

Ashland/Southborough Supplemental Interconnection

Ashland/Southborough, Massachusetts

Pare Project 11144.02

April 2019

PREPARED FOR:

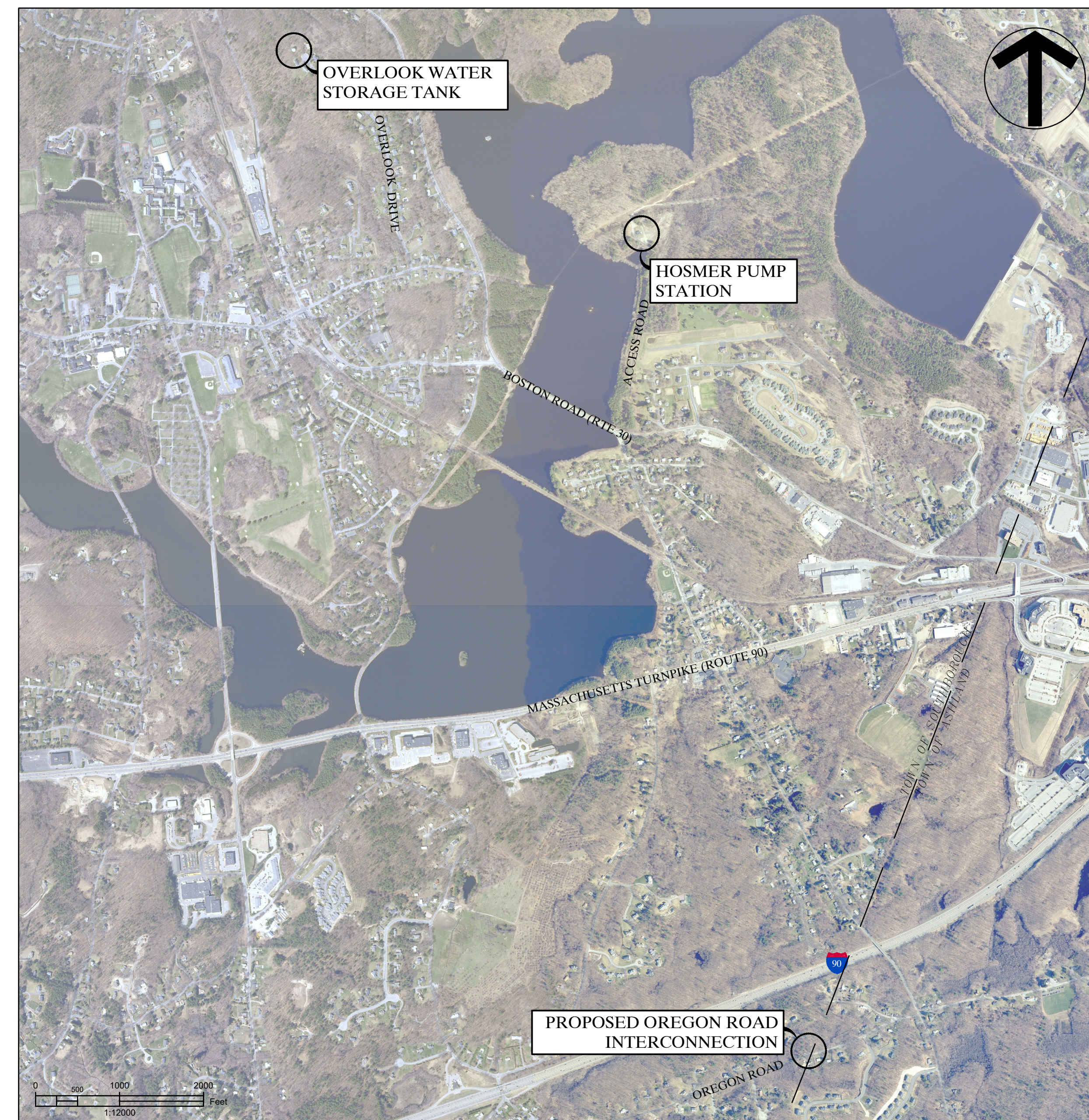
The Town of Ashland
Department of Public Works

Town of Southborough
Department of Public Works

PREPARED BY:



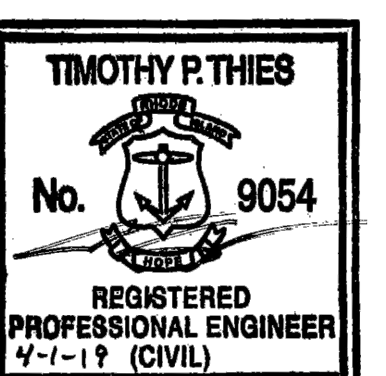
PARE CORPORATION
ENGINEERS - SCIENTISTS - PLANNERS
8 BLACKSTONE VALLEY PLACE
LINCOLN, RI 02865
401-334-4100



LIST OF DRAWINGS:

SHEET No.	DRAWING No.	DRAWING TITLE
1	C0.0	COVER SHEET
2	C1.0	GENERAL NOTES
3	C2.1	HOSMER PUMP STATION SITE PLAN
4	C2.2	HOSMER PUMP STATION DEMOLITION PLAN
5	C2.3	HOSMER PUMP STATION PROPOSED UPGRADES PLAN
6	C3.1	OREGON ROAD INTERCONNECTION METER & VAULT PLAN
7	C4.1	OVERLOOK WATER STORAGE TANK VALVE AND BUILDING PLAN
8	C5.1	REFERENCE PHOTOS
9 - 10	C6.1 - C6.2	GENERAL DETAILS 1-2
11	E1.1	ELECTRICAL GENERAL NOTES AND LEGEND
12	E2.1	HOSMER PUMP STATION ELECTRICAL SITE PLAN
13	E3.1	ELECTRICAL SITE PLAN DETAILS
14	E4.1	ONE-LINE DIAGRAM
15	E5.1	ELECTRICAL EQUIPMENT ELEVATIONS
16	E6.1	HOSMER PUMP STATION ELECTRICAL DEMOLITION PLAN
17	E7.1	HOSMER PUMP STATION MODIFIED POWER PLAN
18	E8.1	OREGON ROAD INTERCONNECTION METER & VAULT ELECTRICAL SITE PLAN
19	E9.1	OREGON ROAD INTERCONNECTION METER & VAULT POWER PLAN
20	E10.1	OREGON ROAD INTERCONNECTION METER & VAULT EQUIPMENT ELEVATION
21	E11.1	OVERLOOK STORAGE TANK POWER PLAN WITH DETAILS
22	E12.1	WIRING DIAGRAMS AND DETAILS
23	E13.1	LOOP, WIRE, AND CONDUIT SCHEDULE

100% DESIGN — ISSUED FOR BIDDING



**Ashland/Southborough
 Supplemental Interconnection**
 Ashland/Southborough, Massachusetts

REVISIONS:

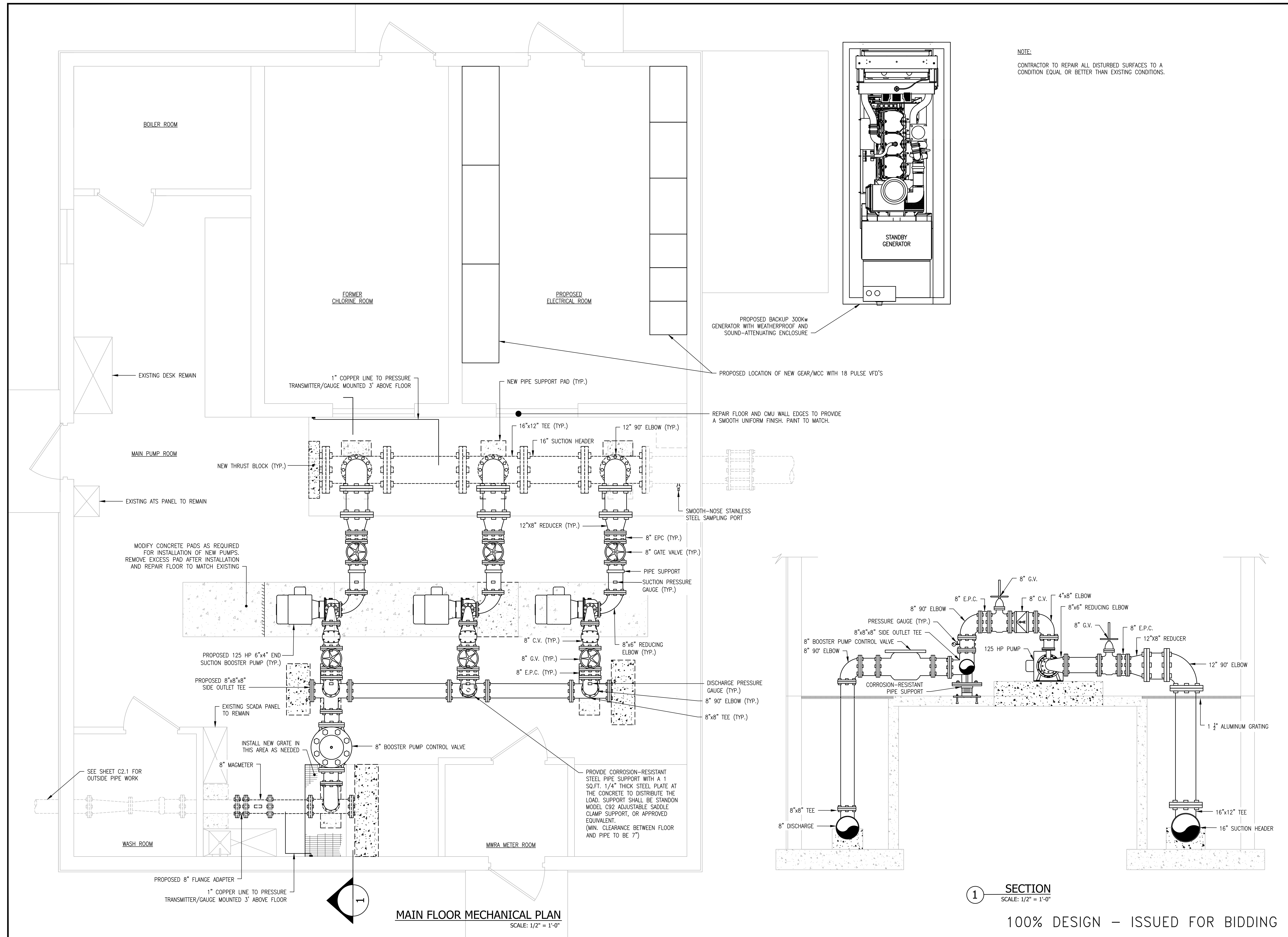
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 DATE: APRIL 2019
 SCALE: 1/2"=1'-0"
 DESIGNED BY: SPD
 CHECKED BY: SPD
 DRAWN BY: BJS
 APPROVED BY: TPT
 DRAWING TITLE:

HOSMER PUMP STATION
 PROPOSED UPGRADES

DRAWING NO.:
 SHEET NO. 5 OF 23

NOTE:
 CONTRACTOR TO REPAIR ALL DISTURBED SURFACES TO A CONDITION EQUAL OR BETTER THAN EXISTING CONDITIONS.

