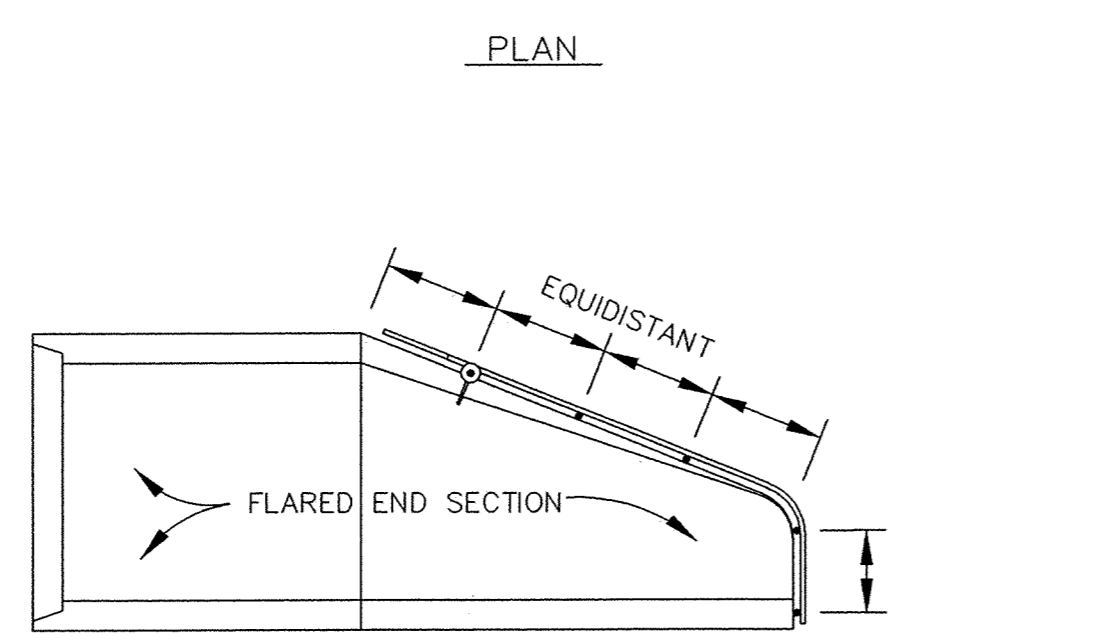
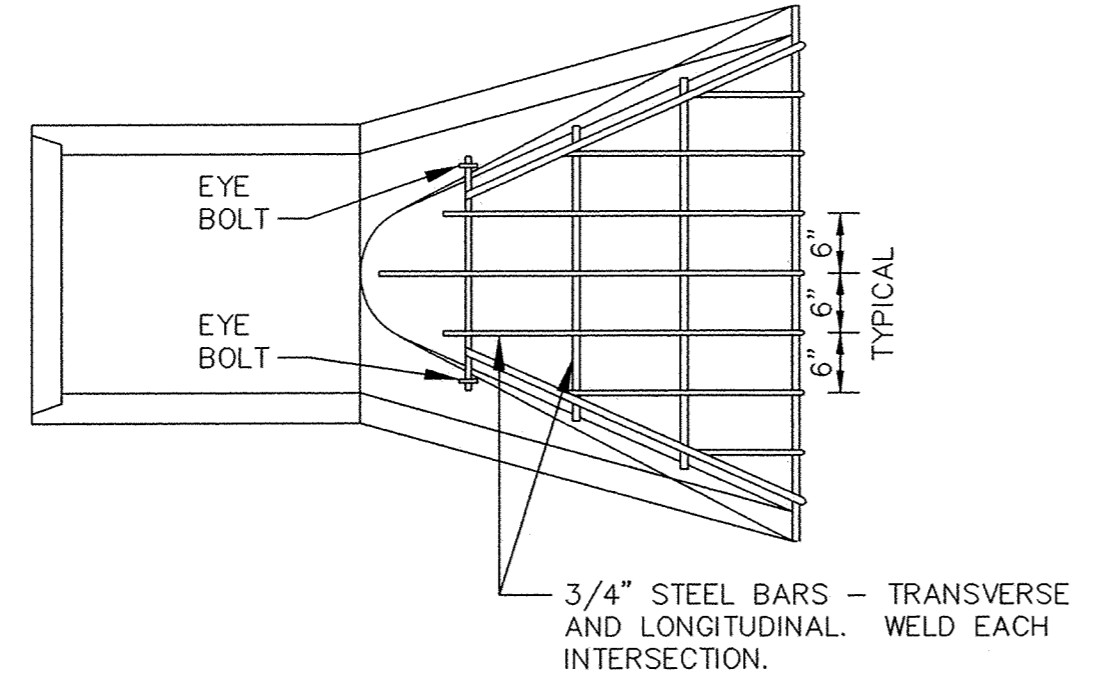


