

C:\Users\steve\Desktop\SHELBY CTY WATER SERVICES BLDG\SHELBY CTY WATER SERVICES BLDG.dwg, CS COV5HT, 4/17/2023 3:32:43 PM

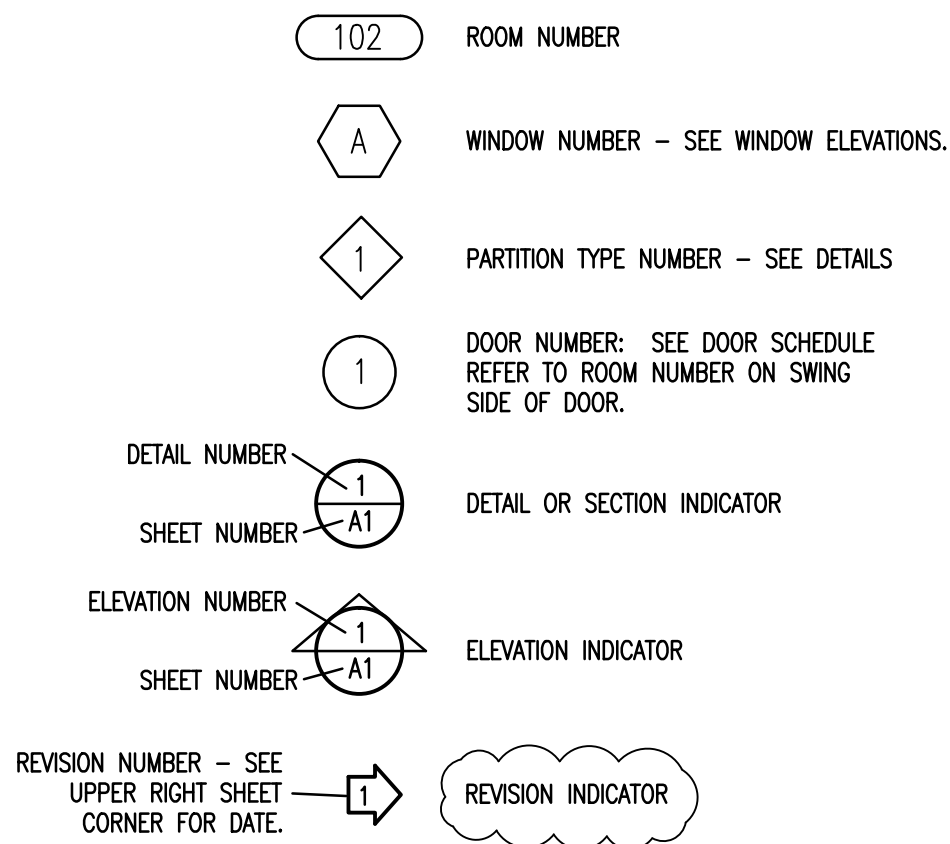
APPLICABLE CODES:

- 2021 International Building Code
- 2021 International Existing Building Code
- 2021 International Plumbing Code
- 2021 International Mechanical Code
- 2021 International Fire Code
- 2015 International Energy Conservation Code
- 2023 National Electrical Code
- 2017 ANSI 117.1 Accessibility Code
- 2010 ADA Standards for Accessible Design

NOTE: THIS BUILDING WAS DESIGNED AS A TYPE II–B NON–COMBUSTIBLE BUILDING. NON–FIRE RETARDANT WOOD OR LUMBER MAY NOT BE USED EXCEPT AS SPECIFICALLY NOTED IN 2015 IBC SECTION 603.

WOOD USED AS FINISH WALL AND FLOOR SURFACES SHALL BE UL CLASS “C” OR BETTER.

ARCHITECTURAL SYMBOL LEGEND



ABBREVIATIONS

- C/C
- C
- #
- APPROX.
- A.F.F.
- C.J.
- CL
- C.L.G.
- CONC.
- CONT.
- COORD.
- D.
- DIA.
- EL.
- ELEV
- EXT.
- FAB.
- FIN.
- F.O.S.
- FLR.
- GYP. BD.
- H.
- HD.
- HR.
- HT.
- INT.
- M.O.
- MAX.
- MFOR.
- MIN.
- N.I.C.
- O.C
- O.F.C.I.
- O.F.I.
- PLN.
- R
- REBAR
- REF.
- REFL
- RND.
- R.O.
- THRU
- TYP.
- U.O.N.
- W.
- W/
- WDW.
- W.W.M.
- W.W.F.
- CENTERLINE
CENTER TO CENTER
AT THE RATE OF
NUMBER
- APPROXIMATE, APPROXIMATELY
- ABOVE FINISH FLOOR
- CONTROL JOINT
- CLEAR
- CEILING
- CONCRETE
- CONTINUOUS
- COORDINATE
- DEEP
- DIAMETER
- ELEVATION (HGT. REF. SURVEY DATUM)
- ELEVATION (VERTICAL BUILDING VIEW)
- EXTERIOR
- FABRICATE, FABRICATED
- FINISH, FINISHED
- FACE OF STUDS
- FLOOR
- GYPSON BOARD
- HIGH
- HEAD
- HOURL
- HEIGHT
- INTERIOR
- MASONRY OPENING
- MAXIMUM
- MANUFACTURER
- MINIMUM
- NOT IN CONTRACT
ON CENTER
- OWNER FURNISHED, CONTRACTOR INSTALLED
- OWNER FURNISHED AND INSTALLED
- PLAN
- RADIUS
- REINFORCING BAR
- REFERENCE
- REFLECTED
- ROUND
- ROUGH OPENING
- THROUGH
- TYPICAL
- UNLESS OTHERWISE NOTED
- WIDE
- WITH
- WINDOW
- WELDED WIRE MESH
- WELDED WIRE FABRIC

OCCUPANCY TYPES: Non–Separated Occupancies

- 2021 IBC: LOW HAZARD STORAGE Group S–2 (IBC Section 311)
7500 SF
- 2021 IBC: BUSINESS Group B (IBC Section 304)
6000 SF

CONSTRUCTION TYPE:

- 2021 IBC: TYPE II–B (IBC Section 602)
PRE–ENGINEERED METAL BUILDING

BUILDING HEIGHT AND AREA LIMITATIONS:

3 stories / 23,500 S.F./ 55’ Height (IBC Table 504 & 506)
(Allowable area and height increases not calculated)

THIS PROJECT: 1 story – 13,500 S.F. – 25’ height

THIS BUILDING IS NOT REQUIRED TO BE FIRE SPRINKLERED (NFPA 13)

- (IBC 903) – GROUP B– NOT REQUIRED
- (IBC 903) – GROUP S–2 – NOT REQUIRED

FIRE ALARM SYSTEM IS NOT REQUIRED BY (F) IBC 907

MINIMUM OCCUPANT LOADS BY CODE:

- 1 per 300 S.F. – Group S–2 (IBC Table 1004.5)
- 1 per 150 S.F. – Group B (IBC Table 1004.5)

MAXIMUM TRAVEL TO EXIT:

- Exit Access Travel Distance Limit – Group S–2 / B – 200’ max. (IBC Table 1017.2)
- Max. distance this project – 153’
- Common Path of Egress Travel – 75’ max. (IBC 1006.2.1)
- Max. distance this project – 56’

FIRE EXTINGUISHERS (FE) – BRACKET MTD. (FE) – SEMI–RECESSED CABINET

PROVIDE PORTABLE WALL MOUNTED FIRE EXTINGUISHERS WHERE SHOWN ON PLAN AND NOT TO EXCEED 75’ TRAVEL DISTANCE FOR ANY OCCUPANT. ADD EXTINGUISHERS TO COMPLY WITH FIXTURE OR EQUIPMENT LAYOUTS.

PROVIDE UL 4–A: 80B;C 10# ABC TYPE ON WALL BRACKETS OR IN SEMI–RECESSED CABINETS. PROVIDE APPROVED EASILY VISIBLE SIGNAGE INDICATING ALL LOCATIONS.

TOP OF CABINET OR BRACKET @ 48” ABOVE FLOOR
MAXIMUM CABINET PROJECTION = 4” FROM WALL

S–2 OCCUPANCY: 7,500 S.F. @ 300 = 25 OCCUPANTS

WATER CLOSETS REQD: (IBC TABLE 2902.1) – 1/100 OCCUPANTS = 2 REQD. TOTAL

WATER CLOSETS PROVIDED: 2 WC + 2 URINALS

LAVATORIES REQD: (IBC TABLE 2902.1) 1/100 OCCUPANTS = 2 REQD. TOTAL

LAVATORIES PROVIDED: 2

B OCCUPANCY: 6,000 S.F. @ 150 = 40 OCCUPANTS

WATER CLOSETS REQD: (IBC TABLE 2902.1) – 1/25 OCCUPANTS = 2 REQD. TOTAL

WATER CLOSETS PROVIDED: 2 WC + 2 URINALS

LAVATORIES REQD: (IBC TABLE 2902.1) 1/40 OCCUPANTS = 2 REQD. TOTAL

LAVATORIES PROVIDED: 2

DRINKING FOUNTAINS REQD: (IBC 2902.1) 1/1000 OCCUPANTS = 2 OR BI–LEVEL

DRINKING FOUNTAINS PROVIDED: 2

SERVICE SINKS REQD: (IBC TABLE 2902.1) 1 SERVICE SINK REQD. TOTAL

SERVICE SINKS PROVIDED: 1

EGRESS CAPACITY TABULATION

OCCUPANCY	SIZE	OCCUPANCY LOAD IBC 1004.5	EGRESS WIDTH IBC 1005	EGRESS WIDTH PROVIDED
GROUP S–2	7,500 S.F.	1 per 300 S.F.	25 OCCUPANTS x 0.2” = 5”	34” x 2 = 68”
GROUP B	6,000 S.F.	1 per 150 S.F.	40 OCCUPANTS x 0.2” = 8”	34” x 2 = 68”
65 TOTAL OCCUPANTS				

REQUIRED FIRE PROTECTION RATINGS FOR WALLS and OPENINGS – BUILDING TYPE II–B:

ELEMENT	WALL RATING (IBC Table 601)	OPENING RATING (IBC Table 716.1)
Fire Barriers	3 hr. – IBC 706.4 (N/A)	
Exterior Brg. Walls	0 hr. – IBC 601	0 hr
Interior Brg. Walls	0 hr. – IBC 601	0 hr
Exterior Non–Brg. Walls	0 hr. – IBC 601	0 hr
Other interior partitions:	0 hr. – IBC 601	0 hr
Structural Frame:	0 hr. – IBC 601	
Floors, Beams, and Joists:	0 hr. – IBC 601	
Roofs, Beams, and Rafters:	0 hr. – IBC 601	
Exterior Wall Fire Resistance Rating:	>30’ separation – 0 hr.– IBC 705.5	
Vertical Exit Enclosures:	N/A hr.	
Exit Passageways:	N/A hr.	
Interior Corridors:	0 hr. (IBC Table 1020.2 <30 Occupant Load)	
Demising Interior Partitions:	N/A hr.	
Floor / Ceiling Assembly:	N/A hr.	
Occupancy Separation:	0 hr. (IBC Table 508.4)	

D R A W I N G I N D E X

CIVIL ENGINEERING SHEETS

C0.0 – C5.1 12 SHEETS
1–2 2 SHEETS

ARCHITECTURAL 12 SHEETS

- CS COVER SHEET
- LF LIFE SAFETY FLOOR PLAN
- A1 DIMENSION FLOOR PLAN
- A2 REFLECTED CEILING PLAN
- A3 EXTERIOR ELEVATIONS
- A4 EXTERIOR ELEVATIONS
- A5 BUILDING SECTIONS
- A6 BUILDING DETAILS
- A7 MILLWORK, CASEWORK, TILE DETAILS
- A8 WINDOW, DOOR & FINISH SCHEDULES
- A9 ACCESSIBILITY DETAILS
- A10 FENCE AND GATE DETAILS

STRUCTURAL ENGINEERING SHEETS

S1–S5 5 SHEETS

PLUMBING ENGINEERING SHEETS

P0.1 – P2.0 3 SHEETS

HVAC ENGINEERING SHEETS

M0.1 – M2.0 5 SHEETS

ELECTRICAL ENGINEERING SHEETS

E1–E11 11 SHEETS

50 TOTAL SHEETS

BID DOCUMENTS DATED 4-3-23

OFFICES AND WAREHOUSE
PRE-ENGINEERED METAL BUILDING

Project Name and Address:
Shelby County Water Services Building
10927 US Highway 280
Westover, Alabama 35185

Drawing scale indicated is accurate on 24"x36" sheets only

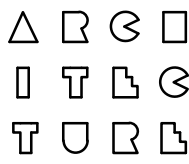
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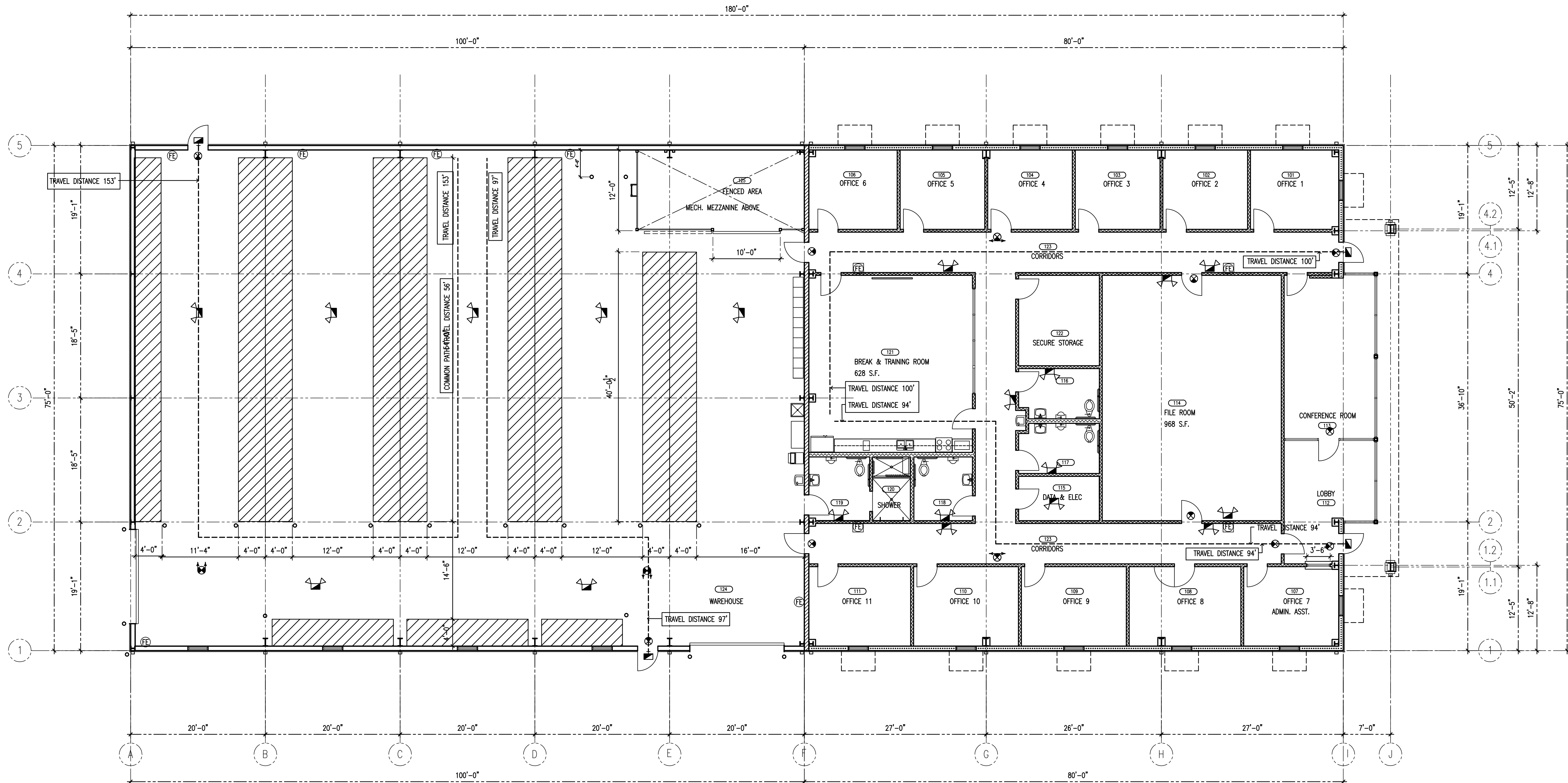
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steve@cokerarch.com

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DRAWN BY	SJC
PROJECT NO.	230317

SHEET NO.	CS
1	OF 12 ARCH SHEETS

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FIRE EXTINGUISHERS (FE) - BRACKET MTD. (FE) - SEMI-RECESSED CABINET

PROVIDE PORTABLE WALL MOUNTED FIRE EXTINGUISHERS WHERE SHOWN ON PLAN AND NOT TO EXCEED 75' TRAVEL DISTANCE FOR ANY OCCUPANT. ADD EXTINGUISHERS TO COMPLY WITH FIXTURE OR EQUIPMENT LAYOUTS.

PROVIDE UL 4-A: 80B:C 10# ABC TYPE ON WALL BRACKETS OR IN SEMI-RECESSED CABINETS. PROVIDE APPROVED EASILY VISIBLE SIGNAGE INDICATING ALL LOCATIONS.

TOP OF CABINET OR BRACKET @ 48" ABOVE FLOOR
MAXIMUM CABINET PROJECTION = 4" FROM WALL

EXIT LIGHT W/ BATTERY BACKUP. ARROW INDICATES DIRECTION
EMERGENCY LIGHT W/ BATTERY BACKUP. MOUNT AT 8'-0" AFF

OFFICES EXTERIOR WALLS:
METAL SIDING 1 ON 6" -16 GA. @ 16" C/C METAL STUDS
WITH MASONRY WAINSCOT

WAREHOUSE EXTERIOR WALLS:
METAL SIDING 2 ON 8" WALL GIRTS.
3/4 PLYWOOD INTERIOR WALL SURFACE TO 8'-0" AFF,
EXTERIOR GLUE, FLAMESPREAD CLASS B OR C ONLY.

SEPARATION WALL:
5/8" GYPSUM BOARD BOTH SIDES OF
6" -16 GA. @ 16" C/C METAL STUDS
WITH MINERAL WOOL SOUND INSULATION

INTERIOR PARTITIONS:
5/8" GYPSUM BOARD BOTH SIDES OF
3 5/8"-20 GA. @ 24" C/C METAL STUDS
WITH MINERAL WOOL / FIBERGLASS SOUND
INSULATION AS NOTED

LIFE SAFETY FLOOR PLAN
scale: 1/8" = 1'-0"
scale is accurate on 24"x36" sheets only

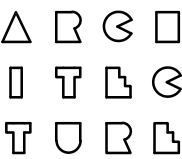
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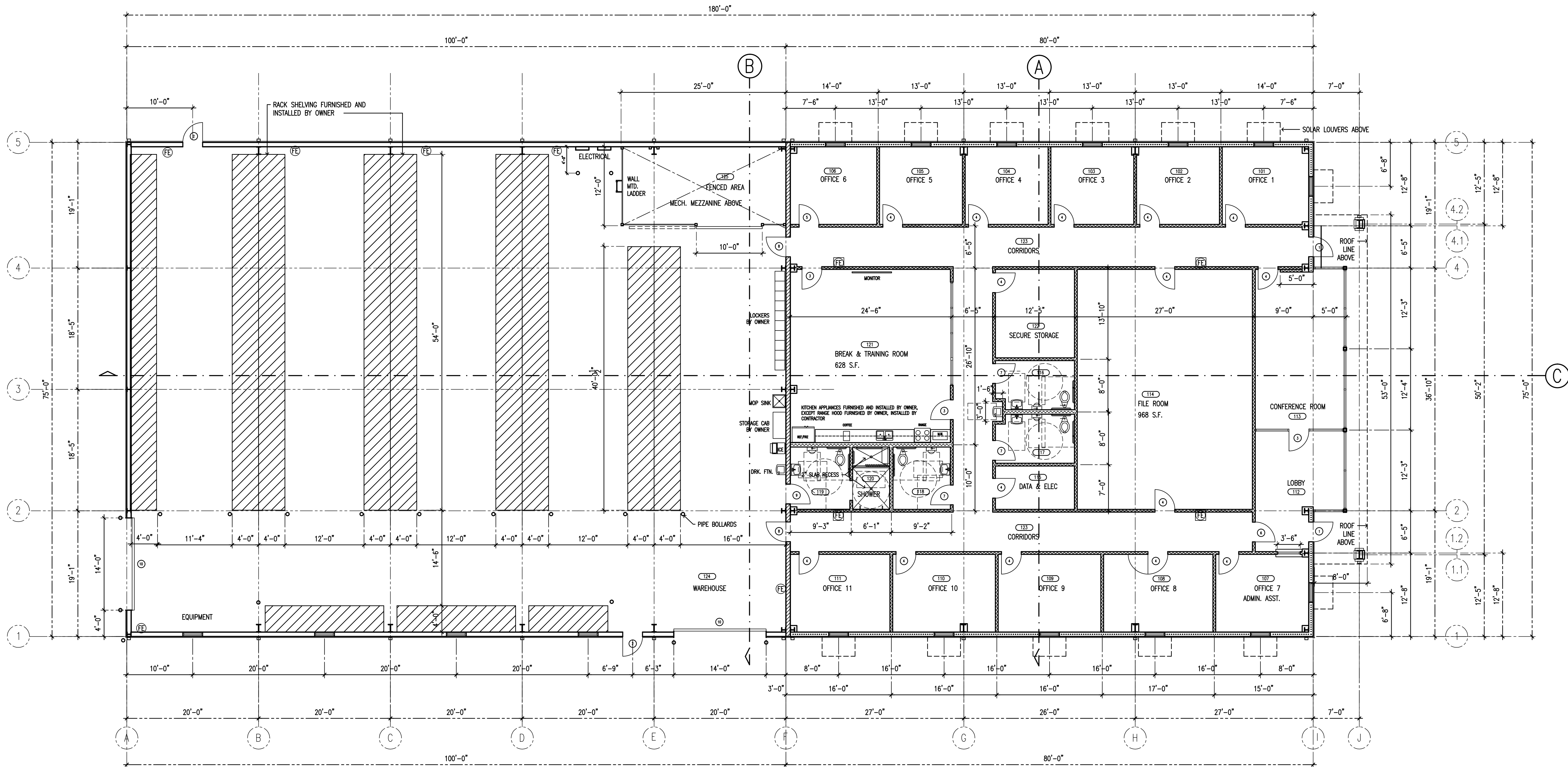
Phone 205/595-0021

E-mail:
steve@cokerarch.com

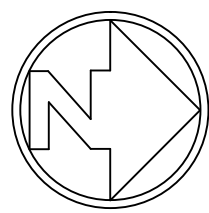
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DRAWN BY	SJC
PROJECT NO.	220317

SHEET NO.	LF
2	OF 12 ARCH SHEETS

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- OFFICES EXTERIOR WALLS:
METAL SIDING 1 ON 6" -16 GA. @ 16" C/C METAL STUDS
WITH MASONRY WAINSCOT
- WAREHOUSE EXTERIOR WALLS:
METAL SIDING 2 ON 8" WALL GIRTS.
3/4 PLYWOOD INTERIOR WALL SURFACE TO 8'-0" AFF.
EXTERIOR GLUE, FLAMESPREAD CLASS B OR C ONLY.
- SEPARATION WALL:
5/8" GYPSUM BOARD BOTH SIDES OF
6" -16 GA. @ 16" C/C METAL STUDS
WITH MINERAL WOOL SOUND INSULATION
- INTERIOR PARTITIONS:
5/8" GYPSUM BOARD BOTH SIDES OF
3 5/8"-20 GA. @ 24" C/C METAL STUDS
WITH MINERAL WOOL / FIBERGLASS SOUND
INSULATION AS NOTED



DIMENSION FLOOR PLAN
scale: 1/8" = 1'-0"
scale is accurate on 24"x36" sheets only

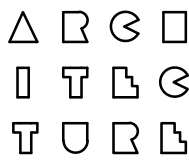
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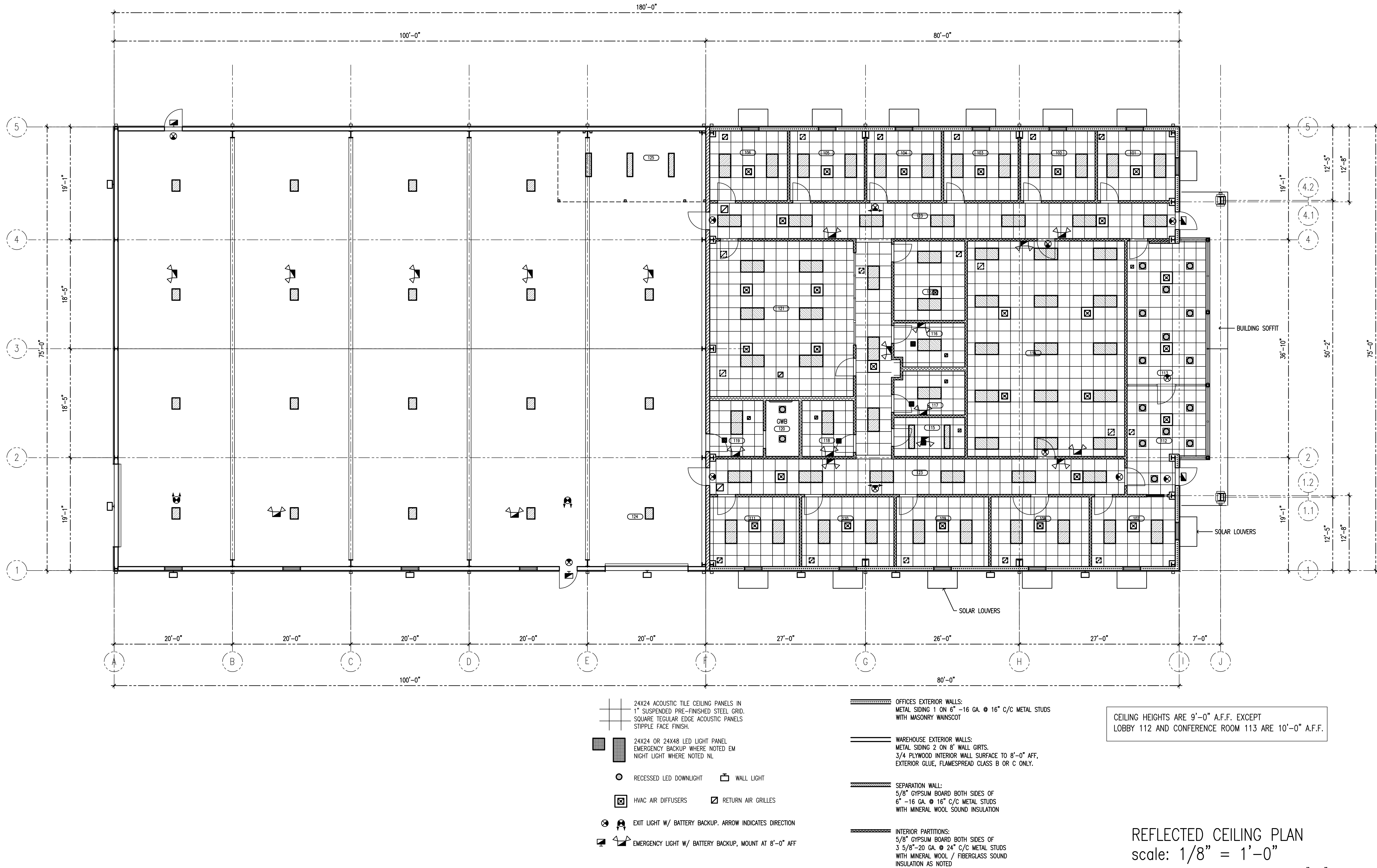
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SHEET NO.	A1
3	OF 12 ARCH SHEETS

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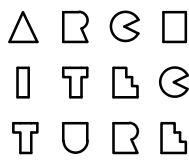
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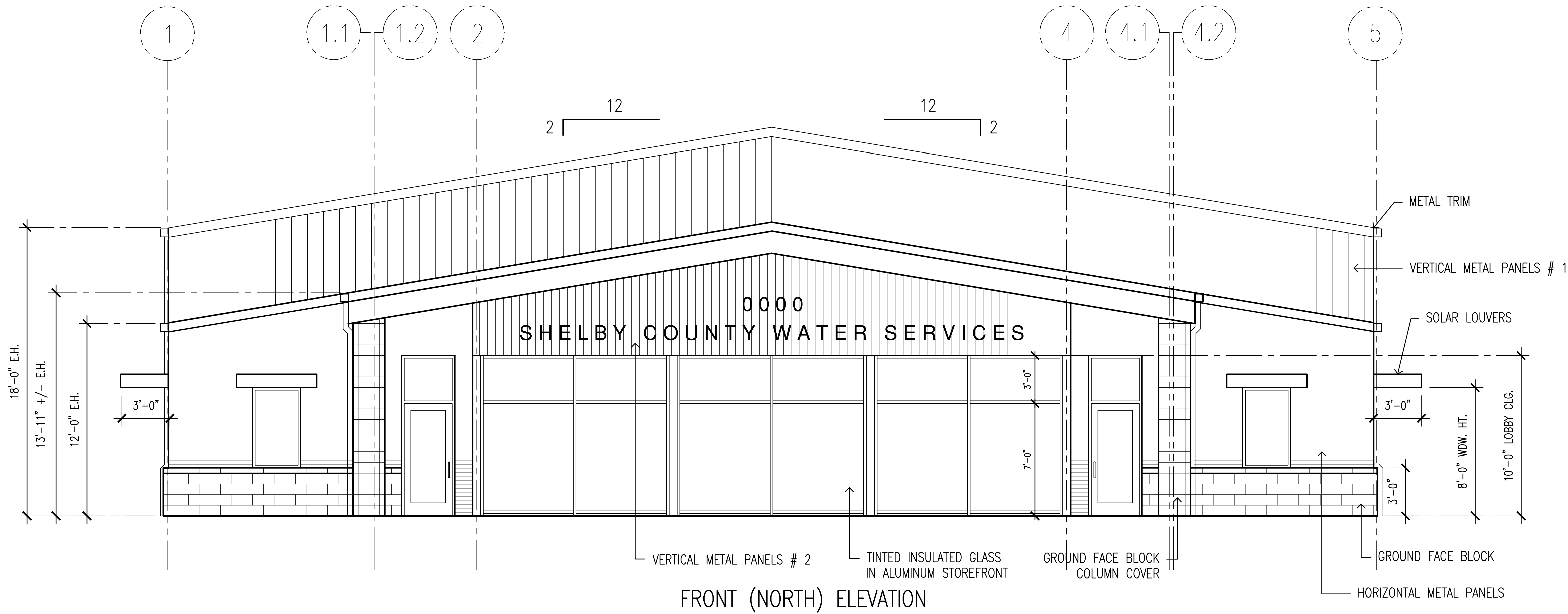
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SHEET NO.	A2
4	OF 12 ARCH SHEETS



FRONT (NORTH) ELEVATION

BASIS OF DESIGN FOR GROUND FACE BLOCK VENEER:
16" W. X 8" H. X 4" THK. BY

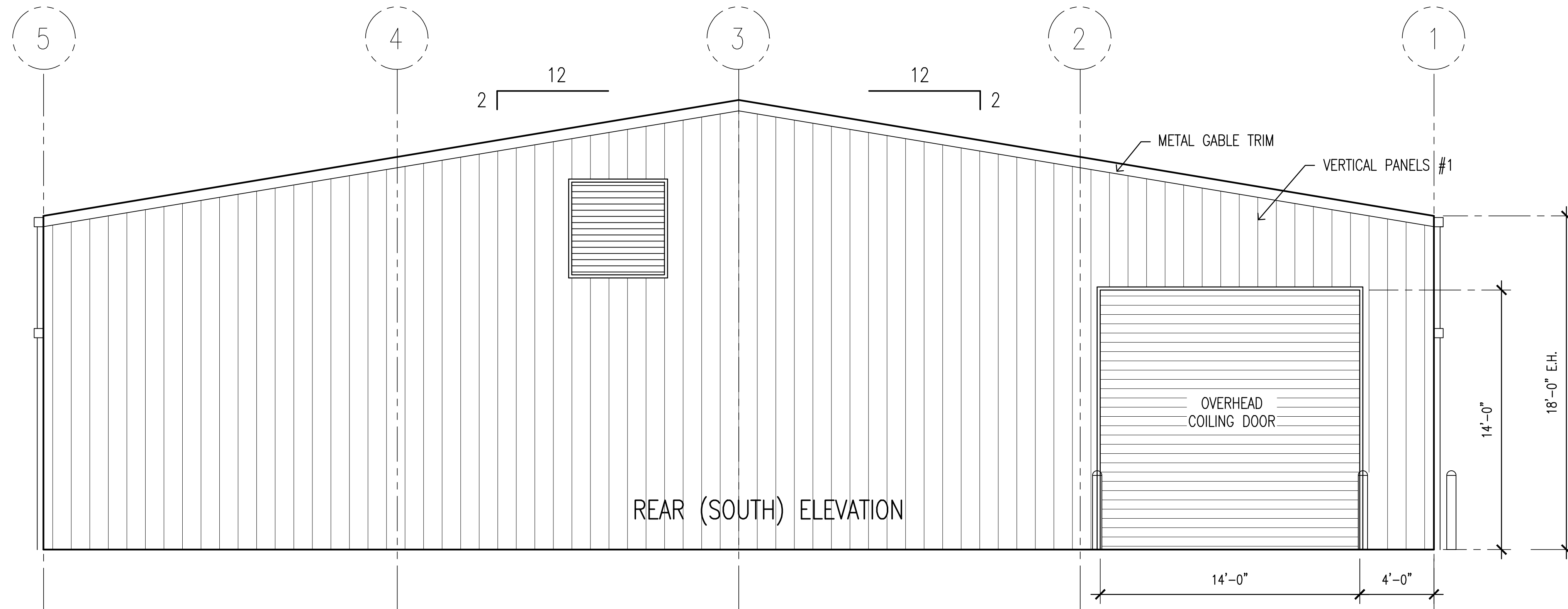
DECRASTONE BY SMYRNA READY MIX CONCRETE OR
ECHELON HIGH POLISH – GEORGIA MASONRY SUPPLY

BASIS OF DESIGN FOR METAL ROOF PANELS:

MBCI ULTRA-DEK: 18" OR 24" W., 24 GA.
CONCEALED FASTENER, TRAPEZOIDAL SEAM, SMOOTH.
SIGNATURE 200 OR 300 FINISH.

BASIS OF DESIGN FOR EXTERIOR METAL PANELS:

HORIZONTAL WALL PANELS: MBCI MASTERLINE 16 16" W. 24 GA,
VERTICAL PANELS # 1 : MBCI PBR 36" W. 26 GA.
VERTICAL PANELS # 2 : MBCI FW-120-1 12" W. 6" BEAD 24 GA.



REAR (SOUTH) ELEVATION

EXTERIOR ELEVATIONS
scale: 1/4" = 1'-0"

scale is accurate on 24"x36" sheets only

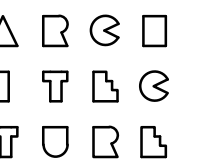
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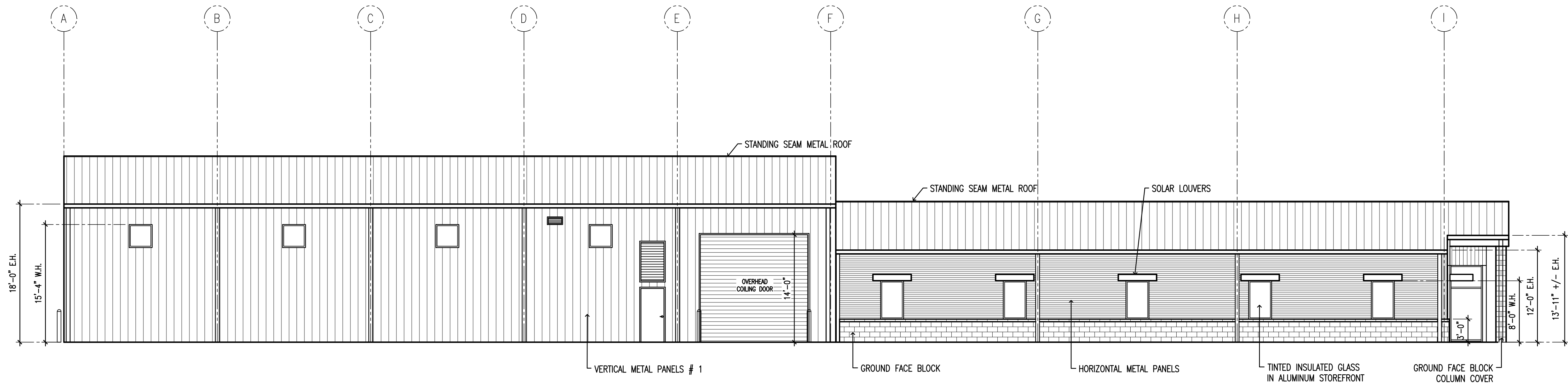
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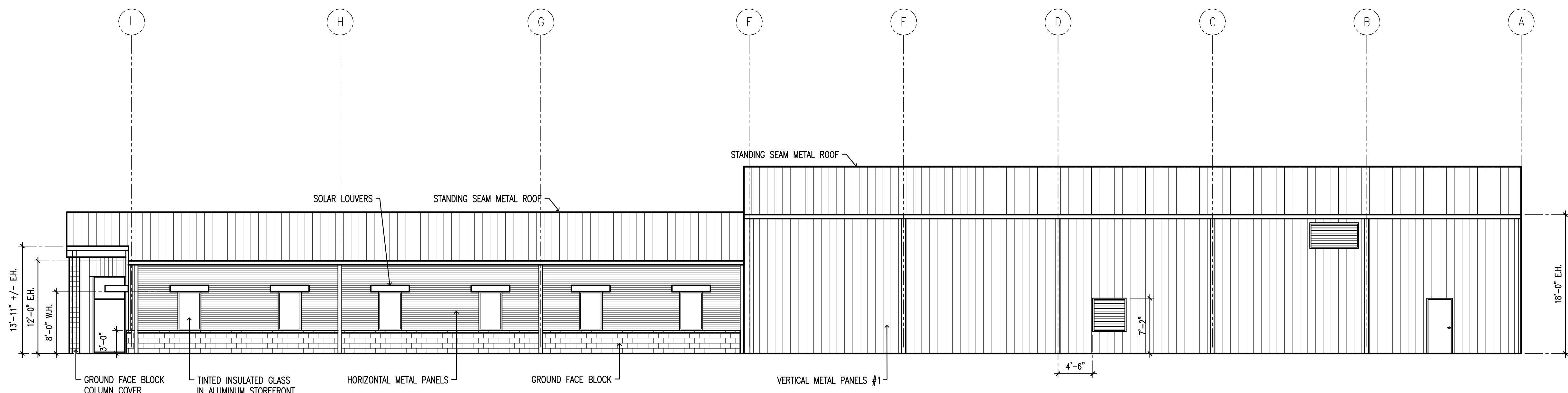
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SHEET NO.
A3
5 OF 12 ARCH SHEETS

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FRONT SIDE (EAST) ELEVATION



REAR SIDE (WEST) ELEVATION

BASIS OF DESIGN FOR GROUND FACE BLOCK VENEER:
16" W. X 8" H. X 4" THK. BY
DECRSTONE BY SMYRNA READY MIX CONCRETE OR
ECHELON HIGH POLISH - GEORGIA MASONRY SUPPLY

BASIS OF DESIGN FOR METAL ROOF PANELS:
MBCI ULTRA-DEK: 18" OR 24" W., 24 GA.
CONCEALED FASTENER, TRAPEZOIDAL SEAM, SMOOTH.
SIGNATURE 200 OR 300 FINISH.

BASIS OF DESIGN FOR EXTERIOR METAL PANELS:
HORIZONTAL WALL PANELS: MBCI MASTERLINE 16 16" W. 24 GA.
VERTICAL PANELS # 1 : MBCI PBR 36" W. 26 GA.
VERTICAL PANELS # 2 : MBCI FW-120-1 12" W. 6" BEAD 24 GA.

EXTERIOR ELEVATIONS
scale: 1/8" = 1'-0"

scale is accurate on 24"x36" sheets only

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STATE OF ALABAMA

No. 1933

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Birmingham, Alabama

REGISTERED ARCHITECT

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SHEET NO.

A4

6 OF 12 ARCH SHEETS

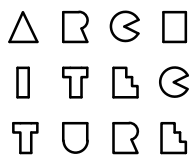
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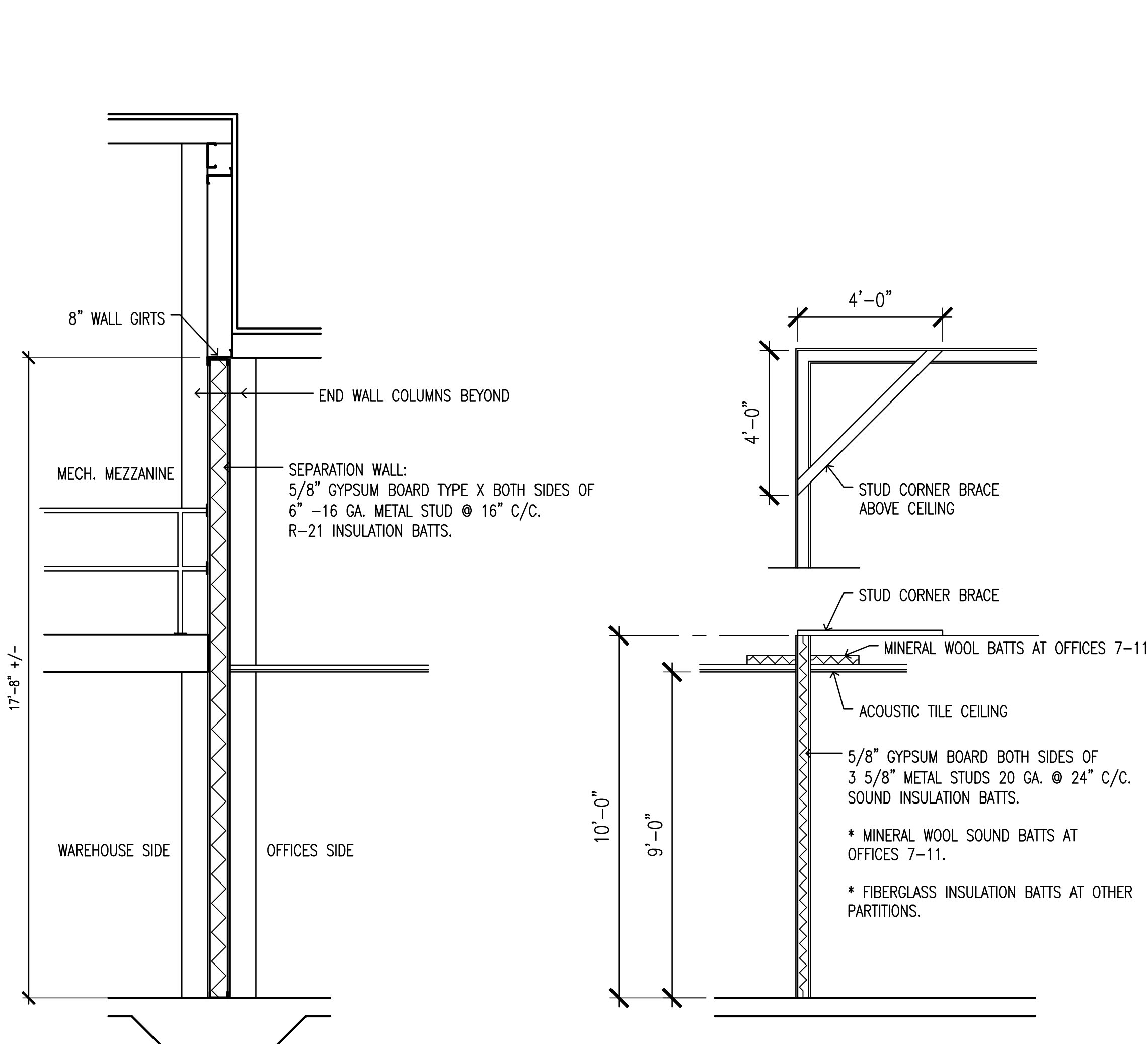
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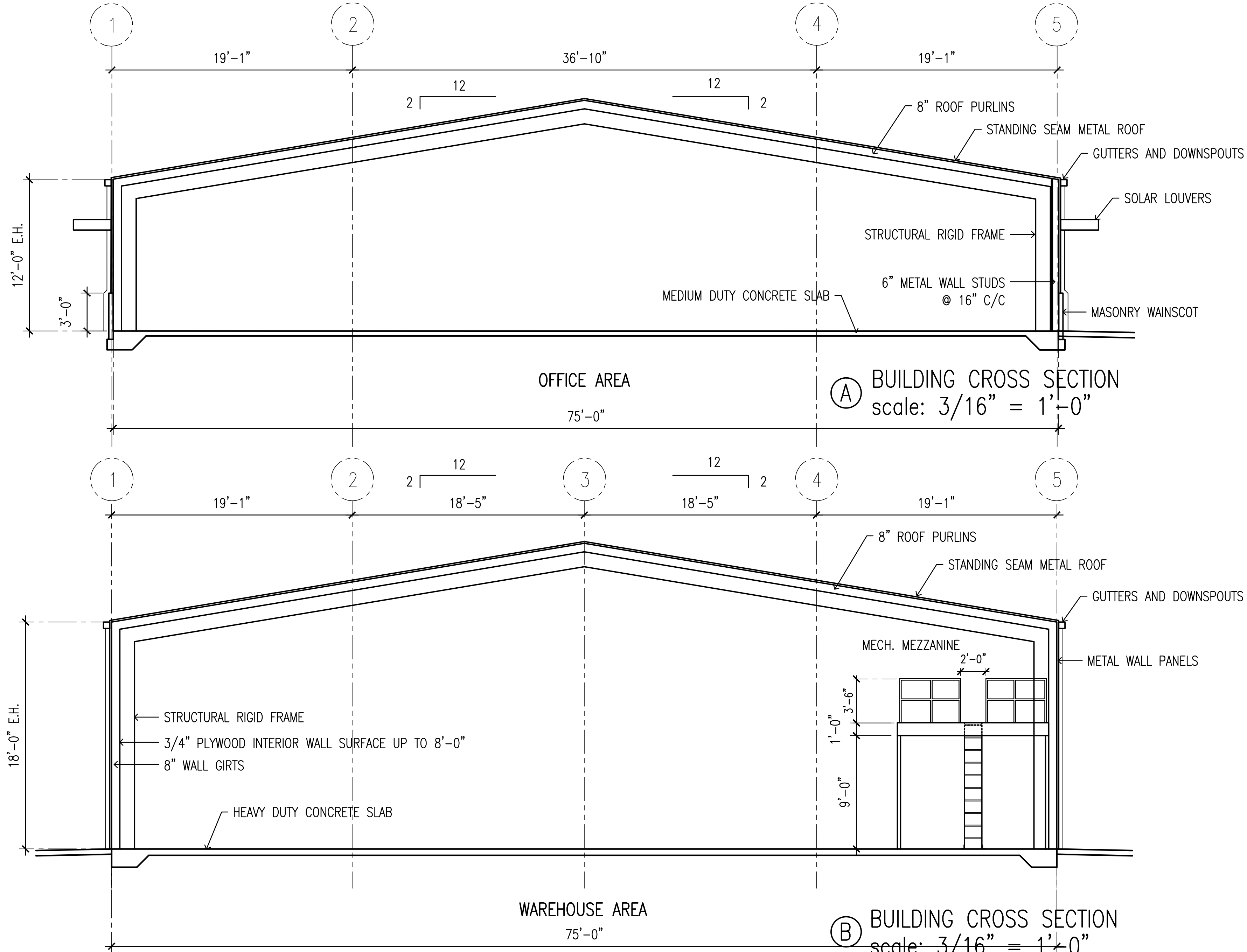
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SHEET NO.	A5
7	OF 12 ARCH SHEETS



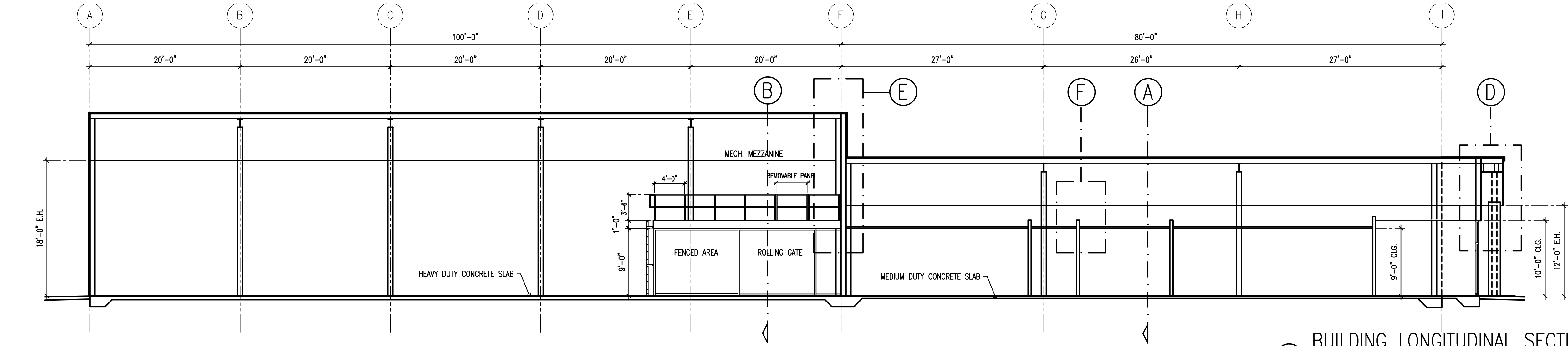
Ⓔ SEPARATION WALL CROSS SECTION
scale: 3/8" = 1'-0"

Ⓕ PARTITION & CORNER BRACE
scale: 3/8" = 1'-0"



Ⓐ BUILDING CROSS SECTION
scale: 3/16" = 1'-0"

Ⓑ BUILDING CROSS SECTION
scale: 3/16" = 1'-0"



Ⓒ BUILDING LONGITUDINAL SECTION
scale: 1/8" = 1'-0"

scale is accurate on 24"x36" sheets only

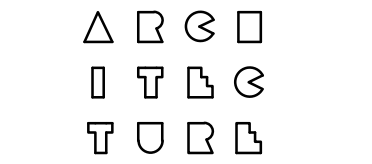
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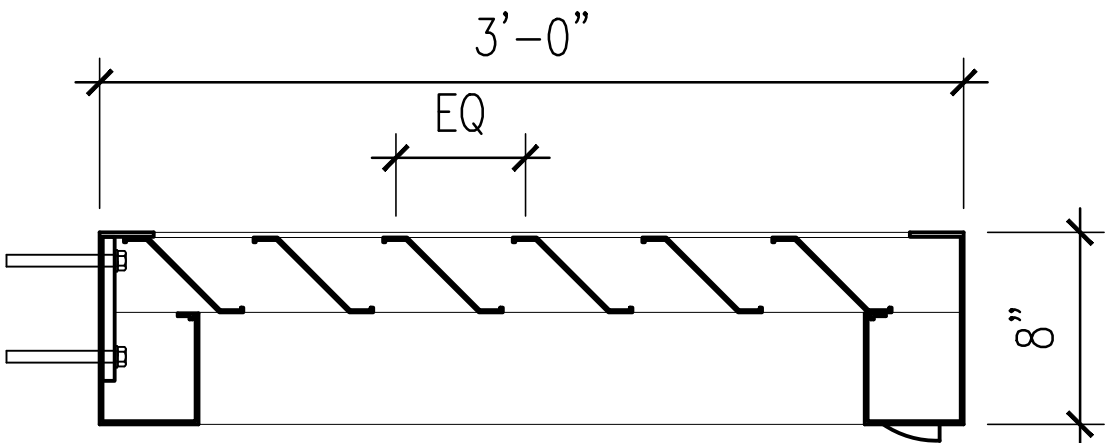
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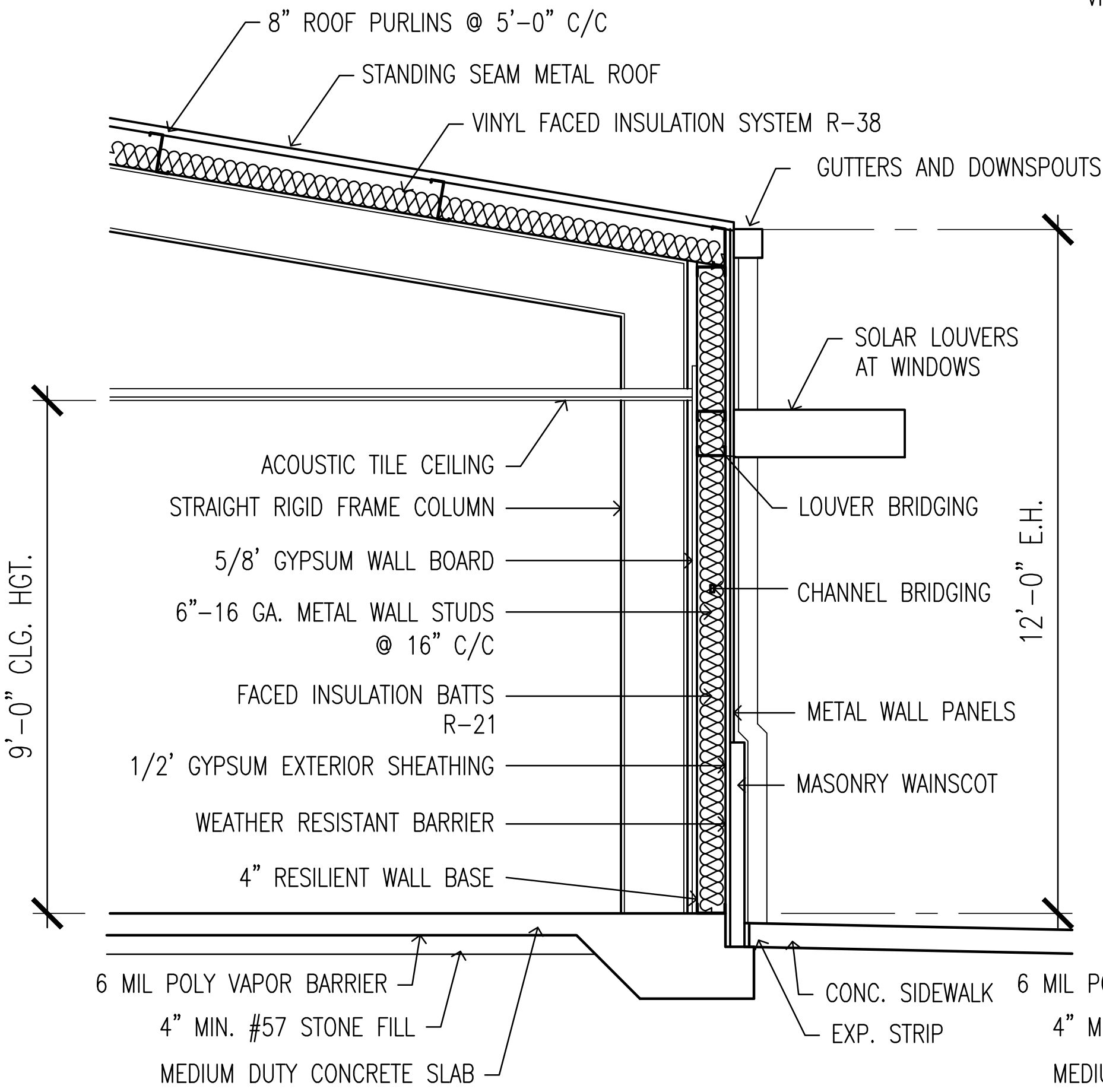
SHEET NO.
A6
8 OF 12 ARCH SHEETS



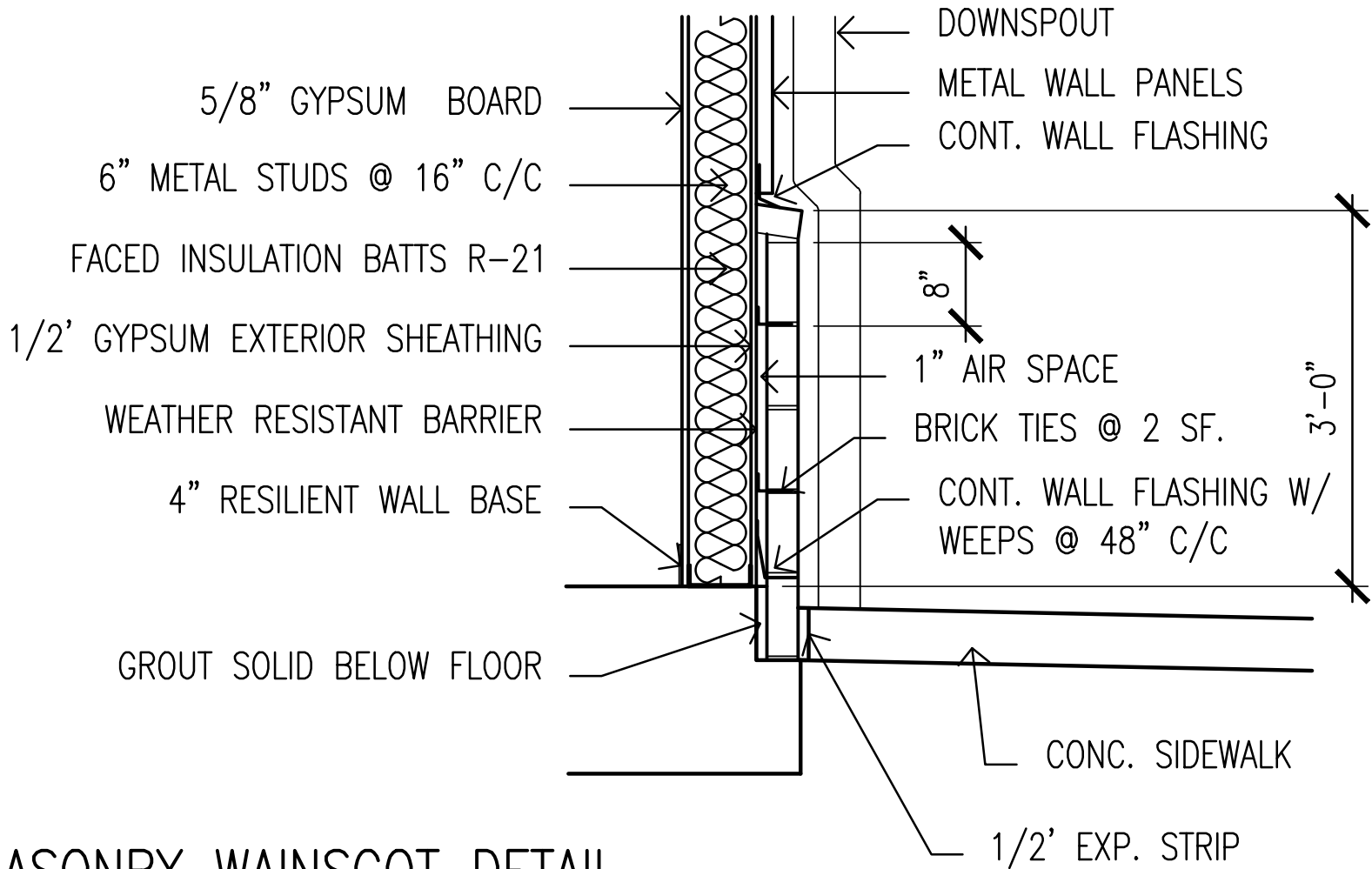
MANUFACTURED ALUMINUM CONSTRUCTION.
CLEAR ANODIZED ALUMINUM FINISH.
Z-BAR TYPE LOUVERS.

BASIS OF DESIGN: T V M - SEE SPEC.

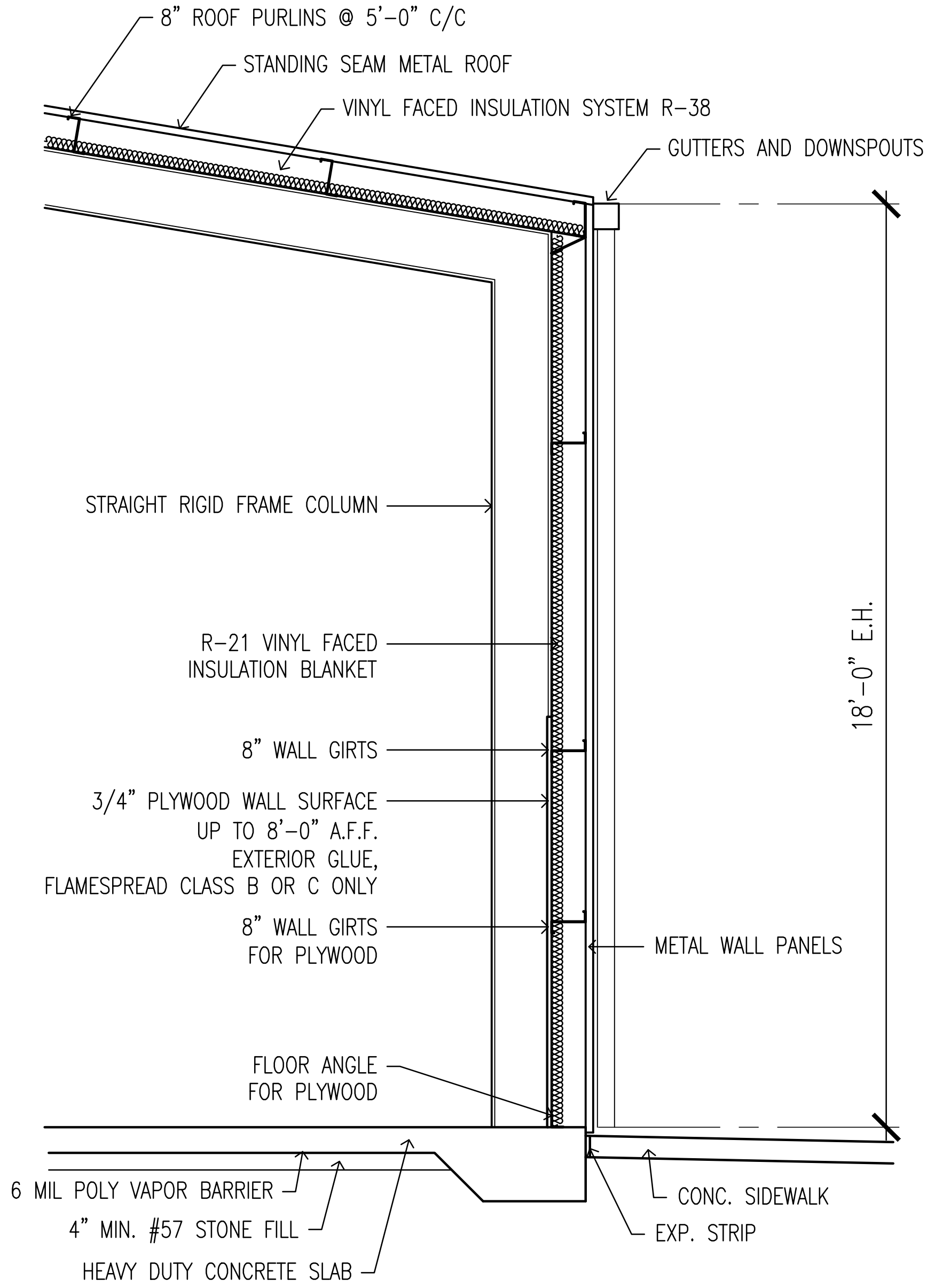
SOLAR LOUVER (SUNSCREEN) DETAIL
scale: 1 1/2" = 1'-0"



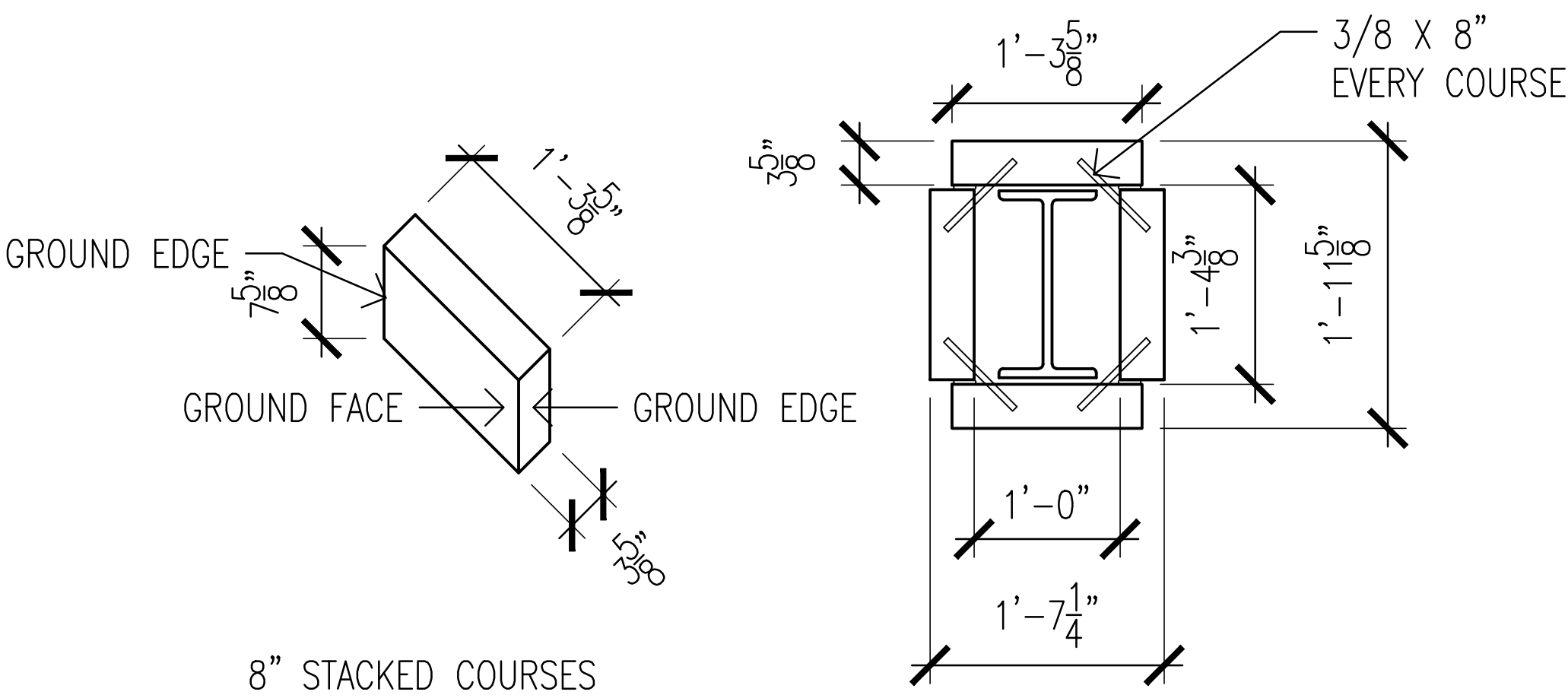
(A) OFFICE AREA



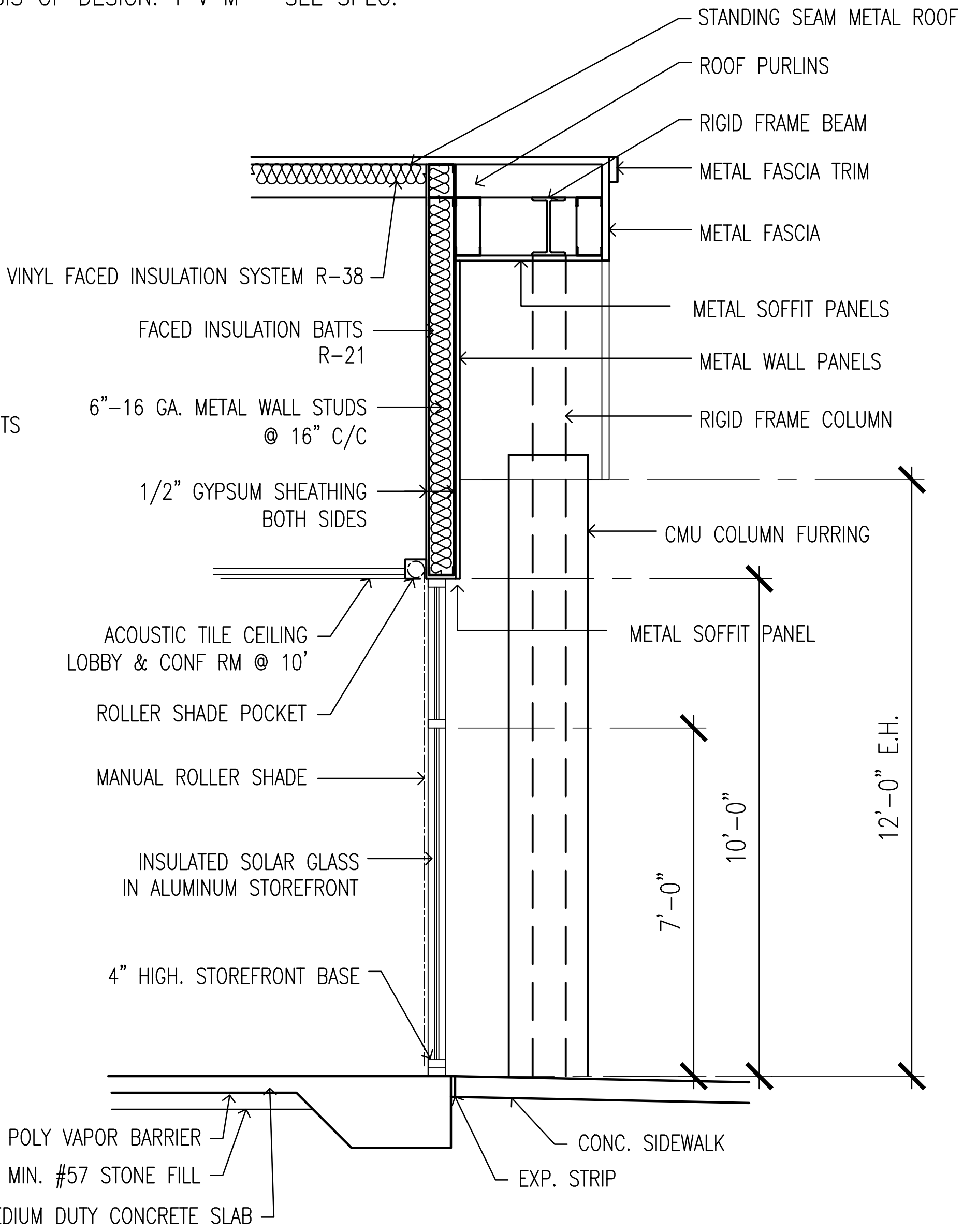
MASONRY WAINSCOT DETAIL
scale: 3/4" = 1'-0"



(B) WAREHOUSE AREA



FRONT COLUMN CMU FURRING
scale: 1" = 1'-0"

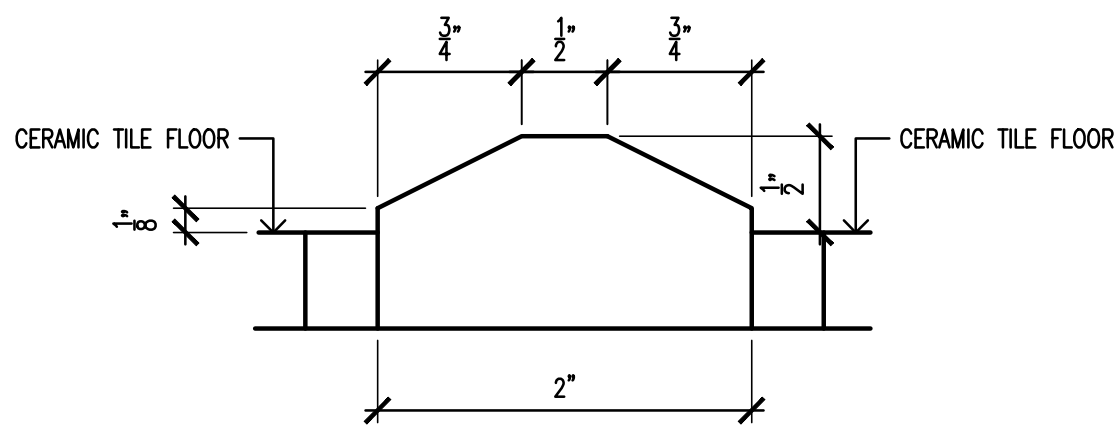


(D) LOBBY & CONFERENCE ROOM

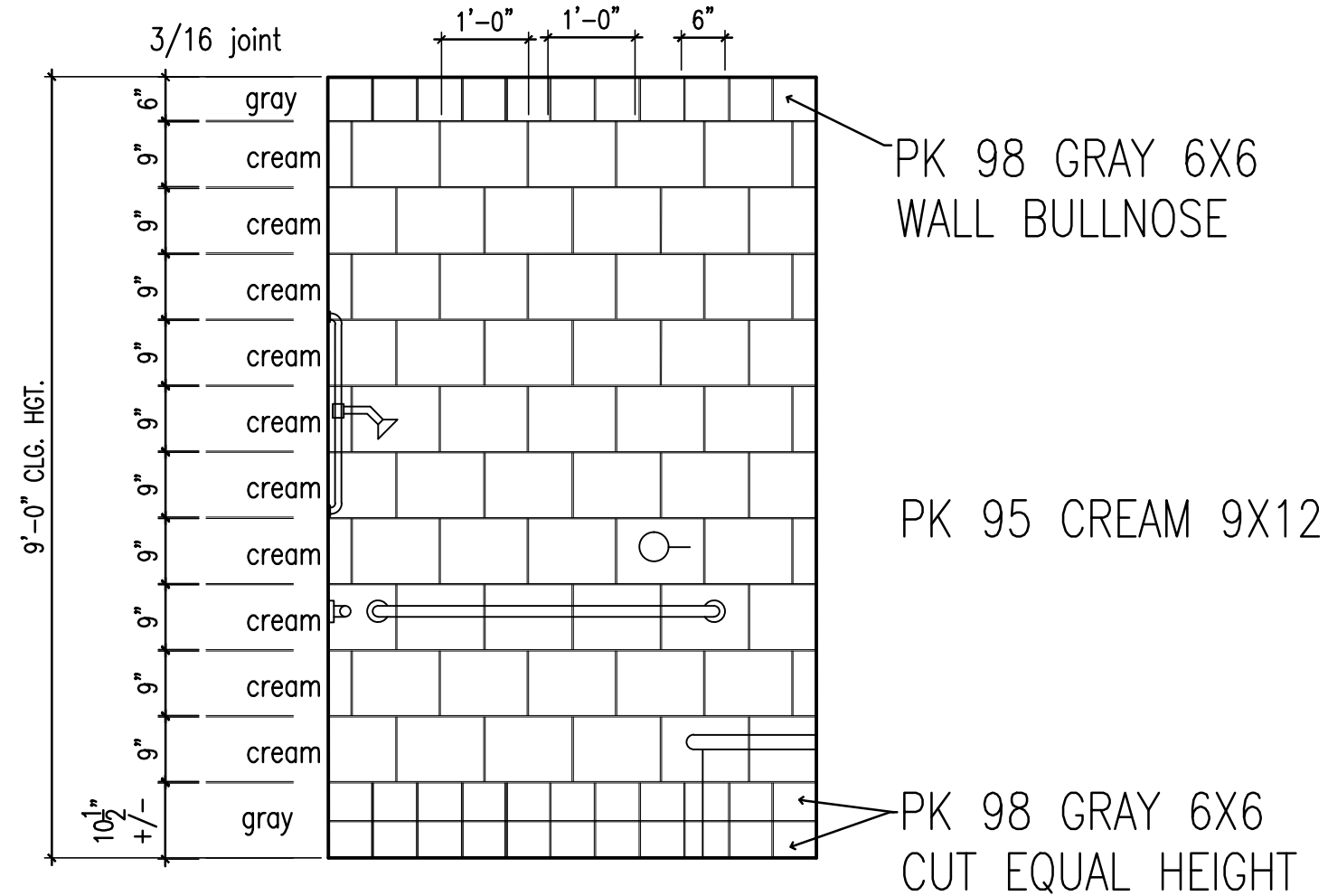
WALL SECTIONS AND DETAILS
scale: 1/2" = 1'-0"

scale is accurate on 24"x36" sheets only

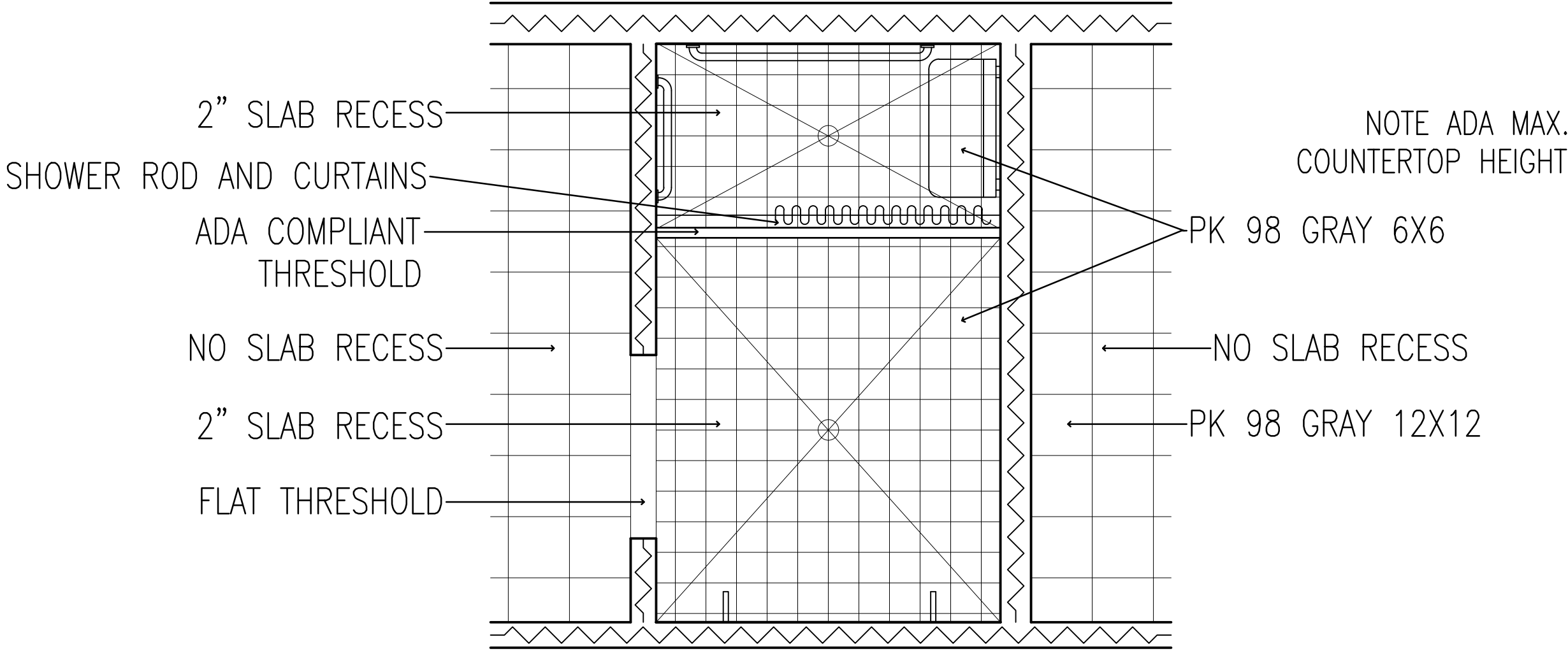
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SHOWER FLOOR THRESHOLD
(MARBLE OR PVC)



CERAMIC WALL TILE PATTERN
(SHOWN AT SHOWER)



CERAMIC FLOOR TILE PATTERN
(SHOWN AT SHOWER)

CERAMIC WALL AND FLOOR TILE:
DAL TILE "PARKWAY" SERIES

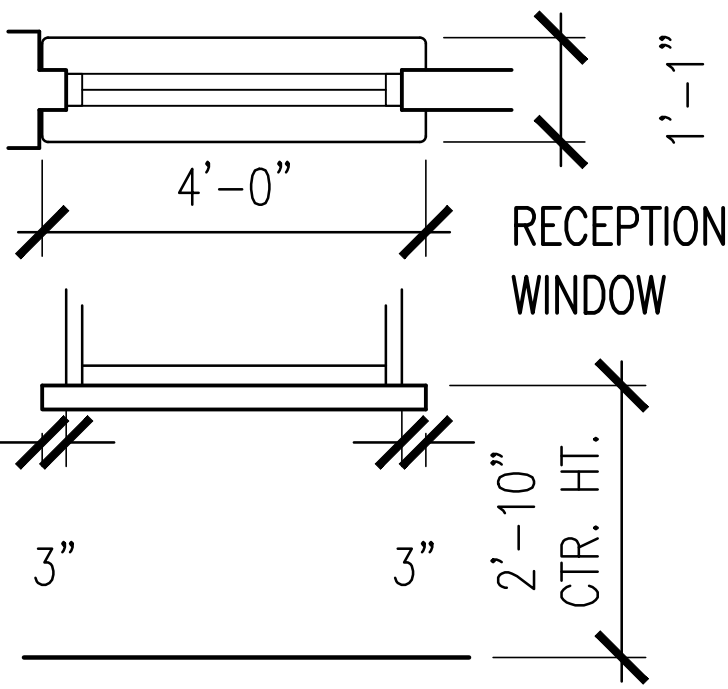
ALL CERAMIC TILE SANDED GROUT:
MAPEI ULTRACOLOR FA PLUS.
COLOR TO BE SELECTED.

