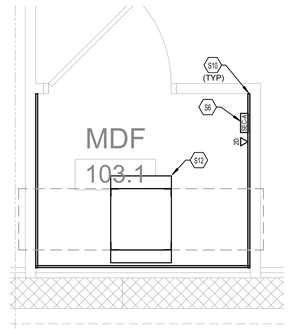
S2	PROVIDE DOOR POSITION AT THIS LOCATION. (TYPICAL)
S3	PROVIDE ELECTRIC STRIKE AT THIS LOCATION. (TYPICAL)
S4	PROVIDE PROXIMITY READER AT THIS LOCATION. (TYPICAL)
S5	PROVIDE ELECTRIC LATCH AT THIS LOCATION. (TYPICAL)
S6	ACCESS CONTROL PANEL LOCATION. PANEL WILL BE PROVIDED AND INSTALLED BY OTHERS. PROVIDE CONDUIT AND JUNCTION BOX INFRASTRUCTURE TO ALL DOOR LOCATIONS AS NOTED ON PLANS AND LEGEND.
S7	PROVIDE 1.5" CONDUIT FOR FUTURE AV CABLING BETWEEN FLOORBOX AND WALL MONITOR.
S8	ROUTE CONDUIT OUT AT 12" BELOW ROOF LEVEL FOR OUTDOOR WAP. PROVIDE CONDUIT STUB-OUT AT LOCATION INDICATED AND COIL UP 15' OR SPARE CATEGORY CABLING ABOVE CEILING IN BUILDING.
S9	ROUTE CONDUIT OUT AT 9' AFF FOR OUTDOOR WAP. PROVIDE CONDUIT STUB-OUT AT LOCATION INDICATED AND COIL UP 15' OR SPARE CATEGORY CABLING ABOVE CEILING IN BUILDING.
S10	PROVIDE FIRE RETARDANT BACKBOARD IN LOCATION SHOWN. REFER TO SPECIFICATION FOR ADDITIONAL REQUIREMENTS.
S12	PROVIDE FLOOR MOUNTED 4 POST DATA RACK. REFER TO SPECIFICATIONS AND SYSTEMS RISER DIAGRAM FOR REQUIREMENTS.
S14	SOUND SYSTEM SPEAKERS TO BE MOUNTED TO ROOF OF PRESSBOX. SPEAKERS ARE FURNISHED AND INSTALLED BY OTHERS. CONTRACTOR TO PROVIDE CONDUIT STUB-OUTS ON SIDE WALL BELOW ROOF LEVEL FOR FUTURE CABLING. FROM STUB-OUT LOCATION, PROVIDE 1.5" CONDUIT FROM EACH LOCATION TO SOUND SYSTEM RACK IN PRESS BOX.
S15	PROVIDE 1" CONDUIT STUB OUT FOR CAMERA AT 12" BELOW ROOF LEVEL. COIL UP 25' OF CATEGORY CABLING ABOVE CEILING INSIDE BUILDING.
S19	INSTALL 12' LADDER RACK CABLE TRAY TO CORRIDOR. ONCE IN CORRIDOR, CABLING MAY BE ROUTED IN J-HOOKS WHERE CONCEALED ABOVE CEILING OR IN CONDUITS WHERE EXPOSED.
S20	PROVIDE DATA CONNECTION FOR FACP. COORDINATE FINAL LOCATION WITH FACP INSTALLER. DATA TO BE CONCEALED IN FACP, NOT SEPARATE FACEPLATE.
S21	SOUND SYSTEM RACK TO BE PROVIDED AND INSTALLED BY OTHERS. PROVIDE SOUND SYSTEM CONDUITS NOTED ON PLAN TO THIS LOCATION AND STUB UP IN FLOOR.
S22	ROUTE 6 STRAND SINGLE MODE FIBER OPTIC CABLE FROM MDF TO SOUND SYSTEM RACK. TERMINATE FIBER IN OWNER PROVIDED RACK. REFER TO SYSTEMS ONE-LINE DIAGRAM FOR ADDITIONAL INFORMATIION.
S23	PROVIDE WALL MOUNTED RACK ENCLOSURE TRIPPLITE SMART RACK 15 RU SRW15US. IN RACK PROVIDE 6 STRAND FIBER OPTIC PATCH PANEL, CATEGORY CABLING PATCH PANEL FOR TICKETING BOOTH OUTLETS, AND SEPARATE COPPER PATCH PANEL FOR ASSOCIATED CCTV CABLING PATCH PANELS. PROVIDE 6 STRAND SINGLE MODE FIBER OPTIC CABLE BETWEEN RACK LOCATION AND DATA RACK IN VISITOR CONCESSIONS BUILDING. MOUNT ON THE WALL WITH TOP OF RACK 12" BELOW FINISHED CEILING.



5 ENLARGED SYSTEMS PLAN - MDF 103.1 CABLE TRAY PLAN

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

0 0.5' 1' 2' 4' 6' 8'



4 ENLARGED SYSTEMS PLAN - MDF 103.1

4 / 3 E-401

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

0 0.5' 1' 2' 4' 6' 8'

DRAWING SIZE: 30 X 42

STAMP

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POTTSGROVE HIGH SCHOOL FACILITY AND ATHLETIC IMPROVEMENTS

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REVISIONS	
BID SET	10/21/2026

DRAWN BY	Designer
REVIEWED BY	RC
JOB #	2665

SHEET TITLE

SYSTEMS PLAN - HOME SIDE PAVILION

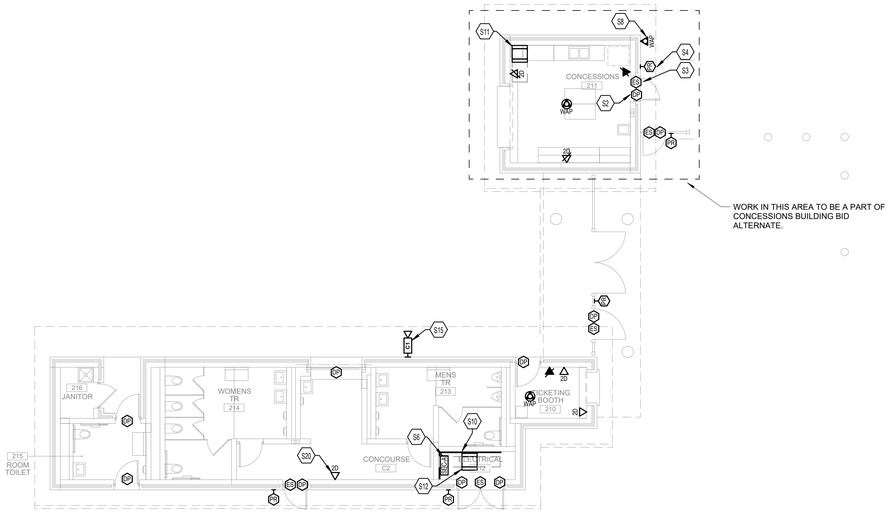
SHEET #

E-401

SCALE	AS NOTED
DATE	10-21-2026

TAGGED NOTES

S2	PROVIDE DOOR POSITION AT THIS LOCATION. (TYPICAL)
S3	PROVIDE ELECTRIC STRIKE AT THIS LOCATION. (TYPICAL)
S4	PROVIDE PROXIMITY READER AT THIS LOCATION. (TYPICAL)
S6	ACCESS CONTROL PANEL LOCATION. PANEL WILL BE PROVIDED AND INSTALLED BY OTHERS. PROVIDE CONDUIT AND JUNCTION BOX INFRASTRUCTURE TO ALL DOOR LOCATIONS AS NOTED ON PLANS AND LEGEND.
S8	ROUTE CONDUIT OUT AT 12" BELOW ROOF LEVEL FOR OUTDOOR WAP. PROVIDE CONDUIT STUB-OUT AT LOCATION INDICATED AND COIL UP 15' OR SPARE CATEGORY CABLING ABOVE CEILING IN BUILDING.
S10	PROVIDE FIRE RETARDANT BACKBOARD IN LOCATION SHOWN. REFER TO SPECIFICATION FOR ADDITIONAL REQUIREMENTS.
S11	PROVIDE WALL MOUNTED RACK ENCLOSURE TRIPPLITE SMART RACK 15 RU SRW15US. IN RACK PROVIDE 6 STRAND FIBER OPTIC PATCH PANEL, CATEGORY CABLING PATCH PANEL FOR TICKETING BOOTH OUTLETS, AND SEPARATE COPPER PATCH PANEL FOR ASSOCIATED CCTV CABLING PATCH PANELS. PROVIDE 6 STRAND SINGLE MODE FIBER OPTIC CABLE BETWEEN RACK LOCATION AND DATA RACK IN VISITOR CONCESSIONS BUILDING. MOUNT ON THE WALL WITH TOP OF RACK 12" BELOW FINISHED CEILING.
S12	PROVIDE FLOOR MOUNTED 4 POST DATA RACK. REFER TO SPECIFICATIONS AND SYSTEMS RISER DIAGRAM FOR REQUIREMENTS.
S15	PROVIDE 1" CONDUIT STUB OUT FOR CAMERA AT 12" BELOW ROOF LEVEL. COIL UP 25' OF CATEGORY CABLING ABOVE CEILING INSIDE BUILDING.
S20	PROVIDE DATA CONNECTION FOR FACP. COORDINATE FINAL LOCATION WITH FACP INSTALLER. DATA TO BE CONCEALED IN FACP, NOT SEPARATE FACEPLATE.



