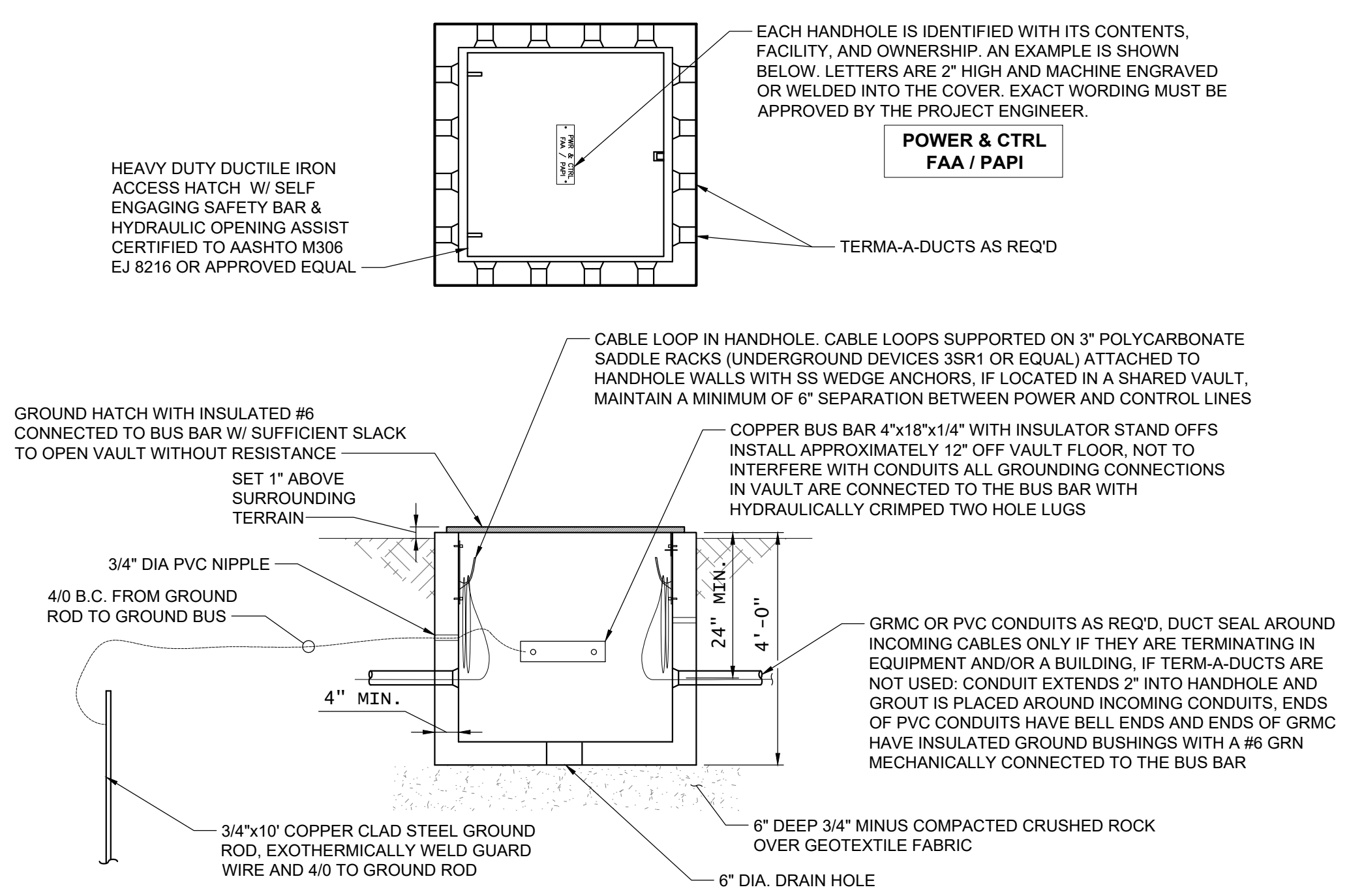


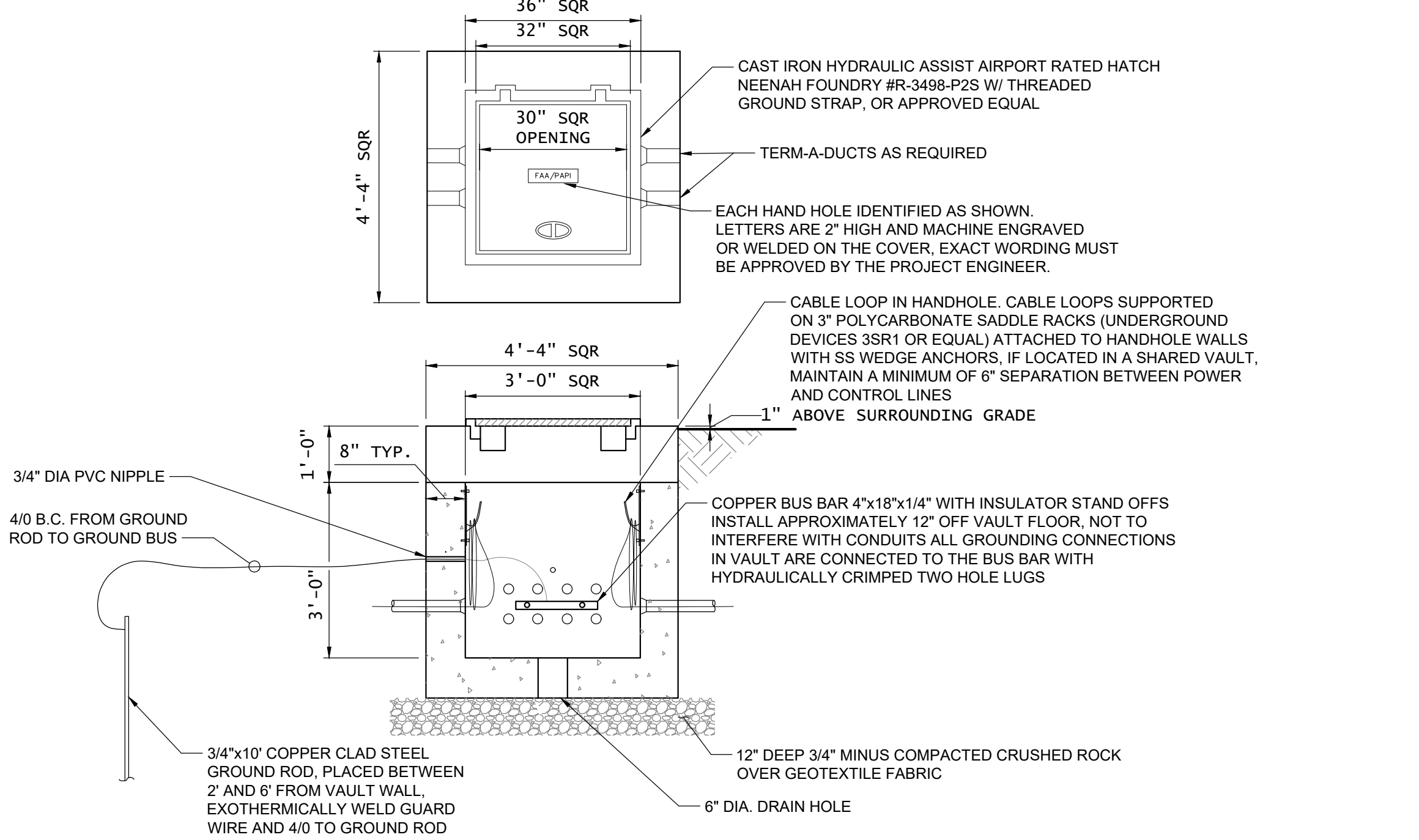
H  
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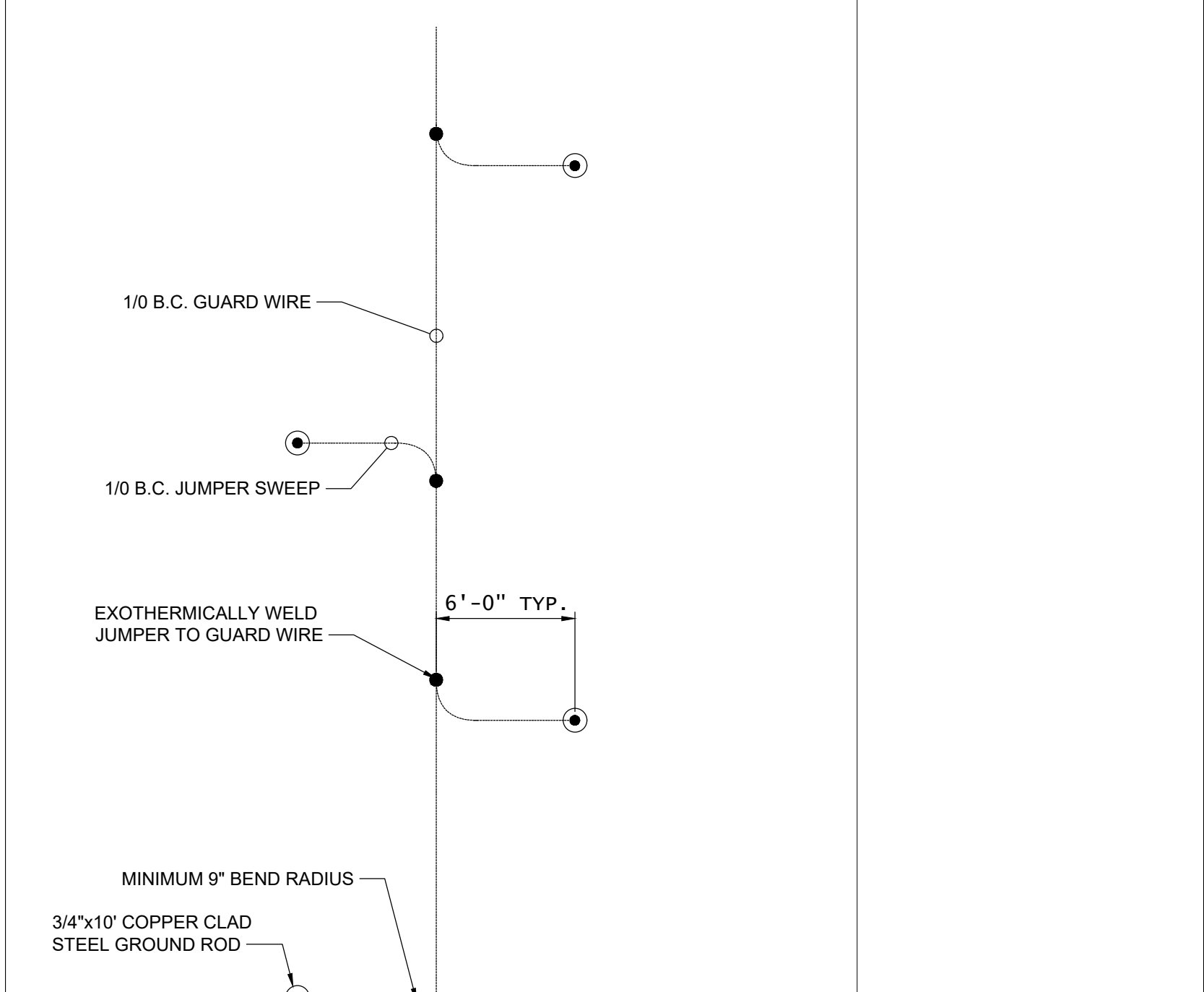
- NOTES:**
- EACH CABLE TAGGED IN EVERY VAULT AND PULLBOX AT LEAST TWICE, ONCE AT THE ENTRANCE AND ONCE AT THE EXIT. ALL POWER AND CONTROL CABLES ARE TAGGED PER THE LATEST VERSION OF FAA-C-1391.
  - USE ALMETEK .030" THICK POLYETHYLENE CABLE MARKERS SIZED AS REQ'D W/ MIN. 1/4" HIGH LETTERS. ALTERNATIVELY CIRCULAR BRASS CABLE TAGS MAY BE USED AS WELL. TAGS ATTACHED TO CABLES WITH NYLON TIE WRAPS.
  - ALL UNUSED CONDUITS SHALL HAVE A PULL STRING INSTALLED AND SECURED IN EACH VAULT.
  - EACH HANDHOLE SHALL HAVE A GROUND ROD INSTALLED BETWEEN 2' AND 6' FROM THE WALL EDGE.
  - HANDHOLES LOCATED INSIDE THE LIMITS OF TAXIWAYS, RUNWAY OR APRONS ARE 200KIP AIRPORT EXTRA HEAVY DUTY RATED, ALL HANDHOLES IN THE RSA AND TSA ARE 100KIP AIRCRAFT RATED. UNLESS OTHERWISE INDICATED ALL OTHER HANDHOLE ARE H-20 RATED, PROOF LOADED TO AASHTO M306.

