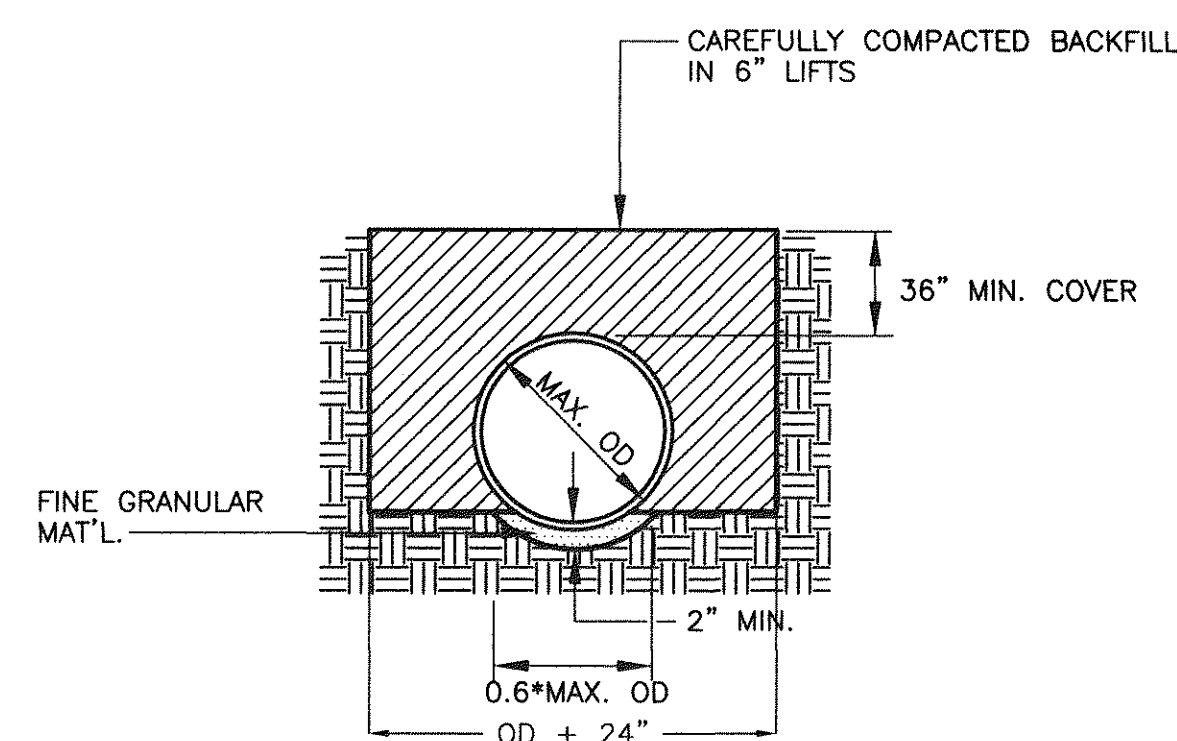


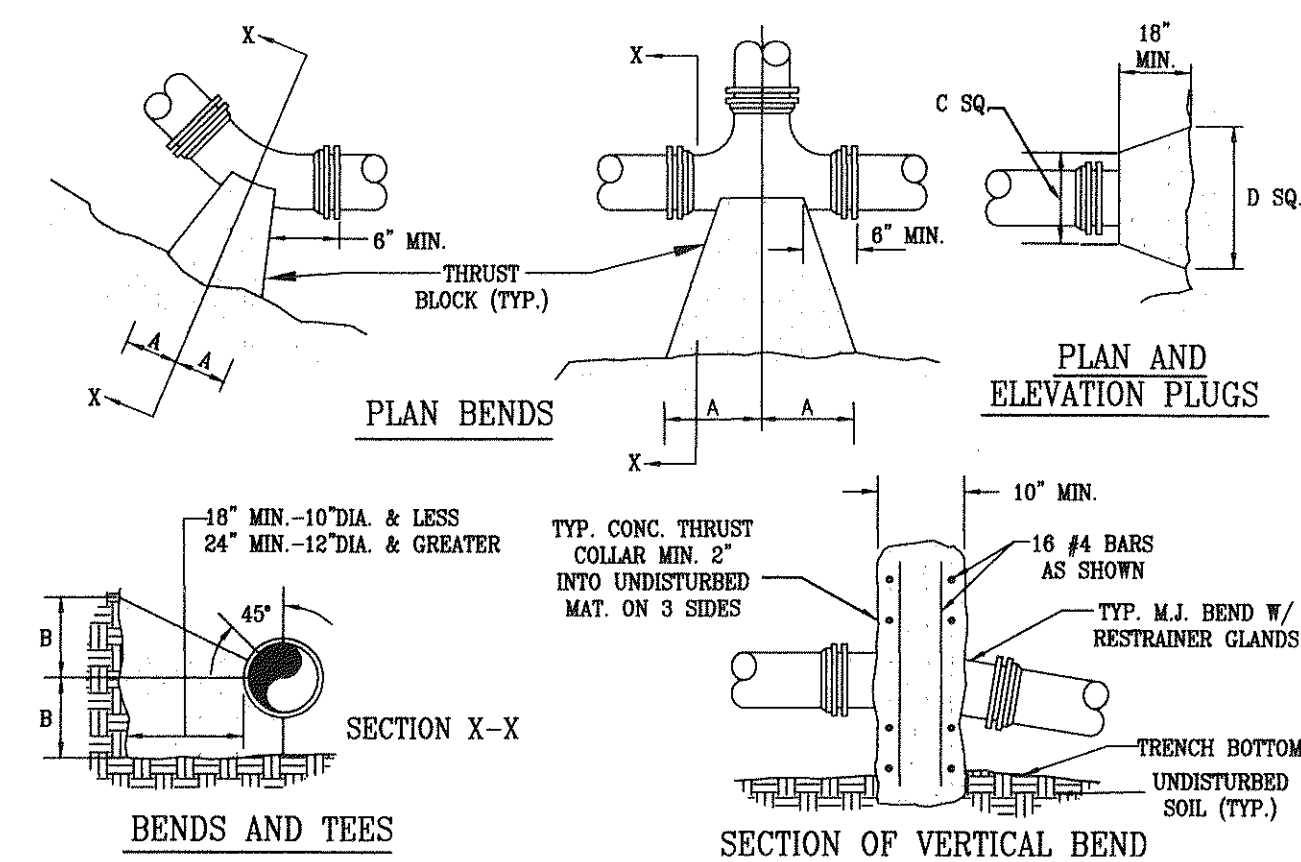
BLOW-OFF ASSEMBLY



SHAPED BOTTOM
W/ TAMPED BACKFILL

- NOTES:
1. WHERE THE TRENCH BOTTOM IS IN ROCK, IT SHALL BE EXCAVATED TO A MINIMUM OF 8" BELOW THE BOTTOM OF THE PIPE AND BACKFILLED WITH SUITABLE BEDDING MATERIAL.
 2. WHERE PIPE FOUNDATIONS ARE YIELDING, PIPE SHALL BE BEDDED ON A MINIMUM OF 8" SUITABLE BEDDING MATERIAL.
 3. SHAPE TRENCH BOTTOM FOR PIPE BARREL, JOINTS, AND FITTINGS TO PROVIDE CONTINUOUS SUPPORT AND NO POINT LOADING OF PIPE, JOINTS, AND FITTINGS.
 4. FOR PIPE LESS THAN 12" DIA., TRENCH WIDTH MAY BE 36"

