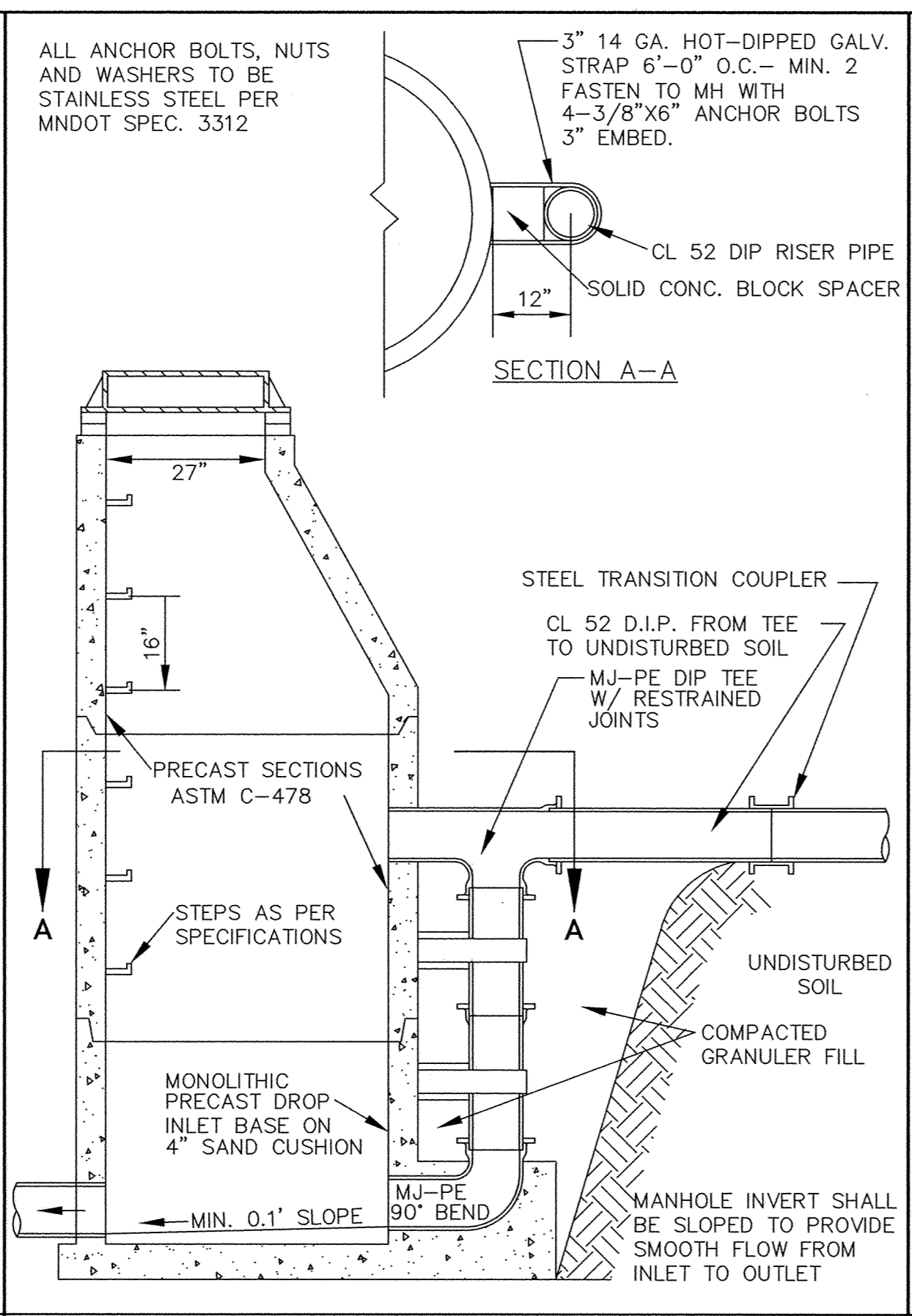