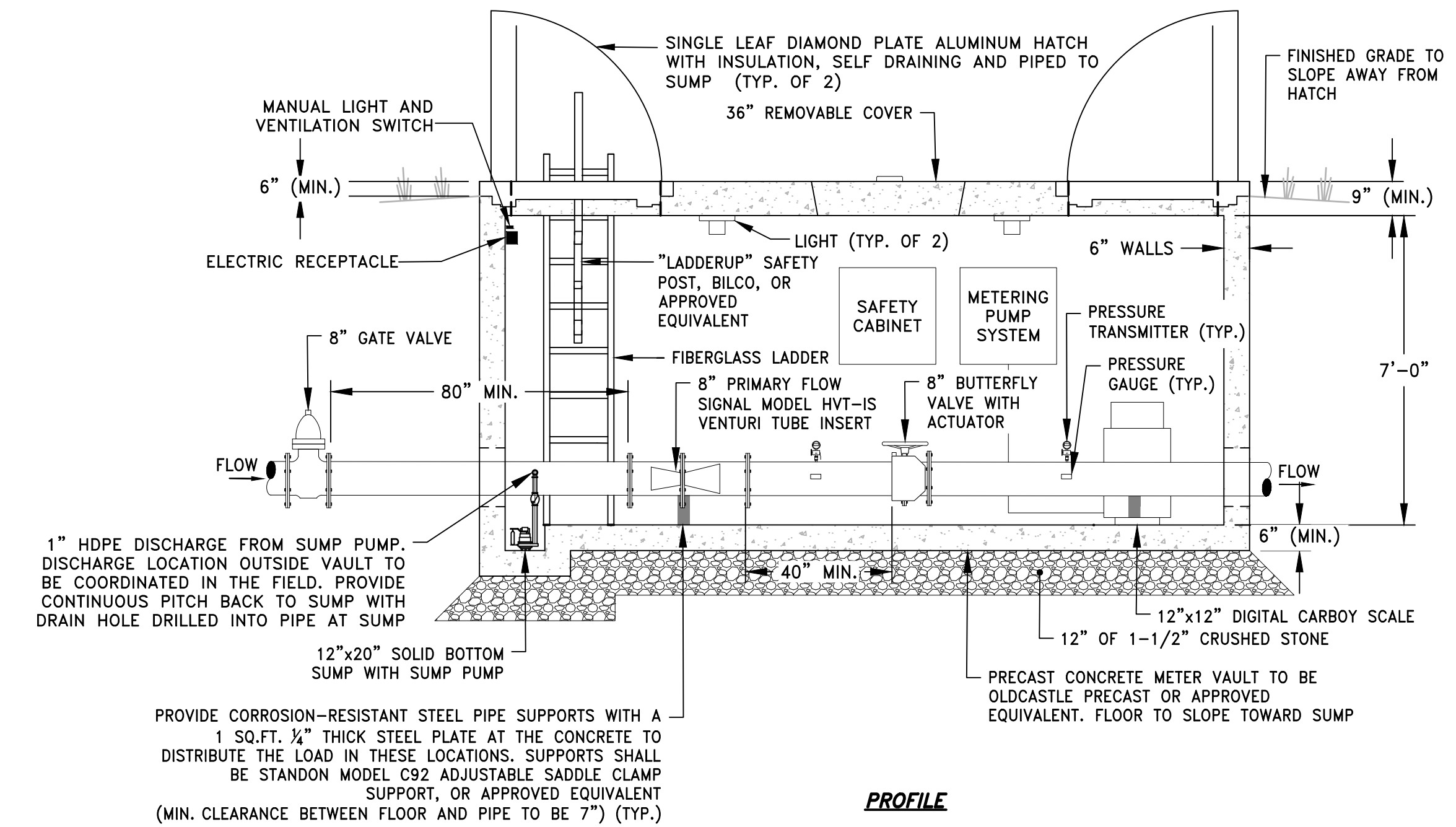
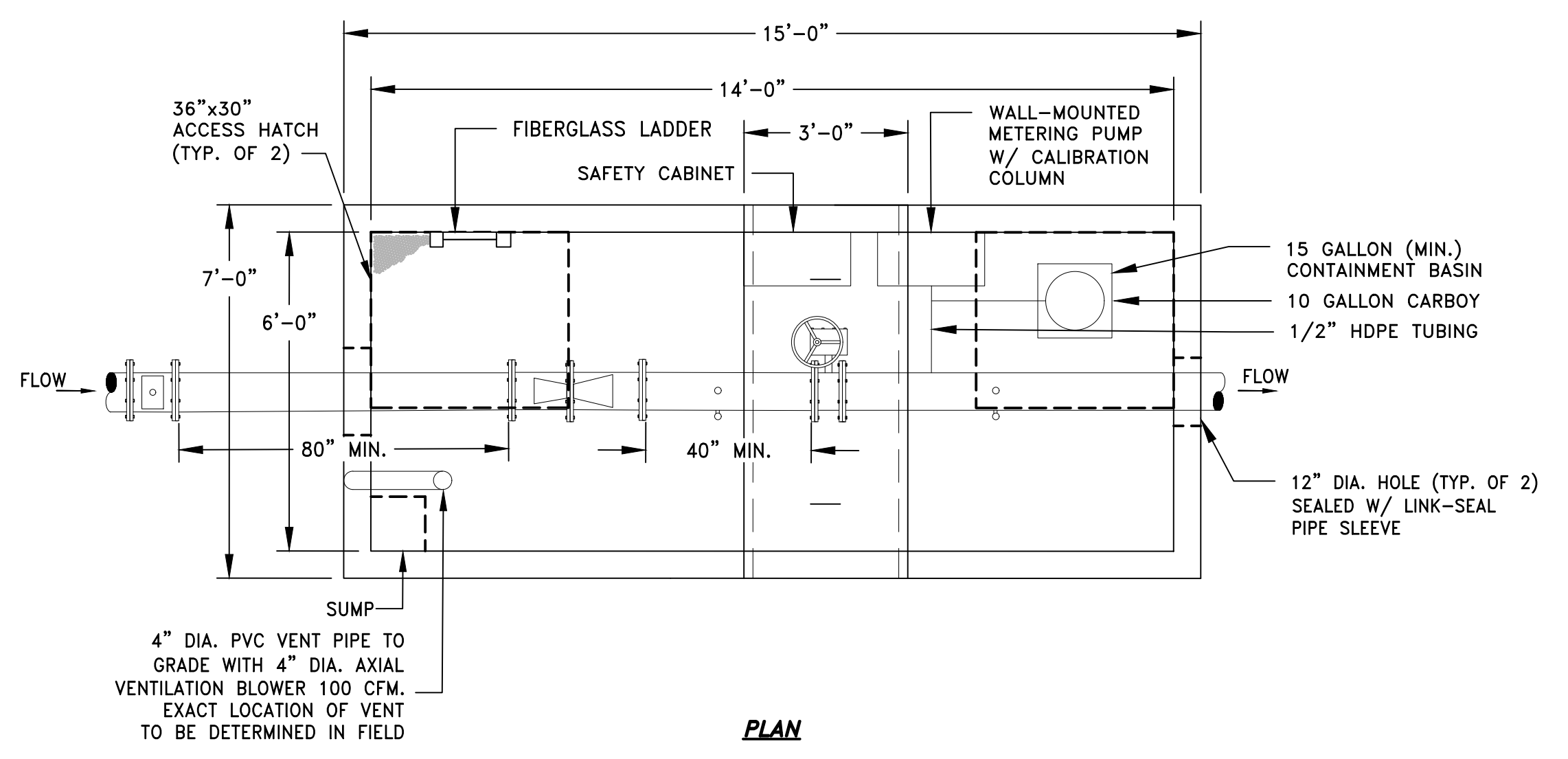
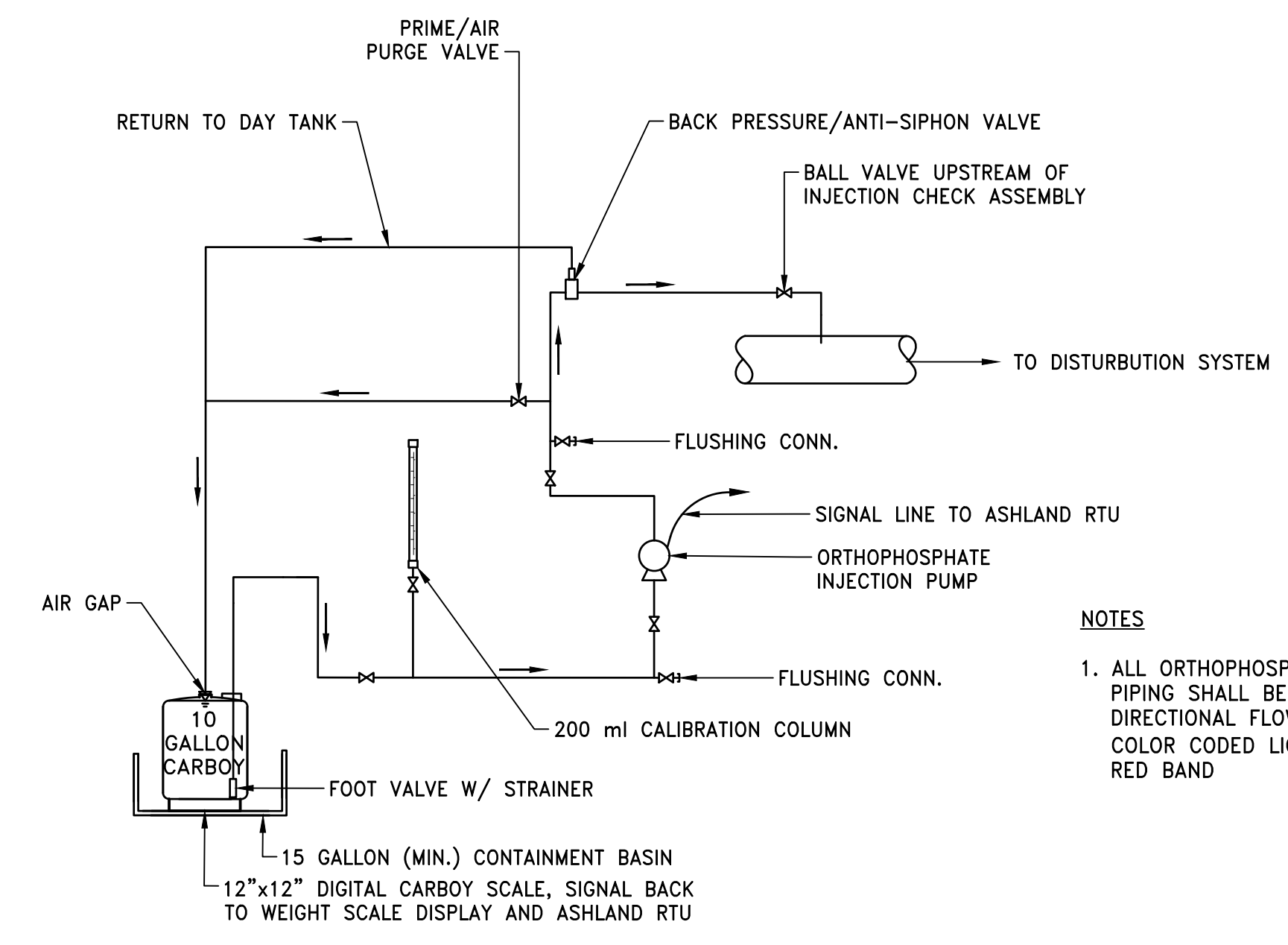
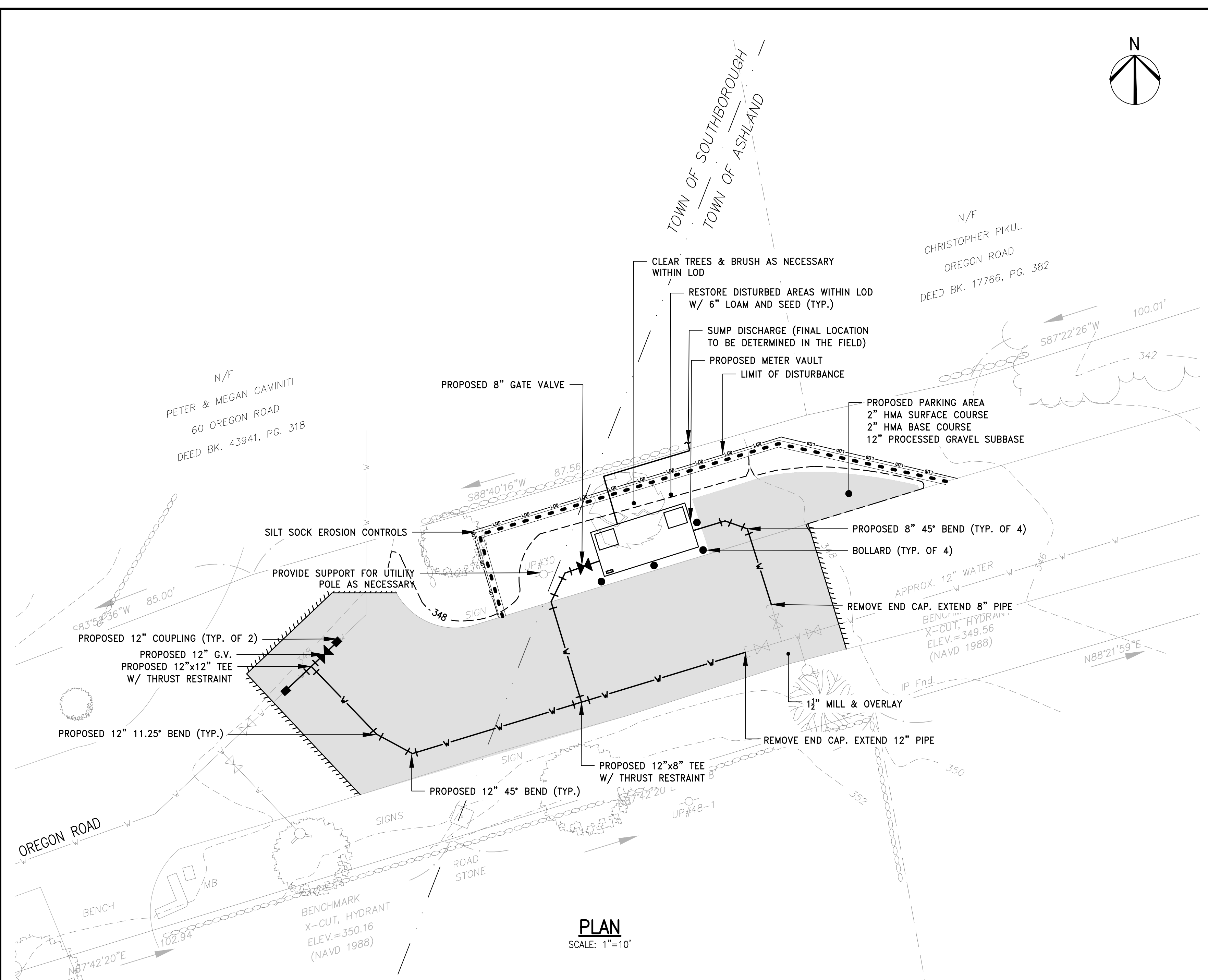