**H-20 RATED HANDHOLE**  
NOT TO SCALE



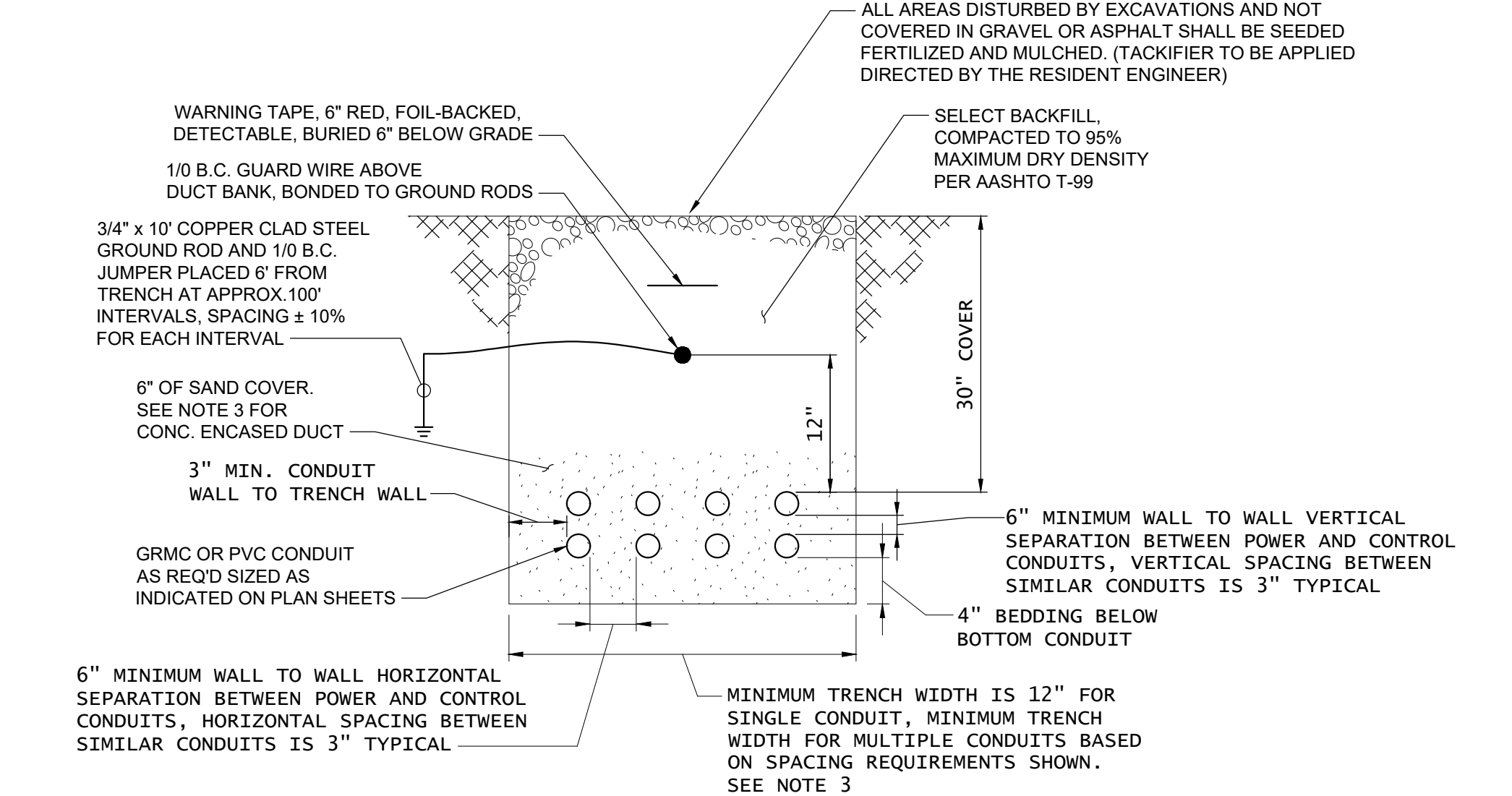
- NOTES:**
- MANHOLE AND VAULT SHALL BE DESIGNED FOR 100,000 LB WHEEL LOADS WITH 250PSI TIRE PRESSURE PER A/C 150/5320-60 , APP 3.
  - EACH CABLE TAGGED IN EVERY VAULT AND PULLBOX AT LEAST TWICE, ONCE AT THE ENTRANCE AND ONCE AT THE EXIT. ALL POWER AND CONTROL CABLES ARE TAGGED PER THE LATEST VERSION OF FAA-C-1391.
  - USE ALMETEK .030" THICK POLYETHYLENE CABLE MARKERS SIZED AS REQ'D W/ MIN. 1/4" HIGH LETTERS. ALTERNATIVELY CIRCULAR BRASS CABLE TAGS MAY BE USED AS WELL. TAGS ATTACHED TO CABLES WITH NYLON TIE WRAPS.
  - ALL UNUSED CONDUITS SHALL HAVE A PULL STRING INSTALLED AND SECURED IN EACH VAULT.
  - EACH HANDHOLE SHALL HAVE A GROUND ROD INSTALLED BETWEEN 2' AND 6' FROM THE WALL EDGE.
  - HANDHOLES LOCATED INSIDE THE LIMITS OF TAXIWAYS, RUNWAY OR APRONS ARE 200KIP AIRPORT EXTRA HEAVY DUTY RATED, ALL HANDHOLES IN THE RSA AND TSA ARE 100KIP AIRCRAFT RATED. UNLESS OTHERWISE INDICATED ALL OTHER HANDHOLE ARE H-20 RATED, PROOF LOADED TO AASHTO M306.

