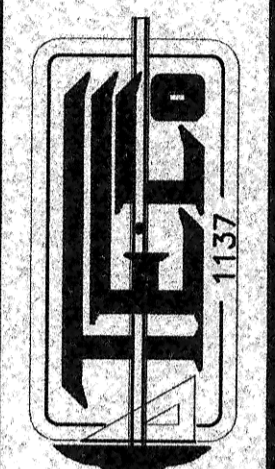


# AS-BUILT DETAIL SHEET

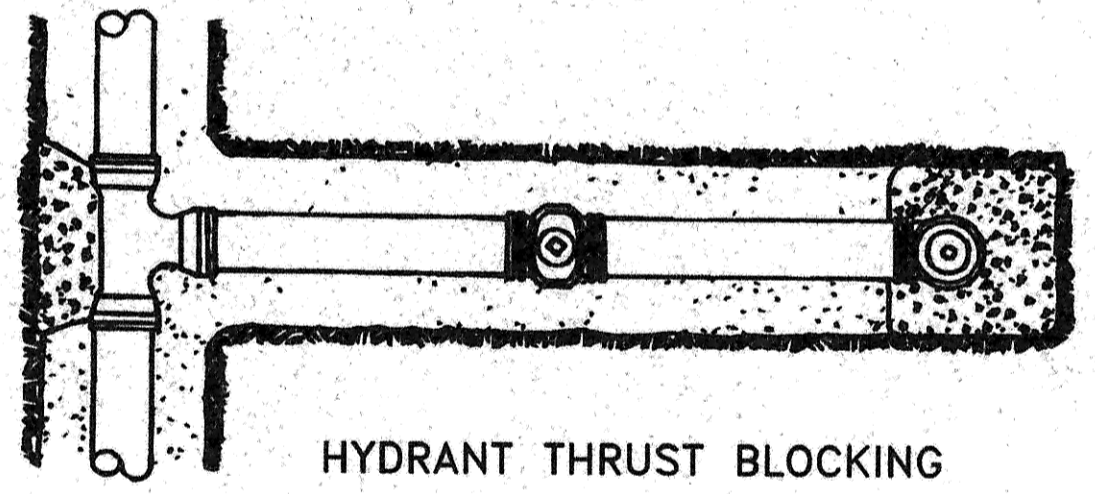
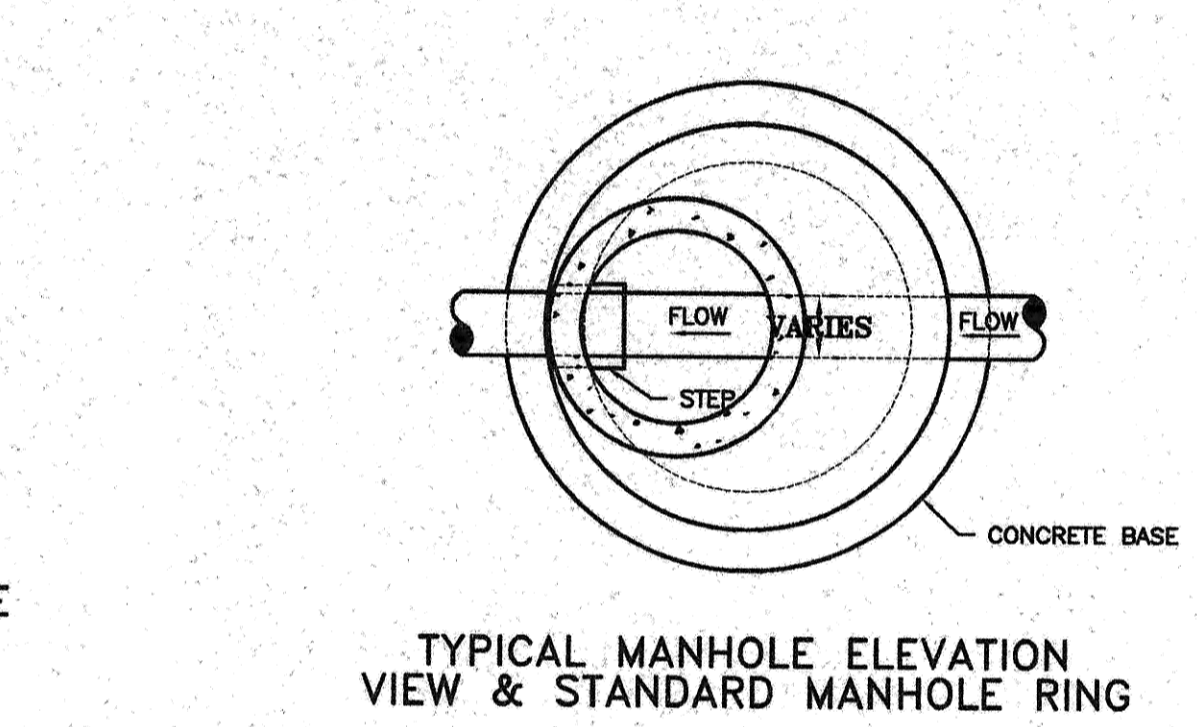
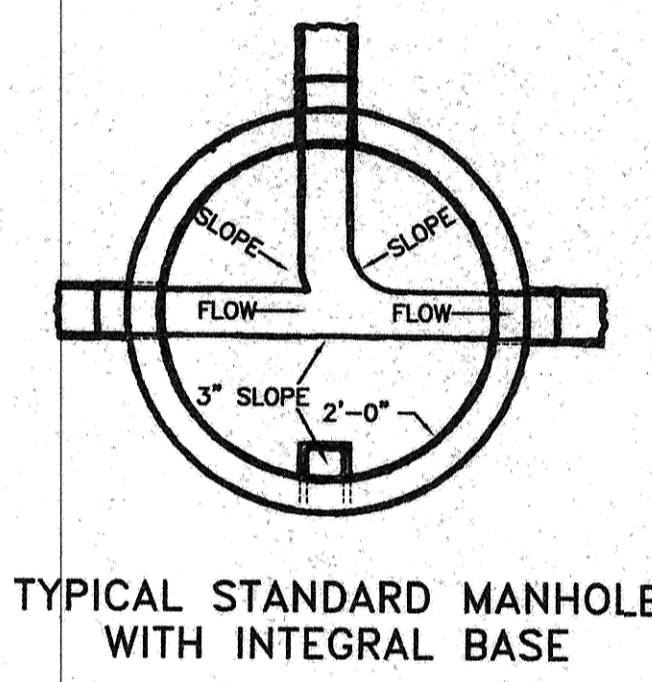
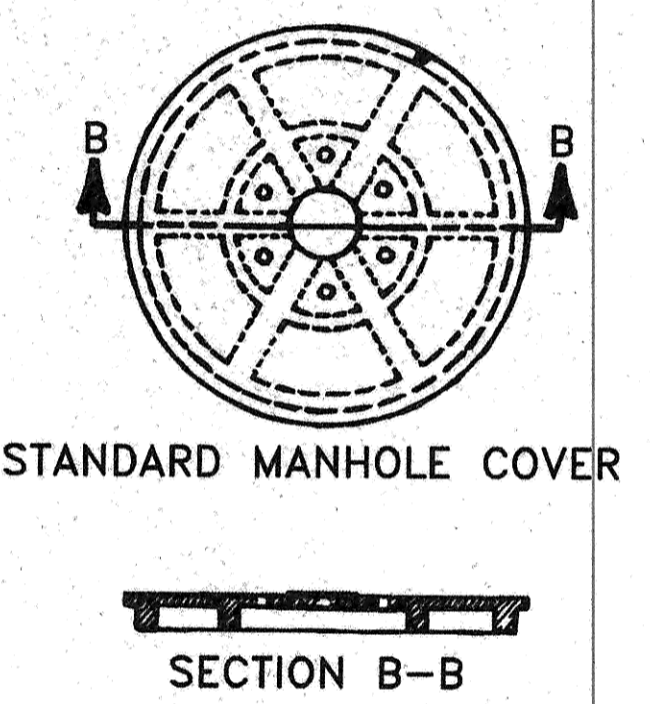
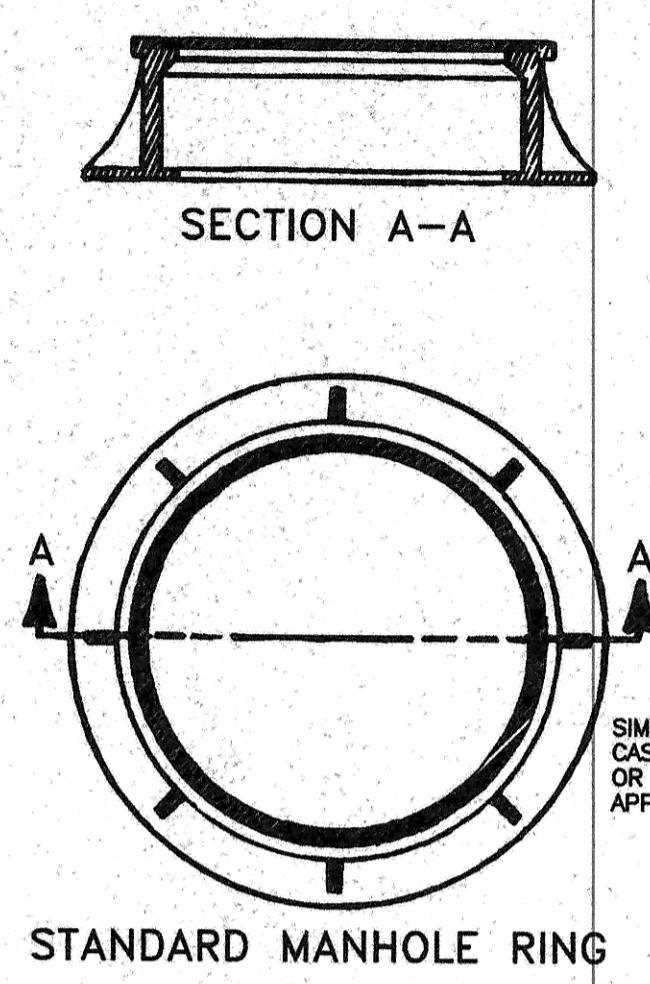