SYSTEMS PLAN - VISITORS SIDE
CONCESSIONS AND BLEACHERS

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

0 1' 2' 4' 8' 12' 16'

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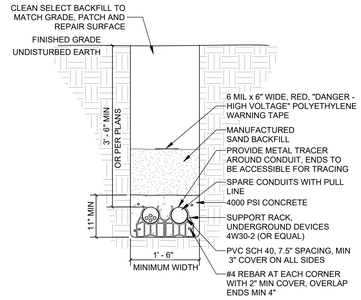
SYSTEMS PLAN - VISITORS SIDE PAVILION

SHEET #

E-402

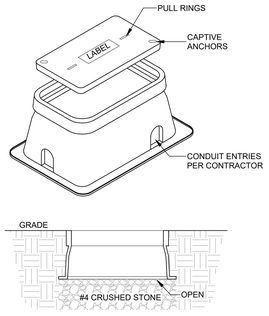
SCALE	AS NOTED
DATE	10-21-2026

DRAWING SIZE: 30 X 42



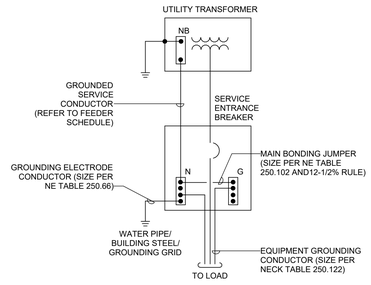
DUCT BANK NOTES:
A. USE RIGID STEEL SWEEPING ELBOWS AT ALL TURNS, WHERE RISING ON UTILITY POWER POLE, TURNING UP INTO PAD MOUNTED UTILITY TRANSFORMER AND TURNING UP INTO BUILDING.
B. REFER TO POWER RISER, FLOOR PLANS AND PLAN NOTES FOR EXACT QUANTITY AND SIZE OF CONDUITS.
C. COMMUNICATIONS/FIBER RACEWAYS SHALL BE ROUTED IN DUCT BANK ENCASED CONSTRUCTION, CONSTRUCTED SAME AS SHOWN, EXCEPT FOR NUMBER AND SIZE OF CONDUIT.
D. POUR CONCRETE AGAINST UNDISTURBED EARTH.
E. REFER TO SPECIFICATIONS FOR EXCAVATION, TRENCHING, BACKFILLING AND GRADING REQUIREMENTS. REFER TO EARTHWORK SPECIFICATIONS FOR GENERAL ROCK REMOVAL AND EARTHWORK REQUIREMENTS.

1 DUCT BANK DETAIL
NO SCALE

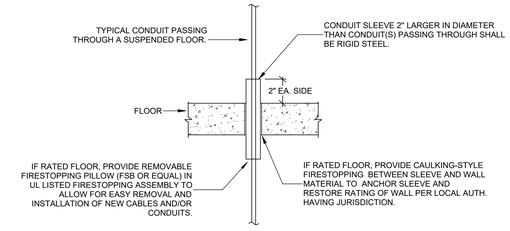


NOTES:
A. BOXES TO BE SIZED PER NEC 314.28 BASED UPON FIELD CONFIGURATION OF CONDUIT ENTRIES. PROVIDE EXTENSIONS WHERE REQUIRED.
B. BOX AND LID TO BE CONSTRUCTED OF POLYMER CONCRETE. LID TIER RATING PER INSTALLED LOCATION.
C. REFER TO SPECIFICATIONS FOR RELATED INFORMATION.

2 PULL BOX DETAIL
NO SCALE

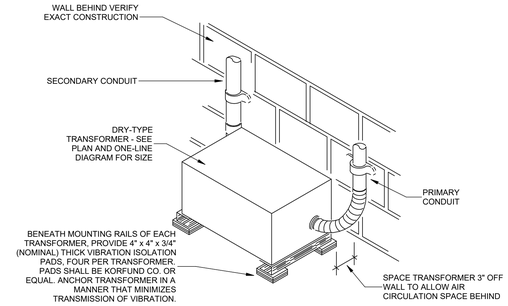


3 SERVICE ENTRANCE GROUNDING DETAIL
NO SCALE



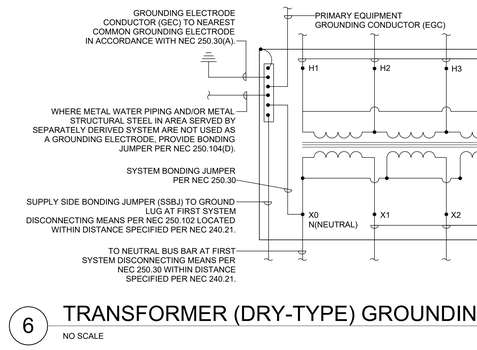
GENERAL FLOOR PENETRATION NOTES :
A. WHERE CONDUITS PENETRATE A FLOOR SLAB AND ARE EXPOSED, PROVIDE SQUARE 4" HIGH CONCRETEPAD AROUND CONDUIT SLEEVE AND EXTEND SLEEVE 4" ABOVE PAD.
B. WHERE CONDUITS OR SLEEVES PENETRATE FLOORS IN GROUPS, THE CONCRETE PAD SHOULD BE CONTINUOUS AROUND ALL CONDUITS OR SLEEVES.

4 CONDUIT PENETRATION SLEEVE INSTALLATION
NO SCALE

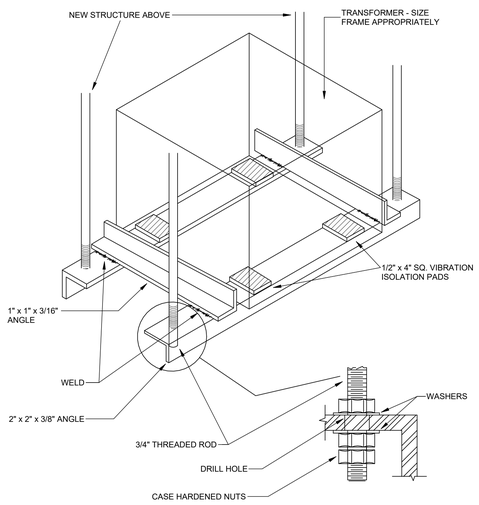


NOTES:
A. THE FINAL 12" TO 18" OF RACEWAY CONNECTION TO BOTH PRIMARY AND SECONDARY SIDES SHALL BE "SEALTITE" TYPE UA FLEXIBLE CONDUIT OR EQUAL, FOR VIBRATION ISOLATION.
B. ALL FLOOR - MOUNTED TRANSFORMERS 75KVA AND HIGHER TO HAVE A 4" HIGH REINFORCED CONCRETE PAD.

5 TYPICAL DRY-TYPE TRANSFORMER INSTALLATION
NO SCALE

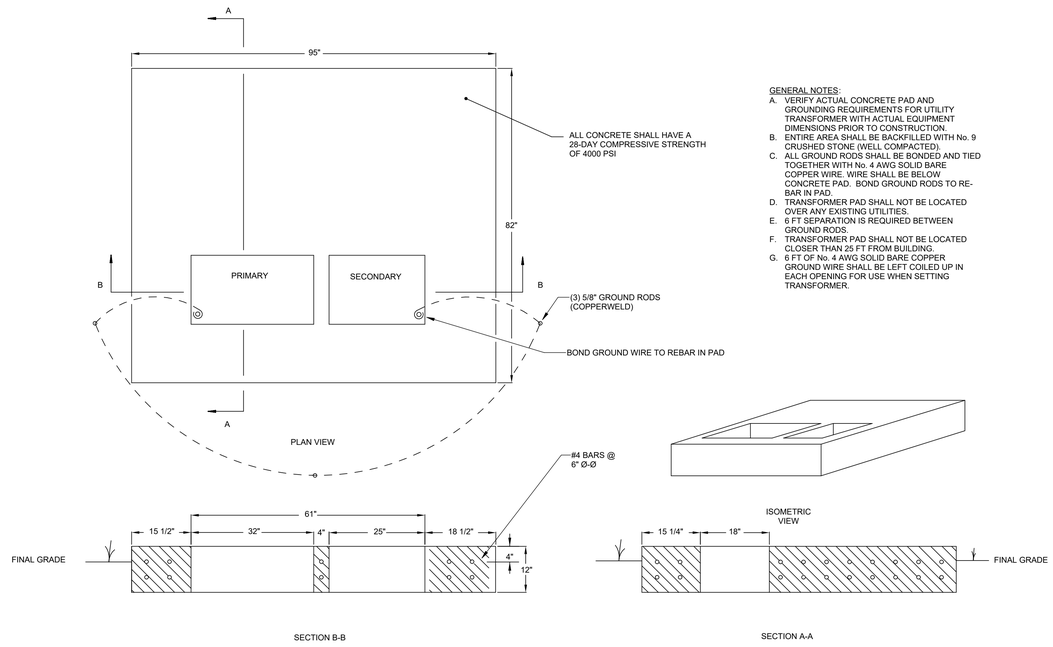


6 TRANSFORMER (DRY-TYPE) GROUNDING DETAIL
NO SCALE



GENERAL NOTES
A. THIS DETAIL ONLY APPLIES TO DRY-TYPE TRANSFORMERS UP TO 45 KVA.

7 SUSPENDED DRY-TYPE TRANSFORMER INSTALLATION
NO SCALE



GENERAL NOTES:
A. VERIFY ACTUAL CONCRETE PAD AND GROUNDING REQUIREMENTS FOR UTILITY TRANSFORMER WITH ACTUAL EQUIPMENT DIMENSIONS PRIOR TO CONSTRUCTION.
B. ENTIRE AREA SHALL BE BACKFILLED WITH No. 9 CRUSHED STONE (WELL COMPACTED).
C. ALL GROUND RODS SHALL BE BONDED AND TIED TOGETHER WITH No. 4 AWG SOLID BARE COPPER WIRE. WIRE SHALL BE BELOW CONCRETE PAD. BOND GROUND RODS TO RE-BAR IN PAD.
D. TRANSFORMER PAD SHALL NOT BE LOCATED OVER ANY EXISTING UTILITIES.
E. 6 FT SEPARATION IS REQUIRED BETWEEN GROUND RODS.
F. TRANSFORMER PAD SHALL NOT BE LOCATED CLOSER THAN 25 FT FROM BUILDING.
G. 6 FT OF No. 4 AWG SOLID BARE COPPER GROUND WIRE SHALL BE LEFT COILED UP IN EACH OPENING FOR USE WHEN SETTING TRANSFORMER.