**AIRCRAFT RATED HANDHOLE**  
NOT TO SCALE



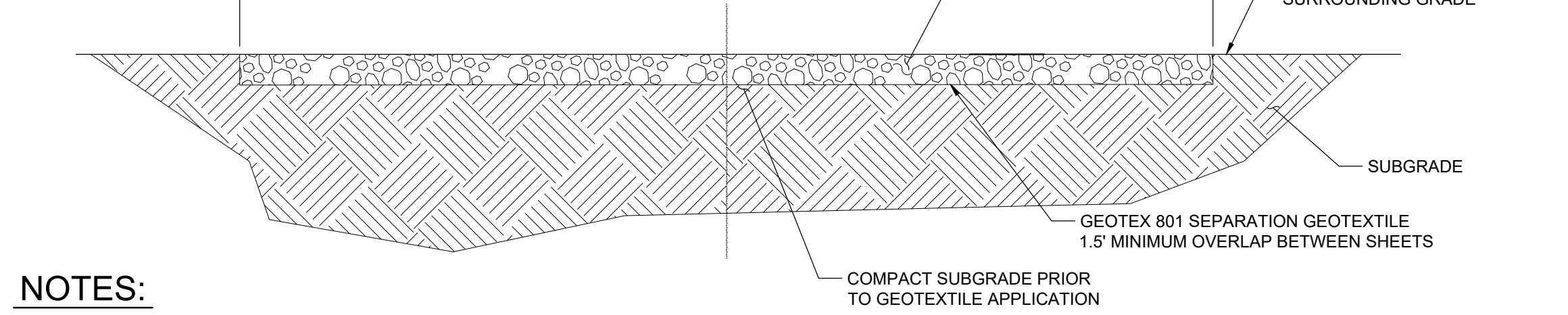
- NOTES:**
- THE GUARD WIRE RUNS CONTINUOUSLY ALONG THE CABLE/DUCT RUN WITH NO DEVIATIONS FROM THE RUN AND NO GAPS.
  - THE GUARD WIRE IS BONDED TO THE EES AT EACH END AND TO GROUND RODS ALONG THE LENGTH OF THE RUN.
  - GROUND RODS ARE INSTALLED APPROXIMATELY 6' ON EITHER SIDE OF THE TRENCH AND CONNECTED VIA JUMPER WIRE TO THE GUARD WIRE. ALL CONNECTION ARE EXOTHERMICALLY WELDED.
  - THE JUMPER WIRES ARE SWEEP AWAY FROM THE GUARD WIRE IN A REPEATABLE PATTERN AS SHOWN.
  - GUARD WIRES ARE SPACED 100' ± 10' ALONG THE DUCT. VARY THE SPACING BETWEEN RODS BY 10% TO PREVENT RESONANCE.

**TYPICAL GUARD WIRE**  
NOT TO SCALE



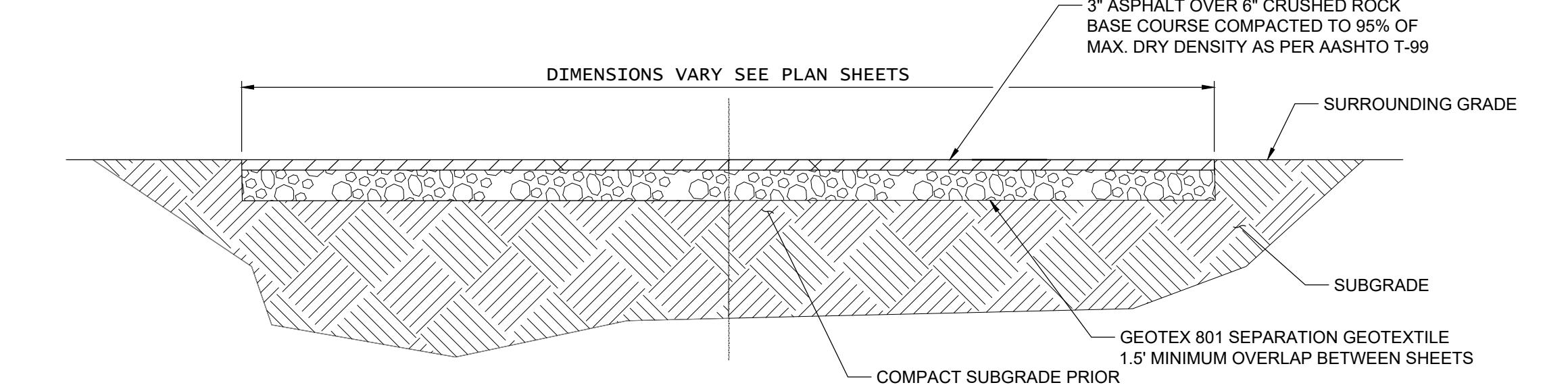
- NOTES:**
- THIS DETAIL TO BE USED FOR ALL DUCT FOR WHICH A SPECIFIC DETAIL DOES NOT APPLY.
  - FILL COMPACTED IN MAXIMUM 6" LIFTS.
  - CONCRETE COVER OVER CONDUITS (IF SPECIFIED AS CONCRETE ENCASED) IS A MINIMUM OF 3" ON ALL WALLS.
  - MINIMUM TRENCH WIDTH CAN BE REDUCED TO THAT REQUIRED TO MEET SPACING REQUIREMENTS IF APPROVED IN WRITING BY THE RESIDENT ENGINEER.
  - IF CROSSING UNDER OTHER UTILITIES MAINTAIN 6" VERTICAL CLEARANCE TO TOP OF CONDUIT. GUARD WIRE AND WARNING TAPE MAY BE ROUTED ON TOP OF OTHER UTILITY WITH THE PERMISSION OF THE RESIDENT ENGINEER.
  - MEDIUM VOLTAGE (ABOVE 600V) AND LOW VOLTAGE (600V & BELOW) CONDUITS ARE CONSIDERED DISSIMILAR IN REGARDS TO SPACING REQUIREMENTS.

