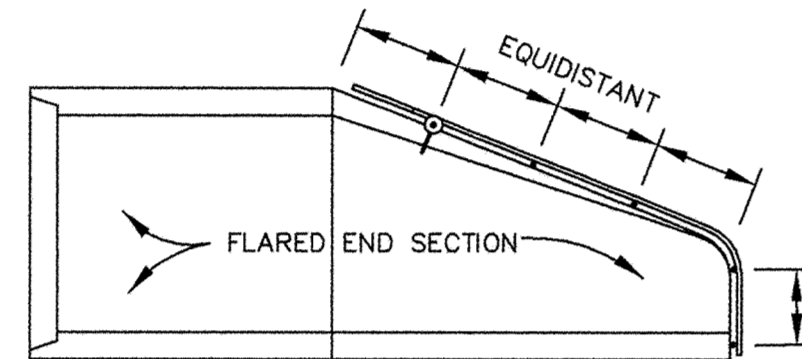
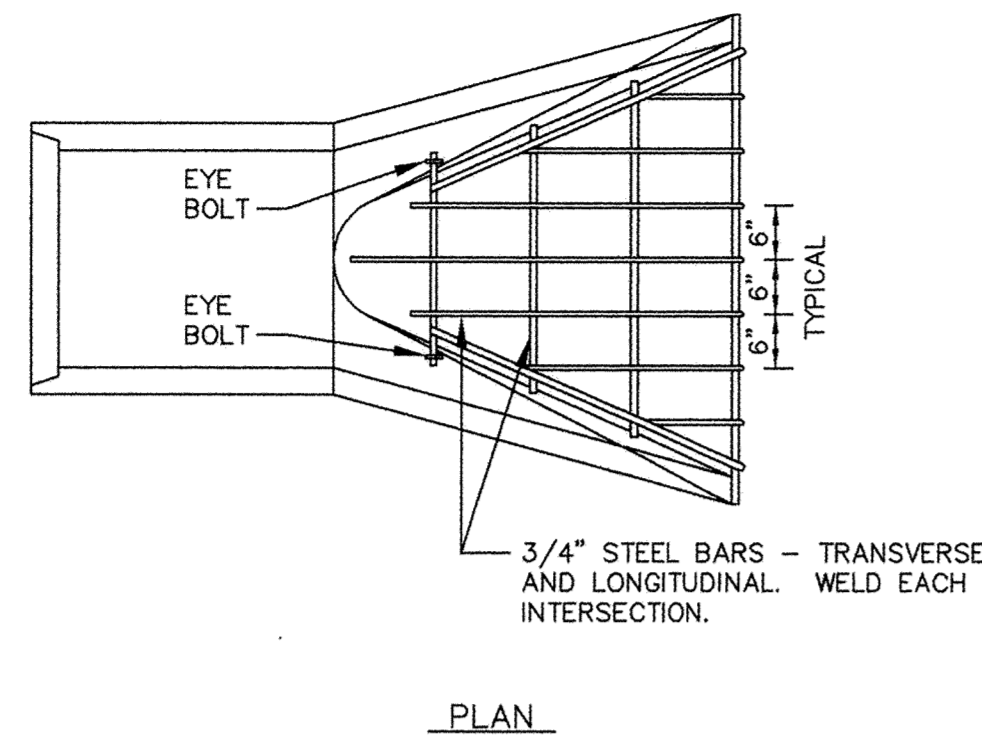


THE BOTTOM OF THE TRENCH SHALL BE SHAPED TO FIT THE PIPE BARREL FOR AT LEAST 50% OF THE OUTSIDE DIAMETER. THE REMAINDER OF THE PIPE IS SURROUNDED TO A HEIGHT OF AT LEAST 6" ABOVE ITS TOP BY SELECT FILL MATERIALS, PLACED BY HAND TOOLS AND COMPACTED TO COMPLETELY FILL ALL SPACES UNDER AND ADJACENT TO THE PIPE.