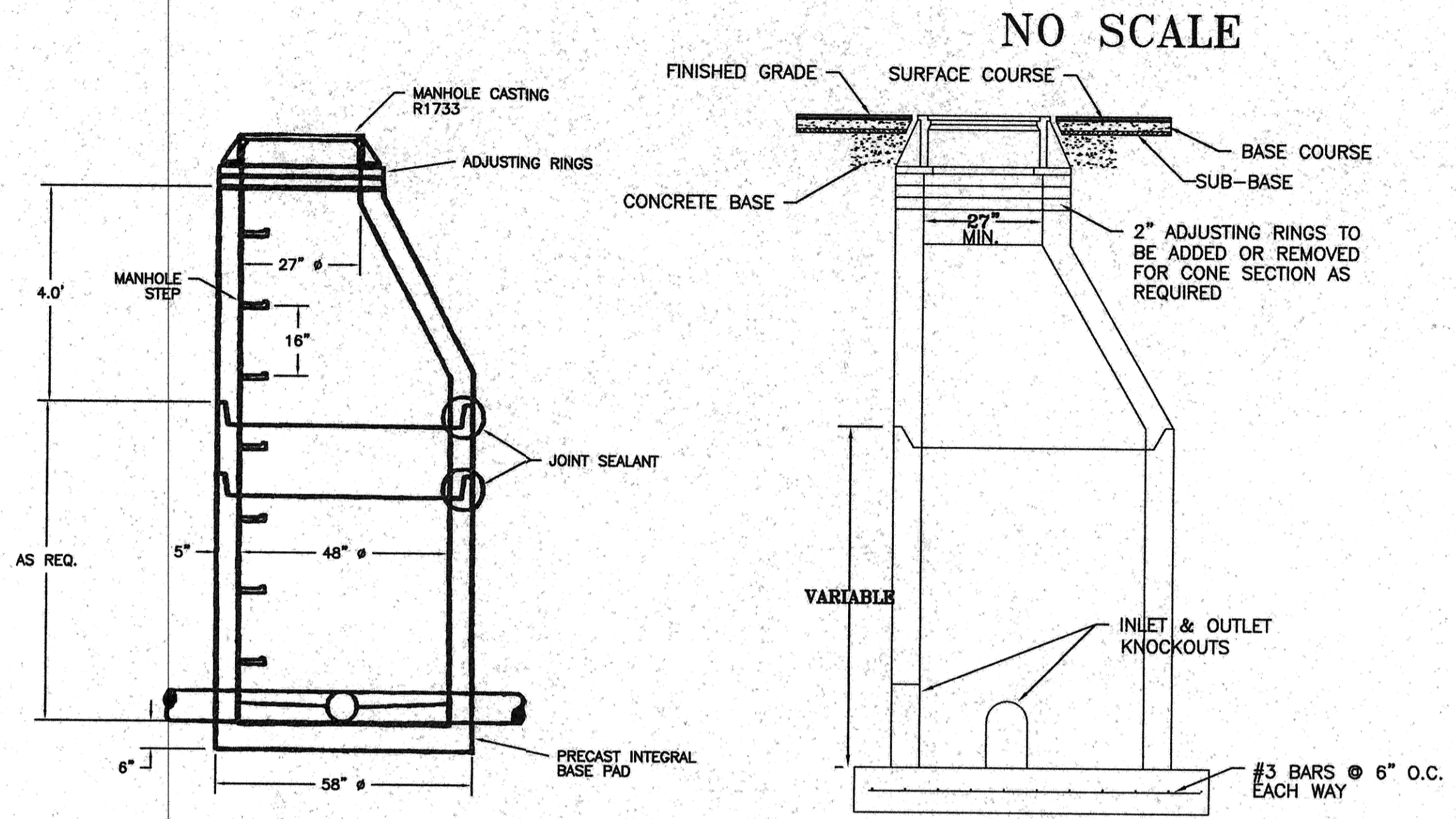
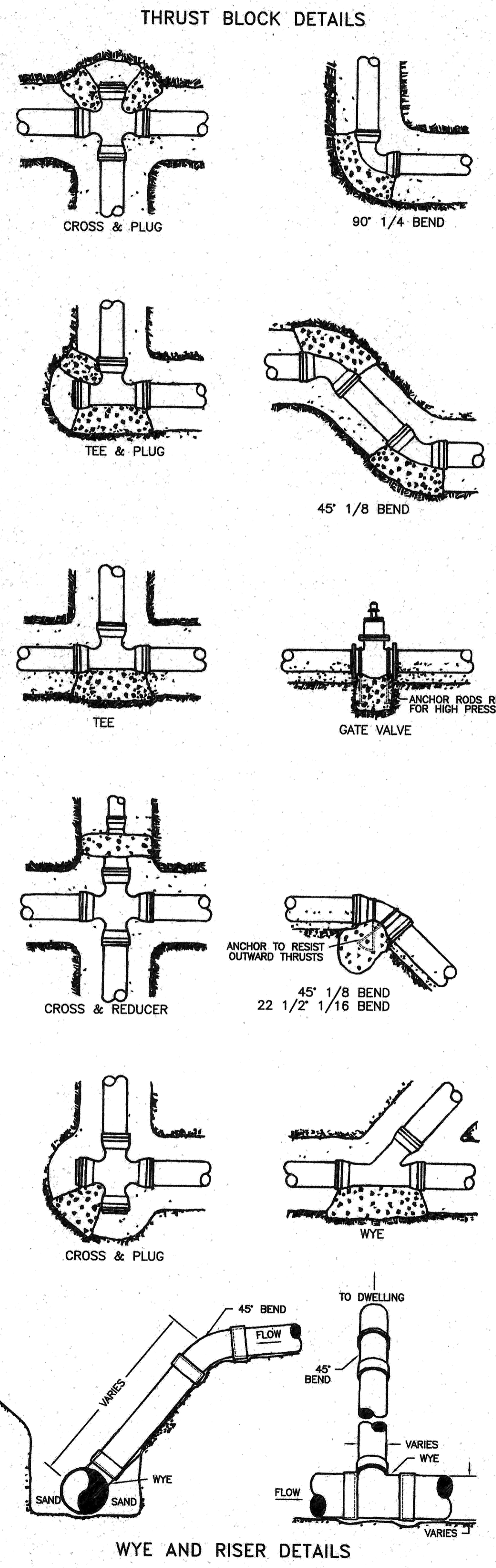
TOMAN ENGINEERING COMPANY  
CONSULTING CIVIL ENGINEERS  
908 2ND ST. N.W. • WANDAN, NORTH DAKOTA 58554 • 701-683-6483



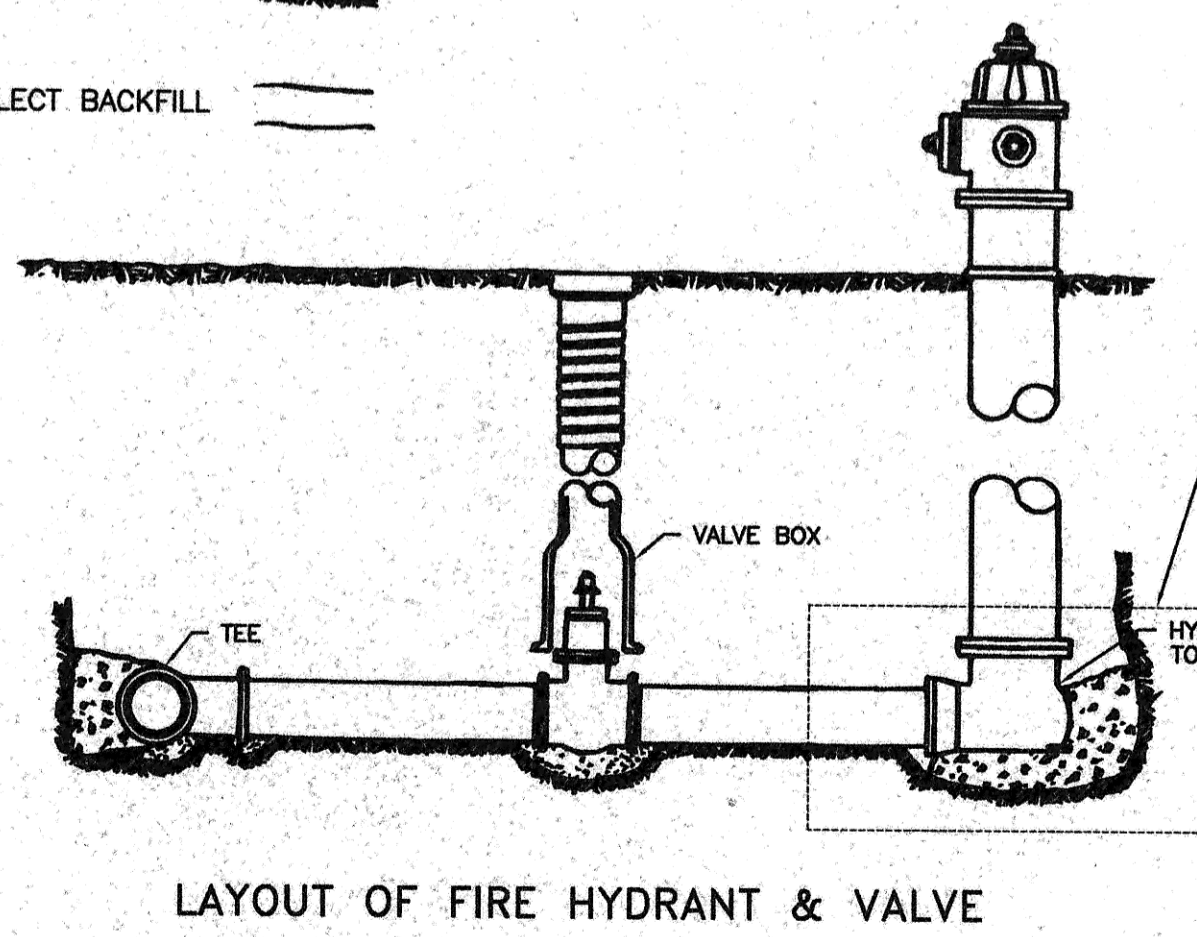
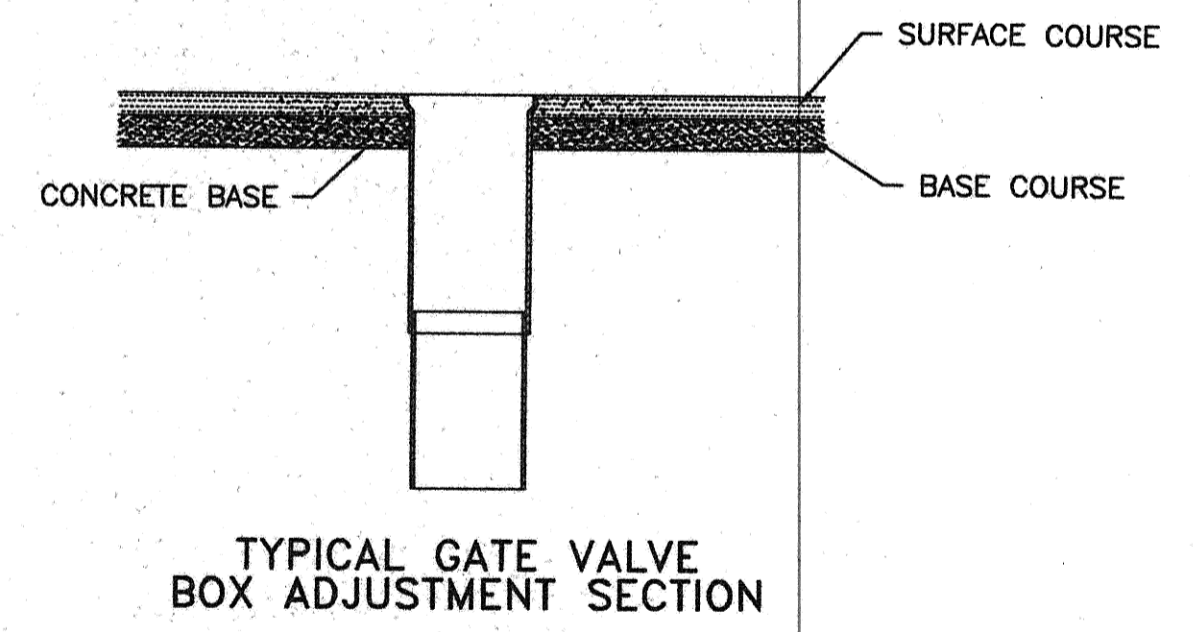
