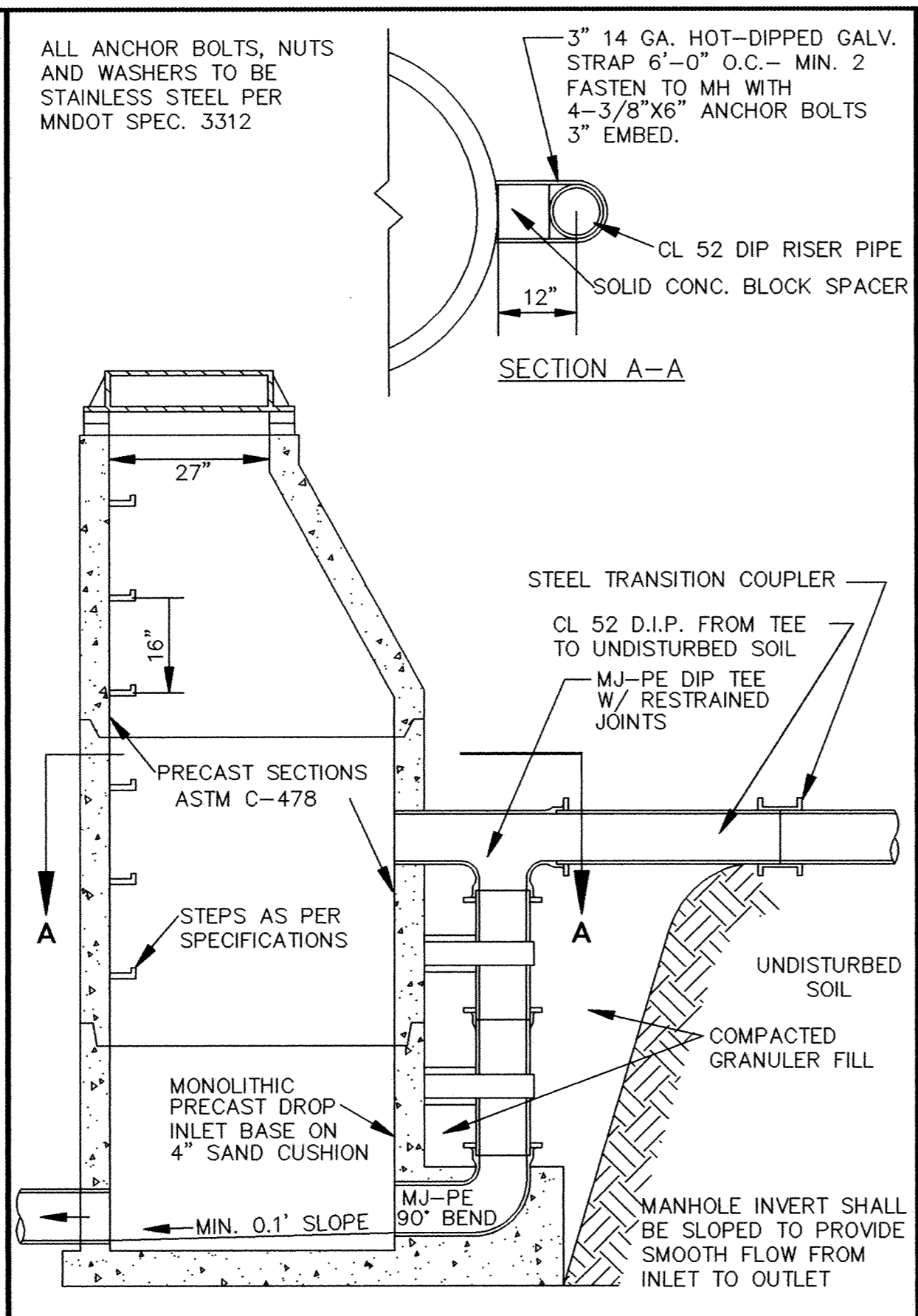