CERAMIC TILE DETAILS
scale: 1/2" = 1'-0"

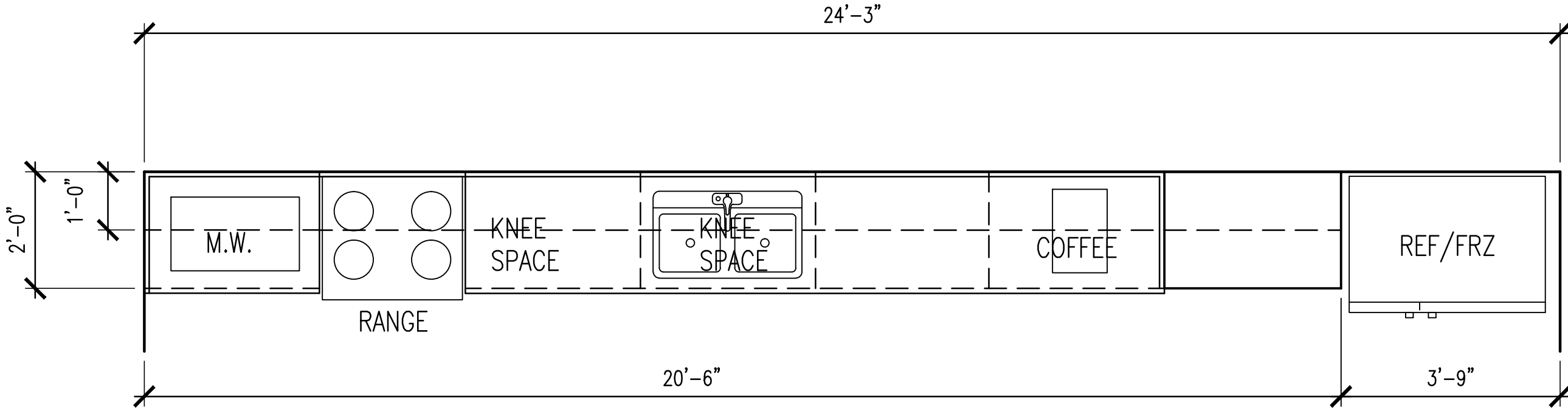
SLOPE SLABS MAX. 1/4"/FT. TO
CENTER DRAINS. PROVIDE SLOPED
CONC. FILL, SHOWER PAN, TILE LATH,
SETTING BED, AND GROUTED TILE FINISH.

TIE SHOWER PAN INTO FLOOR DRAINS.

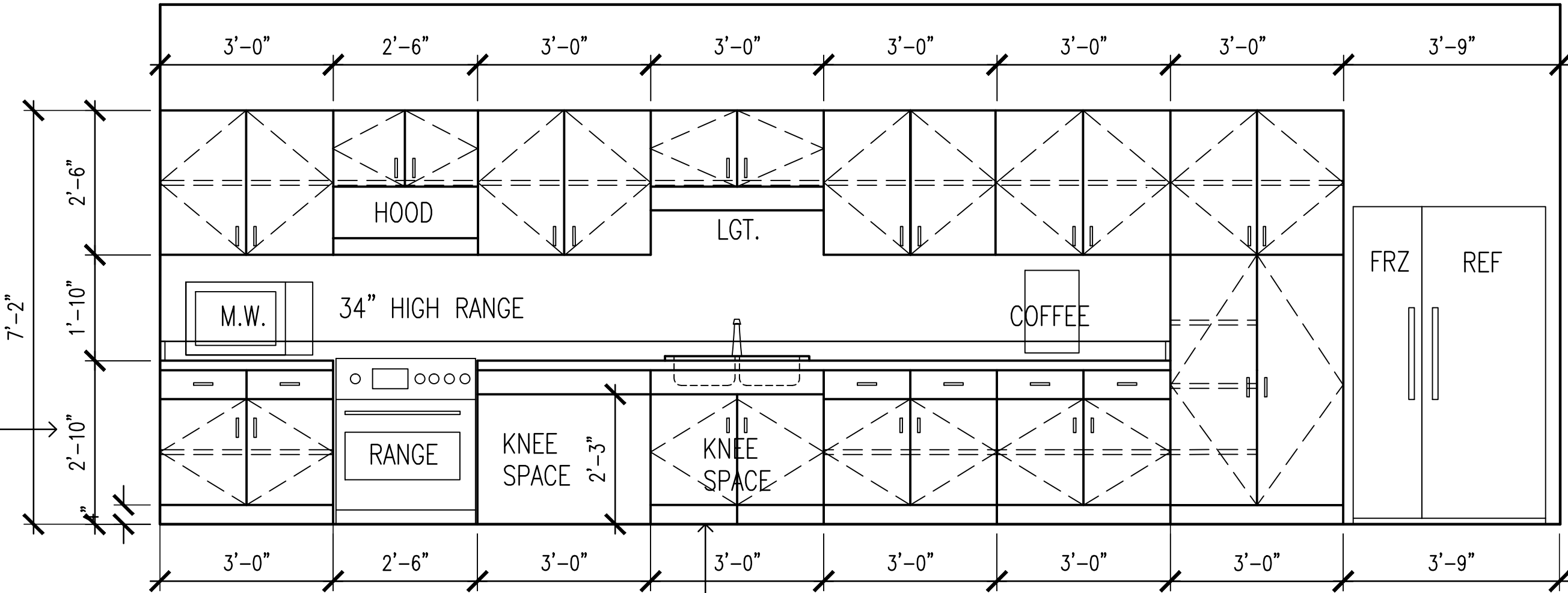
PROVIDE COMPLETE SYSTEM
OF SCHLUTER-KERDI SYSTEMS
AT WALL CORNERS, FLOORS, AND
SHOWER



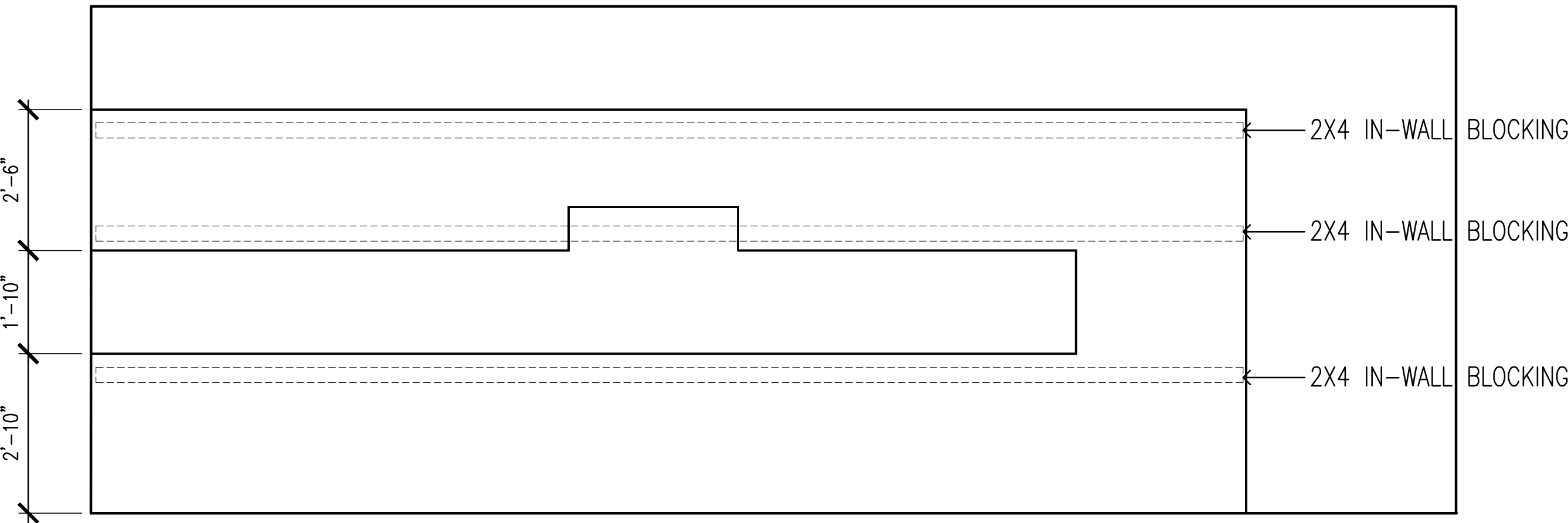
COUNTERTOPS AND BACKSPLASH: SOLID SURFACING
CABINETS, OUTSIDE FINISHES: HIGH PRESSURE PLASTIC LAMINATE
CABINET SHELVES: HIGH PRESSURE PLASTIC LAMINATE
CABINETS, INTERIOR FINISH: MELAMINE
WIRE DOOR AND DRAWER PULLS: 4" BRUSHED CHROME
CABINETRY PLASTIC LAMINATE: WILSONART 7937-38 RIVER CHERRY, VELLUM FINISH, VERTICAL GRAIN
SOLID SURFACE SS-1: CORIAN "SILT" COLOR



PLAN



ELEVATION



WALL BLOCKING DIAGRAM

BREAK AND TRAINING ROOM 122

CASEWORK DETAILS
scale: 1/2" = 1'-0"

scale is accurate on 24"x36" sheets only

REVISIONS	BY

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STATE OF ALABAMA
No. 1933
Stephen J. Coker
Birmingham, Alabama
REGISTERED ARCHITECT

Not Valid for Construction
without Registration Seal

Shelby County Water Services Building
10927 US Highway 280
Westover, Alabama 35185

△ □ ⊞ ⊞
□ ⊞ ⊞ ⊞
⊞ ⊞ ⊞ ⊞

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DRAWING DATE	4-3-23
DRAWN BY	SJC
PROJECT NO.	220317

SHEET NO.
A7

9 OF 12 ARCH SHEETS

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INTERIOR FINISH SCHEDULE									
GYPSUM BOARD LEVEL 4 FINISH					CERAMIC TILE THINSET				
ROOM	FLOOR	WALL BASE	WDW. TRIM	WALLS	WAINSCOT	CEILING	*CLG. HGT.*	DOORS	DOOR FRAME
101 OFFICE 1	CARPET TILE	RUBBER	SEMI-GLOSS ENAMEL	PAINTED GYP. BD.		2X2 ATC	9'-0"	STAINED AND SEALED	SEMI-GLOSS ENAMEL
102 OFFICE 2	CARPET TILE	RUBBER	SEMI-GLOSS ENAMEL	PAINTED GYP. BD.		2X2 ATC	9'-0"	STAINED AND SEALED	SEMI-GLOSS ENAMEL
103 OFFICE 3	CARPET TILE	RUBBER	SEMI-GLOSS ENAMEL	PAINTED GYP. BD.		2X2 ATC	9'-0"	STAINED AND SEALED	SEMI-GLOSS ENAMEL
104 OFFICE 4	CARPET TILE	RUBBER	SEMI-GLOSS ENAMEL	PAINTED GYP. BD.		2X2 ATC	9'-0"	STAINED AND SEALED	SEMI-GLOSS ENAMEL
105 OFFICE 5	CARPET TILE	RUBBER	SEMI-GLOSS ENAMEL	PAINTED GYP. BD.		2X2 ATC	9'-0"	STAINED AND SEALED	SEMI-GLOSS ENAMEL
106 OFFICE 6	CARPET TILE	RUBBER	SEMI-GLOSS ENAMEL	PAINTED GYP. BD.		2X2 ATC	9'-0"	STAINED AND SEALED	SEMI-GLOSS ENAMEL
107 OFFICE 7	CARPET TILE	RUBBER	SEMI-GLOSS ENAMEL	PAINTED GYP. BD.		2X2 ATC	9'-0"	STAINED AND SEALED	SEMI-GLOSS ENAMEL
108 OFFICE 8	CARPET TILE	RUBBER	SEMI-GLOSS ENAMEL	PAINTED GYP. BD.		2X2 ATC	9'-0"	STAINED AND SEALED	SEMI-GLOSS ENAMEL
109 OFFICE 9	CARPET TILE	RUBBER	SEMI-GLOSS ENAMEL	PAINTED GYP. BD.		2X2 ATC	9'-0"	STAINED AND SEALED	SEMI-GLOSS ENAMEL
110 OFFICE 10	CARPET TILE	RUBBER	SEMI-GLOSS ENAMEL	PAINTED GYP. BD.		2X2 ATC	9'-0"	STAINED AND SEALED	SEMI-GLOSS ENAMEL
111 OFFICE 11	CARPET TILE	RUBBER	SEMI-GLOSS ENAMEL	PAINTED GYP. BD.		2X2 ATC	9'-0"	STAINED AND SEALED	SEMI-GLOSS ENAMEL
112 LOBBY	LUXURY VINYL	RUBBER		VINYL WALL FABRIC		2X2 ATC	10'-0"		
113 CONFERENCE ROOM	CARPET TILE	RUBBER		VINYL WALL FABRIC		2X2 ATC	10'-0"	STAINED AND SEALED	SEMI-GLOSS ENAMEL
114 FILE ROOM	CARPET TILE	RUBBER		PAINTED GYP. BD.		2X2 ATC	9'-0"	STAINED AND SEALED	SEMI-GLOSS ENAMEL
115 DATA AND ELECTRICAL	LUXURY VINYL	RUBBER		PAINTED GYP. BD.		2X2 ATC	9'-0"	STAINED AND SEALED	SEMI-GLOSS ENAMEL
116 REST ROOM	CERAMIC TILE	CERAMIC TILE		CERAMIC TILE		2X2 ATC	9'-0"	STAINED AND SEALED	SEMI-GLOSS ENAMEL
117 REST ROOM	CERAMIC TILE	CERAMIC TILE		CERAMIC TILE		2X2 ATC	9'-0"	STAINED AND SEALED	SEMI-GLOSS ENAMEL
118 REST ROOM	CERAMIC TILE	CERAMIC TILE		CERAMIC TILE		2X2 ATC	9'-0"	STAINED AND SEALED	SEMI-GLOSS ENAMEL
119 REST ROOM	CERAMIC TILE	CERAMIC TILE		CERAMIC TILE		2X2 ATC	9'-0"	SEMI-GLOSS ENAMEL	SEMI-GLOSS ENAMEL
120 SHOWER ROOM	CERAMIC TILE	CERAMIC TILE		CERAMIC TILE		GWB	9'-0"		
121 BREAK AND TRAINING ROOM	LUXURY VINYL	RUBBER		PAINTED GYP. BD.		2X2 ATC	9'-0"		
122 SECURE STORAGE	CARPET	RUBBER		PAINTED GYP. BD.		2X2 ATC	9'-0"	STAINED AND SEALED	SEMI-GLOSS ENAMEL
123 CORRIDORS	LUXURY VINYL	RUBBER		VINYL WALL FABRIC		2X2 ATC	9'-0"	STAINED AND SEALED	SEMI-GLOSS ENAMEL
124 WAREHOUSE	SEALED CONC			PAINTED 3/4" PLYWOOD				SEMI-GLOSS ENAMEL	SEMI-GLOSS ENAMEL
125 FENCED AREA	SEALED CONC								

DOOR SCHEDULE												
DOORS SCHEDULED BY TYPE. VERIFY QUANTITIES. HOLLOW METAL DOORS - 18 GA. HOLLOW METAL FRAMES - 16 GA.												
DOOR MARK	ROOM TYPE	ELEVATION	EXPOSURE	WIDTH	HEIGHT	THK.	MATERIAL	TYPE	FRAME	GLASS	FIRE RATING	REMARKS
1	ENTRY	A	EXTERIOR	3'-0"	7'-0"	1 3/4"	ALUM & GLASS	STOREFRONT	STOREFRONT	YES	NO	WIDE STILE HEAVY DUTY
2	BUILDING EXITS	B	EXTERIOR	3'-0"	7'-0"	1 3/4"	GALVANNEALED HOLLOW METAL	FLUSH PANEL	GALVANNEALED HOLLOW METAL	NO	NO	
3	CONF ROOM, BREAK ROOM	C	INTERIOR	3'-0"	7'-0"	1 3/4"	ALUM & GLASS	STOREFRONT	STOREFRONT	YES	NO	NARROW STILE FROSTED GLASS
4	OFFICES	D	INTERIOR	3'-0"	7'-0"	1 3/4"	SOLID CORE WOOD	FLUSH PANEL	HOLLOW METAL KNOCK DOWN	NO	NO	
5	SECURE STORAGE	E	INTERIOR	3'-0"	7'-0"	1 3/4"	SOLID CORE WOOD	FLUSH PANEL	HOLLOW METAL KNOCK DOWN	NO	NO	
6	CORRIDOR	F	INTERIOR	3'-0"	7'-0"	1 3/4"	SOLID CORE WOOD	FLUSH PANEL	HOLLOW METAL KNOCK DOWN	YES	NO	
7	REST ROOMS	G	INTERIOR	3'-0"	7'-0"	1 3/4"	SOLID CORE WOOD	FLUSH PANEL	HOLLOW METAL KNOCK DOWN	NO	NO	
8	CORRIDORS AT WAREHOUSE	H	INTERIOR	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	FLUSH PANEL	HOLLOW METAL KNOCK DOWN	YES	NO	
9	REST ROOM	I	INTERIOR	3'-0"	7'-0"	1 3/4"	HOLLOW METAL	FLUSH PANEL	HOLLOW METAL KNOCK DOWN	NO	NO	
10	ROLL UP DOORS	J	EXTERIOR	14'-0"	14'-0"	-	INSULATED METAL	SLAT	TRACK	NO	NO	MOTORIZED HOIST

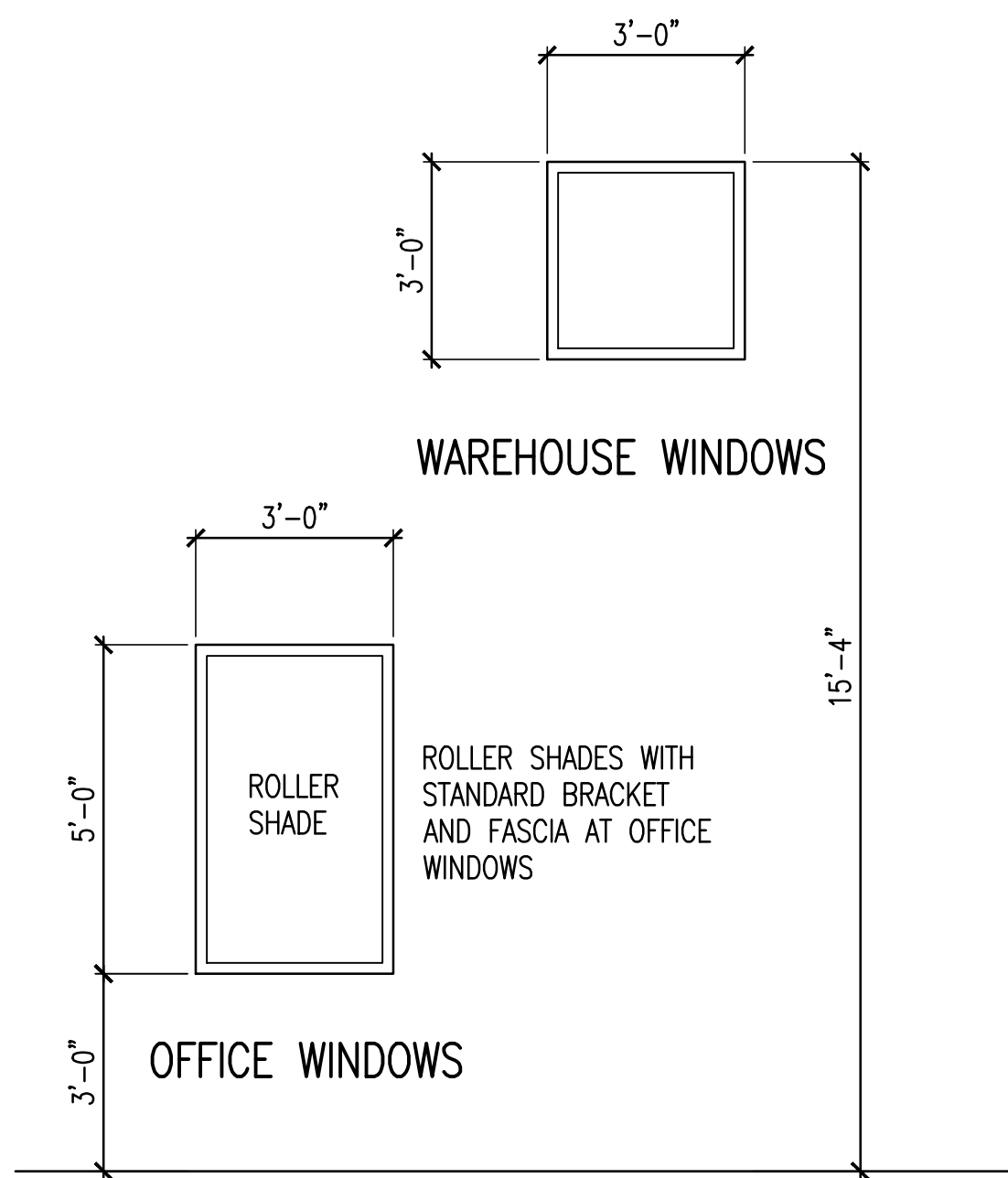
DOOR HARDWARE SCHEDULE														
VERIFY KEYING MATRIX WITH OWNER					INTERIOR DOOR HARDWARE FINISH: US 26D SATIN CHROME									
REF	ROOM TYPE	HINGES	EXIT LOCKSET	LOCKSET	PASSAGE LATCH	PRIVACY LATCH	DEADBOLT	CLOSER	STOP	GLASS	KICKPLATES	WEATHERSTRIP	THRESHOLD	REMARKS
1	ENTRY	CONTINUOUS	RIM DEVICE					X	X	X		X	X	
2	BUILDING EXITS	3	RIM DEVICE					X	X	X		X	X	
3	CONF ROOM, BREAK ROOM	3		X				X	X	X				
4	OFFICES	3		X				X	X					
5	SECURE STORAGE	3		X			X		X					
6	CORRIDOR	3			X			X	X	X				
7	REST ROOMS	3				X			X					
8	CORRIDORS	3	RIM DEVICE					X	X	X		X	X	
9	REST ROOM	3				X		X	X			X	X	
10	ROLL UP DOORS	-						X				X	X	HARDWARE BY MFG.

ALL DOOR CLOSERS MUST MEET ADA/ANSI STANDARD 5 POUND MAXIMUM RESISTANCE FORCE REQUIRED TO OPERATE
ALL FUNCTIONS ALWAYS UNLOCKED FROM INSIDE. ALL FUNCTIONS ALWAYS UNLOCKED ALONG EXIT PATHS.
EXIT LOCK: OPENING DOOR FROM INSIDE IS LIMITED TO A SINGLE ACTION.

COMMERCIAL ANSI GRADE 1 CYLINDRICAL LEVER LOCKS AND DEADBOLTS.
ALL OPERATING DEVICES TO BE ADA/ANSI APPROVED LEVER HANDLES

CARPET TILES: INTERFACE STYLE: EARTH COLOR: PLATEAU
RUBBER BASE : 4" COVE JOHNSENIITE #63 "BURNT UMBER B"
LUXURY VINYL TILE: MOHAWK GROUP - HOT & HEAVY - LINEATE - 948 FIGURED
ACOUSTICAL TILE: 2X2 SQUARE TEGULAR-EDGE ACOUSTIC CEILING TILE
VINYL WALL FABRIC: MDC MODERN INDUSTRY GUNMETAL 3063MI / 4131
WALL PAINT: SW 6073 "PERFECT GREIGE" EGGSHELL LATEX
DOOR FRAMES: SW 7020 "BLACK FOX" SEMI-GLOSS
CORNER GUARDS: IPC 150 3" X 8" "PEPPERDUST" 0119. INSTALL AT ALL OUTSIDE CORNERS IN CORRIDORS.

MICROPHONE GLASS CUT-OUT = 3 1/2" Ø
MICROPHONE: FURNISHED BY OWNER INSTALLED BY CONTRACTOR



WINDOW ELEVATIONS
scale: 3/8" = 1'-0"

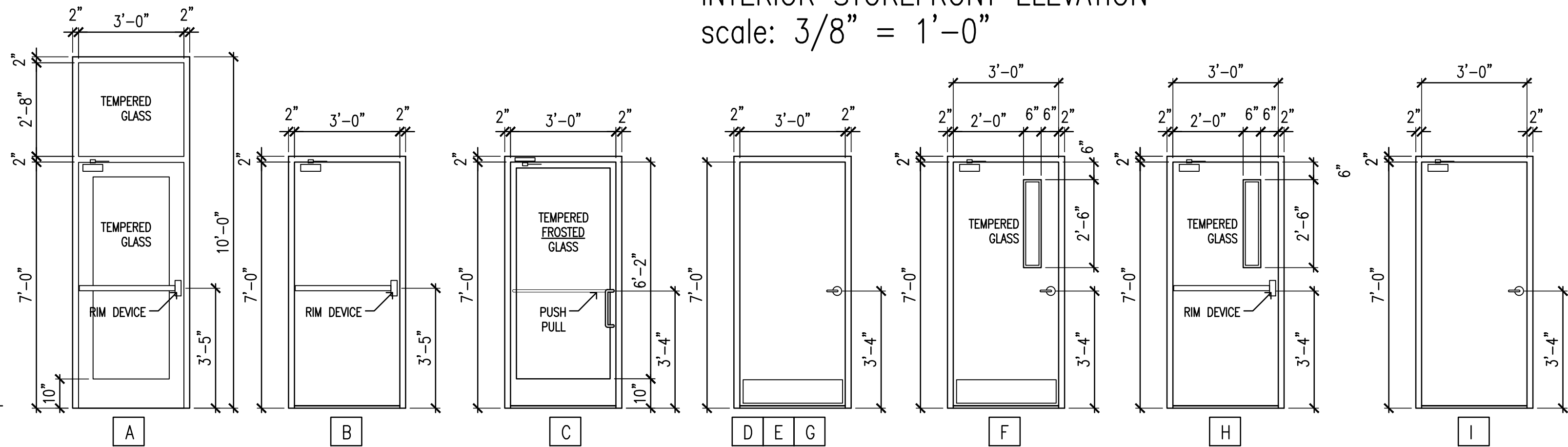
MECHOSHADE 5X MANUAL ROLLER SHADES
WITH RECESSED CEILING POCKET AT
CONFERENCE ROOM STOREFRONT

MECHOSHADE 5X MANUAL ROLLER SHADES
WITH STANDARD BRACKET AND FASCIA AT OFFICE
WINDOWS

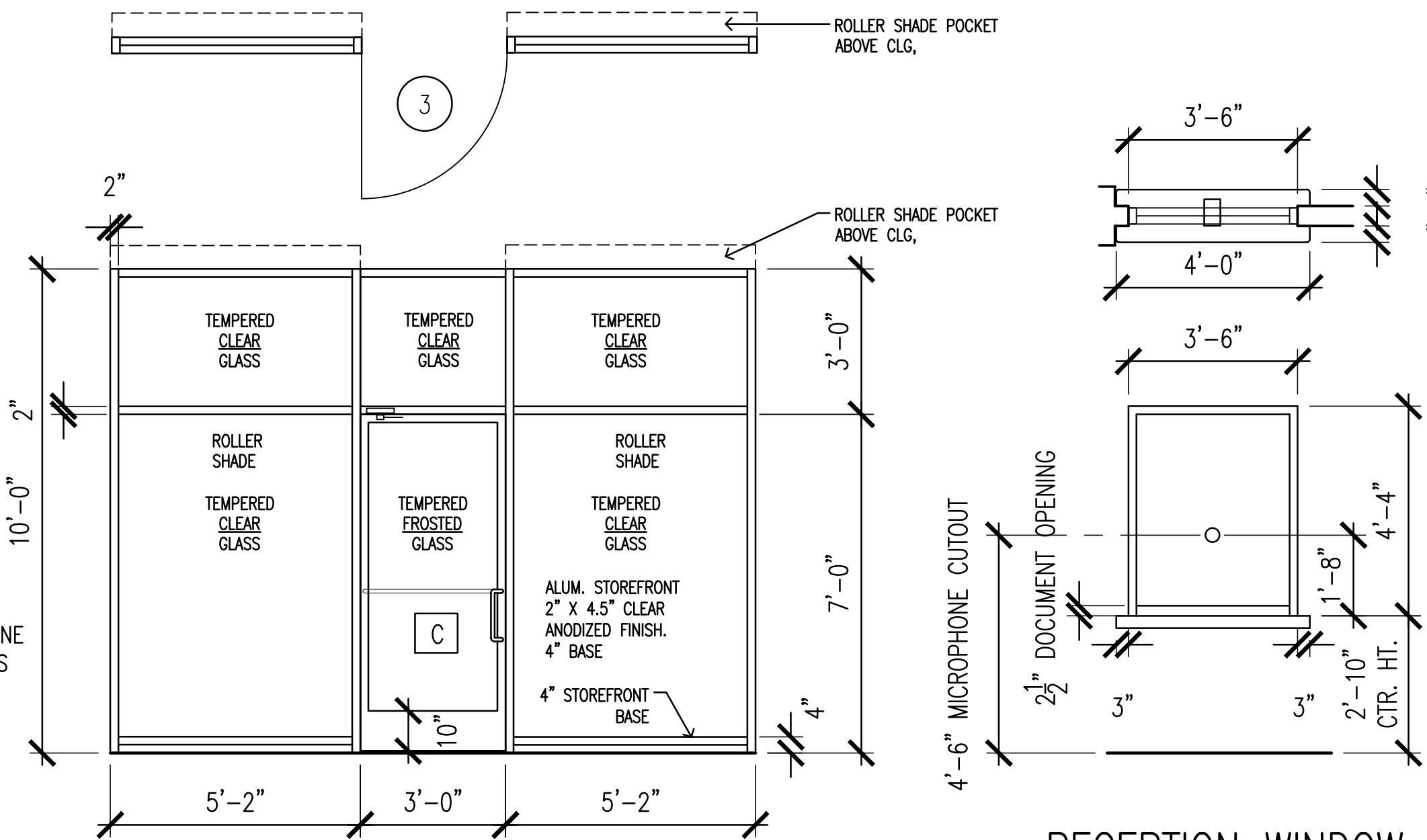
ALL EXTERIOR GLASS UNITS SHALL BE
VITRO "SOLARBLUE" + CLEAR
VLT = 50 SHGC = .49

1" INSULATED TINTED GLASS
IN 2 X 4.5" THERMALLY-BROKEN
CLEAR ANODIZED STOREFRONT SASH

INTERIOR GLASS: 1/4" SINGLE PANE
TEMPERED POLISHED PLATE GLASS



DOOR ELEVATIONS
scale: 3/8" = 1'-0"



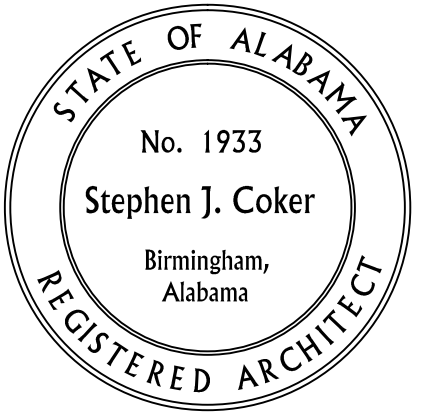
INTERIOR STOREFRONT ELEVATION
scale: 3/8" = 1'-0"

RECEPTION WINDOW

scale is accurate on 24"x36" sheets only

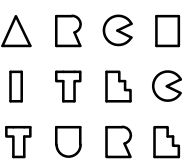
REVISIONS	BY

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Stephen Coker Architect LLC



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Shelby County Water Services Building
10927 US Highway 280
Westover, Alabama 35185



Stephen
Coker
Architect
LLC

1000 Glen View Road
Birmingham, Alabama 35222

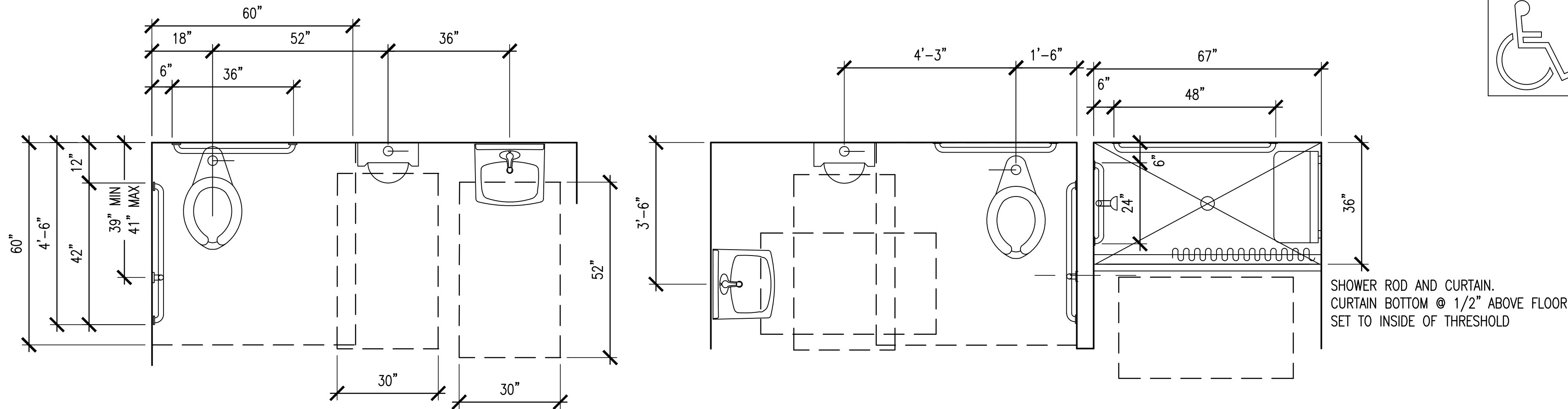
Phone 205/595-0021

E-mail:
steve@cokerarch.com

DRAWING DATE	4-3-23
DRAWN BY	SJC
PROJECT NO.	220317

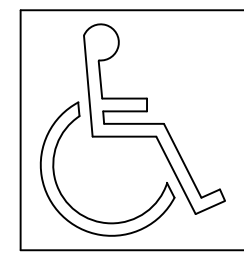
SHEET NO.	A8
10	OF 12 ARCH SHEETS

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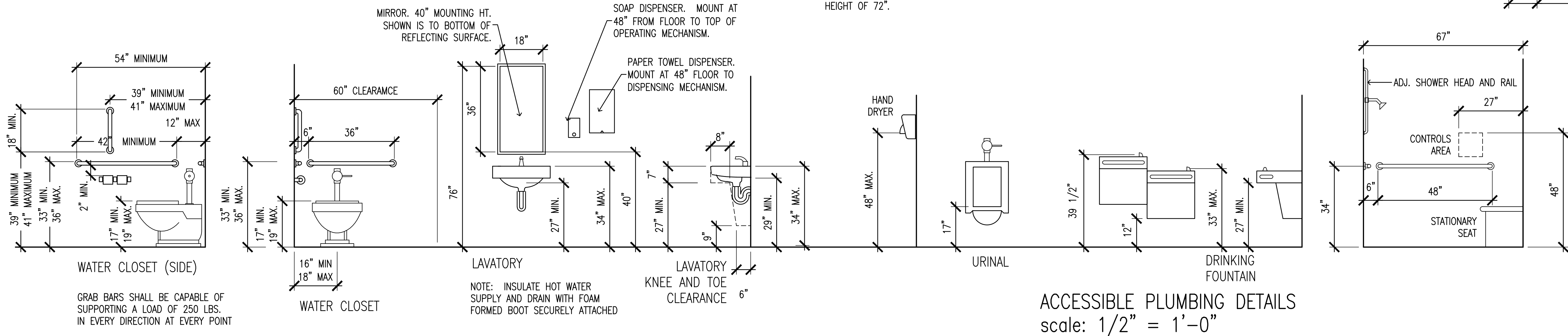
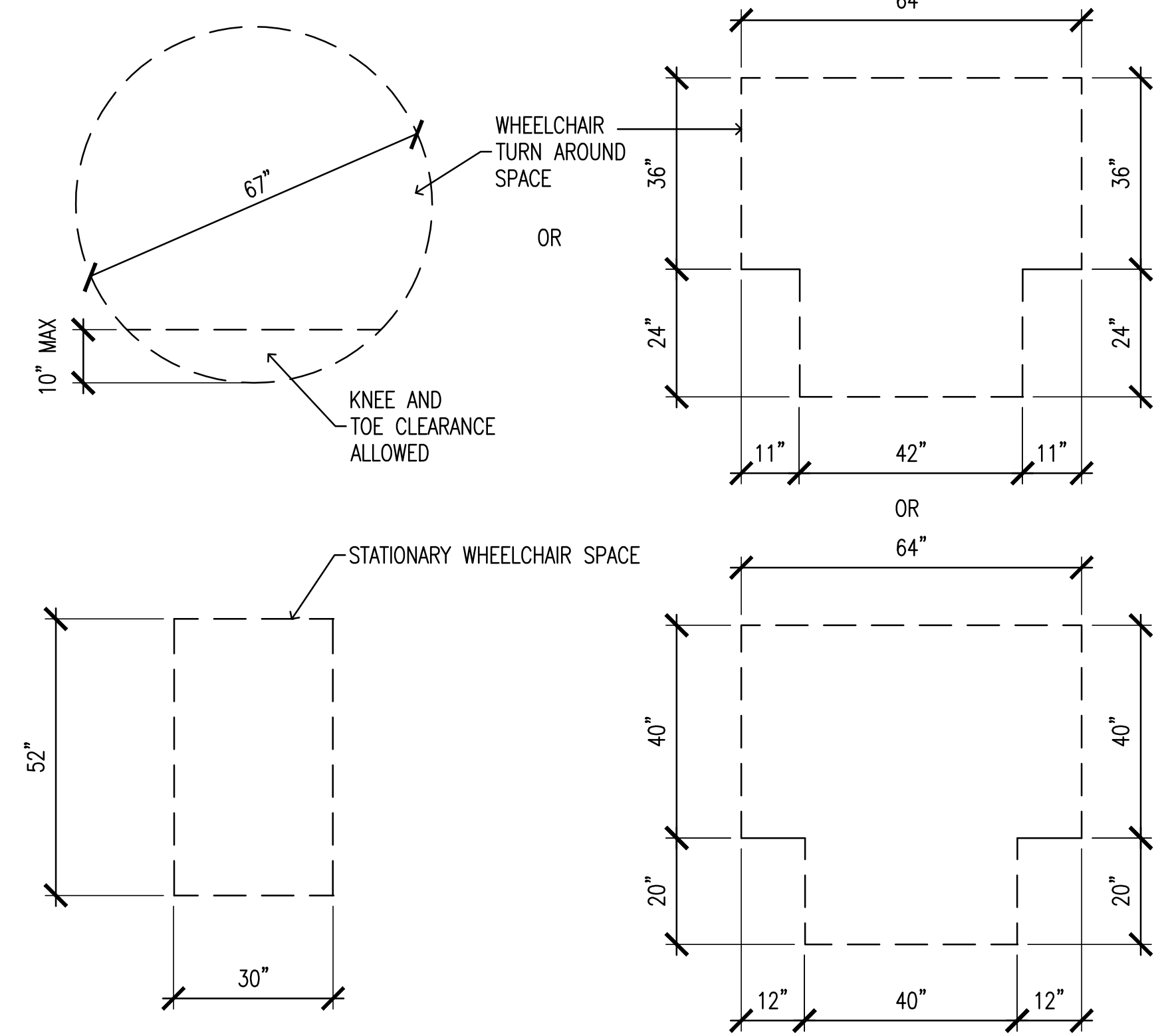


116 REST ROOM
117 OPPOSITE HAND
119 REST ROOM
118 OPPOSITE HAND

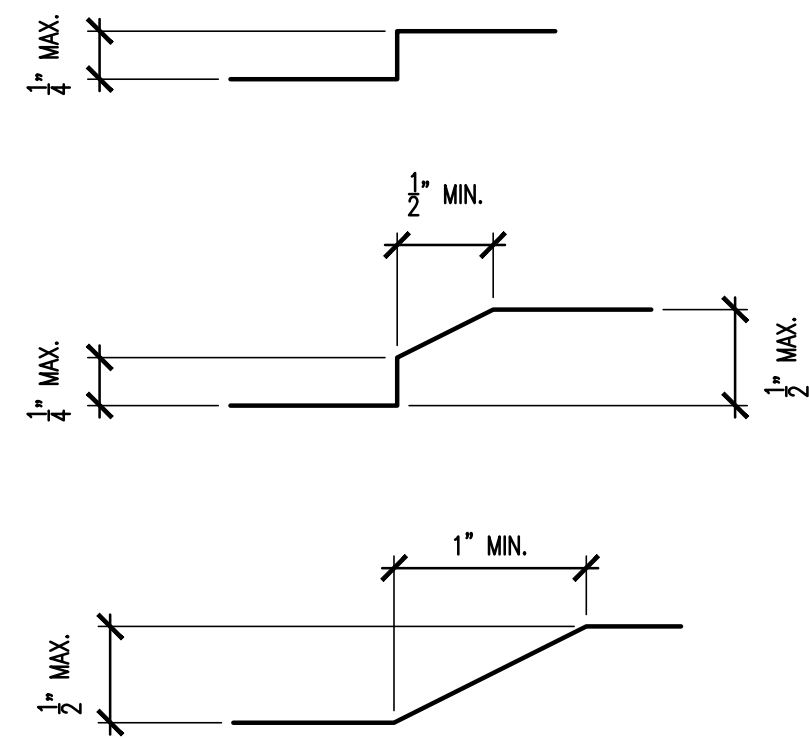
PROVIDE SMOOTH, HARD, NON-ABSORBENT FINISHES FOR:
REST ROOM FLOOR AND BASE
WALL FINISHES WITHIN 24" OF WATER CLOSETS, URINALS, AND SERVICE SINKS UP TO A MINIMUM HEIGHT OF 48"
SHOWER FINISHES ON ALL WALLS UP TO A MINIMUM HEIGHT OF 72".



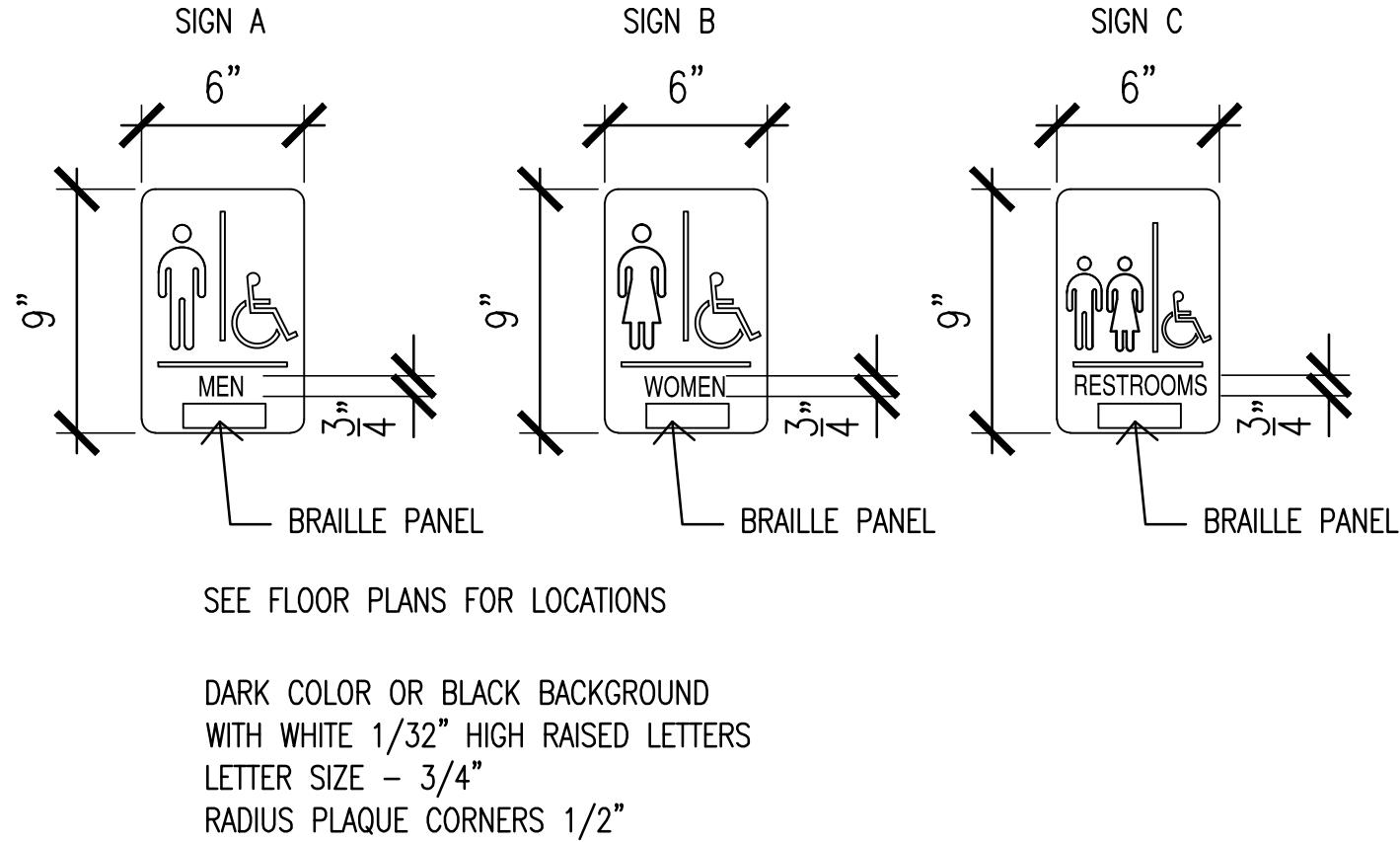
MINIMUM FIXTURE CLEARANCES - NEW BUILDINGS



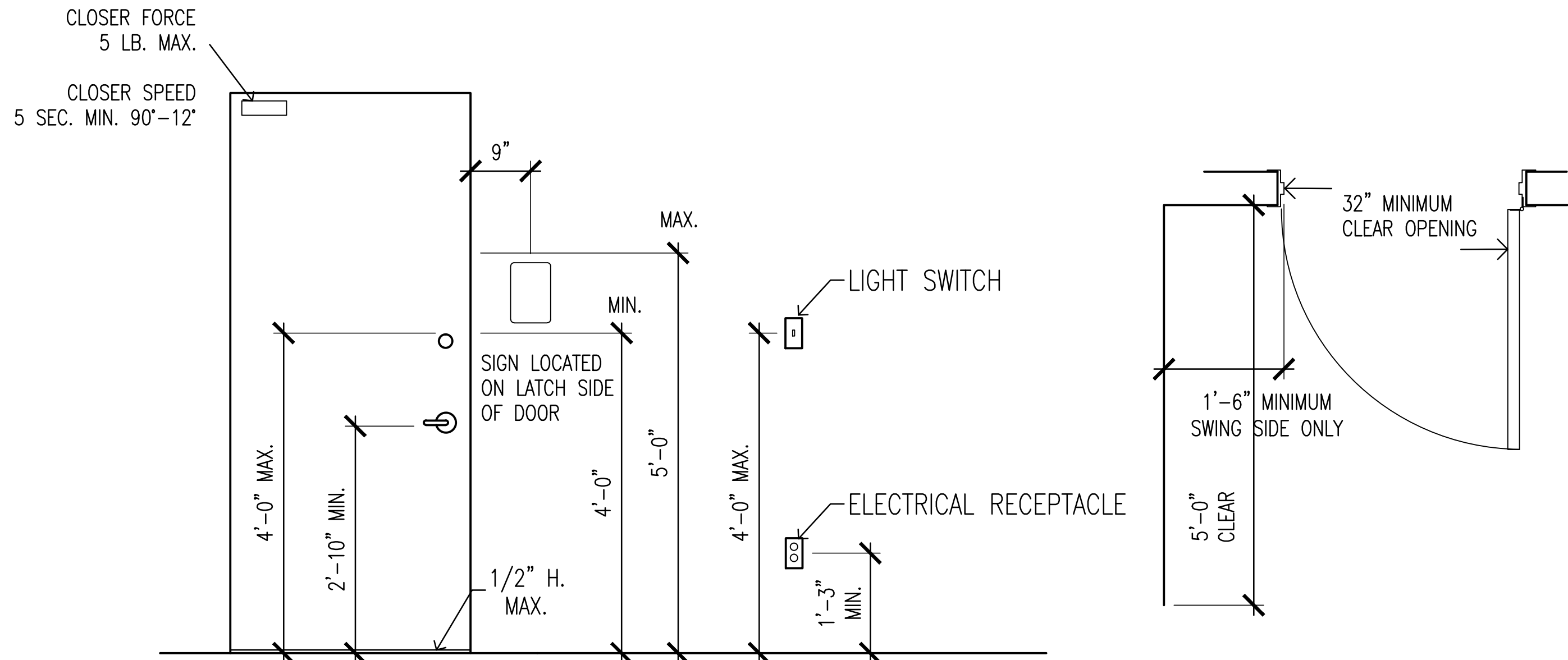
ACCESSIBLE PLUMBING DETAILS
scale: 1/2" = 1'-0"



ACCESSIBLE THRESHOLD DETAILS
full scale



ACCESSIBLE SIGNAGE DETAILS
not to scale

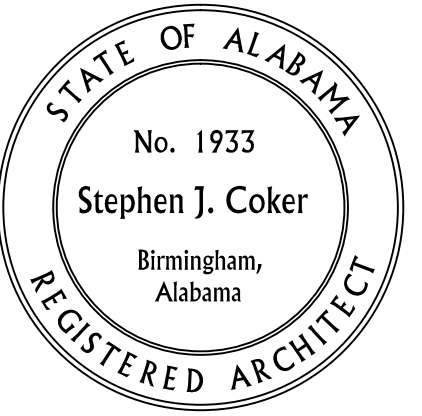


ACCESSIBLE ARCHITECTURAL DETAILS
scale: 1/2" = 1'-0"

scale is accurate on 24"x36" sheets only

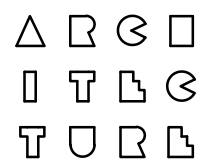
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Shelby County Water Services Building
10927 US Highway 280
Westover, Alabama 35185



Stephen
Coker
Architect
LLC

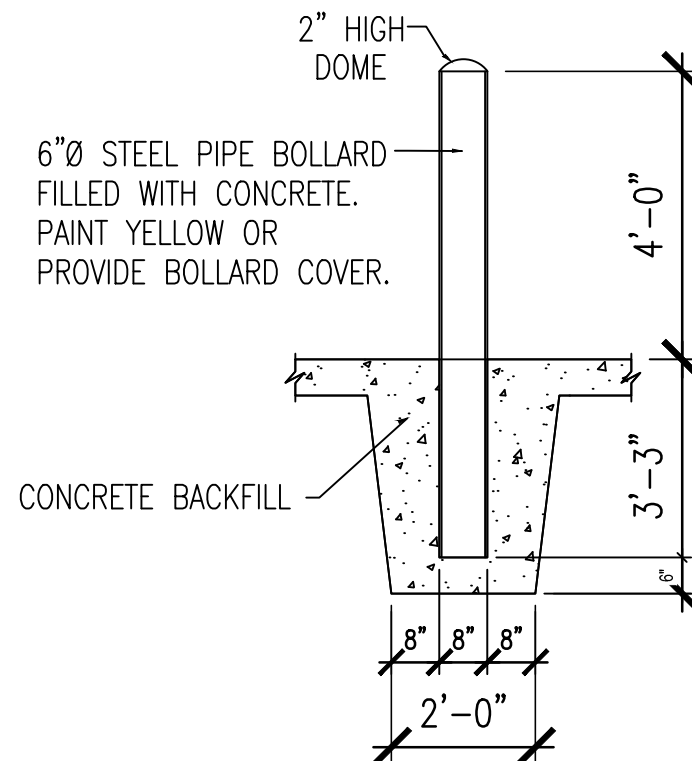
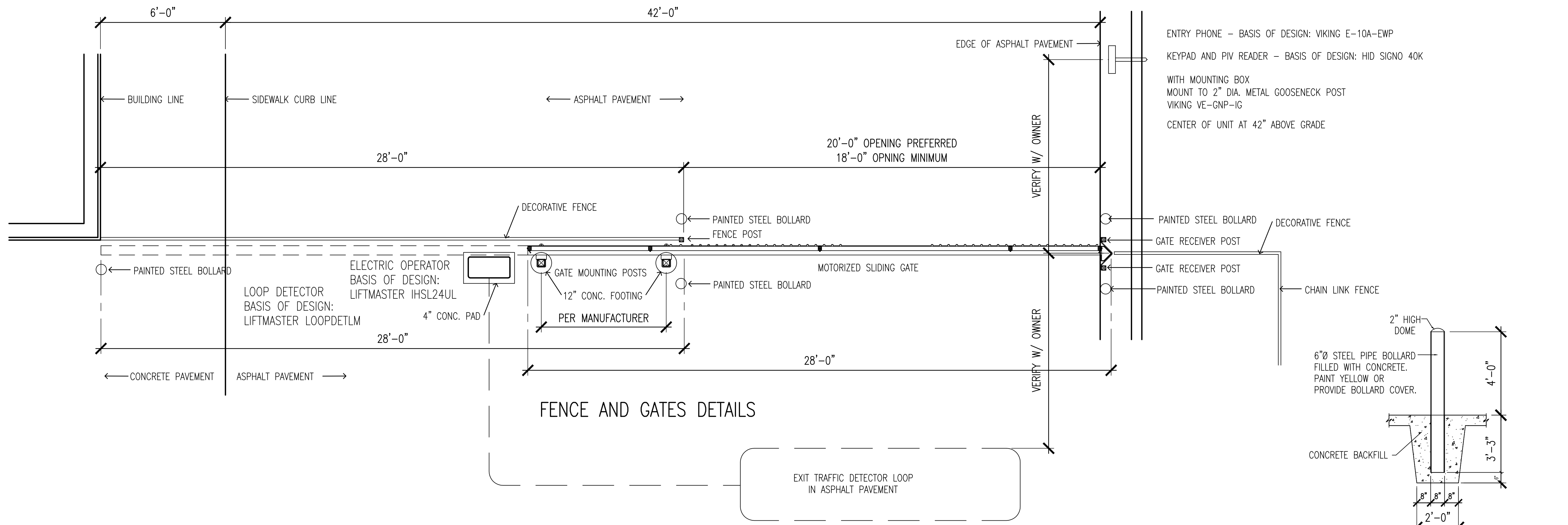
1000 Glen View Road
Birmingham, Alabama 35222

Phone 205/595-0021

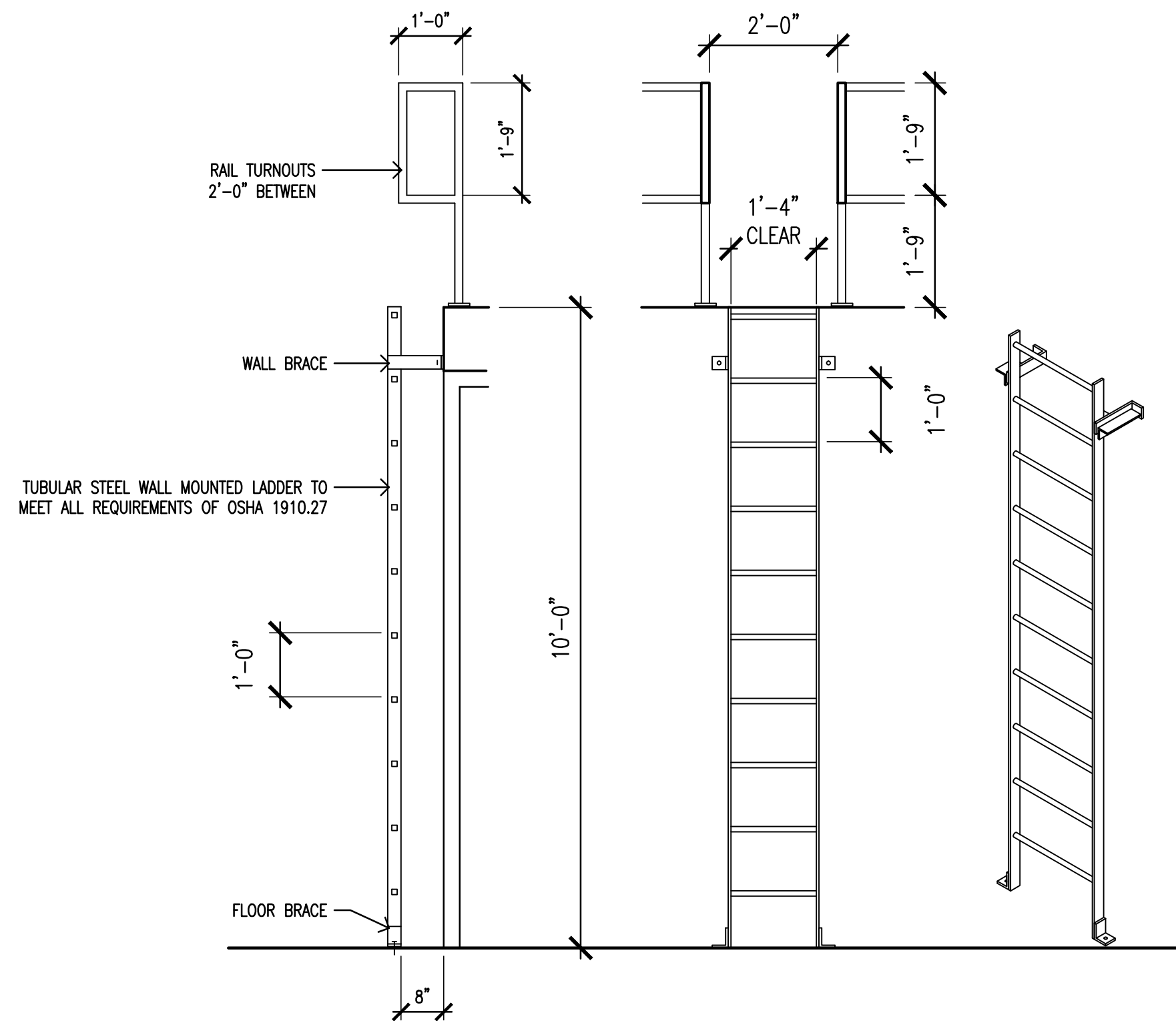
E-mail:
steve@cokerarch.com

DRAWING DATE	4-3-23
DRAWN BY	SJC
PROJECT NO.	220317

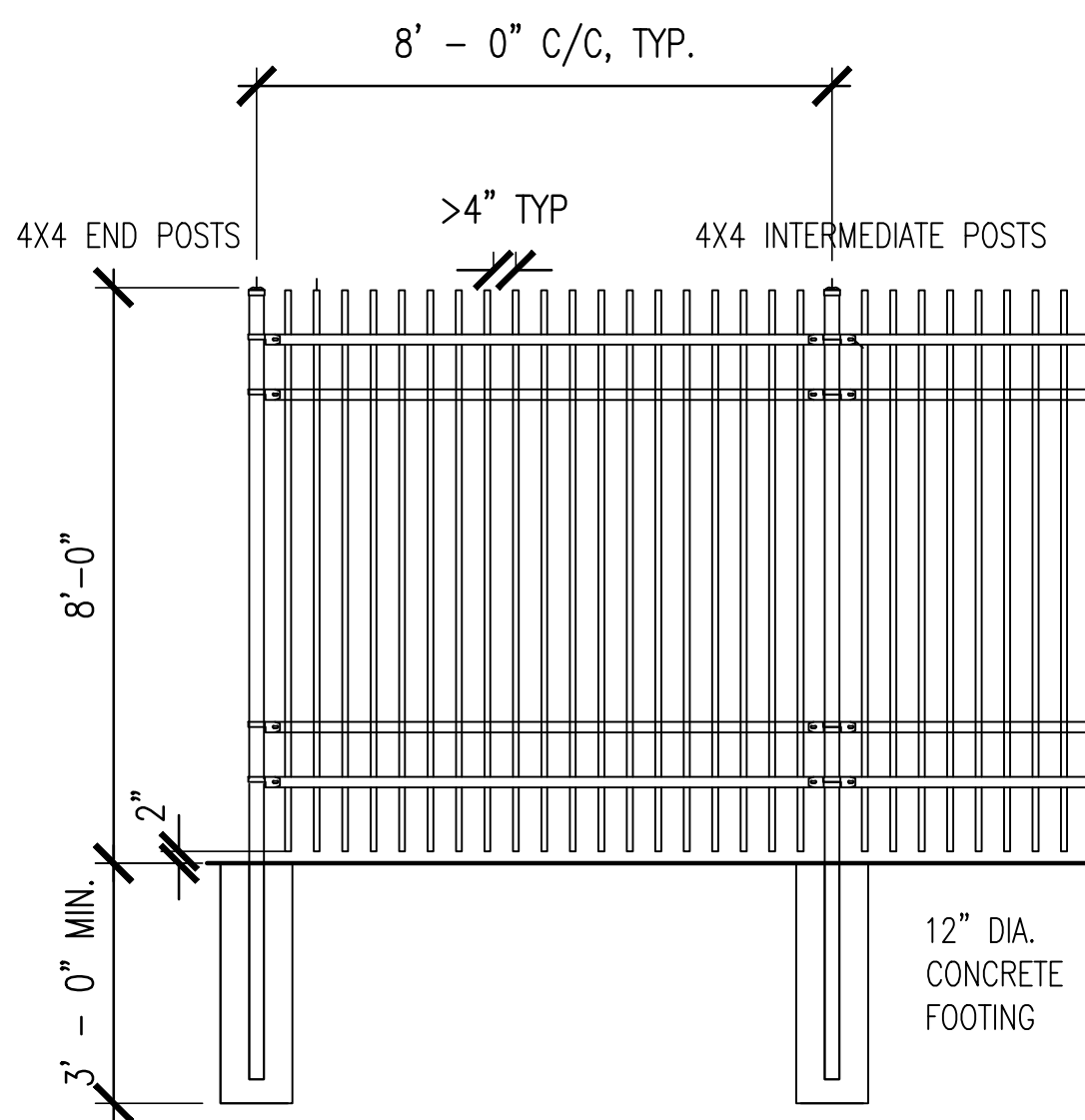
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PIPE BOLLARD DETAIL

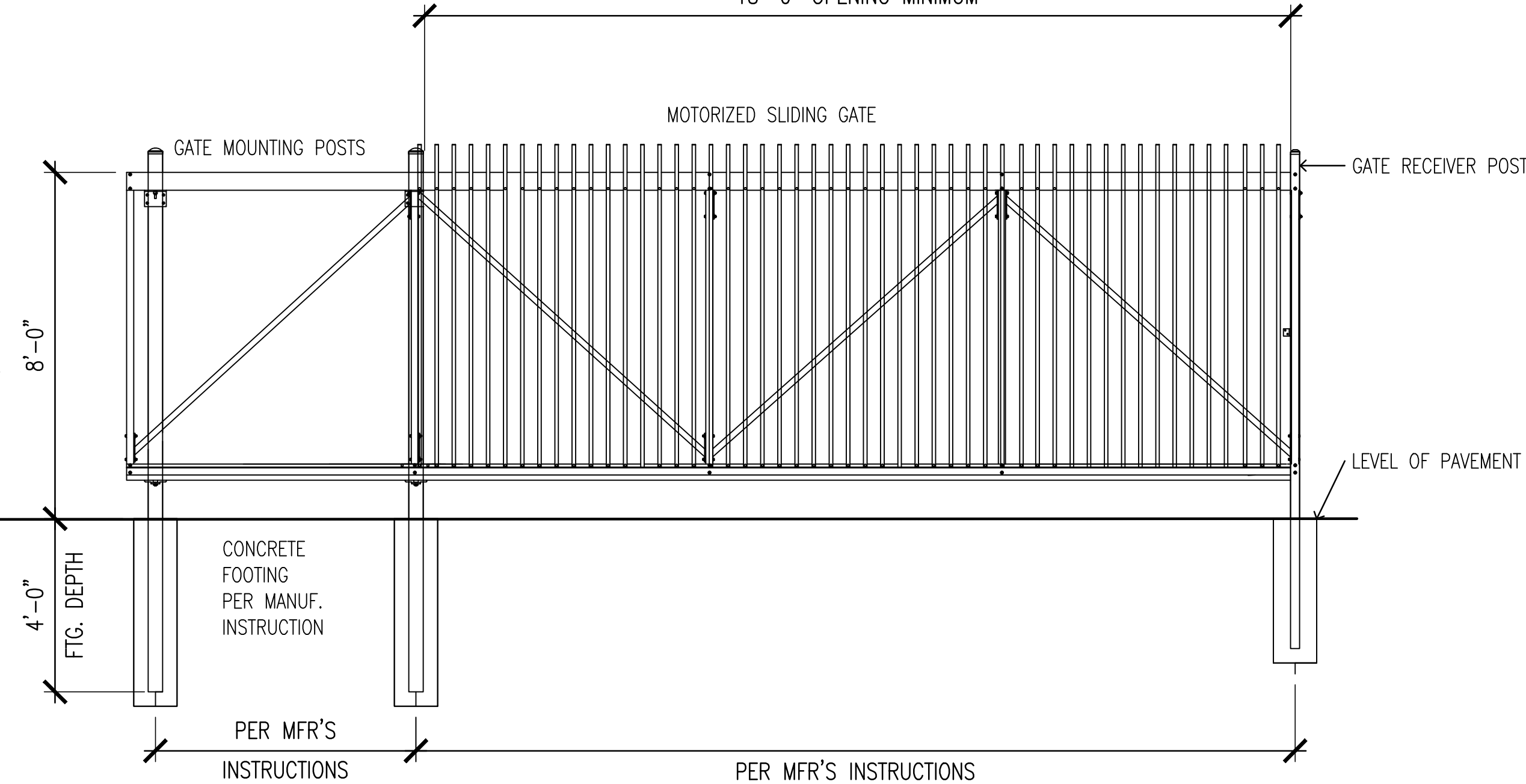


MEZZANINE LADDER DETAILS
scale: 1/2" = 1'-0"



DECORATIVE FENCE DETAILS

FENCE BASIS OF DESIGN:
AMERISTAR "ECHELON II", GENESIS
STYLE. BLACK COLOR.



