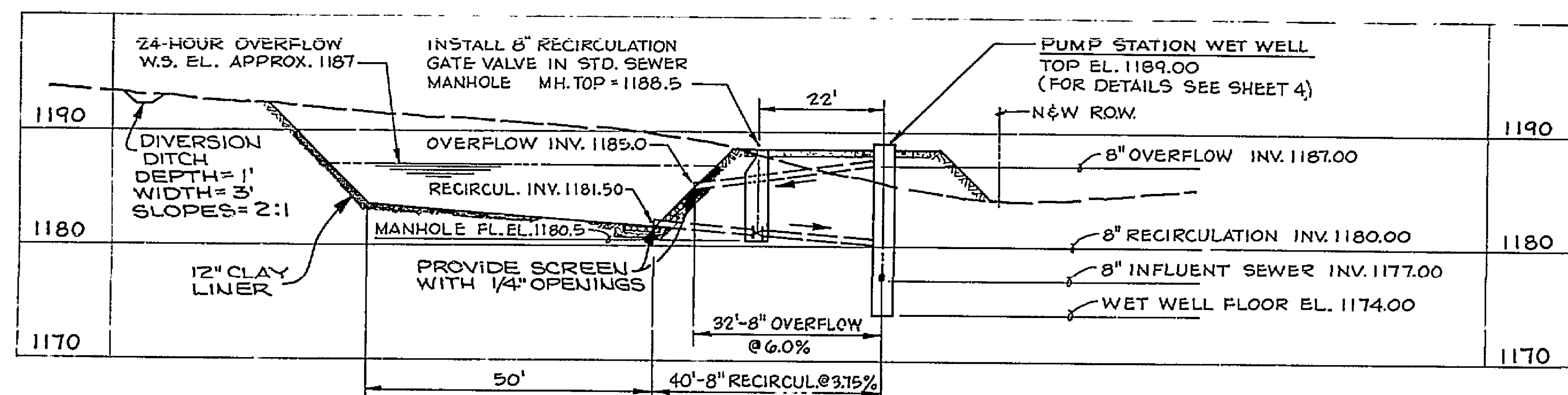
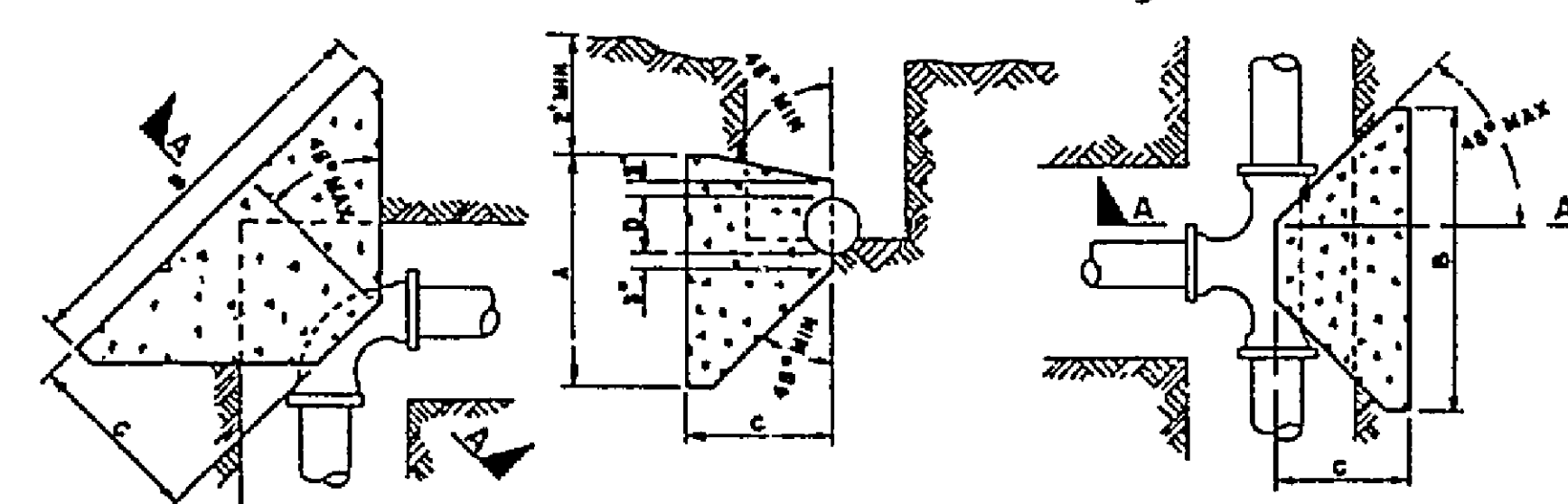