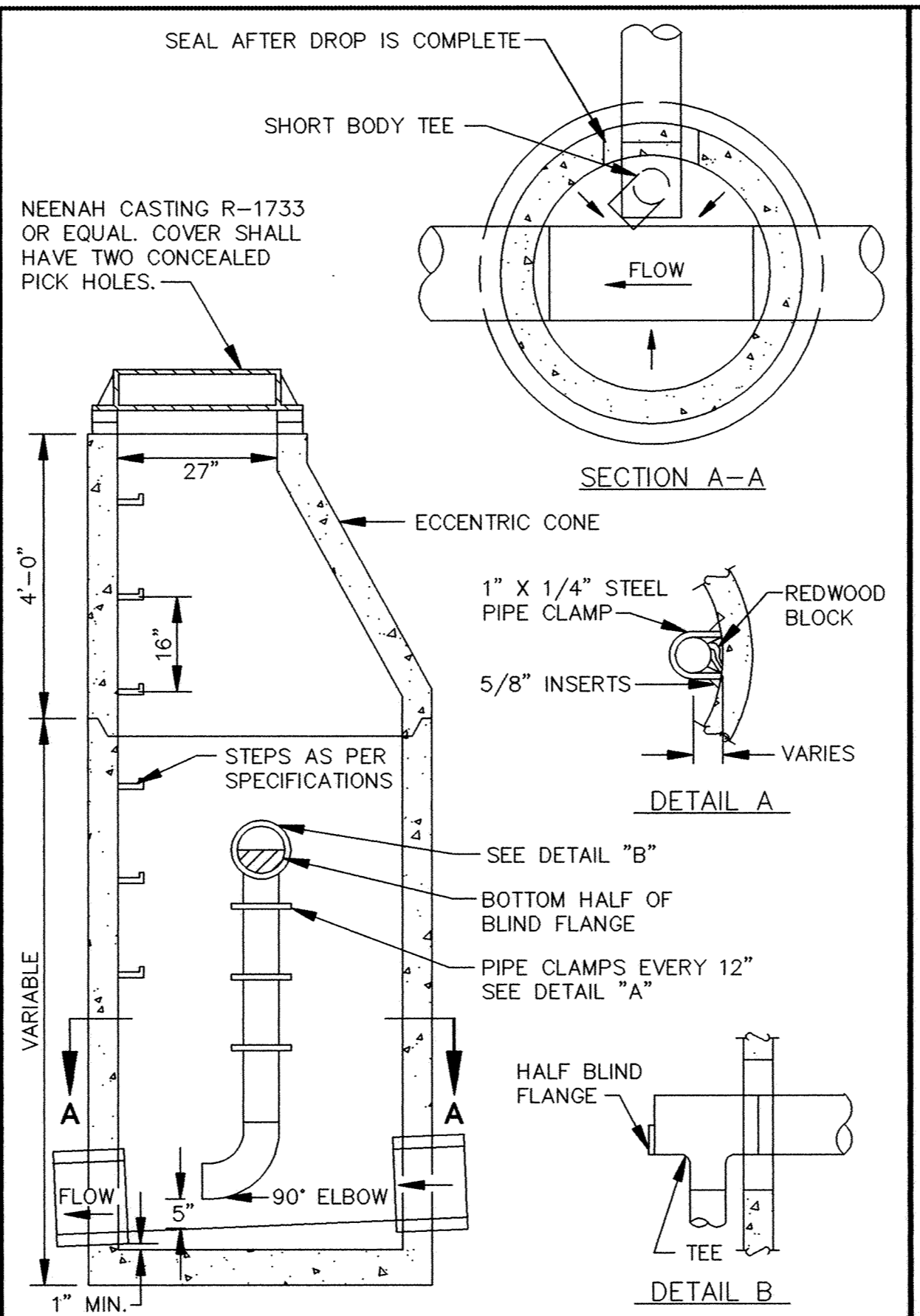