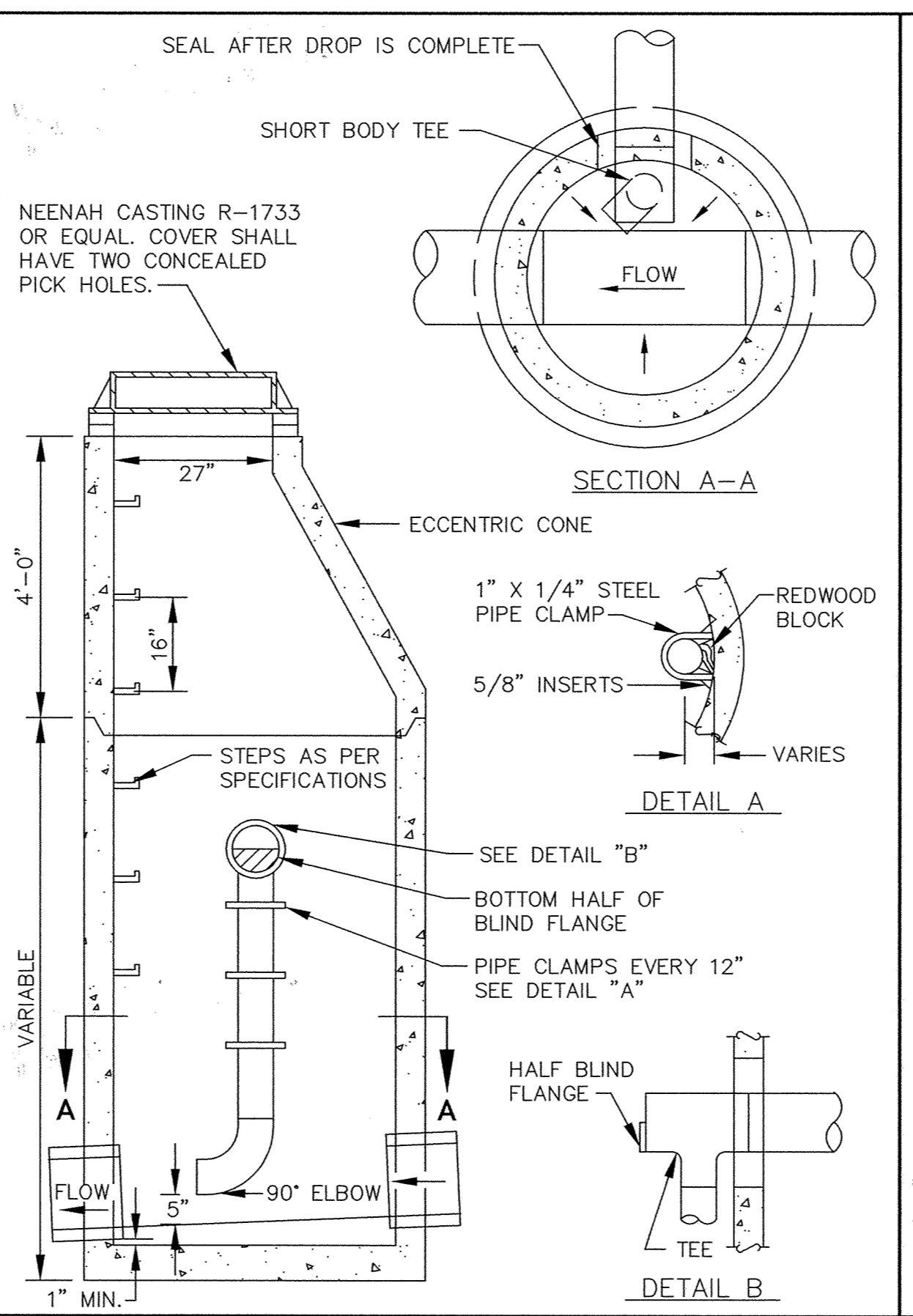