MAIN FLOOR MECHANICAL PLAN
 SCALE: 1/2" = 1'-0"

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

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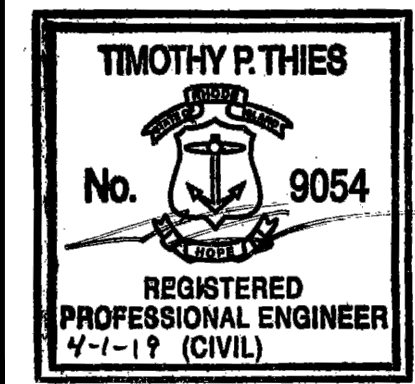
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DATE:	APRIL 2019
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DESIGNED BY:	SPD
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APPROVED BY:	TPT
DRAWING TITLE:	OREGON ROAD INTERCONNECTION METER & VAULT PLAN
DRAWING NO.:	C3.1
SHEET NO.:	6 OF 23



BURIED METER VAULT DETAIL
 NOT TO SCALE

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REVISIONS:

NO.	DESCRIPTION

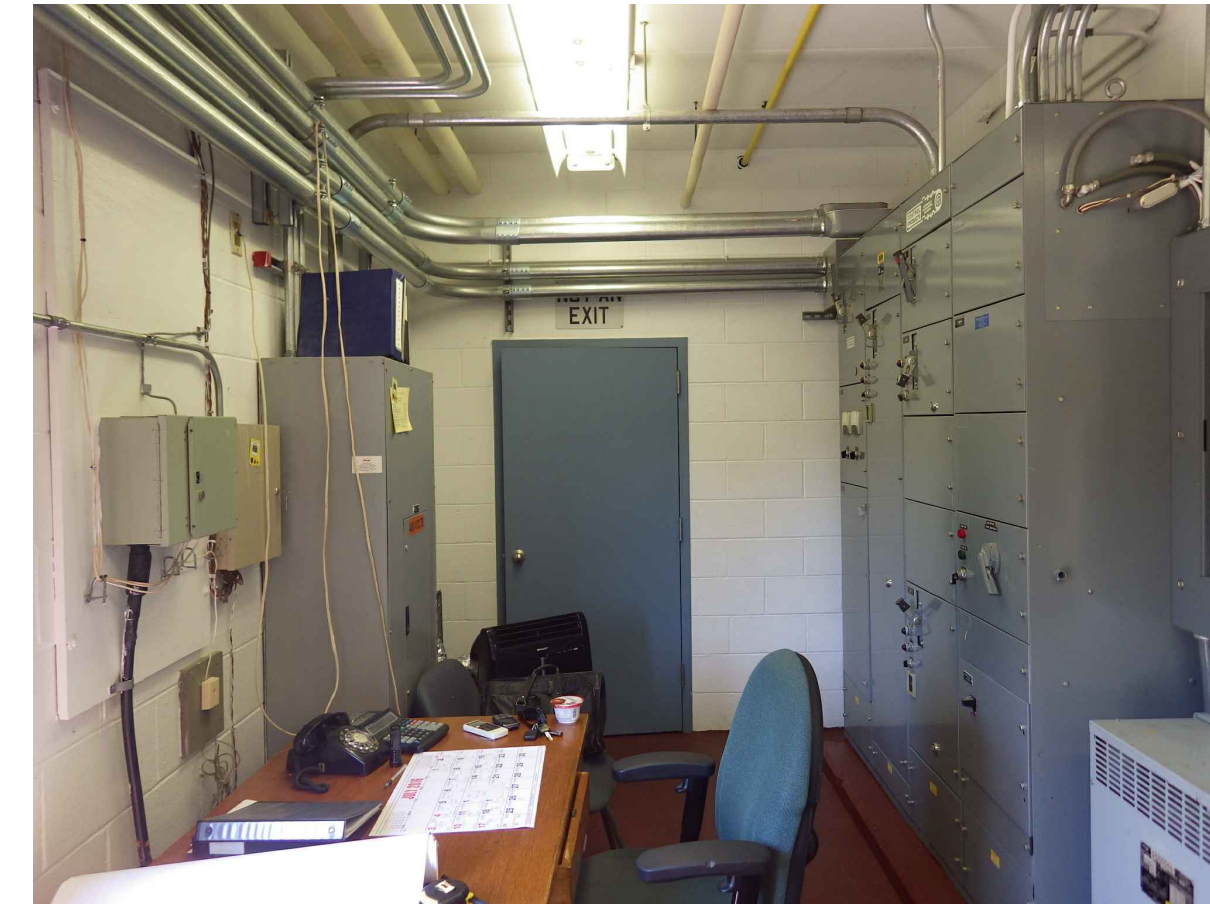
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 DRAWING TITLE:

REFERENCE PHOTOS

DRAWING NO.: **C5.1**
 SHEET NO. 8 OF 23



1 NOT TO SCALE



2 NOT TO SCALE



3 NOT TO SCALE



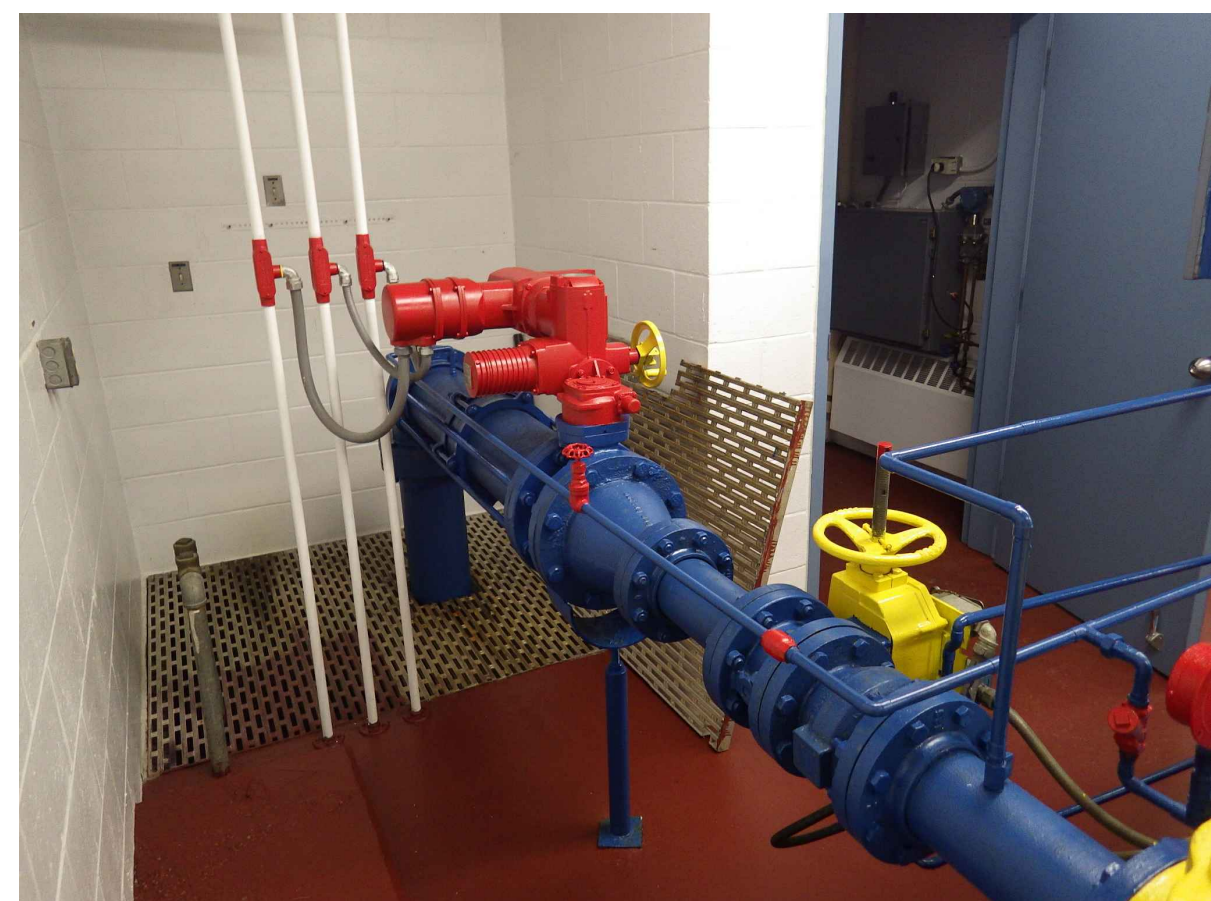
4 NOT TO SCALE



5 NOT TO SCALE



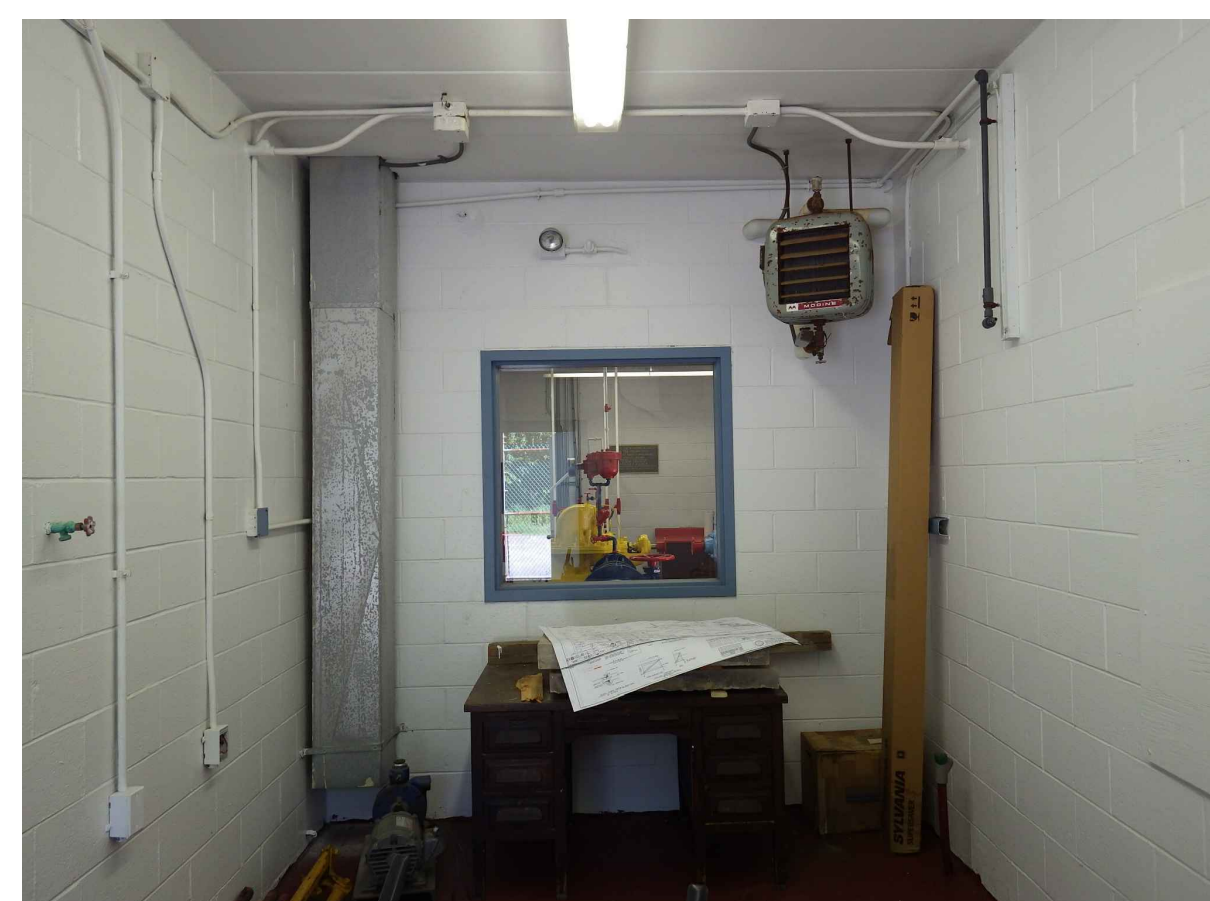
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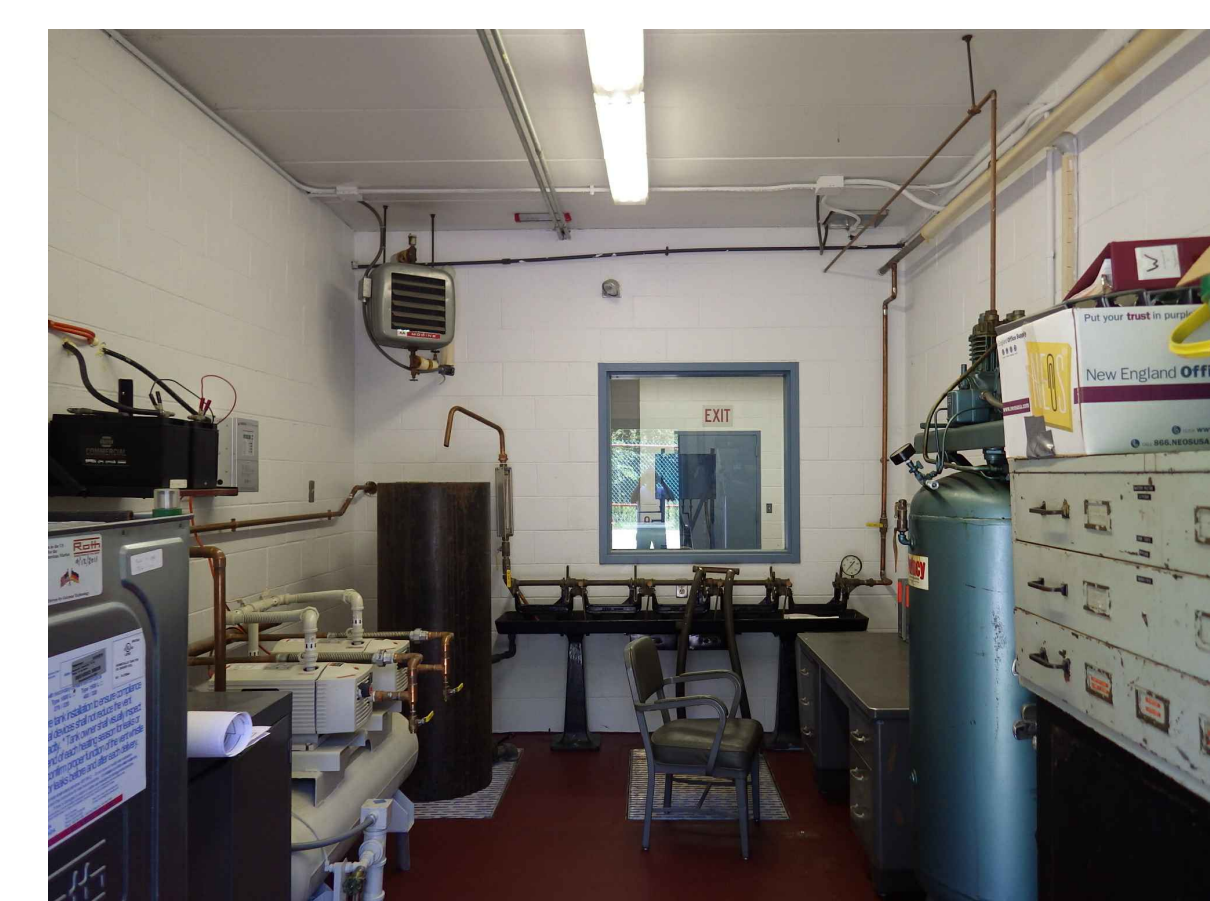
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8 NOT TO SCALE