8 PAD MOUNTED UTILITY TRANSFORMER CONCRETE PAD AND GROUNDING DETAIL
NO SCALE

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SHEET TITLE

ELECTRICAL DETAILS

SHEET #

E-500

SCALE	AS NOTED
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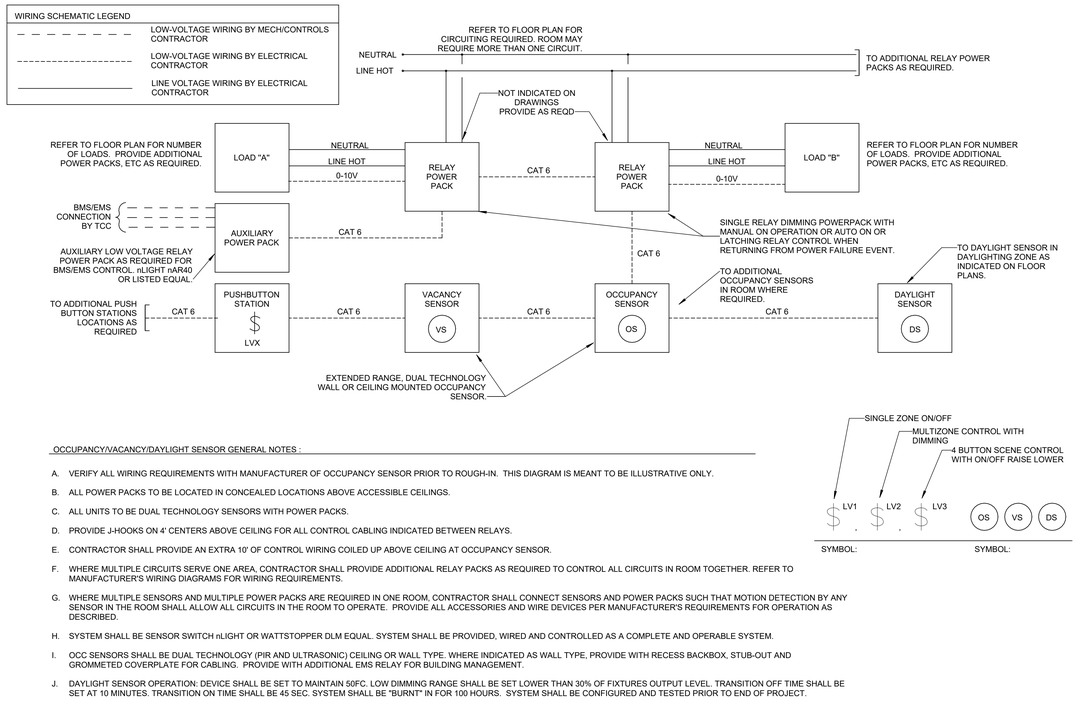
DRAWING SIZE: 30 X 42



OCCUPANCY/VACANCY/DAYLIGHT SENSOR GENERAL NOTES :

A. VERIFY ALL WIRING REQUIREMENTS WITH MANUFACTURER OF OCCUPANCY SENSOR PRIOR TO ROUGH-IN. THIS DIAGRAM IS MEANT TO BE ILLUSTRATIVE ONLY.

B. ALL POWER PACKS TO BE LOCATED IN CONCEALED LOCATIONS ABOVE ACCESSIBLE CEILINGS.

C. ALL UNITS TO BE DUAL TECHNOLOGY SENSORS WITH POWER PACKS.

D. PROVIDE J-HOOKS ON 4' CENTERS ABOVE CEILING FOR ALL CONTROL CABLING INDICATED BETWEEN RELAYS.

E. CONTRACTOR SHALL PROVIDE AN EXTRA 10' OF CONTROL WIRING COILED UP ABOVE CEILING AT OCCUPANCY SENSOR.

F. WHERE MULTIPLE CIRCUITS SERVE ONE AREA, CONTRACTOR SHALL PROVIDE ADDITIONAL RELAY PACKS AS REQUIRED TO CONTROL ALL CIRCUITS IN ROOM TOGETHER. REFER TO MANUFACTURER'S WIRING DIAGRAMS FOR WIRING REQUIREMENTS.

G. WHERE MULTIPLE SENSORS AND MULTIPLE POWER PACKS ARE REQUIRED IN ONE ROOM, CONTRACTOR SHALL CONNECT SENSORS AND POWER PACKS SUCH THAT MOTION DETECTION BY ANY SENSOR IN THE ROOM SHALL ALLOW ALL CIRCUITS IN THE ROOM TO OPERATE. PROVIDE ALL ACCESSORIES AND WIRE DEVICES PER MANUFACTURER'S REQUIREMENTS FOR OPERATION AS DESCRIBED.

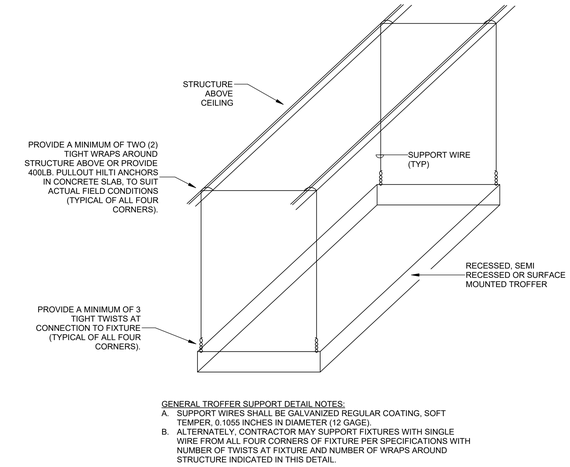
H. SYSTEM SHALL BE SENSOR SWITCH nLIGHT OR WATTSTOPPER DLM EQUAL. SYSTEM SHALL BE PROVIDED, WIRED AND CONTROLLED AS A COMPLETE AND OPERABLE SYSTEM.

I. OCC SENSORS SHALL BE DUAL TECHNOLOGY (PIR AND ULTRASONIC) CEILING OR WALL TYPE. WHERE INDICATED AS WALL TYPE, PROVIDE WITH RECESS BACKBOX, STUB-OUT AND GROMMETED COVERPLATE FOR CABLING. PROVIDE WITH ADDITIONAL EMS RELAY FOR BUILDING MANAGEMENT.

J. DAYLIGHT SENSOR OPERATION: DEVICE SHALL BE SET TO MAINTAIN 50FC. LOW DIMMING RANGE SHALL BE SET LOWER THAN 30% OF FIXTURES OUTPUT LEVEL. TRANSITION OFF TIME SHALL BE SET AT 10 MINUTES. TRANSITION ON TIME SHALL BE 45 SEC. SYSTEM SHALL BE "BURNT" IN FOR 100 HOURS. SYSTEM SHALL BE CONFIGURED AND TESTED PRIOR TO END OF PROJECT.

1 OCCUPANCY/VACANCY/DAYLIGHT SENSOR LIGHTING CONTROL WIRING DIAGRAM

NO SCALE

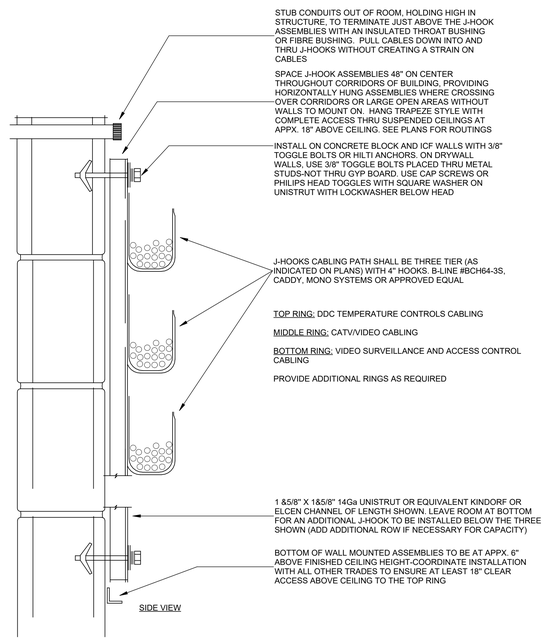


GENERAL TROFFER SUPPORT DETAIL NOTES:

A. SUPPORT WIRES SHALL BE GALVANIZED REGULAR COATING, SOFT TEMPER, 0.1055 INCHES IN DIAMETER (12 GAGE).
B. ALTERNATELY, CONTRACTOR MAY SUPPORT FIXTURES WITH SINGLE WIRE FROM ALL FOUR CORNERS OF FIXTURE PER SPECIFICATIONS WITH NUMBER OF TWISTS AT FIXTURE AND NUMBER OF WRAPS AROUND STRUCTURE INDICATED IN THIS DETAIL.

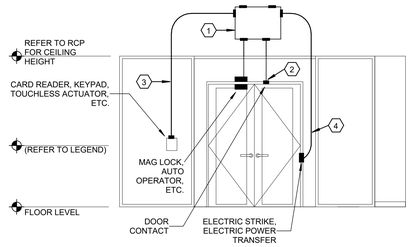
2 TROFFER SUPPORT DETAIL

NO SCALE



3 J HOOK INSTALLATION DETAIL

NO SCALE



TAGGED NOTES:

1. DOOR JUNCTION PANEL ABOVE DOOR PROVIDED AND INSTALLED BY THE ACCESS CONTROL VENDOR/CONTRACTOR. REFER TO DOOR HARDWARE SPECIFICATIONS AND FLOOR PLANS FOR ALL LOCATIONS.
2. PROVIDE CONDUIT STUB-OUT FROM DOOR FRAME TO 6" ABOVE CEILING AT DOOR LOCATION AS REQUIRED FOR DOOR POSITION CONTACT SWITCHES, AUTO OPERATORS, MAGNETIC LOCKS, ETC.. PROVIDE ADDITIONAL CONDUITS AND LOCATIONS AS REQUIRED FOR ADDITIONAL DEVICES. REFER TO DOOR HARDWARE SPECIFICATIONS AND FLOOR PLANS FOR DEVICES REQUIRED.
3. PROVIDE CONDUIT STUB-OUT FROM DOOR OPERATOR DEVICE 6" ABOVE CEILING AT DOOR LOCATION AS REQUIRED FOR CARD READERS, TOUCHLESS ACTUATORS, KEYPADS, ETC. PROVIDE ADDITIONAL CONDUITS AT LOCATIONS AS REQUIRED FOR ADDITIONAL DEVICES. REFER TO DOOR HARDWARE SPECIFICATIONS AND FLOOR PLANS FOR DEVICES REQUIRED.
4. PROVIDE CONDUIT STUB-OUT FROM DOOR FRAME TO 6" ABOVE CEILING AT DOOR LOCATION AS REQUIRED FOR FOR ELECTRIC POWER TRANSFER, ELECTRIC STRIKE, ETC. PROVIDE ADDITIONAL CONDUITS AT LOCATIONS AS REQUIRED FOR ADDITIONAL DEVICES. REFER TO DOOR HARDWARE SPECIFICATIONS AND FLOOR PLANS FOR DEVICES REQUIRED.