TABLE OF QUANTITIES  
RIPRAP AT RCP OUTLETS

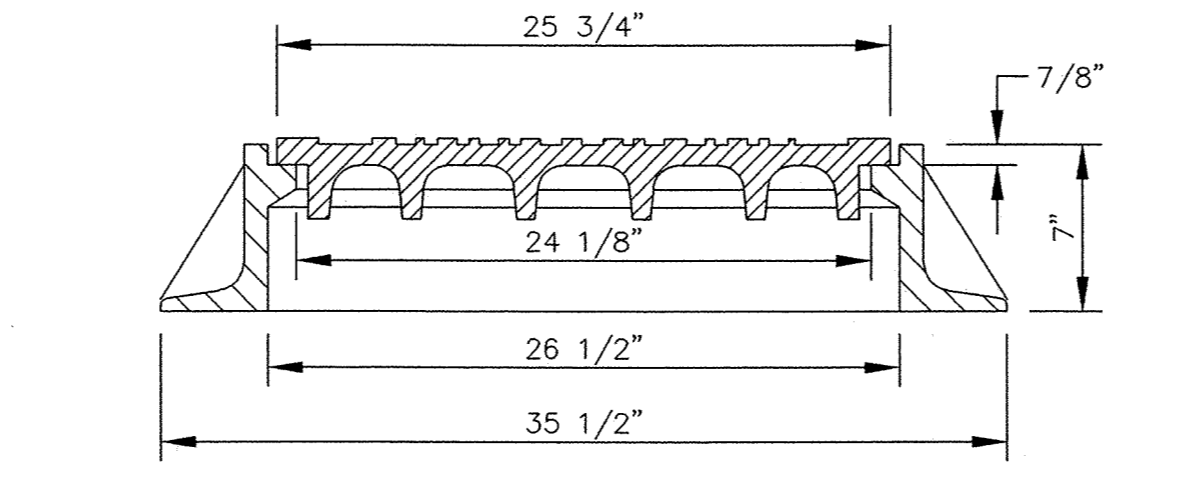
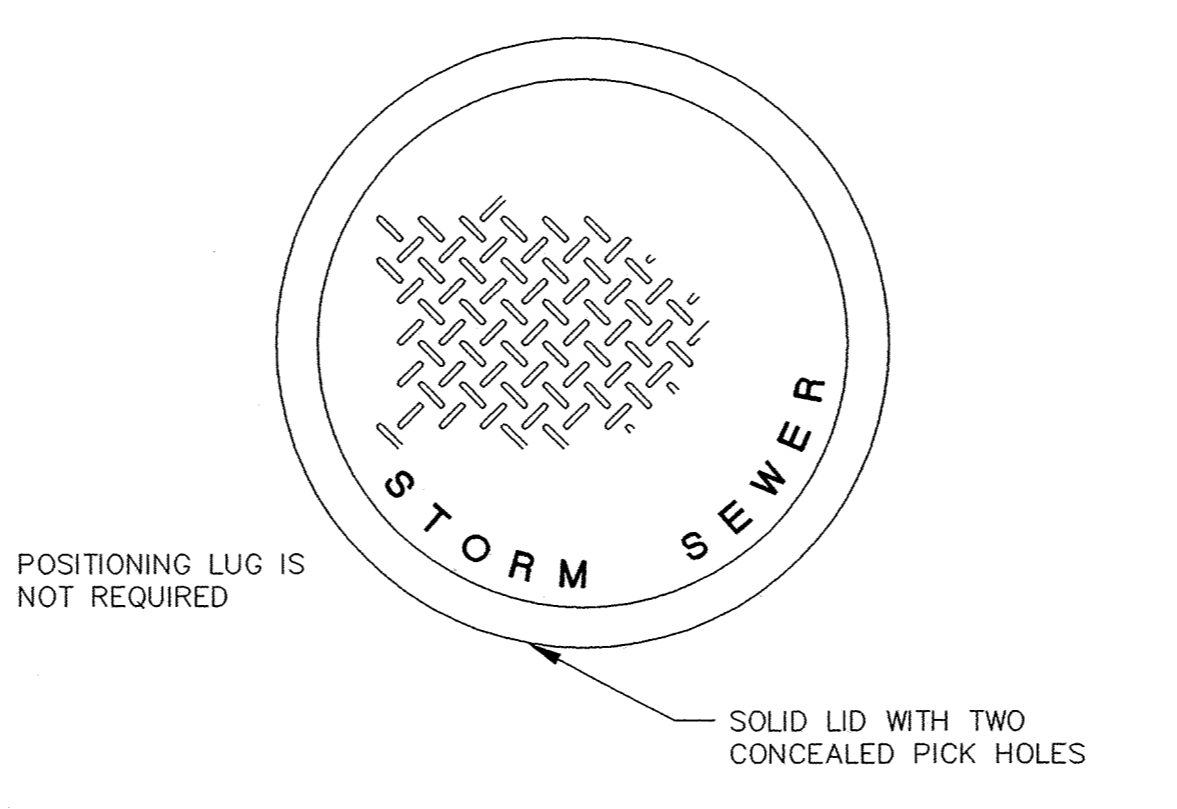
DIA. OF ROUND PIPE (IN.)	L (FT.)	CLASS IV d <sub>50</sub> = 12"	
		24" DEPTH RIPRAP (CU. YDS.)	12" DEPTH GRANULAR FILTER (CU. YDS.)
12	8	5.5	2.8
15	8	5.8	2.9
18	10	7.8	3.9
21	10	8.4	4.2
24	12	11.0	5.5
27	12	11.6	5.8
30	14	14.5	7.3
36	16	18.3	9.2
42	18	21.7	10.9
48	20	25.8	12.9

