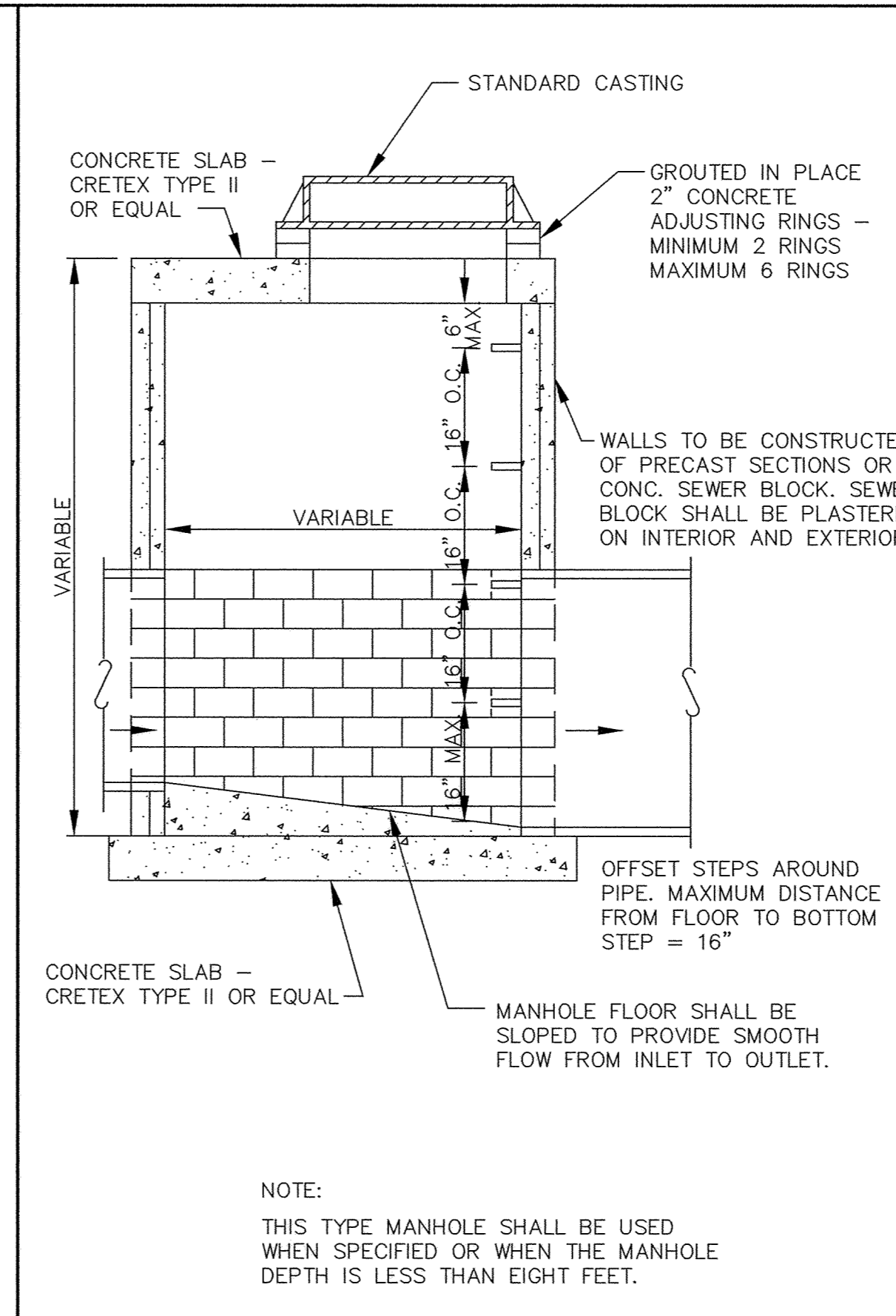