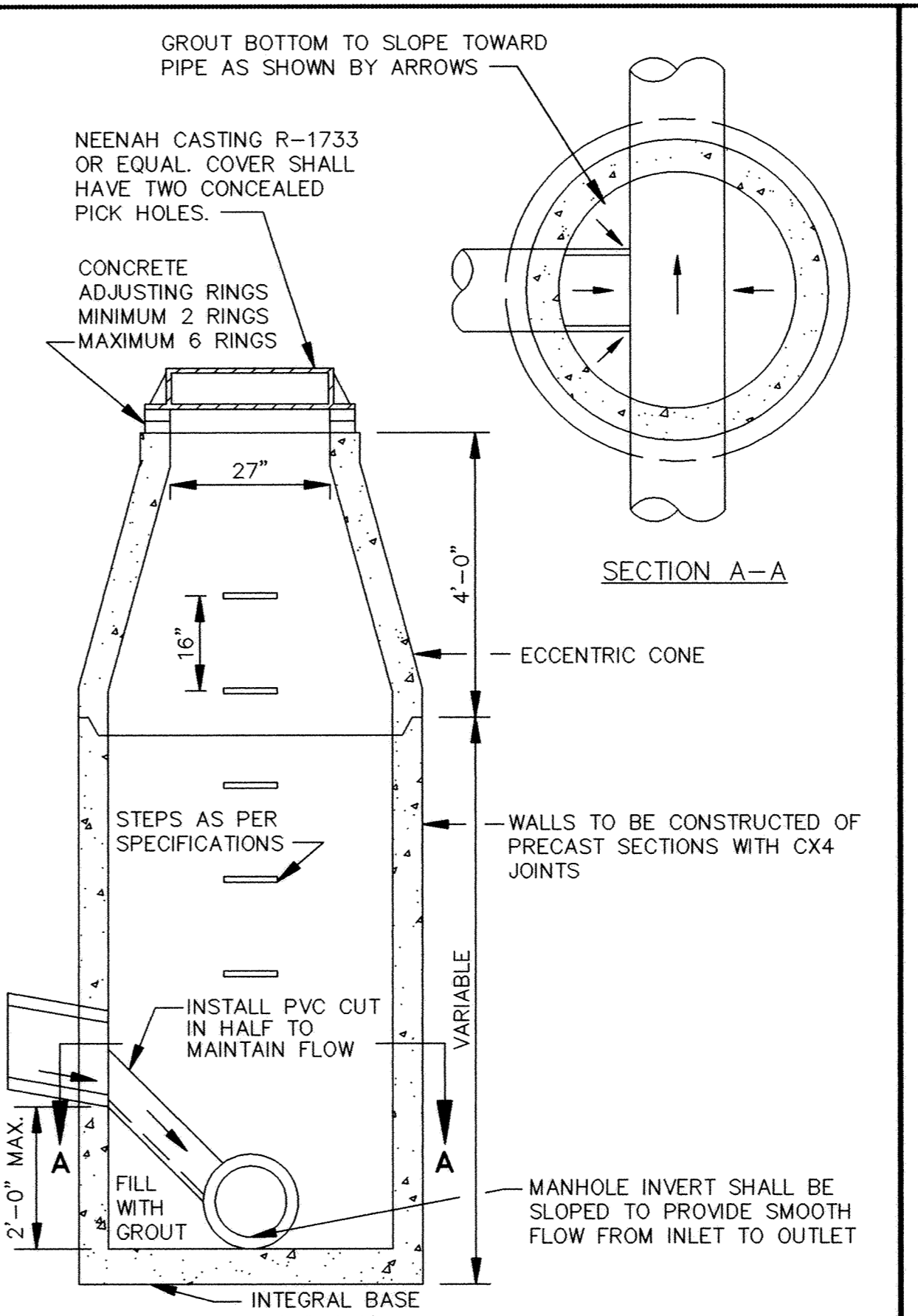
STANDARD AIR RELIEF MANHOLE