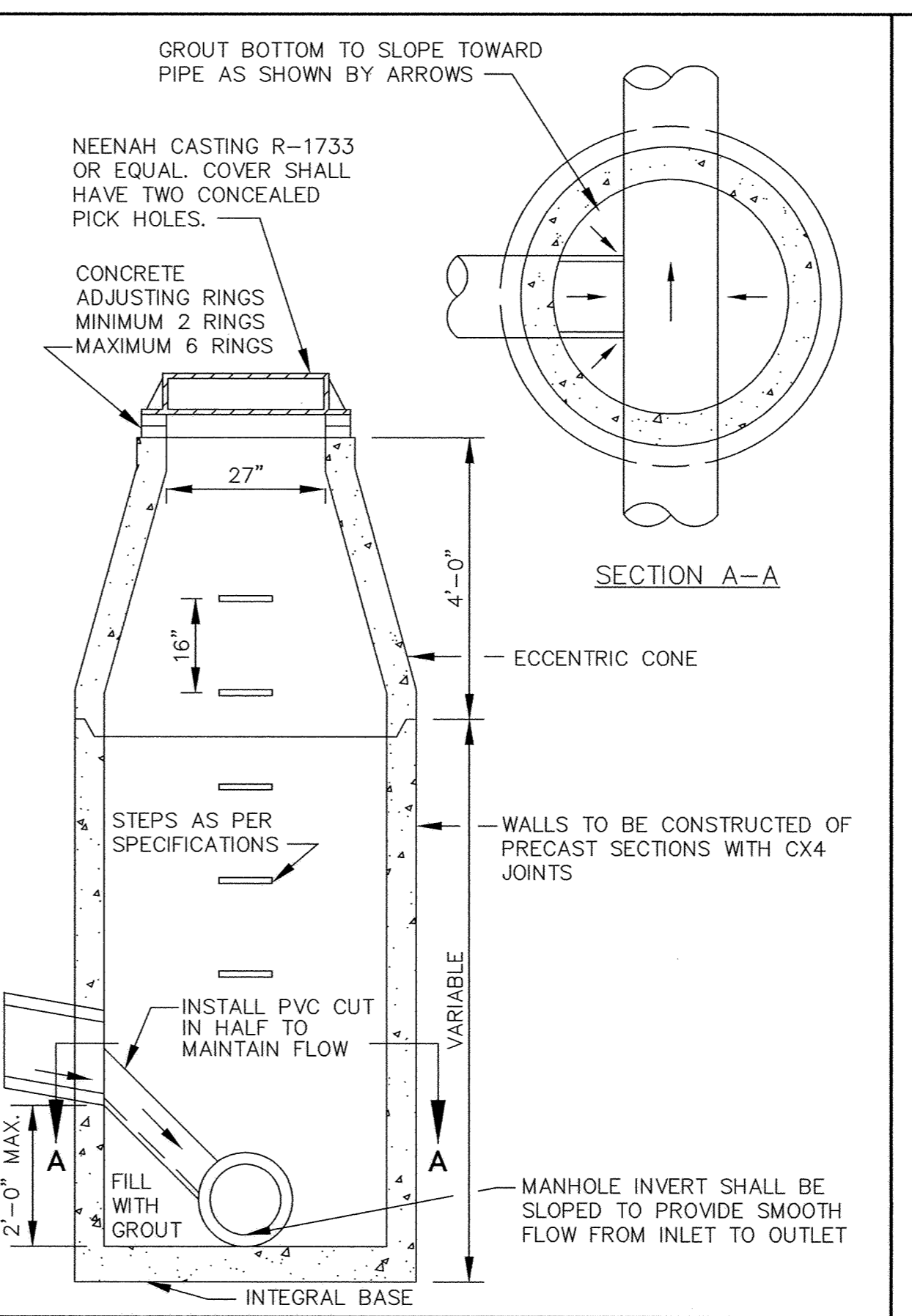
STANDARD AIR RELIEF MANHOLE



