

NEW ATHLETIC TRAINING FACILITY

AT

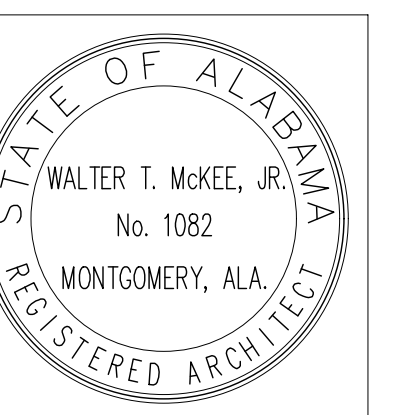
SARALAND HIGH SCHOOL

FOR THE

SARALAND CITY SCHOOLS

SARALAND, ALABAMA

DCM#2025907



SHEET TITLE:
COVER SHEET

PROJ. MGR.: JRB
DRAWN: JRB

DATE: 04.03.2026

REVISIONS

JOB NO. 25-173

SHEET NO:

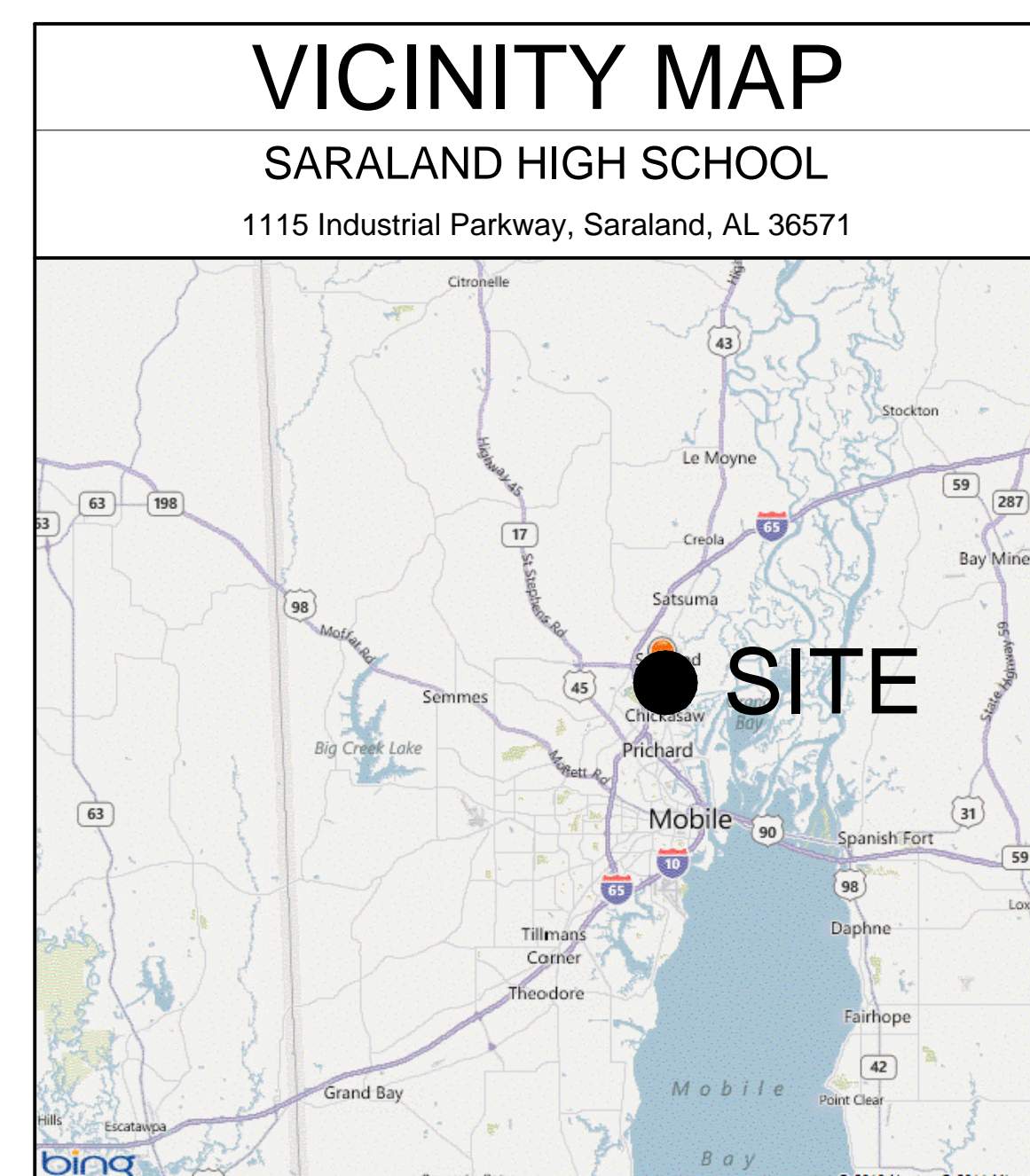
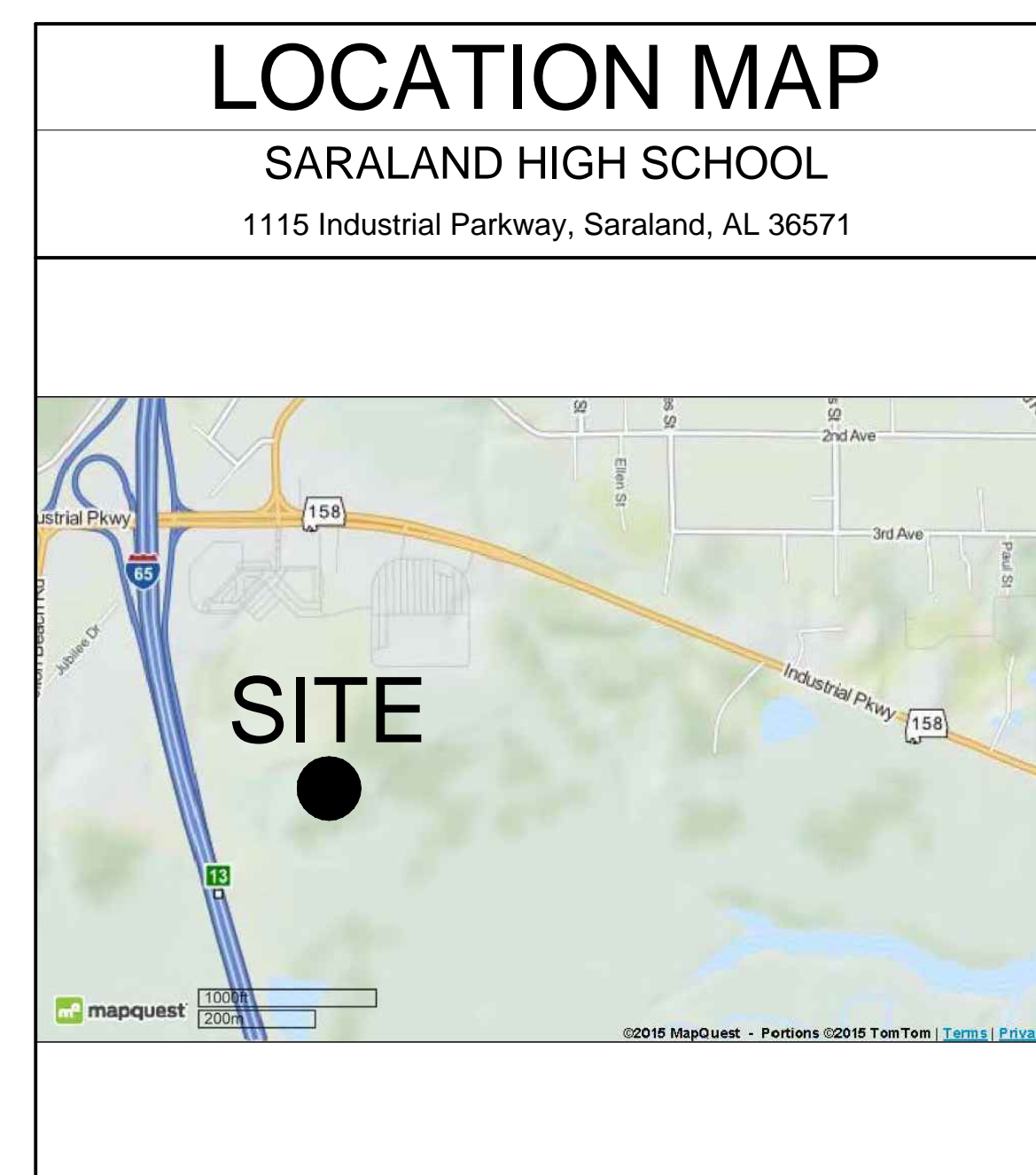
G0.1

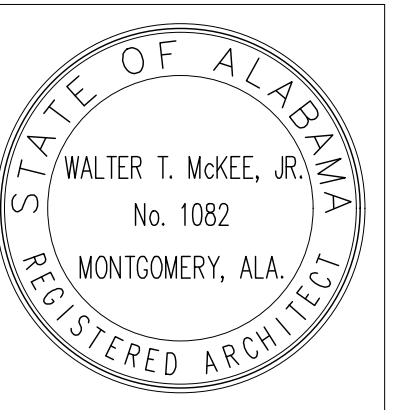
INDEX TO DRAWINGS

SHT. NUM.	SHT. TITLE	SHT. NUM.	SHT. TITLE
GENERAL		PLUMBING	
G0.1	TITLE SHEET and INDEX TO DRAWINGS	P1	PLUMBING SCHEDULES, NOTES AND DETAILS
G1.1	CODE PLAN	P2	PLUMBING FLOOR PLANS
CIVIL		MECHANICAL	
C-10	PROJECT NOTES	M1	HVAC FLOOR PLAN AND SECTION
C-11	EXISTING CONDITIONS AND DEMO PLAN	M2	HVAC SCHEDULE AND DETAILS
C-2.0	GEOMETRIC PLAN	M3	HVAC DETAILS
C-3.0	GRADING AND DRAINAGE PLAN	M4	HVAC CONTROLS
C-3.1	DOWNSPOUT PLAN	ELECTRICAL	
C-4.0	UTILITY PLAN	E0.1	ELECTRICAL LEGEND AND NOTES
C-4.1	WATER UTILITY DETAILS	E1.1	ELECTRICAL SITE PLAN
C-4.2	SEWER UTILITY DETAILS	E2.1	ELECTRICAL PLAN - LIGHTING
C-5.0	CIVIL CONSTRUCTION DETAILS	E2.2	LIGHTING CONTROLS, DETAILS AND NOTES
C-6.0	EROSION CONTROL PLAN	E3.1	ELECTRICAL PLAN - POWER
C-6.1	EROSION CONTROL DETAILS	E4.1	ELECTRICAL PLAN - AUXILIARY
STRUCTURAL		E5.1	LIGHTING SCHEDULE, NOTES, DETAILS, AND ENERGY REPORT
S0.1	GENERAL NOTES, SCHEDULES, AND TYPICAL DETAILS	E5.2	PANELBOARD SCHEDULE, DETAILS, AND NOTES
S1.1	FOUNDATION PLAN	E6.1	AUXILIARY RISER DIAGRAM, DETAILS AND NOTES
S1.2	ROOF FRAMING PLAN	E6.2	COMMUNICATIONS RISER, DETAILS AND NOTES
S2.1	SECTIONS AND DETAILS	E7.1	POWER RISER DIAGRAM, DETAILS AND NOTES
ARCHITECTURAL		E7.2	GROUNDING DETAILS AND NOTES
A1.1	FLOOR PLAN, REFLECTED CEILING PLAN, ROOF PLAN		
A4.1	EXTERIOR ELEVATIONS AND MISCELLANEOUS DETAILS		
A5.1	BUILDING SECTIONS		
A6.1	WALL SECTIONS		
A8.1	DOOR AND ROOM FINISH SCHEDULES AND DETAILS		

CONTACTS

Owner Saraland City Board of Education 4010 Lil' Spartan Drive Saraland, Alabama 36571 Phone: (251) 375.5420	ARCHITECTURAL Lathan McKee Architects 631 South Hull Street Montgomery, Alabama 36104 Phone: (334) 834.9933	CIVIL Sawgrass Consulting, LLC 30673 Sgt. E.I. "Boots" Thomas Drive Spanish Fort, AL 36527 Phone: (251) 544.7900
STRUCTURAL Blackburn, Daniels, O'barr Consulting Structural Engineers 1005 Browns Hill Road Lowndesboro, Alabama 36752 Phone: (334) 265.0206	PLUMBING and MECHANICAL Zgouvas, Eiring and Associates 800 South McDonough Street Montgomery, Alabama 36104 Phone: (334) 263.4406	ELECTRICAL Gunn and Associates 3102 Highway 14 Millbrook, AL 36054 Phone: (334) 285.1273





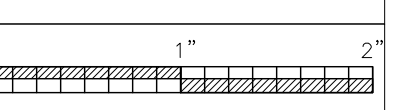
SHEET TITLE:
CODE PLAN

PROJ. MGR.: JRB
DRAWN: JRB
DATE: 04.03.2026
REVISIONS:

JOB NO. **25-173**

SHEET NO:

G1.1

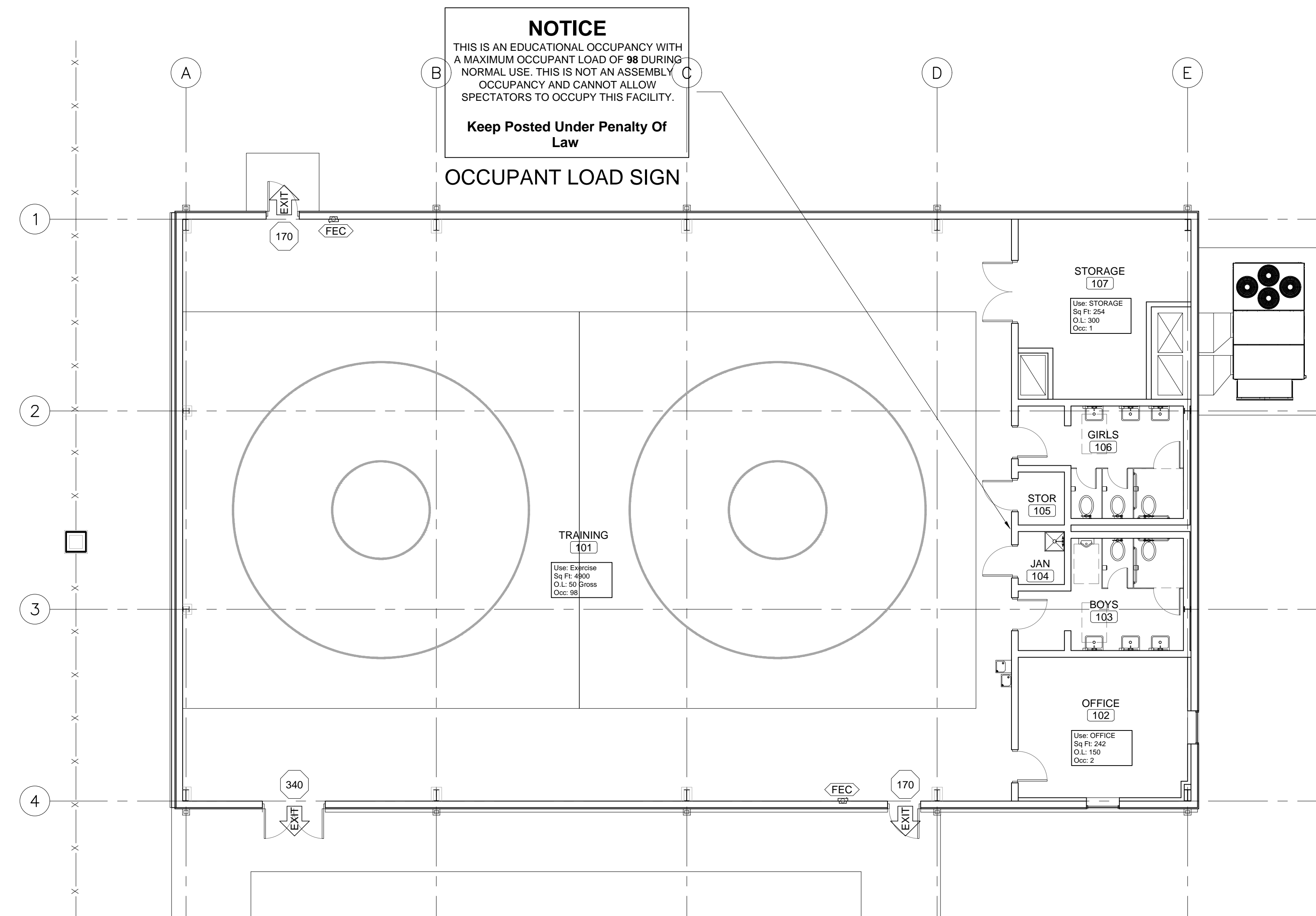


PLUMBING CALCULATIONS IBC
<p>2021 INTERNATIONAL PLUMBING CODE REQUIREMENTS:</p> <p>OCCUPANT LOAD TOTAL = 101 PERSONS</p> <p>TOILETS (TABLE 2902.1) (1 PER 50 OCC.) (101 OCC.); 2 REQUIRED 6 PROVIDED</p> <p>LAVATORIES (TABLE 2902.1) (1 PER 50 OCC.) (101 OCC.); 2 REQUIRED 6 PROVIDED</p> <p>DRINKING FOUNTAINS (TABLE 2902.1) (1 PER 100 OCC.) (101 OCC.); 1 REQUIRED 2 PROVIDED</p> <p>SERVICE SINK (TABLE 2902.1): 1 REQUIRED 1 PROVIDED</p>

CODE REVIEW
<p>CODE: 2021 INTERNATIONAL BUILDING CODE</p> <p>OCCUPANCY TYPE: E</p> <p>SPRINKLERED: NO</p> <p>NUMBER OF STORIES: 1</p> <p>CONSTRUCTION TYPE: TYPE IIB</p> <p>TYPE IIB, REQUIRES THE FOLLOWING FIRE RESISTANCE (TABLE 601):</p> <p>STRUCTURAL FRAME: 0 HOUR</p> <p>EXTERIOR BEARING WALLS: 0 HOUR</p> <p>INTERIOR BEARING WALLS: 0 HOUR</p> <p>EXTERIOR NONBEARING WALLS: 0 HOUR</p> <p>INTERIOR NONBEARING WALLS: 0 HOUR</p> <p>FLOOR CONSTRUCTION: 0 HOUR</p> <p>ROOF CONSTRUCTION: 0 HOUR</p> <p>OTHER REQUIREMENTS:</p> <p>OCCUPANCY SEPARATION (TABLE 508.4): NO MIXED OCCUPANCY</p> <p>INCIDENTAL USE AREAS (TABLE 509.1): N/A</p> <p>CORRIDORS (1020.2.): NONE</p> <p>STAIRS & SHAFT ENCLOSURES (707 & TABLE 707.3.10 NOT LEES THAN 508.4 IF APPLICABLE): NONE</p> <p>SINGLE OCCUPANCY FIRE BARRIERS (TABLE 707.3.10): NOT APPLICABLE</p> <p>ALLOWABLE EXIT ACCESS TRAVEL DISTANCE: 200 FEET FOR NON-SPRINKLERED EDUCATIONAL OCCUPANCY (TABLE 1017.2)</p>

EXIT CALCULATIONS
<p>TOTAL BUILDING AREA</p> <p>OCCUPANCY TYPE - 'E'</p> <p>BUILDING TYPE: IB NON-SPRINKLERED</p> <p>ALLOWABLE AREA FACTOR: 14,500 SQ FT (TABLE 506.2)</p> <p>ACTUAL SF: 6,180 SQ FT</p> <p>ALLOWABLE HEIGHT (TABLE 504.3) ALLOWABLE # OF STORIES (TABLE 504.4)</p> <p>ALLOWABLE HEIGHT: 55 FT</p> <p>ALLOWABLE NO. OF STORIES: 2</p> <p>ACTUAL BUILDING HEIGHT: ± 17 FT</p> <p>ACTUAL NO. OF STORIES: 1</p> <p>BUILDING AREA MODIFICATION (506.3)</p> <p>FRONTAGE INCREASE (506.3.3) - NOT NEEDED</p> <p>OCCUPANT LOAD</p> <p>OCCUPANT LOAD TOTAL (1004 & TABLE 1004.1.2) = 101 PERSONS</p> <p>EXIT REQUIREMENTS</p> <p>EXIT ACCESS (TABLE 1006.2.1 & TABLE 1006.3.3)</p> <p>NO. OF EXITS REQUIRED: 2</p> <p>NO. OF EXITS FURNISHED: 3</p> <p>MEANS OF EGRESS WIDTH (1005.3)</p> <p>SEE PLAN FOR EXIT WIDTHS.</p> <p>MINIMUM CORRIDOR WIDTH (TABLE 1020.2) N/A</p>

CODE LEGEND	
SYMBOL	DESCRIPTION
	PRIMARY BUILDING EXIT
	TRAVEL DISTANCE NEAREST TO EXIT
	HANDICAP ACCESSIBLE
	FIRE EXTINGUISHER CABINET
	CALCULATED EGRESS CAPACITY (PERSONS)



PLAN NORTH
CODE PLAN
SCALE: 1/8"=1'-0"

UTILITY PLAN NOTES

1. THE CONTRACTOR SHALL NOTIFY CONSTRUCTION MANAGER'S CONSTRUCTION SURVEILLANCE REPRESENTATIVE AND LOCAL JURISDICTIONAL INSPECTOR 48 HOURS BEFORE THE BEGINNING OF EACH PHASE OF CONSTRUCTION.
2. ALL WORK SHALL COMPLY WITH APPLICABLE STATE, FEDERAL, AND LOCAL CODES, AND ALL NECESSARY LICENSES AND PERMITS SHALL BE OBTAINED BY THE CONTRACTOR AT HIS EXPENSE UNLESS PREVIOUSLY OBTAINED BY THE OWNER/DEVELOPER.
3. THE CONTRACTOR SHALL IMMEDIATELY INFORM THE ENGINEER OF ANY DISCREPANCIES OR ERRORS HE DISCOVERS IN THE PLAN.
4. DEVIATION FROM THESE PLANS AND NOTES WITHOUT THE PRIOR CONSENT OF THE OWNER OR HIS REPRESENTATIVE OR THE ENGINEER MAY BE CAUSE FOR THE WORK TO BE UNACCEPTABLE.
5. THE CONTRACTOR IS REQUIRED TO USE THE ONE-CALL CENTER TELEPHONE NUMBER FOR THE PURPOSE OF COORDINATING THE MARKING OF UNDERGROUND UTILITIES.
6. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO DETERMINE THE LOCATION OF ALL EXISTING UNDERGROUND UTILITIES AND TO TAKE WHATEVER STEPS ARE NECESSARY TO PROVIDE FOR THEIR PROTECTION. THE ENGINEER HAS DILIGENTLY ATTEMPTED TO LOCATE AND INDICATE ALL EXISTING FACILITIES ON THESE PLANS, HOWEVER, THIS INFORMATION IS SHOWN FOR THE CONTRACTOR'S CONVENIENCE ONLY. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THE LOCATIONS OF UTILITIES SHOWN OR NOT SHOWN. CONTRACTOR TO CONTACT THE UTILITY COMPANIES FOR EXACT LOCATION OF THEIR UTILITIES PRIOR TO STARTING CONSTRUCTION. ANY AND ALL DAMAGE MADE TO UTILITIES BY THE CONTRACTOR SHALL BE THE SOLE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR AND REPLACE.
7. THE CONTRACTOR SHALL COORDINATE LOCATION AND INSTALLATION OF ALL UNDERGROUND UTILITIES AND APPURTENANCES TO MINIMIZE DISTURBING CURBING, PAVING AND COMPACTED SUB-GRADE.
8. UTILITY COORDINATION SHALL BE INCLUDED IN THE PROJECT SCHEDULE AND IT IS THE EXPLICIT RESPONSIBILITY OF THE CONTRACTOR TO ASSURE THAT THE PROJECT SCHEDULE INCLUDES THE NECESSARY RELOCATION. THE CONTRACTOR SHOULD SEEK ASSISTANCE FROM ALL UTILITY COMPANIES TO LOCATE AND PROTECT THEIR FACILITIES.
9. THE CONTRACTORS SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE BY HIS EQUIPMENT TO EXISTING UTILITIES, CROSS-DRAIN PIPES AND HEADWALLS.
10. THE CONTRACTOR SHALL EXPLORE AHEAD 200 FEET SO ADJUSTMENTS CAN BE MADE IN THE ALIGNMENT OF THE PIPE IN CASE OF CONFLICTS WITH EXISTING STRUCTURES, UTILITIES AND PIPING.
11. ALL EXCESS MATERIAL FROM EXCAVATION SHALL BE DISPOSED OF BY THE CONTRACTOR. COST FOR THIS WORK SHALL BE INCLUDED IN OTHER ITEMS OF WORK.
12. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PREVENTING PIPE FROM FLOATING. IF PIPE FLOATS DURING CONSTRUCTION, THE CONTRACTOR SHALL RELAY PIPE TO GRADE AT HIS EXPENSE.
13. ALL PROPERTY LINE MARKERS (IRON PINS, CONCRETE MONUMENTS, ETC.) DESTROYED DURING CONSTRUCTION SHALL BE REPLACED IN KIND BY THE CONTRACTOR. THE CONTRACTOR SHALL EMPLOY A LAND SURVEYOR REGISTERED IN THE STATE OF ALABAMA TO RESET PROPERTY MARKERS. THE COST FOR THIS WORK SHALL BE INCLUDED IN OTHER ITEMS OF WORK.
14. THE CONTRACTOR SHALL MEET OR EXCEED ALL REQUIREMENTS OF THE LOCAL UTILITIES AUTHORITY CONSTRUCTION SPECIFICATIONS FOR WATER, SEWER, & ELECTRICAL.
15. AFTER THE PROPOSED GRAVITY SEWER SYSTEM IS COMPLETED THE CONTRACTOR SHALL VIDEO THE SYSTEM & SUBMIT TO THE OWNER, ARCHITECT, & ENGINEER FOR REVIEW. THE CONTRACTOR SHALL PULL MANDREL TESTS ON ALL INSTALLED GRAVITY MAINS IN ADDITION TO ALL OTHER REQUIREMENT OF THE LOCAL UTILITY AUTHORITY.
16. THE CONTRACTOR SHALL PROVIDE AS-BUILT SHOTS OF ALL UTILITIES TO THE OWNER UPON COMPLETION.

GRADING AND DRAINAGE NOTES

1. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES AROUND WORK AND SHALL PROVIDE PROTECTION AGAINST WATER DAMAGE AND SOIL EROSION.
2. ALL SILT BARRIERS MUST BE PLACED AS ACCESS IS OBTAINED DURING CLEARING. NO GRADING SHALL BE DONE UNTIL SILT BARRIER AND DETENTION FACILITIES ARE CONSTRUCTED.
3. ALL SEDIMENT CONTROL DEVICES ARE TO BE CONSTRUCTED AND FULLY OPERATIONAL PRIOR TO ANY OTHER CONSTRUCTION OR GRADING.
4. ALL SLOPES SHALL BE STABILIZED AS SOON AS POSSIBLE.
5. COMPACTION OF THE BACKFILL OF ALL TRENCHES SHALL BE COMPACTED TO THE DENSITY OF 95% OF THEORETICAL MAXIMUM DRY DENSITY (ATM D698). BACKFILL MATERIAL SHALL BE FREE FROM ROOTS, STUMPS OR OTHER FOREIGN DEBRIS AND SHALL BE PLACED AT OR NEAR OPTIMUM MOISTURE. CORRECTION OF ANY TRENCH SETTLEMENT WITHIN A YEAR FROM THE DATE OF APPROVAL WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.
6. ALL FILL MATERIAL AND COMPACTION REQUIREMENTS SHALL MEET THE GEOTECHNICAL REPORT PREPARED BY GEOCON ENGINEERING & MATERIALS TESTING.
7. MAXIMUM SLOPE OF EMBANKMENT SHALL BE 3.0 FEET HORIZONTAL TO 1.0 FOOT VERTICAL, OR MATCH EXISTING.
8. PROPOSED CONTOUR INTERVALS ARE AS LABELED. ALL PROPOSED CONTOURS ARE FINISHED GRADES.
9. THE CONTRACTOR WILL INSURE THAT POSITIVE AND ADEQUATE DRAINAGE IS MAINTAINED AT ALL TIMES WITHIN THE PROJECT LIMITS. THIS MAY INCLUDE, BUT NOT LIMITED TO, REPLACEMENT OR RECONSTRUCTION OF EXISTING DRAINAGE STRUCTURES THAT HAVE BEEN DAMAGED OR REMOVED OR RE-GRADING AS REQUIRED BY THE ENGINEER, EXCEPT FOR THOSE DRAINAGE ITEMS SHOWN AT SPECIFIC LOCATIONS IN AND HAVING SPECIFIC PAY ITEMS IN THE DETAILED ESTIMATE. NO SEPARATE PAYMENT WILL BE MADE FOR ANY COSTS INCURRED TO COMPLY WITH THIS REQUIREMENT.
10. EXCESS EARTH CUT MATERIAL, IF ANY, SHALL BECOME THE RESPONSIBILITY OF THE CONTRACTOR AND SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE APPROVED TO BE PLACED ON SITE BY THE OWNER.
11. ALL STORM DRAINAGE PIPE SHALL BE LAID ON SMOOTH CONTINUOUS GRADES WITH NO VISIBLE BENDS AT JOINTS.
12. ALL STORM DRAINAGE INLET STRUCTURES SHALL HAVE METAL FRAME AND COVER FOR ACCESS.
13. THE CONTRACTOR SHALL PROVIDE ANY EXCAVATION AND MATERIAL SAMPLES NECESSARY TO CONDUCT REQUIRED SOIL TESTS. ALL ARRANGEMENTS AND SCHEDULING FOR THE TESTING SHALL BE THE CONTRACTOR'S RESPONSIBILITY.
14. SOILS TESTING AND ON-SITE INSPECTION SHALL BE PERFORMED BY AN INDEPENDENT GEOTECHNICAL ENGINEER. THE SOILS ENGINEER SHALL PROVIDE COPIES OF TEST REPORTS TO THE CONTRACTOR, THE OWNER AND THE OWNER'S REPRESENTATIVE AND SHALL PROMPTLY NOTIFY THE OWNER, HIS REPRESENTATIVE AND THE CONTRACTOR SHOULD WORK PERFORMED BY THE CONTRACTOR FAIL TO MEET THESE SPECIFICATIONS.
15. CONTRACTOR SHALL REMOVE ALL UNSUITABLE MATERIAL FROM LIMITS OF ROADWAY CONSTRUCTION AS DIRECTED BY AN INDEPENDENT GEOTECHNICAL-TECHNICAL ENGINEER. UNSUITABLE MATERIAL SHALL BE REMOVED FROM THE SITE UNLESS OTHERWISE DIRECTED.

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. ALL DRAINAGE SWALES MUST BE GRASSED AND RIP-RAP MUST BE PLACED AS SHOWN TO CONTROL EROSION.
2. SILT FENCE MUST MEET THE REQUIREMENTS OF LOCAL JURISDICTIONAL AGENCY, SAID REQUIREMENTS AS SHOWN BY THESE PLANS.
3. DISTURBED AREAS SHALL BE VEGETATED AFTER CONSTRUCTION. USE TEMPORARY SEASONAL SEEDING AND MULCHING ON GOING AS PER ALDOT STANDARD SPEC. SECTIONS 652 AND 656 RESPECTIVELY AND USE CENTIPEDE SOD FOR PERMANENT GRASSING AS PER ALDOT STANDARD SPEC. SECTION 654.
4. ADDITIONAL EROSION CONTROL MEASURES OR SILT BARRIERS TO BE PLACED AS SHOWN AND/OR DIRECTED BY THE PROJECT ENGINEER AND/OR LOCAL JURISDICTIONAL INSPECTOR.
5. WHEN ANY CONSTRUCTION BORDERS A DRAINAGE COURSE:
 - A. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ANY BUILDING OR OTHER EXCAVATION SPOIL DIRT, CONSTRUCTION TRASH OR DEBRIS, ETC., FROM THE DRAINAGE AREA SHOWN HEREON IN AN EXPEDITIOUS MANNER AS CONSTRUCTION PROGRESSES.
 - B. THE CONTRACTOR HEREBY AGREES TO STOP ALL WORK AND RESTORE THESE AREAS IMMEDIATELY UPON NOTIFICATION BY THE LOCAL JURISDICTIONAL INSPECTOR AND/OR PROFESSIONAL ENGINEER.
6. FOR ALL CONSTRUCTION ALONG AND/OR ACROSS WATERWAYS, BANK PROTECTION AND STABILIZATION SHALL BE REQUIRED AS PER LOCAL JURISDICTIONAL EROSION LAWS,
7. ALL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO COMMENCING CONSTRUCTION AND SHALL BE MAINTAINED IN PROPER WORKING ORDER UNTIL ALL DISTURBED AREAS ARE STABILIZED. CONSTRUCTION ENTRANCE PADS SHALL BE INSTALLED BY THE CONTRACTOR AT CONSTRUCTION ACCESS POINTS PRIOR TO LAND DISTURBANCE.
8. A COPY OF THE APPROVED LAND DISTURBANCE PLAN SHALL BE PRESENT ON THE SITE WHENEVER LAND DISTURBING ACTIVITY IS IN PROGRESS.
9. CONSTRUCT SILT FENCE ALONG THE DOWNSTREAM SIDE OF ALL PROPOSED FILL CONSTRUCTION.
10. EROSION CONTROL DEVICES SHALL BE INSTALLED IMMEDIATELY AFTER GROUND DISTURBANCE OCCURS. THE LOCATION OF SOME OF THE EROSION CONTROL DEVICES MAY HAVE TO BE ALTERED FROM THAT SHOWN ON THE APPROVED PLANS IF DRAINAGE PATTERNS DURING CONSTRUCTION ARE DIFFERENT FROM THE FINAL PROPOSED DRAINAGE PATTERNS. IT IS THE CONTRACTOR'S RESPONSIBILITY TO ACCOMPLISH EROSION CONTROL FOR ALL DRAINAGE PATTERNS CREATED AT VARIOUS STAGES DURING CONSTRUCTION. ANY DIFFICULTY IN CONTROLLING EROSION DURING ANY PHASE OF CONSTRUCTION SHALL BE REPORTED TO THE ENGINEER IMMEDIATELY.
11. CONTRACTOR SHALL MAINTAIN ALL EROSION CONTROL MEASURES UNTIL PERMANENT VEGETATION HAS BEEN ESTABLISHED. CONTRACTOR SHALL CLEAN OUT ALL SEDIMENT PONDS WHEN REQUIRED BY THE ENGINEER OR LOCAL JURISDICTIONAL INSPECTOR. CONTRACTOR SHALL INSPECT EROSION CONTROL MEASURES AT THE END OF EACH WORKING DAY TO ENSURE MEASURES ARE FUNCTIONING PROPERLY.
12. THE CONTRACTOR SHALL REMOVE ACCUMULATED SILT WHEN THE SILT IS 1/3 OF THE HEIGHT OF THE SILT FENCE UTILIZED FOR EROSION CONTROL. IN THE DETENTION POND, SILT SHALL BE REMOVED WHEN A DEPTH OF 18" HAS ACCUMULATED AT THE WEIR.
13. ALL EASEMENTS DISTURBED MUST BE DRESSED AND GRASSED TO CONTROL EROSION IN ACCORDANCE WITH EASEMENT PLATS PRIOR ACCEPTANCE.
14. SILT BARRIERS TO BE PLACED AT DOWNSTREAM TOE OF ALL CUT AND FILL SLOPES.

15. THE CONTRACTOR SHALL FURNISH AND MAINTAIN ALL NECESSARY BARRICADES AROUND THE WORK AND SHALL PROVIDE PROTECTION AGAINST WATER DAMAGE AND SOIL EROSION.
16. TREE PROTECTION AND EROSION CONTROL MEASURES ARE TO BE ACCOMPLISHED PRIOR TO ANY OTHER CONSTRUCTION ON THE SITE AND MAINTAINED UNTIL PERMANENT GROUND COVER IS ESTABLISHED.
17. ALL SILT BARRIERS MUST BE PLACED AS ACCESS IS OBTAINED DURING CLEARING. NO GRADING SHALL BE DONE UNTIL SILT BARRIER AND DETENTION FACILITIES ARE CONSTRUCTED.
18. ALL SEDIMENT CONTROL DEVICES ARE TO BE CONSTRUCTED AND FULLY OPERATIONAL PRIOR TO ANY OTHER CONSTRUCTION OR GRADING.
19. ALL DISTURBED AREAS TO BE GRASSED AS SOON AS POSSIBLE WITH SEASONAL TEMPORARY SEEDING AND MULCHING AS PER ALDOT STANDARD SPEC. SECTIONS 652 AND 656.
20. ALL SLOPES SHALL BE STABILIZED AS SOON AS POSSIBLE.
21. GRASS AREAS DISTURBED DURING CONSTRUCTION SHALL BE REPLACED WITH GRASS IN KIND. IN AREAS OF INDECIPHERABLE GRASSES USE CENTIPEDE SOD FOR PERMANENT GRASSING AS PER ALDOT STANDARD SPEC. SECTION 654.
22. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PERFORM REQUIRED MAINTENANCE OF ALL EROSION AND SEDIMENT CONTROL DEVICES TO ENSURE THEIR FUNCTION AT ALL TIMES.
23. IF HEAVY RAINFALL IS PREDICTED, CONTRACTOR SHALL INSPECT EROSION CONTROL ITEMS WITH ENGINEER PRIOR TO EVENT, IF AT ALL POSSIBLE. ANY IMPROVEMENTS, CLEANING, OR ADJUSTMENTS THAT ARE REQUIRED PRIOR TO EVENT SHALL BE GIVEN FULL URGENCY AS MUCH IS POSSIBLE.

SITE NOTES

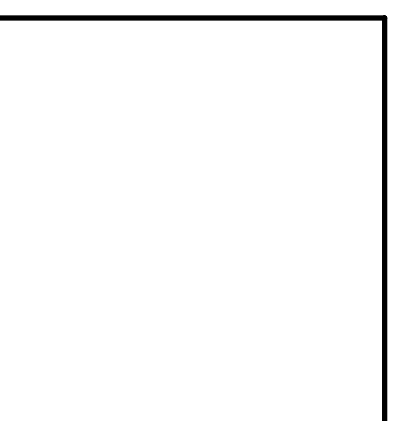
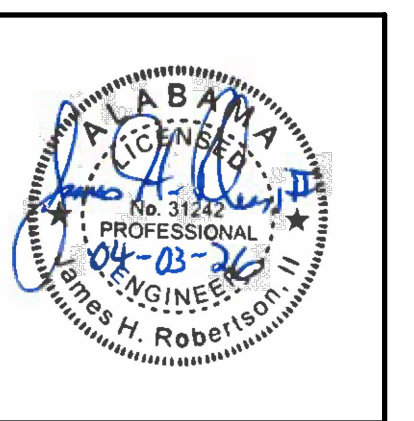
1. ALL CONCRETE SHALL BE CLASS A, 4,000 PSI AT 28 DAYS COMPRESSIVE STRENGTH WITH A MAXIMUM SLUMP OF 4" UNLESS NOTED OTHERWISE. ALL EXPOSED CONCRETE TO HAVE A FINE BROOM FINISH.
2. ALL MATERIALS SHALL BE NEW UNLESS USED OR SALVAGED MATERIALS ARE AUTHORIZED BY THE OWNER OR TENANT.
3. ALL DIMENSIONS ARE FACE OF CURB OR AS NOTED.
4. NECESSARY BARRICADES, SUFFICIENT LIGHTS, SIGNS AND OTHER TRAFFIC CONTROL METHODS AS MAY BE NECESSARY PER MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, PART VI, SHALL BE PROVIDED AND MAINTAINED THROUGHOUT CONSTRUCTION. THE PROJECT WILL REQUIRE ROAD CLOSURE/ TRAFFIC CONTROL SCHEME.
5. SPECIAL CARE SHALL BE GIVEN WHILE WORKING NEAR PRIVATE RESIDENCES. ANY DAMAGES TO OR ADJACENT TO PRIVATE PROPERTY SHALL BE REPAIRED AT THE EXPENSE OF THE CONTRACTOR.
6. IF ANY CONFLICTS EXIST BETWEEN APPLICABLE ACCESSIBILITY CODES, STANDARDS AND GUIDELINES THE CODES, STANDARDS, AND GUIDELINES PROVIDING THE GREATER DEGREE OF ACCESSIBILITY TAKE PRECEDENCE AS PER HUD MAP CHAPTER 5 GUIDELINES.
7. ALL ACCESSIBILITY CODES, STANDARDS AND GUIDELINES USED FOR THE PROJECT DESIGN MUST BE INCLUDED WITHIN THE CODE SUMMARY.

UTILITY PROVIDERS

POWER: ALABAMA POWER
 WATER: SARALAND WATER & SEWER
 SEWER: SARALAND WATER & SEWER
 GAS: SPIRE

ON-SITE CONTACT: SAWGRASS CONSULTING LLC.
 (251) 544-7900 (OFFICE)
 (251) 544-7918 (FAX)

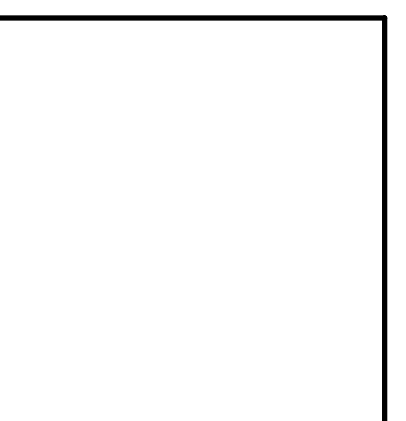
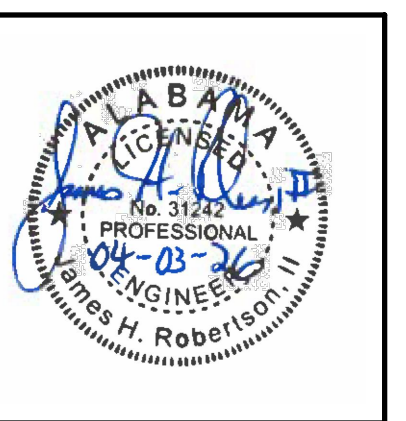
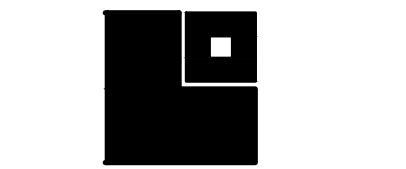
SHEET INDEX	
SHEET NO.	SHEET TITLE
C-1.0	PROJECT NOTES
C-1.1	EXIST COND & DEMO PLAN
C-2.0	GEOMETRIC PLAN
C-3.0	GRADING & DRAINAGE PLAN
C-3.1	DOWNSPOUT PLAN
C-4.0	UTILITY PLAN
C-4.1	WATER UTILITY DETAILS
C-4.2	SEWER UTILITY DETAILS
C-5.0	CIVIL CONSTRUCTION DETAILS
C-6.0	EROSION CONTROL PLAN
C-6.1	EROSION CONTROL DETAILS



SHEET TITLE:
PROJECT NOTES

PROJ. MGR.: JR
DRAWN: BT
DATE: 04.03.2026
REVISIONS

JOB NO. 25-173
SHEET NO: C-1.0
0 1" 2"



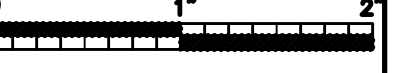
SHEET TITLE:
**EXIST
COND &
DEMO PLAN**

PROJ. MGR.: JR
DRAWN: BT
DATE: 04.03.2026
REVISIONS

JOB NO. 25-173

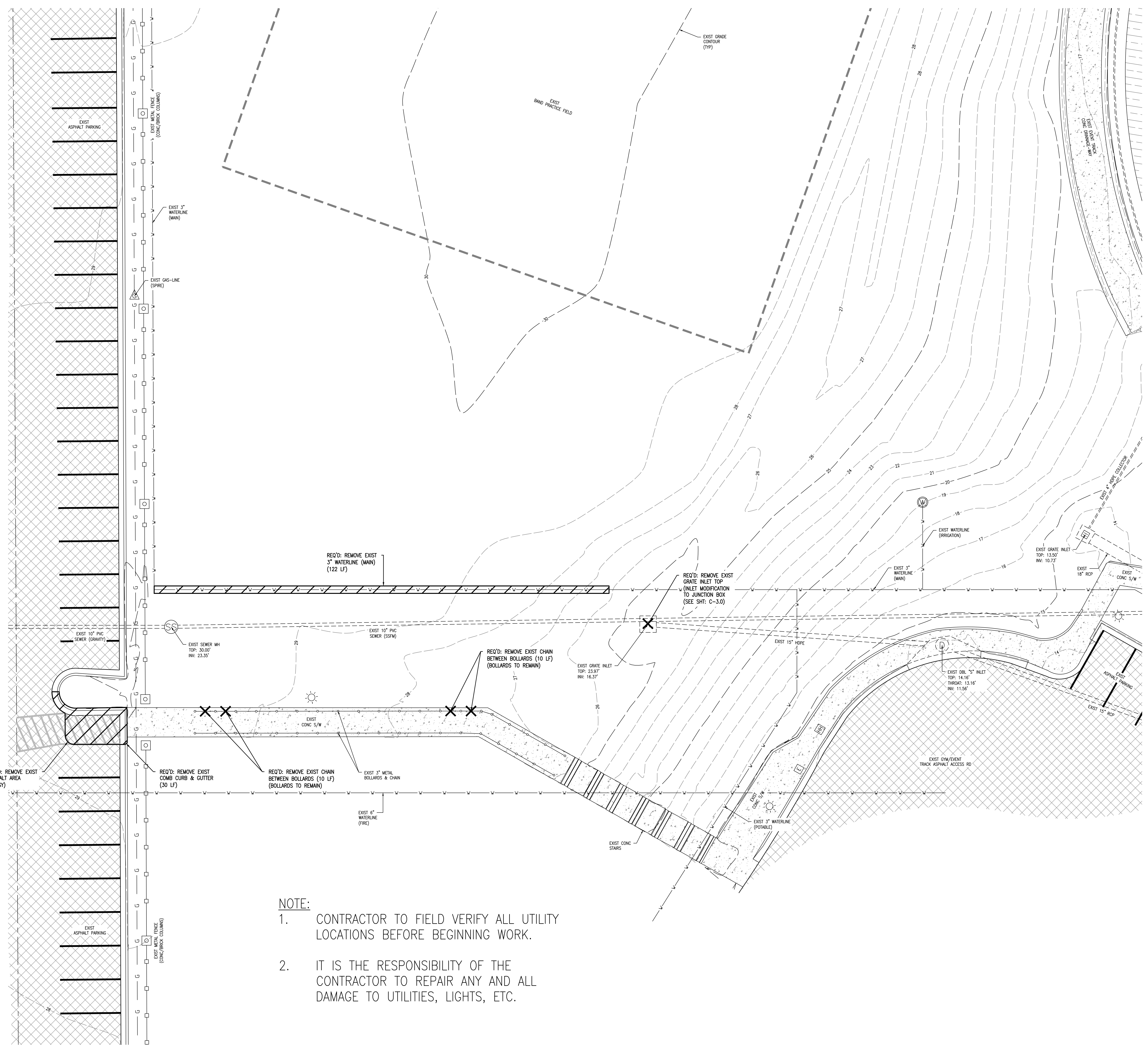
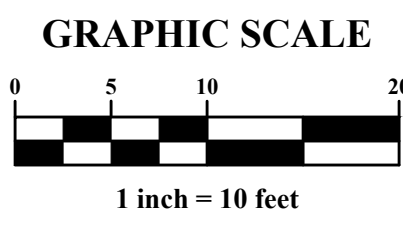
SHEET NO:

C-1.1

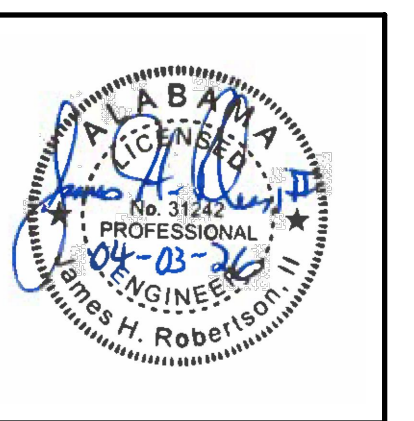


LEGEND

---	R/W--PROP LINE
W	EX WATER-VALVE
SS	EX SEWER-LINE
MH	EX SEWER MH
CO	EX SEWER CO
EB	EX ELEC BOX
TR	EX TRANSFORMER
LP	EX LIGHT POLE
GAS	EX GAS-LINE
DP	EX DRAINAGE PIPE
MH	EX DRAINAGE MH
GI	EX GRATE INLET
F	EX FENCE
BLDG	EX BLDG AREA
ASPH	EX ASPHALT AREA
CONC	EX CONC AREA
DEMO	DEMO AREA
X	DEMO ITEM



- NOTE:**
1. CONTRACTOR TO FIELD VERIFY ALL UTILITY LOCATIONS BEFORE BEGINNING WORK.
 2. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REPAIR ANY AND ALL DAMAGE TO UTILITIES, LIGHTS, ETC.



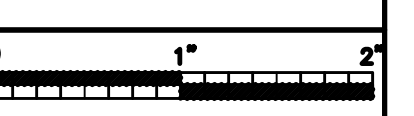
SHEET TITLE:
GEOMETRIC PLAN

PROJ. MGR.: JR
DRAWN: BT
DATE: 04.03.2026
REVISIONS

JOB NO. 25-173

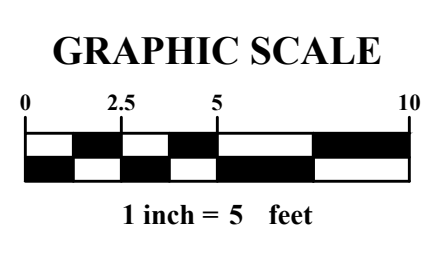
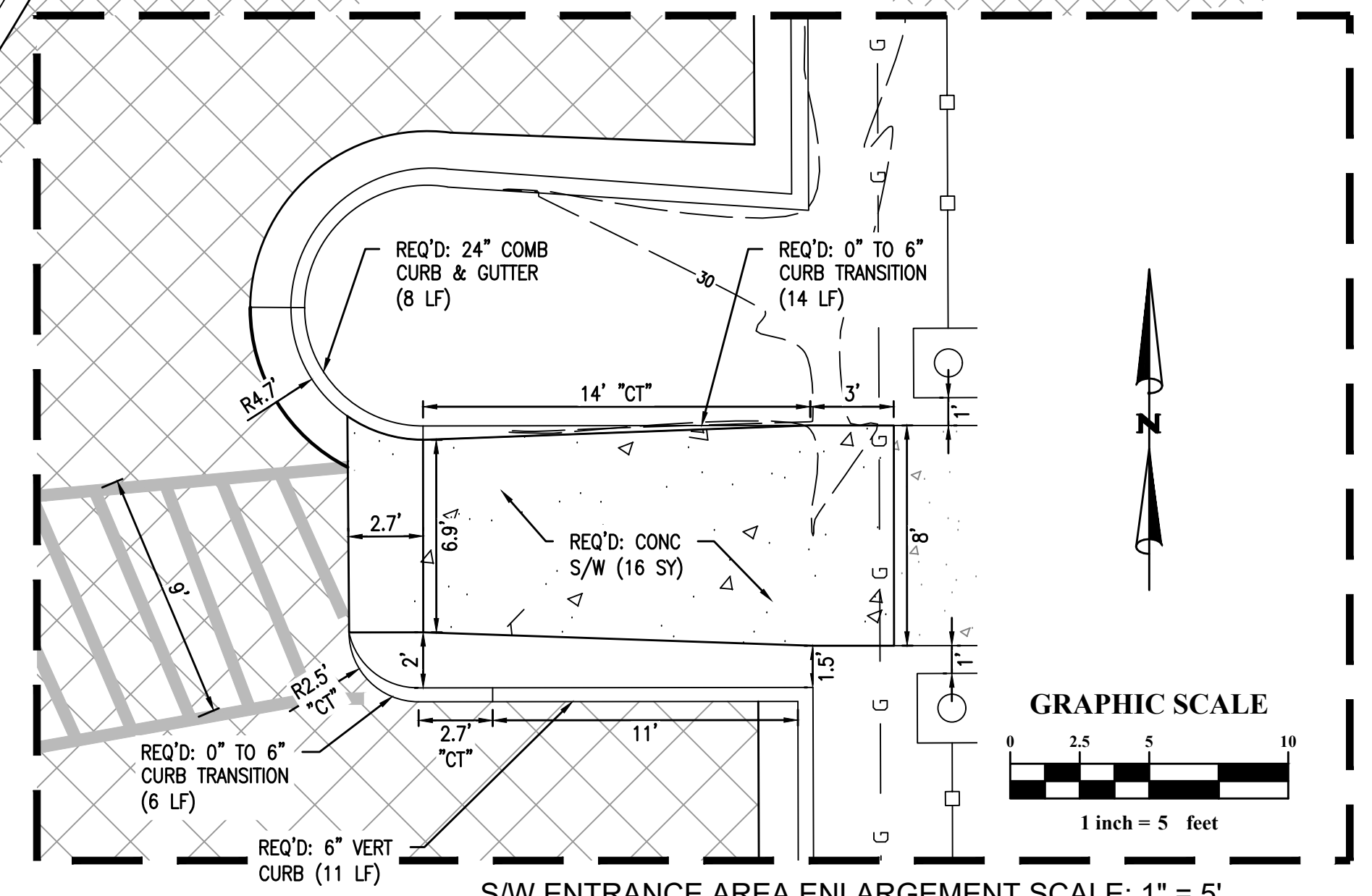
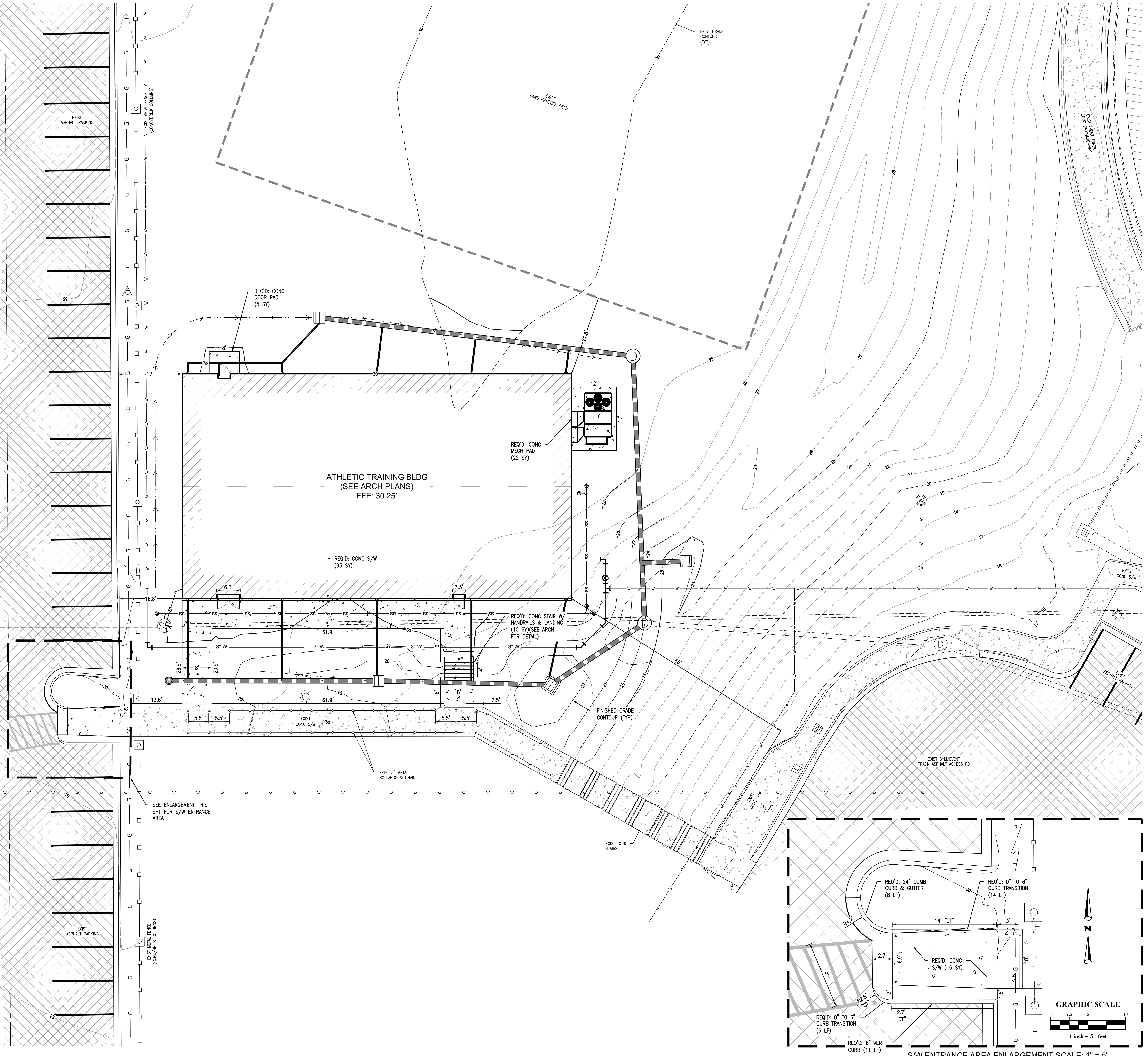
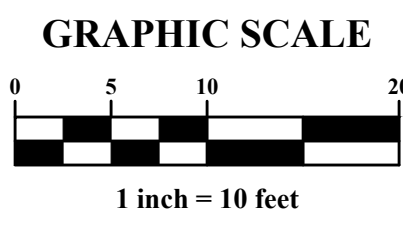
SHEET NO:

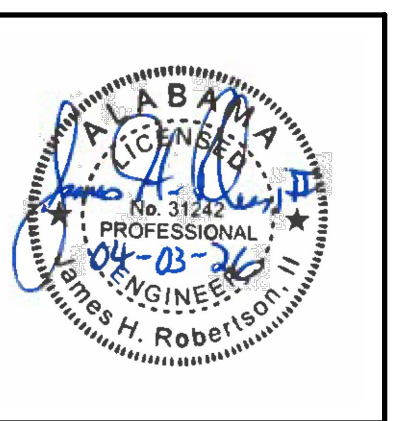
C-2.0



LEGEND

W-W	R/W-PROP LINE
W	EX WATER-VALVE
WV	EX WATER-VALVE
SS	EX SEWER-LINE
SS	EX SEWER MH
SS	EX SEWER CO
EB	EX ELEC BOX
TR	EX TRANSFORMER
LP	EX LIGHT POLE
GAS	EX GAS-LINE
GAS	EX GAS-LINE
DP	EX DRAINAGE PIPE
DP	EX DRAINAGE MH
GI	EX GRATE INLET
F	EX FENCE
BLDG	EX BLDG AREA
ASPH	EX ASPHALT AREA
CONC	EX CONC AREA
W	PR WATER-LINE
SS	PR SEWER-LINE
SS	PR SEWER CO
DP	PR DRAINAGE SWALE
CONC	PR CONC AREA
BLDG	PR BLDG





SHEET TITLE:
**GRADING &
DRAINAGE
PLAN**

PROJ. MGR.: JR
DRAWN: BT

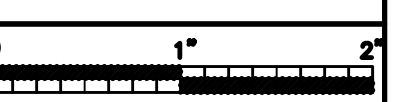
DATE: 04.03.2026

REVISIONS

JOB NO. 25-173

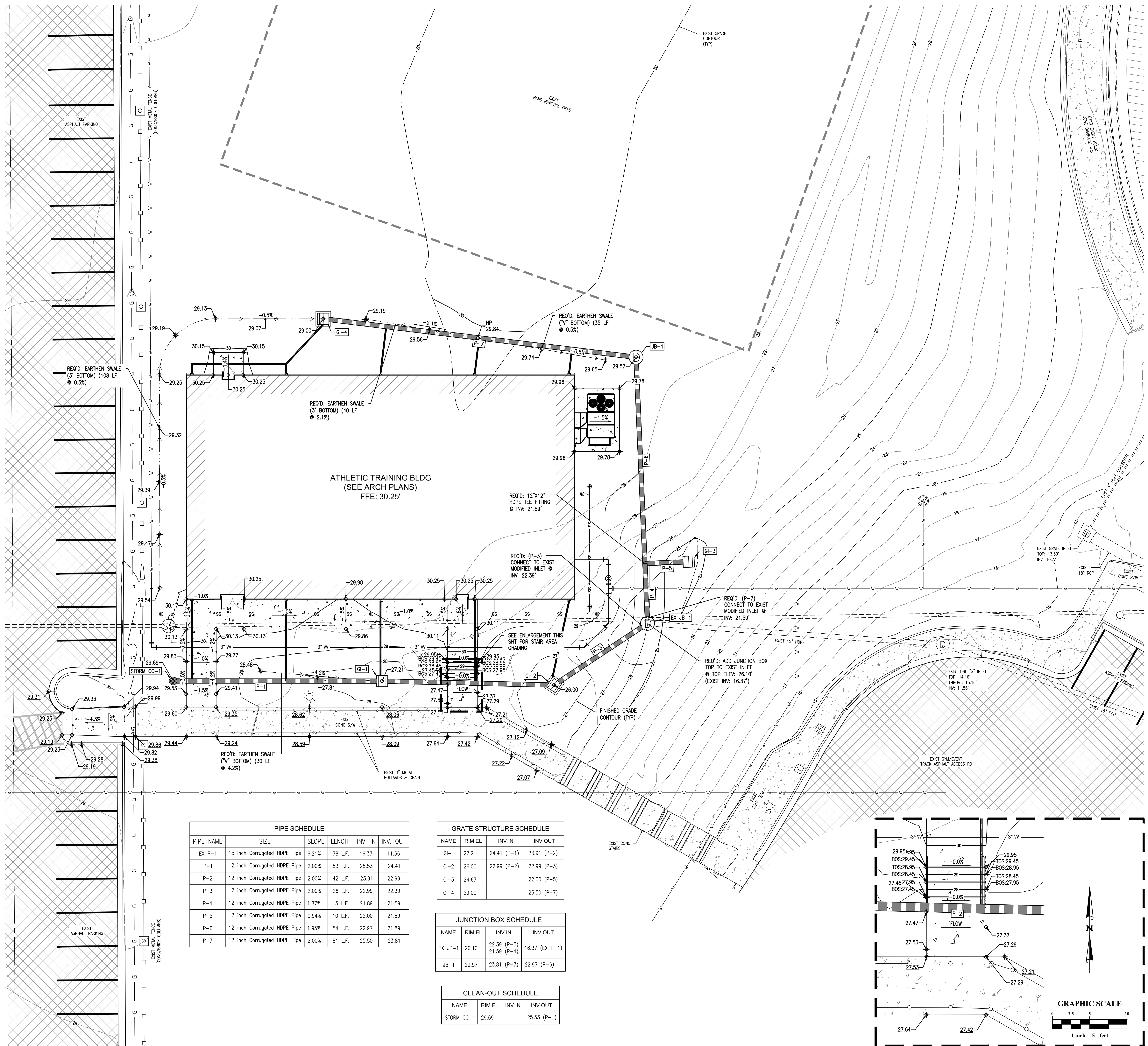
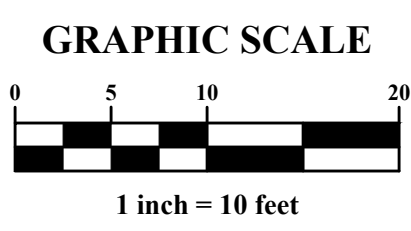
SHEET NO:

C-3.0



LEGEND

- R/W-PROP LINE
- EX WATER-LINE
- EX WATER VALVE
- EX SEWER-LINE
- EX SEWER MH
- EX SEWER CO
- EX ELEC BOX
- EX TRANSFORMER
- EX LIGHT POLE
- EX GAS-LINE
- EX DRAINAGE PIPE
- EX DRAINAGE MH
- EX GRATE INLET
- EX FENCE
- EX BLDG AREA
- EX ASPHALT AREA
- EX CONC AREA
- PR WATER-LINE
- PR SEWER-LINE
- PR SEWER CO
- PR DRAINAGE SWALE
- PR CONC AREA
- PR BLDG

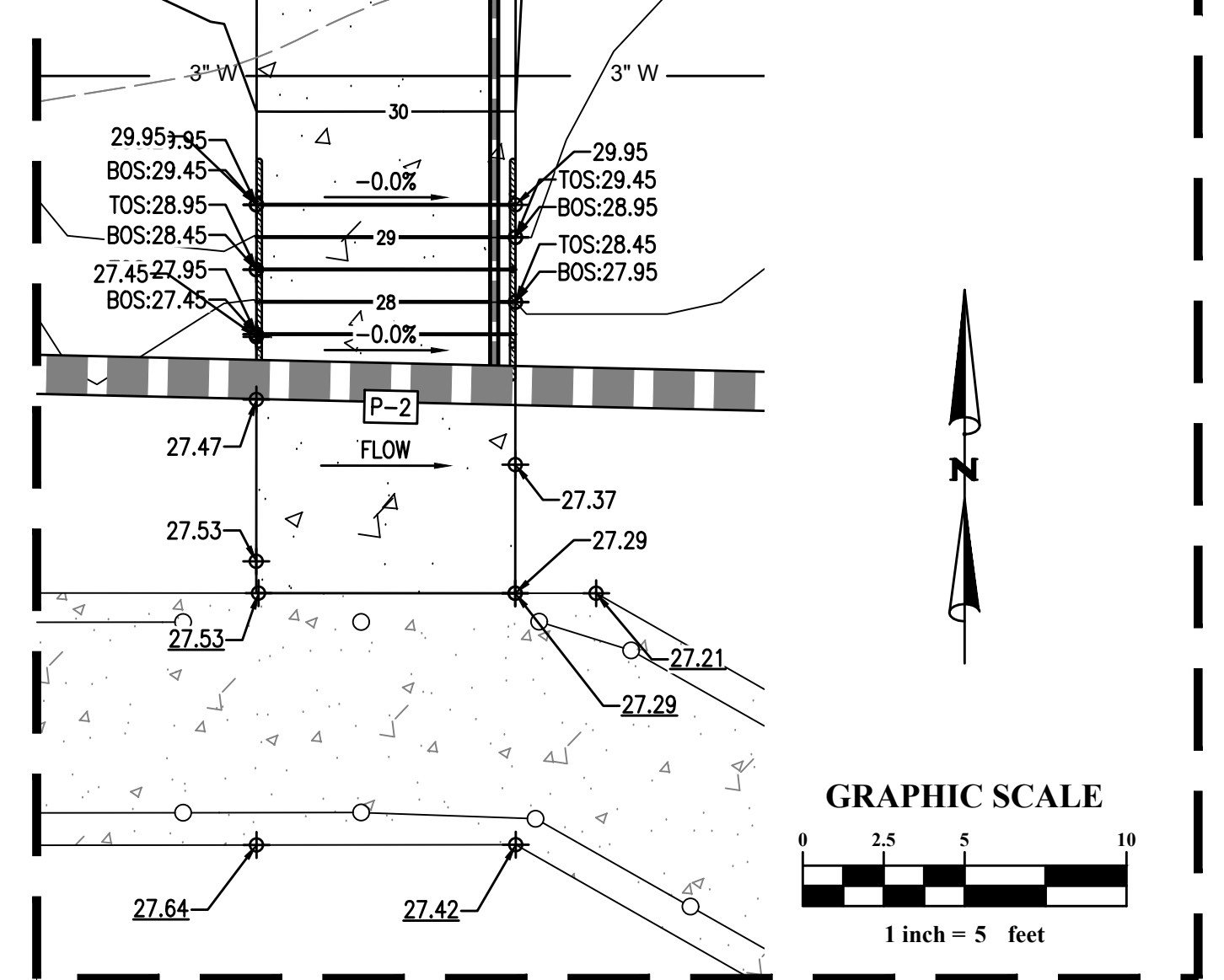


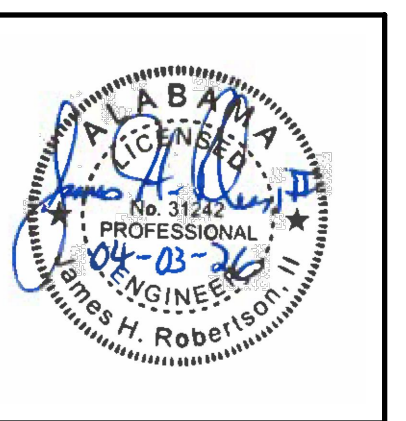
PIPE SCHEDULE					
PIPE NAME	SIZE	SLOPE	LENGTH	INV. IN	INV. OUT
EX P-1	15 inch Corrugated HDPE Pipe	6.21%	78 L.F.	16.37	11.56
P-1	12 inch Corrugated HDPE Pipe	2.00%	53 L.F.	25.53	24.41
P-2	12 inch Corrugated HDPE Pipe	2.00%	42 L.F.	23.91	22.99
P-3	12 inch Corrugated HDPE Pipe	2.00%	26 L.F.	22.99	22.39
P-4	12 inch Corrugated HDPE Pipe	1.87%	15 L.F.	21.89	21.59
P-5	12 inch Corrugated HDPE Pipe	0.94%	10 L.F.	22.00	21.89
P-6	12 inch Corrugated HDPE Pipe	1.95%	54 L.F.	22.97	21.89
P-7	12 inch Corrugated HDPE Pipe	2.00%	81 L.F.	25.50	23.81

GRATE STRUCTURE SCHEDULE			
NAME	RIM EL	INV IN	INV OUT
GI-1	27.21	24.41 (P-1)	23.91 (P-2)
GI-2	26.00	22.99 (P-2)	22.99 (P-3)
GI-3	24.67		22.00 (P-5)
GI-4	29.00		25.50 (P-7)

JUNCTION BOX SCHEDULE			
NAME	RIM EL	INV IN	INV OUT
EX JB-1	26.10	22.39 (P-3) 21.59 (P-4)	16.37 (EX P-1)
JB-1	29.57	23.81 (P-7)	22.97 (P-6)

CLEAN-OUT SCHEDULE			
NAME	RIM EL	INV IN	INV OUT
STORM CO-1	29.69		25.53 (P-1)

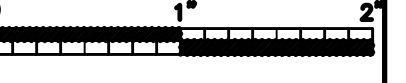




SHEET TITLE:
**DOWNSPOUT
PLAN**

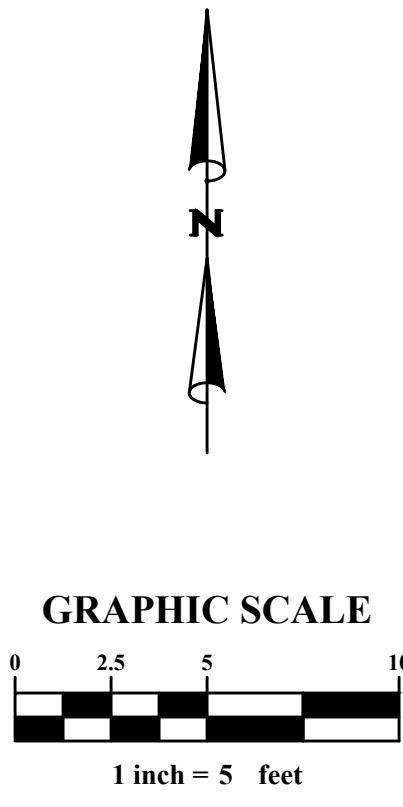
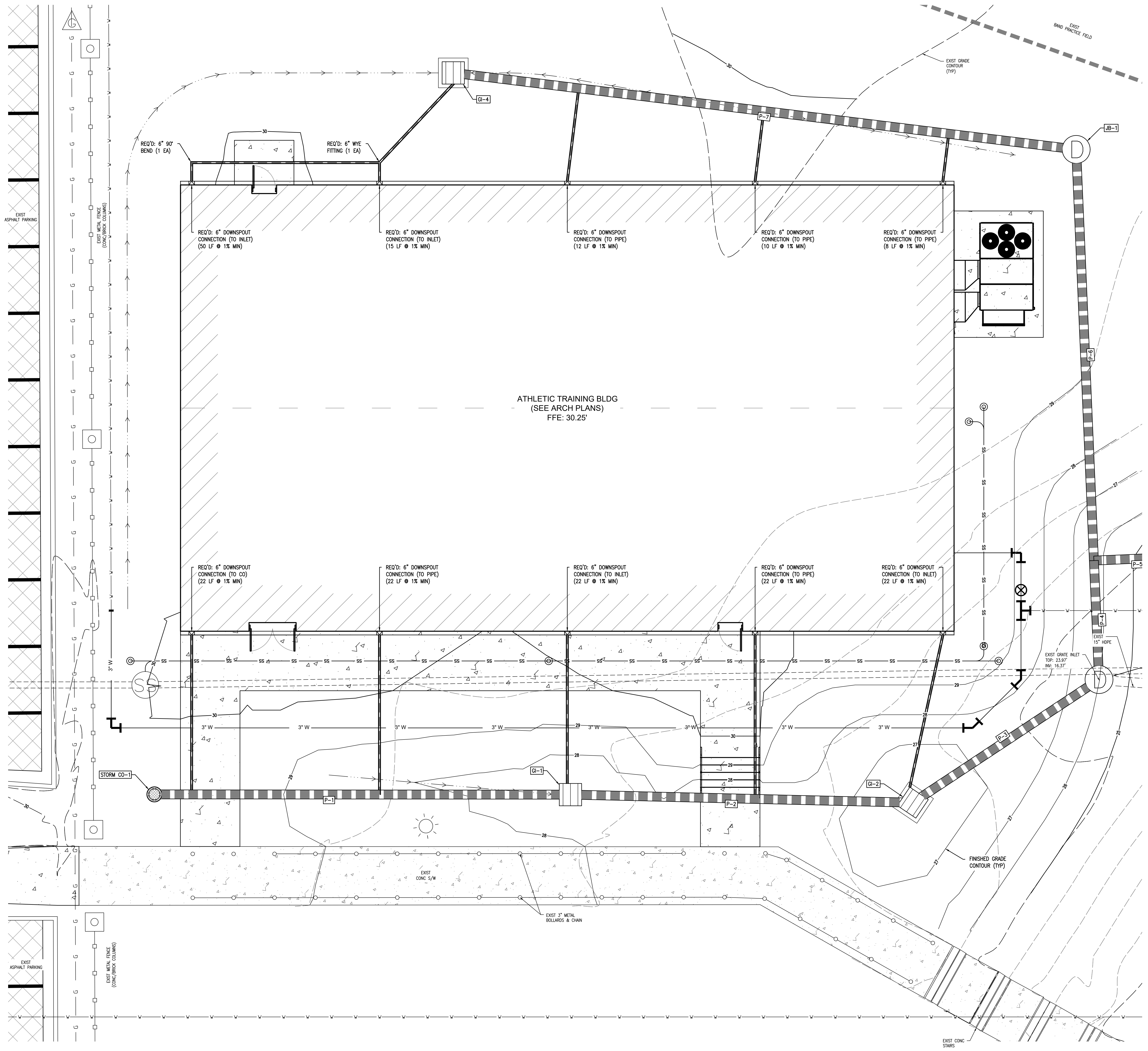
PROJ. MGR.: JR
DRAWN: BT
DATE: 04.03.2026
REVISIONS

JOB NO. 25-173
SHEET NO:
C-3.1

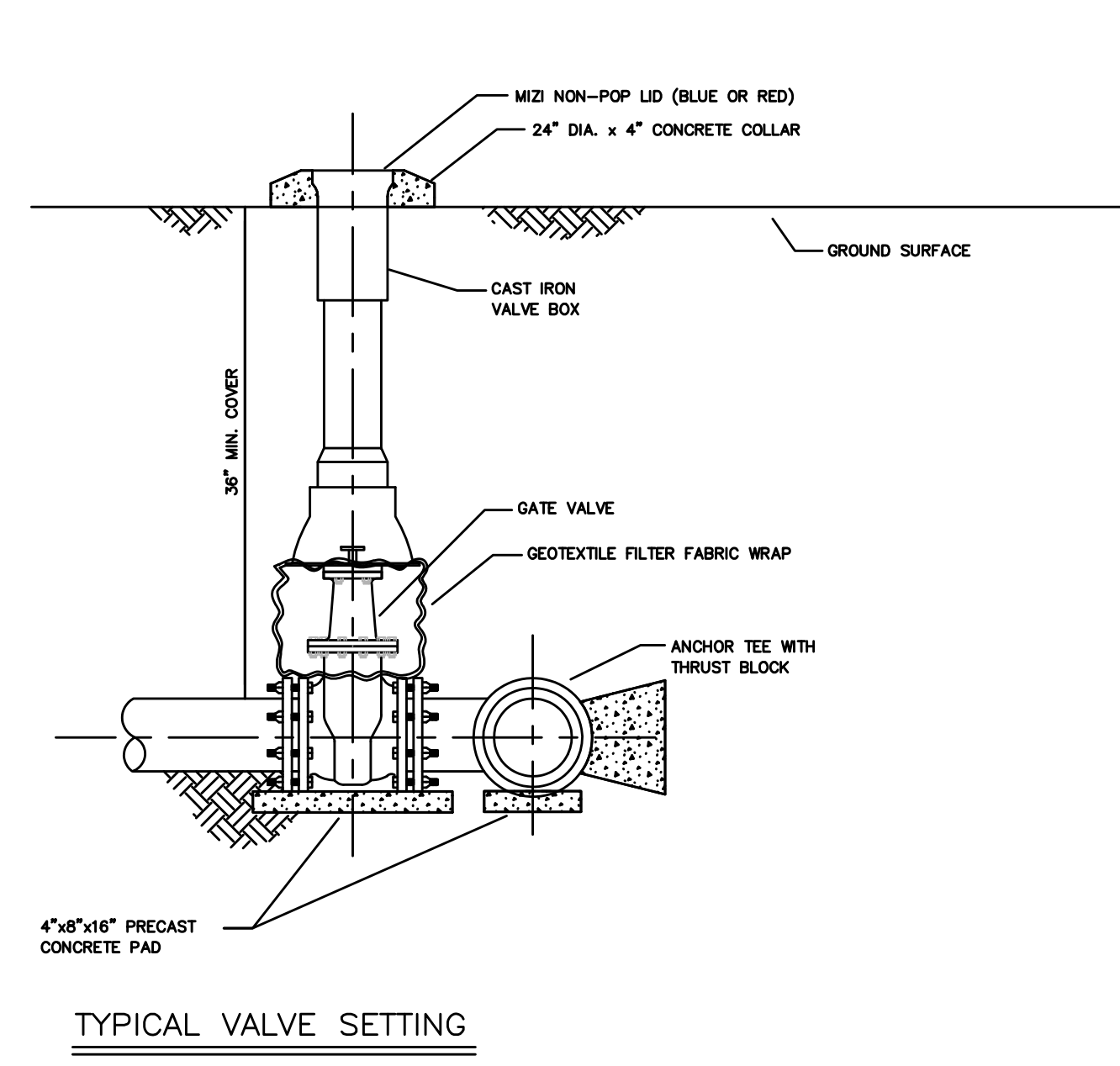
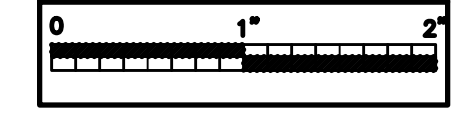
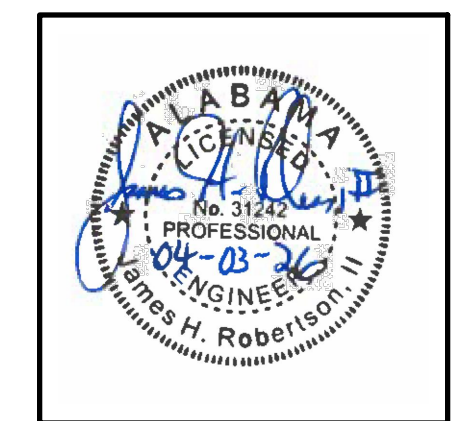
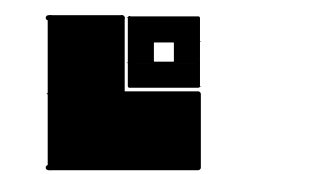


LEGEND

---	R/W-PROP LINE
W-W	EX WATER-VALVE
SS	EX SEWER-LINE
SS	EX SEWER MH
SS	EX SEWER CO
□	EX ELEC BOX
⊕	EX TRANSFORMER
⊙	EX LIGHT POLE
GAS	EX GAS-LINE
---	EX DRAINAGE PIPE
---	EX DRAINAGE MH
---	EX GRATE INLET
---	EX FENCE
▨	EX BLDG AREA
▨	EX ASPHALT AREA
▨	EX CONC AREA
---	PR WATER-LINE
---	PR SEWER-LINE
---	PR SEWER CO
---	PR DRAINAGE SWALE
---	PR CONC AREA
---	PR BLDG



S:\1-Clients\25-114 Saraland HS Multi Purpose Building - Saraland City Schools\CIVIL ENGINEERING\PRODUCTION DWGS\SLHS ADD 26 G&D-EC.dwg
- Monday, April 6, 2026 10:46:18 AM

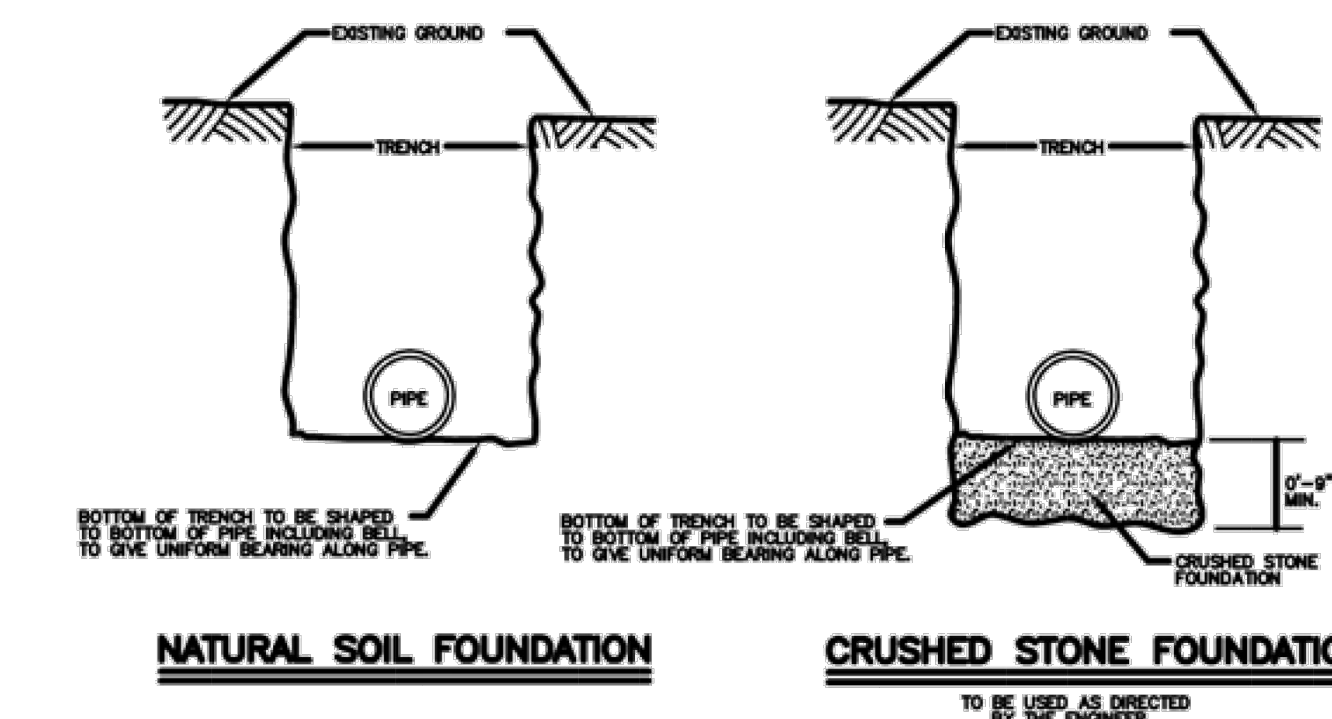


- VALVE BOX NOTE:
1. VALVE BOXES SHALL BE CAST IRON AND CONSIST OF A BASE COVERING THE OPERATING NUT AND THE HEAD OF THE VALVE.
 2. ALL VALVE BOXES SHALL BE A MINIMUM OF 5-1/2 INCHES IN DIAMETER.
 3. UNDER NO CONDITION SHALL PIPE, OF ANY TYPE, BE USED IN THE PLACEMENT OF THE VALVE BOX.
 4. GEOTEXTILE FILTER WRAP AROUND BASE OF VALVE BOX.
 5. VALVE BOX WITHOUT CONCRETE COLLAR SHALL BE FLUSH WITH SURFACE IF LOCATED IN PAVED TRAVEL-WAYS.

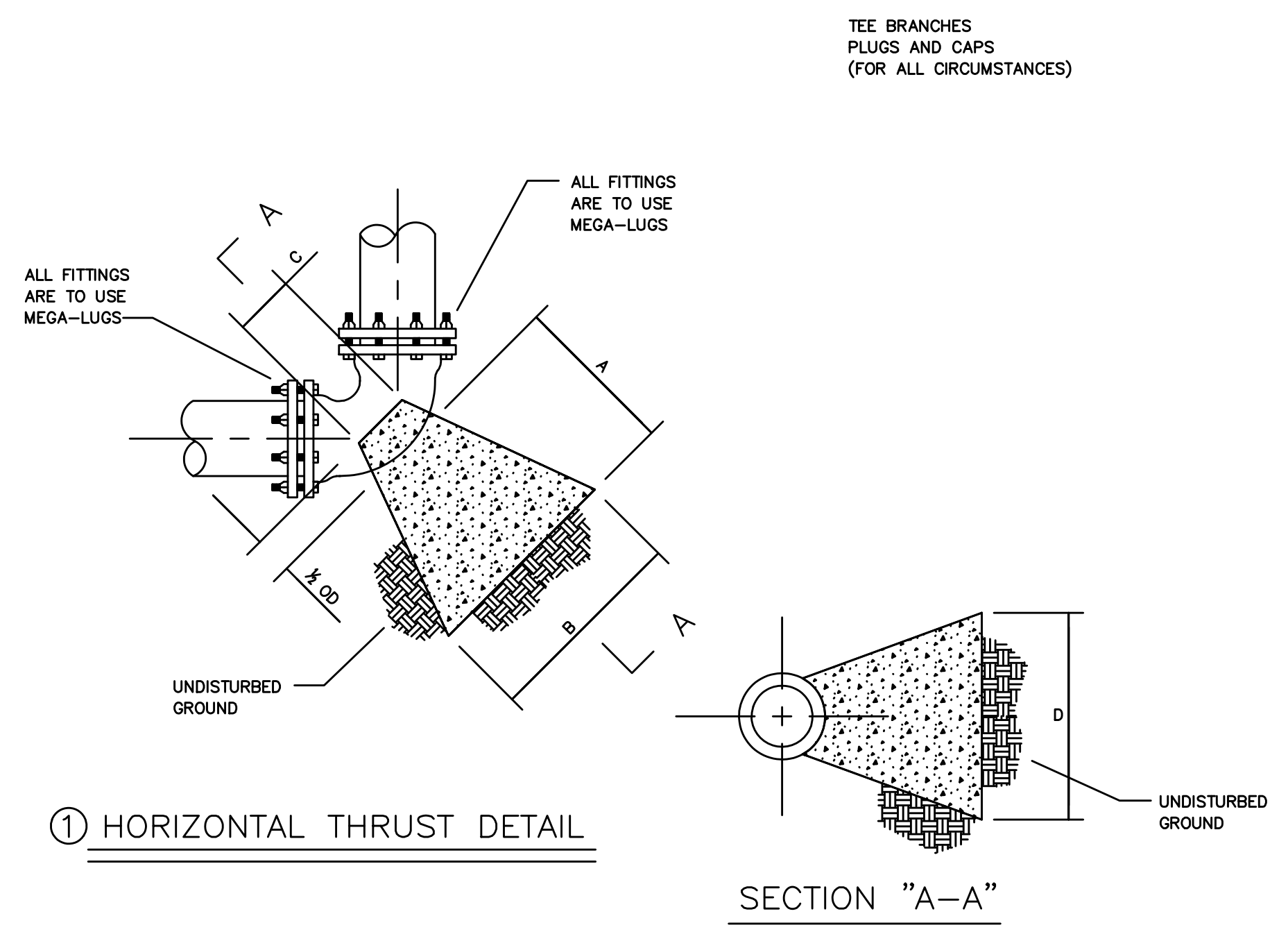
LIMIT OF PAVEMENT	NOMINAL PIPE DIAMETER (INCHES)	TRENCH WIDTH (INCHES)
4	4	40
6	6	42
8	8	44
10	10	46
12	12	48
14	14	50
15	15	51
18	18	52
18	18	54
20	20	56
24	24	60
30	30	66
36	36	72
42	42	78
48	48	84

TRENCH WIDTHS & PAVING CUT-BACKS

- NOTES:
1. THE LIMITS FOR PAVING OVER THE TRENCH SHALL BE THE TRENCH WIDTH SHOWN PLUS THE CUT-BACK ON EITHER SIDE OF THE TRENCH.
 2. REPLACEMENT WORK BEYOND TRENCH WIDTH OR LIMITS FOR PAVING SHALL BE AT THE CONTRACTOR'S EXPENSE. NO EXTRA COMPENSATION WILL BE ALLOWED.
 3. THE LIMITS FOR SELECT BACKFILL SHALL BE THE APPLICABLE TRENCH WIDTH SHOWN MULTIPLIED BY THE AVERAGE DEPTH OF BACKFILL TO THE TOP OF PIPE.
 4. THE JAGGED EDGES OF THE EXISTING PAVEMENT ALONG THE TRENCH CUT SHALL BE SQUARED AND CUT TO A NEAT LINE WITH AN APPROPRIATE SAW ALONG STRAIGHT LINES PARALLEL TO THE CENTER OF THE PAVEMENT CUT.