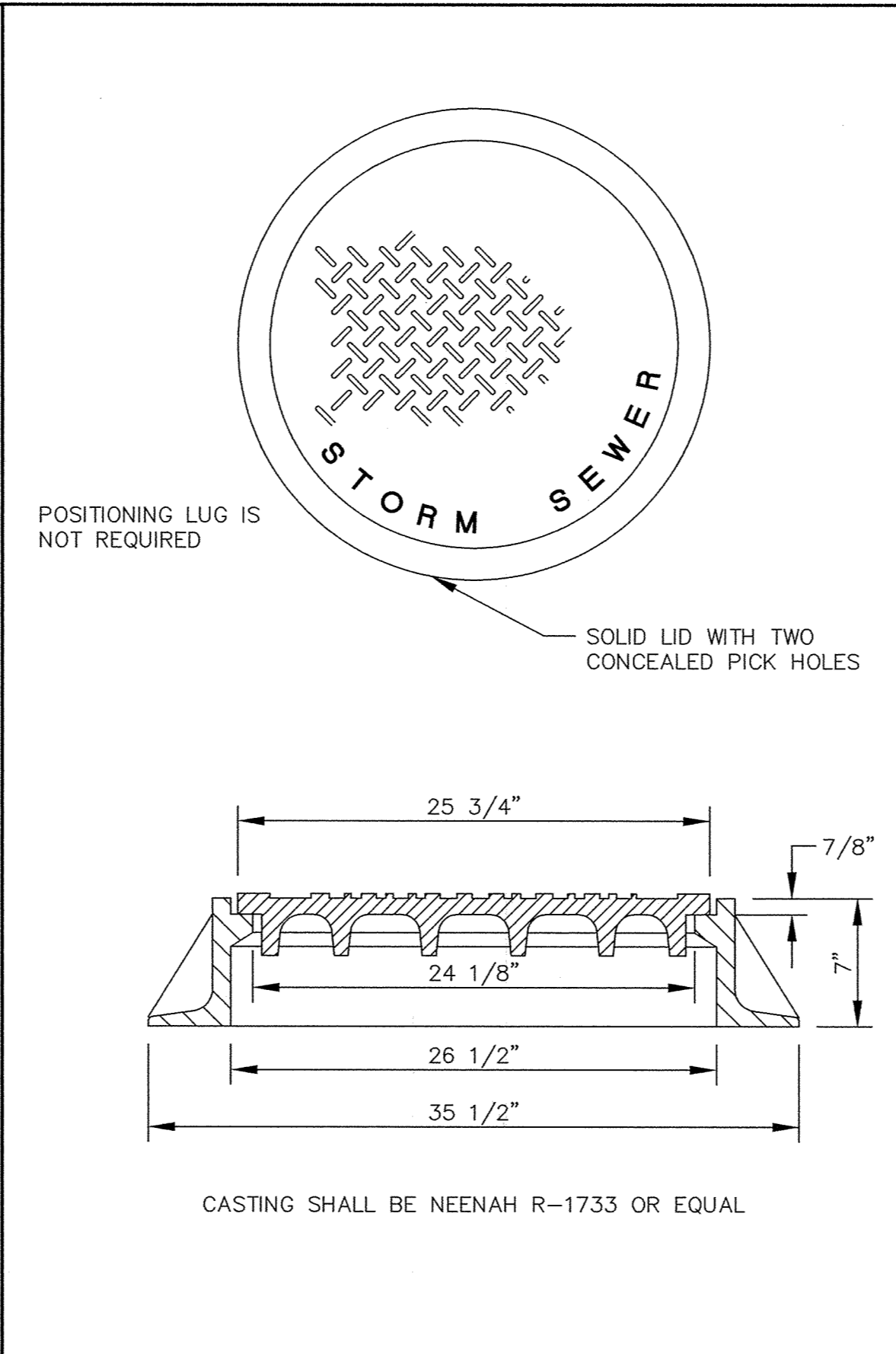