**GENERAL DUCT BANK**  
NOT TO SCALE



- NOTES:**
- CRUSHED ROCK ACCESS ROADS LOCATED INSIDE THE RSA FOLLOW THE SLOPE/CONTOUR OF THE GROUND. CRUSHED ROCK ACCESS ROAD LOCATED OUTSIDE THE RSA ARE CROWNED WITH A 4% SLOPE AND MAY BE SET 1" ABOVE SURROUNDING GRADE.
  - CRUSHED ROCK SURFACING IS PLACED KEYED-IN TO THE SURROUNDING GRADE. SLOPE AS REQUIRED TO PREVENT PONDING.
  - MATERIAL SUBSTITUTIONS (TO ASPHALT MILLINGS OR CRUSHED CONCRETE) ARE ALLOWABLE WITH PRIOR WRITTEN APPROVAL OF THE PROJECT ENGINEER.

**CRUSHED ROCK SURFACING AND ACCESS ROADS**  
NOT TO SCALE



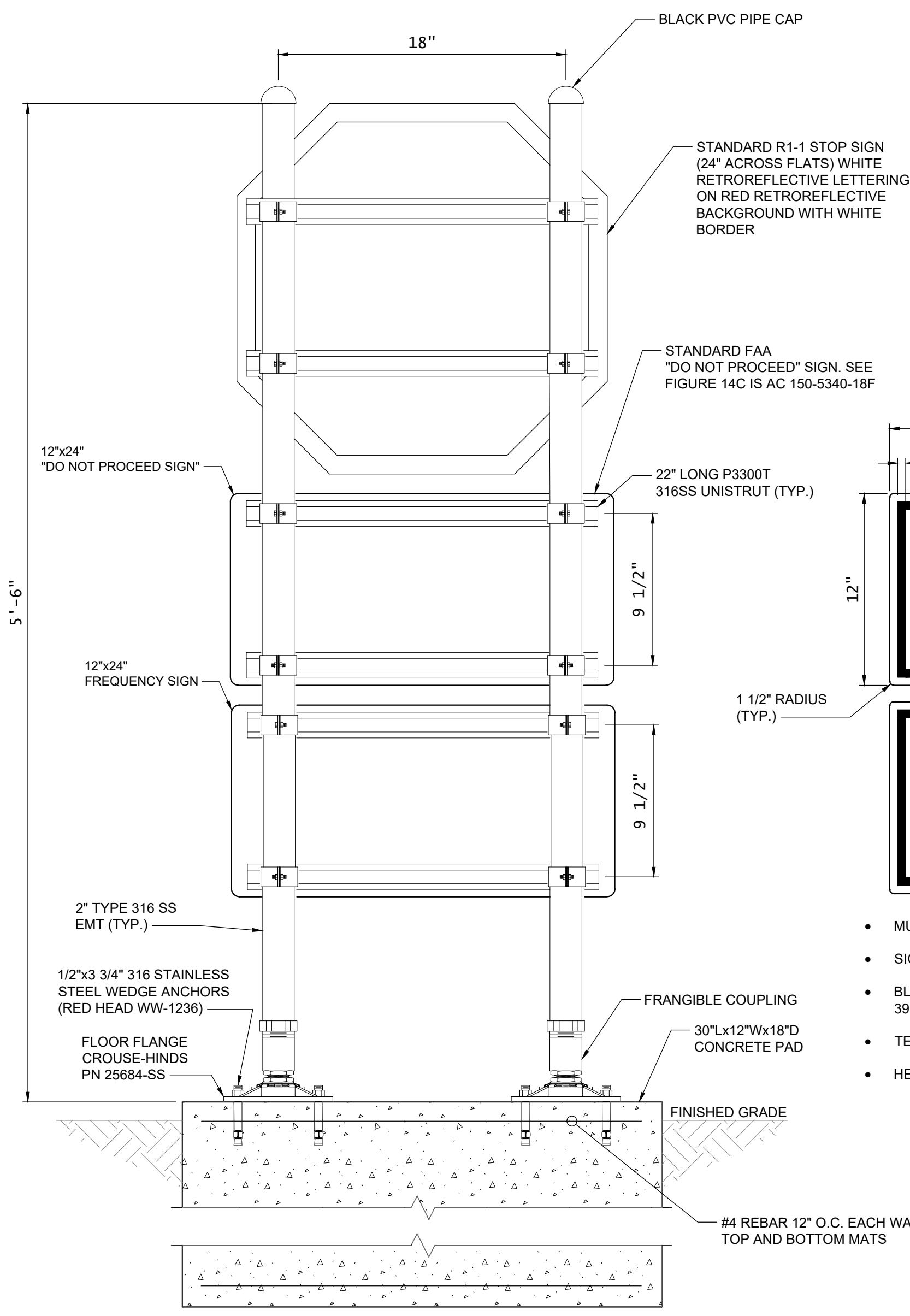
- NOTES:**
- ASPHALT ACCESS ROADS LOCATED INSIDE THE RSA FOLLOW THE SLOPE/CONTOUR OF THE GROUND AND HAVE A 1% CROWN. ASPHALT ACCESS ROAD LOCATED OUTSIDE THE RSA ARE CROWNED WITH A 2% SLOPE AND MAY BE SET 1" ABOVE SURROUNDING GRADE. UNLESS OTHERWISE INDICATED ROADS SHALL FOLLOW THE CONTOURS OF THE TERRAIN.
  - ASPHALT SURFACING INSIDE THE RSA IS PLACED KEYED-IN TO THE SURROUNDING GRADE. SLOPED TO FOLLOW THE GENERAL CONTOURS OF THE TERRAIN. MINOR GRADING IS ALLOWABLE TO PREVENT PONDING. SURFACING PLACED OUTSIDE THE RSA MAY BE SET 1" PROUD AND SHALL BE GRADED TO PREVENT PONDING.