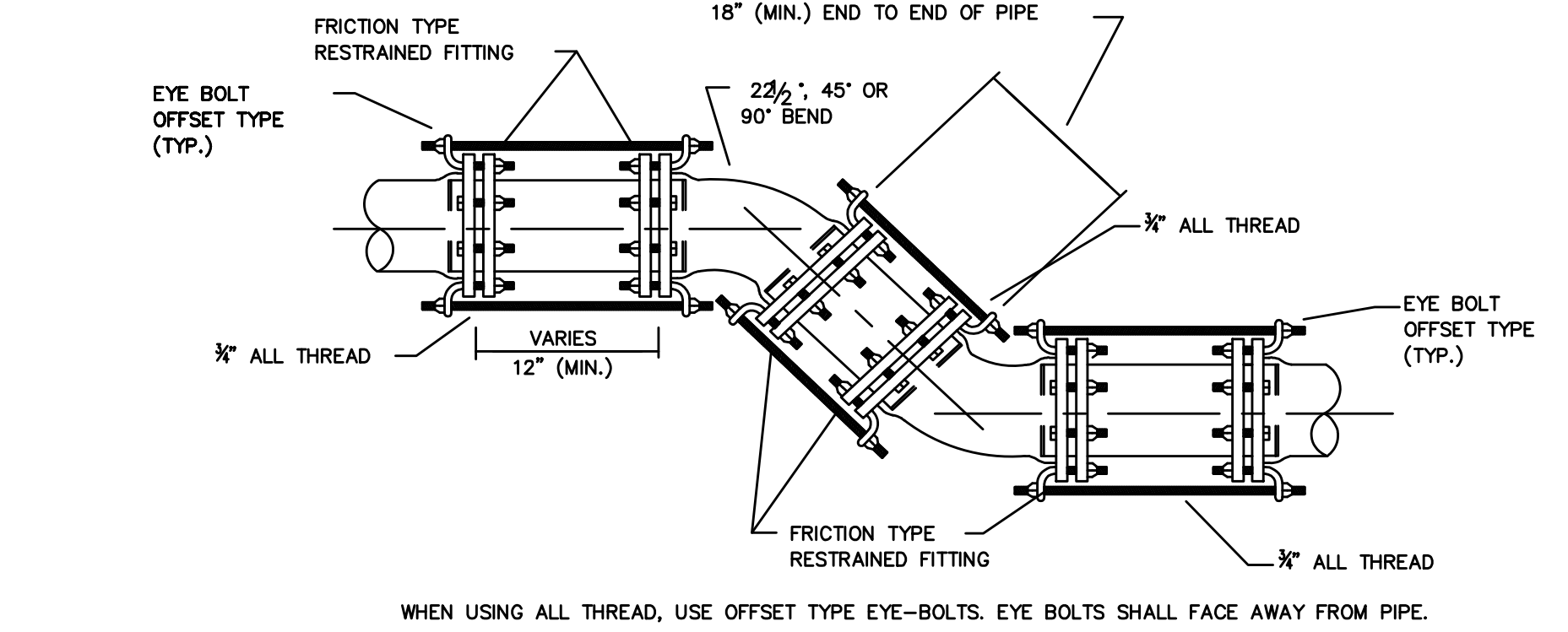


- DETAIL OF PIPE FOUNDATION
- GENERAL NOTES:
1. SOIL CONDITIONS SHALL BE VERIFIED BY ENGINEER BEFORE THRUST BLOCK IS CONSTRUCTED WHERE SOIL BEARING PRESSURE IS LESS THAN 2000 LB/FT². THRUST BLOCK BEARING AREA SHALL BE INCREASED APPROPRIATELY.
 2. ALL CONCRETE SHALL BE CLASS A, 4000 P.S.I.
 3. ALL MANS GREATER THAN 12\"/>
 4. PIPE SHALL BE DUCTILE IRON.
 5. UNDER ADVERSE CONSTRUCTION CONDITIONS CONCRETE SHALL BE \"HIGH EARLY\" TYPE.



① DIMENSIONS FOR CONCRETE BLOCKING HORIZONTAL THRUST

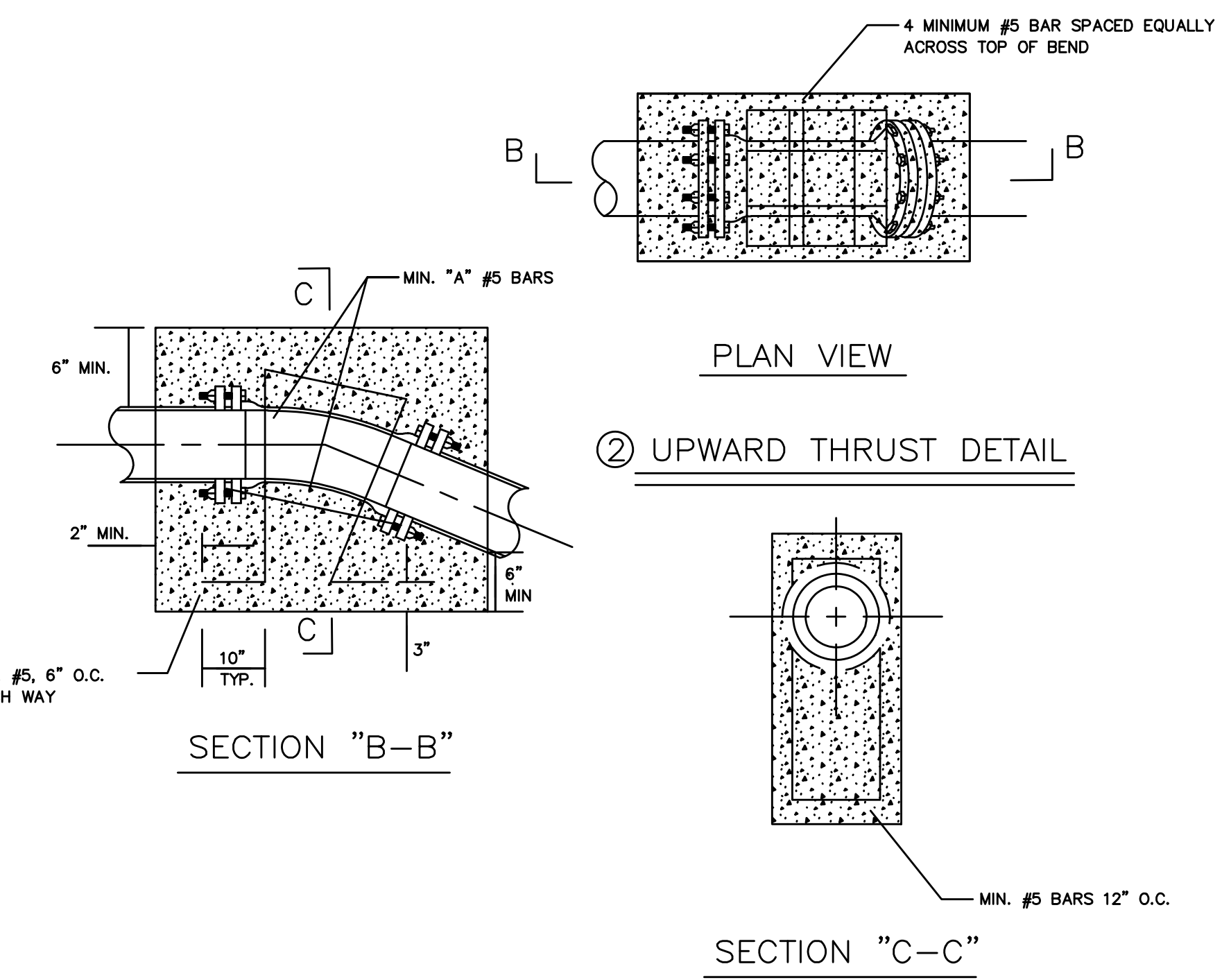
BEND	SIZE	A (FT.)	B (FT.)	C (FT.)	D (FT.)	VOLUME (CU. YD.)
111°	6"	1.0	2.0	7"	1.0	0.04
	8"	1.0	2.0	7"	1.0	0.05
	12"	1.0	2.0	11"	2.0	0.1
	18"	2.0	3.0	15"	2.0	0.3
	20"	2.0	3.0	19"	3.0	0.5
222°	6"	1.0	2.0	7"	1.0	0.05
	8"	1.0	2.0	7"	2.0	0.1
	12"	2.0	3.0	11"	2.0	0.3
	18"	2.0	4.0	15"	3.0	0.6
	20"	3.0	5.0	19"	3.0	1.0
45°	6"	1.5	2.0	7"	1.5	0.11
	8"	2.0	3.0	7"	2.0	0.3
	12"	2.0	4.0	11"	3.0	0.7
	18"	3.0	5.0	15"	4.0	1.4
	20"	4.0	6.0	19"	5.0	2.8
90°	6"	1.5	2.0	7"	1.75	0.13
	8"	2.0	3.0	7"	2.0	0.3
	12"	2.0	4.0	11"	4.0	0.8
	18"	3.0	5.0	15"	5.0	1.5
	20"	4.0	7.0	19"	6.0	3.9



ANCHORING OF VERTICAL OR HORIZONTAL BENDS WHERE THRUST BLOCKS ARE NOT DESIRED

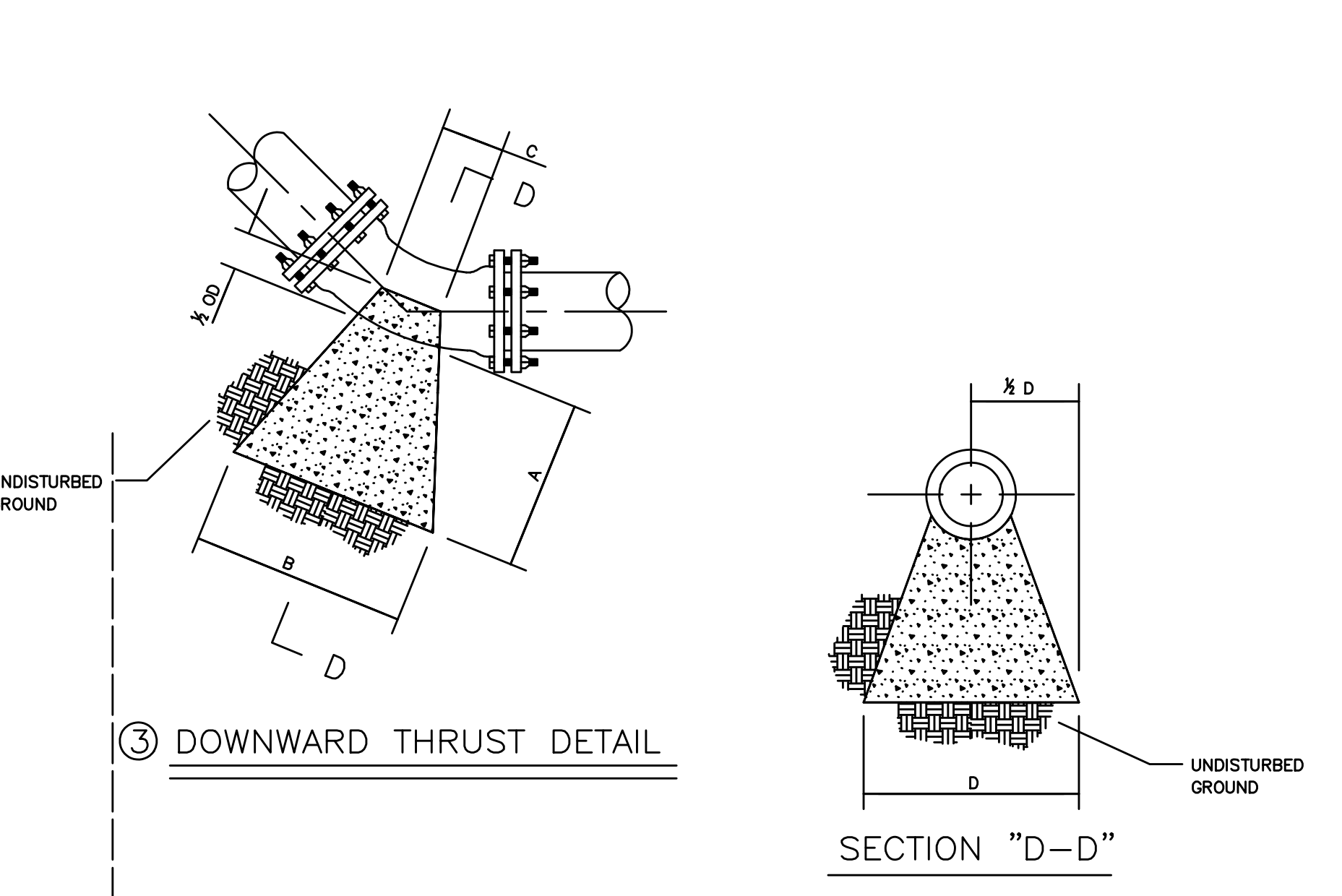


- CONNECTION NOTES:
1. DRIVEWAYS SHALL NOT BE BUILT OVER METERS.
 2. ALL LINES SHALL BE CHLORINATED AND PRESSURE TESTED IN COMPLETE ACCORDANCE WITH SPANISH FORT WATER SYSTEMS SPECIFICATIONS AND REQUIREMENTS. AFTER SUCCESSFUL COMPLETION OF THE TESTING AND CHLORINATION, THE PRESSURE SHALL REMAIN ON THE SYSTEM AT ALL TIMES.
 3. TEN FT. SEPARATION REQUIRED HORIZONTALLY BETWEEN PARALLEL WATER AND SEWER LINES.
 4. SADDLE IS REQUIRED FOR ALL SERVICE CONNECTION TO MAINS.
 5. MINIMUM DISTANCE BETWEEN SERVICE TAPS TO BE NOT LESS THAN 36\"/>
 6. AIR RELEASE VALVES ARE NOT ALLOWED BY SWS.



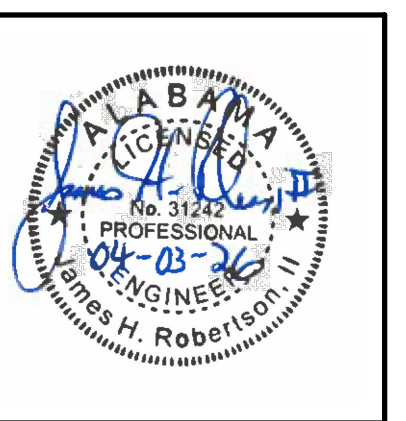
② DIMENSIONS FOR CONCRETE REQUIRED TO RESIST UPWARD THRUST

BEND	SIZE	NO. OF REIN. BARS REQ'D	VOLUME (CU. YD.)
111°	6"	2	0.3
	8"	2	0.5
	12"	2	1.4
	18"	3	2.4
	20"	3	3.8
222°	6"	2	0.7
	8"	2	1.2
	12"	2	2.7
	18"	3	4.8
	20"	3	7.4
45°	6"	2	1.2
	8"	2	2.2
	12"	2	4.9
	18"	3	8.8
	20"	3	13.7
90°	6"	2	1.8
	8"	2	3.1
	12"	3	7.0
	18"	3	12.4
	20"	4	19.4



③ DIMENSIONS FOR CONCRETE BLOCKING DOWNWARD THRUST

BEND	SIZE	A (FT.)	B (FT.)	C (FT.)	D (FT.)	VOLUME (CU. YD.)
111°	6"	1.0	2.0	7"	1.0	0.04
	8"	1.0	2.0	7"	1.0	0.05
	12"	1.0	2.0	11"	2.0	0.1
	18"	2.0	3.0	15"	2.0	0.3
	20"	2.0	3.0	19"	3.0	0.5
222°	6"	1.0	2.0	7"	1.0	0.05
	8"	1.0	2.0	7"	2.0	0.1
	12"	2.0	3.0	11"	2.0	0.3
	18"	2.0	4.0	15"	3.0	0.6
	20"	3.0	5.0	19"	3.0	1.0
45°	6"	1.5	2.0	7"	1.5	0.11
	8"	2.0	3.0	7"	2.0	0.3
	12"	2.0	4.0	11"	3.0	0.7
	18"	3.0	5.0	15"	4.0	1.4
	20"	4.0	6.0	19"	5.0	2.8
90°	6"	1.75	2.5	7"	2.0	0.2
	8"	2.0	3.0	7"	3.0	0.4
	12"	4.0	6.0	11"	4.0	2.1
	18"	4.0	7.0	15"	5.0	3.1
	20"	5.0	8.0	19"	7.0	5.3



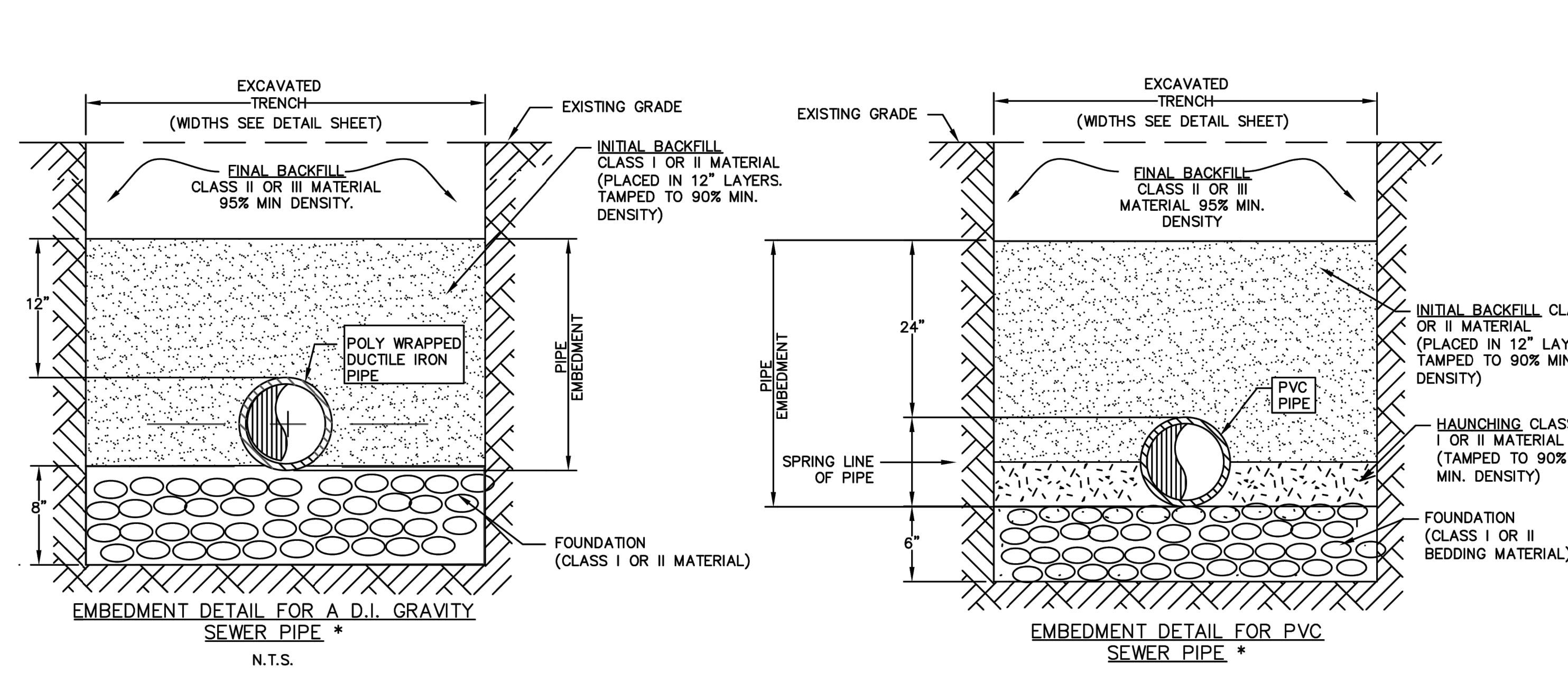
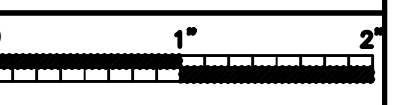
SHEET TITLE:
SEWER
UTILITY
DETAILS

PROJ. MGR.: JR
DRAWN: BT
DATE: 04.03.2026
REVISIONS

JOB NO. 25-173

SHEET NO:

C-4.2



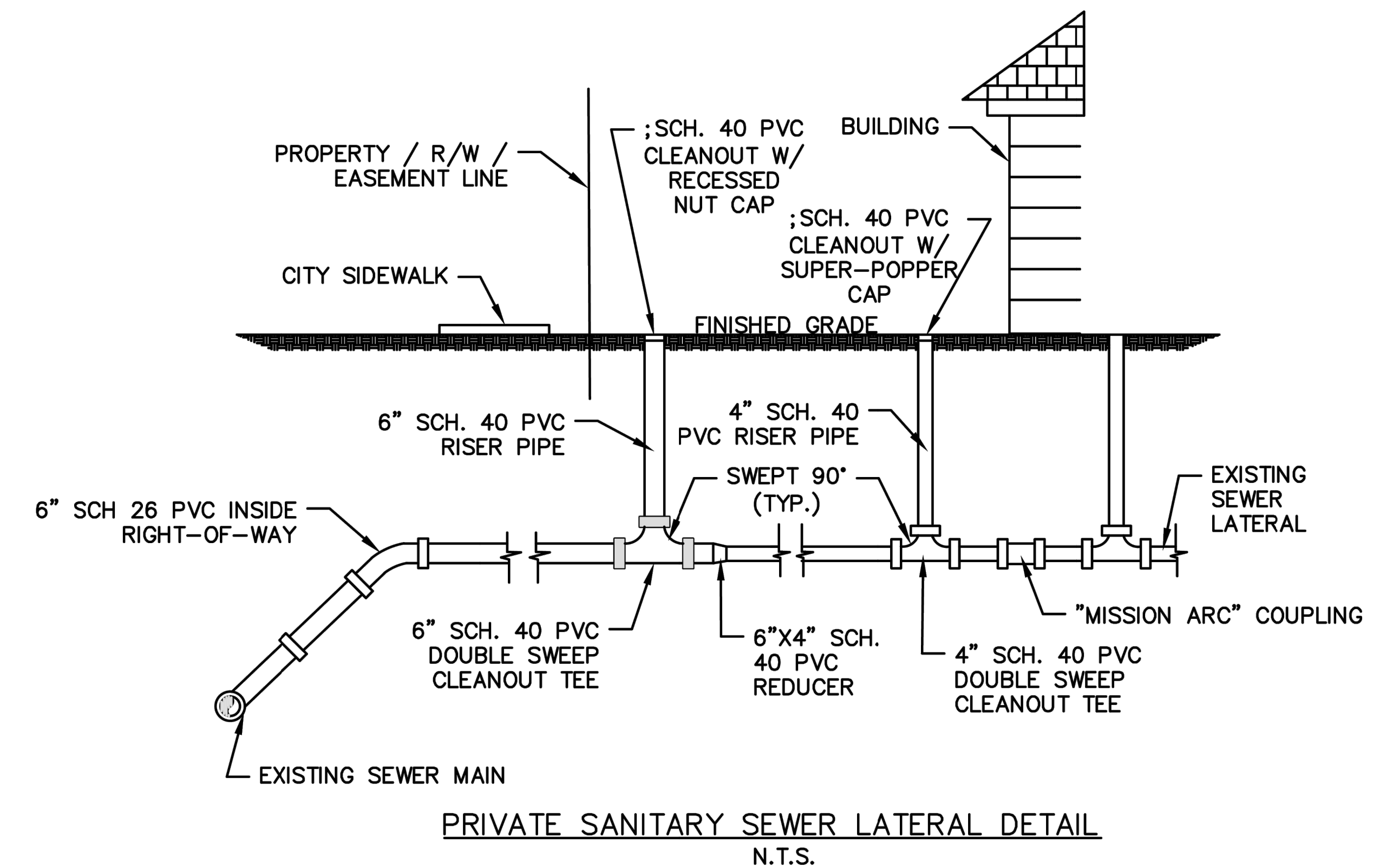
GENERAL NOTES FOR COMPACTION

1. WHEN USING MECHANICAL COMPACTORS, AVOID CONTACT WITH PIPE. USE SMALL MECHANICAL COMPACTORS WHEN COMPACTING OVER PIPE CROWN AND MAINTAIN 6" MINIMUM COVER ABOVE PIPE. COMPACTION WITH BACK-HOE BUCKET, OR OTHER EQUIPMENT NOT INTENDED FOR COMPACTION USE, IS NOT ALLOWED.
2. MATERIAL SHALL BE INSTALLED AND COMPACTED IN 12" MAXIMUM LAYERS.
3. FINAL GRADE OF BEDDING SHALL BE LEVELED BY HAND.
4. HAUNCHING SHALL BE WORKED IN AROUND PIPE BY HAND & EVENLY TAMPED TO PROVIDE UNIFORM SUPPORT.
5. EMBEDMENT COMPACTION SHALL BE ACHIEVED BY PLACING AND WORKING IN BY HAND TO INSURE ALL EXCAVATED VOIDS AND HAUNCH AREAS ARE FILLED. HAND TAMP WITH VIBRATORY PLATE COMPACTORS. TO MINIMIZE COMPACTION EFFORT OF CLASS III MATERIAL, MOISTURE CONTENT SHALL BE MAINTAINED NEAR OPTIMUM.
6. LOCALIZED LOADINGS/DIFFERENTIAL SETTLEMENT SHALL BE MINIMIZED AT PIPE CROSSINGS.
7. PLACEMENT OF EMBEDMENT MATERIALS SHALL BE BY METHODS THAT WILL NOT DISTURB OR DAMAGE THE PIPE.
8. WORK IN AND TAMP THE HAUNCHING MATERIAL IN THE AREA BETWEEN THE BEDDING AND UNDERSIDE OF THE PIPE BEFORE PLACING AND COMPACTING THE REMAINDER OF THE EMBEDMENT IN THE PIPE ZONE.
9. USE COMPACTION EQUIPMENT AND TECHNIQUES THAT ARE COMPATIBLE WITH MATERIALS USED AND LOCATION IN THE TRENCH. (SEE NOTE 12)
10. HEAVY COMPACTION EQUIPMENT SHALL NOT BE USED FOR COMPACTION PURPOSES WITHIN THE PIPE EMBEDMENT AND FOUNDATION PIPE ZONES. BEFORE USING HEAVY COMPACTION OR CONSTRUCTION EQUIPMENT DIRECTLY OVER THE PIPE, PLACE SUFFICIENT BACKFILL TO PREVENT DAMAGE, EXCESSIVE DEFLECTIONS, OR OTHER DISTURBANCE OF THE PIPE. SUFFICIENT BACKFILL SHALL BE AS DETERMINED BY THE ENGINEER.
11. THE MINIMUM DEPTH OF COVER TO BE ESTABLISHED BY THE ENGINEER. IN THE ABSENCE OF AN ENGINEER REVIEW, THE FOLLOWING "DEFAULT" COVER RECOMMENDATIONS SHALL BE USED. FOR CLASS I, EMBEDMENT MATERIALS INSTALLED TO THE MINIMUM REQUIRED DENSITIES SHALL PROVIDE COVER OF AT LEAST 24" OR ONE PIPE DIAMETER (WHICHEVER IS GREATER). FOR CLASS II AND III, EMBEDMENT MATERIALS INSTALLED TO THE MINIMUM REQUIRED DENSITIES SHALL PROVIDE COVER OF AT LEAST 36" OR ONE PIPE DIAMETER (WHICHEVER IS GREATER). AT LEAST 48" COVER IS REQUIRED BEFORE USING HEAVY COMPACTION EQUIPMENT.
12. COMPACTION METHODS:
 - a. COARSE GRAINED, CLEAN MATERIALS, SUCH AS CRUSHED STONE, GRAVELS AND SAND, ARE MORE READILY COMPACTED USING VIBRATORY EQUIPMENT. VIBRATORY PLATE TAMPERS WORK WELL FOR COARSE GRAINED MATERIALS (CLASS I AND CLASS II).
 - b. FINE MATERIALS REQUIRE KNEADING AND IMPACT FORCE ALONG WITH CONTROLLED WATER CONTENT TO ACHIEVE ACCEPTABLE DENSITIES. HAND TAMPERS OR AIR DRIVEN HAND-HELD IMPACT RAMMERS ARE SUITABLE FOR THE FINE GRAINED MATERIALS (CLASS III AND CLASS IV).
 - c. IN TRENCHES, SMALL HAND-HELD OR WALK BEHIND COMPACTORS ARE REQUIRED TO PRECLUDE DAMAGE TO THE PIPE AND TO INSURE THOROUGH COMPACTION IN THE CONFINED AREAS AROUND THE PIPE AND ALONG THE TRENCH WALL.

*UNLESS OTHERWISE SPECIFIED BY GEOTECHNICAL REPORT

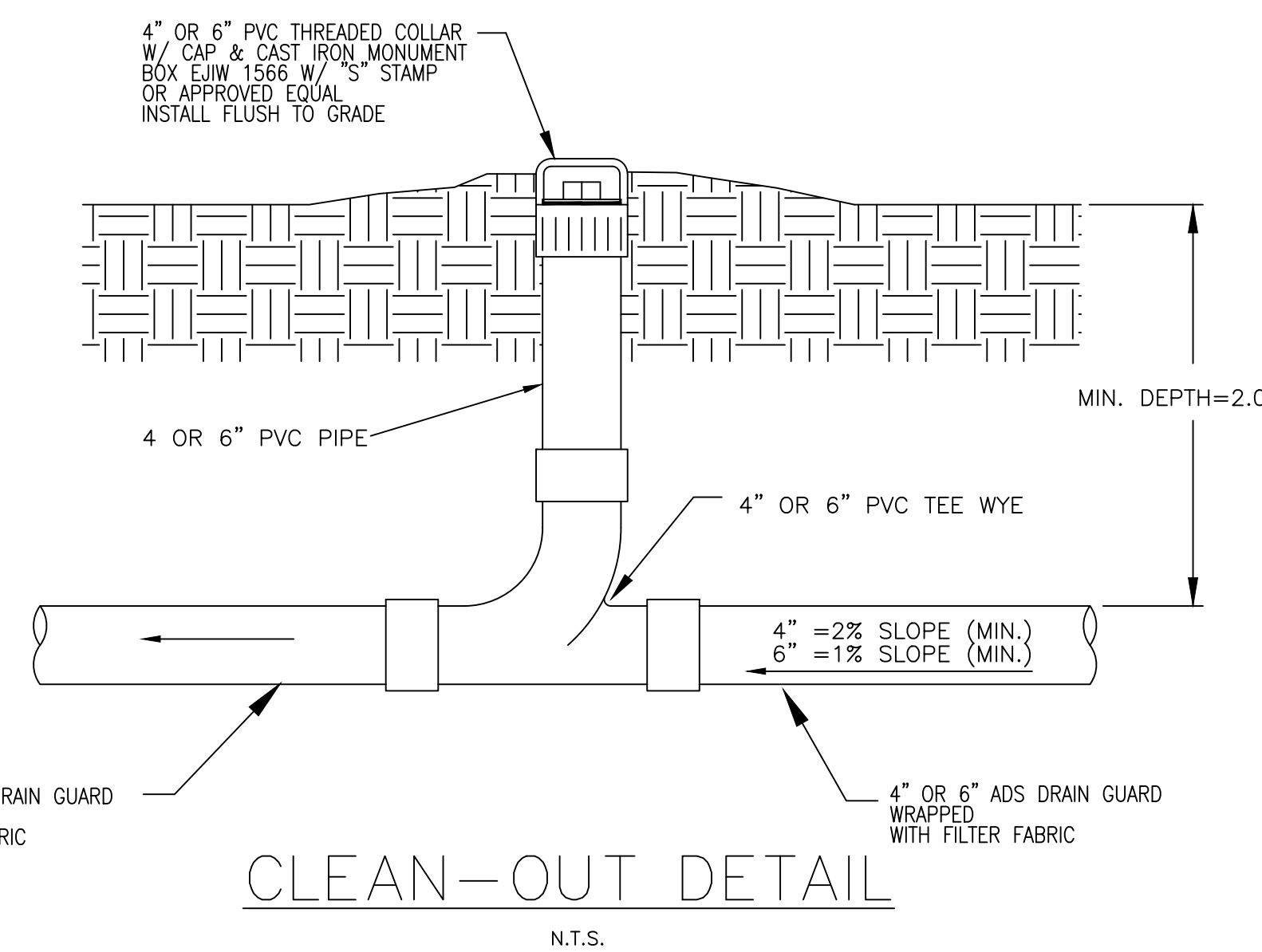
EMBEDMENT MATERIAL & CLASS DESCRIPTIONS:
(SEE SPECIFICATIONS FOR SIEVE ANALYSIS)

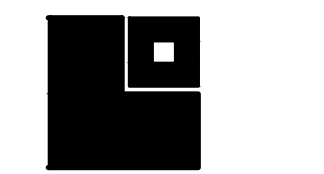
- CLASS I - ANGULAR, GRADED STONE, OR ROCK, DENSE OR OPEN GRADED W/ LITTLE OR NO FINES (1/2" INCH TO 1 1/2" INCH IN SIZE) (ALDOT #57 STONE, B-BASE)
- CLASS II - CLEAN COARSE GRAINED SANDS & GRAVELS (1 1/2" INCH MAXIMUM SIZE)
- CLASS III - COARSE GRAINED MATERIAL W/ FINES, GRAVEL OR SAND MUST COMPRISE MORE THAN 50% OF CLASS III MATERIALS. (1 1/2" INCHES MAX. SIZE)



NOTES:

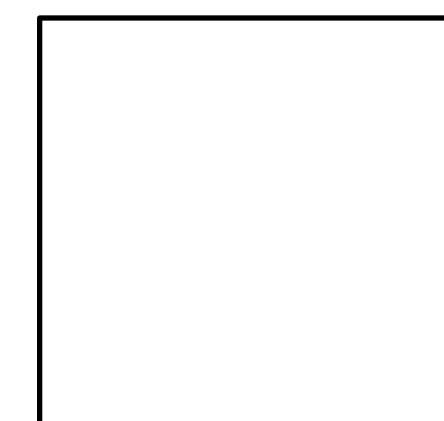
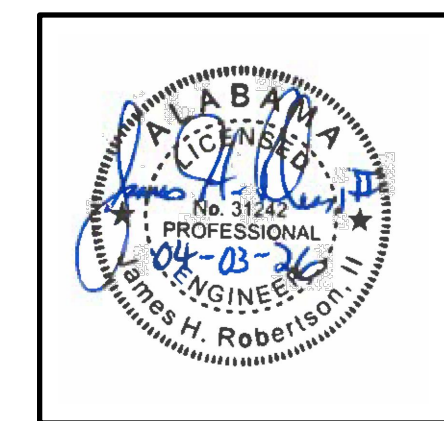
1. A CLEANOUT SHALL BE PLACED AT THE PROPERTY / RIGHT-OF-WAY / EASEMENT LINE AND WITHIN 2' TO 5' OF BUILDING OR AS APPROVED BY THE ENGINEER. CLEANOUTS PLACED AT THE BUILDINGS SHALL HAVE DOUBLE-SWEEP TEES & SUPER-POPPER CAP PER CITY PLUMBING CODES.
2. A CAST IRON CLEANOUT COVER AS SHOWN IN DETAIL ABOVE SHALL BE INSTALLED IN DRIVEWAYS AND OTHER TRAFFIC-BEARING SURFACES.
3. DETAILS SHOWN ABOVE ARE TYPICAL FOR AN EXISTING 4" LATERAL. LINE SIZES AND ALL ASSOCIATED ITEMS INCLUDING FITTINGS AND TEES SHALL BE EITHER 4" OR 6", AS APPROPRIATE.
4. DOUBLE SWEEP TEE SHALL BE GASKET RUN JOINTS BY SOLVENT WELD BRANCH JOINTS.





**LATHAN
McKEE**
ARCHITECTS

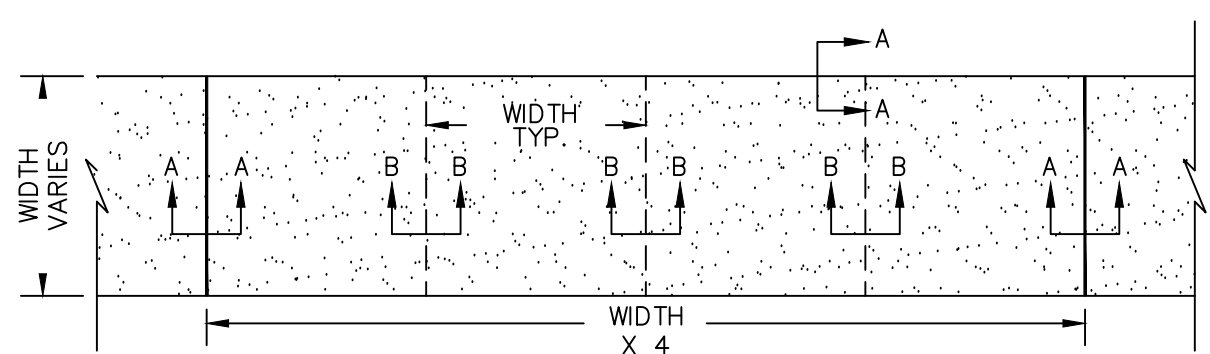
NEW ATHLETIC TRAINING FACILITY
AT
SARALAND HIGH SCHOOL
FOR THE
SARALAND CITY SCHOOLS
SARALAND, ALABAMA



SHEET TITLE:
**CIVIL
CONST
DETAILS**

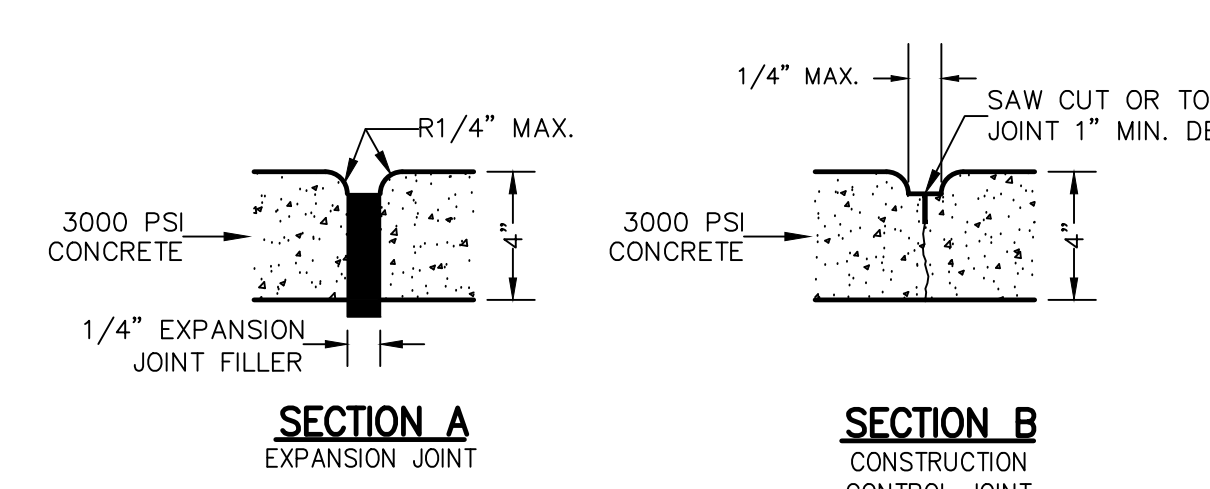
PROJ. MGR.: JR
DRAWN: BT
DATE: 04.03.2026
REVISIONS

JOB NO. 25-173
SHEET NO: C-5.0
0 1" 2'



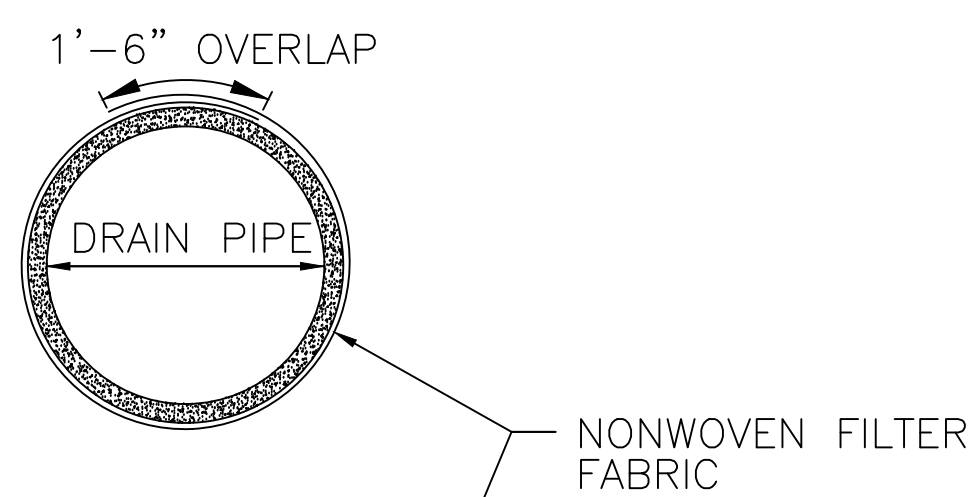
NOTES:

1. PROVIDE 6 FEET BETWEEN CONTROL JOINTS AND 24 FEET BETWEEN EXPANSION JOINTS.
2. ALL EXPANSION JOINTS SHALL BE 1/2" THICK, NEOPRENE MATERIAL.
3. EXPANSION MATERIAL TO BE USED AT ALL PC'S, PT'S AND STRUCTURES.



CONCRETE WALK DETAIL

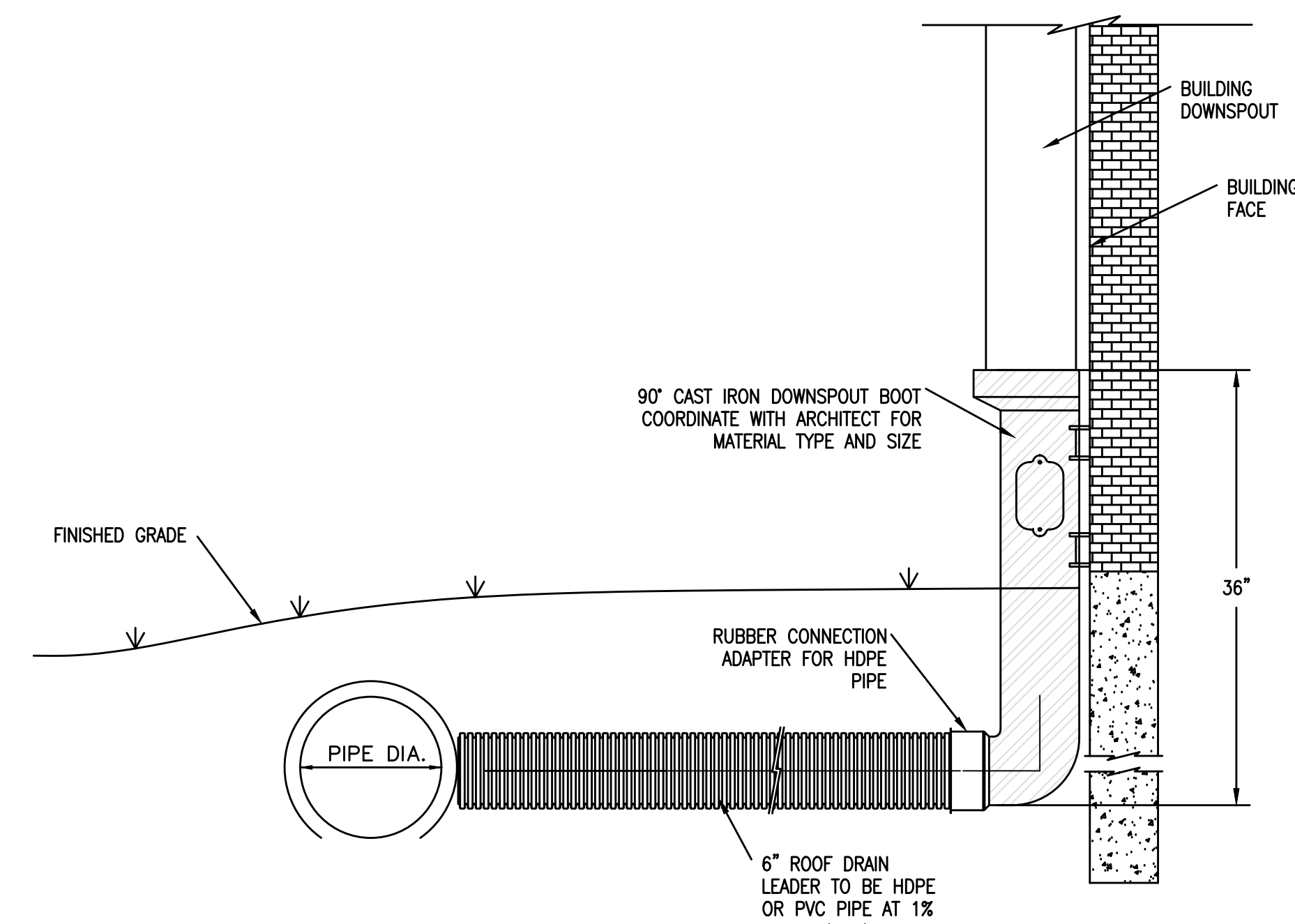
N.T.S.



NOTE:
JOINTS ON ALL STORM DRAIN PIPES SHALL BE PIPE WRAPPED WITH A NON-WOVEN FILTER FABRIC AS SHOWN IN THIS DETAIL.

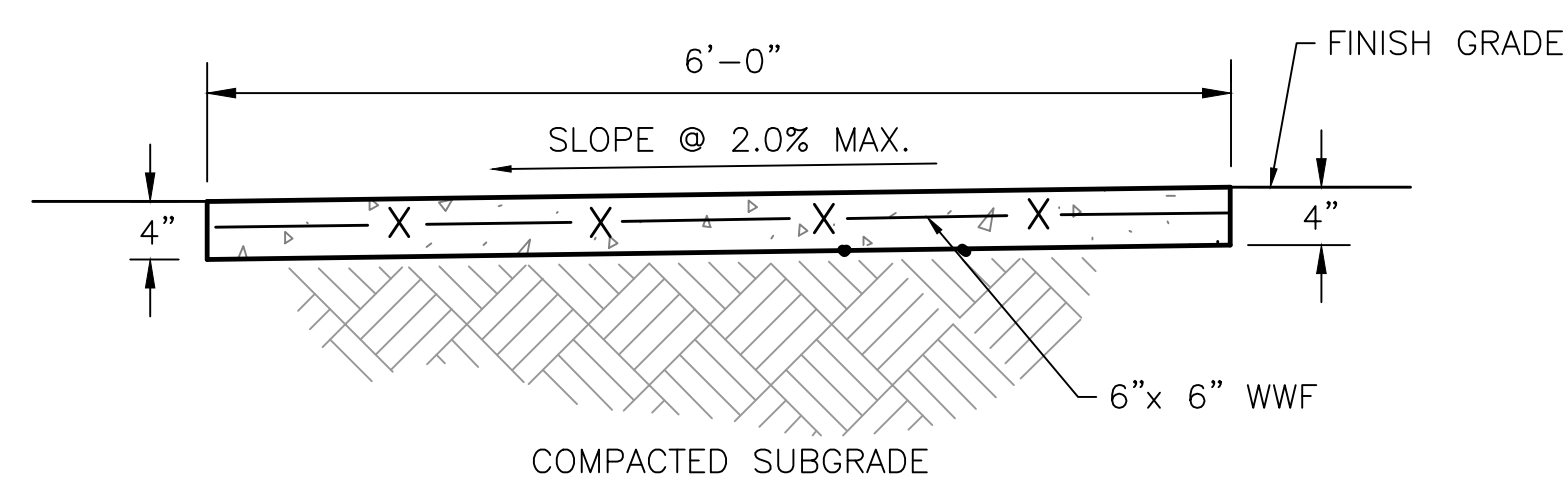
PIPE JOINT WRAP

N.T.S.



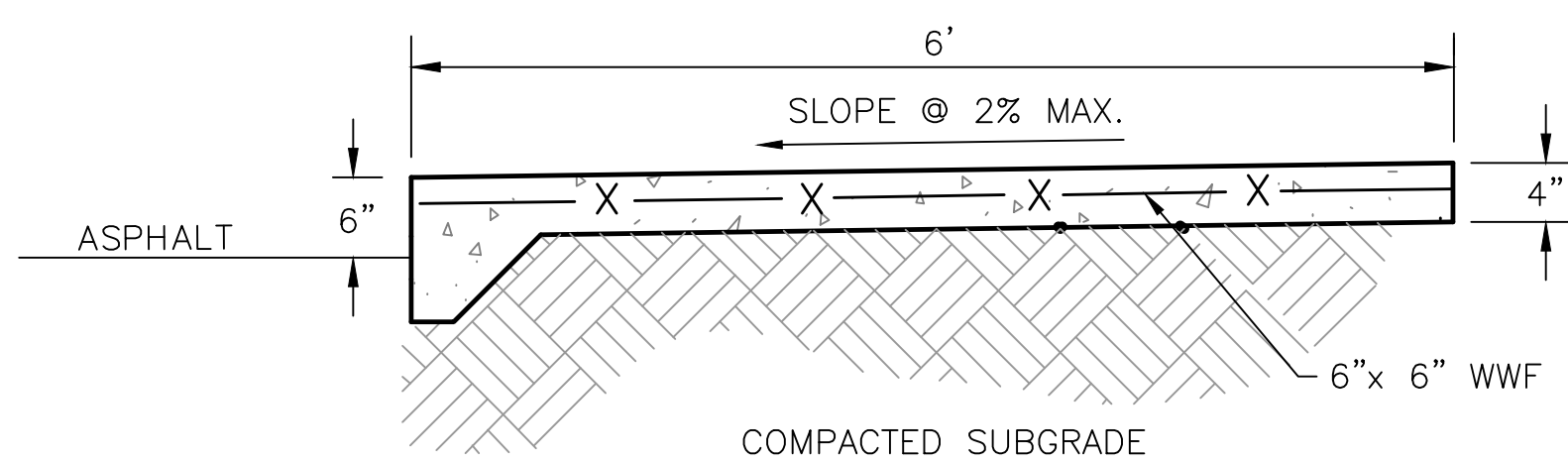
DOWNSPOUT CONNECTION DETAIL (PIPE CONNECTION)

N.T.S.



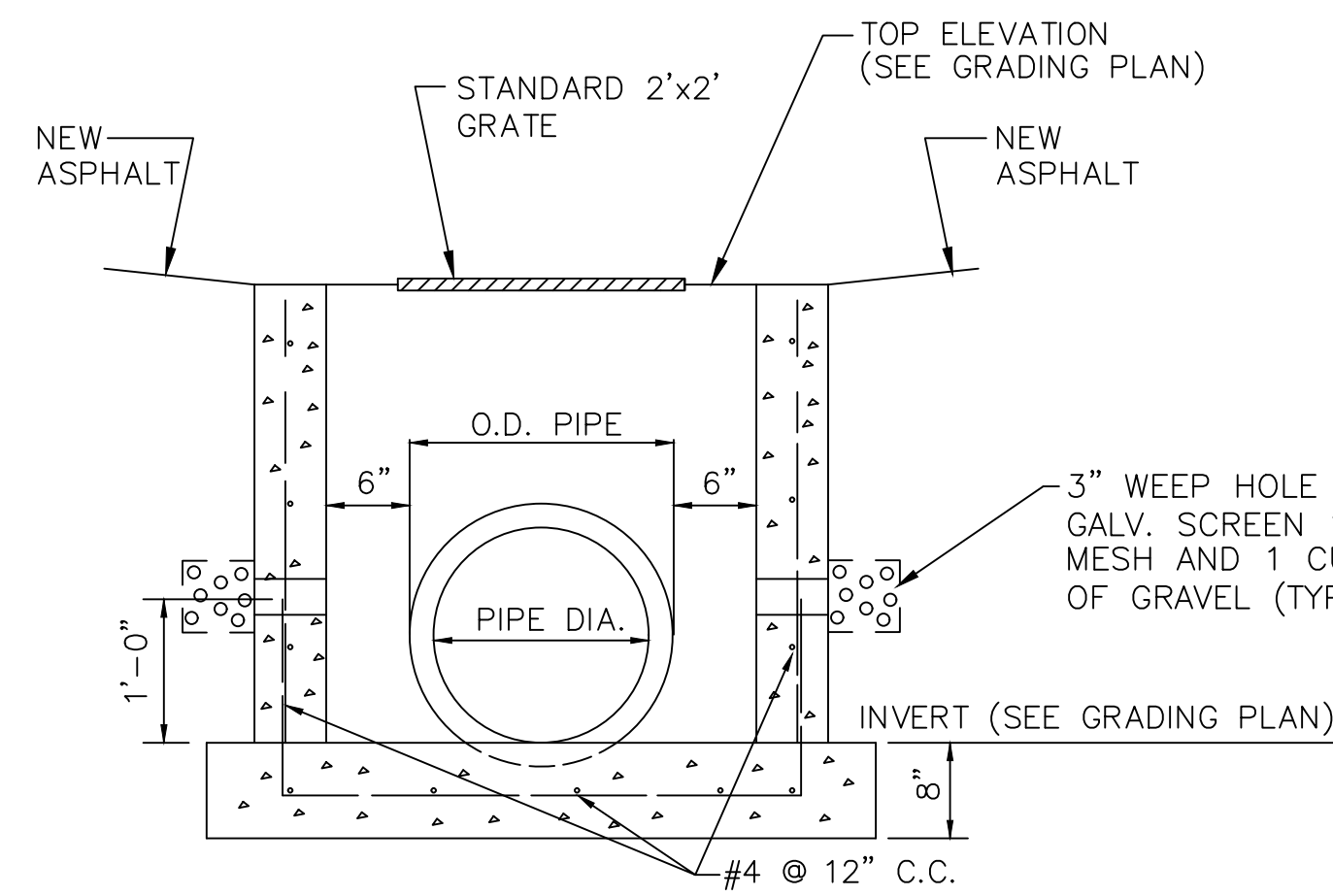
**FLUSH
CONCRETE SIDEWALK**

N.T.S.

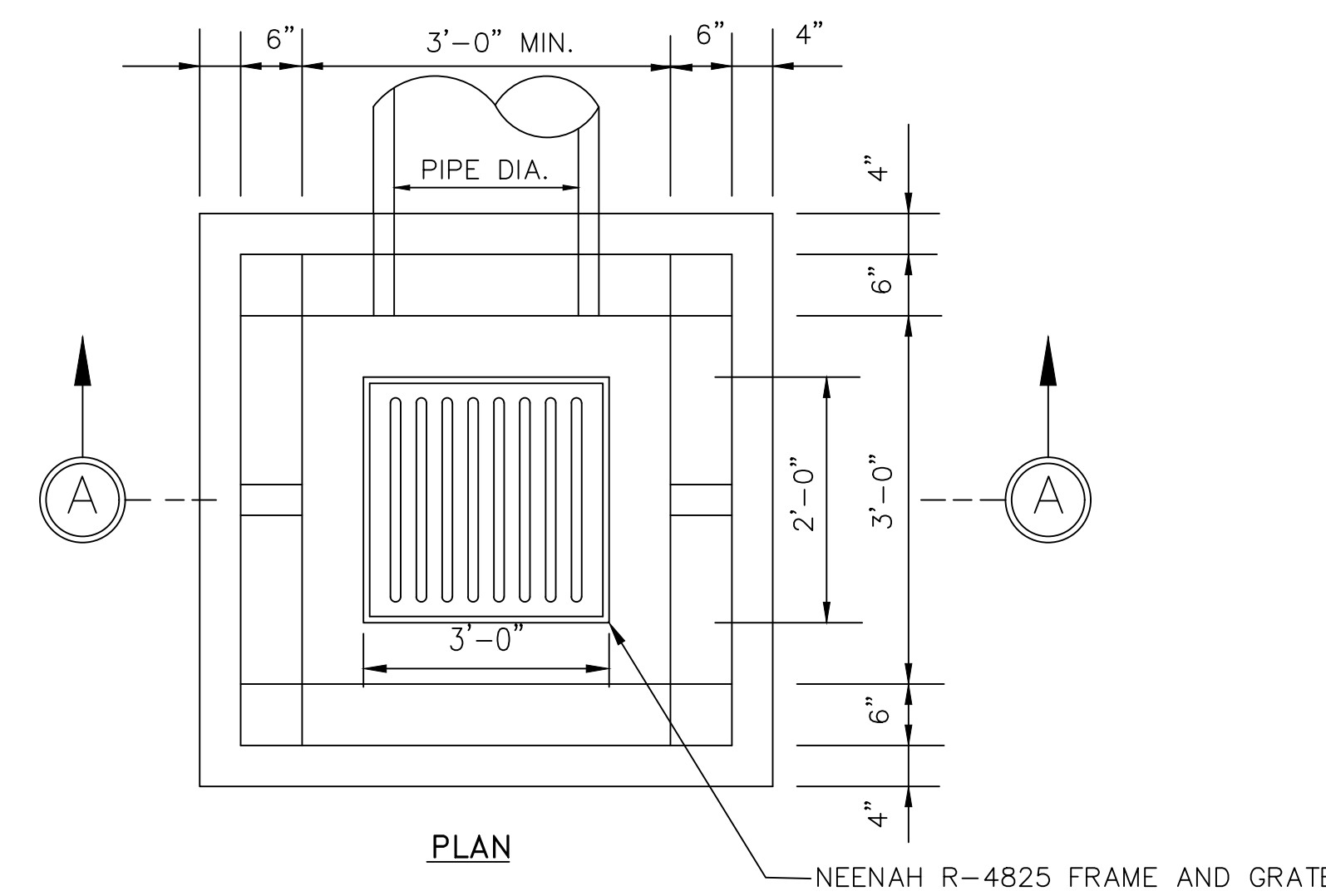


**RAISED
CONCRETE SIDEWALK**

N.T.S.



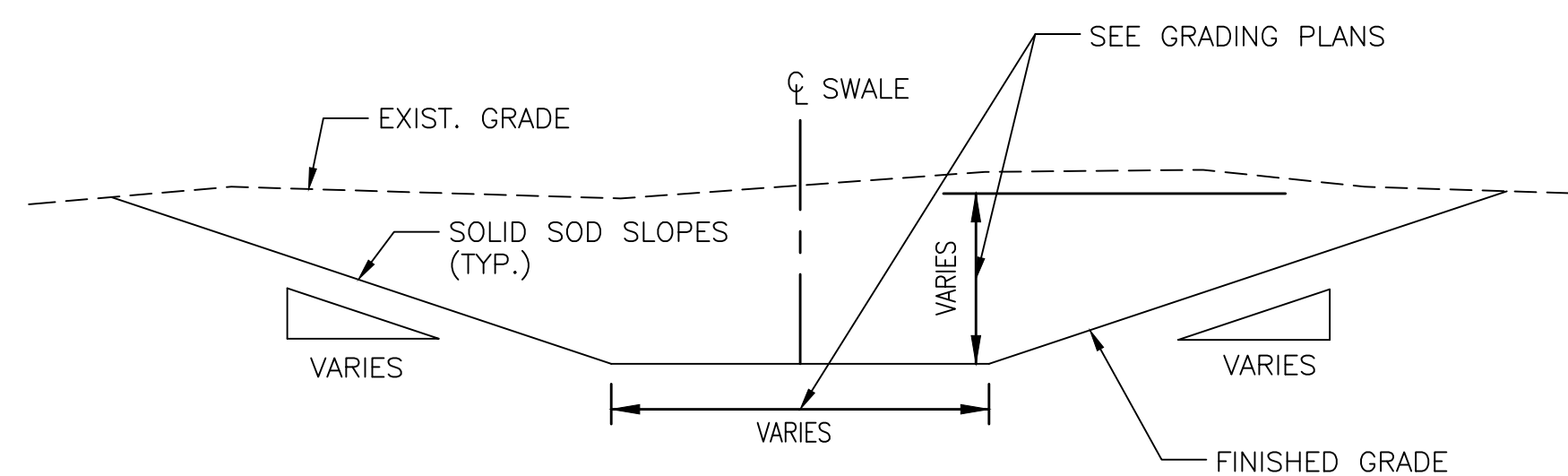
SECTION A-A



PLAN

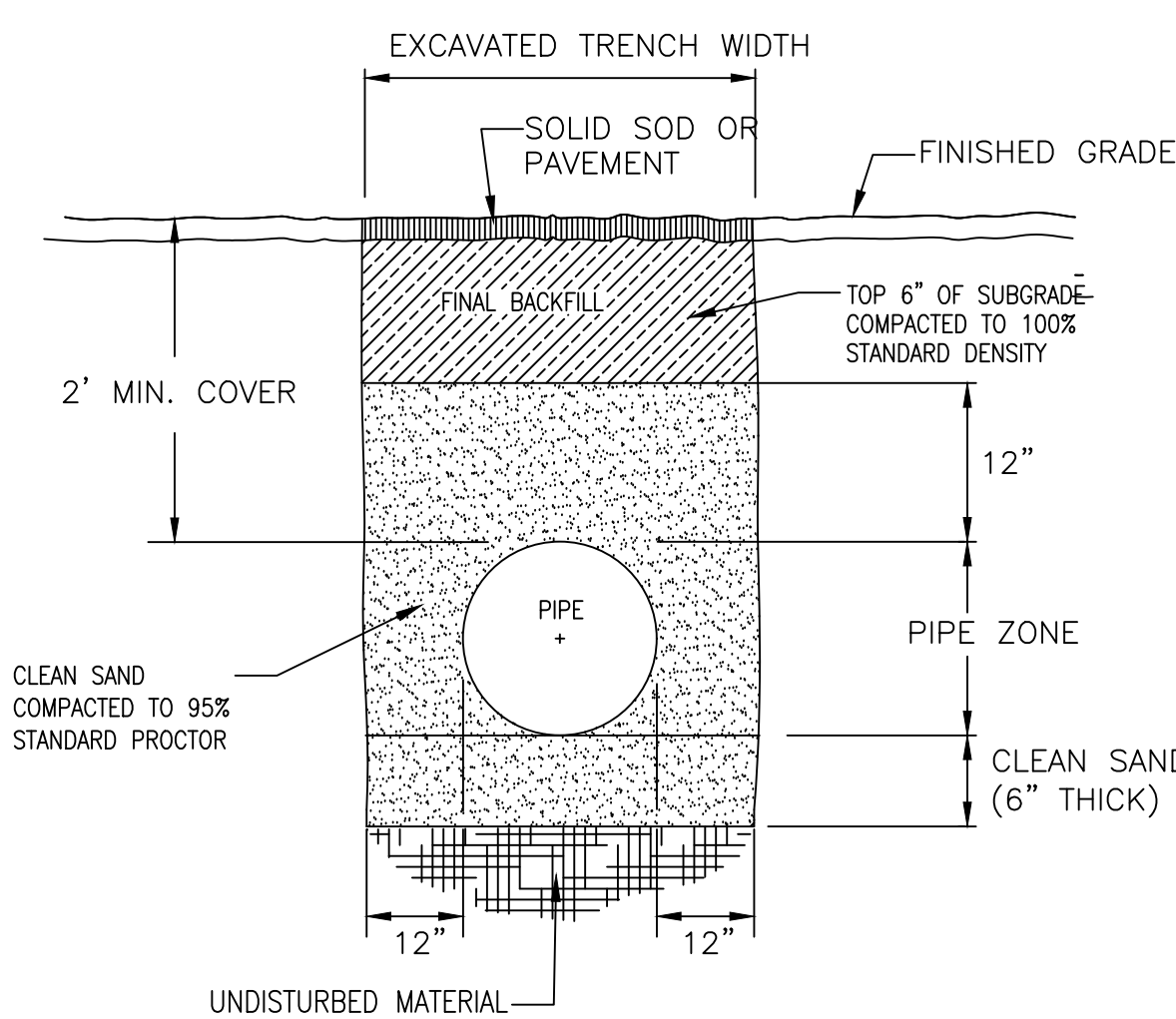
**CONCRETE GRATE
INLET DETAIL**

N.T.S.



DRAINAGE SWALE DETAIL

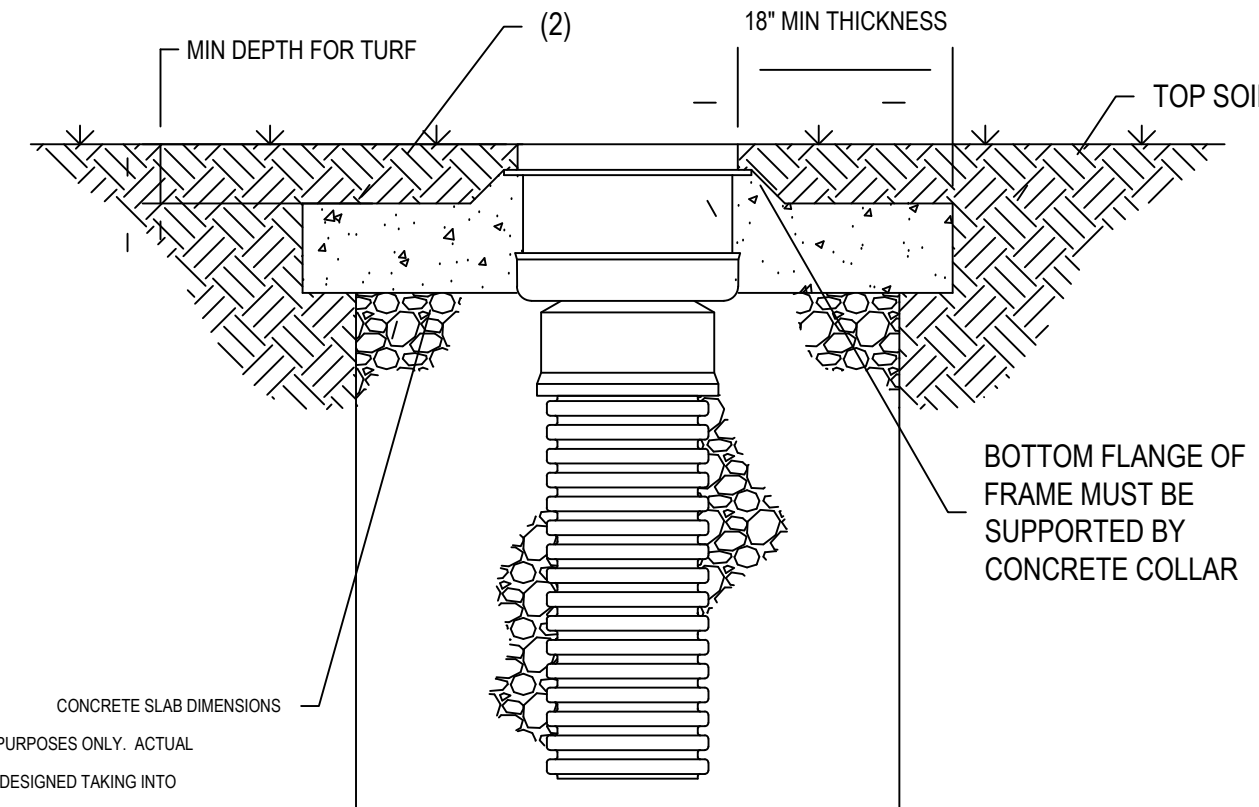
N.T.S.



PIPE TRENCH BACKFILL DETAIL

N.T.S.

12" - 30" INLINE DRAIN/CLEANOUT

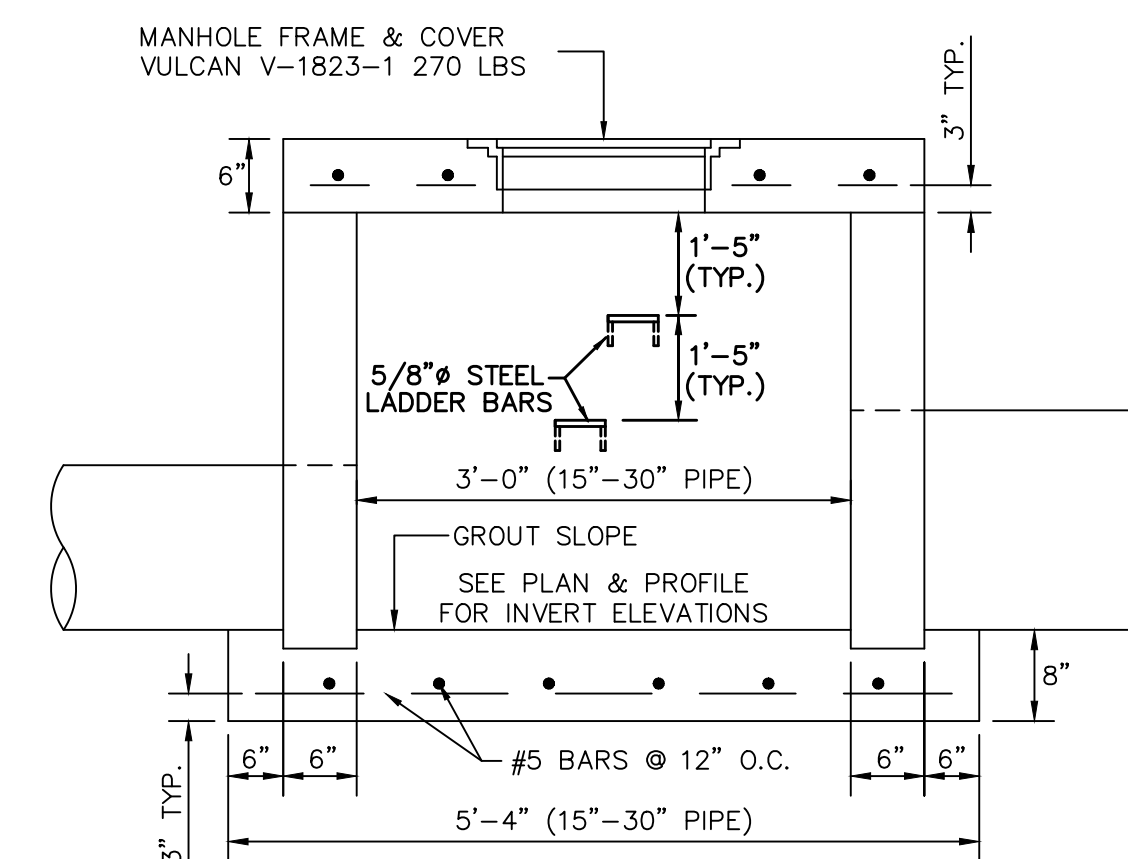


TRAFFIC LOADS:
ARE FOR GUIDELINE PURPOSES ONLY. ACTUAL CONCRETE SLAB MUST BE DESIGNED TAKING INTO CONSIDERATION LOCAL SOIL CONDITIONS, TRAFFIC LOADING, & OTHER APPLICABLE DESIGN FACTORS.

<p>THIS PRINT DISCLOSES SUBJECT MATTER IN WHICH NYLOPLAST HAS PROPRIETARY RIGHTS. THE RECEIPT OR POSSESSION OF THIS PRINT DOES NOT CONFER, TRANSFER, OR LICENSE THE USE OF THE DESIGN OR TECHNICAL INFORMATION SHOWN HEREIN. REPRODUCTION OF THIS PRINT OR ANY INFORMATION CONTAINED HEREIN, OR MANUFACTURE OF ANY ARTICLE HEREFROM, FOR THE DISCLOSURE TO OTHERS IS FORBIDDEN, EXCEPT BY SPECIFIC WRITTEN PERMISSION FROM NYLOPLAST.</p>		<p>3100 VERNONA AVE BURLING, GA 30518 PHN: (770) 532-3443 FAX: (770) 532-3499 www.nyloplast-us.com</p>
<p>DRAWN BY: EBC DATE: 01-05-09</p>	<p>MATERIAL PROJECT NO./NAME</p>	<p>Nyloplast TITLE 12 IN - 30 IN DRAIN BASIN & INLINE DRAIN TURF TRAFFIC INSTALLATION</p>
<p>REVISED BY: NMH DATE: 03-14-16</p>	<p>DWG SIZE: A SCALE: 1:25 SHEET: 1 OF 1</p>	<p>DWG NO.: 7001-110-340 REV: F</p>

NYLOPLAST CLEANOUT DETAILS

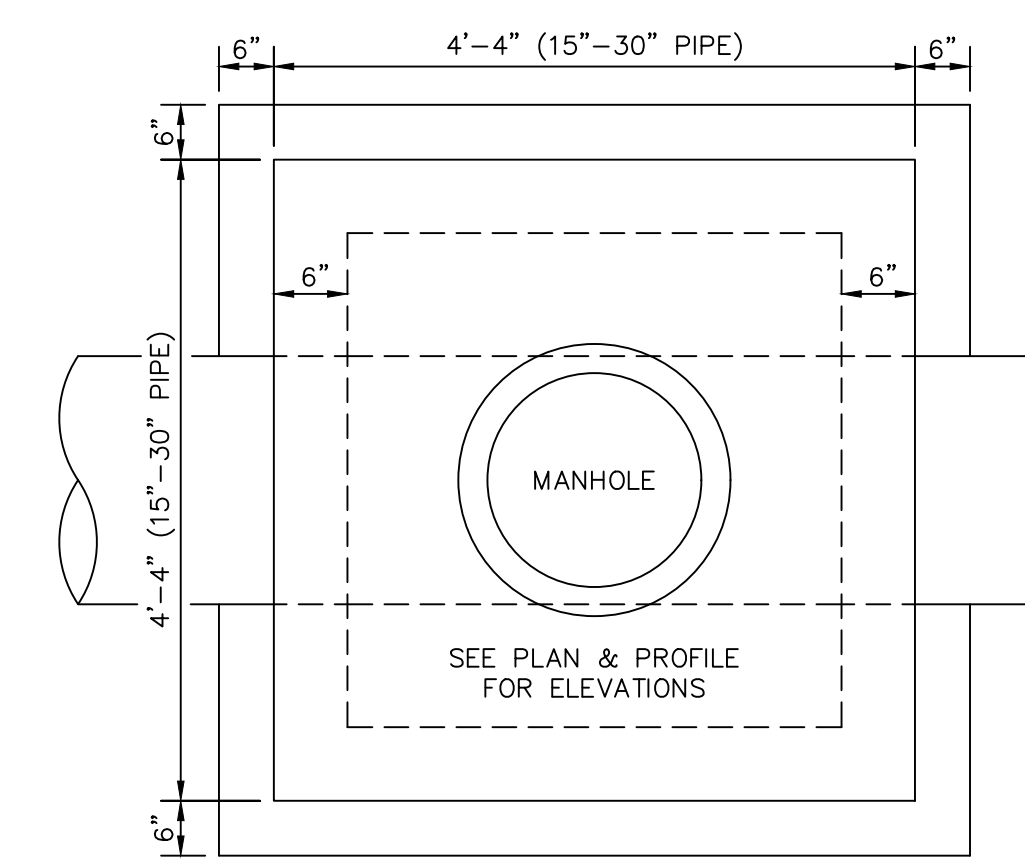
N.T.S.



TYPICAL SECTION

JUNCTION BOX DETAIL

N.T.S.



PLAN VIEW

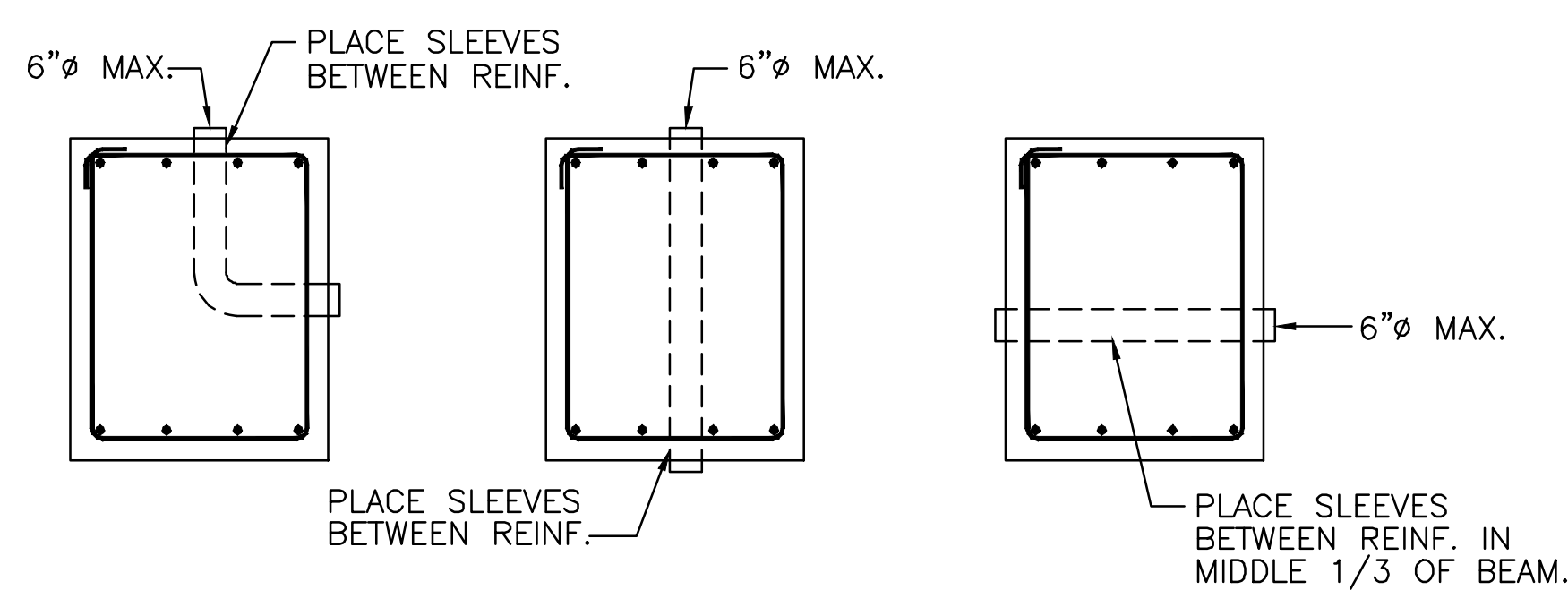
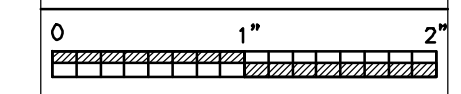
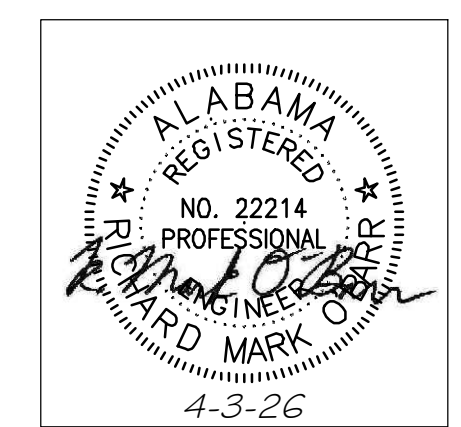
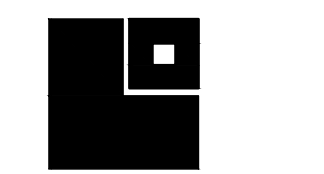
NOTE: STEPS REQUIRED FOR BOX HEIGHTS 4'-0" AND GREATER.



ENGINEERING - SURVEYING - CONSTRUCTION MANAGEMENT

30673 Sgt. E. L. "Booth" Thomas Drive, Spanish Fort, AL 36527 Phone: (251) 544-7900

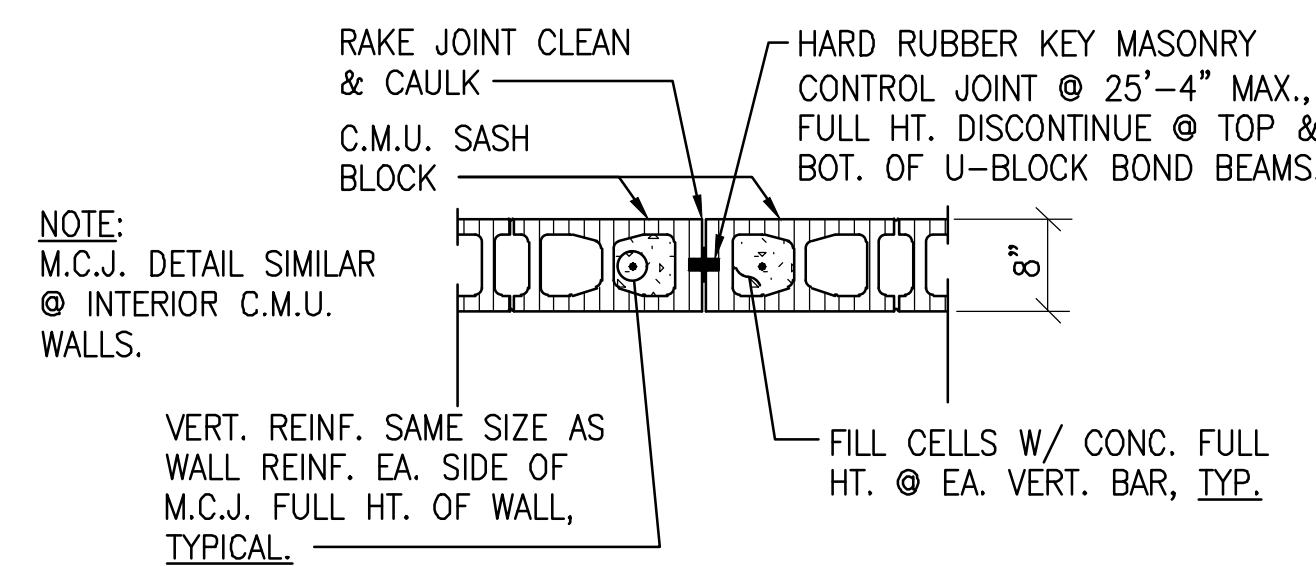
S-11-Clients/25-114 Saraland HS Multi Purpose Building Saraland City Schools/CIVIL ENGINEERING/PRODUCTION DWG/SS/LS/HS ADD 26 NOTES-DETAILS.dwg - Monday, April 6, 2026 10:47:03 AM



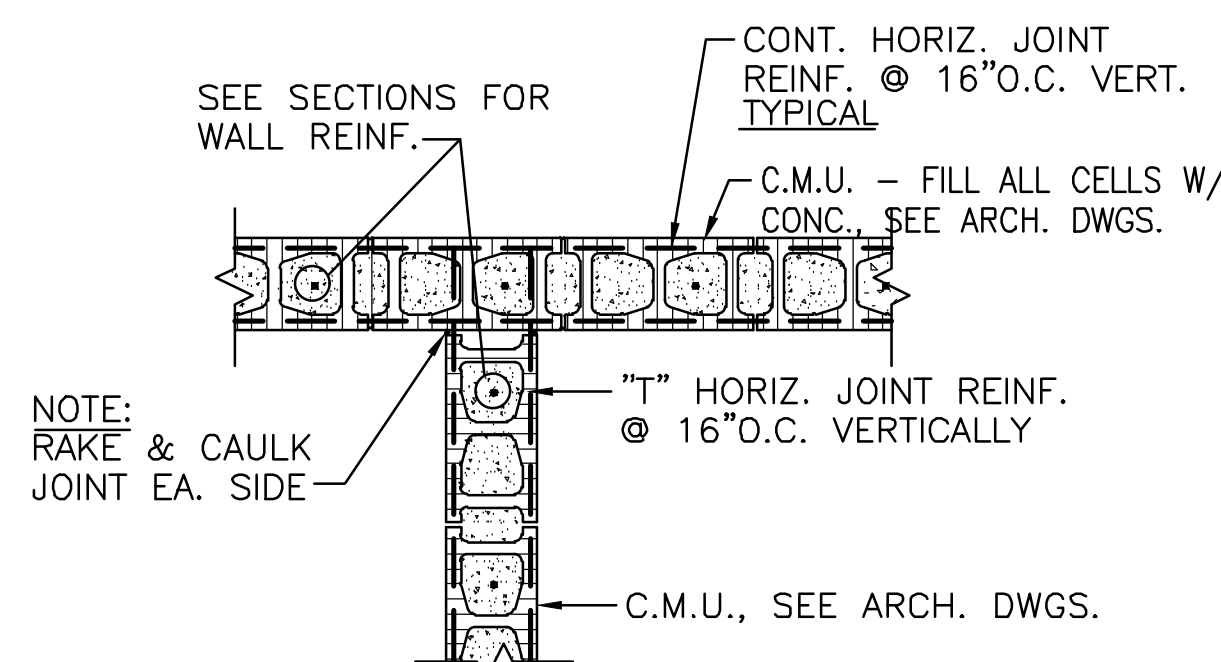
TYPICAL PLUMBING SLEEVE IN GRADE BEAM DETAILS

NOTES:

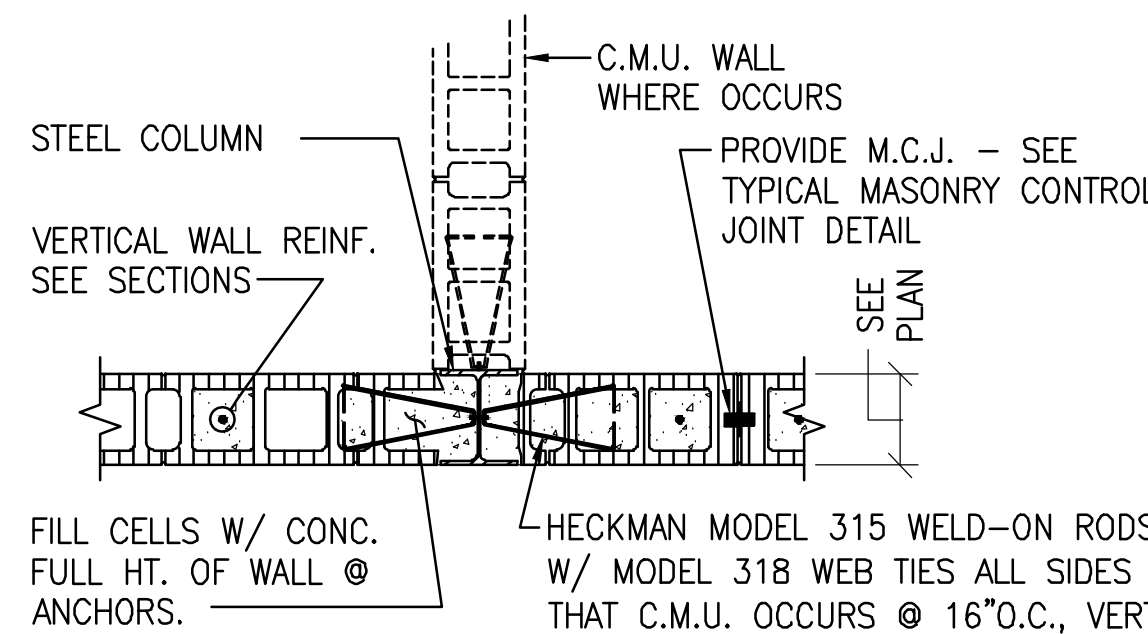
- 1. ALL SLEEVES PLACED IN GRADE BEAMS SHALL BE MADE W/ SCHEDULE 40 STEEL PIPE. PROVIDE 3" Ø STEEL PIPE SLEEVES @ 2" Ø PLUMBING PIPES & 6" Ø SLEEVES @ 4" Ø PLUMBING PIPES.
2. PLACE PLUMBING PIPE OUTSIDE OF GRADE BEAMS & BELOW GRADE BEAMS WHERE POSSIBLE. ONLY SLEEVE GRADE BEAM WHEN THIS IS NOT POSSIBLE.
3. ALL SLEEVES PENETRATING VERTICALLY THRU TOP OR BOTTOM OF BEAM SHALL REQUIRE APPROVAL FROM BLACKBURN DANIELS O'BARR INC. ALL OTHER PENETRATIONS SHALL BE SUBJECT TO APPROVAL AS DEEMED NECESSARY BY BLACKBURN DANIELS O'BARR.



TYPICAL MASONRY CONTROL JOINT (M.C.J.)