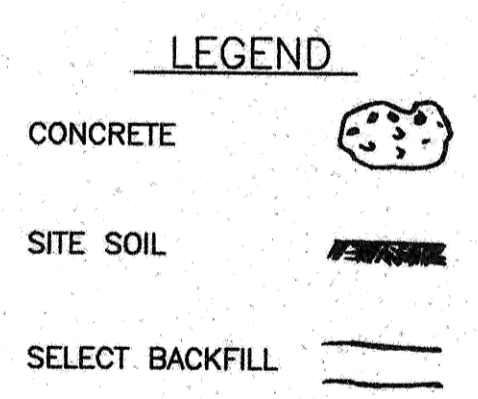
PROJECT: BORDEN HARBOR WATER & SEWER CITY PROJECT NO. 97-10  
DETAIL SHEET ( HARBOR TRAIL SE )  
CITY PROJECT NO. 97-10

NO.	REVISIONS	BY	DATE	DATE	DATE

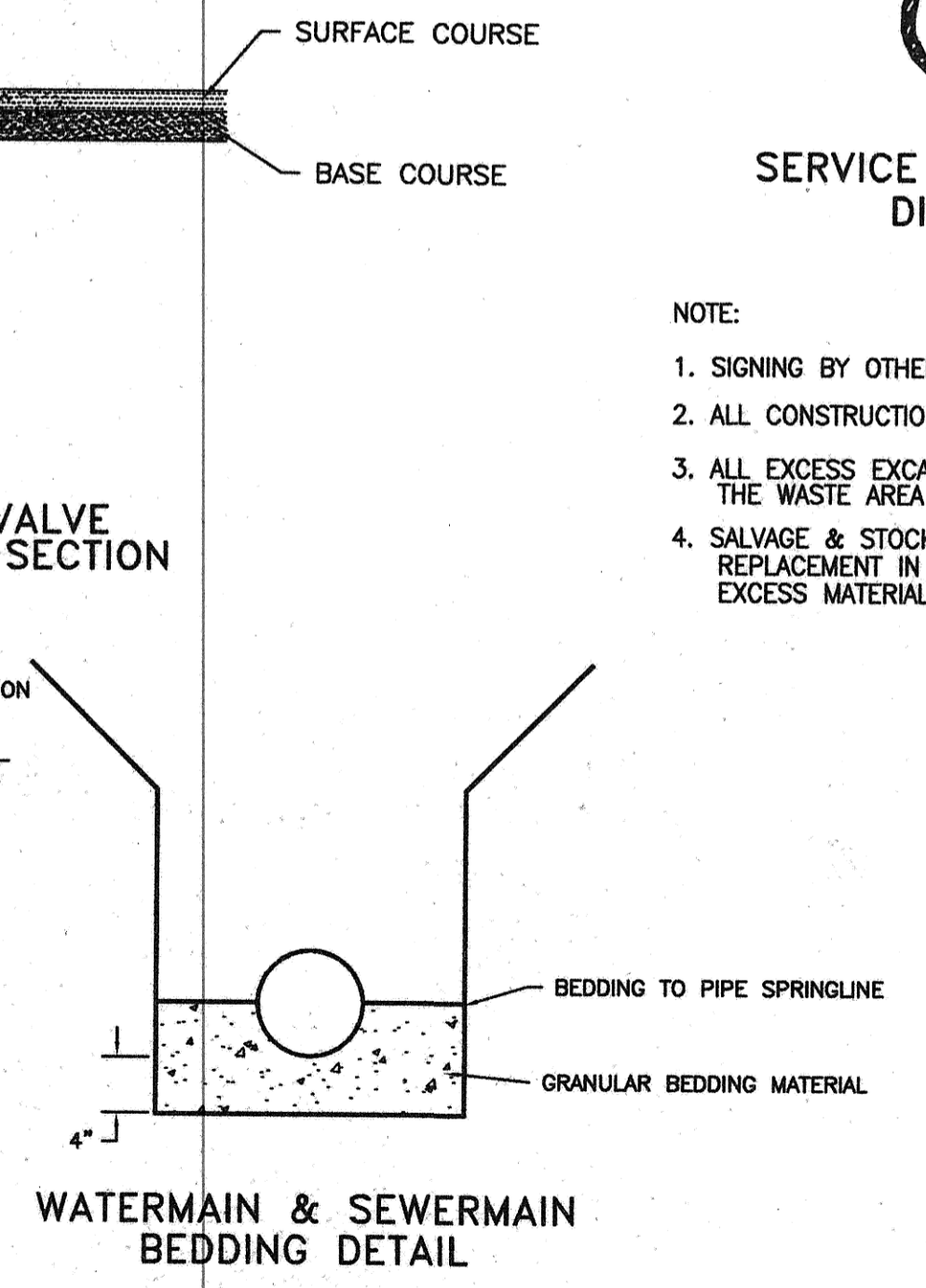
SHEET NUMBER  
4  
OF 4 SHEETS