NOTE: LIMESTONE ROCK SHALL NOT BE USED AS RIP-RAP.

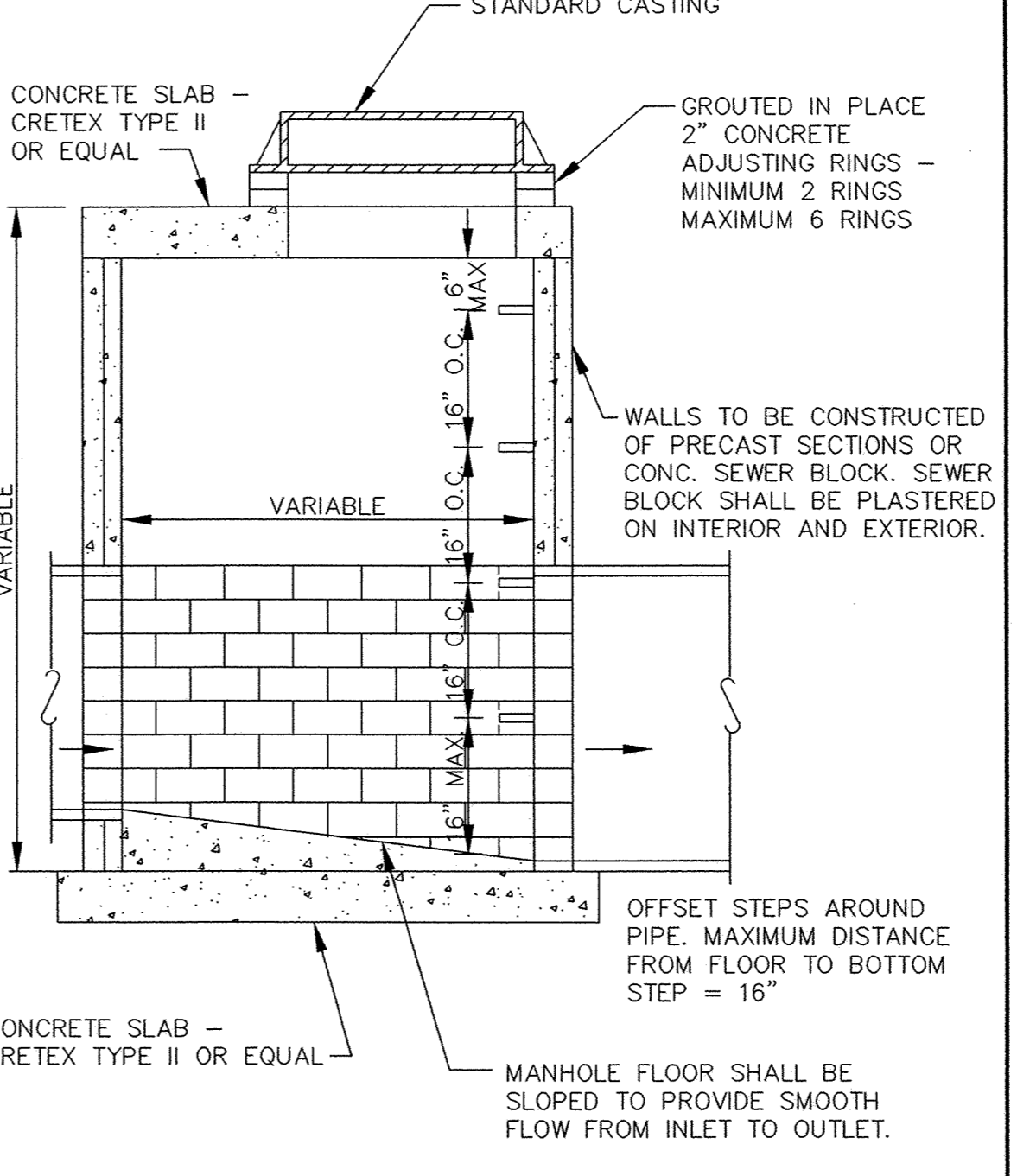
NOTE: RIP-RAP SHALL BE INSTALLED TO PROVIDE EASY REMOVAL OF TRASH GUARD.