GENERAL NOTES:

A. PROVIDE ALL NECESSARY BACKBOXES, CONDUITS AND ROUGH-INS REQUIRED. REFER TO DOOR HARDWARE SPECIFICATIONS FOR DOOR RISER REQUIREMENTS PER DOOR AND FOR EQUIPMENT ITEMS AND CONNECTIONS.
B. REFER TO DOOR HARDWARE SPECIFICATIONS SECTION FOR ADDITIONAL REQUIREMENTS. PROVIDE ALL CONDUITS AND FINAL TERMINATIONS OF PATHWAYS AT ALL DOOR FRAMES, WALLS, BACKBOXES, ETC. AS REQUIRED FOR WIRING PATHWAYS.
C. PROVIDE 3/4" CONDUIT MINIMUM FOR ALL ACCESS CONTROL ROUGH-IN AND STUB-OUTS.
D. IN EXPOSED AREAS, PROVIDE CONDUIT THROUGH ENTIRE AREA. IN AREAS WITH CONCEILED CEILINGS PROVIDE CONDUITS INTO CEILING SPACE TO ALLOW FUTURE OWNER INSTALLATION.

4 TYPICAL DOOR HARDWARE ROUGH-IN ELEVATION

NO SCALE

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SHEET #	E-501
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DRAWING SIZE: 30 X 42

ONE-LINE DIAGRAM LINETYPE LEGEND

NEW

NEW ENCLOSURE

EXISTING

EXISTING ENCLOSURE

DEMOLITION

THREE PHASE DRY TYPE TRANSFOMER SCHEDULE

GENERAL NOTES:
A. UTILIZE PRIMARY AND SECONDARY FEEDER SIZES BELOW UNLESS OTHERWISE NOTED ON RISER DIAGRAM.
B. CONFIRM / COORDINATE TRANSFORMER AND TERMINAL BREAKERS' LUG SIZES WITH CONDUCTOR SIZES INDICATED.
C. COMPLY WITH NEC 240.87 FOR BREAKERS 1200A AND LARGER.
D. TRANSFORMER SECONDARY CONDUCTORS ARE ADJUSTED TO REFLECT THE NEUTRAL CONDUCTOR AS A CURRENT-CARRYING CONDUCTOR.

NOTES:
1. CONNECT GROUNDING ELECTRODE CONDUCTOR FROM TRANSFORMER X0 TERMINAL TO BUILDING STEEL IF AVAILABLE, OR TO OTHER BUILDING GROUND SYSTEM AS DESIGNATED.
2. CONDUCTOR SIZING BASED ON INDICATED TERMINAL BREAKER. REFER TO PANEL SCHEDULES AND/OR ONE-LINE DIAGRAM FOR FINAL SELECTION.
3. GROUNDING CONDUCTOR FROM TRANSFORMER TO PRIMARY OVERCURRENT DEVICE SIZED AS AN EQUIPMENT GROUNDING CONDUCTOR PER NEC TABLE 250.122.
4. BONDING CONDUCTOR FROM TRANSFORMER TO SECONDARY OVERCURRENT DEVICE SIZED AS A SEPARATELY DERIVED SYSTEM SUPPLY SIDE BONDING JUMPER PER NEC TABLE 250.66.

	PRIMARY - 480 DELTA			SECONDARY - 208Y/120V			
RATED KVA	**TERMINAL BREAKER (NOTE 2)**	***COPPER* CONDUCTOR SIZE (NOTE 3)**	**CONDUIT SIZE**	***COPPER* CONDUCTOR SIZE (NOTE 4)**	**CONDUIT SIZE**	**GROUNDING ELECTRODE CONDUCTOR SIZE (NOTE 1)**	**TERMINAL BREAKER (NOTE 2)**
9	20A/3P	3#12, #12G	3/4"	4#8, #8G	1"	#8	35A/3P
15	30A/3P	3#10, #10G	3/4"	4#6, #8G	1"	#8	60A/3P
30	50A/3P	3#8, #10G	3/4"	4#2, #8G	1 1/2"	#8	100A/3P
45	80A/3P	3#4, #8G	1"	4#2/0, #4G	2"	#4	175A/3P
75	150A/3P	3#1/0, #6G	1 1/2"	4 - 300KCMIL, #2G	2 1/2"	#2	250A/3P
112.5	250A/3P	3 - 250 KCMIL, #4G	2 1/2"	4#4/0, #2/0G (2 SETS)	2 1/2"	#2/0	400A/3P
150	300A/3P	3 - 300 KCMIL, #4G	2 1/2"	4 - 400 KCMIL, #2/0G (2 SETS)	3"	#2/0	600A/3P
225	400A/3P	3 - 500 KCMIL, #3G	3"	4 - 350 KCMIL, #2/0G (3 SETS)	3"	#2/0	800A/3P
300	500A/3P	3#4/0, #2G (2 SETS)	2"	4 - 400 KCMIL, #3/0G (4 SETS)	3"	#3/0	1200A/3P

ONE-LINE FEEDER SCHEDULE (COPPER)

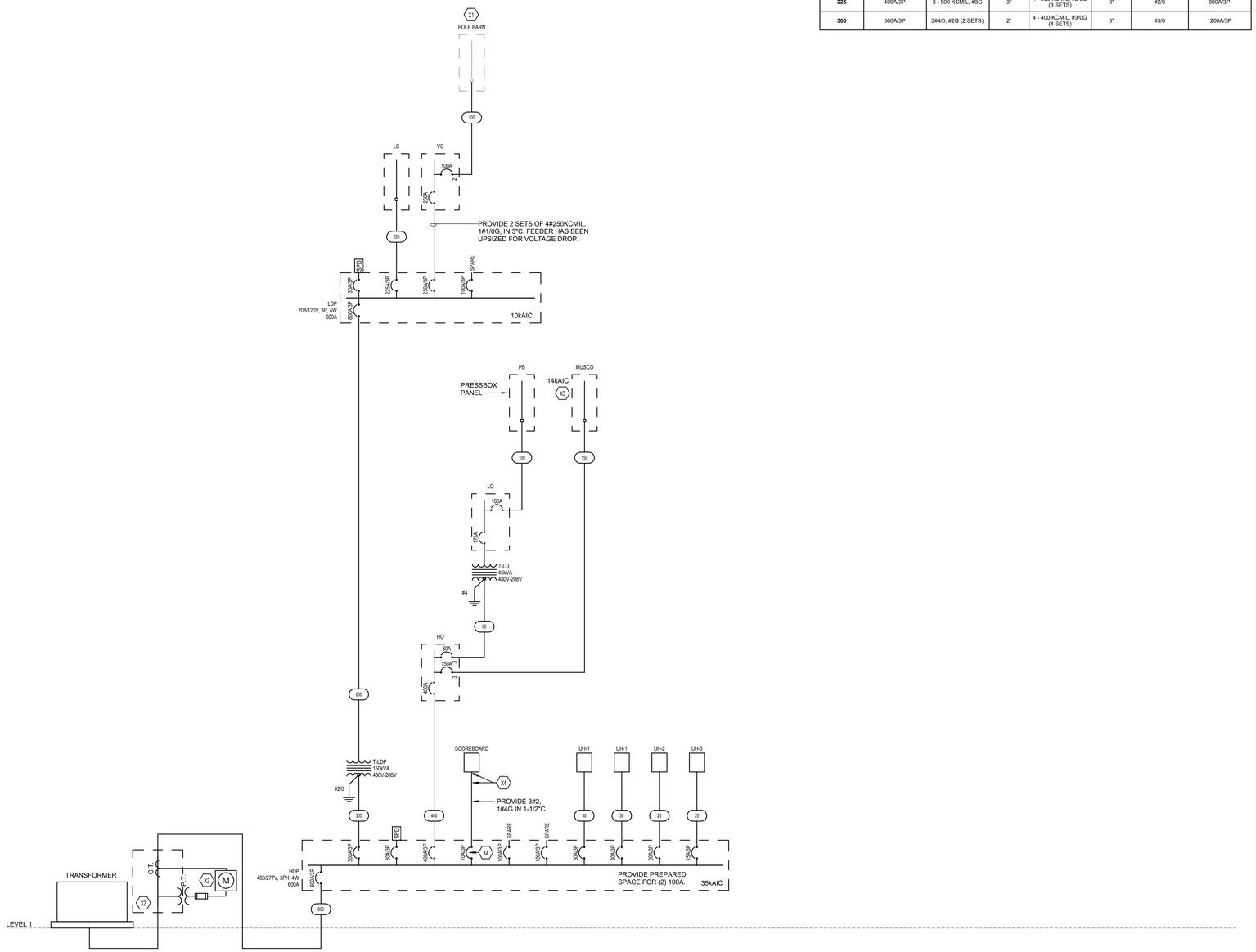
NOTES:
• TAGS WITH SUFFIX "-3W" ARE THREE-WIRE, NO NEUTRAL.