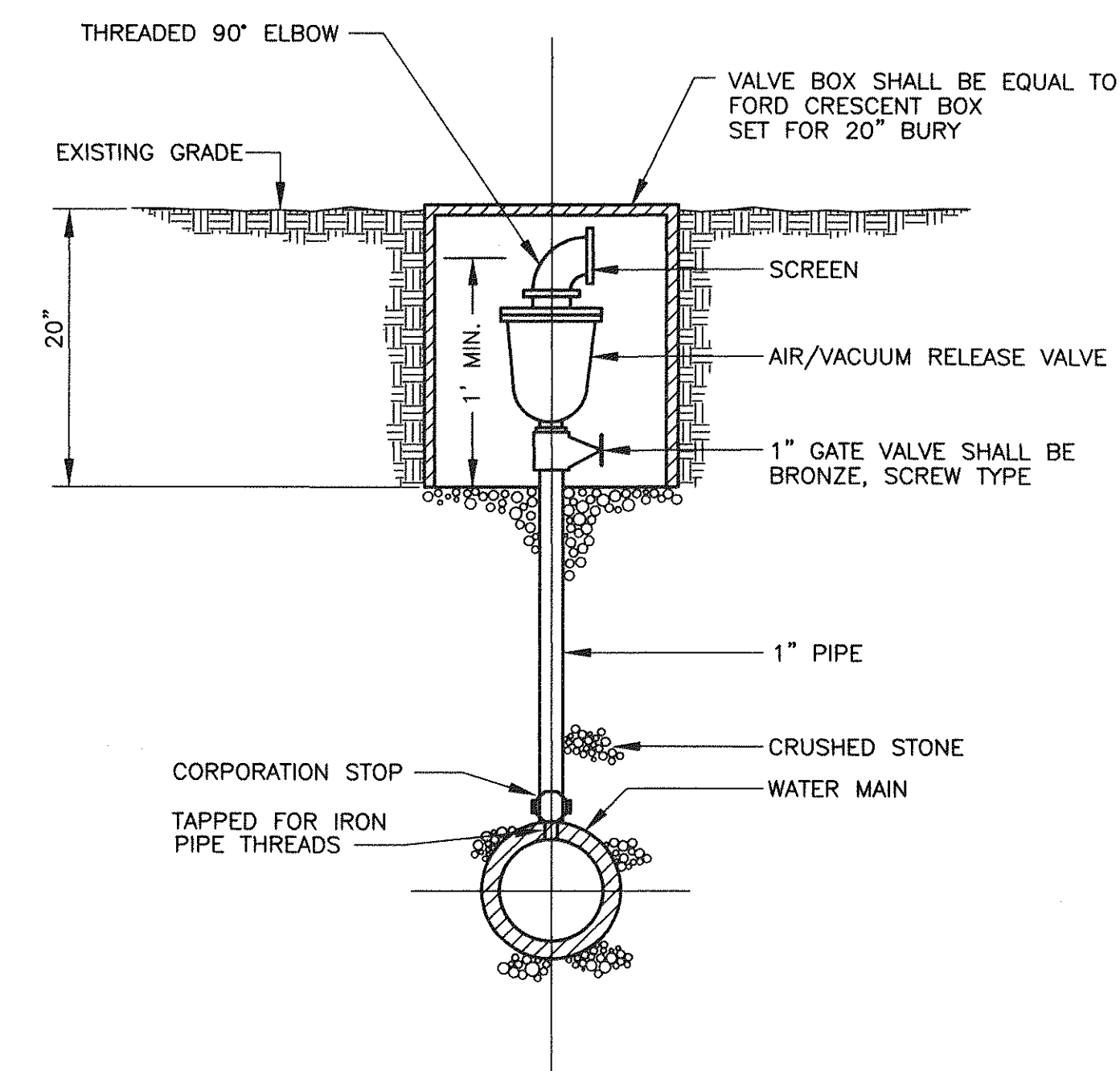
BEDDING DETAIL



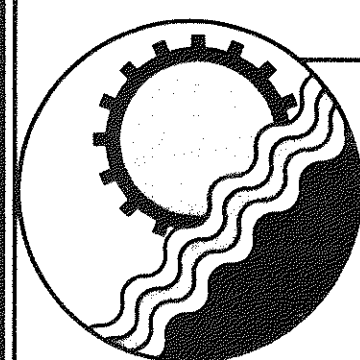
- NOTES:
1. FOR VERT. BEND DOWN IN EXCESS OF 11 1/4" BEND, ANCHORAGE SHALL BE DESIGNED BY ENGINEER.
 2. FOR VERT. BEND UPWARD, BLOCKING TO BE SIMILAR TO THAT FOR HORIZ. BEND.
 3. GLANDS & BOLTS SHALL BE PROTECTED FROM CONC. BY PLASTIC SHEETING WHEN POURING THRUST BLOCKS.
 4. ALL THRUST BLOCK & SUPPORT CONC. SHALL BE 3000 PSI READY MIX CONC.
 5. THRUST BLOCKS WITH "B" DIMENSION GREATER THAN 30" SHALL HAVE THE RESTRAINED PIPE INSTALLED WITH A MINIMUM OF 4' OF COVER.

PIPE SIZE	90° BEND		45° BEND		22 1/2° BEND		11 1/4° BEND		TEE		PLUG	
	A	B	A	B	A	B	A	B	A	B	C	D
4"	8"	12"	8"	8"	6"	6"	6"	6"	11"	9"	10"	6"
6"	18"	12"	8"	10"	8"	8"	8"	8"	11"	10"	12"	18"
8"	18"	13"	10"	10"	8"	8"	8"	8"	11"	12"	12"	24"
10"	20"	16"	12"	14"	8"	12"	8"	12"	14"	16"	16"	30"
12"	20"	16"	12"	14"	8"	12"	8"	12"	14"	16"	16"	30"
16"	26"	20"	16"	18"	11"	13"	11"	13"	18"	20"	20"	36"
24"	82"	42"	62"	30"	44"	22"	22"	16"	82"	42"	82"	42"
30"	185"	42"	100"	42"	52"	42"	46"	30"	185"	42"	185"	42"

THRUST BLOCK DETAILS



AUTOMATIC AIR/VACUUM RELEASE VALVE ASSEMBLY



ENGINEERING CONCEPTS, INC.

20 S. ROANOKE ST., PO BOX 619
FINCASTLE, VIRGINIA 24090
540.473.1253 FAX: 540.473.1254

AS-BUILT

Drawn RHW
Designed RHW
Checked WPJ
Approved JST

GREENFIELD
RAW WATER LINE #3
WATER SYSTEM
DETAILS

SCALE: NONE
JUNE 22, 1998
PROJECT: 97075
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