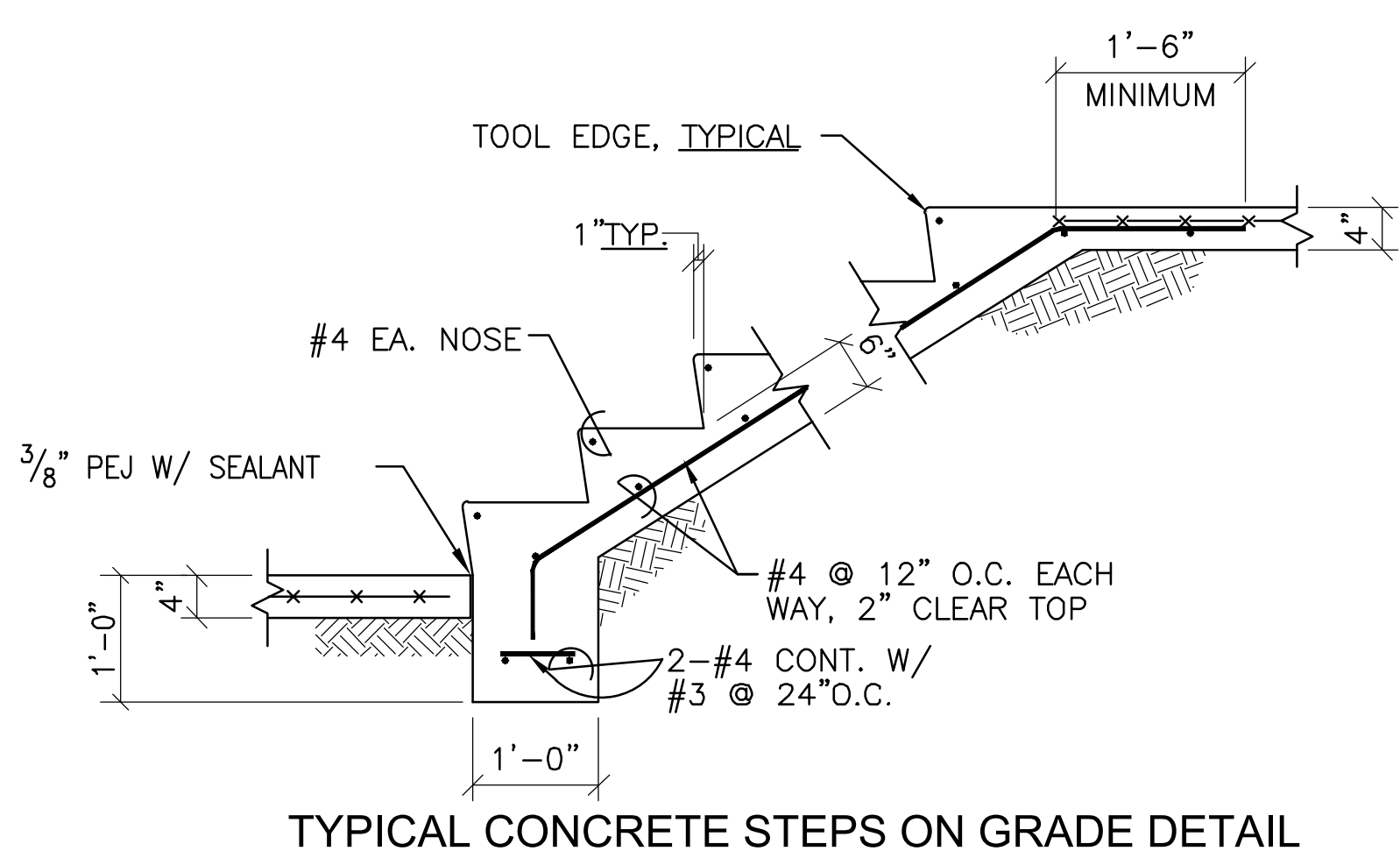


TYPICAL DETAIL AT WALL INTERSECTION

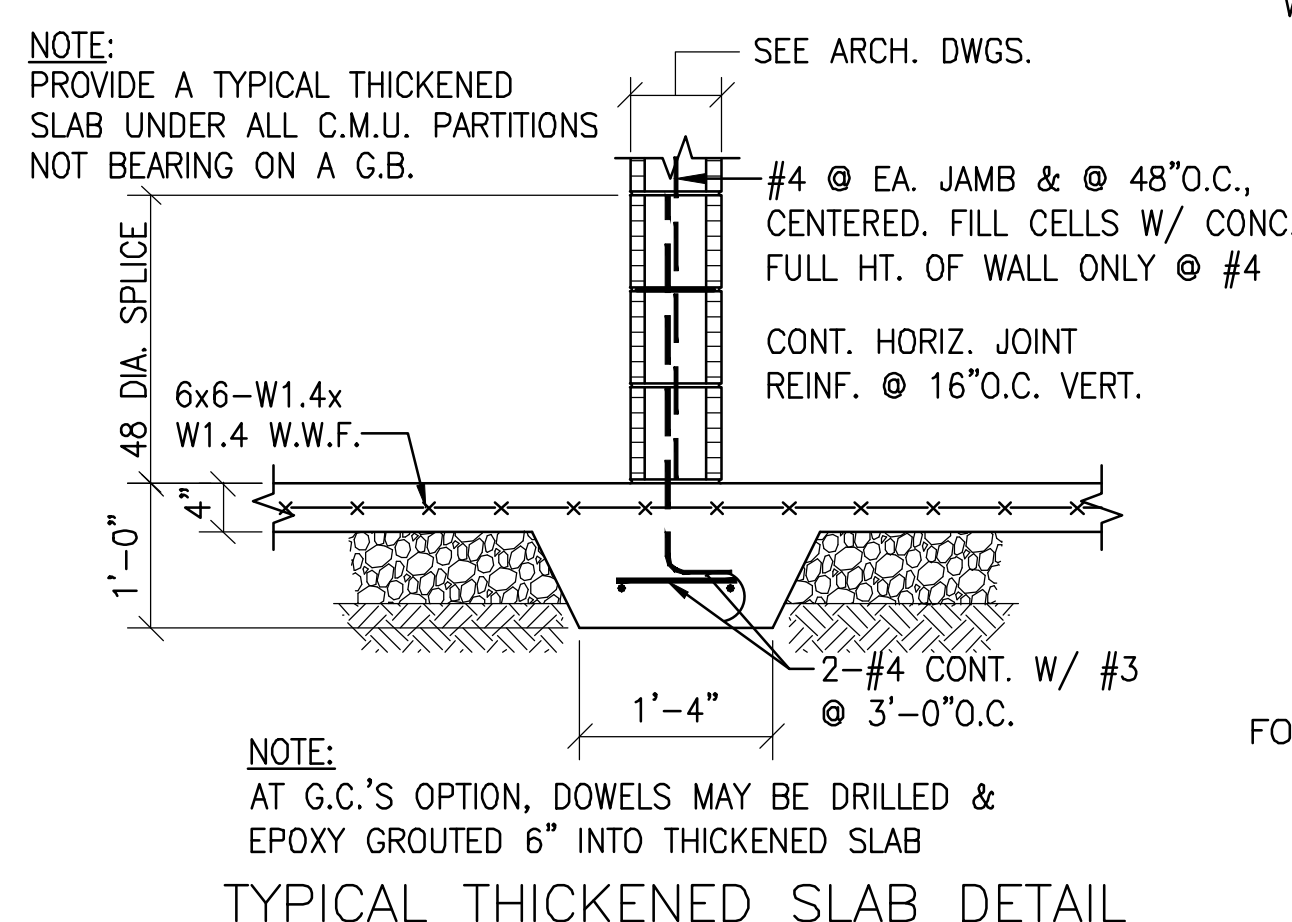


COLUMN INTERRUPTING C.M.U. WALL

TYPICAL COLUMN-C.M.U. WALL ANCHORAGE DETAILS



TYPICAL CONCRETE STEPS ON GRADE DETAIL



TYPICAL THICKENED SLAB DETAIL

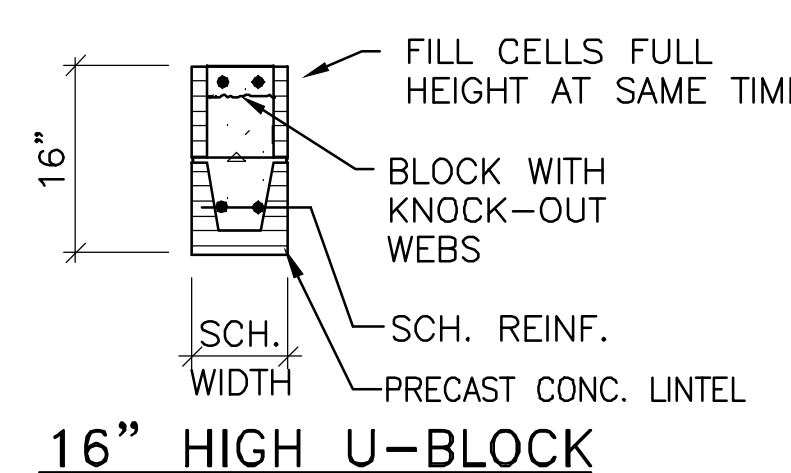
FOOTING SCHEDULE table with columns: MARK, SIZE, DEPTH, REINFORCEMENT. Includes rows A, B, and C with reinforcement details like 3-#4 EA. WAY TOP.

*- PROVIDE 180° HOOK EACH END OF BARS

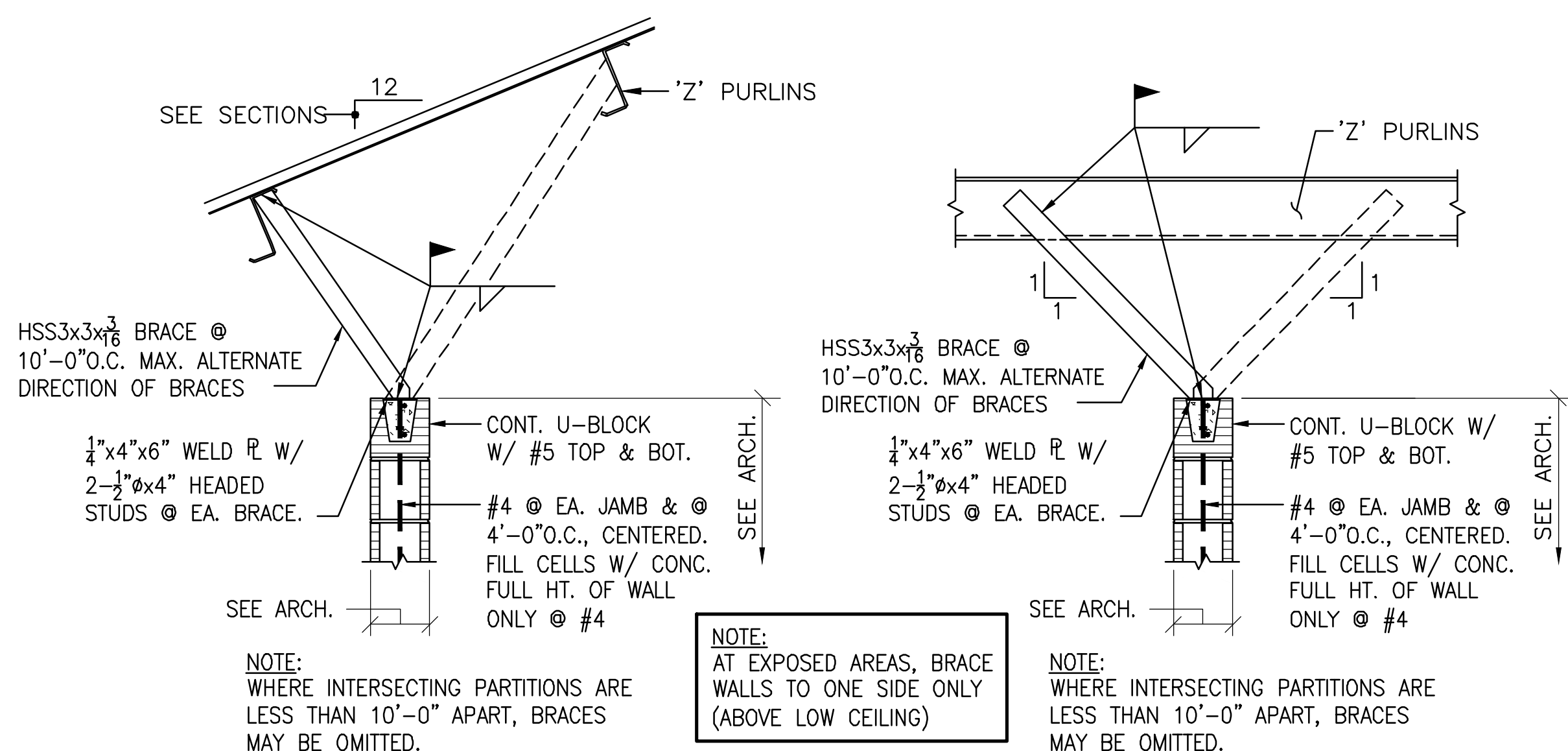
INTEL SCHEDULE table with columns: MARK OR LOCATION, MAX. SPAN, TYPE, SIZE, REINFORCEMENT, REMARKS. Includes rows for 8" and 16" high U-blocks.

NOTES:

- 1. UNLESS NOTED OTHERWISE, BEAR 8" HIGH U-BLOCKS 8" EA. END AND 16" HIGH U-BLOCKS 16" EACH END.
2. FILL CELLS WITH CONCRETE FULL HEIGHT AT U-BLOCK BEARING FOR ENTIRE LENGTH OF BEARING & REIN. EA. CELL W/ BAR SAME SIZE AS WALL REINFORCING. VERTICAL REIN. SHALL BE CONTINUOUS THRU INTEL AT BEARING.

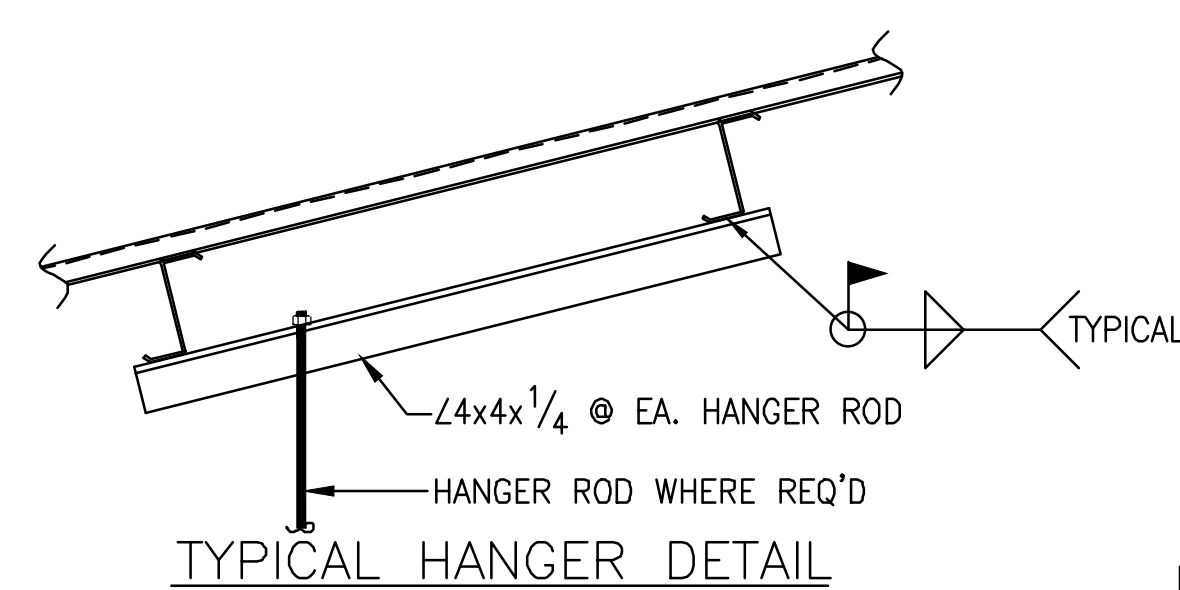


16" HIGH U-BLOCK

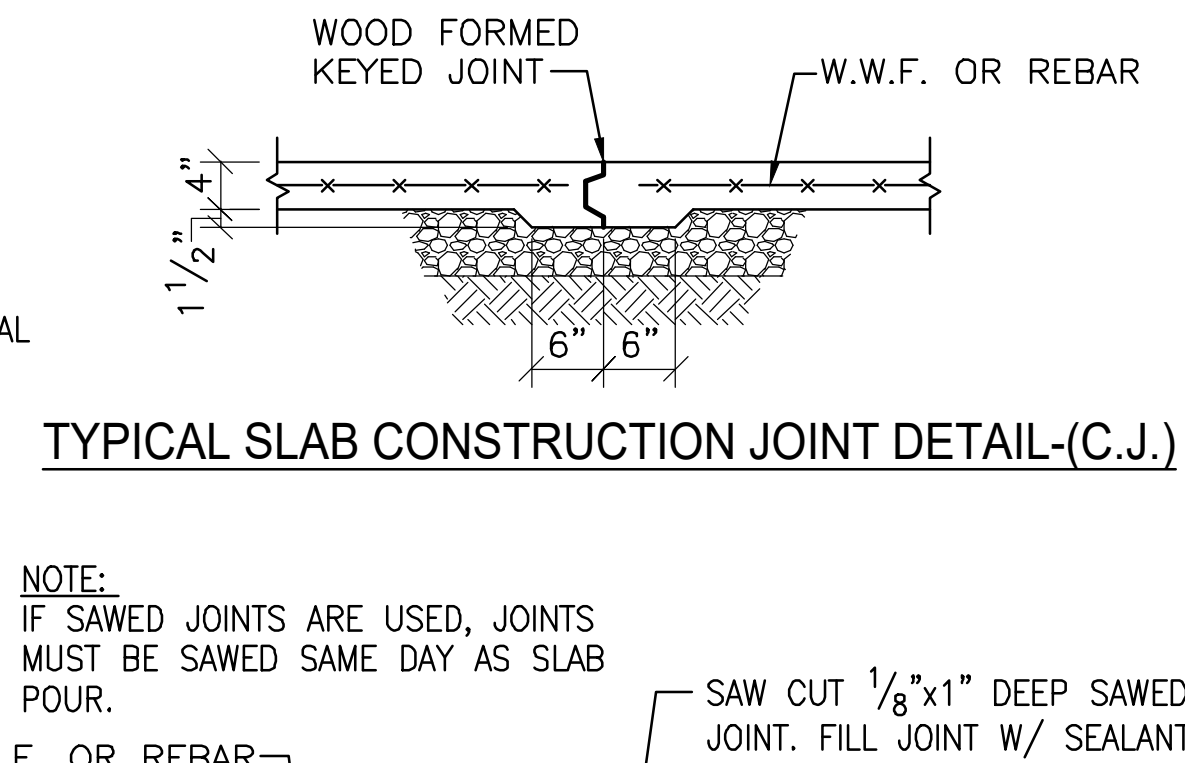


WALL PARALLEL TO PURLINS WALL PERPENDICULAR TO PURLINS

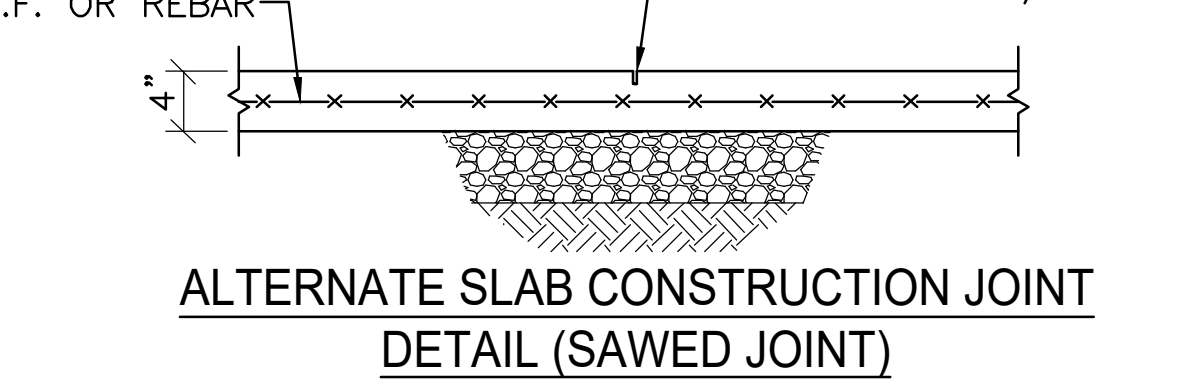
TYPICAL C.M.U. PARTITION WALL ANCHORAGE DETAIL



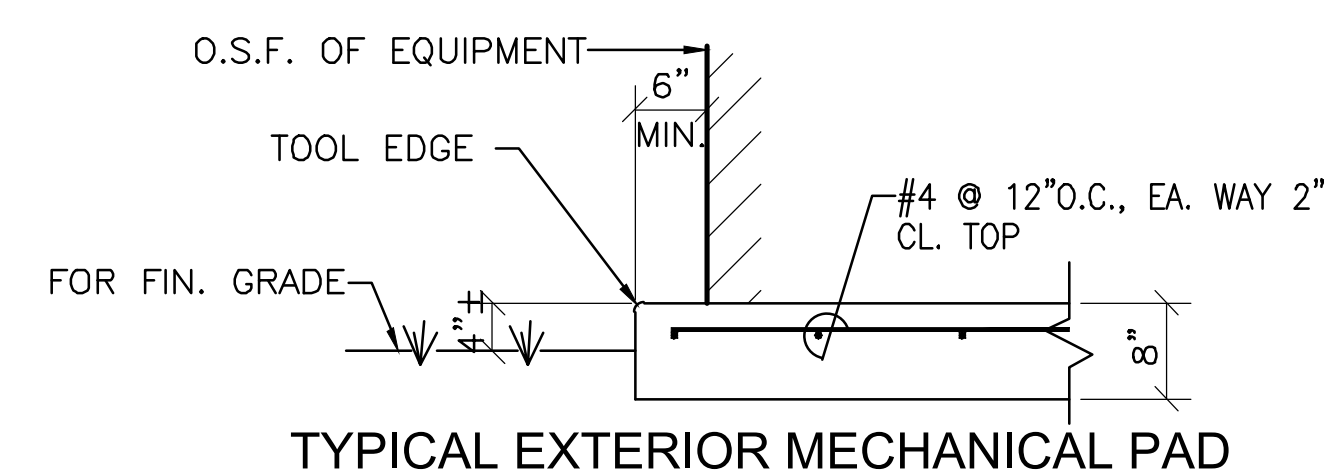
TYPICAL HANGER DETAIL



TYPICAL SLAB CONSTRUCTION JOINT DETAIL-(C.J.)



ALTERNATE SLAB CONSTRUCTION JOINT DETAIL (SAWED JOINT)



TYPICAL EXTERIOR MECHANICAL PAD

GENERAL NOTES

- FOUNDATION:
1. THE BEARING STRATA OF ALL FOOTINGS AND GRADE BEAMS SHALL BE UNSPECIFIED AND APPROVED BY THE SOILS TESTING LABORATORY PRIOR TO PLACING THE REINFORCING STEEL AND CONCRETE.
2. ALL FOOTINGS SHALL BEAR ON AN UNDISTURBED SOIL STRATA OR COMPACTED FILL CAPABLE OF SUSTAINING THE LOADS.
3. FOOTINGS WERE DESIGNED FOR AN ALLOWABLE SOIL BEARING OF P = 1500 PSF. ALLOWABLE SOIL BEARING SHALL BE VERIFIED BY TESTING AGENCY PRIOR TO FOOTINGS BEING POURED.
4. ELEVATIONS SHOWN ON PLAN ARE TOP OF FOOTINGS AND ARE MINIMUM DEPTH. DIFFERENT OR UNUSUAL CONDITIONS SHALL BE REPORTED TO THE ARCHITECT AND/OR ENGINEER.
5. ALL FOOTING REINFORCEMENT SHALL BE HELD SECURELY FROM THE GROUND. CONCRETE BLOCK AND BROKEN TILE SHALL NOT BE USED. CONCRETE OR CLAY BRICK MAY BE USED.
6. DOWEL ALL FOOTINGS AND WALLS WHERE THEY ABUT WITH SAME STEEL AS VERTICAL.
7. PROVIDE PREFORMED EXPANSION JOINT WHERE SHOWN.
8. IN FOOTINGS PROVIDE CORNER BARS AT ALL EXTERIOR BUILDING CORNERS.
9. DO NOT BACK FILL BEHIND FOUNDATION WALLS UNTIL TOP AND BOTTOM SLABS HAVE BEEN POURED AND ATTAINED THEIR DESIGN STRENGTHS. BACK FILL BOTH SIDES OF FOUNDATION WALLS AT SAME TIME TO PREVENT OVERTURNING.
10. BACK FILL BEHIND ALL RETAINING WALLS SHALL BE AN APPROVED GRANULAR MATERIAL.

CONCRETE:

- 1. ALL CONCRETE SHALL HAVE A COMPRESSIVE STRENGTH AT 28 DAYS OF Fc = 3000 PSI AND A MAXIMUM WATER-CEMENT RATIO OF 0.53.
2. REINFORCING STEEL SHALL CONFORM TO ASTM A615 GRADE 60.
3. WELDED WIRE FABRIC SHALL CONFORM TO ASTM A185 OR ASTM A1064.
4. UNLESS NOTED OTHERWISE PROTECTIVE COVERING OF REINFORCEMENT SHALL BE AS FOLLOWS (SEE DETAILS): FOOTINGS AND GRADE BEAMS 3" CLEAR BOTTOM AND SIDES, 1 1/2" CLEAR TOP. CONCRETE SLABS 3/4" CLEAR. WALLS 1 1/2" CLEAR SIDES, BEAMS 1 1/2" CLEAR TO STRIPPERS FORMED CONCRETE COLUMNS 1 1/2" CLEAR TO TIES.
5. LAP ALL CONCRETE WALL VERTICAL REINFORCING AND CONCRETE BEAM HORIZONTAL REINFORCING WITH CLASS B LAP SPLICES. SPLICE THE RODS WITH MECHANICAL SPLICES CAPABLE OF DEVELOPING 125% OF THE BAR YIELD STRENGTH. LAP ALL OTHER CONTINUOUS BARS WITH CLASS A SPLICES UNLESS NOTED OTHERWISE.
6. PLACING PLANS AND DETAILS SHALL BE IN ACCORDANCE WITH THE LATEST "A.C.I. DETAILING MANUAL".
7. STEEL FABRICATOR SHALL SUBMIT SHOP DRAWINGS FOR THE ARCHITECT AND/OR ENGINEER'S REVIEW.
8. DO NOT RUN CONDUITS, RACEWAYS, OR PIPES IN CONCRETE SLABS, BEAMS, OR COLUMNS WITHOUT SPECIFIC APPROVAL FROM BLACKBURN DANIELS O'BARR.

MASONRY:

- 1. PROVIDE MASONRY HORIZONTAL JOINT REINFORCEMENT 16" O.C. VERTICAL IN ALL CONCRETE BLOCK WALLS. REINFORCEMENT SHALL BE FOR TOTAL WIDTH OF CAVITY WALLS.
2. WHERE CONCRETE OR STEEL BEAMS BEAR ON CONCRETE BLOCK WALLS, BLOCK CELLS SHALL BE FILLED WITH CONCRETE 1'-4" WIDE TO FOUNDATION AND REINFORCED WITH A #5 EACH CELL UNLESS NOTED OR DETAILED OTHERWISE.
3. CONCRETE OR GROUT FILL FOR BLOCK FILL SHALL HAVE 3/8 INCH MAXIMUM SIZE CONCRETE AGGREGATE AND SUFFICIENT WATER SO THE CONCRETE WILL FLOW INTO THE BLOCK CELLS WITHOUT LEAVING VOIDS. HEIGHT OF LIFT WHEN FILLING CELLS SHALL NOT EXCEED 4'-0".
4. CONCRETE OR GROUT FILL FOR C.M.U. SHALL HAVE A 28 DAY COMPRESSIVE STRENGTH OF Fc = 3000 PSI. ON 16" AND DEEPER U-BLOCKS, FILL CELLS FULL HEIGHT OF INTEL AT SAME TIME.
5. ANCHOR ALL MASONRY WALLS TO STEEL COLUMNS WITH STRAP ANCHORS AT 18" O.C. VERTICALLY UNLESS SHOWN OTHERWISE.
6. UNLESS INDICATED OTHERWISE PROVIDE KEYS RUBBER MASONRY CONTROL JOINTS AT A MAXIMUM SPACING OF 25'-4". JOINT SHALL BE DISCONTINUOUS AT BOND BEAM. COORDINATE EXACT LOCATIONS WITH ARCHITECT.
7. PROVIDE REINFORCING BAR SUPPORTS TO CENTER VERTICAL REINFORCING IN MASONRY WALLS.
8. PROVIDE 48 DIAMETER LAP SPICES IN VERTICAL MASONRY REINFORCING.
9. PROVIDE CORNER BARS IN U-BLOCK BOND BEAMS AT CORNERS, TYPICAL.
10. ALL CMU SHALL BE PLACED IN A RUNNING BOND PATTERN.
11. VERTICAL REINFORCING SHALL BE CONTINUOUS THROUGH BOND BEAMS AND LINTELS (CUT OUT OR NOTCH BOTTOM OF U-BLOCKS AS REQUIRED -- DO NOT SUBSTITUTE BLOCK WITH KNOCK-OUT WEBS WHERE STANDARD U-BLOCK IS INDICATED). FOR BOND BEAMS AT TOP OF WALL, EXTEND VERTICAL REINFORCING TO 1" CLEAR TOP OF BOND BEAM.

STRUCTURAL STEEL:

- 1. MISCELLANEOUS STEEL SHAPES SHALL CONFORM TO ASTM, A36, LATEST EDITION.
2. STEEL FABRICATOR SHALL SUBMIT SHOP DRAWINGS FOR THE ARCHITECT AND/OR ENGINEER'S REVIEW.
3. THE CONTRACTOR SHALL VERIFY ALL SHOP DRAWINGS DIMENSIONS WITH STRUCTURAL AND ARCHITECTURAL PLANS AND DETAILS.
4. CONNECTIONS NOT SHOWN ON DRAWINGS SHALL BE DESIGNED BY THE FABRICATOR.

PREF-ENGINEERED METAL BUILDING:

- 1. THE COMPLETE DESIGN OF METAL BUILDING INCLUDING ALL COMPONENTS SHOWN OR NOT SHOWN ON THE DRAWINGS SHALL BE ACCOMPLISHED BY THE BUILDING MANUFACTURER.
2. THE DESIGN SHALL BE MADE BY A REGISTERED ENGINEER, REGISTERED IN THE STATE OF ALABAMA AND HE SHALL AFFIX HIS REGISTRATION NUMBER TO ALL SHOP DRAWINGS AND CALCULATIONS.
3. THE BUILDING AND ALL OF ITS COMPONENTS SHALL BE DESIGNED FOR THE FOLLOWING DEAD AND LIVE LOADS:
a) ACTUAL WEIGHT OF STEEL STRUCTURE.
b) 8 PSF DEAD (COLLATERAL) LOAD IN ADDITION TO ACTUAL WEIGHT OF STRUCTURE AND ROOFING MATERIALS.
c) 20 PSF ROOF LIVE LOAD.
d) ANY ADDITIONAL LOADS AND REACTIONS THAT ARE SHOWN ON THE DRAWINGS.
e) WIND LOADING AS REQUIRED BY INTERNATIONAL BUILDING CODE.
4. NO LIVE LOAD REDUCTION SHALL BE TAKEN FOR THE DESIGN OF THE RIGID FRAMES.
5. WHERE MEMBER SIZES AND GAGES ARE SHOWN THEY SHALL BE CONSIDERED A MINIMUM SIZE. THE MANUFACTURER SHALL NOT USE SMALLER SIZE OR LIGHTER GAGES, OR OMIT FRAMING WHERE INDICATED. HE SHALL USE ONLY LARGER SIZE AND HEAVIER GAGES IF HIS DESIGN INDICATES THESE ARE REQUIRED TO MEET THE LOADING CRITERIA.
6. THE DEFLECTION OF GIRTS SHALL BE LIMITED TO 1/240 OF THE SPAN AT BRICK. DEFLECTION OF PURLINS SHALL BE LIMITED TO 1/240 OF THE SPAN. DEFLECTIONS SHALL BE BASED ON TOTAL LOAD (DEAD PLUS LIVE LOADS). TOTAL RIGID FRAME DRIFT SHALL BE LIMITED TO H/240, WHERE H IS EQUAL TO THE EAVE HEIGHT.
7. COLUMN BASES SHALL BE DESIGNED AS PINNED CONNECTIONS. MOMENTS AT COLUMN BASE PLATES ARE NOT ACCEPTABLE.
8. LOCATE ROD X-BRACING WHERE INDICATED ON PLAN.

CODES:

- ALL PARTS SHALL BE FURNISHED AND ERECTED ACCORDING TO THE APPLICABLE CODES AND SPECIFICATIONS OF THE FOLLOWING:
AMERICAN CONCRETE INSTITUTE (ACI)
AMERICAN INSTITUTE OF STEEL CONSTRUCTION (AISC)
AMERICAN WELDING SOCIETY (AWS)
CSHA STEEL ERECTION STANDARD (CSHA)
INTERNATIONAL BUILDING CODE (IBC 2021) (ICC)

DESIGN LIVE LOADS:

- ROOF.....20 PSF
RISK CATEGORY (PER IBC 2021/ASCE 7-16).....II
WIND.....INTERNATIONAL BUILDING CODE (PER ASCE 7-16)
ULTIMATE DESIGN WIND SPEED (Vult).....151 MPH
NOMINAL DESIGN WIND SPEED (Vnom).....117 MPH
WIND EXPOSURE.....C
INTERNAL PRESSURE COEFFICIENT.....+/-0.18
SEISMIC.....INTERNATIONAL BUILDING CODE (PER ASCE 7-16)
ANALYSIS PROCEDURE.....ASCE 7 (SECT 12.8)
MAPPED SPECTRAL ACCELERATION (SHORT-TERM).....Sa=0.096g
MAPPED SPECTRAL ACCELERATION (1-SECOND).....S1=0.061g
SITE CLASS.....D
SHORT-PERIOD SPECTRAL RESPONSE ACCEL.....Sps=0.103g
1-SECOND SPECTRAL RESPONSE ACCEL.....S1=0.098g
SEISMIC DESIGN CATEGORY.....B
SEISMIC IMPORTANCE FACTOR.....Ipe=1.0
SEISMIC RESISTING SYSTEM(S).....
STEEL RIGID FRAMES/ROD X-BRCC (R=3.0)
TOTAL DESIGN SHEAR (ULTIMATE).....3.4k
SEISMIC RESPONSE COEFFICIENT.....Cs=0.034

SNOW.....INTERNATIONAL BUILDING CODE

- GROUND SNOW LOAD.....Pg=0 PSF

COMPONENTS AND CLADDING ULTIMATE WIND PRESSURES:

NOTE: MULTIPLY ALL VALUES SHOWN BELOW BY 0.6 TO GET ALLOWABLE DESIGN PRESSURES. SEE FIGURE 60.4-1 OF ASCE 7-16 FOR INDICATED ZONES.

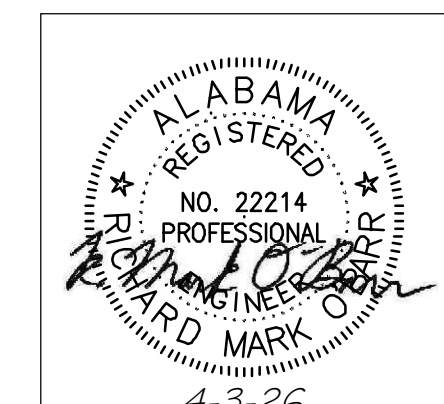
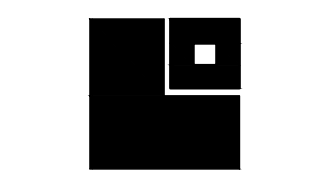
- ROOF/TRIBUTARY AREA A = 10 SF
ZONE 1: -71.5 PSF/20.6 PSF
ZONE 2: -94.2 PSF/20.6 PSF
ZONE 3: -128.5 PSF/20.6 PSF
ROOF/TRIBUTARY AREA A = 50 SF
ZONE 1: -60.5 PSF/17.6 PSF
ZONE 2: -80.1 PSF/17.6 PSF
ZONE 3: -100.3 PSF/17.6 PSF
WALL/TRIBUTARY AREA A = 10 SF
ZONE 4: -48.6 PSF/50.7 PSF
ZONE 5: -60.0 PSF/50.7 PSF
WALL/TRIBUTARY AREA A = 50 SF
ZONE 4: -44.0 PSF/43.3 PSF
ZONE 5: -50.6 PSF/43.3 PSF
WALL/TRIBUTARY AREA A = 100 SF
ZONE 4: -42.0 PSF/43.0 PSF
ZONE 5: -46.7 PSF/43.0 PSF

SPECIAL INSPECTIONS:

- ALL SPECIAL INSPECTIONS REQUIRED BY CHAPTER 17 OF IBC SHALL BE PERFORMED BY A DESIGNATED TESTING AGENCY OR AGENCIES RESPONSIBLE FOR SPECIAL INSPECTIONS.

WIND REQUIREMENTS FOR SPECIAL INSPECTIONS:

- 1. THE FOLLOWING STRUCTURAL COMPONENTS ARE DESIGNATED AS WIND SYSTEMS AND/OR PART OF THE MAIN WINDPROOF-RESISTING SYSTEM OF THE BUILDING AND ARE SUBJECT TO THE REQUIREMENTS OF SECTION 1705.12 OF IBC 2021 AND PROJECT SPECIFICATIONS:
ROOF DIAPHRAGM SYSTEM(S) AND ATTACHMENT
STEEL RIGID FRAMES/ROD X-BRACING INCLUDING ANCHORAGE
CMU SHEAR WALLS INCLUDING ANCHORAGE TO FOUNDATION
THESE SPECIFIC COMPONENTS ARE IN ADDITION TO ALL GENERAL COMPONENTS LISTED IN SECTION 1705.12 OF IBC 2021 AND ARE SUBJECT TO ALL SPECIAL INSPECTIONS AND TESTING AS REQUIRED BY CHAPTER 17 OF IBC 2021, PROJECT SPECIFICATIONS, AND SCHEDULE OF SPECIAL INSPECTIONS. SPECIAL INSPECTION REPORTS SHALL BE SUBMITTED AS PER THE STATEMENT OF SPECIAL INSPECTIONS.
2. OTHER ARCHITECTURAL COMPONENTS AND THEIR ANCHORAGES MAY ALSO BE DESIGNATED AS WIND-RESISTING COMPONENTS. SEE OTHER DISCIPLINE'S DRAWINGS AND SPECIFICATIONS.



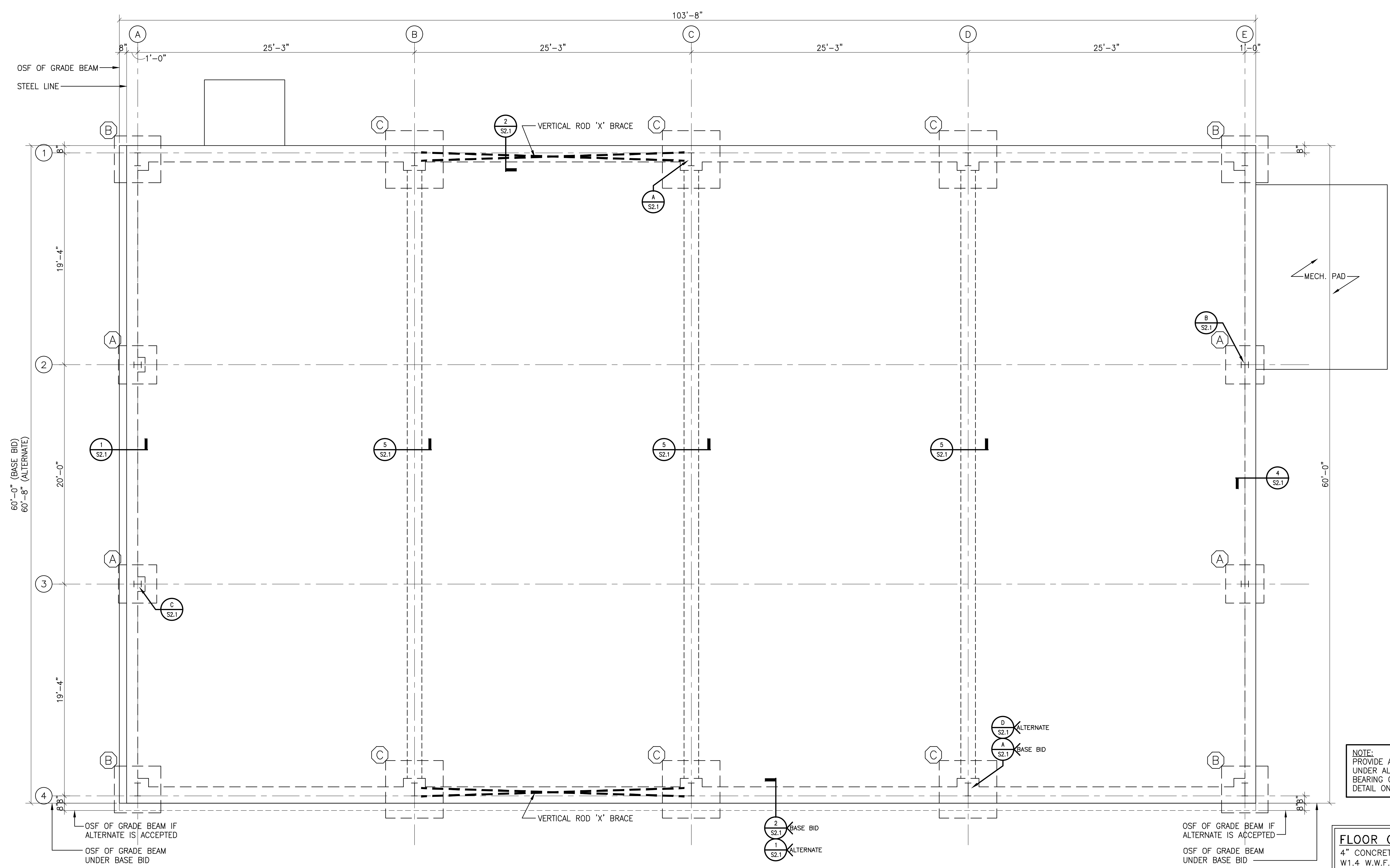
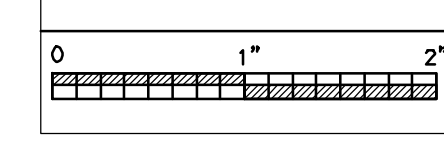
SHEET TITLE:
FOUNDATION PLAN

PROJ. MGR.: RMO
DRAWN: RAS
DATE: 04.03.2026
REVISIONS

JOB NO. 25-173

SHEET NO:

S1.1



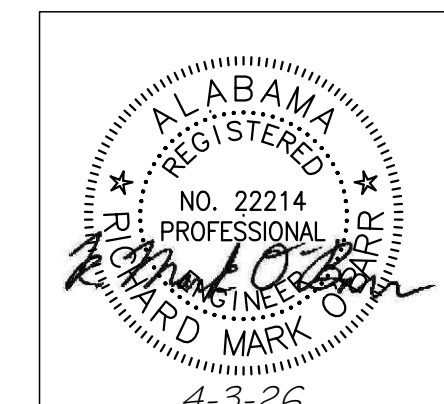
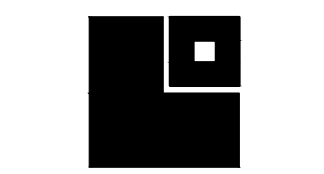
NOTE:
PROVIDE A TYPICAL THICKENED SLAB
UNDER ALL C.M.U. PARTITIONS NOT
BEARING ON A FOOTING. SEE TYPICAL
DETAIL ON SHEET S0.1

FLOOR CONSTRUCTION
4" CONCRETE SLAB W/ 6x6-W1.4x
W1.4 W.W.F. OVER VAPOR BARRIER
OVER 4" POROUS FILL.
FINISH FL. EL. = 0'-0" (ASSUMED)

NOTE:
TOP OF ALL FOOTINGS SHALL BE
(-2'-8") BELOW FINISH FLOOR.
UNLESS NOTED OTHERWISE ON PLAN.

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



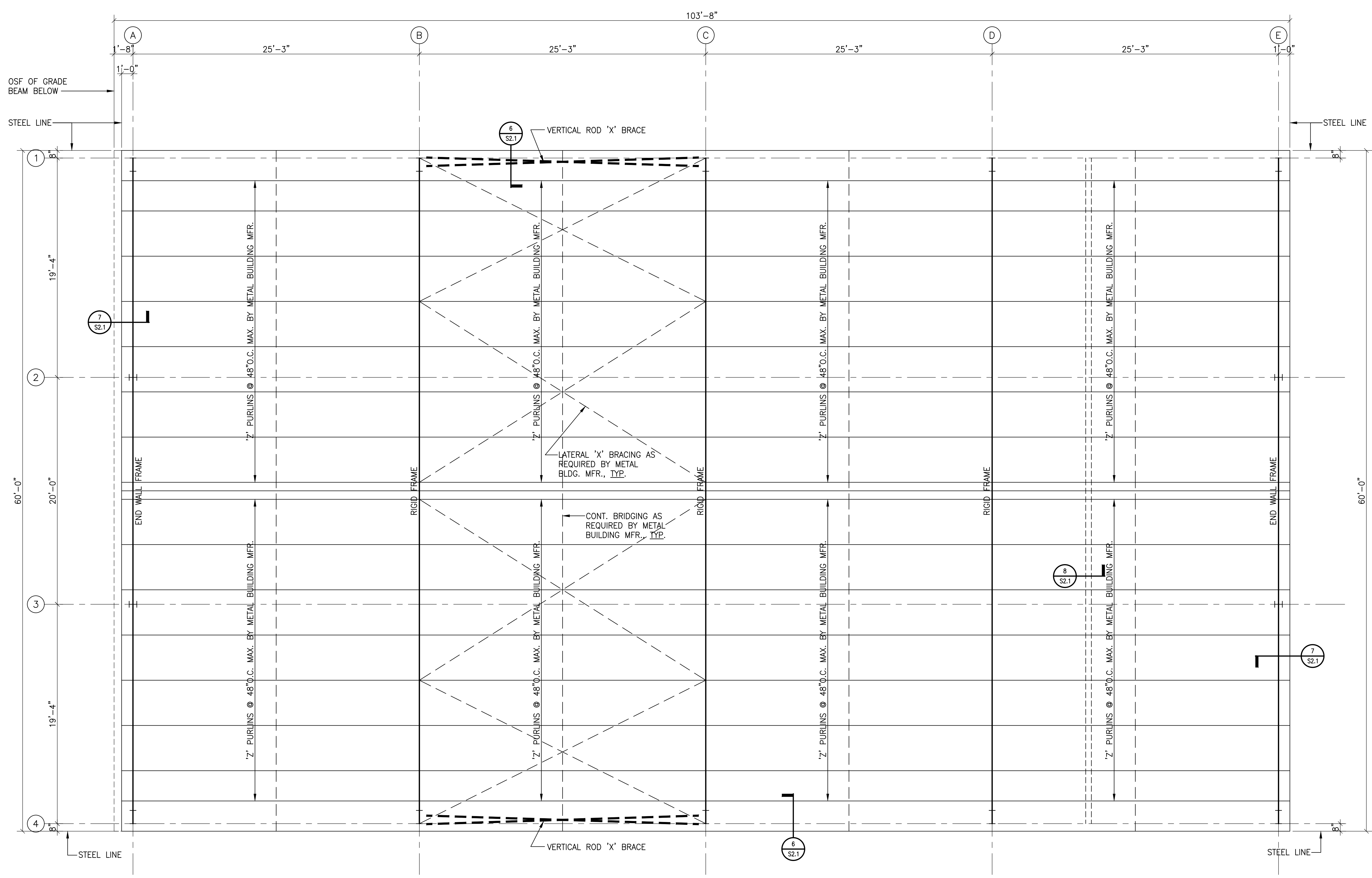
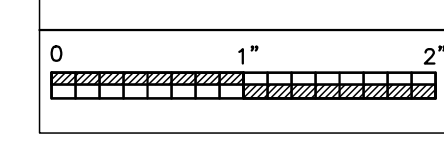


SHEET TITLE:
ROOF FRAMING PLAN

PROJ. MGR.: RMO
DRAWN: RAS
DATE: 04.03.2026
REVISIONS

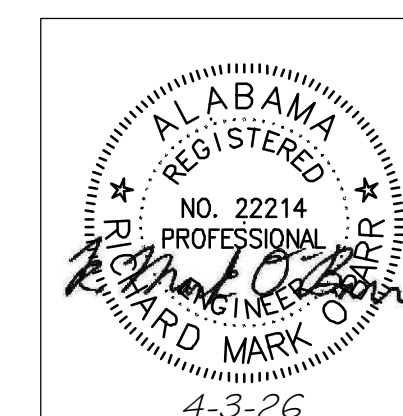
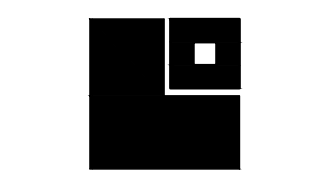
JOB NO. 25-173

SHEET NO:
S1.2



ROOF FRAMING PLAN
SCALE: 1/4" = 1'-0"





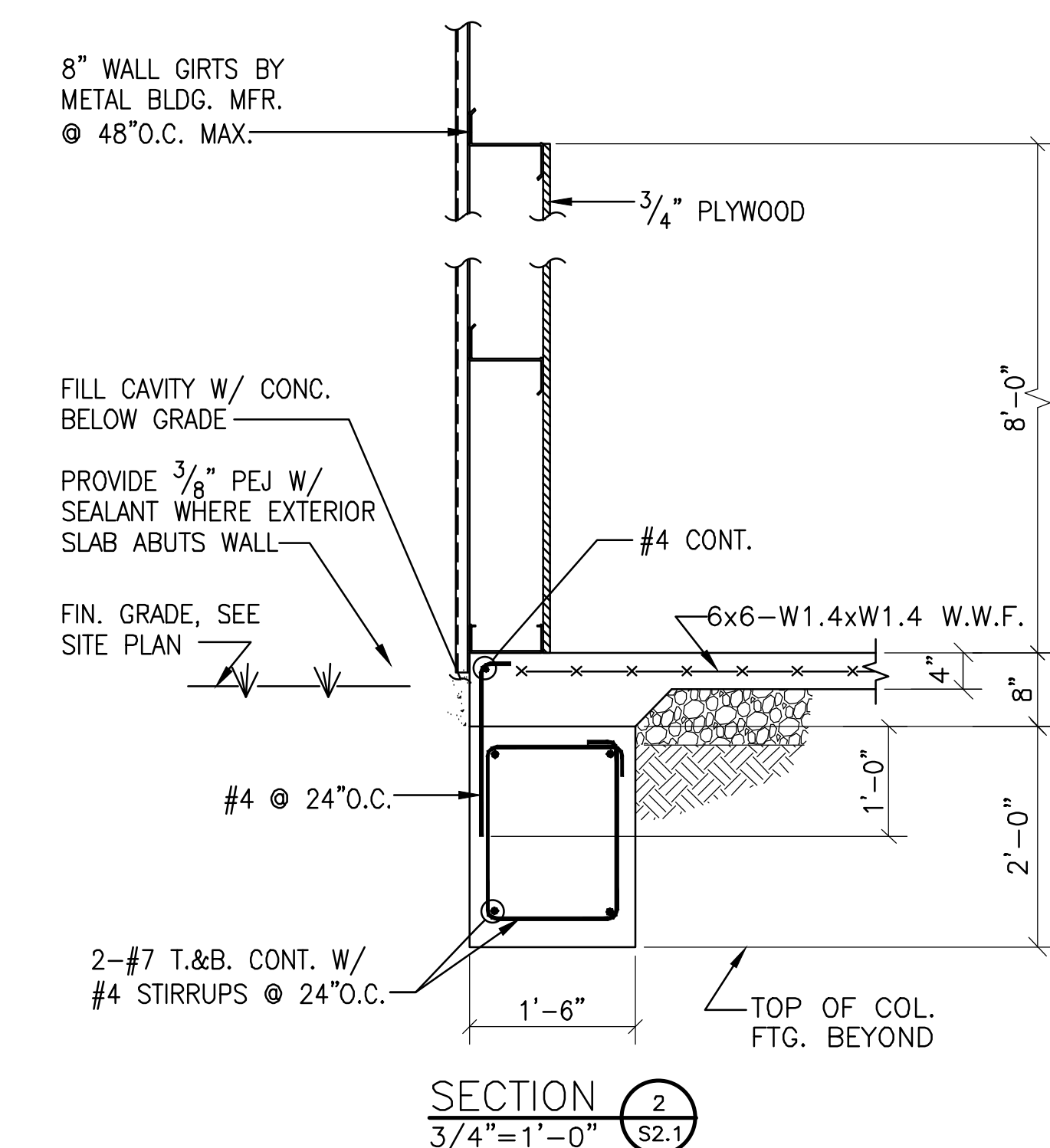
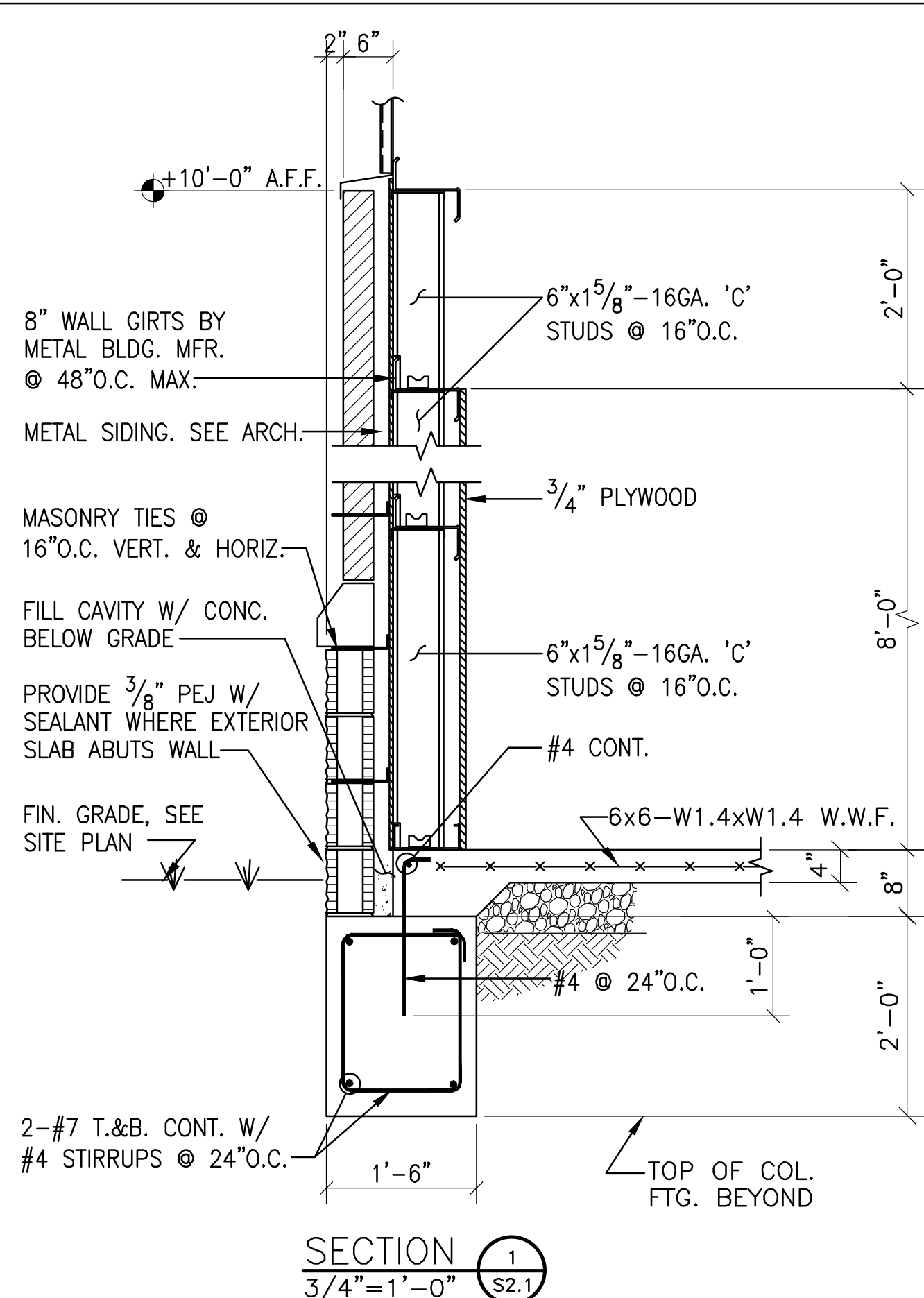
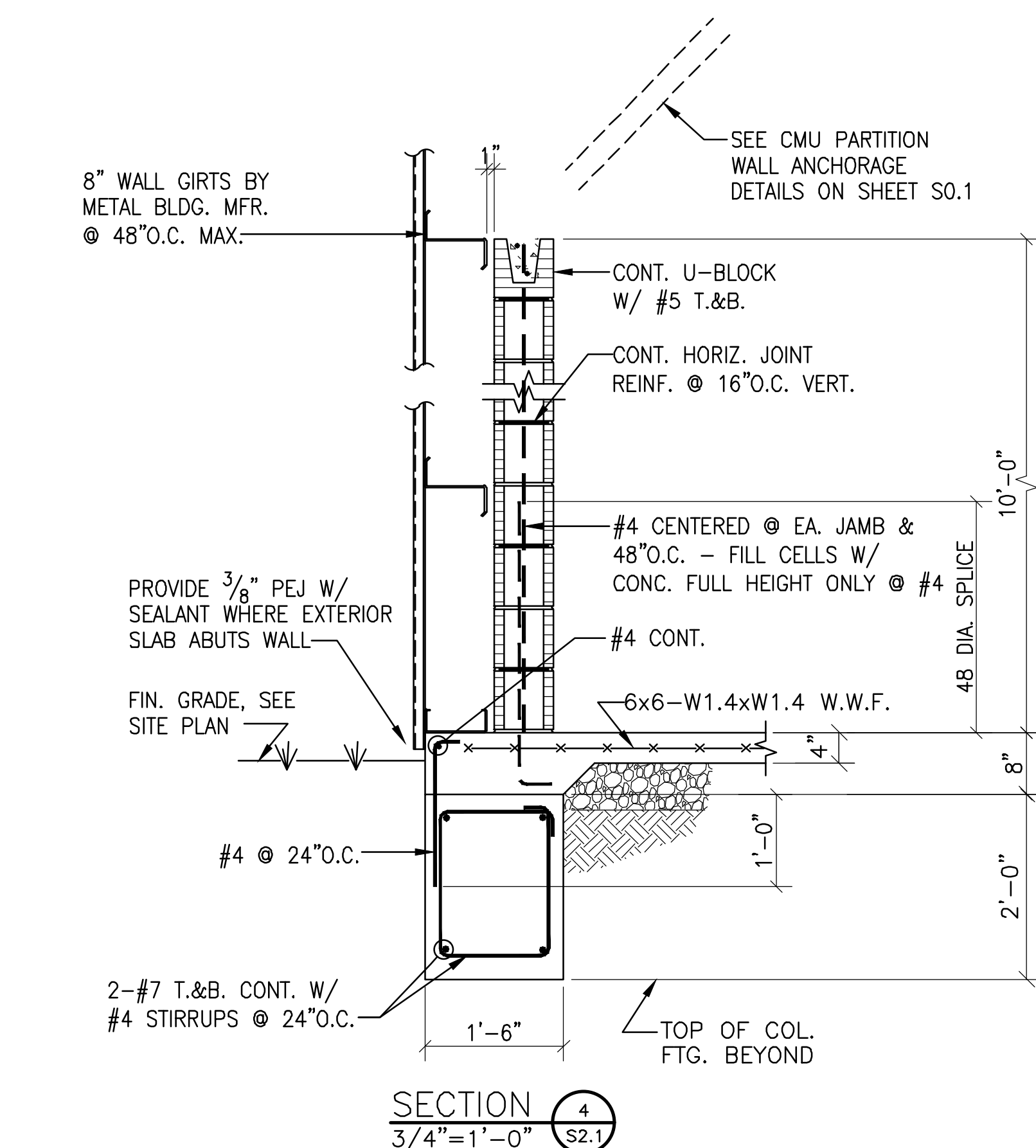
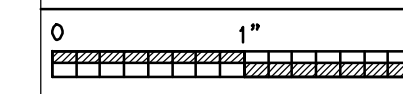
SHEET TITLE:
SECTIONS & DETAILS

PROJ. MGR.: RMO
DRAWN: RAS
DATE: 04.03.2026
REVISIONS

JOB NO. 25-173

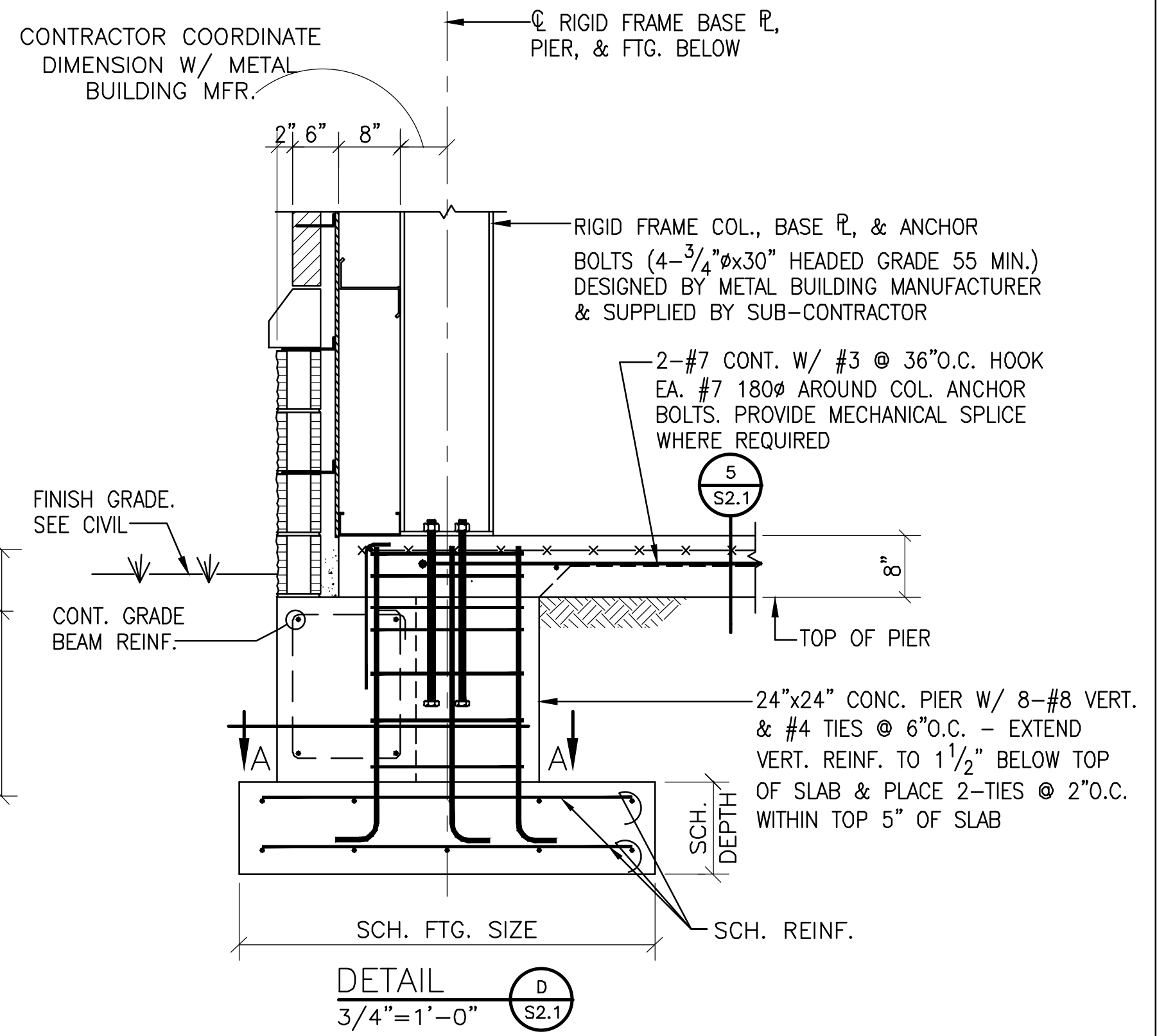
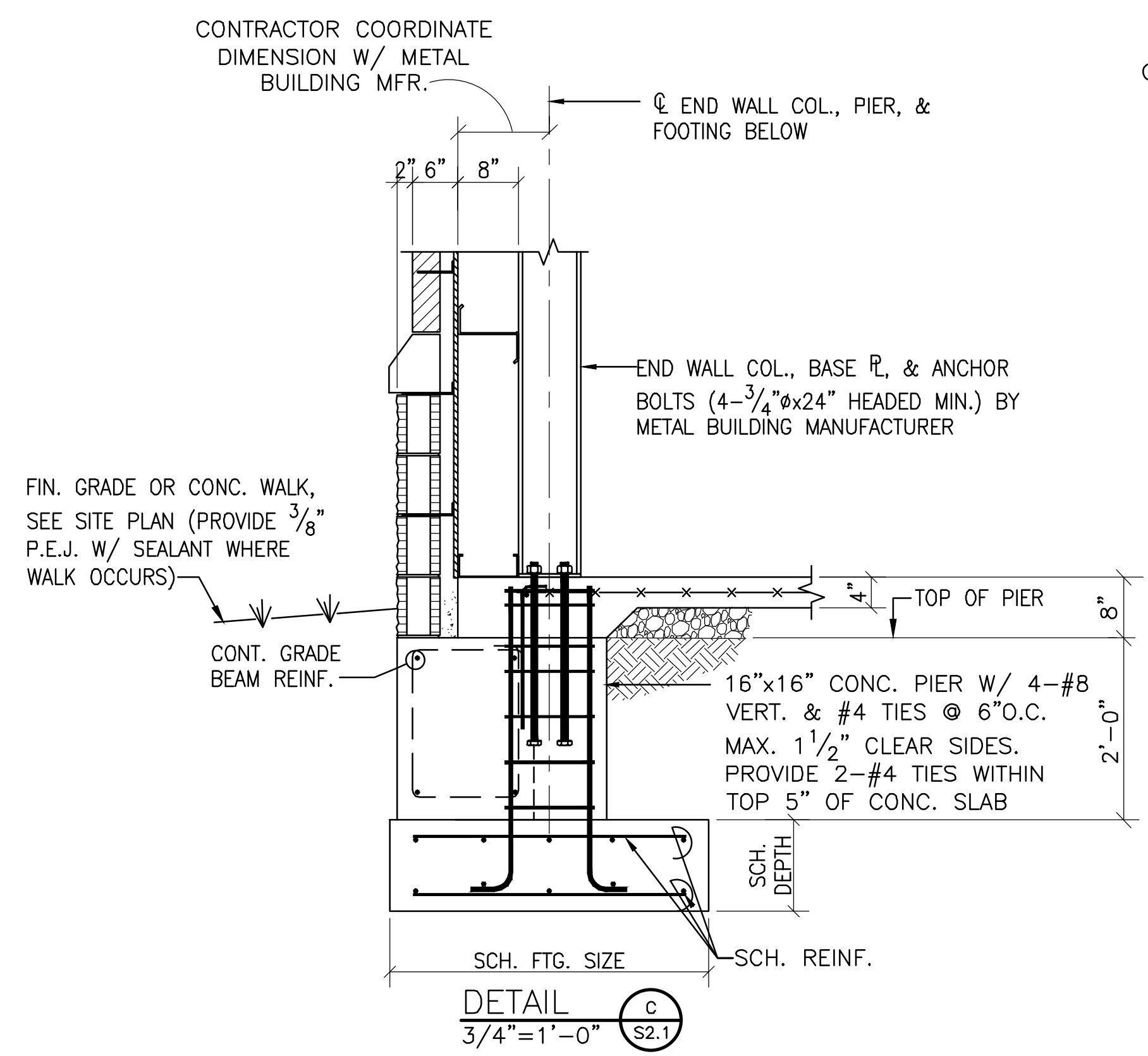
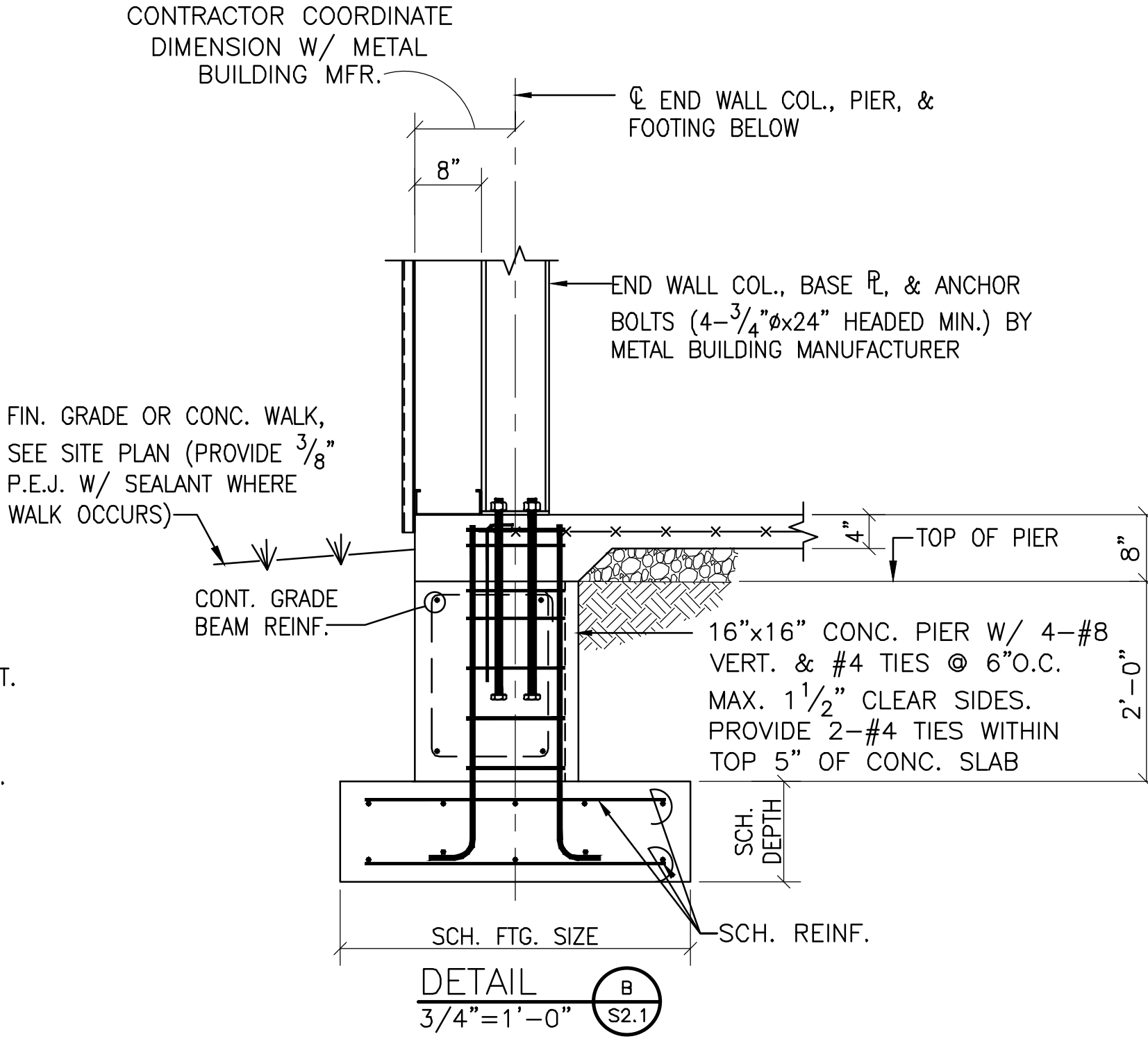
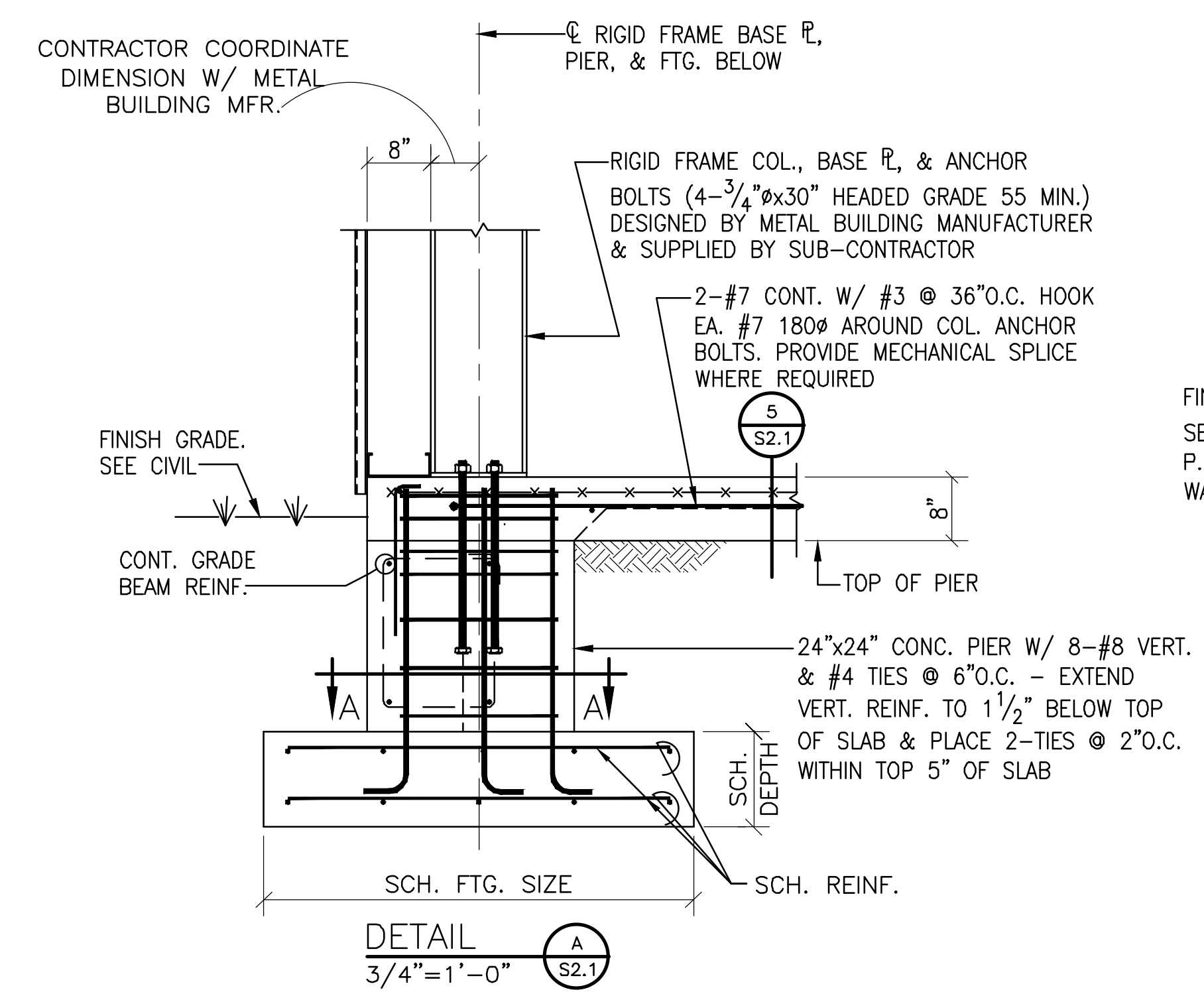
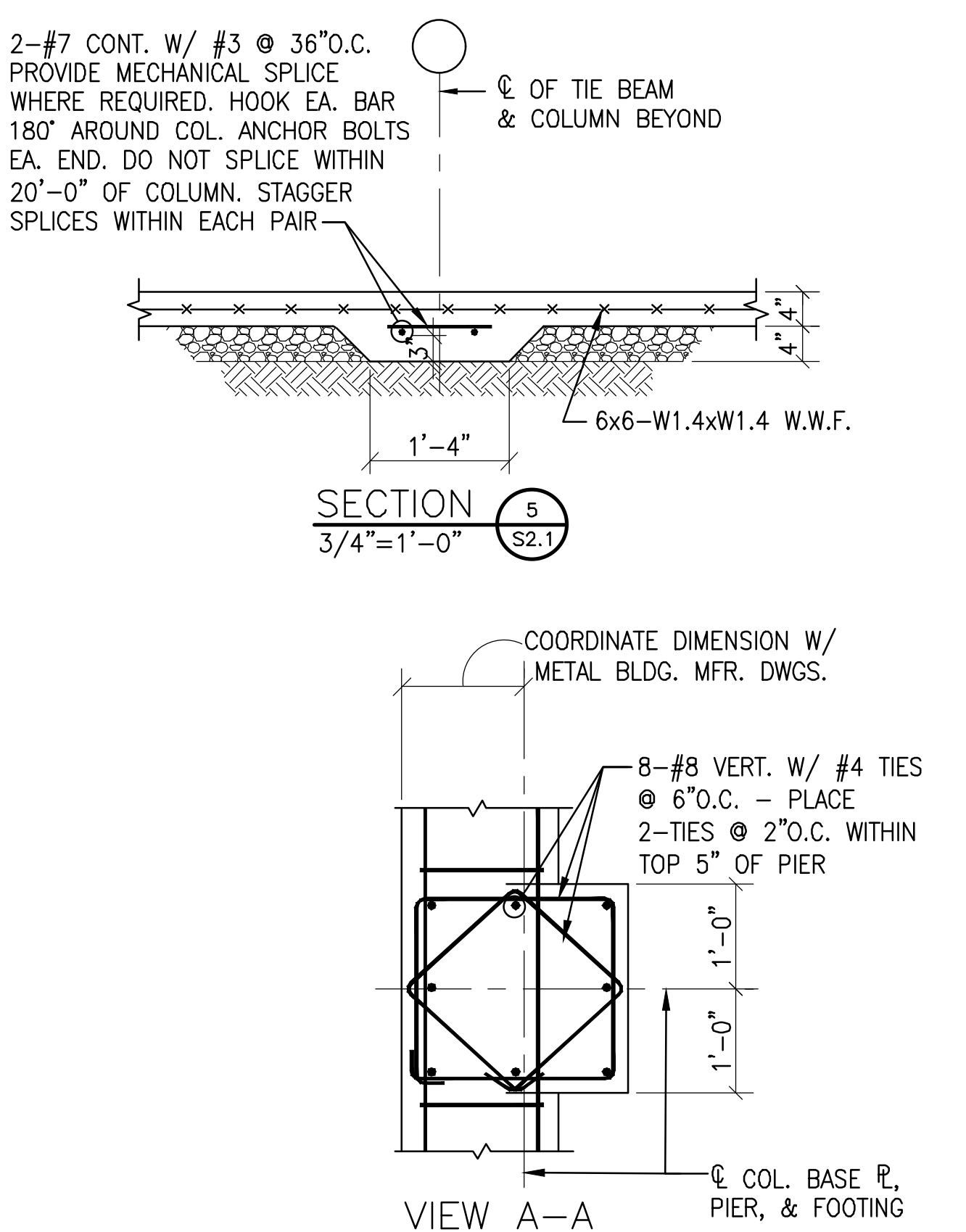
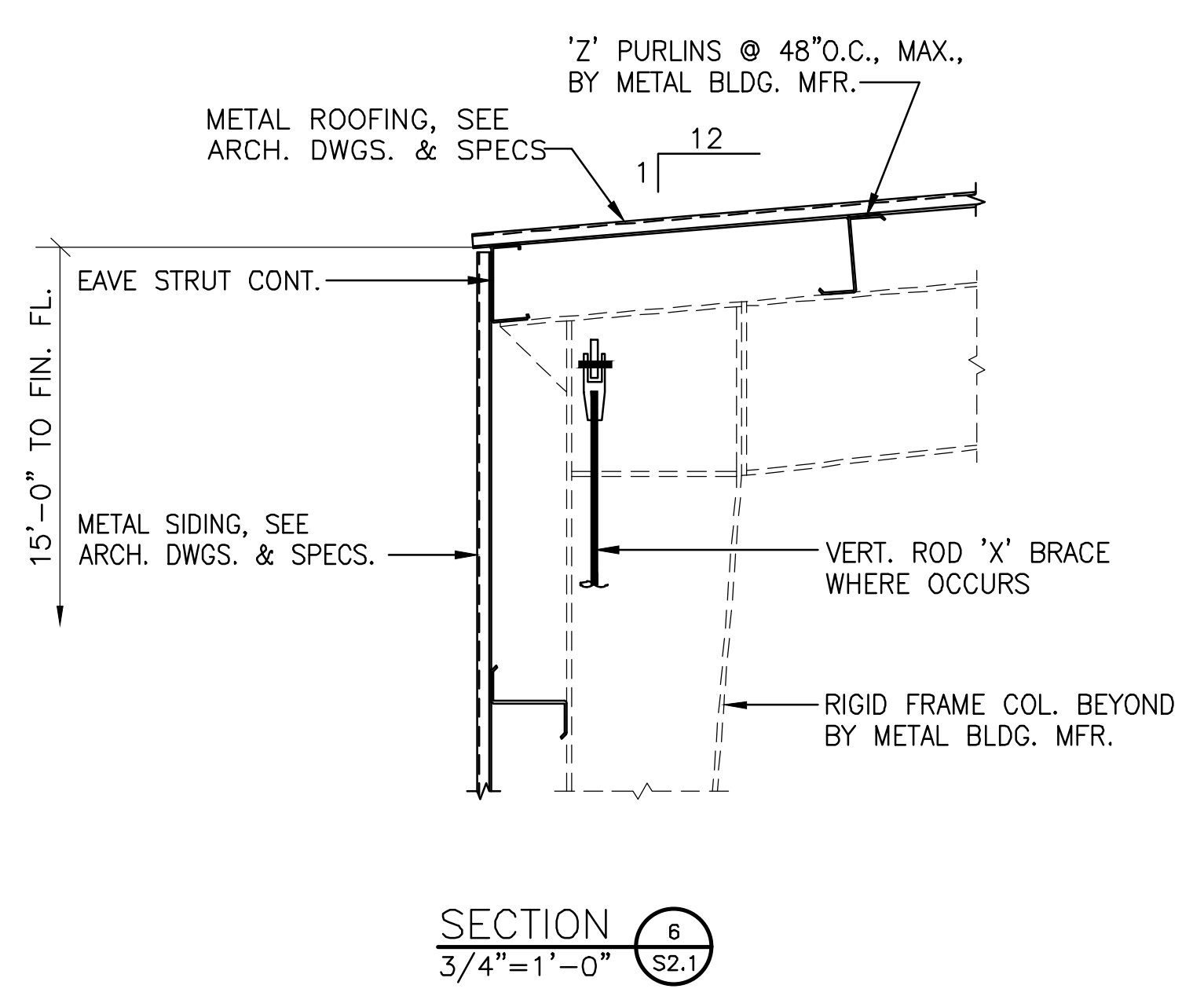
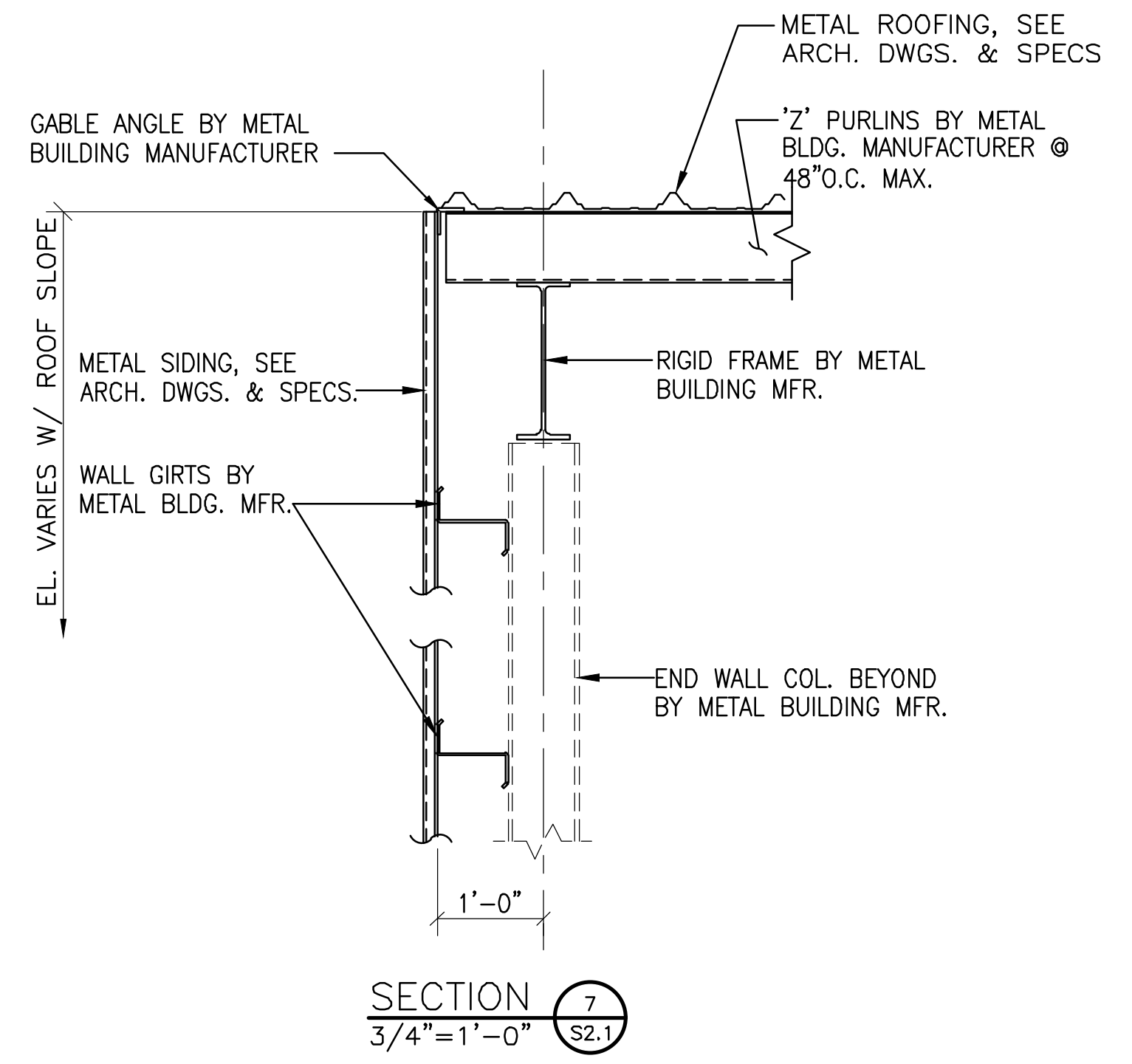
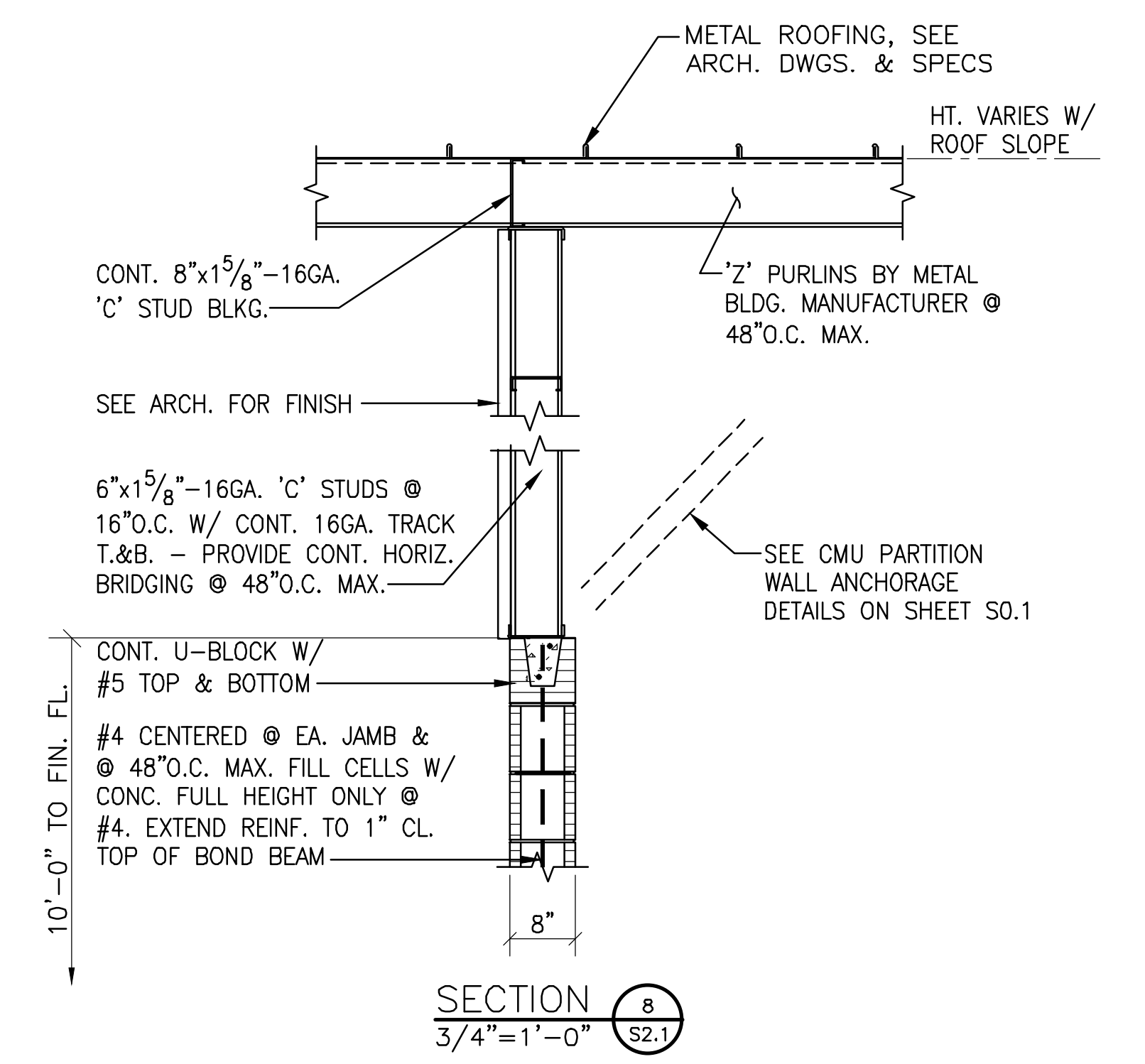
SHEET NO:

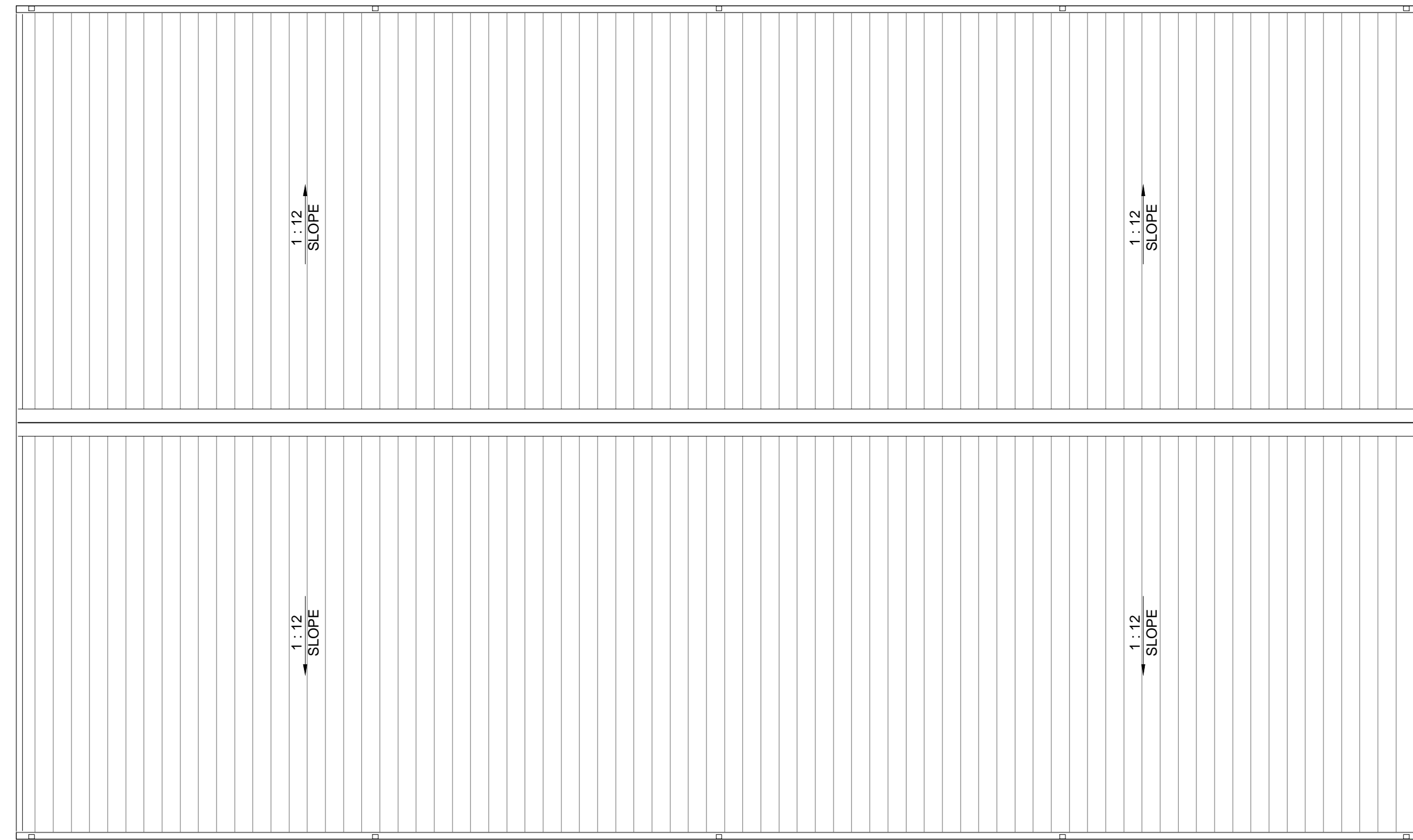
S2.1



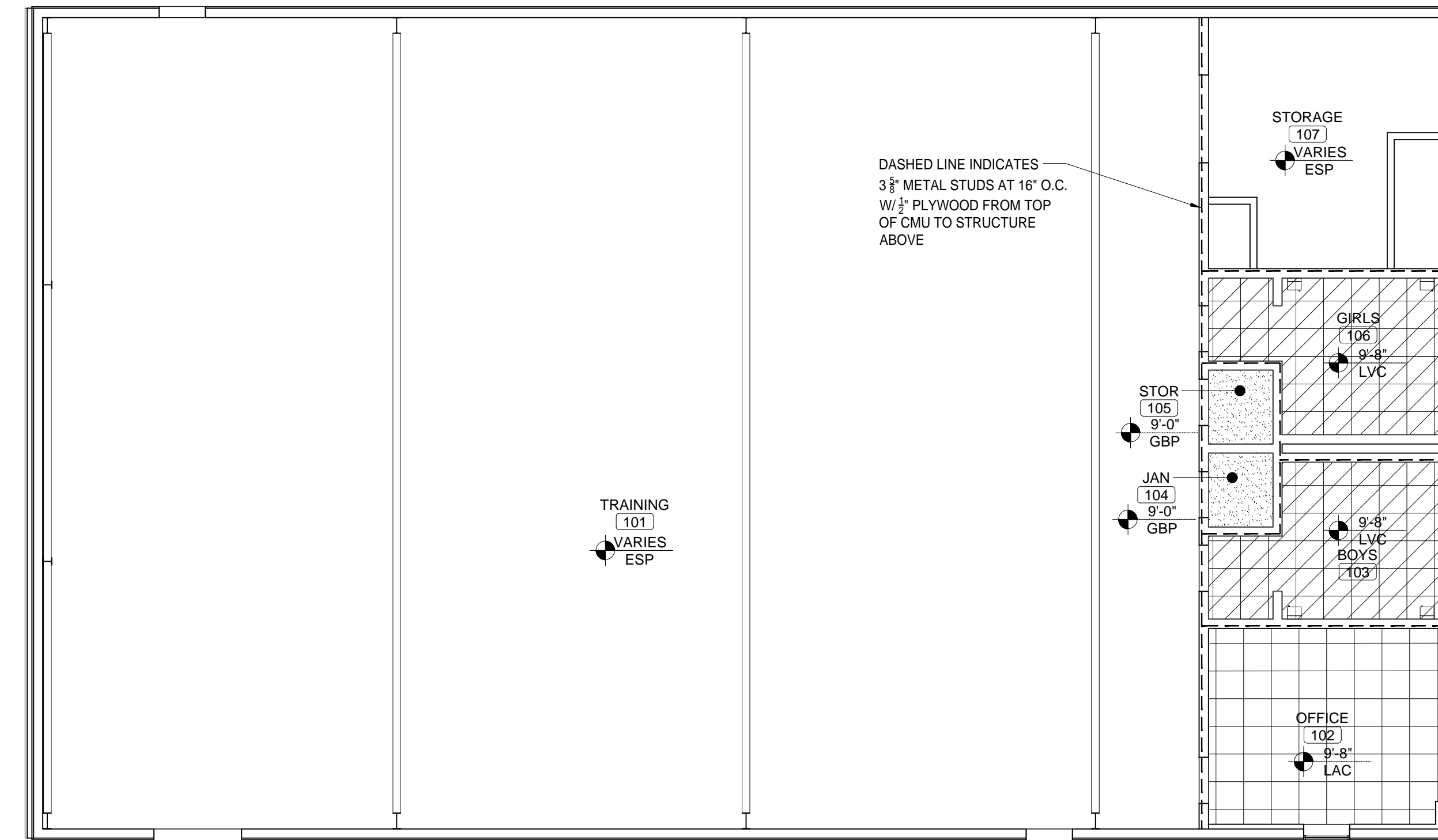
OMITTED

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





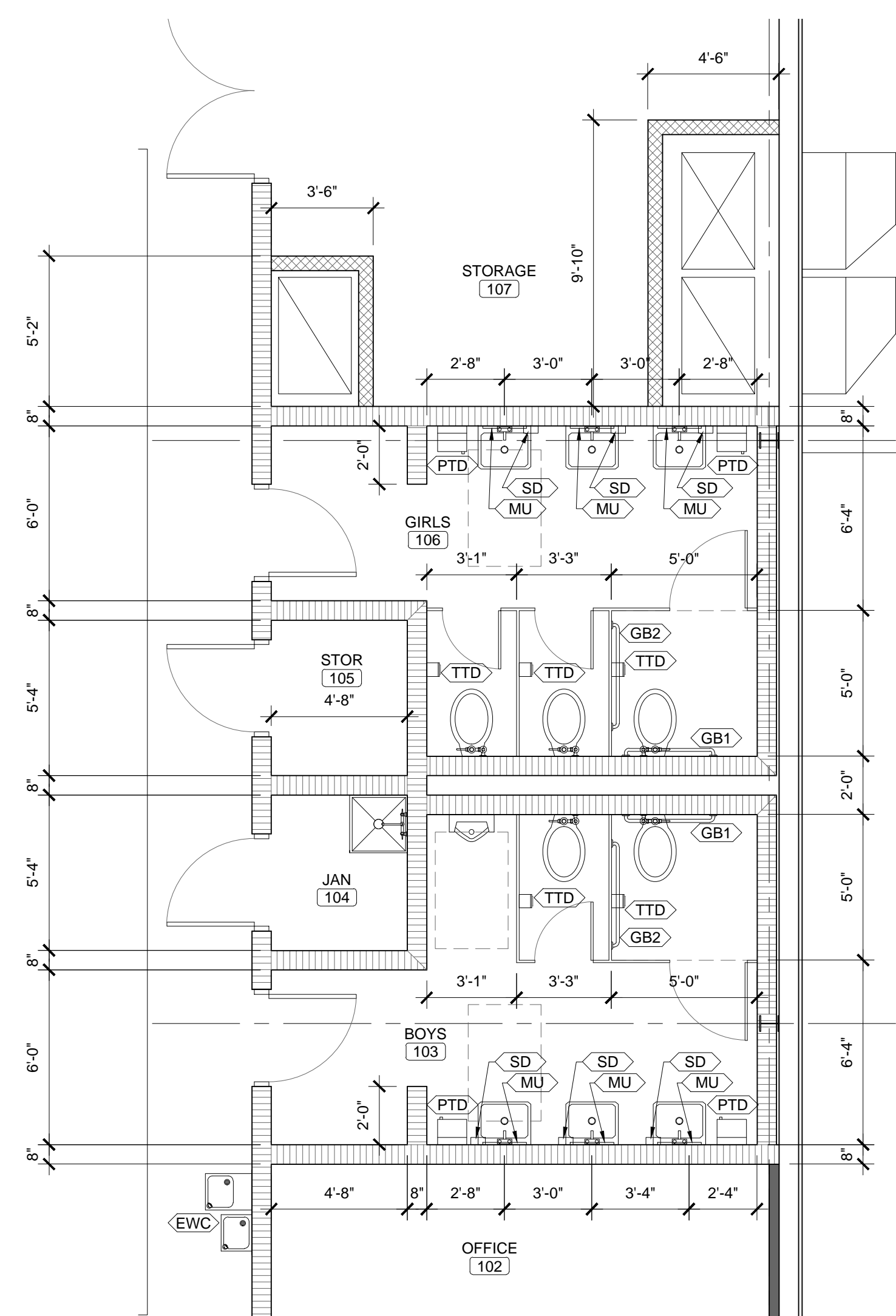
ROOF PLAN
1/8"=1'-0"



REFLECTED CEILING PLAN LEGEND

CODE	DESCRIPTION
8'-0" GBP	HEIGHT A.F.F. MATERIAL
GBP	GYPSUM BOARD - PAINT
LAC	2 X 2 LAY-IN ACOUSTICAL CEILING TILE W/ SMOOTH FACE
LVC	2 X 2 LAY-IN VINYL CLAD CEILING TILE
ESP	EPOSED STRUCTURE - PAINT

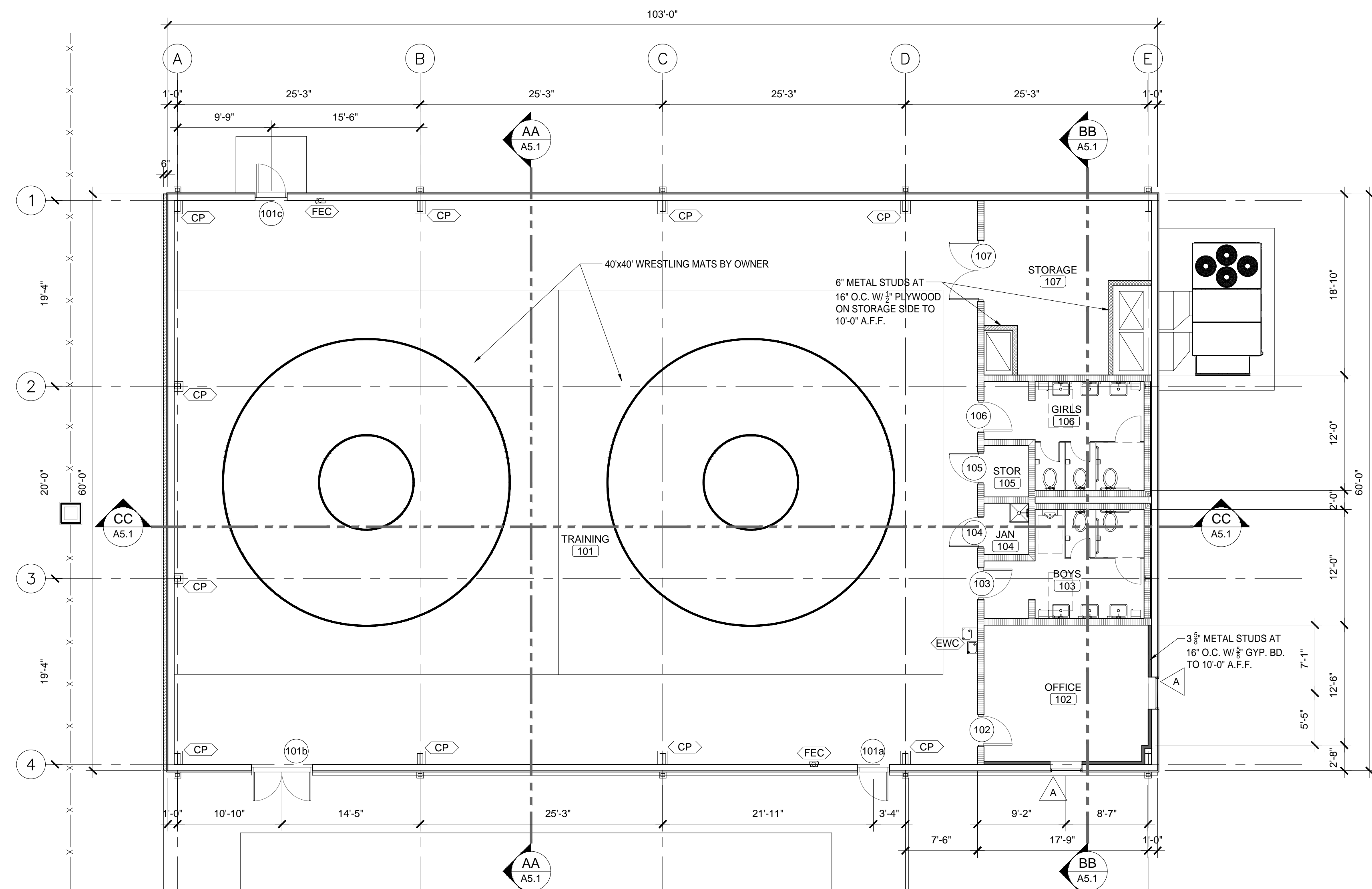
REFLECTED CEILING PLAN
1/8"=1'-0"



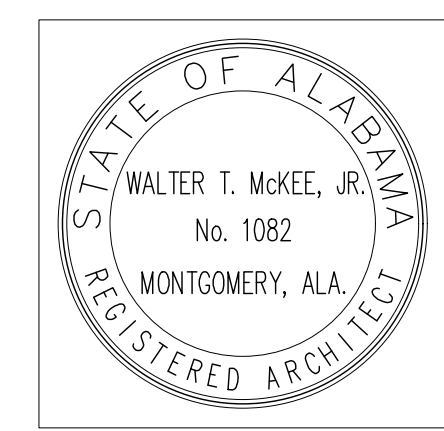
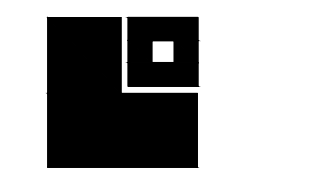
LARGE SCALE FLOOR PLAN
1/4"=1'-0"

SPECIALTIES LEGEND

KEYNOTE	DESCRIPTION
TTD	TOILET TISSUE DISPENSER - FURNISHED BY OWNER-INSTALLED BY THE CONTRACTOR
PTD	PAPER TOWEL DISPENSER - FURNISHED BY OWNER-INSTALLED BY THE CONTRACTOR
SD	SOAP DISPENSER - FURNISHED BY OWNER-INSTALLED BY THE CONTRACTOR
GB1	36" GRAB BAR MOUNTED WHERE CENTERLINE OF WALL MOUNT IS 6" OUT FROM CORNER OF WALL / TOILET PARTITION AND IS TO BE 33'-36" AFF
GB2	42" GRAB BAR MOUNTED WHERE CENTERLINE OF WALL MOUNT IS 12" OUT FROM CORNER OF WALL / TOILET PARTITION AND IS TO BE 33'-36" AFF
MU	18" X 36" MIRROR UNIT W/ SHELF TO BE MOUNTED WITH THE BOTTOM EDGE 36" AFF AND THE TOP EDGE 71" AFF
EWC	ELECTRIC WATER COOLER
FEC	FIRE EXTINGUISHER CABINET
CP	COLUMN PADDING



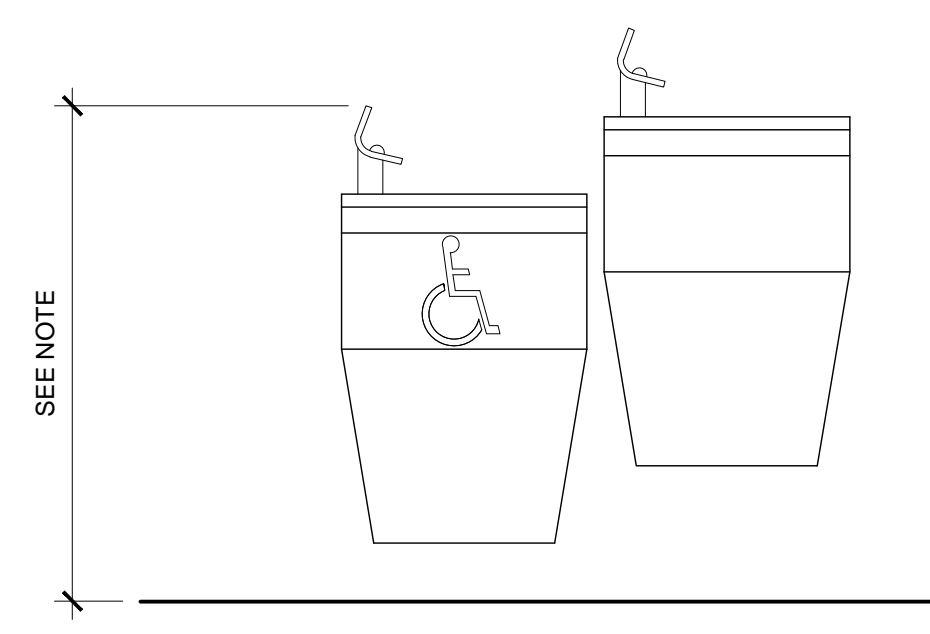
FLOOR PLAN
1/8"=1'-0"



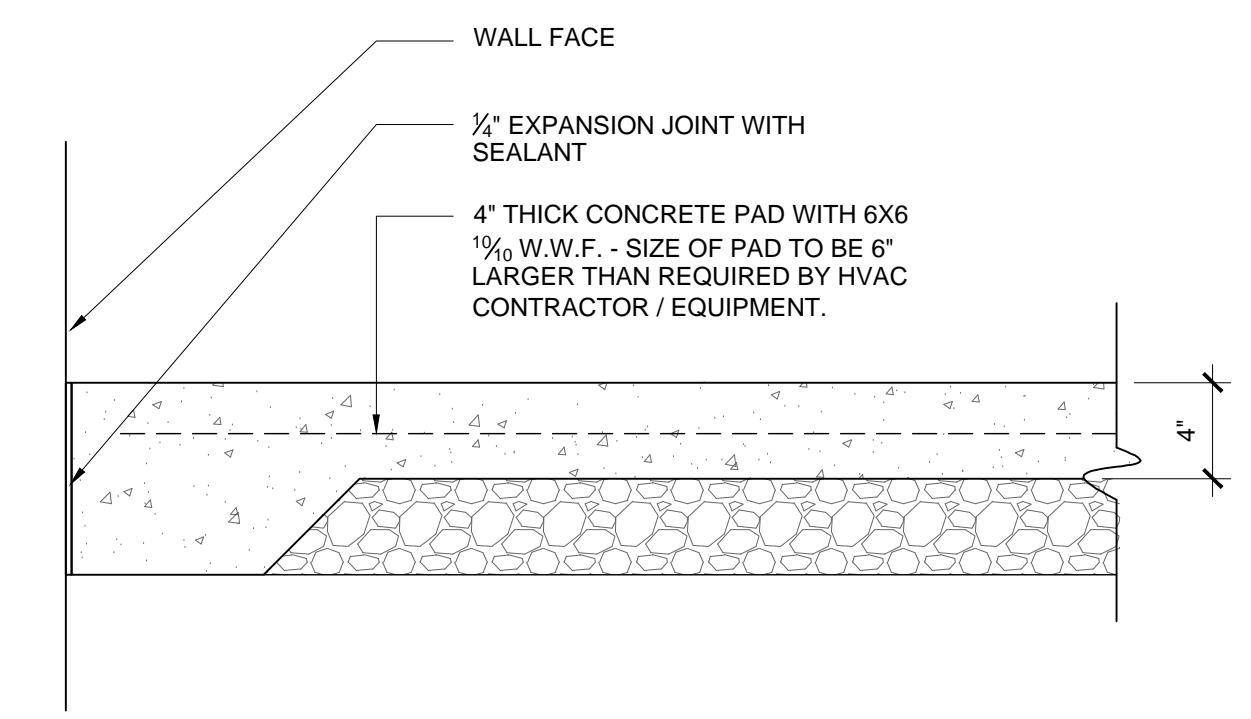
SHEET TITLE:
EXTERIOR ELEVATIONS AND MISCELLANEOUS DETAILS

PROJ. MGR.: JRB
DRAWN: JRB
DATE: 04.03.2026
REVISIONS

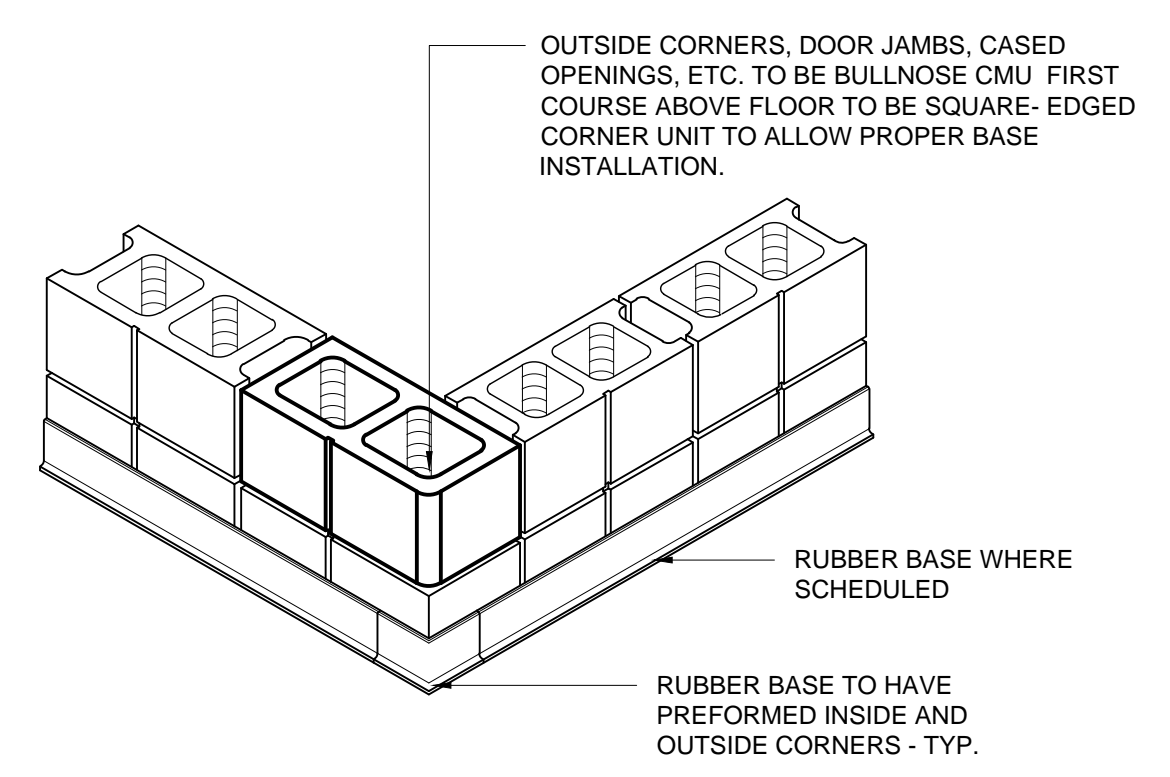
JOB NO. 25-173
SHEET NO:



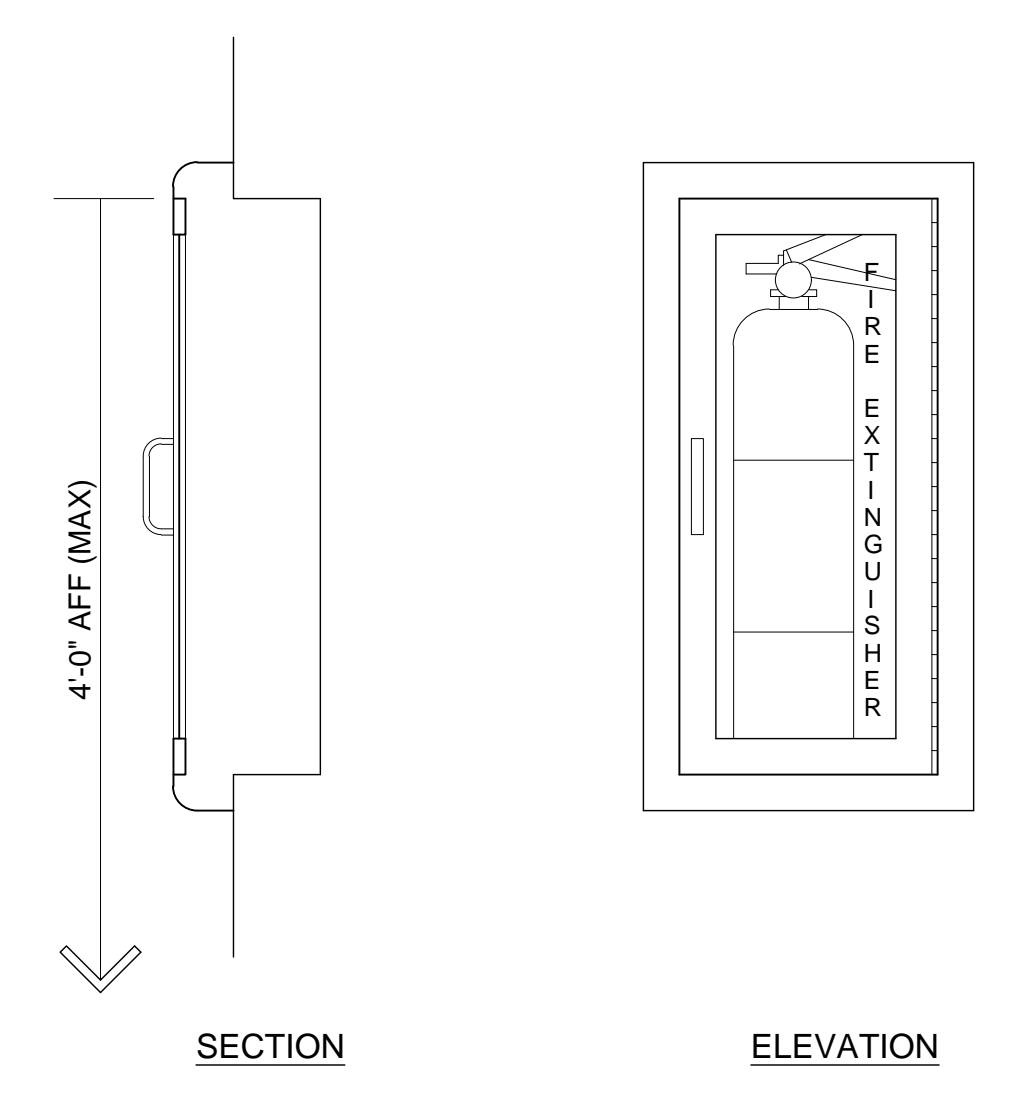
ELECTRIC WATER COOLER (EWC)
SCALE: 1 1/2" = 1'-0"



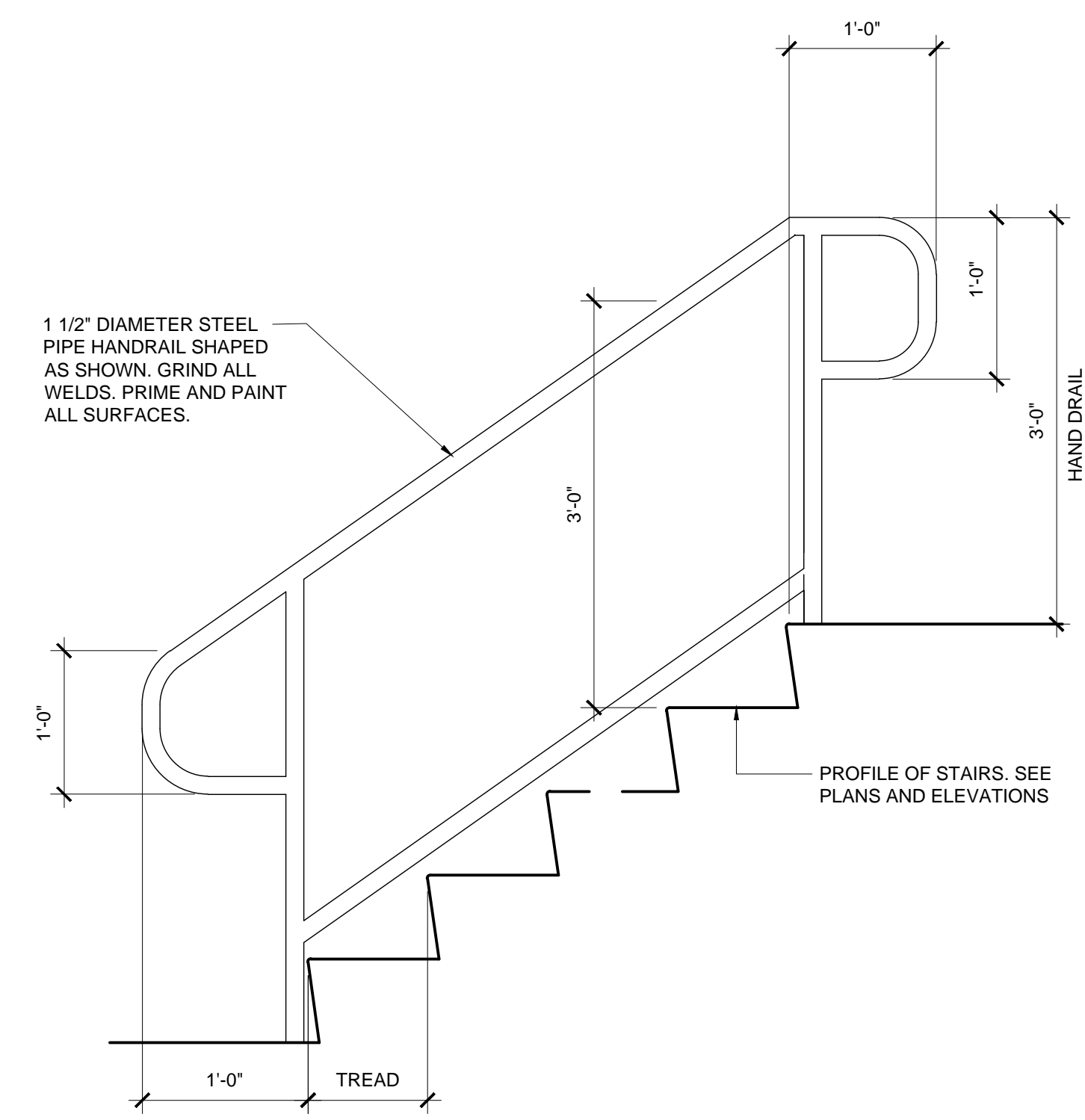
HVAC EQUIPMENT PAD (CEP)
SCALE: 1 1/2" = 1'-0"



RUBBER BASE DETAIL
SCALE: 3/4" = 1'-0"

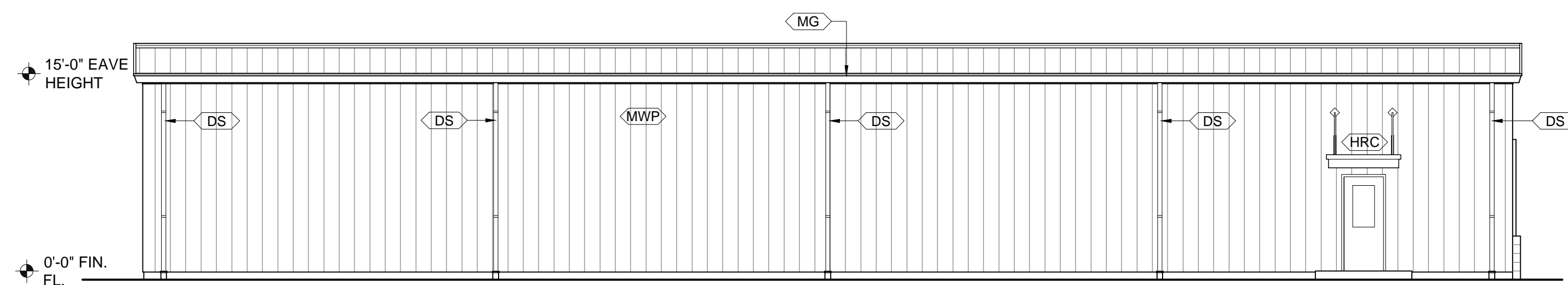


FIRE EXTINGUISHER CABINET (FEC)
SCALE: 1 1/2" = 1'-0"

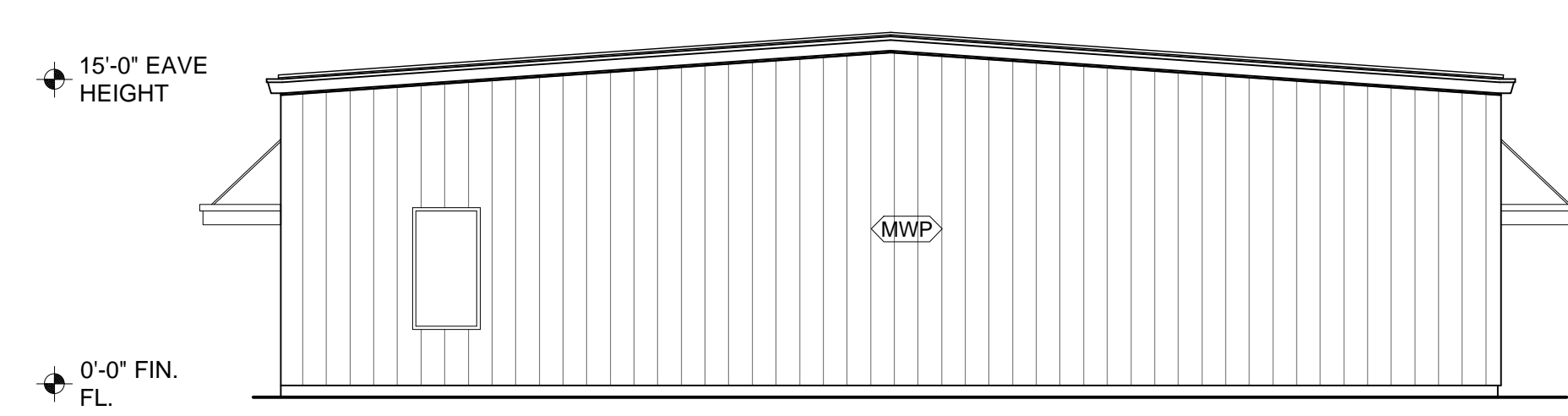


METAL GUARDRAIL / HANDRAIL AT STAIRS
SCALE: 1" = 1'-0"

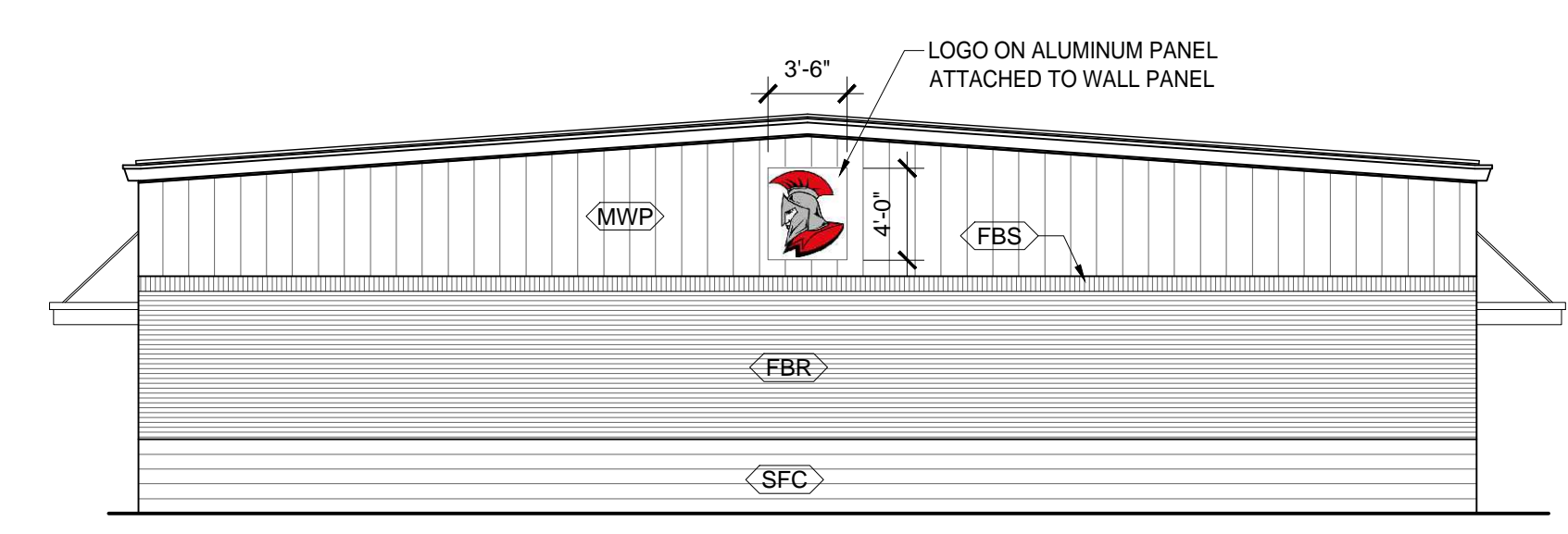
EXTERIOR ELEVATION LEGEND	
SYMBOL	DESCRIPTION
< DS >	METAL DOWNSPOUT - INTO BOOT
< FBR >	FACE BRICK-RUNNING BOND
< FBS >	FACE BRICK-SOLDIER COURSE
< MG >	METAL GUTTER
< MRT >	METAL RAKE TRIM
< MWP >	METAL WALL PANEL
< MRP >	METAL ROOF PANEL
< HRC >	HANGER ROD CANOPY
< SFC >	SPLIT-FACE CMU



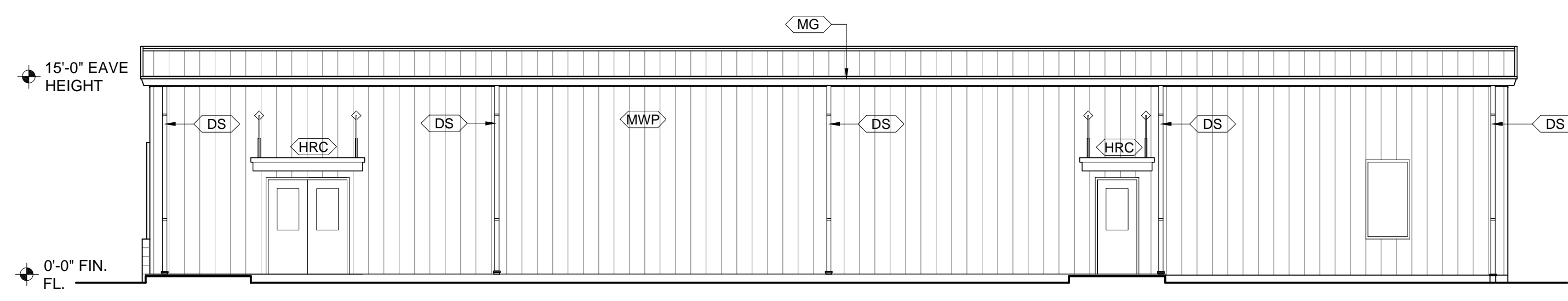
(A) NORTH ELEVATION
SCALE: 1/8" = 1'-0"



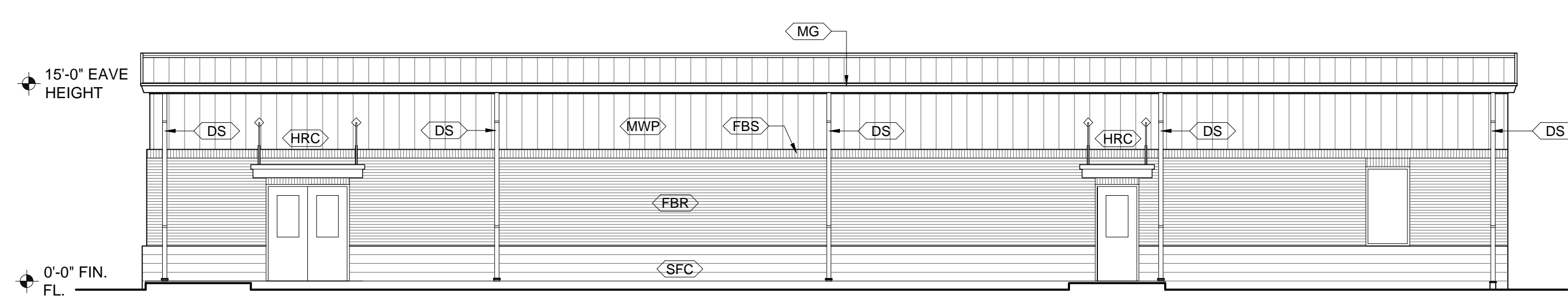
(B) EAST ELEVATION
SCALE: 1/8" = 1'-0"



(C) WEST ELEVATION
SCALE: 1/8" = 1'-0"

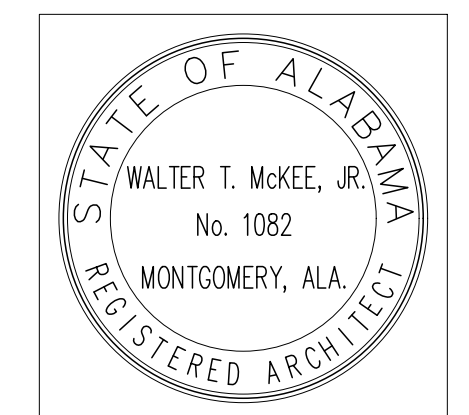
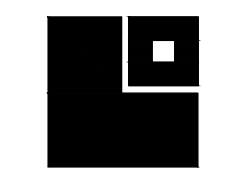


(D) SOUTH ELEVATION - BASE BID
SCALE: 1/8" = 1'-0"



(D) SOUTH ELEVATION - ALTERNATE #1
SCALE: 1/8" = 1'-0"

- Z:\020525-173 New Athletic Training Facility for Saraland High School for Saraland City Schools\CAD Drawings\Architectural\A4.0 Exterior Elevations.dwg
- Thursday, April 9, 2026 5:31:08 PM

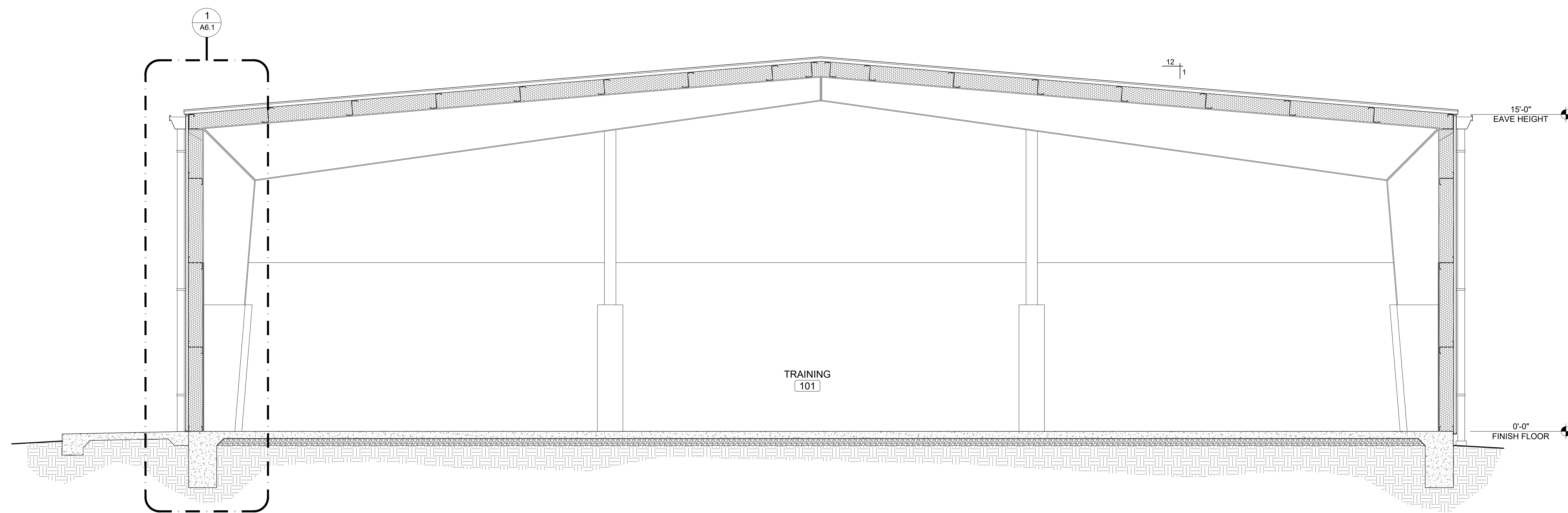


SHEET TITLE:
BUILDING SECTIONS

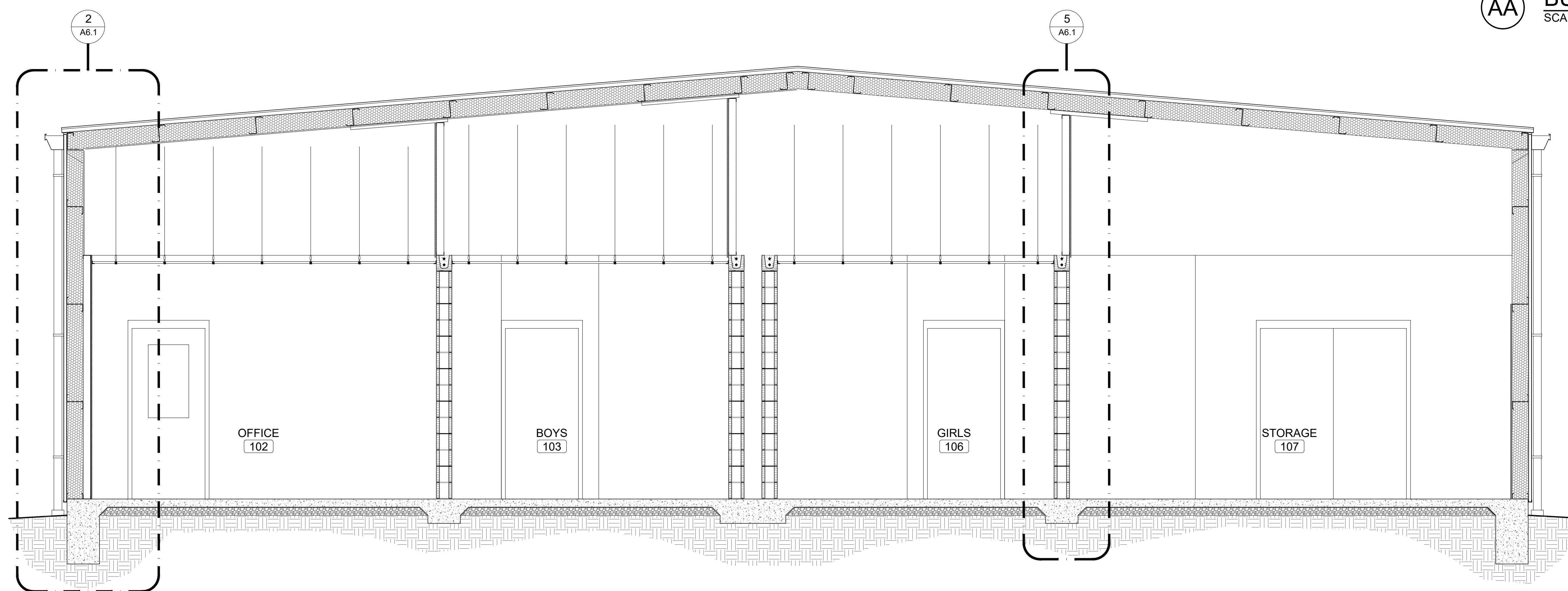
PROJ. MGR.: JRB
DRAWN: JRB
DATE: 04.03.2026
REVISIONS

JOB NO. 25-173
SHEET NO:

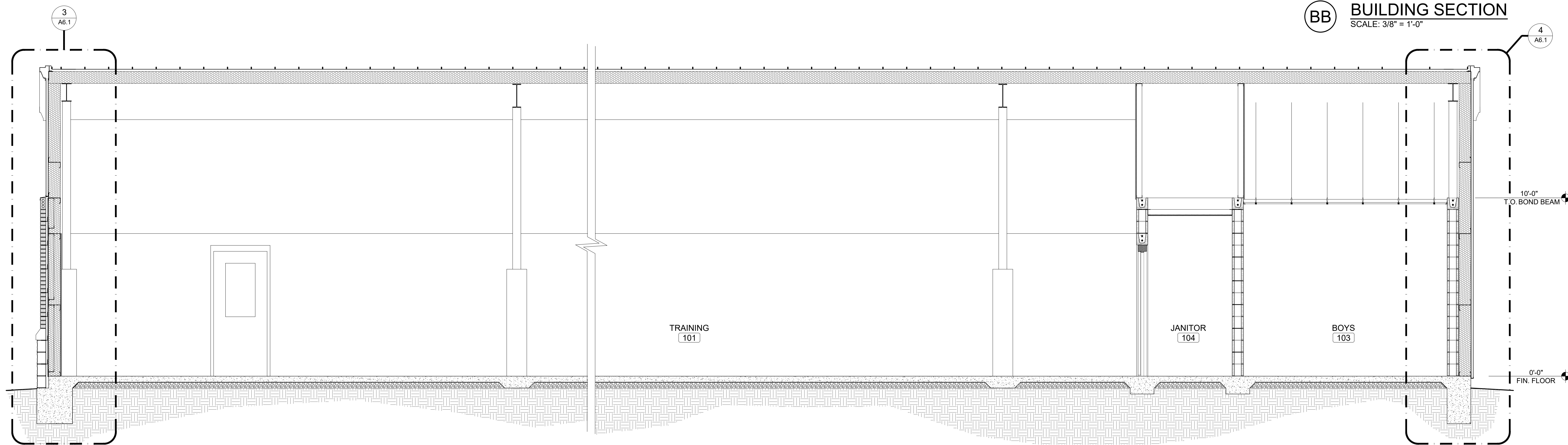
A5.1



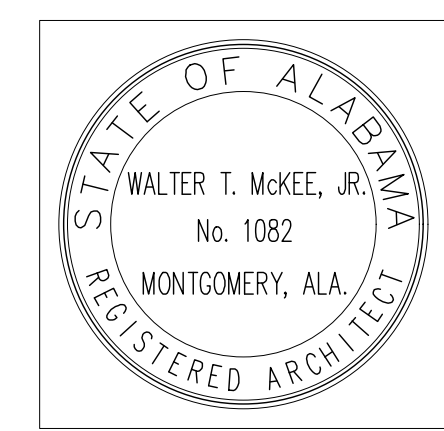
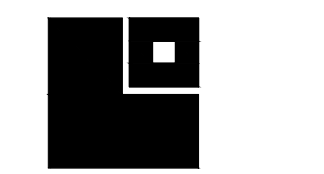
AA BUILDING SECTION
SCALE: 3/8" = 1'-0"



BB BUILDING SECTION
SCALE: 3/8" = 1'-0"



CC BUILDING SECTION
SCALE: 3/8" = 1'-0"



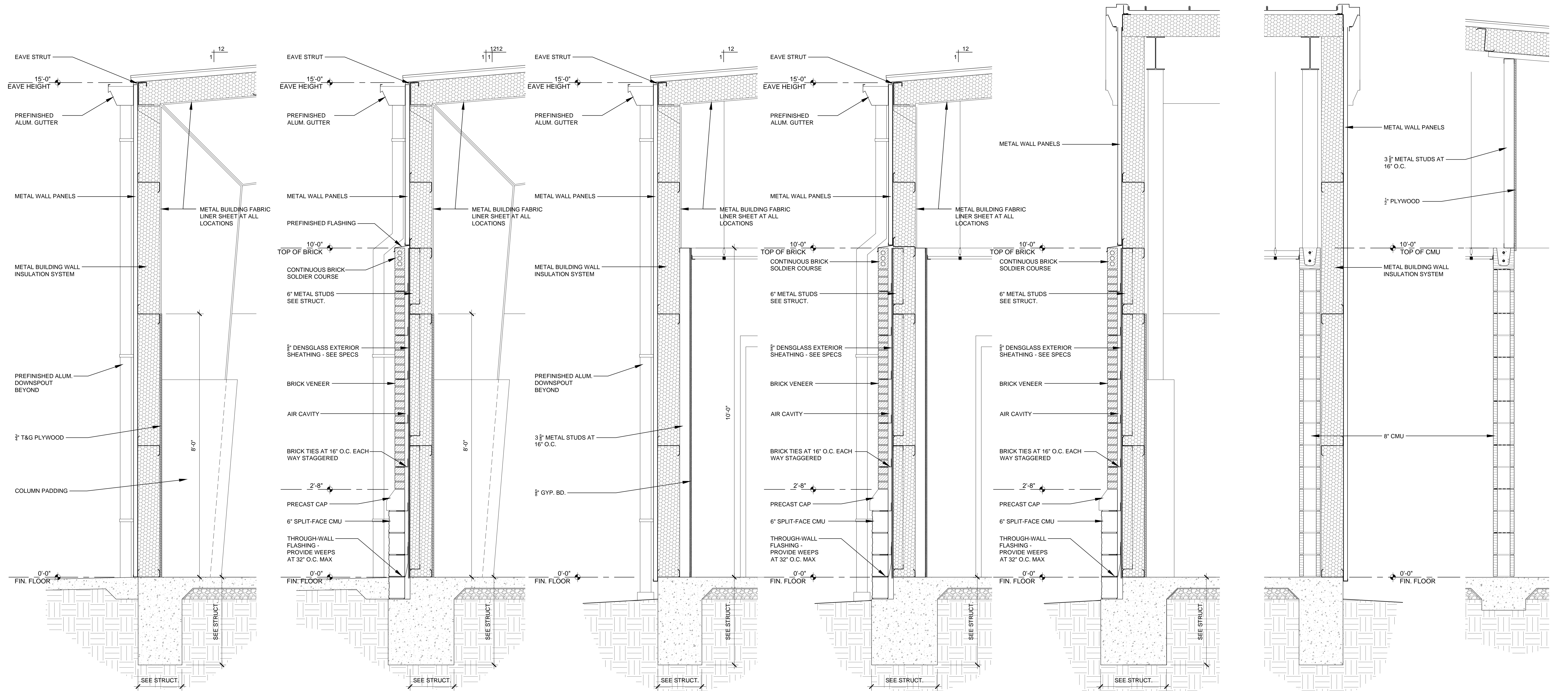
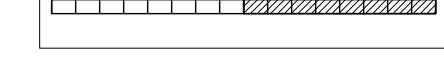
SHEET TITLE:
WALL SECTIONS

PROJ. MGR.: JRB
DRAWN: JRB
DATE: 04.03.2026
REVISIONS:

JOB NO. 25-173

SHEET NO:

A6.1



1 WALL SECTION - BASE BID
SCALE: 3/4"=1'-0"

1 WALL SECTION - ALT #1
SCALE: 3/4"=1'-0"

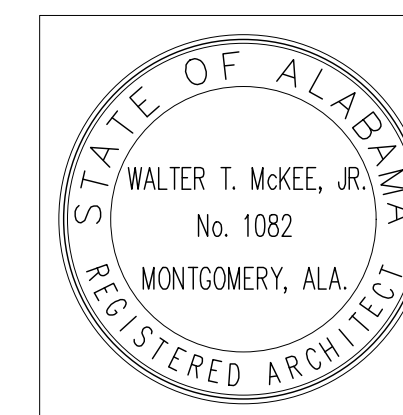
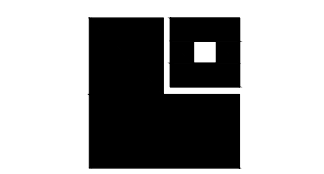
2 WALL SECTION - BASE BID
SCALE: 3/4"=1'-0"

2 WALL SECTION - ALT #1
SCALE: 3/4"=1'-0"

3 WALL SECTION
SCALE: 3/4"=1'-0"

4 WALL SECTION
SCALE: 3/4"=1'-0"

5 WALL SECTION
SCALE: 3/4"=1'-0"



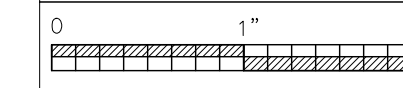
SHEET TITLE:
SCHEDULES
AND DETAILS

PROJ. MGR.: JRB
DRAWN: JRB
DATE: 04.03.2026
REVISIONS

JOB NO. 25-173

SHEET NO:

A8.1



ROOM FINISH SCHEDULE

ROOM #	ROOM NAME	FLOOR	BASE	WALLS				CEILING		WAINS.	HEIGHT	REMARKS
				NORTH	SOUTH	EAST	WEST	TYPE	HEIGHT			
PART - A												
101	TRAINING	EP	EP/RB	PLY	PLY	CMUP	PLY	ESP	SEE RCP	---	---	RB AT PLYWOOD WALLS
102	OFFICE	EP	EP/RB	CMUP	GBP	GBP	CMUP	LAC	SEE RCP	---	---	RB AT GYP BD WALLS
103	BOYS	EP	EP	CMUP	CMUP	CMUP	CMUP	LVC	SEE RCP	---	---	
104	JANITOR	EP	EP	CMUP	CMUP	CMUP	CMUP	GBP	SEE RCP	---	---	
105	STORAGE	EP	EP	CMUP	CMUP	CMUP	CMUP	GBP	SEE RCP	---	---	
106	GIRLS	EP	EP	CMUP	CMUP	CMUP	CMUP	LVC	SEE RCP	---	---	
107	STORAGE	EP	EP	PLY	CMUP/GBP	GBP/PLY	CMUP	ESP	SEE RCP	---	---	RB AT PLYWOOD / GYP BD WALLS

DOOR SCHEDULE

DOOR #	WIDTH	HEIGHT	THICKNESS	MATERIALS	DOOR TYPE	DOOR FINISH	FRAME TYPE	FRAME FINISH	LABEL	DETAILS		SIGNAGE	REMARKS
										HEAD	JAMB		
101a	3'-0"	7'-2"	1 3/4"	FRP	A	FACTORY	SF1	FACTORY	---	* 3/A8.1	* 4/A8.1		*IF ALT. 1 IS TAKEN, DETAILS ARE 5 & 6
101b	PAIR 3'-0"	7'-2"	1 3/4"	FRP	A	FACTORY	SF1	FACTORY	---	* 3/A8.1	* 4/A8.1		*IF ALT. 1 IS TAKEN, DETAILS ARE 5 & 6
101c	3'-0"	7'-2"	1 3/4"	FRP	A	FACTORY	SF1	FACTORY	---	3/A8.1	4/A8.1		
102	3'-0"	7'-0"	1 3/4"	FLUSH WOOD SOLID CORE	B	FACTORY	HM1	PAINT	---	1/A8.1	2/A8.1		COACH
103	3'-0"	7'-0"	1 3/4"	FLUSH WOOD SOLID CORE	B	FACTORY	HM1	PAINT	---	1/A8.1	2/A8.1		BOYS
104	3'-0"	7'-0"	1 3/4"	FLUSH WOOD SOLID CORE	B	FACTORY	HM1	PAINT	---	1/A8.1	2/A8.1		JANITOR
105	3'-0"	7'-0"	1 3/4"	FLUSH WOOD SOLID CORE	B	FACTORY	HM1	PAINT	---	1/A8.1	2/A8.1		STORAGE
106	3'-0"	7'-0"	1 3/4"	FLUSH WOOD SOLID CORE	B	FACTORY	HM1	PAINT	---	1/A8.1	2/A8.1		GIRLS
107	PAIR 3'-0"	7'-0"	1 3/4"	FLUSH WOOD SOLID CORE	B	FACTORY	HM1	PAINT	---	1/A8.1	2/A8.1		STORAGE

SIGN MOUNTING HEIGHT

703.4.1 HEIGHT ABOVE FINISH FLOOR OF GROUND
TACTILE CHARACTERS ON SIGNS SHALL BE LOCATED 48 INCHES (1220 mm) MINIMUM ABOVE THE FINISH FLOOR OR GROUND SURFACE, MEASURED FROM THE BASELINE OF THE LOWEST TACTILE CHARACTER AND 60 INCHES (1525 mm) MAXIMUM ABOVE FINISH FLOOR OR GROUND SURFACE, MEASURED FROM THE BASELINE OF THE HIGHEST TACTILE CHARACTER.
EXCEPTION: BRAILLE PROVIDED ON ELEVATOR CAR CONTROLS SHALL BE SEPARATED 3/8 INCHES (4.8 mm) MINIMUM AND SHALL BE LOCATED EITHER DIRECTLY BELOW OR ADJACENT TO THE CORRESPONDING RAISED CHARACTERS OR SYMBOLS.

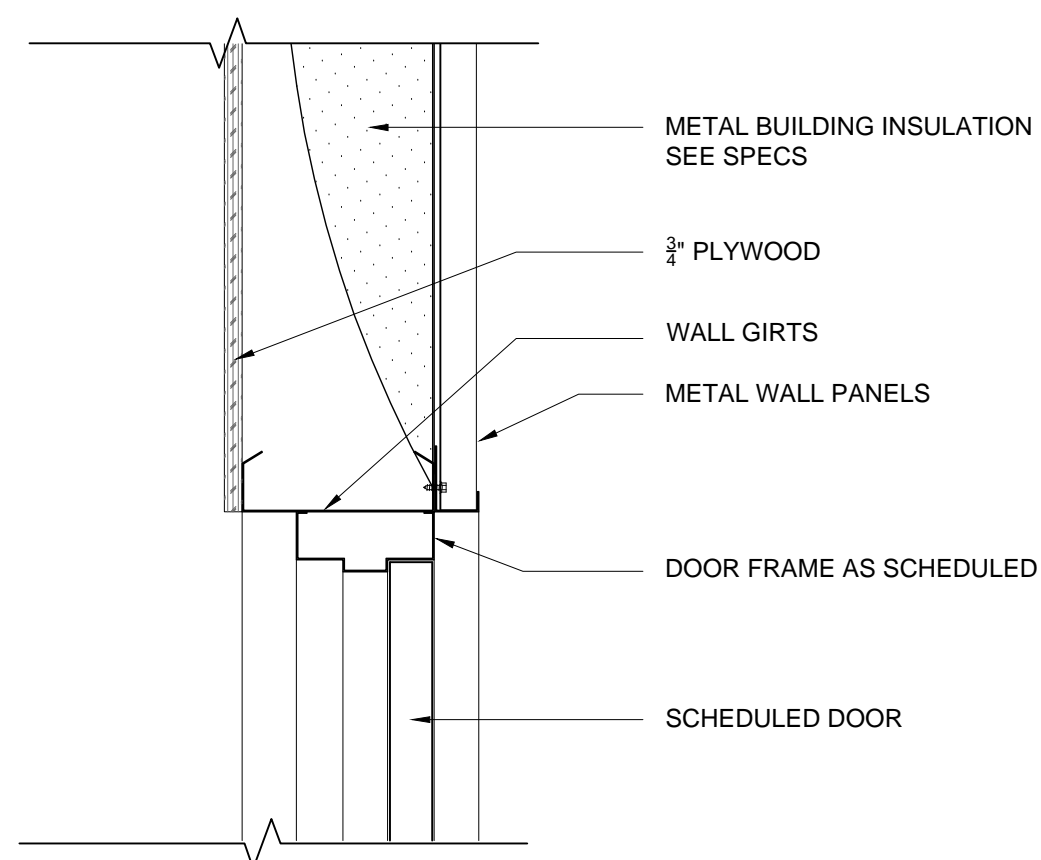
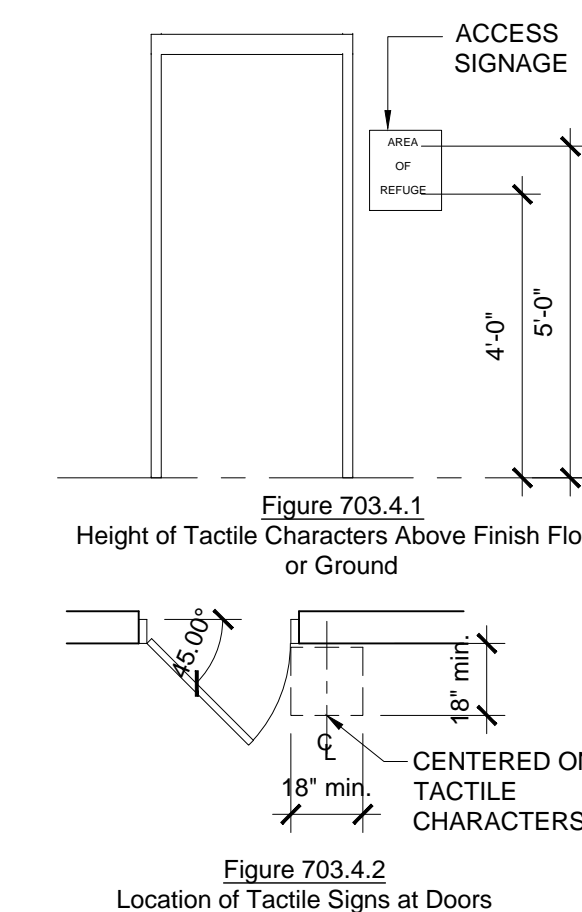
703.4.2 LOCATION
WHERE A TACTILE SIGN IS PROVIDED AT A DOOR, THE SIGN SHALL BE LOCATED ALONGSIDE THE DOOR AT THE LATCH SIDE. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH ONE ACTIVE LEAF, THE SIGN SHALL BE LOCATED ON THE INACTIVE LEAF. WHERE A TACTILE SIGN IS PROVIDED AT DOUBLE DOORS WITH TWO ACTIVE LEAFS, THE SIGN SHALL BE LOCATED TO THE RIGHT OF THE RIGHT HAND DOOR. WHERE THERE IS NO WALL SPACE AT THE LATCH SIDE OF A SINGLE DOOR OR AT THE RIGHT SIDE OF DOUBLE DOORS, SIGNS SHALL BE LOCATED ON THE NEAREST ADJACENT WALL. SIGNS CONTAINING TACTILE CHARACTERS SHALL BE LOCATED SO THAT THE CLEAR FLOOR SPACE OF 18 INCHES (455 mm) MINIMUM, CENTERED ON THE TACTILE CHARACTERS, IS PROVIDED BEYOND THE ARC OF ANY DOOR SWING BETWEEN THE CLOSEST POSITION AND 45 DEGREE OPEN POSITION.
EXCEPTION: SIGNS WITH TACTILE CHARACTERS SHALL BE PERMITTED ON THE PUSH SIDE OF DOORS WITH CLOSERS AND WITHOUT HOLD-OPEN DEVICES.

SIGNAGE NOTES:

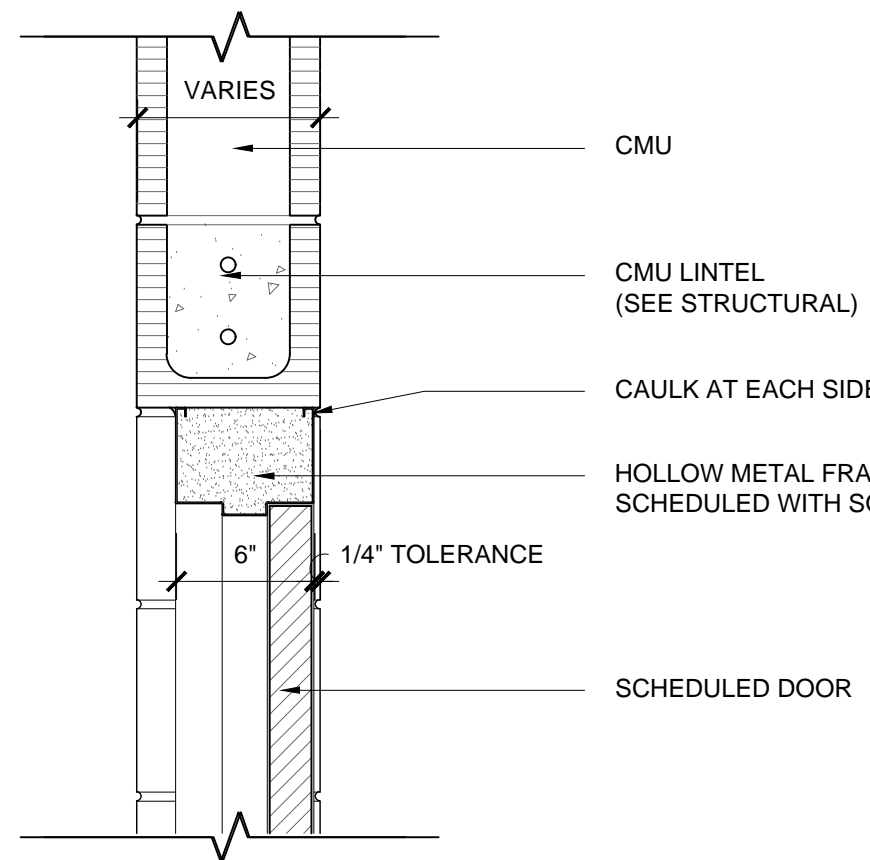
FURNISH INDIVIDUAL PLASTIC LAMINATE SIGNAGE SYSTEM WITH ROOM OR OCCUPANT'S NAME AND ROOM NUMBER. FINAL WORDING TO BE FURNISHED WHEN SHOP DRAWINGS FOR SIGNAGE SYSTEM ARE SUBMITTED.

LABELED DOOR AND FRAME NOTE:

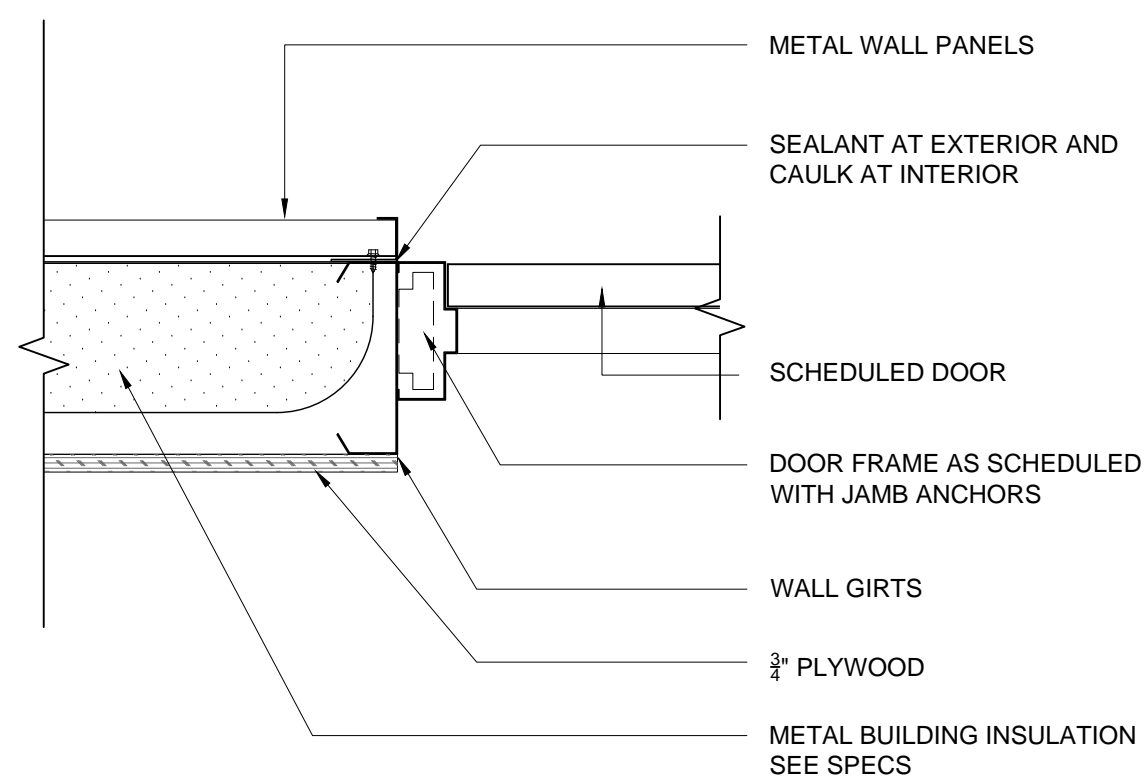
HOURLY RATING DESIGNATIONS AND / OR ALPHABETICAL LETTER DESIGNATIONS ARE GIVEN WHERE PROTECTED OPENINGS ARE REQUIRED IN RATED PARTITIONS. THESE OPENING PROTECTIVE ASSEMBLIES SHALL INCLUDE THE FRAME, DOOR, HARDWARE, CLOSING DEVICE, SILL AND ANCHORAGE. CONTRACTOR SHALL SEE THAT NO COMPONENT IS OMITTED OR SUBSTANDARD QUALITY USED SUCH THAT THE EFFECTIVENESS OF THE ENTIRE OPENING AS A FIRE OR SMOKE BARRIER MIGHT BE JEOPARDIZED. DOORS AND FRAMES SHALL BE FURNISHED WITH UNDERWRITER'S LABORATORIES OR WARNDOCKHERSEY LABELS WITH APPROPRIATE FIRE RESISTANCE RATINGS FOR THE CLASS OF OPENING SCHEDULED. SUBJECT TO DOOR MANUFACTURER'S PROCEDURAL LIMITATIONS, LABELS SHOULD BEAR THE FOLLOWING NOTATION: "FIRE DOOR, TO BE EQUIPPED WITH FIRE EXIT HARDWARE"



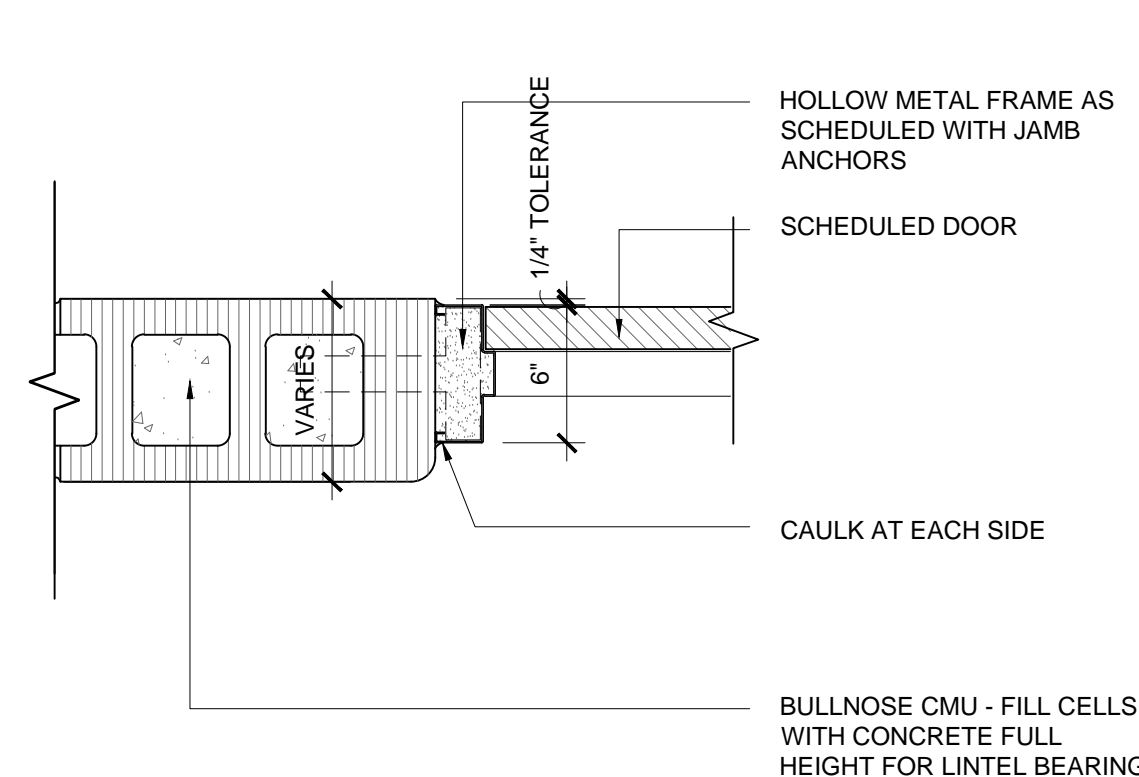
3 EXTERIOR DOOR DETAIL HEAD
SCALE: 1 1/2"=1'-0"



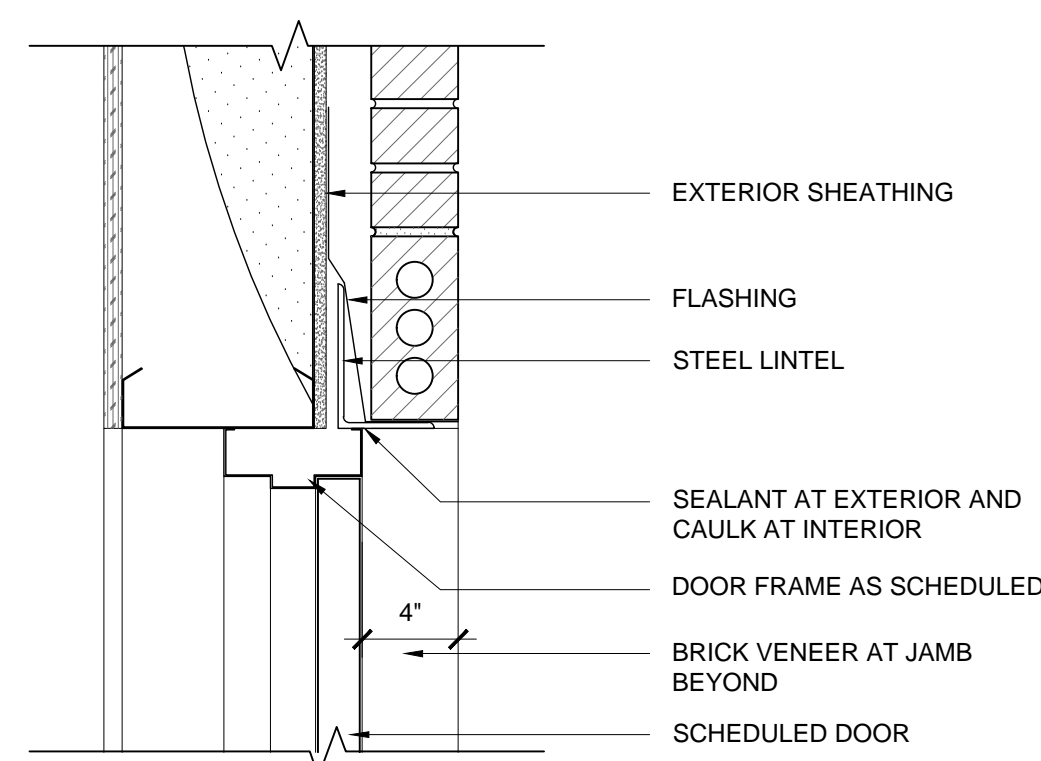
1 INTERIOR DOOR DETAIL HEAD
SCALE: 1 1/2"=1'-0"



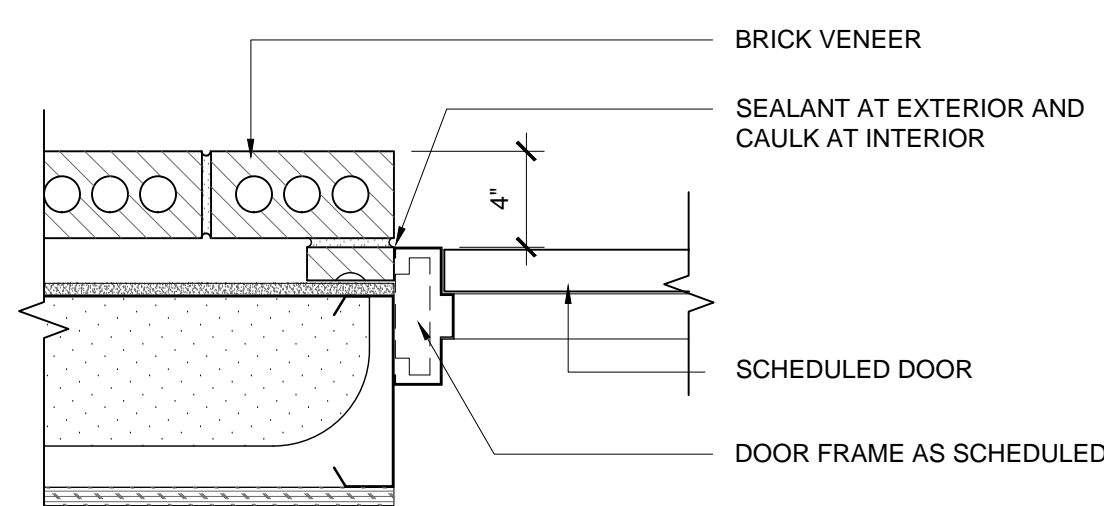
4 EXTERIOR DOOR DETAIL JAMB
SCALE: 1 1/2"=1'-0"



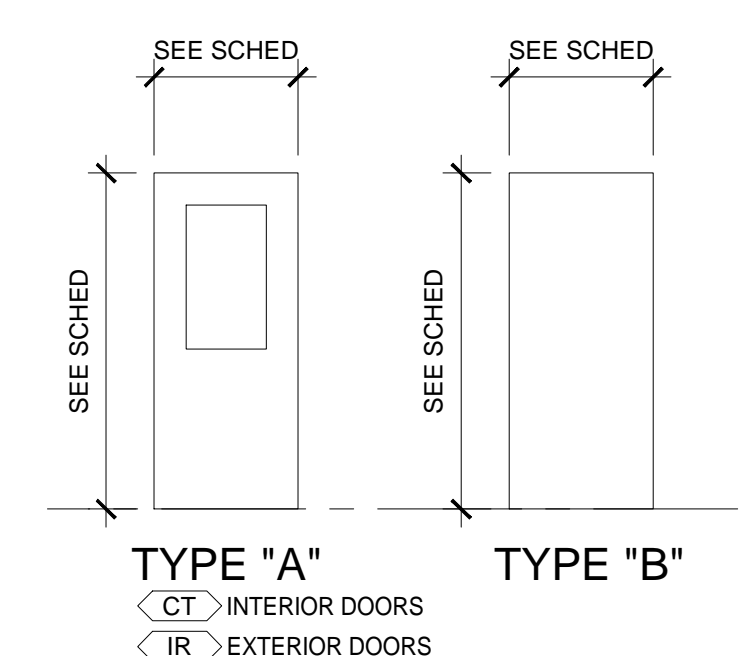
2 INTERIOR DOOR DETAIL JAMB
SCALE: 1 1/2"=1'-0"



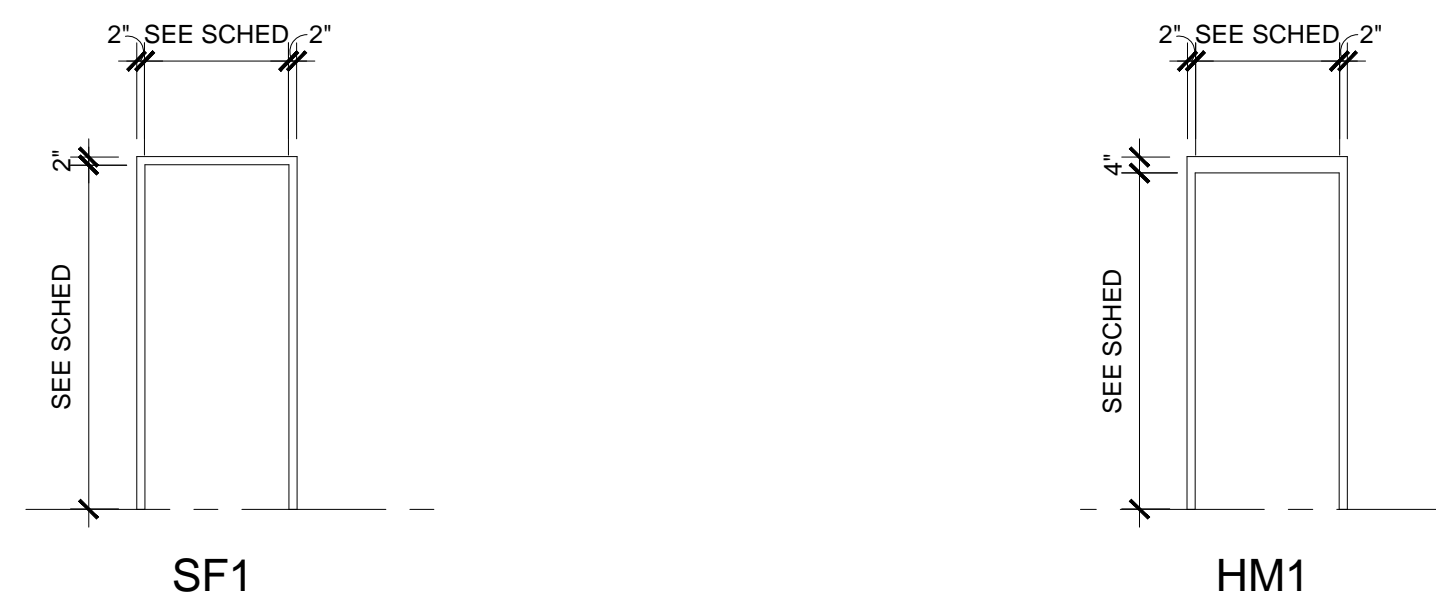
5 EXTERIOR DOOR DETAIL HEAD
SCALE: 1 1/2"=1'-0"



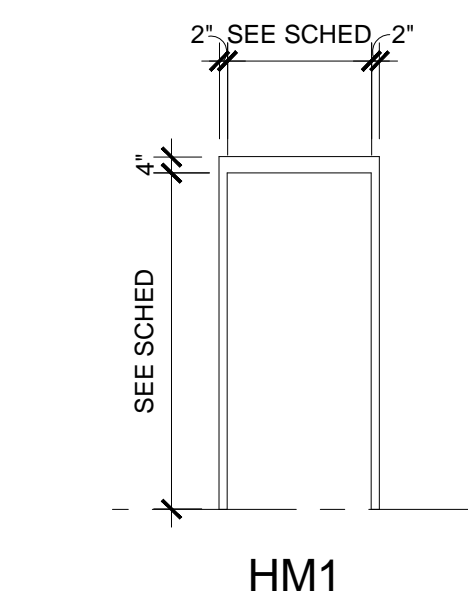
6 EXTERIOR DOOR DETAIL JAMB
SCALE: 1 1/2"=1'-0"



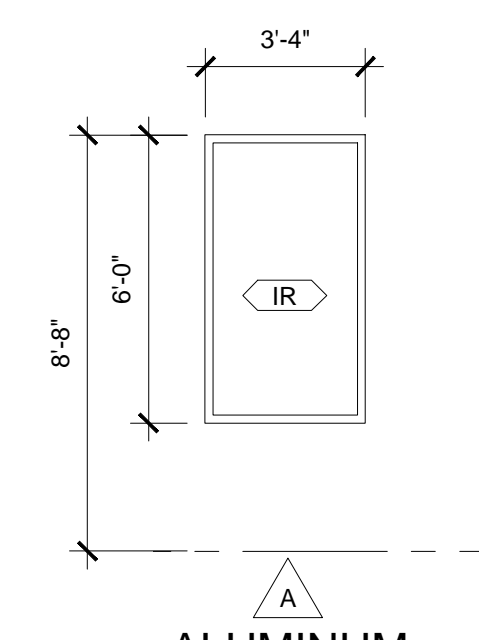
TYPICAL DOOR TYPES
SCALE: 1/4" = 1'-0"



ALUMINUM FRAME TYPES
SCALE: 1/4" = 1'-0"



HOLLOW METAL FRAME TYPES
SCALE: 1/4" = 1'-0"



ALUMINUM STOREFRONT
ALUMINUM WINDOW TYPES
SCALE: 1/4" = 1'-0"

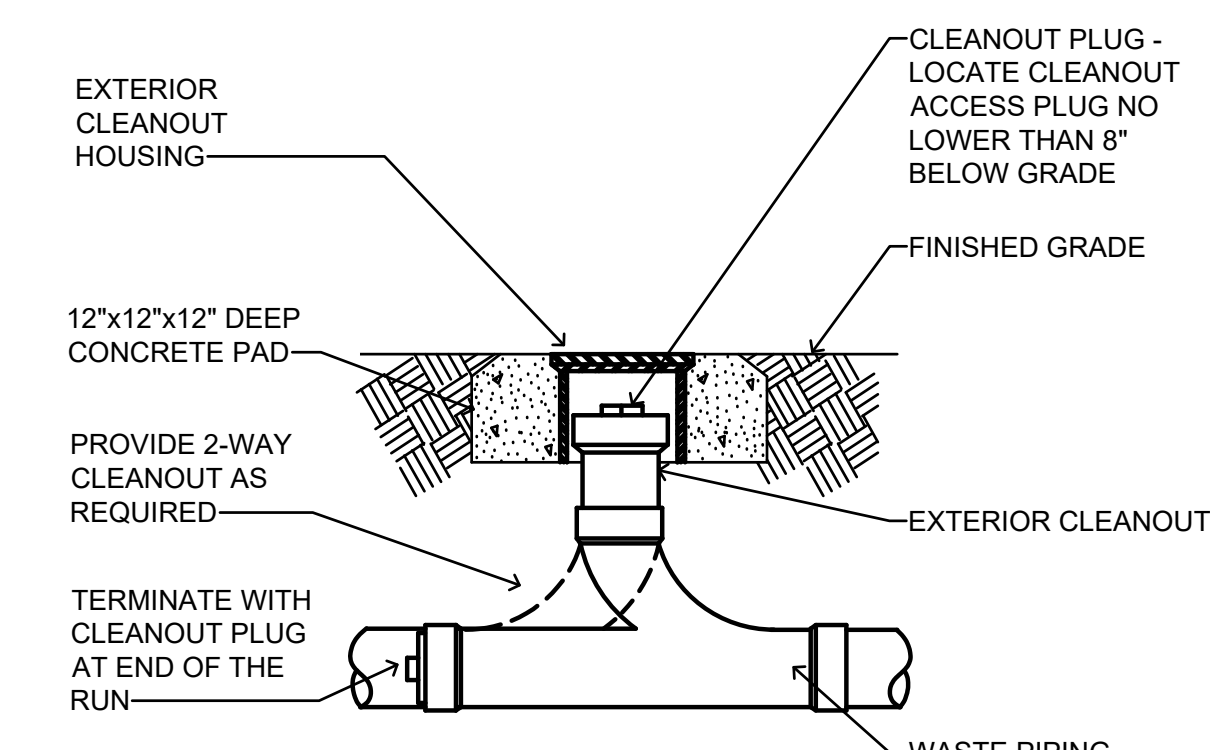
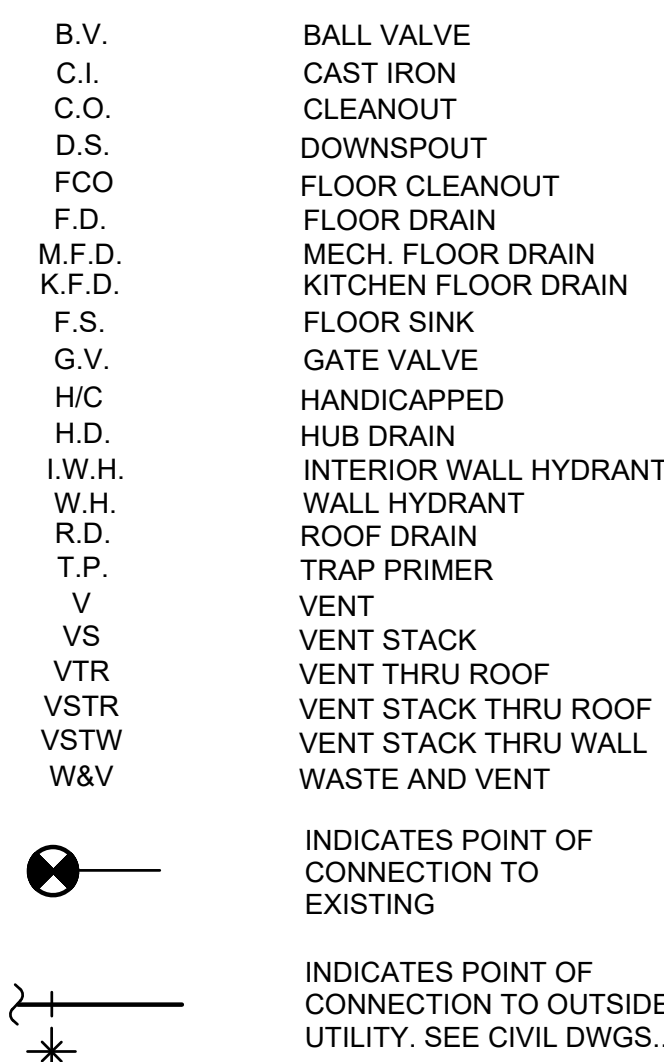
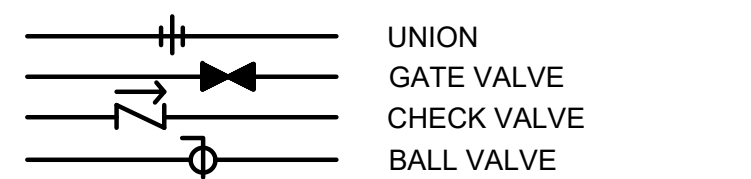
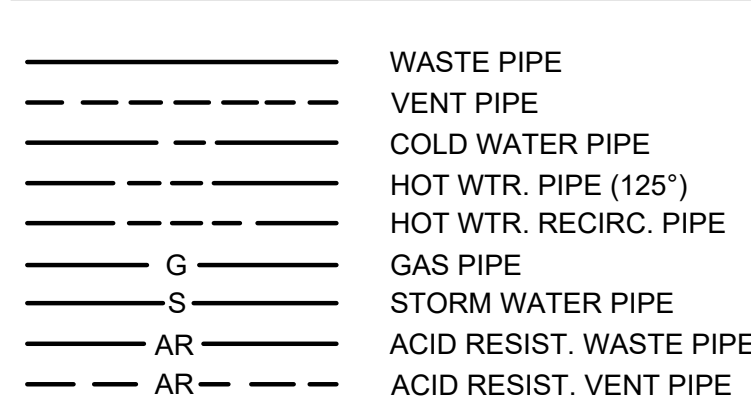
GLAZING SCHEDULE	
SYMBOL	DESCRIPTION
<CT>	CLEAR TEMPERED
<IR>	IMPACT RESISTANT-TINTED