VEHICLE GATE ELEVATION

CANTILEVER GATE BASIS OF DESIGN:
AMERISTAR "TRANSPORT II", GENESIS
STYLE. BLACK COLOR.

SEE CIVIL ENGINEERING SITE
PLAN FOR FENCE AND GATE
LOCATIONS AND EXTENTS

FENCE AND GATES DETAILS
scale: 3/8" = 1'-0"

scale is accurate on 24"x36" sheets only

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STATE OF ALABAMA

No. 1933

Stephen J. Coker

Birmingham, Alabama

REGISTERED ARCHITECT

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Shelby County Water Services Building

10927 US Highway 280

Westover, Alabama 35185

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□ ▽ ◂ ◃
▽ ▽ ▽ ▽

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DRAWING DATE	4-3-23
DRAWN BY	SJC
PROJECT NO.	220317

SHEET NO.

A10

12 OF 12 ARCH SHEETS

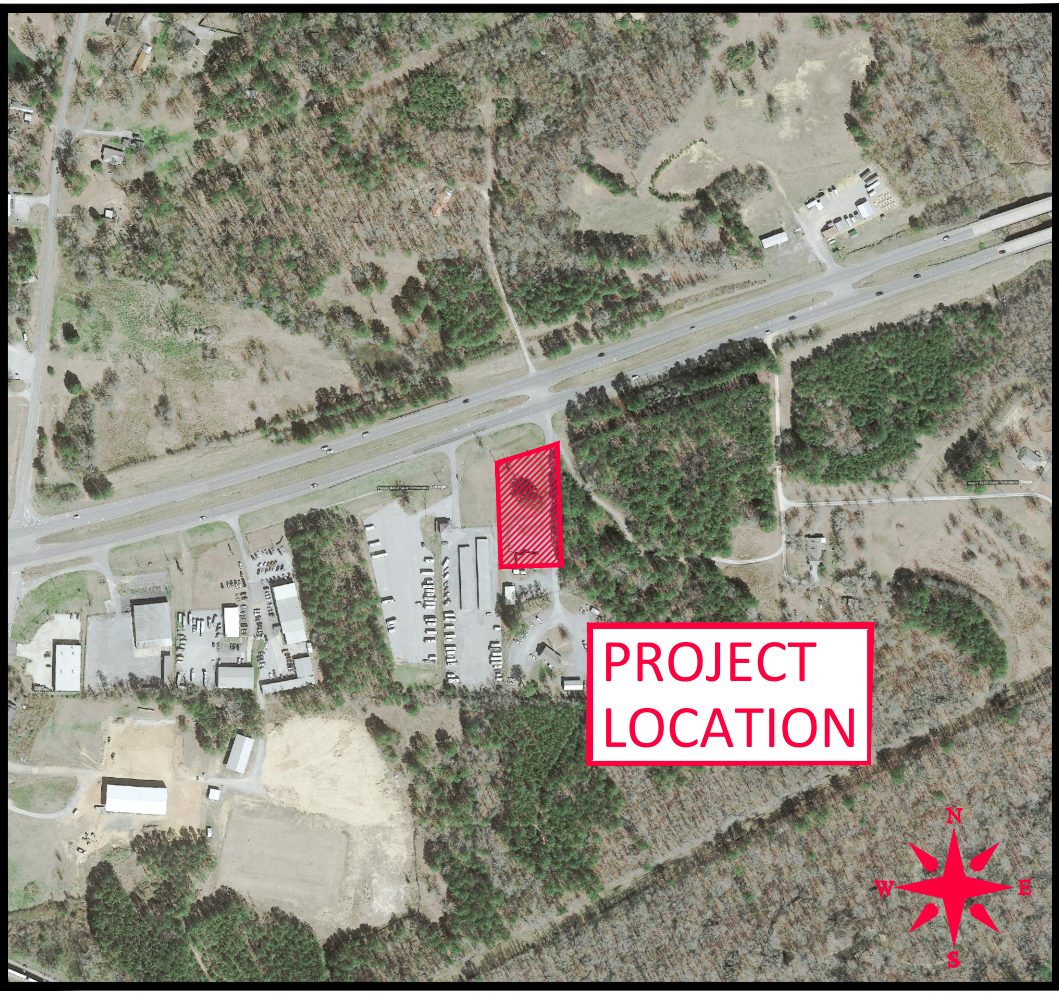
SHELBY COUNTY WATER SERVICES BUILDING CIVIL SITE PLANS

CITY OF WESTOVER

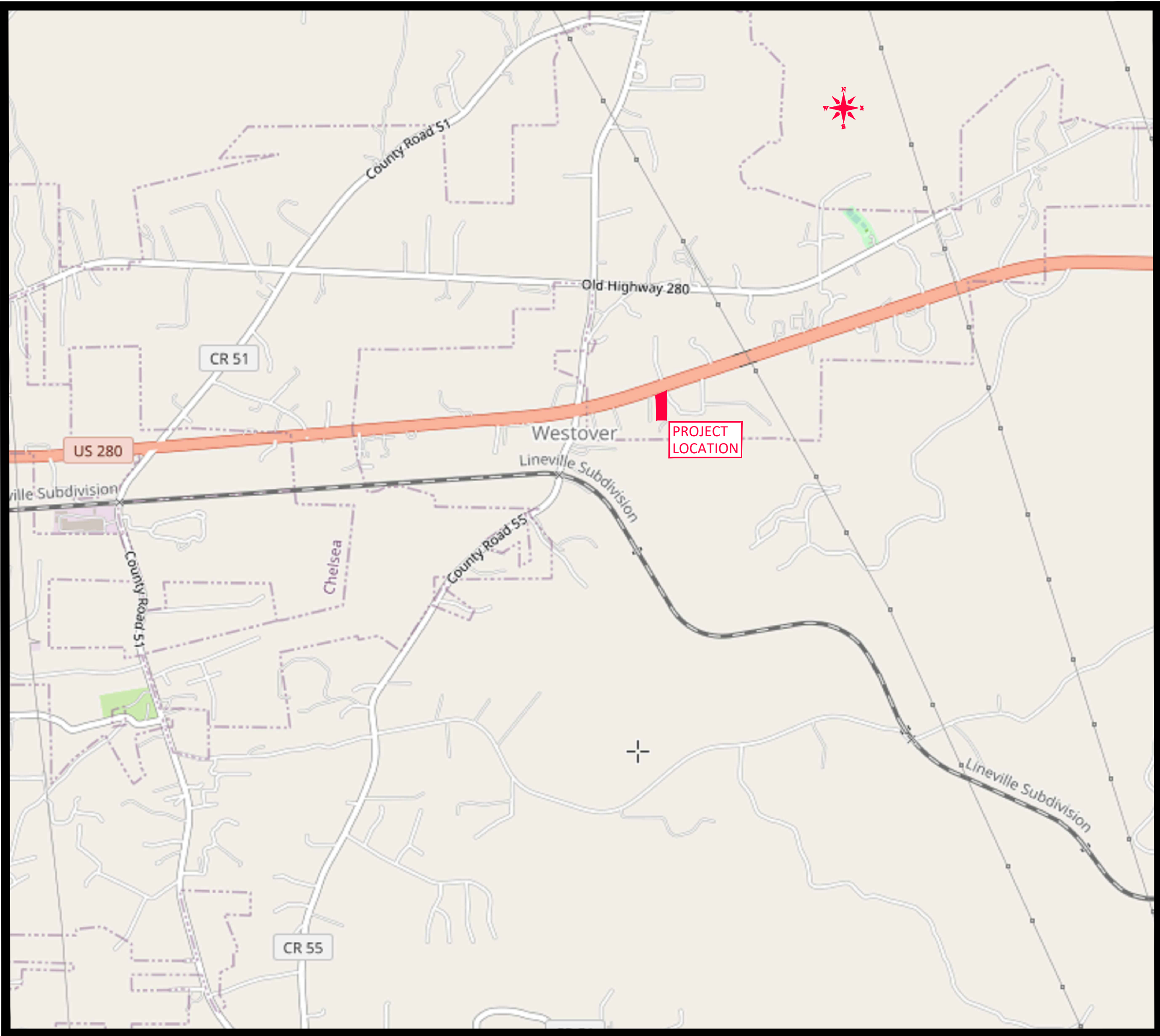
LOCATED IN PORTIONS OF:

NW ¼ Section 27, Township 19 South, Range 1 East
WESTOVER
SHELBY COUNTY, ALABAMA
10927 US HIGHWAY 280
WESTOVER, AL 35185

INDEX TO PROJECT



Aerial Map
Scale: NONE



Vicinity Map
Scale: NONE

PLAN SHEETS:

C0.0	TITLE SHEET
C0.1	PROJECT NOTES
C1.0	EXISTING CONDITIONS
C2.0	EROSION AND SEDIMENT CONTROL - INITIAL
C2.1	EROSION AND SEDIMENT CONTROL - INTERMEDIATE
C2.2	EROSION AND SEDIMENT CONTROL - FINAL
C2.3	DEMOLITION PLAN
C3.0	LAYOUT PLAN
C4.0	GRADING AND DRAINAGE PLAN
C4.1	DRAINAGE PROFILE AND SECTIONS
C5.0	PROJECT DETAILS
C5.1	PROJECT DETAILS

PROJECT CONTACTS

CITY CONTACT:
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COLUMBIANA, AL 35051
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205-475-7145 (CELL)
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CIVIL ENGINEER:
EEFS COMPANY, P.C.
1930 2ND AVENUE NORTH, SUITE 150
BESSEMER, AL 35020
PH 205.424.3737
MICHAEL RICE, PE
MRICE@EEFS-ENG.COM

EEFS

Engineering, Environmental & Forestry Services Company
Civil & Structural Engineering / Land Surveying
1930 2nd Avenue North, Suite 150 (P.O. Box 882)
Bessemer, Alabama - 35020
p: 205.424.3737 / f: 205.424.3730 / www.eefs-eng.com
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DESIGN
REVIEW
PROJECT

ALABAMA
LICENSE
NO. 34870
PROFESSIONAL
11/3/2023
ENGINEER
MICHAEL P. RICE

NO.	DATE	REVISION

PROJECT NAME

SHELBY COUNTY WATER SERVICES
CIVIL SITE PLANS

WESTOVER, ALABAMA

SHEET TITLE

TITLE SHEET

PROJECT NUMBER
2474-23

DRAWN BY
CLM

CHECKED BY
MRP

DATE
04/03/2023

DRAWING NUMBER
C0.0

SHEET NUMBER
1 OF 12

SCALE
NOT TO SCALE

1. ALL WORK SHALL BE PERFORMED IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS AS APPLICABLE. ALL TRAFFIC CONTROL SHALL COMPLY WITH THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR STREETS AND HIGHWAYS, 2009 EDITION.
2. JOB SITE SAFETY THROUGHOUT THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR. THE CONTRACTOR SHALL ENSURE THE WORK AREA IS SAFE FROM ALL HAZARDS DAILY BEFORE LEAVING THE WORK SITE. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR JOB SAFETY, PUBLIC SAFETY, OR TRAFFIC CONTROL OR IMPLEMENTATION OF THESE ITEMS.
3. THE CONTRACTOR SHALL BE RESPONSIBLE TO VERIFY ADJACENT GRADES TO MAINTAIN POSITIVE DRAINAGE FLOW AND TO ENSURE ALL IMPROVEMENT AREAS ARE FREE OF STANDING WATER AFTER RAIN EVENTS.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL REQUIRED LICENSES, PERMITS, TAXES, AND FEES.
5. CONTRACTOR SHALL COORDINATE CONSTRUCTION PHASING WITH OWNER AS TO NOT IMPACT NORMAL BUSINESS OPERATIONS.
6. CONTRACTOR SHALL MAINTAIN ACCESS TO THE SITE AND AT ALL TIMES. CONTRACTOR SHALL DEMOLISH, CONSTRUCT AND REOPEN ONE PARKING AREA PRIOR TO ANY DEMOLITION AND/OR CONSTRUCTION ACTIVITIES PERTAINING TO THE OTHER PARKING AREA.

1. PRIOR TO ANY DEMOLITION WORK, PERIMETER EROSION CONTROL BMP'S (SUCH AS SILT FENCE, ETC.) SHALL BE INSTALLED.
2. THE CONTRACTOR IS RESPONSIBLE FOR THE DEMOLITION, REMOVAL AND DISPOSAL OF ALL PAVING, PADS, UTILITIES, ETC., IN A LOCATION APPROVED BY ALL GOVERNING AUTHORITIES. ALL ITEMS TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL (IF IT IS NECESSARY, TO BE CONFIRMED BY THE OWNER'S INSPECTOR) AND BROUGHT TO PROPOSED GRADE WITH SUITABLE COMPACTED FILL MATERIAL PER SITEWORK SPECIFICATIONS.
3. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL DEBRIS FROM THE SITE AND DISPOSING THE DEBRIS IN A LAWFUL MANNER. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL.
4. ALL EXISTING UNDERGROUND UTILITIES, SUCH AS SANITARY SEWER PIPE, WATER LINES, ELECTRICAL CABLES, ETC. SHOWN ON THE PLANS ARE NOT TO BE INTERRUPTED. CONTRACTOR SHALL FILED VERIFY EXISTING CONDITIONS AND PROCEED WITH CAUTION AROUND ALL FEATURES. THE CONTRACTOR IS RESPONSIBLE TO NOTIFY ALL UTILITY COMPANIES AT LEAST 4 WEEKS IN ADVANCE REGARDING DESTRUCTION AND REMOVAL OF ALL SERVICES.
5. CONTRACTOR SHALL SAWCUT EXISTING PAVEMENT AND CURB AND GUTTER AS NECESSARY TO ASSURE A SMOOTH TRANSITION AND CONTINUOUS GRADE.
6. ANY DAMAGE INCURRED TO THE ITEMS DESIGNATED TO REMAIN SHALL BE REPAIRED/REPLACED IN KIND OR BETTER BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.

1. ALL WORK ON THIS PLAN SHALL BE DONE IN STRICT ACCORDANCE WITH SITE WORK SPECIFICATIONS AND SHELBY COUNTY SITE DEVELOPMENT REGULATIONS.
2. CONTRACTOR IS RESPONSIBLE FOR STRIPPING AND STOCKPILING OF TOPSOIL. CONTRACTOR IS ALSO RESPONSIBLE FOR SPREADING MINIMUM 4" OF TOPSOIL ON ALL UNPAVED AREAS. ALL EXCESS MATERIAL SHALL BE PROPERLY STORED ON-SITE.
3. AN ADEM N.P.D.E.S PERMIT IS NOT REQUIRED FOR STORM WATER DISCHARGES ASSOCIATED WITH THE CONSTRUCTION ACTIVITY.
4. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES (BMP'S) AS REQUIRED BY GOVERNING AUTHORITY. ALL BMP'S SHALL BE DONE PER PLANS, SPECIFICATIONS & ALABAMA HANDBOOK FOR EROSION, SEDIMENT CONTROL AND STORMWATER MANAGEMENT ON CONSTRUCTION SITES AND URBAN AREAS. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AT NO ADDITIONAL COST TO THE OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.
5. BEST MANAGEMENT PRACTICES (BMP'S) AND CONTROLS SHALL CONFORM TO FEDERAL, STATE, OR LOCAL REQUIREMENTS OR MANUAL OF PRACTICE, AS APPLICABLE. CONTRACTOR SHALL IMPLEMENT ADDITIONAL CONTROLS AS DIRECTED BY PERMITTING AGENCY OR OWNER.
6. CONTRACTOR SHALL MINIMIZE CLEARING TO THE MAXIMUM EXTENT PRACTICAL OR AS REQUIRED BY THE CONSTRUCTION PLANS.
7. CONTRACTOR SHALL DENOTE ON THE PLAN THE TEMPORARY PARKING AND STORAGE AREA WHICH SHALL ALSO BE USED AS THE EQUIPMENT MAINTENANCE AND CLEANING AREA, EMPLOYEE PARKING AREA, AND AREA FOR LOCATING PORTABLE FACILITIES AND TOILET FACILITIES. THIS LOCATION SHALL BE COORDINATED WITH THE OWNER.
8. ALL WASH WATER (CONCRETE TRUCKS, VEHICLE CLEANING, EQUIPMENT CLEANING, ETC.) SHALL BE DETAINED AND PROPERLY TREATED OR DISPOSED.
9. SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLotation BOOMS SHALL BE MAINTAINED ON SITE OR READILY AVAILABLE TO CONTAIN AND CLEAN-UP FUEL OR CHEMICAL SPILLS AND LEAKS.
10. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DEPOSITED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE PREMISES THROUGH THE ACTION OF WIND OR STORMWATER DISCHARGE INTO PRIVATE PONDS, DRAINAGE DITCHES OR WATERS OF THE STATE.
11. ALL STORMWATER POLLUTION PREVENTION MEASURES PRESENTED ON THIS PLAN SHALL BE INITIATED AS SOON AS PRACTICABLE.
12. ALL DISTURBED AREAS THAT WILL BE INACTIVE FOR 13 DAYS OR MORE, MUST BE STABILIZED TEMPORARILY WITH THE USE OF FAST GERMINATING ANNUAL GRASS/GRAIN VARIETIES, STRAW/HAY MULCH, WOOD CELLULOSE FIBERS, TACKIFIER, NETTING OR BLANKETS.
13. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED FROM VEHICLES ONTO ROADWAYS OR INTO STORM DRAINS MUST BE REMOVED IMMEDIATELY.
14. CONTRACTOR IS RESPONSIBLE FOR REMOVING SEDIMENT THAT MAY HAVE COLLECTED BY THE SEDIMENT BARRIER (SILT FENCE, OR ETC.) IN CONJUNCTION WITH THE STABILIZATION OF THE SITE.
15. ON-SITE TEMPORARY SOIL STOCKPILE AREA SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION THROUGH IMPLEMENTATION OF BEST MANAGEMENT PRACTICES.
16. ALL EROSION AND SEDIMENT CONTROL BMP'S SHALL BE PROPERLY INSTALLED PRIOR TO ANY CONSTRUCTION ACTIVITIES AND SHALL BE PROPERLY MAINTAINED THROUGHOUT CONSTRUCTION.
17. ALL EROSION AND SEDIMENT CONTROL BMP'S SHALL BE CAREFULLY REMOVED AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED WITH PERMANENT VEGETATION AND AT THE DIRECTION OF THE CITY ENGINEER.
18. ALL TOPSOIL, SEEDING, MULCHING, GROUND PREPARATION, AND SODDING OPERATIONS SHALL MEET THE REQUIREMENTS OF SECTIONS 650, 652, 654, 656 OF THE ALABAMA DEPARTMENT OF TRANSPORTATION'S STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION, 2018 EDITION AS APPLICABLE.

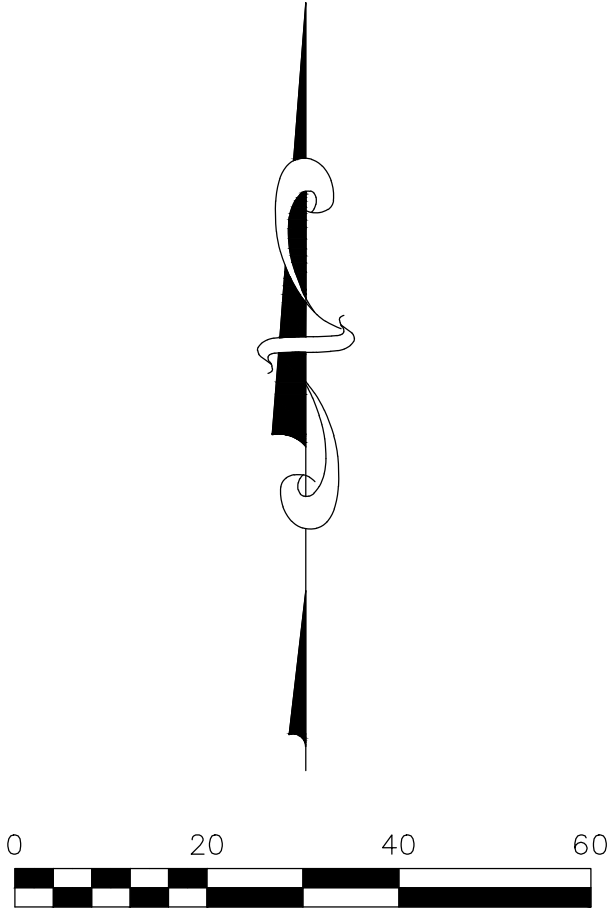
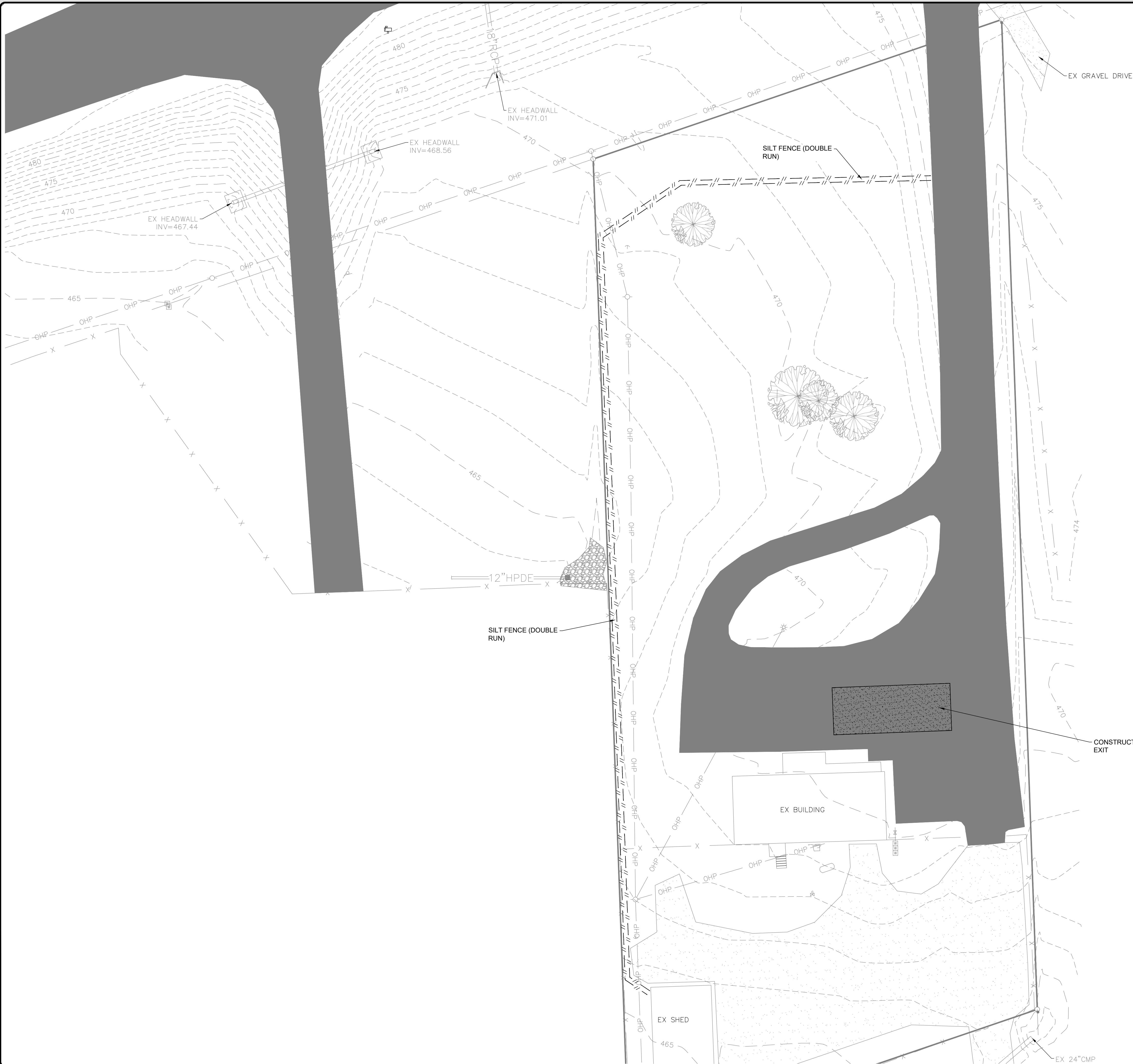
1. ALL RADII ARE DIMENSIONED TO FACE OF CURB AND/OR EDGE OF PAVEMENT, UNLESS OTHERWISE NOTED.
2. IF THERE ARE ANY QUESTIONS OR DISCREPANCIES IN THE PLANS, PLEASE CONTACT THE PROJECT ENGINEER FOR CLARIFICATION.
3. CONTRACTOR SHALL CONTACT THE SURVEYOR FOR GEOMETRIC CONTROL POINTS (HORIZONTAL AND VERTICAL).

1. CONTRACTOR SHALL RELOCATE BENCHMARKS BY A LICENSED ALABAMA PROFESSIONAL LAND SURVEYOR, AS NECESSARY WITH NEW BENCHMARK LOCATION WITHIN A TOLERANCE OF 0.010 VERTICAL FEET.
2. ALL ON-SITE AND OFF-SITE WORK SHALL BE PERFORMED AS UNCLASSIFIED EXCAVATION REGARDLESS OF DEPTH, TYPE, QUANTITY, CHARACTER, COLOR, HARD OR SOFT, AND WET OR DRY.
3. CONTRACTOR IS RESPONSIBLE FOR STRIPPING AND STOCKPILING SUITABLE TOPSOIL. ALL EXCESS MATERIAL SHALL BE HAULED OFF-SITE OR PROPERLY STORED ON-SITE.
4. CONTRACTOR IS RESPONSIBLE FOR SPREADING MINIMUM 4" OF TOPSOIL ON ALL UNPAVED AREAS PRIOR TO INSTALLATION OF PERMANENT VEGETATION.
5. ALL SPOT ELEVATIONS AND GRADES SHOWN ARE FINISHED GRADE ELEVATIONS UNLESS OTHERWISE NOTED. GRADES SHALL BE CONSTRUCTED USING CONTROL LINES AND CONTROL SPOT ELEVATIONS.
6. ALL GRADE SLOPES WITHIN HANDICAP PARKING AREAS (STALLS AND ACCESSIBLE AISLES) SHALL HAVE A MAXIMUM 2% SLOPE IN ANY DIRECTION AND SHALL COMPLY WITH THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.
7. ALL DESIGNATED SIDEWALKS SHALL HAVE A MAXIMUM SLOPE OF 5% LONGITUDINAL AND 2% CROSS SECTIONAL.

1. CRUSHED STONE AGGREGATE BASE SHALL BE COMPACTED TO 100 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR COMPACTION TEST (ASTM 1557, METHOD D). CRUSHED STONE AGGREGATE BASE SHALL MEET OR EXCEED REQUIREMENTS OF SECTION 825, TYPE B OF THE STATE OF ALABAMA DEPARTMENT OF TRANSPORTATION (ALDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2018 EDITION.
2. SUPERPAVE BITUMINOUS CONCRETE BINDER COURSE SHALL MEET OR EXCEED THE REQUIREMENTS OF SECTION 424B FOR BITUMINOUS CONCRETE BINDER (MIX 1) OF THE STATE OF ALABAMA DEPARTMENT OF TRANSPORTATION (ALDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2018 EDITION.
3. SUPERPAVE BITUMINOUS CONCRETE WEARING COURSE SHALL MEET OR EXCEED THE REQUIREMENTS OF SECTION 424A FOR BITUMINOUS CONCRETE WEARING COURSE MIX (MIX 1) OF THE STATE OF ALABAMA DEPARTMENT OF TRANSPORTATION (ALDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2018 EDITION.
4. CONTRACTOR SHALL FIELD VERIFY THE SUITABILITY OF ALL SUB-GRADE MATERIAL WITH A GEOTECHNICAL ENGINEER PRIOR TO THE INSTALLATION OF THE OVERLYING LAYER. ALL SUBGRADE SHALL BE APPROVED AND COMPACTED TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
5. ALL STONE BASE AND ASPHALT MATERIALS SHALL COMPLY WITH ALL APPLICABLE SECTIONS OF DIVISION 800—MATERIALS OF THE STATE OF ALABAMA DEPARTMENT OF TRANSPORTATION (ALDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2018 EDITION.

3. ALL CONCRETE WORK SHALL BE IN ACCORDANCE WITH ACI 318-05.
2. MINIMUM CONCRETE DESIGN STRENGTH SHALL BE NO LESS THAN 3000 PSI @ 28 DAYS, OR AS NOTED IN THE PLANS, DETAILS AND SPECIFICATIONS, WHICHEVER IS HIGHER.
3. HEAVY DUTY CONCRETE PAVING:
 - 3.1. CONCRETE: 6" REINFORCED CONCRETE, 3000 PSI @ 28 DAYS, TYPE 1 PER ALDOT SECTION 450--A
 - 3.2. REINFORCEMENT: #4 REBAR @ 12" O.C. EACH WAY
 - 3.3. SUBGRADE: 6" COMPACTED AGGREGATE BASE, ALDOT 825B
4. WHERE SLABS ABOVE COLUMNS, WALLS, EXISTING PAVEMENTS OR SLABS, OR ANY OTHER VERTICAL SURFACE, PROVIDE A PRE-MIGED EXPANSION JOINT OR ISOLATION JOINT. THE JOINT MATERIAL MUST HAVE A HEIGHT EQUAL TO THE THICKNESS OF THE SLAB AND MUST BE PLACED AT THE SAME ELEVATION AS THE TOP OF THE SLAB.
5. CONCRETE CONTROL JOINTS SHALL NOT EXCEED 12' FOR CONCRETE PAVING AND SHALL NOT EXCEED 5' FOR CONCRETE SIDEWALK. CONCRETE CONTROL JOINTS SHALL BE EITHER SAWCUT OR TOOLED JOINTS. EXPANSION JOINTS SHALL NOT EXCEED 50' O.C. MAXIMUM UNLESS SPECIFIED BY THE PLANS AND DETAILS.
6. SAWCUT JOINTS SHALL BE A DEPTH OF D/4 FROM THE TOP OF SLAB, WHERE "D" IS THE THICKNESS OF THE SLAB. CUTS SHALL BE A MINIMUM $\frac{1}{8}$ " WIDE, OR AS DIRECTED IN THE PLANS AND DETAILS.
7. SAWCUT JOINTS SHALL BE PLACED AS SOON AS POSSIBLE AFTER CONCRETE PLACEMENT, NOT TO EXCEED 8 HOURS.
8. IF CONCRETE PLACEMENT IS STOPPED OR INTERRUPTED FOR 30 MINUTES OR LONGER, A CONSTRUCTION JOINT SHALL BE INSTALLED AT THE LOCATION OF A PLANNED JOINT.
9. MECHANICALLY VIBRATE ALL CONCRETE WHEN PLACED. SLABS ON GRADE MAY BE MECHANICALLY VIBRATED ONLY AROUND EMBEDDED CONDUITS, STEEL AND OTHER STRUCTURAL ELEMENTS, EDGES AND THICKENED AREAS, DOWELS OR KEYS, AND CONSTRUCTION JOINTS.
10. CONTRACTOR SHALL PROVIDE A $\frac{3}{8}$ " CHAMFER FOR ALL EXPOSED CORNERS UNLESS OTHERWISE NOTED.
11. ALL FINISHED CONCRETE ALONG AN ADA ROUTE OR PARKING SPACE SHALL COMPLY WITH THE 2010 ADA STANDARDS FOR ACCESSIBLE DESIGN.
12. CRUSHED STONE AGGREGATE BASE SHALL BE COMPACTED TO 100 PERCENT OF THE MAXIMUM DRY DENSITY AS DETERMINED BY THE MODIFIED PROCTOR COMPACTION TEST (ASTM 1557, METHOD D). CRUSHED STONE AGGREGATE BASE SHALL MEET OR EXCEED REQUIREMENTS OF SECTION 825, TYPE B OF THE STATE OF ALABAMA DEPARTMENT OF TRANSPORTATION (ALDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2018 EDITION.
13. CONTRACTOR SHALL FIELD VERIFY THE SUITABILITY OF ALL SUB-GRADE MATERIAL WITH A GEOTECHNICAL ENGINEER PRIOR TO THE INSTALLATION OF THE OVERLYING LAYER. ALL SUBGRADE SHALL BE APPROVED AND COMPACTED TO THE SATISFACTION OF THE GEOTECHNICAL ENGINEER.
14. ALL CONCRETE MATERIALS SHALL COMPLY WITH ALL APPLICABLE SECTIONS OF DIVISION 800--MATERIALS OF THE STATE OF ALABAMA DEPARTMENT OF TRANSPORTATION (ALDOT) STANDARD SPECIFICATIONS FOR ROAD AND BRIDGE CONSTRUCTION 2022 EDITION.

1. ALL STRIPING SHALL BE CLASS 1 PAINT TYPE A REFLECTIVE MEETING THE REQUIREMENTS OF SECTIONS 701 AND 703 OF THE STATE OF ALABAMA DEPARTMENT OF TRANSPORTATION (ALDOT) STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION 2018 EDITION.
2. STRIPING MATERIALS SHALL COMPLY WITH SECTION 857 OF ALDOT STANDARD SPECIFICATIONS FOR HIGHWAY CONSTRUCTION 2018 EDITION.
3. A MINIMUM 14-DAY CURING PERIOD AFTER COMPLETION OF THE FINAL WEARING SURFACE LAYER OR CONCRETE LAYER SHALL BE REQUIRED BEFORE INSTALLATION OF THE STRIPING.
4. ALL PARKING LOT STRIPING SHALL BE 4" IN WIDTH. FLOW ARROWS SHALL BE AS SHOWN IN THE DETAILS.



EROSION AND SEDIMENT CONTROL NOTES (INITIAL)

1. INSTALL SILT FENCE, SEDIMENT BARRIERS AND CONSTRUCTION EXIT PADS PRIOR TO ANY GRADING OR DEMOLITION WORK.
2. ALL SILT FENCING SHALL BE ALDOT, TYPE A APPROVED WITH STEEL POST AND WIRE.

EROSION CONTROL LEGEND

- // - SILT FENCE
- [Pattern] CONSTRUCTION EXIT
- [Symbol] WATTLE DITCH CHECKS
- [Pattern] PERMANENT BERMUDA SOD
- [Pattern] PERMANENT SEED AND MULCH

REVISION	
NO.	DATE

PROJECT NAME

SHELBY COUNTY WATER SERVICES
CIVIL SITE PLANS

WESTOVER, ALABAMA

SHEET TITLE

EROSION CONTROL
INITIAL

PROJECT NUMBER

2474-23

DRAWN BY

CLM

CHECKED BY

MRP

DATE

04/03/2023

DRAWING NUMBER

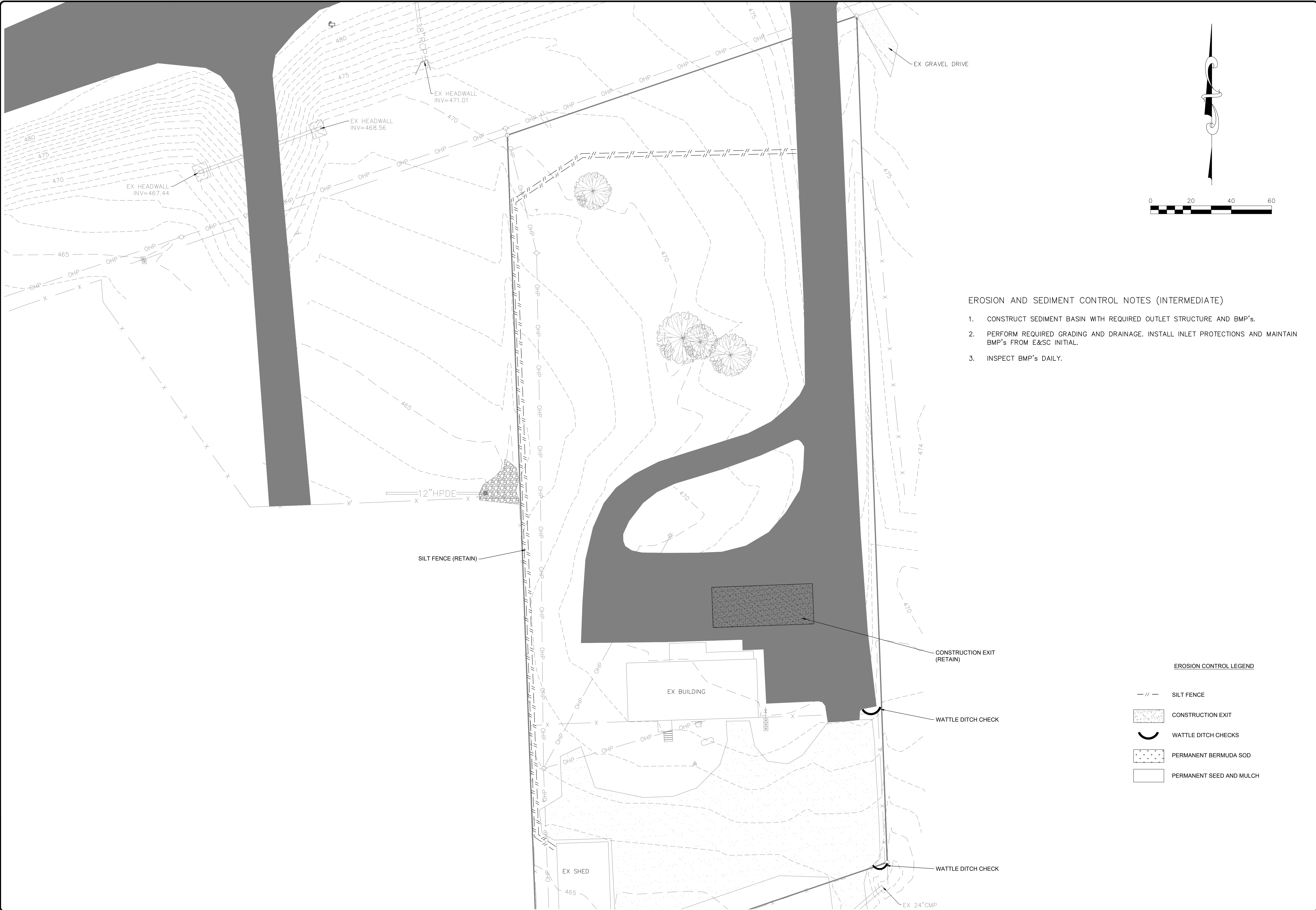
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SHEET NUMBER

4 OF 12

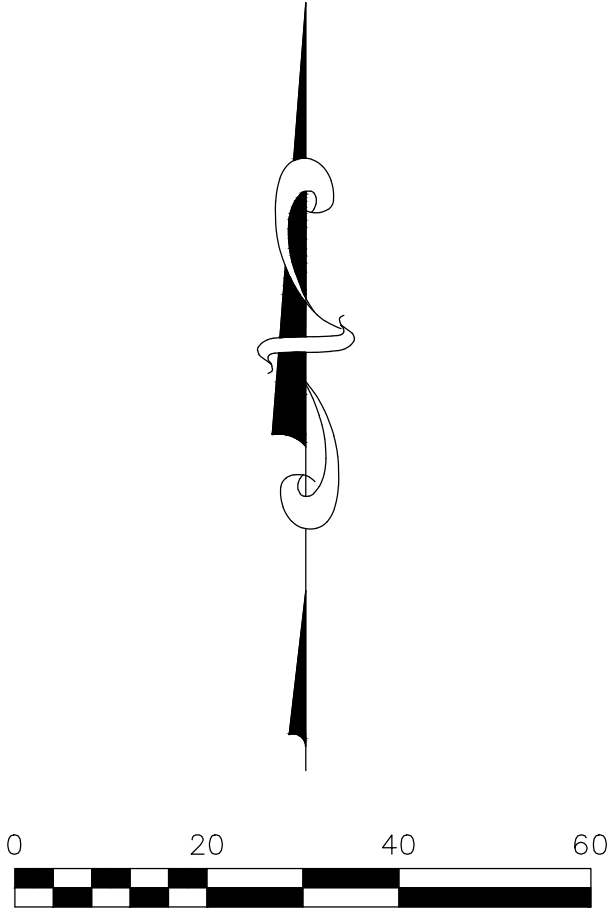
SCALE

1" = 20'



- EROSION AND SEDIMENT CONTROL NOTES (INTERMEDIATE)
1. CONSTRUCT SEDIMENT BASIN WITH REQUIRED OUTLET STRUCTURE AND BMP's.
 2. PERFORM REQUIRED GRADING AND DRAINAGE. INSTALL INLET PROTECTIONS AND MAINTAIN BMP's FROM E&SC INITIAL.
 3. INSPECT BMP's DAILY.

EROSION CONTROL LEGEND	
	SILT FENCE
	CONSTRUCTION EXIT
	WATTLE DITCH CHECKS
	PERMANENT BERMUDA SOD
	PERMANENT SEED AND MULCH



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NO.	DATE

PROJECT NAME

**SHELBY COUNTY WATER SERVICES
CIVIL SITE PLANS**

WESTOVER, ALABAMA

SHEET TITLE

**EROSION CONTROL
INTERMEDIATE**

PROJECT NUMBER 2474-23	
DRAWN BY CLM	CHECKED BY MRP
DATE 04/03/2023	

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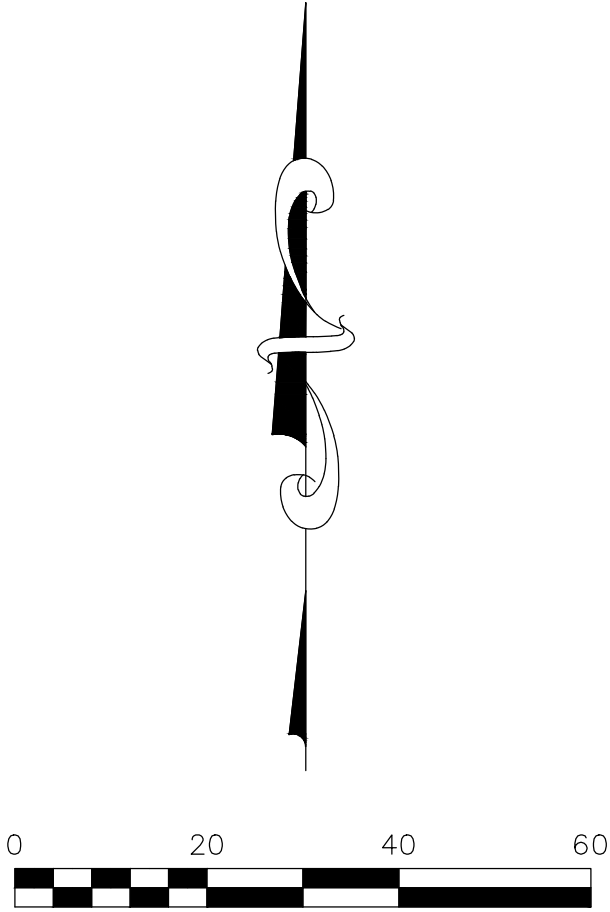
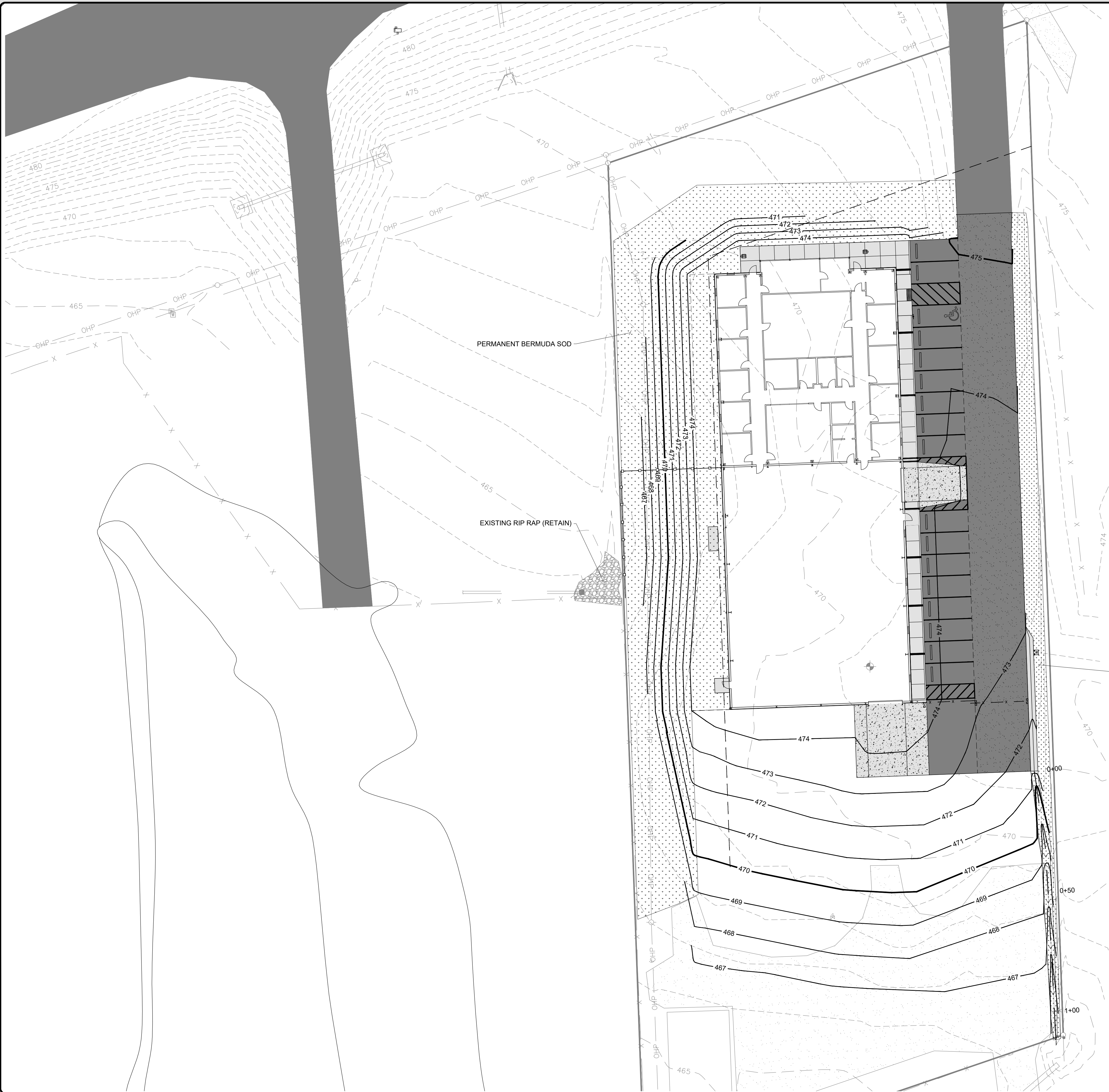
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SHEET NUMBER

5 OF 12

SCALE

1" = 20'



EROSION AND SEDIMENT CONTROL NOTES (FINAL)

1. INSTALL REQUIRED LANDSCAPE, SOD, EROSION CONTROL NETTING AND SEDDING/MULCHING FOR PERMANENT VEGETATION, PER EACH PHASE AS COMPLETED.
2. REMOVE TEMPORARY BMP's SHOWN ON E&SC-INITIAL AND INTERMEDIATE PHASES.
3. ALL DISTURBED AREAS NOT SHOWN AS SOLID SOD OR EROSION CONTROL NETTING SHALL BE SEEDED AND MULCHED.

EROSION CONTROL LEGEND

- SILT FENCE
- CONSTRUCTION EXIT
- WATTLE DITCH CHECKS
- PERMANENT BERMUDA SOD
- PERMANENT SEED AND MULCH

EEFS

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11/3/2023
ENGINEER
MICHAEL P. PRICE

NO.	DATE	REVISION

PROJECT NAME

SHELBY COUNTY WATER SERVICES
CIVIL SITE PLANS

WESTOVER, ALABAMA

SHEET TITLE

EROSION CONTROL
FINAL

PROJECT NUMBER

2474-23

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04/03/2023

DRAWING NUMBER

C2.2

SHEET NUMBER

6 OF 12

SCALE

1" = 20'

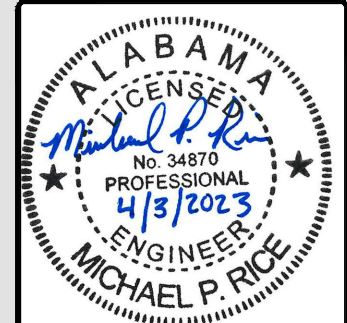


DEMOLITION LEGEND

- LIMITS OF CONSTRUCTION
- [Hatched Box] LIMITS OF STRUCTURE REMOVAL
- [Cross-hatched Box] LIMITS OF HARDSCAPE REMOVAL
- [Box with X] POWER POLE, LIGHT POLE AND/OR GUY ANCOR REMOVAL/RELOCATION BY OTHERS
- [Circle with X] TREE REMOVAL

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NO.	DATE

PROJECT NAME
**SHELBY COUNTY WATER SERVICES
CIVIL SITE PLANS**
WESTOVER, ALABAMA

SHEET TITLE
DEMOLITION PLAN

PROJECT NUMBER
2474-23

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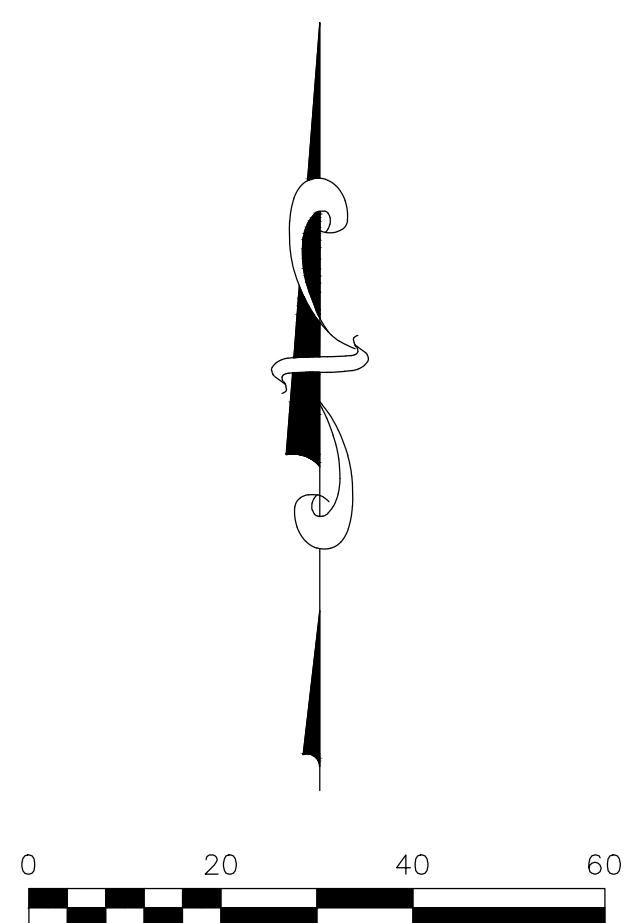
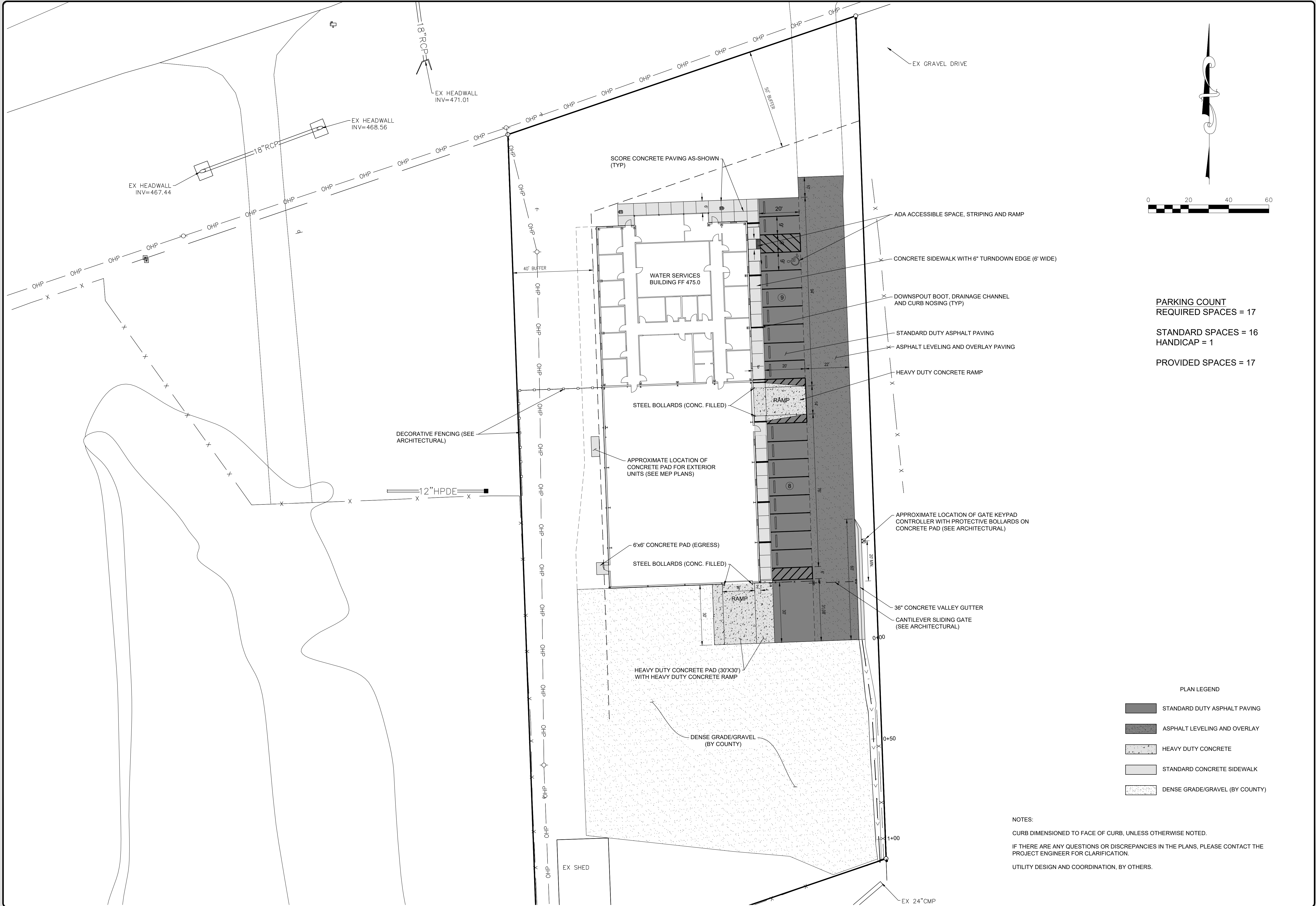
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DATE
04/03/2023

DRAWING NUMBER
C2.3

SHEET NUMBER
7 OF 12

SCALE
1" = 20'



PARKING COUNT
REQUIRED SPACES = 17

STANDARD SPACES = 16
HANDICAP = 1

PROVIDED SPACES = 17

- PLAN LEGEND
- STANDARD DUTY ASPHALT PAVING
 - ASPHALT LEVELING AND OVERLAY
 - HEAVY DUTY CONCRETE
 - STANDARD CONCRETE SIDEWALK
 - DENSE GRADE/GRAVEL (BY COUNTY)

NOTES:
CURB DIMENSIONED TO FACE OF CURB, UNLESS OTHERWISE NOTED.
IF THERE ARE ANY QUESTIONS OR DISCREPANCIES IN THE PLANS, PLEASE CONTACT THE PROJECT ENGINEER FOR CLARIFICATION.
UTILITY DESIGN AND COORDINATION, BY OTHERS.

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NO.	DATE

PROJECT NAME

**SHELBY COUNTY WATER SERVICES
CIVIL SITE PLANS**

WESTOVER, ALABAMA

SHEET TITLE

LAYOUT PLAN

PROJECT NUMBER

2474-23

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DATE

04/03/2023

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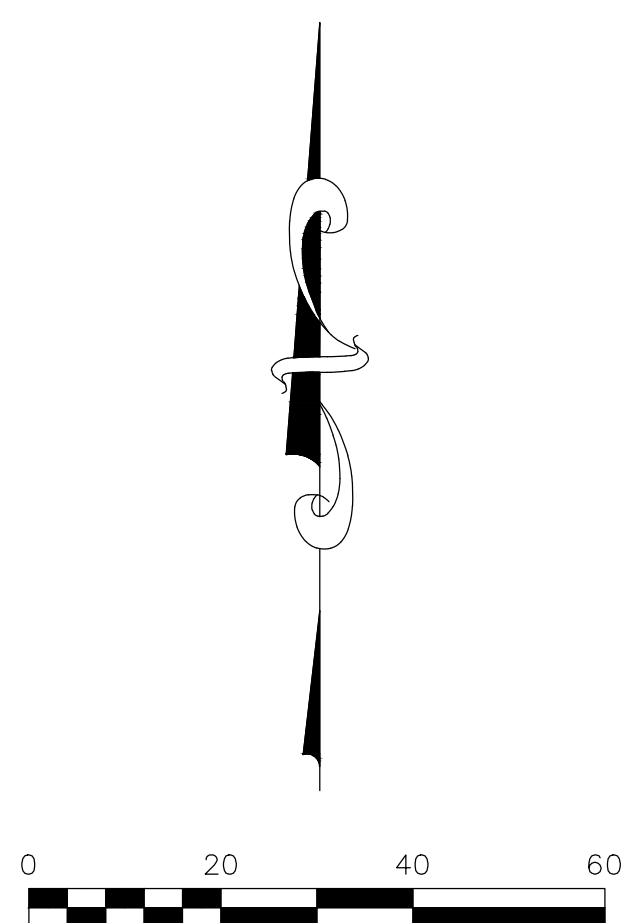
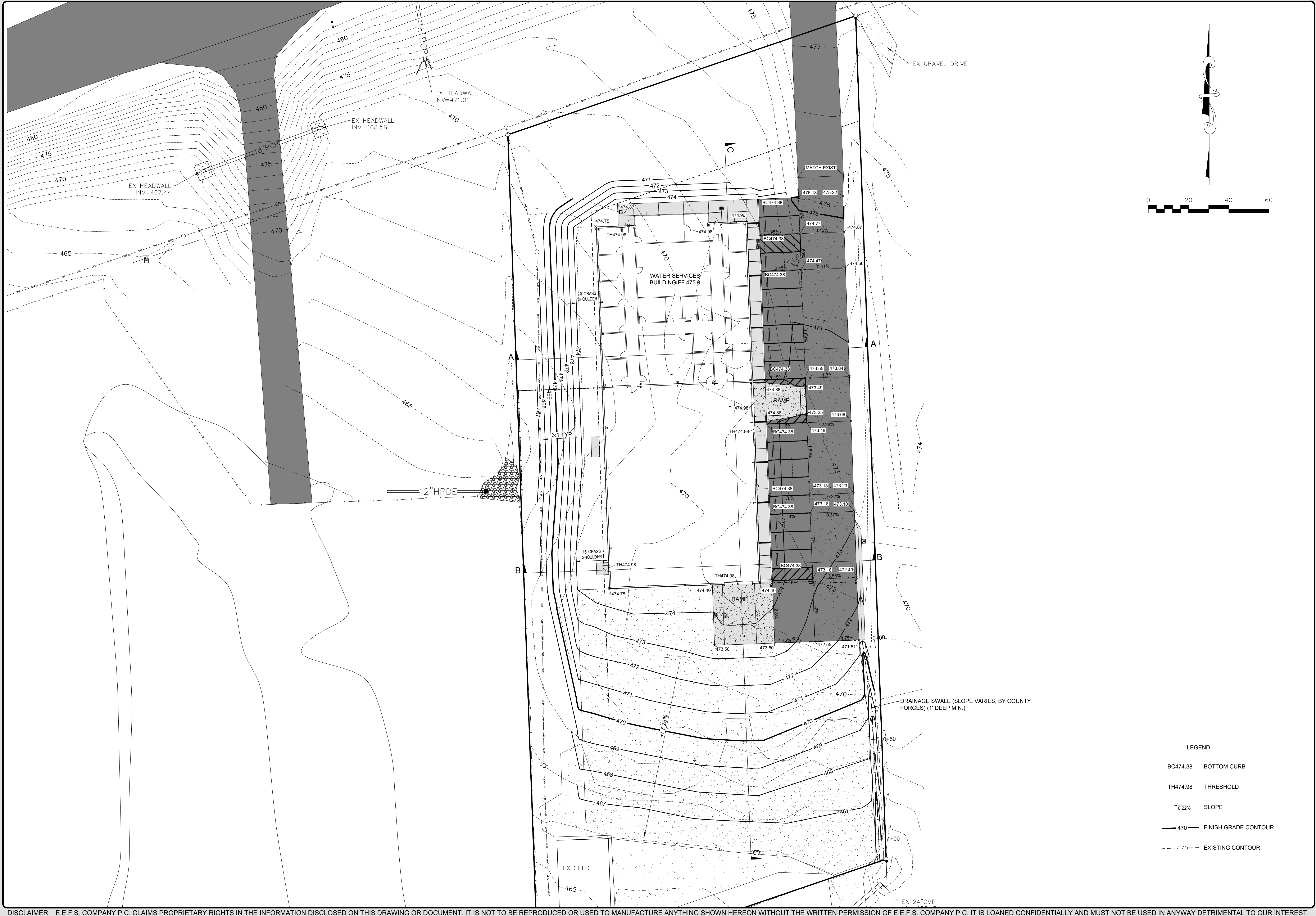
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SHEET NUMBER

8 OF 12

SCALE

1" = 20'



- LEGEND
- BC474.38 BOTTOM CURB
 - TH474.98 THRESHOLD
 - 0.22% SLOPE
 - 470 — FINISH GRADE CONTOUR
 - - - 470 - - - EXISTING CONTOUR

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ALABAMA
MICHAEL P. PRICE
PROFESSIONAL ENGINEER
NO. 34870
11/3/2023

REVISIONS	
NO.	DATE

PROJECT NAME
**SHELBY COUNTY WATER SERVICES
CIVIL SITE PLANS**
WESTOVER, ALABAMA

SHEET TITLE
GRADING AND DRAINAGE PLAN

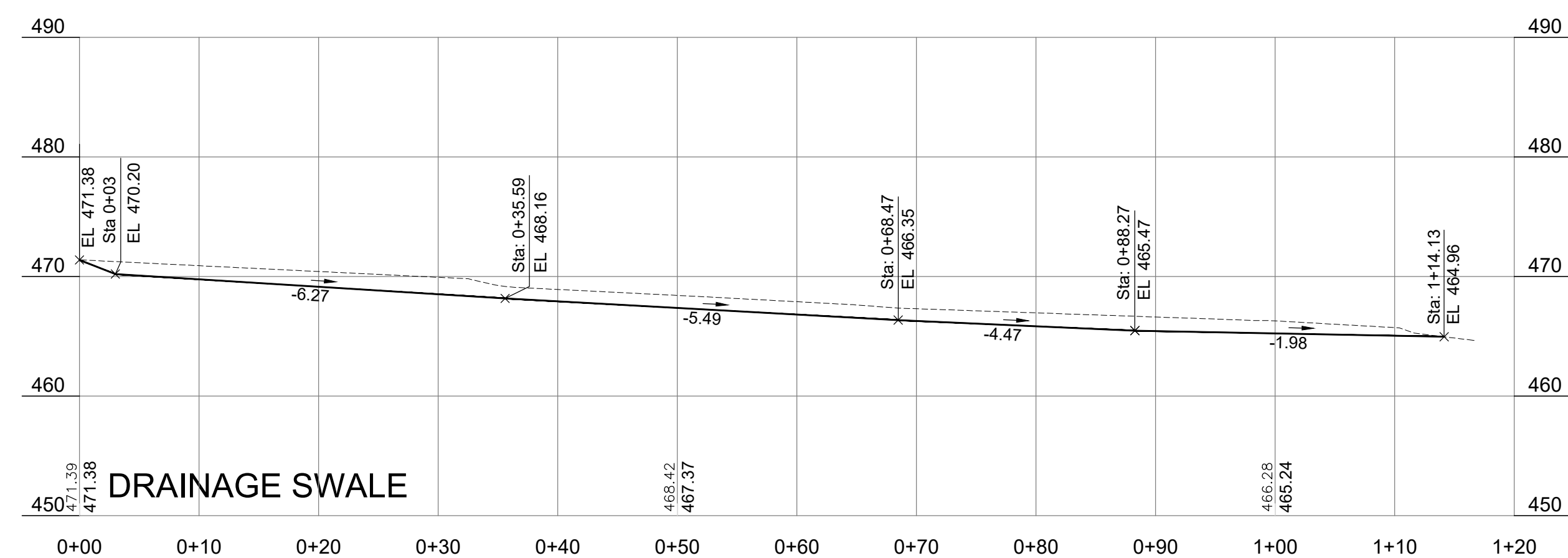
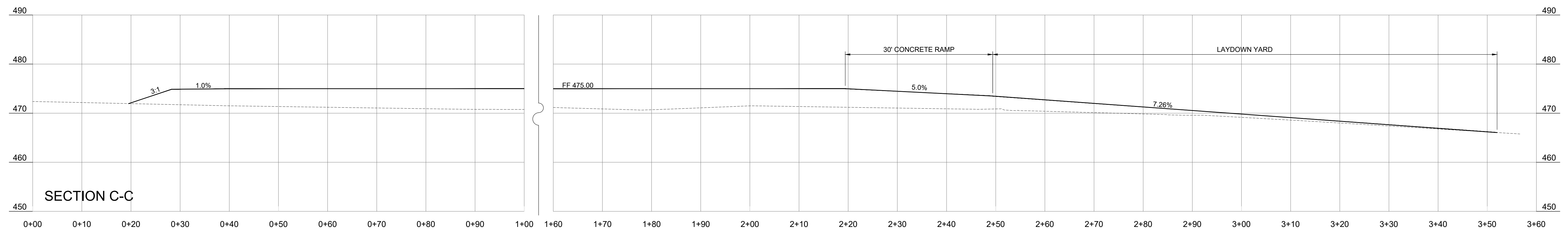
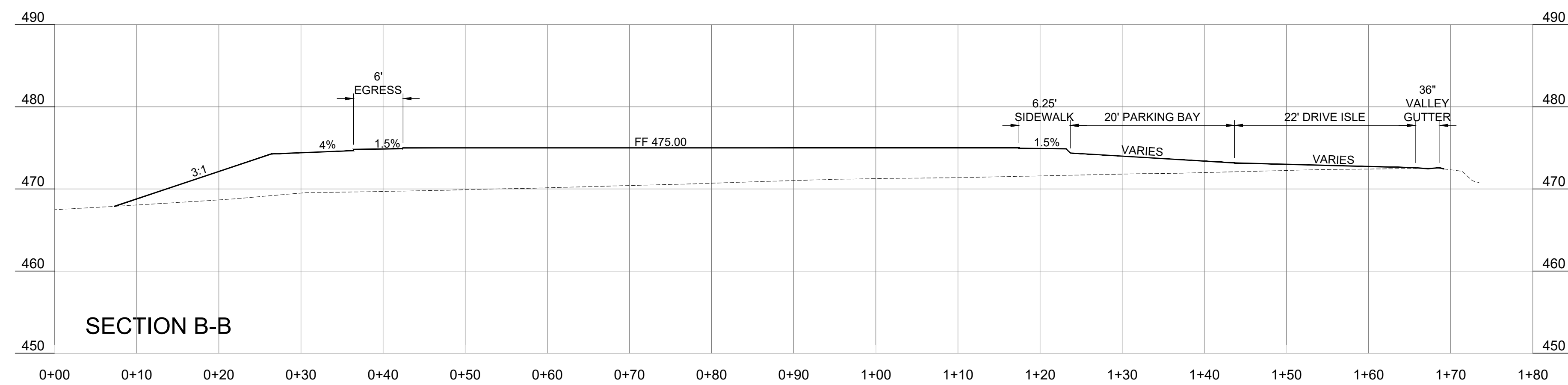
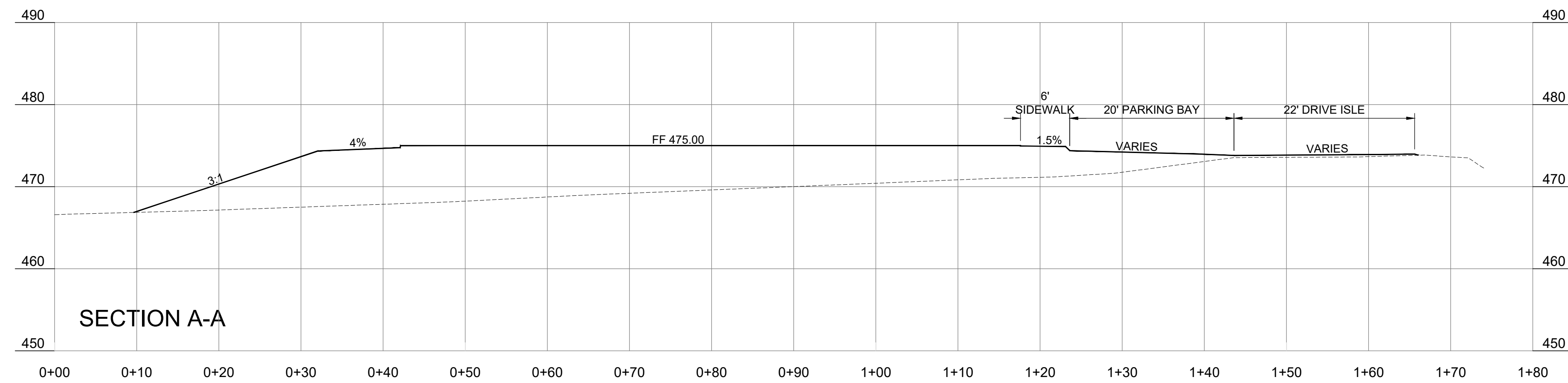
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2474-23