TAG	OCPD SETTING	WIRE SIZE	EQUIP. GROUND SIZE	CONDUIT SIZE
"	"	"	"	"
20	20/3 (4W)	(4) #12	(1) #12	3/4"
30	30/3 (4W)	(4) #10	(1) #10	3/4"
50	40/3 OR 50/3 (4W)	(4) #8	(1) #10	1"
60	60/3 (4W)	(4) #6	(1) #10	1"
80	70/3 OR 80/3 (4W)	(4) #4	(1) #8	1-1/4"
100	90/3 OR 100/3 (4W)	(4) #3	(1) #8	1-1/4"
110	110/3 (4W)	(4) #2	(1) #6	1-1/2"
125	125/3 (4W)	(4) #1	(1) #6	1-1/2"
150	150/3 (4W)	(4) #1/0	(1) #6	2"
175	175/3 (4W)	(4) #2/0	(1) #6	2"
200	200/3 (4W)	(4) #3/0	(1) #6	2"
225	225/3 (4W)	(4) #4/0	(1) #4	2-1/2"
250	250/3 (4W)	(4) #250 KCMIL	(1) #4	3"
300	300/3 (4W)	(4) #350 KCMIL	(1) #4	3"
350	350/3 (4W)	(4) #500 KCMIL	(1) #3	3-1/2"
400	400/3 (4W)	(4) #500 KCMIL	(1) #3	3-1/2"
500	500/3 (4W)	2 RUNS OF (4) - #250 KCMIL/PHASE	(1) #2	3"
600	600/3 (4W)	2 RUNS OF (4) - #350 KCMIL/PHASE	(1) #1	3"
700	700/3 (4W)	2 RUNS OF (4) - #500 KCMIL/PHASE	(1) #1/0	3-1/2"
800	800/3 (4W)	2 RUNS OF (4) - #500 KCMIL/PHASE	(1) #1/0	3-1/2"
1000	1000/3 (4W)	3 RUNS OF (4) - #500 KCMIL/PHASE	(1) #2/0	3-1/2"
1200	1200/3 (4W)	4 RUNS OF (4) - #350 KCMIL/PHASE	(1) #3/0	3-1/2"
1600	1600/3 (4W)	5 RUNS OF (4) - #500 KCMIL/PHASE	(1) #4/0	3-1/2"
2000	2000/3 (4W)	6 RUNS OF (4) - #500 KCMIL/PHASE	(1) #250 KCMIL	3-1/2"
3000	3000/3 (4W)	8 RUNS OF (4) - #500 KCMIL/PHASE	(1) #400 KCMIL	3-1/2"
4000	4000/3 (4W)	11 RUNS OF (4) - #500 KCMIL/PHASE	(1) #500 KCMIL	3-1/2"
EX	EXISTING TO REMAIN			

TAGGED NOTES

(##)

X1 EXISTING POLE BARN PANEL SHALL BE REFED AS INDICATED.
X2 PROVIDE CT AND METER AT UTILIITY TRANSFORMER PER UTILITY REQUIREMENTS.
X3 PROVIDE 480V-3P PANEL FOR MUSCO LIGHTING. REFER TO MUSCO DRAWINGS FOR CIRCUITING, CONTROLS AND ADDITIONAL INFORMAITON.
X4 COORDINATE EXACT SCOREBOARD AND REQUIREMENTS WITH MANUFACTURER'S INSTRUCTIONS. PROVIDE DEDUCT FOR CIRCUIT AND FEEDER ACCOUNTING FOR VOLTAGE DROP FOR SCOREBOARD IF REQUIREMENTS ARE REDUCED. ONE LINE DIAGRAM REFLECTS SCOREBOARD OPTION WITH LARGEST POWER REQUIREMENTS.



1 ONE-LINE DIAGRAM
NO SCALE

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REVISIONS	
BID SET	10/21/2026

DRAWN BY	TRR
REVIEWED BY	RC
JOB #	2665

SHEET TITLE

ONE-LINE DIAGRAM

SHEET #

E-600

SCALE	AS NOTED
DATE	10-21-2026

DRAWING SIZE: 30 X 42

PANELBOARD AND WIRING SCHEDULE

PANEL: HO — **MAINS TYPE:** MCB — **PANEL INTERRUPTING RATING:** 14kAIC
VOLTAGE: 480Y/277V,3P,4W — **SPD:** — **LOCATION:** BREAK ROOM 110
AMPERES: 400 A — **MOUNTING:** SURFACE — **SUPPLY FROM:** HDP
GENERAL NOTES:

NOTES	CIRCUIT DESCRIPTION	HOT, NEUT, GND	OCP	P	CKT	A		B		C		CKT	P	OCP	HOT, NEUT, GND	CIRCUIT DESCRIPTION	NOTES
					1	17.7	27.3					2					
	TLO	3-#4, 1-#4, 1-#8	70	3	3			9.7	24.8			4	3	150	3-#3/0, 1-#3/0, 1-#6	MUSCO	
					5					12.2	24.8	6					
	UH-7 MAINTENANCE SHOP 111	3-#12, 1-#12, 1-#12	20	3	7	3.3	3.3					8					
					9			3.3	3.3			10	3	20	3-#12, 1-#12, 1-#12	UH-7	
					11					3.3	3.3	12					
	RTU-1	3-#6, 1-#6, 1-#10	50	3	13	11.1	11.1					14					
					15			11.1	11.1			16	3	50	3-#6, 1-#6, 1-#10	RTU-2	
					17					11.1	11.1	18					
	LTG - NORTH LOT	1-#10, 1-#10, 1-#10	20	1	19	1.7	3.0					20					
	LTG - EAST LOT	1-#10, 1-#10, 1-#10	20	1	21			1.2	3.0			22	3	15	3-#12, 1-#12, 1-#12	WH-1	
	SPACE	--	--	1	23					--	3.0	24					
	SPACE	--	--	1	25	--	--					26	1	--	--	SPACE	
	SPACE	--	--	1	27			--	--			28	1	--	--	SPACE	
	SPACE	--	--	1	29					--	--	30	1	--	--	SPACE	
	SPACE	--	--	1	31	--	--					32	1	--	--	SPACE	
	SPACE	--	--	1	33			--	--			34	1	--	--	SPACE	
	SPACE	--	--	1	35					--	--	36	1	--	--	SPACE	
	SPACE	--	--	1	37	--	--					38	1	--	--	SPACE	
	SPACE	--	--	1	39			--	--			40	1	--	--	SPACE	
	SPACE	--	--	1	41					--	--	42	1	--	--	SPACE	
						78.5 kVA		67.5 kVA		68.8 kVA							
						284 A		244 A		249 A							

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
EQUIP	22212 VA	100.00%	22212 VA	TOTAL CONNECTED LOAD: 216845 VA
HVAC	92958 VA	100.00%	92958 VA	TOTAL ESTIMATED DEMAND: 210845 VA
LTNG	4863 VA	100.00%	4863 VA	TOTAL CONNECTED CURRENT: 258 A
REC	18000 VA	77.78%	14000 VA	TOTAL ESTIMATED DEMAND CURRENT: 254 A
Lighting	76812 VA	100.00%	76812 VA	25 % ADDITIONAL CAPACITY: 63 A
				TOTAL PANEL CURRENT: 317 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.

PANELBOARD AND WIRING SCHEDULE

PANEL: MUSCO — **MAINS TYPE:** MCB — **PANEL INTERRUPTING RATING:** 14kAIC
VOLTAGE: 480Y/277V,3P,4W — **SPD:** Yes — **LOCATION:** BREAK ROOM 110
AMPERES: 150 A — **MOUNTING:** SURFACE — **SUPPLY FROM:** HO
GENERAL NOTES:

NOTES	CIRCUIT DESCRIPTION	HOT, NEUT, GND	OCP	P	CKT	A		B		C		CKT	P	OCP	HOT, NEUT, GND	CIRCUIT DESCRIPTION	NOTES
					1	5.6	5.6					2					
	F1 - FOOTBALL LTG - C1	3-#10, 1-#10, 1-#10	30	3	3			5.6	5.6			4	3	30	3-#10, 1-#10, 1-#10	F2 - FOOTBALL LTG - C2	
					5					5.6	5.6	6					
	F1 - POLE ACCENT/RGBW LTG - C5	2-#12, 1-#12, 1-#12	15	2	7	1.2	1.2					8					
					9			1.2	1.2			10	2	15	2-#12, 1-#12, 1-#12	F2 - POLE ACCENT/RGBW - C6	
					11					5.6	5.6	12					
	F3 - FOOTBALL LTG - C3	3-#8, 1-#8, 1-#8	30	3	13	5.6	5.6					14	3	30	3-#8, 1-#8, 1-#8	F4 - FOOTBALL LTG - C4	
					15			5.6	5.6			16					
	F3 - FOOTBALL LTG - C7	2-#12, 1-#12, 1-#12	15	2	17					1.2	1.2	18	2	15	2-#12, 1-#12, 1-#12	F4 - POLE ACCENT/RGBW - C8	
					19	1.2	1.2					20					
	SPACE	--	--	1	21					--	--	22	1	--	--	SPACE	
	SPACE	--	--	1	23							24	1	--	--	SPACE	
	SPACE	--	--	1	25	--	--					26	1	--	--	SPACE	
	SPACE	--	--	1	27			--	--			28	1	--	--	SPACE	
	SPACE	--	--	1	29					--	--	30	1	--	--	SPACE	
	SPACE	--	--	1	31	--	--					32	1	--	--	SPACE	
	SPACE	--	--	1	33			--	--			34	1	--	--	SPACE	
	SPACE	--	--	1	35					--	--	36	1	--	--	SPACE	
	SPACE	--	--	1	37	--	--					38	1	--	--	SPACE	
	SPACE	--	--	1	39			--	--			40	1	--	--	SPACE	
	SPACE	--	--	1	41					--	--	42	1	--	--	SPACE	
						27.3 kVA		24.8 kVA		24.8 kVA							
						98 A		89 A		89 A							

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
Lighting	76812 VA	100.00%	76812 VA	TOTAL CONNECTED LOAD: 76812 VA
				TOTAL ESTIMATED DEMAND: 76812 VA
				TOTAL CONNECTED CURRENT: 92 A
				TOTAL ESTIMATED DEMAND CURRENT: 92 A
				25 % ADDITIONAL CAPACITY: 23 A
				TOTAL PANEL CURRENT: 115 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P. REFER TO MUSCO DRAWINGS FOR ADDITIONAL INFORMATION.