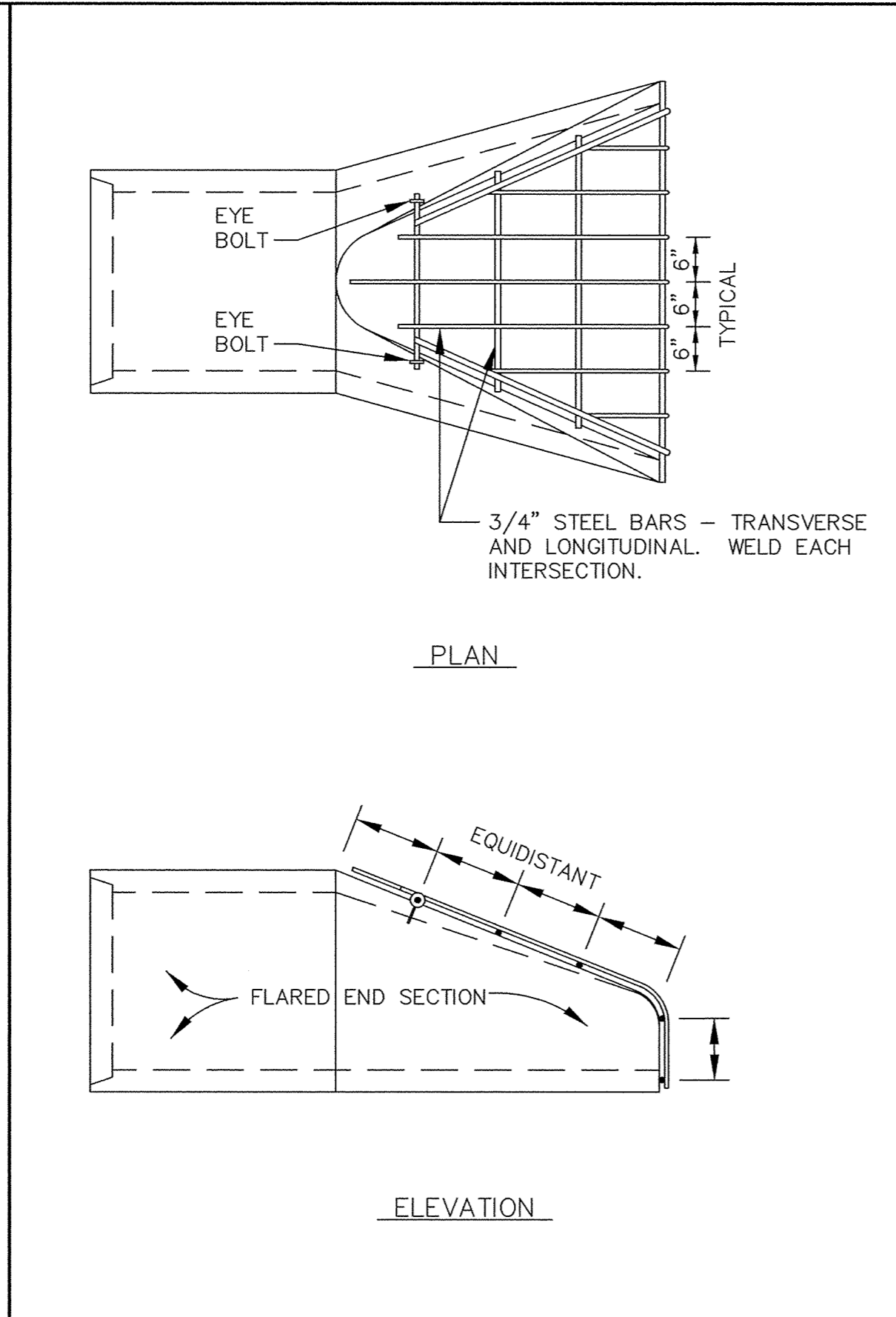
STANDARD MANHOLE



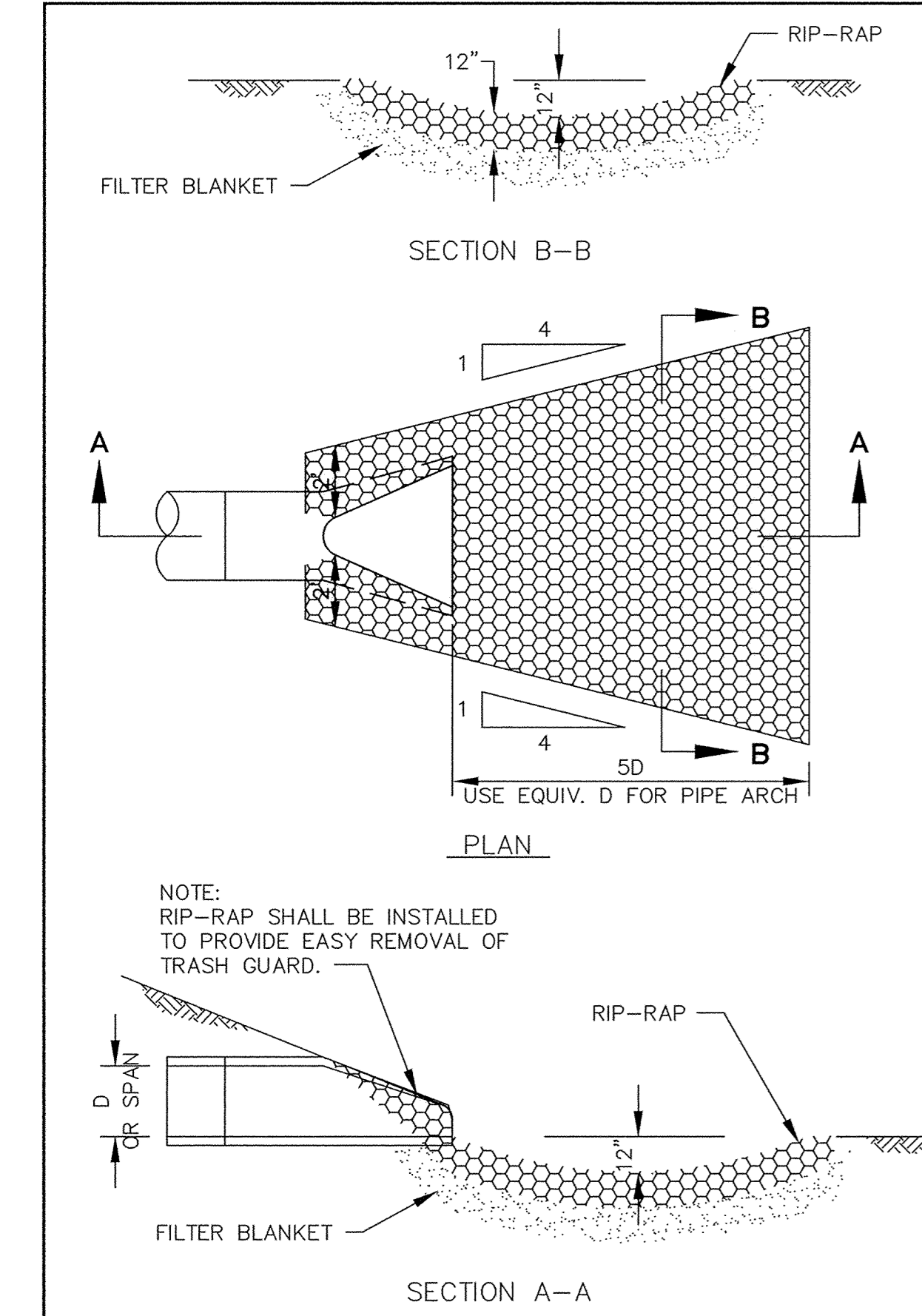
SLAB TOP MANHOLE



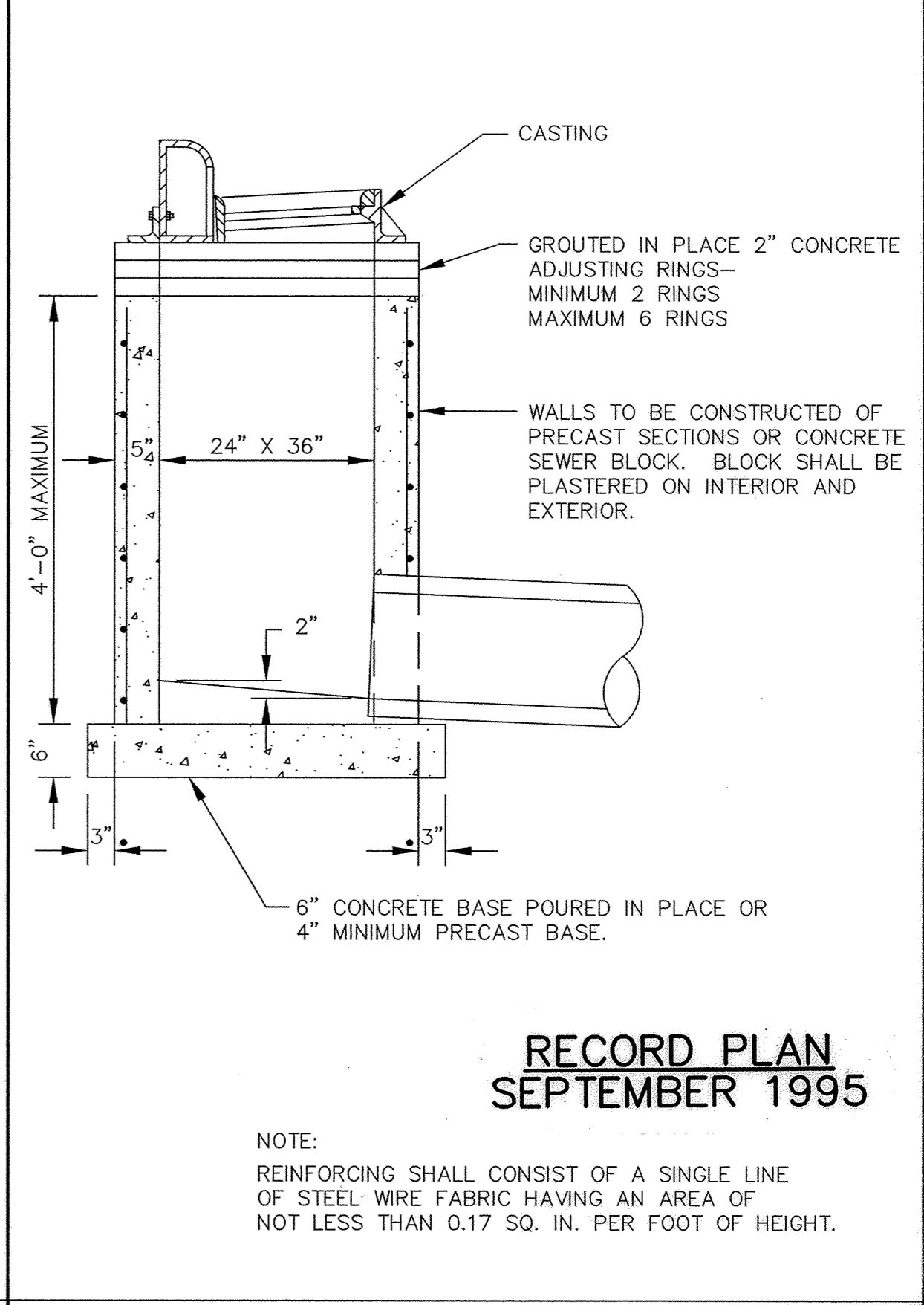