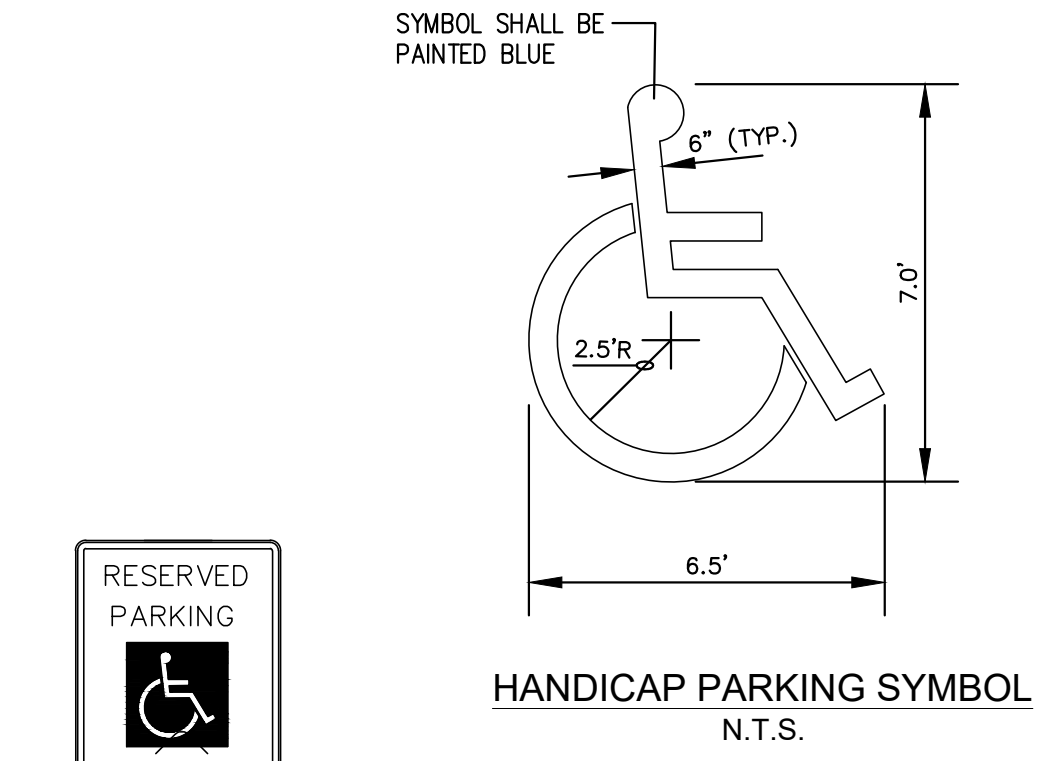
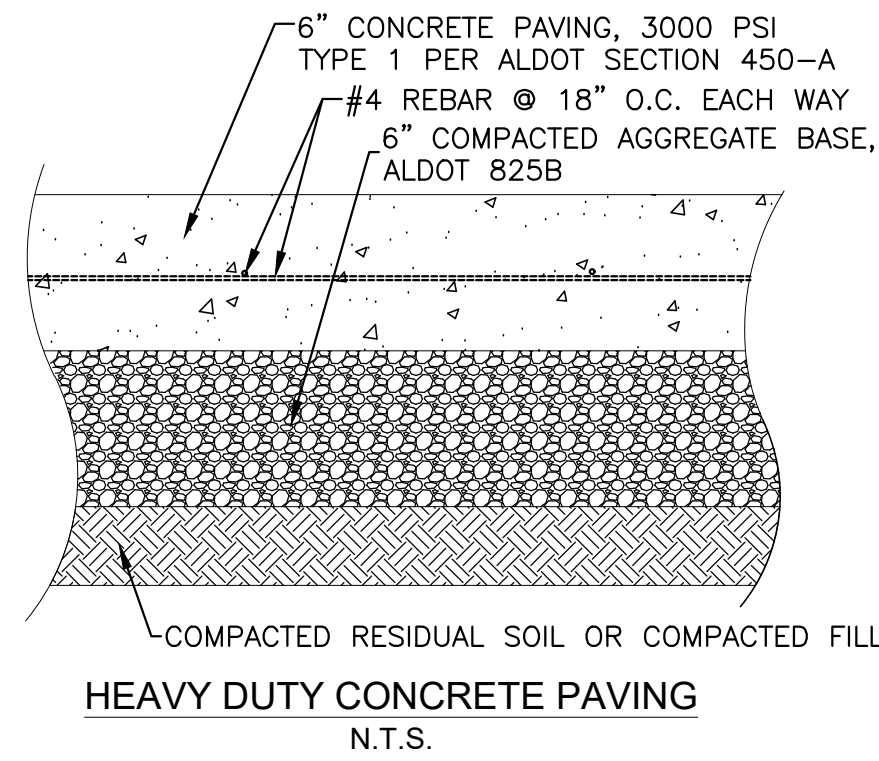
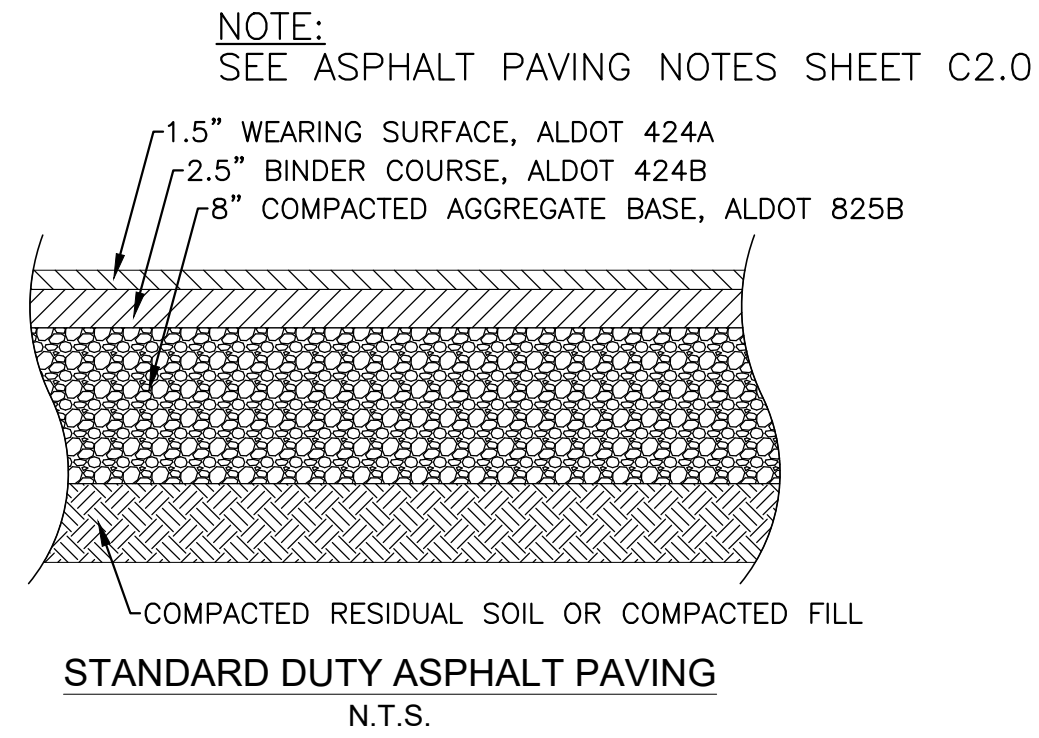
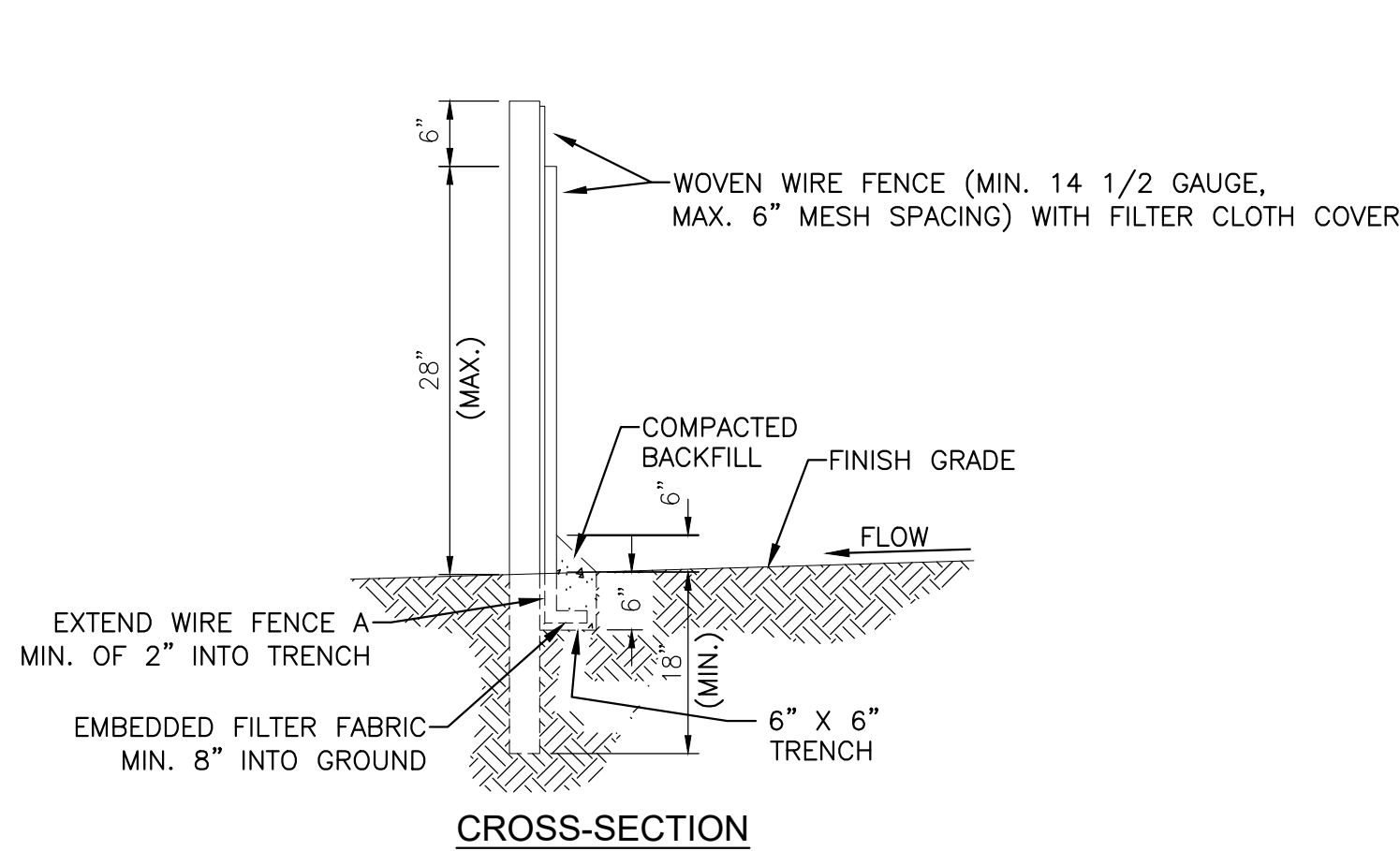
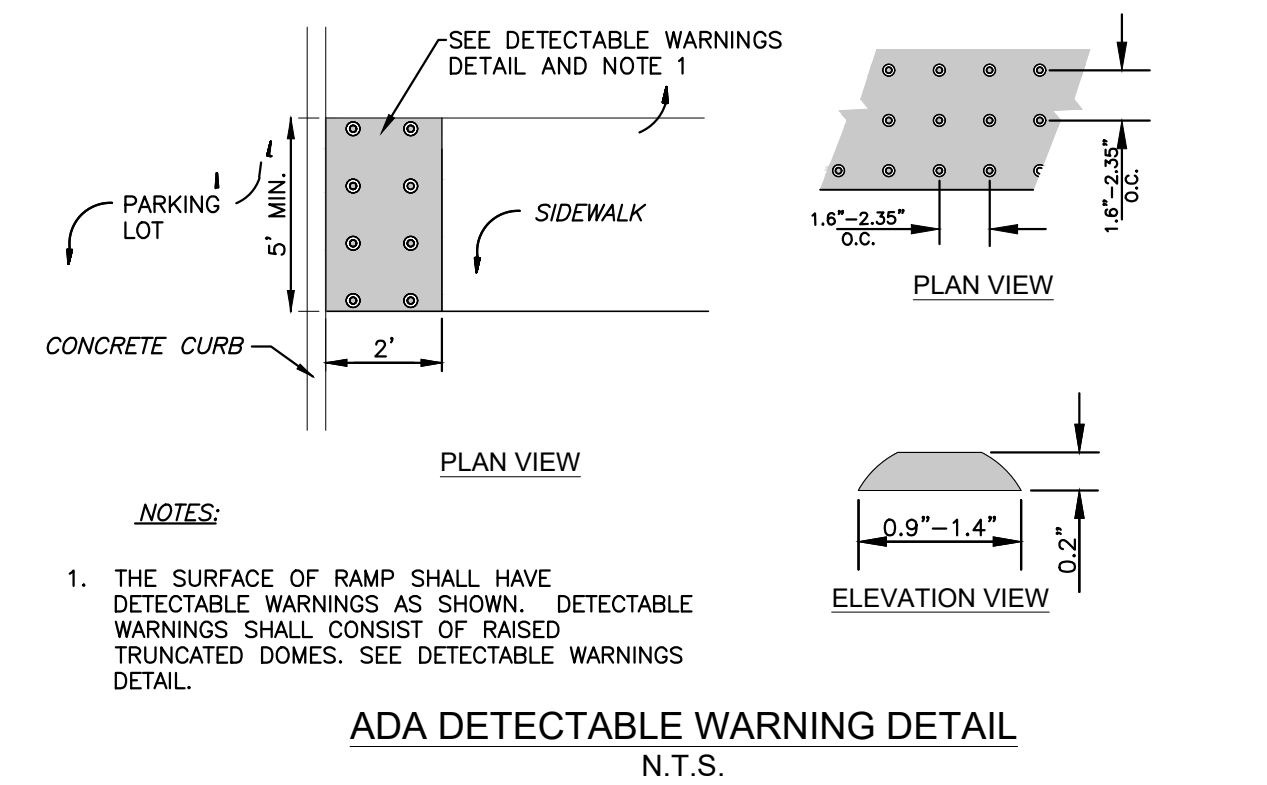
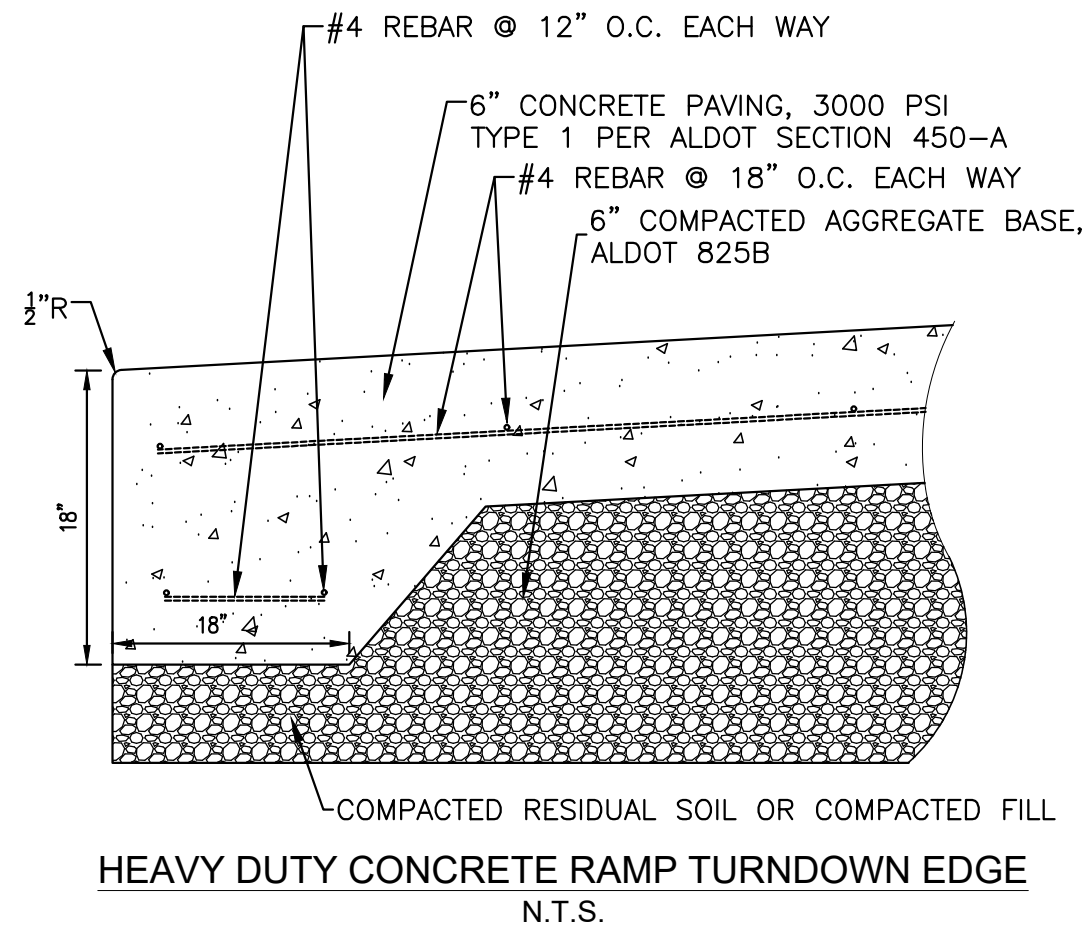
DRAWN BY CLM	CHECKED BY MRP
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DATE
04/03/2023

DRAWING NUMBER
C4.0
SHEET NUMBER
9 OF 12

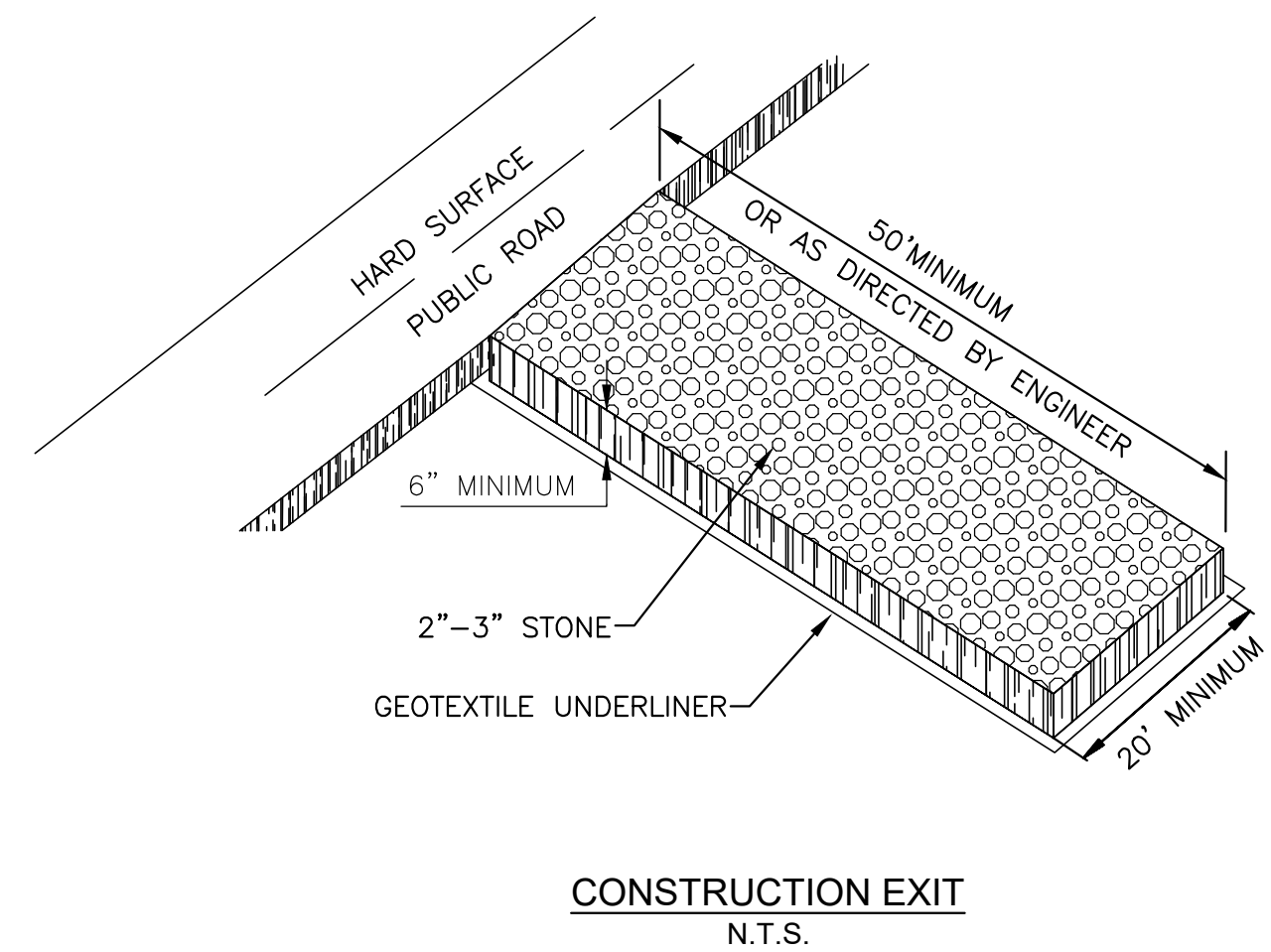
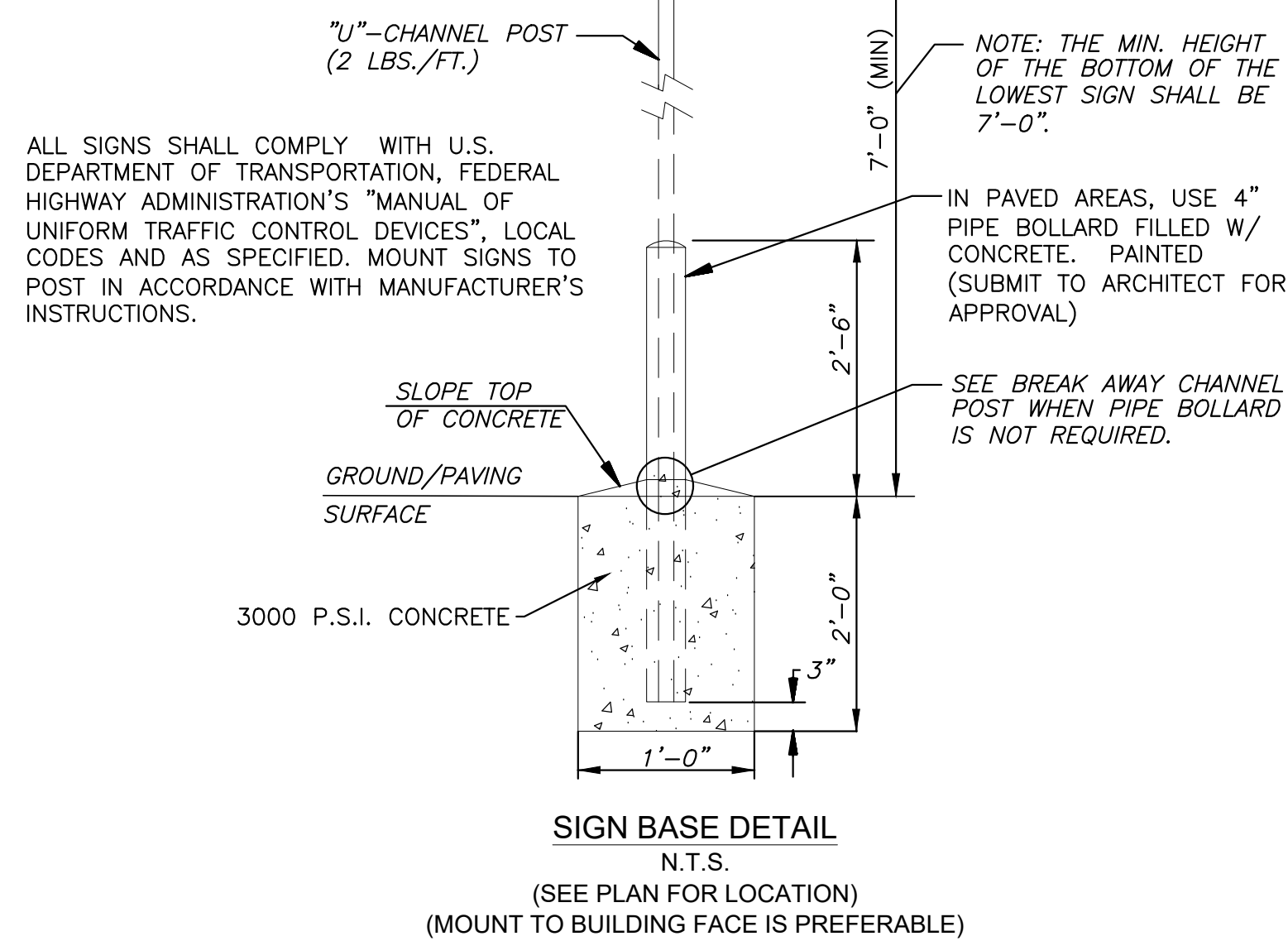
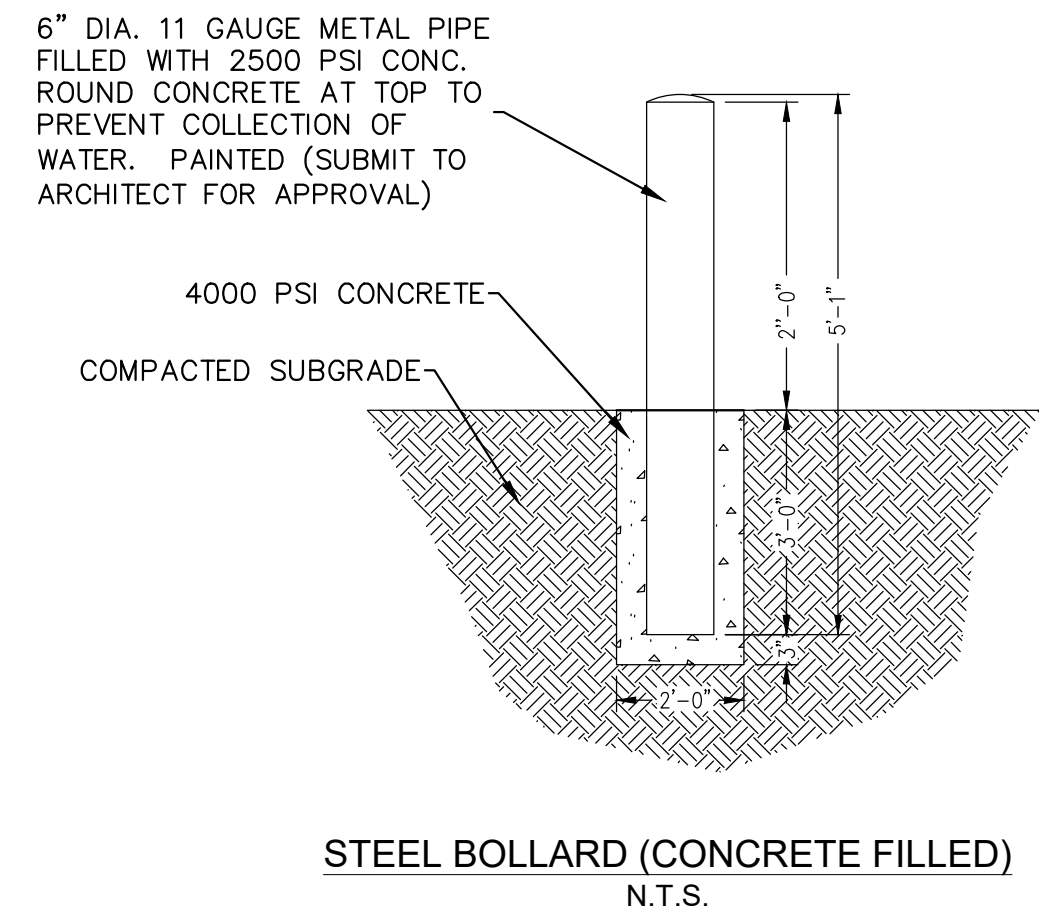
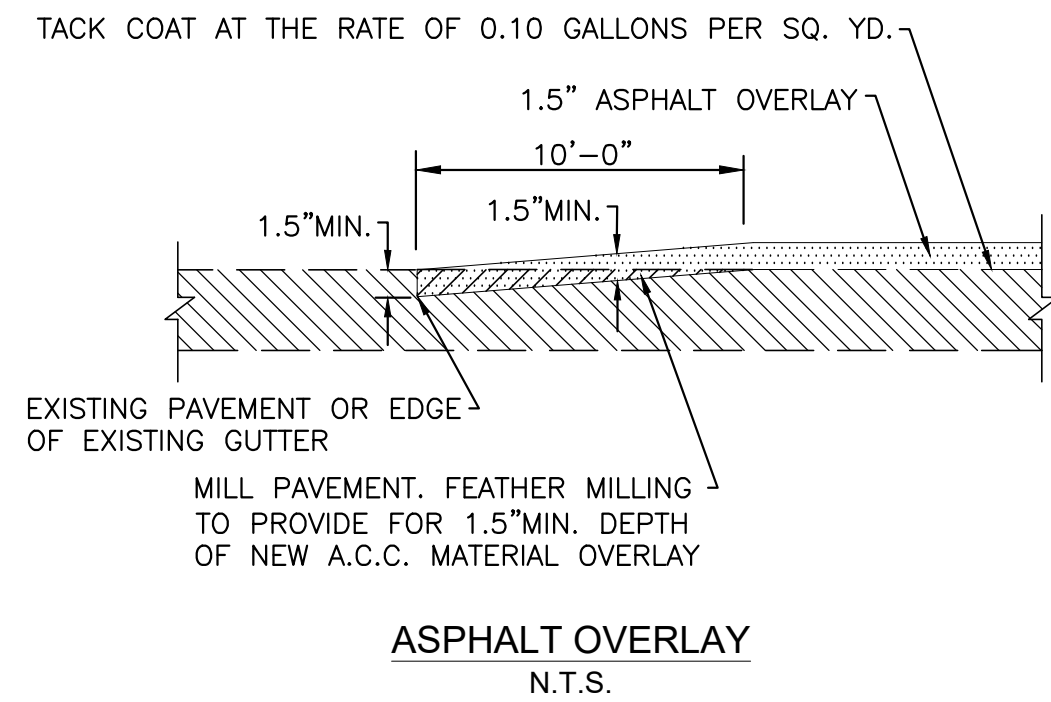
SCALE
1" = 20'



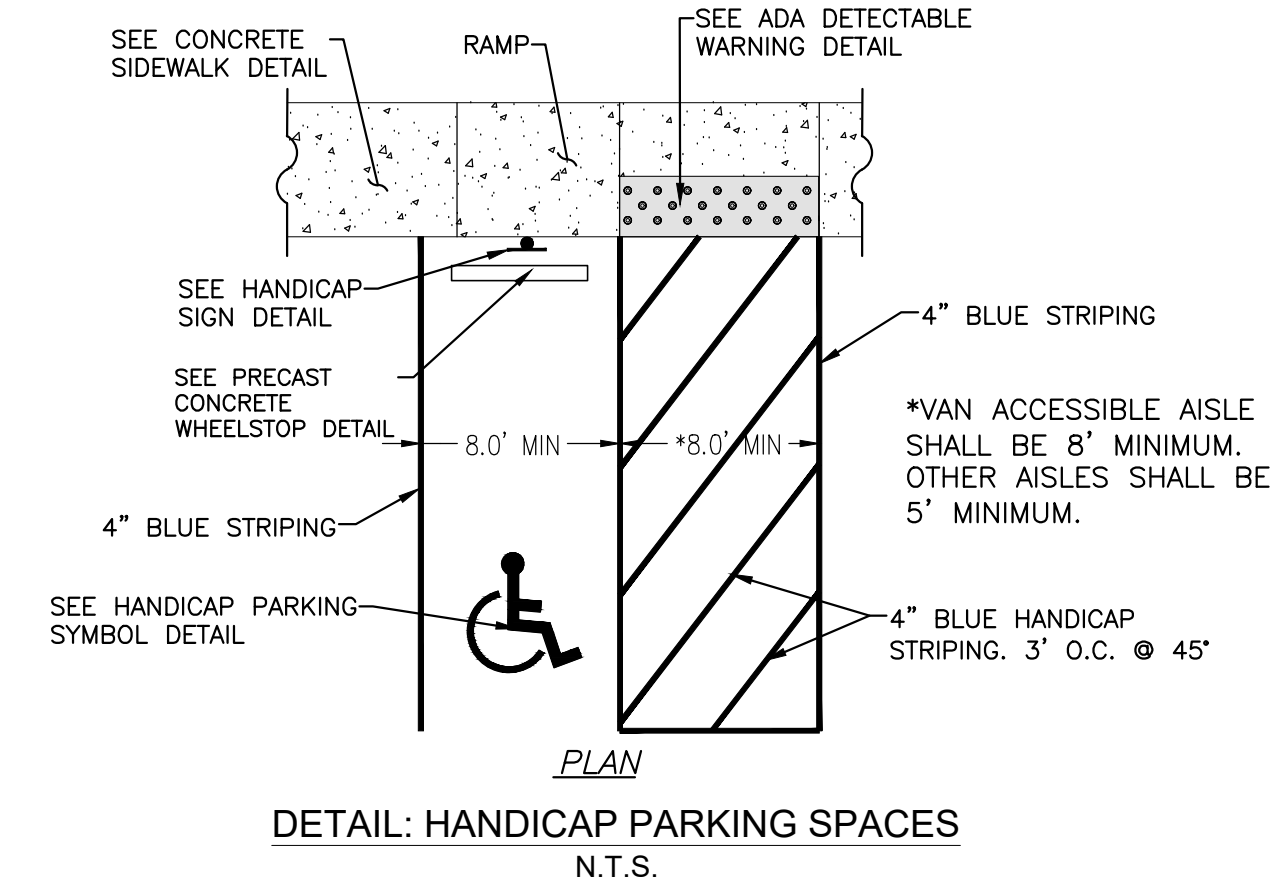
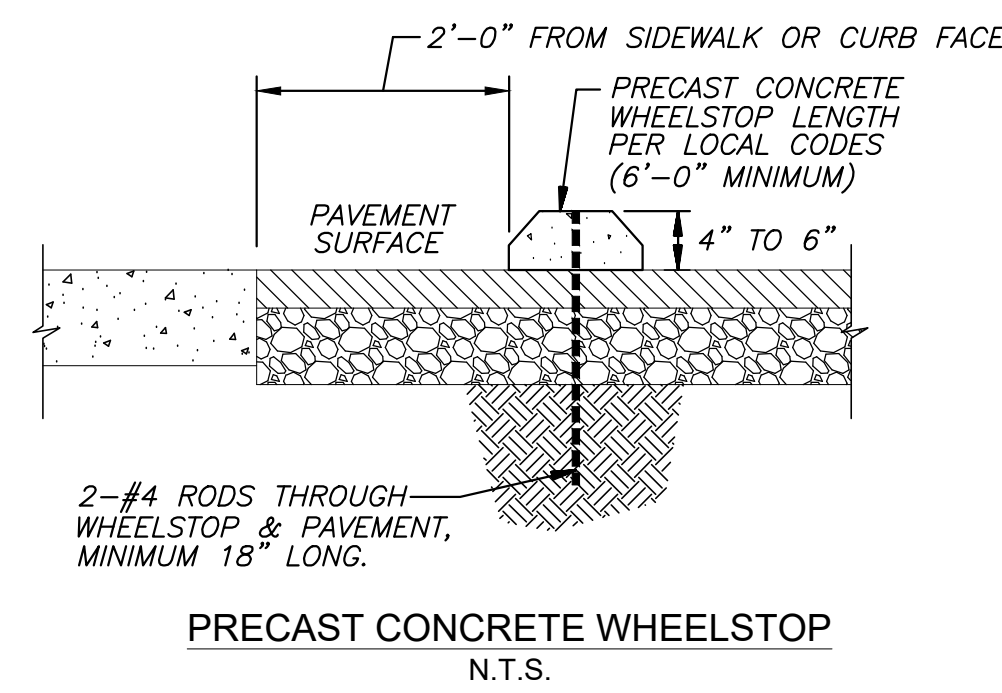
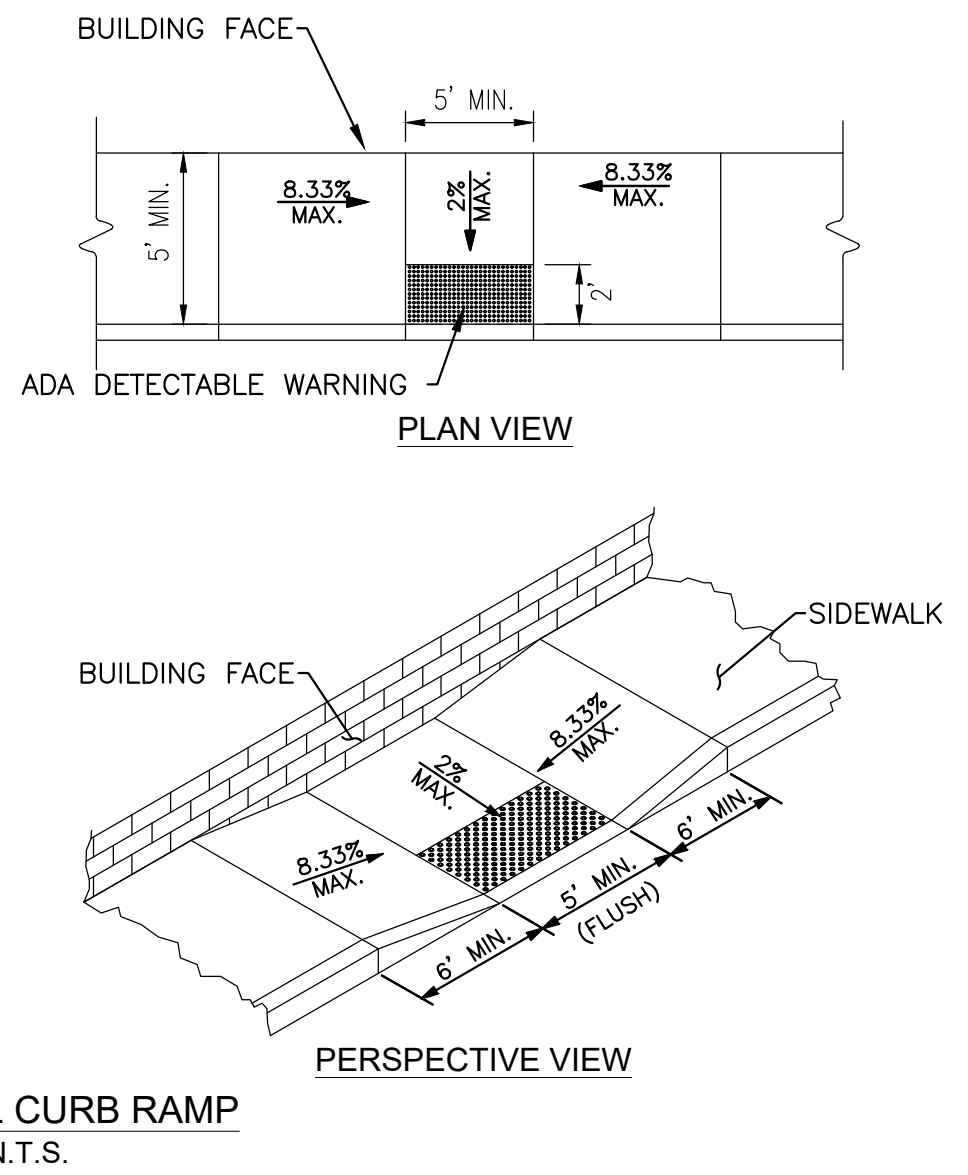


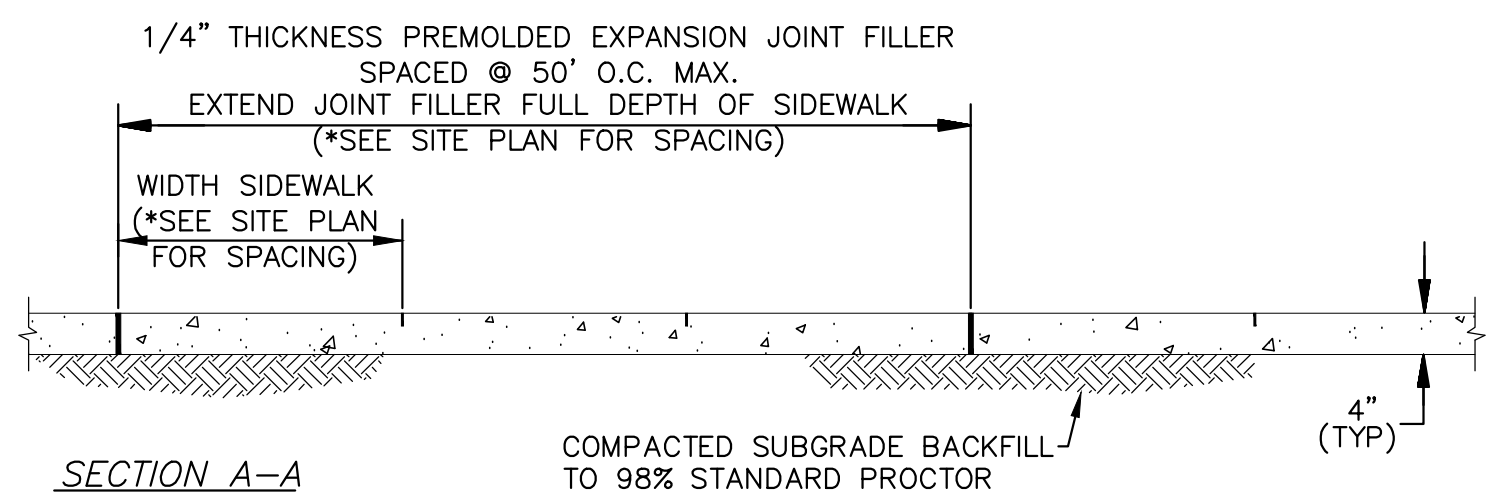
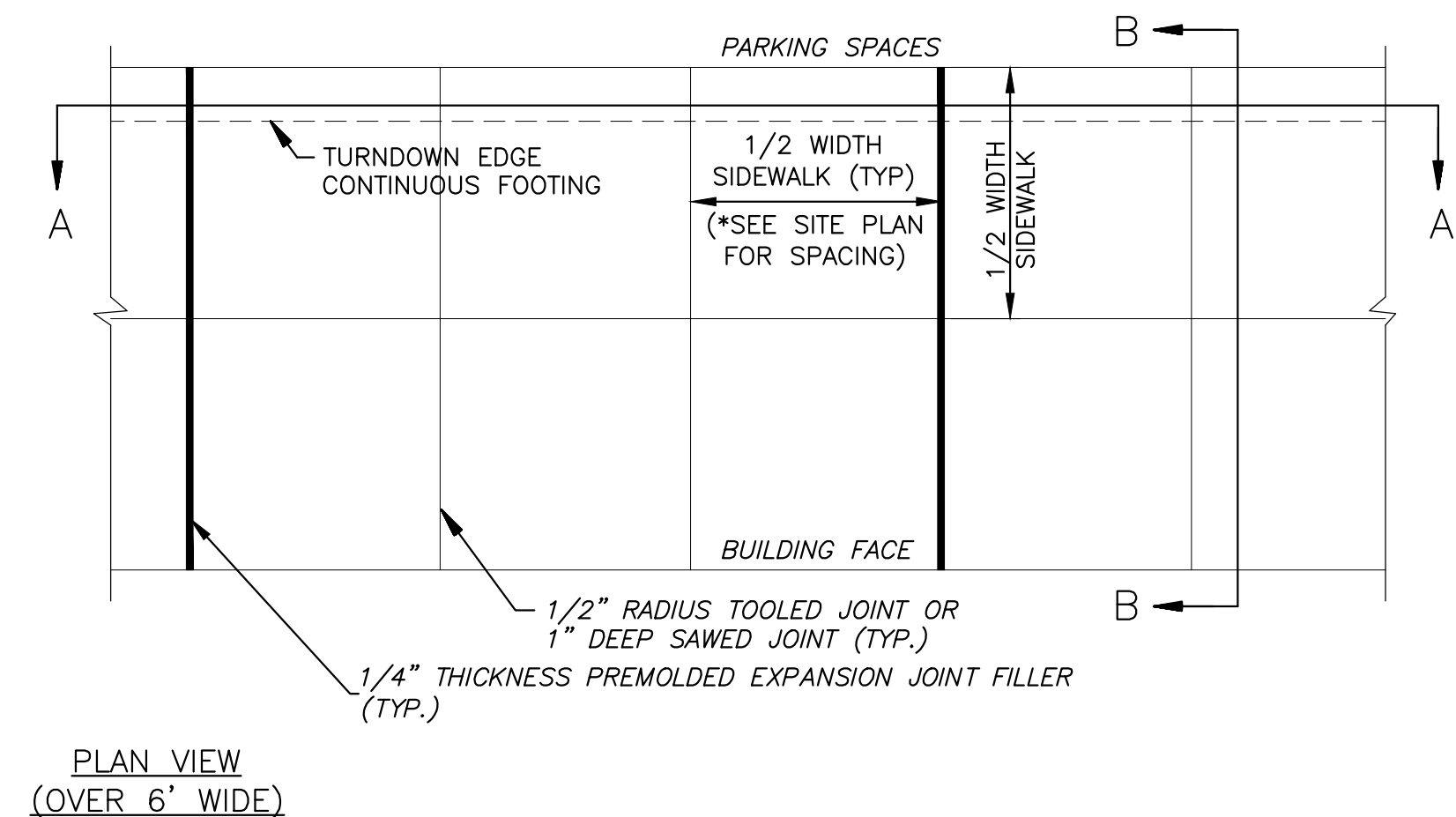
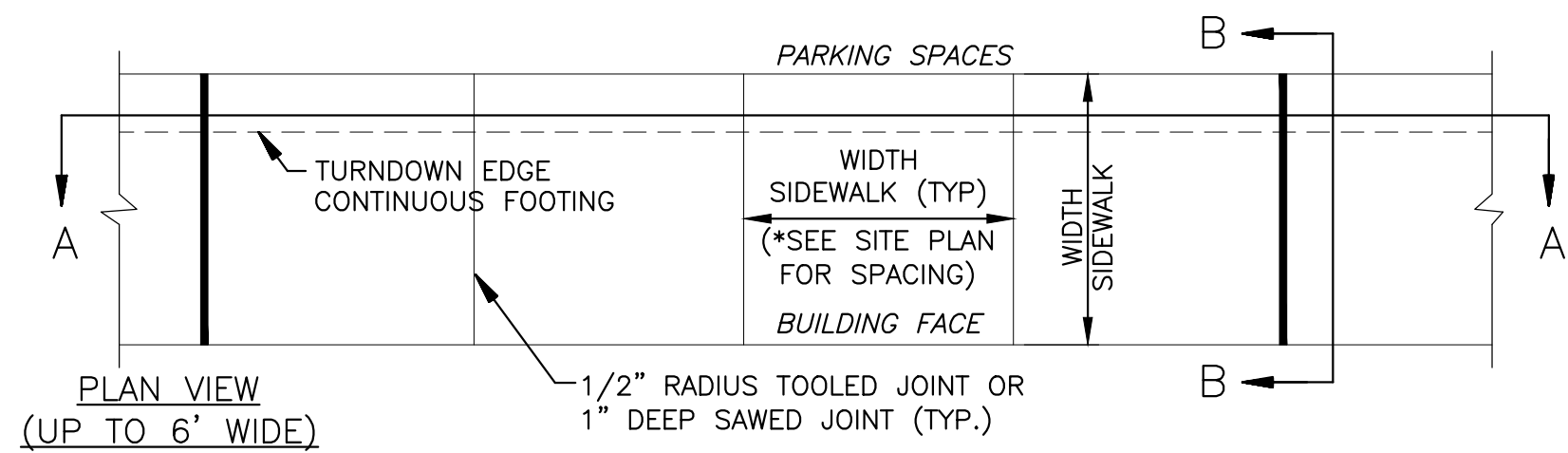
- POSTS:** STEEL EITHER T OR U TYPE (1.3 LB./FT. MIN.)
POSTS SHALL HAVE MIN. LENGTH OF 48".
POSTS SHALL BE SPACED A MAXIMUM OF 10' O.C.
- FENCE:** WOVEN WIRE, 14-1/2 GA. 6" MAX. MESH OPENING
- FILTER FABRIC:**
1. MIRAFI 140NS
2. PHILLIPS 66 SUPAC 4NP
3. DUPONT TYPAR 3341
4. OR APPROVED EQUAL.
- WOVEN WIRE FENCE TO BE FASTENED SECURELY TO FENCE POSTS WITH WIRE TIES OR STAPLES.
 - FILTER FABRIC TO BE FASTENED SECURELY TO WOVEN WIRE FENCE WITH TIES SPACED EVERY 24" AT TOP AND MID SECTION.
 - WHEN TWO SECTIONS OF FILTER FABRIC ADJOIN EACH OTHER THEY SHALL BE OVERLAPPED BY EIGHTEEN INCHES AND FOLDED, PRIOR TO FASTENING.
 - MAINTENANCE SHALL BE PERFORMED AS NOTED IN THE EROSION CONTROL PLAN. COLLECTED MATERIAL SHALL BE REMOVED WHEN "BULGES" DEVELOP IN THE SILT FENCE.

SILT FENCE TYPE 'A'
N.T.S.

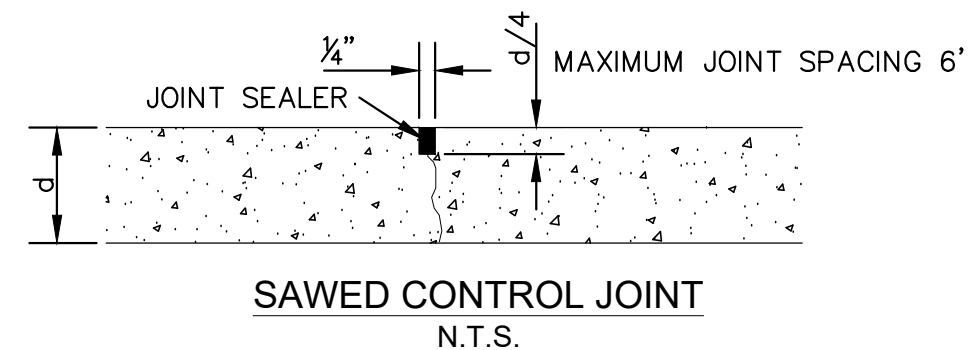


- NOTES:**
1. THE SURFACE OF RAMP SHALL HAVE DETECTABLE WARNINGS AS SHOWN. DETECTABLE WARNINGS SHALL CONSIST OF RAISED TRUNCATED DOMES. SEE DETECTABLE WARNINGS DETAIL.
2. LANDING AREA SHALL MAINTAINED A POSITIVE SLOPE TOWARD CONCRETE GUTTER.
3. CONSTRUCT PER A.D.A. STANDARDS.
4. REFER TO PLANS FOR ADJACENT SLOPES.
5. THE CROSS SLOPE OF THE RAMP AND LANDING SURFACE SHALL BE NO GREATER THAN 1:50.



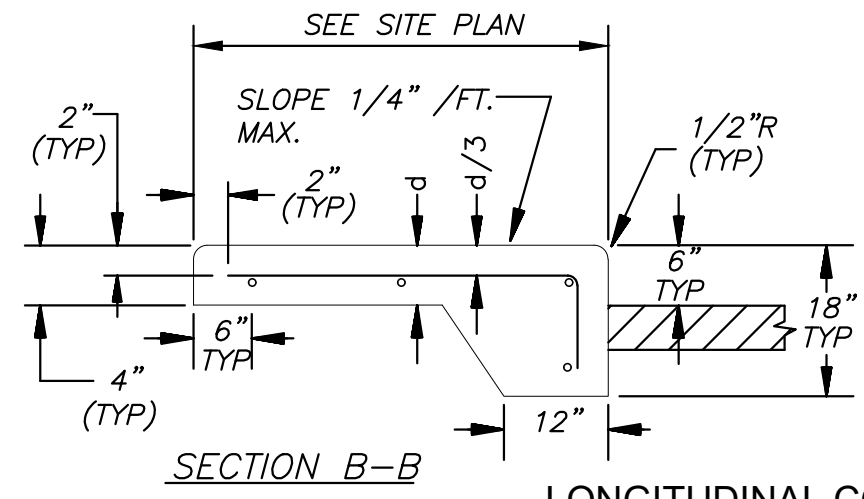


CONCRETE SIDEWALK
N.T.S.

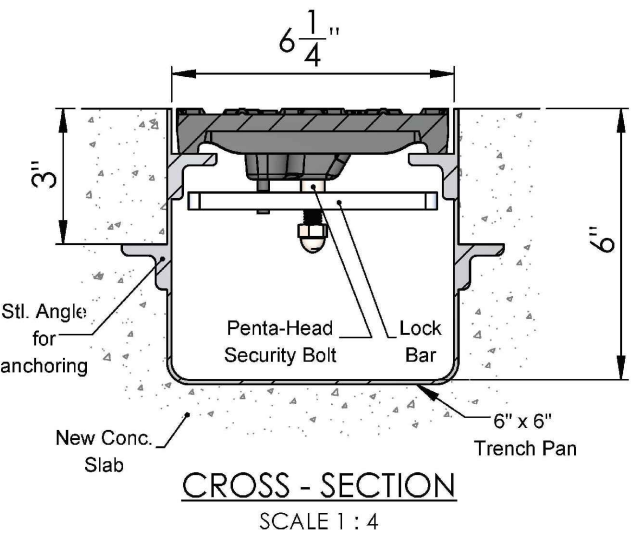
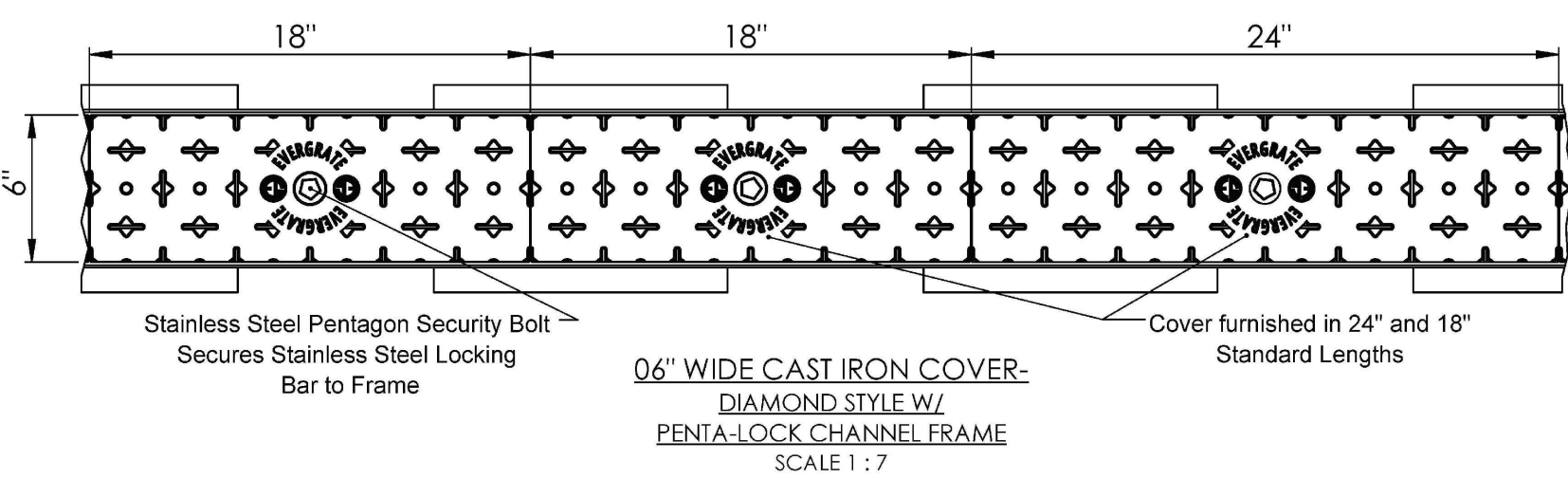
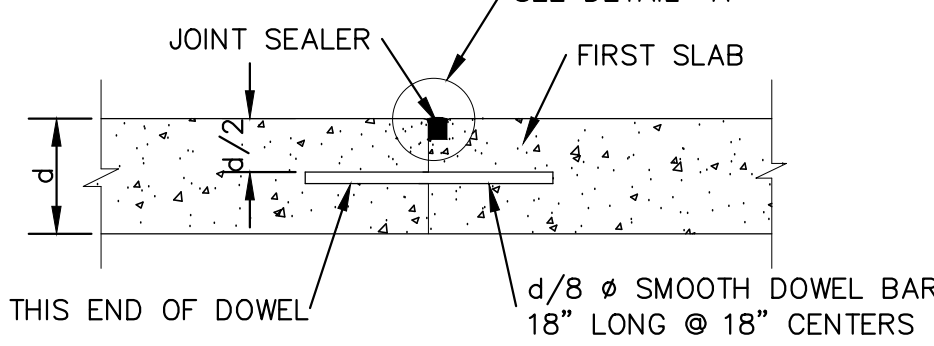
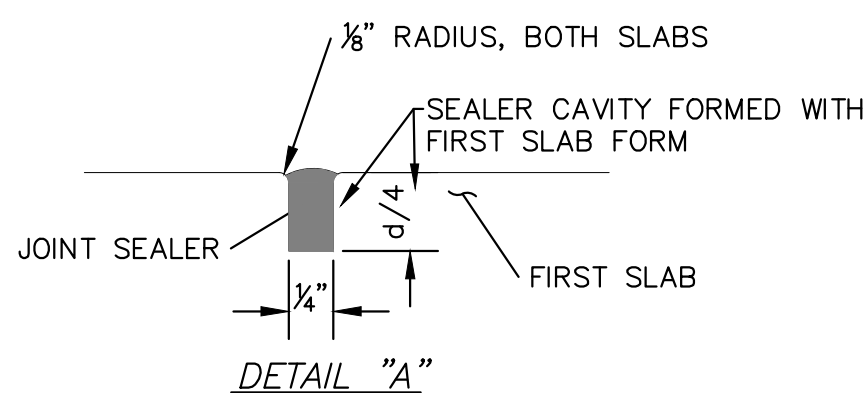
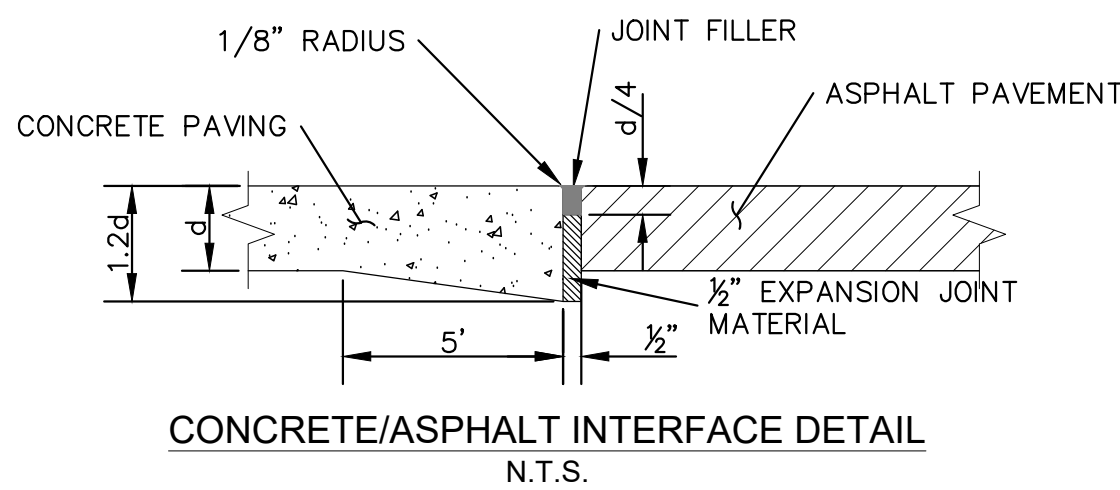


NOTES:

1. PROVIDE 1/2" EXPANSION JOINT BETWEEN SIDEWALK AND ALL FIXED OBJECTS, INCLUDING BUT NOT LIMITED TO, BUILDINGS, PATIOS, CURB AND GUTTER, ETC.
2. *REFER TO SITE PLAN FOR JOINT SPACING
3. WHERE REQUIRED, REINFORCEMENT WILL BE No. 3 BARS 24" O.C. EACH WAY MAX. SPACING, OR 6 x 6 - W1.4 X W1.4 WWF. *REQUIRED FOR MAIN ENTRANCE WALKWAY.



LONGITUDINAL CONSTRUCTION JOINT
N.T.S.



PERSPECTIVE OF ASSEMBLY
N.T.S.

Product No. : T-06C Diamond

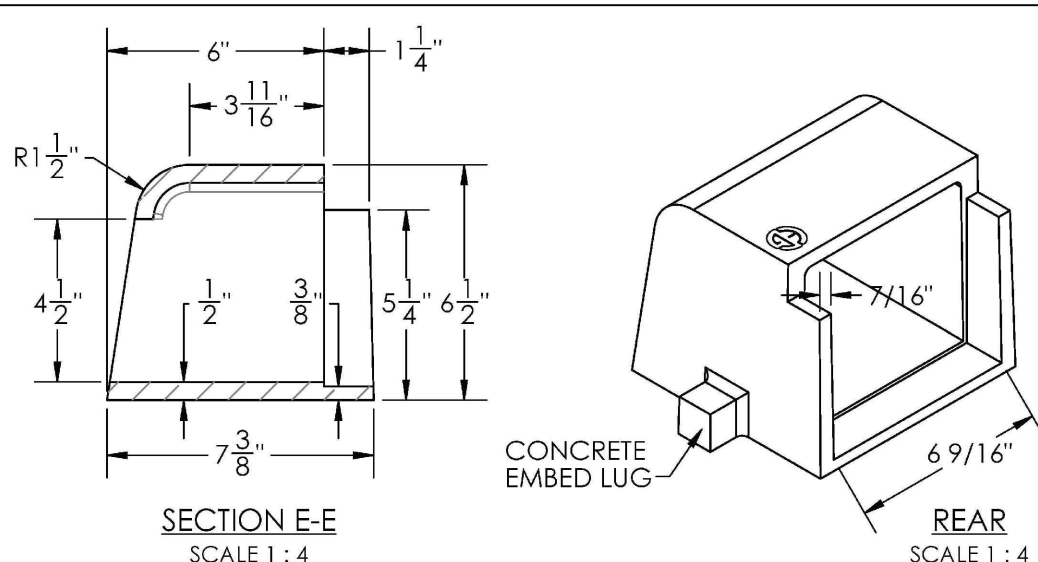
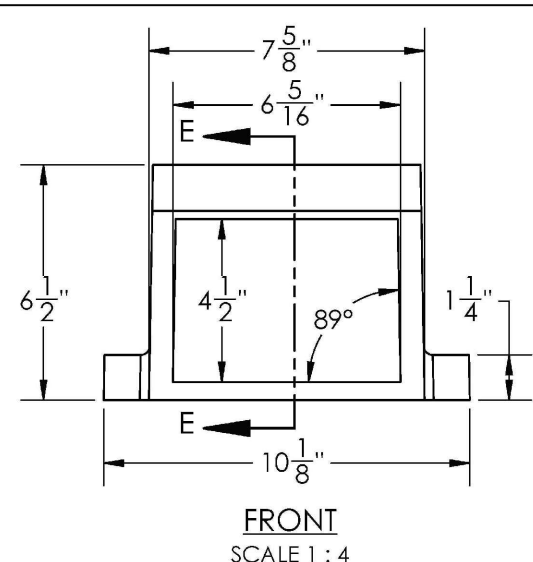
Grate Material: ASTM-A48 Class 308 Cast Iron
Frame Material: Plain Steel
Load Rating: Non-Traffic (Pedestrian)
Made in USA

Grate + Frame Weight: 21.4 lbs./LF.
6" x 18" Open Area: N/A
6" x 24" Open Area: N/A



EVERGRATE
Durable. Dependable. Design.
A DIVISION OF J.R. HOE

OR APPROVED EQUAL



PERSPECTIVE OF C-646T
N.T.S.

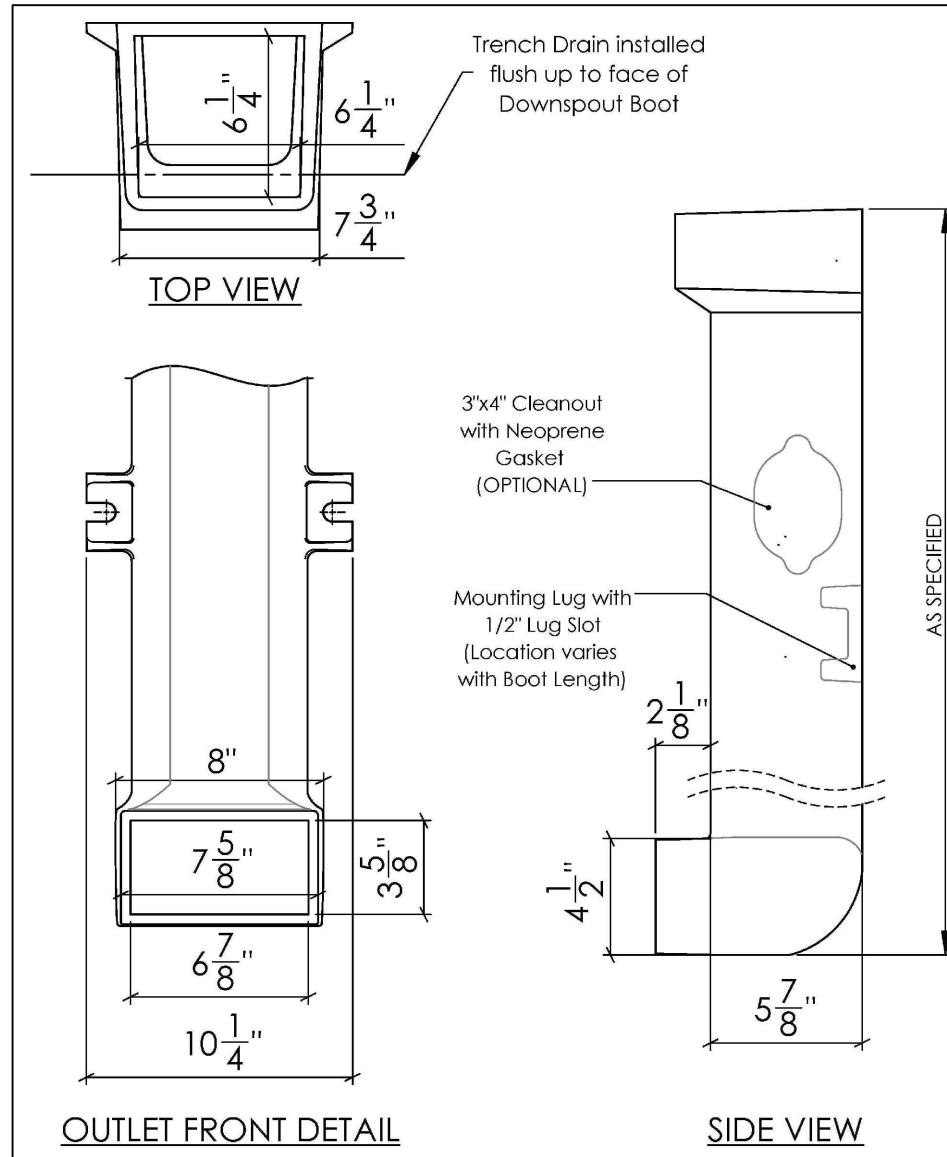
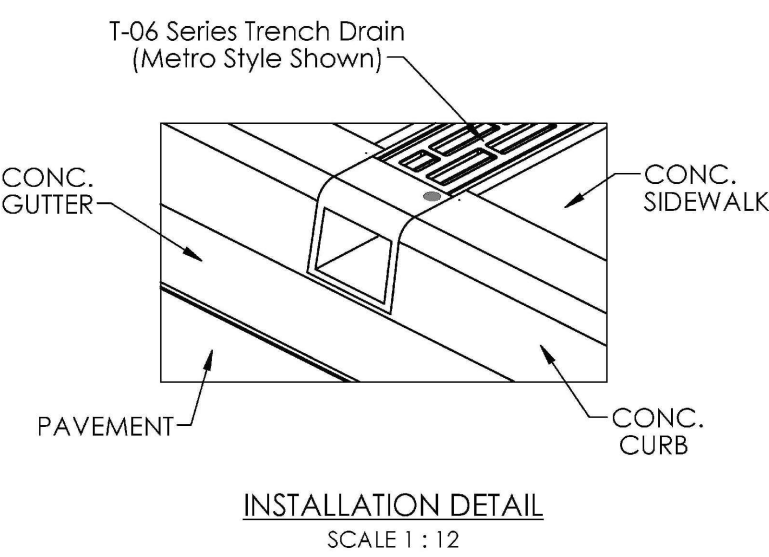
Product No. : C-646T

Material: ASTM-A48 Class 308 Gray Iron
Weight: 25 lbs. ea.
Made in USA



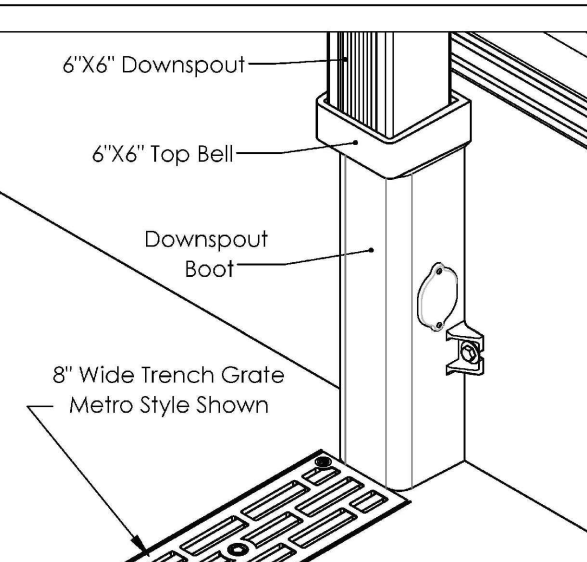
EVERGRATE
Durable. Dependable. Design.
A DIVISION OF J.R. HOE

OR APPROVED EQUAL



E-66 Downspout Boot (6"X6" Top Bell)

Material: ASTM-A48 Class 308 Cast Iron
Made in USA
Finish Options: Plain, Powder Coat



AVAILABLE LENGTHS:
16", 20", 24", 28", 32", 36", 40", 48", 60", 72"
*Units over 40" in length supplied in 2 piece assemblies.
*Cleanout available on sizes 24" or longer in length.

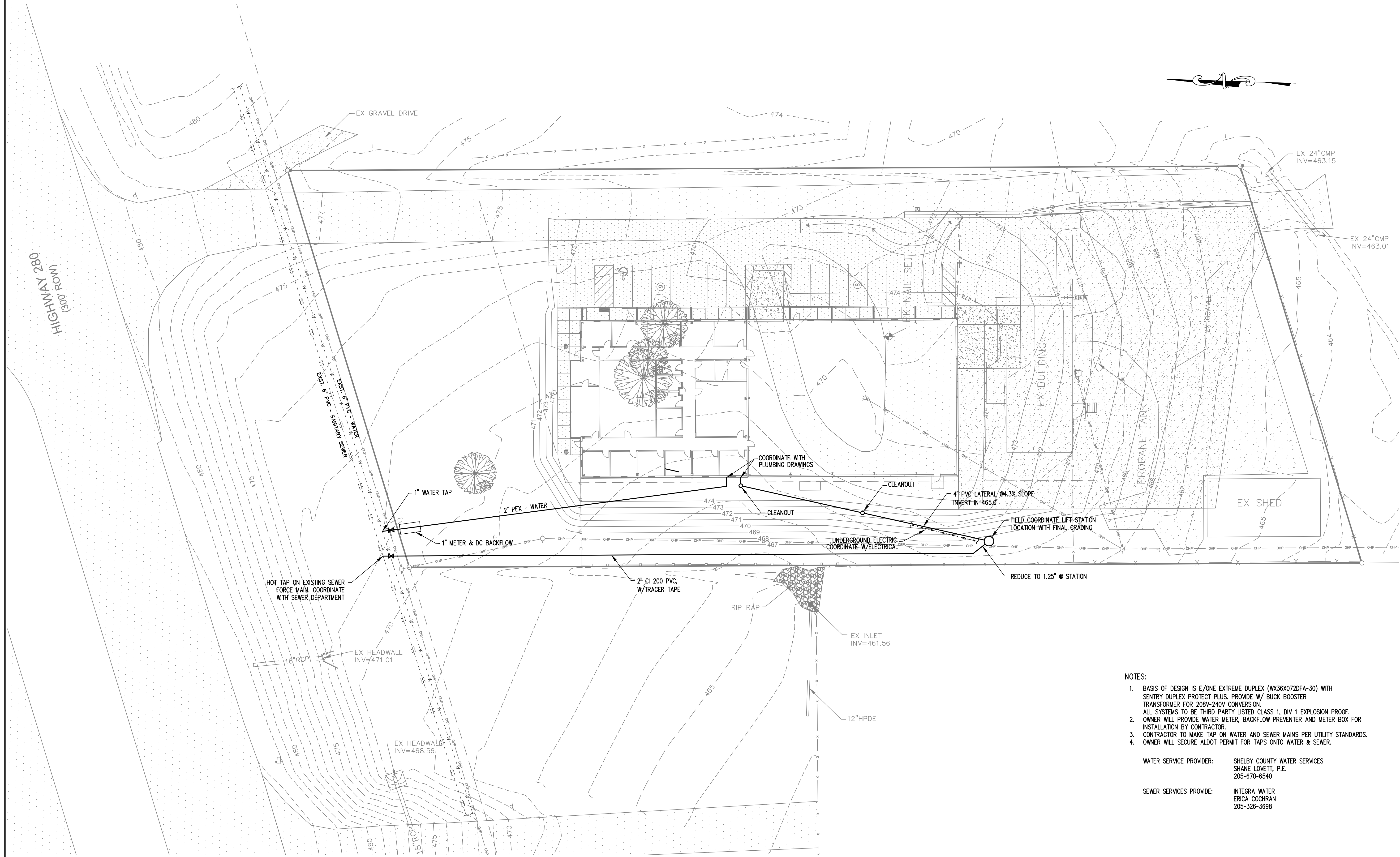
EVERGRATE TRENCH DRAIN CONNECTION:
Fits Evergrate Trench Drain Sizes:
T-08C
T-12A
T-12C
T-14A
T-14C



EVERGRATE
Durable. Dependable. Design.
A DIVISION OF J.R. HOE

OR APPROVED EQUAL

NO.	DATE	REVISION



- NOTES:
1. BASIS OF DESIGN IS E/ONE EXTREME DUPLEX (WX36X072DFA-30) WITH SENTRY DUPLEX PROTECT PLUS. PROVIDE W/ BUCK BOOSTER TRANSFORMER FOR 208V-240V CONVERSION. ALL SYSTEMS TO BE THIRD PARTY LISTED CLASS 1, DIV 1 EXPLOSION PROOF. OWNER WILL PROVIDE WATER METER, BACKFLOW PREVENTER AND METER BOX FOR INSTALLATION BY CONTRACTOR.
 2. CONTRACTOR TO MAKE TAP ON WATER AND SEWER MAINS PER UTILITY STANDARDS.
 3. OWNER WILL SECURE ALDOT PERMIT FOR TAPS ONTO WATER & SEWER.

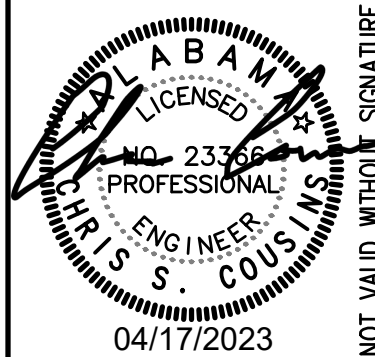
WATER SERVICE PROVIDER: SHELBY COUNTY WATER SERVICES
SHANE LOVETT, P.E.
205-670-6540

SEWER SERVICES PROVIDE: INTEGRA WATER
ERICA COCHRAN
205-326-3698

SHELBY COUNTY WATER SERVICES BUILDING

10927 US HIGHWAY 280
WESTOVER, ALABAMA 35185

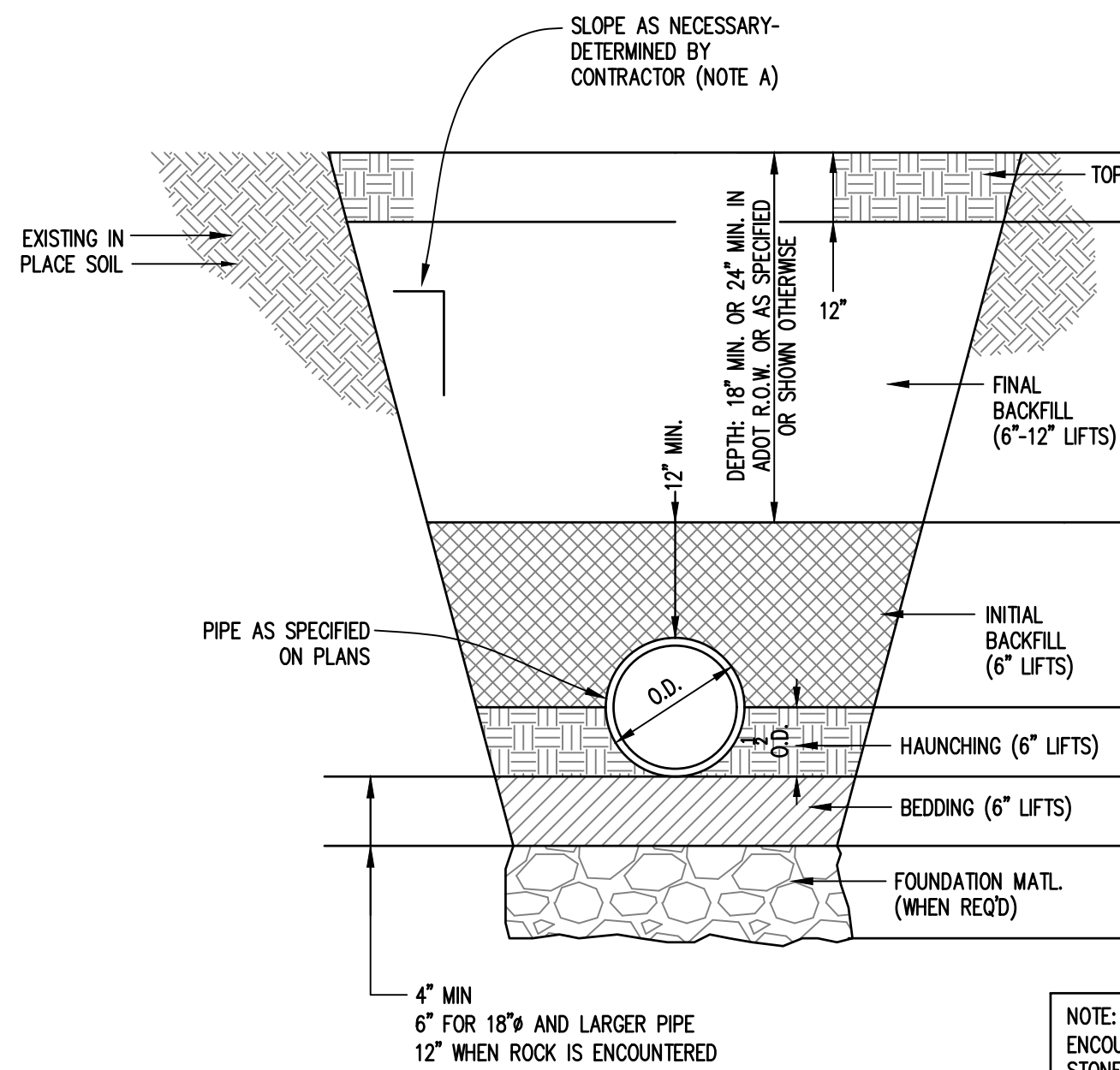
2023



NOT VALID WITHOUT SIGNATURE

BAR = 1"

Title	
UTILITY PLAN	
Drawing	
Project No.	04-03-23
Date	1" = 20'
Scale	1 of 2
Sheet	



BEDDING AND BACKFILL FOR TRENCHES DETAIL
SCALE: N.T.S.