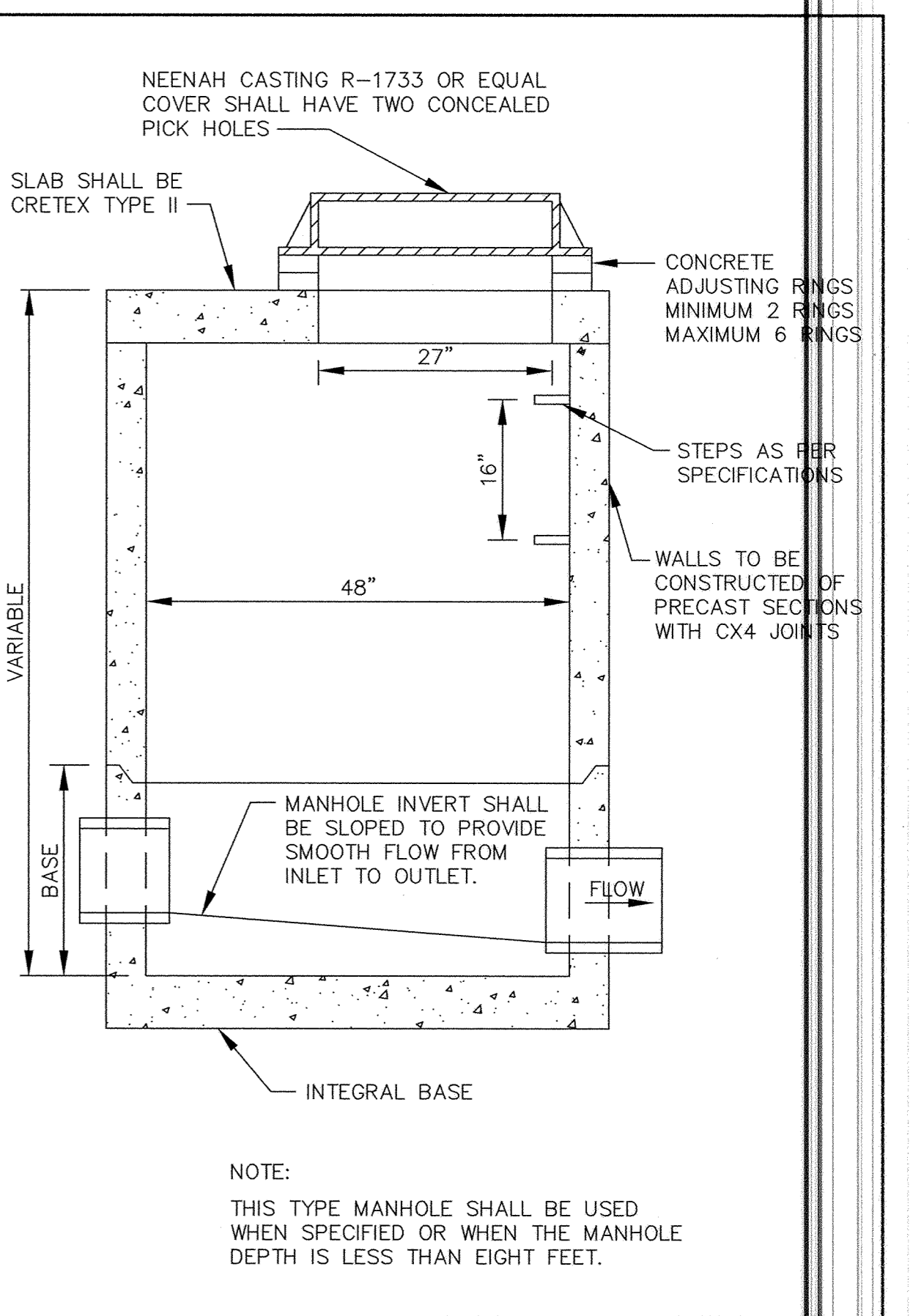
OUTSIDE DROP MANHOLE