PLUMBING FIXTURE SCHEDULE

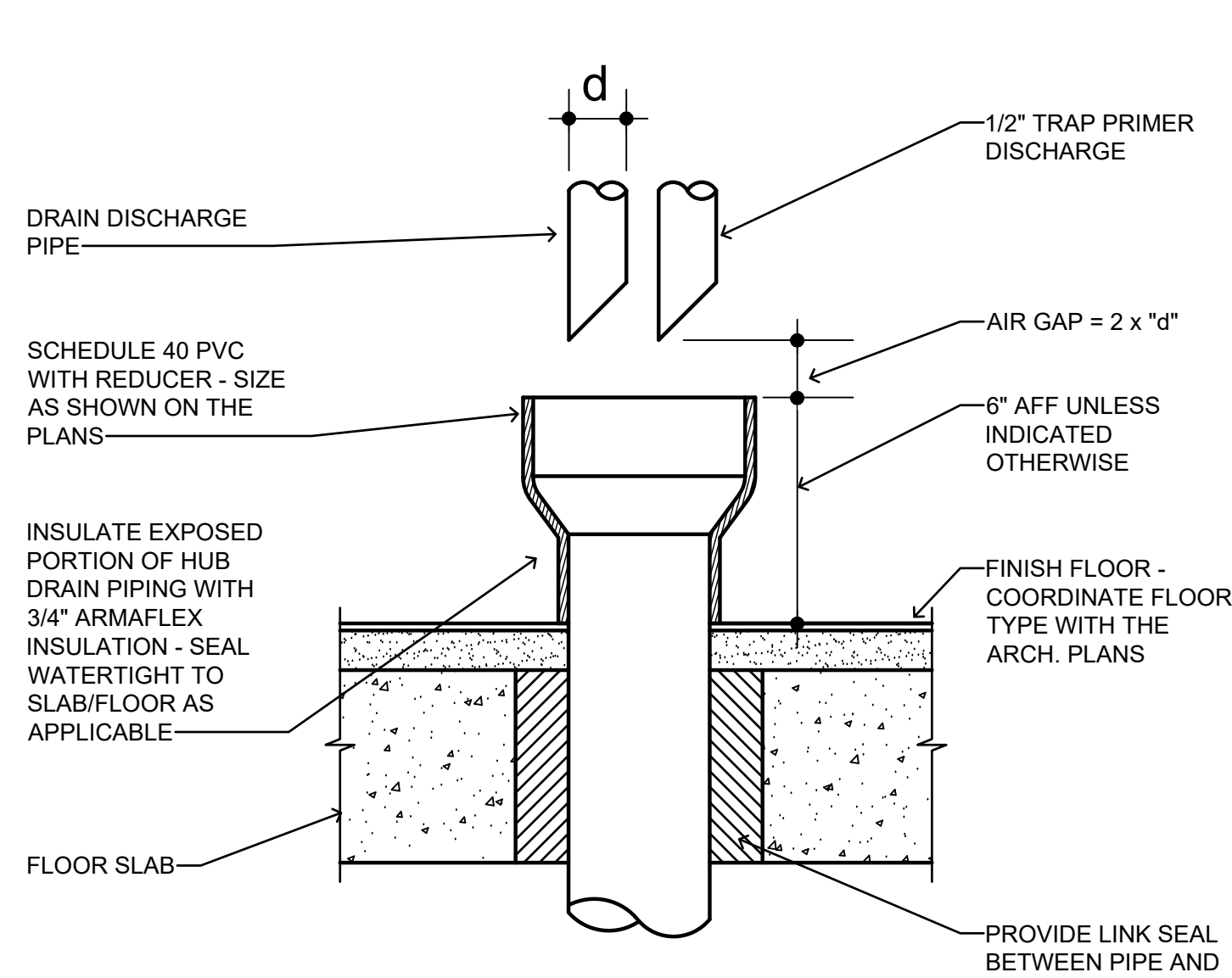
NO.	FIXTURE	WASTE	C.W.	H.W.	REMARKS
P1	WATER CLOSET	3"	1"	---	FL. MTD. - REG.
P2	ADA WATER CLOSET	3"	1"	---	FL. MTD. - ADA
P3	URINAL	2"	3/4"	---	WALL HUNG - SEE ARCH. PLANS FOR MOUNTING HEIGHT
P4	ADA LAVATORY **	1 1/4"	1/2"	1/2"	WALL HUNG - SEE ARCH. PLANS FOR MOUNTING HEIGHT
P5	MOP BASIN	3"	1/2"	1/2"	FL. MTD. CORNER TYPE
P6	SPLIT LEVEL EWC	1 1/2"	1/2"	---	WALL HUNG - HIGH/LOW
T.P.	TRAP PRIMER	---	1/2"	---	CONNECT TO FLOOR DRAIN AS SPECIFIED

** PROVIDE A WATER TEMPERATURE LIMITING DEVICE (ASSE 1070 MIXING VALVE) WITH 1/2" TEMPERED WATER LINE TO FAUCET - SEE SPECS FOR REQUIREMENTS

LEGEND



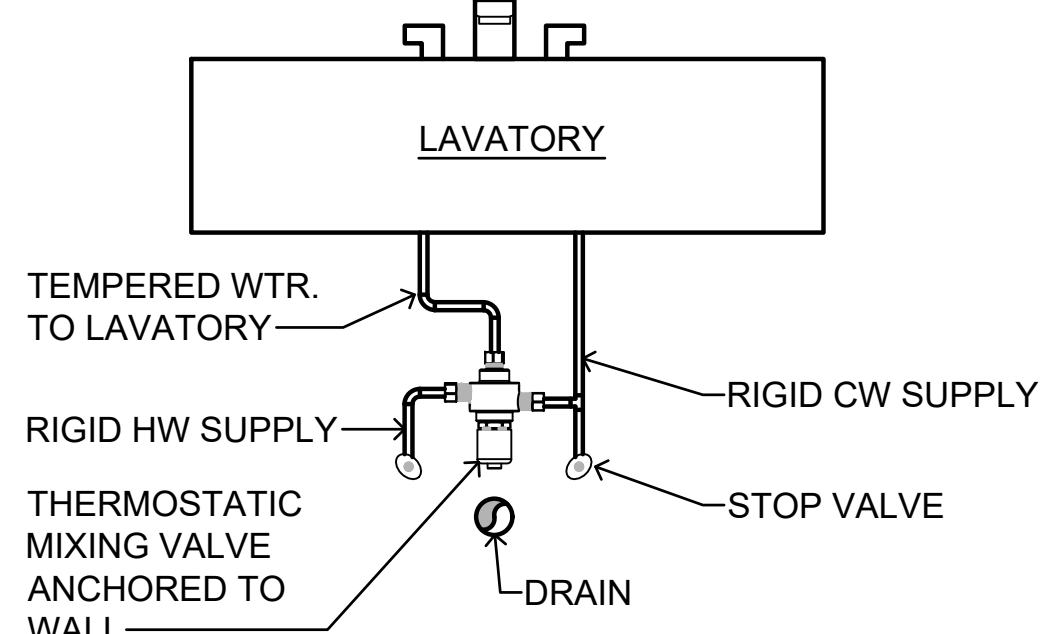
TYP. EXTERIOR CLEANOUT DETAIL
NO SCALE



TYP. INTERIOR FLOOR CLEANOUT DETAIL
NO SCALE

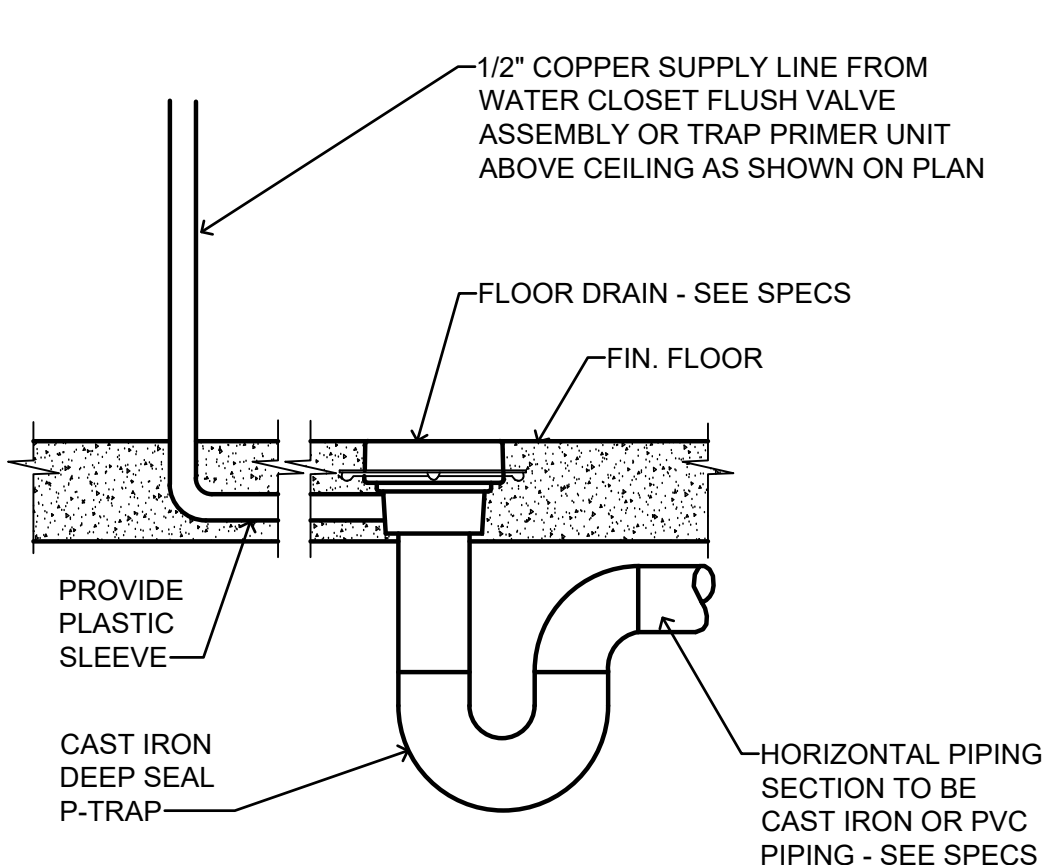
HUB DRAIN DETAIL

NO SCALE
DETAIL IS FOR FLOOR PENETRATION, WHERE HUB DRAINS ARE ROUTED THROUGH A RETURN AIR PLATFORM. HUB DRAIN MUST BE CAST IRON AND COMPLETELY INSULATED AND SEALED AIRTIGHT TO THE SLAB



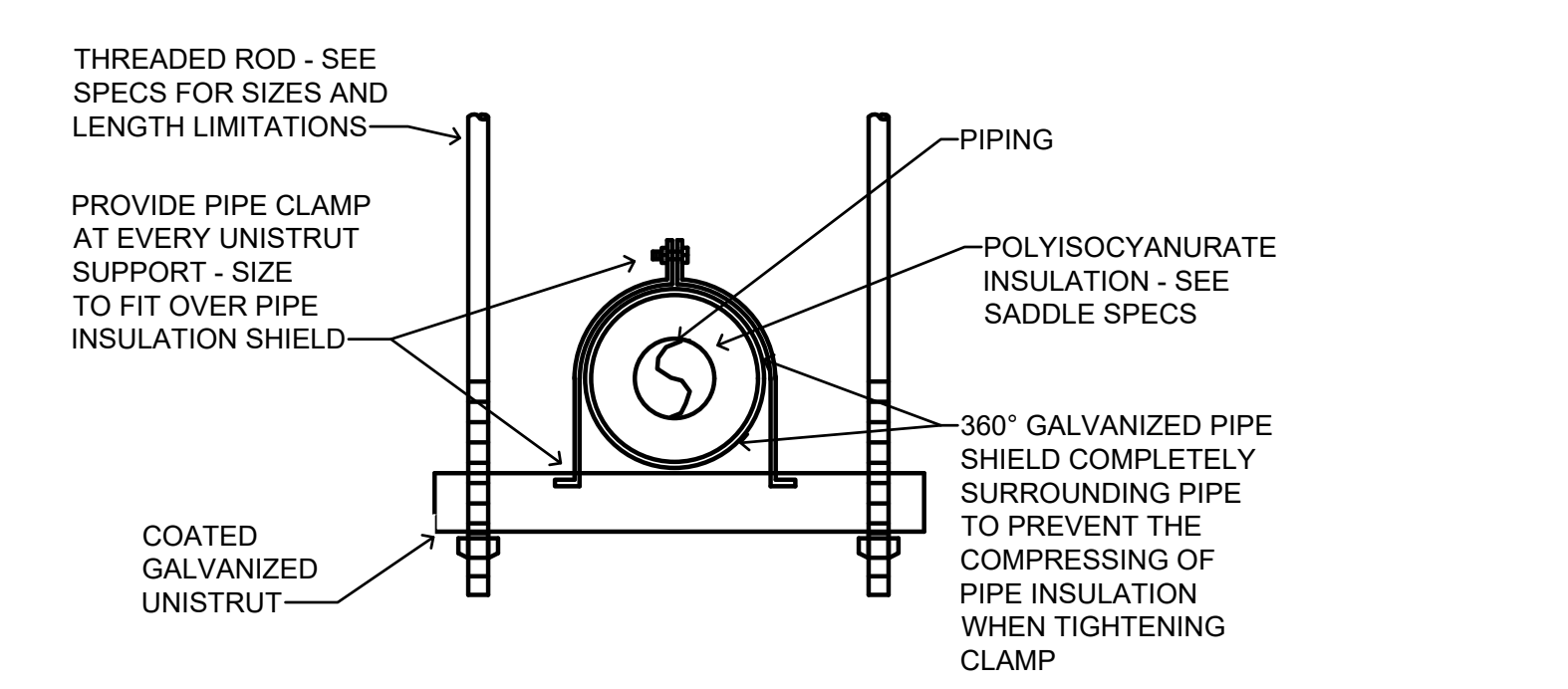
DETAIL OF TMV BELOW LAVATORY
NO SCALE

DETAIL DOES NOT APPLY TO TANKLESS WATER HEATERS WHERE SPECIFIED - TANKLESS WATER HEATERS ARE SPECIFIED WITH INTEGRAL ASSE 1070 MIXING VALVE



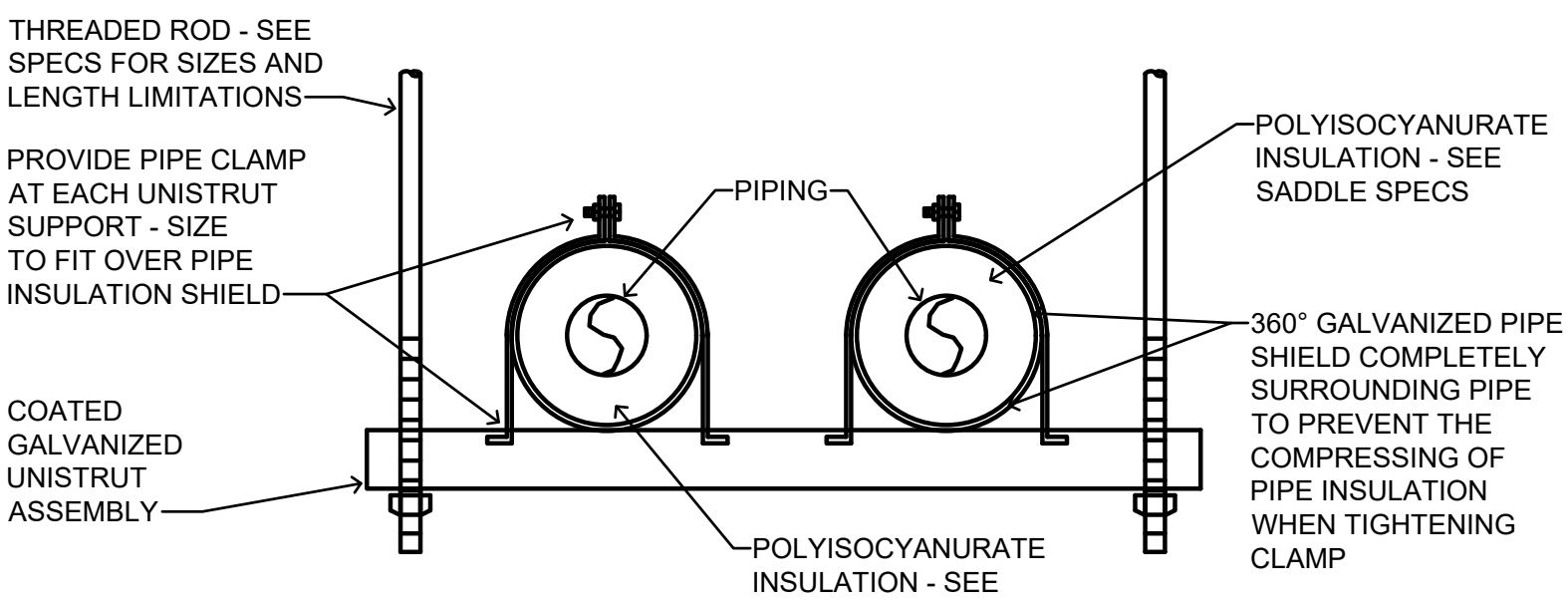
FLOOR DRAIN/TRAP PRIMER DETAIL
NO SCALE

HUB DRAIN CONNECTIONS SIMILAR



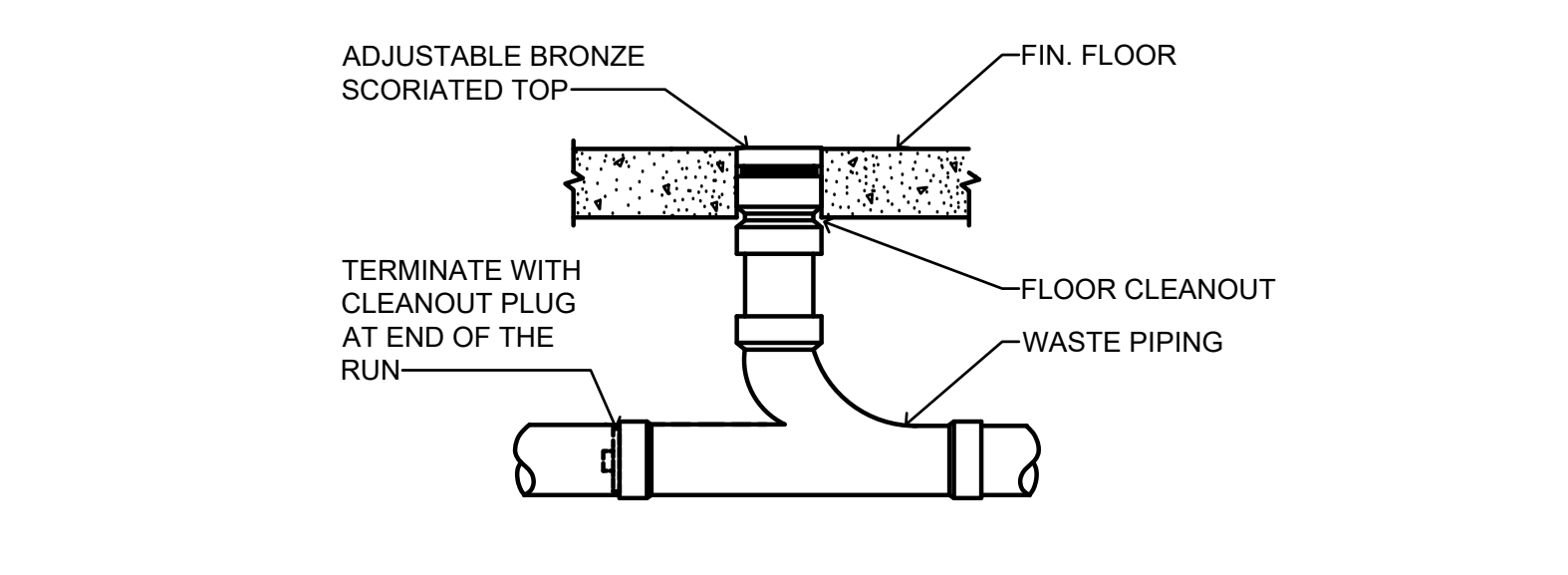
TYPICAL UNISTRUT HANGER DETAIL
NO SCALE

- NOTES:
- HANGER SPACING TO BE AS SPECIFIED.
 - MANUFACTURER'S SADDLE LABEL WITH LOGO STICKER SHALL BE APPLIED TO EACH SADDLE AND SHALL BE VISIBLE FOR VERIFICATION OF PROPER INSTALLATION.
 - REFER TO THE SPECIFICATIONS FOR COATING REQUIREMENTS



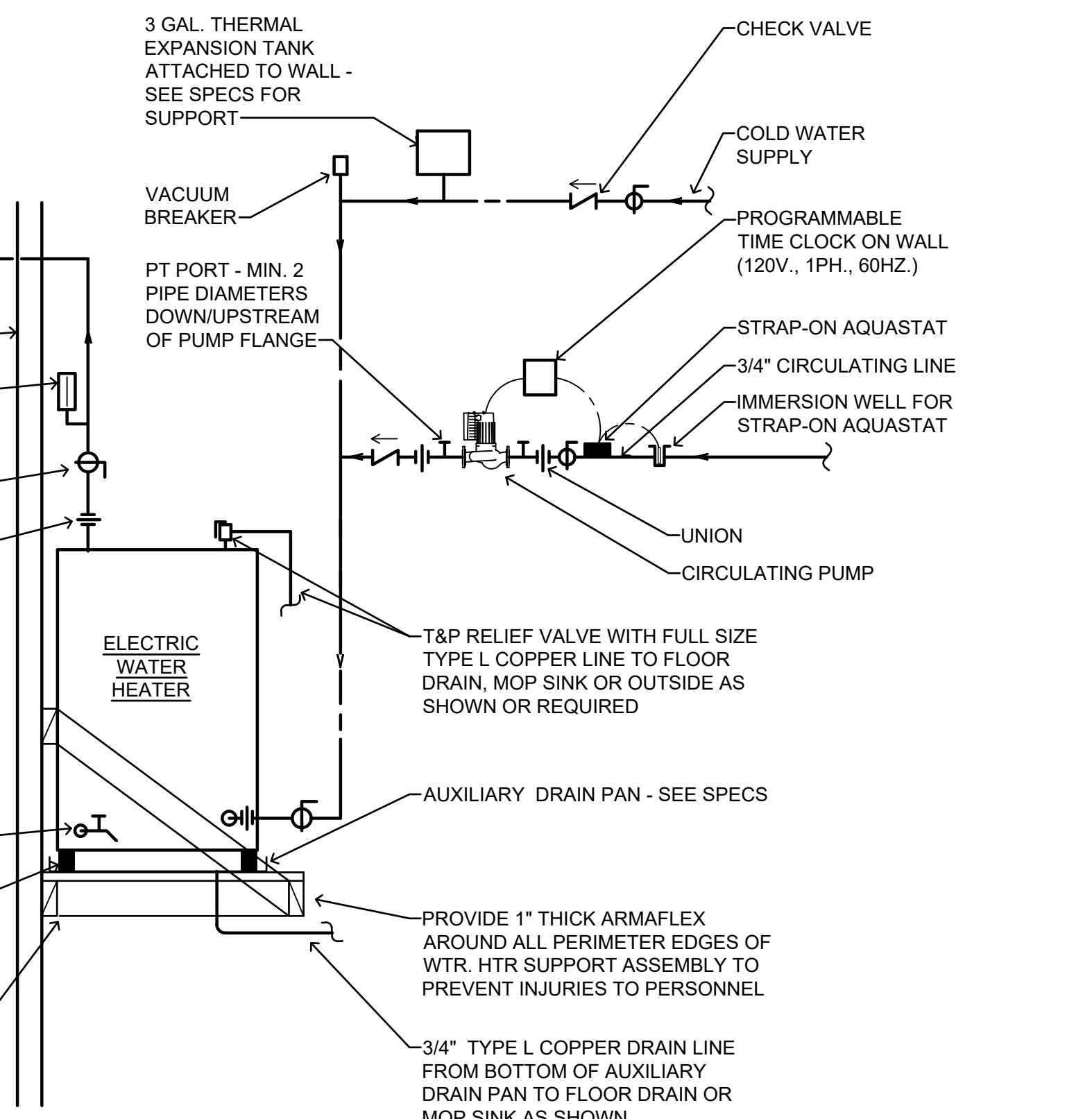
TYPICAL MULTIPLE PIPES HANGER DETAIL
NO SCALE

- NOTES:
- HANGER SPACING TO BE AS SPECIFIED
 - MANUFACTURER'S SADDLE LABEL WITH LOGO STICKER SHALL BE APPLIED TO EACH SADDLE AND SHALL BE VISIBLE FOR VERIFICATION OF PROPER INSTALLATION
 - REFER TO THE SPECIFICATIONS FOR COATING REQUIREMENTS



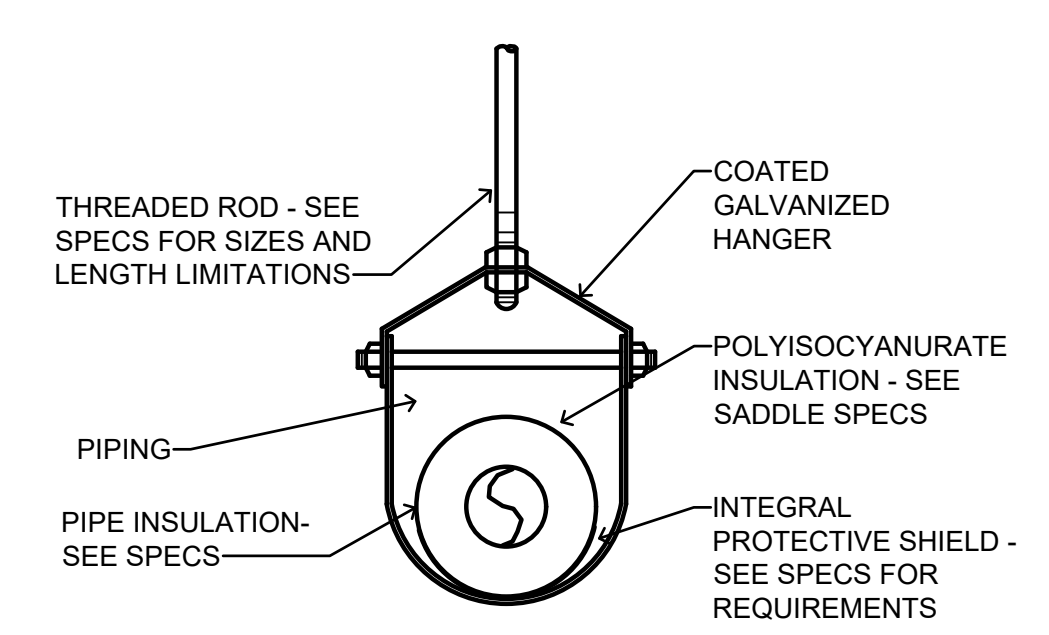
TYPICAL HORIZONTAL/VERTICAL UNISTRUT PIPING SUPPORT DETAIL AT ABOVE CEILING PARTITION
NO SCALE

- NOTES:
- MULTIPLE PIPES SIMILAR.
 - SUPPORT SPACING SHALL BE AS SPECIFIED FOR UNISTRUT ASSEMBLIES.
 - MANUFACTURER'S SADDLE LABEL WITH LOGO STICKER SHALL BE APPLIED TO EACH SADDLE AND SHALL BE VISIBLE FOR VERIFICATION OF PROPER INSTALLATION.
 - TYPICAL UNISTRUT AND HANGER DETAILS INDICATED ARE PREFERRED. THIS DETAIL IS REQUIRED FOR PIPING SUPPORTS WHEN HANGER RODS EXCEED 36" TO STRUCTURE ABOVE CEILING.
 - COORDINATE UNISTRUT ATTACHMENTS/ANCHORS TO WALL WITH ARCHITECT'S SPECIFICATIONS FOR TYPE OF WALL INSTALLED AND PROVIDE ANCHORS/ATTACHMENTS AS REQUIRED.
 - REFER TO THE SPECIFICATIONS FOR COATINGS REQUIRED.



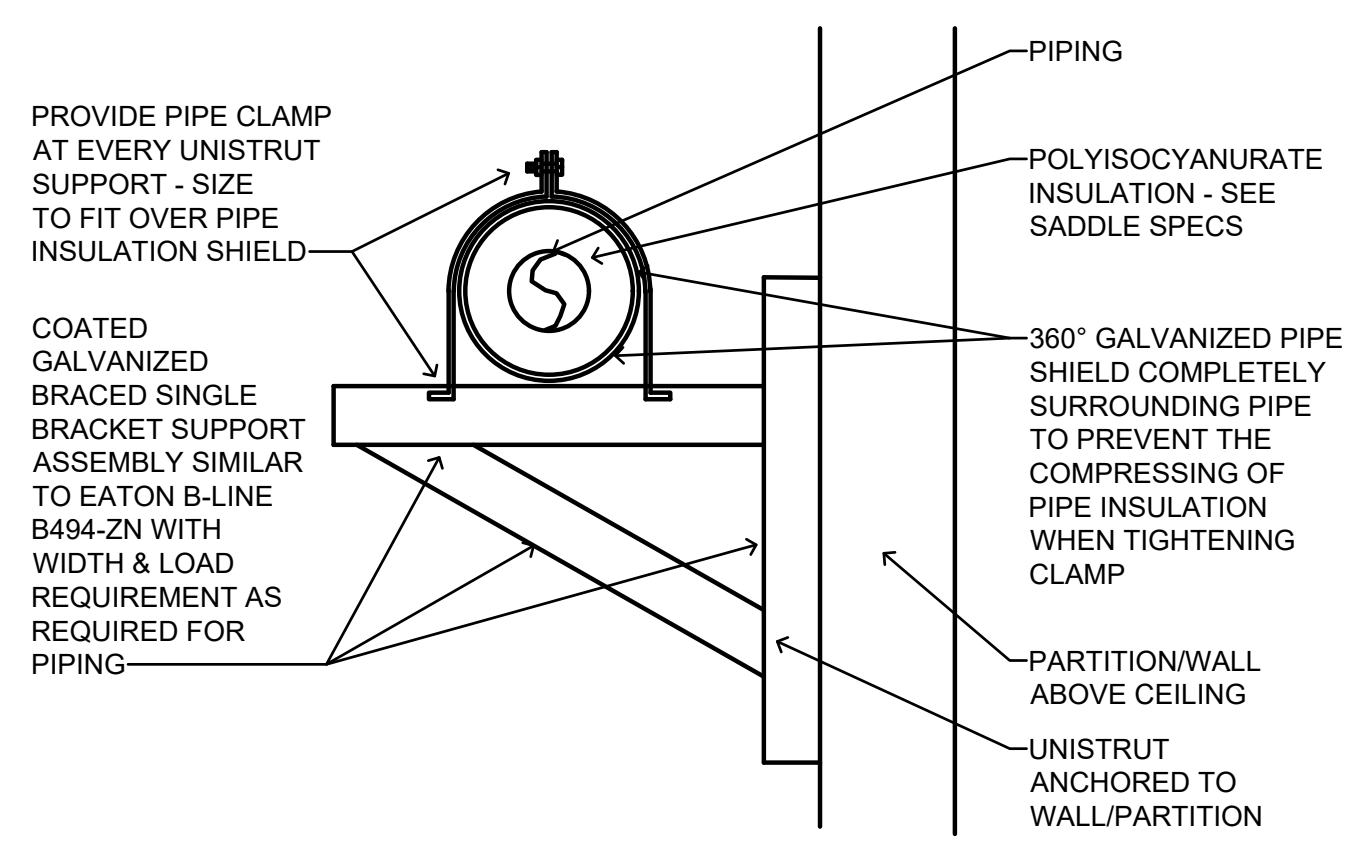
WATER HEATER PIPING CONN. DETAIL
NO SCALE

- NOTES:
- IF THE SPECIFIED OPTIONAL PREFABRICATED STAND IS PROVIDED, CONTRACTOR SHALL INSTALL 1" THICKNESS PAINTED PLYWOOD BETWEEN AUX. DRAIN PAN AND THE PREFABRICATED METAL STAND - PROVIDE TWO COATS BLACK PAINT FOR FLOORWOOD



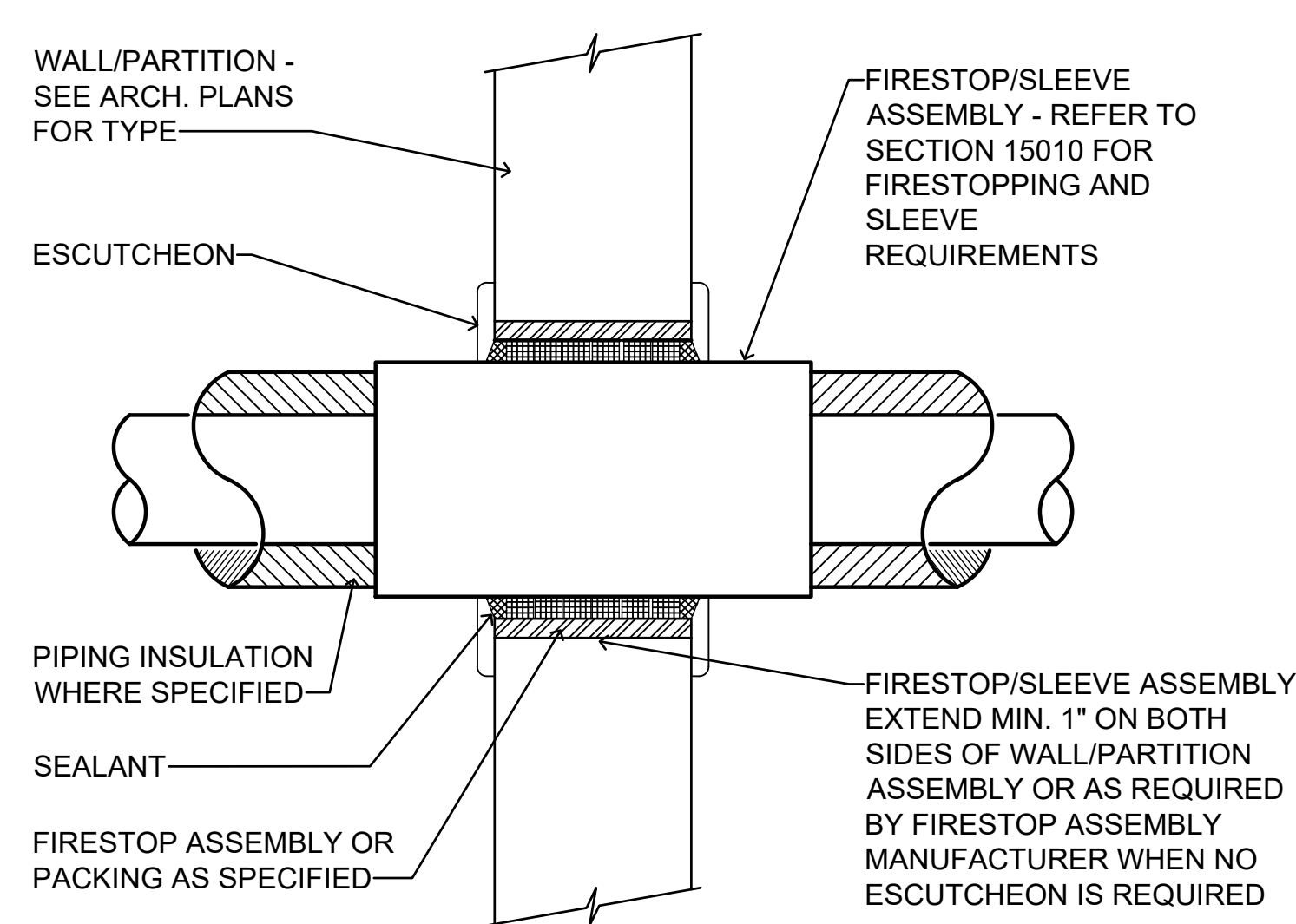
TYPICAL PIPE HANGER DETAIL
NO SCALE

- NOTES:
- HANGER SPACING TO BE AS SPECIFIED.
 - MANUFACTURER'S SADDLE LABEL WITH LOGO STICKER SHALL BE APPLIED TO EACH SADDLE AND SHALL BE VISIBLE FOR VERIFICATION OF PROPER INSTALLATION.
 - REFER TO THE SPECIFICATIONS FOR COATING REQUIREMENTS.



TYPICAL HORIZONTAL/VERTICAL UNISTRUT PIPING SUPPORT DETAIL AT ABOVE CEILING PARTITION
NO SCALE

- NOTES:
- MULTIPLE PIPES SIMILAR.
 - SUPPORT SPACING SHALL BE AS SPECIFIED FOR UNISTRUT ASSEMBLIES.
 - MANUFACTURER'S SADDLE LABEL WITH LOGO STICKER SHALL BE APPLIED TO EACH SADDLE AND SHALL BE VISIBLE FOR VERIFICATION OF PROPER INSTALLATION.
 - TYPICAL UNISTRUT AND HANGER DETAILS INDICATED ARE PREFERRED. THIS DETAIL IS REQUIRED FOR PIPING SUPPORTS WHEN HANGER RODS EXCEED 36" TO STRUCTURE ABOVE CEILING.
 - COORDINATE UNISTRUT ATTACHMENTS/ANCHORS TO WALL WITH ARCHITECT'S SPECIFICATIONS FOR TYPE OF WALL INSTALLED AND PROVIDE ANCHORS/ATTACHMENTS AS REQUIRED.
 - REFER TO THE SPECIFICATIONS FOR COATINGS REQUIRED.



INTERIOR WALL PIPING PENETRATION DETAIL
NOT TO SCALE

- NOTES:
- SEE SPEC SECTION 15010 FOR FIRESTOP AND SLEEVE REQUIREMENTS
 - DETAIL APPLIES TO ALL PIPING.
 - ONLY ONE PIPE PER ASSEMBLY ALLOWED.
 - WHERE PIPING IS EXPOSED IN FINISHED AREAS, PROVIDE ESCUTCHEONS OVER PENETRATIONS AND DELETE REQUIREMENT FOR EXTENDING OF THE SLEEVE/FIRESTOP ASSEMBLY 1" ON EACH SIDE OF THE PARTITION. TERMINATE FLUSH WITH WALL. DO NOT USE SPLIT TYPE ESCUTCHEONS NOR SPLIT TYPE SLEEVES.

GENERAL PLUMBING NOTES

- PROGRESS OR SIMILAR TYPE JOINTS AND FITTINGS ARE NOT ALLOWED.
- THE PLUMBING CONTRACTOR MUST NOT INSTALL THE PIPING INSULATION. ALL PIPING INSULATION WORK MUST BE PROVIDED BY AN INDEPENDENT THIRD PARTY LICENSED AND EXPERIENCED INSULATION SUBCONTRACTOR WHOSE PRIMARY BUSINESS IS THE SALE AND INSTALLATION OF INSULATION MATERIALS IN ACCORDANCE WITH INSULATION MANUFACTURERS' REQUIREMENTS AND THE SPECIFICATIONS.
- ROUGH IN WATER CLOSET AND URINAL FLUSH VALVE SO THAT THE FLUSH TUBE IS VERTICALLY STRAIGHT.
- ADA FIXTURES AND INSTALLATION MUST COMPLY WITH CURRENT ADA STANDARDS FOR ACCESSIBLE DESIGN.
- FLUSH VALVE HANDLE FOR ALL ADA MANUAL FLUSH WATER CLOSETS MUST BE LOCATED ON THE WIDE SIDE OF THE TOILET STALL AS REQUIRED BY CURRENT ADA STANDARDS FOR ACCESSIBLE DESIGN.
- ROUGH-IN ADA WATER CLOSETS 18" FROM FINISHED WALL TO CENTERLINE OF THE WATER CLOSET. MEASURE FROM FACE OF SHORT SIDE OF THE STALL TO THE FINISHED WALL.
- PROVIDE A CAST IRON DEEP SEAL P-TRAP FOR EACH FLOOR DRAIN AND HUB DRAIN WITH TRAP PRIMER AS SPECIFIED.
- ROUTE ALL OVERHEAD WATER PIPING AND WATER PIPING WITHIN NON-MASONRY WALLS WITHIN THE BUILDING INSULATION ENVELOPE. OVERHEAD PIPING MUST BE LOCATED BETWEEN THE ARCHITECTURAL AIR BARRIER LOCATED AT THE BOTTOM OF THE OVERHEAD STRUCTURE AND THE FINISHED CEILING. DO NOT ROUTE OVERHEAD WATER PIPING IN THE ATTIC WHEN IT CAN BE ROUTED BETWEEN THE ARCHITECTURAL AIR BARRIER AND THE FINISHED CEILING.
- ALL WATER PIPING INSTALLED AT BUILDING PERIMETER STUD WALLS MUST BE LOCATED ON THE INTERIOR (WARM) SIDE OF THE BUILDING EXTERIOR WALL INSULATION.
- ALL WATER PIPING SHOWN TO BE IN EXTERIOR PERIMETER MASONRY WALLS MUST BE LOCATED WITHIN THE RESPECTIVE UNFILLED MASONRY BLOCK CELLS. DO NOT INSTALL WATER PIPING WHERE THE STRUCTURAL OR ARCHITECTURAL PLANS INDICATE THE MASONRY TO BE FILLED WITH CONCRETE.
- PROVIDE VALVE(S) WITH HOSE END VALVES AS REQUIRED TO ALLOW FOR DRAINAGE OF ALL RISERS AND OTHER SYSTEM LOW POINTS.
- COORDINATE ALL PIPING RUNS WITH THE ELECTRICAL PLANS AND THE ELECTRICAL CONTRACTOR. DO NOT ROUTE ANY PIPING OVER ELECTRICAL PANELS, TRANSFORMERS, SWITCHGEAR, ETC. MAINTAIN CLEARANCES AS REQUIRED BY RESPECTIVE CODES.
- ALL PIPING AND FITTINGS ROUTED WITHIN RETURN AIR PLenums, RETURN AIR PLATFORMS, OR WITHIN FIRE RATED PARTITIONS AND ENCLOSURES MUST BE CAST IRON, PVDF (FOR WASTE PIPING) OR COPPER FOR WATER PIPING. SEE SPECS.
- PLUMBING VENTS MUST TERMINATE A MINIMUM OF 10'-0" HORIZONTALLY FROM ALL ROOF MOUNTED HVAC OUTSIDE AIR INTAKES.
- PROVIDE A READILY ACCESSIBLE CLEANOUT AT OR NEAR THE BASE OF EACH WASTE AND VENT STACK PER INTERNATIONAL PLUMBING CODE AND THE SPECIFICATIONS. CLEANOUTS MUST BE HIGH ENOUGH TO CLEAR THE TILE BASE WITHOUT CUTTING OF THE BASE AND MUST BE LOCATED WITHIN THE SPECIFIED PIPING ENCLOSURE FOR ALL WALL MOUNTED LAVATORIES AND WALL MOUNTED HAND SINKS WHEN POSSIBLE.
- LOCATE CLEANOUTS TO THE SIDE OF THE WATER CLOSETS WITH A MINIMUM CLEARANCE OF 6" FROM THE ROUGH-IN OF THE WATER CLOSETS. PREFERRED LOCATION IS IN ADA STALL TO ALLOW FOR ADDITIONAL ACCESS SPACE.
- EXTREME CARE MUST BE TAKEN WHEN ROUGHING IN CLEANOUTS AT EACH WALL MOUNTED LAVATORY AND HAND SINK. CLEANOUTS MUST BE LOCATED WITHIN THE SPECIFIED LAV. SHIELD PIPING COVER WHENEVER POSSIBLE.
- ALL CLEANOUTS MUST BE ROUGHED IN HIGH ENOUGH TO CLEAR THE ARCHITECTURAL BASE MOLDING WITHOUT CUTTING THE BASE MOLDING.
- WATER SUPPLY SYSTEM IS DESIGNED FOR A STATIC PRESSURE OF 50 TO 75 PSI. GAUGE WATER SUPPLY PRESSURE AND VERIFY PRESSURE IS WITHIN THE SPECIFIED LIMITS. PROVIDE WATER PRESSURE REDUCING VALVE AS REQUIRED TO MAINTAIN WATER PRESSURE WITHIN DESIGN LIMITS.
- PROVIDE A BALL VALVE ON ONE SIDE OF EVERY DIELECTRIC UNION AS REQUIRED TO FACILITATE ITS REMOVAL.
- TOPS OF ALL OUTSIDE CLEANOUTS MUST BE FLAT AND BROUGHT TO GRADE AND FINISHED FLOORS IN 12x12x12 CONCRETE PAD. SEE DETAIL.
- ALL WALL HYDRANTS MUST BE LOCATED 32" TO THE BOTTOM OF THE WALL HYDRANT ENCLOSURE (NOT THE EXTERIOR PERIMETER FLANGE). COORDINATE FINAL HEIGHT OF INDOOR WALL HYDRANTS WITH ARCHITECTURAL CABINET PLANS PRIOR TO ROUGHING IN. DO NOT LOCATE WITHIN A CABINET UNLESS DIRECTED BY THE ARCHITECT.
- WATER HAMMER ARRESTORS MUST BE INSTALLED AT ALL SOLENOID, REMOTE OPERATED OR QUICK CLOSING VALVES AND AT EACH PLUMBING FIXTURE OR BATTERY OF PLUMBING FIXTURES. SEE SPECS FOR ADDITIONAL REQUIREMENTS.
- ALL HUB DRAINS THAT RISE THROUGH RETURN AIR PLATFORMS MUST BE INSULATED CAST IRON OR PVDF AND TERMINATED 8" ABOVE THE RETURN AIR PLATFORM AND SEALED AIR TIGHT. DO NOT USE PVC PIPING IN THE RETURN AIR PLATFORM. COORDINATE PIPING LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
- ALL PIPING WITH VALVES AND OTHER ITEMS THAT MAY REQUIRE MAINTENANCE, SERVICE OR REPLACEMENT, MUST BE LOCATED NO MORE THAN 12" ABOVE THE FINISHED CEILING AND NO MORE THAN 14'-0" ABOVE FINISH FLOOR IN AREAS WITHOUT CEILINGS, TO ENSURE PROPER ACCESS. PROVIDE DROPS IN PIPING AS REQUIRED FOR COMPLIANCE.
- IPC 704.1 REQUIRES ALL DRAINAGE PIPING UPSTREAM OF A GREASE INTERCEPTOR TO BE SLOPED AT 1/4" PER FOOT (2% SLOPE).
- DEMOLISH ALL EXISTING WALLS AS REQUIRED TO INSTALL NEW ITEMS AS SHOWN AND/OR SPECIFIED. RECONSTRUCTION AND REPAIR OF DEMOLISHED WALLS MUST BE AS DIRECTED BY THE ARCHITECT. COORDINATE DEMOLITION AND REPAIRING/REBUILDING OF EXISTING WALLS WITH GENERAL CONTRACTOR PRIOR TO BID TO ALLOW FOR INSTALLATION OF CARRIERS, FIXTURES, PIPING, ETC. AS REQUIRED AND AS APPLICABLE.

LATHAN McKEE ARCHITECTS

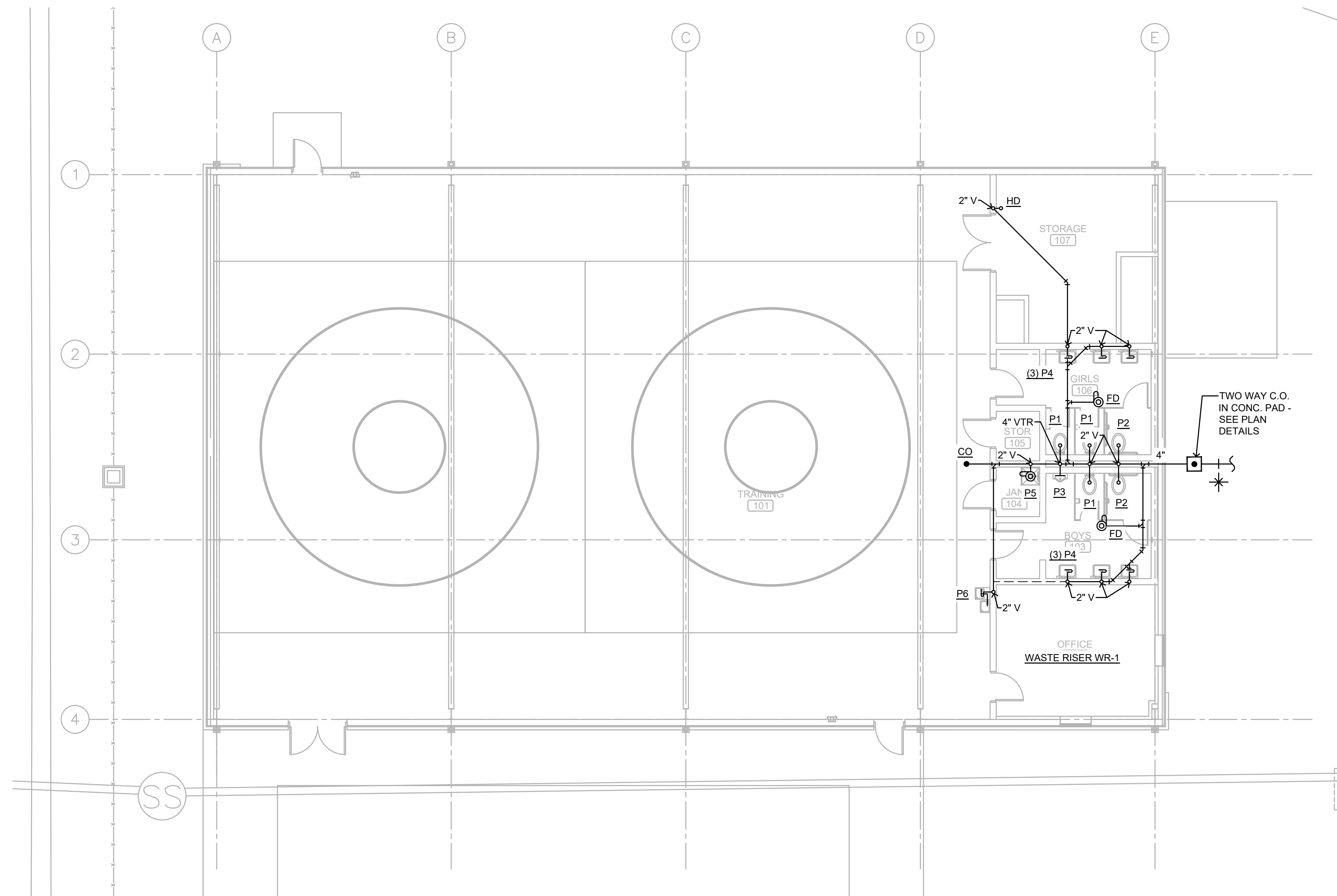
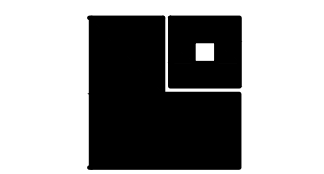
NEW ATHLETIC TRAINING FACILITY AT SARALAND HIGH SCHOOL FOR THE SARALAND CITY SCHOOLS SARALAND, ALABAMA

PROJ. MGR.: T. ZGOUVAS
DRAWN: C. WARD
DATE: 04.03.2026
REVISIONS:

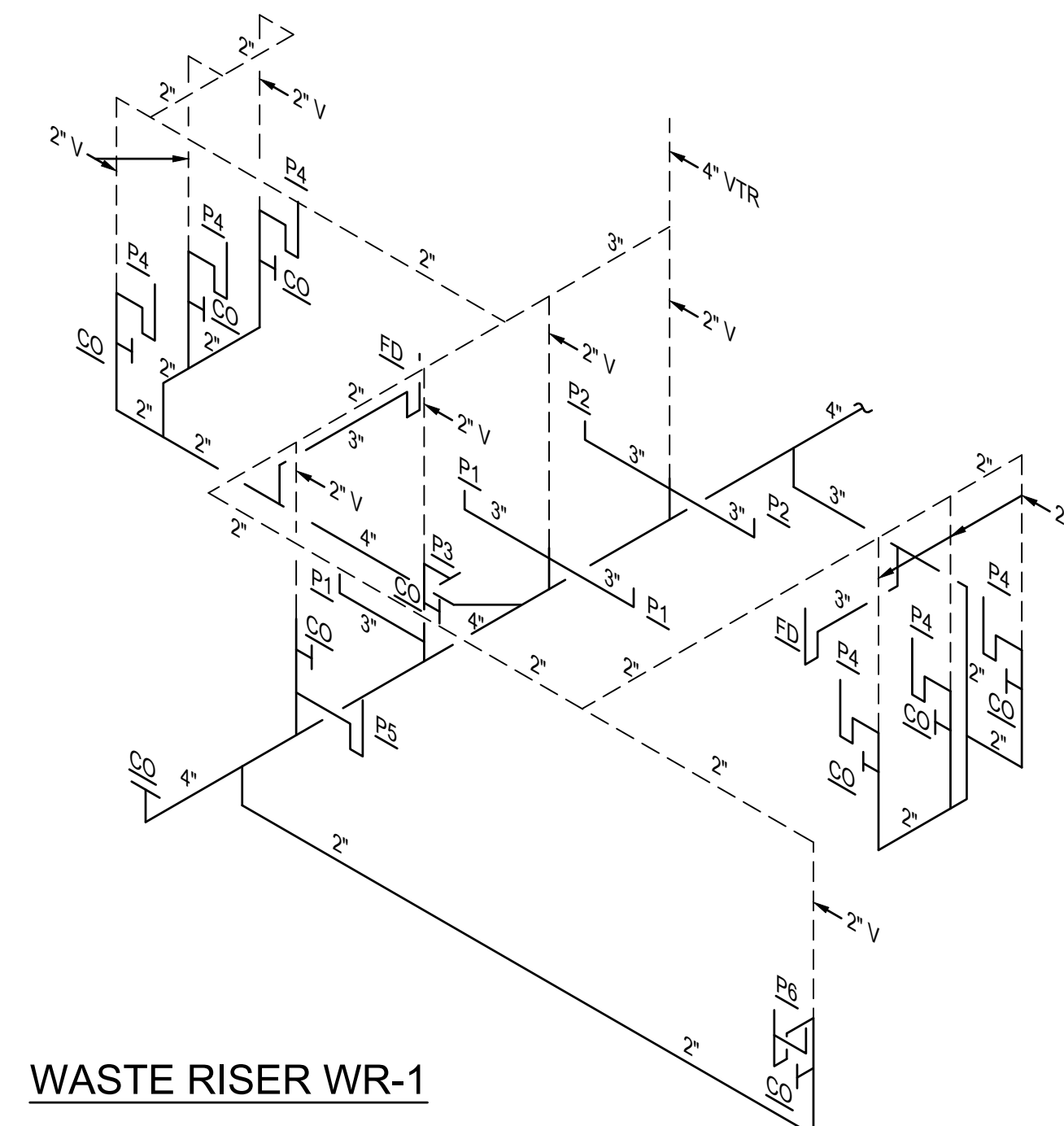
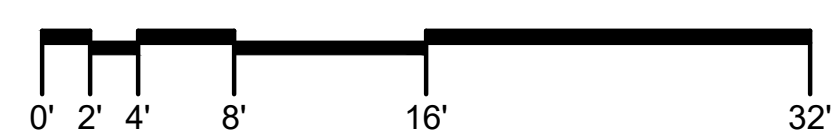
SHEET TITLE:
PLBG. SCHEDULES, DETAILS & NOTES

JOB NO. 25-173
SHEET NO. P1

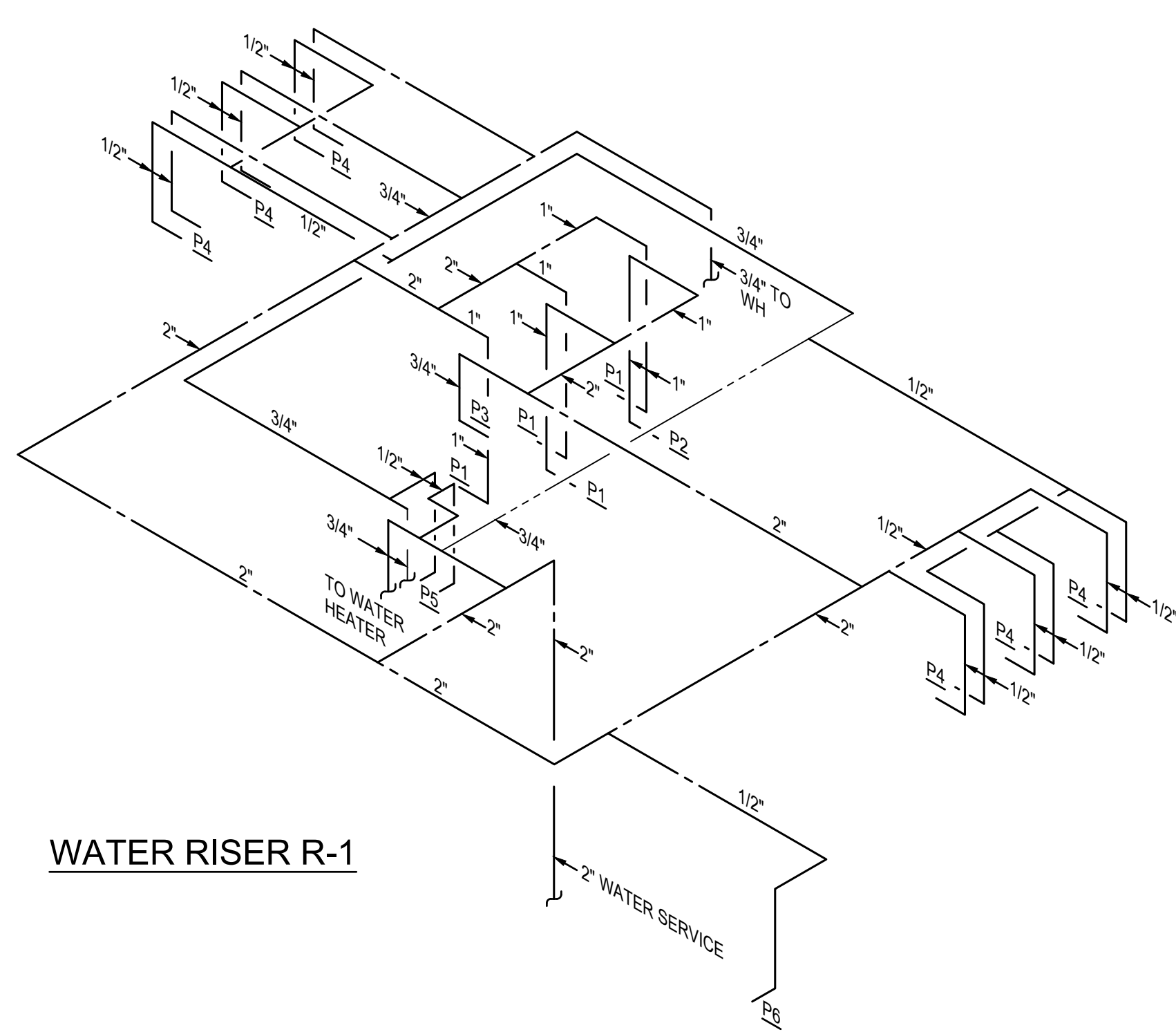
ZGOUVAS, IRING & ASSOCIATES
CONSULTING ENGINEERS
800 S. McDONOUGH STREET
MONTGOMERY, AL 36104
334.263.4408
25A PROJECT NUMBER 26-000



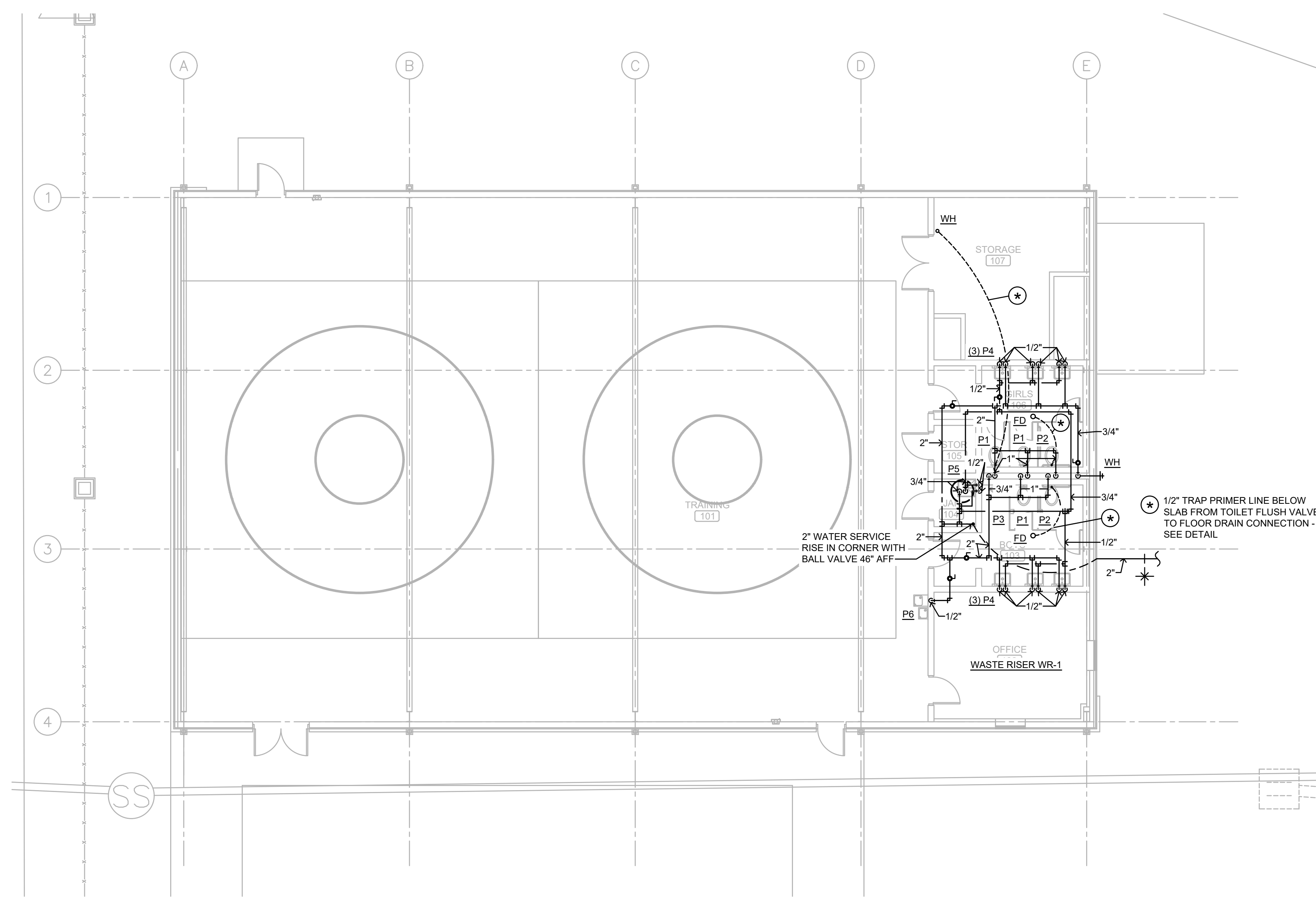
SHOWING WASTE PIPING
PLBG. FLOOR PLAN
SCALE: 1/8" = 1'-0"



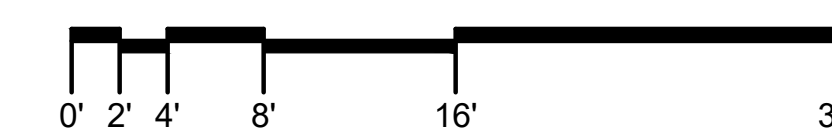
WASTE RISER WR-1



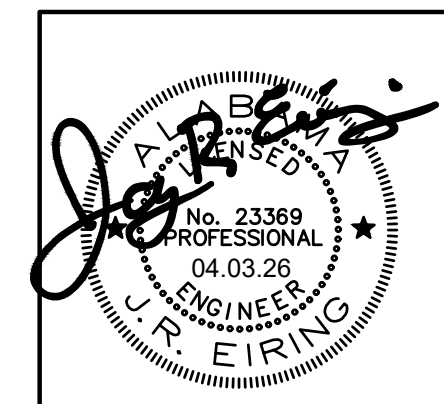
WATER RISER R-1



SHOWING WATER PIPING
PLBG. FLOOR PLAN
SCALE: 1/8" = 1'-0"



ZGOUVAS, EIRING & ASSOCIATES
CONSULTING ENGINEERS
800 S. McDONOUGH STREET
MONTGOMERY, AL. 36104
334.263.4408
ZEA PROJECT NUMBER 26-000



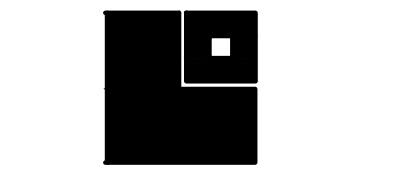
SHEET TITLE:
PLBG. FLOOR PLANS

PROJ. MGR.: T. ZGOUVAS
DRAWN: C. WARD
DATE: 04.03.2026
REVISIONS

JOB NO. 25-173

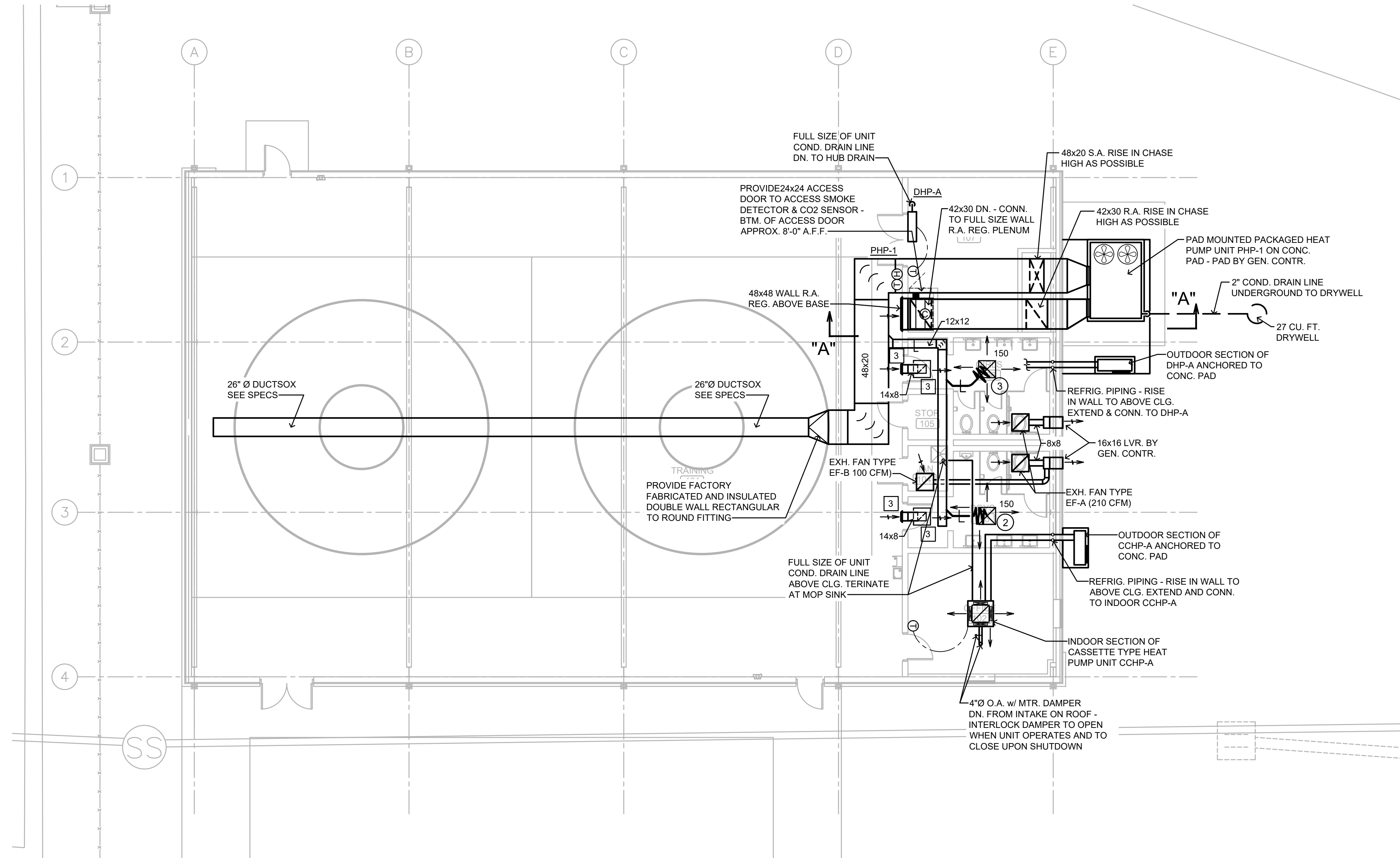
SHEET NO:

P2

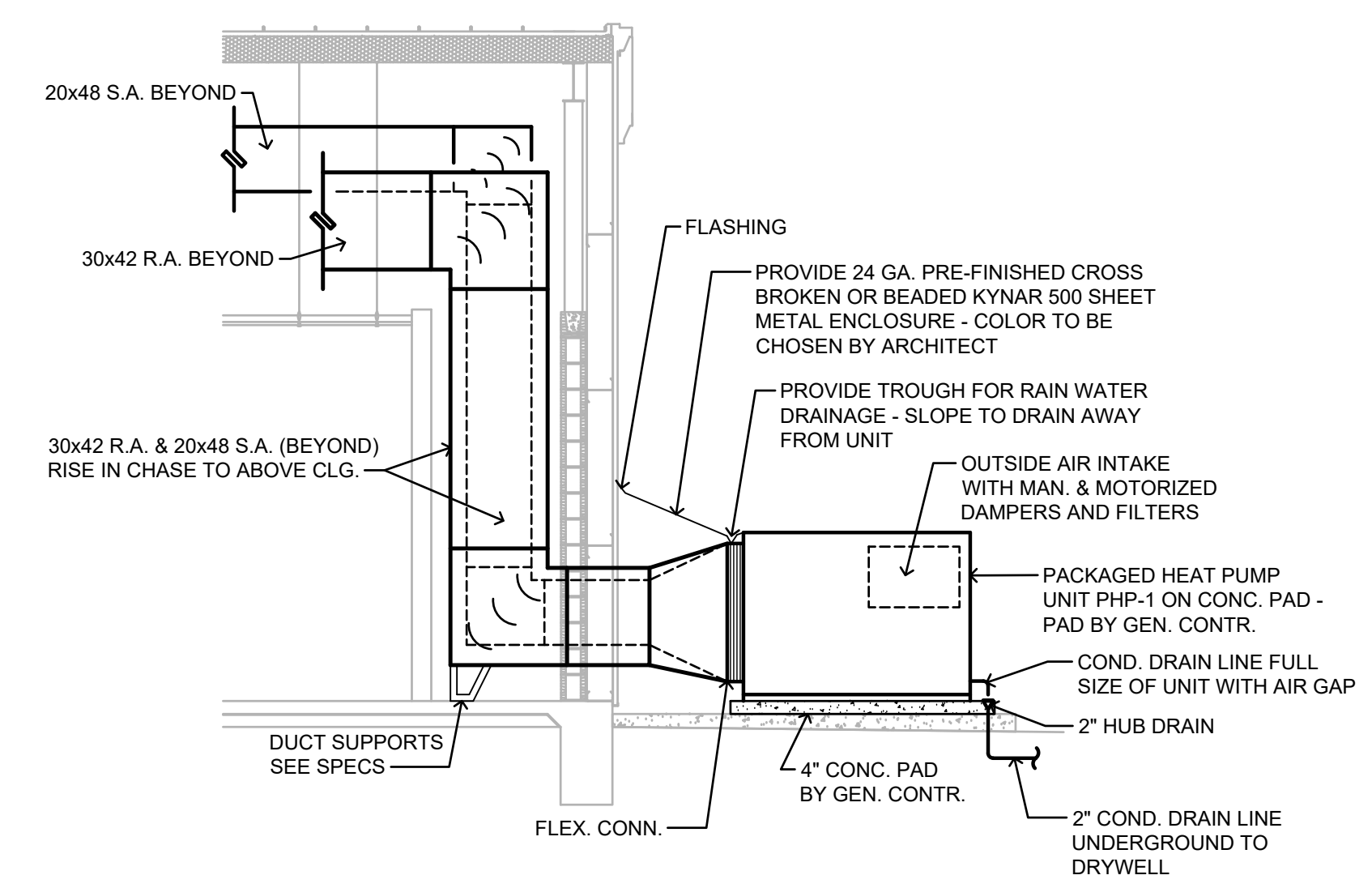


LEGEND

	BAROMETRIC DAMPER		CEILING DIFFUSER DESIGNATOR
	MANUAL VOLUME DAMPER (MVD)		RETURN AIR GRILLE/REGISTER
	MOTORIZED DAMPER (MD)		EXHAUST AIR GRILLE/REGISTER
	SMOKE DETECTOR		AIR TRANSFER DUCT
	DUCT MOUNTED CO2 SENSOR		AUXILIARY DRAIN
	CEILING DIFFUSER		THERMOSTAT
	RETURN AIR GRILLE/REGISTER		REMOTE TEMPERATURE SENSOR
	EXHAUST AIR GRILLE/REGISTER		HUMIDISTAT
	DUCT W/ RECTANGULAR SIZE		CO2 SENSOR
	RECTANGULAR SUPPLY DUCT TURNING UP		ABOVE FINISH FLOOR
	RECTANGULAR SUPPLY AIR DUCT TURNING DOWN		CEILING DIFFUSER
			CEILING OR COOLING CONNECT OR CONNECTION
			FIRE DAMPER
			OUTSIDE AIR
			RETURN AIR
			SUPPLY AIR
			RECTANGULAR RETURN AIR OR EXHAUST DUCT TURNING UP
			RECTANGULAR RETURN AIR OR EXHAUST DUCT TURNING DOWN



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



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

NEW ATHLETIC TRAINING FACILITY
AT
SARALAND HIGH SCHOOL
FOR THE
SARALAND CITY SCHOOLS
SARALAND, ALABAMA



SHEET TITLE:
HVAC FLOOR PLAN
AND SECTION

PROJ. MGR.: T. ZGOUVAS
DRAWN: C. WARD
DATE: 04.03.2026

REVISIONS

JOB NO. 25-173
SHEET NO.

M1



PACKAGED PAD MOUNTED HEAT PUMP UNITS SCHEDULE

UNIT TYPE	PHP-1
MINIMUM AIR CFM	6000
MINIMUM OUTSIDE AIR SETPOINT/MAX. CO2 SETPOINT/MAX. O.A. (ECONOMIZER) CFM	370 / 950 / 6000
APPROXIMATE EXTERNAL STATIC PRESSURE - IN. WATER COLUMN	0.80
APPROXIMATE INDOOR ECM FAN MOTOR HP-POWER	6.0 HP - 480V., 3PH., 60HZ.
MINIMUM TOTAL COOLING CAPACITY AT AHRI CONDITIONS-BTU/HR	180,000
MINIMUM HEATING CAPACITY (COMPRESSOR ONLY) AT 70°F	
INDOOR TEMPERATURE AND 47°F OUTDOOR TEMPERATURE-BTU/HR	160,000
MINIMUM AUXILIARY ELECTRIC RESISTANCE HEAT - KW	54.0
NUMBER OF CONTROL STEPS	TWO
POWER	480V., 3PH., 60HZ.
APPROXIMATE COMPRESSOR MOTOR(S) F.L.A. - POWER	26.0 - 480V., 3PH., 60HZ.
APPROXIMATE OUTDOOR SECTION FAN MOTOR(S) F.L.A. - POWER	3.5 - 480V., 1PH., 60HZ.
MINIMUM ENERGY EFFICIENCY RATING AT AHRI CONDITIONS	11.5
MINIMUM HSPF / COP	3.5
APPROXIMATE MCA	110.0
APPROXIMATE MOCP	125.0

NOTES:

- ALL UNIT MUST BE FACTORY WIRED FOR SINGLE POINT POWER CONNECTIONS (FAN AND HEATER).
- 480 VOLT, 3 PHASE POWER IS BEING PROVIDED BY ELECTRICAL TO THE HEAT PUMP UNIT.
- EER RATINGS BASED ON AHRI 340/360
- COP RATINGS BASED ON AHRI 340/360 AT 47°F DB/43°F WB
- EACH UNIT MUST BE PROVIDED WITH A REFRIGERANT HOT GAS REHEAT COIL, RELATED MODULATING HOT GAS REHEAT COIL VALVE AND LOCATED IN THE REHEAT POSITION. COIL SHALL BE PROVIDED COMPLETE WITH REFRIGERANT PIPING, PIPE INSULATION, VALVES, CONTROLS, ETC., ALL AS REQUIRED FOR HUMIDITY CONTROL. PROVIDE MANUAL REFRIGERANT ISOLATION VALVES FOR HOT GAS AND LIQUID LINES - FURNISH FOR APPROVAL DETAILED REFRIGERANT PIPING CONN. DIAGRAM AND CONTROL WIRING DIAGRAM - SEE SPECS FOR ADDITIONAL DETAILED REQUIREMENTS.
- UNIT MUST HAVE MINIMUM OF TWO COMPRESSORS OR 2-STAGES OF COOLING AS REQUIRED BY ASHRAE 90.1
- UNIT MUST BE PROVIDED WITH TWO SPEED CONTROL OF THE SUPPLY FAN SUCH THAT THE FAN AIRFLOW WILL VARY AS A FUNCTION OF LOAD AS REQUIRED BY ASHRAE 90.1.

EXHAUST/RETURN AIR REGISTER SCHEDULE

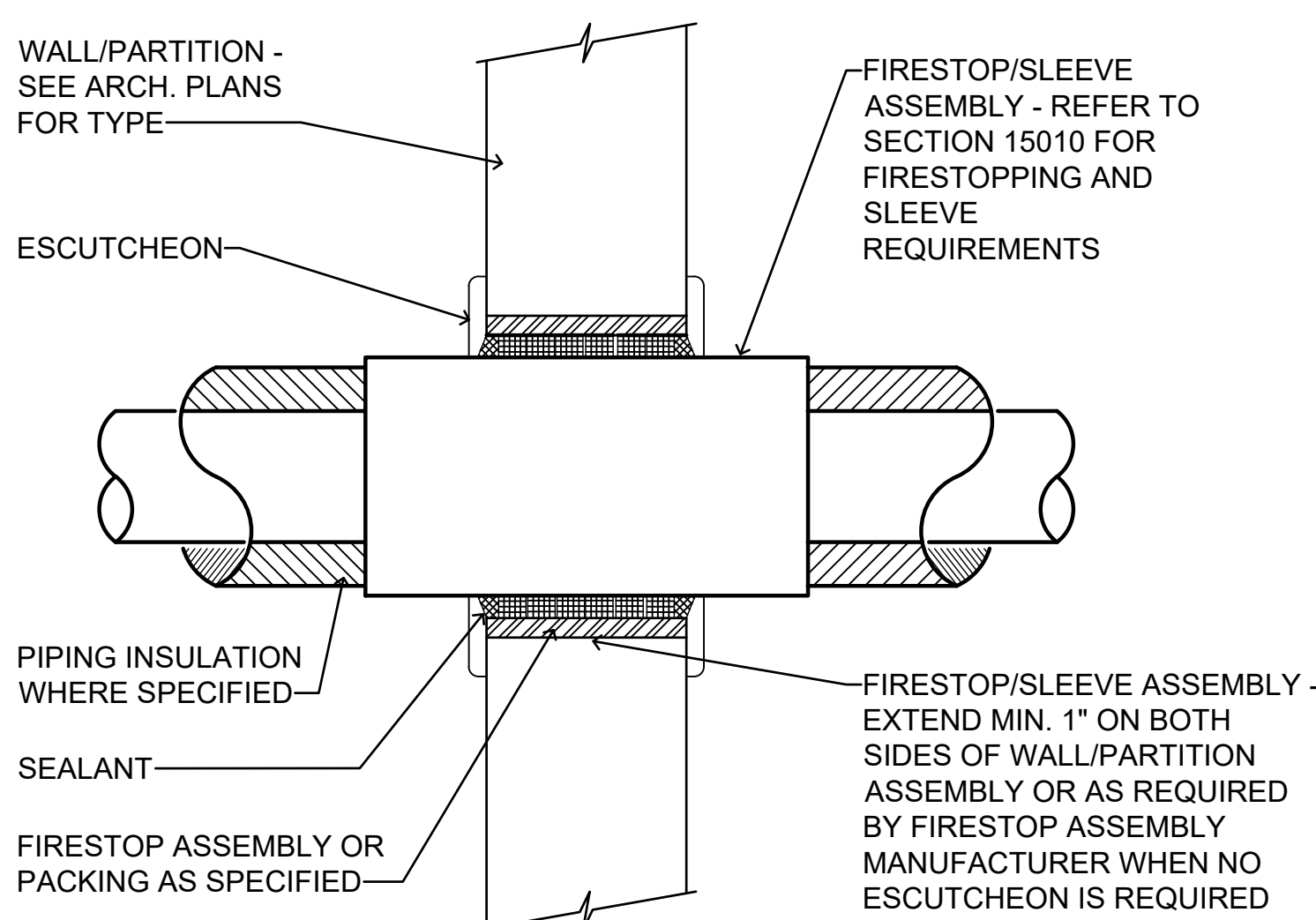
SYMBOL	CFM RANGE	SIZE - IN. x IN.	DESCRIPTION	MAXIMUM NC RATING	BRANCH DUCT SIZE
1	0 - 140	9x9	CEILING EXH. OR RETURN REG.	20	9x6
2	141 - 240	12x12	CEILING EXH. OR RETURN REG.	20	12x7
3	241 - 340	14x14	CEILING EXH. OR RETURN REG.	20	14x7
4	341 - 460	16x16	CEILING EXH. OR RETURN REG.	20	16x9
5	461 - 600	18x18	CEILING EXH. OR RETURN REG.	20	18x10
6	601 - 760	20x20	CEILING EXH. OR RETURN REG.	20	20x12
7	761 - 940	24x24	CEILING EXH. OR RETURN REG.	20	24x12
8	941 - 1200	30x24	CEILING EXH. OR RETURN REG.	20	24x14
9	1201 - 1400	36x24	CEILING EXH. OR RETURN REG.	20	28x14

NOTES

- RUNOUTS/BRANCH DUCTS SHALL BE AS SCHEDULED ABOVE UNLESS NOTED OTHERWISE ON THE PLANS.
- 1) & 2) SHALL BE IN INTEGRAL 48x24 METAL CEILING PANEL AS SPECIFIED. ALL OTHERS SHALL BE IN INTEGRAL 24x24 METAL CEILING PANEL AS SPECIFIED.
- CONTRACTOR SHALL INSULATE THE BACK SIDE OF CEILING MOUNTED EXHAUST & RETURN AIR GRILLES/REGISTERS WITH 1" THICKNESS EXTERNAL DUCT INSULATION WITH CHARACTERISTICS SPECIFIED FOR EXTERNAL DUCT INSULATION.

CEILING CASSETTE TYPE HEAT PUMP UNIT SCHEDULE

UNIT TYPE	CCHP-A
MINIMUM TOTAL COOLING CAP. AT A.R.I. CONDITIONS - BTU/HR	18,000
MINIMUM HEATING CAP. (COMPRESSOR ONLY) AT 70°F INDOOR & 47°F AMBIENT - BTU/HR	19,000
INDOOR FAN CFM AT HIGH SPEED (WET COIL)	560
OUTSIDE AIR CFM	35
INDOOR UNIT MCA - POWER	1.5 A - 208 V., 1 PH., 60 HZ.
OUTDOOR UNIT MCA (COMPRESSOR AND COND. FAN) - POWER	11.0 A - 208 V., 1 PH., 60 HZ.
OUTDOOR UNIT MOCP	28.0 A - 208 V., 1 PH., 60 HZ.
MINIMUM HSPF AT AHRI 210/240 CONDS.	9.2
MINIMUM S.E.E.R. AT AHRI 210/240 CONDS	25.0



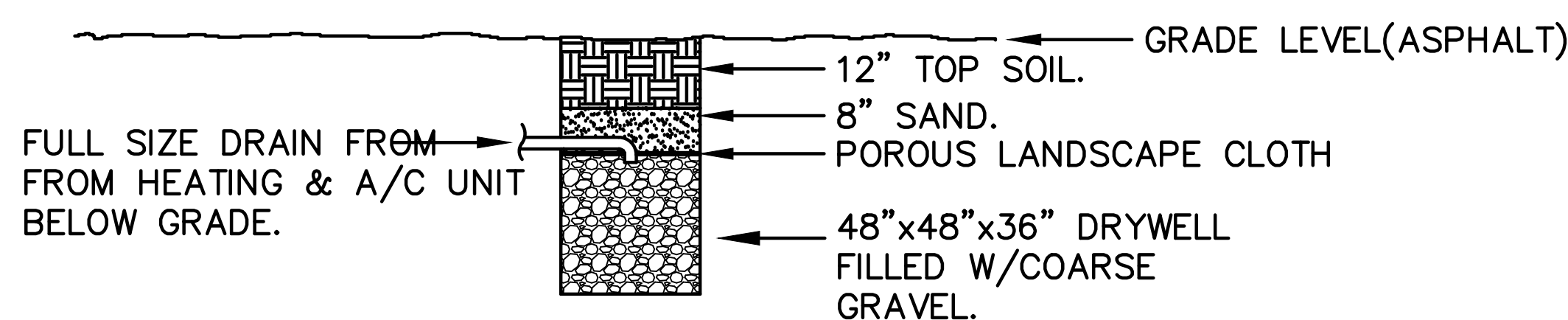
INTERIOR WALL PIPING PENETRATION DETAIL

NOT TO SCALE

- NOTES:
- SEE SPEC SECTION 15010 FOR FIRESTOP AND SLEEVE REQUIREMENTS
 - DETAIL APPLIES TO ALL PIPING.
 - ONLY ONE PIPE PER ASSEMBLY ALLOWED.
 - WHERE PIPING IS EXPOSED IN FINISHED AREAS, PROVIDE ESCUTCHEONS OVER PENETRATIONS AND DELETE REQUIREMENT FOR EXTENDING OF THE SLEEVE/FIRESTOP ASSEMBLY 1" ON EACH SIDE OF THE PARTITION. TERMINATE FLUSH WITH WALL. DO NOT USE SPLIT TYPE ESCUTCHEONS NOR SPLIT TYPE SLEEVES.