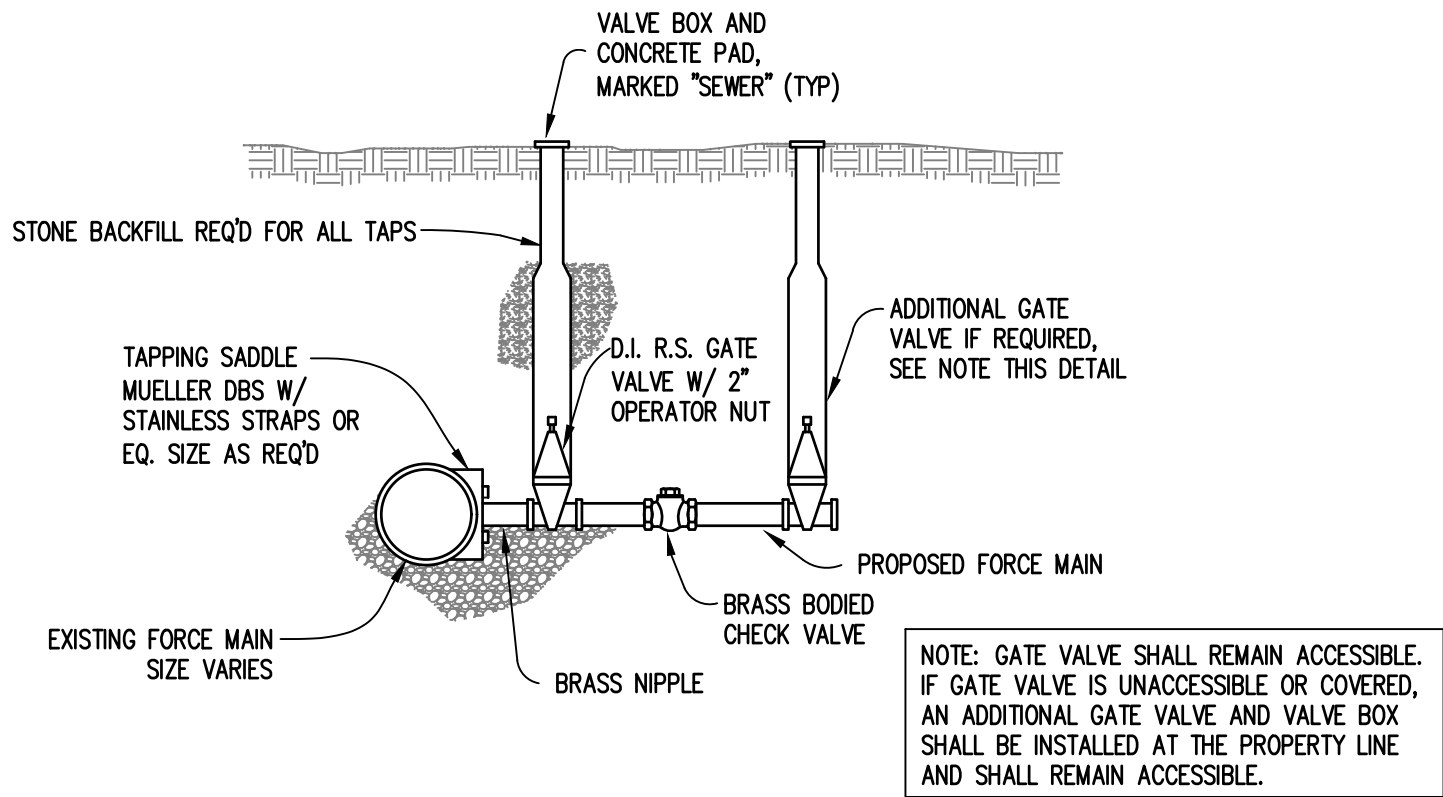
TYPE 1 AND 2 TRENCH			TYPE 3 TRENCH	TYPE 4 AND 5 TRENCHES	GRAVITY LINES			PAVED AREAS		
D.I.	CONC.	PVC			D.I.	CONC.	PVC	D.I.	CONC.	PVC
4	4	4	4	4 OR 5	4	4	4	5**	5**	5**
3	3	3	3	3	3	3	3	1**	1**	1**
2	2	2	2***	1	2	2	1	1**	1**	1**
2	2	2	2***	1	1	1	1	1**	1**	1**
2*	1*	1*	2***	1	1	1	1	1	1	1

- * BEDDING NOT REQUIRED FOR PRESSURE MAINS UNLESS IN AREAS OF ROCK EXCAVATION OR UNSUITABLE SOIL; BELL HOLES REQ'D FOR PIPES GREATER THAN 4" DIA.
- ** TEMPORARY PUG-MIX BACKFILL REQ'D UNTIL PAVEMENT PLACEMENT IS COMPLETE. IF REQ'D TO PREVENT SETTLEMENT, PUG-MIX MAY BE SUBSTITUTED FOR NO. 57 AND 67 STONE IN PAVED AREAS WITH DEEP CUTS. ALL BACKFILL UNDER PAVED AREAS SHALL BE COMPACTED TO 98% STANDARD PROCTOR DENSITY (MINIMUM).
- *** PIPE BEDDED IN 6-INCH MINIMUM LOOSE SOIL UNDER THE PIPE. BACKFILL CONSOLIDATED TO TOP OF PIPE. ALL BACKFILL IS NATIVE MATERIAL FREE OF 1" & LARGER ROCKS AND FOREIGN MATERIAL (APPROXIMATELY 80% STANDARD PROCTOR, AASHTO T-99). WHEN ROCK IS ENCOUNTERED USE 12" STONE UNDER PIPE. BELL HOLE MUST BE EXCAVATED FOR EACH JOINT OF PIPE.

- JOB SPECIFIC NOTES**
- A. FOR ALL 24" DIAMETER PIPE, A TYPE 3 PIPE TRENCH IS REQUIRED EXCEPT IN PAVED AREAS OR IF SPECIFIED OTHERWISE. IN ALL AREAS WHERE DEPTH OF COVER EXCEEDS 15 FEET, A TYPE 4/5 TRENCH IS REQUIRED.
- B. FOR ALL PIPE LESS THAN 24" IN DIAMETER, A PIPE TRENCH 1/2 IS SUFFICIENT EXCEPT IN PAVED AREAS OR IF SPECIFIED OTHERWISE. IN ALL AREAS WHERE DEPTH OF COVER EXCEEDS 10 FEET, A TYPE 3 TRENCH IS REQUIRED, UNLESS SHOWN TO BE A TYPE 4/5 TRENCH.
- C. IF PIPE DEPTH IS INDICATED SUCH THAT TRENCH TYPE CHANGES FROM THAT SHOWN IN DRAWINGS (SEE PREVIOUS NOTES), THE CONTRACTOR SHALL USE THE CORRECT TRENCH AT NO ADDITIONAL COST TO THE OWNER.

MATERIALS	DESCRIPTION
1	CRUSHED STONE, ASTM-448 NO. 57 OR 67 GRADATION
2	SELECT EXCAVATED MAT'L REASONABLY DRY (WITHIN LIMITS REQ'D FOR COMPACTION) NO STONES GREATER THAN 1" DIA.
3	EXCAVATED MAT'L REASONABLY DRY (WITHIN LIMITS REQ'D FOR COMPACTION) NO STONES GREATER THAN 12" DIA.
4	SELECT TOPSOIL MAT'L TO SUPPORT VEGETATION, NO STONES GREATER THAN 1/2" DIA.
5	CRUSHED STONE, MOIST "PUG-MIX" PER ALDOT SECTION 825

- STANDARD NOTES:**
- A. CONTRACTOR IS SOLELY RESPONSIBLE FOR COMPLYING WITH ALL APPLICABLE OSHA REGULATIONS FOR "OPEN TRENCH EXCAVATIONS".
- B. ALL MATERIALS SHALL BE COMPACTED TO MINIMUM 95% STANDARD PROCTOR DENSITY AT 2% OPTIMUM MOISTURE CONTENT TO PREVENT SETTLEMENT, UNLESS STATED OTHERWISE.



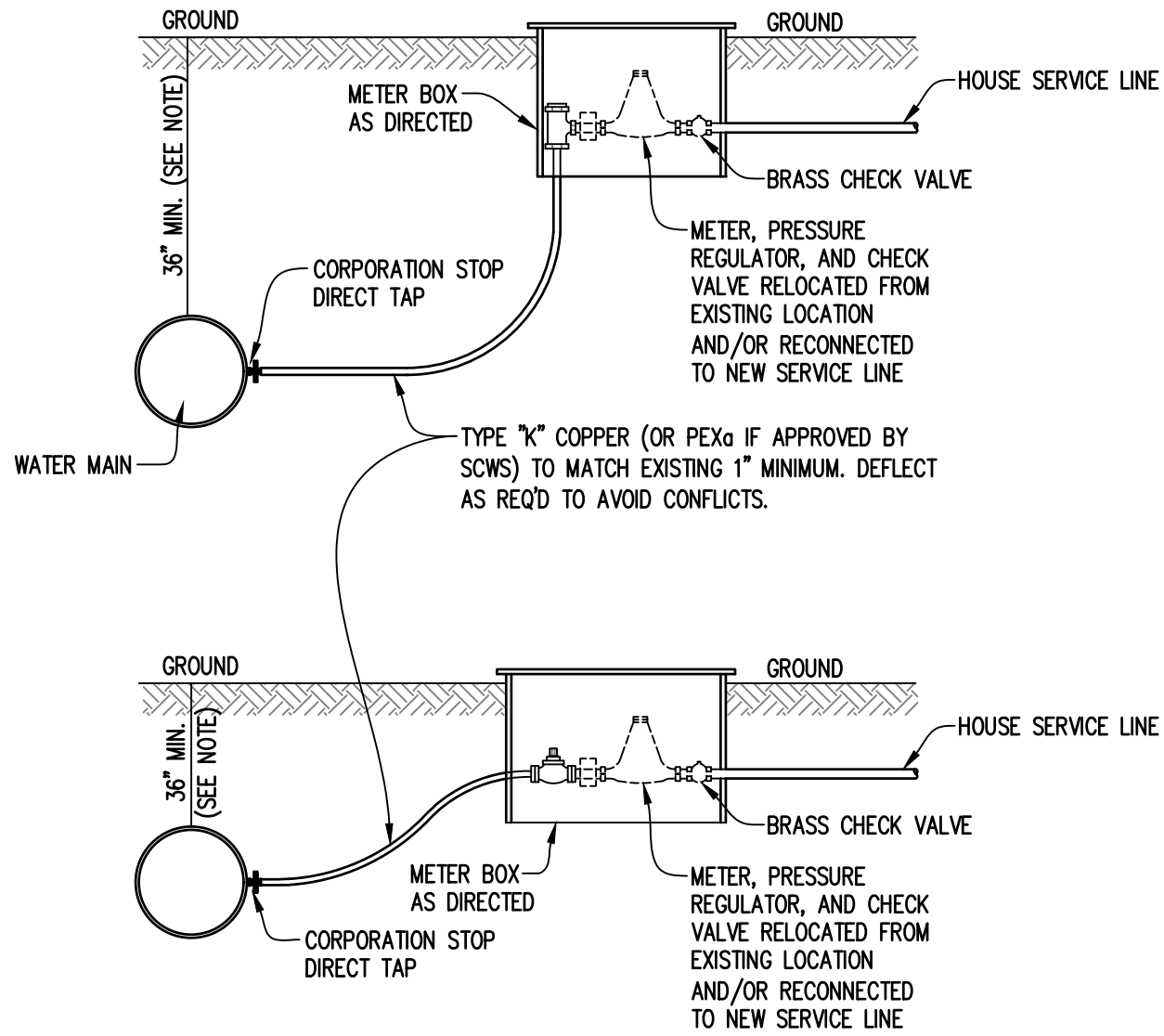
TYPICAL LESS THAN 3" HOT TAP FORCE MAIN CONNECTION
SCALE: N.T.S.

- NOTES:**
- METERS TO BE SET IMMEDIATELY OFF RIGHT OF WAY OR AT BACK OF RIGHT OF WAY.
 - SERVICE MATERIAL SHALL BE 1" TYPE K COPPER TUBING; UNLESS PEX_a IS APPROVED FOR USE BY SHELBY COUNTY WATER SERVICES. PEX_a SHALL BE MUNIPEX AS MANUFACTURED BY REHAM CONSTRUCTION, LLC. AND CONTRACTOR SHALL USE STAINLESS STEEL INSERTS AT ALL FITTINGS AND VALVES. 2" CASING SHALL BE SEALED AT EACH END.
 - NO JOINTS ALLOWED IN SERVICES. TYPICAL OF ALL SERVICES.
 - PIPE DEPTH SHALL BE MINIMUM 36" FOR SHELBY COUNTY ROW AND 48" FOR STATE ROW.
 - DIRECTIONAL BORES FOR CASINGS SHALL BE AT A MINIMUM DEPTH OF 48". CASINGS SHALL EXTEND A MINIMUM 2' BEYOND EDGE OF PAVEMENT OR CURB.
 - USAGE OF ANGLED AND STRAIGHT CURB STOPS SHALL BE AT THE DIRECTION OF SHELBY COUNTY.

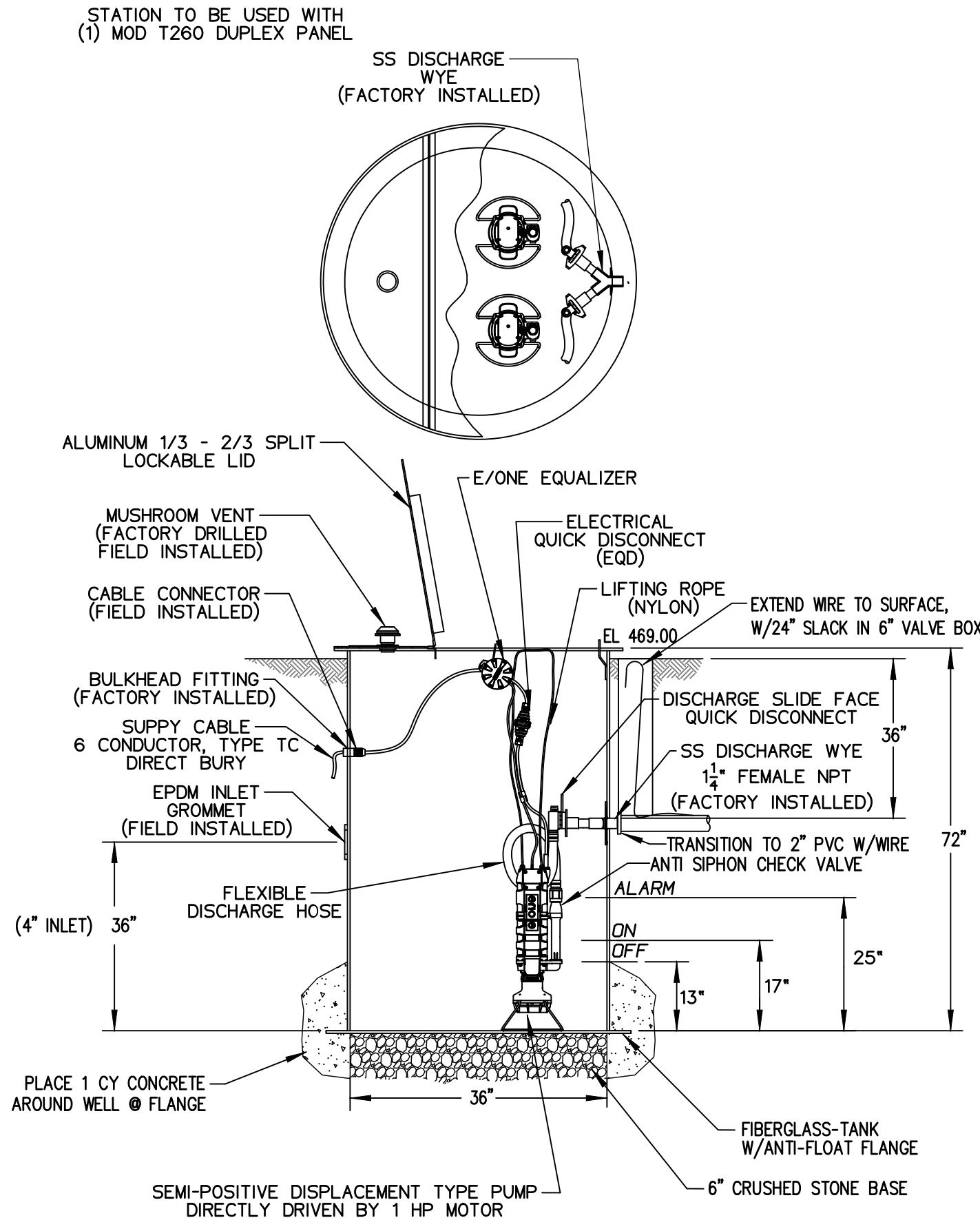
PARTIAL MATERIALS LIST:

- CORP STOPS: 1" BRASS BALL TYPE CORPORATION STOP - FORD FB10004.
- CURB STOPS: 3/4" ANGLE CURB STOP - FORD BA43-332W*
1" ANGLE CURB STOP - FORD BA43-444W*
3/4" STRAIGHT CURB STOP - FORD B43-332W*
1" STRAIGHT CURB STOP - FORD B43-444W*
- BALL VALVES: 3/4" BRASS BALL VALVE SCREW JOINT - NIBCO T580
1" BRASS BALL VALVE SCREW JOINT - NIBCO T580
- METER ADAPTORS: 3/4" METER ADAPTOR - FORD A-14
1" METER ADAPTOR - FORD A-34
- METER COUPLINGS: 3/4" BRASS METER COUPLING - FORD C38-23-2.5
1" BRASS METER COUPLING - FORD C38-44-2.625
- METER BOXES: 18" x 24" RECTANGULAR METER BOX - POLYPLASTIC NDS D-1500 DIOIR

*TO BE APPROVED BY SHELBY COUNTY PRIOR TO INSTALLATION



TYPICAL SHORTSIDE METER INSTALLATION
SCALE: N.T.S.



LIFT STATION PLAN & SECTION VIEWS
SCALE: N.T.S.

NOTE:
ALL ASSEMBLIES TO BE THIRD PARTY LISTED CLASS 1, DIV 1 EXPLOSION PROOF

1. GENERAL NOTES:

1. CODES AND SPECIFICATION
- A. GENERAL BUILDING CODE: INTERNATIONAL BUILDING CODE, 2015 EDITION.
- B. CONCRETE: BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-14).
- C. COLD-FORMED METAL FRAMING: NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, AMERICAN IRON AND STEEL INSTITUTE.
2. THE GENERAL NOTES ARE NOT A SUBSTITUTE OR A REPLACEMENT FOR THE PROJECT SPECIFICATIONS. THESE NOTES ARE INTENDED AS A GUIDE TO THE DESIGN AND/OR CONSTRUCTION REQUIREMENTS ESTABLISHED FOR THIS PROJECT. NO CONTRACTOR SHOULD ATTEMPT TO DESIGN, BID, OR CONSTRUCT ANY PORTION OF THE WORK HEREIN WITHOUT CONSULTING THE PROJECT SPECIFICATIONS. THE MORE STRINGENT REQUIREMENT SHALL APPLY WHERE CONFLICTS OCCUR BETWEEN THESE NOTES AND THE SPECIFICATIONS, UNLESS A WRITTEN CLARIFICATION IS ISSUED BY THE STRUCTURAL ENGINEER.
3. STRUCTURAL DRAWINGS ARE INTENDED TO BE USED IN CONJUNCTION WITH THE DRAWINGS OF OTHER CONSULTANTS AND TRADES. THE CONTRACTOR SHALL COORDINATE THE VARIOUS REQUIREMENTS.
4. DO NOT SCALE THESE DRAWINGS.
5. ALL DETAILS SHOWN ARE TYPICAL. SIMILAR DETAILS APPLY TO SIMILAR CONDITIONS, UNLESS NOTED.

2. SPECIAL INSPECTIONS: (BY TESTING AGENCY):

1. SPECIAL INSPECTOR (SI) SHALL BE RETAINED AND PAID BY THE OWNER.
2. THE SPECIAL INSPECTOR SHALL BE FULLY QUALIFIED, APPROVED BY THE BUILDING OFFICIAL, REGISTERED BY APPLICABLE REGISTRATION BOARD IF REQUIRED AND ACCEPTABLE TO THE ARCHITECT.
3. THE DUTIES OF THE SPECIAL INSPECTOR SHALL INCLUDE, BUT ARE NOT LIMITED TO, VERIFICATION OF CONSTRUCTION QUALITY CONTROL, TESTING, COMPLIANCE WITH THE CONSTRUCTION DOCUMENTS, BUILDING CODE REQUIREMENTS, AND LOCAL BUILDING DEPARTMENT REQUIREMENTS.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO PROVIDE PROPER NOTIFICATION TO THE SPECIAL INSPECTOR AND PROCEED WITH THE CONSTRUCTION ONLY AFTER THE SPECIAL INSPECTOR'S REVIEW AND APPROVAL.
5. SPECIAL INSPECTOR'S SHALL KEEP RECORDS OF ALL INSPECTIONS AND TESTING. THE SPECIAL INSPECTOR SHALL FURNISH INSPECTION OF REPORTS TO THE CODE OFFICIAL, AND TO THE REGISTERED DESIGN PROFESSIONAL OF RECORD. ALL DISCREPANCIES SHALL BE BROUGHT TO THE IMMEDIATE ATTENTION OF THE CONTRACTOR FOR CORRECTION. IF THE DISCREPANCIES ARE NOT CORRECTED, THE DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE CODE OFFICIAL AND THE DESIGN PROFESSIONAL OF RECORD. A FINAL REPORT OF INSPECTIONS DOCUMENTING COMPLETION OF ALL REQUIRED SPECIAL INSPECTION AND CORRECTION OF ANY DISCREPANCIES NOTED IN THE INSPECTIONS SHALL SUBMITTED PRIOR TO THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY. INTERIM REPORTS SHALL BE SUBMITTED PERIODICALLY WITH MINIMUM FREQUENCY OF TWO WEEKS.
6. SPECIAL INSPECTIONS ARE REQUIRED FOR, BUT NOT LIMITED TO, THE ACTIVITIES AS INDICATED IN THE 2015 INTERNATIONAL BUILDING CODE.
7. FAILURE TO NOTIFY THE SPECIAL INSPECTOR MAY RESULT IN THE CONTRACTOR HAVING TO REMOVE WORK FOR THE PURPOSE OF INSPECTION AT THE CONTRACTOR'S EXPENSE.
8. PREMATURE NOTIFICATION FOR INSPECTIONS WILL RESULT IN AN ADDITIONAL INSPECTION WITH THE EXPENSES AND FEES PAID BY THE CONTRACTOR.

3. DESIGN LOADS:

1. DEAD LOADS:
ANY CHANGES IN CONSTRUCTION MATERIALS FROM THOSE SHOWN ON THE ARCHITECTURAL OR STRUCTURAL DRAWINGS SHALL BE REPORTED BY THE GENERAL CONTRACTOR TO THE STRUCTURAL ENGINEER FOR VERIFICATION OF LOAD-CARRYING CAPACITY OF THE STRUCTURE.
2. LIVE LOADS (PSF):
ROOF-----20
MEZZANINE-----150
3. SNOW LOAD:
A) GROUND SNOW LOAD (Pg.)-----5 PSF
B) IMPORTANCE FACTOR (I)-----1.0
C) EXPOSURE FACTOR (Ce)-----1.0
D) THERMAL FACTOR (Ct)-----1.0
4. WIND LOADS:
A. BASIC WIND SPEED (3-SECOND GUST)-----115 MPH
B. IMPORTANCE FACTOR-----1.0
C. WIND EXPOSURE-----C
D. INTERNAL PRESSURE COEFFICIENT-----+/- 0.18
- COMPONENTS AND CLADDING WIND SERVICE PRESSURES MAIN BUILDING:
A. DISTANCE A - 14 FEET
B. WALL PRESSURES:
END ZONES (REGIONS WITHIN DISTANCE "A" OF WALL EDGE):
EFFECTIVE WIND AREA = ≤ 10 SQ FT. ---29.7 PSF
EFFECTIVE WIND AREA = 20 SQ FT. ---27.8 PSF
EFFECTIVE WIND AREA = 50 SQ FT. ---25.0 PSF
EFFECTIVE WIND AREA = 100 SQ FT. ---23.1 PSF
EFFECTIVE WIND AREA = 200 SQ FT. ---21.3 PSF
EFFECTIVE WIND AREA = ≥ 500 SQ FT. ---18.4 PSF
INTERIOR ZONES (REGIONS OTHER THAN END ZONES):
EFFECTIVE WIND AREA = ≤ 10 SQ FT. ---24.1 PSF
EFFECTIVE WIND AREA = 20 SQ FT. ---23.1 PSF
EFFECTIVE WIND AREA = 50 SQ FT. ---22.2 PSF
EFFECTIVE WIND AREA = 100 SQ FT. ---20.3 PSF
EFFECTIVE WIND AREA = 200 SQ FT. ---19.4 PSF
EFFECTIVE WIND AREA = 500 SQ FT. ---18.4 PSF
5. SEISMIC LOADS:
A. SEISMIC IMPORTANCE FACTOR (Ie)-----1.0
B. MAPPED SPECTRAL RESPONSE ACCELERATIONS:
Ss-----0.249
S1-----0.101
C. SITE CLASS-----C
D. SPECTRAL RESPONSE COEFFICIENTS:
Sds-----0.256
Sd1-----0.099
E. SEISMIC DESIGN CATEGORY-----B
F. BASIC SEISMIC-FORCE RESISTING SYSTEMS:
OTHER INFORMATION BY PEMB

4. SUBMITTALS:

1. ALL SHOP DRAWINGS MUST BE REVIEWED FOR 'APPROVAL' AND STAMPED BY THE GENERAL CONTRACTOR PRIOR TO SUBMITTAL.
2. SUBMIT EACH SET OF SHOP DRAWINGS ON THREE PRINTS ONLY. ONE PRINT WILL BE RETURNED TO THE CONTRACTOR. ALL PRINTS REQUIRED BY THE CONTRACTOR ARE THE RESPONSIBILITY OF THE CONTRACTOR AND SHOULD BE MADE AFTER APPROVED SHOP DRAWINGS ARE RETURNED. ALL ADDITIONAL PRINTS THAT ARE SUBMITTED WILL BE RETURNED UNMARKED.
3. THE GENERAL CONTRACTOR SHALL SUBMIT FOR ENGINEER REVIEW SHOP DRAWINGS FOR THE FOLLOWING ITEMS. ITEMS MARKED (**) SHALL HAVE SHOP DRAWINGS SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED. ITEMS MARKED (#) SHALL BE SUBMITTED FOR ENGINEER'S RECORD ONLY.
- A. REINFORCING STEEL
B. CONCRETE MIX DESIGN
C. PRE-ENGINEERED METAL BUILDING (**)
D. COLD-FORMED METAL FRAMING (**)#
4. DESIGN CALCULATIONS: THE GENERAL CONTRACTOR SHALL SUBMIT FOR ENGINEER'S REVIEW TWO SETS OF DESIGN CALCULATIONS SEALED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE IN WHICH THE PROJECT IS LOCATED, FOR THE FOLLOWING ITEMS:
- A. PEMB
B. COLD FORMED METAL FRAMING

5. FOUNDATION NOTES:

1. GEOTECHNICAL REPORT: FOUNDATION DESIGN IS BASED ON THE GEOTECHNICAL REPORT BY: TERRACON CONSULTANTS, INC., BIRMINGHAM, AL TITLED "SHELBY COUNTY WATER SERVICES BUILDING GEOTECHNICAL ENGINEERING REPORT, WESTOVER, ALABAMA TERRACON PROJECT NUMBER: E1235030. THE GENERAL CONTRACTOR SHALL OBTAIN A COPY OF THE GEOTECHNICAL REPORT FROM THE OWNER AND FOLLOW ALL REQUIREMENTS WITHIN THE RECOMMENDATIONS SECTION.
2. ASSUMED MAXIMUM BEARING PRESSURES (PSF):
COLUMN FOOTINGS-----2500
CONTINUOUS FOOTINGS-----2500
3. ALL FOUNDATION BEARING SURFACES SHALL BE REVIEWED BY THE GEOTECHNICAL ENGINEER PRIOR TO PLACING CONCRETE TO INSURE THEIR COMPLIANCE WITH PRESSURES NOTED. ALL BOTTOM ELEVATIONS ARE ESTIMATED AND MAY BE ADJUSTED IN THE FIELD BY THE GEOTECHNICAL ENGINEER.
4. ALL AREAS TO HAVE SLABS ON GRADE SHALL BE PROOF ROLLED IN ACCORDANCE WITH THE GEOTECHNICAL REPORT UNDER OBSERVATION OF THE GEOTECHNICAL ENGINEER AND APPROVED PRIOR TO PREPARATION FOR CONCRETE PLACEMENT.
5. COMPACTED FILL WITHIN THE BUILDING AREA SHALL MEET THE REQUIREMENTS RECOMMENDED BY GEOTECHNICAL ENGINEER. FLOOR SLABS TO HAVE A MINIMUM OF 4" OF STONE BASE. MODULUS OF SUBGRADE REACTION = 100 PCI.

6. CONCRETE NOTES:

1. CONCRETE COMPRESSIVE STRENGTH AT 28 DAYS:
4000 PSI --- NORMAL WT. --- UNLESS NOTED.
2. CONCRETING OPERATIONS SHALL COMPLY WITH ACI STANDARDS.
3. EARTH SUPPORTED SLABS:
TYPICAL 5" THICK, REINFORCED WITH 24 POUNDS PER CUBIC YARD OF FIBER FIBRE TI-60 TYPE 1 STEEL FIBERS.
WAREHOUSE: 8" THICK, REINFORCED WITH 24 POUNDS PER CUBIC YARD OF FIBER FIBRE TI-60 TYPE 1 STEEL FIBERS. PROVIDE 4" OF COMPACTED, GRANULAR MATERIAL SUCH AS CRUSHED STONE, GRAVEL, OR CLEAN SAND AS SPECIFIED IN THE GEOTECHNICAL REPORT.
4. SLABS TO MEET FLOOR FLATNESS LEVELNESS CRITERIA OF FF 35/FL 25 AND MINIMUM LOCAL VALUES OF FF MIN 24/FL MIN 17.

7. REINFORCING STEEL NOTES:

1. REINFORCING BARS: ASTM A615 GRADE 60.
2. WELDED WIRE FABRIC (WVF): ASTM A185. MINIMUM LAP AND EMBEDMENT TO BE THE GREATER OF ONE CROSS WIRE SPACING PLUS 2 INCHES OR 6 INCHES.
3. REINFORCING BAR PLACING ACCESSORIES IN ACCORDANCE WITH ACI MANUAL OF STANDARD PRACTICE. WHERE CONCRETE IS EXPOSED IN FINISHED BUILDING, PROVIDE ACCESSORIES WITH RUSTPROOF LEGS.
4. DETAIL REINFORCEMENT IN ACCORDANCE WITH ACI 315. REINFORCEMENT SHALL NOT BE WELDED UNLESS NOTED OR APPROVED BY THE ENGINEER.
5. ALL SPLICES SHALL BE CLASS 'B' TENSION LAP SPlice, UNLESS NOTED.
6. ALL REINFORCING MARKED 'CONTINUOUS' SHALL BE SPLICED WITH CLASS 'B' TENSION LAP SPlice, UNLESS NOTED.
7. PROVIDE CORNER BARS WITH CLASS 'B' LAP SPlice AT ALL FOUNDATION INTERSECTIONS AND CORNERS.
8. CONCRETE COVERAGE OF REINFORCEMENT:-----3" BOTTOM & SIDES
9. FIELD BENDING OF CONCRETE REINFORCING STEEL IS NOT PERMITTED WITHOUT WRITTEN APPROVAL OF THE STRUCTURAL ENGINEER.

8. PREFABRICATED METAL BUILDING NOTES:

1. METAL BUILDING MANUFACTURER SHALL BE A MEMBER OF METAL BUILDING MANUFACTURERS ASSOCIATION (MBMA) AND BE ACCREDITED BY INTERNATIONAL ACCREDITATION SERVICES (IAS). METAL BUILDING MANUFACTURER SHALL PROVIDE IAS ACCREDITATION DOCUMENTATION TO THE ARCHITECT.
2. METAL BUILDING SHALL BE DESIGNED IN ACCORDANCE WITH 'THE METAL BUILDING MANUFACTURERS ASSOCIATION'S DESIGN PRACTICES MANUAL.'
3. ANCHOR BOLTS: F1554 GRADE 55 AND HEAVY HEX NUT.
4. HEADED ANCHOR ROD SIZE, TOTAL LENGTH, AND LOCATION BY METAL BUILDING SUPPLIER. SEE TYPICAL DETAILS FOR ANCHOR ROD EMBEDMENT LENGTH. HEADED ANCHOR RODS SHALL BE PURCHASED AND INSTALLED BY THE CONTRACTOR. ANCHOR ROD INSTALLATION TOLERANCES, HOLE SIZES IN BASE PLATES, AND PLATE WASHERS TO BE COORDINATED BETWEEN METAL BUILDING SUPPLIER AND CONTRACTOR INSTALLING ANCHOR RODS.
5. BEFORE FOOTING INSTALLATION, THE HEADED ANCHOR RODS EMBEDMENT LENGTHS MUST BE VERIFIED. THE FOOTING DEPTH SHALL BE THE SCHEDULED DEPTH OR THE HEADED ANCHOR ROD EMBEDMENT LENGTH PLUS 3 INCHES, WHICHEVER IS GREATER.
6. HORIZONTAL FORCE TRANSFER FROM METAL BUILDING COLUMN BASE TO CONCRETE IS THE RESPONSIBILITY OF THE METAL BUILDING SUPPLIER.
7. METAL BUILDING SUPPLIER TO VERIFY COLUMN LAYOUT. ANY CHANGES MUST BE SUBMITTED FOR REVIEW OF FOUNDATION DESIGN BEFORE CONSTRUCTION STARTS.
8. GRAVITY DESIGN LOADS:
A. LIVE LOAD: 20 PSF (REDUCIBLE AT RIGID FRAME RAFTERS AND COLUMNS ONLY)
B. DEAD LOAD: WEIGHT OF STRUCTURE
C. COLLATERAL LOAD: 5 PSF (INCLUDES ITEMS SUCH AS SPRINKLERS, MECHANICAL DUCT, ELECTRICAL SYSTEMS, CEILING AND LIGHTS)
9. DEFLECTION LIMITS FOR MEMBERS:
A. ROOF PURLINS AND RAFTERS:
1. DL SPAN/180
2. LL SPAN/180
3. TL SPAN/120
B. SPANDREL BEAMS:
1. HORIZONTAL DEFLECTION: SPAN/240
C. OVERALL BUILDING DRIFT:
1. MAXIMUM ALLOWABLE DRIFT OF H/240.
2. H IS THE BUILDING EAVE HEIGHT.
D. DEFLECTION AND DRIFT LIMITS ARE TO BE CONSIDERED WITH A 10 YEAR WIND OCCURRENCE.
E. DEFLECTION AND DRIFT DUE TO SEISMIC LOADS SHOULD BE LIMITED IN ACCORDANCE WITH THE BUILDING CODE.
10. ROOF PURLINS MUST BE CAPABLE OF RESISTING NET WIND PRESSURES (IN OR OUT) ASSUMING INTERIOR FLANGE UNBRACED EXCEPT WHERE FLANGE BRACING IS PROVIDED.

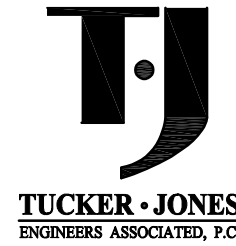
11. THE METAL BUILDING MANUFACTURER WILL BE RESPONSIBLE FOR COMPLETE DESIGN OF THE METAL BUILDING STRUCTURAL FRAME (INCLUDING LATERAL LOADS) DOWN TO THE FOUNDATION. THE DESIGN SHALL BE PERFORMED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.
12. BEFORE FOUNDATION DESIGN AND INSTALLATION, METAL BUILDING SUPPLIER SHALL SUBMIT DESIGN LOADS AND COLUMN REACTIONS TO THE STRUCTURAL ENGINEER AND ARCHITECT FOR REVIEW.
13. METAL BUILDING DESIGN CALCULATION COVER SHEET AND ALL METAL BUILDING SHOP DRAWINGS AND ERECTION DRAWINGS SHALL BE SEALED AND SIGNED BY THE MANUFACTURER'S PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.
14. ALL CONNECTIONS OF THE STRUCTURAL STEEL MEMBERS TO THE METAL BUILDING SHALL BE DESIGNED BY THE METAL BUILDING SUPPLIER TO RESIST THE FORCES INDICATED ON THE DRAWINGS. CALCULATIONS FOR THESE CONNECTIONS STAMPED BY A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED.
15. ALL COLUMNS SHALL BE ANALYZED AND DESIGNED AS HAVING PINNED BASES.
16. EXCEPT AS OTHERWISE APPROVED BY ARCHITECT, STRUCTURAL CLEARANCES SHALL BE MAINTAINED AS INDICATED IN THE CONSTRUCTION DOCUMENTS.
17. STANDING SEAM STEEL DECK SHALL NOT BE CONSIDERED AS PROVIDING DIAPHRAGM RESISTANCE FOR LATERAL WIND LOADS.
18. ALL DEVIATIONS FOR THE CONSTRUCTION DOCUMENTS ARE SUBJECT TO APPROVAL BY THE ARCHITECT AND STRUCTURAL ENGINEER. ALL DEVIATIONS SHALL BE EXPRESSLY LISTED AND DEFINED IN THE SHOP DRAWING SUBMITTAL. ARCHITECT AND STRUCTURAL ENGINEER ARE NOT RESPONSIBLE FOR DISCOVERY OF DEVIATIONS NOT LISTED, AND APPROVAL OF UNLISTED DEVIATIONS SHALL NOT BE IMPLIED.
19. ALL EXTERIOR EXPOSED METAL BUILDING STEEL SHALL BE PAINTED. SEE ARCHITECTURAL DRAWINGS FOR PAINT REQUIREMENTS.

9. STEEL DECK NOTES:

1. DECK PROPERTIES AND ATTACHMENTS SHALL BE IN ACCORDANCE WITH THE STEEL DECK INSTITUTE.
2. DECK SHALL BE CONTINUOUS OVER THREE OR MORE SPANS.
3. FORM DECK: 3 1/2" CONC ON 9/16", 24 GA, NON-COMPOSITE STEEL FORM DECK (4" TOTAL THICKNESS) WITH 6X6W21/W21 WWR AT MID-DEPTH TO BE CONFIRMED BY PEMB MANUFACTURER.
4. LIGHT GAGE METAL FRAMING, SUSPENDED CEILINGS, LIGHT FIXTURES AND DUCTS OR OTHER UTILITIES SHALL NOT BE SUPPORTED BY THE METAL ROOF DECK.

10. COLD-FORMED METAL FRAMING NOTES:

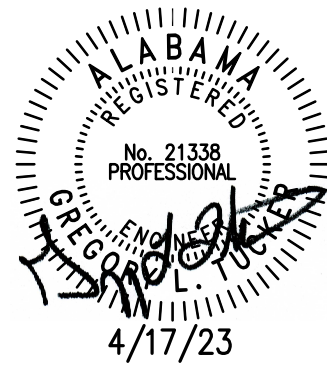
1. ALL MEMBERS SHALL BE DESIGNED IN ACCORDANCE WITH THE NORTH AMERICAN SPECIFICATION FOR THE DESIGN OF COLD-FORMED STEEL STRUCTURAL MEMBERS, AMERICAN IRON AND STEEL INSTITUTE.
2. ALL FRAMING MEMBERS SHALL BE FORMED FROM CORROSION-RESISTANT STEEL, CORRESPONDING TO THE REQUIREMENTS OF ASTM A446, WITH A MINIMUM YIELD STRENGTH OF 33 KSI OR 50 KSI AS INDICATED.
3. ALL MEMBERS SHOWN ARE STANDARD DESIGNATIONS OF THE STEEL STUD MANUFACTURERS ASSOCIATION (SSMA).
4. DESIGN OF MEMBERS INDICATED IN STRUCTURAL DRAWINGS IS BASED ON MINIMUM PROPERTIES OF PRODUCTS PRODUCED BY DIETRICH INDUSTRIES, INC. NO SUBSTITUTION OF MATERIALS IS ACCEPTABLE FOR USE WITHOUT PRIOR APPROVAL OF THE STRUCTURAL ENGINEER. SUBSTITUTIONS ARE ACCEPTABLE, SUBJECT TO APPROVAL OF THE STRUCTURAL ENGINEER AND SHALL MEET OR EXCEED ALL PROPERTIES OF PRODUCTS PRODUCED BY THE STEEL STUD MANUFACTURERS ASSOCIATION (SSMA).
5. FABRICATOR IS RESPONSIBLE FOR THE DESIGN AND DETAILING OF ALL LIGHTGAGE STEEL FRAMING AND SHALL RETAIN A PROFESSIONAL ENGINEER REGISTERED IN THE STATE WHERE THE PROJECT IS LOCATED. THE ENGINEER SHALL SEAL AND SIGN BOTH CALCULATIONS AND SHOP DRAWINGS. GENERALLY, CONNECTIONS SHOWN ON THE DRAWINGS ARE SCHEMATIC AND ARE INTENDED ONLY TO SHOW THE RELATIONSHIP OF THE MEMBERS AND INFORMATION FOR PRICING/BIDDING.
6. SUBMIT CALCULATIONS AND SHOP DRAWINGS FOR DETAILS, FABRICATION, AND ERECTION OF LIGHTGAGE STEEL FRAMING DRAWINGS SHALL INCLUDE LAYOUT, SPACING, TYPE, MATERIAL/MEMBER PROPERTIES AND ALL DETAILS OF CONNECTIONS FOR ALL LIGHTGAGE STEEL FRAMING INDICATED ON THE STRUCTURAL DRAWINGS.
7. SHOP DRAWINGS SHALL BE REVIEWED BY THE CONTRACTOR PRIOR TO SUBMISSION. DRAWINGS SHALL BEAR THE CONTRACTOR'S APPROVAL STAMP ACCEPTING RESPONSIBILITY FOR DIMENSIONS, QUANTITIES AND COORDINATION WITH THE OTHER TRADES.
8. ALL FRAMING COMPONENTS SHALL BE CUT SQUARELY FOR ATTACHMENT TO PERPENDICULAR MEMBERS OR AS REQUIRED FOR AN ANGULAR FIT TIGHT AGAINST ABUTTING MEMBERS.
9. AXIALLY LOADED STUDS SHALL BE INSTALLED IN A MANNER WHICH WILL ASSURE THAT THEIR ENDS ARE POSITIONED TIGHT AGAINST THE INSIDE OF RUNNER WEBS PRIOR TO FASTENING. PROVIDE WEAK-AXIS HORIZONTAL BRACING AT 36 INCHES MAXIMUM VERTICAL SPACING, BOTH STUD FLANGES. HORIZONTAL BRACING SHALL BE 1-1/2" X 20 GA STRAPS AND CS TYPE RUNNER SOLID BRIDGING AT EACH END OF WALL, ADJACENT TO WALL OPENINGS, AND 8'-0" O/C MAXIMUM.
10. WHERE STUD FRAME TO STRUCTURAL FLOOR OR ROOF MEMBERS SUBJECT TO DEFLECTION FROM OCCUPANT LIVE LOADING, A DEFLECTION CLIP ASSEMBLY SHALL BE PROVIDED AT THE TOP RUNNER TO ACCOMMODATE VERTICAL STRUCTURAL MOVEMENT.
11. FASTENING OF COMPONENTS SHALL BE BY SELF-DRILLING SCREWS OR BY WELDING AS DEFINED BELOW U.N.C. ON THE DRAWINGS.
12. SCREWED CONNECTIONS:
A. SCREWS SHALL BE TYPE S-12 OR TYPE S-4 FOR ALL FRAMING MEMBERS PER MANUFACTURER'S RECOMMENDATIONS.
B. A MINIMUM OF THREE (3) EXPOSED THREADS SHALL PENETRATE THROUGH ALL JOINED MATERIALS.
C. CORROSION-RESISTANT CADMIUM-PLATED SCREWS SHALL BE USED FOR SCREWS ATTACHING METAL LATH, MASONRY TIES, AND OTHER EXTERIOR MATERIALS.
13. CUTTING OF STEEL FRAMING MEMBERS MAY BE DONE WITH A SAW OR CUTTING SHEARS. TORCH CUTTING OF LOAD BEARING MEMBERS IS NOT PERMITTED.
14. COMPLETE, UNIFORM, AND LEVEL BEARING SUPPORT SHALL BE PROVIDED FOR THE BOTTOM RUNNER. AT SPLICES WHERE SUPPORT IS NOT COMMON TO BOTH RUNNERS, EITHER BUTT WELD RUNNERS OR USE A STUD SECTION INSERTED IN THE RUNNER AS A SPLICING MEMBER ATTACHED PER MANUFACTURER'S RECOMMENDATIONS. RUNNER INTERSECTIONS SHALL BUTT EVENLY.
15. SPACING OF STUDS SHALL HAVE A TOLERANCE OF 1/8" FROM THAT SHOWN ON THE DRAWINGS, PROVIDING THAT THE CUMULATIVE ERROR DOES NOT EXCEED THE REQUIREMENTS OF OTHER MATERIALS OR CONSTRUCTION.
16. ALIGNMENT OF STUDS (PLUMBNESS) AND WALLS (STRAIGHTNESS) SHALL BE WITHIN 1/960TH OF THEIR RESPECTIVE HEIGHTS AND LENGTHS.
17. STUDS SHALL BE PLUMBED ALIGNED AND SECURELY ATTACHED TO BOTH TOP AND BOTTOM RUNNERS. SPLICES IN STUDS ARE NOT PERMITTED.
18. TEMPORARY BRACING WHERE REQUIRED, SHALL BE PROVIDED UNTIL ERECTION IS COMPLETED.
19. WHERE MANUFACTURER'S RECOMMENDATIONS FOR ERECTION, ATTACHMENT, ASSEMBLY, BRACING ALIGNMENT OR OTHER REQUIREMENTS ARE MORE STRINGENT THAN INDICATED IN THESE DRAWINGS OR THE PROJECT SPECIFICATIONS, THE MANUFACTURER'S RECOMMENDATIONS SHALL APPLY.



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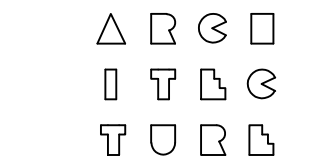
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Stephen Coker Architect LLC



Not Valid for Construction
without Registration Seal

Shelby County Water Services Building
10927 US Highway 280
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DRAWING DATE	4-17-23
DRAWN BY	WCE
PROJECT NO.	220621

GENERAL NOTES

SHEET NO.	S1
OF	SHEETS

2015 IBC - SCHEDULE OF SPECIAL INSPECTION SERVICES

MATERIAL/ACTIVITY	EXTENT	INSTRUCTIONS/FREQUENCY
INSPECTION OF FABRICATORS (IBC 1704.2.5)		
VERIFY FABRICATION/QUALITY CONTROL PROCEDURES	PERIODIC	PERFORM IN-PLANT REVIEW OF FABRICATOR QUALITY CONTROL PROCEDURES FOR COMPLETENESS AND ADEQUACY RELATIVE TO THE FABRICATOR'S SCOPE OF WORK WHERE FABRICATION OF STRUCTURAL, LOAD-BEARING OR LATERAL LOAD-RESISTING MEMBERS OR ASSEMBLIES IS BEING CONDUCTED ON THE FABRICATOR'S PREMISES.
STEEL CONSTRUCTION (IBC 1705.2)		
MATERIAL VERIFICATION OF STRUCTURAL STEEL	PERIODIC	PERFORM SHOP AND FIELD INSPECTION.
VERIFY DIAMETER, GRADE, TYPE, LENGTH, AND EMBEDMENT OF ANCHOR RODS FOR CONFORMANCE WITH CONSTRUCTION DOCUMENTS	CONTINUOUS	
VERIFY MEMBER LOCATIONS, BRACES, STIFFENERS, AND APPLICATION OF JOINT DETAILS AT EACH CONNECTION COMPLY WITH CONSTRUCTION DOCUMENTS	CONTINUOUS	
CONCRETE CONSTRUCTION (IBC 1705.3 AND IBC TABLE 1705.3)		
INSPECT REINFORCEMENT, INCLUDING PRESTRESSING TENDONS, AND VERIFY PLACEMENT.	PERIODIC	REFERENCE ACI 318 CH. 20, 25.2, 25.3, 26.5.1-26.5.3 AND IBC 1908.4
INSPECT ANCHORS CAST IN CONCRETE	PERIODIC	REFERENCE ACI 318: 17.8.2
INSPECT ANCHORS POST-INSTALLED IN HARDENED CONCRETE MEMBERS:		SPECIFIC REQUIREMENTS FOR SPECIAL INSPECTION SHALL BE INCLUDED IN THE RESEARCH REPORT FOR THE ANCHOR ISSUED BY AN APPROVED SOURCE IN ACCORDANCE WITH ACI 318: 17.8.2 OR OTHER QUALIFICATION PROCEDURES. WHERE NOT PROVIDED, CONSULT WITH REGISTERED DESIGN PROFESSIONAL FOR REQUIREMENTS TO BE APPROVED BY BUILDING OFFICIAL PRIOR TO PROCEEDING.
ADHESIVE ANCHORS INSTALLED IN HORIZONTALLY OR UPWARDLY INCLINED ORIENTATIONS TO RESIST SUSTAINED TENSION LOADS	CONTINUOUS	REFERENCE ACI 318: 17.8.2.4
VERIFY USE OF REQUIRED DESIGN MIX.	PERIODIC	REFERENCE ACI 318: CH. 19, 26.4.3, 26.4.4 AND IBC 19104.1-2, 1908.2-3
PRIOR TO CONCRETE PLACEMENT, FABRICATE SPECIMENS FOR STRENGTH TESTS, PERFORM SLUMP AND AIR CONTENT TESTS, AND DETERMINE THE TEMPERATURE OF THE CONCRETE.	CONTINUOUS	REFERENCE ASTM C172, C31; ACI 318: 26.4.5, 26.12; IBC 1908.10
INSPECT CONCRETE AND SHORCRETE PLACEMENT FOR PROPER APPLICATION TECHNIQUES.	CONTINUOUS	REFERENCE ACI 318: 26.4.5 AND IBC 1908.6-7, 1908.9
VERIFY MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES.	PERIODIC	REFERENCE ACI 318: 26.4.7-9 AND IBC 1908.9
INSPECT FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS OF THE CONCRETE MEMBER BEING FORMED.	PERIODIC	REFERENCE ACI 318: 26.10.1 (B)
SOILS (IBC 1705.6)		
VERIFY MATERIALS BELOW SHALLOW FOUNDATIONS ARE ADEQUATE TO ACHIEVE THE DESIGN BEARING CAPACITY.	PERIODIC	
VERIFY EXCAVATIONS ARE EXTENDED TO PROPER DEPTH AND HAVE REACHED PROPER MATERIAL.	PERIODIC	
PERFORM CLASSIFICATION AND TESTING OF COMPACTED FILL MATERIALS.	PERIODIC	
VERIFY USE OF PROPER MATERIALS, DENSITIES AND LIFT THICKNESS DURING PLACEMENT AND COMPACTION OF COMPACTED FILL.	CONTINUOUS	
PRIOR TO PLACEMENT OF COMPACTED FILL, INSPECT SUBGRADE AND VERIFY THAT SITE HAS BEEN PREPARED PROPERLY.	PERIODIC	
STRUCTURAL OBSERVATIONS (IBC 1704.6)		
ITEM TO BE OBSERVED:		NAME OF OBSERVER:
FOOTINGS		
OTHER:		
OTHER:		
*INSPECTION AGENTS FIRM	ADDRESS	TELEPHONE NO.
1. OWNER'S TESTING AGENCY		
2.		
3.		
4.		
NOTE: THE INSPECTION AND TESTING AGENT(S) SHALL BE ENGAGED BY THE OWNER OR THE OWNER'S AGENT, AND NOT BY THE CONTRACTOR OF SUBCONTRACTOR WHOSE WORK IS TO BE INSPECTED OR TESTED. ANY CONFLICT OF INTEREST MUST BE DISCLOSED TO THE BUILDING OFFICIAL PRIOR TO COMMENCING WORK. THE QUALIFICATIONS OF THE INSPECTION AGENT(S) MAY BE SUBJECT TO THE APPROVAL OF THE BUILDING OFFICIAL.		
DATE:		
NOTES:		
1. STRUCTURAL STEEL WELDING: A. COMPLETE AND PARTIAL PENETRATION GROOVE WELDS - CONTINUOUS. B. MULTIPLE - PASS FILLET WELDS - CONTINUOUS. C. PLUG AND SLOT WELDS - CONTINUOUS. D. SINGLE - PASS FILLET WELDS < 5/16" - PERIODIC. E. DECK WELDS - PERIODIC.		
2. REINFORCING STEEL WELDING: A. VERIFICATION OF WELDABILITY - PERIODIC. B. REINFORCING STEEL RESISTING FLEXURAL AND AXIAL IN INTERMEDIATE AND SPECIAL MOMENT FRAMES AND BOUNDARY ELEMENTS IN SPECIAL WALLS OR SHEAR REINF - CONTINUOUS. C. SHEAR REINFORCEMENT - CONTINUOUS. D. OTHER REINFORCING - PERIODIC.		
3. EXCEPTIONS: SPECIAL INSPECTIONS SHALL NOT BE REQUIRED FOR: A. ISOLATED SPREAD CONCRETE FOOTINGS OF BUILDINGS THREE STORIES OR LESS ABOVE GRADE PLANE THAT ARE FULLY SUPPORTED ON EARTH OR ROCK. B. CONTINUOUS CONCRETE FOOTINGS SUPPORTING WALLS OF BUILDINGS THREE STORIES OR LESS ABOVE GRADE PLANE THAT ARE FULLY SUPPORTED ON EARTH OR ROCK WHERE: 1. FOOTINGS SUPPORT WALLS OF LIGHT-FRAME CONSTRUCTION. 2. FOOTINGS ARE DESIGNED IN ACCORDANCE WITH TABLE 1809.7. 3. THE STRUCTURAL DESIGN OF THE FOOTING IS BASED ON A SPECIFIED COMPRESSIVE STRENGTH, F'c, NO GREATER THAN 2500 POUNDS PER SQUARE INCH (PSI), REGARDLESS OF THE COMPRESSIVE STRENGTH SPECIFIED IN THE CONSTRUCTION DOCUMENTS OR USED IN THE FOOTING CONSTRUCTION. C. NONSTRUCTURAL CONCRETE SLABS SUPPORTED DIRECTLY ON THE GROUND, INCLUDING PRESTRESSED SLABS ON GRADE, WHERE THE EFFECTIVE PRESTRESS IN THE CONCRETE IS LESS THAN 150 PSI. D. CONCRETE FOUNDATION WALLS CONSTRUCTED IN ACCORDANCE WITH TABLE 1807.1.6.2. E. CONCRETE PATIOS, DRIVEWAYS AND SIDEWALKS ON GRADE.		
DEFINITIONS: PERIODIC - PART-TIME OR INTERMITTENT OBSERVATION OF WORK THAT HAS BEEN/IS BEING PERFORMED AND AT THE COMPLETION OF THE WORK. CONTINUOUS - FULL-TIME OBSERVATION OF WORK. INSPECTOR IS PRESENT IN THE AREA WHERE THE WORK IS BEING PERFORMED. OBSERVE - INSPECT THESE ITEMS ON A RANDOM/INTERMITTENT BASIS. OPERATIONS NEED NOT BE DELAYED PENDING THESE INSPECTIONS. PERFORM - PERFORM THESE TASKS FOR EACH WELDED JOINT OR MEMBER, BOLTED CONNECTION, OR STEEL ELEMENT PRIOR TO FINAL ACCEPTANCE.		

TUCKER • JONES

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REVISIONS	BY

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Stephen Coker Architect LLC



Not Valid for Construction
without Registration Seal

Shelby County Water Services Building
10927 US Highway 280
Westover, Alabama 35185

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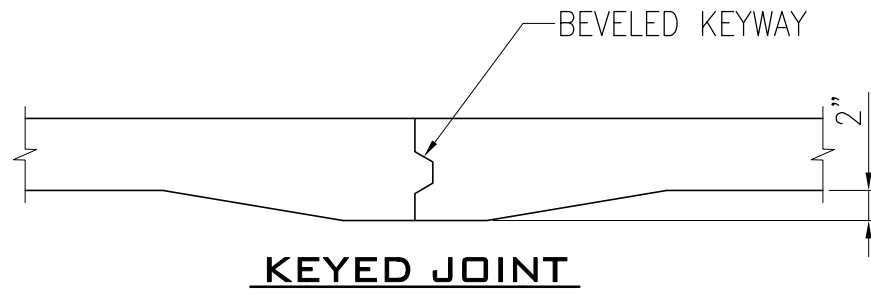
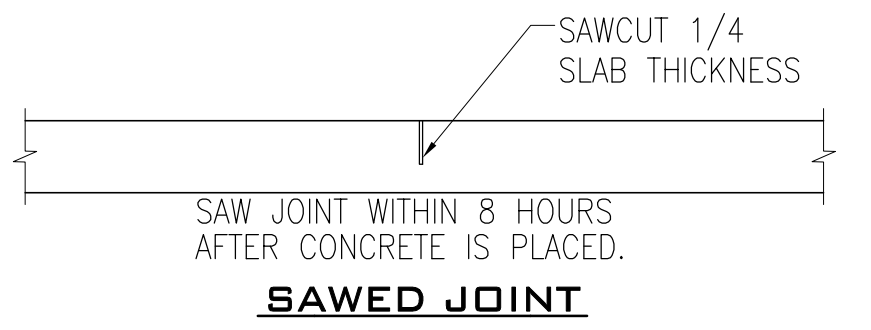
DRAWING DATE	4-17-23
DRAWN BY	WCE
PROJECT NO.	220621
SPECIAL INSPECTIONS	
SHEET NO.	
S2	
OF	SHEETS

FOOTING TENSION LAP SPLICE LENGTHS				
BAR SIZE	f'c = 3000 PSI		f'c = 4000 PSI	
	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS
#3	28"	22"	24"	19"
#4	37"	29"	32"	25"
#5	47"	36"	40"	31"
#6	56"	43"	48"	37"
#7	81"	63"	70"	54"
#8	93"	72"	80"	62"
#9	105"	81"	91"	70"
#10	118"	91"	102"	79"
#11	131"	101"	113"	87"

TOP BARS ARE HORIZONTAL REINFORCEMENT WITH MORE THAN 12" OF CONCRETE CAST BELOW THE REINF.

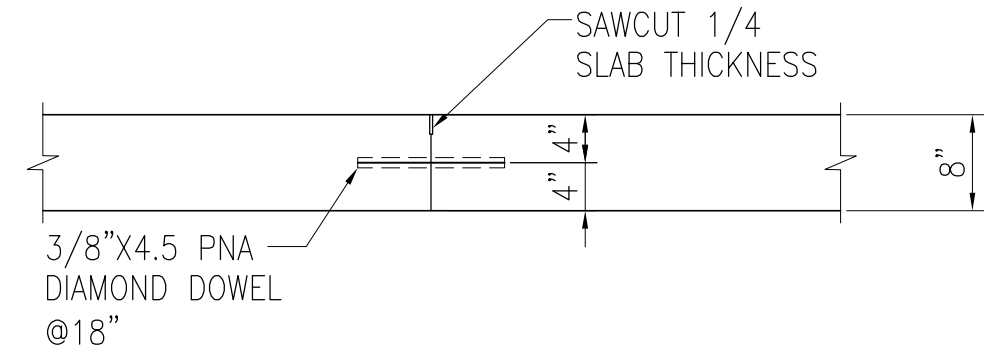
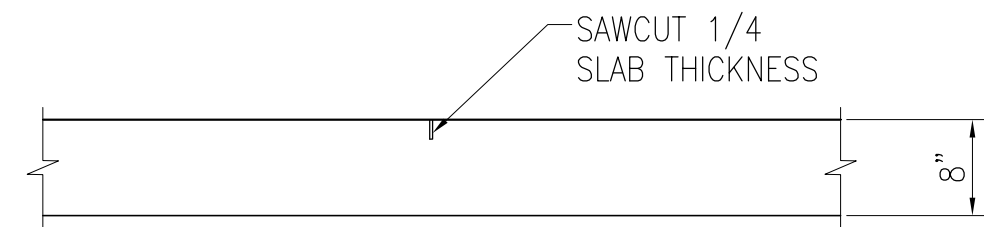
FOOTING SCHEDULE				
FOOTING DESIGNATION	F4	F5	F6	F7
SIZE	4'-0"x4'-0"	5'-0"x5'-0"	6'-0"x6'-0"	7'-0"x7'-0"
DEPTH	2'-0"	2'-0"	2'-0"	2'-0"
REINF EW	6#4	7#4	7#5	6#6
NOTES	1	1	1	1

NOTES:
1. PROVIDE TOP AND BOTTOM REINFORCING.



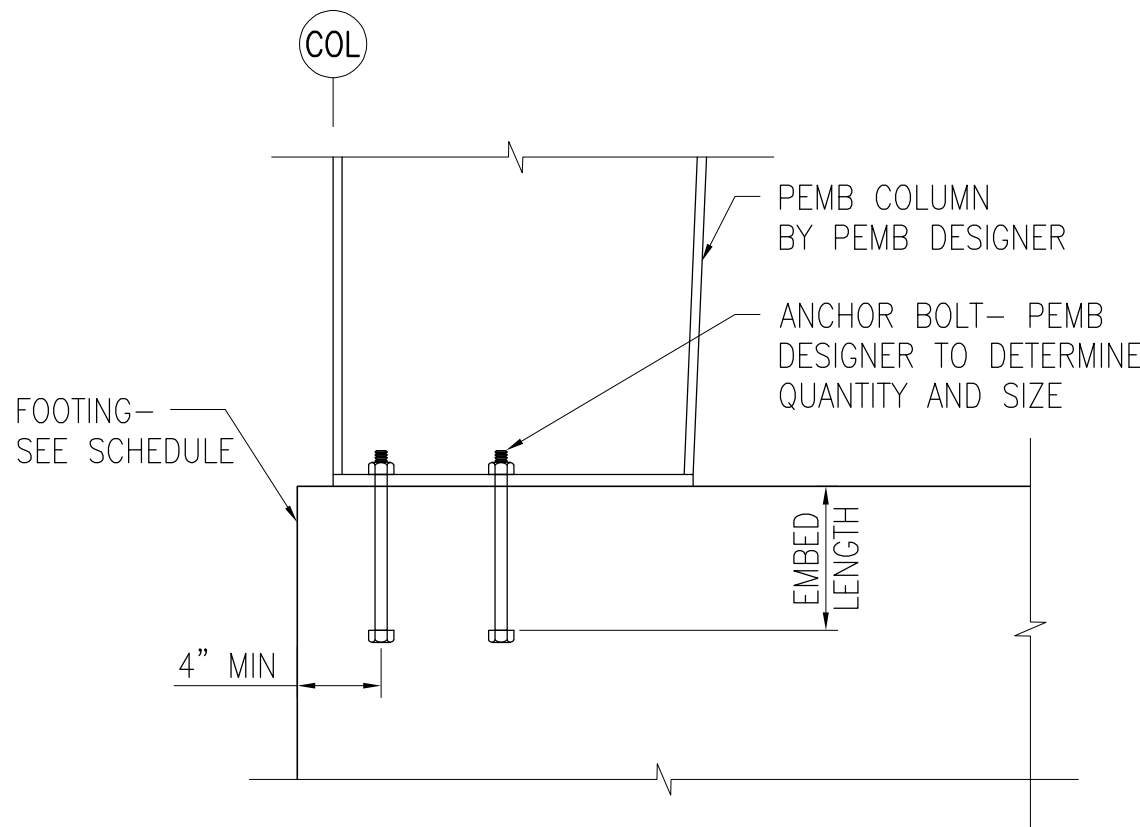
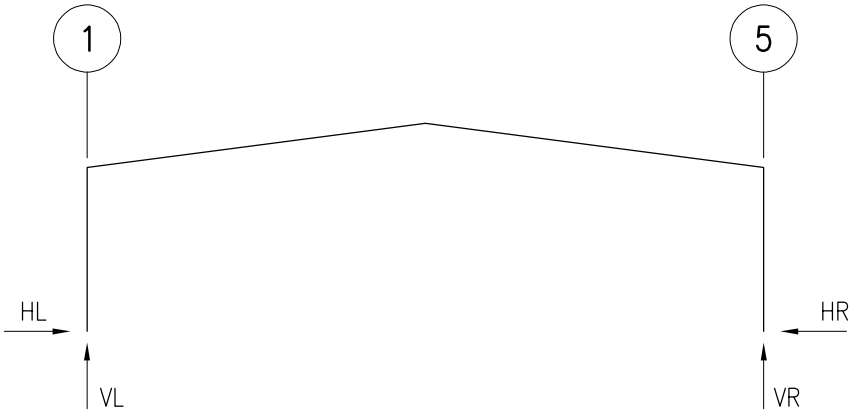
TYPICAL 5" SLAB CONTROL JOINT

JOINT TYPE IS OPTIONAL



TYPICAL 8" SLAB CONTROL JOINT

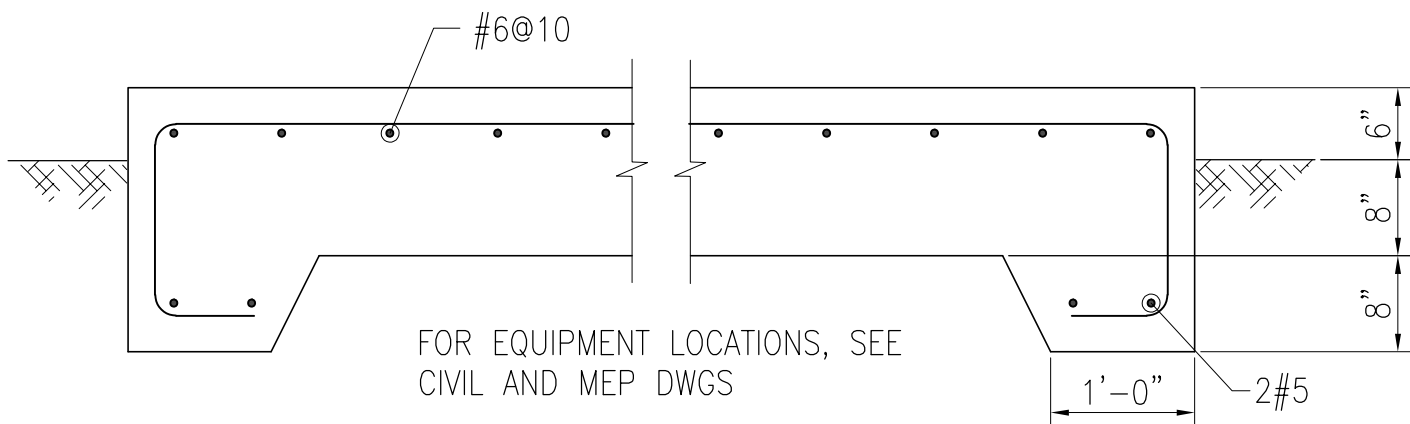
JOINT TYPE IS OPTIONAL



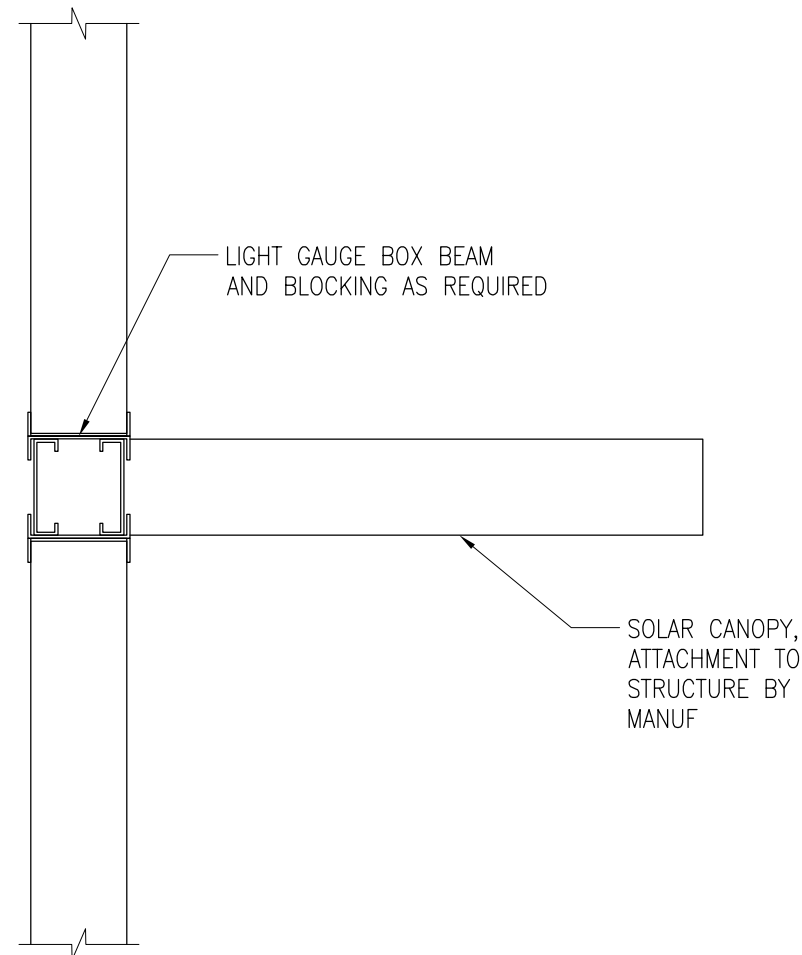
ANCHOR BOLT EMBEDMENT LENGTHS	
BOLT DIA	MIN. EMBEDMENT
3/4"	9"
1"	12"
1-1/4"	15"
1-1/2"	18"
2"	24"

ASSUMED METAL BUILDING "A" REACTIONS (KIPS)					
LOCATION	LOAD	HL	VL	HR	VR
LINES G,H&I	DL+LL+SL	±8.0	20.0	±8.0	20.0
	0.6DL+0.6WL	±8.0	-8.0	±8.0	-8.0
LINES B,C,D&E	DL+LL+SL	±6.0	16.0	±6.0	16.0
	0.6DL+0.6WL	±10.0	-8.0	±10.0	-8.0

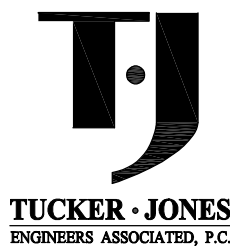
ENDWALL COLUMN REACTIONS
MAX HORIZ ±7.1K
MAX D&L 0.6K
MAX UPLIFT -0.0K



MECHANICAL EQUIPMENT PAD DETAIL



TYPICAL SOLAR CANOPY DETAIL



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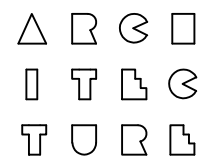
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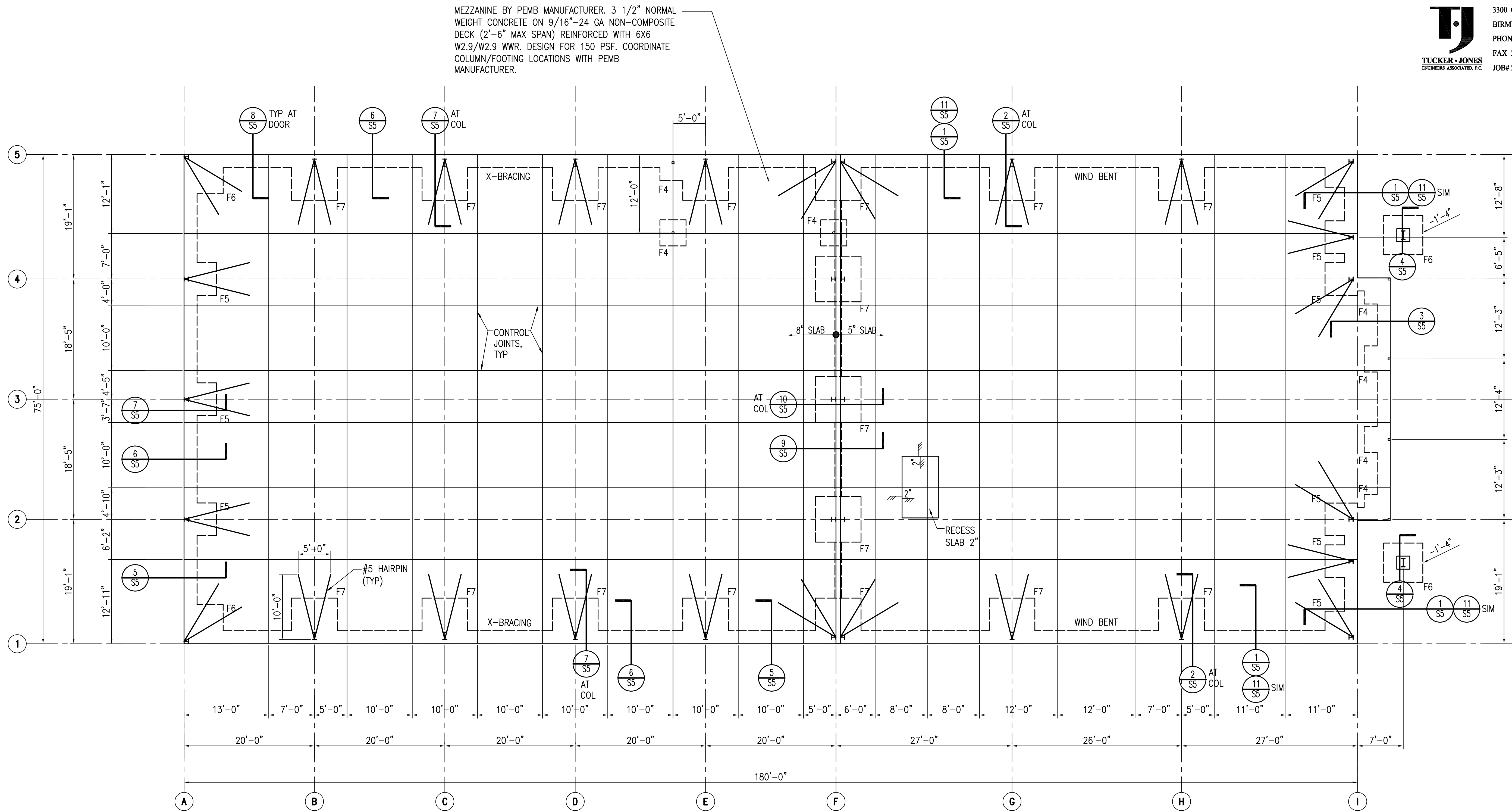
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DRAWN BY	WCE
PROJECT NO.	220621

TYPICAL DETAILS

SHEET NO.