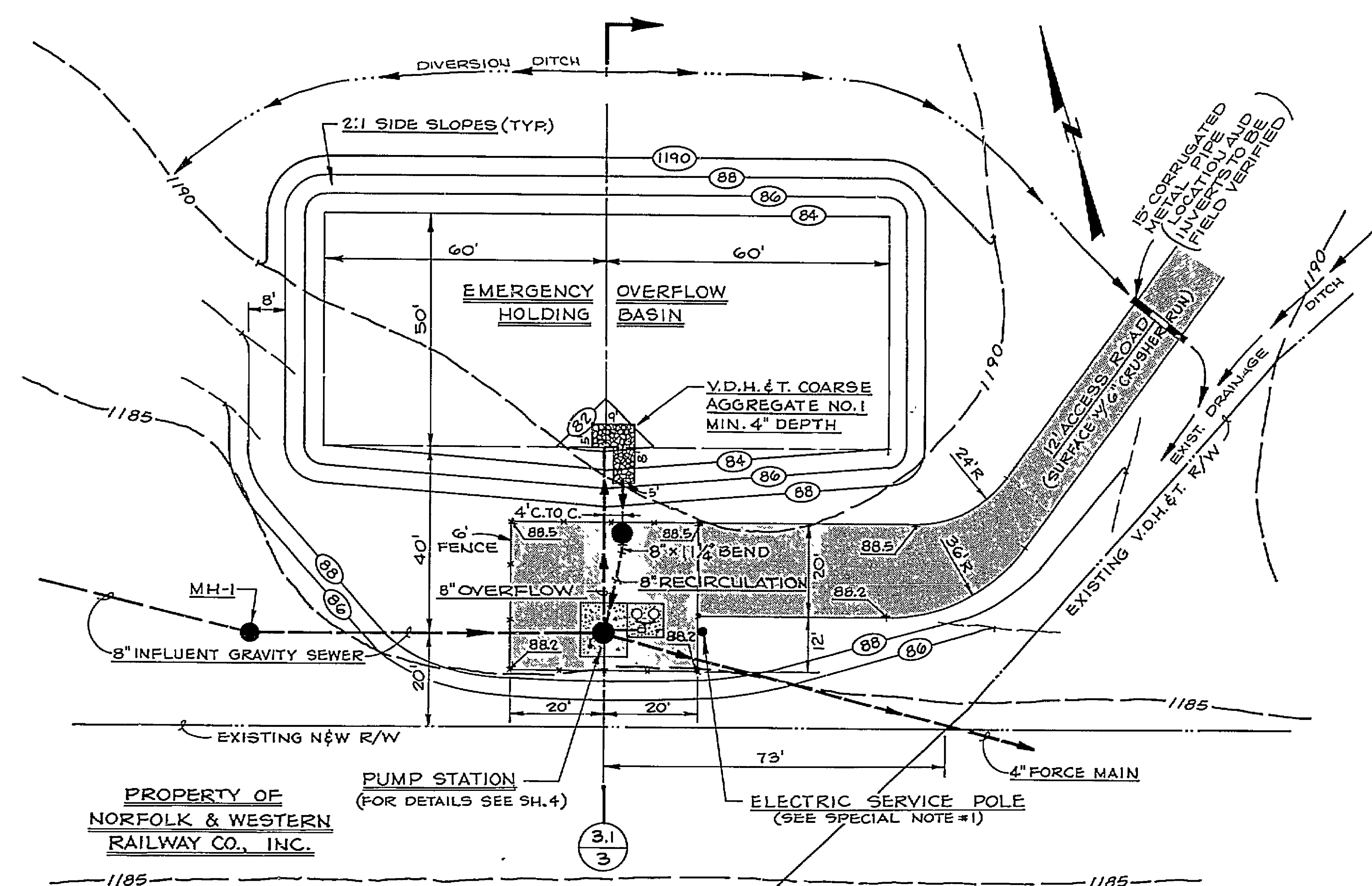
SECTION 3.1
SCALE: 1"=20' HORIZ.
1"=10' VERT.