WALL MOUNTED DUCTLESS HEAT PUMP UNIT SCHEDULE

UNIT TYPE	DHP-A
MINIMUM TOTAL COOLING CAP. AT A.R.I. CONDITIONS - BTU/HR	12,000
MINIMUM HEATING CAP. (COMPRESSOR ONLY) AT 70°F INDOOR & 47°F AMBIENT - BTU/HR	14,000
INDOOR FAN CFM AT HIGH SPEED (WET COIL)	380
INDOOR UNIT MCA - POWER	1.5 A - 208 V., 1 PH., 60 HZ.
OUTDOOR UNIT MCA (COMPRESSOR AND COND. FAN) - POWER	11.0 A - 208 V., 1 PH., 60 HZ.
OUTDOOR UNIT MOCP (COMPRESSOR AND COND. FAN) - POWER	28.0 A - 208 V., 1 PH., 60 HZ.
MINIMUM HSPF AT AHRI 210/240 CONDS.	10.2
MINIMUM S.E.E.R. AT AHRI 210/240 CONDS	20.8
BASIS OF DESIGN	mitsubishi PKA / PUZ



DRYWELL DETAIL

NO SCALE

FANS SCHEDULE

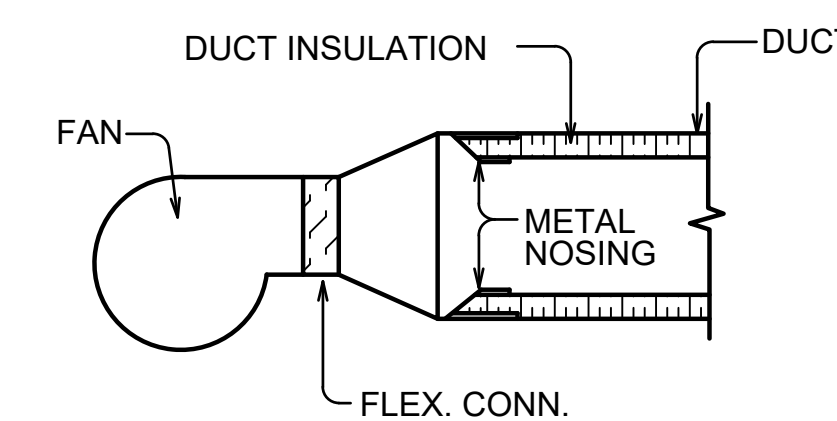
FAN TYPE	EF-A	EF-B
C.F.M.	210	100
MINIMUM FAN SIZE - INCHES	8.0	8.0
APPROX. FAN ROOF/WALL OPENING - INCHES	N/A	N/A
MAXIMUM FAN SPEED - RPM	1050	1050
APPROX. EXTERNAL STATIC PRESSURE - IN. OF WATER	.30	.35
MINIMUM FAN MOTOR H.P. - POWER	84 WATTS - 120V, 1PH., 60 HZ.	84 WATTS - 120V, 1PH., 60HZ.
CONTROL INTERLOCK	LIGHTING CIRCUIT	LIGHTING CIRCUIT
DESCRIPTION	CEILING MOUNTED, CENTRIFUGAL, DIRECT DRIVEN, ECM	CEILING MOUNTED, CENTRIFUGAL, DIRECT DRIVEN, ECM

CEILING DIFFUSER SCHEDULE

SYMBOL	CFM RANGE	NECK SIZE INCHES	FACE SIZE INCHES	BRANCH DUCT SIZE	MAXIMUM NC VALUE	BASIS OF DESIGN
1	10 - 95	6" ROUND	24x24	6"Ø	20	TITUS TMS
2	100 - 180	8" ROUND	24x24	8"Ø	20	TITUS TMS
3	185 - 270	10" ROUND	24x24	10"Ø	20	TITUS TMS
4	275 - 400	12" ROUND	24x24	12"Ø	20	TITUS TMS
5	405 - 530	14" ROUND	24x24	14"Ø	20	TITUS TMS
6	535 - 625	15" ROUND	24x24	15"Ø	20	TITUS TMS

NOTES

- RUNOUTS/BRANCH DUCTS SHALL BE AS SCHEDULED ABOVE UNLESS NOTED OTHERWISE ON THE PLANS
- CONTRACTOR SHALL INSULATE THE EXTERIOR (BACK SIDE OF DIFFUSER PANEL) WITH 1" THICKNESS EXTERNAL DUCT INSULATION WITH CHARACTERISTICS SPECIFIED FOR EXTERNAL DUCT INSULATION.



TYPICAL DUCT LINER INTERRUPTION DETAIL

NOT TO SCALE

- NOTE !! THIS DETAIL APPLIES TO FIRE DAMPER INSTALLATION, WHERE DUCTS CONNECT TO FAN SECTION, ANYWHERE BARE DUCT LINER PROTRUDES INTO THE AIRSTREAM, ANY POINT WHERE LINED DUCT IS PRECEDED BY UNLINED DUCT, BARE DUCT INSULATION EDGES THAT ARE EXPOSED IN THE RETURN AIR PLENUM, ETC. - SEE SPECS FOR ADDITIONAL REQUIREMENTS

PHP-1 REFRIGERANT, OUTDOOR AIR AND EXHAUST CALCULATIONS

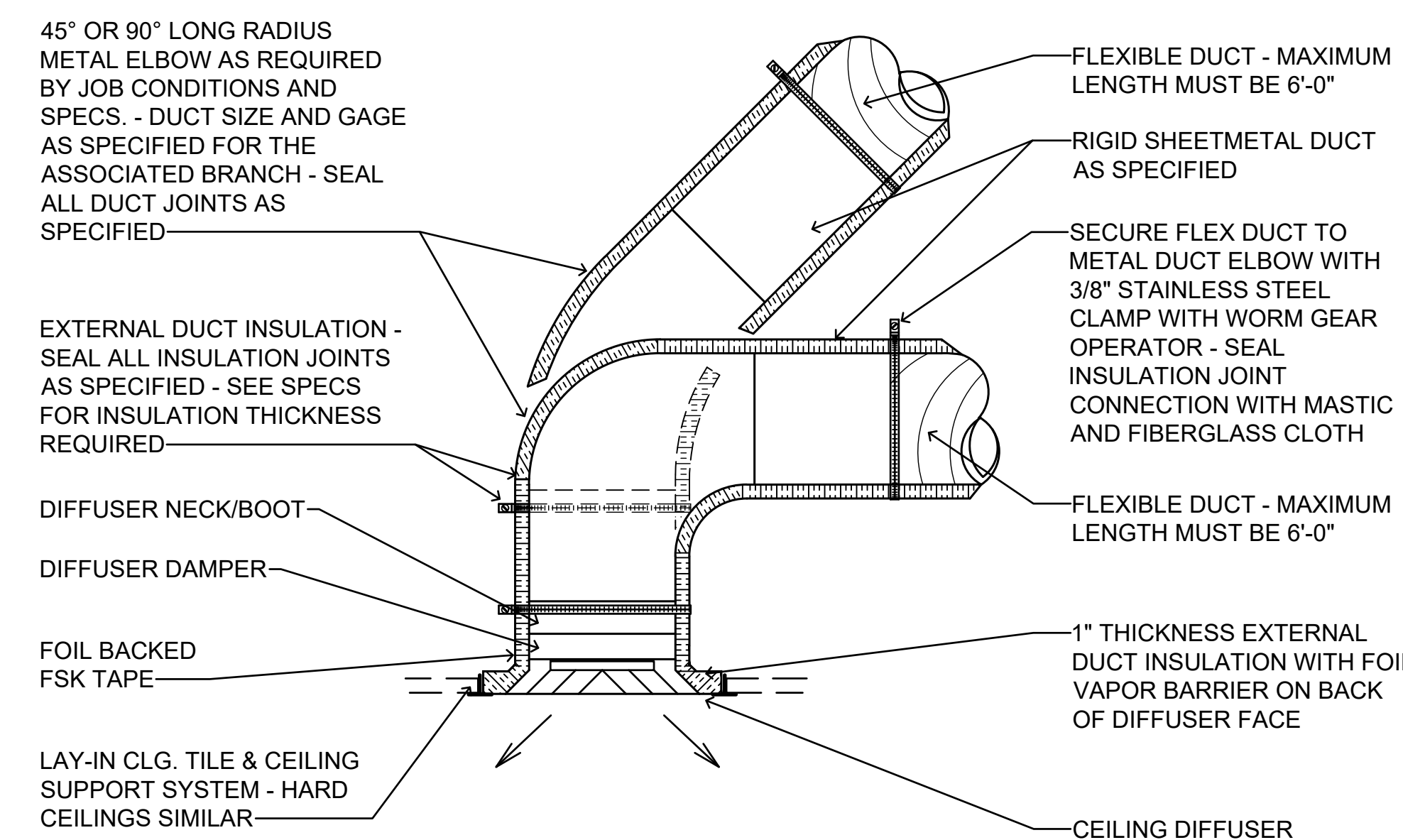
	Area	ClgHt	Volume	Pers/1000 SF	# People	CRW/SF	Area CFM	CFM/Pers on	People CFM	Voz	Ez	#Fixtures	CFM/Fixt	CFW/SF	Min Exhaust	Supply Air	Zp EQ 4-5	Refrig	Lbs Refrig	Allowable #/1000 cu ft	Actual #/1000 cu ft	Max Allowed in space	
TRAINING 101	5000	10	50000	10	50	0.06	300	5	250	550	1					4300	0.127907						
STORAGE 107	320	10	3200	0	0	0.12	39	0	39	1						200	0.195						
GIRLS 106	160	10	1600	0	0	0.06	12.5	5	0	12.5	0.8	3	70		210	150	0.083333						
BOYS 103	160	10	1600	0	0	0.06	12.5	5	0	12.5	0.8	3	70		210	150	0.083333						
Total			56400		50		364			250					420	4800			454b	35	3.1	0.620567	174.84
Max "Zp"			0.195																				
"Ez"			0.9																				
"Voz" Total OSA EQ 4-6			854																				
Total Building Occupancy			98																				
Zone Occupancy			50																				
"D" from EQ 4-7			1.96																				
"Vot" Equation 4-8			948.8889																				
TOTAL OSA			948.8889																				

CCHP-A REFRIGERANT, OUTDOOR AIR AND EXHAUST CALCULATIONS

	Area	ClgHt	Volume	Pers/1000 SF	# People	CRW/SF	Area CFM	CFM/Pers on	People CFM	Voz	Ez	#Fixtures	CFM/Fixt	CFW/SF	Min Exhaust	Supply Air	Zp EQ 4-5	Refrig	Lbs Refrig	Allowable #/1000 cu ft	Actual #/1000 cu ft	Max Allowed in space	
OFFICE 102	250	10	2500	5	2	0.06	18.75	5	12.5	31.25	0.8					350	0.089286						
Total			2500		2		18.75		12.5						0	350			454b	7.5	3.1	3	7.75

DHP-A REFRIGERANT, OUTDOOR AIR AND EXHAUST CALCULATIONS

	Area	ClgHt	Volume	Pers/1000 SF	# People	CRW/SF	Area CFM	CFM/Pers on	People CFM	Voz	Ez	#Fixtures	CFM/Fixt	CFW/SF	Min Exhaust	Supply Air	Zp EQ 4-5	Refrig	Lbs Refrig	Allowable #/1000 cu ft	Actual #/1000 cu ft	Max Allowed in space	
STORAGE 107	250	9.5	2375	0	0	0.12	37.5	0	0	37.5	0.8					350	0.107143						
Total			2375		0		37.5		0						0	350			454b	6	3.1	2.526316	7.3625



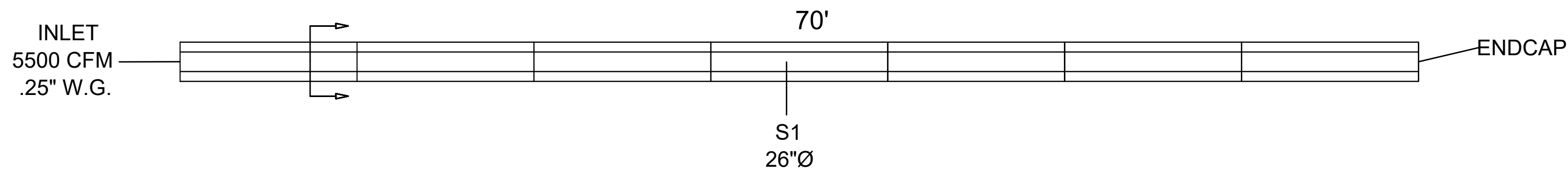
DIFFUSER BOOT/PLENUM CONNECTION DETAIL

NOT TO SCALE

- DIFFUSERS PANELS SHALL BE INSULATED PRIOR TO INSTALLING INTO THE CEILING GRID
- DO NOT COVER STAINLESS STEEL BAND AND WORM GEAR OPERATOR UNTIL THE ENGINEER HAS INSPECTED THE INSTALLATION.



TRAINING 101



DUCTSOX Redefining Air Dispersion

DuctSox Corporation
4343 Chavenelle Road
Dubuque, Iowa 52002
866-382-8769
www.ductsox.com

Submittal

Project Name: Saraland High School Athletic Training Facility

Segment Details: S1

Sox Details					
ID	Label	Section Length	Center Line Length	Diameter	Fabric Color
S1		70 ft. 0 in. (21.34 m)	70 ft. 0 in. (21.34 m)	26 in. (660 mm)	Sedona-XM To Be Determined

Hanging Details					
ID	Label	Hardware (Y/N)	Suspension	Hardware Type	Support Type
S1		Yes	IHS	Cable	Galvanized

Fittings Details				
ID	Label	Fitting	Diameter	Length
A1	AFD 1	AFD	26 in. (660 mm)	-

DuctSox Corporation - 4343 Chavenelle Road Dubuque, Iowa 52002 - 866-382-8769 - www.ductsox.com Page 4 of 13

DUCTSOX Redefining Air Dispersion

DuctSox Corporation
4343 Chavenelle Road
Dubuque, Iowa 52002
866-382-8769
www.ductsox.com

Submittal

Project Name: Saraland High School Athletic Training Facility

Airflow Design & CFD Analysis: S1

Location	Percentage	Type	Size
03:00	25%	L-Vent	22
05:00	25%	L-Vent	22
07:00	25%	L-Vent	22
09:00	25%	L-Vent	22

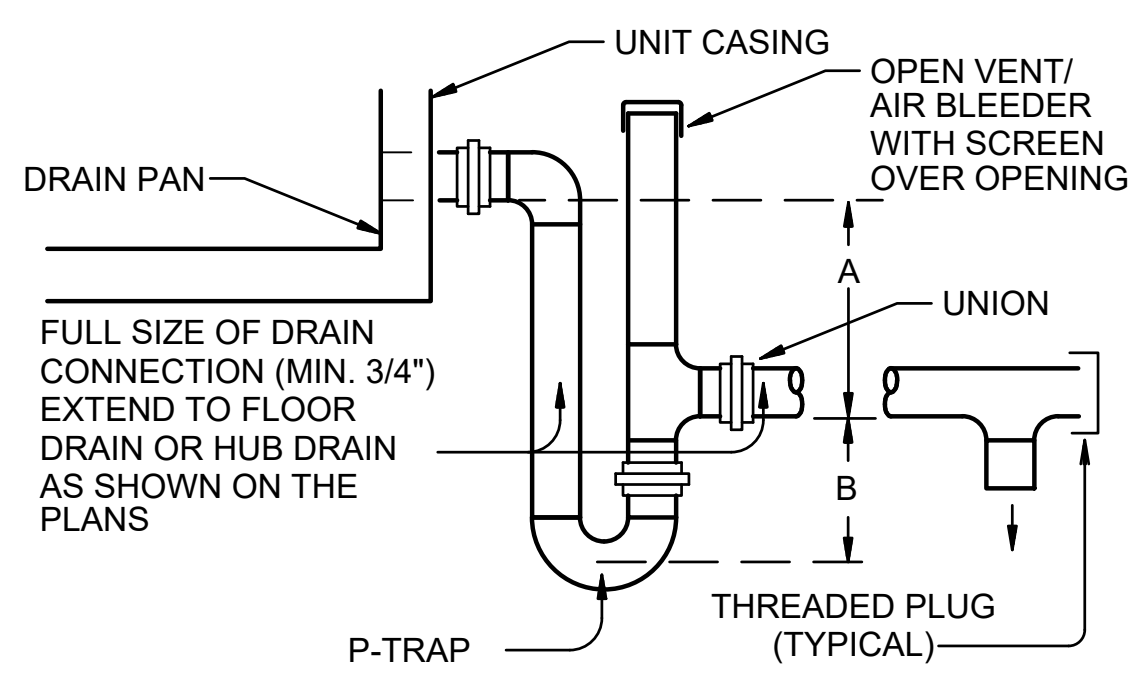
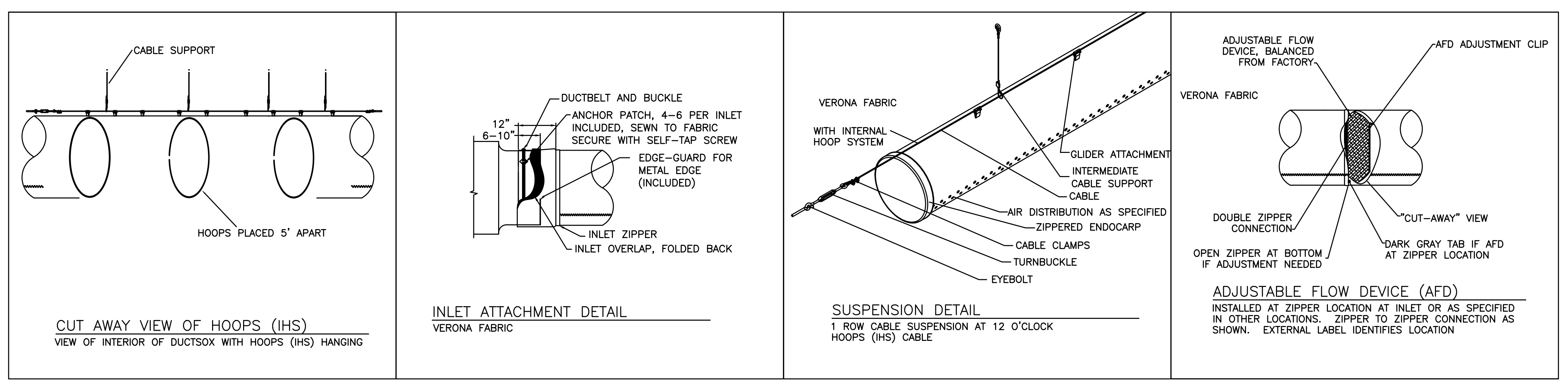
Type	L-Vent
Size	22
Location	03:00, 05:00, 07:00, 09:00

Imperial	
50 FPM:	27.43 ft
100 FPM:	17.15 ft
150 FPM:	11.43 ft
200 FPM:	8.57 ft
250 FPM:	6.86 ft

Metric	
0.254 m/s:	9.36 m
0.508 m/s:	5.23 m
0.762 m/s:	3.48 m
1.016 m/s:	2.61 m
1.270 m/s:	2.09 m

*Note: Reference dispersion Size for CFD performance analysis below. If size is same, only one performance image will be displayed.

DuctSox Corporation - 4343 Chavenelle Road Dubuque, Iowa 52002 - 866-382-8769 - www.ductsox.com Page 6 of 13

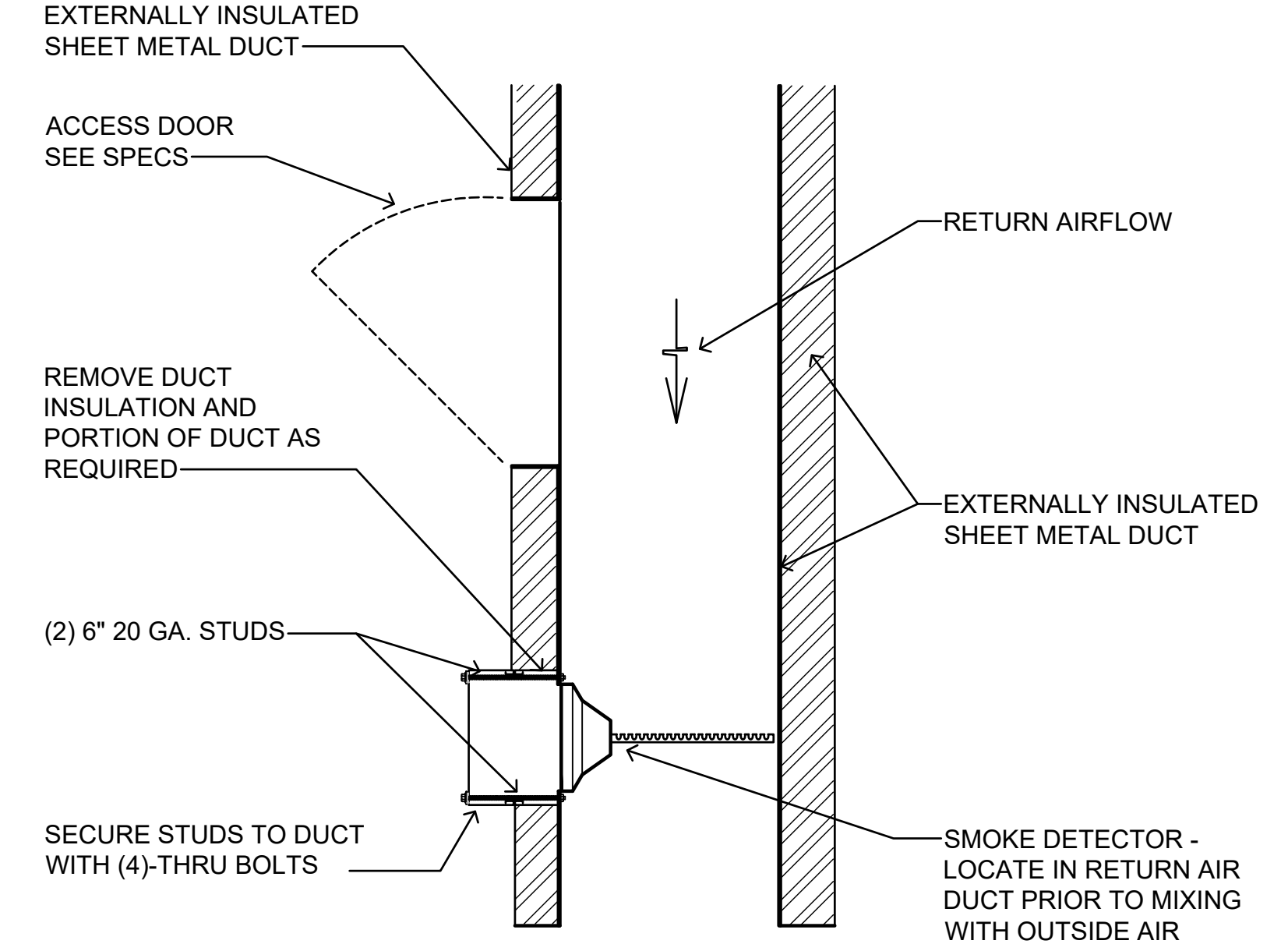


UNIT TYPE	A	B
DRAW-THRU	2" PLUS "X"	"X" PLUS 1"
BLOW-THRU	1" MINIMUM	2X PLUS 1"

WHERE "X" = UNIT STATIC PRESSURE

TYPICAL EVAPORATOR COIL CONDENSATE DRAIN DETAIL

- NOT TO SCALE
- NOTES:
- CONTRACTOR SHALL PROVIDE DRAIN ARRANGEMENT AS REQUIRED BY THE UNIT MANUFACTURER. IN ABSENCE OF THOSE REQUIREMENTS, CONTRACTOR SHALL PROVIDE DRAIN AS DETAILED ABOVE.
 - CONTRACTOR SHALL RAISE THE RESPECTIVE UNIT AS REQUIRED TO ALLOW FOR INSTALLATION OF THE DRAIN AS DETAILED ABOVE.
 - PROVIDE AN ELECTRIC SWITCH IN THE AUXILIARY CONDENSATE DRAIN LINE ON THE BUILDING CONDENSATE DRAIN LINE TO THE BUILDING ENERGY MANAGEMENT SYSTEM (BAS) OPERATOR CONSOLE (IF APPLICABLE) SHOULD THE LINE BECOME OBSTRUCTED.
 - PROVIDE UNIONS AT EACH CONDENSATE DRAIN LINE TRAP ASSEMBLY FOR ALL MINI-SPLIT SYSTEMS.
 - DUCTLESS MINI-SPLIT EQUIPMENT THAT PRODUCES CONDENSATE SHALL BE PROVIDED WITH AN INLINE CHECK VALVE LOCATED IN THE DRAIN LINE OR A TRAP AS REQUIRED BY IMC 307.2.4.1.
 - PER IMC 307.2.5, CONDENSATE DRAIN LINES SHALL BE CONFIGURED TO PERMIT THE CLEARING OF BLOCKAGES AND PERFORMANCE OF MAINTENANCE WITHOUT REQUIRING THE DRAIN LINE TO BE CUT.



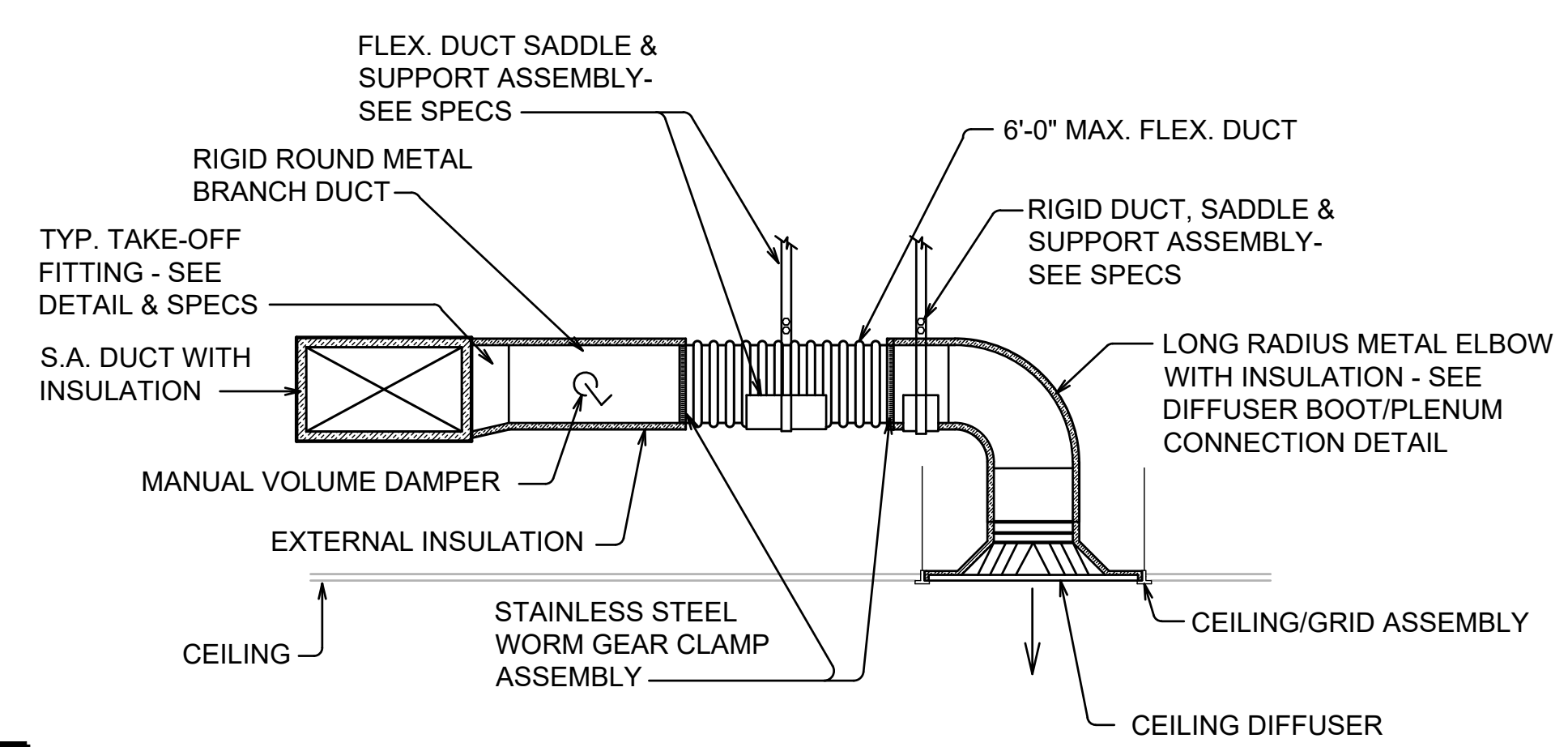
SMOKE DETECTOR MOUNTING DETAIL

- NOT TO SCALE
- CONTRACTOR SHALL PROVIDE DRAIN ARRANGEMENT AS REQUIRED BY THE UNIT MANUFACTURER. IN ABSENCE OF THOSE REQUIREMENTS, CONTRACTOR SHALL PROVIDE DRAIN AS DETAILED ABOVE.
 - CONTRACTOR SHALL RAISE THE RESPECTIVE UNIT AS REQUIRED TO ALLOW FOR INSTALLATION OF THE DRAIN AS DETAILED ABOVE.
 - PROVIDE AN ELECTRIC SWITCH IN THE AUXILIARY CONDENSATE DRAIN LINE ON THE BUILDING CONDENSATE DRAIN LINE TO THE BUILDING ENERGY MANAGEMENT SYSTEM (BAS) OPERATOR CONSOLE (IF APPLICABLE) SHOULD THE LINE BECOME OBSTRUCTED.
 - PROVIDE UNIONS AT EACH CONDENSATE DRAIN LINE TRAP ASSEMBLY FOR ALL MINI-SPLIT SYSTEMS.
 - DUCTLESS MINI-SPLIT EQUIPMENT THAT PRODUCES CONDENSATE SHALL BE PROVIDED WITH AN INLINE CHECK VALVE LOCATED IN THE DRAIN LINE OR A TRAP AS REQUIRED BY IMC 307.2.4.1.
 - PER IMC 307.2.5, CONDENSATE DRAIN LINES SHALL BE CONFIGURED TO PERMIT THE CLEARING OF BLOCKAGES AND PERFORMANCE OF MAINTENANCE WITHOUT REQUIRING THE DRAIN LINE TO BE CUT.

CEILING MOUNTED EXHAUST FAN CONN. DETAIL

NO SCALE

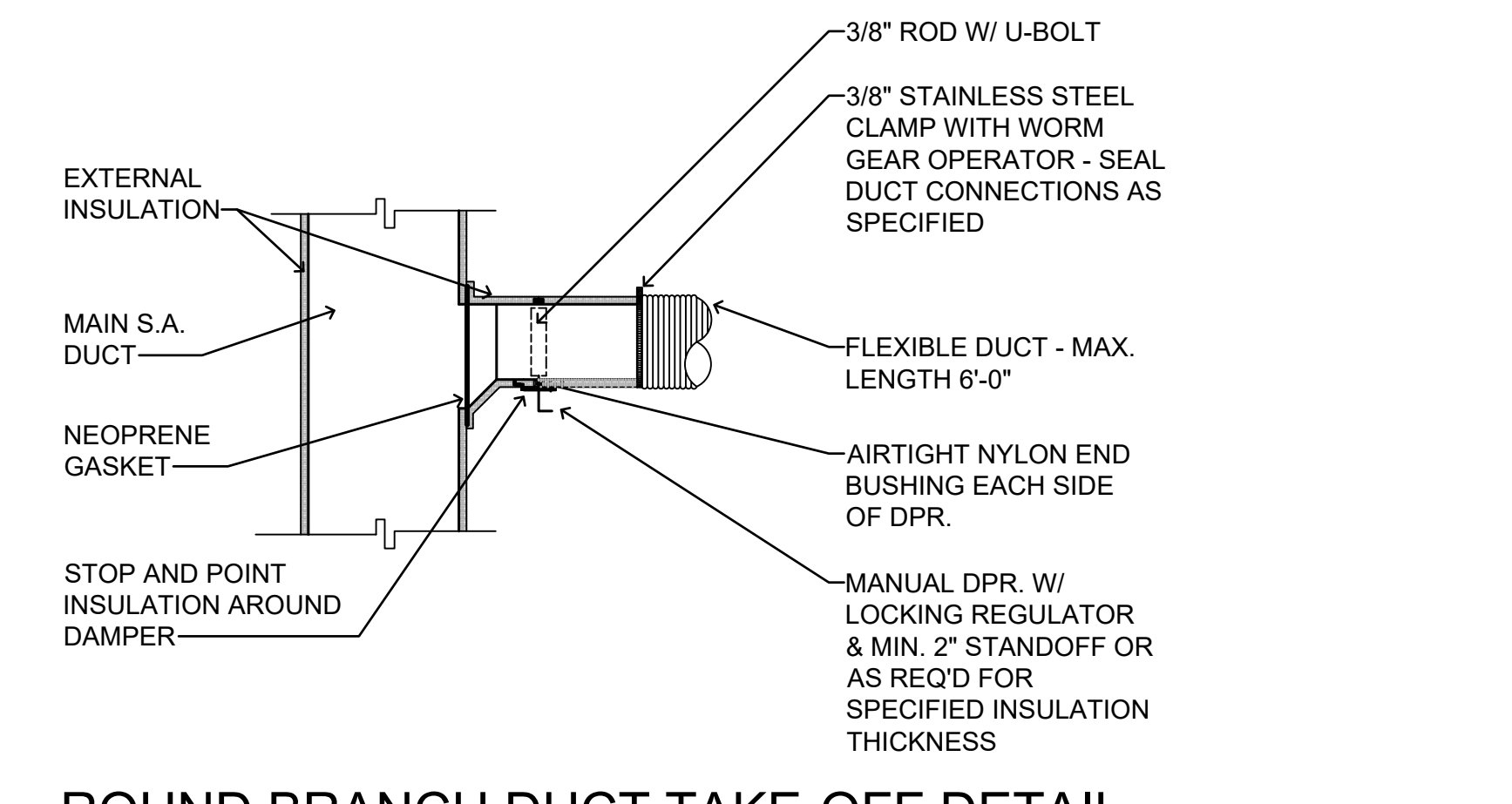
PROVIDE BONDING JUMPER ACROSS FLEXIBLE CONNECTION AS SPECIFIED SECTION 15700, PARAGRAPH FLEXIBLE CONNECTIONS AND BONDING JUMPERS



TYPICAL DIFFUSER RUN-OUT CONN.

NOT TO SCALE

SEAL ALL DUCT AND INSULATION JOINTS AS SPECIFIED



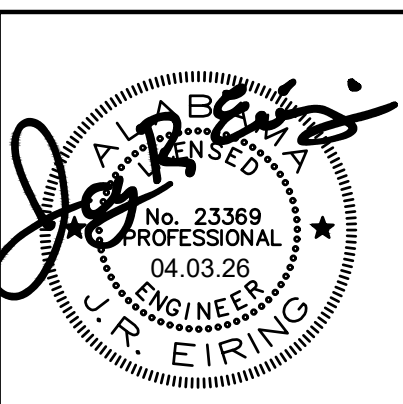
ROUND BRANCH DUCT TAKE-OFF DETAIL

NOT TO SCALE

RECTANGULAR RUNOUTS SIMILAR EXCEPT WITH RECTANGULAR DUCT



NEW ATHLETIC TRAINING FACILITY
AT
SARALAND HIGH SCHOOL
FOR THE
SARALAND CITY SCHOOLS
SARALAND, ALABAMA



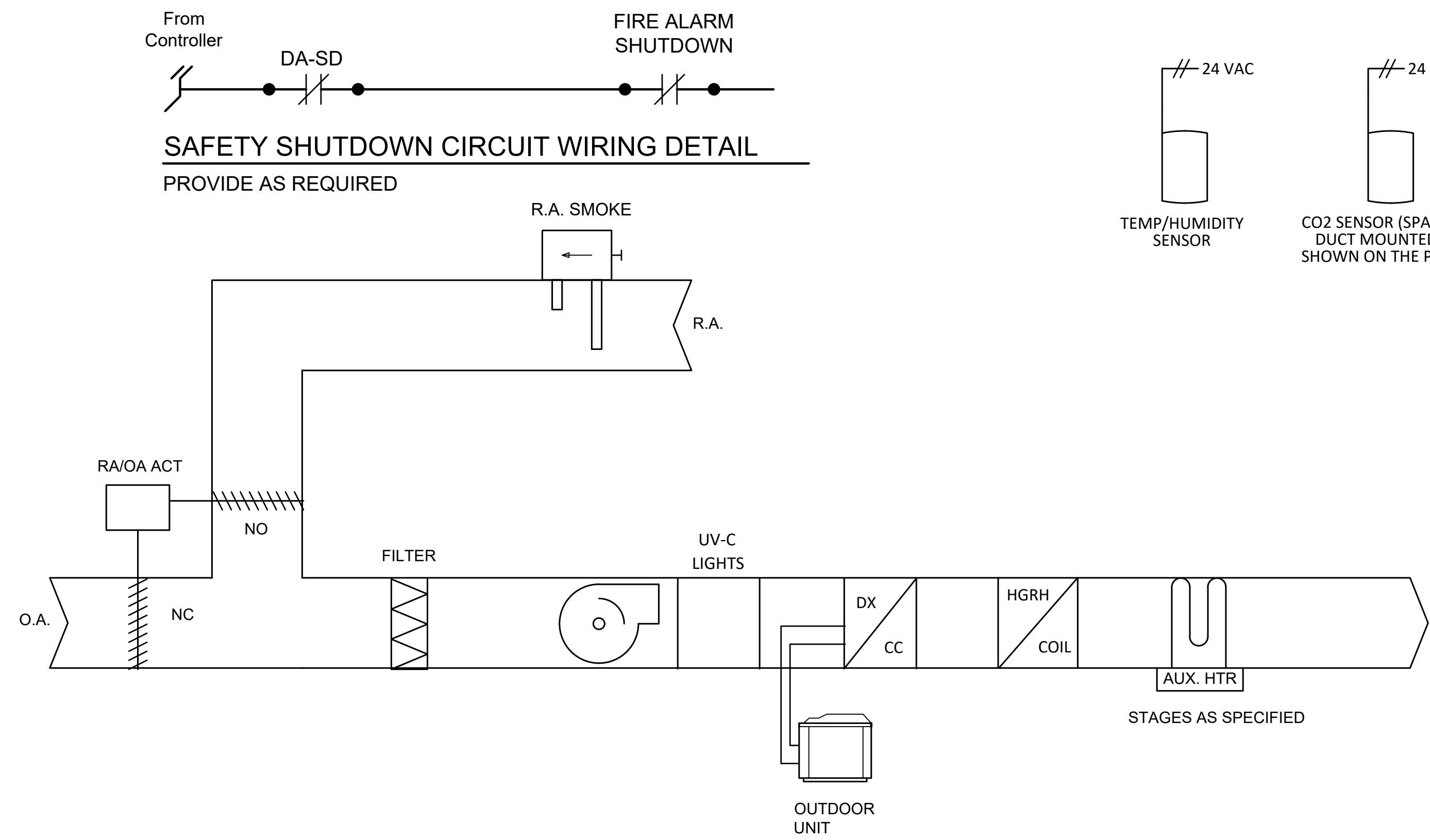
SHEET TITLE:
HVAC DETAILS

PROJ. MGR.: T. ZGOUVAS
DRAWN: C. WARD
DATE: 04.03.2026
REVISIONS

JOB NO. 25-173
SHEET NO.

M3





PACKAGED HEAT PUMP UNIT & HOT GAS REHEAT COIL WITH DEMAND CONTROL VENTILATION CONTROLS SCHEMATIC (PHP-1)

Packaged Heat Pump Unit Sequence of Operation

Smoke Detector Shutdown (As Applicable):

The unit shall shut down in response to a signal from the smoke detector in the return air duct(s) indicating the presence of smoke. The smoke detectors shall be interlocked to the unit through the dry contacts of the smoke detector. A manual reset of the smoke detector shall be required to restart the unit. Coordinate the quantity of smoke detectors required with the plans. Smoke detectors are furnished and wired by division 16. Installation into the duct by the mechanical contractor. Coordinate all prior to bid and provide as specified.

Occupied Mode:

Coordinate all programmable thermostat scheduling and temperatures with Owner as requested. During occupied periods, the supply fan shall run upon a call for heating or cooling, the normally closed (NC) outside air damper and normally open (NO) return air damper(s) as applicable, shall open to their respective setpoints to provide for their minimum scheduled outside air setpoint. The heat pump DX cooling or heating cycle shall stage to maintain the occupied space temperature setpoint.

Unoccupied Mode:

Coordinate all programmable thermostat scheduling and temperatures with Owner as requested. When the space temperature is below the unoccupied heating setpoint of 60.0 deg. F (adj.) the supply fan shall start, the NC outside air damper shall remain closed, the NO return air damper (as applicable) shall remain open and the DX heating cycle shall be enabled. When the space temperature rises above the unoccupied heating setpoint of 60.0 deg. F (adj.) plus the unoccupied differential of 4.0 deg. F (adj.), the heating cycle shall be disabled, the supply fan shall stop, the NC outside air damper shall remain closed and the NO return air damper (as applicable) shall remain in its NO position.

When the space temperature is above the unoccupied cooling setpoint of 85.0 deg. F (adj.), the supply fan shall start, the NC outside air damper shall remain closed, the NO return air damper (as applicable) shall remain open and the DX cooling cycle shall be enabled. When the space temperature falls below the unoccupied cooling setpoint of 85.0 deg. F (adj.) minus the unoccupied differential of 4.0 deg. F (adj.) the cooling cycle shall be disabled, the supply fan shall stop, the NC outside air damper shall remain closed and the NO return air damper (as applicable) shall remain open.

Cooling Mode:

The unit thermostat shall use space temperature and space temperature setpoint to determine when to initiate requests for cooling. When the space temperature rises above the setpoint, the unit thermostat shall stage the DX cooling as required to maintain the space temperature setpoint. The first compressor (as applicable) shall energize after its minimum 3-minute off time has expired. If additional cooling capacity is required the second stage (as applicable) of cooling shall be enabled. Once the space temperature falls below the setpoint the compressors shall be deactivated and system returns to its occupied/unoccupied cooling schedule.

Heating Mode:

The unit thermostat shall use the space temperature and space temperature setpoint to determine when to initiate requests for heat. When the space temperature drops below the setpoint, the unit thermostat shall enable DX heating stage or auxiliary heater when ambient temperature is below 35°F (adj.) to maintain the space temperature setpoint. Once the space temperature rises above the setpoint the compressor(s) or auxiliary electric heating stages shall be disabled.

CO2 Control/Demand Ventilation:

A space CO2 sensor shall modulate the motorized outside air and return air damper(s) in sequence to maintain a minimum concentration of 800 PPM (adj.). Upon satisfaction of the CO2 sensor setpoint, the outside air damper shall return to its minimum scheduled outside air setpoint and the return air damper shall modulate up or down based on the outside air damper requirement. HP-4 does not require demand control ventilation.

Dehumidification/Humidity Control:

Factory installed hot gas reheat coil shall allow for the application of dehumidification.

Dehumidification shall be allowed. The outside air damper shall drive to between its minimum and maximum scheduled outside air setpoint based on the CO2 readings (as applicable) during dehumidification.

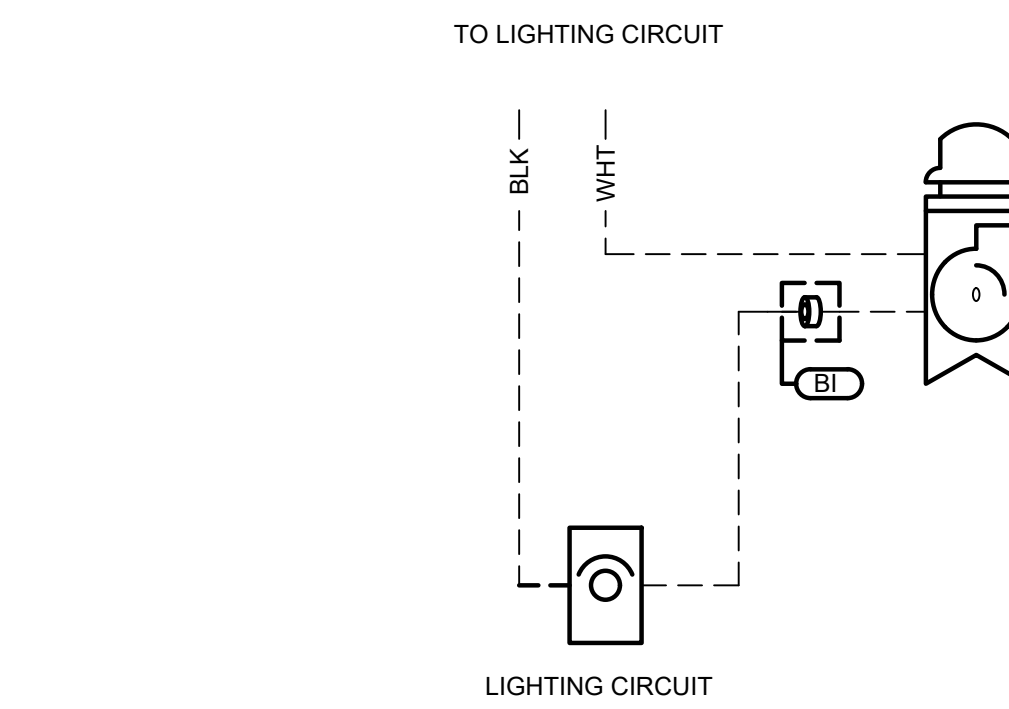
On a call for dehumidification, the compressor shall be locked out of the heating mode, the compressor cooling mode shall be enabled and the hot gas reheat valve shall modulate as required to maintain space temperature. When the humidity control setpoint is satisfied, the hot gas reheat coil valve shall close and the compressor shall be disabled. If there is a call for cooling from the space temperature thermostat, while in reheat, the reheat valve shall be de-energized and the compressor continues to run.

Condensate Drain Blockage for ALL Units:

Provide an electronic switch in each condensate drain line and auxiliary drain pan with interface as required to shut down the unit should an obstruction occur in the condensate drain line. Upon detection of an obstruction in the condensate drain line the unit shall shutdown.

UV-C Lights:

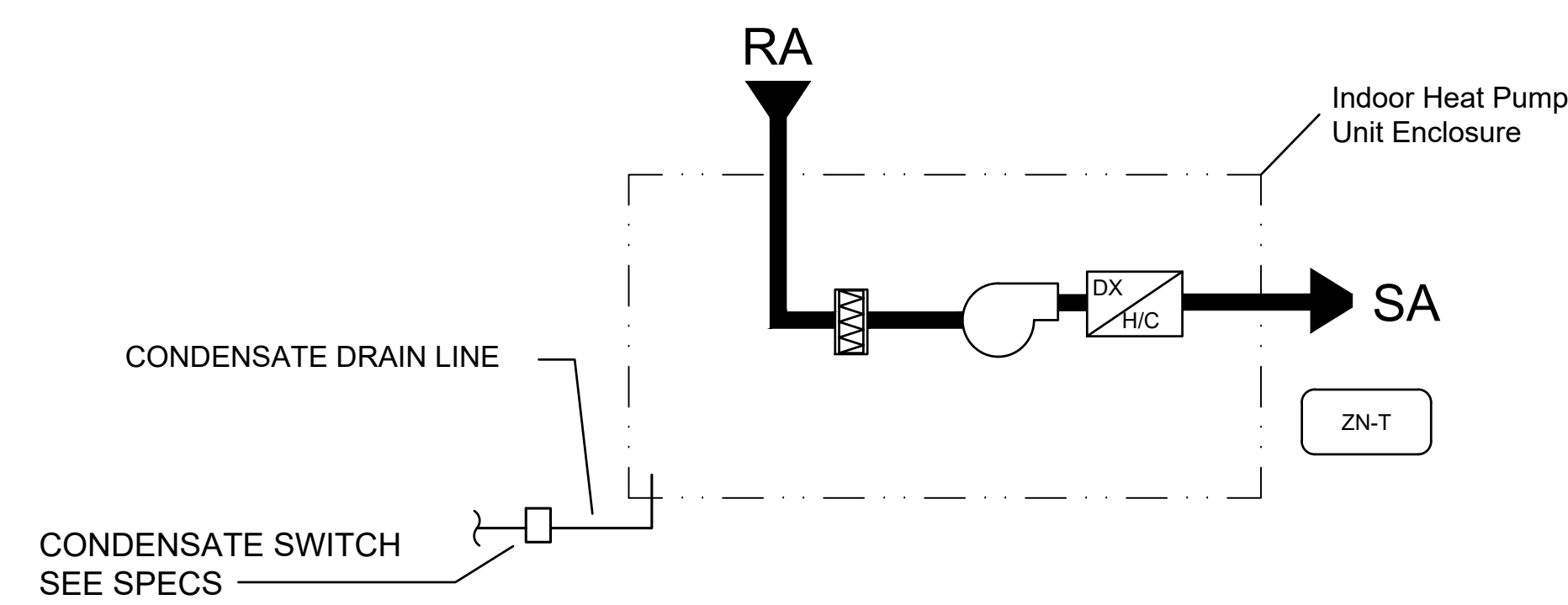
Units with UV-C lights shall cycle/operate and be located as required by the UV-C lighting Manufacturer.



EXHAUST FAN CONTROL SCHEMATIC

OCCUPIED/UNOCCUPIED MODE:

TOILET/JAN. CLOSET EXHAUST FAN SHALL OPERATE ANYTIME THE LIGHTING SWITCH IS TURNED ON. FAN SHALL OPERATE FOR A MAXIMUM OF 10 MINUTES (ADJ.) AFTER LIGHT SWITCH HAS TURNED OFF OR, IN ABSENCE OF THE SWITCH BEING TURNED OFF, FOR A MAXIMUM OF 10 MINUTES (ADJ.)



CASSETTE TYPE HEAT PUMP (CCHP) CONTROLS SCHEMATIC

NOTE: DHP UNITS SIMILAR

CCHP HEAT PUMP UNITS SEQUENCE OF OPERATION

OCCUPIED MODE:

CCHP units shall operate in continuous occupied mode. Cassette units shall operate as specified for split system heat pump units.

UNOCCUPIED MODE:

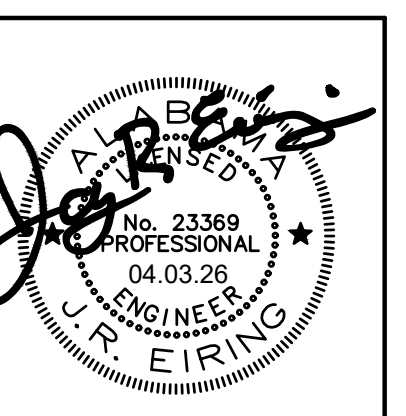
Cassette unit shall be as specified for packaged heat pump unit. DHP unit shall NOT have an unoccupied schedule. DHP unit must be as occupied 24/7/365.25.

COOLING/HEATING MODE:

The unit controller shall use space temperature and space temperature setpoint to determine when to initiate requests for cooling or heating. When the space temperature rises above the setpoint, the unit controller shall stage the DX cooling or heating as required to maintain the space temperature setpoint.

CONDENSATE DRAIN BLOCKAGE:

Provide an electronic switch in each condensate drain line and auxiliary drain pan with interface as required to shut down the unit should an obstruction occur in the condensate drain line or moisture is indicated in the auxiliary drain pan. Upon detection of an obstruction in the condensate drain line or moisture is proven in the auxiliary drain pan, the unit shall shutdown.



SHEET TITLE:
HVAC CONTROLS

PROJ. MGR.: T. ZGOUVAS
DRAWN: C. WARD
DATE: 04.03.2026
REVISIONS:

JOB NO. 25-173

SHEET NO:

M4



ELECTRICAL LEGEND

CEILING OUTLETS

- RECESSED 2' X 4' LED FIXTURE MARK "A" CIRCUIT No. 2 TYPICAL
- RECESSED 2' X 4' LED FIXTURE MARK "A" CIRCUIT No. 2 TYPICAL "EMERGENCY BATTERY POWER"
- RECESSED 1' X 4' LED FIXTURE MARK "A" CIRCUIT No. 2 TYPICAL
- RECESSED 1' X 4' LED FIXTURE MARK "A" CIRCUIT No. 2 TYPICAL "EMERGENCY BATTERY POWER"
- RECESSED 2' X 2' LED FIXTURE MARK "A" CIRCUIT No. 2 TYPICAL
- RECESSED 2' X 2' LED FIXTURE MARK "A" CIRCUIT No. 2 TYPICAL "EMERGENCY BATTERY POWER"
- SURFACE OR PENDANT MOUNTED LED STRIP FIXTURE MARK "FS" CIRCUIT No. 2 TYPICAL
- SURFACE OR PENDANT MOUNTED LED STRIP FIXTURE MARK "FS" CIRCUIT No. 2 TYPICAL "EMERGENCY BATTERY POWER"
- RECESSED OR SURFACE MOUNT DOWNLIGHT
- RECESSED OR SURFACE MOUNT DOWNLIGHT "EMERGENCY POWER"
- SURFACE OR PENDANT MOUNTED ROUND FIXTURE
- SURFACE OR PENDANT MOUNTED ROUND FIXTURE "EMERGENCY BATTERY POWER"
- JUNCTION BOX
- EXIT LIGHT
- EXHAUST FAN
- DUPLEX RECEPTACLE – 20 AMP, 125 VOLT, 2 POLE, 3 WIRE GROUNDED TYPE, NEMA 5–20R. CEILING MOUNTED.
- DUPLEX RECEPTACLE – 20 AMP, 125 VOLT, GFI, 2 POLE, 3 WIRE GROUNDED TYPE, NEMA 5–20R. CEILING MOUNTED.

LIGHTING CONTROLS

- CEILING MOUNTED OCCUPANCY SENSOR
- POWER PACK FOR OCCUPANCY SENSOR
- ROOM CONTROLLER – 1 ZONE DIMMING
- ROOM CONTROLLER – 2 ZONE DIMMING
- ROOM CONTROLLER – ON/OFF NO DIMMING
- WALL DIMMER – ON/OFF & 0–10V 1–ZONE DIMMING
- WALL DIMMER – ON/OFF & 0–10V 2–ZONE DIMMING
- LOW VOLTAGE SWITCH, 2–BUTTON
- LOW VOLTAGE SWITCH CONNECTED TO LIGHTING CONTROL PANEL, 2–BUTTON
- OCCUPANCY SENSOR WALL SWITCH, ULTRASONIC TECHNOLOGY, 1–BUTTON SIMILAR TO HUBBELL LIGHT HAWK 2

*COORDINATE WITH LIGHTING CONTROL DETAILS FOR MORE REQUIREMENTS

WALL OUTLETS

- ALL 120V RECEPTACLES ON THIS PROJECT SHALL BE TAMPER PROOF TYPE WHERE REQUIRED BY THE NATIONAL ELECTRIC CODE.

- WALL MOUNTED EXIT LIGHT
- WALL MOUNTED COMBO EXIT LIGHT/EMERGENCY
- WALL MOUNTED LIGHTING FIXTURE
- WALL MOUNTED LIGHTING FIXTURE "EMERGENCY POWER"
- BATTERY OPERATED EMERGENCY WALL PACK
- DUPLEX RECEPTACLE – 20 AMP, 125 VOLT, 2 POLE, 3 WIRE GROUNDED TYPE, NEMA 5–20R. MOUNT 18" A.F.F. UNLESS NOTED OTHERWISE
- DUPLEX RECEPTACLE – 20 AMP, 125 VOLT, GFI, 2 POLE, 3 WIRE GROUNDED TYPE, NEMA 5–20R. MOUNT 18" A.F.F. UNLESS NOTED OTHERWISE
- DUPLEX RECEPTACLE – 20 AMP, 125 VOLT, GFI, 2 POLE, 3 WIRE GROUNDED TYPE, NEMA 5–20R. MOUNT 18" A.F.F. UNLESS NOTED OTHERWISE; PROVIDE WEATHERPROOF BOX FOR RECEPTACLE; OUTLET BOX HOODS SHALL BE IDENTIFIED AS "EXTRA-DUTY"
- DUPLEX RECEPTACLE – 20 AMP, 125 VOLT, 2 POLE, 3 WIRE GROUNDED TYPE, NEMA 5–20R. MOUNT 6" ABOVE COUNTER
- DUPLEX RECEPTACLE – 20 AMP, 125 VOLT, GFI, 2 POLE, 3 WIRE GROUNDED TYPE, NEMA 5–20R. MOUNT 6" ABOVE COUNTER
- DUPLEX RECEPTACLE – 20 AMP, 125 VOLT, 2 POLE, 3 WIRE GROUNDED TYPE, NEMA 5–20R WITH DUAL USB 2.0/3.0 COMPATIBLE RECEPTACLES. MOUNT 6" ABOVE COUNTER
- QUADRAPLEX RECEPTACLE – 20 AMP, 125 VOLT, GFI, 2 POLE, 3 WIRE GROUNDED TYPE, NEMA 5–20R. MOUNT 18" A.F.F. UNLESS NOTED OTHERWISE
- QUADRAPLEX RECEPTACLE – 20 AMP, 125 VOLT, 2 POLE, 3 WIRE GROUNDED TYPE, NEMA 5–20R. MOUNT 18" A.F.F. UNLESS NOTED OTHERWISE
- QUADRAPLEX RECEPTACLE – 20 AMP, 125 VOLT, 2 POLE, 3 WIRE GROUNDED TYPE, NEMA 5–20R. MOUNT 6" ABOVE COUNTER UNLESS NOTED OTHERWISE
- DUPLEX RECEPTACLE – 20 AMP, 125 VOLT, GFI, 3 POLE, 3 WIRE GROUNDED TYPE, NEMA 5–20R. MOUNT 26" AFF TO C/L FOR DRINKING FOUNTAIN
- SINGLE RECEPTACLE – 30 AMP, 125 VOLT, 2 POLE, 3 WIRE GROUNDED TYPE, NEMA L6–30R. MOUNT AS DIRECTED FOR RACK UPS SYSTEM
- 250V RECEPTACLE; 4 WIRE; MT 14" AFF TO C/L; NEMA 10–30R; HUBBELL SERIES 9350
- SINGLE RECEPTACLE; 1PH, 3 WIRE W/GRD NEMA 5–30R; MT 18" AFF FOR POWER TO COM RACK UPS UNIT
- JUNCTION BOX SIZE NOTED OR REQUIRED, WITH BLANK SCREW COVER AND FLEXIBLE CONDUIT CONNECTION
- PHOTOCCELL; TORK MODEL 5231 (120V), TWIST RECEPTACLE: TORK 2421.
- 250V RECEPTACLE; 4 WIRE; MT 14" AFF TO C/L; NEMA 14–30R; HUBBELL SERIES 9350
- 250V RECEPTACLE; 4 WIRE; MT 14" AFF TO C/L; NEMA 10–50R; HUBBELL SERIES 7962
- WALL MOUNTED LED FIXTURE MARK "FS" CIRCUIT No. 2 TYPICAL
- WALL MOUNTED LED FIXTURE MARK "FS" CIRCUIT No. 2 TYPICAL "EMERGENCY POWER"

TELEPHONE & TELEVISION SYSTEMS

- COMM OUTLET – SEE DETAILS SHEET E6.2.
- CEILING OUTLET FOR WIRELESS INTERNET – SEE DETAILS SHEET E6.2.
- COMMUNICATIONS FLOOR RACK – SEE DETAILS SHEET E6.2.
- TELEPHONE BACKBOARD – 3/4" EXTERIOR GRADE PLYWOOD WITH TWO COATS OF INSULATING VARNISH, SIZE AS SHOWN

CLOSED CIRCUIT TELEVISION

- CLOSED CIRCUIT TELEVISION CAMERA – INTERIOR; SEE DETAILS SHEET E6.2.

PANELS AND POWER

- PANELBOARD
- PANELBOARD FLUSH MOUNTED
- FUSIBLE DISCONNECT SWITCH; XX/YY/ZZ WHERE X INDICATES AMPERAGE, Y INDICATES # OF POLES, AND Z INDICATES NEMA RATING; FURNISH AND INSTALL FUSES PER MANUFACTURER'S RECOMMENDATIONS
- MOTOR FURNISHED BY OTHERS AND CONNECTED BY ELECTRICAL CONTRACTOR; "S" INDICATES HORSE POWER RATING
- CIRCUIT BREAKER
- TRANSFORMER
- GROUNDING ELECTRODE CONNECTION

MISCELLANEOUS EQUIPMENT

- CONTACTOR
- WATER HEATER

WALL SWITCHES (UNLESS OTHERWISE NOTED, MOUNT 48" A.F.F.)

- A.C. TYPE, SINGLE POLE, 20 AMP, 120/277 VOLT
- A.C. TYPE, 3–WAY, 20 AMP, 120/277 VOLT
- MOTOR RATED TOGGLE SWITCH DISCONNECT, WITH THERMAL OVERLOADS A.C. TYPE, 20 AMP, 120/277 VOLT
- MOTOR RATED TOGGLE SWITCH DISCONNECT, WITH THERMAL OVERLOADS A.C. TYPE, 30 AMP, 120/277 VOLT
- MOTOR RATED TOGGLE SWITCH DISCONNECT, WITH THERMAL OVERLOADS DOUBLE POLE SINGLE THROW, A.C. TYPE, 30 AMP, 208 VOLT
- PRESET INTERVAL TIMER SWITCH, HUBBELL TD–300 SERIES OR EQUALS
- PUSH BUTTON, TOGGLE SWITCH, ROTARY SWITCH, ETC., FURNISHED WITH EQUIPMENT BY OTHERS, INSTALLED AND WIRED BY THE ELECTRICAL CONTRACTOR.

FIRE ALARM SYSTEM

- FIRE ALARM SYSTEM CONTROL PANEL
- FIRE ALARM SYSTEM REMOTE ANNUNCIATOR
- FIRE ALARM SYSTEM FIRE PUMP CONTROLLER
- FIRE ALARM SYSTEM MANUAL PULL STATION
- FIRE ALARM SYSTEM VOICE EVAC SPEAKER/STROBE
- WEATHERPROOF FIRE ALARM SYSTEM SIGNAL HORN/STROBE
- FIRE ALARM SYSTEM STROBE
- FIRE ALARM SYSTEM SUPERVISORY SWITCH
- FIRE ALARM SYSTEM TAMPER SWITCH
- FIRE ALARM SYSTEM FLOW SWITCH
- FIRE ALARM SYSTEM AUTOMATIC HEAT DETECTOR; 135 DEGREE/RATE OF RISE TYPE; CEILING MOUNTED
- FIRE ALARM SYSTEM AUTOMATIC SMOKE DETECTOR; CEILING MOUNTED
- FIRE ALARM SYSTEM AUTOMATIC SMOKE DETECTOR; CEILING MOUNTED, ELEVATOR RECALL
- FIRE ALARM SYSTEM AUTOMATIC CARBON MONOXIDE DETECTOR W/ AUDIBLE SOUNDER; CEILING MOUNTED. PROVIDE WITHIN 5'–0" OF FURNACE DISCHARGE REGISTER. COORDINATE EXACT LOCATION WITH MECHANICAL CONTRACTOR.
- FIRE ALARM SYSTEM AUTOMATIC AIR DUCT SMOKE DETECTOR MOUNTED IN MECHANICAL DUCT
- FIRE ALARM SYSTEM REMOTE TEST STATION
- FIRE ALARM SYSTEM ZONE MODULE, CONTROL TYPE
- FIRE ALARM SYSTEM ZONE MODULE, MONITOR TYPE
- FIRE ALARM SYSTEM MAGNETIC DOOR HOLDERS
- FIRE ALARM SYSTEM SUPERVISED CIRCUITING IN CONDUIT, RACEWAY INSTALLED CONCEALED
- INDICATES CEILING MOUNTED DEVICE

BRANCH CIRCUITING

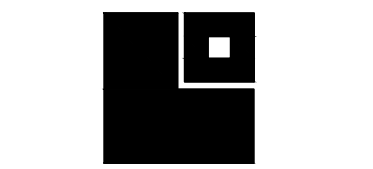
- RUN CONCEALED UNDER FLOOR OR IN GROUND
- RUN CONCEALED IN CEILING OR WALLS
- HOMERUN TO PANEL. ANY CIRCUIT WITHOUT FURTHER IDENTIFICATION INDICATES 2 #12, 1 #12 GROUND – 3/4" C; 3 #12, 1 #12 GROUND – 3/4" C; 4 #12, 1 #12 GROUND – 3/4" C; ETC. AS PER NEC. LETTERS AND NUMERALS INDICATE PANEL AND CIRCUIT NUMBER.
- HOMERUN TO PANEL. ANY CIRCUIT WITHOUT FURTHER IDENTIFICATION INDICATES 2 #10, 1 #10 GROUND – 3/4" C; 3 #10, 1 #10 GROUND – 3/4" C; 4 #10, 1 #10 GROUND – 1" C; ETC. AS PER NEC. LETTERS AND NUMERALS INDICATE PANEL AND CIRCUIT NUMBER.
- HOMERUN TO PANEL. ANY CIRCUIT WITHOUT FURTHER IDENTIFICATION INDICATES 2 #8, 1 #10 GROUND – 1" C; 3 #8, 1 #10 GROUND – 1" C; 4 #8, 1 #10 GROUND – 1 1/4" C; ETC. AS PER NEC. LETTERS AND NUMERALS INDICATE PANEL AND CIRCUIT NUMBER.
- WHERE A NUMBER IS SHOWN NEXT TO OR ON THE CIRCUIT OR HOMERUN, THE NUMBER INDICATES CONDUCTOR SIZE OTHER THAN #12 – NUMBER #6 CONDUCTORS INDICATED. PROVIDE GROUND SIZED PER NEC TABLE 250 FOR MAX AMPACITY OF CONDUCTOR SIZE AS SHOWN. SIZE CONDUIT PER NEC ANNEX C.
- LIQUID-TIGHT FLEXIBLE CONDUIT CONNECTION
- SURFACE MOUNTED CONDUIT; RUN PARALLEL OR PERPENDICULAR TO BUILDING LINES
- EMPTY CONDUIT WITH PULLWIRE, RUN CONCEALED IN CEILING OR WALLS

MISCELLANEOUS

- A AMPERE
- ADA AMERICANS WITH DISABILITIES ACT ABOVE FINISH FLOOR
- AIF AMPERE INTERRUPTING CAPACITY
- ATS AUTOMATIC TRANSFER SWITCH
- C CONDUIT
- CL CENTER LINE
- CWP COLD WATER PIPE
- EM EMERGENCY
- EMT ELECTRIC METALLIC TUBING
- GFI GROUND FAULT INTERRUPTER
- GRC GALVANIZED RIGID METAL CONDUIT
- GRD GROUND
- MCB MAIN CIRCUIT BREAKER
- MCC MOTOR CONTROL CENTER
- MLO MAIN LUGS ONLY
- MT MOUNT
- N NEUTRAL
- NIC NOT IN CONTRACT
- NEC NATIONAL ELECTRICAL CODE
- NEMA NATIONAL ELECTRICAL MANUFACTURER'S ASSOC.
- NFPA NATIONAL FIRE PROTECTION ASSOCIATION
- NL NIGHT LIGHT
- NTS NOT TO SCALE
- P POLE
- PF POWER FACTOR
- PH PHASE
- PNL PANEL
- PVC PVC (POLYVINYL CHLORIDE) CONDUIT
- SLD SINGLE LINE DIAGRAM
- TBB TELEPHONE BACKBOARD
- TVSS TRANSIENT VOLTAGE SURGE SUPPRESSORS
- UL UNDERWRITER'S LABORATORY
- U.N.O. UNLESS NOTED OTHERWISE
- V VOLTAGE
- W WIRE
- WP WEATHERPROOF
- # NUMBER
- 3R NEMA 3R WEATHERPROOF ENCLOSURE
- 4X NEMA 4X WEATHERPROOF/CORROSION ENCLOSURE

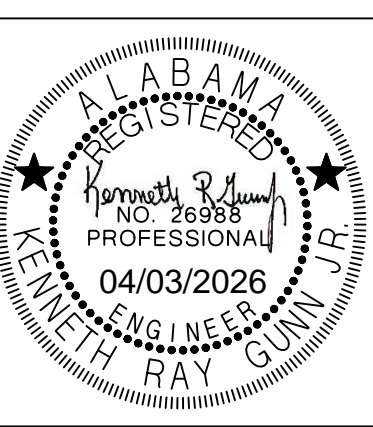
GENERAL ELECTRICAL NOTES:

- THE SERVICE VOLTAGE TO THE FACILITY IS 480/277 VOLT, 3 PHASE, 4 WIRE.
- INSTALLATION SHALL COMPLY WITH THE NATIONAL ELECTRICAL CODE, STATE AND LOCAL CODES, AND MANUFACTURER'S RECOMMENDATIONS.
- MAINTAIN ALL CLEARANCES FOR ELECTRICAL EQUIPMENT PER THE NEC.
- COORDINATE ROUGH-IN OF ALL ELECTRICAL DEVICES WITH ARCHITECTURAL FLOOR PLANS, ELEVATIONS AND MILLWORK SHOP DRAWINGS PRIOR TO ROUGH-IN. AVOID ALL BACKSPASHES AT COUNTERS.
- ALL DIMENSIONS INDICATED IN THESE DOCUMENTS ARE FOR REFERENCE AND COORDINATION PURPOSES ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS IN THE FIELD, AND COORDINATING WORK WITH OTHER TRADES TO AVOID CONFLICTS.
- VERIFY ALL DOOR SWINGS WITH ARCHITECTURAL BEFORE ROUGH-IN OF LIGHT SWITCHES TO ENSURE PROPER SWITCH LOCATION.
- THE LOCATION OF OUTLETS, FIXTURES, AND EQUIPMENT SHOWN ON THE DRAWINGS ARE APPROXIMATE, OFFSET AS NEEDED OR AS REQUESTED BY THE OWNER. THE OWNER SHALL HAVE THE RIGHT TO RELOCATE ANY OUTLETS OR FIXTURES BEFORE THEY ARE INSTALLED WITHOUT ANY ADDITIONAL COST.
- COORDINATE EXACT LOCATION OF ALL ELECTRICAL FLOOR DEVICES WITH ARCHITECT PRIOR TO INSTALLATION.
- ALL CONDUIT SIZE SHALL BE A MINIMUM 3/4" UNLESS NOTED OTHERWISE IN THE DRAWINGS OR SPECIFICATIONS.
- ALL ELECTRICAL RACEWAYS AND CABLING SHALL BE INSTALLED CONCEALED WITHIN THE CONFINES OF THE BUILDING FOUNDATIONS EXCEPT THOSE SPECIFICALLY SERVING LOADS OR EQUIPMENT EXTERIOR OF THE BUILDING. ALL SUCH RACEWAYS SHALL BE A MINIMUM 18" INSIDE FOUNDATIONS AND POWER AND COMMUNICATIONS RACEWAYS SHALL BE SEPARATED BY A MINIMUM 18".
- ALL CONDUITS INSTALLED UNDERFLOOR SHALL BE ROUTED UNDER STRUCTURAL CONCRETE FLOOR SLABS. CONTRACTOR SHALL NOT INSTALL CONDUITS IN CONCRETE FLOORING WITHOUT THE EXPRESS WRITTEN PERMISSION OF THE STRUCTURAL ENGINEER. CONDUITS PENETRATING THRU CONCRETE FLOORS SHALL ADHERE TO THE ELECTRICAL SPECIFICATIONS AND RECOMMENDATIONS OF THE STRUCTURAL ENGINEER.
- ALL RACEWAYS INSTALLED ON EXTERIOR OF THE BUILDING, INCLUDING CONDUIT UNDER CANOPIES, SHALL BE GRC. EMT WILL NOT BE ACCEPTED.
- ALL RACEWAYS SHALL BE SUPPORTED PER NEC AND AT LEAST EVERY 10' AND WITHIN 3' OF EVERY JUNCTION BOX. RACEWAYS SUPPORTED ON BOTTOM OF SECONDARY CEILING SHALL BE SUPPORTED FROM THE STRUCTURE NOT FROM THE GYPBOARD CEILING.
- ALL EMPTY WALL MOUNTED JUNCTION BOXES SHALL BE PROVIDED WITH A WALL BLANK AND ALL EMPTY RACEWAYS SHALL BE PROVIDED WITH A PULL WIRES.
- PROVIDE ALL CONDUIT STUBS WITH A PROTECTIVE COLLAR.
- INSURE THAT ALL PENETRATIONS OF FIRE WALLS AND DECKS ARE PROPERLY SEALED PER INTERNATIONAL BUILDING CODE 712 AND WITH AN UL APPROVED DEVICE OR FIRE CAULK. REFER TO ARCHITECTURAL PLANS FOR THE LOCATIONS OF RATED FIRE WALLS AND UL ASSEMBLY LOCATIONS AND TYPES AND BID ACCORDINGLY.
- PROVIDE A CONDUIT EXPANSION JOINTS WITH BONDING JUMPER IN ALL CONDUITS CROSSING AN EXPANSION JOINT. REFER TO ARCHITECTURAL DRAWINGS FOR EXPANSION JOINT LOCATIONS.
- ALL UNDERGROUND CONDUITS RUNS ENTERING THE BUILDING SHALL BE SEALED TO PREVENT THE ENTRANCE OF MOISTURE.
- ALL FLEXIBLE CONDUITS ON THE EXTERIOR, IN WET LOCATIONS OR ANY MECHANICAL ROOM SHALL BE LIQUID TIGHT WITH SUITABLE FITTINGS.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR SEALING AROUND DEVICES, PENETRATIONS, OUTLETS, AND CONDUITS THAT PENETRATE THE WALLS ABOVE THE CEILING TO MAINTAIN SOUNDPROOFING. CONTRACTOR SHALL VERIFY THAT THE OPENINGS SIZES ARE LESS THAN 1/2" ON ALL SIDES OF THE PENETRATIONS. ALL OPENINGS IN EXCESS OF 1/2" SHALL BE CAULKED/SEALED WITH SHEET ROCK MUD. THE DRYWALL CONTRACTOR SHALL BE RESPONSIBLE FOR SEALING PENETRATIONS IN PLACE WHEN THE SHEETROCK ARE INSTALLED. PENETRATIONS MADE AFTER THE DRYWALL CONTRACTOR HAS FINISHED IN AN AREA SHALL BE SEALED BY THE CONTRACTOR MAKING THE PENETRATION.
- PLANNED INTERRUPTIONS OF UTILITY SERVICE TO ANY EXISTING FACILITY OR AREAS WITHIN ANY FACILITY AFFECTED BY THIS CONTRACT, SHALL BE CAREFULLY PLANNED AND COORDINATED IN ADVANCE OF THE REQUESTED INTERRUPTION. THE CONTRACTOR SHALL NOT INTERRUPT SERVICES UNTIL SPECIFIED APPROVAL HAS BEEN GRANTED. THE REQUEST SHALL INDICATE SERVICES AND AREAS TO BE AFFECTED, DATE AND TIME OF INTERRUPTION AND DURATION OF OUTAGE. REQUEST FOR INTERRUPTION OF SERVICE WILL NOT BE APPROVED UNTIL ALL EQUIPMENT AND MATERIAL REQUIRED FOR THE COMPLETION OF THAT PARTICULAR PHASE OF WORK ARE ON THE JOB SITE. CONTRACTOR IS RESPONSIBLE FOR ALL OVERTIME, HOLIDAY, AND WEEKEND PAY TO THEIR EMPLOYEES TO DO THIS WORK DURING SCHEDULED NON-NORMAL WORK HOURS.
- ALL EMERGENCY LIGHTS AND EXIT SIGNS SHALL HAVE AN EMERGENCY BATTERY BALLAST CONNECTED AHEAD OF LOCAL SWITCHING, UNLESS EMERGENCY LIGHTING IS ON EMERGENCY CIRCUIT FROM A GENERATOR.
- CONTRACTOR IS RESPONSIBLE FOR PROPER SENSITIVITY AND TIME DELAY SETTINGS FOR OCCUPANCY SENSORS. PROVIDE PROPER NUMBER OF POWER PACKS AND LOCATE POWER PACKS AND OCCUPANCY SENSORS ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- ALL JUNCTION BOX COVERS ABOVE THE CEILING SHALL BE CLEARLY MARKED WITH WHICH CIRCUITS OR ELECTRICAL SYSTEM THEY CONTAIN.
- HVAC EQUIPMENT POWER WIRING SHALL BE FURNISHED AND INSTALLED BY THIS CONTRACTOR. CONTROL EQUIPMENT AND CONTROL WIRING SHALL BE FURNISHED UNDER DIVISION 15 UNLESS OTHERWISE NOTED. PROVIDE 3/4" CONDUITS WITH PULL WIRE BETWEEN INSIDE AND OUTSIDE UNITS, THERMOSTAT OUTLETS AND UNITS AND/OR MECHANICAL CONTROL PANEL AS APPLICABLE. THERMOSTAT OUTLETS SHALL BE 4" SQUARE OUTLETS, FLUSH MOUNTED WITH SINGLE GANG OR DOUBLE GANG PLASTER RINGS AS DIRECTED BY THE HVAC CONTRACTOR. COORDINATE EXACT LOCATION OF ALL EQUIPMENT, DEVICES, OUTLETS, ETC. WITH THE MECHANICAL DRAWINGS AND DIVISION 15 SPECIFICATIONS. COORDINATE WITH THE HVAC CONTRACTOR FOR EXACT LOCATIONS OF ALL EQUIPMENT.
- ELECTRICAL DRAWINGS SHALL BE CAREFULLY COORDINATED WITH FOOD SERVICE DRAWINGS. REFER TO FOOD SERVICE DRAWINGS FOR EQUIPMENT LEGENDS, ROUGH-IN DIMENSIONS, AND OTHER SPECIFIC EQUIPMENT REQUIREMENTS.
- ELECTRICAL CONTRACTOR SHALL VERIFY THE EXACT LOCATION, POWER REQUIREMENTS, AND TYPE AND LOCATION OF ALL POWER AND CONTROL TERMINATIONS FOR ALL FOOD SERVICE EQUIPMENT PRIOR TO ROUGH-IN.
- ALL FIELD POWER AND CONTROL WIRING REQUIRED FOR FOOD SERVICE EQUIPMENT SHALL BE PROVIDED BY ELECTRICAL CONTRACTOR UNLESS OTHERWISE INDICATED. PROVIDE ALL MATERIAL AND LABOR AS REQUIRED FOR COMPLETE INSTALLATION OF FOOD SERVICE EQUIPMENT. INCLUDING RECEPTACLES, MATCHING PLUGS, MATCHING CORD CONNECTORS, CORD SETS, DISCONNECT SWITCHES, SWITCHING CIRCUITS, CONTROL CIRCUITING, AND THE INSTALLATION OF ANY POWER OR CONTROL COMPONENTS SHIPPED LOOSE.
- PROVIDE AND INSTALL ALL CIRCUITING AND AUXILIARY EQUIPMENT NECESSARY TO INTERLOCK THE KITCHEN HOOD FIRE SUPPRESSION SYSTEM WITH SUPPLY AND EXHAUST FAN STARTERS, SHUNT TRIP CIRCUIT BREAKERS, NATURAL GAS CUTOFF SOLENOID VALVES, AND THE FIRE ALARM SYSTEM. THE EXHAUST FAN SHALL REMAIN ON WHEN THE FIRE SUPPRESSION SYSTEM IS ACTIVATED, IF THE EXHAUST FAN IS NOT ON WHEN THE SUPPRESSION SYSTEM IS ACTIVATED IT SHALL BE STARTED. THE SUPPLY FAN, HOOD LIGHTS, AND ALL APPLIANCES AND OUTLETS UNDER THE HOOD SHALL BE DEENERGIZED WHEN THE SUPPRESSION SYSTEM IS ACTIVATED.
- BUILDING OWNER MUST RECEIVE RECORD DRAWINGS AND MANUALS THAT PROVIDE INSTRUCTIONS ABOUT THE OPERATION AND MAINTENANCE OF THE BUILDING'S ELECTRICAL DISTRIBUTION SYSTEM.



LATHAN
McKEE
ARCHITECTS

NEW ATHLETIC TRAINING FACILITY
AT
SARALAND HIGH SCHOOL
FOR THE
SARALAND CITY SCHOOLS
SARALAND, ALABAMA



SHEET TITLE:
ELECTRICAL LEGEND
& NOTES

PROJ. MGR.: J. TILLEY
DRAWN: J. TILLEY
DATE: 04.03.2026
REVISIONS

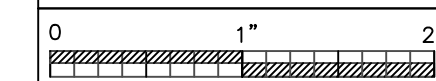
JOB NO. 25-173

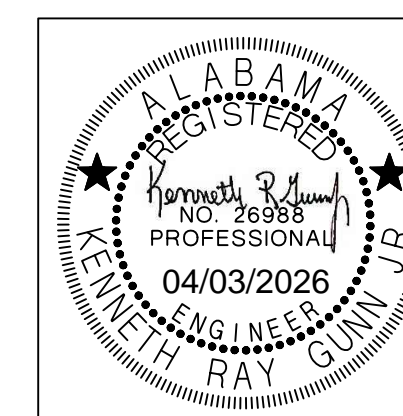
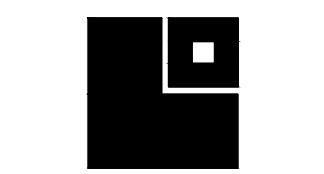
SHEET NO:

E0.1

Gunn & Associates, P.C.
Consulting Engineers
3102 Highway 14
Millbrook, AL 36054
Tel: 334.285.1273

1200 Providence Park, Suite 200
Birmingham, AL 35242
GAM26-051





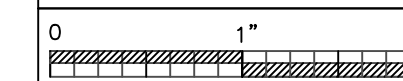
SHEET TITLE: SITE PLAN - ELECTRICAL

PROJ. MGR.: J. TILLEY
DRAWN: J. TILLEY
DATE: 04.03.2026
REVISIONS

JOB NO. 25-173

SHEET NO:

E1.1



Gunn & Associates, P.C.
Consulting Engineers
3102 Highway 14
Millbrook, AL 36054
1200 Providence Park, Suite 200
Birmingham, AL 35242
Tel: 334.285.1273
GAA26-051

UNDERGROUND UTILITY NOTES:

- THE UNDERGROUND UTILITY PORTION OF THIS PROJECT CONSISTS OF BUT IS NOT LIMITED TO:
 - TRENCHING/BACKFILLING FOR DUCT LINES AND CONDUIT SYSTEMS
 - DUCTBANK INSTALLATIONS
 - LOW VOLTAGE CONDUCTOR INSTALLATION
 - PATCH/REPAIR ALL DAMAGED SURFACES AS A RESULT OF DUCTLINE INSTALLATIONS
- INSTALLATION SHALL COMPLY WITH THE REQUIREMENTS OF THE NATIONAL ELECTRICAL SAFETY CODE (NEC) AND THE NATIONAL ELECTRICAL CODE (NEC).
- ALL CONDUCTIVE PARTS OF EQUIPMENT, ENCLOSURES, SUPPORTS, FRAMES, CASES, CONDUIT SYSTEMS AND SURGE ARRESTORS, CABLE SHEATHS, CABLE SHIELDS, COMMON NEUTRALS, ETC., SHALL BE GROUNDED. UNLESS NOTED OTHERWISE CONNECTIONS BELOW GRADE SHALL BE FUSION-WELDED AND ABOVE GRADE FUSION-WELDED OR BOLTED SOLDERLESS. ALL GROUND CONDUCTORS SHALL BE COPPER.
- ALL CLEARANCES SHALL BE MAINTAINED PER NEC AND NEC. ALL PARTS, DEVICES, EQUIPMENT, ETC. WHICH REQUIRE MAINTENANCE, ADJUSTMENT, OPERATION OR EXAMINATION DURING NORMAL NETWORK OPERATION SHALL BE ARRANGED SO AS TO BE ACCESSIBLE BY THE PROVISION OF ADEQUATE WORKING SPACES, WORKING FACILITIES AND CLEARANCES. UNLESS NOTED OTHERWISE ALL CLEARANCES ARE MEASURED FROM SURFACE TO SURFACE.
- ALL DIMENSIONS INDICATED IN THESE DOCUMENTS ARE FOR REFERENCE AND COORDINATION PURPOSES ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS IN THE FIELD.
- UNLESS OTHERWISE SHOWN OR DIRECTED DUCT LINES SHALL NOT BE LOCATED DIRECTLY UNDER STRUCTURES AND NOT DIRECTLY UNDER OR OVER OTHER SUBSURFACE STRUCTURES. WHERE DUCT LINES ARE REQUIRED TO CROSS OTHER UTILITIES SUCH AS SEWERS, WATER LINES, OTHER POWER LINES, COMMUNICATION LINES, ETC., ADEQUATE SUPPORT SHALL BE PROVIDED ON EACH SIDE OF THE CROSSING TO PREVENT TRANSFERRING ANY DIRECT LOAD ONTO THE OTHER LINE. DUCT LINES SHALL BE SO INSTALLED AS TO PREVENT HEAT TRANSFER BETWEEN ANY HEAT PRODUCING LINES AND/OR EQUIPMENT TO DUCT LINES.
 - ROUTING SHOWN ON DRAWINGS IS TYPICAL AND THE CONTRACTOR SHALL PROPOSE FINAL ROUTING BASED UPON ACTUAL FIELD DIMENSIONS, CONDITIONS AND EXISTING UNDERGROUND UTILITIES AND STRUCTURES.
 - PRIOR TO TRENCHING, THE CONTRACTOR SHALL STAKE OUT THE ENTIRE NETWORK ARRANGEMENT. ONE GRADE A WOODEN STAKE WITH RED FLAG SHALL BE DRIVEN EVERY 50'-0" AND AT EACH CHANGE OF DIRECTION. FOUR STAKES SHALL BE DRIVEN TO OUTLINE EQUIPMENT AND/OR MANHOLE LOCATIONS. ON PAVEMENTS RED PAINT SHALL BE USED TO OUTLINE THE AREAS TO BE CUT. SECURE EXISTING UNDERGROUND UTILITY INFORMATION FROM THE CONTRACTING OFFICER PRIOR TO PERFORMING ANY TRENCHING.
 - DEPTHS INDICATED FOR INSTALLATION ARE MINIMUM. ACTUAL DEPTHS MAY VARY DUE TO TERMINATIONS, COMPENSATIONS FOR RADIUS OF VERTICAL TRANSITIONS, EXISTING UTILITY CROSSINGS, ETC. APPROVAL SHALL BE OBTAINED FOR ANY DEPTH LESS THAN INDICATED. TRENCHES SHALL BE OVER-EXCAVATED AS NECESSARY TO ALLOW FOR PROPER TRENCH PREPARATION, DUCT BANK CONSTRUCTION, FORMING AND/OR BACKFILLING REQUIREMENTS.
 - ALL TRENCHING AND BACKFILL COMPACTION SHALL COMPLY WITH GEOTECHNICAL REPORT AND DIVISION 200.
 - CALL 811 TO LOCATE UTILITIES BEFORE YOU DIG. COORDINATE WITH OWNER FOR THEIR KNOWLEDGE OF THE SITE ALSO.

SHEET NOTES:

- CONTRACTOR SHALL BORE UNDERGROUND SECONDARY TO EXISTING ALABAMA POWER TRANSFORMER. CONFIRM WITH ALABAMA POWER WITCH TRANSFORMER TO CONNECT SECONDARY FEEDER TO. ALTER OR REPLACE CONCRETE PAD S NEEDED TO INSTALL UNDERGROUND FEEDER TO EXISTING TRANSFORMER.
- PROVIDE 2" UNDERGROUND CONDUIT WITH MULE TAPE AND CONNECT TO EXISTING COMMUNICATIONS IN-GRADE BOX.

GENERAL NOTES:

- LOCATIONS OF RISER POLES, AND TRANSFORMERS SHALL BE COORDINATED PRIOR TO BIDS. ADJUST FEEDER AND CONDUIT LENGTHS ACCORDINGLY. PAY ALL UTILITY COMPANY FEES. BID ACCORDINGLY.
- COORDINATE WITH POWER RISER DIAGRAMS FOR FEEDER AND CONDUIT SIZES AND ALL OTHER ADDITIONAL REQUIREMENTS NOT SHOWN ON SITE PLAN.
- ALL UNDERGROUND CONDUITS SHALL BE 36" MINIMUM BELOW GRADE. PRIMARY CONDUIT SHALL BE MINIMUM 48" BELOW GRADE.
- ALL ROUTING IS SHOWN DIAGRAMMATIC. VERIFY ACTUAL ROUTING AND FIELD CONDITIONS PRIOR TO BIDS.
- CONTRACTOR SHALL LABEL ALL CONDUITS ENTERING AND EXITING COMMUNICATIONS HAND HOLES AND BACKBOARDS.
- SEE TYPICAL TRENCH/DUCT DETAILS FOR ALL SURFACES. WORK SHALL COMPLY WITH DETAILS.
- SEE SHEET COMMUNICATIONS RISER DIAGRAMS ON SHEET E6.2 FOR ADDITIONAL REQUIREMENTS.

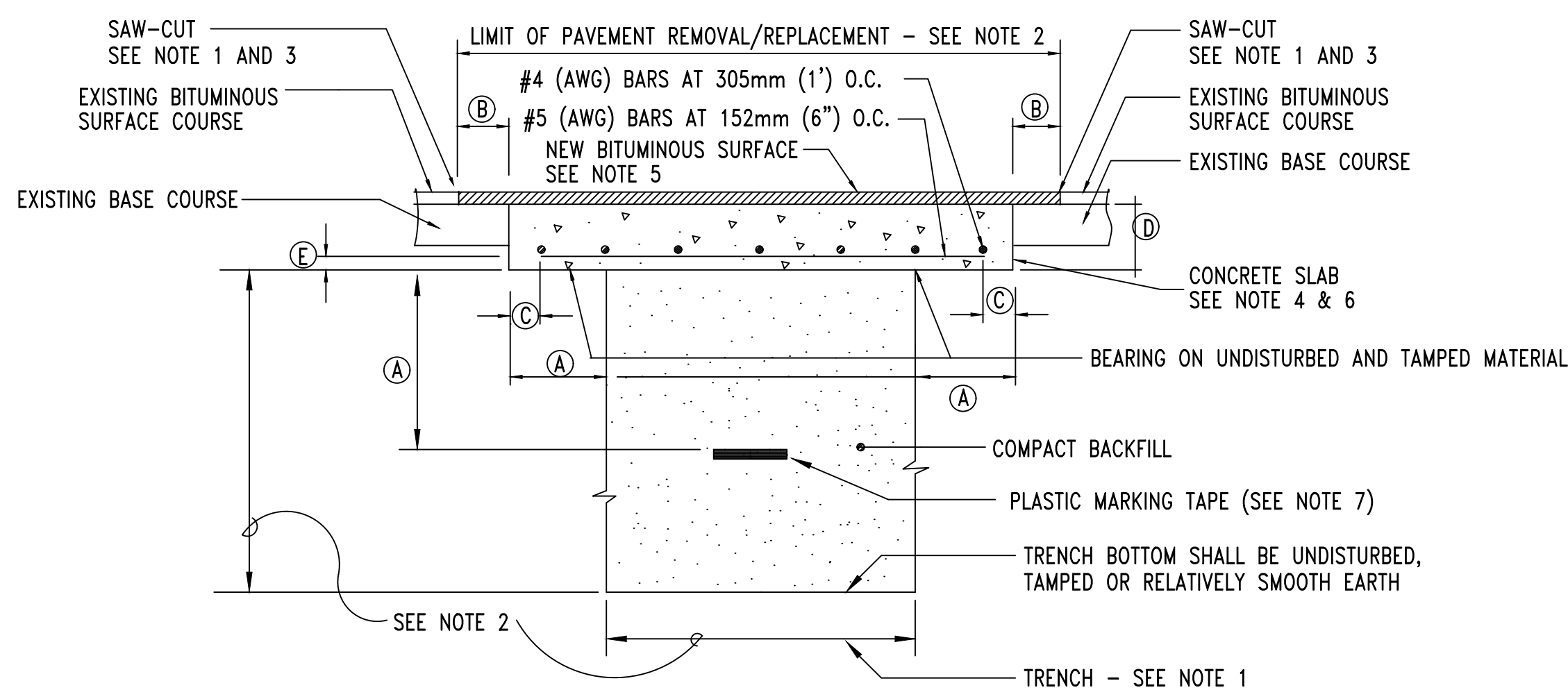
SITE LEGEND

- OP— OVERHEAD PRIMARY
- UP--- UNDERGROUND PRIMARY
- US--- UNDERGROUND SECONDARY
- UC--- UNDERGROUND COMMUNICATION
- EUC--- EXISTING UNDERGROUND COMMUNICATION
- ☐ PAD MOUNTED TRANSFORMER

NOTES:

- TRENCH/CUT EXISTING SURFACES. BACKFILL/PATCH/REPAIR ALL SURFACES AS SHOWN.
- TRENCH DEPTH AND WIDTH SHALL BE AS REQUIRED FOR THE INSTALLATION OF THE RACEWAY LINE SPECIFIED. SEE APPLICABLE RACEWAY LINE SECTION.
- PAVEMENT REMOVAL SHALL BE COMPLETE FROM THE SITE AND EXTEND BEYOND THE TRENCH WIDTH AS INDICATED.
- CONCRETE SHALL BE CLASS A.
- MATCH THICKNESS OF EXISTING BITUMINOUS SURFACE, OR 38mm (1.5") MINIMUM, WHICHEVER IS GREATER.
- REINFORCING BARS SHALL MEET ASTM A615, A616 OR A617, GRADE 40.
- REINFORCING BARS SHALL BE INSTALLED THE CONTINUOUS LENGTH OF CONCRETE SLAB.
- PLASTIC MARKER TAPE SHALL BE RED AND CONTAIN FOIL BACKING OR EQUIVALENT TO ENABLE DETECTION BY A METAL DETECTOR. SEE SPECIFICATIONS.