STANDARD MANHOLE CASTING



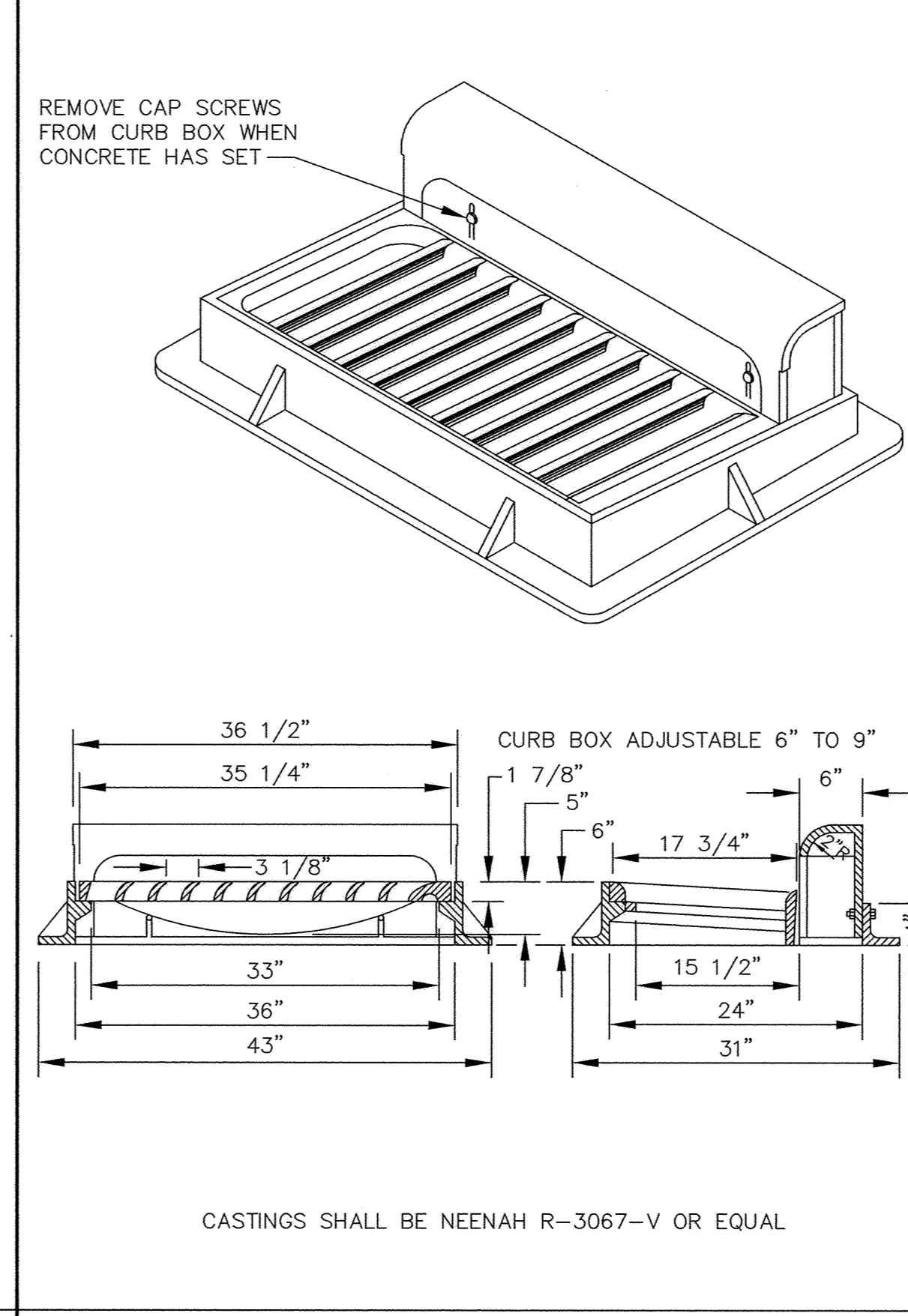
TRASH GUARD



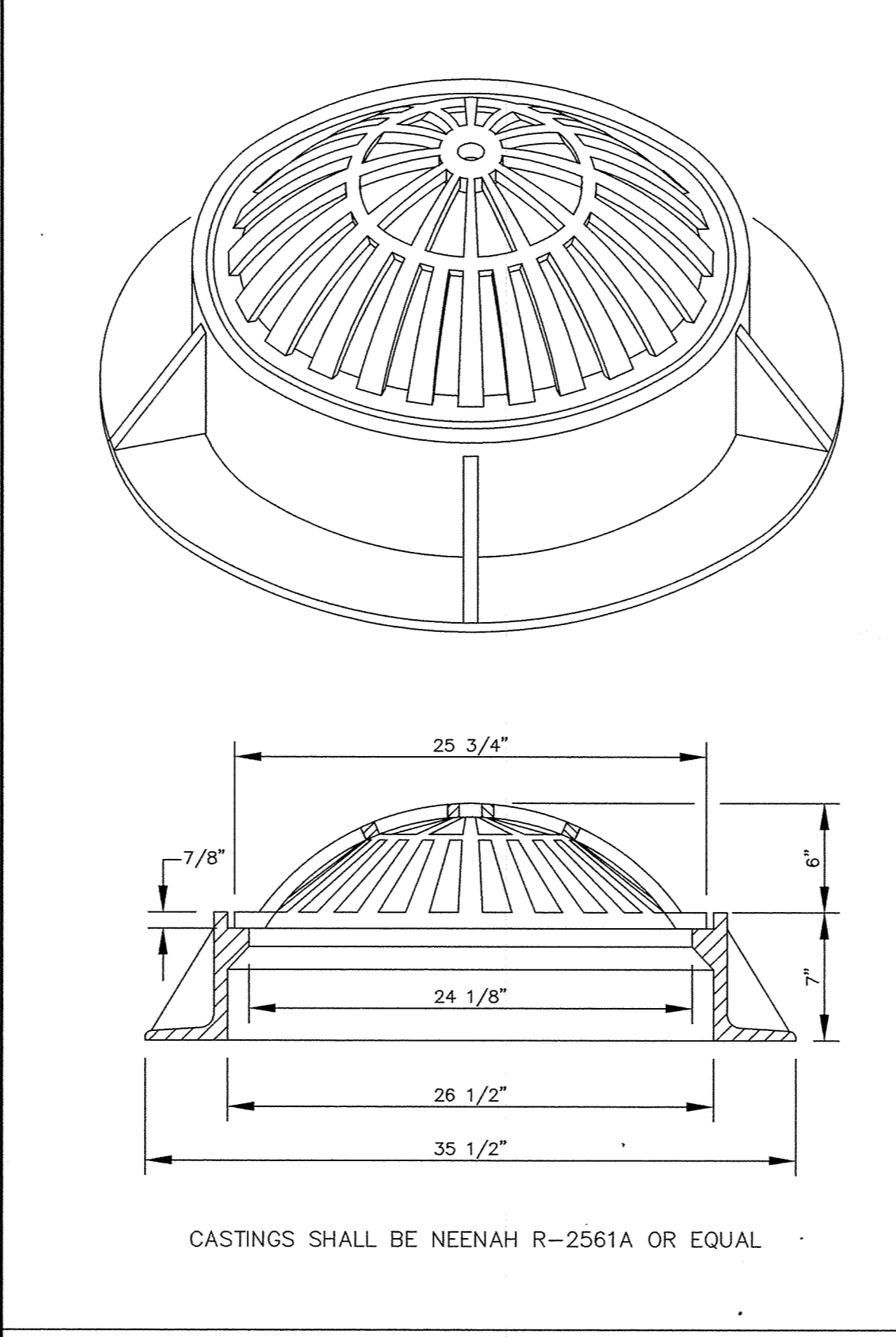
RIP-RAP INSTALLATION