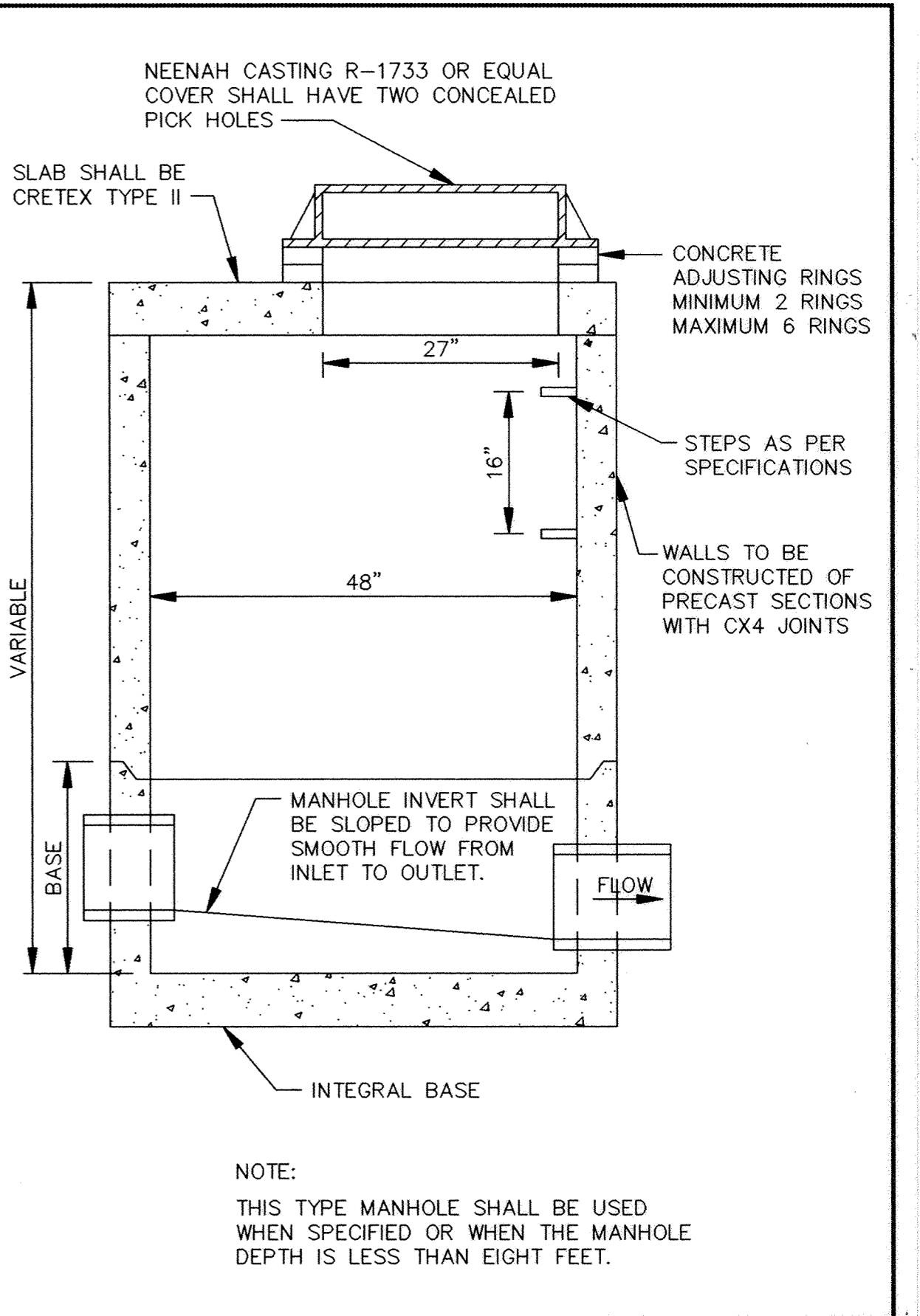
OUTSIDE DROP MANHOLE