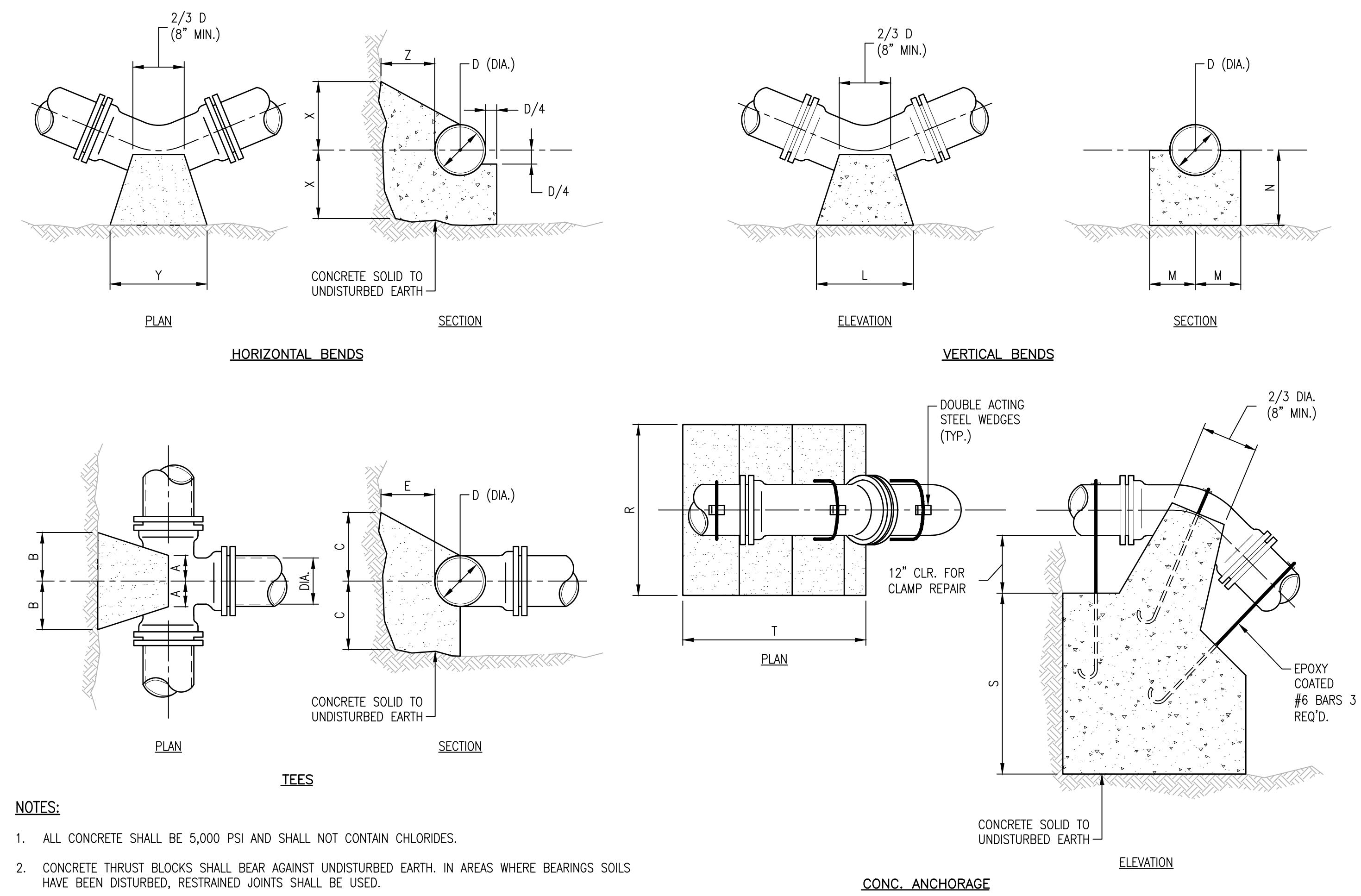
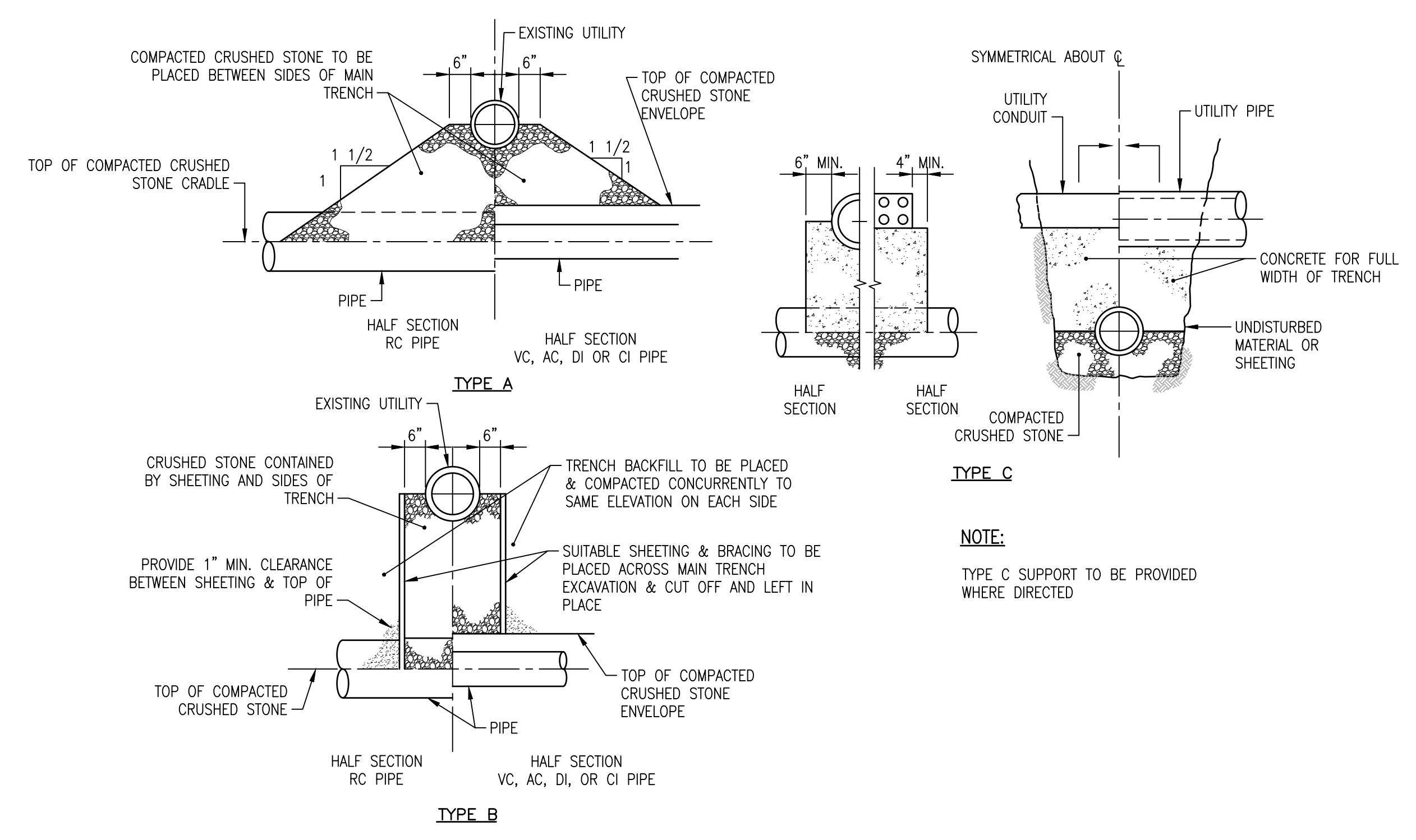
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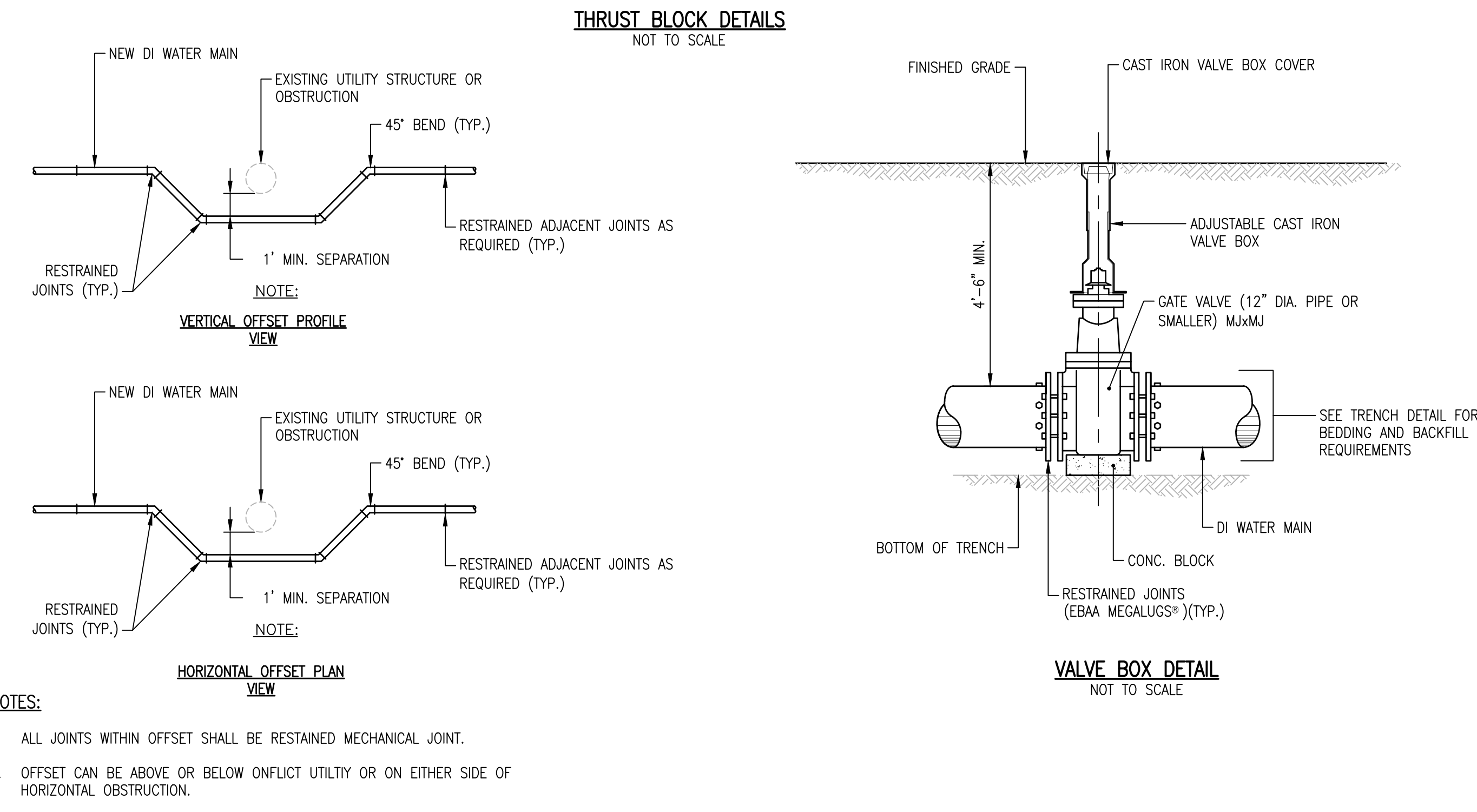
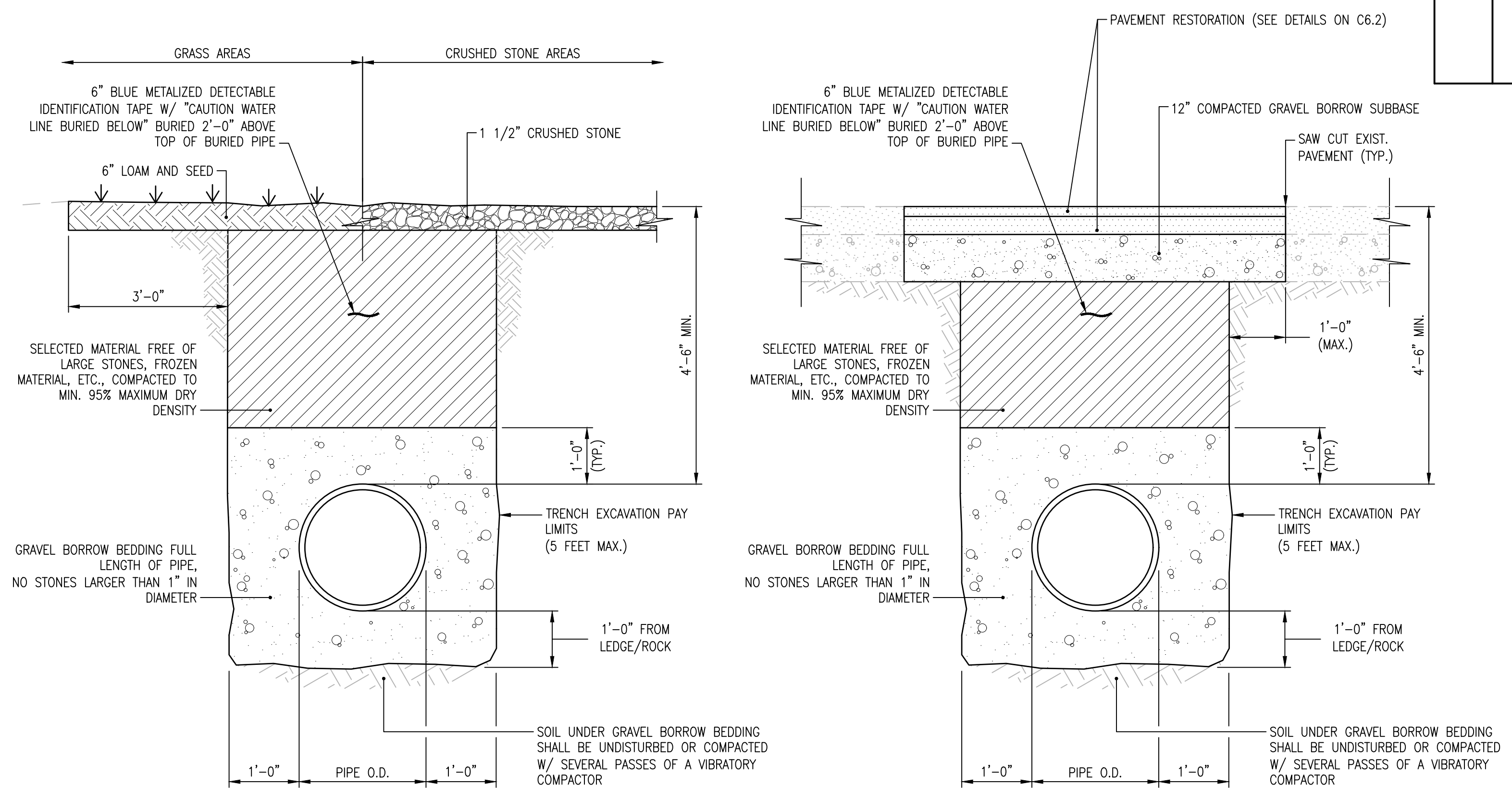
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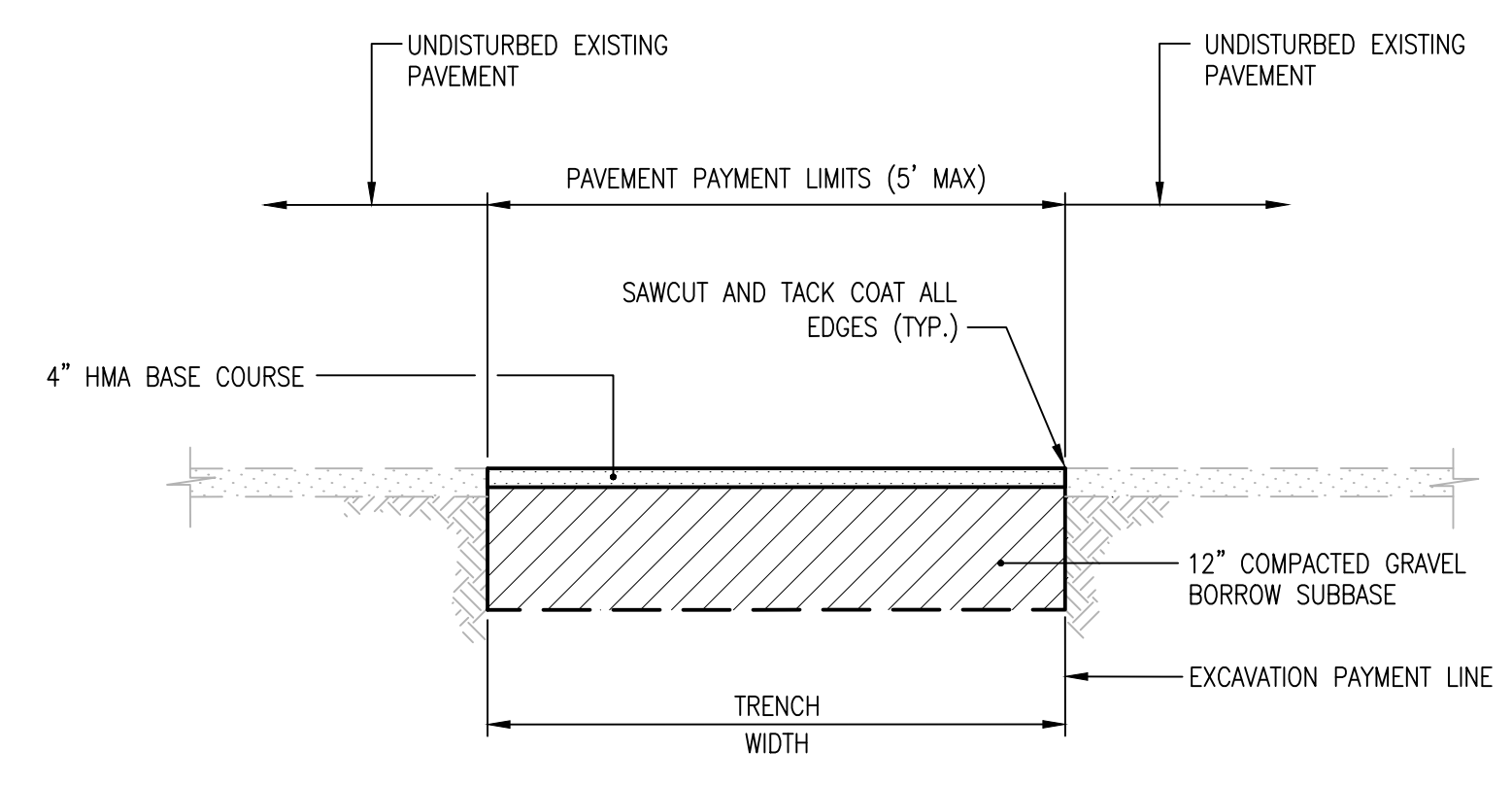