NOTE: (1) PIPE DEFLECTIONS SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S SPECIFICATIONS BEDDING REQUIREMENTS SHALL BE AS INDICATED HEREON UNLESS MODIFIED IN THE SPECIFICATIONS (2) CONCRETE FOR THRUST BLOCKS SHALL HAVE MINIMUM 28 DAY COMPRESSIVE STRENGTH OF 3,000 PSI, AND MAX. SLUMP OF 3 INCHES AT TIME OF PLACEMENT.



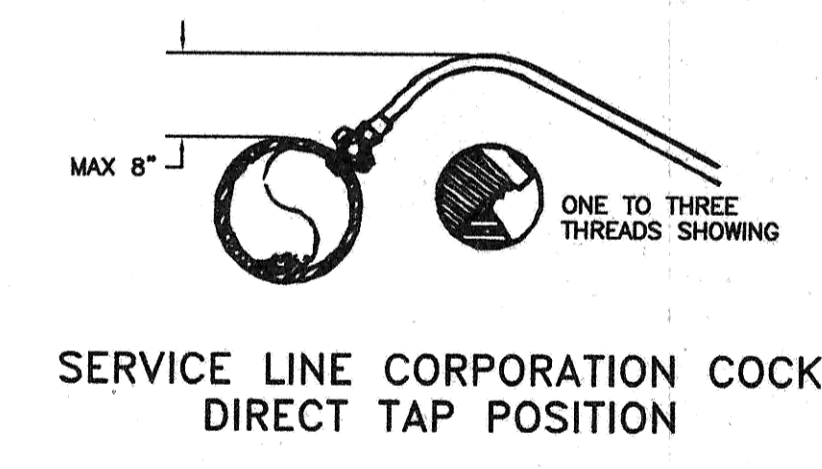
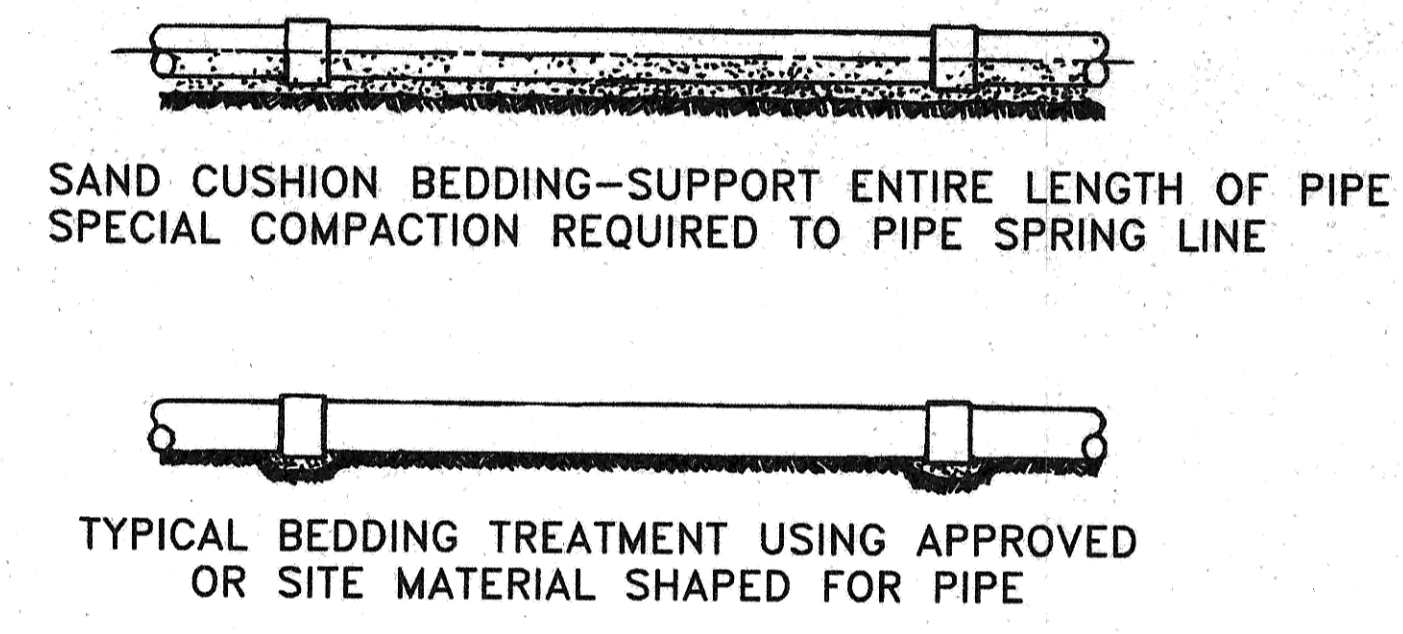
DASHED LINES SHOW OUTLINE OF CRIB TO BE USED WHEN PERCOLATION IS NEGLIGIBLE. FILL WITH COARSE GRAVEL OR ROCK TO PROVIDE A MINIMUM EFFECTIVE LEACHING CAPACITY OF AT LEAST ONE CUBIC YARD (4' x 4' x 2')