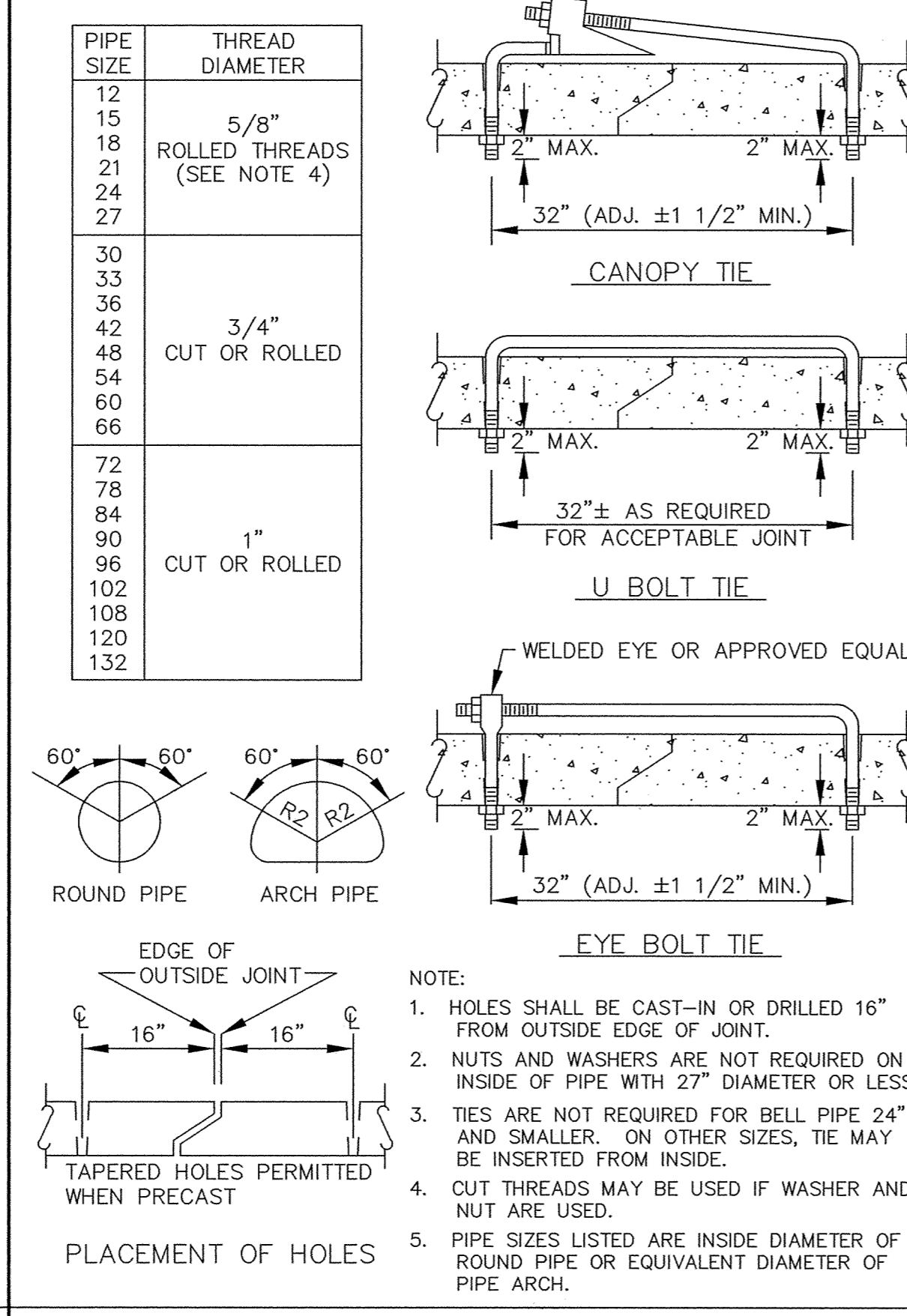
SHALLOW CATCH BASIN



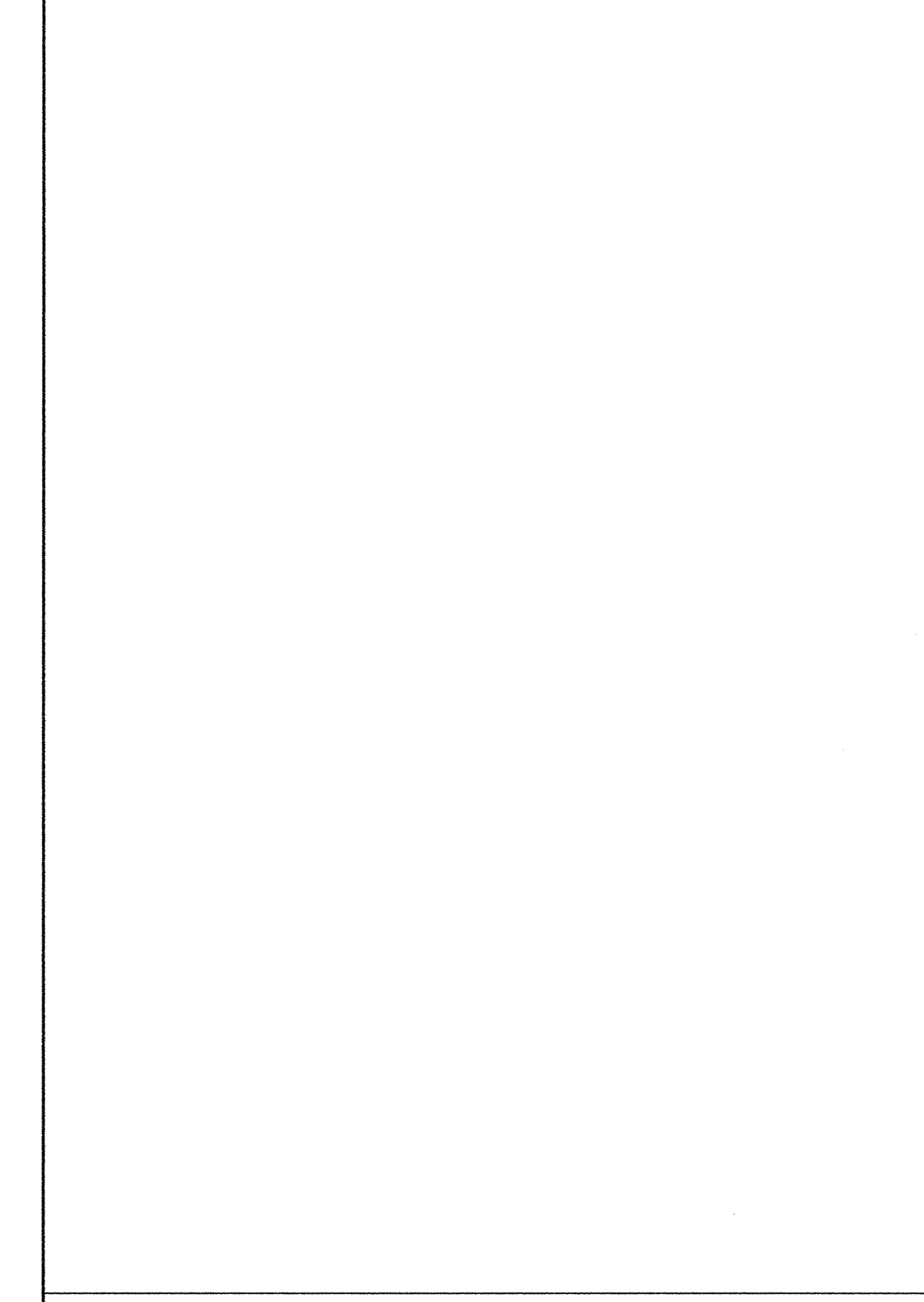
STANDARD INLET CASTING



BEEHIVE CASTING



CONCRETE PIPE JOINT TIES



CONCRETE PIPE JOINT TIES

CITY OF ELK RIVER  
STORM SEWER DETAILS

DATE FEB. 1994 SHEET 12 OF 13 SHEETS PROJECT NO. 230-208

DATE	DESCRIPTION	DESIGNED	CHECKED	DRAWN

GRAPHIC SCALE  
0 HORIZ.  
0 VERT.

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. Swanson*  
DATE 2/10/95 REG. NO. 19130

**MSA**  
CONSULTING ENGINEERS

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

9800 SHELARD PARKWAY  
MINNEAPOLIS, MINNESOTA 55441  
(612) 546-0432

ER208D2