ELEVATION



CASTING SHALL BE NEENAH R-1733 OR EQUAL



NOTE:  
THIS TYPE MANHOLE SHALL BE USED WHEN SPECIFIED OR WHEN THE MANHOLE DEPTH IS LESS THAN EIGHT FEET.

**Westwood Professional Services, Inc.**  
7599 Anagram Drive  
Eden Prairie, MN 55344  
Phone: 612/937-5150 Fax: 612/937-5822

PREPARED FOR:  
**D.R. Horton, Inc.**  
20860 Kenbridge Court, Suite 100  
Lakeville, MN 55044

CONTRACTOR: *Hennen Construction Co.*  
14520 Main Street  
Rogers, MN 55374  
# 763-428-4177

RECORD DRAWING  
CONFORMING TO CONSTRUCTION RECORDS.  
By Zak Spong DATE 04/25/07  
WESTWOOD PROFESSIONAL SERVICES

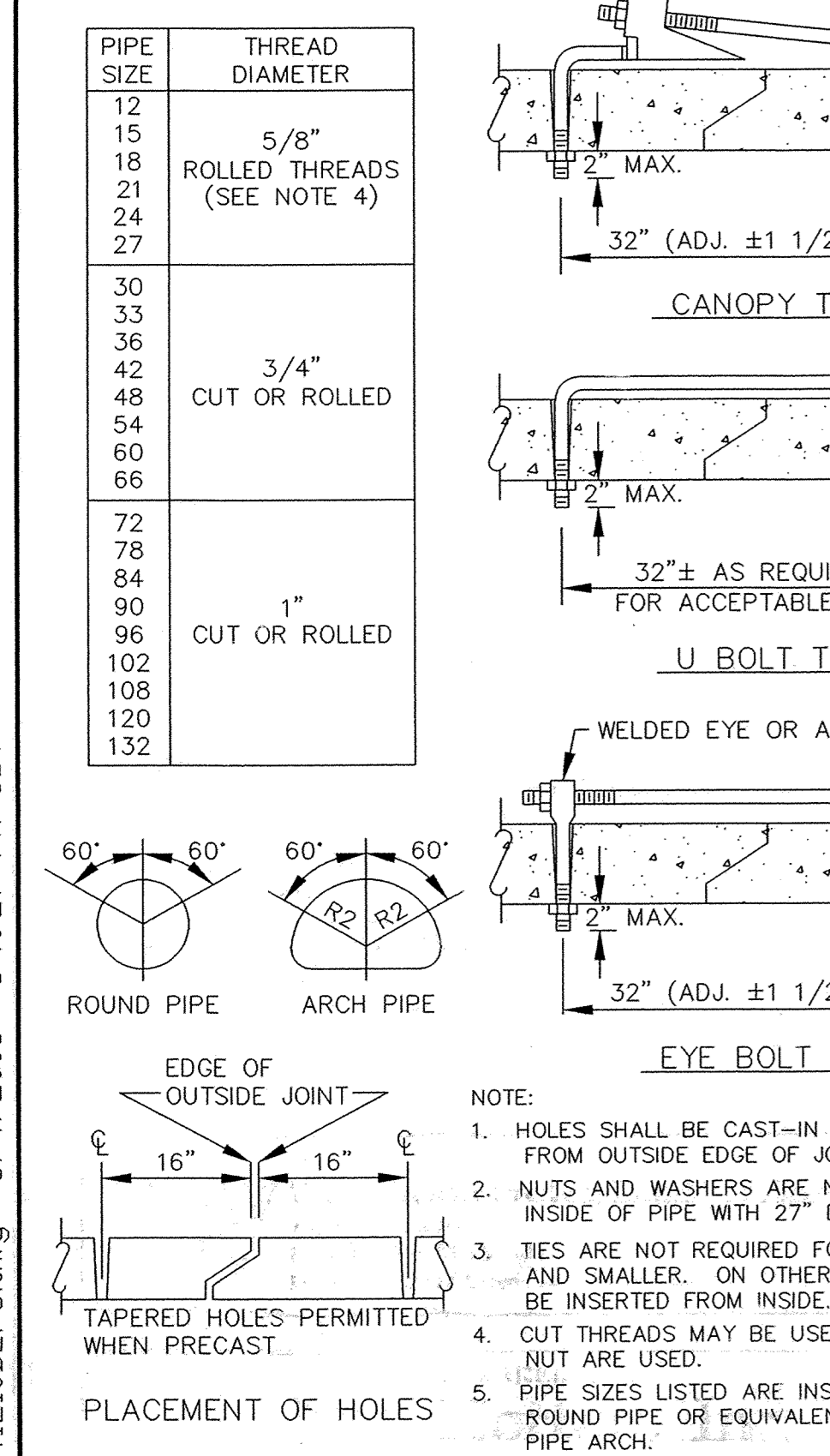