S3

OF SHEETS

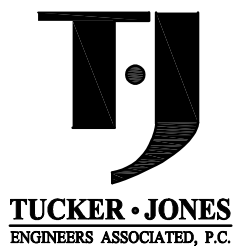


FOUNDATION AND FLOOR PLAN

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



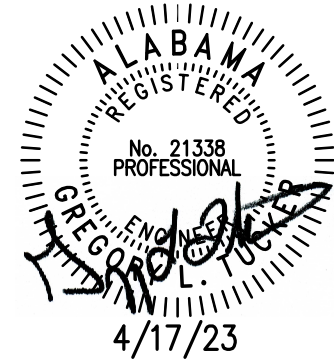
1. TOP OF FINISH FLOOR ELEVATION 0'-0", UNLESS NOTED.
2. 5" AND 8" SLAB ON GRADE, AS NOTED. SEE GENERAL NOTES AND TYPICAL DETAILS.
3. EXTEND ALL FOOTING TOP REINFORCING 4'-0" INTO SLAB BEYOND EXTENT OF FOOTINGS.
4. FINAL COLUMN LOCATIONS AND REACTIONS TO BE COORDINATED WITH METAL BUILDING SUPPLIER BEFORE FOUNDATION INSTALLATION BEGINS.
5. FOR DIMENSIONS NOT SHOWN, SEE ARCH DWGS.



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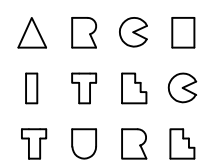
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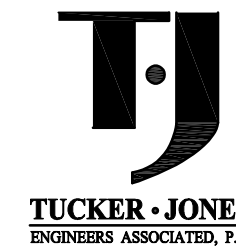
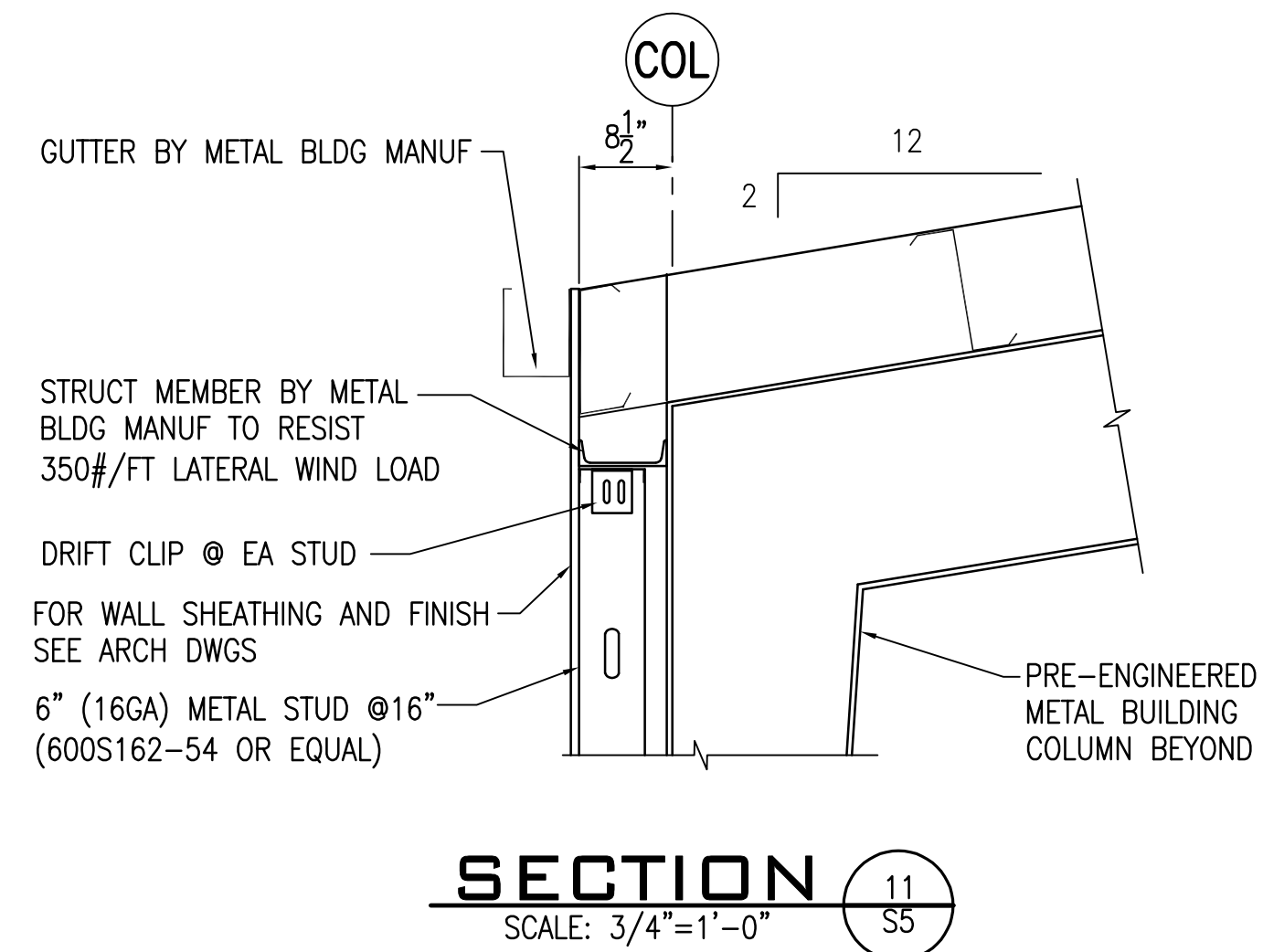
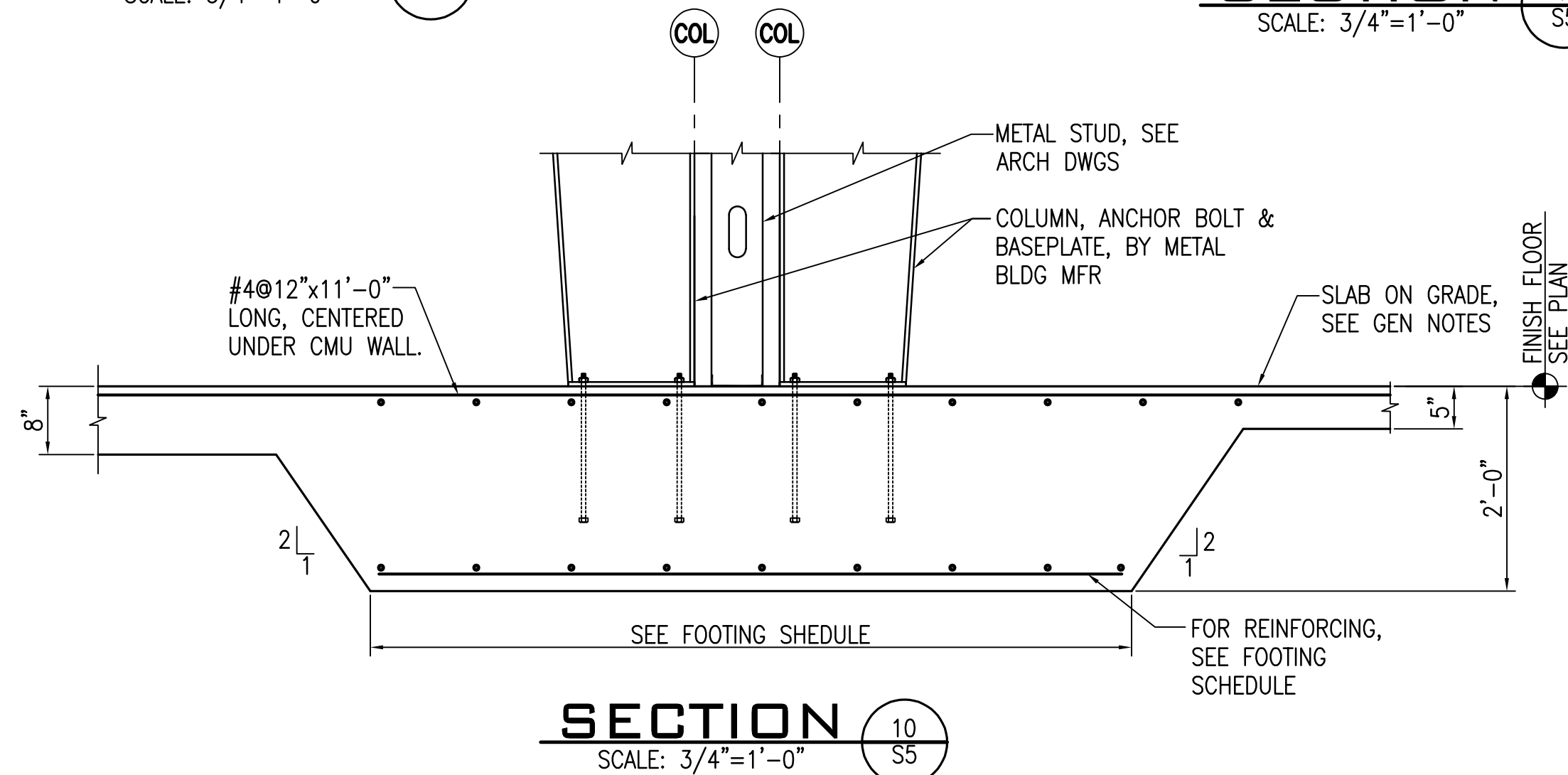
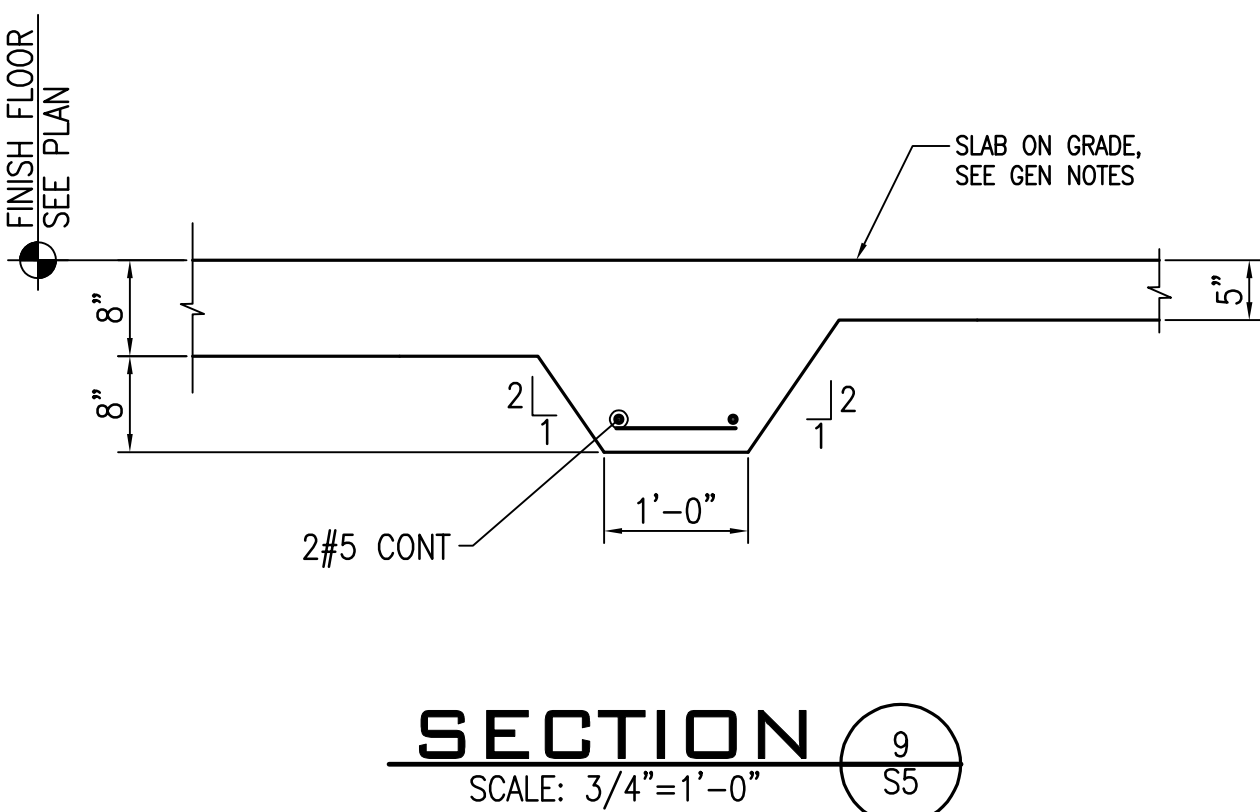
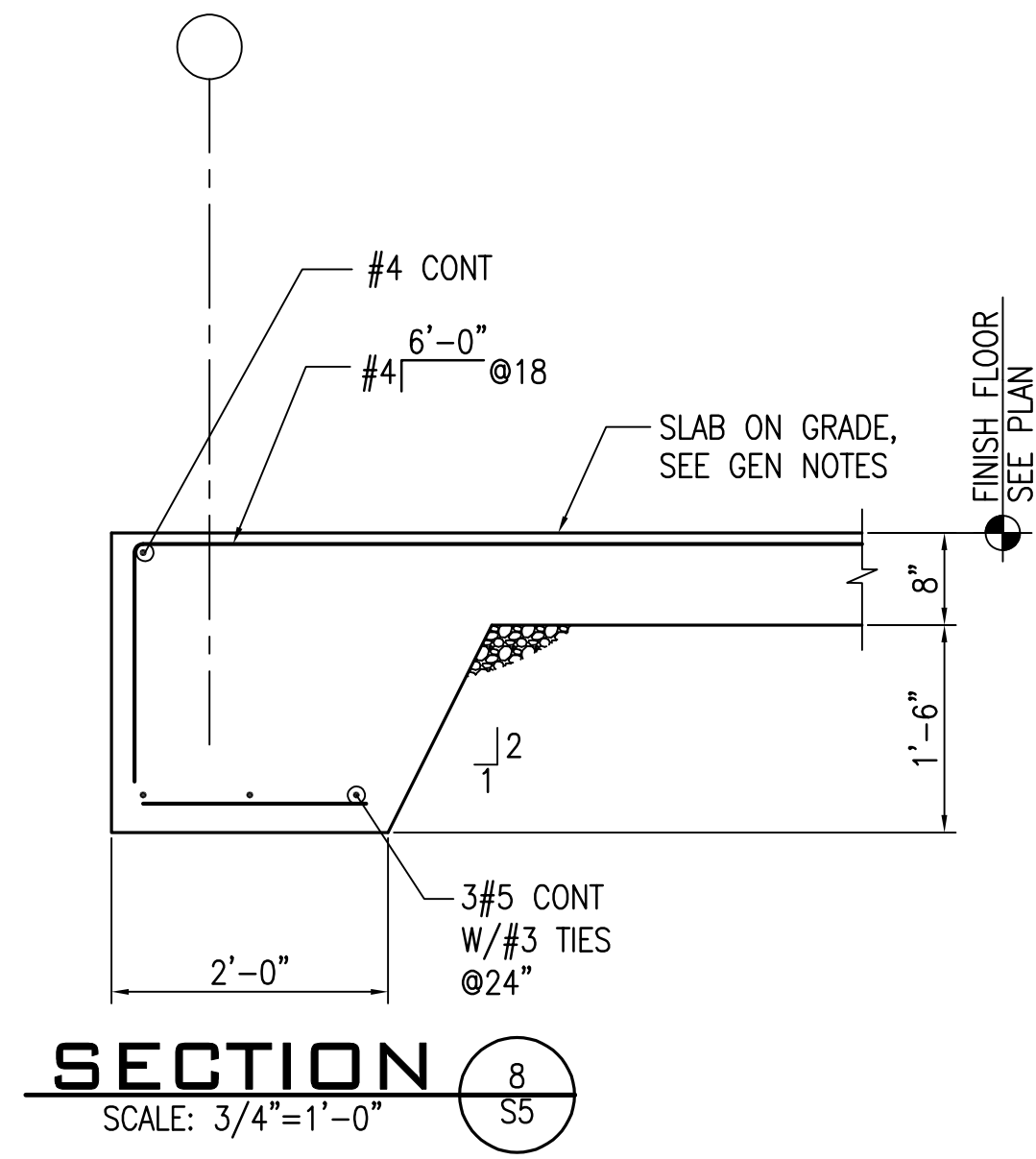
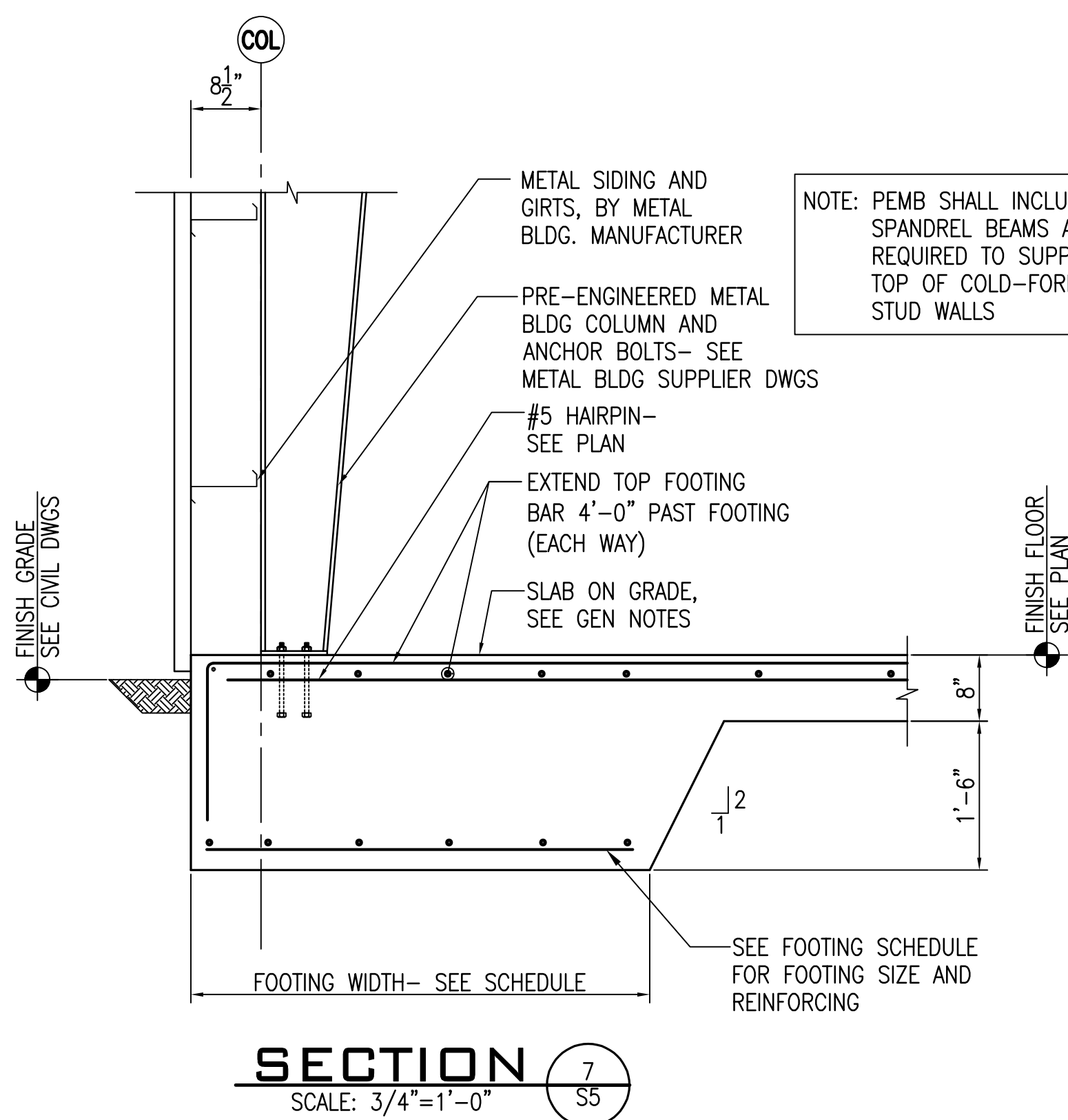
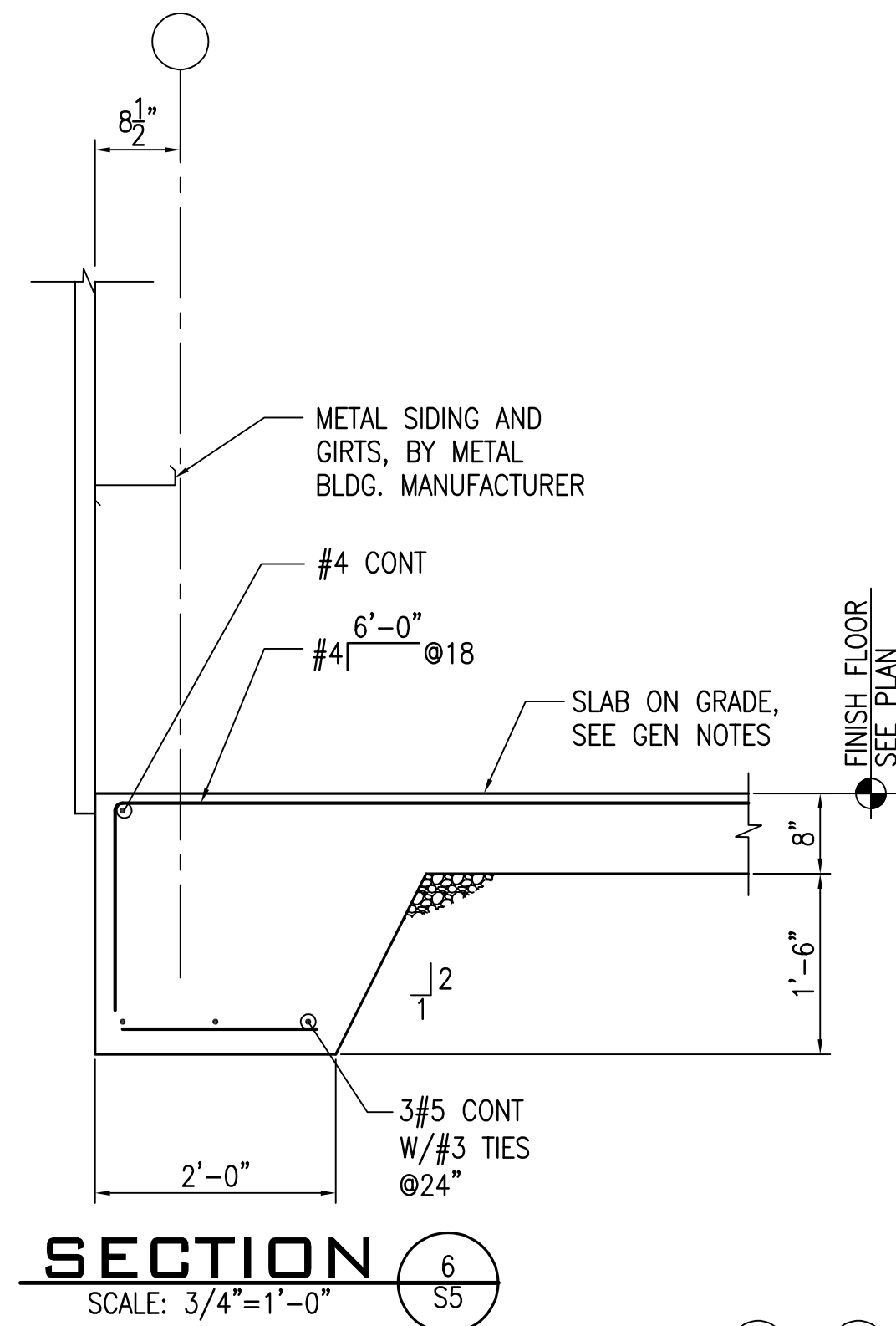
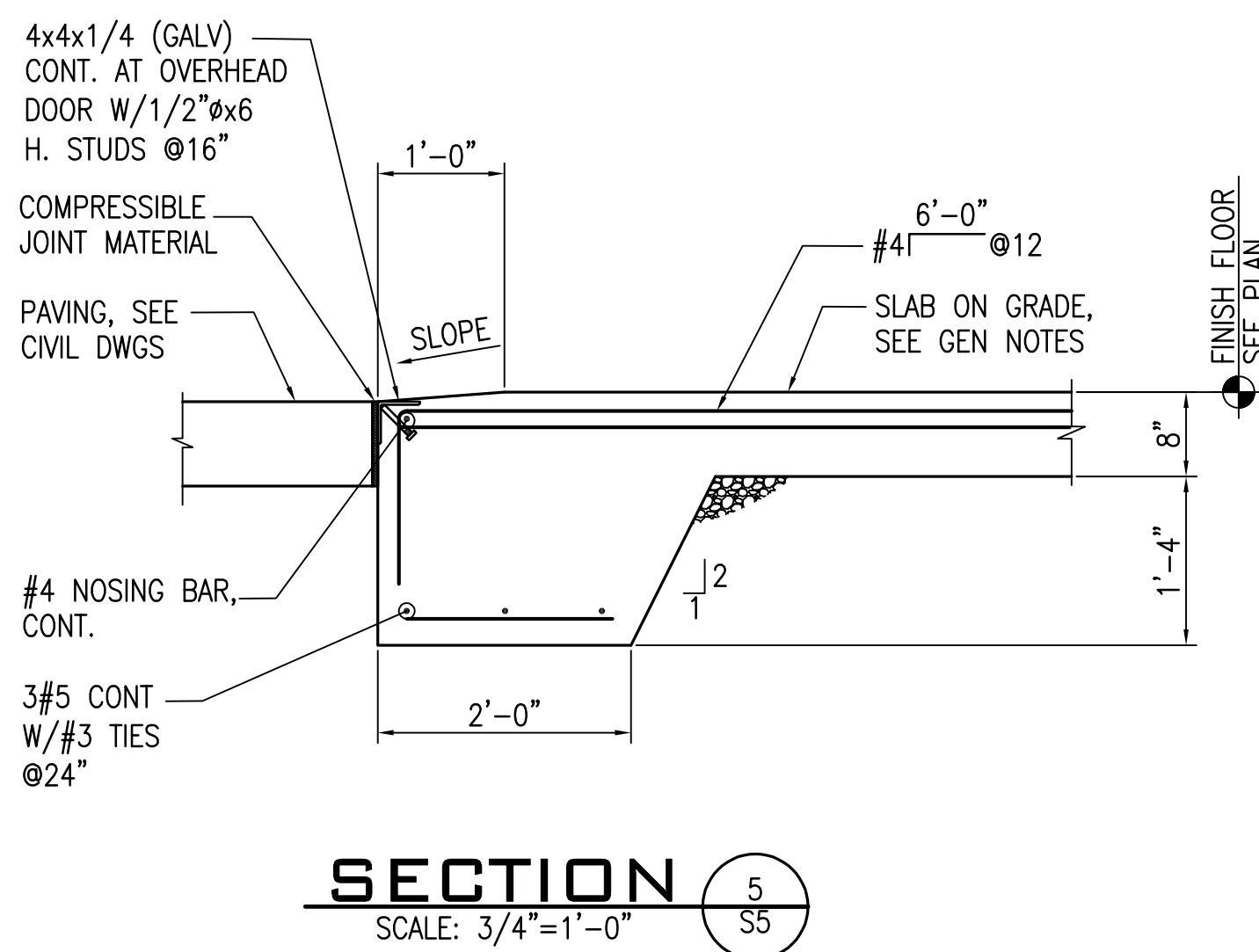
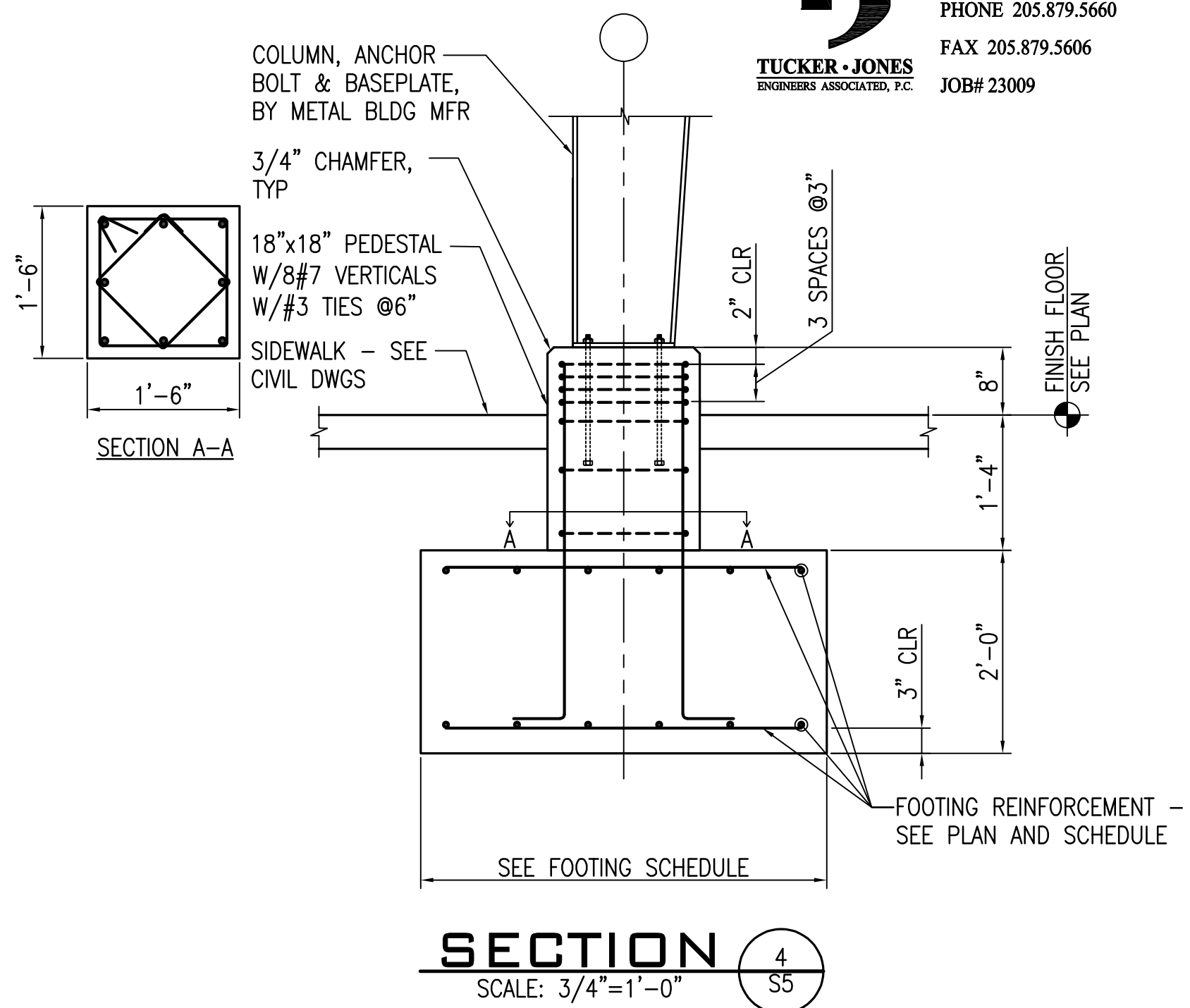
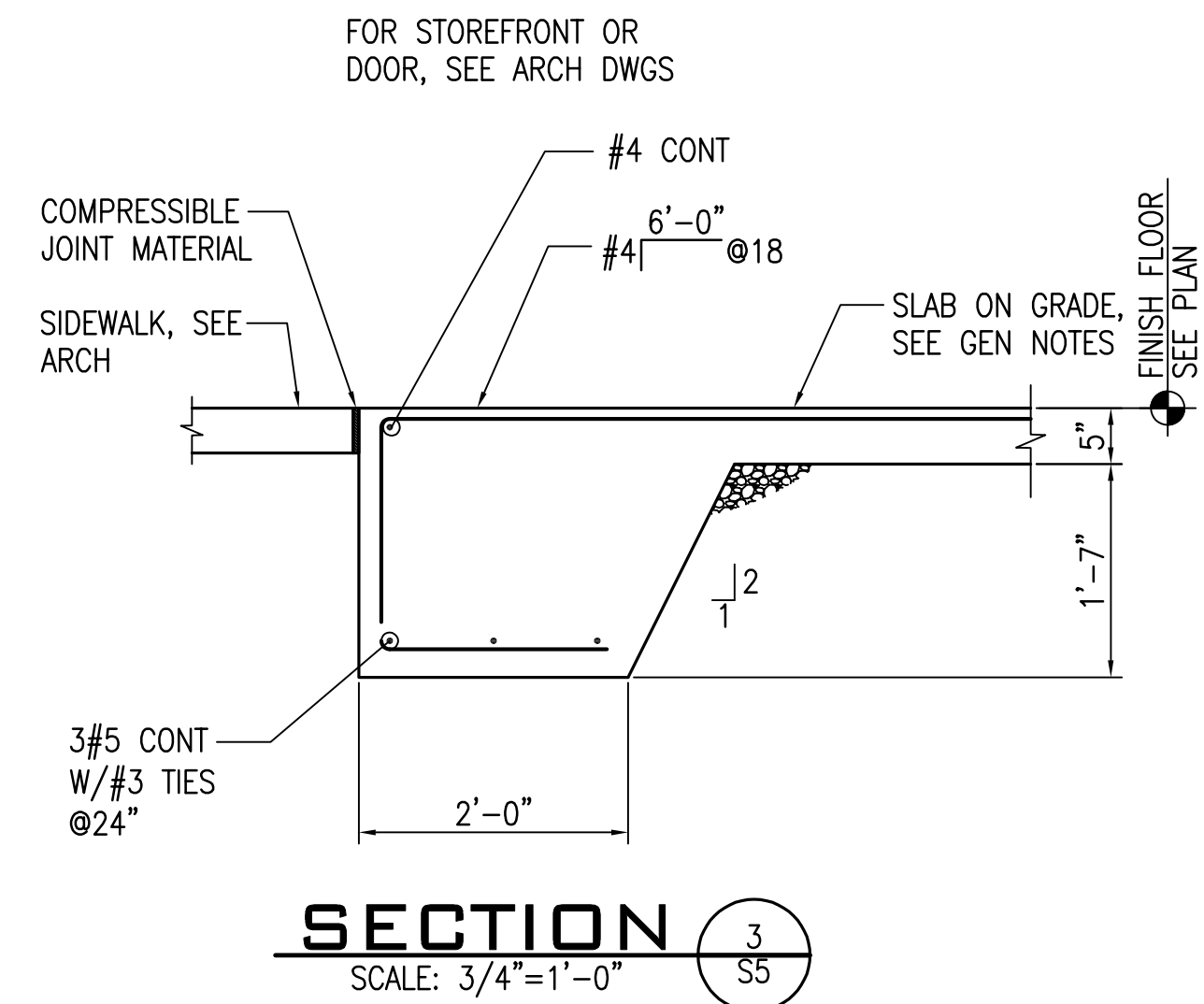
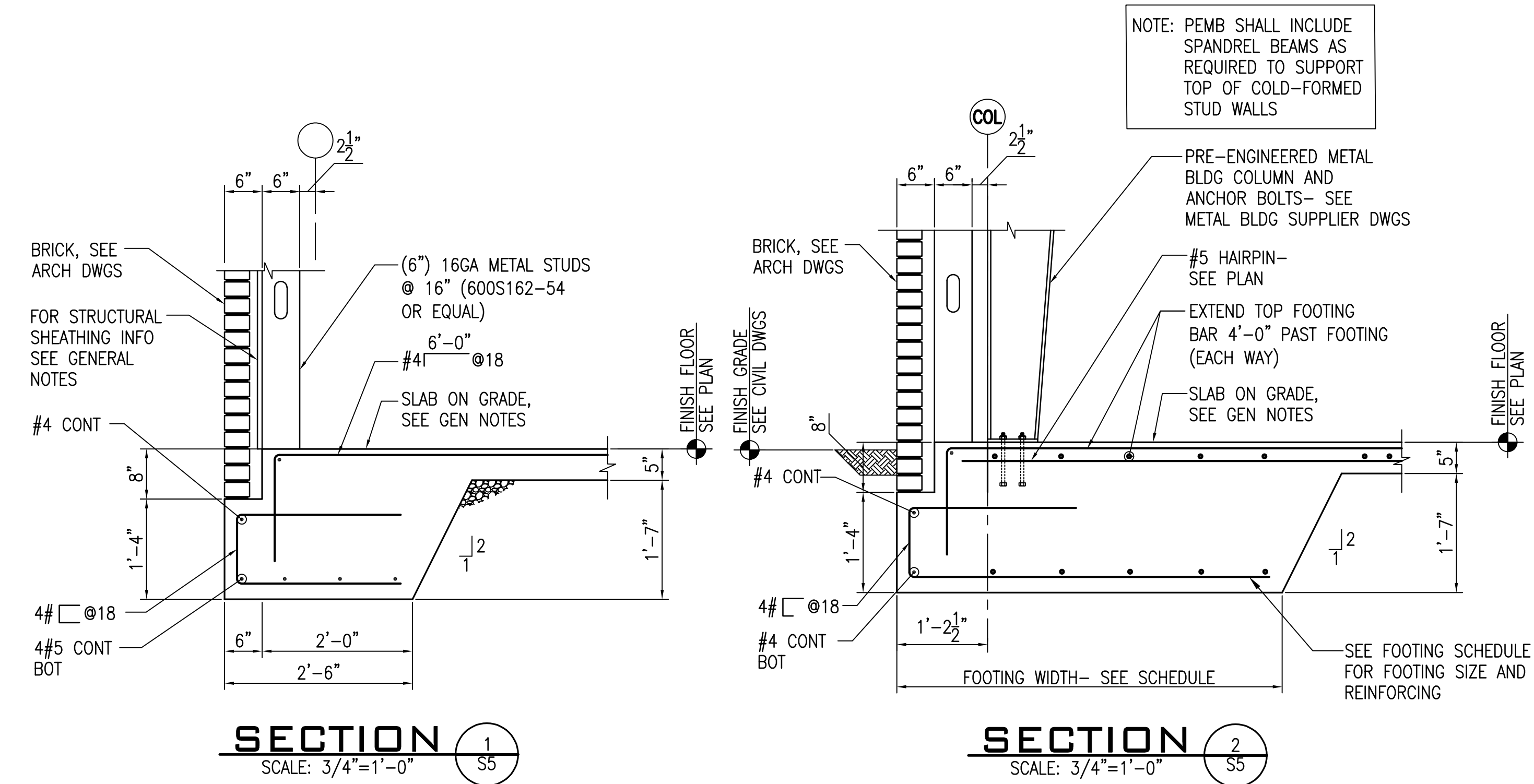
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**FOUNDATION
AND FLOOR PLAN**

SHEET NO.

S4

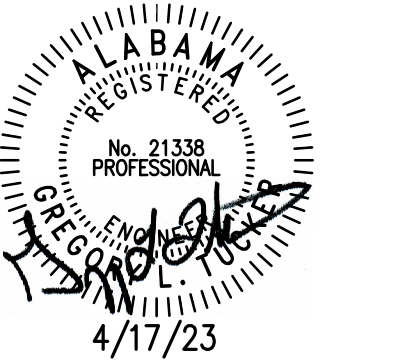
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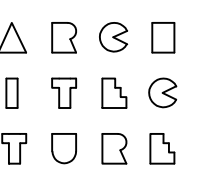
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SECTIONS

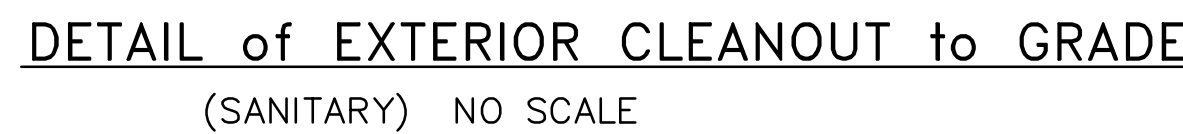
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S5
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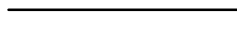
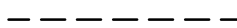






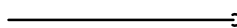




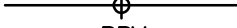

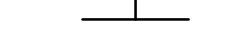

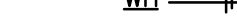


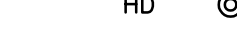




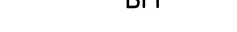







WATER HEATER									
TAG	SERVING	TYPE	GALLONS	RECOVERY ● 80°F GPH	EWI °F	LVT °F	KW	V/ø	MODEL
EWH-1	SHOWERS	ELECTRIC TANK	50	51	60	140	10	208/1	RHEEM ELD52-TB

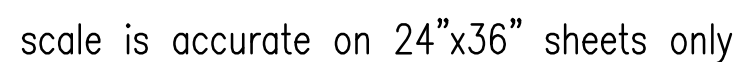
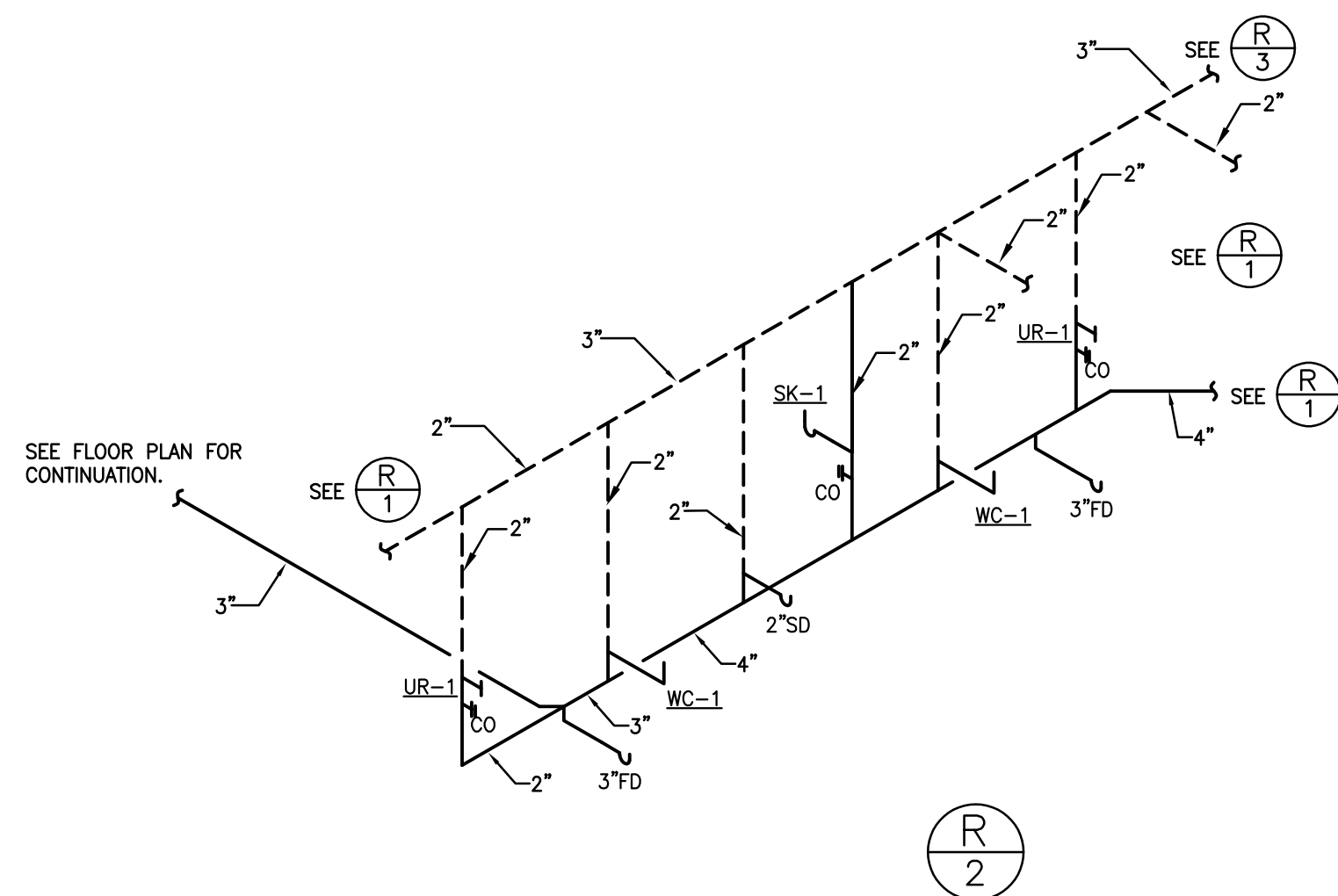
NOTE:

① AQUASTAT AND 7 DAY CONTROL



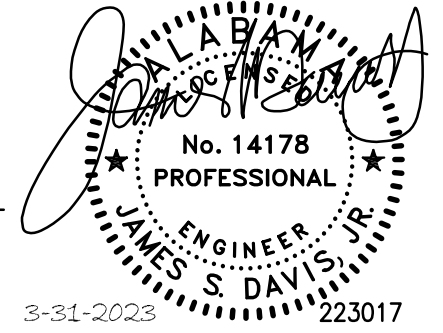
- ### PLUMBING LEGEND

- | | |
|---|---|
|  | SOIL OR WASTE LINE |
|  | VENT LINE |
|  | COLD WATER LINE |
|  | HOT WATER LINE |
|  | HOT WATER CIRCULATOR LINE |
|  | BALL VALVE |
|  | PIPE TURNING UP |
|  | PIPE TURNING DOWN |
|  | P-TRAP |
|  | REDUCED PRESSURE ZONE
BACKFLOW PREVENTER |
|  | PRESSURE REDUCING STATION, SEE DETAIL |
|  | WATER HAMMER
ARRESTER, SIZE SHOW |
|  | WALL HYDRANT |
|  | FLOOR DRAIN WITH TRAP GUARD |
|  | MECHANICAL ROOM FLOOR DRAIN WITH TRAP GUARD |
|  | HUB DRAIN WITH TRAP GUARD |
|  | PLUMBING FIXTURE NO. |
|  | RISER DIAGRAM NO. |
|  | ABOVE FINISHED FLOOR |
|  | BELOW FINISHED FLOOR |
|  | CLEANOUT |
|  | COLD WATER |
|  | VENT STACK THRU ROOF |
|  | HOT WATER |
|  | HOT WATER RETURN |
|  | ABOVE CEILING |
|  | DOWN |
|  | WITH |
|  | ELECTRIC WATER COOLER |
|  | LAVATORY |
|  | STAINLESS STEEL |
|  | URINAL |
|  | WATER CLOSET |



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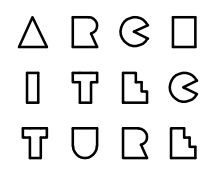
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BID DOCUMENTS
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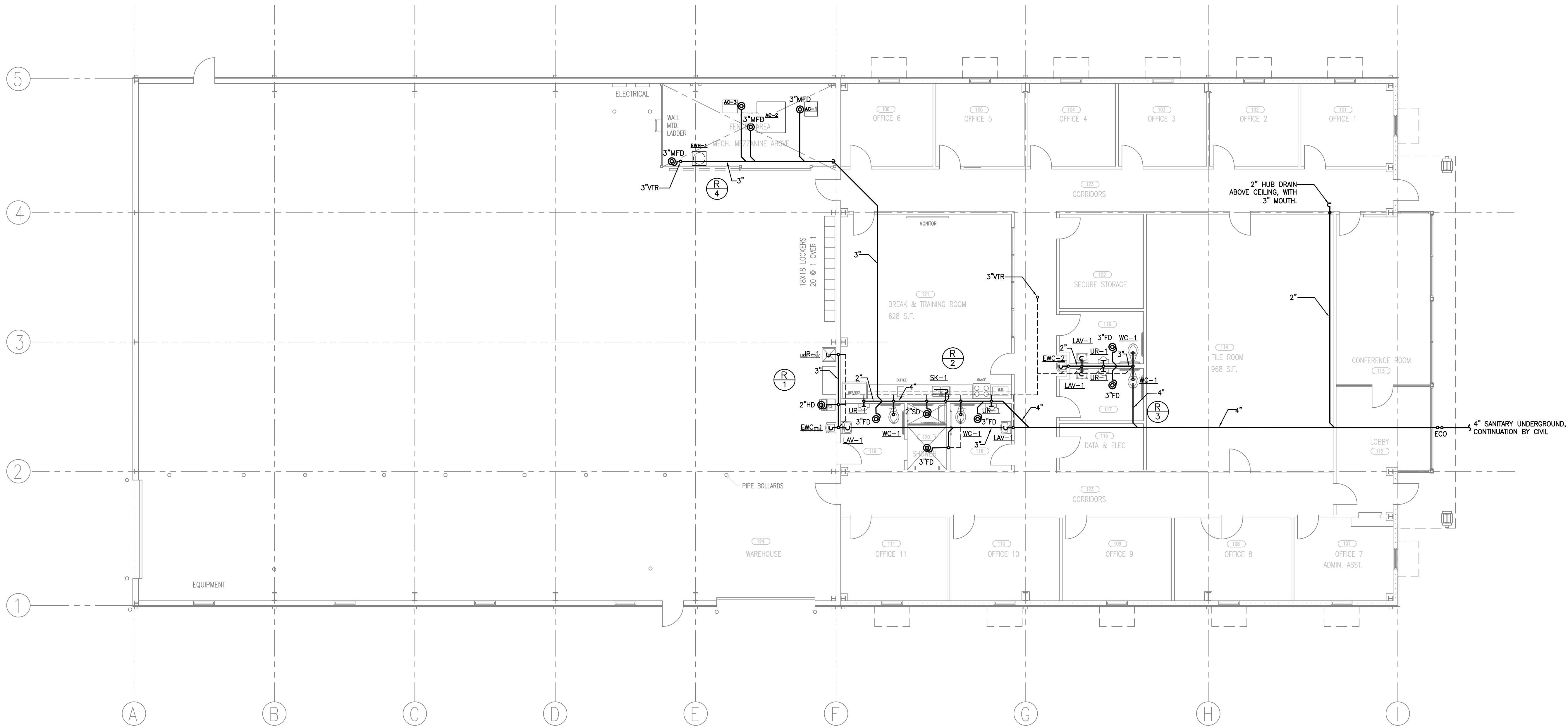
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PROJECT NO.	223017

PLUMBING
FLOOR PLAN
NONPRESSURE

SHEET NO.

P1.0

X OF X SHEETS



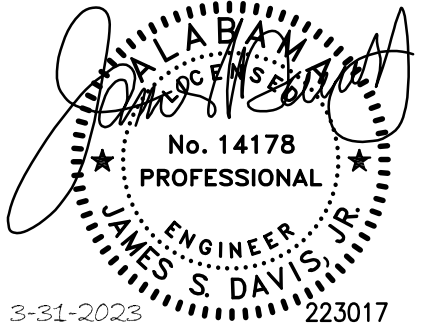
PLUMBING FLOOR PLAN - NONPRESSURE

1/8" = 1'-0"

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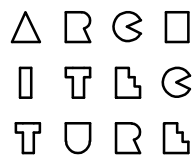
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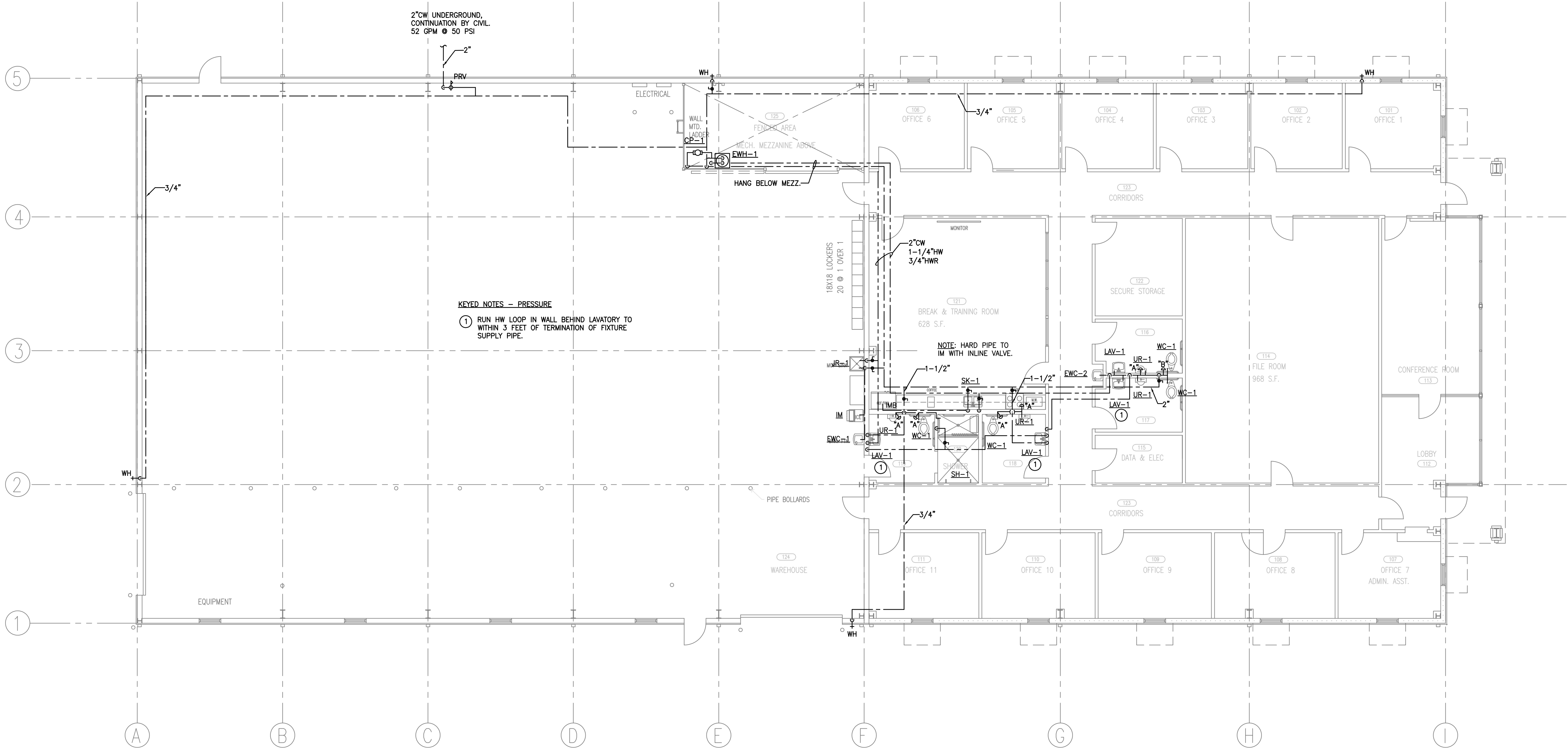
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DRAWING DATE	4-3-2023
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PLUMBING
FLOOR PLAN
PRESSURE

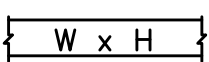

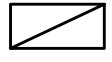
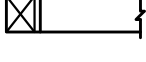
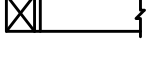

















SHEET NO.			
P2.0			
X	OF	X	SHEETS



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

scale is accurate on 24"x36" sheets only

HVAC LEGEND

	NEW DUCTWORK - INSIDE DIMENSIONS: WIDTH(IN.) X HEIGHT(IN.)
	SUPPLY AIR DUCT SECTION.
	RETURN OR EXHAUST AIR DUCT SECTION.
	DUCT TURNING DOWN.
	DUCT TURNING UP.
	RECTANGULAR 90° ELBOW WITH TURNING VANES.
	STANDARD 90° RADIUS ELBOW (LONG RADIUS).
	STANDARD 45° RADIUS ELBOW.
	UNDERCUT DOOR FOR TRANSFER AIR.
	SUPPLY AIR FLOW
	RETURN AIR FLOW
	EXHAUST AIR FLOW
	WALL MOUNTED THERMOSTAT (48" A.F.F. TO CENTERLINE OF DEVICE).
	MANUAL DAMPER (RECT.-RUSKIN MD35, RND.-RUSKIN MDRS25)
	AUTOMATIC DAMPER (RUSKIN CD50)
	SLOPE DOWN IN DIRECTION OF ARROW.
	PIPE TURNING UP.
	PIPE TURNING DOWN.
	BRANCH OFF TOP OF MAIN.
	BRANCH OFF BOTTOM OF MAIN.
	BRANCH OFF SIDE OF MAIN.
	DRAIN PIPING.

GENERAL NOTES

- MECHANICAL DRAWINGS ARE DIAGRAMMATIC AND SUBJECT TO REQUIREMENTS OF ARCHITECTURAL DRAWINGS AND CONDITIONS EXISTING IN THE FIELD. MECHANICAL DRAWINGS INDICATE GENERALLY THE LOCATION OF COMPONENTS AND ARE NOT INTENDED TO SHOW ALL FITTINGS OR ALL DETAILS OF THE WORK TO BE PERFORMED.
- FOLLOW THE DRAWINGS CLOSELY, COORDINATE DIMENSIONS WITH ARCHITECTURAL DRAWINGS AND FIELD CONDITIONS. DO NOT SCALE MECHANICAL DRAWINGS FOR LOCATIONS OF SYSTEM COMPONENTS.
- COORDINATE CONSTRUCTION OF ALL MECHANICAL WORK WITH ARCHITECTURAL, STRUCTURAL, CIVIL, ELECTRICAL WORK, ETC., SHOWN ON OTHER CONTRACT DOCUMENT DRAWINGS.
- MAKE NO CHANGES WITHOUT THE ARCHITECT'S WRITTEN PERMISSION. IN CASE OF DOUBT, OBTAIN ARCHITECT'S DECISION BEFORE PROCEEDING WITH WORK. FAILURE TO FOLLOW THIS INSTRUCTION SHALL MAKE THE CONTRACTOR LIABLE FOR DAMAGE TO OTHER WORK AND RESPONSIBLE FOR REMOVING AND REPAIRING DEFECTIVE OR MISLOCATED WORK IN PROPER MANNER.
- DO NOT SCALE DRAWINGS TO LOCATE DIFFUSERS AND EQUIPMENT. COORDINATE WITH NEW LIGHTING, ELECTRICAL CONDUIT, AND ALL FIELD CONDITIONS.
- PRIOR TO PREPARING SUBMITTALS, VERIFY ALL EQUIPMENT VOLTAGES WITH ELECTRICAL DRAWINGS AND ELECTRICAL CONTRACTOR AND REPORT ANY INCONSISTENCIES TO THE ARCHITECT PRIOR TO ORDERING EQUIPMENT. ANY FAILURE TO DO SO WILL MAKE THE MECHANICAL CONTRACTOR RESPONSIBLE FOR ANY EQUIPMENT ORDERED WITH THE INCORRECT VOLTAGE.
- PROTECT MECHANICAL EQUIPMENT FROM DAMAGE DURING CONSTRUCTION. WHEN INSTALLATION IS COMPLETE, CLEAN EQUIPMENT AS REQUIRED AND PROVIDE ALL NEW FILTERS.
- INSTALL ALL EQUIPMENT TO PROVIDE NORMAL SERVICE ACCESS TO ALL COMPONENTS. INSTALL IN ACCORDANCE WITH MANUFACTURER'S INSTRUCTIONS. IF MANUFACTURER'S INSTRUCTIONS CONFLICT WITH CONTRACT DOCUMENTS, OBTAIN ARCHITECT'S DECISION BEFORE PROCEEDING.
- ALL WORK SHALL COMPLY WITH ALL APPLICABLE CODES AND STANDARDS (SEE SPECIFICATIONS).
- PROVIDE ALL NECESSARY RELAYS, SWITCHES, SENSORS, LOW VOLTAGE CONTROL WIRING, ACTUATORS, ETC. FOR A COMPLETE AND FUNCTIONAL HVAC CONTROLS SYSTEM.
- COORDINATE EXACT LOCATION OF ALL WALL MOUNTED DEVICES (THERMOSTATS, HUMIDITY SENSORS, ETC.) WITH ARCHITECT PRIOR TO ROUGH IN. ALL WALL MOUNTED DEVICES SHALL BE INSTALLED 48" A.F.F. TO THE CENTERLINE OF THE DEVICE (UNLESS NOTED OTHERWISE).

AIR DEVICE LEGEND

MARK	DESCRIPTION	(X)	MODEL #
LD(X)	LOUVER FACE, 24"x24" LAY-IN CEILING DIFFUSER, 4-WAY THROW UNLESS NOTED OTHERWISE. CFM SHOWN.	SQUARE NECK SIZE	TITUS TDC-AA
		NECK SIZE	ROUND RUNOUT
		6 X 6	6"
		9 X 9	8"
		12 X 12	10"
CBD-X(X)	CURVED BLADE DIFFUSER, 1-2-3-4 WAY BLOW, SURFACE MOUNTED, OPPOSED BLADE DAMPER	NECK SIZE	TITUS 250-AA
		SQUARE NECK SIZE	TITUS TDC-AA
		--	TITUS 272
SD(X)	SAME AS LD, SURFACE MOUNTED, OPPOSED BLADE DAMPER.	SQUARE NECK SIZE	TITUS TDC-AA
SR	SIDE WALL SUPPLY REGISTER, SIZE AND CFM SHOWN.	--	TITUS 272
E(X)	CEILING EXHAUST GRILLE, 1/2" X 1/2" X 1/2" ALUMINUM CORE, SURFACE MOUNTED	SQUARE NECK SIZE	TITUS 50F
R(X)	CEILING RETURN GRILLE, 1/2" X 1/2" X 1/2" ALUMINUM CORE, OPPOSED BLADE DAMPER	SQUARE NECK SIZE	TITUS 50F
T(X)	CEILING TRANSFER GRILLE, 1/2" X 1/2" X 1/2" ALUMINUM CORE	SQUARE NECK SIZE	TITUS 50F
WTR	WALL TRANSFER REGISTERS, SIZE SHOWN	--	TITUS 350

EXHAUST FANS

MARK	TYPE	CFM	E.S.P. (IN. WG)	MOTOR		ACCESSORIES	CONTROL	DESIGN BASIS
				HP	V/Φ/Hz			
EF-1	Ⓐ	11,000	.15	2.0	208/3/60	Ⓜ	TEMP SENSOR, CO SENSOR 1-HR MARK TIME SWITCH	COOK 36EW616D08
EF-2	Ⓑ	510	.5	1/4	115/1/60	Ⓜ Ⓝ	INTERLOCK W/ AC-2	COOK 100SQN15D

FAN TYPES:

- Ⓐ CENTRIFUGAL ROOF EXHAUSTER DIRECT DRIVE
Ⓑ CENTRIFUGAL IN-LINE DIRECT DRIVE
Ⓒ PACKAGED WALL FAN DIRECT DRIVE WITH INTEGRAL HOUSING, SHUTTER AND INLET GUARD
Ⓓ WALL MOUNTED PROPELLER - DIRECT DRIVE

FAN ACCESSORIES:

- Ⓛ ALUMINUM BIRDSSCREEN, SLOPED ROOF CURB (MINIMUM 8" ABOVE ROOF), BACKDRAFT DAMPER, DISCONNECT SWITCH.
Ⓜ DISCONNECT SWITCH, VIBRATION ISOLATORS, & BACKDRAFT DAMPER
Ⓝ SPEED CONTROLLER
Ⓞ SPEED CONTROLLER AND DISCONNECT SWITCH

INDOOR AC UNITS - VRF SYSTEM

MARK	AREA SERVED	TYPE	CONNECTED OUTDOOR UNIT	MAX. CFM	CAPACITY (MBH)		ELECTRICAL			ACCESSORIES	DESIGN BASIS MODEL
					TOTAL COOLING	TOTAL HEATING	V/Φ/Hz	MCA	MOCP		
AC-4	CONFERENCE - 113	Ⓒ	HP-4	551	18.0	20.0	208/1/60	.6	15	Ⓛ Ⓜ Ⓝ Ⓞ	DAIKIN FXZQ18TAVJU
AC-5	CONFERENCE - 113	Ⓒ	HP-4	551	18.0	20.0	208/1/60	.6	15	Ⓛ Ⓜ Ⓝ Ⓞ	DAIKIN FXZQ18TAVJU
AC-6	LOBBY - 112	Ⓒ	HP-4	353	11.9	13.6	208/1/60	.4	15	Ⓛ Ⓜ Ⓝ Ⓞ	DAIKIN FXZQ12TAVJU

AC UNIT TYPES

- Ⓐ MULTI POSITION AIR HANDLER
Ⓑ WALL MOUNTED
Ⓒ CEILING MOUNTED CASSETTE (4-WAY)
Ⓓ CEILING SUSPENDED DUCTED

ACCESSORIES

- Ⓛ WIRED WALL MOUNTED CONTROLLER/SENSOR
Ⓜ DRAIN PAN LEVEL SENSOR
Ⓝ MERV 8 FILTERS.

NOTES (APPLIES TO ALL UNITS)

- COOLING CAPACITY CALCULATED BASED ON 95.0°Fdb/78.0°Fwb OUTSIDE AIR.
- HEATING CAPACITY CALCULATED BASED ON 47°Fdb OUTSIDE AIR.
- REFRIGERANT: R-410A
- PROVIDE WALL MOUNTED DELUXE WIRED MA REMOTE CONTROLLER OR REMOTE SENSOR WITH COMMUNICATION WIRING AS SHOWN.
- PROVIDE POWER CONNECTION AT EACH INDOOR UNIT.
- PROVIDE INTERNAL FACTORY BUILT-IN CONDENSATE LIFT MECHANISM.
- PROVIDE OUTSIDE AIR INTAKE CONNECTION.
- ALL UNITS SHALL FULLY INTEGRATE TO CENTRAL CONTROLLER AND BUILDING DDC CONTROLS SYSTEM.
- PROVIDE AND INSTALL ALL MOUNTING BRACKETS, SUSPENSION BRACKETS, BOLTS, RODS, WASHERS AND NUTS AS REQUIRED FOR COMPLETE INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS.
- INSTALL UNITS WITH ALL MINIMUM REQUIRED AND ALL RECOMMENDED CLEARANCES FOR OPERATION.
- ALL CONDENSATE DRIAN PIPING SHALL BE STANDARD WEIGHT GALVANIZED OR TYPE L COPPER PIPE BEGINNING AT UNIT PAN CONNECTION TO POINT OF DISCHARGE. NO RUBBER OR PLASTIC PIPE ALLOWED. SEE SPECIFICATIONS SECTION 23 1000, 2.1 HVAC DRAIN PIPING. PROVIDE SEPARATION POINTS (UNIONS) AS REQUIRED FOR DRAIN CLEANING AND MAINTENANCE.

AIR HANDLING UNIT - SPLIT SYSTEM HEAT PUMP

MARK	CFM	CFM OA	ESP (IN. WC)	HP	FAN		AUX ELEC HEAT		UNIT ELECTRICAL			MANUFACTURER/ MODEL NO.
					FLA	V/PH/HZ	KW	V/PH/HZ	MCA	MOCP	V/PH/HZ	
AC-1	1,840	140	.75	.75	6.8	208/1/60	13.5	208/3/60	55.5	60.0	208/3/60	CARRIER FV4CNB006
AC-2	2,520	510	.75	3.0	7.5	208/3/60	35.0	208/3/60	92.8	100.0	208/3/60	CARRIER 40RFQA08
AC-3	1,800	135	.75	.75	6.8	208/1/60	13.5	208/3/60	55.5	60.0	208/3/60	CARRIER FV4CNB006

AC UNIT GENERAL NOTES

- COOLING CAPACITY BASED ON 95° F.
- CONTRACTOR TO COORDINATE/VERIFY ELECTRICAL REQUIREMENTS WITH EQUIPMENT MANUFACTURER AND FIELD CONDITIONS PRIOR TO ORDERING.
- UL LISTED.
- MAX FACE VELOCITY = 500 FPM.

ACCESSORIES

- PHASE PROTECTION
- MICROPROCESSOR CONTROLS
- SPRING ISOLATORS
- 2" THICK THROWAWAY FILTERS
- AUXILIARY DRAIN PAN WITH FLOAT SWITCH.

OUTDOOR UNIT - SPLIT SYSTEM HEAT PUMP

MARK	COOLING CAPACITY (MBH)			HEATING CAPACITY		ELECTRICAL			SEER/COP	MANUFACTURER/ MODEL NO.
	TOTAL	SENSIBLE	AMBIENT TEMP (°F)	MBH	AMBIENT TEMP (°F)	MCA	MOCP	VOLTS/PH/HZ		
HP-1	57.37	44.43	95.0	59.03	47.0	33.4	60	208/1/60	16.0/3.64	CARRIER 25TPA
HP-2	90.5	65.7	95.0	86.67	47.0	35	50	208/3/60	11.2/3.5	CARRIER 38AUQM08
HP-3	57.37	44.43	95.0	59.03	47.0	33.4	60	208/1/60	16.0/3.64	CARRIER 25TPA

ACCESSORIES

- 2-STAGE COMPRESSOR
- PHASE PROTECTION
- MICROPROCESSOR CONTROLS
- ISOLATION VALVES
- LIQUID LINE REFRIGERANT DRIER
- ANTI-SHORT CYCLE TIMER
- CRANKCASE HEATERS
- HIGH/LOW PRESSURE CONTROL
- LOW AMBIENT COOLING TO 40°F
- FROSTSTAT
- THERMAL EXPANSION VALVE
- HAIL/VANDAL GUARDS
- VIBRATION ISOLATORS
- SIGHT GLASS WITH MOISTURE INDICATOR

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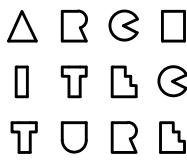


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HVAC NOTES
AND SCHEDULES

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OUTSIDE AIR CALCULATIONS - AC-1

OCCUPANCY CATEGORY	PEOPLE (P _z)	AREA (A _z)	CFM / P (R _p)	CFM / SF (R _a)	UNCORRECTED OSA
OFFICE 1	1	154 S.F.	5.0	0.06	14.2 CFM
OFFICE 2	1	148 S.F.	5.0	0.06	13.9 CFM
OFFICE 3	1	148 S.F.	5.0	0.06	13.9 CFM
OFFICE 4	1	148 S.F.	5.0	0.06	13.9 CFM
OFFICE 5	1	148 S.F.	5.0	0.06	13.9 CFM
OFFICE 6	1	154 S.F.	5.0	0.06	14.2 CFM
CORRIDOR	0	466 S.F.	5.0	0.06	28 CFM
		TOTAL SUPPLY AIR: (V _{pz})			1840 CFM
		TOTAL UNCORRECTED OSA: (V _{ou})			112 CFM
		ZONE EFFECTIVENESS: (E _z)			0.8
		VENTILATION EFFICIENCY: (E _v)			1.0
		TOTAL CORRECTED OSA: (V _{ot})			140 CFM
		TOTAL OSA PROVIDED:			140 CFM
NOTES					
1. OUTSIDE AIR CALCS. BASED ON ASHRAE STANDARD 62.1-2010 & 2015 IMC, TABLE 403.3.					
2. ZONE AIR DISTRIBUTION EFFECTIVENESS (E _z) IS 0.8 FOR CEILING SUPPLY OF WARM AIR 15°F OR MORE ABOVE SPACE TEMPERATURE.					