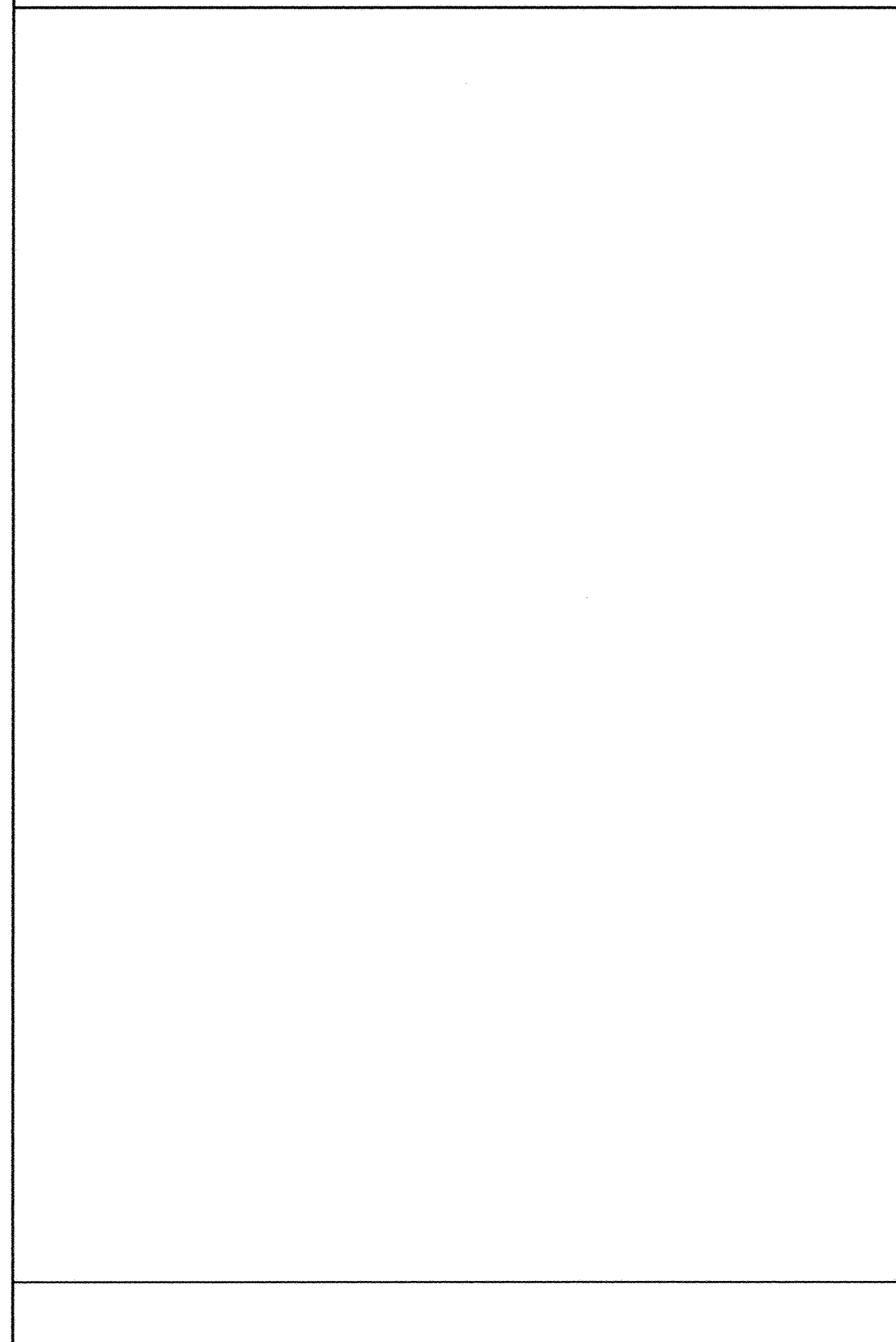
INSIDE DROP MANHOLE