PIPE SIZE	TEE OR DEAD END	90° BEND	45° BEND	22 1/2° & 11 1/4° BENDS
4"	2.0	3.0	1.5	1.5
6"	3.0	4.5	2.25	2.25
8"	4.0	6.0	3.0	3.0
10"	5.0	7.5	3.75	3.75
12"	6.0	9.0	4.5	4.5
14"	7.0	10.5	5.25	5.25
16"	8.0	12.0	6.0	6.0
18"	9.0	13.5	6.75	6.75
20"	10.0	15.0	7.5	7.5
24"	12.0	18.0	9.0	9.0
30"	15.0	22.5	11.25	11.25
36"	18.0	27.0	13.5	13.5
42"	21.0	31.5	15.75	15.75
48"	24.0	36.0	18.0	18.0
54"	27.0	40.5	20.25	20.25
60"	30.0	45.0	22.5	22.5

NOTE: CONCRETE SHALL NOT BE POURED ON JOINTS, LIMITING FLEXIBILITY.
ALL TEES, BENDS, PLUGS AND CAPS SHALL BE ANCHORED WITH THRUST BLOCKS.

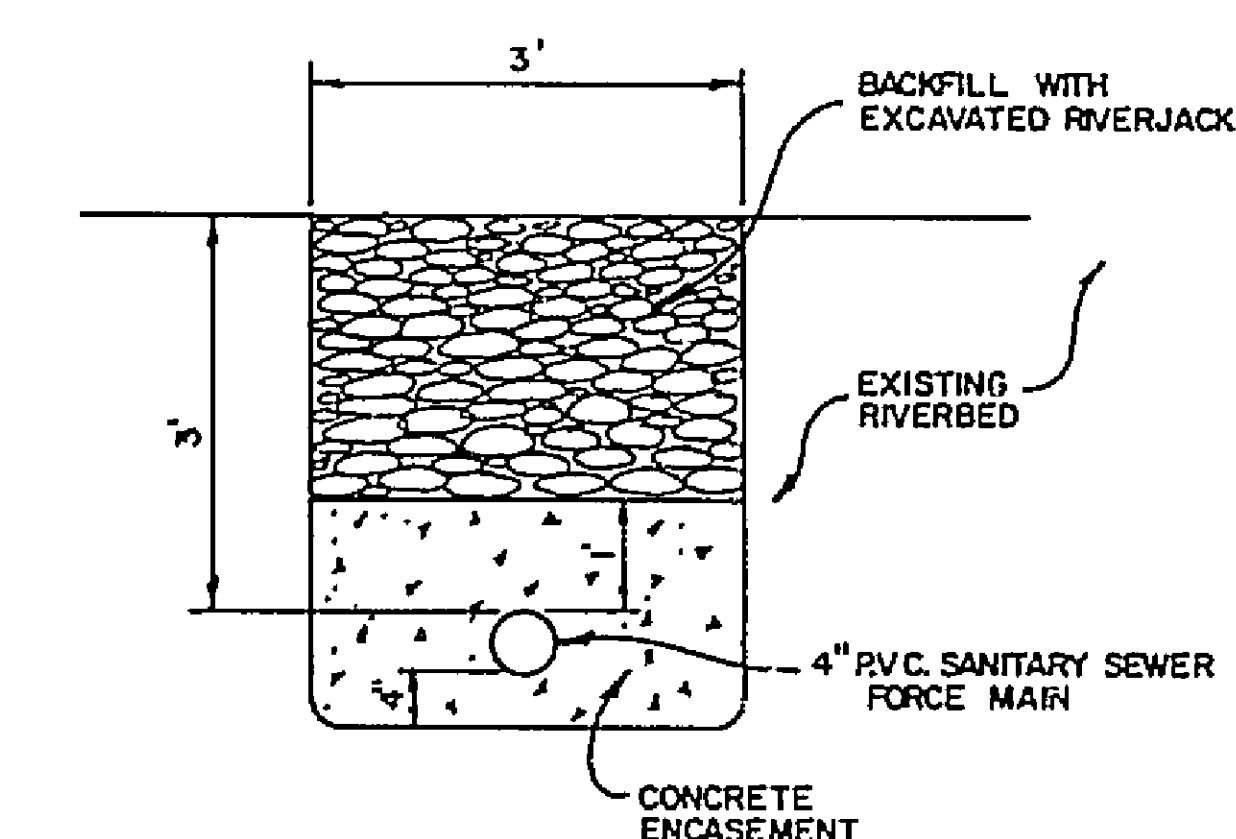
THRUST BLOCK
(HORIZONTAL AND VERTICAL BENDS)