DIMENSION BLOCK		
REF	SI	ENGLISH
A	305mm	1'-0"
B	152mm	0'-6"
C	51mm	0'-2"
D	203mm	0'-8"
E	76mm	0'-3"

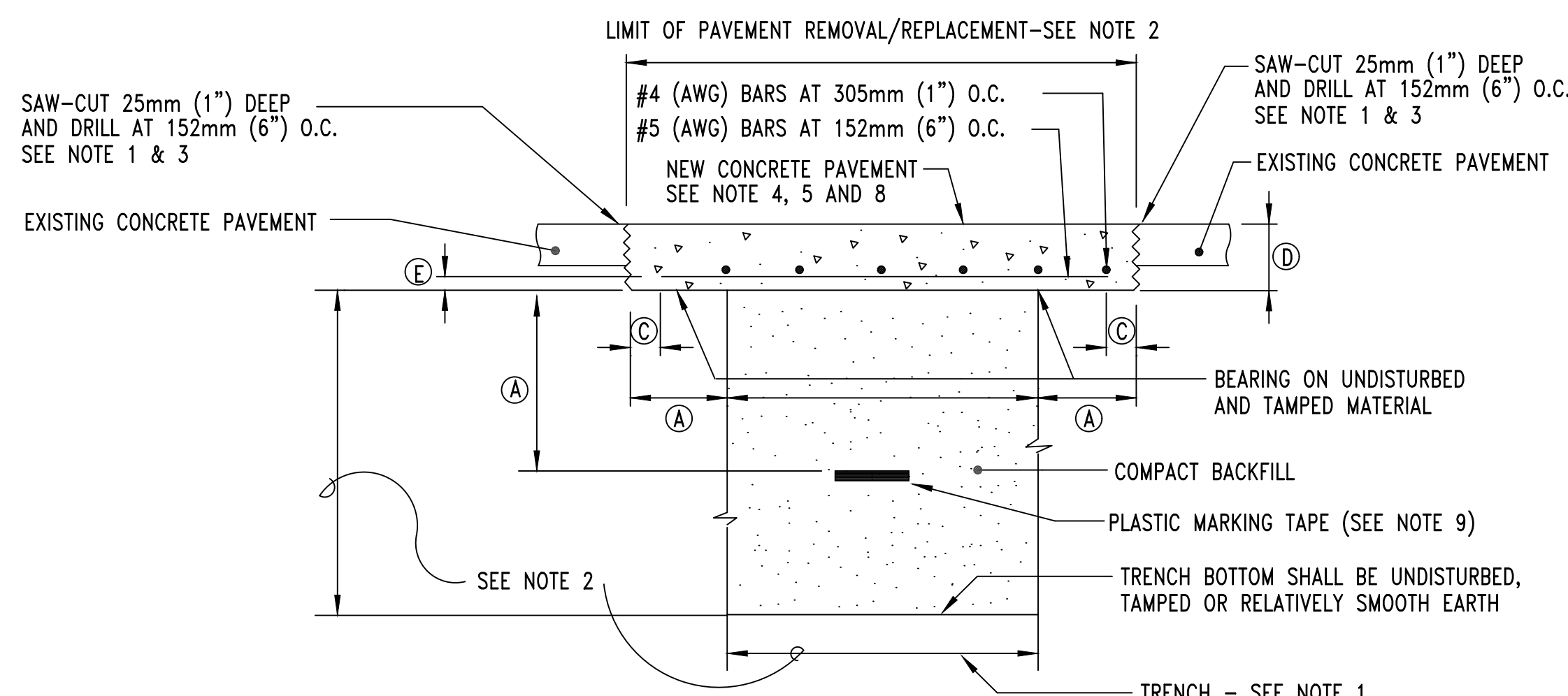


1 SECTION - TYPICAL TRENCH/BACKFILL/REPAIR FLEXIBLE PAVEMENT

NOTES:

- TRENCH/CUT EXISTING SURFACES. BACKFILL/PATCH/REPAIR ALL SURFACES AS SHOWN.
- TRENCH DEPTH AND WIDTH SHALL BE AS REQUIRED FOR THE INSTALLATION OF THE RACEWAY LINE SPECIFIED. SEE APPLICABLE RACEWAY LINE SECTION.
- PAVEMENT REMOVAL SHALL BE COMPLETE FROM THE SITE AND EXTEND BEYOND THE TRENCH WIDTH AS INDICATED.
- CONCRETE SHALL BE CLASS A.
- MATCH THICKNESS OF EXISTING CONCRETE PAVEMENT 8" (20.32cm) MIN.
- LEAVE DRILLED FACE OF EXISTING PAVEMENT IRREGULAR TO INSURE KEY TO NEW CONCRETE PAVEMENT.
- ALL EXISTING JOINTS TO BE RE-ESTABLISHED.
- REINFORCING BARS SHALL MEET ASTM A615, A616 OR A617, GRADE 40.
- REINFORCING BARS SHALL BE INSTALLED THE CONTINUOUS LENGTH OF CONCRETE PAVEMENT.
- PLASTIC MARKER TAPE SHALL BE RED AND CONTAIN FOIL BACKING OR EQUIVALENT TO ENABLE DETECTION BY A METAL DETECTOR. SEE SPECIFICATIONS.

DIMENSION BLOCK		
REF	SI	ENGLISH
A	305mm	1'-0"
B	152mm	0'-6"
C	51mm	0'-2"
D	203mm	0'-8"
E	76mm	0'-3"

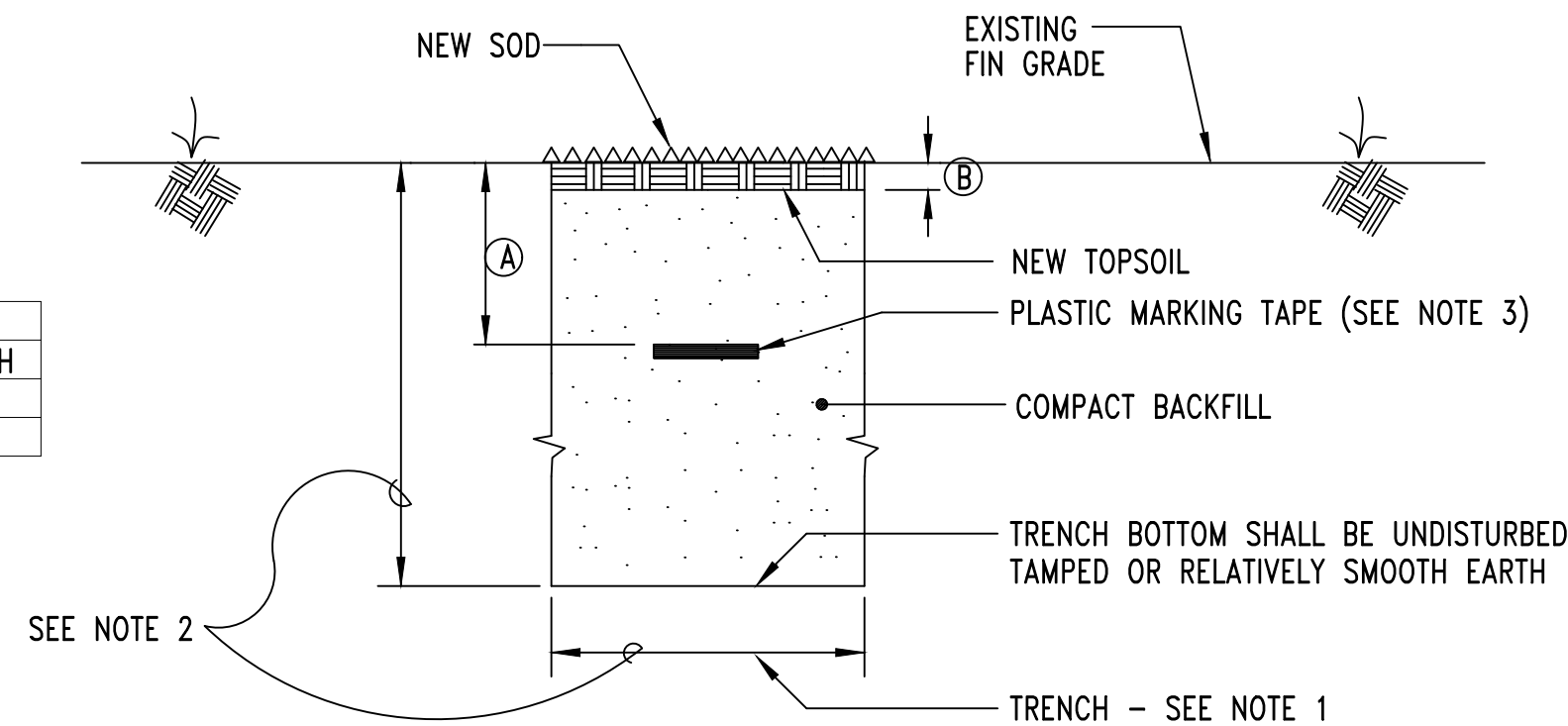


2 SECTION - TYPICAL TRENCH/BACKFILL/REPAIR RIGID PAVEMENT

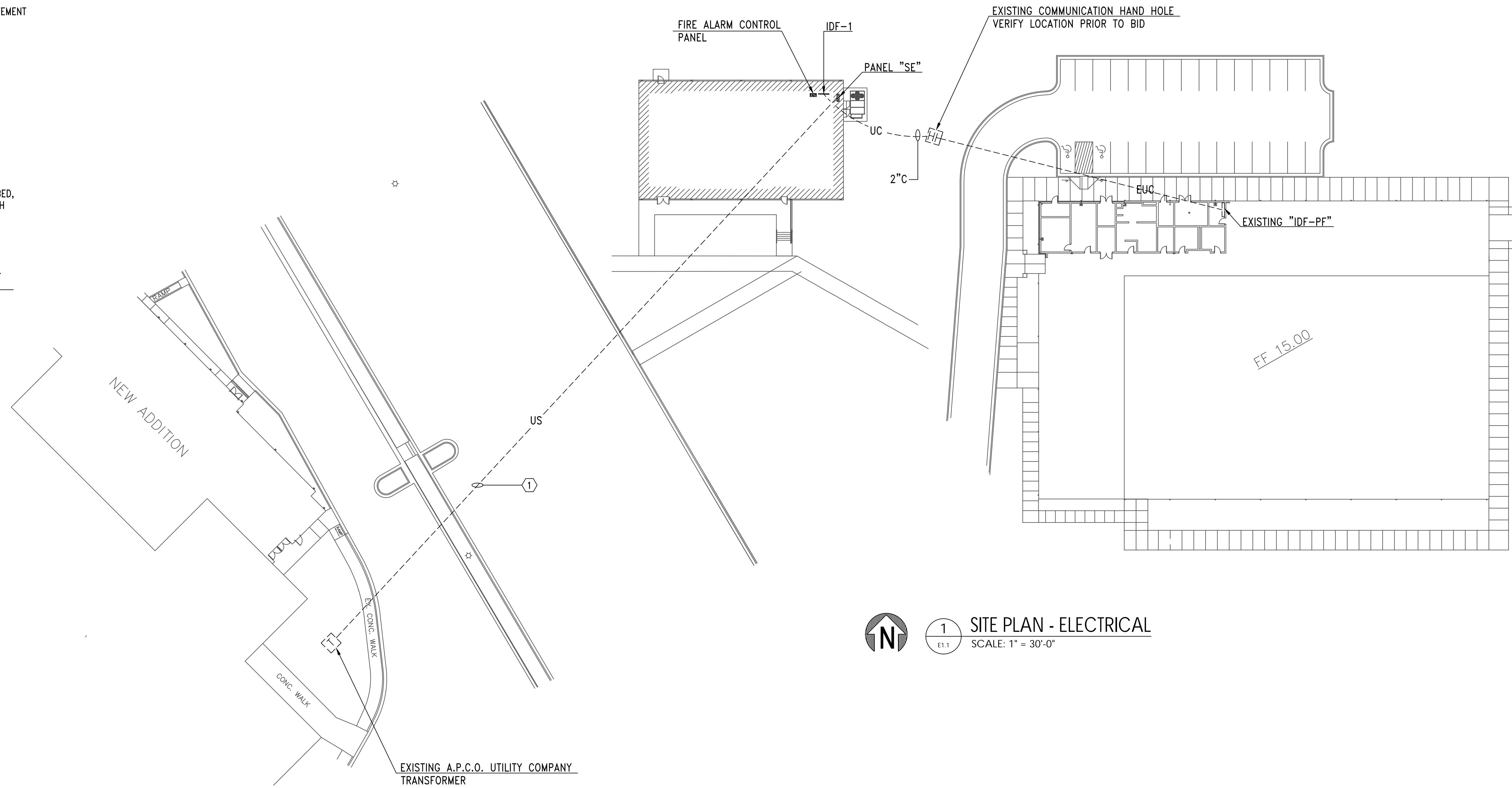
NOTES:

- TRENCH/CUT EXISTING SURFACES. BACKFILL/PATCH/REPAIR AND INSTALL NEW SOD.
- TRENCH DEPTH AND WIDTH SHALL BE AS REQUIRED FOR THE INSTALLATION OF THE RACEWAY LINE SPECIFIED. SEE APPLICABLE RACEWAY LINE SECTION.
- PLASTIC MARKER TAPE SHALL BE RED AND CONTAIN FOIL BACKING OR EQUIVALENT TO ENABLE DETECTION BY A METAL DETECTOR. SEE SPECIFICATIONS.

DIMENSION BLOCK		
REF	SI	ENGLISH
A	305mm	1'-0"
B	51mm	0'-2"



3 SECTION - TYPICAL TRENCH/BACKFILL/REPAIR SODDED AREAS



1 SITE PLAN - ELECTRICAL
SCALE: 1" = 30'-0"

ROOM CONTROLLER NOTES:

- CONTRACTOR SHALL LOCATE ALL ROOM CONTROLLERS ABOVE DOORS IN EACH ROOM 6" ABOVE CEILING GRID. PROVIDE ACCESS PANELS WHERE LOCATED ABOVE HARD CEILINGS OR MOUNT IN UTILITY TYPE ROOMS WHENEVER POSSIBLE. ROOM CONTROLLERS SHOWN ON THIS PLAN IS DIAGRAMMATIC FOR CIRCUITRY. DO NOT USE THESE FOR ACTUAL LOCATIONS. PROVIDE A WHITE PHENOLIC LABEL WITH 1" BLACK TEXT THAT READS "RC" GLUED ON CEILING GRID UNDER POWER PACK FOR EACH LOCATION FOR FUTURE MAINTENANCE.

PHOTOCONTROL OF LIGHTING:

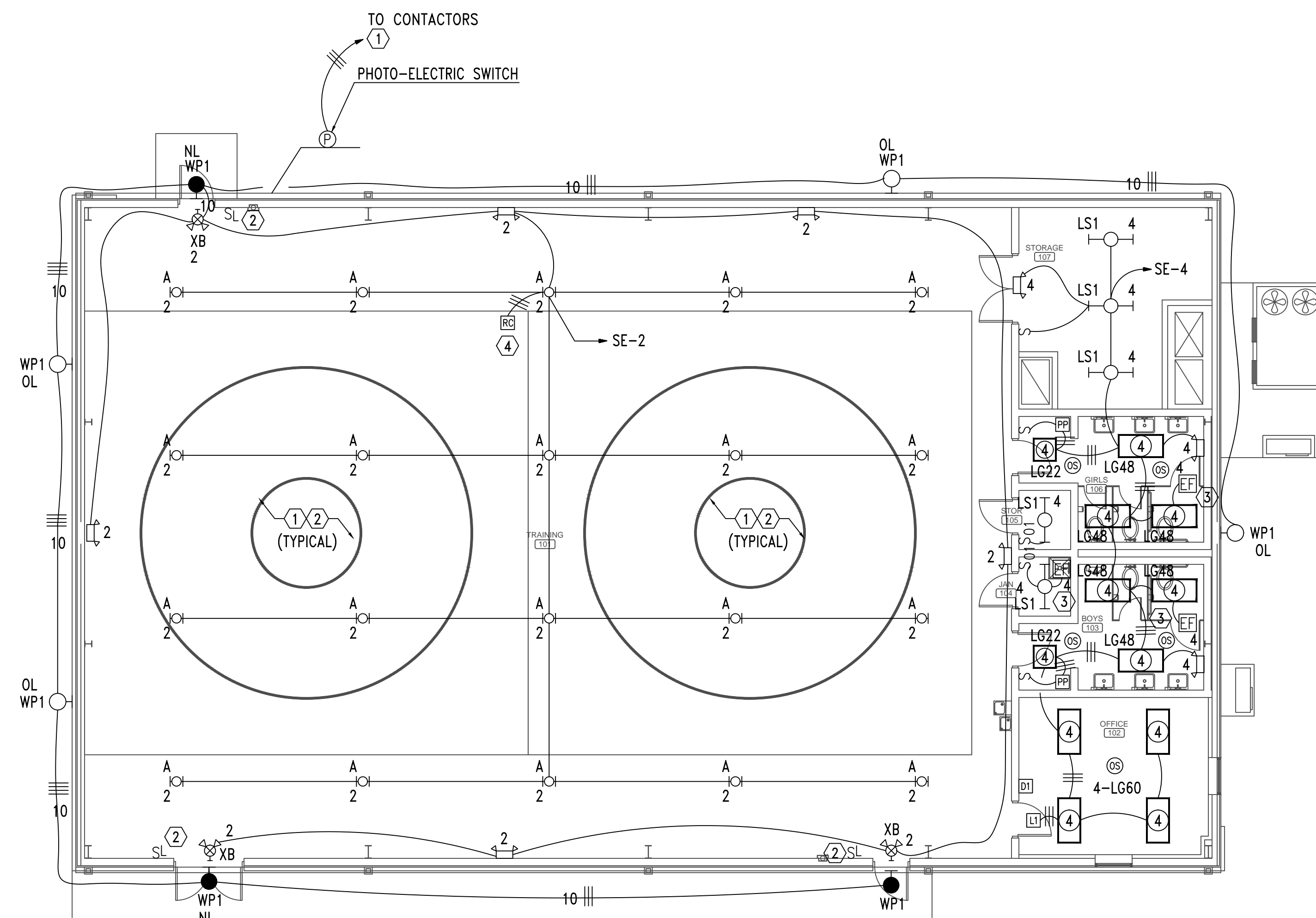
- PHOTOCONTROL OF LIGHT FIXTURES WILL NOT BE REQUIRED FOR THE AREAS ON THIS PAGE. THE PRIMARY SIDELIGHTED AREA WILL NOT HAVE WATTAGES EXCEEDING 150W.

GENERAL NOTES:

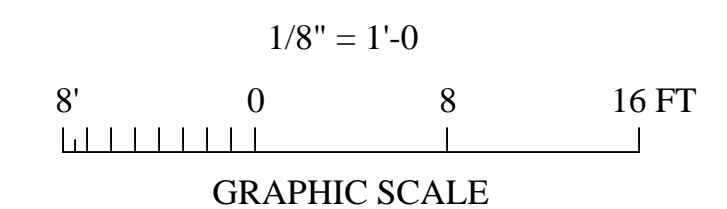
- PROVIDE DEDICATED NEUTRALS FOR EACH MULTIWIRED HOMERUN PER NEC.
- COORDINATE WITH LIGHTING CONTROL DETAILS FOR ADDITIONAL REQUIREMENTS.
- SEE LIGHTING CONTROL DETAILS ON SHEET E2.2 FOR ADDITIONAL REQUIREMENTS.

SHEET NOTES:

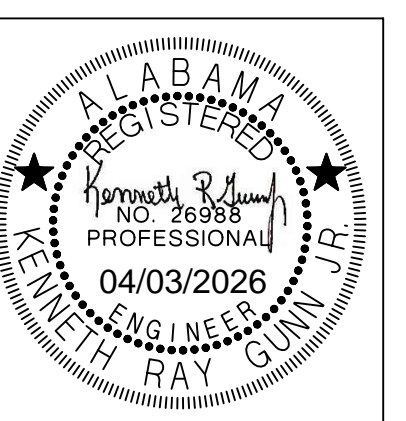
- DUE TO SECURITY CONCERNS THE OWNER DOES NOT WANT CORRIDOR LIGHTS TO TURN OFF DURING CLASS BY OCCUPANCY SENSORS.
- PROVIDE WIREGUARD FOR ALL EXIT SIGNS, EMERGENCY WALL PACKS, AND SWITCHES IN THIS AREA.
- PROVIDE INTERCONNECTING RELAY TRANSFORMER TO CONTROL 120V EXHAUST FAN ON/OFF BY THE 277 VOLT LIGHTING CIRCUIT IN THIS ROOM. TRANSFORMER SHALL BE 277V INPUT, 120V OUTPUT, 1,000 VA.
- LOCATE ROOM CONTROLLER BESIDE PANEL SE.



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



Gunn & Associates, P.C.
Consulting Engineers
3102 Highway 14 Millbrook, AL 36054
1200 Providence Park, Suite 200 Birmingham, AL 35242
Tel: 334.285.1273 GA#26-051



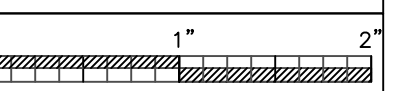
SHEET TITLE:
FLOOR PLAN - LIGHTING

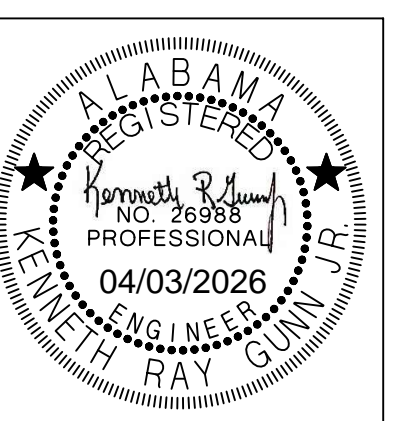
PROJ. MGR.: J. TILLERY
DRAWN: J. TILLERY
DATE: 04.03.2026
REVISIONS:

JOB NO. 25-173

SHEET NO:

E2.1





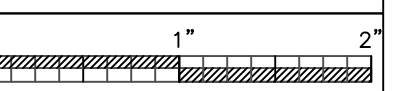
SHEET TITLE:
LIGHTING CONTROL
DETAILS & NOTES

PROJ. MGR.: J. TILLERY
DRAWN: J. TILLERY
DATE: 04.03.2026
REVISIONS

JOB NO. 25-173

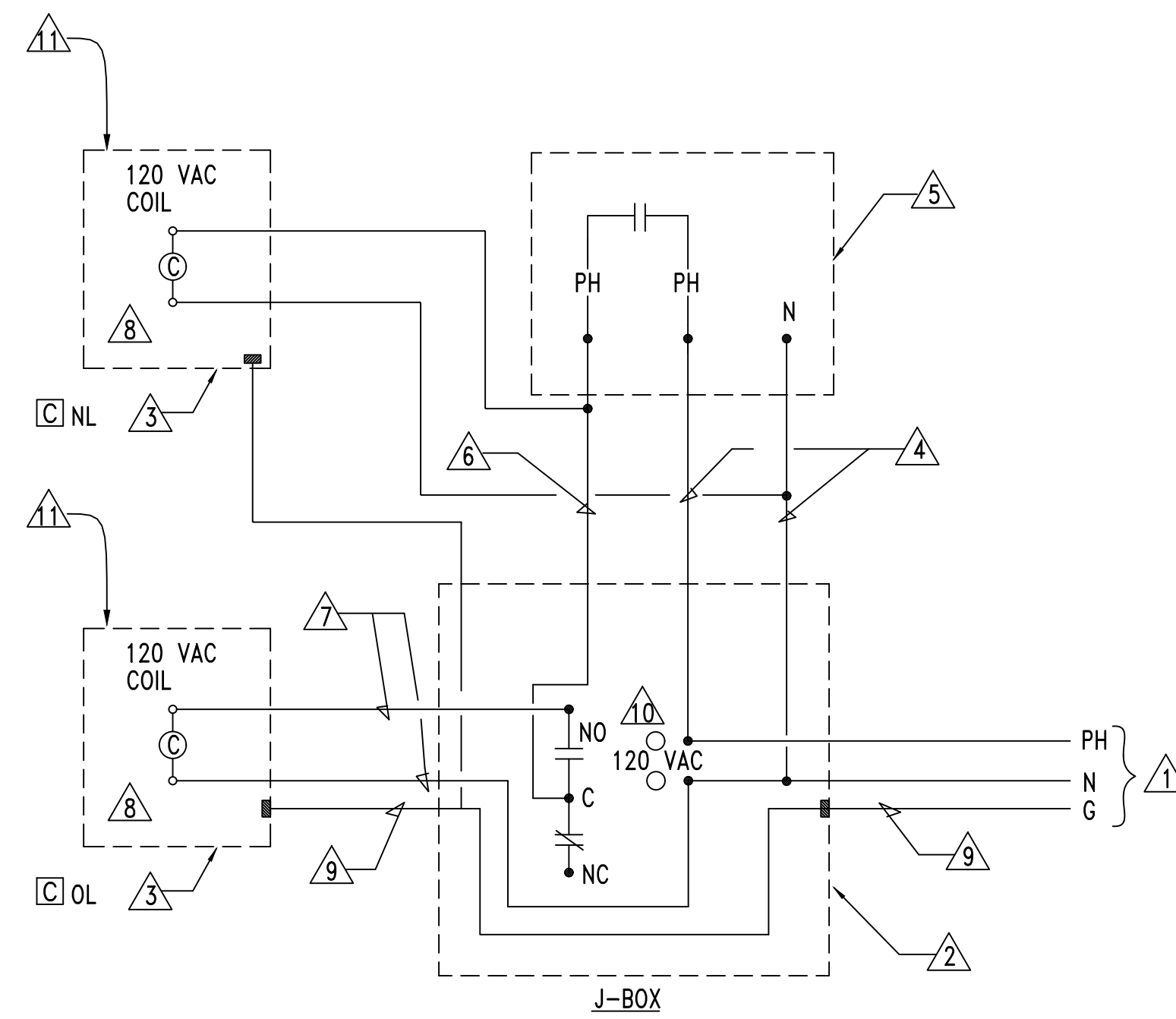
SHEET NO:

E2.2



OCCUPANCY SENSOR AND CONTROL NOTES:

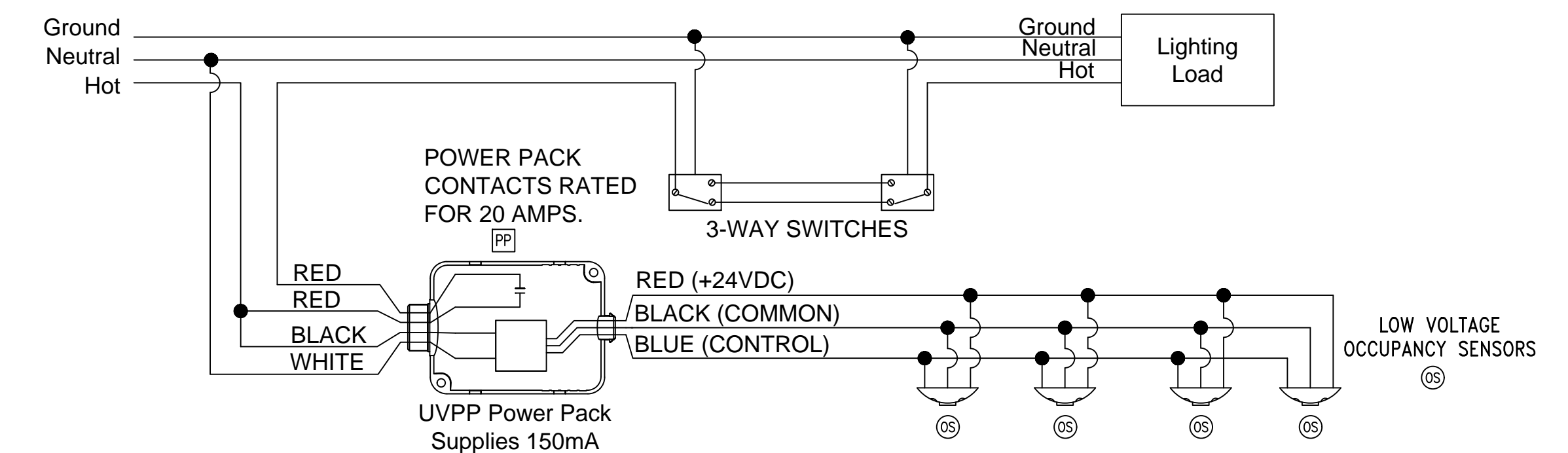
- OCCUPANCY SENSORS SHALL BE VACANCY TYPE WITH DUAL TECHNOLOGY DETECTION AND 20-MINUTE CUTOFF TIME.
- OCCUPANCY SENSOR MANUFACTURER PROVIDER WILL BE RESPONSIBLE FOR SIZING THE OCCUPANCY SENSORS IN EACH SPACE. PROVIDE THIS SIZING TO THE ENGINEER DURING SUBMITTAL PHASE FOR APPROVAL. PROVIDE ADDITIONAL OCCUPANCY SENSORS AS REQUIRED TO FULLY COVER ALL SPACES. IF ADDITIONAL OCCUPANCY SENSORS OR ANY OTHER EQUIPMENT IS REQUIRED IT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR TO PROVIDE AND INSTALL. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THIS WITH LIGHTING MANUFACTURER PRIOR TO BIDS AND COVER THE COST OF ALL MATERIAL AND LABOR FOR ANY ADDITIONAL OCCUPANCY SENSORS.
- ALL OCCUPANCY SENSORS LOCATIONS ARE APPROXIMATE. REFER TO MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR EXACT MOUNTING AND SPACING REQUIREMENTS PRIOR TO INSTALLATION.
- ULTRASONIC CEILING MOUNTED OCCUPANCY SENSORS SHALL BE LOCATED A MINIMUM OF SIX (6) FEET FROM HVAC SUPPLY/RETURN VENTS.
- CONTRACTOR IS RESPONSIBLE FOR PROPER SENSITIVITY AND TIME DELAY SETTINGS FOR OCCUPANCY SENSORS, FOLLOWING THE MANUFACTURER'S RECOMMENDED PLACEMENT, AND FIELD VERIFICATION OF CIRCUITS WITH RESPECT TO POWER PACK PLACEMENT.
- OCCUPANCY SENSORS MOUNTED OVER DOORWAYS SHALL BE PLACED ONE (1) FOOT INSIDE THRESHOLD.
- LIGHTING CONTROL SYSTEM IS SPECIFIED AROUND THE HUBBELL AUTOMATION SYSTEM. CONTRACTOR SHALL PROVIDE ALL MATERIALS, DEVICES, WIRING, CONNECTIONS, AND PROGRAMMING NEEDED IF ANY OTHER LIGHTING CONTROL SYSTEM SUBMITS FOR APPROVAL AND IS PROVIDED.
- HUBBELL, COOPER, AND ILC ARE APPROVED EQUALS.
- CONTRACTOR SHALL GROUND ALL JUNCTION BOXES CONTAINING LOW VOLTAGE SWITCHES OR ANY OTHER TYPE LIGHTING CONTROL DEVICE WITH #12 GRD.



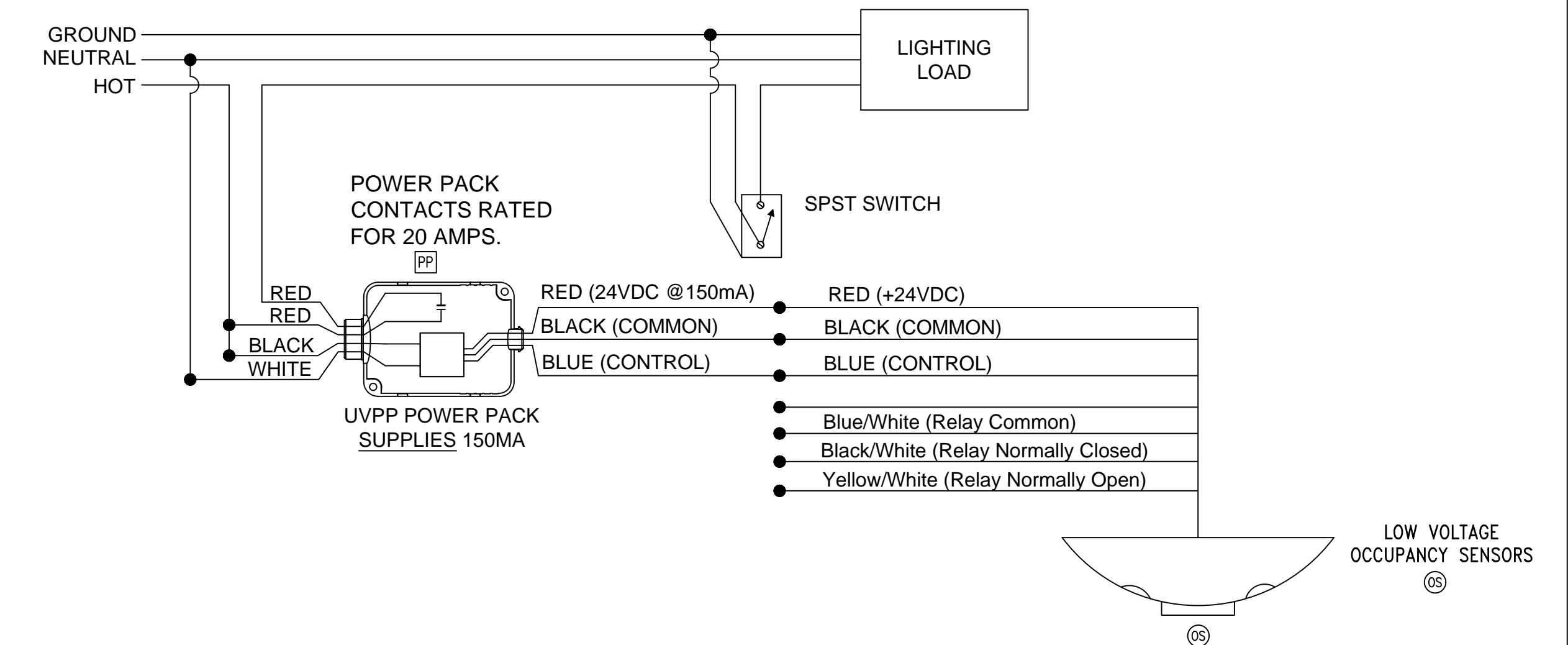
1 DETAIL - TYPICAL OPERATION OF TIME SWITCH/PHOTO-CELL/CONTACTOR
E2.3 NO SCALE

KEYED NOTES

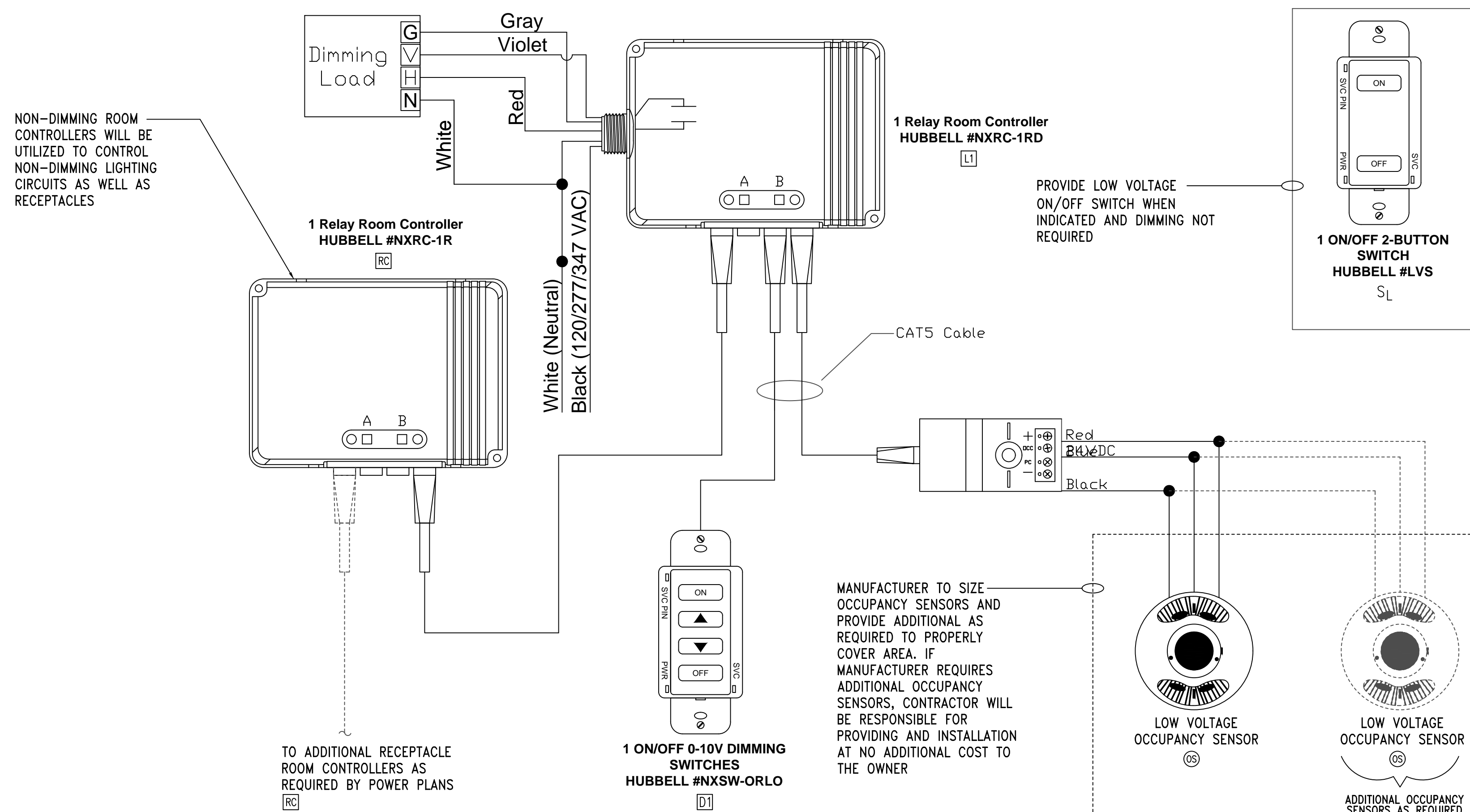
- ⚠ POWER SUPPLY - 120V, 1PH, 60HZ
- ⚠ TIME SWITCH ENCLOSURE - NEMA 1 UNLESS NOTED OTHERWISE
- ⚠ CONTACTOR ENCLOSURE - NEMA 1 UNLESS NOTED OTHERWISE
- ⚠ POWER TAP TO PHOTO-CELL IN GRC
- ⚠ TURN-LOCK PHOTO-CELL, SEE DETAIL
- ⚠ SWITCH LEG RETURN IN GRC
- ⚠ POWER TO CONTACTOR COIL
- ⚠ LIGHTING CONTACTOR [C] NL & [C] OL AS FOLLOWS:
 - NEMA ICS 2-211B INDUSTRIAL DUTY TYPE
 - ELECTRICALLY OPERATED-ELECTRICALLY HELD
 - RATING AND NUMBER OF POLES INDICATED
 - CONTACTS SHALL BE SILVER ALLOY, DOUBLE-BREAK, SUITABLE FOR TUNGSTEN, BALLAST LIGHTING, RESISTANCE AND MOTOR LOADS
 - FUSING FOR CONTROL CIRCUIT
- ⚠ GROUND CONDUCTOR - BOND TO EACH ENCLOSURE AND INSTALL IN EACH CONDUIT SYSTEM
- ⚠ DIGITAL TIME SWITCH AS FOLLOWS:
 - ONE CHANNEL WITH 24 HOUR, SEVEN DAY PROGRAMMING AND SKIP-A-DAY FEATURE
 - INPUT: 120 VAC, 60HZ
 - OUTPUT: DPST DRY CONTACTS (UNPOWERED)
 - HEAVY DUTY CONTACTS RATED 20 AMPERE RESISTIVE AT 120 VAC
 - TEMPERATURE RANGE: -20 TO +60 DEGREES CELSIUS
 - RELATIVE HUMIDITY: 0 TO 90% RH
 - CLOCK ACCURACY: ±2 MINUTES PER YEAR
 - LED INDICATION OF TIME AND LOAD STATUS
 - FULL WEEK'S RESERVE POWER (BATTERY BACK-UP)
- ⚠ PROVIDE NUMBER OF POLES REQUIRED.



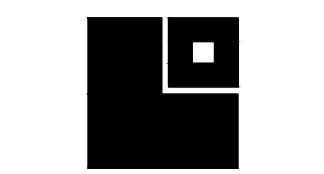
4 TYPICAL 3-WAY SWITCHING OCCUPANCY SENSOR WIRING DIAGRAM
E2.3 NO SCALE



3 TYPICAL SINGLE SWITCH OCCUPANCY SENSOR WIRING DIAGRAM
E2.3 NO SCALE



2 TYPICAL MULTIPLE OCCUPANCY SENSOR, SINGLE 0-10V DIMMING SYSTEM, AND MULTIPLE ROOM RECEPTACLE CONTROLLER DETAIL
E2.3 NO SCALE

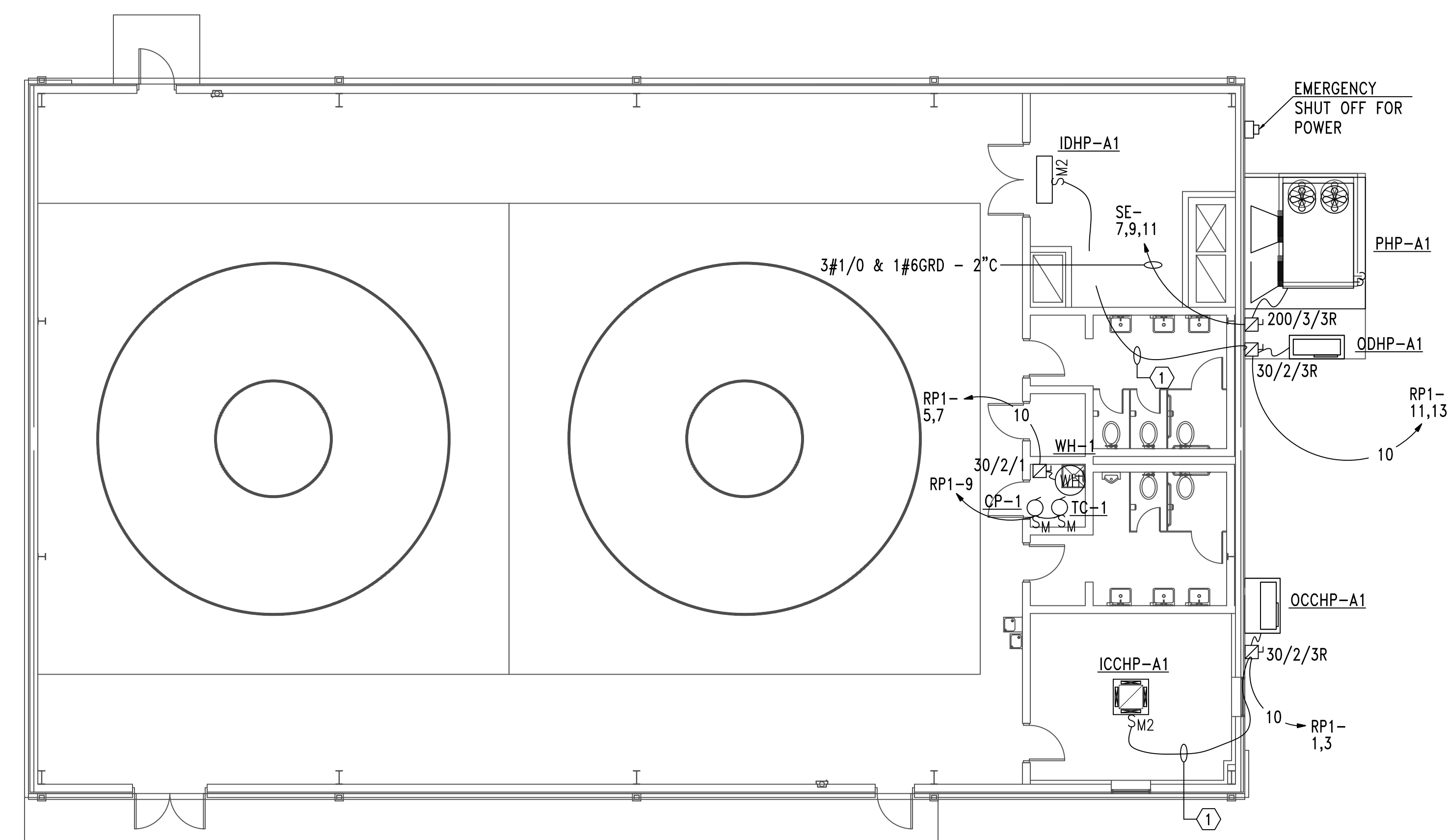


MECHANICAL GENERAL NOTES:

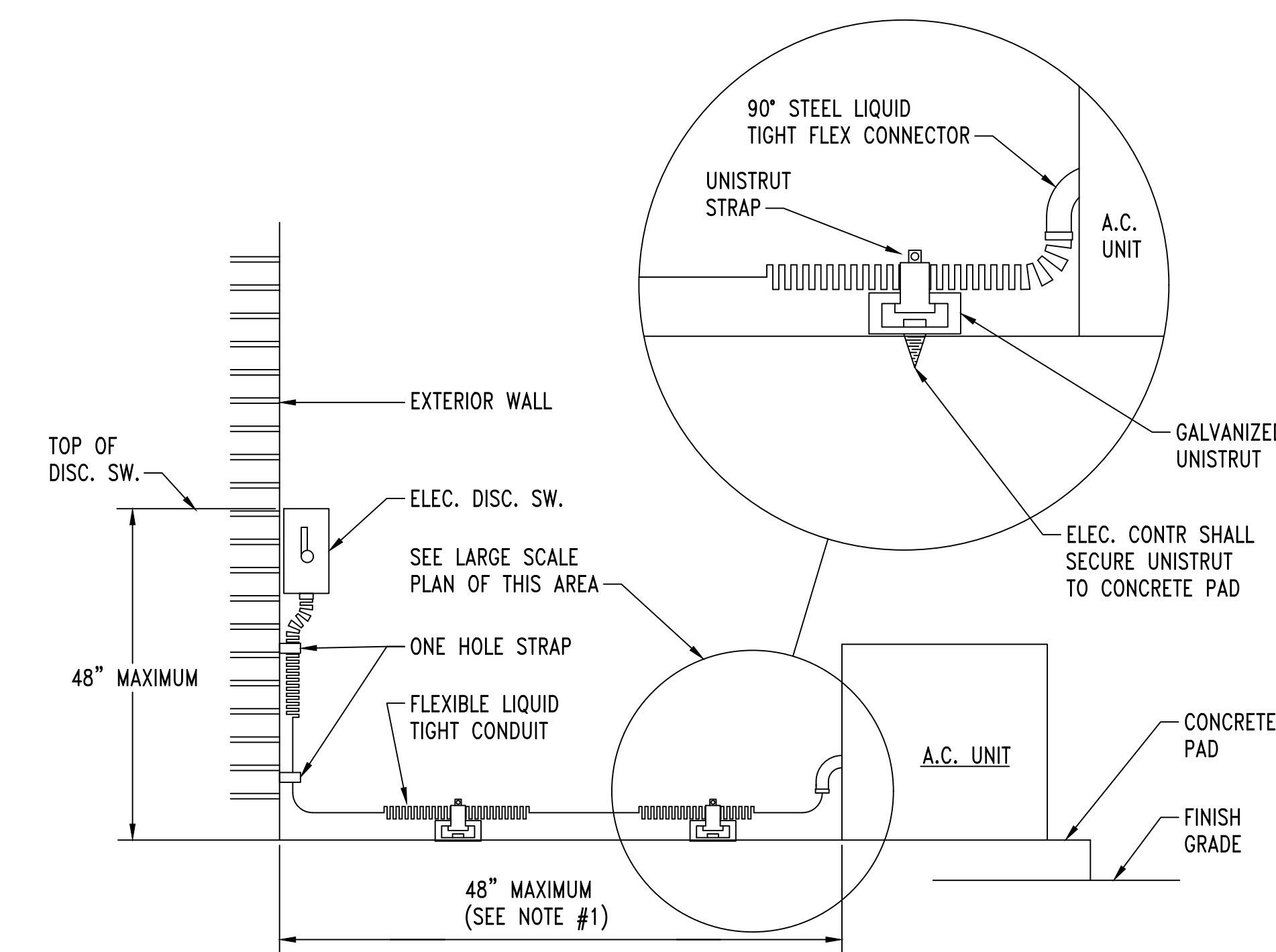
- COORDINATE WITH MECHANICAL/PLUMBING DRAWINGS FOR EXACT LOCATIONS OF EQUIPMENT.
- MOUNT EXTERIOR DISCONNECTS ON EXTERIOR WALLS AT LEAST 18" FROM WINDOWS. LOCATIONS OF DISCONNECTS AND EQUIPMENT ARE SHOWN FOR DRAWING CLARITY PURPOSES ONLY.
- COORDINATE WITH MECHANICAL/PLUMBING CONTRACTORS TO INSURE OVERCURRENT PROTECTION DEVICES FOR THEIR EQUIPMENT IS SIZED PER MANUFACTURER'S RECOMMENDATIONS. ENGINEER SIZED OVERCURRENT PROTECTION ACCORDING TO MECHANICAL/PLUMBING DRAWINGS AND SPECIFICATIONS, ACTUAL EQUIPMENT SUPPLIED MAY DIFFER. ELECTRICAL CONTRACTOR SHALL WORK WITH OTHER TRADE DISCIPLINES TO INSURE ANY CHANGES WILL BE INSTALLED CORRECTLY AT THE COST OF THE PERSON MAKING THE CHANGES.
- ALL FLEXIBLE CONNECT TO HVAC UNITS SHALL BE RUN PARALLEL TO HARD SURFACE AND STRAPPED AT LEAST EVERY 2'.
- CONTRACTOR SHALL PROVIDE CONDUIT FOR MECHANICAL CONTROLS. COORDINATE EXACT LOCATIONS WITH MECHANICAL CONTRACTOR PRIOR TO ROUGH-IN.
- ALL DISCONNECTS TO HAVE NAMEPLATE AS SHOWN IN DETAIL (4) THIS SHEET, NO EXCEPTIONS.
- PROVIDE DEDICATED NEUTRALS FOR EACH MULTIWIRED HOMERUN PER NEC.
- SEE DETAIL THIS SHEET FOR MECHANICAL UNIT CONNECTION DETAIL.

NOTE:

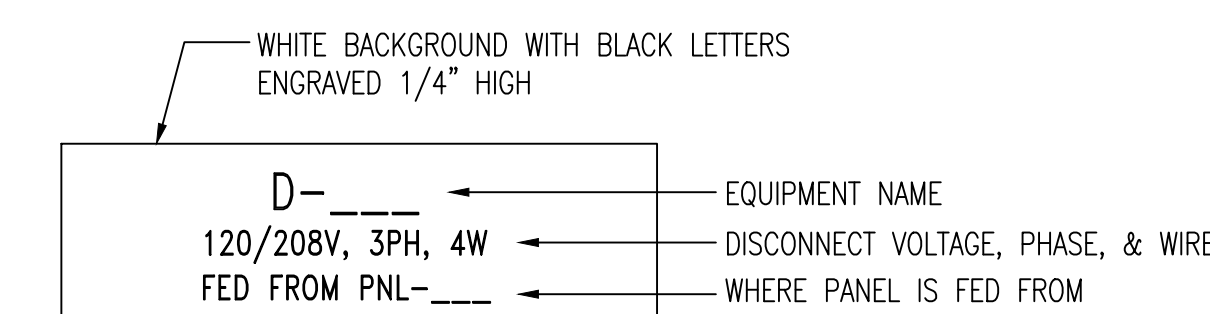
- FOR DISTANCE GREATER THAN 48" CONDUIT TO BE ROUTED BELOW GRADE WITH 6" OF MECH. UNIT, STUB-UP W/ RIGID ELBOW THRU CONCRETE PAD. PROVIDE FLEXIBLE CONNECTION FROM ELBOW TO MECH. UNIT, W/ CONNECTION MADE AT UNIT AS SHOWN ABOVE.



2 FLOOR PLAN - MECHANICAL POWER
SCALE: 1/8"=1'-0"

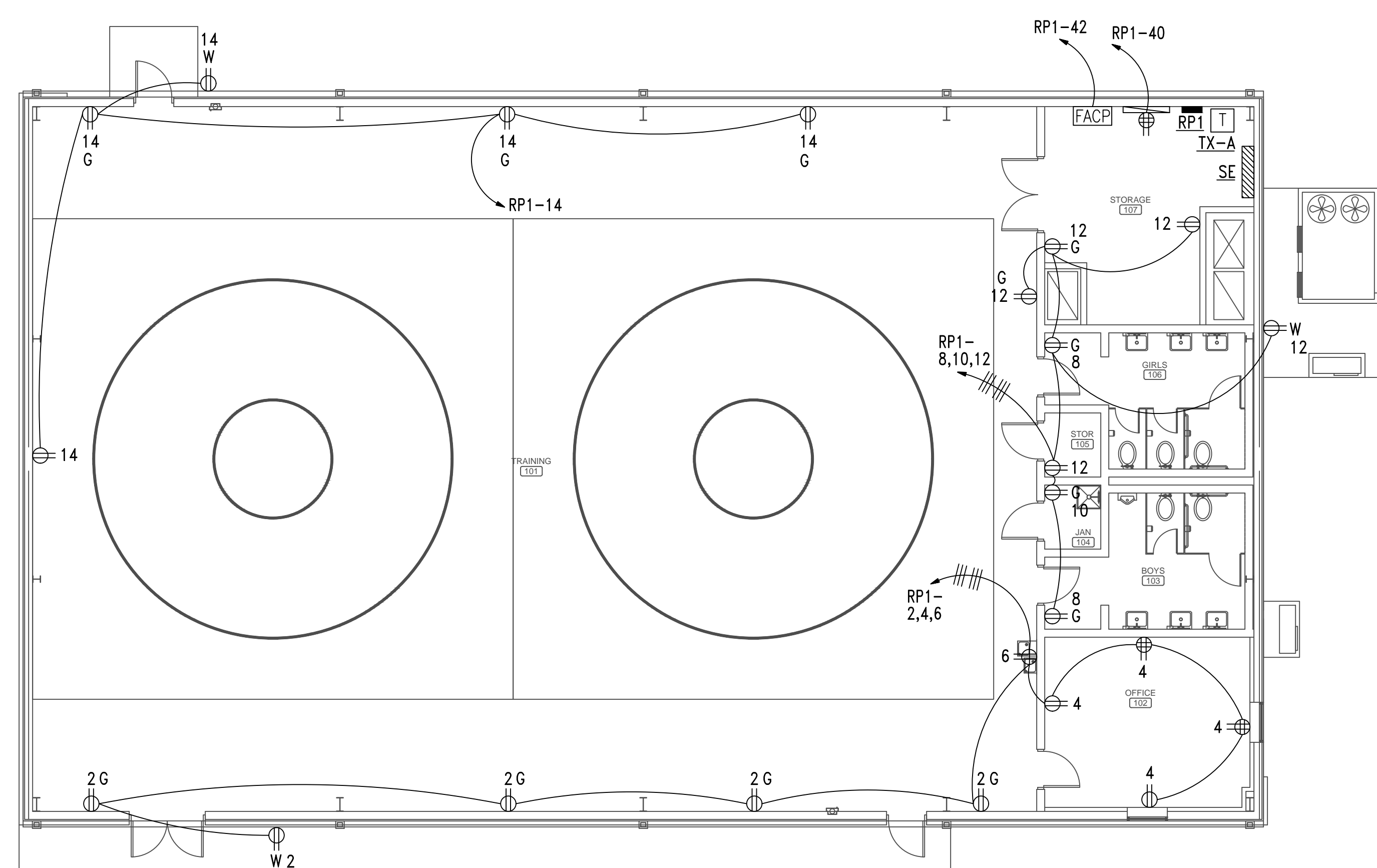


4 MECHANICAL UNIT CONNECTION DETAIL
NO SCALE



TYPICAL NORMAL POWER NAMEPLATE

3 DETAIL - TYPICAL DISCONNECT NAMEPLATE
NO SCALE



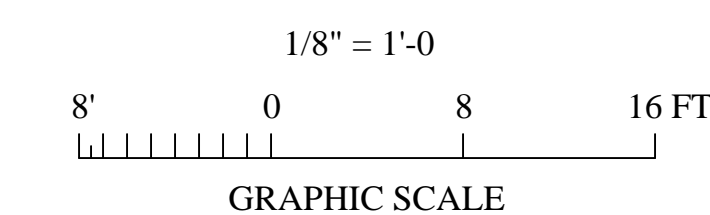
1 FLOOR PLAN - POWER
SCALE: 1/8"=1'-0"

GENERAL NOTES:

- PROVIDE DEDICATED NEUTRALS FOR EACH MULTIWIRED HOMERUN PER NEC.
- COORDINATE EXACT LOCATION OF ALL ELECTRICAL AND COMMUNICATIONS DEVICES WITH MILLWORK PROVIDERS PRIOR TO ROUGH-IN.
- ALL DISCONNECTS TO HAVE NAMEPLATE AS SHOWN IN DETAIL, NO EXCEPTIONS.
- ALL RECEPTACLE CIRCUITS THAT ARE ROUTED UNDERGROUND SHALL BE STUBBED UP ABOVE CEILING IN AN ACCESSIBLE LOCATION FOR FUTURE USE.
- THE OWNER TAKES EXCEPTION TO THE FOLLOWING SECTIONS OF 2013 ASHRAE 90, SECTION 8.4.2 AUTOMATIC RECEPTACLE CONTROLS AND SECTION 8.4.3 ELECTRICAL ENERGY MONITORING. THESE REQUIREMENTS WILL NOT BE PROVIDED IN THIS PROJECT.

SHEET NOTES:

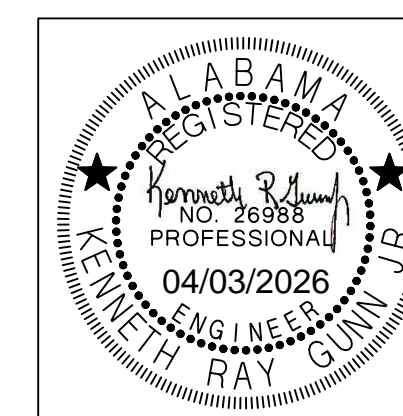
- INTERIOR UNIT RECEIVES POWER FROM THE EXTERIOR UNIT. PROVIDE INTERCONNECTING CIRCUITRY AS NEEDED IN CONDUIT TO CONNECT THE INTERIOR UNIT.



Gunn & Associates, P.C.
Consulting Engineers
3102 Highway 14
Millbrook, AL 36054
Tel: 334.285.1273

1200 Providence Park, Suite 200
Birmingham, AL 35242
GA#26-051

NEW ATHLETIC TRAINING FACILITY
AT
SARALAND HIGH SCHOOL
FOR THE
SARALAND CITY SCHOOLS
SARALAND, ALABAMA



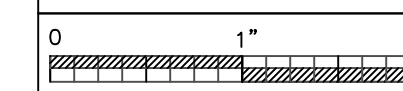
SHEET TITLE:
FLOOR PLAN -
POWER

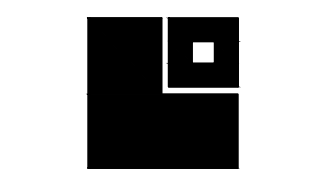
PROJ. MGR.: J. TILLERY
DRAWN: J. TILLERY
DATE: 04.03.2026
REVISIONS

JOB NO. 25-173

SHEET NO:

E3.1



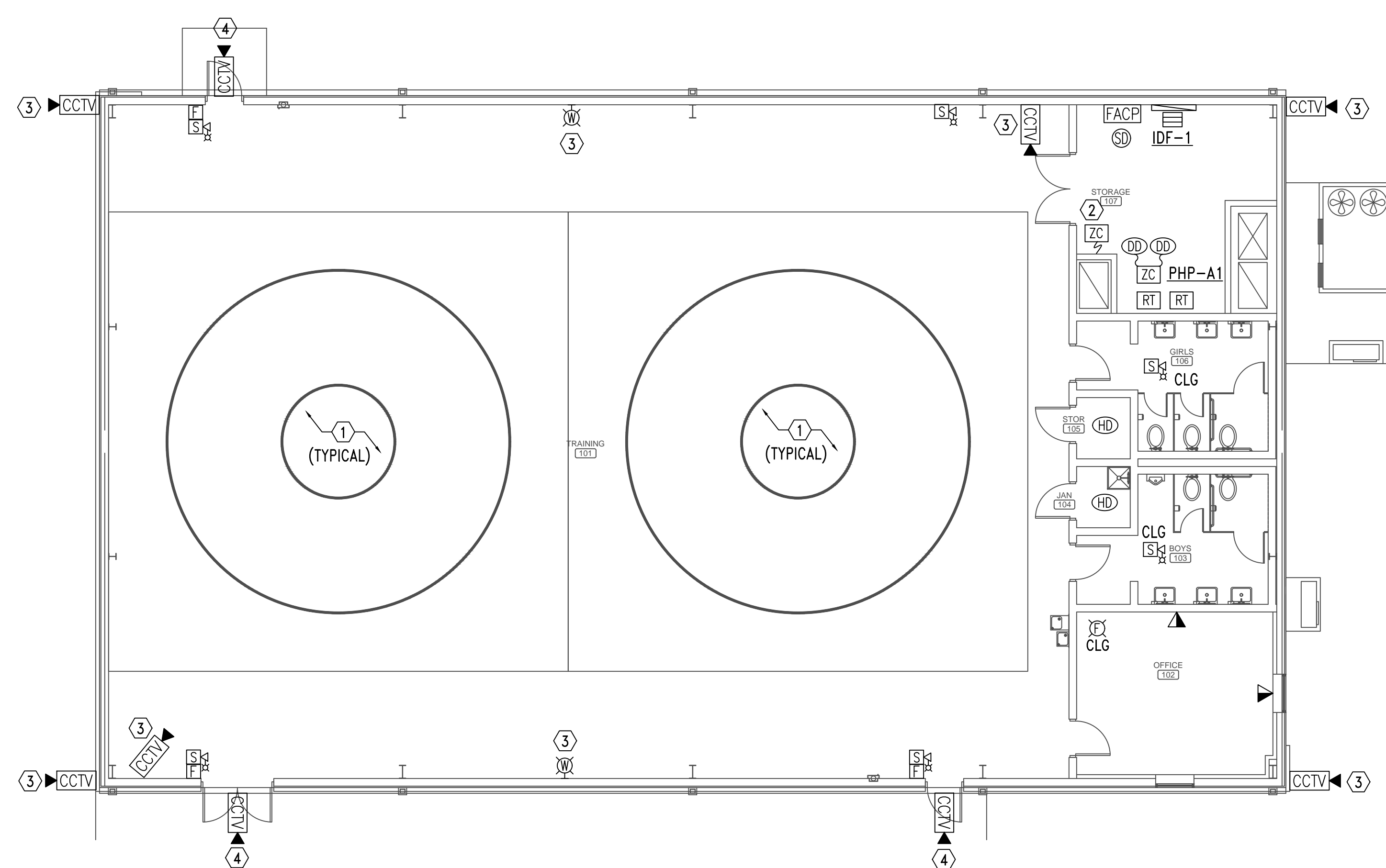


GENERAL NOTES:

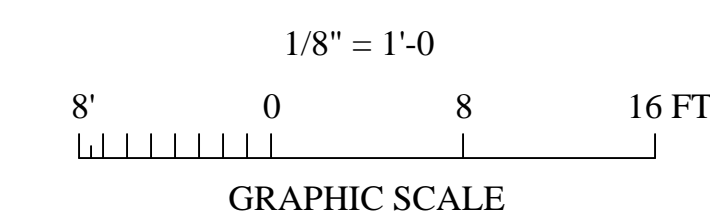
1. COORDINATE WITH CORRESPONDING RISER DIAGRAMS.
2. COORDINATE AND MOUNT COMMUNICATIONS OUTLETS WITHIN 6" OF CORRESPONDING POWER RECEPTACLE.

SHEET NOTES:

- ① PROVIDE WIREGUARD FOR ALL FIRE ALARM IN GYMNASIUM, LOCKER ROOM & WEIGHT ROOM AREAS. ALL DATA CABLING SHALL BE IN CONDUIT IN EXPOSED AREAS.
- ② PROVIDE FIRE ALARM CONTROL MODULE TO MUTE SOUND SYSTEM UPON ACTIVATION FROM FIRE ALARM SYSTEM.
- ③ MOUNT 12' AFF.
- ④ MOUNT ABOVE DOOR AND BELOW CANOPY.

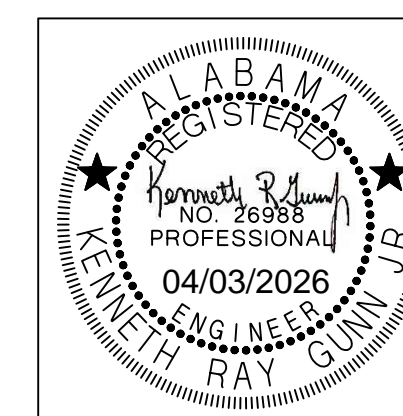


1 FLOOR PLAN - AUXILIARY
SCALE: 1/8"=1'-0"



Gunn & Associates, P.C.
Consulting Engineers
3102 Highway 14
Millbrook, AL 36054
Tel: 334.285.1273

1200 Providence Park, Suite 200
Birmingham, AL 35242
GA#26-051



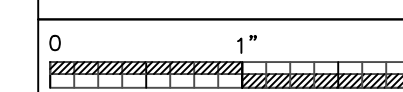
SHEET TITLE:
FLOOR PLAN -
AUXILIARY

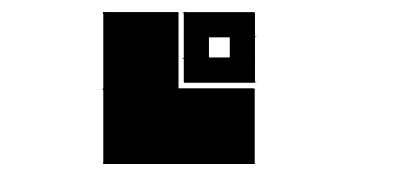
PROJ. MGR.:	J. TILLERY
DRAWN:	J. TILLERY
DATE:	04.03.2026
REVISIONS:	

JOB NO. 25-173

SHEET NO:

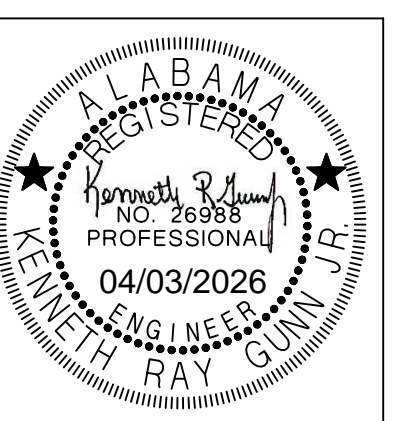
E4.1





LATHAN & MCKEE ARCHITECTS

NEW ATHLETIC TRAINING FACILITY AT SARALAND HIGH SCHOOL FOR THE SARALAND CITY SCHOOLS SARALAND, ALABAMA



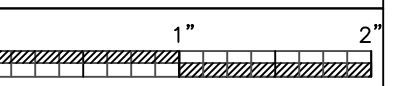
SHEET TITLE: LIGHTING SCHEDULE DETAILS & NOTES

PROJ. MGR.: J. TILLERY
DRAWN: J. TILLERY
DATE: 04.03.2026
REVISIONS

JOB NO. 25-173

SHEET NO:

E5.1



LUMINAIRE NOTES:

- ALL LUMINAIRES AND INSTALLATION SHALL BE IN ACCORDANCE WITH NEC, NFPA AND LOCAL CODES. ALL LUMINAIRES SHALL BE UL LISTED AND INSTALLED IN ACCORDANCE WITH THE UL LISTING.
- LUMINAIRES SHALL BE FURNISHED COMPLETE WITH THE PROPER LAMP BASE OR PIN RECEPTORS, WIRING COMPONENTS, LAMPS, SUPPORTING FRAMES AND DEVICES, ETC., FOR A COMPLETE INSTALLATION.
- ALL LUMINAIRE DEVICES, COMPONENTS, FITTINGS, SUPPORTS, ETC., SHALL BE COORDINATED TO PROVIDE A COMPLETE UL LISTED INSTALLATION.
- ALL LUMINAIRES BALLAST, DRIVERS, LAMPS, ETC SHALL BE COMPATIBLE WITH THE LIGHTING CONTROL SYSTEM OR DIMMING CONTROL SYSTEM PROVIDED.
- SECURE EACH LAY-IN LUMINAIRE AT TWO LOCATIONS TO THE CEILING GRID. PROVIDE BOLTS, SCREWS, RIVETS OR APPROVED CLIPS FOR USE WITH THE TYPE CEILING AND LUMINAIRE INSTALLED.
- ALL LUMINAIRES IN MECHANICAL AND ELECTRICAL ROOMS SHALL BE INSTALLED TO CLEAR ELECTRICAL EQUIPMENT, DUCT, PIPING, ETC., SUSPEND BELOW OBSTRUCTION WHEN CONFLICTS OCCUR.
- ALL LED LUMINAIRES SHALL BE PROVIDED WITH 4000K COLOR TEMPERATURE LAMPS, UNLESS NOTED OTHERWISE.
- ARCHITECT RESERVES THE RIGHT TO SELECT ALL COLORS FOR LUMINAIRES, POLES, MOUNTING ACCESSORIES, ETC. DURING SHOP DRAWING REVIEW.
- COORDINATE LUMINAIRE MOUNTING WITH ARCHITECTURAL ELEVATIONS PRIOR TO INSTALLATION.
- ALL EXIT SIGNS AND LUMINAIRES DESIGNATED AS EMERGENCY SHALL BE PROVIDED WITH A MINIMUM 1100 LUMEN EMERGENCY BATTERY BALLAST CAPABLE OF 90 MINUTES OF ILLUMINATION. X DESIGNATION MEANS DIFFERENT TYPE BATTERY SEE SCHEDULE.
- CONTRACTOR SHALL PROVIDE ALL SLOPE ADAPTERS, FLANGE KITS, TRIMS, AND ALL OTHER MOUNTING ACCESSORIES AS NEEDED TO MOUNT EACH LUMINAIRE IN CEILINGS AS SHOWN. COORDINATE WITH ARCHITECTURAL REFLECTED CEILING PLANS.
- PROVIDE ALL EXIT SIGNS WITH DIRECTIONAL ARROWS AS SHOWN ON DRAWINGS.

LIGHTING FIXTURE SCHEDULE						
TYPE:	MANUFACTURER NUMBER AND EQUALS:	VOLTAGE:	MOUNTING:	LAMP TYPE:	LAMP QUANTITY:	DESCRIPTION:
A	COLUMBIA NO. ECH1764L16-DW-ED-U-PM-F5006 OR PRIOR APPROVED EQUAL BY WILLIAMS OR COOPER	MVOLT	SUSPENDED	LED	16,500 LUMENS	SUSPENDED 2 FEET LED HIGH BAY LUMINAIRE. MOUNT AT 26 FEET ABOVE FINISHED FLOOR. PROVIDE WITH PROTECTIVE WIRE GUARD. PROVIDE WITH AIRCRAFT CABLE MOUNTING AND SAFETY CHAINS.
LG22	HUBBELL NO. SRP24-40V-H-E-EDU OR EQUALS BY WILLIAMS, OR COOPER	MVOLT	RECESSED	LED	5000 LUMEN	2'X2' 4000-LUMEN FLAT PANEL FIXTURE. 0-10V DIMMING CAPABLE.
LG48	HUBBELL NO. SRP24-40V-H-E-EDU OR EQUALS BY WILLIAMS, OR COOPER	MVOLT	RECESSED	LED	5000 LUMEN	2'X4' 4000-LUMEN FLAT PANEL FIXTURE. 0-10V DIMMING CAPABLE.
LG60	HUBBELL NO. SRP24-40V-H-E-EDU OR EQUALS BY WILLIAMS, OR COOPER	MVOLT	RECESSED	LED	6000 LUMEN	2'X4' 4000-LUMEN FLAT PANEL FIXTURE. 0-10V DIMMING CAPABLE.
LS1	HUBBELL NO. LCL4-4000K-MLE-U OR EQUALS BY WILLIAMS, OR COOPER	MVOLT	SURFACE OR CHAIN HUNG	LED	5300 LUMEN	SURFACE MOUNTED 4" LED STRIP. CHAIN HANG WHEN SURFACE MOUNT IS NOT POSSIBLE.
WP1	HUBBELL NO. 1FM2-0-60-16-400K-60CR-TYPE 5UM-COLOR BY ARCH OR PRIOR APPROVED EQUALS BY WILLIAMS OR COOPER	MVOLT	WALL	LED	6000 LUMEN	DARK BRONZE EXTERIOR LED LIGHT. UL LISTED FOR WET LOCATIONS.
EM WALL PACK	COMPASS NO. C20H-HO5D - WIREGUARDS IN SHOP AREAS OR PRIOR APPROVED EQUAL BY EMERG-LITE, MCPHILBEN, OR PRESOLITE	MVOLT	WALL	LED	1000 LUMEN	1000 LUMEN LED EMERGENCY WALL PACK
EXIT SIGN COMBO "XB"	DUAL-LITE NO. EVOICL1113-06L OR PRIOR APPROVED EQUAL BY EMERG-LITE, MCPHILBEN, OR PRESOLITE	MVOLT	UNIVERSAL	LED	1000 LUMEN	THERMOPLASTIC 1000 LUMEN COMBO LED EXIT SIGN EGRESS LIGHT. PROVIDE WITH NUMBER OF FACES AND DIRECTIONAL ARROWS AS SHOWN ON DRAWINGS. COORDINATE COLOR OF SIGNAGE WITH LOCAL REQUIREMENTS. PROVIDE WITH EMERGENCY BATTERY. PROVIDE WIREGUARDS IN GYM.

NOTES:
 1. ARCHITECT RESERVES THE RIGHT TO SELECT ALL COLORS OR MAKE CUSTOM COLOR DURING SHOP DRAWING REVIEW. BID ACCORDINGLY.
 2. COORDINATE MOUNTING OF ALL LUMINAIRES WITH ARCHITECTURAL ELEVATIONS PRIOR TO INSTALLATION.
 3. PROVIDE EMERGENCY BATTERY BALLAST FOR ALL EMERGENCY TYPE FIXTURES CAPABLE OF 90 MINUTES. ALL EMERGENCY LIGHTS IN SAFE AREA SHALL BE CONNECTED TO THE BATTERY INVERTER FOR 180-MINUTES OF RUN TIME.
 4. FOR WARRANTY AND LONG TERM SUPPORT FOR OWNER, ALL LIGHTING FIXTURES SHALL BE PURCHASED THROUGH MANUFACTURER REPRESENTATIVES LOCATED IN THE STATE OF ALABAMA. SUBMITTALS RECEIVED THAT DO NOT COMPLY WITH THIS REQUIREMENT WILL BE REJECTED WITHOUT REVIEW. THE ELECTRICAL CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DELAYS CAUSED BY NON COMPLIANCE WITH THIS REQUIREMENT.
 5. ALL INTERIOR LIGHTS SHALL HAVE 4000K TEMPERATURE LAMPS, UNLESS NOTED OTHERWISE.
 6. ALL EXTERIOR LIGHTS SHALL HAVE 4000K TEMPERATURE LAMPS.

COMcheck Software Version 4.1.5.5
Interior Lighting Compliance Certificate

Project Information
 Energy Code: 90.1 (2015) Standard
 Project Title: A NEW ATHLETIC TRAINING FACILITY AT SARALAND HIGH SCHOOL
 Project Type: New Construction
 Construction Site: Saraland, AL
 Designer/Contractor: JASON TILLERY, GUNN & ASSOCIATES, MELBROOK, AL
 Designer/Contractor: JASON TILLERY, GUNN & ASSOCIATES, MELBROOK, AL

Area Category	Floor Area (SQ FT)	B Allowed Watts / F2	C Allowed Watts / F2	D Allowed Watts (B X C)
3. ATHLETIC FACILITY (Gymnasium/Track Center/Playing Area)	1022	1.25	1.25	1528
Total Allowed Watts =		1528		

Fixture ID / Description / Lamp / Wattage Per Lamp / Ballast	A Lamp/ Fixture	B # of Fixtures	C Watt	D (C X D)
3. ATHLETIC FACILITY (Gymnasium/Track Center/Playing Area)	1	0	30	220
LG22 Other	1	20	45	450
LG48 & LG60 Other	1	20	100	2100
LS122 Other	1	2	25	50
Total Proposed Watts =		2820		

Interior Lighting PASSES: Design 63%, better than code

Interior Lighting Compliance Statement
 Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 90.1 (2015) Standard requirements in COMcheck version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the inspection checklist.

JASON TILLERY, ELECTRICAL DESIGNER, Date: 03-24-2026

COMcheck Software Version 4.1.5.5
Exterior Lighting Compliance Certificate

Project Information
 Energy Code: 90.1 (2015) Standard
 Project Title: A NEW ATHLETIC TRAINING FACILITY AT SARALAND HIGH SCHOOL
 Project Type: New Construction
 Exterior Lighting Zone: 1 (Developed rural area (L2T))
 Construction Site: Saraland, AL
 Designer/Contractor: JASON TILLERY, GUNN & ASSOCIATES, MELBROOK, AL
 Designer/Contractor: JASON TILLERY, GUNN & ASSOCIATES, MELBROOK, AL

Area/Category	A Quantity	B Allowed Watts / Unit	C Totalable Wattage	D Allowed Watts (B X C)
Walkway < 10 feet wide	898 8' or	0.7	Yes	428
Total Allowed Watts =		428		

Fixture ID / Description / Lamp / Wattage Per Lamp / Ballast	A Lamp/ Fixture	B # of Fixtures	C Watt	D (C X D)
LED P. Other	1	0	0	0
Total Proposed Watts =		0		

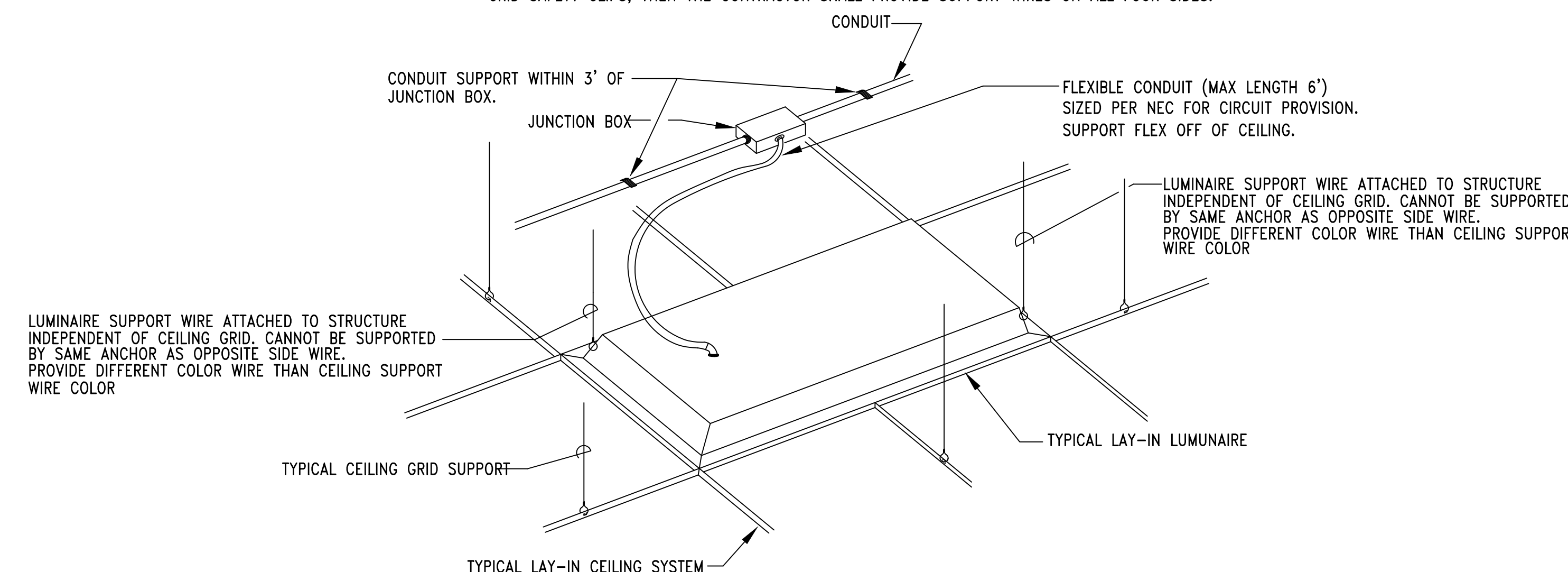
Exterior Lighting PASSES: Design 67%, better than code

Exterior Lighting Compliance Statement
 Compliance Statement: The proposed exterior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed exterior lighting systems have been designed to meet the 90.1 (2015) Standard requirements in COMcheck version 4.1.5.5 and to comply with any applicable mandatory requirements listed in the inspection checklist.

JASON TILLERY, ELECTRICAL DESIGNER, Date: 03-24-2026

NOTES:

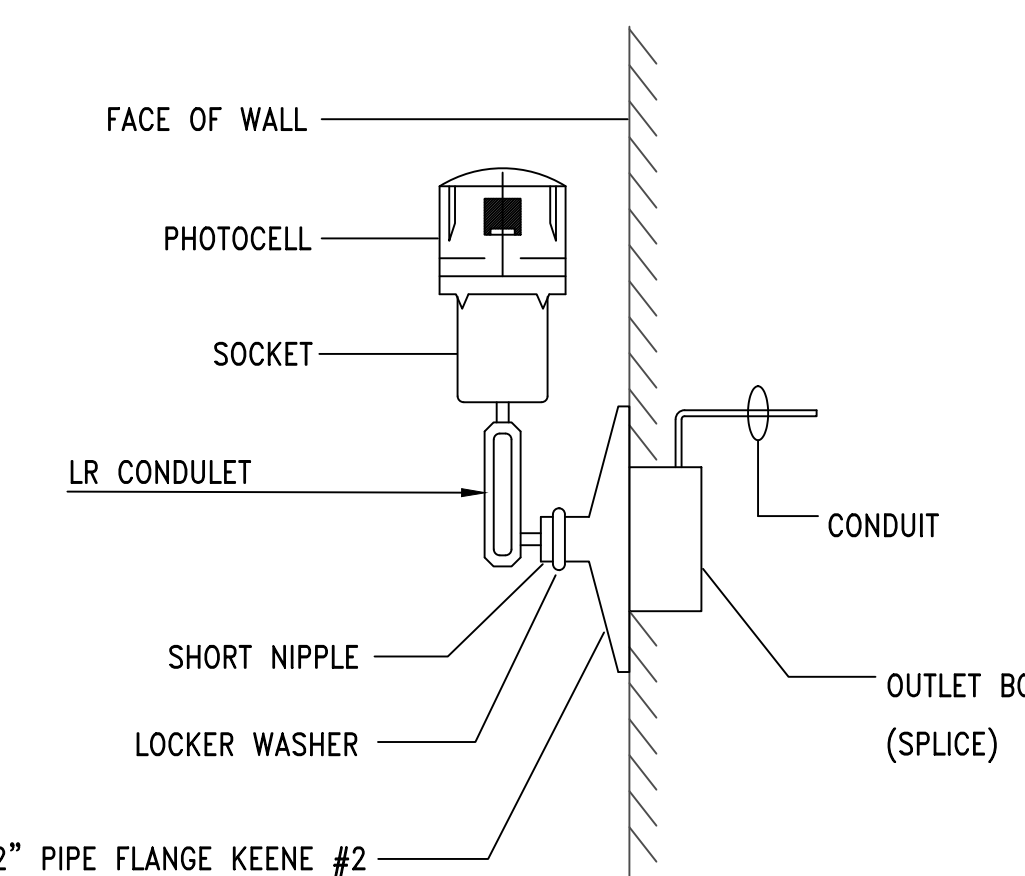
- ALL RECESSED LUMINAIRES SHALL BE WIRED FROM A JUNCTION BOX AS SHOWN, INCLUDING LUMINAIRES IN A CONTINUOUS ROW. NO WIRING THRU FIXTURES. NO MORE THAN TWO LUMINAIRES SHALL BE CIRCUITED TO ONE JUNCTION BOX.
- LUMINAIRE SUPPORT WIRES TO BE A MINIMUM OF #14 GAGE PRE-STRAINED GALVANIZED WIRE ATTACHED AT OPPOSITE CORNERS. LUMINAIRE SHALL BE SUPPORTED TO THE STRUCTURE INDEPENDENT OF THE CEILING GRID.
- CONDUCTORS IN FLEXIBLE CONDUIT FROM JUNCTION BOX TO LUMINAIRE SHALL CONTAIN AN INSULATED GREEN GROUND WIRE, WITH NEUTRAL AND PHASE CONDUCTORS REQUIRED FOR THE CIRCUITING AND SWITCHING REQUIREMENTS INDICATED.
- JUNCTION BOXES SHALL BE ACCESSIBLE AND LOCATED WITHIN 1'-6" ABOVE LAY-IN CEILING INSTALLATION. PROVIDE PENDANT ALL-THREAD RODS AND/OR STRUT ASSEMBLIES TO MEET THIS REQUIREMENT WHERE DROP CEILING IS MORE THAN 1'-6" FROM STRUCTURE.
- CONTRACTOR SHALL INSTALL ALL T-BAR SAFETY CLIPS TO GRID. IF FIXTURE DOES NOT COME WITH GRID SAFETY CLIPS, THEN THE CONTRACTOR SHALL PROVIDE SUPPORT WIRES ON ALL FOUR SIDES.



1 NO SCALE
DETAIL - TYPICAL LAY-IN LUMINAIRE INSTALLATION

NOTES:

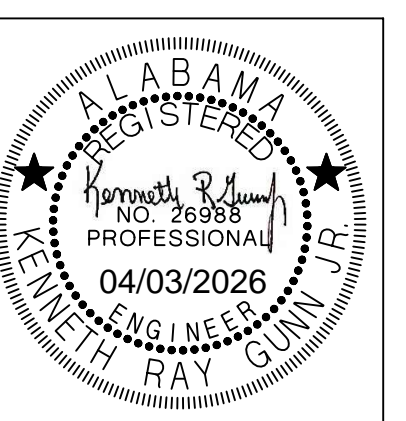
- PAINT CONDUIT NIPPLE, SOCKET AND PIPE FLANGE WITH TWO COATS OF ENAMEL.
- COMPLETE ASSEMBLY TO BE UL LISTED FOR WET LOCATIONS.
- PHOTOCELL TO BE MOUNTED FACING NORTH FREE FROM ALL SHADOWS WHICH MIGHT CAUSE PHOTOCELL TO TURN LIGHTS ON EARLY. CONTRACTOR SHALL COORDINATE PROPER MOUNTING LOCATION PRIOR TO INSTALLATION.