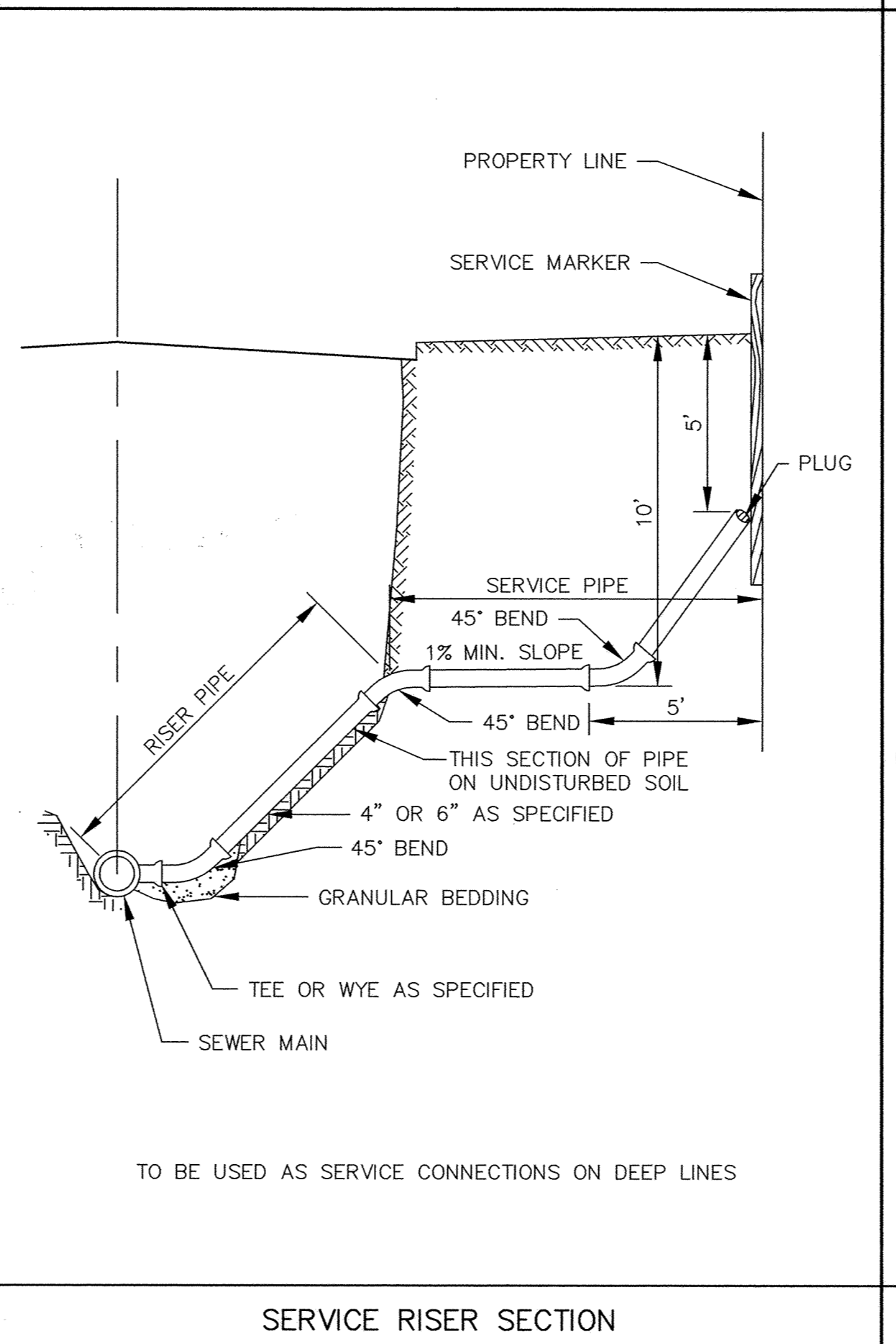
INSIDE DROP MANHOLE (TWO FEET OR LESS)