**ASPHALT SURFACING AND ACCESS ROADS**  
NOT TO SCALE

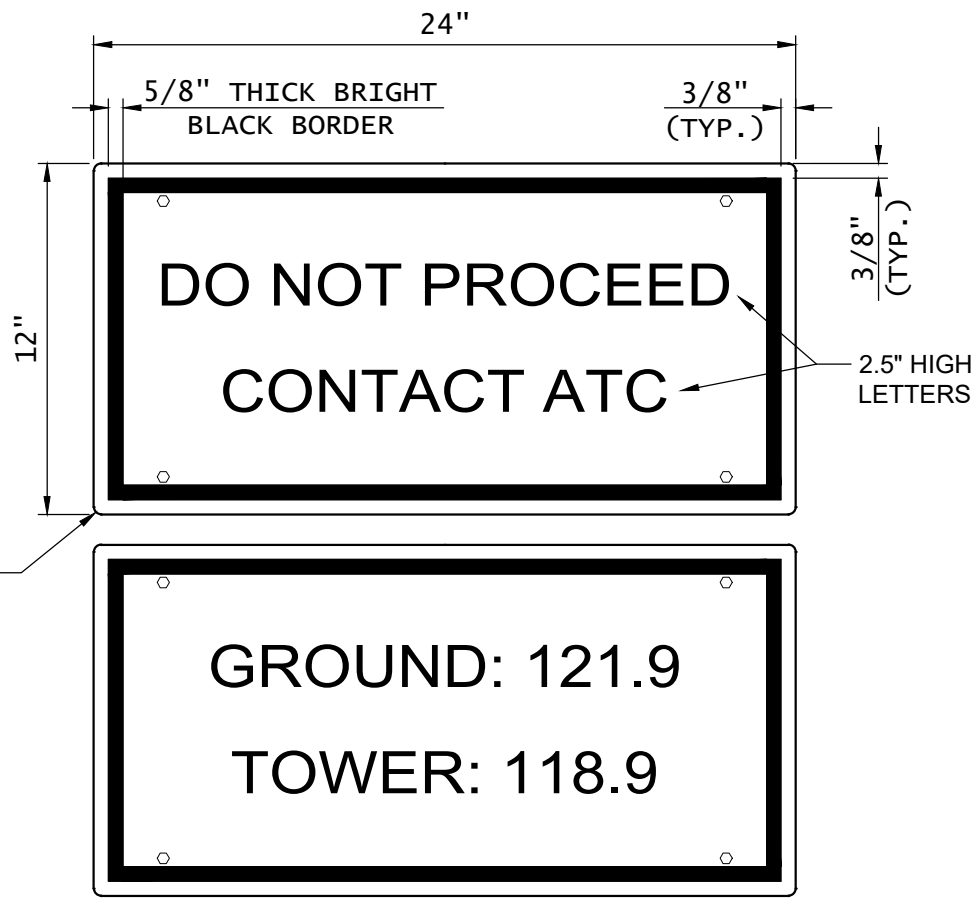
REV	APPROVED DATE	DESCRIPTION	JCN	REDLINE DATE	APVD
DEPARTMENT OF TRANSPORTATION <b>FEDERAL AVIATION ADMINISTRATION</b> ATO - TECHNICAL OPERATIONS <span style="float: right;">WESTERN SERVICE AREA</span>					
<b>PAPI</b> <b>GENERAL SITE DETAILS - 1</b>					
LIHUE		LIHUE AIRPORT		HI	
REVIEWED BY	SUBMITTED BY	DESIGNED BY	ISSUED BY	DATE	APPROVED BY
	ADAM	ADAM	ADAM	01/06/2023	JCN
DRAWN	ADAM	ENGINEERING SERVICES	NAVAIDS	DRAWING NO	1798073
CHECKED				LIH-D-PAPI21-G006	REV

