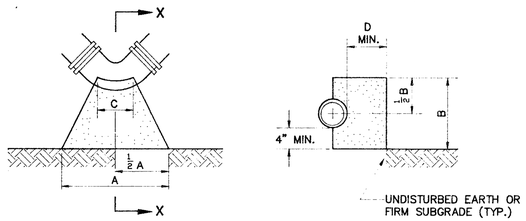
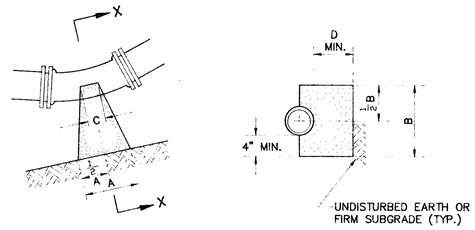


NOTE: INSTALL TWO LAYERS OF 15 LB. BUILDER'S FELT OR TWO LAYERS OF 6 MIL. POLYETHYLENE BETWEEN CONCRETE AND FITTING.

PIPE DIA.	45° BEND					90° BEND				
	A	B	C	D	E	A	B	C	D	E
3"	9"	12"	6"	6"	4"	12"	12"	6"	12"	6"
4"	9"	12"	6"	6"	4"	16"	12"	6"	12"	6"
6"	12"	14"	6"	8"	4"	21"	14"	6"	18"	6"
8"	18"	16"	8"	9"	6"	30"	16"	8"	18"	9"
10"	24"	18"	8"	10"	6"	36"	24"	10"	18"	9"
12"	30"	20"	12"	12"	9"	48"	24"	12"	18"	12"
16"	42"	30"	12"	15"	9"	60"	30"	16"	21"	12"
20"	56"	30"	12"	16"	16"	72"	40"	20"	21"	24"
24"	60"	36"	12"	21"	24"	84"	48"	24"	24"	30"
30"	72"	48"	16"	27"	24"	108"	60"	30"	24"	36"

BASED ON NORMAL OPERATING PRESSURE UP TO 150 PSI

E = ADDITIONAL LENGTH TO BE ADDED TO DIMENSION A FOR EACH ADDITIONAL 50 PSI PRESSURE UP TO 300 PSI



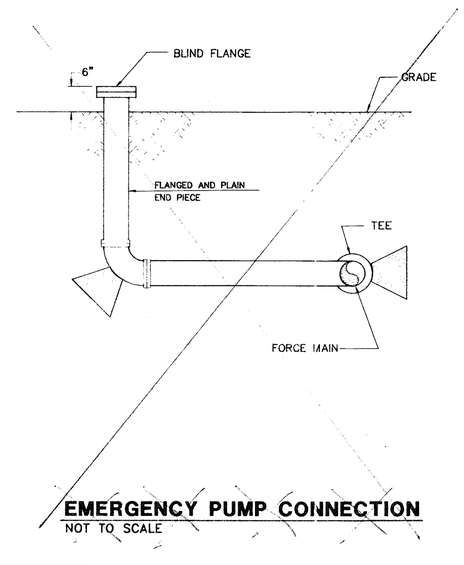
NOTE: INSTALL TWO LAYERS OF 15 LB. BUILDER'S FELT OR TWO LAYERS OF 6 MIL. POLYETHYLENE BETWEEN CONCRETE AND FITTING.

PIPE DIA.	11 1/4° BEND					22 1/2° BEND				
	A	B	C	D	E	A	B	C	D	E
3"	4"	12"	4"	6"	2"	6"	12"	6"	7"	2"
4"	4"	12"	4"	6"	2"	6"	12"	6"	7"	2"
6"	6"	14"	6"	7"	2"	8"	14"	6"	8"	2"
8"	8"	16"	8"	7"	2"	12"	16"	8"	8"	4"
10"	9"	18"	8"	8"	4"	15"	18"	8"	10"	4"
12"	12"	20"	12"	9"	4"	18"	20"	12"	12"	6"
16"	15"	24"	12"	9"	6"	24"	24"	12"	15"	6"
20"	30"	12"	10"	10"	6"	30"	30"	12"	18"	9"
24"	18"	36"	12"	12"	6"	36"	36"	12"	18"	9"
30"	24"	42"	16"	14"	9"	48"	42"	16"	21"	12"

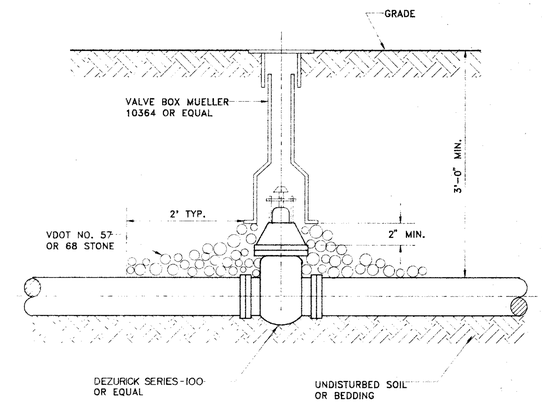
BASED ON NORMAL OPERATING PRESSURE UP TO 150 PSI