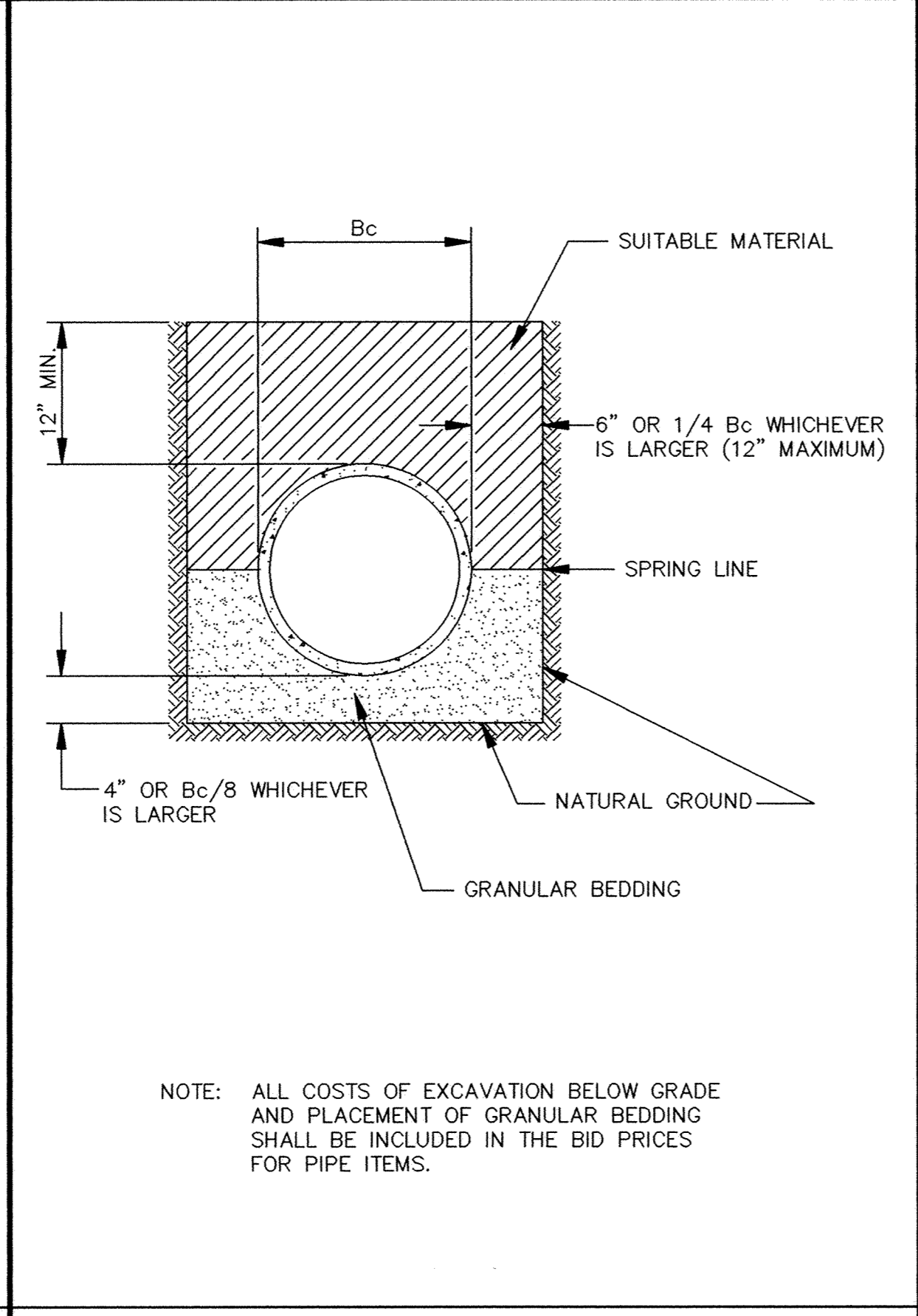
INSIDE DROP MANHOLE