SPINNES STAINES

ISSUED FOR: BID

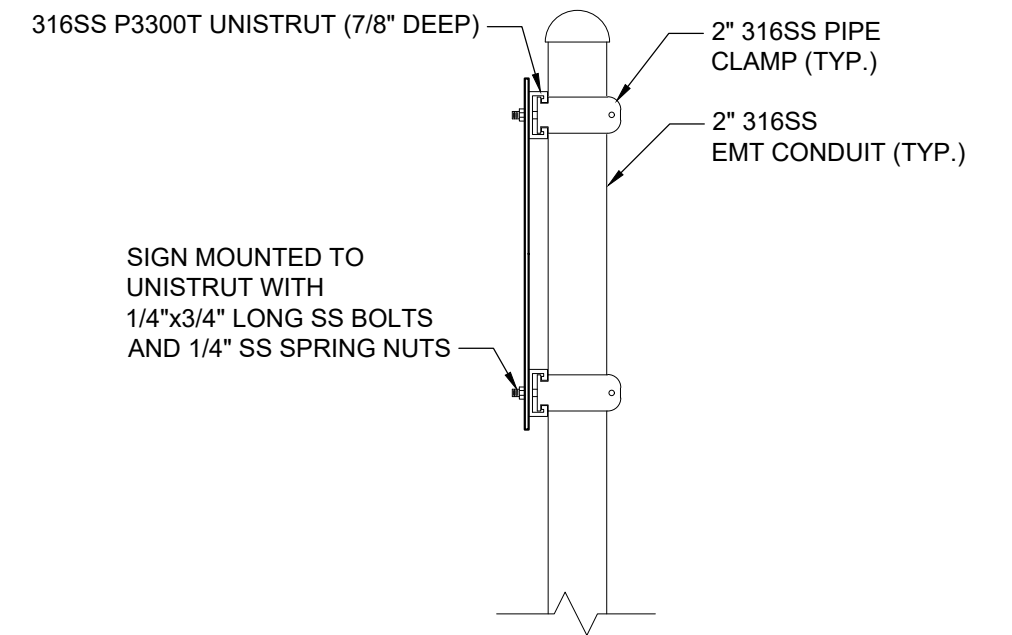


**TYPICAL AIRFIELD STOP SIGN (REAR PROFILE)**  
NOT TO SCALE

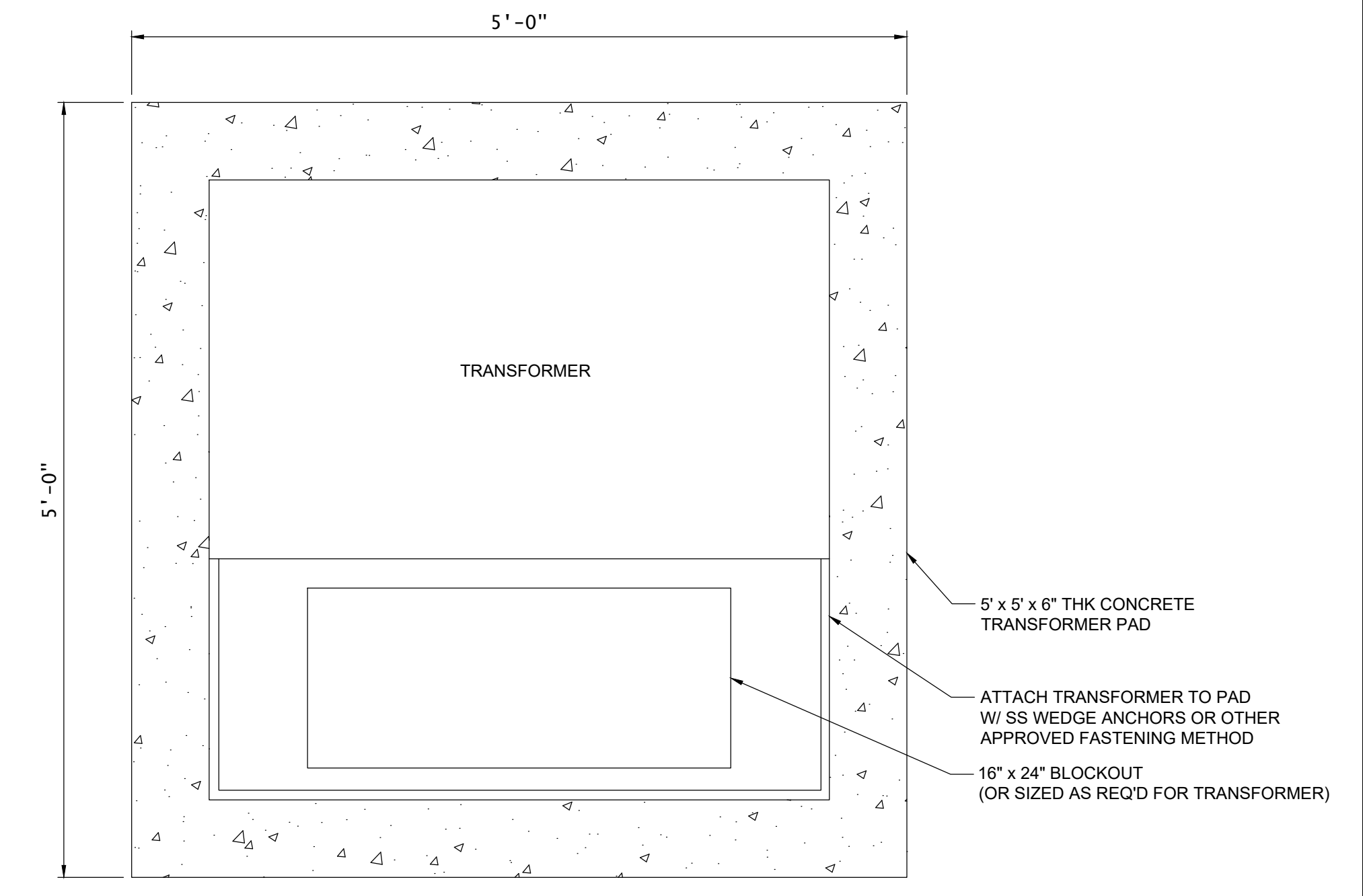


- MUTCD HORIZONTAL RECTANGLE 24"x12" BLANK STANDARD
- SIGN MADE FROM 0.080" THICK ALUMINUM
- BLACK LETTERS ON WHITE BACKGROUND WITH 3M SERIES 3930 HIGH INTENSITY PRISMATIC REFLECTIVE SHEETING.
- TEXT: FONT MUTCD "SERIES B 2000"
- HEIGHT: 2 1/2"; STROKE 5/16"