E = ADDITIONAL LENGTH TO BE ADDED TO DIMENSION A FOR EACH ADDITIONAL 50 PSI PRESSURE UP TO 300 PSI

THRUST BLOCKING DETAILS
NOT TO SCALE



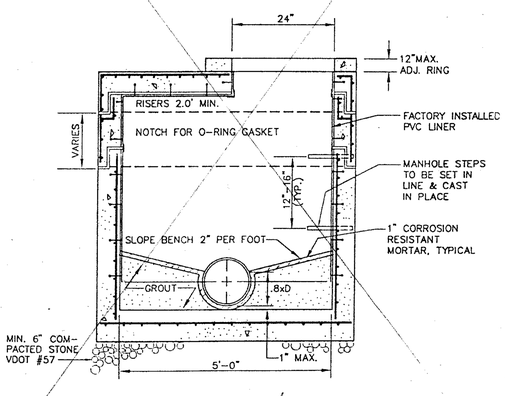
EMERGENCY PUMP CONNECTION
NOT TO SCALE



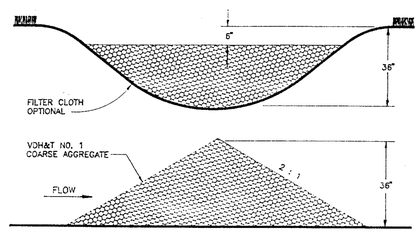
TYPICAL PLUG VALVE INSTALLATION
NOT TO SCALE

NOTES:

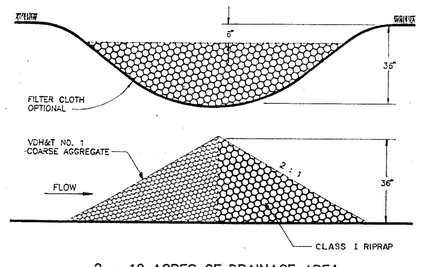
1. MANHOLE TO MEET CURRENT REQUIREMENTS OF ASTM C-478.
2. CONCRETE TO BE 4000 PSI MINIMUM COMPRESSIVE STRENGTH. (MAXIMUM 30'- 0" DEPTH)
3. ALL REINFORCING STEEL TO MEET CURRENT REQUIREMENTS OF ASTM A-615.
4. TAPERED JOINT WITH O-RING GASKET TO MEET CURRENT REQUIREMENTS OF ASTM C-361 & C-443.
5. COLD APPLIED JOINT SEALER (SAHOM-98) SHALL BE USED IN ADDITION TO THE JOINT SPECIFIED.
6. RESILIENT CONNECTORS (ASTM C-923) REQUIRED ON ALL PIPE CONNECTIONS TO MANHOLES. VOIDS SHALL BE FILLED FLUSH WITH INSIDE FACE OF MANHOLE WITH NON-SHRINK GROUT.
7. MANHOLE TO BE PROVIDED WITH A FACTORY INSTALLED PVC LINER EQUAL TO T-LOCK.
8. BENCH AND INVERT GROUT TOP COAT TO BE 1" SEWPERCOAT 2000 CORROSION RESISTANT MORTAR OR APPROVED EQUAL.



FLAT SLAB TOP MANHOLE WITH PVC LINER
NOT TO SCALE

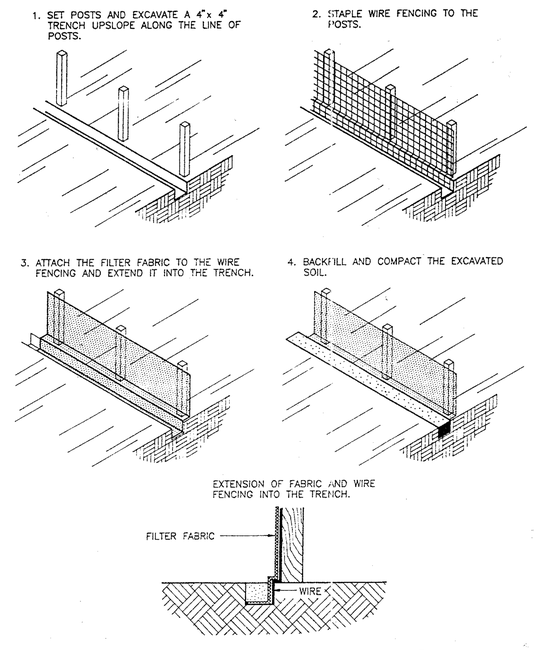


2 ACRES OR LESS OF DRAINAGE AREA

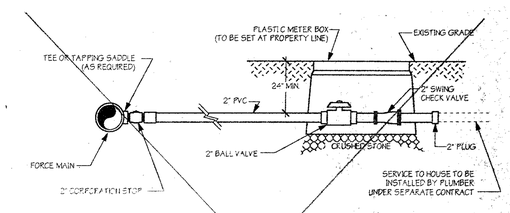


2 – 10 ACRES OF DRAINAGE AREA

ROCK CHECK DAM (CD)
NOT TO SCALE



SILT FENCE CONSTRUCTION (SF)
NOT TO SCALE



FORCE MAIN SERVICE CONNECTION
NO SCALE

SEE SHEET 26A FOR REVISED DETAIL

COMMONWEALTH OF VIRGINIA
THOMAS S. COX
No. 023882
12/1/94
PROFESSIONAL ENGINEER

COMMONWEALTH OF VIRGINIA
FREDERICK T.M. PRIBBLE
No. 10055
12/1/94
PROFESSIONAL ENGINEER

Draper Aden Associates
CONSULTING ENGINEERS
BLACKSBURG, VIRGINIA – RICHMOND, VIRGINIA – NASHVILLE, TENNESSEE

DESIGNED:	TSC
DRAWN:	TSC
CHECKED:	SPH
DATE:	5/20/94

DETAILS
DISPUTANTA SEWAGE COLLECTION SYSTEM IMPROVEMENTS
PRINCE GEORGE COUNTY, VIRGINIA

REVISIONS:
12/11/94 – VDH, COUNTY, FMHA COMMENTS
5/8/95 – C.O.#1

SCALE: AS NOTED

PLAN NO. T-21073

SHEET 45 OF 45