OUTSIDE AIR CALCULATIONS AC-4, 5 & 6

OCCUPANCY CATEGORY	PEOPLE (Pz)	AREA (Az)	CFM / P (Rp)	CFM / SF (Ra)	UNCORRECTED OSA
LOBBY	1	205 S.F.	5.0	0.06	17.3 CFM
CONFERENCE	15	325 S.F.	5.0	0.06	94.5 CFM
		TOTAL SUPPLY AIR: (Vpz)		1455 CFM	
		TOTAL UNCORRECTED OSA: (Vou)		111.8 CFM	
		ZONE EFFECTIVENESS: (Ez)		0.8	
		VENTILATION EFFICIENCY: (Ev)		1.0	
		TOTAL CORRECTED OSA: (Vot)		139.7 CFM	
		TOTAL OSA PROVIDED:		140 CFM	

NOTES

1.

OUTSIDE AIR CALCS. BASED ON ASHRAE STANDARD 62.1-2010 & 2015 IMC, TABLE 403.3.

2.

ZONE AIR DISTRIBUTION EFFECTIVENESS (E_g) IS 0.8 FOR CEILING SUPPLY OF WARM AIR 15°F OR MORE ABOVE SPACE TEMPERATURE.

OUTSIDE AIR CALCULATIONS AC-2

OCCUPANCY CATEGORY	PEOPLE (Pz)	AREA (Az)	CFM / P (Rp)	CFM / SF (Ra)	UNCORRECTED OSA
BREAK AND TRAINING	16	635 S.F.	5.0	0.06	118 CFM
CORRIDOR	0	224 S.F.	5.0	0.06	13.4 CFM
SECURE STORAGE	0	121 S.F.	5.0	0.06	7.3 CFM
TOILET	---	87 S.F.	---	---	---
TOILET	---	87 S.F.	---	---	---
DATA & ELEC	0	79 S.F.	5.0	0.06	10.74 CFM
TOILET	---	82 S.F.	---	---	---
TOILET/SHOWER	0	142 S.F.	---	----	---
		TOTAL SUPPLY AIR: (Vpz)		2520 CFM	
		TOTAL UNCORRECTED OSA: (Vou)		149.4 CFM	
		ZONE EFFECTIVENESS: (Ez)		0.8	
		VENTILATION EFFICIENCY: (Ev)		1.0	
		TOTAL CORRECTED OSA: (Vot)		187.4 CFM	
		TOTAL OSA PROVIDED:		510 CFM	

NOTES

1.

OUTSIDE AIR CALCS. BASED ON ASHRAE STANDARD 62.1-2010 & 2015 IMC, TABLE 403.3.

2.

ZONE AIR DISTRIBUTION EFFECTIVENESS (Ez) IS 0.8 FOR CEILING SUPPLY OF WARM AIR 15°F OR MORE ABOVE SPACE TEMPERATURE.

OUTSIDE AIR CALCULATIONS AC-3

OCCUPANCY CATEGORY	PEOPLE (Pz)	AREA (Az)	CFM / P (Rp)	CFM / SF (Ra)	UNCORRECTED OSA
OFFICE 7	1	165 S.F.	5.0	0.06	14.9 CFM
OFFICE 8	1	195 S.F.	5.0	0.06	16.7 CFM
OFFICE 9	1	184 S.F.	5.0	0.06	14.2 CFM
OFFICE 10	1	184 S.F.	5.0	0.06	14.2 CFM
OFFICE 11	1	148 S.F.	5.0	0.06	13.9 CFM
CORRIDOR	0	417 S.F.	5.0	.06	25 CFM
		TOTAL SUPPLY AIR: (Vpz)		1800 CFM	
		TOTAL UNCORRECTED OSA: (Vou)		98.9 CFM	
		ZONE EFFECTIVENESS: (Ez)		0.8	
		VENTILATION EFFICIENCY: (Ev)		1.0	
		TOTAL CORRECTED OSA: (Vot)		123.6 CFM	
		TOTAL OSA PROVIDED:		135 CFM	

NOTES

1.

OUTSIDE AIR CALCS. BASED ON ASHRAE STANDARD 62.1-2010 & 2015 IMC, TABLE 403.3.

2.

ZONE AIR DISTRIBUTION EFFECTIVENESS (Ez) IS 0.8 FOR CEILING SUPPLY OF WARM AIR 15°F OR MORE ABOVE SPACE TEMPERATURE.

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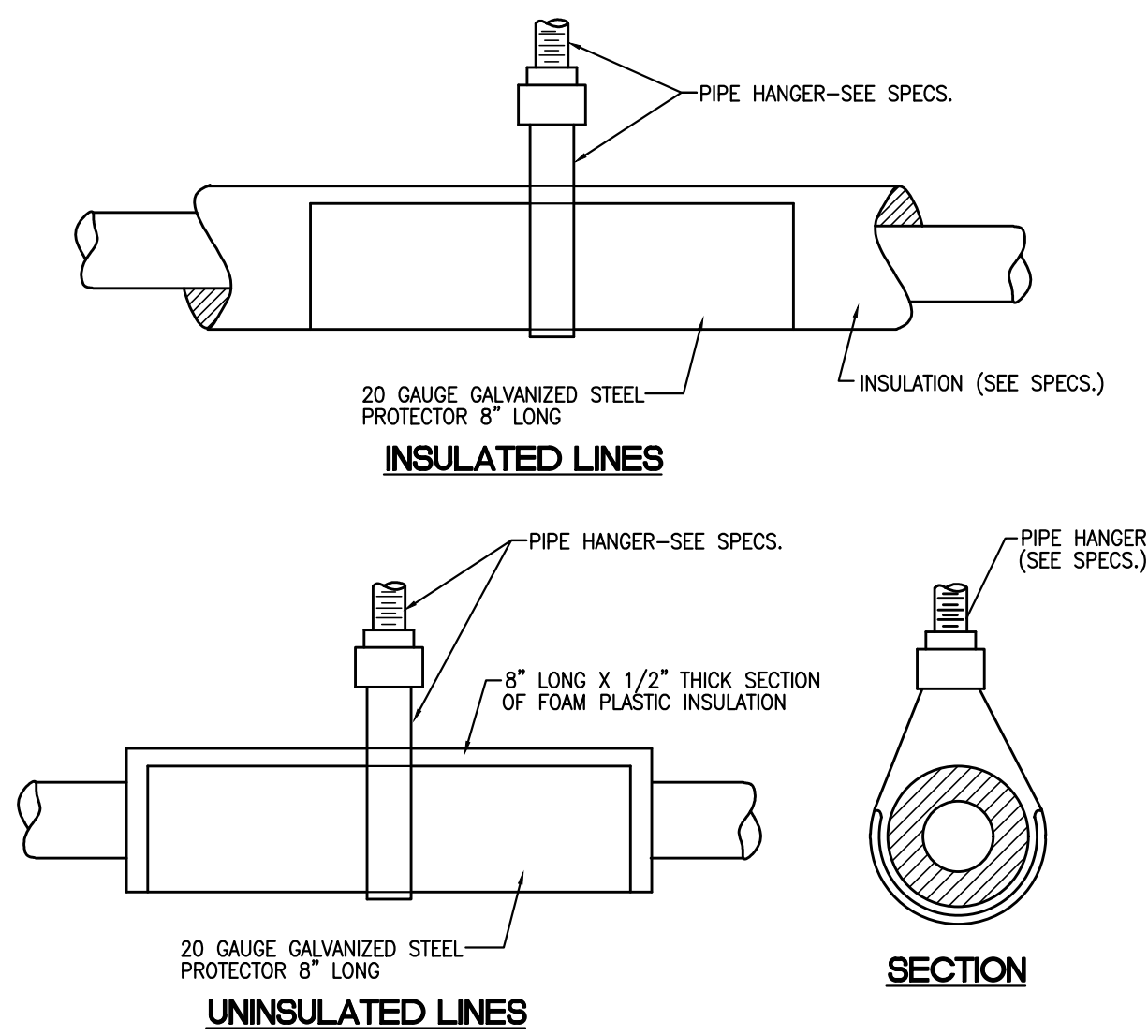
Phone 205/595-0021

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steve@cokerarch.com

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HVAC
OUTSIDE AIR
CALCULATIONS

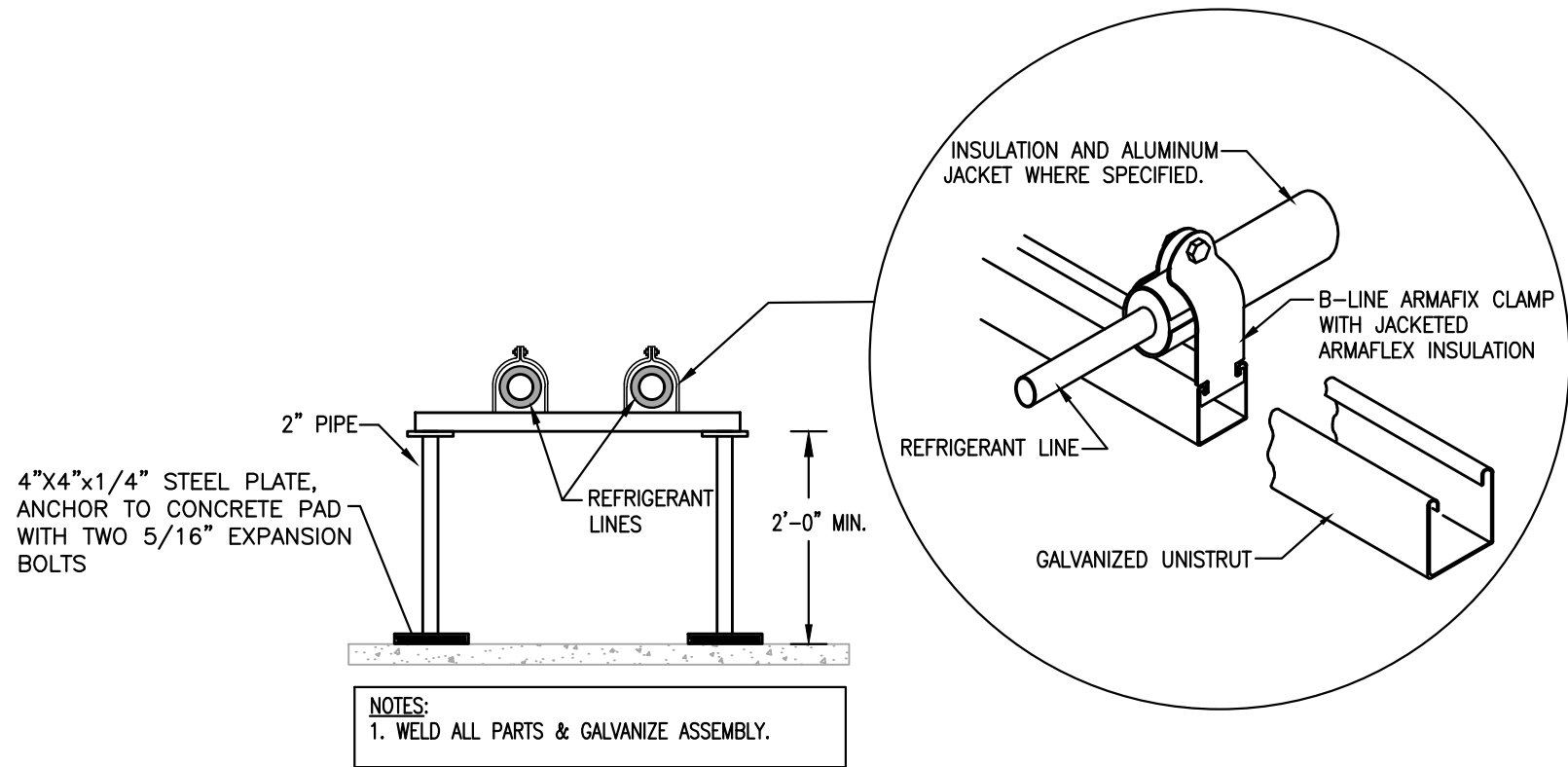
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REFRIGERANT LINE HANGERS

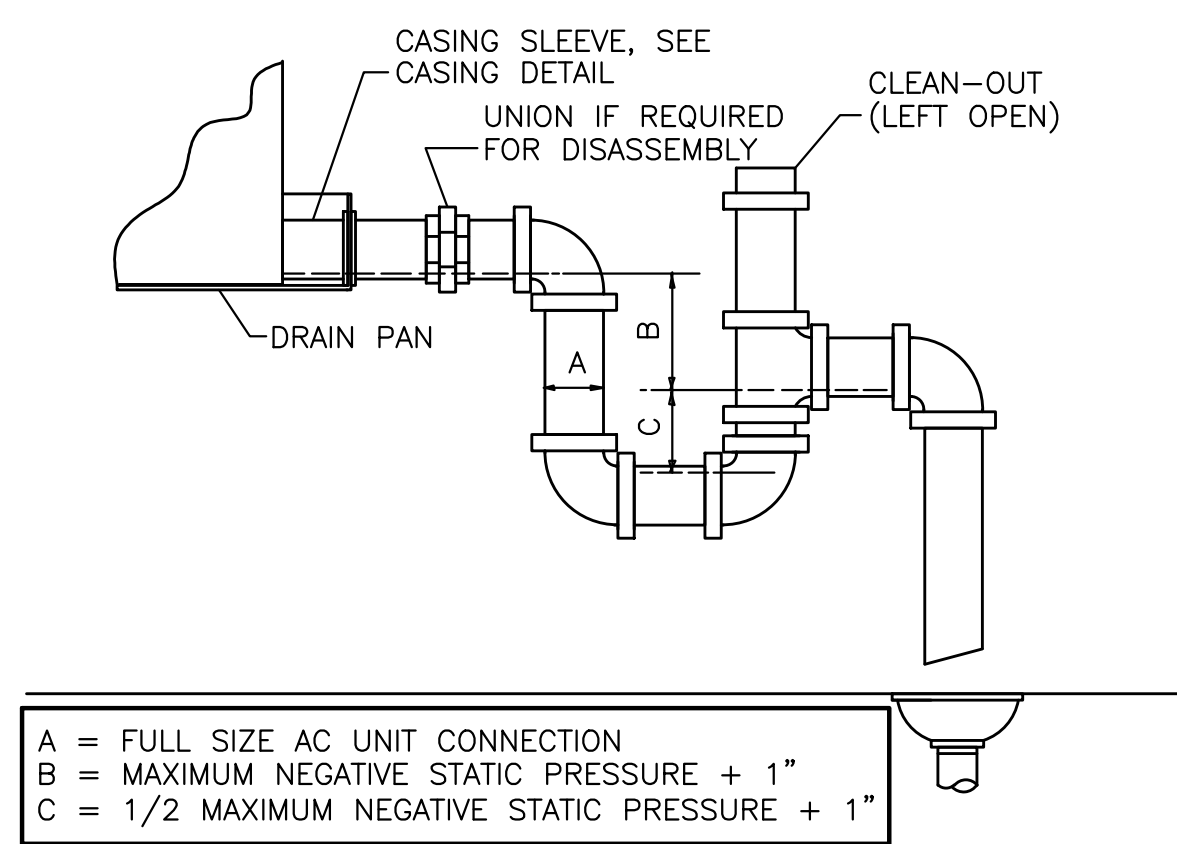
NOT TO SCALE

NOTE: LOCATE ADDITIONAL HANGERS AT VALVES AND AT CHANGES IN DIRECTION.



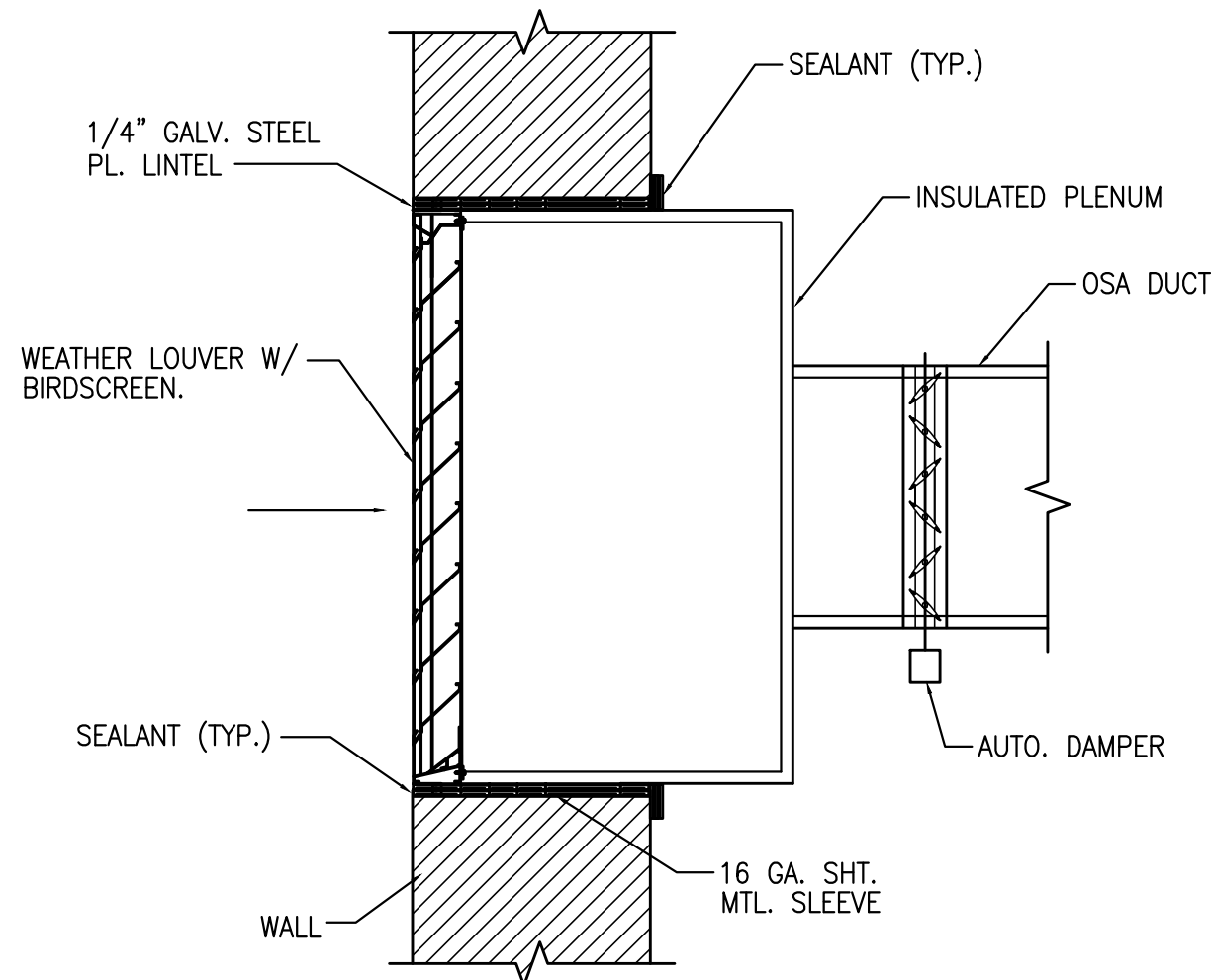
REFRIGERANT PIPING SUPPORT DETAIL

NOT TO SCALE



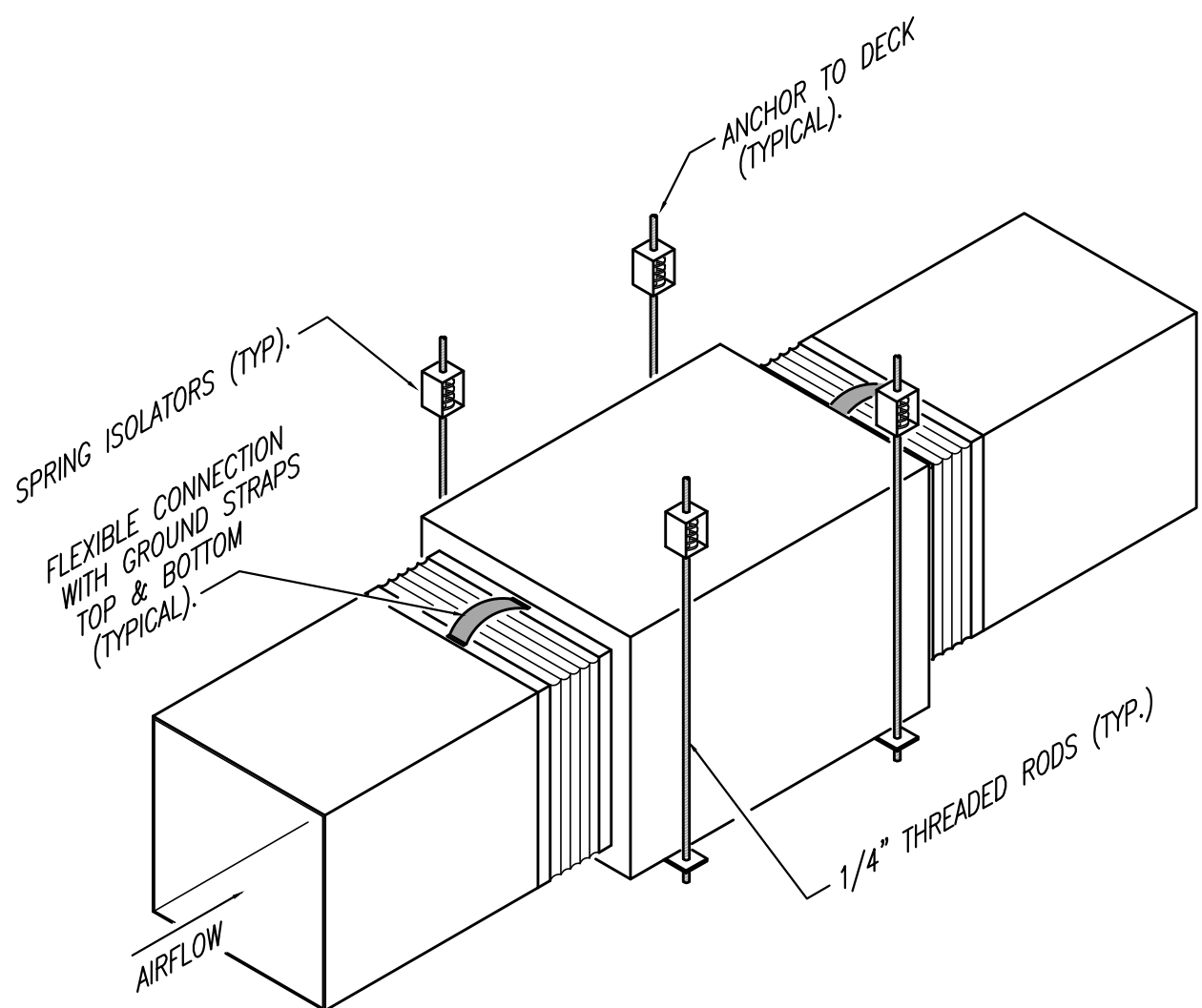
AC UNIT DRAIN TRAP

(NEGATIVE PRESSURE)
NO SCALE



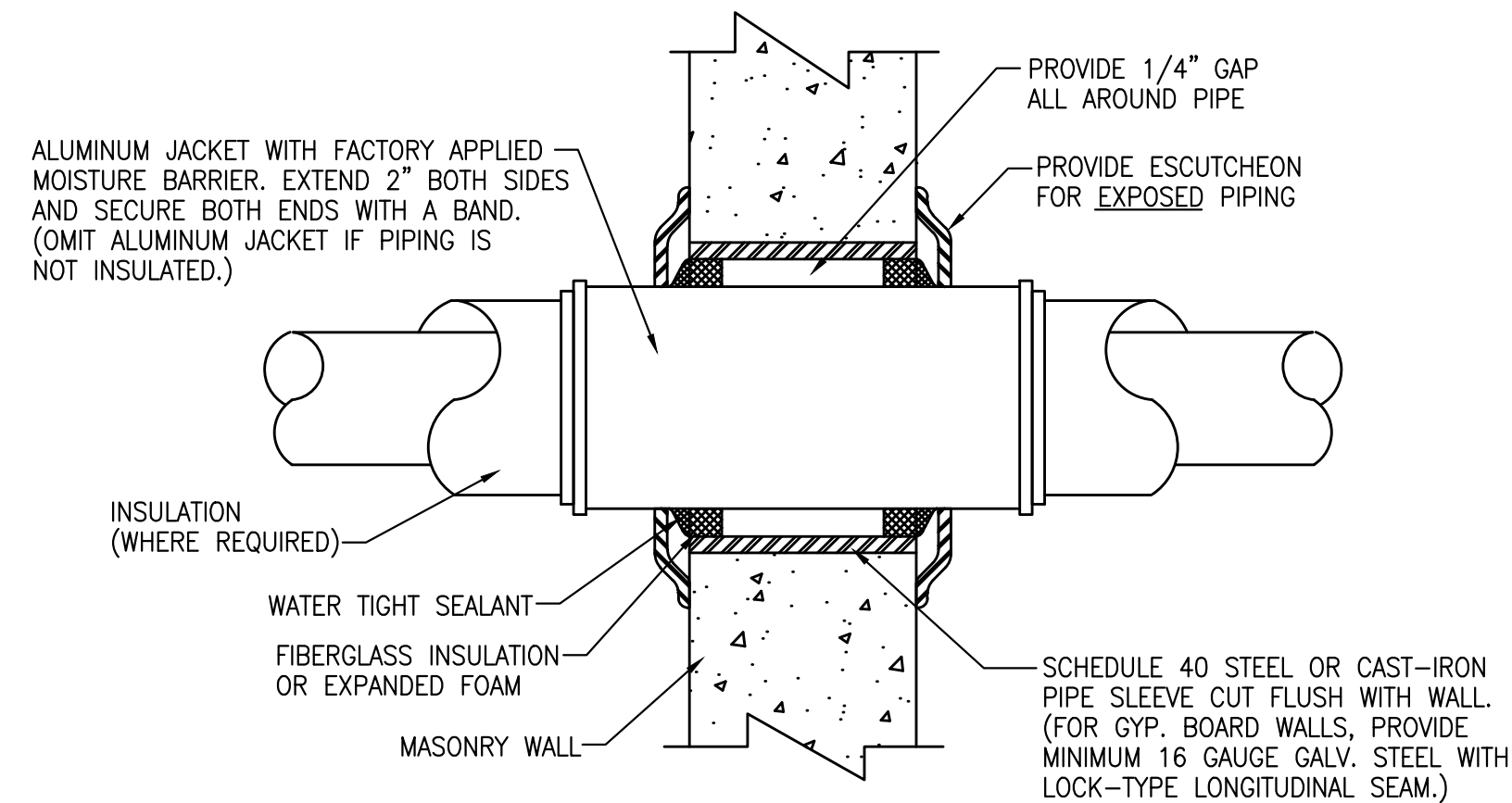
OSA INTAKE LOUVER DETAIL

NO SCALE



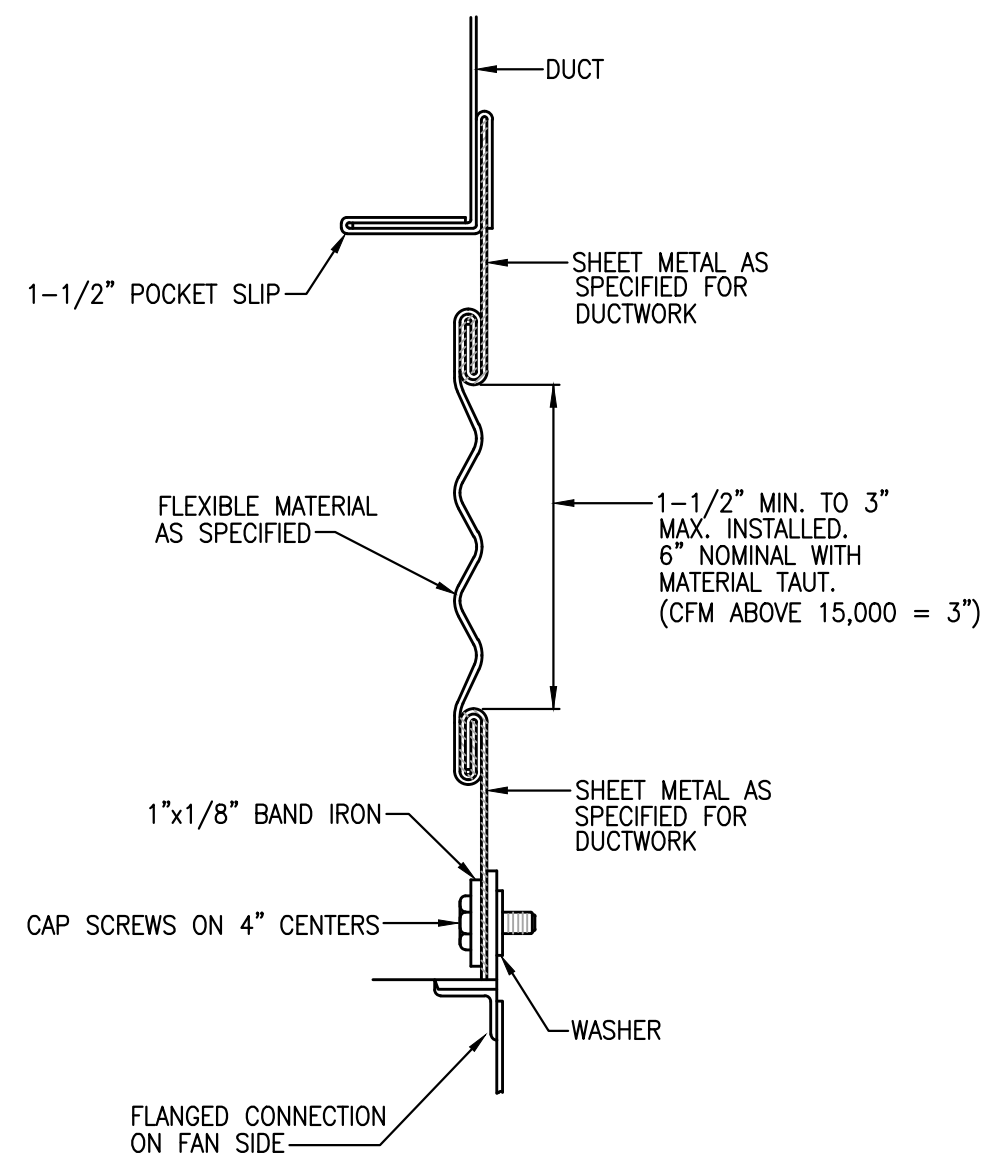
IN-LINE EXHAUST FAN DETAIL (EF-2)

NOT TO SCALE



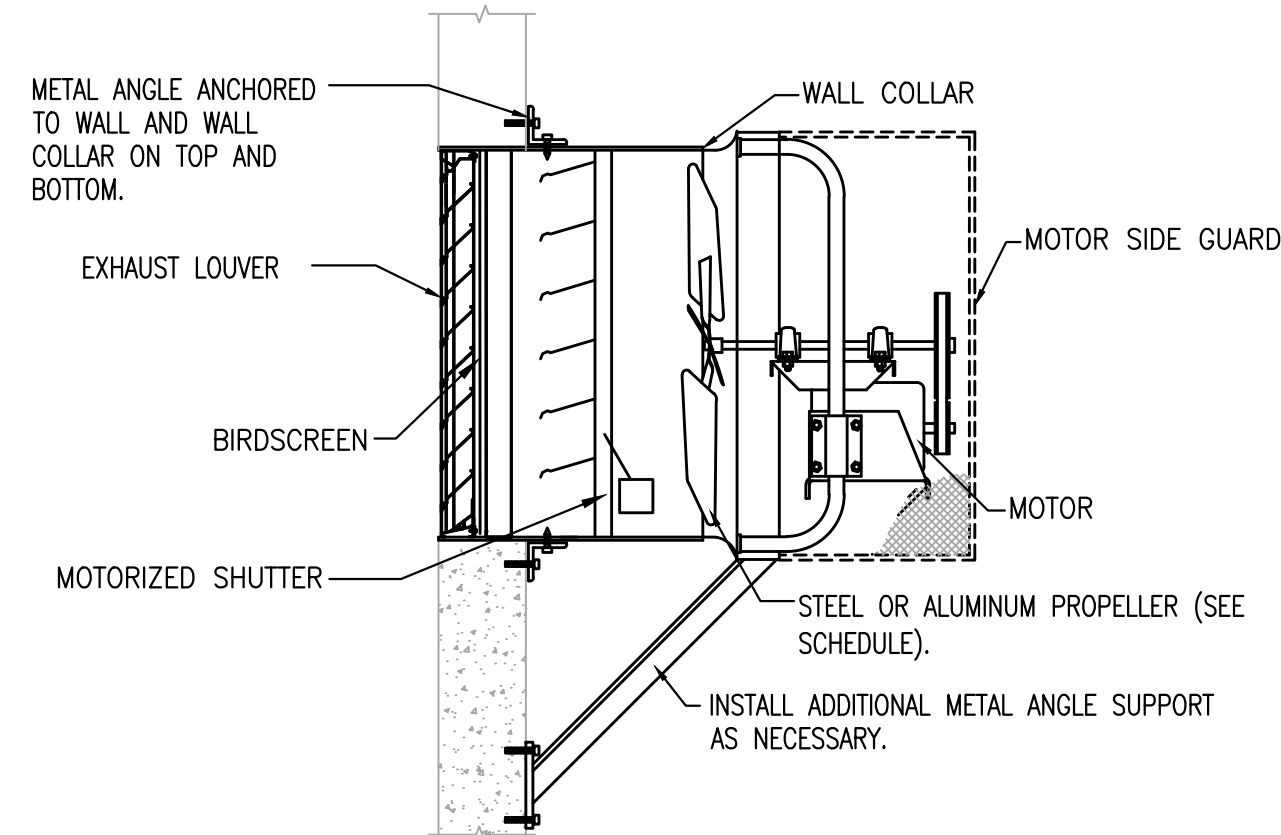
PIPE SLEEVE FOR OUTSIDE WALL ABOVE OR BELOW GRADE

NOT TO SCALE



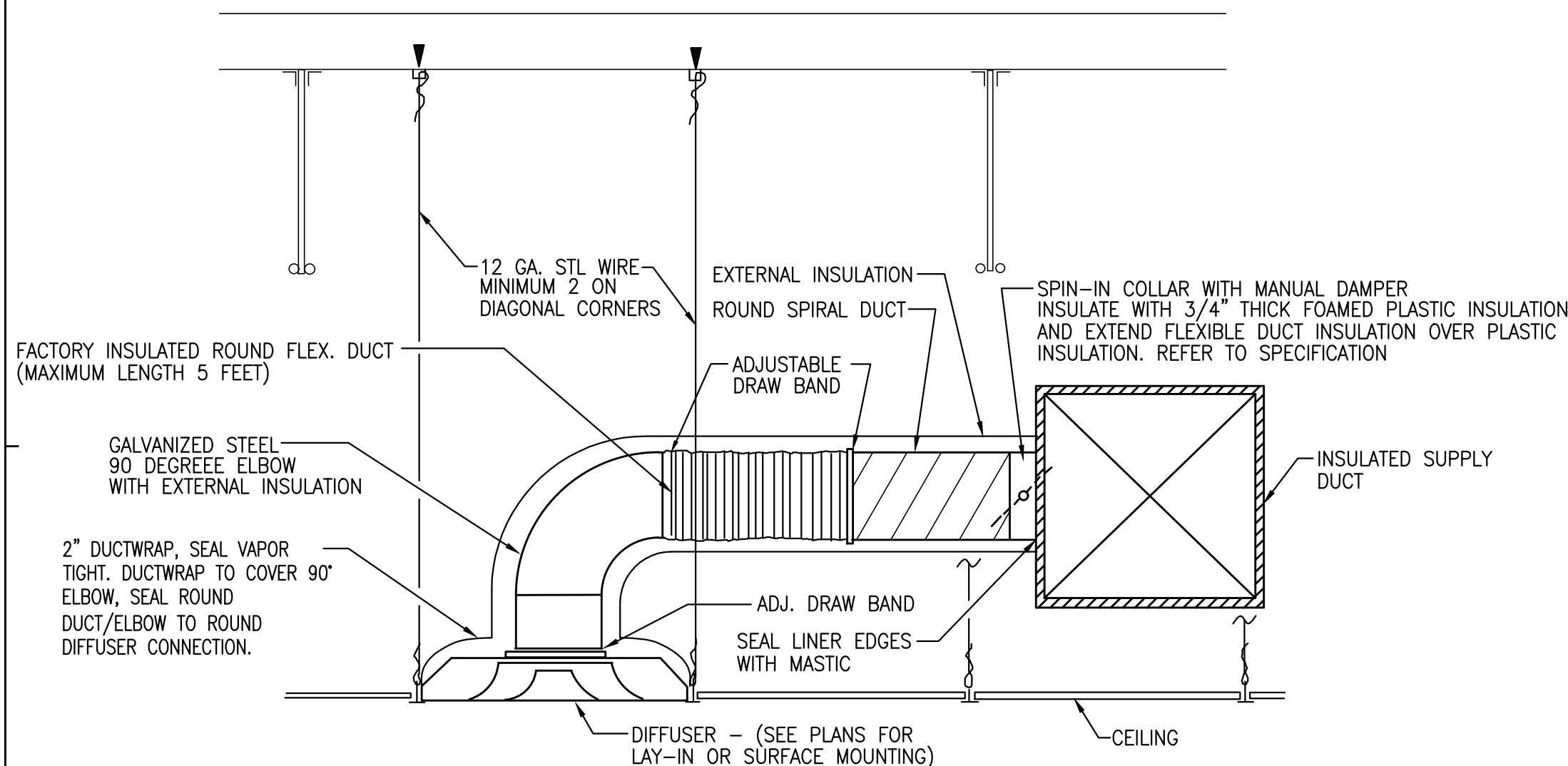
FLEXIBLE DUCT CONNECTION DETAIL

NOT TO SCALE



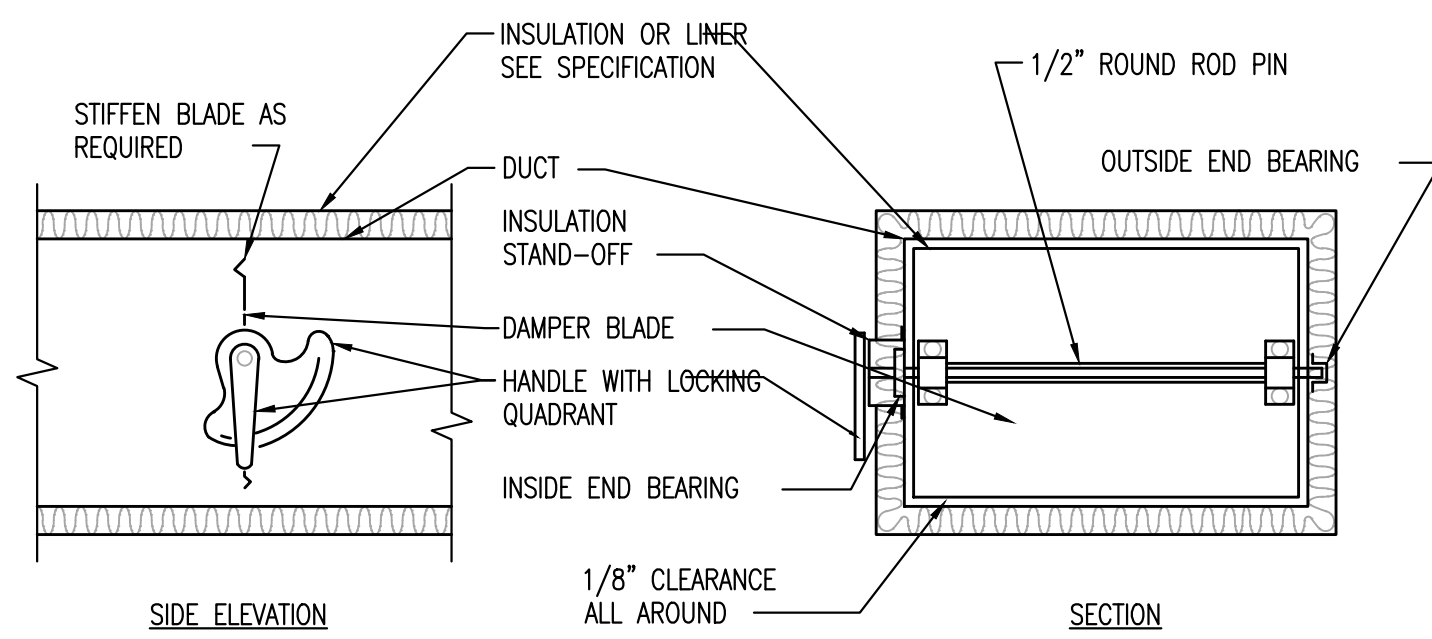
WALL PROPELLER FAN DETAIL (EF-1)

NO SCALE



CEILING DIFFUSER INSTALLATION DETAIL

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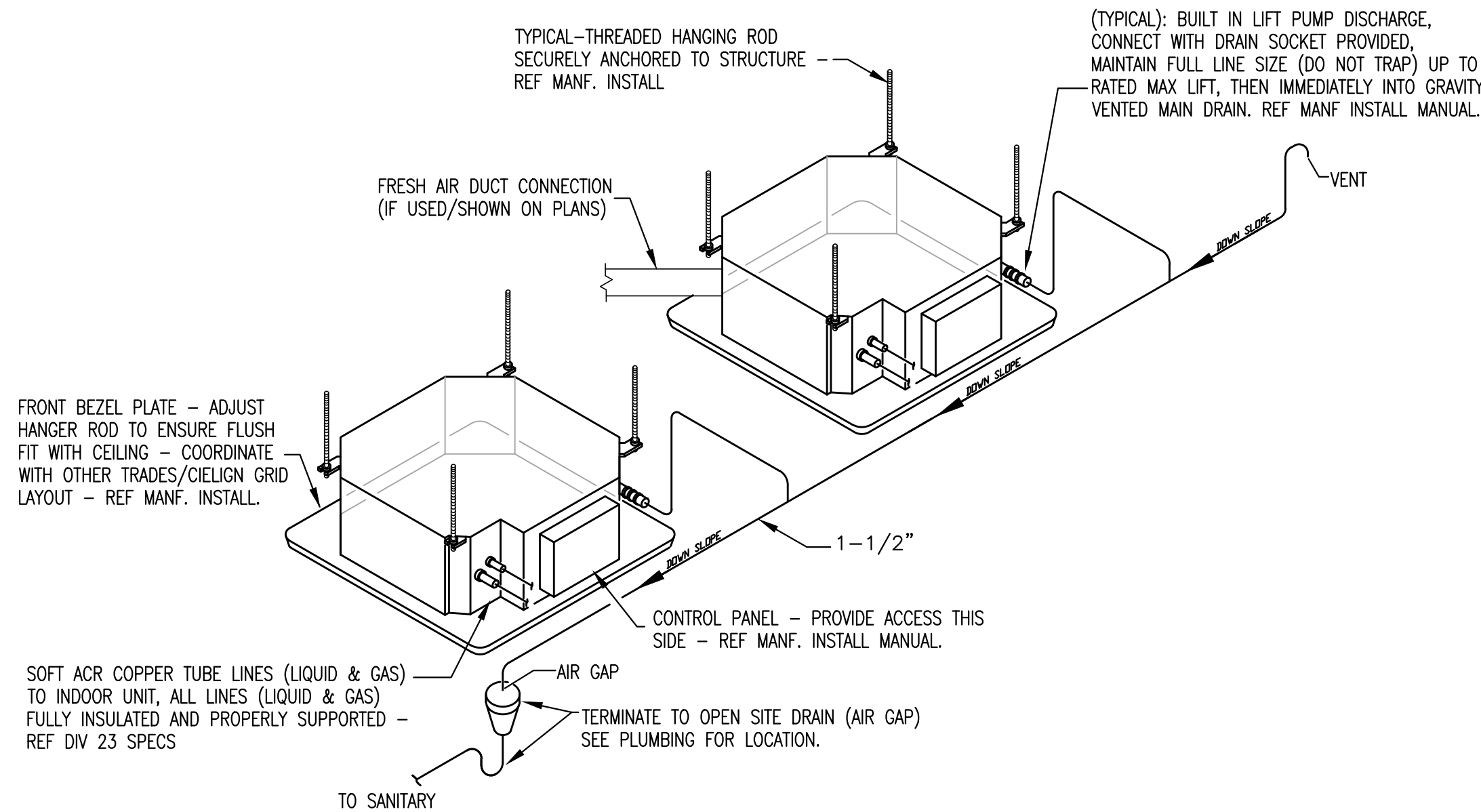


NOTE:

- DELETE INSULATION STAND-OFF ON DUCTWORK WITHOUT EXTERIOR INSULATION.
- DETAIL SHOWS SINGLE BLADE DAMPER. DAMPER INSTALLATION SHALL BE SIMILAR FOR MULTI-BLADE DAMPERS & ROUND DAMPERS.
- MANUAL DAMPERS SHALL BE EQUAL TO RUSKIN MD35 (FOR RECTANGULAR DUCTS) AND SHALL BE EQUAL TO RUSKIN MDRS25 (FOR ROUND DUCTS).

MANUAL DAMPER (MD) DETAIL

NOT TO SCALE



TYPICAL VRF SYSTEM CEILING CASSETTES INSTALLATION

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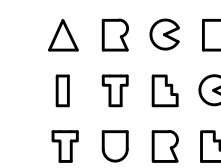


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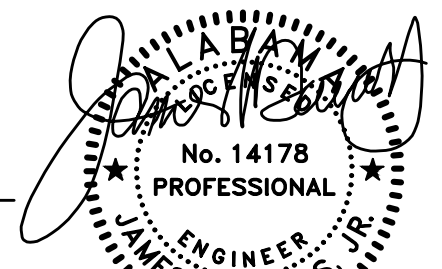
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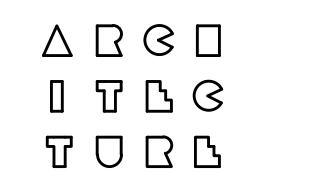


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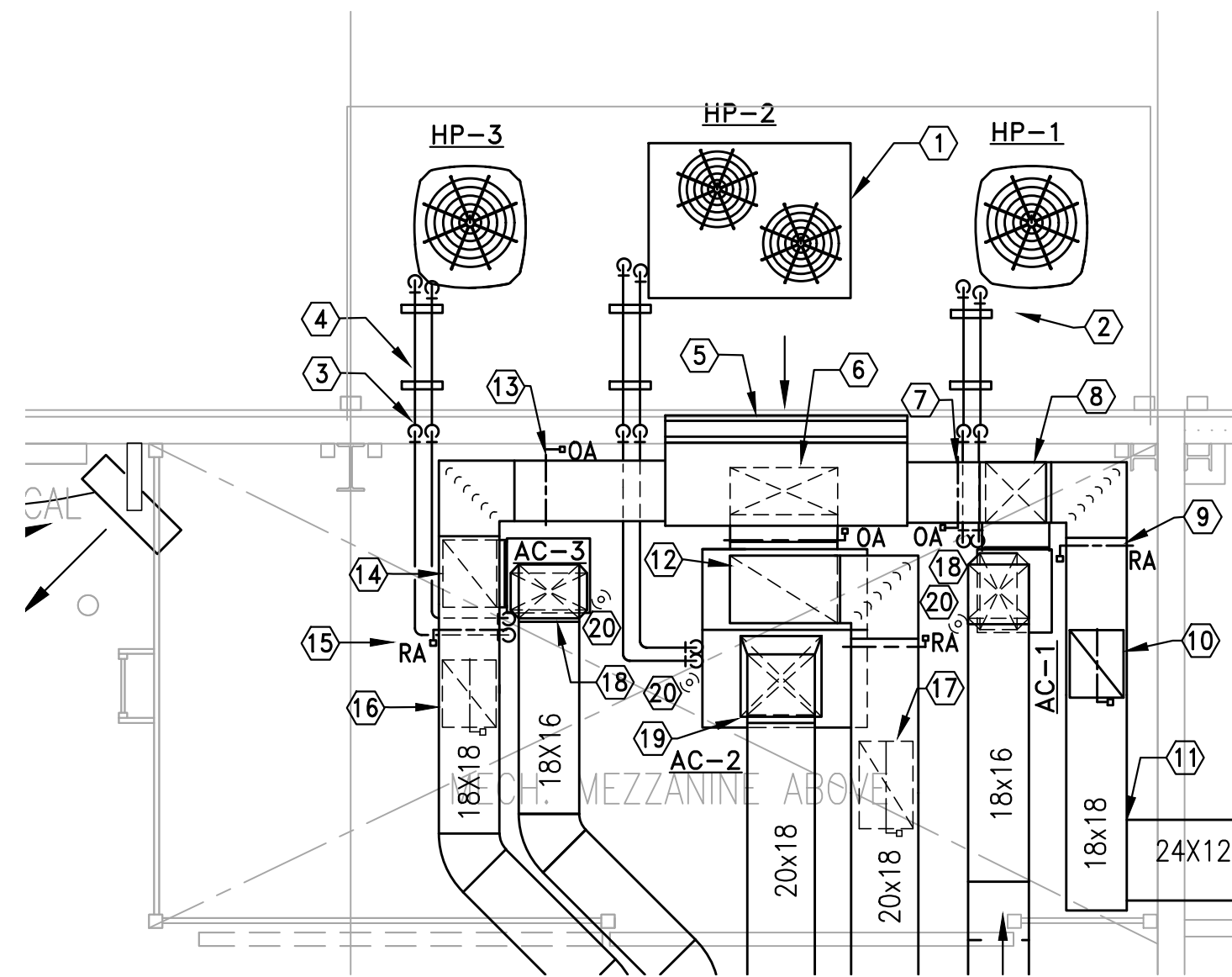
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HVAC FLOOR
PLAN

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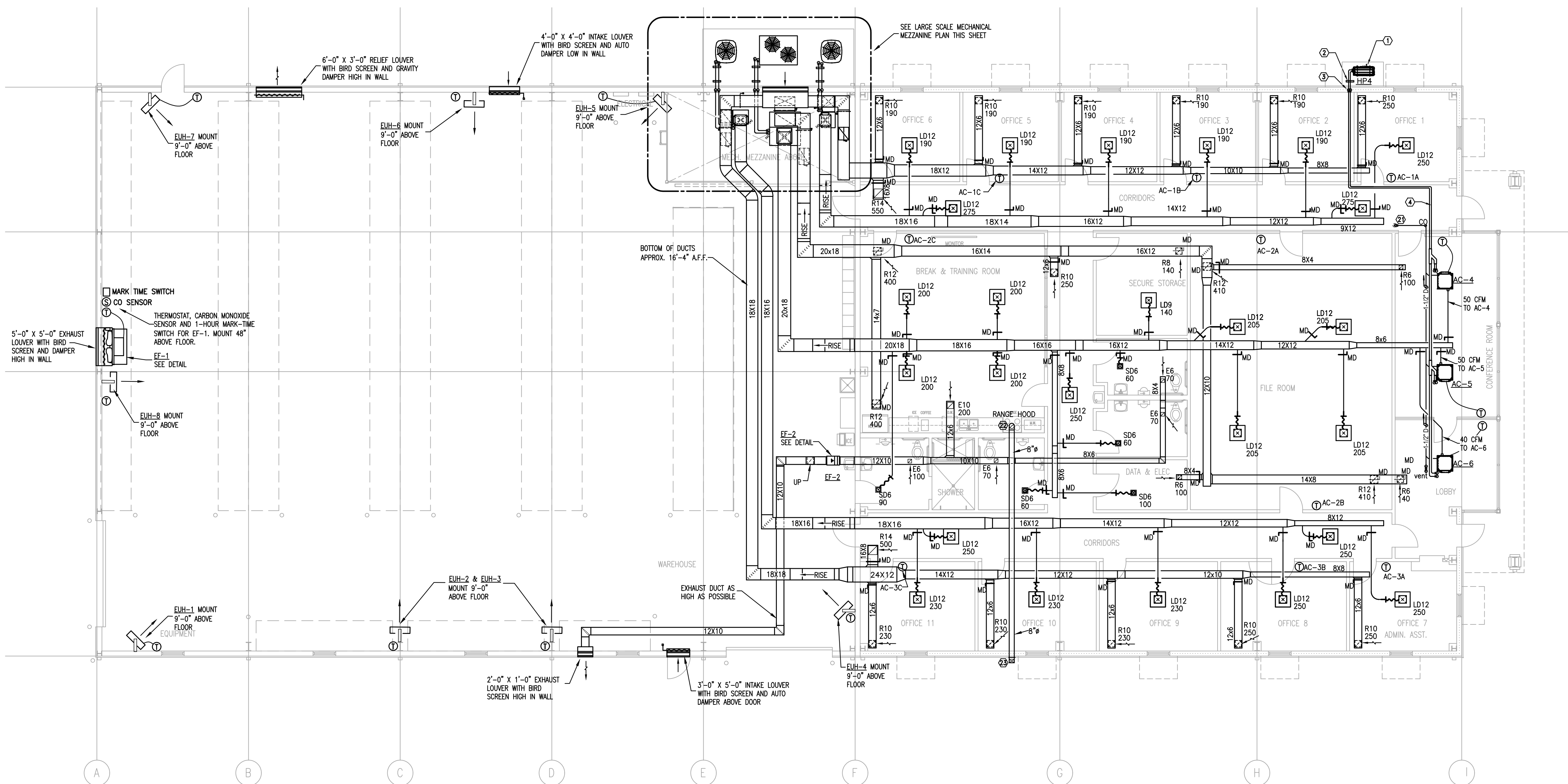


LARGE SCALE MECHANICAL MEZZANINE PLAN

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

KEYED NOTES:

- 1 SECURE OUTDOOR UNIT TO CONCRETE PAD (TYPICAL).
- 2 REFRIGERANT LINE PIPING SUPPORT-SEE DETAIL (TYPICAL).
- 3 REFRIGERANT PIPING DOWN TO OUTDOOR UNIT. SEAL WALL PENETRATION WEATHER TIGHT (TYPICAL).
- 4 REFRIGERANT PIPING SIZED PER MANUFACTURERS INSTRUCTIONS (TYPICAL).
- 5 6'-0" X 3'-0" OUTDOOR AIR LOUVER WITH BIRD SCREEN. INSTALL 24" DEEP INSULATED PLENUM OVER ENTIRE LOUVER.
- 6 CONNECT 32X14 OUTDOOR AIR DUCT TO BOTTOM OF PLENUM. INSTALL AUTO OUTDOOR AIR DAMPER IN DUCT AND EXTEND TO FULL SIZE CONNECTION AC-2 MIXED AIR PLENUM. CONNECT TO UNIT WITH FLEX CONNECTION (SEE DETAIL).
- 7 CONNECT 18X18 OUTDOOR AIR DUCT TO PLENUM. INSTALL AUTO OUTDOOR AIR DAMPER IN DUCT.
- 8 DROP 18X18 OUTDOOR AIR DUCT DOWN AND CONNECT TO 18X18 RETURN AIR DUCT BELOW.
- 9 18X18 RETURN AIR DUCT ON FLOOR OF MECHANICAL MEZZANINE WITH AUTO RETURN AIR DAMPER. COMBINE WITH 18X18 OUTDOOR AIR DUCT FROM ABOVE AND CONNECT TO FULL SIZE RETURN CONNECTION ON AC-1. CONNECT TO UNIT WITH FLEX CONNECTION (SEE DETAIL).
- 10 20X16 OPENING WITH AUTO RELIEF DAMPER IN TOP OF 18X18 RETURN AIR DUCT.
- 11 CONNECT 24X12 RETURN AIR DUCT FROM OFFICES TO 18X18 RETURN AIR DUCT AT FLOOR OF MECHANICAL MEZZANINE.
- 12 20X18 RETURN AIR DUCT WITH AUTO RETURN AIR DAMPER. TURN DOWN AND TRANSITION TO FULL SIZE CONNECTION ON AC-3 MIXING BOX. CONNECT TO UNIT WITH FLEX CONNECTION (SEE DETAIL).
- 13 18X18 OUTSIDE AIR DUCT WITH AUTO OUTSIDE AIR DAMPER. CONNECT TO OUTDOOR AIR PLENUM.
- 14 COMBINE OUTDOOR AIR AND RETURN AIR DUCTS. DROP DOWN WITH 20X16 DUCT AND CONNECT FULL SIZE TO AC-3 RETURN AIR CONNECTION. CONNECT TO UNIT WITH FLEX CONNECTION (SEE DETAIL).
- 15 18X18 RETURN AIR DUCT WITH AUTO RETURN AIR DAMPER.
- 16 20X16 OPENING WITH AUTO RELIEF DAMPER IN BOTTOM OF 18X18 RETURN AIR DUCT.
- 17 26X16 OPENING WITH AUTO RELIEF DAMPER IN BOTTOM OF 20X18 RETURN AIR DUCT.
- 18 18X18 SUPPLY DUCT DOWN AND TRANSITION TO FULL SIZE OF UNIT CONNECTION. CONNECT TO UNIT WITH FLEX CONNECTION (SEE DETAIL).
- 19 20X18 SUPPLY DUCT DOWN AND TRANSITION TO FULL SIZE OF UNIT CONNECTION. CONNECT TO UNIT WITH FLEX CONNECTION (SEE DETAIL).
- 20 DISCHARGE 1" CONDENSATE DRAIN INTO MECHANICAL FLOOR DRAIN. SEE PLUMBING.
- 21 DISCHARGE 1-1/2" COMBINED CONDENSATE DRAINS INTO HUB DRAIN ABOVE CEILING. SEE PLUMBING.
- 22 CONNECT 8"Ø EXHAUST DUCT TO RANGE HOOD AS REQUIRED. INSTALL EXHAUST DUCT PER HOOD MANUFACTURER'S INSTALLATION INSTRUCTIONS.
- 23 WALL CAP WITH BIRDSCREEN AND BACKDRAFT DAMPER.



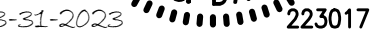
HVAC FLOOR PLAN

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

scale is accurate on 24"x36" sheets only

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HVAC CONTROLS

M2.0

X OF X SHEETS



NOT TO SCALE

GENERAL CONTROLS NOTES

THE CONTRACTOR SHALL PROVIDE ALL CONTROLS AS REQUIRED TO INCLUDE ALL CONTROL PANELS, WIRING, CONDUIT, CONTROL SEQUENCES, POWER WIRING, AND COMPONENTS NECESSARY TO PROVIDE A COMPLETE SYSTEM. ALL CONTROL WIRING SHALL BE INSTALLED IN CONDUIT IN ACCORDANCE WITH THE ELECTRICAL DRAWINGS AND SPECIFICATIONS.

UNITS ARE TO BE CONTROLLED BY THE FACTORY MOUNTED CONTROLLER AND WILL INTERFACE WITH THE BUILDING AUTOMATION SYSTEM (BAS) VIA BACNET IP OR AS DETERMINED BY THE CONTROLS CONTRACTOR. THE BAS WILL SEND THE CONTROLLER OCCUPIED, UNOCCUPIED, OPTIMAL START/STOP, NIGHT HEAT/COOL AND TIMED OVERRIDE COMMANDS. THE BAS WILL ALSO SEND ZONE TEMPERATURE SETPOINTS

CONTROL SEQUENCES:

UNITS SHALL BE STARTED VIA THE BAS SUBJECT TO BUILDING ALARMS AND SAFETIES. PROVIDE THREE REMOTE TEMPERATURE SENSORS FOR EACH UNIT IN THE SELECTED SPACES AS SHOWN ON THE DRAWINGS. PROVIDE COOLING/HEATING/EMERGENCY HEATING STEPS AND CONTROL FUNCTIONS TO MATCH EQUIPMENT REQUIREMENTS. UNIT CONTROL WILL BE AS SELECTED EITHER BY A SINGLE SELECTED REMOTE TEMPERATURE SENSING POINT OR BY A REMOTE TEMPERATURE SENSING POINT AND A REMOTE TEMPERATURE SENSING POINT READING (HEATING MODE) . IN THE OCCUPIED MODE AC UNIT FANS TO RUN CONTINUOUSLY. PROVIDE AUTOMATIC DAMPERS IN THE OUTSIDE AIR DUCT (NORMALLY CLOSED) . RETURN DUCT (NORMALLY OPEN) AND RELIEF AIR DUCT (NORMALLY CLOSED) . UNITS TO BE EQUIPPED TO PROVIDE COOLING BELOW 55°F OUTDOOR AIR TEMPERATURE VIA 100% OUTDOOR AIR ECONOMIZER. ON A CALL FOR COOLING WITH THE OUTSIDE AIR TEMPERATURE BELOW 55°F, THE COMPRESSORS SHALL BE DISABLED AND THE UNIT SHALL BE OPERATED IN THE 100% OUTDOOR AIR MODE. PROVIDE CONTROLS TO PROVIDE MODULATING TEMPERATURES TO PROVIDE COOLING TO THE SPACES AS REQUIRED . (SUBJECT TO A MIXED AIR LOW LIMIT TEMPERATURE OF 52°F) .



NOT TO SCALE

THE FAN SHALL BE STARTED BY THE BAS (SUBJECT TO THE BUILDING FIRE ALARM SIGNAL) WHEN THE SPACE TEMPERATURE OR THE CARBON MONOXIDE SENSOR RISES ABOVE SETPOINT. THE FAN SHALL ALSO BE STARTED IF THE 1-HOUR MARK-TIME OVERRIDE SWITCH IS ACTIVATED. WHEN THE EXHAUST FAN IS SIGNALLED TO START THE BAS SHALL OPEN THE AUTOMATIC INTAKE DAMPERS AT THE INTAKE LOUVERS. THE BAS SHALL MONITOR THE STATUS OF THE FAN AND ALARM THE WORKSTATION IF THE FAN FAILS TO RUN OR IF THE INTAKE DAMPERS FAIL TO OPEN.



NO SCALE

FAN OPERATION SHALL BE INTERLOCKED WITH AC-2. EXHAUST FAN SHALL RUN ANYTIME THE AC-2 SUPPLY AIR FAN IS OPERATING.

VRF SYSTEM REFRIGERANT PIPING AND CONTROLS SCHEMATIC

NO SCALE



NOT TO SCALE

THE HEATER SHALL BE STARTED WHEN THE SPACE TEMPERATURE DROPS BELOW SETPOINT ON THE SPACE THERMOSTAT.

REVISIONS	BY

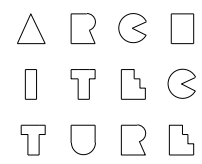
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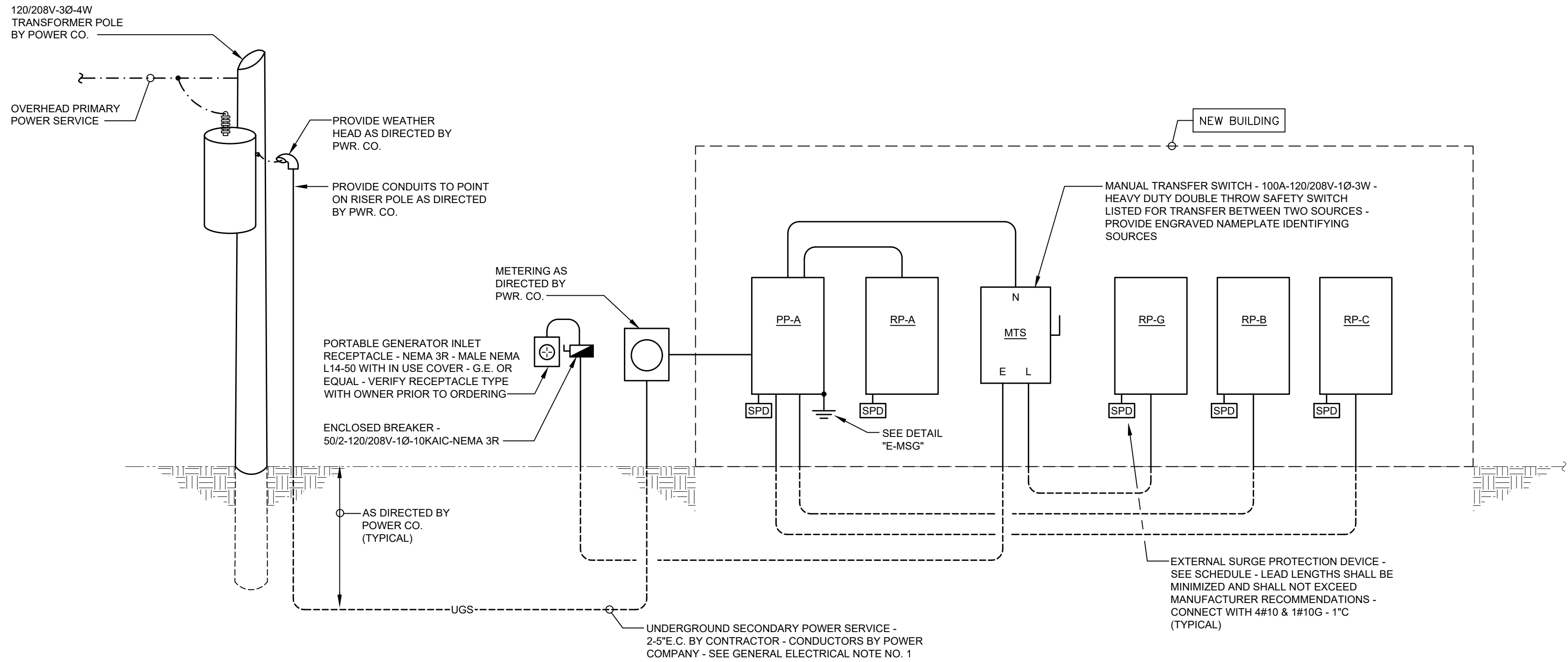
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PROJECT NO	220317

ELECTRICAL
DETAILS
AND
DIAGRAMS

SHEET NO

E2

2 OF 11 SHEETS



SINGLE LINE DIAGRAM

SCALE : NONE

DIAGRAM NOTES

- REFER TO PANELBOARD SCHEDULES FOR ALL APPLICABLE FEEDER SIZES, BREAKER RATINGS, BUS RATINGS, ETC. NOT SHOWN ON THIS DIAGRAM.
- NEUTRAL-GROUND BONDS SHALL ONLY BE MADE AT THE FOLLOWING LOCATIONS:
A. MAIN BREAKER AT PP-A.

NAME:	LP-A
RATING:	225A-277/480V-3Ø-4W
FED FROM:	UTILITY
AVAILABLE FAULT CURRENT:	9,872A (10/12/2020)

VERIFY ACTUAL AVAILABLE FAULT CURRENT
WITH POWER SYSTEM STUDY

POWER SERVICE EQUIPMENT

NAME:	MPZ-A
RATING:	40A-120/240V-1Ø-3W
FED FROM:	LP-A (THRU T-A) (EQUIPMENT STAND)

POWER DISTRIBUTION EQUIPMENT

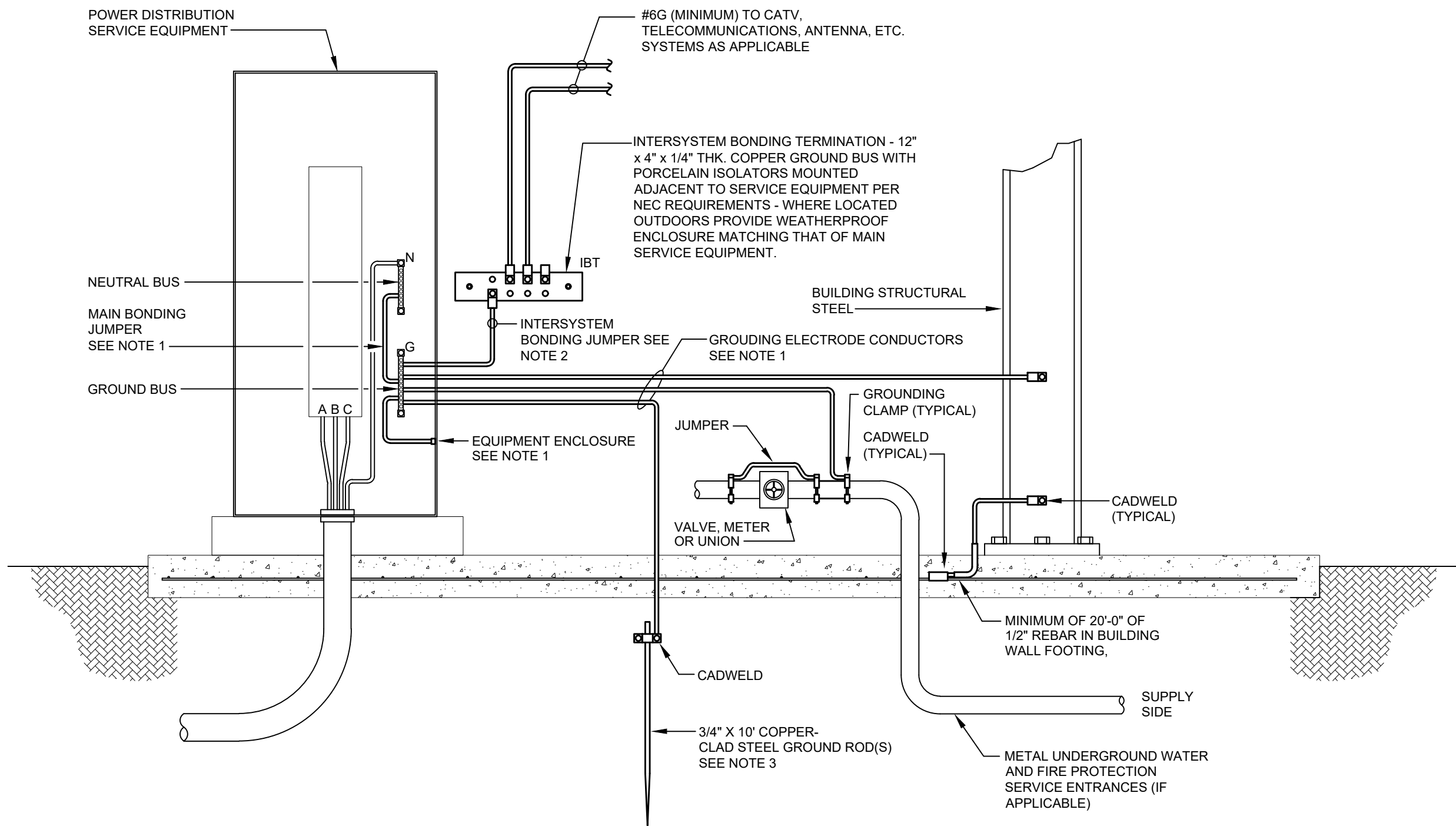
AMPACITY SHALL BE BASED ON
MAIN BREAKER OR FEEDER
BREAKER, NOT BUS RATING

DETAIL "E-EDL" ELECTRICAL DISTRIBUTION EQUIPMENT LABEL

SCALE : NONE

DETAIL NOTES

- PANEL NAMES & RATINGS LISTED ABOVE ARE FOR EXAMPLE PURPOSES ONLY. NAMES & RATINGS SHALL BE ADJUSTED TO MATCH ASSOCIATED EQUIPMENT.
- THE INTENT OF THIS DETAIL IS TO DEMONSTRATE GENERAL ELECTRICAL IDENTIFICATION REQUIREMENTS FOR ELECTRICAL DISTRIBUTION AND UTILIZATION EQUIPMENT. REFER TO SPECIFICATIONS FOR SPECIFIC REQUIREMENTS REGARDING LOCATIONS, CONTENT, MATERIALS, ETC..