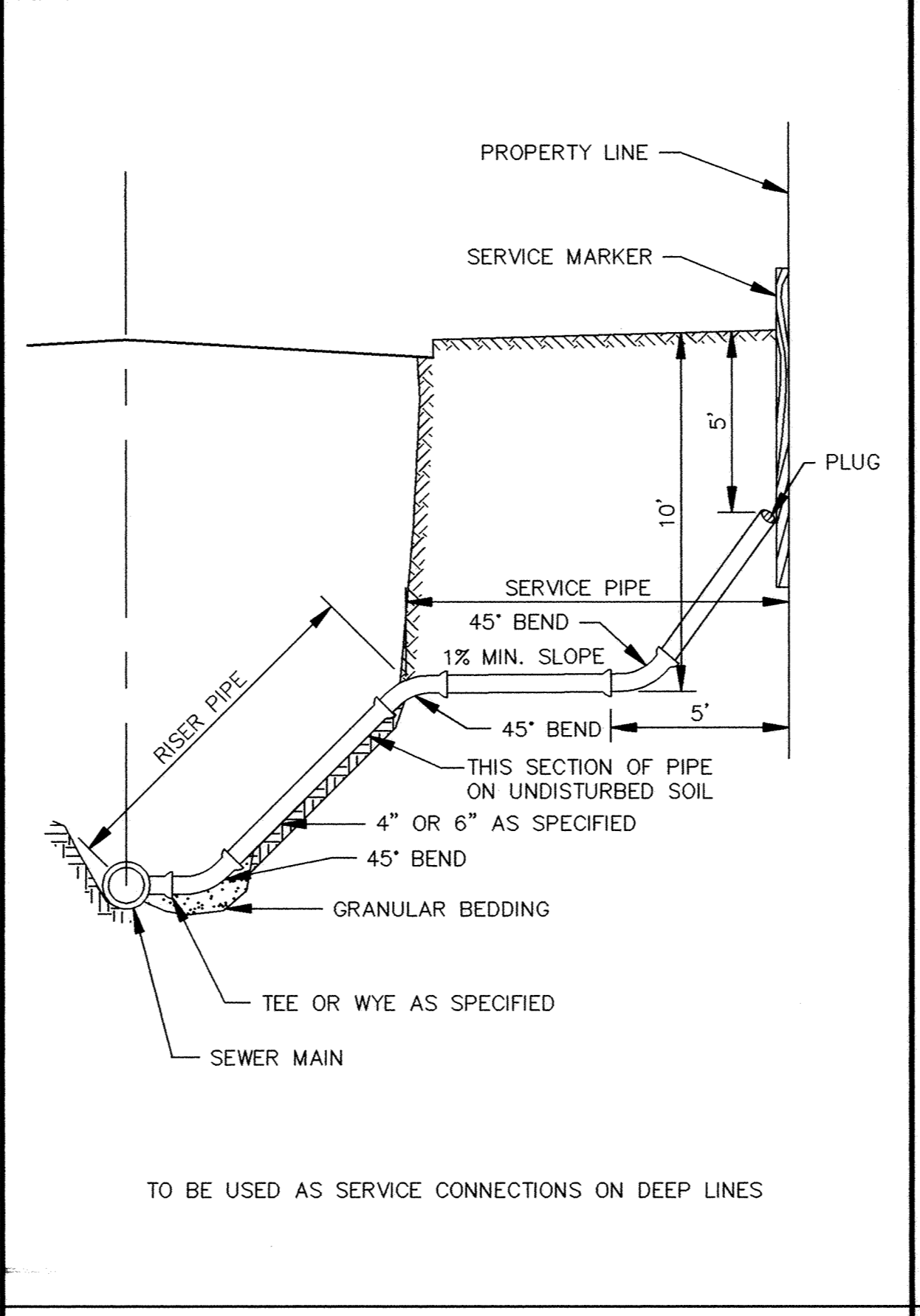
INSIDE DROP MANHOLE (TWO FEET OR LESS)