PUMP STATION & BASIN SITE PLAN
SCALE: 1"=20'

SPECIAL NOTES:

- THE ELECTRIC SERVICE POLE ADJACENT TO THE PUMP STATION SHALL BE A 25-FOOT LONG CLASS IV WOOD POLE WITH SERVICE HEAD INSTALLED FOR 120/230 VOLT SERVICE. ELECTRIC SUPPLY WILL BE BROUGHT TO THIS POLE BY APCO. (COORDINATE WITH MR. JOHN GALADIC, 985-2352) ELECTRIC METER SHALL BE MOUNTED ON SERVICE POLE.
- THE 12-FOOT ACCESS ROAD FROM CAMPBELL DRIVE TO THE PUMP STATION SITE AND THE DELINEATED AREA ADJACENT TO THE PUMP STATION SHALL BE SURFACED WITH 6 INCHES OF CRUSHER RUN STONE COMPACTED.
- ALL FORCE MAIN SHALL BE 4-INCH DIAMETER SCHEDULE 80 PVC PIPE WITH PRESSURE TYPE JOINTS AND A WORKING PRESSURE OF 200 PSI.
- ALL BURIED FORCE MAIN BENDS OF 114° OR GREATER SHALL BE INSTALLED WITH THRUST BLOCKS IN ACCORDANCE WITH THE DETAIL SHOWN ON THE PLANS.
- AN AIR-RELEASE VALVE IS REQUIRED AT THE HIGHEST POINT OF THE FORCE MAIN. IT IS THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE EXACT LOCATION DURING CONSTRUCTION.
- THE HOLDING BASIN AND ALL SURROUNDING DISTURBED AREA NOT OTHERWISE PAVED SHALL BE HYDROSEDED, LIMED, FERTILIZED AND MULCHED AT THE FOLLOWING RATES:
SEED MIXTURE: K-31 FESCUE @ 5 LB./1000 S.F.
LIME: 100 LB./1000 S.F. PULVERIZED AGRICULTURAL LIMESTONE
FERTILIZER: 5-20-10 @ 5 LB./1000 S.F. OR 38-0-0 @ 3 LB./1000 S.F.



RIVER CROSSING DETAIL
NO SCALE

		CAMPBELL HILLS SANITARY SEWER	
		ROANOKE COUNTY, VIRGINIA	
REVISIONS DATE: 8-9-88 BY: J.M.B. DESCRIPTION: 4" FORCE MAIN CHECKED BY: W.D. # 88-0786 N.B.		MISCELLANEOUS DETAILS	
		SCALE: AS NOTED 5 MAR 1986	
DESIGNED BY: J.M.B. DRAWN BY: J.M.B. W.D. # 88-0786 N.B.		T. P. PARKER & SON	
		engineers & surveyors, ltd.	
TELEPHONE (703) 387-1153 P.O. DRAWER 39, SALEM, VIRGINIA 24153		SC-0132 SHEET 2 OF 7	