DETAIL "E-MSG" MAIN SERVICE GROUNDING

SCALE : NONE

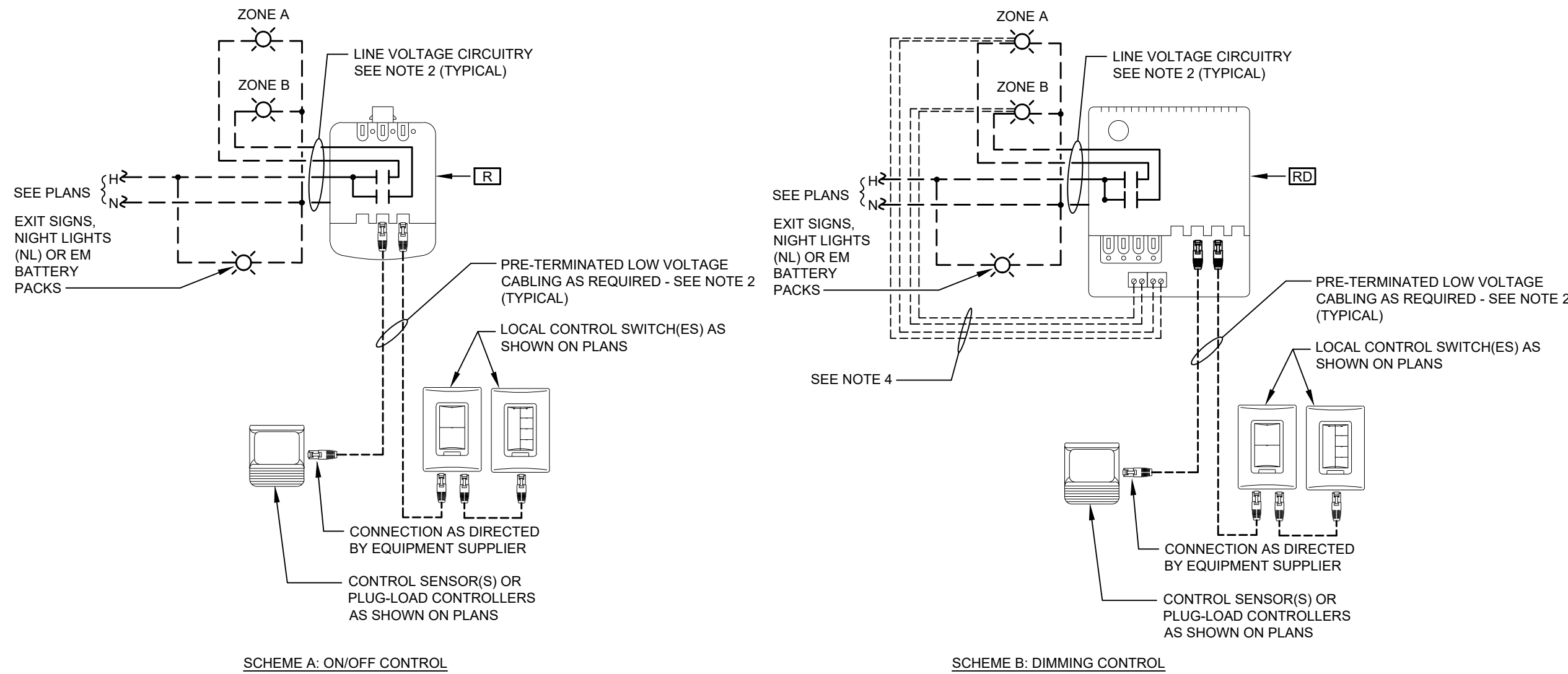
DETAIL NOTES

- ALL GROUNDING ELECTRODE CONDUCTORS AND MAIN BONDING JUMPERS SHALL BE INSULATED COPPER, SIZED IN ACCORDANCE WITH NEC TABLE 250.66 UNLESS NOTED OTHERWISE.
- THE INTERSYSTEM BONDING JUMPER SHALL BE INSULATED COPPER, SIZED TO MATCH THE GROUNDING ELECTRODE CONDUCTOR OR #6AWG, WHICHEVER IS GREATER.
- ADDITIONAL GROUND RODS SHALL BE INSTALLED A MINIMUM OF SIX (6) FEET APART AND CONNECTED BY GROUNDING ELECTRODE CONDUCTORS UNTIL THE GROUND RESISTANCE DOES NOT EXCEED FIVE (5) OHMS.
- ALL GROUNDING CONDUCTORS SHALL BE INSTALLED IN CONDUIT (TYPE PER SPECIFICATION REQUIREMENTS) UNLESS SPECIFICALLY NOTED OTHERWISE. METAL CONDUITS SHALL BE GROUNDED PER NEC REQUIREMENTS.
- REFER TO "GROUNDING" SPECIFICATIONS SECTION FOR ADDITIONAL GROUNDING REQUIREMENTS.



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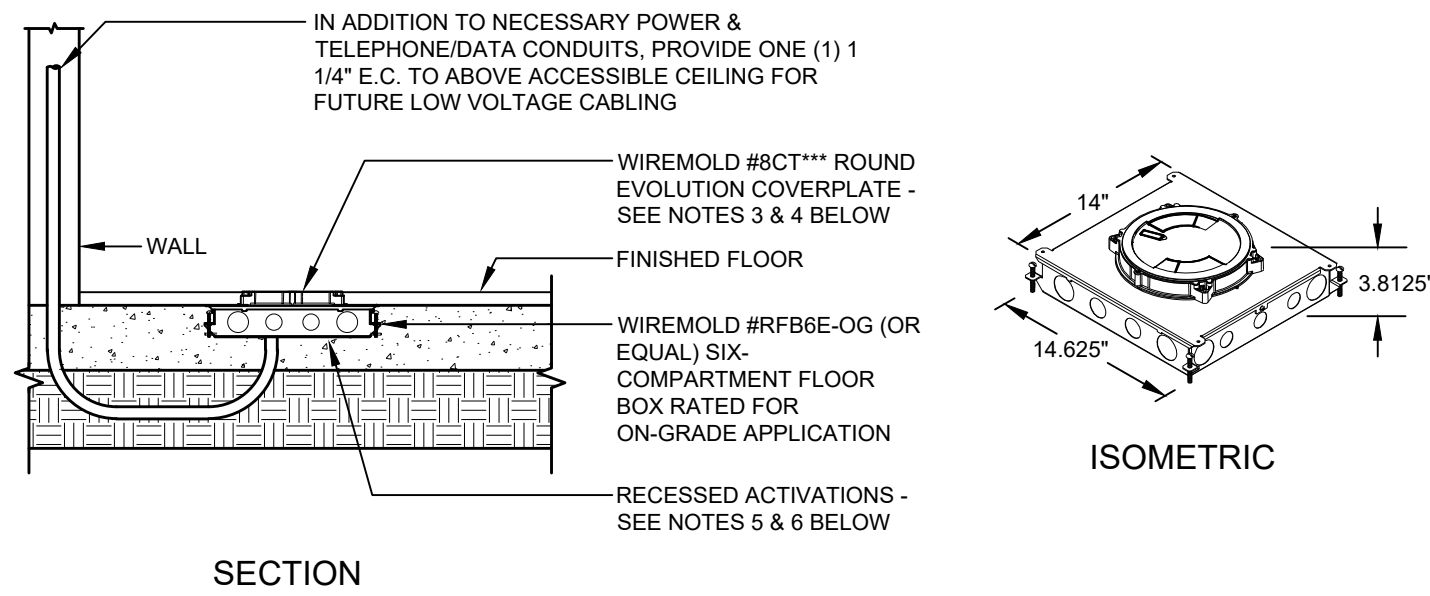
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DETAIL "E-RC" TYPICAL ROOM DIGITAL LIGHTING CONTROL WIRING DIAGRAM(S)

SCALE : NONE

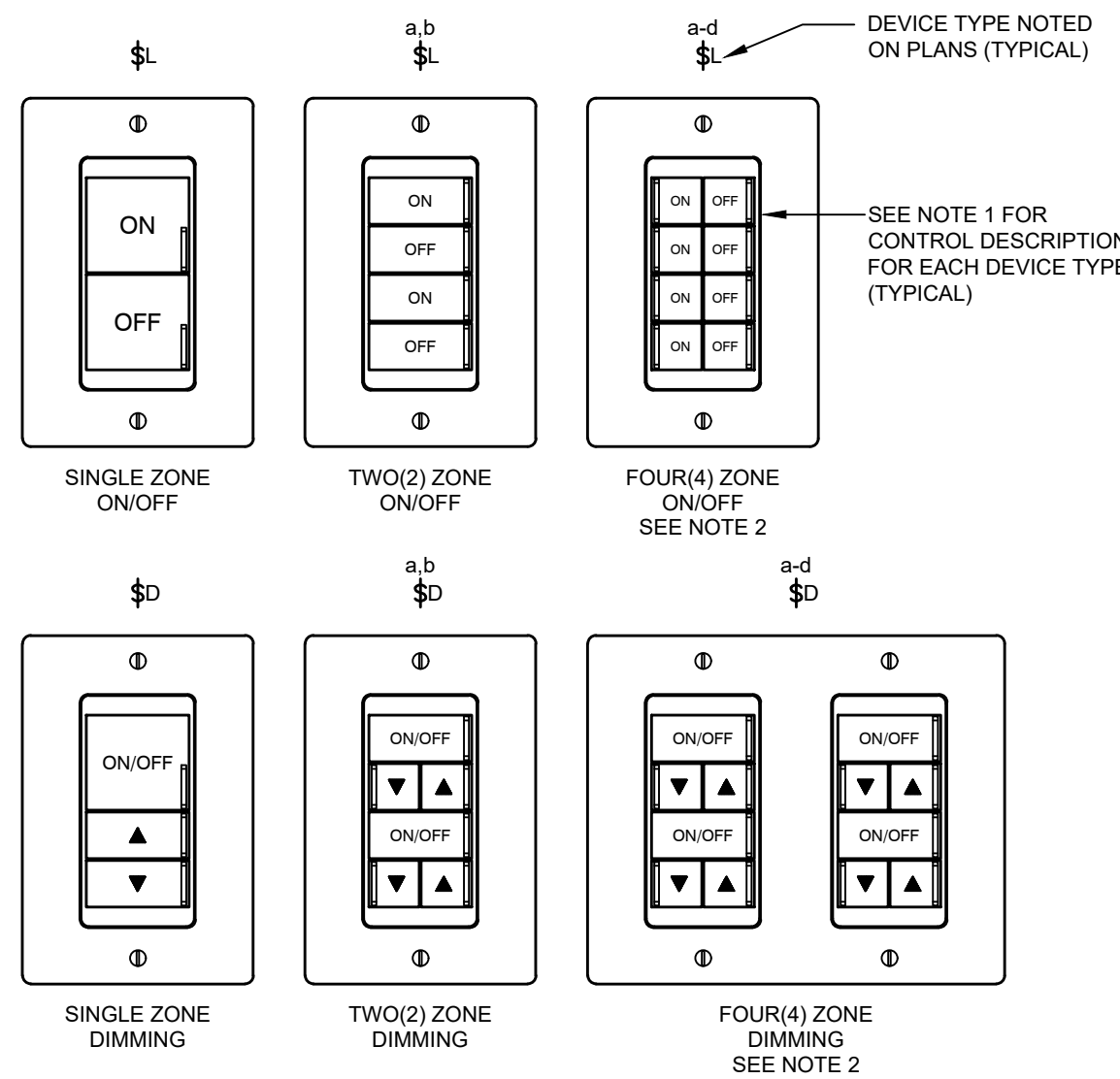
DIAGRAM NOTES
1. DEVICES SHOWN ON THIS DIAGRAM ARE TYPICAL ONLY. EXACT SWITCHING, COMPONENTS, CONNECTIONS, DIMMING TYPE, ETC. WILL VARY. REFER TO PLANS FOR EXACT DEVICES REQUIRED IN EACH SPACE.
2. ALL CIRCUITRY/CABLING SHALL BE CONCEALED. LOW VOLTAGE CABLING MAY BE INSTALLED WITHOUT CONDUIT WHERE ABOVE ACCESSIBLE CEILINGS (IF SUPPORTED EVERY 60" MAXIMUM WITH J-HOOKS). ALL LINE VOLTAGE WIRING SHALL BE INSTALLED IN CONDUIT (UNLESS SPECIFICALLY NOTED OTHERWISE) PER SPECIFICATION REQUIREMENTS. FURNISH NUMBER OF ROOM CONTROLLERS/POWER PACKS AS REQUIRED TO ACCOMPLISH INTENT SHOWN ON PLAN.
3. THIS DIAGRAM SHOWS GENERAL WIRING REQUIREMENTS ONLY. CONTRACTOR SHALL PROVIDE ALL LOW VOLTAGE CONNECTIONS, LINE VOLTAGE CONNECTIONS, EQUIPMENT, ETC. AS RECOMMENDED BY THE LIGHTING CONTROL SYSTEM PROVIDER AS REQUIRED FOR A FULLY-FUNCTIONAL DIGITAL LIGHTING CONTROL SYSTEM.
4. CONTRACTOR SHALL FURNISH AND INSTALL ALL LOW VOLTAGE CONTROL CABLING OR ADDITIONAL CONDUCTOR(S) FROM 0-10V DIMMING ROOM CONTROLLER(S) TO ALL 0-10V DIMMED LIGHT FIXTURES AS REQUIRED FOR FULL DIMMING CONTROL OF ALL OVERHEAD LIGHTING THROUGHOUT ASSOCIATED SPACE. EXACT CONTROL CABLING WILL VARY DEPENDING ON FIXTURE DIMMING TYPE. MULTI-CONDUCTOR, PLENUM RATED CABLE SHALL BE USED FOR ALL LOW VOLTAGE CABLING.
5. WHERE EXHAUST FANS SERVE RESTROOMS AND ARE ON A DIFFERENT CIRCUIT THAN RESTROOM LIGHTING, FURNISH POWER PACK AND ASSOCIATED LOW-VOLTAGE CABLING AS REQUIRED TO CONTROL FAN WITH LIGHTS.



DETAIL "E-FB1" MULTI-SERVICE FLOOR BOX (MEDIUM SIZE)

SCALE : NONE

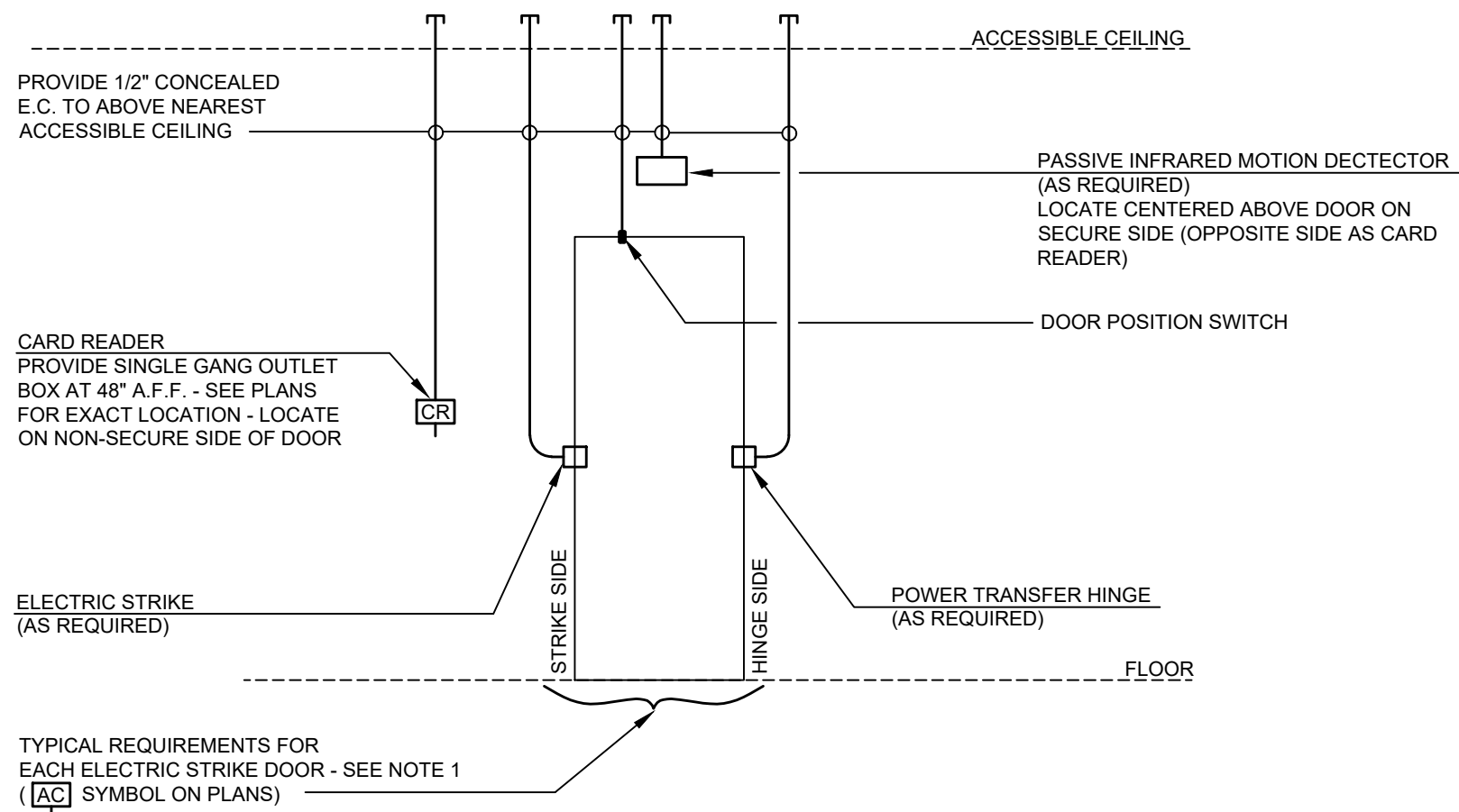
DETAIL NOTES
1. THE EXACT LOCATIONS AND ORIENTATIONS OF ALL FLOOR BOXES SHALL BE VERIFIED BY THE CONTRACTOR WITH THE ARCHITECT PRIOR TO ROUGH-IN.
2. CONTRACTOR SHALL BE RESPONSIBLE FOR COORDINATING PENETRATIONS THROUGH SLABS AND OPENINGS/CONDUITS WITHIN SLABS WITH THE INSTALLER OF THE SLABS PRIOR TO ROUGH-IN.
3. ALL COVERPLATE MATERIALS/FINISHES SHALL BE AS SELECTED BY THE ARCHITECT. CONTRACTOR SHALL PROVIDE CARPET/TILE CUTOUT INSERTS IN COVERPLATE LID (TO MATCH ADJACENT CARPET/TILE) WHERE LID HAS AN INSERT AREA.
4. ALL COVER FLANGE OPTIONS SHALL GENERALLY BE AS FOLLOWS, BUT SHALL BE SUBMITTED TO THE ARCHITECT FOR REVIEW/APPROVAL PRIOR TO ORDERING FLOOR BOXES: a. CARPET AND VCT FLOORING: FLANGED TRIM. b. EXPOSED CONCRETE, WOOD, TILE OR SIMILAR FLOORING (WITH GROUTING): FLANGELESS TRIM.
5. EACH FLOOR BOX SHALL BE PROVIDED WITH TWO (2) 20A-125V-1P, GROUNDING NEMA 5-20R DUPLEX POWER RECEPTACLES CONNECTED TO THE CIRCUITS INDICATED ON THE PLANS, UNLESS NOTED OTHERWISE.
6. EACH FLOOR BOX SHALL BE PROVIDED WITH COMMUNICATION JACKS AND ASSOCIATED LOW VOLTAGE CABLING AS INDICATED BY "1V2D" OR SIMILAR NOTATIONS ON PLANS. CONTRACTOR SHALL REFER TO THE COMMUNICATION OUTLET LEGEND AT DETAIL "E-CO" FOR A DESCRIPTION OF ALL ASSOCIATED JACK & CABLE TYPES.



DETAIL "E-LCS" TYPICAL DIGITAL LIGHTING CONTROL STATION LAYOUT

SCALE : NONE

DIAGRAM NOTES
1. ON/OFF CONTROLS SHALL INCLUDE ON/OFF CONTROL FOR EACH ZONE. DIMMING CONTROLS SHALL INCLUDE ON/OFF AND RAISE/LOWER CONTROLS FOR EACH ZONE. PRESET STATIONS SHALL INCLUDE FOUR(4) SELECTABLE SCENES, MASTER ON/OFF AND MASTER RAISE/LOWER CONTROLS.
2. WHERE MORE THAN FOUR(4) ZONES ARE REQUIRED ON PLANS, FURNISH ADDITIONAL CONTROL STATIONS AS REQUIRED FOR INDEPENDENT CONTROL OF EACH ZONE. ADDITIONAL CONTROL STATIONS SHALL BE GANGED TOGETHER UNDER A SINGLE COVERPLATE. CONTRACTOR SHALL INSTALL OUTLET BOX LARGE ENOUGH TO ACCOMMODATE REQUIRED NUMBER OF CONTROL STATIONS.
3. UNLESS SELECTED OTHERWISE BY THE ARCHITECT DURING THE SUBMITTAL PROCESS, ALL COVERPLATES SHALL MATCH OTHER DEVICE PLATES (TYPICALLY STAINLESS STEEL), AND ALL DEVICES SHALL MATCH OTHER DEVICES (TYPICALLY GRAY). REFER TO SPECIFICATIONS FOR ADDITIONAL INFORMATION REGARDING FINISHES.
4. REFER TO DETAIL "E-RC" FOR CABLING AND CONNECTION REQUIREMENTS FOR EACH CONTROL STATION.
5. ALL BUTTONS SHALL BE PERMANENTLY ENGRAVED AS SHOWN ON THIS DETAIL. GENERIC BUTTONS WITHOUT DESIGNATIONS NOTED ABOVE ARE NOT ALLOWED. SUBMIT LAYOUT FOR EACH PROPOSED CONTROL STATION FOR REVIEW DURING SUBMITTAL PROCESS. SUBMITTALS WITHOUT THIS INFORMATION WILL BE REJECTED WITHOUT REVIEW.



DETAIL "E-AC" - ACCESS CONTROLLED DOOR ELECTRICAL ELEVATION

SCALE : NONE

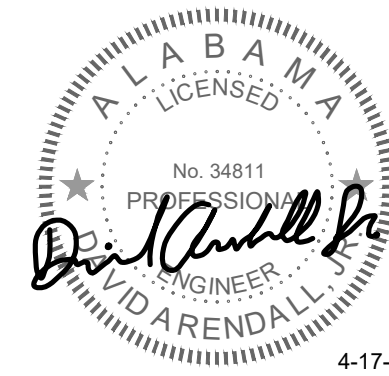
DIAGRAM NOTES
1. DIAGRAM INDICATES POSSIBLE CONDUIT REQUIREMENTS. NOT ALL CONDUITS/OUTLETS ARE REQUIRED AT EACH DOOR. VERIFY EXACT REQUIREMENTS AND LOCATIONS OF ALL DEVICES WITH DOOR HARDWARE SUPPLIER AND ACCESS CONTROL SYSTEM SUPPLIER PRIOR TO ROUGH-IN.



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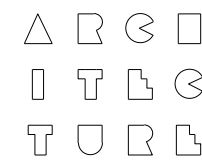
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ELECTRICAL
DETAILS
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DIAGRAMS

SHEET NO

E3

3 OF 11 SHEETS

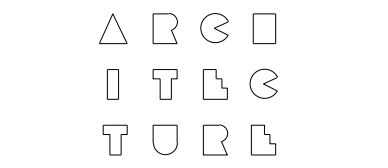
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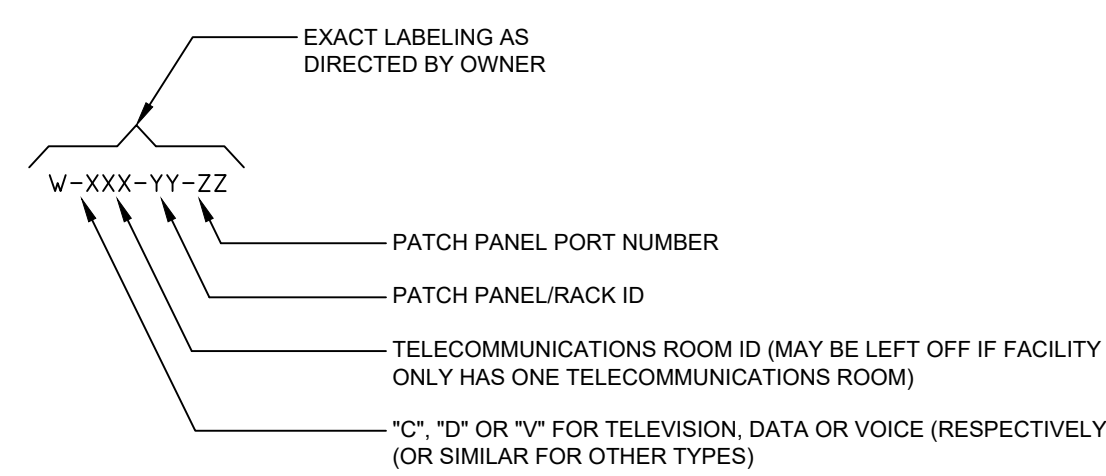
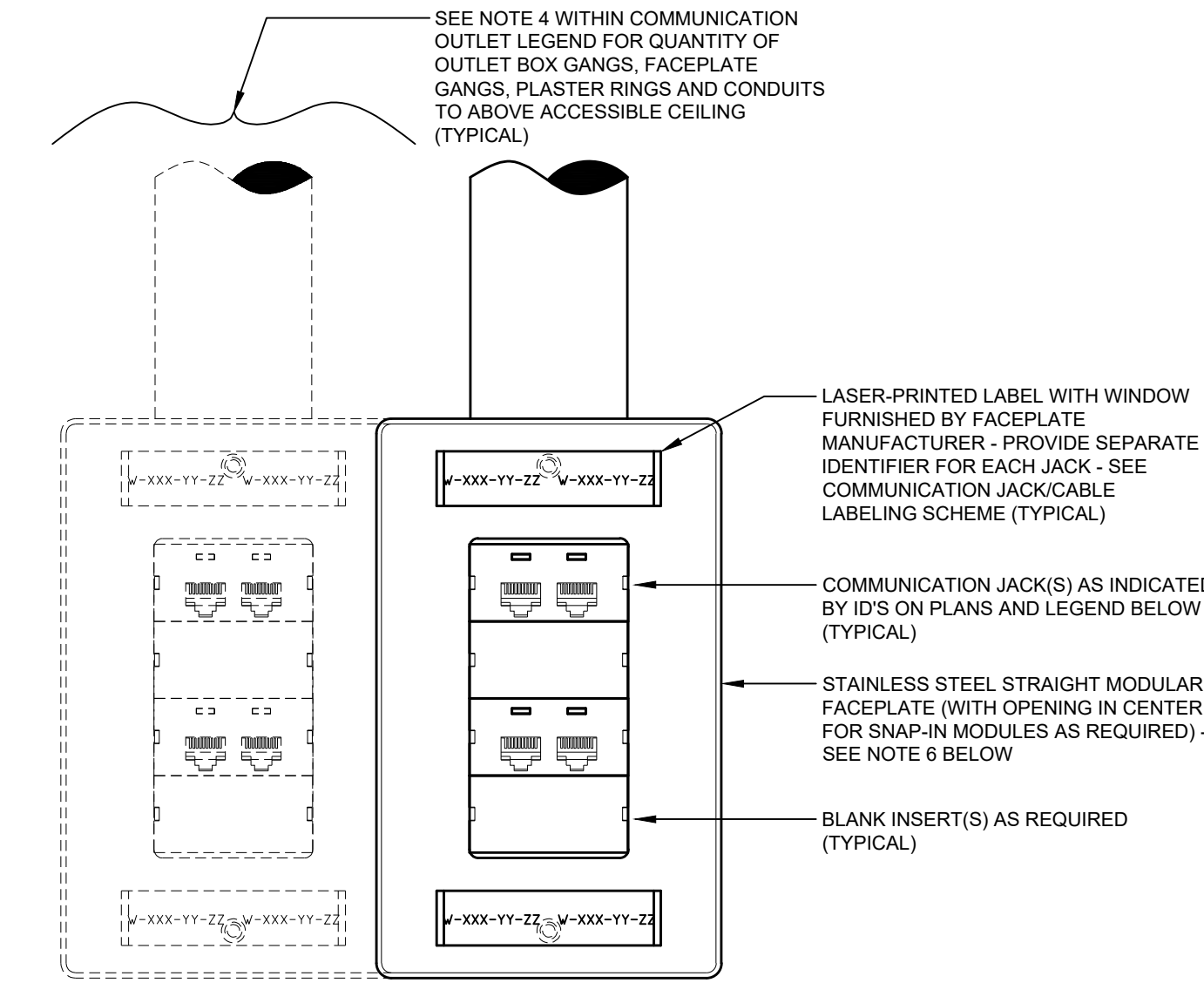
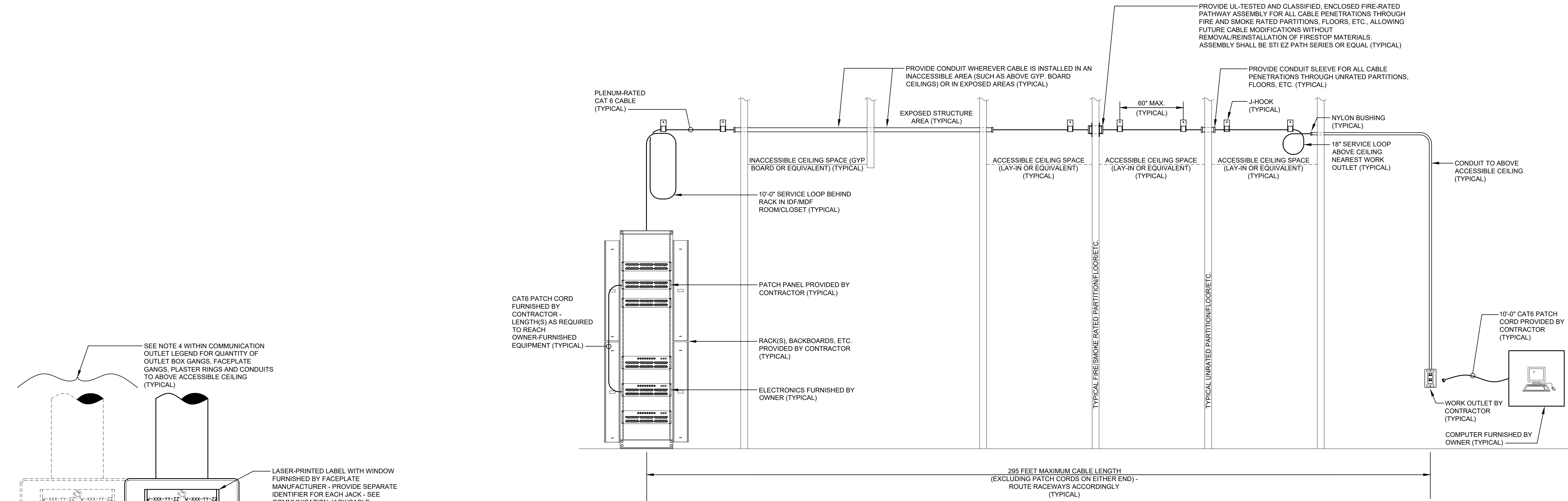
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ELECTRICAL
DETAILS
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DIAGRAMS

SHEET NO

E4

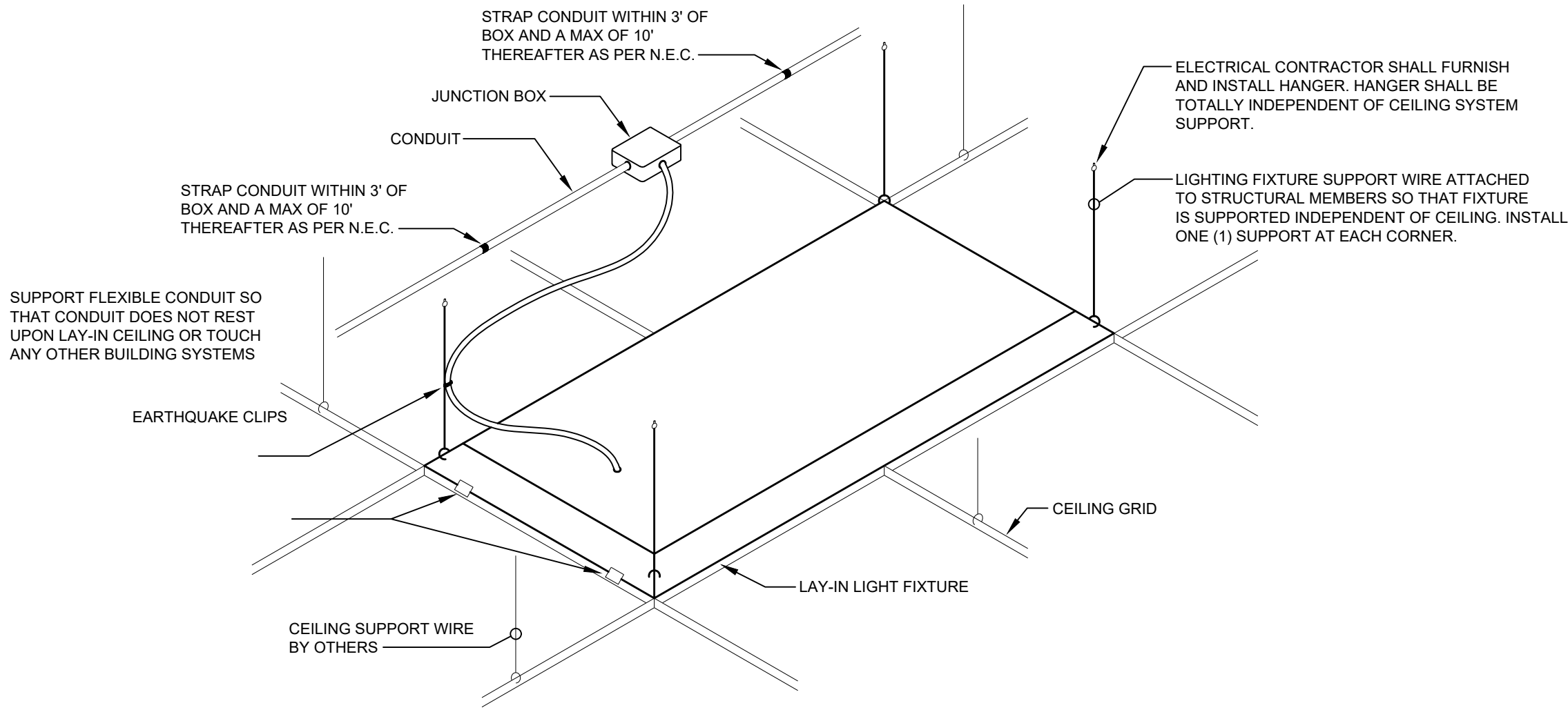
4 OF 11 SHEETS



DETAIL "E-SCH" -
STRUCTURED CABLING HORIZONTAL
TYPICAL WIRING DIAGRAM
SCALE : NONE

DETAIL "E-CO"
COMMUNICATION OUTLET
SCALE : NONE

COMMUNICATION OUTLET LEGEND				
JACK ID(S) SHOWN ON PLANS	JACK TYPE(S)	ASSOCIATED HOMERUN CABLING FROM JACK (SEE NOTE 3 BELOW)	HOMERUN CABLING TO (UNLESS SHOWN OTHERWISE ON PLANS)	REMARKS
*D	RJ45 DATA JACK(S)	CAT6 DATA CABLE(S).	NEAREST DATA PATCH PANEL	
*H	IF CABLE LENGTH < 35': PASSIVE HDMI JACK(S) IF CABLE LENGTH > 35': ACTIVE HDMI JACK(S) - RAPID RUN OPTICAL TRANSMITTER PLATE OR EQUAL	SEE *HD BELOW FOR CABLE REQUIREMENTS. SEE *HD BELOW FOR CABLE REQUIREMENTS.	ASSOCIATED LOW VOLTAGE *HD OUTLET AT DISPLAY LOCATION (TV/PROJECTOR/ETC.)	SEE NOTE 6 BELOW
*HD	IF CABLE LENGTH < 35': PASSIVE HDMI JACK(S) IF CABLE LENGTH > 35': ACTIVE HDMI JACK(S) - RAPID RUN OPTICAL RECEIVER OR EQUAL - PROVIDE CONCEALED L.V. POWER FROM ADJACENT 120V RECEPTACLE	4K HDMI CABLE RAPID RUN OPTICAL PLENUM RUNNER OR EQUAL	ASSOCIATED LOW VOLTAGE *H OUTLET AT SOURCE LOCATION (WALL/FLOOR/TABLE)	SEE NOTE 6 BELOW
NOTES: 1. THE ASTERISK "*" WITHIN THE JACK ID SECTION ABOVE REPRESENT THE QUANTITIES OF EACH JACK/CABLE TYPE. FOR EXAMPLE, "3D" REPRESENTS THREE (3) DATA JACKS/CABLES. 2. THE JACK IDENTIFIERS SHOWN ABOVE MAY BE COMBINED TOGETHER ON PLANS. FOR EXAMPLE, THE IDENTIFIER "2D" REPRESENTS TWO (2) DATA JACKS/CABLES. 3. ALL LOW VOLTAGE CABLING SHALL BE PLENUM-RATED. 4. THE QUANTITY OF OUTLET BOX GANGS AND CONDUITS FOR EACH COMMUNICATION OUTLET ASSEMBLY SHALL BE AS FOLLOWS: 1-2 JACKS: 1-GANG OUTLET BOX WITH 1-GANG FACEPLATE AND ONE 1" CONDUIT TO ABOVE ACCESSIBLE CEILING SPACE (AND IN OTHER INACCESSIBLE OR EXPOSED AREAS). 3-4 JACKS: 2-GANG OUTLET BOX WITH 1-GANG PLASTER RING, 1-GANG FACEPLATE AND ONE 1" CONDUIT TO ABOVE ACCESSIBLE CEILING SPACE (AND IN OTHER INACCESSIBLE OR EXPOSED AREAS). 5-8 JACKS: 2-GANG OUTLET BOX WITH 2-GANG FACEPLATE AND TWO 1" CONDUITS TO ABOVE ACCESSIBLE CEILING SPACE (AND IN OTHER INACCESSIBLE OR EXPOSED AREAS). 9-12 JACKS: 3-GANG OUTLET BOX WITH 3-GANG FACEPLATE AND THREE 1" CONDUITS TO ABOVE ACCESSIBLE CEILING SPACE (AND IN OTHER INACCESSIBLE OR EXPOSED AREAS). 5. PROVIDE A NYLON BUSHING ON EACH END OF EACH CONDUIT (SPECIFIED WITHIN NOTE 4 ABOVE) TO PROTECT CABLES. 6. ALL AV CABLING TYPES SHALL BE CONFIRMED WITH OWNER PRIOR TO ORDERING MATERIALS. 7. COMMUNICATION OUTLET SHALL BE LOCATED A MAXIMUM OF 8 INCHES FROM THE ADJACENT POWER OUTLET.				



DETAIL "E-FS"
LAY-IN FIXTURE SUPPORT
SCALE : NONE



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PANELBOARD/EQUIPMENT SCHEDULE(S) KEYED NOTES LEGEND	
KEYED NOTE	DESCRIPTION
GFI	INDICATED BREAKER SHALL BE GFI-TYPE (5mA TRIP).
VC	CONTRACTOR SHALL VERIFY REQUIRED BREAKER & CIRCUITRY REQUIREMENTS OF INDICATED CIRCUIT WITH EQUIPMENT SUPPLIER PRIOR TO SUBMITTING SHOP DRAWINGS OR ROUGHING IN CONDUITS.

PANELBOARD SCHEDULE - PP-A											
PANEL TYPE: SQUARE 'D' H-LINE SERIES						AIC RATING: 65KAIC (MINIMUM)					
VOLTAGE: 120/208V-3P-4W						MOUNTING: SURFACE					
AMPS & TYPE: 800/3 MAIN BKR						LOCATION: WAREHOUSE					
FED FROM UTILITY						FEEDER: 3 SETS OF 4-300MCM - 3" C					
CIR. NO.	DESCRIPTION	VOLTS	P	HP	KW OR KVA	AMPS	BKR SIZE	LOCAL SAFETY SW. RATING	WIRE AND COND. SIZE		REMARKS
1	HP-1	208	1			30.1	60/2	60/2 - F60	2#8 & 1#10G - 3/4" C		
2	HP-2	208	3			31.5	50/3	60/3 - F50	3#8 & 1#10G - 1" C		
3	HP-3	208	1			30.1	60/2	60/2 - F60	2#8 & 1#10G - 3/4" C		
4	AC-1	208	3			50.0	60/3	60/3 - F60	3#4 & 1#8G - 1 1/4" C		
5	AC-2	208	3			83.5	100/3	100/3 - F100	3#2 & 1#6G - 1 1/4" C		
6	AC-3	208	3			50.0	60/3	60/3 - F60	3#4 & 1#8G - 1 1/4" C		
7	EW-H-1	208	1		10.0		70/2	-	2#4 & 1#8G - 1" C		
8	RP-C	120/208	3		42.6		225/3	-	4#4/0 & 1#4G - 2 1/2" C		
9	LIFT STATION	120/208	1			16.0	30/2	30/2 - F30	3#8 & 1#10G - 1" C		
10	MTS (N)	120/240	1		13.9		100/2	-	3#3 & 1#8G - 1 1/4" C		
11	RP-A	120/208	3		40.3		225/3	-	4#4/0 & 1#4G - 2 1/2" C		
12	RP-B	120/208	3		28.1		125/3	-	4#1 & 1#6G - 2" C		
13	SPACE - 225/3	120/208	3					-			
14	SPACE - 125/3	120/208	3					-			
15	SPACE - 125/3	120/208	3					-			
16	SPACE - 125/3	120/208	3					-			
17	SPACE - 60/3	120/208	3					-			
18	SURGE PROTECTION	120/208	3				30/3	-	4#10 & 1#10G - 1" C		
		TOTAL CONNECTED LOAD:				227.5 KVA	NOTES: 1. EQUIPMENT SHALL BE SERVICE-ENTRANCE RATED. 2. PROVIDE EXTERNAL 240KA (PER PHASE) SURGE PROTECTION DEVICE.				
						632.0 AMPS					
		TOTAL DEMAND LOAD:				206.9 KVA					
						574.7 AMPS					
		TOTAL COMPUTED LOAD:				218.8 KVA					
						607.6 AMPS					

MANUAL TRANSFER SWITCH SCHEDULE - MTS									
KAIC / WCR RATING: 35KAIC (MINIMUM)				NORMAL FED FROM:			PP-A		
VOLTAGE: 120/208V-1P-3W				NORMAL FEEDER:			SEE PANELBOARD SCHEDULE - PP-A		
AMP RATING: 100 AMP				EMERGENCY FED FROM:			GENERATOR RECEPTACLE		
LOCATION: WAREHOUSE				EMERGENCY FEEDER:			3#8 & 1#10G - 1" C		
LOAD SIDE FEEDER DESCRIPTION			VOLTS	P	HP	KW OR KVA	AMPS	WIRE AND COND. SIZE	
RP-G			120/240	1		13.9		3#3 & 1#8G - 1 1/4" C	
			EMERGENCY		TOTAL CONNECTED LOAD:		NORMAL		NOTES: 1. HEAVY DUTY DOUBLE-THROW SWITCH SUITABLE FOR TRANSFER BETWEEN SOURCES. 2. PROVIDE ENGRAVED NAMEPLATE IDENTIFYING SOURCES.
			12.7 KVA				12.7 KVA		
			61.2 AMPS		61.2 AMPS				
			12.7 KVA		12.7 KVA				
			61.2 AMPS		61.2 AMPS				
			13.9 KVA		13.9 KVA				
			66.6 AMPS		TOTAL COMPUTED LOAD:		66.6 AMPS		

PANELBOARD SCHEDULE - RP-G											
PANEL TYPE: SQUARE 'D' TYPE NQ				AIC RATING: 10KAIC (MINIMUM)							
VOLTAGE: 120/208V-1P-3W				MOUNTING: SURFACE							
AMPS & TYPE: 100 AMP - MLO				LOCATION: ELEC 115							
FED FROM: MTS				FEEDER: SEE MANUAL TRANSFER SWITCH SCHEDULE - MTS							
CKT NO.	NOTES	BKR	DESCRIPTION	WATTS	PHASE	WATTS	DESCRIPTION	BKR	NOTES	CKT NO.	
1	-	20/1	ACCESS CONTROLS	200	A	1,090	LIGHTING - FILE/CONFERENCE	20/1	-	16	
2	-	20/1	SPARE		B	1,140	LIGHTING - OFFICE/CORRIDOR	20/1	-	17	
3	-	20/1	OFFICE 5 & 6 RECEPS	800	A	400	OFFICE 6 RECEP	20/1	-	18	
4	-	20/1	OFFICE 3 & 4 RECEPS	800	B		SPARE	20/1	-	19	
5	-	20/1	OFFICE 1 & 2 RECEPS	800	A		SPARE	20/1	-	20	
6	-	20/1	OFFICE 10 & 11 RECEPS	800	B		SPARE	20/1	-	21	
7	-	20/1	OFFICE 8 & 9 RECEPS	800	A		SPARE	20/1	-	22	
8	-	20/1	OFFICE 7 RECEPS	400	B		SPARE	20/1	-	23	
9	-	20/1	FILE ROOM RECEPS	400	A	-		20/1	-	24	
10	-	20/1	TBB RECEP	400	B	-		20/1	-	25	
11	-	20/1	TBB RECEP	400	A	-		20/1	-	26	
12	GFI	20/1	BREAK REFRIGERATOR	1,200	B	-		20/1	-	27	
13	-	20/1	LIGHTING - WAREHOUSE	1,050	A		SURGE PROTECTION	30/3	-	28	
14	-	20/1	CONF. ROOM FLOOR BOXES	800	B				-	29	
15	-	20/1	LIGHTING - OFFICE/BREAK	1,240	A				-	30	
NOTES: 1. PROVIDE 160KA (PER PHASE) EXTERNAL SURGE PROTECTION DEVICE.				PH. A:	PH. B:	TOTAL CONNECTED LOAD:				12.7 KVA	
				7,180	5,540					61.2 AMPS	
						TOTAL DEMAND LOAD:				12.7 KVA	
										61.2 AMPS	
						TOTAL COMPUTED LOAD:				13.9 KVA	
										66.6 AMPS	



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ELECTRICAL SCHEDULES

SHEET NO

E5

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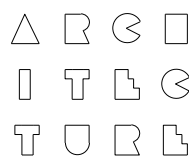
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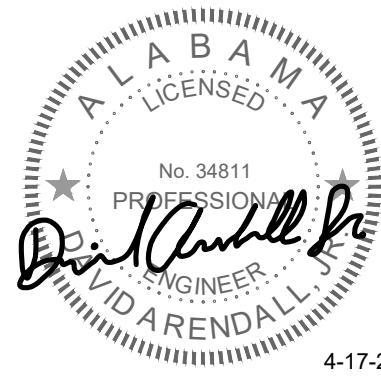
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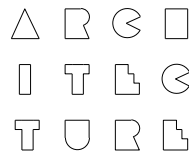
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ELECTRICAL
SCHEDULES

SHEET NO

E6

PANELBOARD SCHEDULE - RP-A									
PANEL TYPE:		SQUARE 'D' TYPE NQ			AIC RATING:		50KAIC (MINIMUM)		SEE NOTE 1
VOLTAGE		120/208V-3P-4W			MOUNTING:		SURFACE		
AMPS & TYPE:		225 AMP - MLO			LOCATION:		WAREHOUSE		
FED FROM:		PP-A			FEEDER:		SEE PANELBOARD SCHEDULE - PP-A		
CKT. NO.	NOTES	BKR	DESCRIPTION	WATTS	PHASE	WATTS	DESCRIPTION	BKR	NOTES
1	-	20/1	WAREHOUSE LIGHTING	1,806	A		-	20/1	-
2	-	20/1	WAREHOUSE RECEPS	800	B		-	20/1	-
3	-	20/1	WAREHOUSE RECEPS	1,000	C		-	20/1	-
4	-	20/1	WAREHOUSE RECEPS	1,000	A		-	20/1	-
5	GFI	20/1	WAREHOUSE DRINKING FOUNTAIN	1,200	B		-	20/1	-
6	-	20/2	WAREHOUSE ICE MAKER	1,200	C		-	20/1	-
7	-			1,200	A	1,667	EUH-4	20/3	-
8	-	20/1	OVERHEAD DOOR	1,127	B	1,667			-
9	-	20/1	OVERHEAD DOOR	1,127	C	1,667			-
10	-	20/1	EXTERIOR LIGHTING	775	A	1,667	EUH-5	20/3	-
11	-	20/1	EQUIPMENT RECEP	1,200	B	1,667			-
12	-	20/1	SPARE		C	1,667			-
13	-	20/1	SPARE		A	1,667	EUH-6	20/3	-
14	-	20/1	SPARE		B	1,667			-
15	-	15/1	WAREHOUSE DAMPERS	400	C	1,667			-
16	-	20/1	MOTORIZED GATE	1,200	A	1,667	EUH-7	20/3	-
17	-	20/1	MEZZANINE LIGHTING	300	B	1,667			-
18	-	15/1	CP-1	200	C	1,667			-
19	-	20/1	SPARE		A		SURGE PROTECTION	30/3	-
20	-	20/1	SPARE		B				-
21	-	20/1	SPARE		C				-
NOTES:				PH. A:	PH. B:	PH. C:	TOTAL CONNECTED LOAD:		34.5 KVA
1. SERIES RATING OF THIS PANELBOARD IS ALLOWED IF REQUIRED TO PROVIDE GFI TYPE BREAKER(S). HOWEVER, ALL BREAKERS SHALL BE FULLY RATED FOR A MINIMUM OF 22KAIC.				12,649	11,295	10,595			95.9 AMPS
						TOTAL DEMAND LOAD:		34.5 KVA	
								95.9 AMPS	
2. PROVIDE 160KA (PER PHASE) EXTERNAL SURGE PROTECTION DEVICE.						TOTAL COMPUTED LOAD:		40.3 KVA	
								111.8 AMPS	

PANELBOARD/EQUIPMENT SCHEDULE(S) KEYED NOTES LEGEND	
KEYED NOTE	DESCRIPTION
GFI	INDICATED BREAKER SHALL BE GFI-TYPE (5mA TRIP).
VC	CONTRACTOR SHALL VERIFY REQUIRED BREAKER & CIRCUITRY REQUIREMENTS OF INDICATED CIRCUIT WITH EQUIPMENT SUPPLIER PRIOR TO SUBMITTING SHOP DRAWINGS OR ROUGHING IN CONDUITS.

PANELBOARD SCHEDULE - RP-B									
PANEL TYPE:		SQUARE 'D' TYPE NQ			AIC RATING:		10KAIC (MINIMUM)		
VOLTAGE		120/208V-3P-4W			MOUNTING:		SURFACE		
AMPS & TYPE:		125 AMP - MLO			LOCATION:		ELEC 115		
FED FROM:		PP-A			FEEDER:		SEE PANELBOARD SCHEDULE - PP-A		
CKT. NO.	NOTES	BKR	DESCRIPTION	WATTS	PHASE	WATTS	DESCRIPTION	BKR	NOTES
1	-	20/1	OFFICE 5 & 6 RECEPS	1,200	A	1,000	CONFERENCE ROOM RECEPS	20/1	-
2	-	20/1	OFFICE 3 & 4 RECEPS	1,200	B	800	BREAK/TRAINING FLOOR BOXES	20/1	-
3	-	20/1	OFFICE 1 & 2 RECEPS	1,200	C		SPARE	20/1	-
4	-	20/1	BREAK/TRAINING RECEPS	1,000	A	600	RECEPTION RECEPS	20/1	-
5	-	20/1	BREAK COUNTER RECEP	200	B		SPARE	20/1	-
6	-	20/1	BREAK COUNTER RECEP	1,200	C	4,000	BREAKROOM RANGE	50/2	GFI,VC
7	-	20/1	SPARE		A	4,000			-
8	-	20/1	BREAK COUNTER RECEP	1,200	B	300	BREAKROOM HOOD	20/1	GFI
9	-	20/1	BREAK COUNTER RECEP	1,200	C	175	AC-4, AC-5, AC-6	15/2	-
10	GFI	20/1	DRINKING FOUNTAIN	1,200	A	175			-
11	-	20/1	GEN. CONV. RECEPS	1,200	B	2,715	HP-4	35/2	-
12	-	20/1	GEN. CONV. RECEPS	1,000	C	2,715			-
13	-	20/1	GEN. CONV. RECEPS	600	A	667	EF-2	15/1	-
14	-	20/1	OFFICE 10 & 11 RECEPS	1,600	B		SPARE	20/1	-
15	-	20/1	OFFICE 8 & 9 RECEPS	1,600	C		SPARE	20/1	-
16	-	20/1	FILE ROOM RECEPS	600	A		SPARE	20/1	-
17	-	20/1	FILE ROOM COPIER	1,200	B		SPARE	20/1	-
18	-	20/1	FILE ROOM PLOTTER	1,200	C		SPARE	20/1	-
19	-	20/2	FILE ROOM PLOTTER	1,456	A		SURGE PROTECTION	30/3	-
20	-			1,456	B				-
21	-	20/1	FILE ROOM RECEPS	800	C				-
NOTES:				PH. A:	PH. B:	PH. C:	TOTAL CONNECTED LOAD:		39.5 KVA
1. PROVIDE 160KA (PER PHASE) EXTERNAL SURGE PROTECTION DEVICE.				12,498	11,871	15,090			109.6 AMPS
						TOTAL DEMAND LOAD:		28.1 KVA	
								77.9 AMPS	
						TOTAL COMPUTED LOAD:		28.1 KVA	
								77.9 AMPS	

PANELBOARD SCHEDULE - RP-C									
PANEL TYPE:		SQUARE 'D' TYPE NQ			AIC RATING:		18KAIC (MINIMUM)		
VOLTAGE		120/208V-3P-4W			MOUNTING:		SURFACE		
AMPS & TYPE:		225 AMP - MLO			LOCATION:		WAREHOUSE		
FED FROM:		PP-A			FEEDER:		SEE PANELBOARD SCHEDULE - PP-A		
CKT. NO.	NOTES	BKR	DESCRIPTION	WATTS	PHASE	WATTS	DESCRIPTION	BKR	NOTES
1	-	20/1	OVERHEAD DOOR	1,127	A		-		-
2	-	20/1	WAREHOUSE RECEPS	600	B		-		-
3	-	20/1	WAREHOUSE RECEPS	800	C	1,373	COMPRESSOR	30/2	-
4	-	20/1	EQUIPMENT RECEP	1,200	A	1,373			-
5	-	20/1	EXTERIOR GATE	1,127	B	1,667	EUH-1	20/3	-
6	-	20/1	SPARE		C	1,667			-
7	-	20/1	SPARE		A	1,667			-
8	-	20/1	SPARE		B	1,667	EUH-2	20/3	-
9	-	20/1	SPARE		C	1,667			-
10	-	20/1	SPARE		A	1,667			-
11	-	20/1	SPARE		B	1,667	EUH-3	20/3	-
12	-	20/1	-		C	1,667			-
13	-	20/1	-		A	1,667			-
14	-	20/1	-		B	1,667	EUH-8	20/3	-
15	-	20/1	-		C	1,667			-
16	-	20/1	-		A	1,667			-
17	-	20/1	-		B	900	EF-1	15/3	-
18	-	20/1	-		C	900			-
19	-	30/3	SURGE PROTECTION		A	900			-
20	-				B	3,640	WELDER	50/2	-
21	-				C	3,640			-
NOTES:				PH. A:	PH. B:	PH. C:	TOTAL CONNECTED LOAD:		37.6 KVA
1. PROVIDE 160KA (PER PHASE) EXTERNAL SURGE PROTECTION DEVICE.				11,268	12,935	13,381			104.4 AMPS
						TOTAL DEMAND LOAD:		37.6 KVA	
								104.4 AMPS	
						TOTAL COMPUTED LOAD:		42.6 KVA	
								118.3 AMPS	



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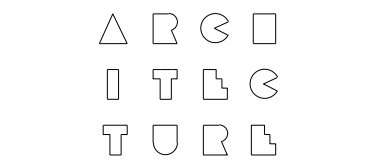
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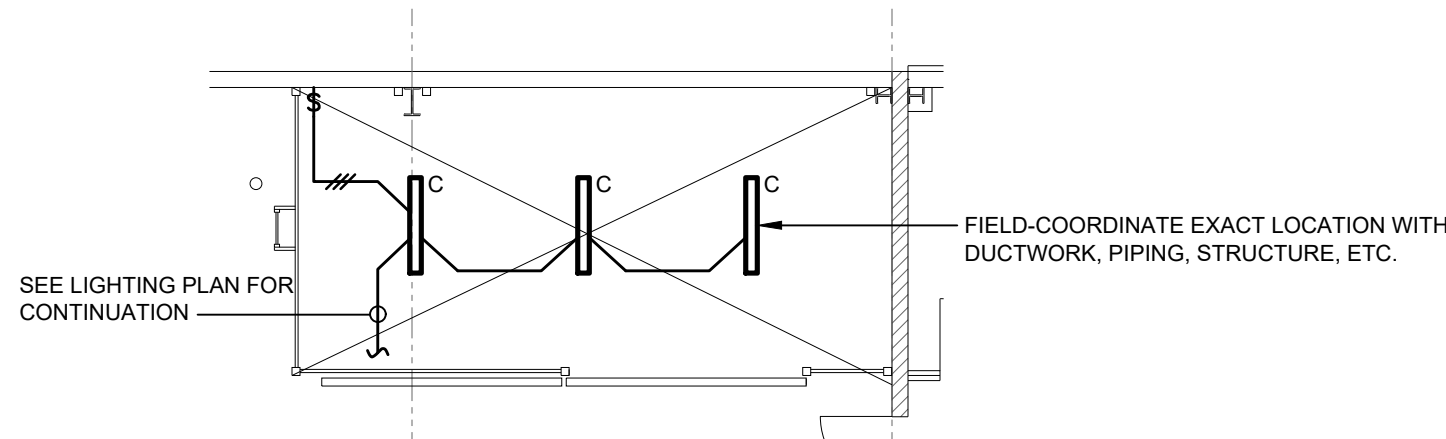
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LIGHTING
PLAN

SHEET NO

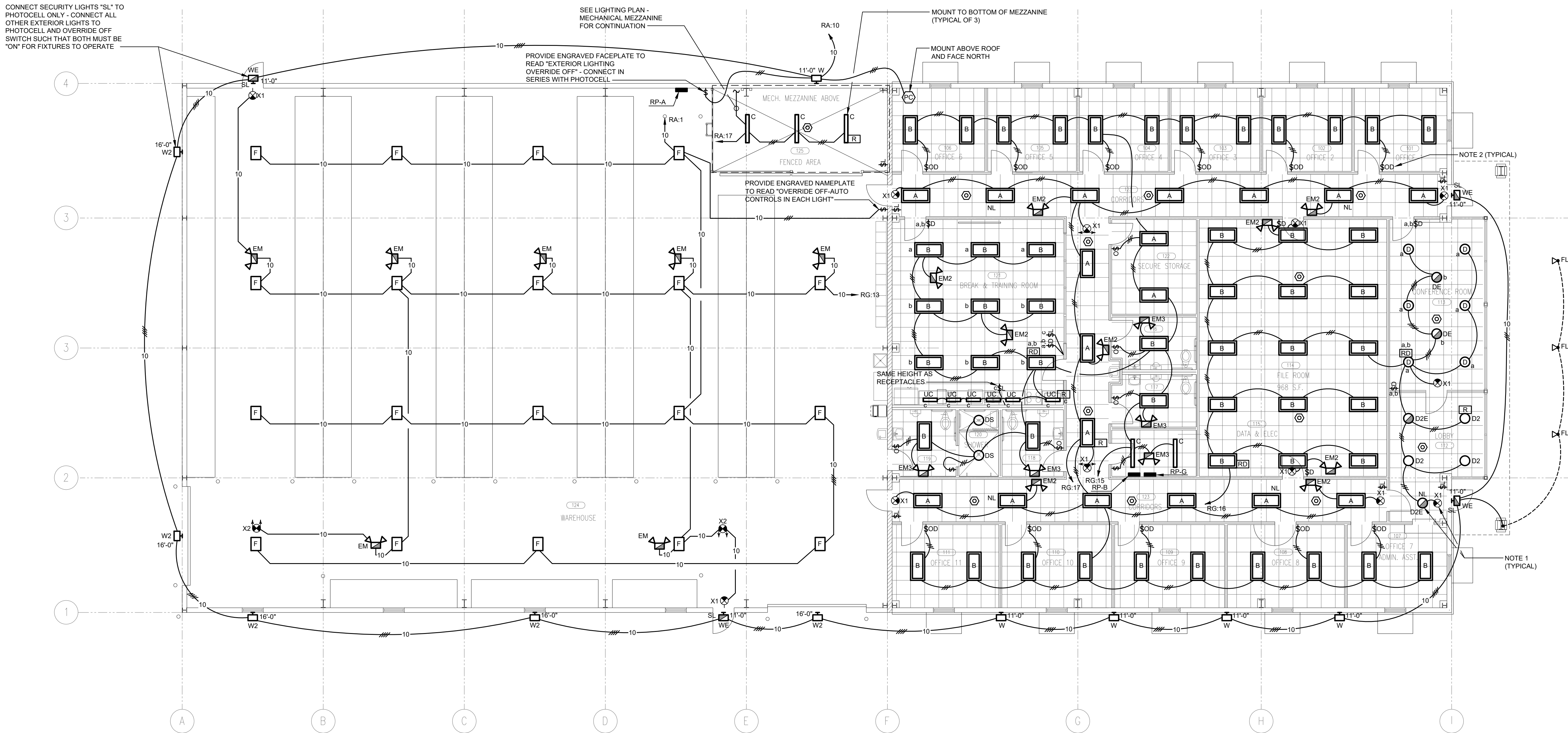
E7

7 OF 11 SHEETS



LIGHTING PLAN - MECHANICAL MEZZANINE

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



LIGHTING PLAN

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

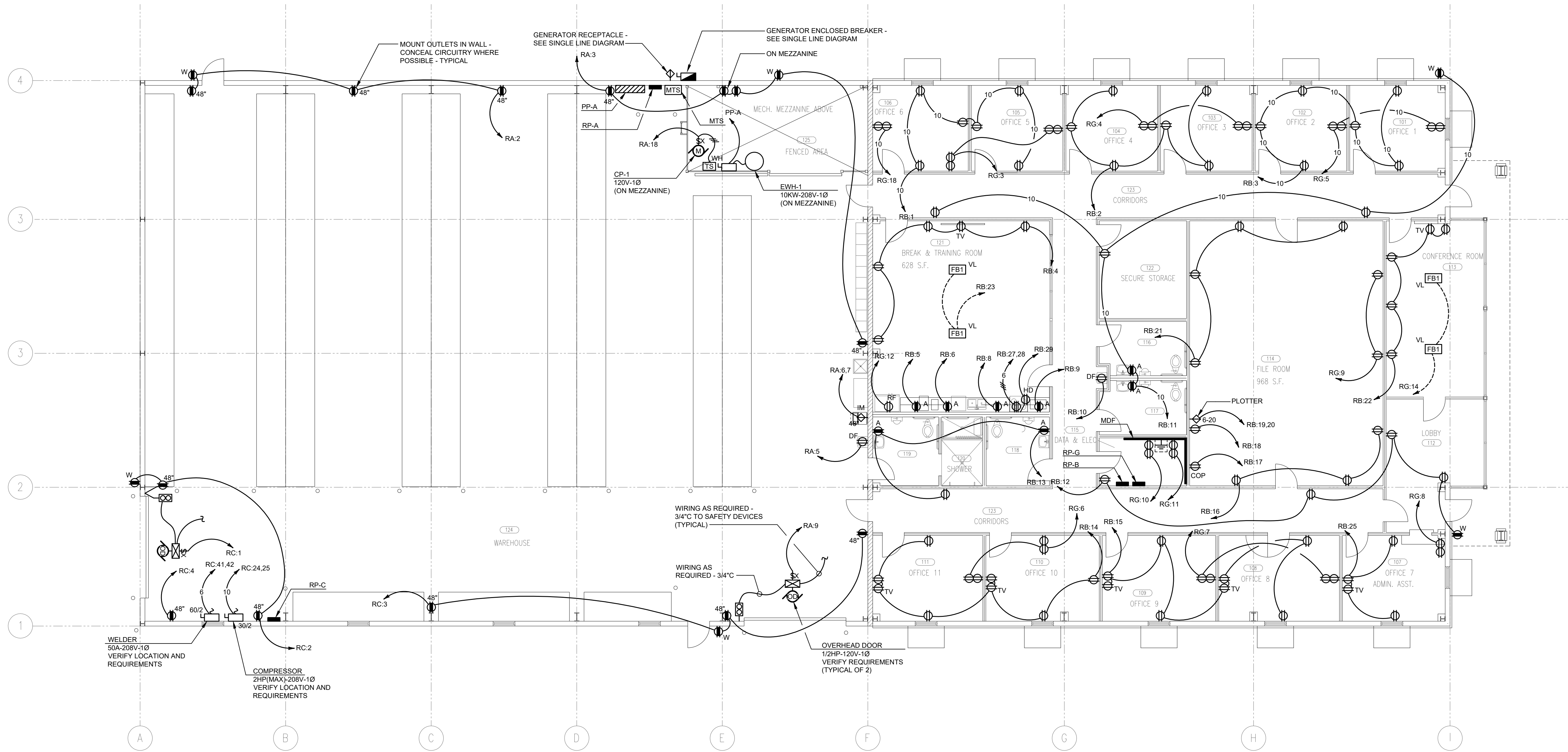
PLAN NOTES

- DO NOT SWITCH EXIT SIGNS, NIGHT LIGHTS OR EMERGENCY BATTERY PACKS (TYPICAL).
- PROVIDE 0-10V DIMMING CABLE TO ALL FIXTURES INDICATED TO HAVE DIMMING CONTROLS.



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

PLAN NOTES

1. PROVIDE ENGRAVED FACEPLATE TO READ "GENERATOR" FOR ALL RECEPTACLES CONNECTED TO PANEL RP-G.

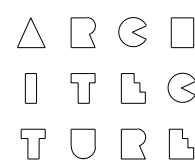
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POWER
PLAN

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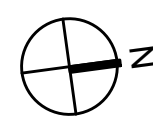
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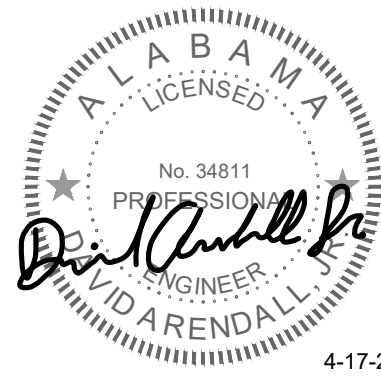
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AUXILIARY PLAN
SCALE : 1/8" = 1'-0"

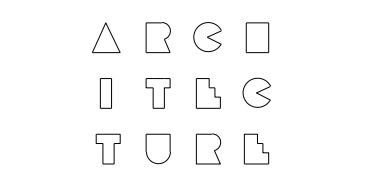
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AUXILIARY PLAN

SHEET NO

E9

9 OF 11 SHEETS



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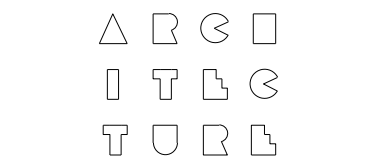
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HVAC
ELECTRICAL
PLAN

SHEET NO.

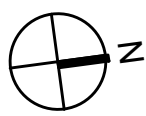
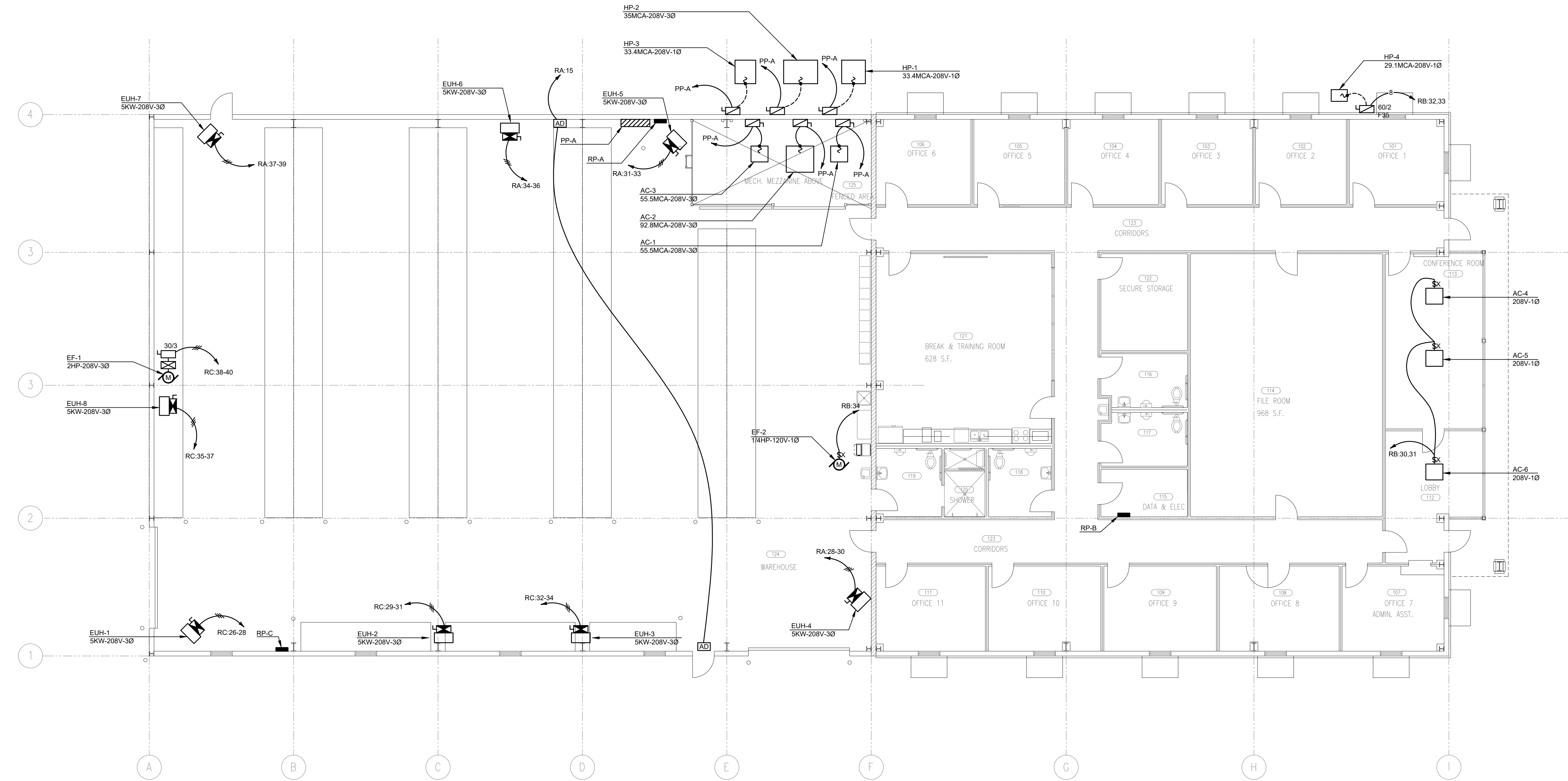
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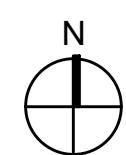
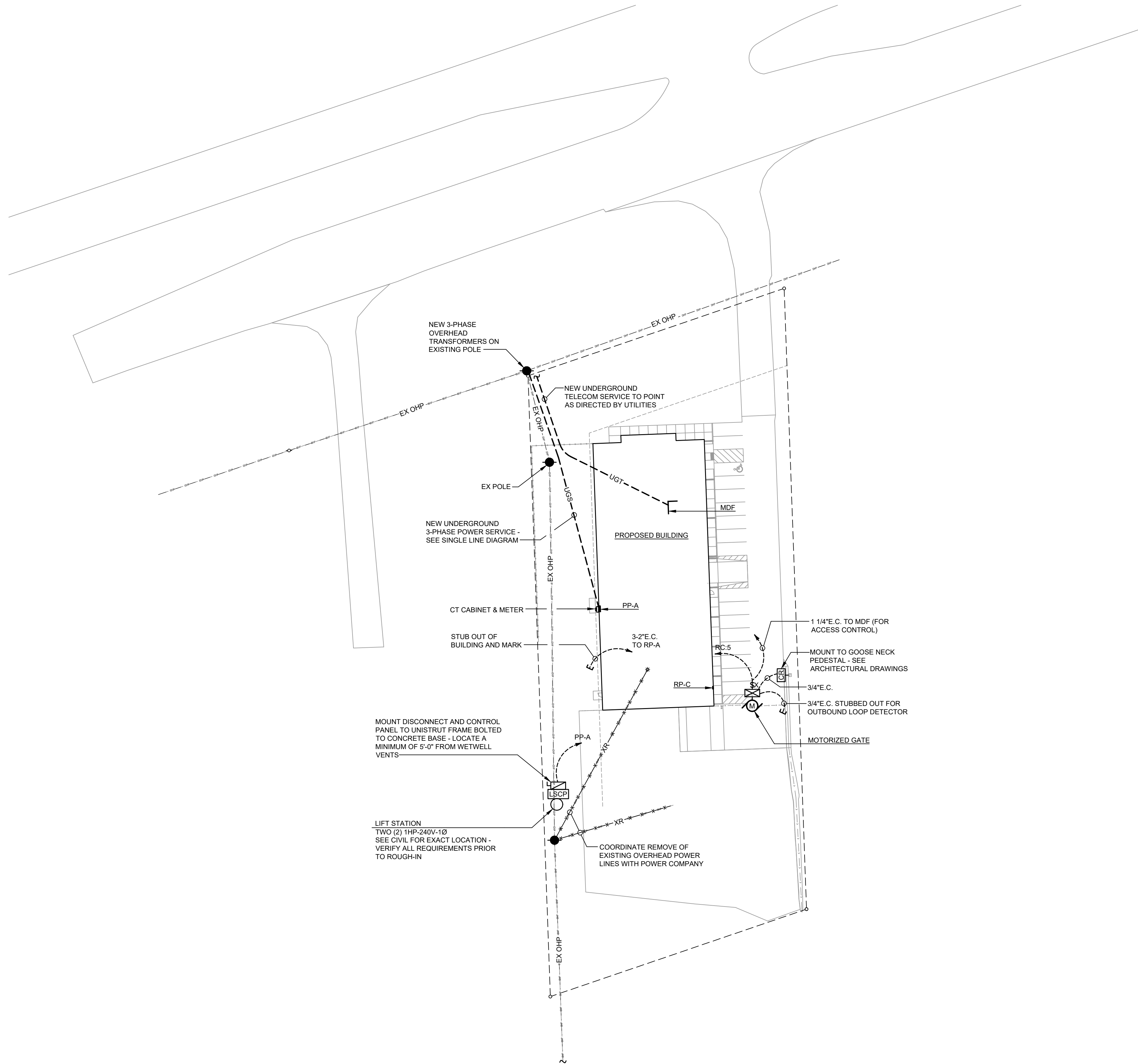


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HVAC ELECTRICAL PLAN
SCALE : 1/8" = 1'-0"



SITE ELECTRICAL PLAN

SCALE : 1" = 40'

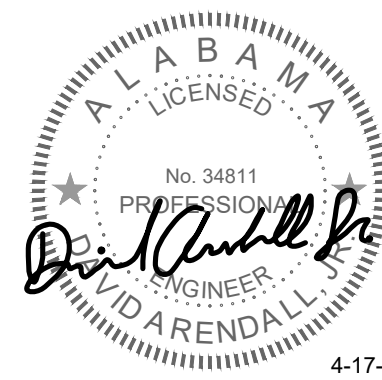


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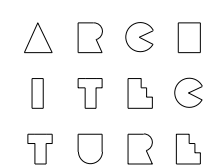
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**SITE
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PLAN**

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E11

11 OF 11 SHEETS