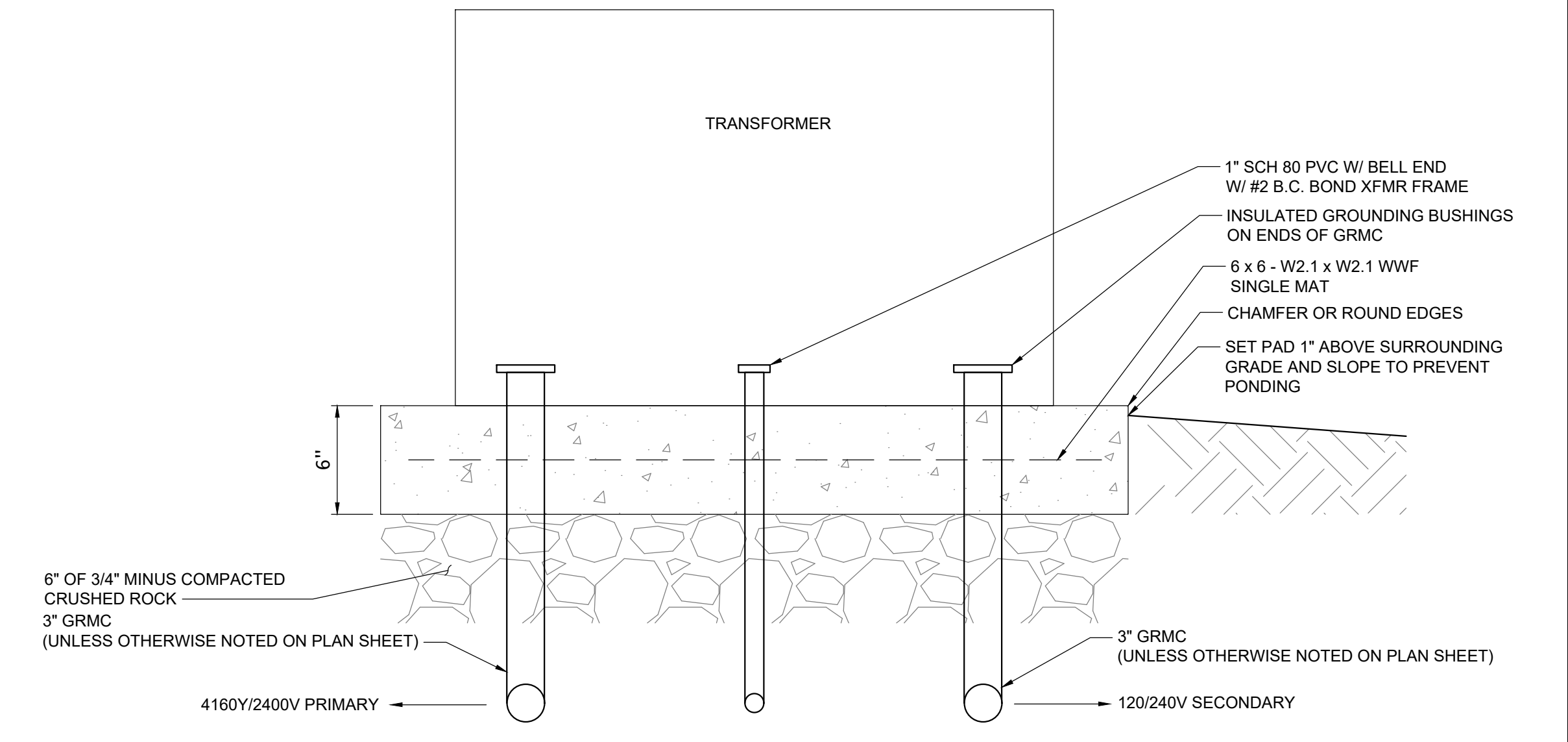
**STANDARD SIGNAGE**  
NOT TO SCALE



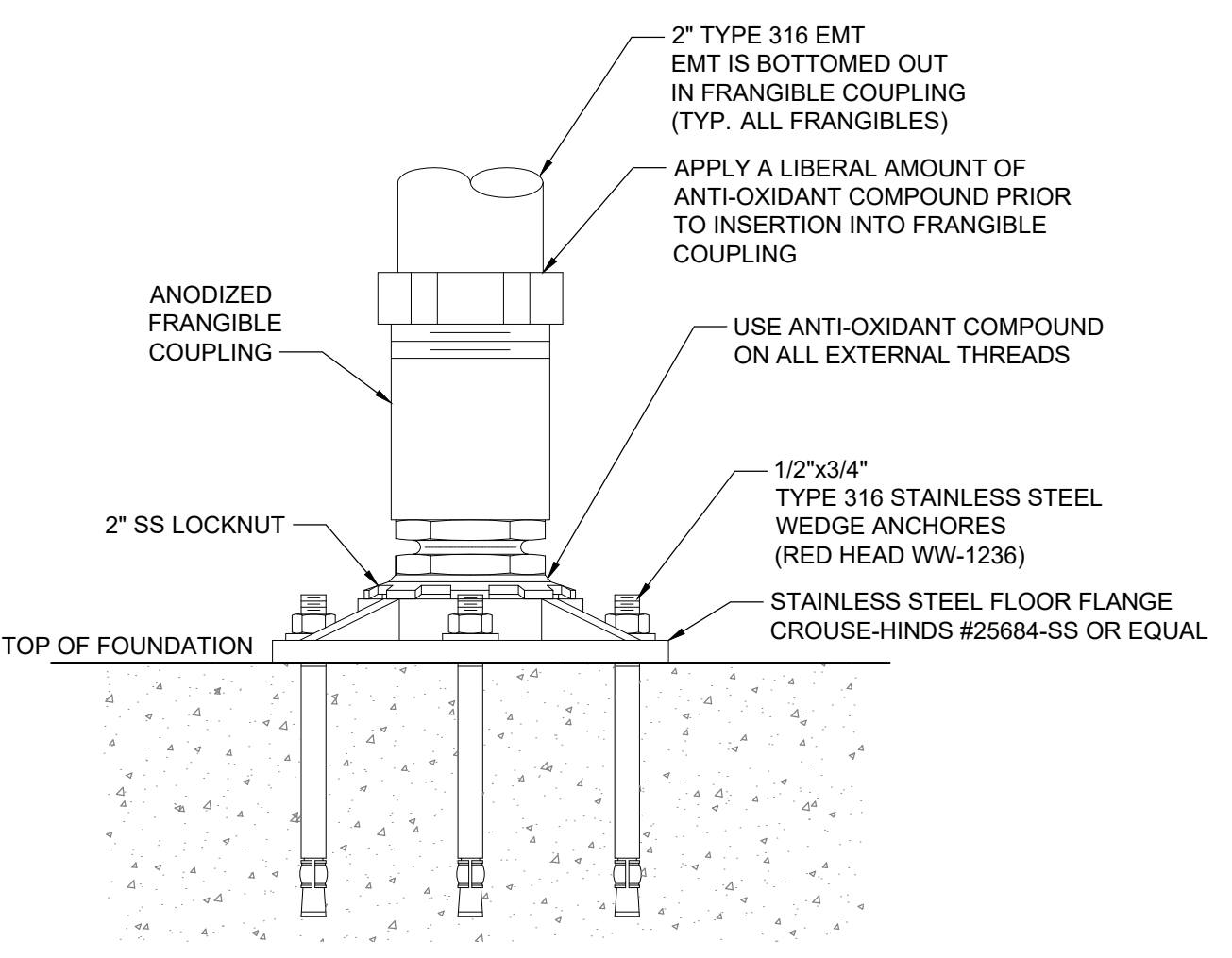
**SIGN CONNECTION (SIDE PROFILE)**  
NOT TO SCALE



**TRANSFORMER (PLAN VIEW)**  
NOT TO SCALE



**TRANSFORMER (PROFILE VIEW)**  
NOT TO SCALE



**TYPICAL FRANGIBLE COUPLING**  
NOT TO SCALE

REV	APPROVED DATE	DESCRIPTION	JCN	REDLINE DATE	APVD
DEPARTMENT OF TRANSPORTATION <b>FEDERAL AVIATION ADMINISTRATION</b> ATO - TECHNICAL OPERATIONS <span style="float: right;">WESTERN SERVICE AREA</span>					
<b>PAPI</b> <b>GENERAL SITE DETAILS - 2</b>					
LIHUE		LIHUE AIRPORT		HI	
REVIEWED BY	SUBMITTED BY	DESIGNED BY	ISSUED BY	DATE	JCN
	<i>AUSTIN WISSELL</i>	<i>AUSTIN WISSELL</i>	<i>AUSTIN WISSELL</i>	01/06/2023	1798073
PROJECT ENGINEER, AJW-2W14B	PLATFORM MANAGER, AJW-2W14B				
DRAWN	ENGINEERING SERVICES	DRAWING NO			
ADM	NAVAIDS	LIH-D-PAPI21-G007			
CHECKED		REV			

SPILERS STAINES

ISSUED FOR: BID