11 NOT TO SCALE

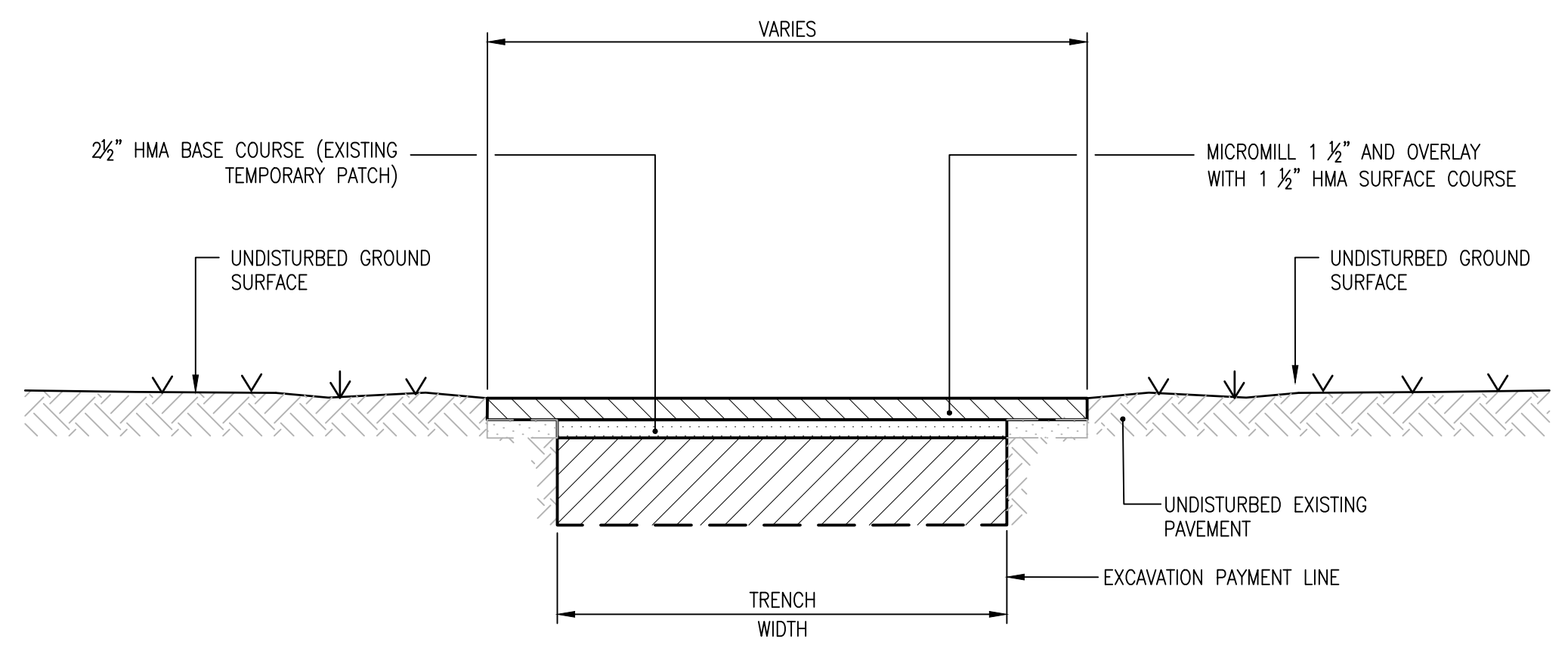


TEES		HORIZONTAL BENDS					VERTICAL BENDS					ANCHORAGES															
		PIPE SIZE-D (DIA.)					PIPE SIZE-D (DIA.)					PIPE SIZE-D (DIA.)					PIPE SIZE-D (DIA.)										
		6"	8"	12"	16"	20"	BEND					BEND					BEND					BEND					
A	8"	10"	1'-0"	1'-3"	1'-6"	1/8	X	1'-0"	1'-0"	1'-0"	1'-3"	1'-6"	1/8	L	1'-3"	1'-8"	2'-6"	3'-6"	4'-8"	1/8	R	2'-6"	3'-0"	4'-6"	5'-4"	6'-0"	
	8"	10"	1'-2"	1'-4"	1'-6"		Y	1'-0"	1'-4"	1'-6"	2'-0"	2'-6"		3'-0"	M	7"	8"	11"	1'-4"		1'-6"	S	2'-6"	2'-9"	3'-6"	2'-6"	5'-6"
	10"	1'-0"	1'-3"	1'-6"	1'-8"		Z	8"	10"	1'-2"	1'-4"	1'-6"		N	7"	8"	11"	1'-4"	1'-6"		T	3'-0"	4'-0"	4'-9"	7'-0"	9'-6"	
	8"	10"	1'-2"	1'-6"	1'-10"		X	1'-0"	1'-0"	1'-0"	1'-3"	1'-6"		L	9"	1'-0"	1'-9"	2'-6"	3'-0"		R	2'-0"	2'-8"	4'-0"	4'-6"	5'-0"	
							Y	1'-0"	1'-4"	1'-6"	1'-9"	2'-6"		M	7"	7"	10"	1'-0"	1'-2"		S	1'-9"	2'-3"	2'-6"	3'-2"	3'-8"	
B	8"	10"	1'-2"	1'-4"	1'-6"	1/16	Z	8"	10"	1'-2"	1'-4"	1'-6"	1/16	N	7"	7"	8"	10"	1'-0"	1/16	T	2'-6"	3'-4"	4'-0"	6'-0"	8'-6"	
	10"	1'-0"	1'-3"	1'-6"	1'-8"		X	1'-0"	1'-0"	1'-0"	1'-3"	1'-6"		L	6"	8"	1'-0"	1'-4"	1'-9"		R	1'-6"	2'-0"	3'-0"	3'-8"	4'-3"	
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C	10"	1'-0"	1'-3"	1'-6"	1'-8"	1/32	Z	8"	10"	1'-2"	1'-4"	1'-6"	1/32	N	7"	7"	8"	10"	1'-0"	1/32	T	2'-0"	2'-6"	3'-0"	4'-6"	5'-9"	
	8"	10"	1'-2"	1'-6"	1'-10"		X	1'-0"	1'-0"	1'-0"	1'-4"	1'-6"		L	6"	8"	1'-0"	1'-4"	1'-9"		R	1'-6"	2'-0"	3'-0"	3'-8"	4'-3"	
	8"	10"	1'-2"	1'-6"	1'-10"		Y	1'-0"	1'-0"	1'-0"	1'-4"	1'-6"		M	7"	7"	10"	1'-0"	1'-2"		S	1'-3"	1'-9"	2'-0"	2'-4"	2'-6"	