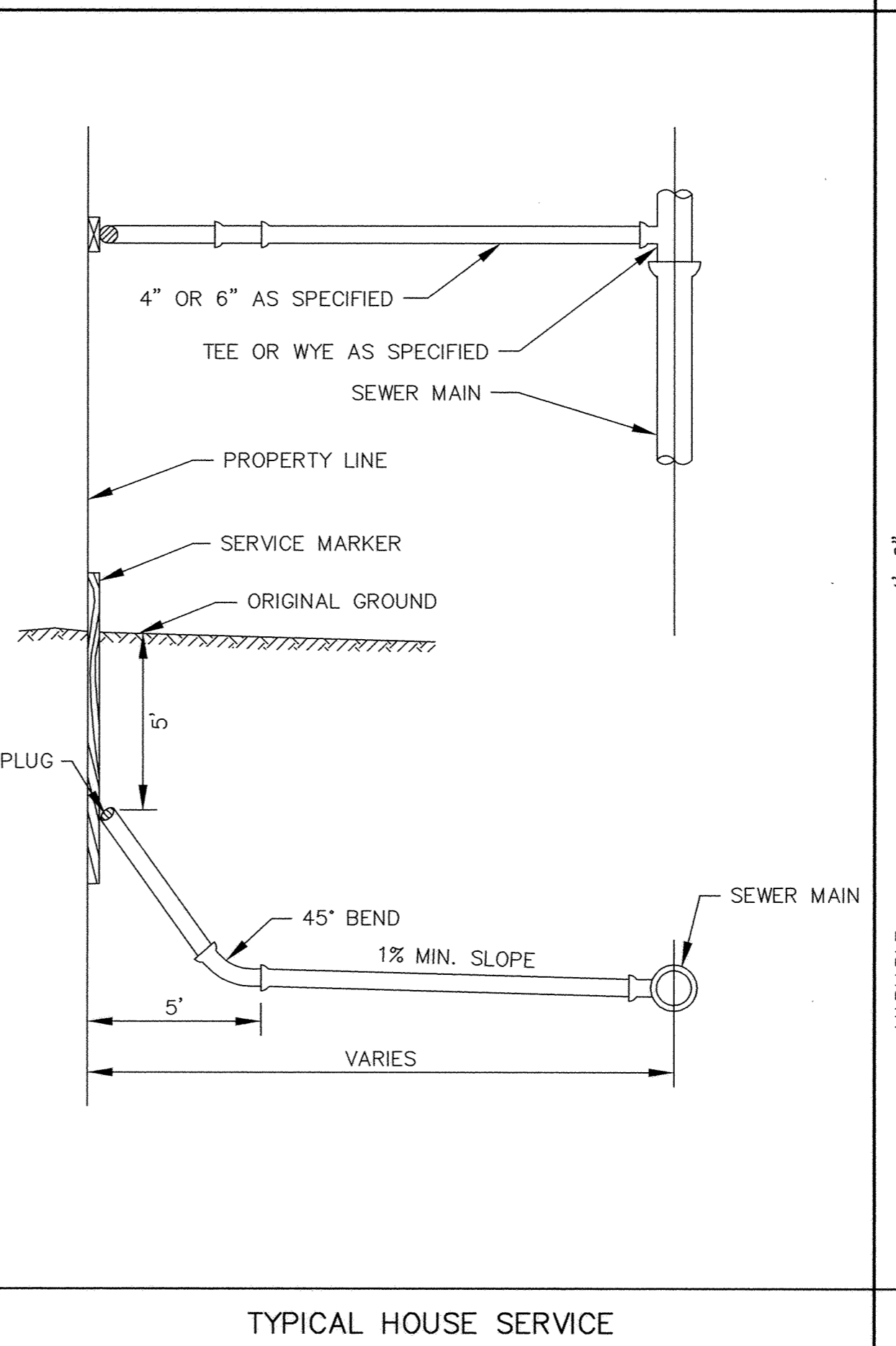
SLAB TOP MANHOLE



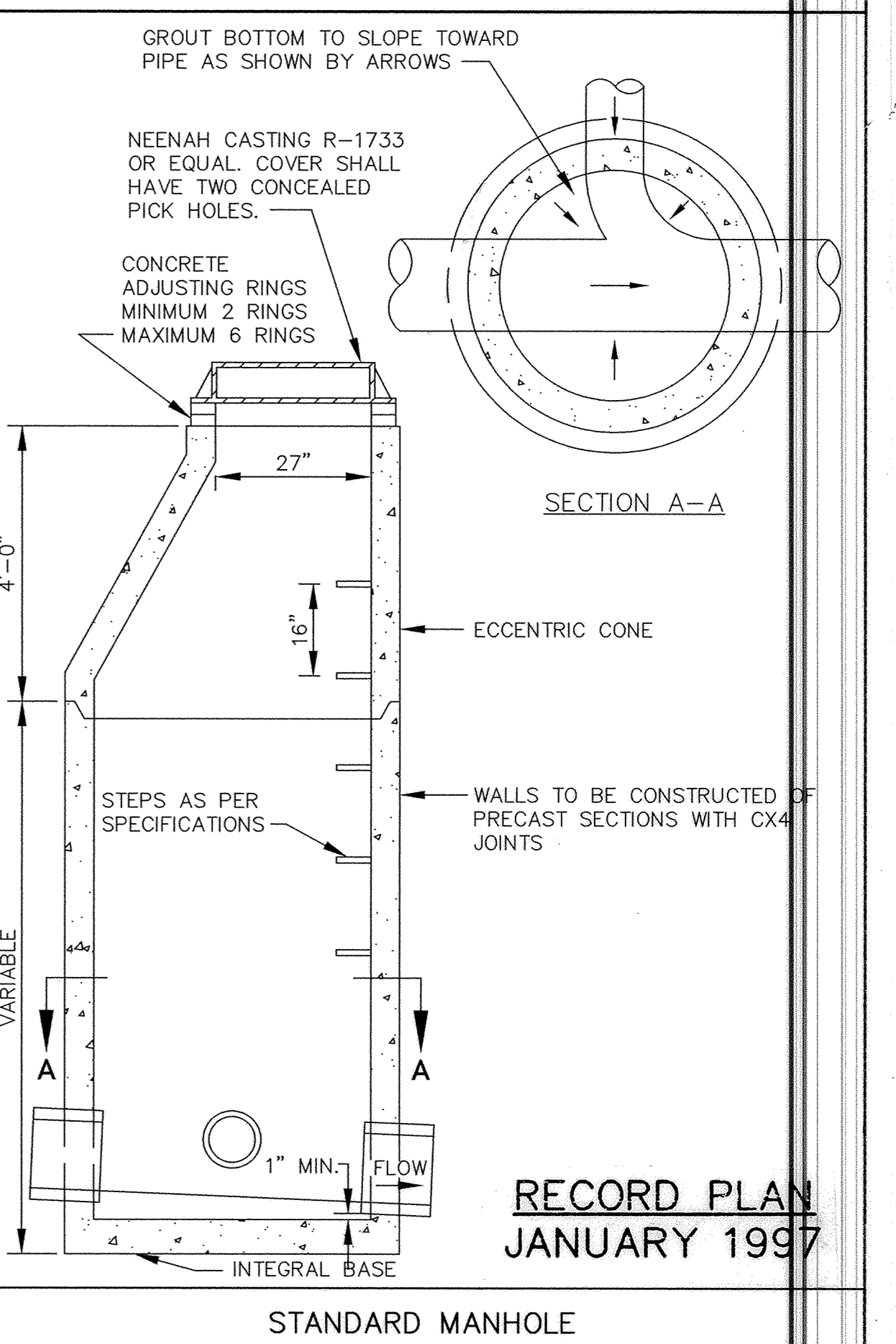
CLASS B PIPE BEDDING



SERVICE RISER SECTION



TYPICAL HOUSE SERVICE



STANDARD MANHOLE

ER292-D1

I HEREBY CERTIFY THAT THIS PLAN, SPECIFICATION, OR REPORT WAS PREPARED BY ME OR UNDER MY DIRECT SUPERVISION AND THAT I AM A DULY REGISTERED PROFESSIONAL ENGINEER UNDER THE LAWS OF THE STATE OF MINNESOTA.
Edward Mauer
DATE 8/21/96 REG. NO. 15316

MSA CONSULTING ENGINEERS
1326 ENERGY PARK DRIVE
ST. PAUL, MINNESOTA 55108
(612) 644-4389

DATE	DESCRIPTION	DESIGNED	SEF
		CHECKED	
		DRAWN	RKM
		GRAPHIC SCALE	
		0 HORIZ.	
		0 VERT.	

CITY OF ELK RIVER
HILLSIDE ESTATES FIFTH ADDITION
SANITARY SEWER DETAILS
DATE JULY 1996 SHEET 13 OF 16 SHEETS PROJECT NO. 230-292

SAFECO PRODUCTS • NEW HARBOR, MINNESOTA
HILLSIDE ESTATES FIFTH ADDITION
SANITARY SEWER DETAILS
DRAWING NUMBER 13
DRAWING NUMBER HILLS 96
1062