PANELBOARD AND WIRING SCHEDULE

PANEL: LO — **MAINS TYPE:** MCB — **PANEL INTERRUPTING RATING:** 10kAIC
VOLTAGE: 208Y/120V,3P,4W — **SPD:** — **LOCATION:** BREAK ROOM 110
AMPERES: 150 A — **MOUNTING:** SURFACE — **SUPPLY FROM:** TLO
GENERAL NOTES:

NOTES	CIRCUIT DESCRIPTION	HOT, NEUT, GND	OCP	P	CKT	A		B		C		CKT	P	OCP	HOT, NEUT, GND	CIRCUIT DESCRIPTION	NOTES
	REC - EXTERIOR REC	1-#12, 1-#12, 1-#12	20	1	1	0.5	0.5					2	1	20	1-#12, 1-#12, 1-#12	REC - ATHLETIC TRAINER 114	
1	REC - ATHLETIC TRAINER 114 FRZ	1-#12, 1-#12, 1-#12	20	1	3			0.2	0.4			4	1	20	1-#12, 1-#12, 1-#12	REC - ATHLETIC TRAINER 114	
	REC - TOILET RM & RECEIVING	1-#12, 1-#12, 1-#12	20	1	5					0.4	0.4	6	1	20	1-#12, 1-#12, 1-#12	REC - MAINTENANCE SHOP 111	
	REC - MAINTENANCE SHOP 111	1-#12, 1-#12, 1-#12	20	1	7	0.2	0.2					8	1	20	1-#12, 1-#12, 1-#12	REC - MAINTENANCE SHOP 111	
	REC - MAINTENANCE SHOP 111	1-#12, 1-#12, 1-#12	20	1	9			0.2	0.4			10	1	20	1-#12, 1-#12, 1-#12	REC - RECEIVING	
	REC - MAINTENANCE SHOP 111	1-#12, 1-#12, 1-#12	20	1	11					0.4	1.0	12	1	20	1-#12, 1-#12, 1-#12	OVERHEAD DOOR	
	REC - MAINTENANCE SHOP 111	1-#12, 1-#12, 1-#12	20	1	13	0.4	0.4					14	1	20	1-#12, 1-#12, 1-#12	REC - WAREHOUSE/STOR 112	
	OVERHEAD DOOR	1-#12, 1-#12, 1-#12	20	1	15			1.0	0.2			16	1	20	1-#12, 1-#12, 1-#12	REC - EWC	
	REC - WAREHOUSE/STOR 112	1-#12, 1-#12, 1-#12	20	1	17					0.5	0.4	18	1	20	1-#12, 1-#12, 1-#12	REC - BREAK RM 110	
	REC - COST, STOR, TOILET RM	1-#12, 1-#12, 1-#12	20	1	19	0.5	0.9					20	1	20	1-#12, 1-#12, 1-#12	REC - VEST, CORR, PLANS RM	
	REC - BREAK RM 110	1-#12, 1-#12, 1-#12	20	1	21			0.5	0.9			22	1	20	1-#12, 1-#12, 1-#12	REC - OFFICE 101	
1	REC - BREAK RM 110 REF	1-#12, 1-#12, 1-#12	20	1	23					0.2	0.7	24	1	20	1-#12, 1-#12, 1-#12	REC - IT MDF	
	REC - OFFICE 102	1-#12, 1-#12, 1-#12	20	1	25	0.9	1.1					26	1	20	1-#12, 1-#12, 1-#12	REC - CONFERENCE RM 105	
	REC - DIRECTOR'S OFFICE 100	1-#10, 1-#10, 1-#10	20	1	27			1.3	0.4			28	1	20	1-#12, 1-#12, 1-#12	REC - CONF RM 105 FLR BOXES	
	REC - IT MDF	1-#12, 1-#12, 1-#12	20	1	29					0.4	3.2	30					
	REC - CONFERENCE RM 105	1-#12, 1-#12, 1-#12	20	1	31	0.4	3.2					32	2	40	2-#8, 1-#8, 1-#10	CU-1	
	REC - ROOF EXTERIOR REC	1-#12, 1-#12, 1-#12	20	1	33			0.4	0.4			34	1	20	1-#12, 1-#12, 1-#12	EF-3 ATHLETIC TRAINER 114	
	EF-4	1-#12, 1-#12, 1-#12	20	1	35					0.7	0.9	36	1	20	1-#10, 1-#10, 1-#10	LTG - TRAINER, RECEIV, MAINT...	
	UH-6 ATHLETIC TRAINER 114	1-#8, 1-#8, 1-#8	20	1	37	1.5	1.0					38	1	20	1-#12, 1-#12, 1-#12	LTG - FACILITY OFFICES	
	REC - MDF RACK	1-#12, 1-#12, 1-#12	20	1	39			0.4	1.0			40	1	20	1-#12, 1-#12, 1-#12	OVERHEAD DOOR	
	TRAP PRIMER TP-2 CUST 108	1-#12, 1-#12, 1-#12	20	1	41					0.7	0.0	42	1	20	1-#12, 1-#12, 1-#12	TIME CLOCK	
	HAND DRYER TOILET ROOM 109	1-#12, 1-#12, 1-#12	20	1	43	1.5	1.5					44	1	20	1-#12, 1-#12, 1-#12	HAND DRYER TOILET RM 115	
	MUSCO CONTROL POWER	1-#12, 1-#12, 1-#12	20	1	45			0.6	0.1			46	1	20	1-#12, 1-#12, 1-#12	LTG - BUILDING EXTERIOR	
	RP-1	1-#12, 1-#12, 1-#12	20	1	47					0.4	1.0	48	1	20	1-#12, 1-#12, 1-#12	CEILING FAN	
	CEILING FAN	1-#12, 1-#12, 1-#12	20	1	49	1.0	1.0					50	1	20	1-#12, 1-#12, 1-#12	CEILING FAN	
	SPARE	--	20	1	51			0.0	1.6			52					
	SPARE	--	20	1	53					0.0	1.1	54	3	100	3-#1, 1-#1, 1-#8	PRESS BOX	
	SPARE	--	20	1	55	0.0	1.1					56					
	SPARE	--	20	1	57			0.0	0.0			58	1	20	--	SPARE	
	SPARE	--	20	1	59					0.0	0.0	60	1	20	--	SPARE	
	SPARE	--	20	1	61	0.0	0.0					62	1	20	--	SPARE	
	SPARE	--	20	1	63			0.0	0.0			64	1	20	--	SPARE	
	SPARE	--	20	1	65					0.0	0.0	66	1	20	--	SPARE	
	SPARE	--	20	1	67	0.0	0.0					68	1	20	--	SPARE	
	SPARE	--	20	1	69			0.0	0.0			70	1	20	--	SPARE	
	SPARE	--	20	1	71					0.0	0.0	72	1	20	--	SPARE	
	SPACE	--	--	1	73	--	--					74	1	--	--	SPACE	
	SPACE	--	--	1	75			--	--			76	1	--	--	SPACE	
	SPACE	--	--	1	77					--	--	78	1	--	--	SPACE	
	SPACE	--	--	1	79	--	--					80	1	--	--	SPACE	
	SPACE	--	--	1	81			--	--			82	1	--	--	SPACE	
	SPACE	--	--	1	83					--	--	84	1	--	--	SPACE	
						17.7 kVA		9.7 kVA		12.2 kVA							
						151 A		81 A		105 A							

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
EQUIP	13212 VA	100.00%	13212 VA	TOTAL CONNECTED LOAD: 39643 VA
HVAC	6448 VA	100.00%	6448 VA	TOTAL ESTIMATED DEMAND: 35643 VA
LTNG	1983 VA	100.00%	1983 VA	TOTAL CONNECTED CURRENT: 110 A
REC	18000 VA	77.78%	14000 VA	TOTAL ESTIMATED DEMAND CURRENT: 99 A
				25 % ADDITIONAL CAPACITY: 25 A
				TOTAL PANEL CURRENT: 124 A

NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.
1. PROVIDE GFCI CIRCUIT BREAKER.

PANELBOARD AND WIRING SCHEDULE

PANEL: VC — **MAINS TYPE:** MCB — **PANEL INTERRUPTING RATING:** 10kAIC
VOLTAGE: 208Y/120V,3P,4W — **SPD:** — **LOCATION:**
AMPERES: 250 A — **MOUNTING:** SURFACE — **SUPPLY FROM:** LDP
GENERAL NOTES:

NOTES	CIRCUIT DESCRIPTION	HOT, NEUT, GND	OCP	P	CKT	A		B		C		CKT	P	OCP	HOT, NEUT, GND	CIRCUIT DESCRIPTION	NOTES
1	REC - CONCESSIONS REF	1-#12, 1-#12, 1-#12	20	1	1	0.2	0.2					2	1	20	1-#12, 1-#12, 1-#12	REC - CONCESSIONS	
	REC - CONCESSIONS	1-#12, 1-#12, 1-#12	20	1	3			0.2	0.2			4	1	20	1-#12, 1-#12, 1-#12	REC - CONCESSIONS	
	REC - CONCESSIONS	1-#12, 1-#12, 1-#12	20	1	5					0.2	0.2	6	1	20	1-#12, 1-#12, 1-#12	REC - CONCESSIONS	
	REC - CONCESSIONS 211 CORD...	1-#12, 1-#12, 1-#12	20	1	7	0.2	0.4					8	1	20	1-#12, 1-#12, 1-#12	REC - VISITOR TICKET BOOTH	
	HAND DRYER	1-#12, 1-#12, 1-#12	20	1	9			1.5	0.7			10	1	20	1-#12, 1-#12, 1-#12	REC - RESTROOMS & WP	
	HAND DRYER	1-#12, 1-#12, 1-#12	20	1	11					1.5	0.4	12	1	20	1-#12, 1-#12, 1-#12	REC - RESTROOM & JANITOR	
	HAND DRYER	1-#12, 1-#12, 1-#12	20	1	13	1.5	1.5					14	1	20	1-#12, 1-#12, 1-#12	HAND DRYER	
	UH-5 JANITOR 216	1-#12, 1-#12, 1-#12	20	1	15			1.0	1.5			16	1	20	1-#12, 1-#12, 1-#12	HAND DRYER	
	CU-1	2-#8, 1-#8, 1-#10	40	2	17					3.2	1.0	18	1	20	1-#12, 1-#12, 1-#12	UH-5 TICKETING BOOTH 210	
					19	3.2	1.0					20	1	20	1-#12, 1-#12, 1-#12	UH-5 TOILET ROOM 215	
	UH-3 WOMENS TR 214	3-#10, 1-#10, 1-#10	30	3	21			1.7	2.4			22	1	30	1-#10, 1-#10, 1-#10	EWH-4 CONCESSIONS 211	
					23					1.7	1.2	24	1	20	1-#12, 1-#12, 1-#12	EF-2 WOMENS TR 214	
					25	1.7	1.7					26					
	UH-4 MENS TR 213	3-#12, 1-#12, 1-#12	20	3	27			1.7	1.7			28	3	20	3-#12, 1-#12, 1-#12	UH-4 CONSESSIONS 211	
					29					1.7	1.7	30					
					31	1.7	0.4					32	1	20	1-#10, 1-#10, 1-#10	REC - FIELD REC 50YD LINE VISITOR	
	EWH-5 TOILET ROOM 215	2-#10, 1-#10, 1-#10	30	2	33			1.8	0.2			34	1	20	1-#12, 1-#12, 1-#12	REC - EWC	1
					35					1.8	0.2	36	1	20	1-#12, 1-#12, 1-#12	REC - EWC	1
	EXTERIOR CAMERA	1-#12, 1-#12, 1-#12	20	1	37	0.2	0.9					38	1	20	1-#12, 1-#12, 1-#12	LTG - VISITOR SIDE INTERIOR	
	EXTERIOR CAMERAS	1-#12, 1-#12, 1-#12	20	1	39			0.2	0.2			40	1	20	1-#12, 1-#12, 1-#12	LTG - VISITOR SIDE EXTERIOR	
	EXTERIOR CAMERAS	1-#10, 1-#10, 1-#10	20	1	41					0.4	0.4	42	1	20	1-#12, 1-#12, 1-#12	TRAP PRIMER TP-2 TOILET RM 215	
	TRAP PRIMER TP-2 STORAGE 204	1-#10, 1-#10, 1-#10	20	1	43	0.4	0.2					44	1	20	1-#12, 1-#12, 1-#12	OVERHEAD DOOR	
	RACK REC - ELEC 212	1-#12, 1-#12, 1-#12	20	1	45			0.2	0.2			46	1	20	1-#12, 1-#12, 1-#12	RACK REC - ELEC 212	
	SECURITY EQUIP - ELEC 212	1-#12, 1-#12, 1-#12	20	1	47					0.2	1.5	48	1	20	1-#12, 1-#12, 1-#12	HAND DRYER CONCOURSE C2	
					49	2.0	0.5					50	1	20	1-#8, 1-#8, 1-#8	LTG - WALKWAY	
	SGP-1	3-#10, 1-#10, 1-#10	30	3	51			2.0	0.0			52	1	20	1-#12, 1-#12, 1-#12	TIME CLOCK	
					53					2.0	0.2	54	1	20	1-#12, 1-#12, 1-#12	WALL RACK CONCESSION 211	
	SPARE	--	20	1	55	0.0	0.0					56	1	20	--	SPARE	
	SPARE	--	20	1	57			0.0	0.0			58	1	20	--	SPARE	
	SPARE	--	20	1	59					0.0	0.0	60	1	20	--	SPARE	
	SPARE	--	20	1	61	0.0	0.0					62	1	20	--	SPARE	
	SPARE	--	20	1	63			0.0	0.0			64	1	20	--	SPARE	
	SPARE	--	20	1	65					0.0	0.0	66	1	20	--	SPARE	
	SPARE	--	20	1	67	0.0	0.0					68	1	20	--	SPARE	
	SPARE	--	20	1	69			0.0	0.0			70	1	20	--	SPARE	
	SPARE	--	20	1	71					0.0	0.0	72	1	20	--	SPARE	
	SPACE	--	--	1	73	--	--					74	1	--	--	SPACE	
	SPACE	--	--	1	75			--	--			76	1	--	--	SPACE	
	SPACE	--	--	1	77					--	--	78	1	--	--	SPACE	
	SPACE	--	--	1	79	--	--					80	1	--	--	SPACE	
	SPACE	--	--	1	81			--	--			82	1	--	--	SPACE	
	SPACE	--	--	1	83					--	--	84	1	--	--	SPACE	
						22.8 kVA		19.7 kVA		21.7 kVA							
						193 A		164 A		184 A							

LOAD CLASSIFICATION	CONNECTED LOAD	DEMAND FACTOR	ESTIMATED DEMAND	PANEL TOTALS
EQUIP	16464 VA	100.00%	16464 VA	TOTAL CONNECTED LOAD: 64168 VA
HVAC	36876 VA	100.00%	36876 VA	TOTAL ESTIMATED DEMAND: 64168 VA
LTNG	3092 VA	100.00%	3092 VA	TOTAL CONNECTED CURRENT: 178 A
REC	7740 VA	100.00%	7740 VA	TOTAL ESTIMATED DEMAND CURRENT: 178 A
				25 % ADDITIONAL CAPACITY: 45 A
				TOTAL PANEL CURRENT: 223 A

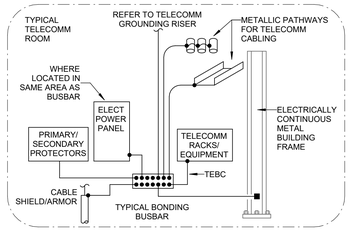
NOTES: WHERE NOT LISTED, WIRE AND CONDUIT SHALL BE BE MINIMUM PER SPECIFICATIONS. SPARE BREAKERS TO BE 20A/1P.
1. PROVIDE GFCI CIRCUIT BREAKER.

PANELBOARD AND WIRING SCHEDULE

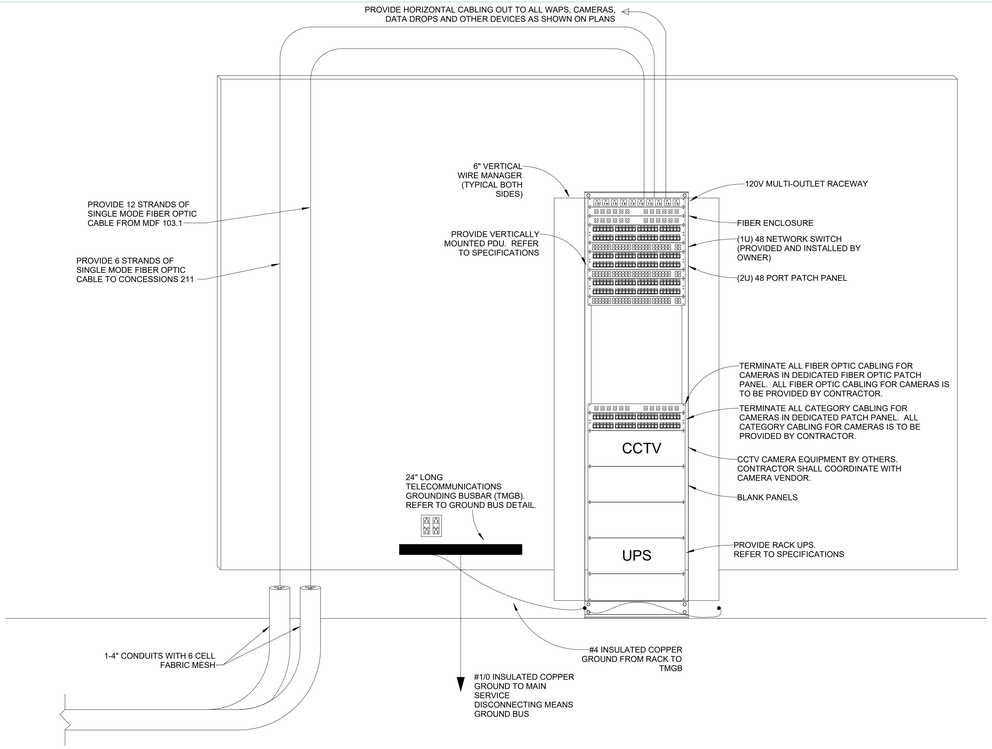
PANEL: LC — **MAINS TYPE:** MCB — **PANEL INTERRUPTING RATING:** 10kAIC
VOLTAGE: 208Y/120V,3P,4W — **SPD:** — **LOCATION:** CONCESSIONS 209
AMPERES: 225 A — **MOUNTING:** SURFACE — **SUPPLY FROM:** LDP
GENERAL NOTES:

NOTES	CIRCUIT DESCRIPTION	HOT, NEUT, GND	OCP	P	CKT	A		B		C		CKT	P	OCP	HOT, NEUT, GND	CIRCUIT DESCRIPTION	NOTES
	REC - CONCESSIONS 209	1-#12, 1-#12, 1-#12	20	1	1	0.5	0.8					2	1	20	1-#12, 1-#12, 1-#12	REC - CONCESSIONS 209 REF	1
1	REC - CONCESSIONS 209 COOLER	1-#12, 1-#12, 1-#12	20	1	3			1.0	0.8			4	1	20	1-#12, 1-#12, 1-#12	REC - CONCESSIONS 209 REF	1
	REC - CONCESSIONS 209	1-#12, 1-#12, 1-#12	20	1	5					0.5	0.8	6	1	20	1-#12, 1-#12, 1-#12	REC - CONCESSIONS 209 REF	1
	REC - CONCESSIONS 209 CORD...	1-#12, 1-#12, 1-#12	20	1	7	0.4	0.4					8	1	20	1-#12, 1-#12, 1-#12	REC - CONCESSIONS 209	
1	REC - CONCESSIONS 209 CORD...	1-#12, 1-#12, 1-#12	20	1	9			0.4	0.2			10	1	20	1-#12, 1-#12, 1-#12	EXTERIOR CAMERA	
1	REC - CONCESSIONS 209 CORD...	1-#12, 1-#12, 1-#12	20	1	11					0.4	1.0	12	1	20	1-#12, 1-#12, 1-#12	REC - CONCESSIONS 209 COOLER	1
	REC - STOR 204 & TOILET RM 205	1-#12, 1-#12, 1-#12	20	1	13	0.7	0.4					14	1	20	1-#12, 1-#12, 1-#12	REC - CONCESSIONS 209 CORD...	1
	HAND DRYER	1-#10, 1-#10, 1-#10	20	1	15			1.5	0.9			16	1	20	1-#12, 1-#12, 1-#12	REC - WOMEN TOILET RM	
	REC - MECH 201 & WP REC	1-#12, 1-#12, 1-#12	20	1	17					0.4	1.5	18	1	20	1-#12, 1-#12, 1-#12	HAND DRYER	
	REC - APPAREL SALES	1-#12, 1-#12, 1-#12	20	1	19	0.4	1.5					20	1	20	1-#10, 1-#10, 1-#10	HAND DRYER	
	CU-1	2-#8, 1-#8, 1-#10	40	2	21			3.2	1.7			22	1	20	1-#10, 1-#10, 1-#10	EF-1 MENS TR 203	
					23					3.2	0.4	24	1	20	1-#12, 1-#12, 1-#12	REC - TICKETING BOOTH 200	
	UH-5 TOILET ROOM 205	1-#12, 1-#12, 1-#12	20	1	25	1.0	0.5					26	1	20	1-#12, 1-#12, 1-#12	REC - APPAREL SALES	
	UH-5	1-#10, 1-#10, 1-#10	20	1	27			1.0	1.0			28	1	20	1-#12, 1-#12, 1-#12	UH-5 STORAGE 204	
	REC - FIELD REC HOME WEST	1-#10, 1-#10, 1-#10	20	1	29					0.4	1.5	30	1	20	1-#10, 1-#10, 1-#10	UH-6 APPAREL SALES 202	
	REC - BATTING CAGE	1-#6, 1-#6, 1-#6	20	1	31	1.5	1.5					32	1	20	1-#10, 1-#10, 1-#10	BASEBALL SCOREBOARD	
	REC - BACKSTOP REC	1-#12, 1-#12, 1-#12	20	1	33			0.4	0.4			34	1	20	1-#12, 1-#12, 1-#12	REC - BASEBALL SCOREBOARD	
	HAND DRYER	1-#12, 1-#12, 1-#12	20	1	35					1.5	1.5	36	1	20	1-#12, 1-#12, 1-#12	HAND DRYER	
	HAND DRYER	1-#10, 1-#10, 1-#10	20	1	37	1.5	1.5					38	1	20	1-#10, 1-#10, 1-#10	HAND DRYER	
	LTG - HOME RESTRMS & APPAREL	1-#12, 1-#12, 1-#12	20	1	39			1.1	2.8			40	2	40	2-#8, 1-#8, 1-#10	EWH-2 JANMECH 207	
	LTG - HOME TICKET BOOTH &...	1-#12, 1-#12, 1-#12	20	1	41					0.3	2.8	42					
	LTG - HOME CONCESSIONS	1-#12, 1-#12, 1-#12	20	1	43	0.3	0.3					44	1	20	1-#12, 1-#12, 1-#12	LTG - EXT HOME CONC & RR	
	EXTERIOR HAND DRYER	1-#12, 1-#12, 1-#12	20	1	45			1.5	0.5			46	1	20	1-#12, 1-#12, 1-#12	LTG - FLAG POLE	
	HAND DRYER	1-#12, 1-#12, 1-#12	20	1	47					1.5	1.5	48	1	20	1-#12, 1-#12, 1-#12	EXTERIOR HAND DRYER	
	EWH-3 STORAGE 204	2-#12, 1-#12, 1-#12	20	2	49	1.8	0.0					50	1	20	--	SPARE	
					51			1.8	0.0			52	1	20	--	SPARE	
	OVERHEAD DOOR	1-#12, 1