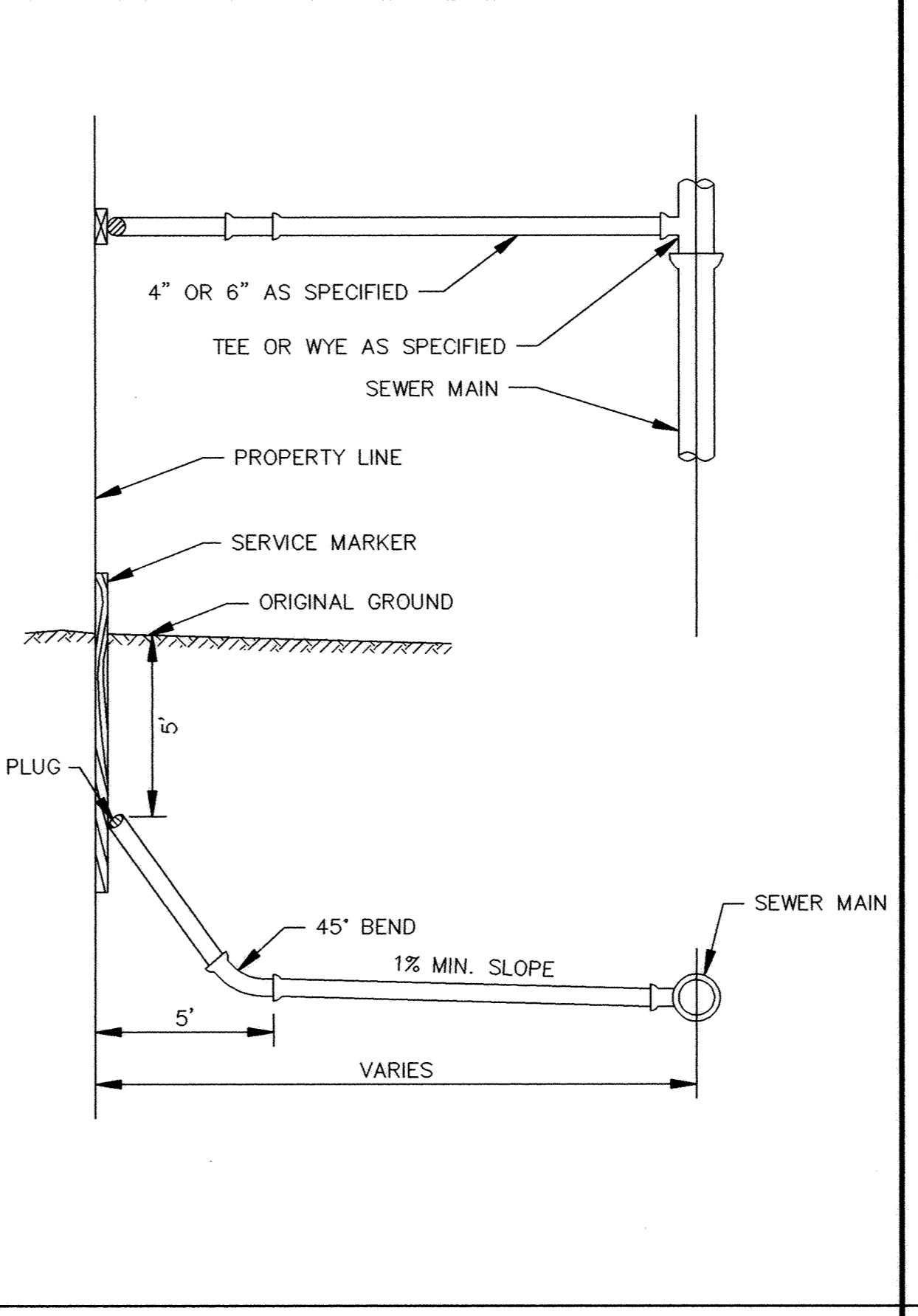
SLAB TOP MANHOLE



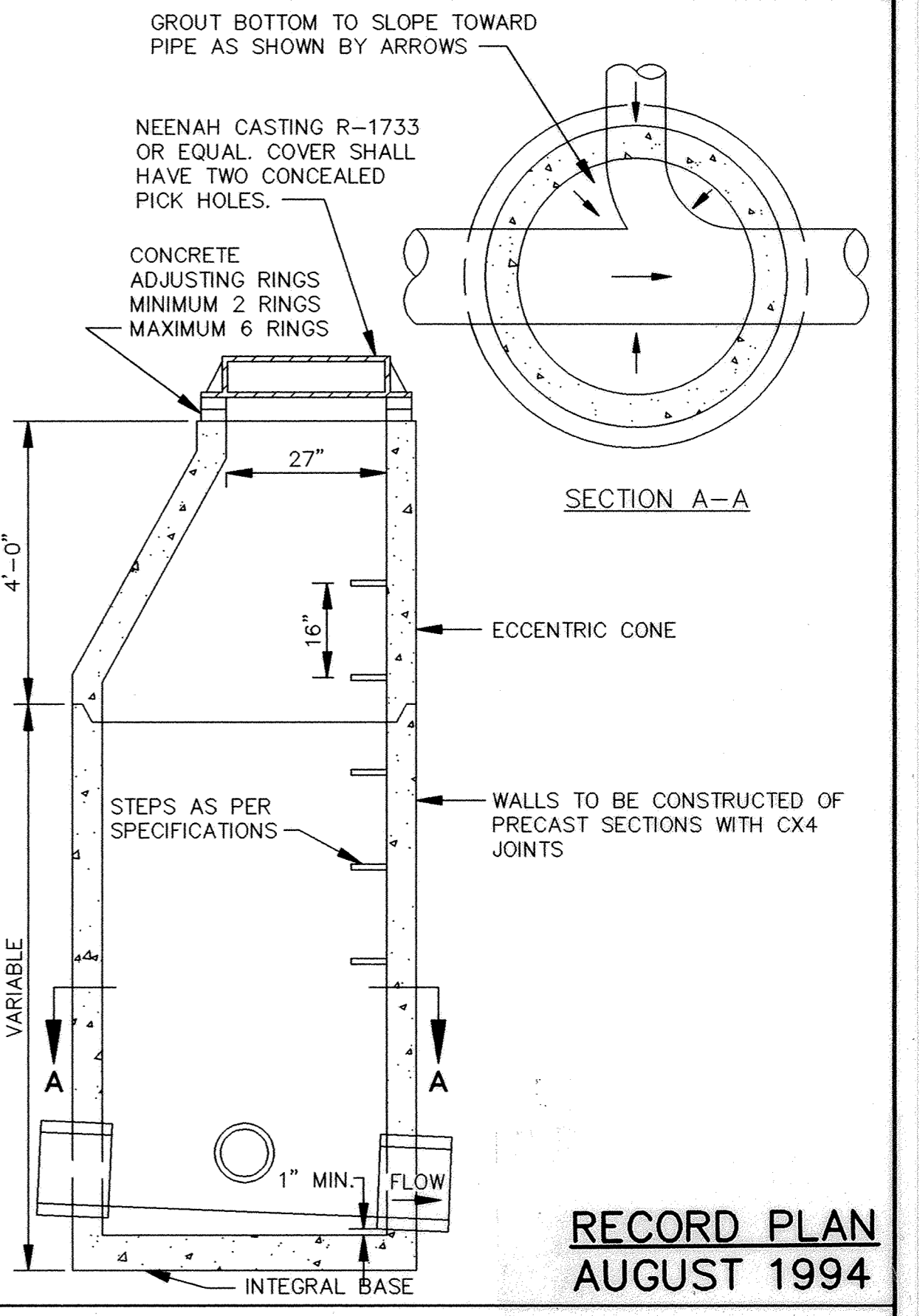
CLASS B PIPE BEDDING



SERVICE RISER SECTION



TYPICAL HOUSE SERVICE



STANDARD MANHOLE

ER199-D1

CITY OF ELK RIVER
HILLSIDE ESTATES SECOND ADDITION
SANITARY SEWER DETAILS

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.
Mark J. Guhans
DATE 10/27/93 REG. NO. 19130

1326 ENERGY PARK DRIVE ST. PAUL, MINNESOTA 55108 (612) 644-4389	9800 SHELARD PARKWAY MINNEAPOLIS, MINNESOTA 55441 (612) 546-0432
DATE	DESCRIPTION
DESIGNED	CHECKED
DRAWN	CLS
GRAPHIC SCALE	
0	HORIZ.
0	VERT.

DATE OCT. 1993 SHEET 4 OF 7 SHEETS PROJECT NO. 230-199

DRAWING NUMBER
HILLS2.94
DRAWING NUMBER
4
DRAWING NUMBER
715