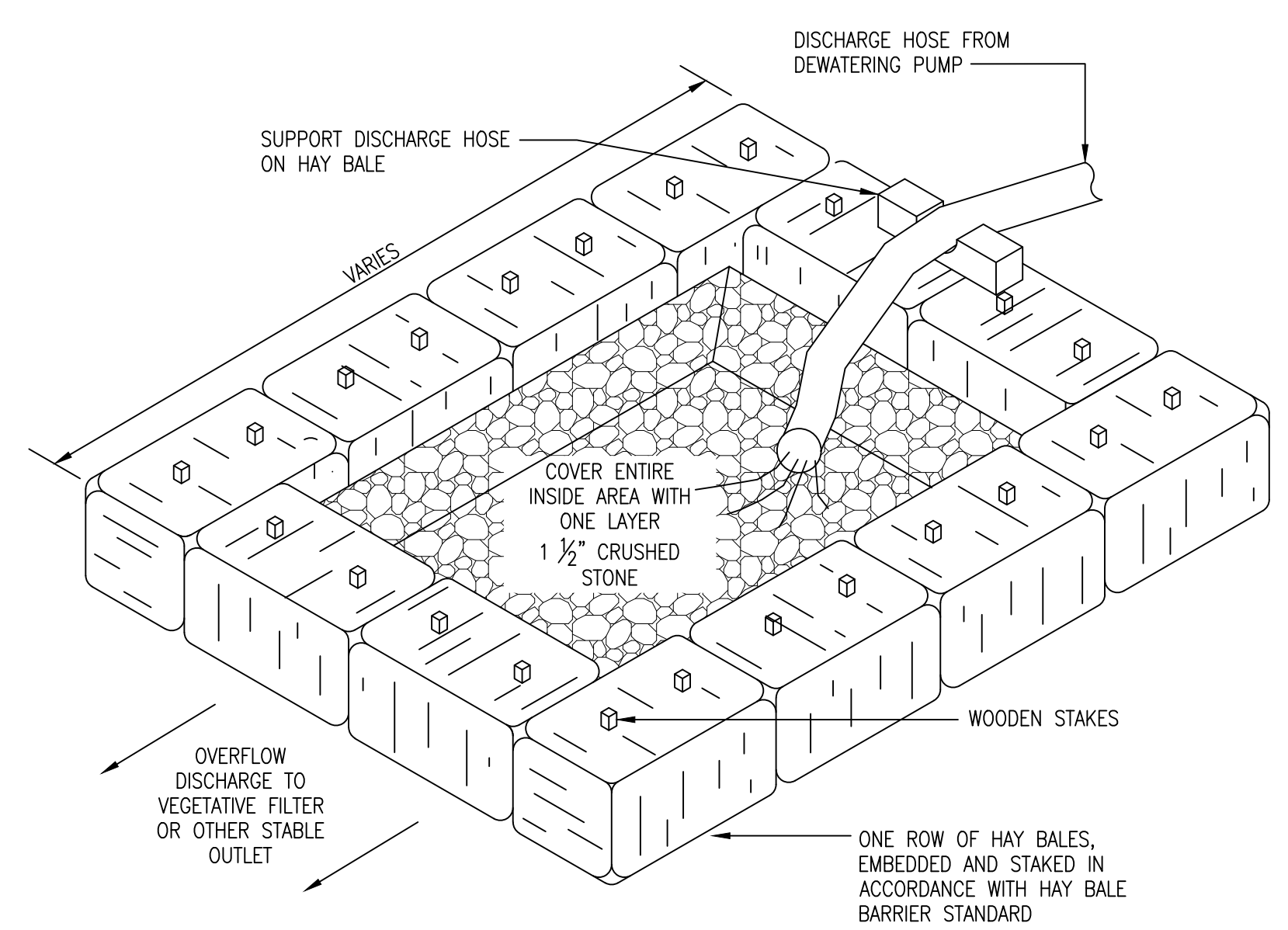


TEMPORARY PAVEMENT TRENCH PATCH
NOT TO SCALE



PERMANENT RESTORATION DETAIL
NOT TO SCALE

NOTE: MILL AND OVERLAY TO BE INSTALLED ONLY AFTER THE TEMPORARY TRENCH PATCH HAS BEEN ALLOWED TO SETTLE A MINIMUM OF 90 DAYS



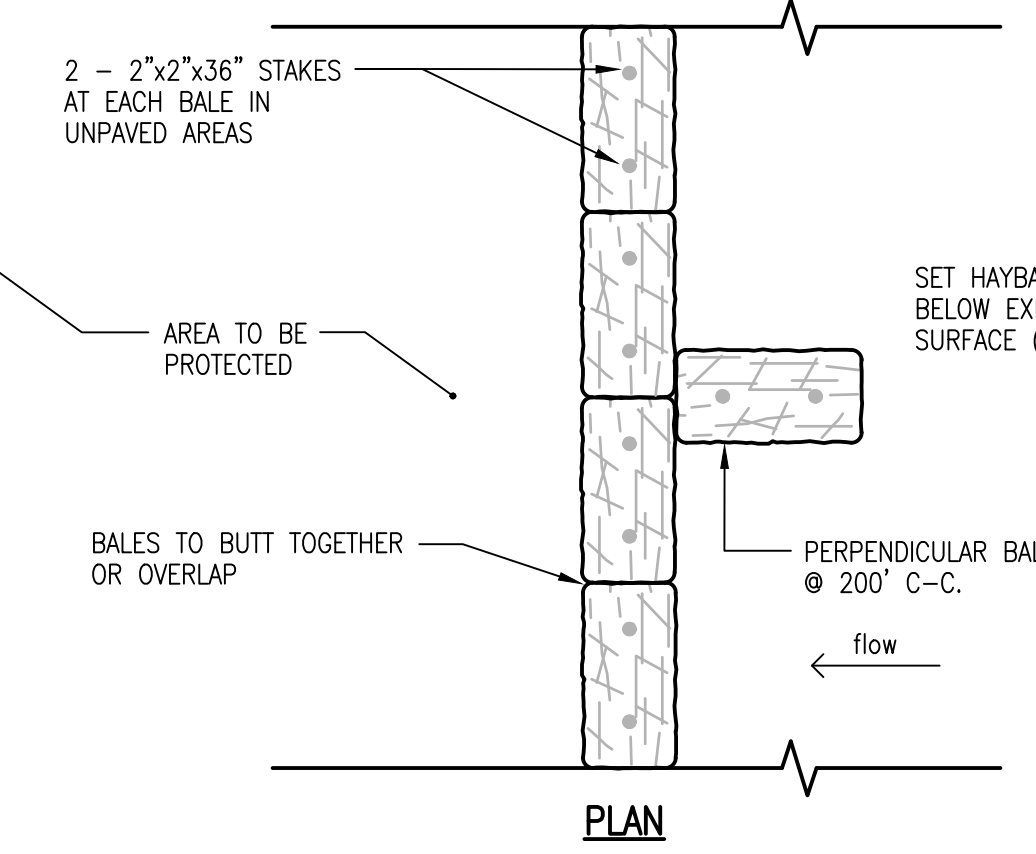
NOTES:

1. REQUIRED SIZE OF FILTER BASIN TO BE DETERMINED BY CONTRACTOR TO ENSURE DISCHARGE IS CLEAR OF SEDIMENT.
2. FILTER FABRIC SHALL BE USED TO LINE THE INSIDE OF THE HAY BALE BASIN AND ANCHORED BY THE WOODEN STAKES.

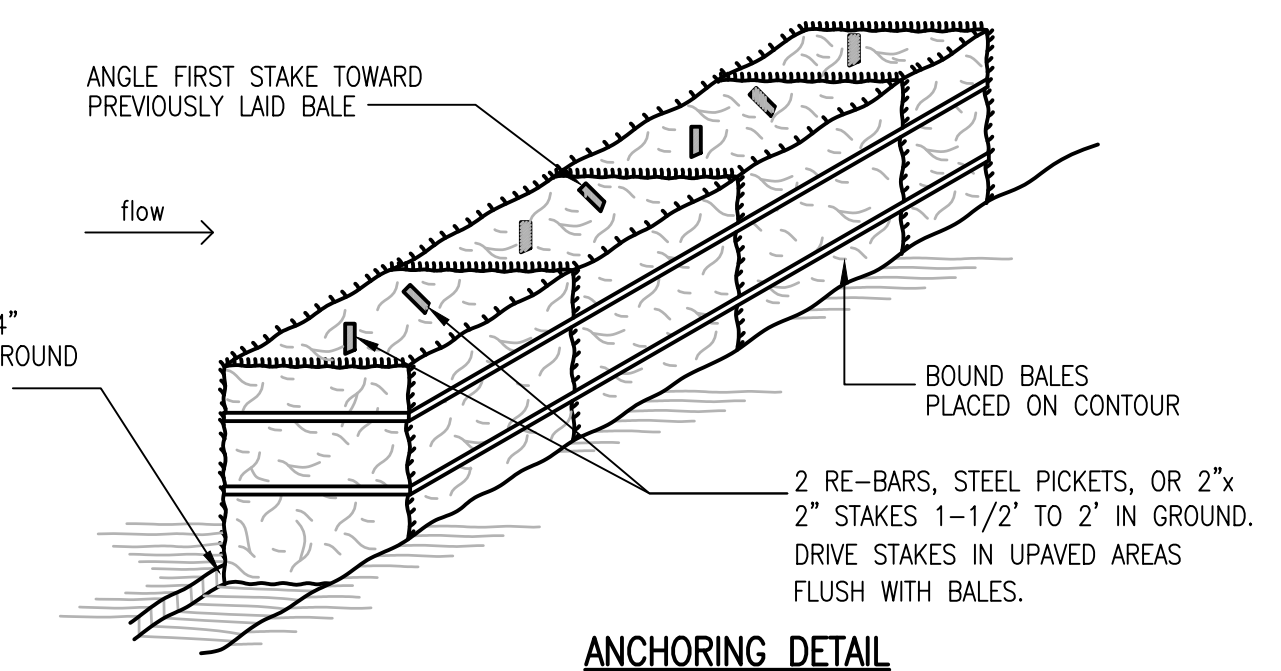
TYPE I PUMPING SETTLING BASIN
NOT TO SCALE

CONSTRUCTION SPECIFICATIONS:

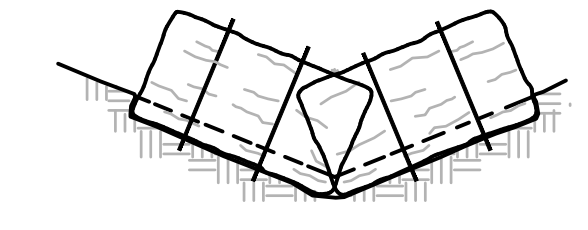
1. HAYBALES ARE TO BE INSTALLED IN LOCATIONS AS SHOWN ON THE PLAN TO PROTECT WETLAND AREAS FROM SILTATION. AT APPROXIMATELY 200-FOOT INTERVALS, A HAYBALE IS TO ABUT PERPENDICULARLY.
2. BALES SHALL BE PLACED AT THE TOE OF A SLOPE OR ON THE CONTOUR, AND IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.
3. EACH BALE SHALL BE EMBEDDED IN THE SOIL, A MINIMUM OF (4) INCHES, AND PLACED SO THE BINDINGS ARE HORIZONTAL.
4. BALES SHALL BE SECURELY ANCHORED IN PLACE BY EITHER TWO STAKES OR RE-BARS DRIVEN THROUGH THE BALE IN UNPAVED AREAS. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAID BALE, AT AN ANGLE, TO FORCE THE BALES TOGETHER. STAKES SHALL BE DRIVEN FLUSH WITH THE BALE.
5. INSPECTION SHALL BE FREQUENT AND REPAIR/REPLACEMENT SHALL BE MADE PROMPTLY AS NEEDED.
6. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.