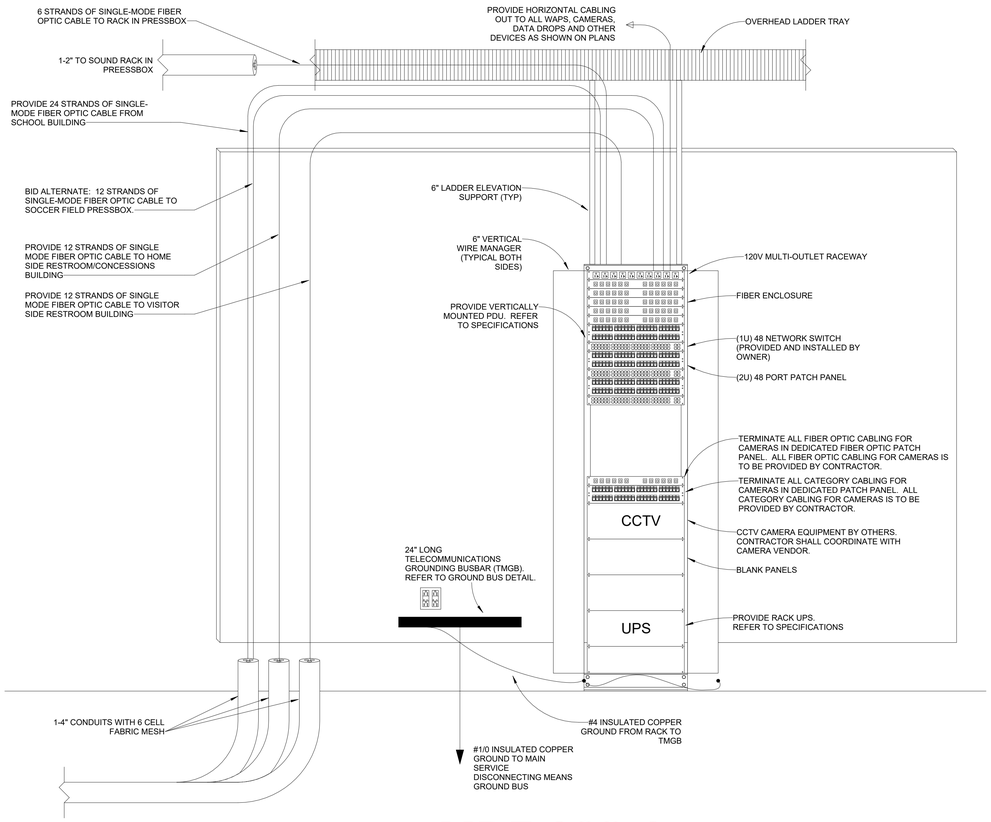
NOTES:
A. ALL WORK TO BE DONE IN ACCORDANCE WITH ANSI/TIA STD-607-C
B. ALL GROUNDING AND BONDING CONDUCTORS SHALL BE GREEN INSULATED COPPER CONDUCTORS AND LISTED FOR INTENDED APPLICATION.
C. LABEL ALL GROUNDING AND BONDING CONDUCTORS IN ACCORDANCE WITH ANSI/TIA/EIA 606 REQUIREMENTS.
D. ALL CONNECTIONS SHALL BE EXOTHERMIC WELD, LISTED COMPRESSION TWO-HOLE LUGS, OR OTHER IRREVERSIBLE COMPRESSION TYPE CONNECTION.
E. ALL METALLIC RACEWAYS FOR TELECOMM CABLING SHALL BE BONDED TO BUSBAR IF LOCATED IN SAME ROOM OR AREA.
F. WHERE THE OSP OR BACKBONE CABLING INCORPORATES A SHIELD OR METALLIC ARMOR, IT SHALL BE BONDED TO THE BUSBAR WHERE THE CABLES ARE TERMINATED OR WHERE THE PAIRS ARE BROKEN OUT FROM THE CABLE SHEATH.
G. BONDING CONDUCTOR TO BUILDING STEEL SHALL BE SIZED TO MATCH BACKBONE CONDUCTOR. OTHER BONDING CONDUCTORS SHALL BE A MINIMUM #6 AWG AND INSTALLED WITH A MINIMUM 8-INCH BEND RADIUS.
H. BONDING CONDUCTORS FOR ENTRANCE PROTECTORS AND CABLE SHIELDING CAPABLE OF CONDUCTING LIGHTNING AND FAULT CURRENTS SHALL MAINTAIN A MINIMUM OF 1FT SEPARATION FROM ALL TELECOMM CABLING.



2 E-800 TELECOMM BUSBAR CONNECTIONS
12" = 1'-0"

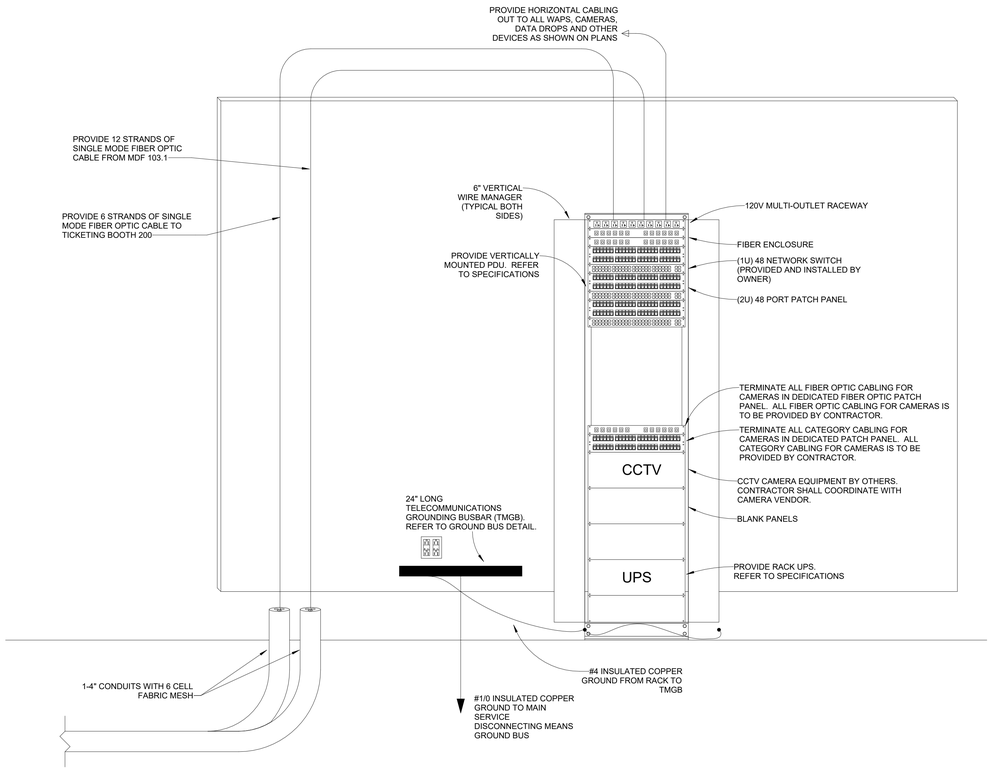


VISITORS SIDE RESTROOM IDF



1 E-800 SYSTEMS ONE-LINE DIAGRAM
NOT TO SCALE

MDF 103.1



HOME SIDE CONCESSIONS IDF

DRAWING SIZE: 30 X 42

ROBERT A. HANS
REGISTERED PROFESSIONAL ENGINEER
COMMONWEALTH OF PENNSYLVANIA
STAMP

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REVISIONS	
BID SET	10/21/2026

DRAWN BY	TRR
REVIEWED BY	RC
JOB #	2665

SHEET TITLE

SYSTEMS ONE-LINE DIAGRAM

SHEET #

E-800

SCALE	AS NOTED
DATE	10-21-2026