RIP-RAP INSTALLATION

TRASH GUARD

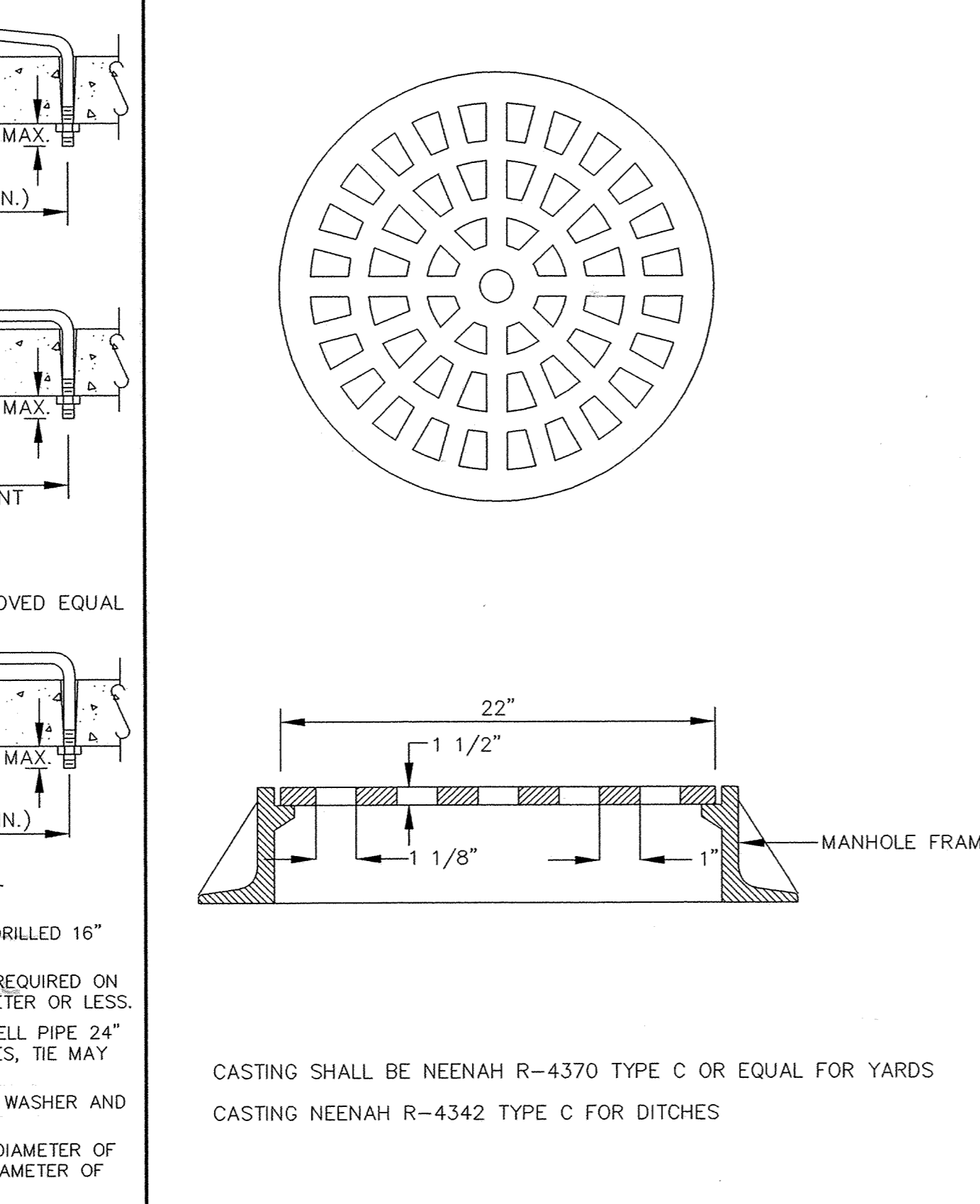
STANDARD MANHOLE CASTING

SLAB TOP MANHOLE

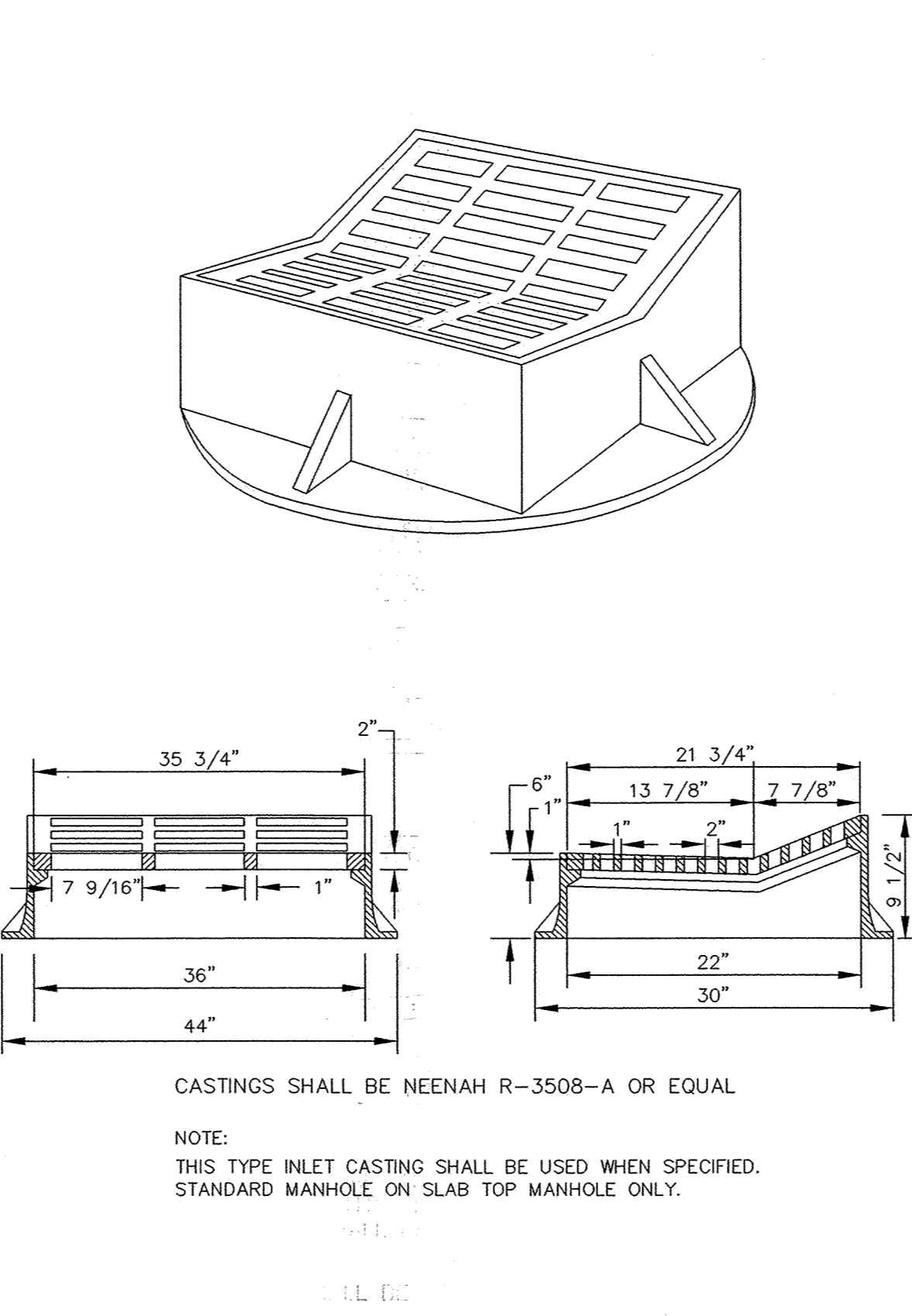
CATCH BASIN SEDIMENTATION BARRIER



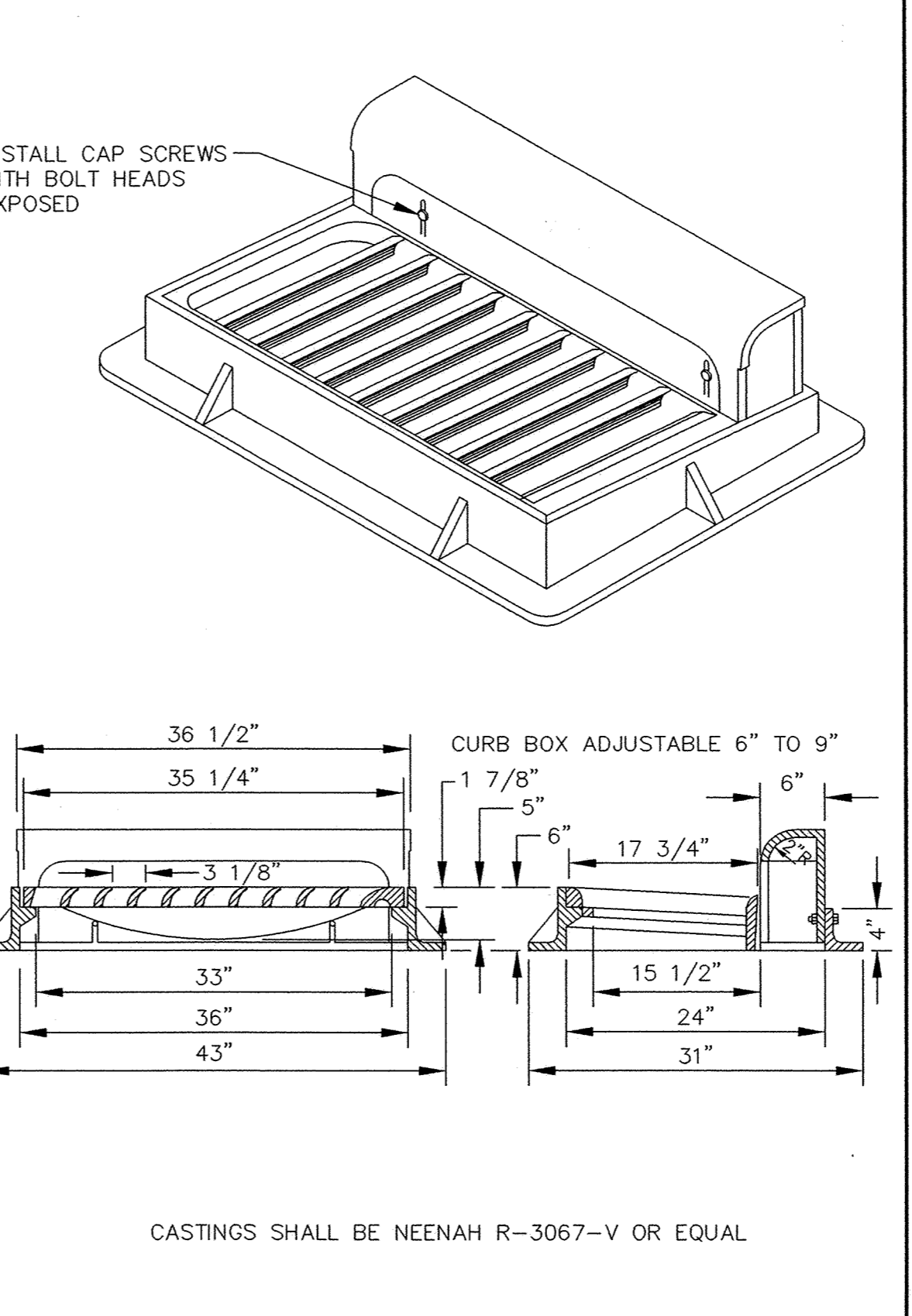
CONCRETE PIPE JOINT TIES



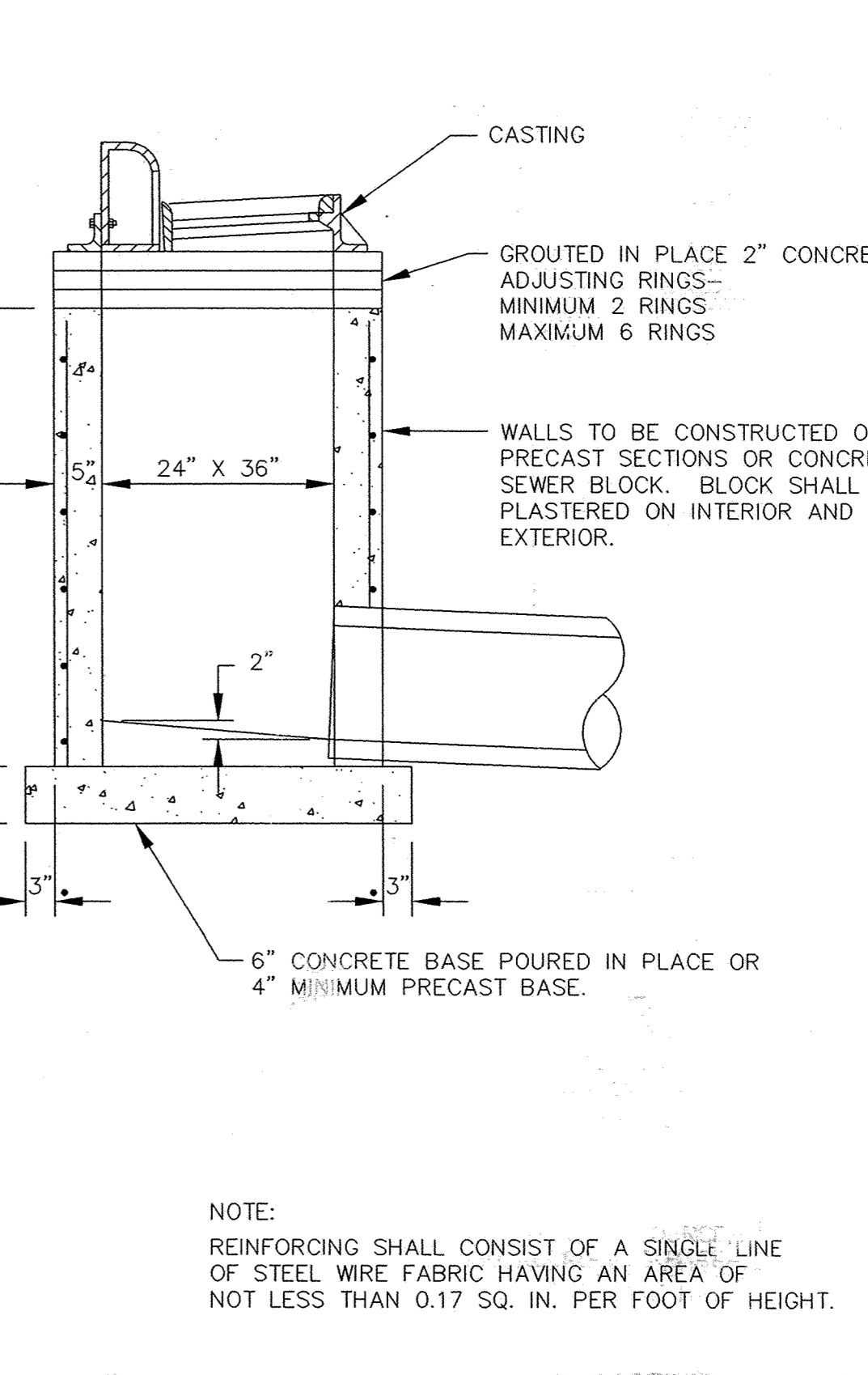
GRATE CASTING



STANDARD INLET CASTING



STANDARD INLET CASTING



SHALLOW CATCH BASIN

DESIGNED BY: --- DRAWN BY: ---  
APPROVED: --- JOB NUMBER ---  
CAD DATE: April 14, 1999 11:14:59 a.m.  
CAD FILE: 230000m\ER-SM.DWG

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.

DATE \_\_\_\_\_ REG. NO. \_\_\_\_\_

NO.	DATE	BY	REVISION DESCRIPTION

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

**Howard R. Green Company**  
CONSULTING ENGINEERS

CITY OF ELK RIVER  
TROTT BROOK FARMS 12TH ADDITION  
STORM SEWER DETAILS

SHEET NO.  
**9**  
OF  
**10**

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