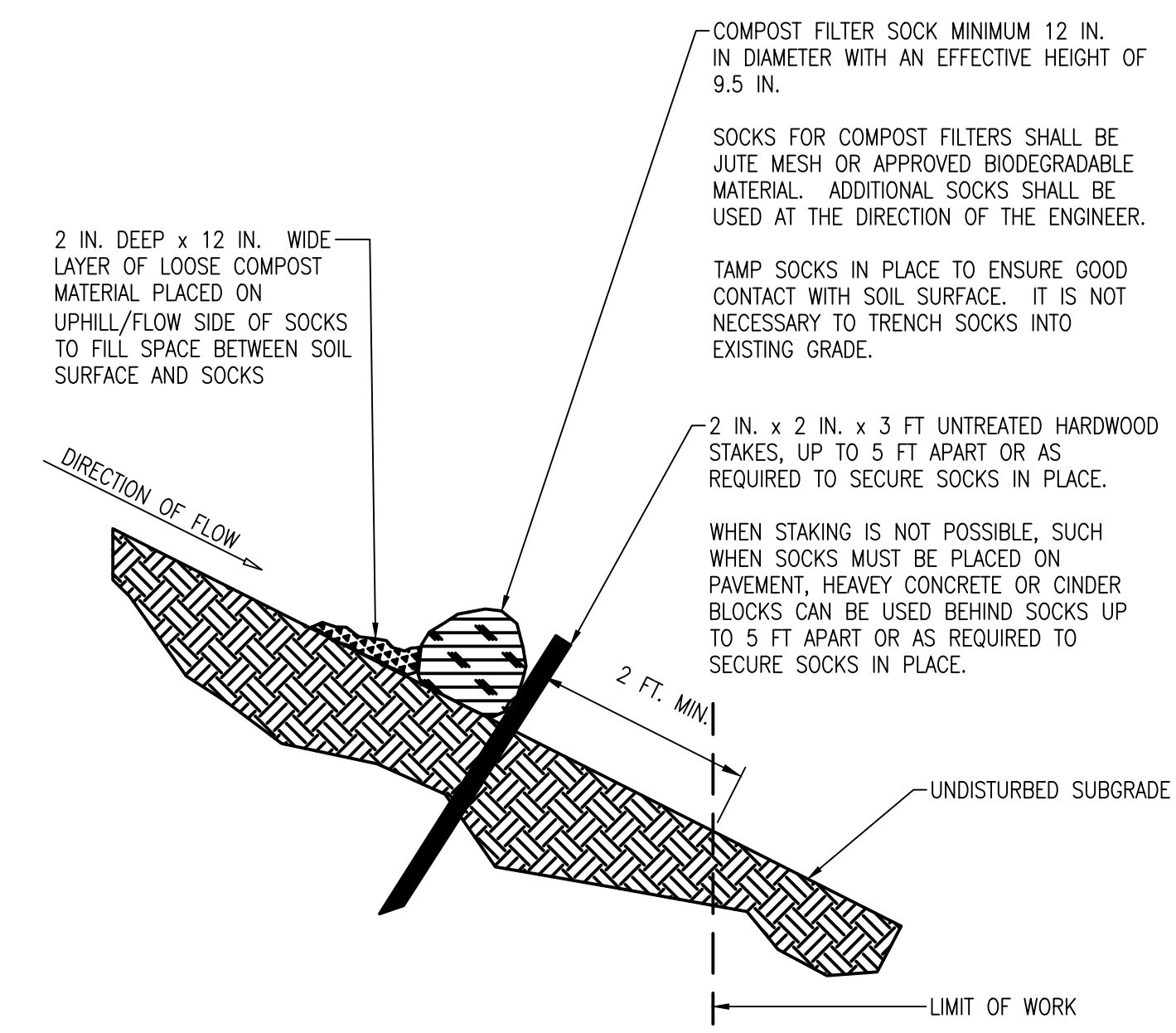
HAY BALE DETAILS
NOT TO SCALE



ANCHORING DETAIL



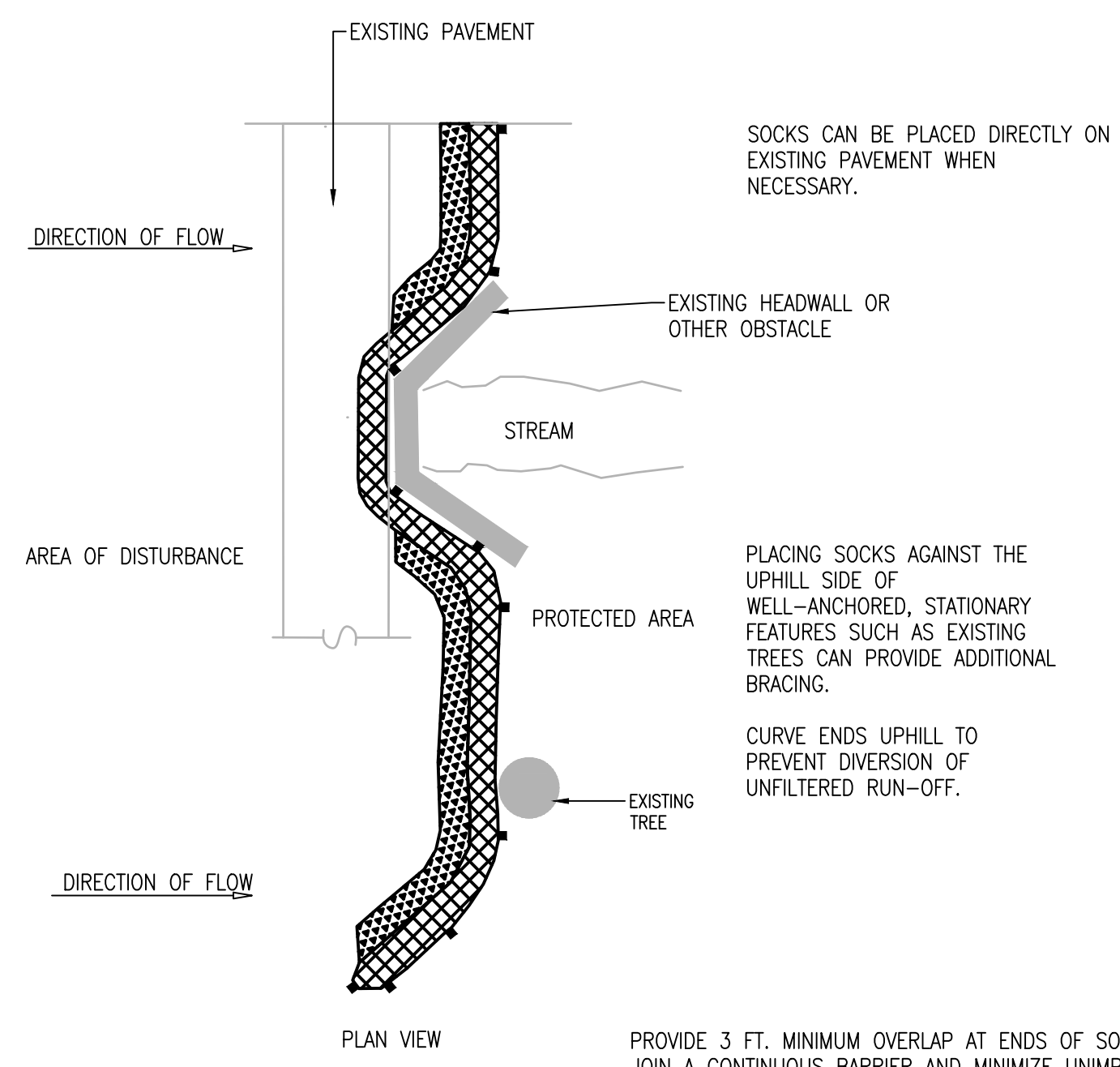
HAY BALE CHECK DAM



GENERAL NOTES:

1. PROVIDE A MINIMUM SOCK DIAMETER OF 12 INCHES FOR SLOPES UP TO 50 FEET IN LENGTH WITH A SLOPE RATIO OF 3H:1V OR STEEPER. LONGER SLOPES OF 3H:1V MAY REQUIRE LARGER SOCK DIAMETER OR ADDITIONAL COURSING OF FILTER SOCKS TO CREATE A FILTER BERM. REFER TO MANUFACTURER'S RECOMMENDATIONS FOR SITUATIONS WITH LONGER OR STEEPER SLOPES.
2. INSTALL SOCKS ALONG CONTOURS AND PERPENDICULAR TO SHEET OR CONCENTRATED FLOW.
3. DO NOT INSTALL IN PERENNIAL, EPHEMERAL OR INTERMITTENT STREAMS.
4. CONFIGURE SOCKS AROUND EXISTING SITE FEATURES TO MINIMIZE SITE DISTURBANCE AND MAXIMIZE CAPTURE AREA OF STORMWATER RUN-OFF.

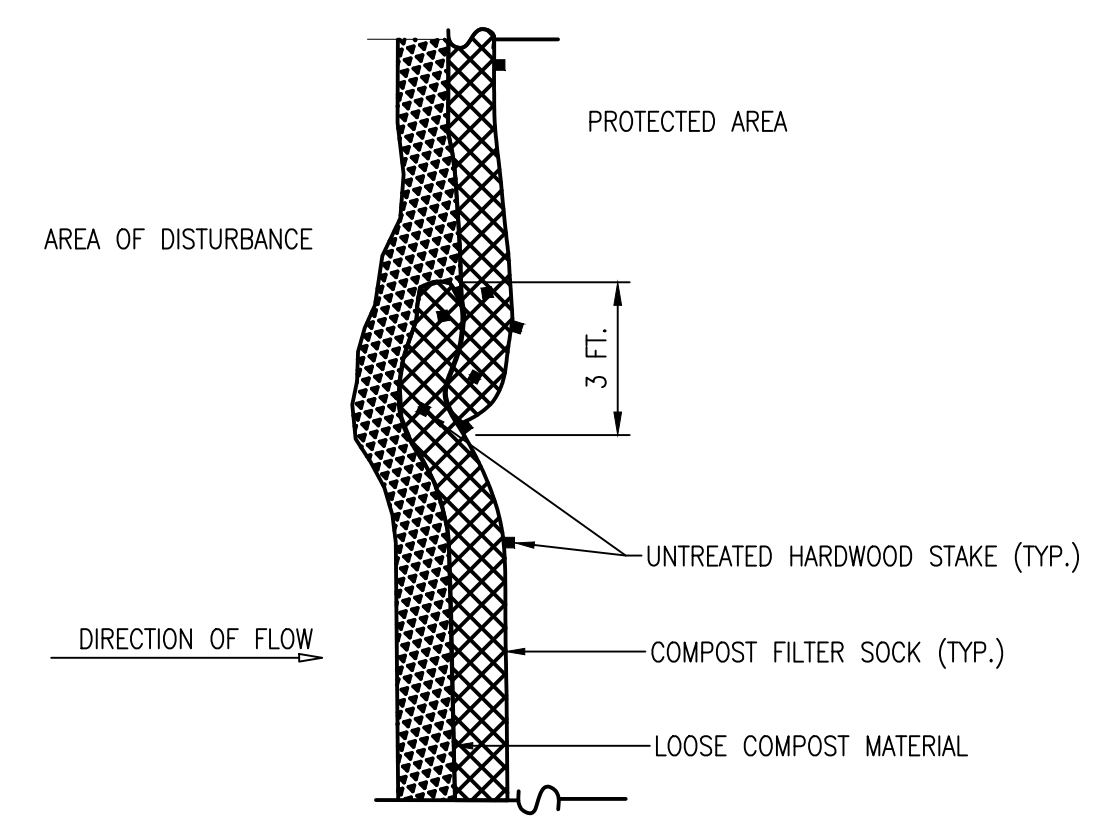
SINGLE COMPOST FILTER SOCK DETAIL
NOT TO SCALE



PLAN VIEW

PROVIDE 3 FT. MINIMUM OVERLAP AT ENDS OF SOCKS TO JOIN A CONTINUOUS BARRIER AND MINIMIZE UNIMPEDED FLOW. STAKE JOINING SOCKS SNUGLY AGAINST EACH OTHER TO PREVENT UNFILTERED FLOW BETWEEN THEM.

SECURES ENDS OF SOCKS WITH STAKES SPACED 18 IN. APART THROUGH TOPS OF SOCKS.



PLAN VIEW - JOIN DETAIL

**Ashtand/Southborough
Supplemental Interconnection
Ashtand/Southborough, Massachusetts**

TIMOTHY P. THIES
No. 9054
REGISTERED PROFESSIONAL ENGINEER
4-1-19 (CIVIL)

REVISIONS:

NO.	DATE	DESCRIPTION

PROJECT NO.:	11144.02
DATE:	APRIL 2019
SCALE:	AS NOTED
DESIGNED BY:	SPD
CHECKED BY:	SPD
DRAWN BY:	BJS
APPROVED BY:	TPT
DRAWING TITLE:	

GENERAL DETAIL
NO. 2