### SADDLES FOR PVC WATERMAIN

NOMINAL PIPE SIZE	OUTLET SIZE SINGLE STRAP	(CLASSES 100-150-200) COUBLE STRAP
4"	1"	1"
6"	1 1/2"	1 1/2"
8"	2"	2"
10"	2"	2"
12"	2"	2"
14"	2"	2"
16"	2"	2"

MAXIMUM SIZE OF OUTLET RECOMMENDED WITH SERVICE CLAMPS (INCHES)



NOTE:  
1. SIGNING BY OTHERS.  
2. ALL CONSTRUCTION SIGNING INCIDENTAL TO PROJECT.  
3. ALL EXCESS EXCAVATION MATERIAL TO BE HAULED TO THE WASTE AREA AND GRADED.  
4. SALVAGE & STOCK PILE ALL GRAVEL MATERIAL FOR REPLACEMENT IN AREAS THAT MIGHT NEED STABILIZING. EXCESS MATERIAL TO BE HAULED TO THE WASTE AREA AND GRADED.

### CURB STOP & DRAIN WITH BASE CURB BOX

NOTE: (1) CURB STOP SHALL BE PLACED ON 4" x 8" x 2" CONCRETE BLOCK (2) AFTER CURB STOP IS PLACED ON CONCRETE BLOCK BACKFILL AROUND CURB STOP WITH WASHED GRAVEL APPROX. 1FT<sup>3</sup> PER BOX