2 NO SCALE
DETAIL - INSTALLATION OF PHOTO-CELL

Gunn & Associates, P.C.
Consulting Engineers
 3102 Highway 14
Millbrook, AL 36054
Tel: 334.285.1273

1200 Providence Park, Suite 200
Birmingham, AL 35242
GA#26-051



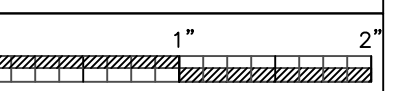
SHEET TITLE:
PANELBOARD
SCHEDULE
DETAILS & NOTES

PROJ. MGR.: J. TILLERY
DRAWN: J. TILLERY
DATE: 04.03.2026
REVISIONS:

JOB NO. 25-173

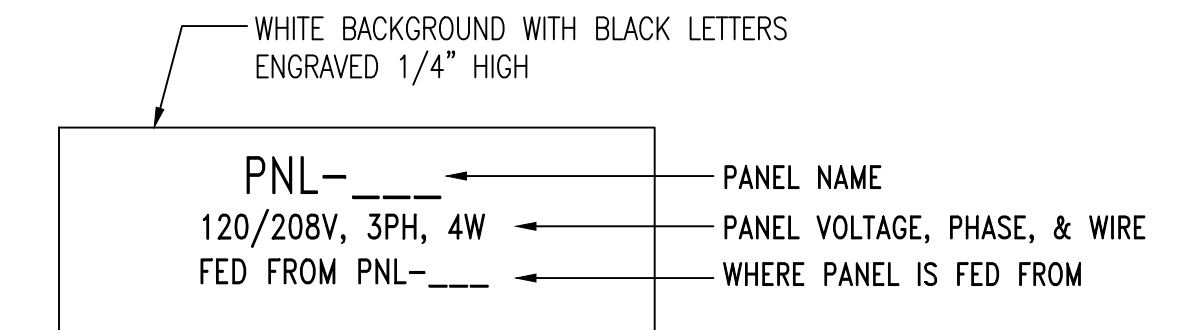
SHEET NO:

E5.2



PANELBOARD NOTES:

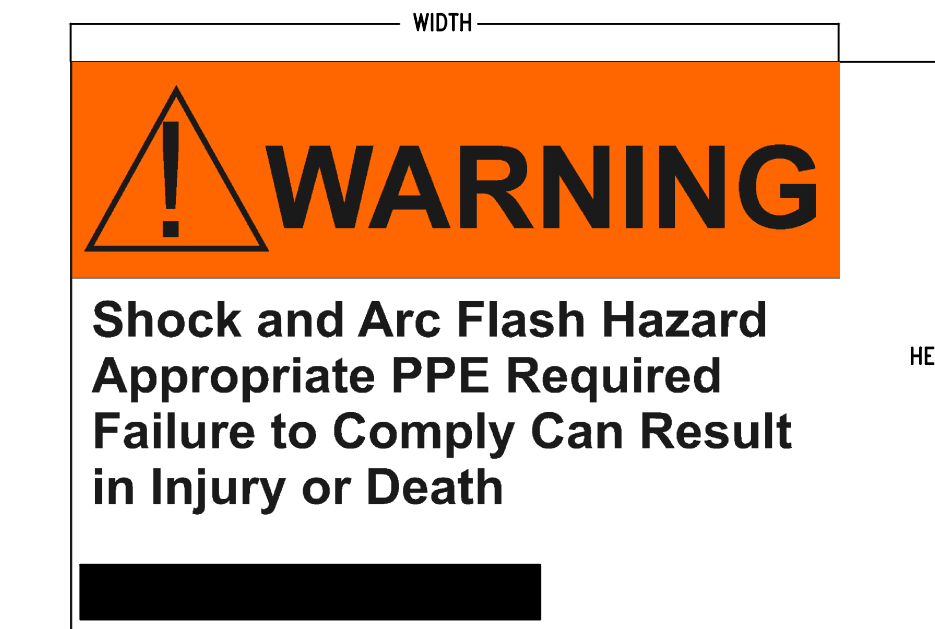
- PANELBOARDS SHALL BE INSTALLED AND ALL CLEARANCES MAINTAINED IN ACCORDANCE WITH THE NEC.
- ALL PANELBOARDS SHALL BE UL LISTED AND INSTALLED IN ACCORDANCE WITH THAT LISTING.
- PANELBOARDS SHALL BE FINISHED COMPLETE WITH THE PROPERLY SIZED ENCLOSURE, INTERNAL HARDWARE, COMPONENTS, SUPPORTING STRUCTURES, ETC., FOR A COMPLETE INSTALLATION.
- FURNISH EACH PANELBOARD WITH A GROUND BAR BONDED TO THE PANEL ENCLOSURE.
- THE TERMINATION POINT OF THE FEEDER SERVING EACH ASSEMBLY SHALL BE AT THE NEAREST POINT OF FEEDER ENTRY INTO THE PANEL, SO AS TO MINIMIZE CONDUCTOR FILL IN THE ENCLOSURE. COORDINATE TOP/BOTTOM FEED PANELBOARD PROVISIONS WITH EACH FEEDER INSTALLATION.
- PROVIDE THE PROPER SIZE AND QUANTITY OF CONDUCTOR TERMINATION POINTS OR LUGS (MULTIPLE LUGS WHEN PARALLEL FEEDERS ARE USED) ON BUSES AND CIRCUIT BREAKERS FOR THE RESPECTIVE SIZE AND NUMBER OF CONDUCTORS INDICATED.
- ALL FLUSH-MOUNTED PANELBOARDS SHALL BE PROVIDED WITH AT LEAST SIX (6) 3/4" SPARE CONDUITS STUBBED TO ABOVE THE NEAREST ACCESSIBLE CEILING.
- PANELBOARDS SHALL BE FULLY RATED. SERIES RATED PANELBOARDS WILL NOT BE ACCEPTED.
- ALL PANELBOARDS SHALL BE CLEARLY MARKED TO COMPLY WITH NEC ARTICLE 110.16 WITH REGARD TO POTENTIAL HAZARDS OF ARC FLASH.
- ALL PANELBOARDS SHALL BE "DOOR-IN-DOOR" OR "HINGED-FRONT-TRIM" CONSTRUCTION.
- COMPLY WITH NEC ARTICLE 408.4. PROVIDE A TYPED CIRCUIT DIRECTORY THAT INDICATES WHAT EACH CIRCUIT IS SERVING. FOR LIGHTING AND RECEPTACLE CIRCUITS, INCLUDE THE ROOM NUMBER IN THE CIRCUIT DESCRIPTION ON THE DIRECTORY.
- EACH PANELBOARD SHALL HAVE A NAMEPLATE AS SHOWN IN DETAIL 1 ON THIS SHEET. ENGINEER WILL NOT PROVIDE FINAL ACCEPTANCE UNTIL THESE NAMEPLATES ARE PROVIDED.
- MANUFACTURER THAT WILL BE PROVIDING PANELBOARDS ON THIS PROJECT SHALL BE RESPONSIBLE FOR PERFORMING A SHORT CIRCUIT ANALYSIS AND TIME-CURRENT COORDINATION (TCC) STUDY, WHICH DEMONSTRATES THAT THE UPSTREAM OVERCURRENT PROTECTIVE DEVICE NEAREST TO THE FAULT LOCATION WILL OPERATE BEFORE OVERCURRENT PROTECTIVE DEVICES WHICH ARE FURTHER UPSTREAM (I.E. SELECTIVE COORDINATION). INCLUDE COORDINATION STUDY IN THE SHOP DRAWING PACKAGE FOR THE PANELBOARDS FOR REVIEW BY THE ENGINEER OF RECORD. AIC RATINGS MAY BE LOWERED BASED ON STUDY.



TYPICAL NORMAL POWER NAMEPLATE

1
ES.2
NO SCALE

DETAIL - TYPICAL PANELBOARD NAMEPLATE



NOTES:

- PROVIDE SELF-ADHESIVE VINYL LABEL TO AFFIX TO ELECTRICAL EQUIPMENT TO WARN OF ARC FLASH HAZARDS.
- THE LABEL FORMAT AND TEXT SHALL BE IN ACCORDANCE WITH THE FIGURE.
- THE LABEL SHALL BE LOCATED ON THE EQUIPMENT TO BE CLEARLY VISIBLE TO QUALIFIED PERSONS BEFORE EXAMINATION, ADJUSTMENT, SERVICING, OR MAINTENANCE OF THE EQUIPMENT.
- THE SIZE OF THE LABEL SHALL BE:
EQUIPMENT TYPE HEIGHT WIDTH
INDOOR 4" 6"
OUTDOOR 4" 6"

2
ES.2
NO SCALE

ARC FLASH WARNING LABELS

PANEL - SE												
TYPE: 250 AMP MCB (SHUNT TRIP)			AIC: 65,000 AMPERES			MOUNTED: SURFACE			VOLTAGE: 277/480 VOLTS, 3 PHASE, 4 WIRE			
CIRCUIT DIRECTORY	(VA) PER PHASE			AMP	POLE	CIRCUIT NUMBER	AMP	POLE	(VA) PER PHASE			CIRCUIT DIRECTORY
	PHASE A	PHASE B	PHASE C						PHASE A	PHASE B	PHASE C	
TX-A	7,680	4,515	6,165	50		1	2	20	1	3,165	1,375	LIGHTS
						3	4	20	1			LIGHTS
						5	6	20	1			SPARE
PHP-A1	24,376			125		7	8	20	1			SPARE
		24,376				9	10	20	1			SPARE
			24,376			11	12	20	1			SPARE
SPARE				60		13	14	20	1			SPARE
						15	16	20	1			SPARE
						17	18	20	1			SPARE
BUSSED SPACE						19	20					BUSSED SPACE
BUSSED SPACE						21	22					BUSSED SPACE
BUSSED SPACE						23	24					BUSSED SPACE
BUSSED SPACE						25	26					BUSSED SPACE
BUSSED SPACE						27	28					BUSSED SPACE
BUSSED SPACE						29	30					BUSSED SPACE
BUSSED SPACE						31	32					BUSSED SPACE
BUSSED SPACE						33	34					BUSSED SPACE
BUSSED SPACE						35	36					BUSSED SPACE
BUSSED SPACE						37	38					BUSSED SPACE
BUSSED SPACE						39	40					BUSSED SPACE
BUSSED SPACE						41	42					BUSSED SPACE
SUB TOTAL (VA)	32,056	28,891	30,541							3,165	1,375	0

TOTAL LOAD PHASE A: 35,221 (VA)
TOTAL LOAD PHASE B: 30,266 (VA)
TOTAL LOAD PHASE C: 30,541 (VA)
TOTAL LOAD: 96,028 (VA) = 116 AMPS

NOTES:
1. PANEL SHALL BE UL LISTED FOR SERVICE ENTRANCE.
2. MAIN BREAKER WILL BE ALLOWED TO BE 80% RATED.
3. PROVIDE PANEL WITH NAME PLATE INDICATING AIC RATING. SEE DETAIL.
4. PROVIDE ARC FAULT LABEL PER DETAIL.
5. PROVIDE WITH INTEGRAL TVSS WITH 160,000 AMPS PER MODE PROTECTION.

PANEL - RP1												
TYPE: 100 AMP MAIN CIRCUIT BREAKER			AIC: 22,000 AMPERES			MOUNTED: SURFACE			VOLTAGE: 120/208 VOLTS, 3 PHASE, 4 WIRE			
CIRCUIT DIRECTORY	(VA) PER PHASE			AMP	POLE	CIRCUIT NUMBER	AMP	POLE	(VA) PER PHASE			CIRCUIT DIRECTORY
	PHASE A	PHASE B	PHASE C						PHASE A	PHASE B	PHASE C	
OCCHP-A1	915			30		1	2	20	1	1,200		RECEPTACLE
		915				3	4	20	1		1,200	RECEPTACLE
WH-1			2,250	30		5	6	20	1			1,200
	2,250					7	8	20	1	1,200		RECEPTACLE
CP-1 & TC-1				20		9	10	20	1		1,200	RECEPTACLE
ODHAP-A1			915	30		11	12	20	1			1,200
	915					13	14	20	1	1,200		RECEPTACLE
BUSSED SPACE						15	16	20	1			SPARE
BUSSED SPACE						17	18	20	1			SPARE
BUSSED SPACE						19	20	20	1			SPARE
BUSSED SPACE						21	22	20	1			SPARE
BUSSED SPACE						23	24	20	1			SPARE
BUSSED SPACE						25	26	20	1			SPARE
BUSSED SPACE						27	28	20	1			SPARE
BUSSED SPACE						29	30	20	1			SPARE
BUSSED SPACE						31	32	20	1			SPARE
BUSSED SPACE						33	34	20	1			SPARE
BUSSED SPACE						35	36	20	1			SPARE
BUSSED SPACE						37	38	20	1			SPARE
BUSSED SPACE						39	40	20	1		600	TBB
BUSSED SPACE						41	42	20	1			600
SUB TOTAL (VA)	4,080	1,515	3,165							3,800	3,000	3,000

TOTAL LOAD PHASE A: 7,680 (VA)
TOTAL LOAD PHASE B: 4,515 (VA)
TOTAL LOAD PHASE C: 6,165 (VA)
TOTAL LOAD: 18,360 (VA) = 51 AMPS

NOTES:
1. PANELBOARD TO BE BOLT-ON TYPE WITH DOOR-IN-DOOR CONSTRUCTION.
2. PROVIDE ARC FAULT LABEL PER DETAIL.
3. PROVIDE LOCK HANDLE CIRCUIT BREAKER.

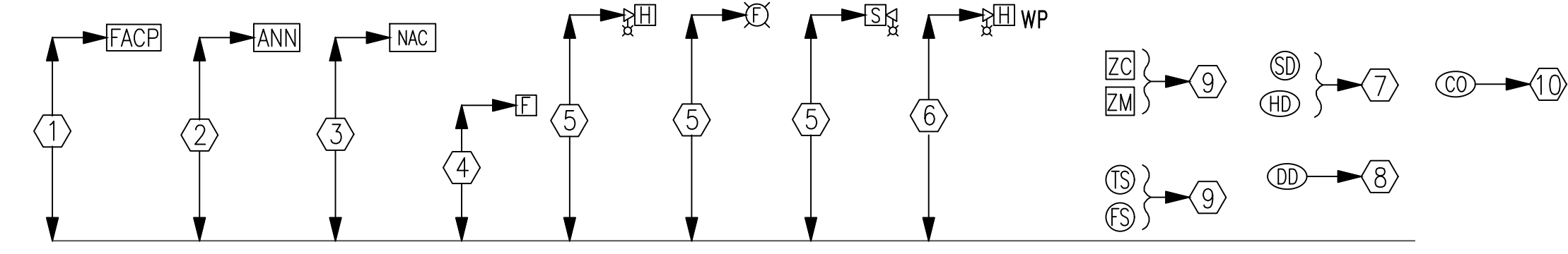
POWER EQUIPMENT MANUFACTURERS BIDDING THIS PROJECT SHALL INCLUDE IN THEIR BASE BID PRICE AN AND ALL EXPEDITED CHARGES AS REQUIRED TO SHIP SWITCHBOARDS, PANELBOARDS, TRANSFORMERS, AND DISCONNECTS TO THE JOB SITE S REQUIRED TO MEET PROJECT SCHEDULE. CONTRACTOR AND SUPPLIER SHALL SET THIS TIME PRIOR TO BID ACCORDING PUBLISHED SCHEDULE IN BID DOCUMENTS.

FIRE ALARM SYSTEM NOTES:

1. THE FIRE ALARM SYSTEM SHALL BE A COMPLETE SUPERVISED DETECTION AND ALARM SYSTEM. PROVIDE PRIMARY POWER CIRCUITS AND ALARM NOTIFICATION AND INITIATING CIRCUITS IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS AND SPECIFICATIONS.
2. INSTALLATION SHALL COMPLY WITH THE ADA, NEC, NFPA, AND UL.
3. ALL SYSTEM COMPONENTS, ENCLOSURES, FRAMES, SURGE ARRESTORS, ETC., SHALL BE GROUNDED.
4. THE FIRE ALARM WIRING SYSTEM SHALL BE FURNISHED AND INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S REQUIREMENTS FOR CLASS "B" SYSTEM AND AS FOLLOWS:
PRIMARY POWER - 120V AC
NOTIFICATION APPLIANCE CIRCUITS (NAC) - 24V DC
SIGNALING LINE CIRCUIT (SLC) - 24V DC
5. ALL EQUIPMENT AND DEVICES SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS, APPLICABLE STANDARDS AND ACCESSIBLE FOR VISUAL INSPECTION AND MAINTENANCE. WIRING DIAGRAMS SHALL BE SECURED FROM THE SYSTEM MANUFACTURER AND INSTALLED ACCORDINGLY TO MEET THE SPECIFIED TYPES.
6. A "CERTIFICATE OF COMPLETION" IN ACCORDANCE WITH NFPA 72 SHALL BE FURNISHED PRIOR TO FINAL ACCEPTANCE.
7. CONTRACTOR IS RESPONSIBLE FOR VERIFYING AND PROVIDING ALL FIRE ALARM DEVICE QUANTITIES FROM AUXILIARY DRAWINGS. DO NOT USE THIS RISER FOR DEVICE COUNTS.
8. THE CONTRACTOR OR THEIR FIRE ALARM SYSTEM VENDOR SHALL PROVIDE AUDIBILITY CALCULATIONS INDICATING COMPLIANCE WITH ALL APPLICABLE PROVISIONS OF NFPA 72 AND THE IBC. THE CONTRACT DRAWINGS INDICATE A MINIMUM DESIGN REQUIRED TO COMPLY WITH APPLICABLE CODES. HOWEVER, SINCE DEVICES VARY FROM MANUFACTURER TO MANUFACTURER THE CONTRACTOR SHALL BE RESPONSIBLE FOR FURNISHING ANY/ALL ADDITIONAL DEVICES AS REQUIRED TO PROVIDE AUDIBILITY AND VISIBILITY LEVELS THAT COMPLY WITH APPLICABLE SECTIONS OF NFPA 72 AND IBC.
9. PROVIDE ADDITIONAL 100% SPARE CAPACITY IN FIRE ALARM CONTROL PANEL FOR FUTURE USE.
10. PROVIDE EMERGENCY BATTERIES CAPABLE OF RUNNING THE COMPLETE FIRE ALARM SYSTEM IN ALARM MODE, PER NFPA GUIDELINES AT A MINIMUM. BATTERIES SHALL BE SIZED TO HANDLE THE FUTURE CAPACITY.
11. THE FIRE ALARM SYSTEM SHALL BE MONITORED BY AN APPROVED SUPERVISING STATION IN ACCORDANCE WITH NFPA 72. PROVIDE IP DIALER FOR MONITORING OF THE FIRE ALARM SYSTEM.
12. ALL WIRING TO BE IN CONDUIT SIZED IN ACCORDANCE WITH NEC WITH A MINIMUM SIZE OF 3/4". PROVIDE ALL FIRE ALARM CONDUIT WITH 3" WIDE RED STRIPE EVERY 10' FOR LENGTH OF RUN.
13. PROVIDE ALL FIRE ALARM JUNCTION BOXES WITH RED COVER, STENCIL THE LETTERS "FA" IN 2" HIGH LETTERS ON EACH BOX COVER.
14. FIRE ALARM SYSTEM PROVIDER IS RESPONSIBLE FOR PROVIDING SIGNAL LINE BOOSTERS AS REQUIRED FOR SYSTEM TO FUNCTION PROPERLY.
15. IN ADDITION TO THE DEVICES INDICATED ON THE PLANS THE CONTRACTOR SHALL PROVIDE A SMOKE DETECTOR LOCATED WITHIN 5 FEET OF EACH FIRE ALARM NOTIFICATION APPLIANCE PANEL.
16. CONTRACTOR SHALL PROVIDE ALL ADDITIONAL 120 VOLT CIRCUITS NEEDED TO MAKE THE FIRE ALARM SYSTEM A COMPLETE FUNCTIONAL SYSTEM.
17. PROVIDE VOICE EVACUATION PER IBC SECTION 907 AND ALL SECTIONS OF THE INTERNATIONAL FIRE CODE.
18. "CLG" DENOTES A CEILING MOUNTED DEVICE AND "WP" DENOTES WEATHERPROOF DEVICE..
19. SEE STANDARD MOUNTING HEIGHT INSTRUCTIONS ON DETAILS (2) THIS SHEET.
20. CONTRACTOR OR THEIR FIRE ALARM SYSTEM VENDOR SHALL PROVIDE SMOKE DETECTOR REPORTS AT THE FINAL TESTING OF THE FIRE ALARM SYSTEM TO SHOW THAT ALL SMOKE DETECTORS ARE LESS THAN 10% DIRTY. ANY SMOKE DETECTOR GREATER THAN 10% DIRTY SHALL BE CLEANED OR REPLACED UNTIL VALUE IS LESS THAN 10%.
21. CONTRACTOR SHALL COORDINATE WITH FIRE PROTECTION DRAWINGS AND PROVIDE MONITORING FOR ALL TAMPER, FLOW, AND SUPERVISORY SWITCHES AS REQUIRED PER NFPA. ALSO, COORDINATE AND PROVIDE HEAT DETECTORS WITHIN 1' OF EVERY SPRINKLER HEAD IN THE ELEVATOR SHAFT.

FIRE ALARM MOUNTING HEIGHTS/INSTRUCTIONS NOTES:

1. MOUNT FIRE ALARM ENCLOSURE WITH THE TOP OF THE CABINET 72" ABOVE THE FINISHED FLOOR OR CENTER THE CABINET AT 63", WHICHEVER IS LOWER.
2. MOUNT ANNUNCIATOR WITH THE TOP OF THE PANEL 72" ABOVE THE FINISHED FLOOR OR CENTER OF THE PANEL AT 63", WHICHEVER IS LOWER. FLUSH MOUNT ANNUNCIATOR UNLESS OTHERWISE NOTED.
3. REMOTE POWER SUPPLIES AND AUXILIARY FIRE ALARM PANELS. LOCATE THE PANEL OR CABINET WITH THE TOP OF THE PANEL 72" ABOVE THE FINISHED FLOOR OR CENTER THE PANEL AT 63", WHICHEVER IS LOWER. DO NOT LOCATE THESE PANELS ABOVE CEILINGS OR WHERE INACCESSIBLE BY A PERSON STANDING ON THE FINISHED FLOOR OF THE SPACE.
4. MOUNT STATIONS SO THAT THEIR OPERATING HANDLES ARE BETWEEN 42" AND 48" ABOVE THE FINISHED FLOOR. DO NOT USE BRICK OR BLOCK COURSES AS YOUR ONLY GUIDE. CUT BRICK OR BLOCK TO ACHIEVE PROPER HANDLE HEIGHT.
5. ALL WALL MOUNTED AUDIO/VISUAL DEVICES SHALL BE MOUNTED SO THE ENTIRE LENS IS BETWEEN 80" AND 96" ABOVE THE FINISHED FLOOR. WHERE LOW CEILING HEIGHTS DO NOT PERMIT MOUNTING AT A MINIMUM OF 80" AFF, VISIBLE APPLIANCES SHALL BE MOUNTED WITHIN 6" OF THE CEILING. DO NOT USE BRICK OR BLOCK COURSES AS YOUR ONLY GUIDE. CUT BRICK OR BLOCK TO ACHIEVE PROPER LENS HEIGHT.
6. WEATHER PROOF APPLIANCES INSTALLED OUTDOORS SHALL BE UL LISTED FOR OUTDOOR USE. MOUNT SO THE ENTIRE LENS IS BETWEEN 80" AND 96" ABOVE FINISHED FLOOR. FOR WEATHERPROOF APPLIANCES MOUNTED AT FIRE DEPARTMENT CONNECTION (FDC), COORDINATE WITH LOCAL AUTHORITY HAVING JURISDICTION PRIOR TO ROUGH-IN FOR MOUNTING HEIGHT.
7. SMOKE AND HEAT DETECTOR HEADS SHALL NOT BE INSTALLED UNTIL AFTER CONSTRUCTION CLEAN-UP IS COMPLETED. IF DETECTOR HEADS ARE INSTALLED PRIOR TO CONSTRUCTION CLEAN-UP, PROTECTIVE COVERS MUST BE IN PLACE TO PROTECT DETECTOR HEADS FROM PARTICULATE DAMAGE. DETECTORS LOCATED ON THE WALL SHALL HAVE THE TOP OF THE DETECTOR AT LEAST 4" AND NOT MORE THAN 12" BELOW THE CEILING. INSTALL SMOKE DETECTORS NO CLOSER THAN 3 FEET FROM AIR HANDLING SUPPLY AIR DIFFUSERS OR RETURN AIR OPENINGS. LOCATE DETECTORS NO CLOSER THAN 12" FROM ANY PART OF A LIGHTING FIXTURE.
8. DUCT SMOKE DETECTOR HEADS SHALL NOT BE INSTALLED UNTIL AFTER CONSTRUCTION CLEAN-UP IS COMPLETED. DETECTOR HEADS INSTALLED PRIOR TO CONSTRUCTION CLEAN-UP SHALL BE REPLACED. DUCT DETECTORS ARE TO BE PROVIDED BY THE FIRE ALARM CONTRACTOR AND INSTALLED BY THE MECHANICAL CONTRACTOR.
9. ADDRESSABLE MODULES SHALL BE INSTALLED LESS THAN 3-FEET FROM THE DEVICE BEING CONTROLLED OR MONITORED. ORIENT THE DEVICE MOUNTING FOR BEST MAINTENANCE ACCESS. LABEL ALL ADDRESSABLE MODULES AS TO THEIR FUNCTION.
10. MOUNT WITHIN 5'-0" OF FURNACE DISCHARGE REGISTER.



2 STANDARD MOUNTING HEIGHTS/INSTRUCTIONS
NO SCALE

SHEET NOTES:

1. PROVIDE A UL LISTED CELLULAR COMMUNICATOR IN THE NEW FIRE ALARM PANEL. PROVIDE TWO YEARS OF CELLULAR MONITORING FROM THE DATE OF FINAL ACCEPTANCE.
2. PROVIDE TVSS PROTECTION ON ALL INCOMING POWER FEEDS.

EMERGENCY RADIO SYSTEM

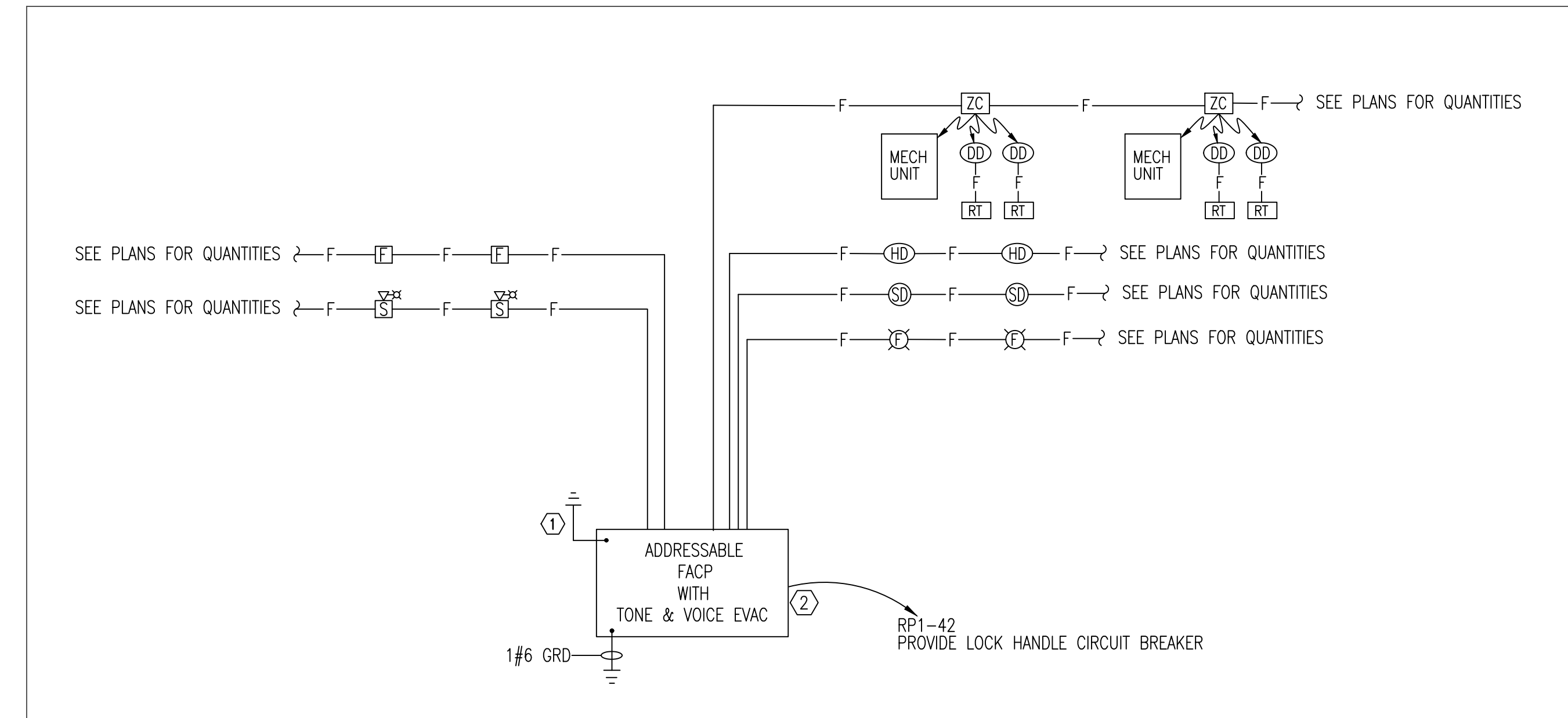
PROVIDE EMERGENCY RESPONDER RADIO SYSTEM TO MEET 2021 INTERNATIONAL FIRE CODE WITHIN THE BUILDING. SYSTEM SHALL MEET UL2524 AND COMPLY WITH IBC 2021 510.

BASE BID:

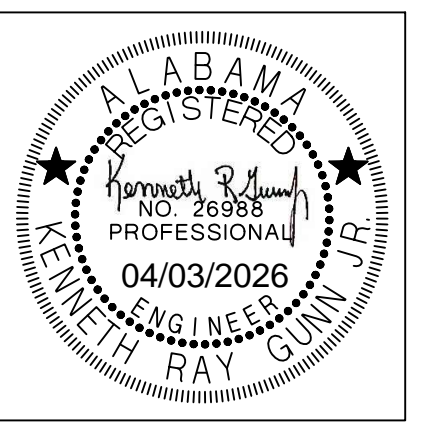
1. ELECTRICAL CONTRACTOR SHALL PROVIDE (1) SIGNAL STRENGTH TEST AT (5) LOCATIONS ON SITE WITHIN PROPOSED BUILDING FOOTPRINT. THE RESULTS SHALL BE SUBMITTED TO THE FIRE MARSHAL FOR ACCEPTANCE.
2. PROVIDE SHOP DRAWING FOR A DISTRIBUTION ANTENNA SYSTEM WITH AMPLIFIER TO COVER THE ENTIRE STRUCTURE TO MEET 510.4. SHOP DRAWINGS SHALL INCLUDE AMPLIFIER INFORMATION, ANTENNA LOCATIONS/COVERAGE, BATTERY DATA.
3. ELECTRICAL CONTRACTOR SHALL PROVIDE EMPTY CONDUIT WITH NYLON PULL STRINGS AS REFLECTED ON DRAWINGS. CONDUIT SHALL BE INSTALLED AS BASED BID AND ARE NOT ALLOWED FOR USE WITH ANY OTHER SYSTEM. ALL EMERGENCY RESPONDER RADIO SYSTEM CONDUIT SHALL BE MARKED WITH "BDA".
4. ELECTRICAL CONTRACTOR SHALL PROVIDE (1) SIGNAL STRENGTH TEST WITHIN THE BUILDING AT 80% COMPLETION OF CONSTRUCTION. THE RESULTS SHALL BE SUBMITTED TO THE FIRE MARSHAL FOR ACCEPTANCE. IF SIGNAL STRENGTH AT ANY PORTION OF THE BUILDING FALLS BELOW REQUIREMENTS OF IFC 510 AN EMERGENCY RESPONDER RADIO SYSTEM SHALL BE PROVIDED. SEE ALLOWANCE FOR ADDITIONAL INFORMATION.

ALLOWANCE:

1. IF THE TEST SIGNAL IS DEEMED NOT TO BE ACCEPTABLE THE ELECTRICAL CONTRACTOR SHALL PROVIDE THE FOLLOWING BY ALLOWANCE. PROVIDE AMPLIFIER, ANTENNA AND ALL ADDITIONAL REQUIRED SYSTEM PARTS IN ACCORDANCE WITH THE APPROVED SHOP DRAWINGS (SEE ITEM 2 UNDER BASE BID ABOVE) AND IFC 2021 510.5. THIS INCLUDES OBTAINING PERMIT PER SECTION 510.3. THE SYSTEM SHALL BE RETESTED BY THE TESTING AGENCY PER 510.5.3 AND TEST RECORDS SHALL BE PROVIDED TO THE FIRE MARSHAL FOR ACCEPTANCE.



1 FIRE ALARM RISER DIAGRAM
NO SCALE



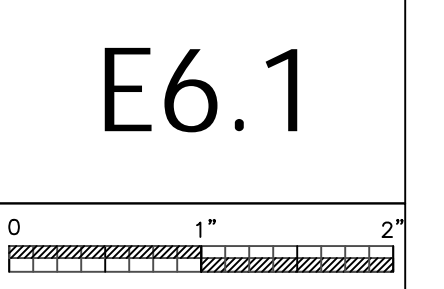
SHEET TITLE:
**AUXILIARY RISER
DIAGRAM
DETAILS & NOTES**

PROJ. MGR.: J. TILLERY
DRAWN: J. TILLERY
DATE: 04.03.2026
REVISIONS

JOB NO. **25-173**
SHEET NO:

Gunn & Associates, P.C.
Consulting Engineers
3102 Highway 14
Millbrook, AL 36054
Tel: 334.285.1273

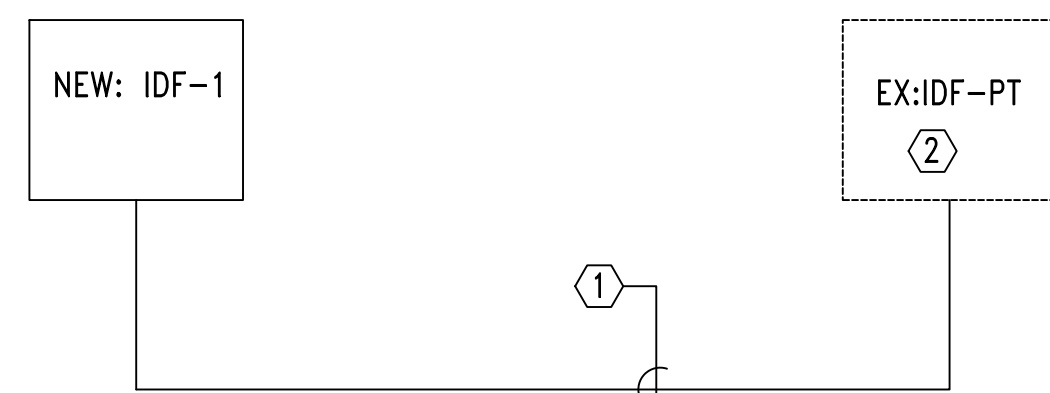
1200 Providence Park, Suite 200
Birmingham, AL 35242
GAM26-051





COMMUNICATION NOTES:

1. PROVIDE 5/8" STRUT ASSEMBLY AT TOP AND BOTTOM OF TBB TO SUPPORT ALL CONDUITS TERMINATING AT BACKBOARD.
2. TBB SHALL BE 3/4" PLYWOOD EXTERIOR RATED AND CUT TO COVER ALL WALLS OR AS INDICATED. PAINT WITH TWO COATS OF FIRE RETARDANT PAINT. MOUNT 2" AFF.
3. PROVIDE A PLASTIC BUSHING OR PROTECTIVE COLLAR AT EACH CONDUIT TERMINATION, INCLUDING TERMINATIONS ABOVE THE CEILING, AT CABLE TRAY, OR AT TBB.
4. ALL CONDUIT TERMINATIONS SHOULD BE DONE EVENLY AT THE TOP AND BOTTOM OF TBB. TERMINATIONS SHALL BE MADE WITHIN THE FIRST FEW INCHES OF THE TBB.
5. SEAL ALL CONDUITS FROM THE EXTERIOR WITH A SEALING COMPOUND, ONCE ALL CABLING HAS BEEN INSTALLED.
6. PROVIDE GROUND BUS FOR EACH TBB. SEE GROUND BUS INSTALLATION DETAIL.
7. PROVIDE ALL CONDUITS WITH MINIMUM #800 MULE TAPE (PULL TAPE).
8. STENCIL ALL JUNCTION BOX COVERS ABOVE THE CEILING WITH 2" LETTERS THAT READ "COMM".
9. ELECTRICAL CONTRACTOR WILL BE RESPONSIBLE FOR ALL RACEWAYS, CABLE TRAY, CABLING, PATCH PANELS, TERMINATIONS, BACKBOARDS, ETC. SEE RISER DIAGRAM, DETAILS, AND SPECIFICATIONS FOR FURTHER EQUIPMENT REQUIREMENTS.
10. BOND RACK FRAMES, STRUT, CONDUITS, AND LADDER RACK TO THE GROUND BUS WITH MINIMUM SIZE WIRE OF #1/0.

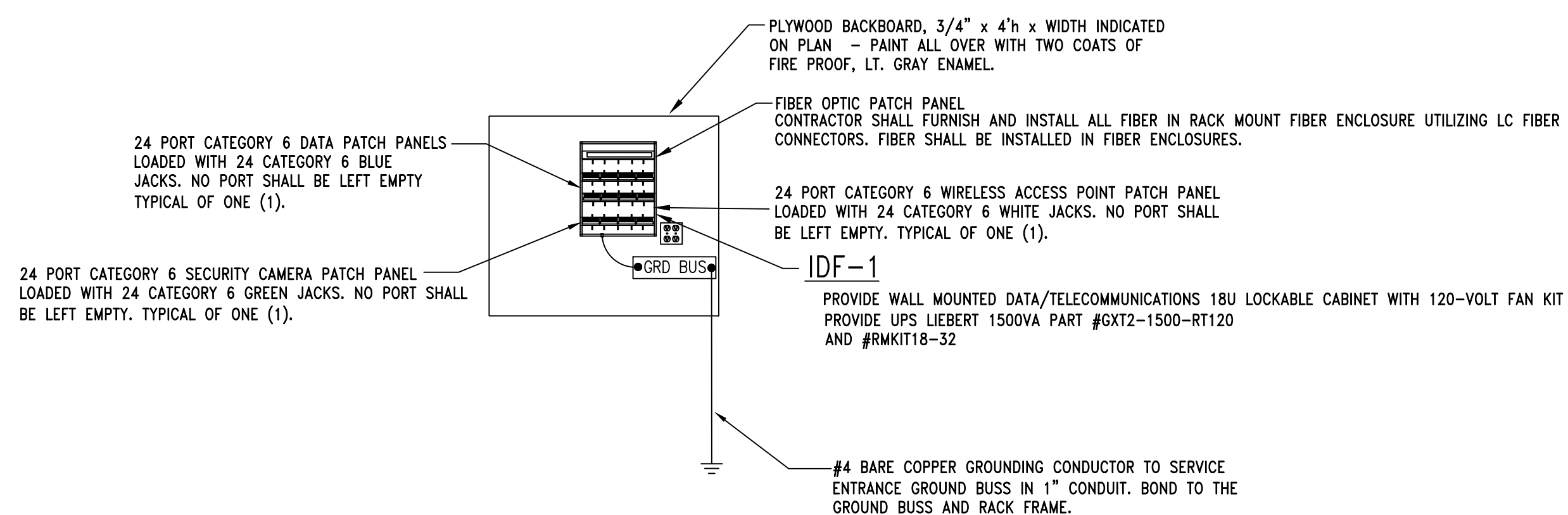


1 COMMUNICATIONS RISER DIGRAM

NO SCALE

RISER DIAGRAM KEYED NOTES:

- 1 CONTRACTOR SHALL PROVIDE A 6 STRAND MULTIMODE 50 MICRON OM3 ARMORED FIBER OPTIC CABLE (OSP RATED) INTERCONNECTING THE EXISTING IDF-PT TO THE IDF-1. PROVIDE LC TYPE CONNECTIONS.
- 2 CONTRACTOR SHALL PROVIDE A FIBER OPTIC PATCH PANEL AS NEEDED IN EXISTING IDF TO INTERCONNECT THE EXISTING IDF TO THE NEW IDF. PROVIDE LC TYPE CONNECTIONS.

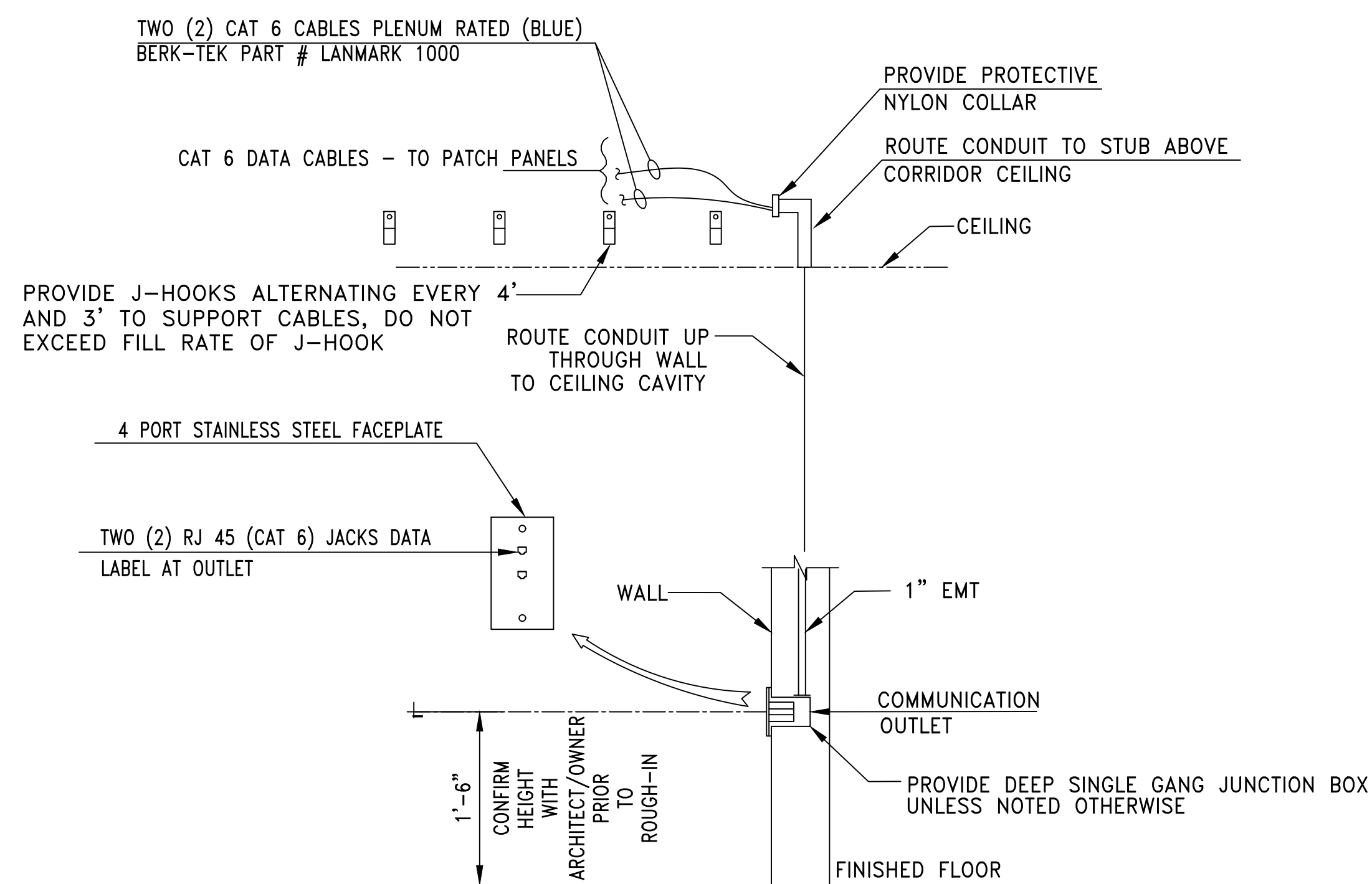


7 IDF COMMUNICATIONS RACK ELEVATION

NO SCALE

* NOTE: PROVIDE CONDUIT TO RUN CABLING IN ALL EXPOSED CEILING AREAS

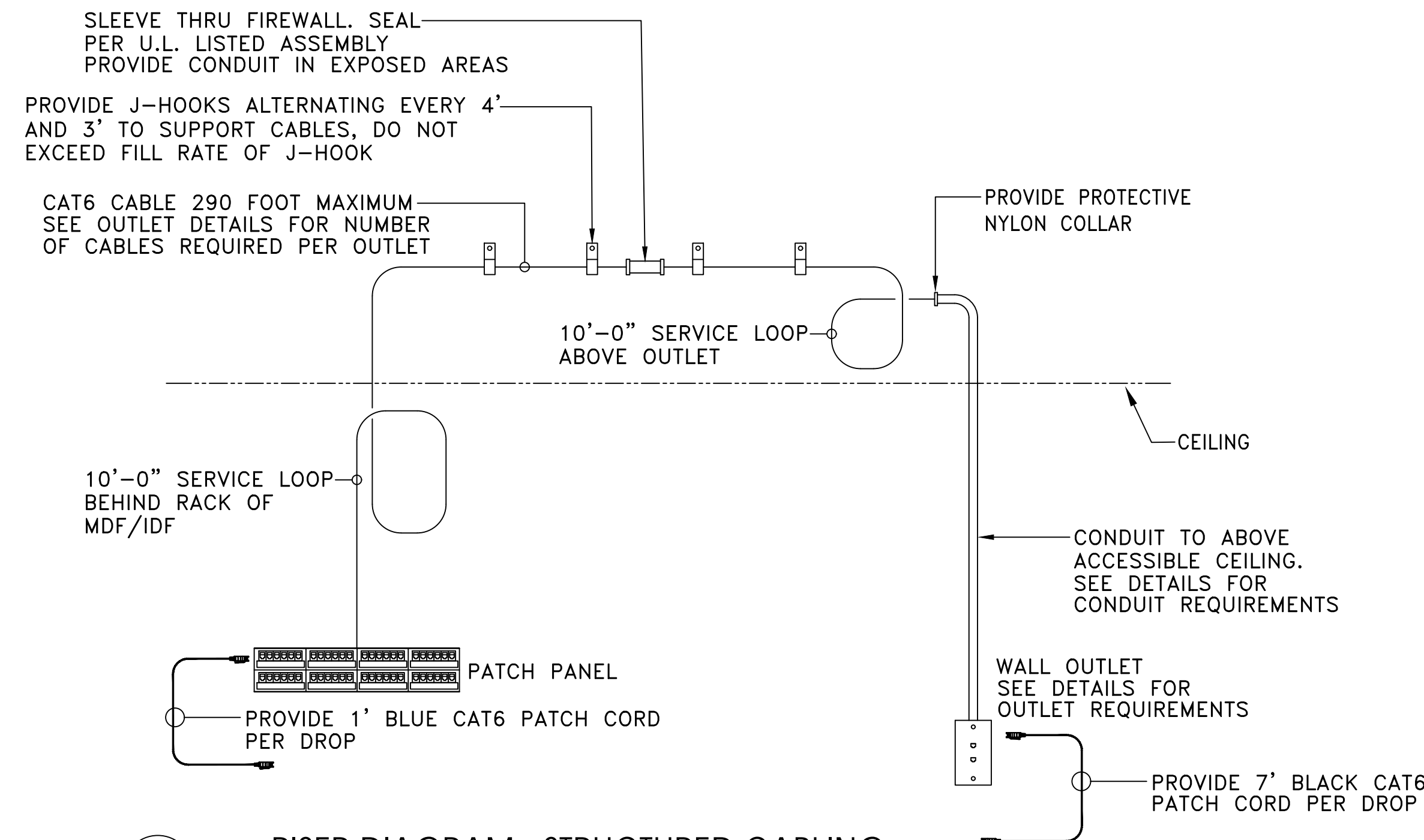
AC * DESIGNATES TO INSTALL DEVICE ABOVE COUNTER



2 DETAIL - TYPICAL COMMUNICATIONS OUTLET

NO SCALE

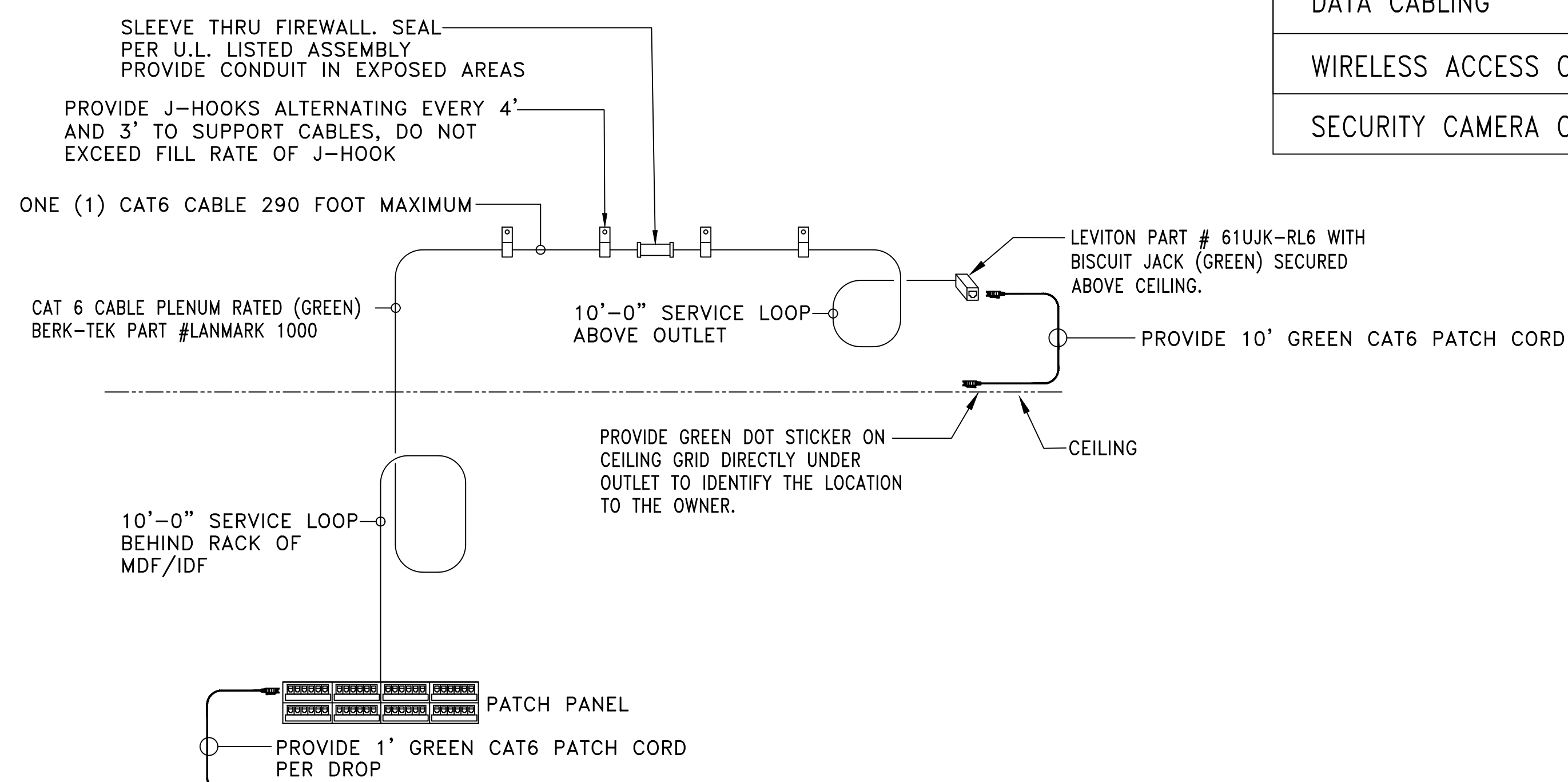
* NOTE: PROVIDE CONDUIT TO RUN CABLING IN ALL EXPOSED CEILING AREAS



6 RISER DIAGRAM - STRUCTURED CABLING

NO SCALE

- * NOTE: PROVIDE CONDUIT TO RUN CABLING IN ALL EXPOSED CEILING AREAS
- * NOTE: EXTERIOR CAMERAS PROVIDE SINGLE GANG JUNCTION BOX WITH 3/4" CONDUIT STUBBED TO ABOVE INTERIOR CEILING. COORDINATE EXTERIOR CAMERA KEYSTONE LOCATION WITH OWNER PRIOR TO INSTALLATION

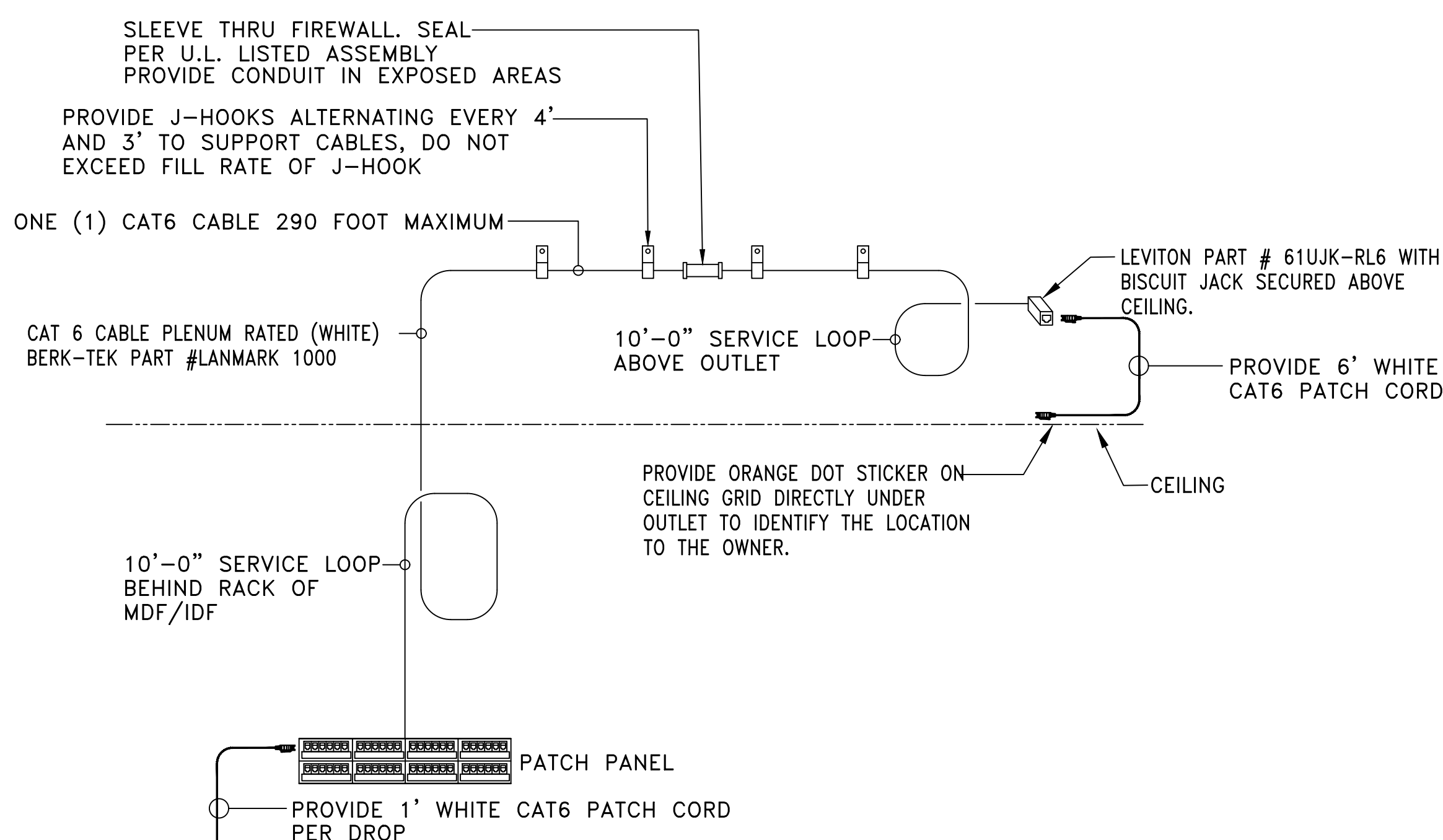


4 DETAIL - TYPICAL SECURITY CAMERA OUTLET

NO SCALE

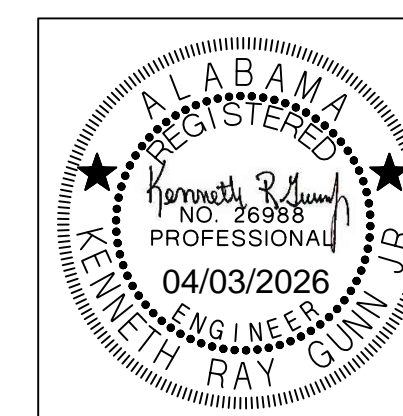
DATA CABLING & KEYSTONE COLOR CODE REQUIREMENT	
DATA CABLING	BLUE
WIRELESS ACCESS CABLING	WHITE
SECURITY CAMERA CABLING	GREEN

* NOTE: PROVIDE CONDUIT TO RUN CABLING IN ALL EXPOSED CEILING AREAS



5 DETAIL - TYPICAL WIRELESS ACCESS POINT OUTLET

NO SCALE



SHEET TITLE:
COMMUNICATION
RISER DIAGRAM
DETAILS & NOTES

PROJ. MGR.: J. TILLEY
 DRAWN: J. TILLEY
 DATE: 04.03.2026
 REVISIONS

JOB NO. 25-173

SHEET NO:

E6.2

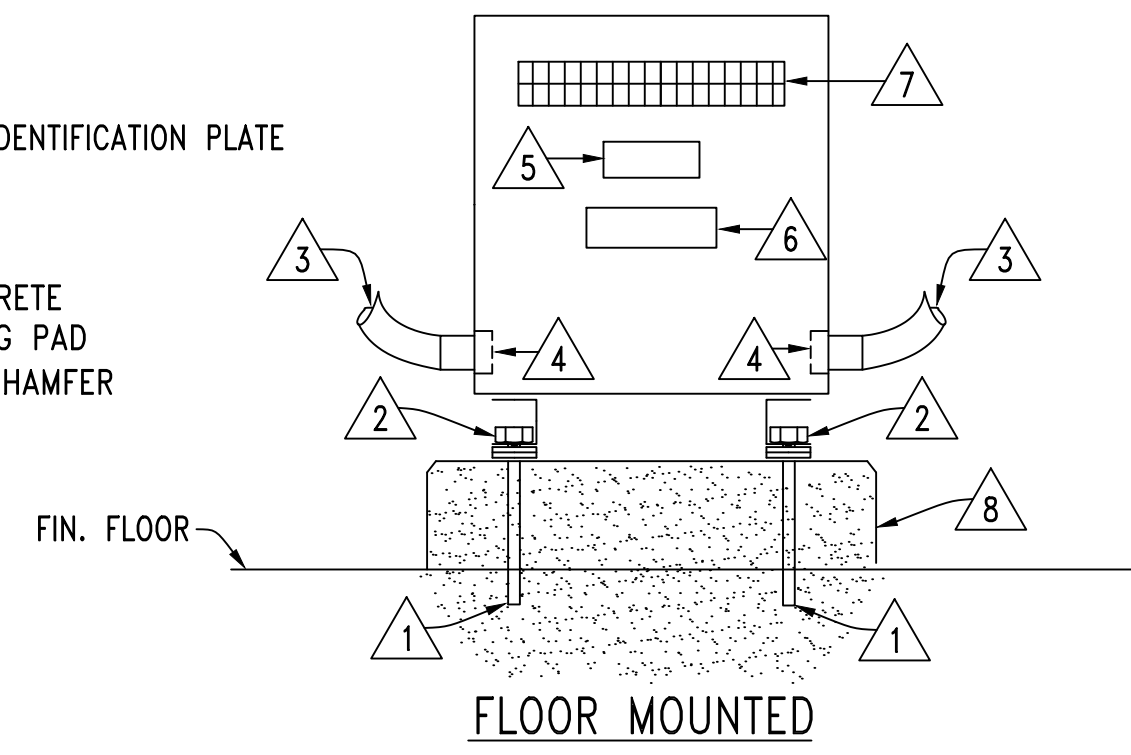


DETAIL KEYED NOTES

- 1 FLOOR ANCHOR SYSTEM
- 2 VIBRATION ISOLATORS - TYP. FOR FOUR
- 3 FLEXIBLE CONNECTION
- 4 GROUND BUSSING TERMINATIONS
- 5 NAMEPLATE
- 6 TRANSFORMER IDENTIFICATION PLATE
- 7 VENTED COVER
- 8 4" HIGH CONCRETE HOUSE-KEEPING PAD WITH 45° 1" CHAMFER

INSTALLATION NOTES:

- 1. SIZE ALL SUPPORTS, ANCHOR SYSTEMS, BOLTS, ETC., AS REQUIRED FOR A SECURE INSTALLATION IN ACCORDANCE WITH THE SPECIFICATIONS.



3 DETAIL-TYPICAL INDOOR INSTALLATION OF DRY TYPE TRANSFORMERS

E7.1 NO SCALE

MARK	KVA	VOLTAGE		°C RISE	K FACTOR	NOTES
		PRIMARY	SECONDARY			
TX-A	30	480 V. DELTA 3 PH., 3 W.	208Y/120 V. 3 PH., 4 W.	150	1	(2)

SINGLE LINE DIAGRAM NOTES:

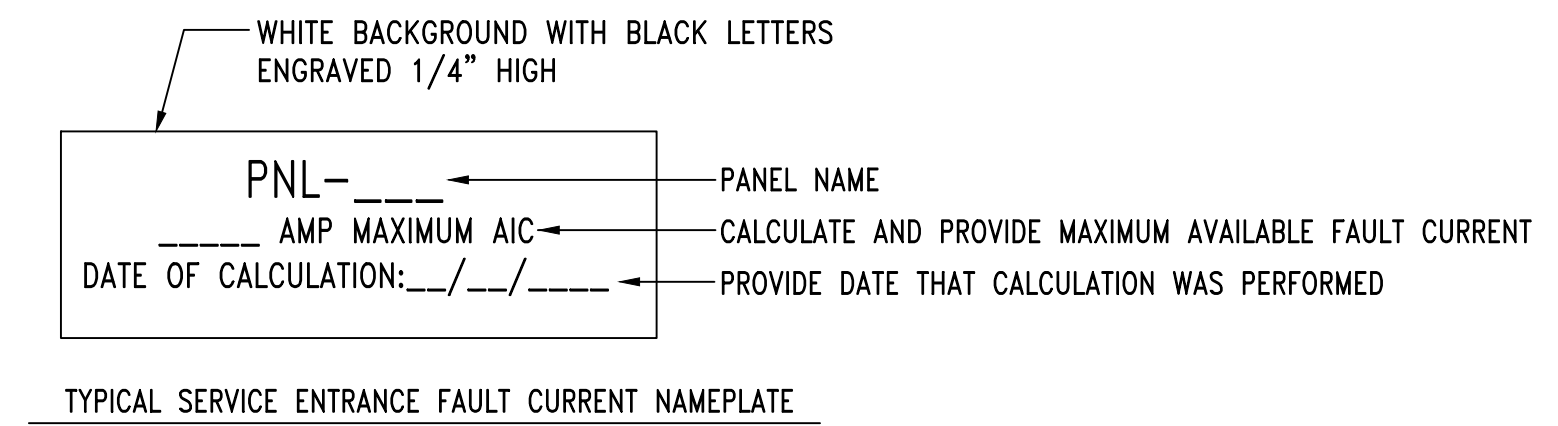
- INSTALLATION AND CONNECTION OF ALL DEVICES SHALL BE IN ACCORDANCE WITH NEC, MANUFACTURER'S RECOMMENDATIONS, AND STATE AND LOCAL CODES.
- CONTRACTOR IS RESPONSIBLE FOR THE CONNECTING, INSTALLATION, AND MARKING OF ALL POWER FEEDER CONDUCTORS FOR THE PROPER PHASE SEQUENCE AND LOADING. CONTRACTOR SHALL TEST EACH FEEDER AND EQUIPMENT FEEDERS WITH A PHASE METER PRIOR TO CONNECTING LOADS.
- THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING AND VERIFYING WITH ALL DIVISIONS THE ACTUAL NAMEPLATE DATA OF ALL EQUIPMENT AND DEVICES SUPPLIED ON THIS PROJECT PRIOR TO BID. CONTRACTOR SHALL THEN PROVIDE THE PROPERLY SIZED OVERCURRENT DEVICES (CIRCUIT BREAKERS, CONDUCTORS, DISCONNECTS, FUSES, ETC.) TO PROPERLY PROTECT THE EQUIPMENT PER THE NEC. ENGINEER'S DESIGN BASED ON DATA GIVEN TO HIM BY DESIGNERS OF OTHER DIVISIONS, ACTUAL NAMEPLATE DATA COULD DIFFER.
- SEAL ALL CONDUITS FROM THE EXTERIOR WITH A SEALING COMPOUND, ONCE ALL CABLING HAS BEEN INSTALLED.
- COORDINATE WITH GROUNDING DETAILS ON SHEET E7.2 FOR ALL THE DIFFERENT TYPE GROUNDING REQUIREMENTS.
- ALL UNDERGROUND SECONDARY FEEDERS SHALL BE A MINIMUM OF 36" BELOW GRADE TO THE TOP OF THE DUCT BANK.
- ALL UNDERGROUND PRIMARY FEEDERS SHALL BE A MINIMUM OF 48" BELOW GRADE TO THE TOP OF THE CONDUIT.
- CONTRACTOR SHALL PROVIDE A FULL SIZE COPY OF THE AS-BUILT POWER RISER DIAGRAM FRAMED BEHIND PLEXIGLASS SCREWED TO THE WALL NEAR MAIN SERVICE PANEL.

KEYED NOTES:

- 1 SEE PANELBOARD SCHEDULE FOR CIRCUIT BREAKER PROVISIONS.
- 2 PROVIDE CONCRETE HOUSEKEEPING PAD FOR DRY TYPE TRANSFORMER PER DETAIL THIS SHEET.
- 3 SHUNT TRIP BUTTON IS MOMENTARY CONTACT MUSHROOM TYPE WITH 2 INCH DIAMETER BUTTON AND SHALL BE WEATHERPROOF AND LOCKABLE ENCLOSURE TO PREVENT ACCIDENTAL ACTIVATION. LOCATE WHERE SHOWN ON PLANS (SEE SHEET E3.1.) PROVIDE MELAMINE ENGRAVED SIGNAGE (WHITE BACKGROUND/RED LETTERING) ABOVE BUTTON WITH 3/4" LETTERING THAT READS "EMERGENCY POWER DISCONNECT FOR BUILDING. DEPRESSING THIS BUTTON WILL DISCONNECT UTILITY POWER FROM BUILDING."

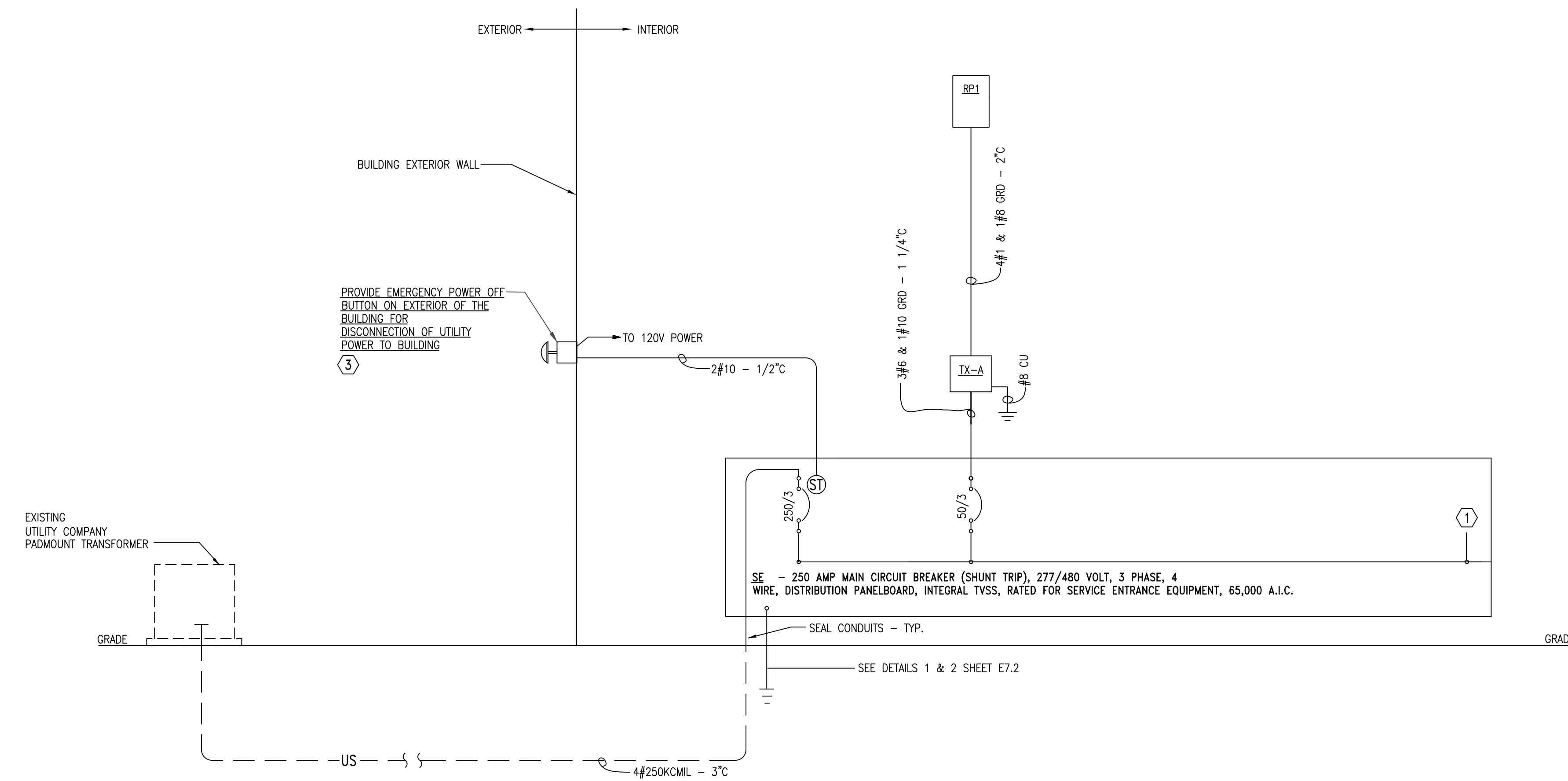
NOTES:

- 1. CONTRACTOR SHALL CALCULATE AND PROVIDE NAMEPLATE ON THE SERVICE ENTRANCE EQUIPMENT THAT INDICATES THE MAXIMUM AVAILABLE FAULT CURRENT AND THE DATE THE CALCULATION WAS PERFORMED. SEE NAMEPLATE REQUIREMENTS BELOW.



2 DETAIL - SERVICE ENTRANCE FAULT CURRENT NAMEPLATE

E7.1 NO SCALE

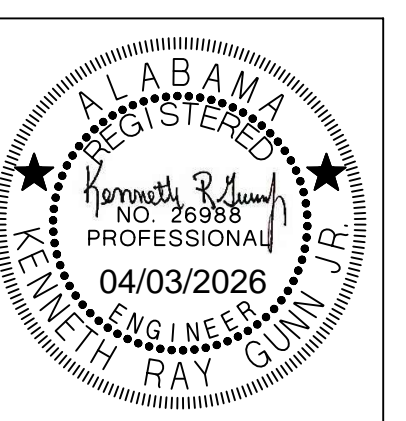


1 POWER RISER DIAGRAM

E7.1 NO SCALE

GA Gunn & Associates, P.C.
Consulting Engineers
3102 Highway 14 Millbrook, AL 36054
Tel: 334.285.1273

1200 Providence Park, Suite 200 Birmingham, AL 35242
GA#26-051



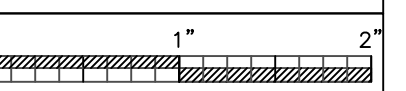
SHEET TITLE:
POWER RISER
DIAGRAM
DETAILS & NOTES

PROJ. MGR.: J. TILLERY
DRAWN: J. TILLERY
DATE: 04.03.2026
REVISIONS

JOB NO. 25-173

SHEET NO:

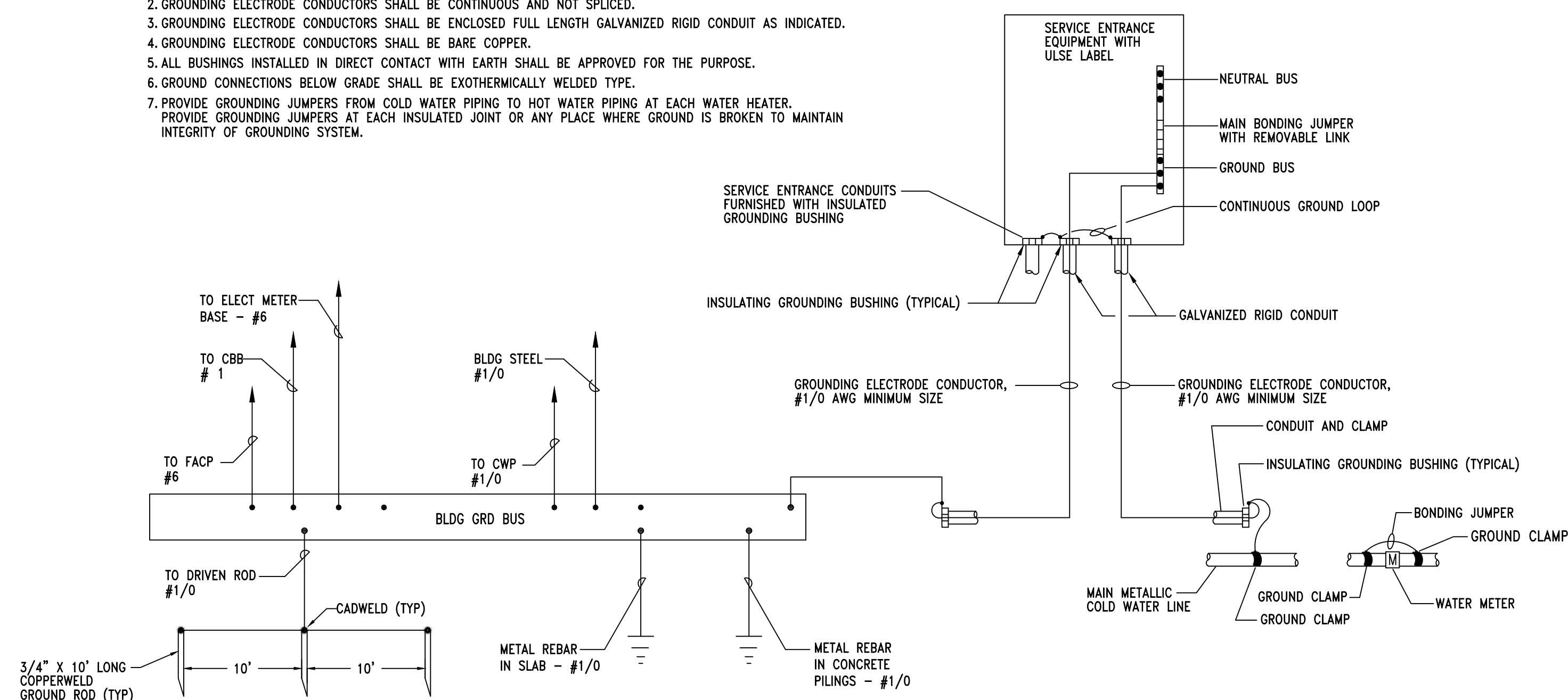
E7.1





NOTES

1. GROUNDING ELECTRODE SYSTEM SHALL BE IN ACCORDANCE WITH NEC ARTICLE 250
2. GROUNDING ELECTRODE CONDUCTORS SHALL BE CONTINUOUS AND NOT SPLICED.
3. GROUNDING ELECTRODE CONDUCTORS SHALL BE ENCLOSED FULL LENGTH GALVANIZED RIGID CONDUIT AS INDICATED.
4. GROUNDING ELECTRODE CONDUCTORS SHALL BE BARE COPPER.
5. ALL BUSHINGS INSTALLED IN DIRECT CONTACT WITH EARTH SHALL BE APPROVED FOR THE PURPOSE.
6. GROUND CONNECTIONS BELOW GRADE SHALL BE EXOTHERMICALLY WELDED TYPE.
7. PROVIDE GROUNDING JUMPERS FROM COLD WATER PIPING TO HOT WATER PIPING AT EACH WATER HEATER. PROVIDE GROUNDING JUMPERS AT EACH INSULATED JOINT OR ANY PLACE WHERE GROUND IS BROKEN TO MAINTAIN INTEGRITY OF GROUNDING SYSTEM.



2 DETAIL - SERVICE ENTRANCE GROUNDING INSTALLATION NO SCALE

DETAIL NOTES

- 1 LOCK-NUT ASSEMBLIES
- 2 METAL GROUNDING BUSHING
- 3 COPPER GROUND LUG
- 4 COPPER GROUND CONDUCTOR. REMOVE INSULATION AT BUSHING. RUN THROUGH BUSHING LUG AND BOND TO RACEWAY SYSTEM. DO NOT SPLICE OR TAP.
- 5 CONTINUOUS COPPER GROUND CONDUCTOR FROM GROUND BUS THROUGH EACH BUSHING. DO NOT SPLICE OR TAP.



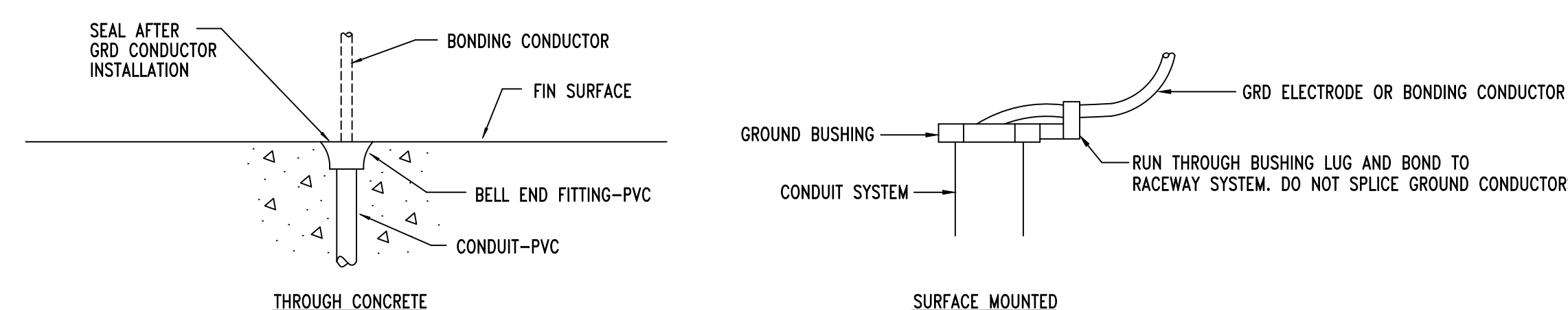
3 DETAIL - TYPICAL GROUND BUSHING INSTALLATION NO SCALE

GROUNDING AND BONDING INSTALLATION NOTES

1. ALL GROUNDING AND BONDING SHALL BE IN ACCORDANCE WITH THE NEC, NESC, IEEE, ANSI AND UL STANDARDS.
2. ALL DIMENSIONING INDICATED IN THESE DOCUMENTS ARE FOR REFERENCE AND COORDINATION PURPOSES ONLY. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING ALL DIMENSIONS IN THE FIELD.
3. THE PURPOSE OF THE GROUNDING AND BONDING SYSTEM IS TO ESTABLISH ALL EQUIPMENT ENCLOSURES, NON-CURRENT CARRYING METALLIC PORTIONS OF THE ELECTRICAL DISTRIBUTION SYSTEM, METAL PIPING, METAL BUILDING FRAME, ETC., AT A ZERO POTENTIAL RELATIVE TO THE EARTH GROUND AND PROVIDE FOR A SAFE, LOW IMPEDANCE RETURN PATH FOR GROUND-FAULT CURRENT. THIS SHALL BE ACCOMPLISHED IN THE FOLLOWING MANNER:
 - a. PROVIDE A SOLIDLY GROUND SECONDARY SYSTEM.
 - b. INTER-CONNECT ALL GROUND BUSES AND POINTS IN THE SYSTEM WITH A COPPER GRD CONDUCTOR (BUS) SYSTEM.
 - c. ALL METALLIC RACEWAYS SHALL BE UL APPROVED AND MADE-UP TIGHT AT ALL COUPLINGS AND TERMINATIONS.
 - d. ALL GROUND CONDUCTORS IN CIRCUITS SHALL BE CONTAINED WITHIN THE SAME RACEWAY AS CURRENT CARRYING CONDUCTORS.
 - e. ALL SPLICES AND TERMINATIONS SHALL BE MADE TIGHT AND AS SUCH TO PROVIDE LOW IMPEDANCE AND SHALL HAVE THE SAME SHORT-TIME CURRENT-CARRYING CAPABILITY AS THE CONDUCTOR IT IS CONNECTED TO.
 - f. ALL GRD ELECTRODES OR BONDING CONDUCTORS INSTALLED ALONE WITHIN A RACEWAY SHALL UTILIZE GRC WITH GROUNDING BUSHINGS AT EACH END. THIS GROUND CONDUCTOR SHALL LOOP THROUGH THE BUSHING LUG PRIOR TO TERMINATION.

NOTES

1. ALL GROUND ELECTRODE CONDUCTORS, SYSTEM BONDING CONDUCTORS, ETC., RUN SEPARATELY SHALL BE PROTECTED BY A CONDUIT SYSTEM.
2. ALL SYSTEM GROUNDING OR BONDING CONDUCTORS SHALL GENERALLY BE ENCLOSED BY A GRC CONDUIT. PROVIDE GROUND BUSHINGS ON EACH END AND BOND CONDUCTORS TO RACEWAY SYSTEM.
3. SYSTEM BONDING CONDUCTORS THAT PENETRATE CONCRETE SLABS SHALL BE ENCLOSED BY A PVC CONDUIT. PROVIDE BELL END FITTING ON EACH END AND SEAL THOSE TERMINATING AT A STUB-UP SHALL BE FLUSH WITH FLOOR.



3 DETAIL - TYPICAL GROUND CONDUCTOR IN CONDUIT SYSTEM NO SCALE

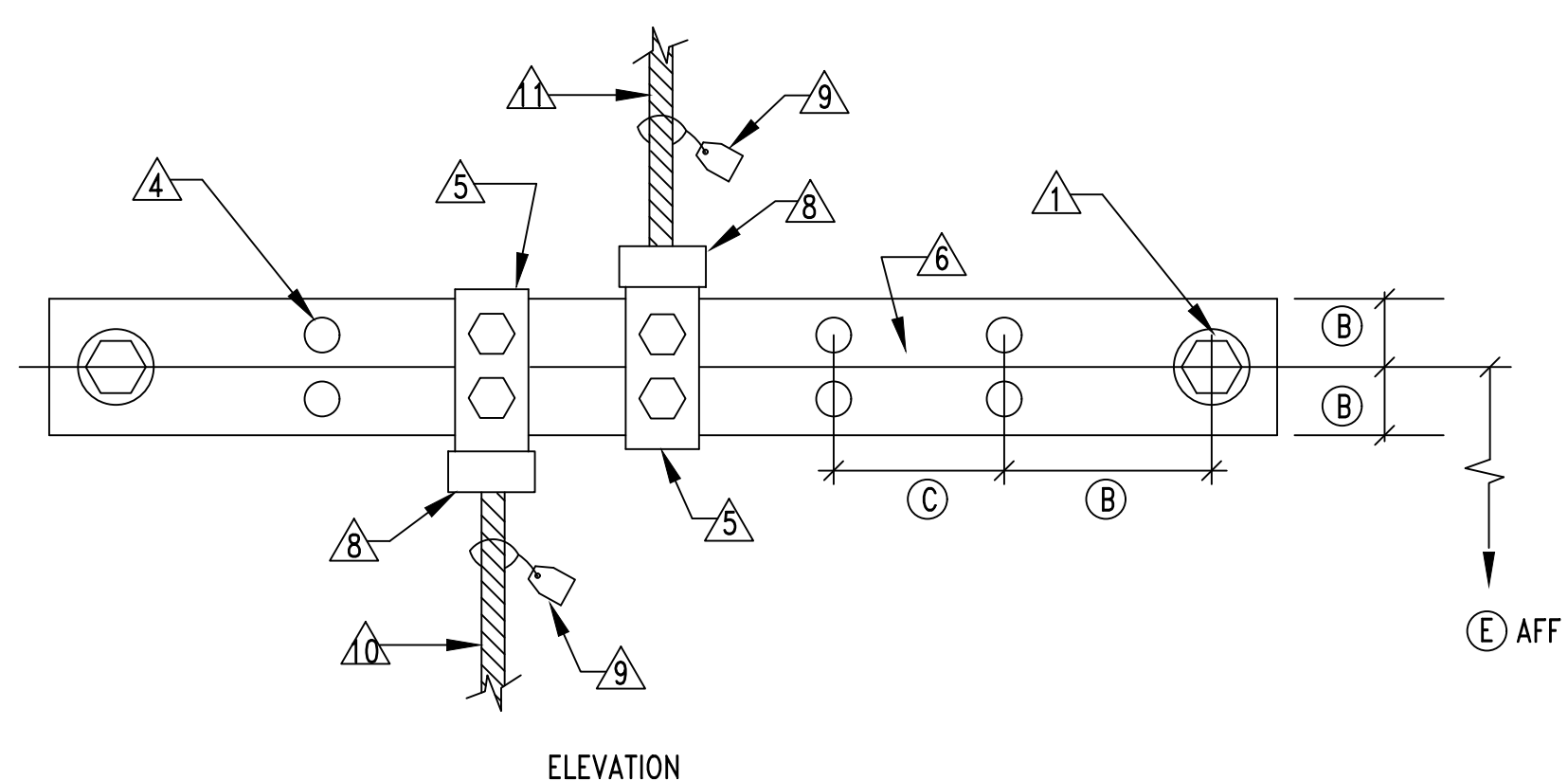
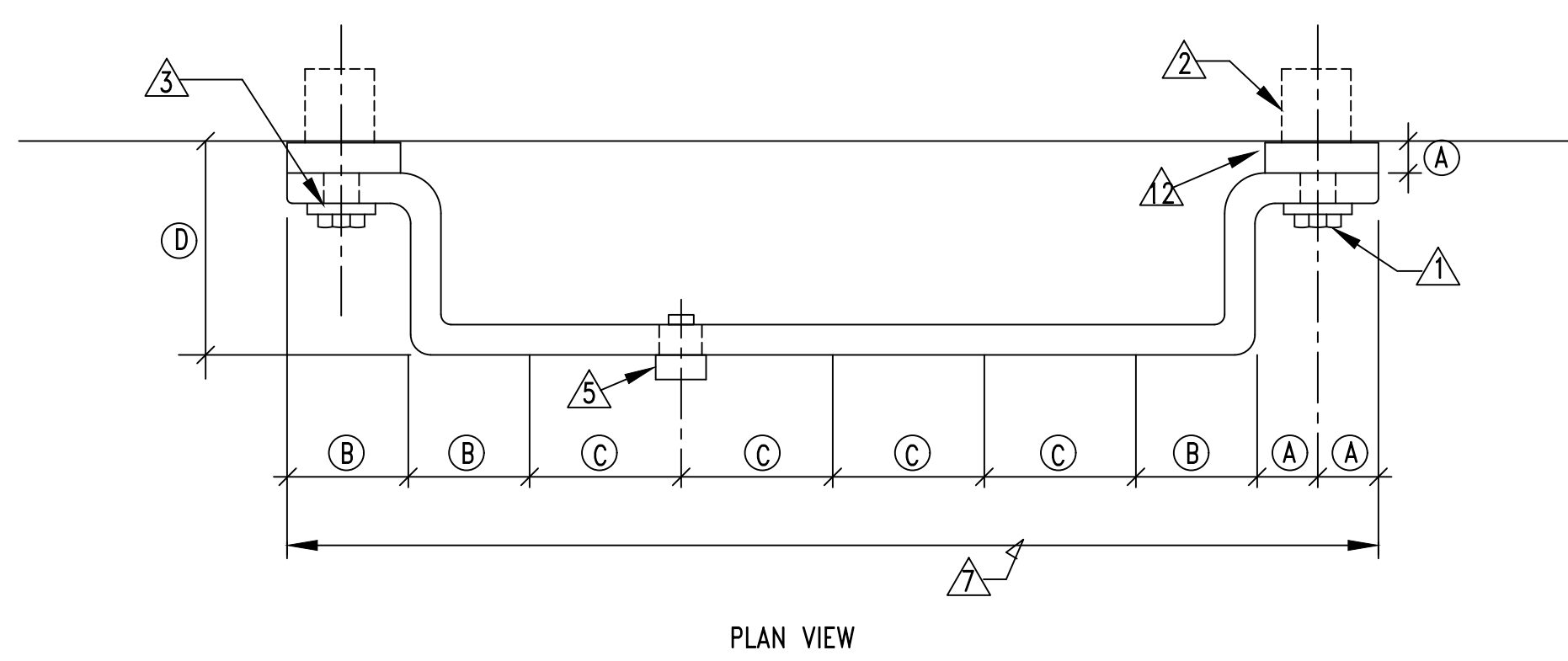
DIMENSION BLOCK		
REF	ENGLISH	SI
A	1"	25.4mm
B	2"	50.8mm
C	2 1/2"	63.5mm
D	3"	76.2mm
E	1'-6"	457.2m

GROUND BUS NOTES

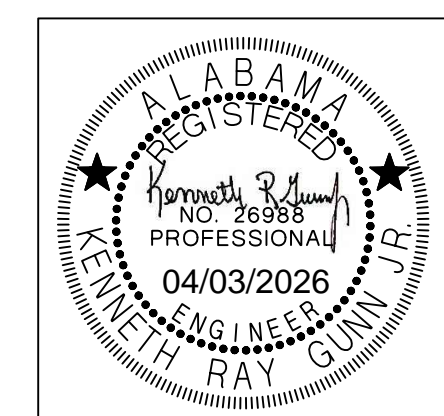
1. GROUND BUS INSTALLATION SHALL BE IN ACCORDANCE WITH THIS DETAIL AND AS INDICATED ON THE DRAWINGS.

KEYED NOTES

- 1 1/2" (12.7mm) X 1 1/2" (38.1mm) SILICON-BRONZE MACHINE BOLT & SILICON-BRONZE WASHER
- 1/2" (12.7mm) EXPANSION ANCHOR
- 9/16" (14.2875mm) HOLE IN BAR
- DRILLED DOUBLE CONNECTOR HOLES
- FLAT, TWO-HOLE CU CABLE CONNECTOR #6 TO #2 (DOUBLE LUGS) #1 TO #4/0 (SINGLE LUGS ONLY)
- 4" (101.6mm) WIDE, 1/4" (6.35mm) DEEP COPPER BUS BAR.
- LENGTH AS REQUIRED BY NUMBER OF CONDUCTOR CONNECTIONS OR AS SPECIFICALLY INDICATED. PROVIDE INTERMEDIATE WALL SUPPORTS AS REQUIRED.
- TYP CU GRD CONDUCTOR CONNECTION
- DESCRIPTION TAG. STATE SIZE OF CONDUCTOR AND TO WHAT IT IS CONNECTED TO.
- TYP GRD CONNECTION FROM BELOW. SEE APPLICABLE DETAILS FOR SLAB PENETRATIONS.
- TYP GRD CONNECTION FROM ABOVE. SEE APPLICABLE DETAILS FOR GRC INSTALLATIONS.
- INSULATED NON-CONDUCTIVE SPACER



1 DETAIL - TYPICAL GROUND BUS INSTALLATION NO SCALE



SHEET TITLE: GROUNDING DETAILS & NOTES

PROJ. MGR.: J. TILLERY
 DRAWN: J. TILLERY
 DATE: 04.03.2026
 REVISIONS:

JOB NO. 25-173

SHEET NO:

E7.2

Gunn & Associates, P.C.
 Consulting Engineers
 3102 Highway 14 Millbrook, AL 36054 1200 Providence Park, Suite 200 Birmingham, AL 35242
 Tel: 334.285.1273 GA#26-051