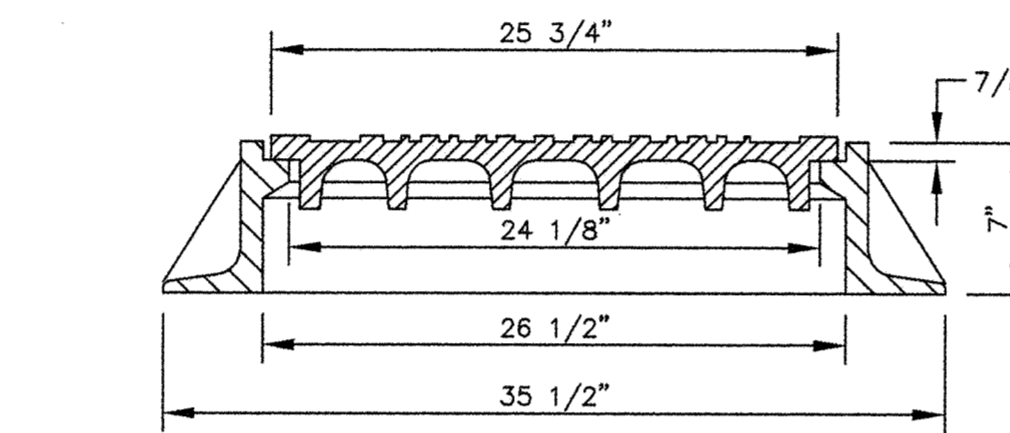
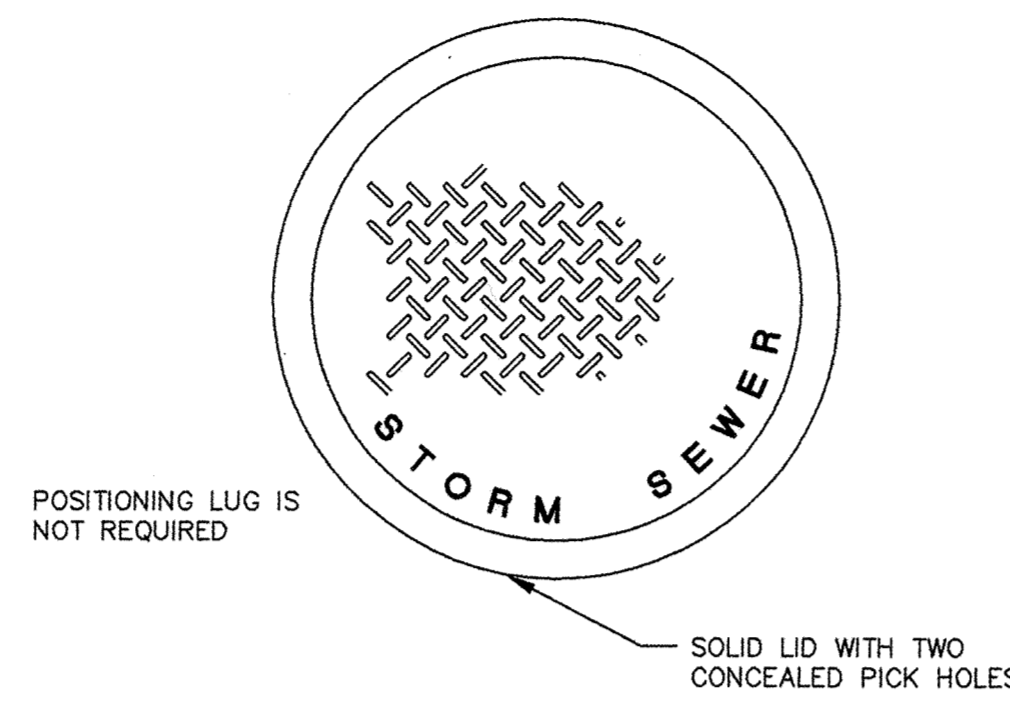
NOTE: ALL COSTS OF EXCAVATION BELOW GRADE AND PLACEMENT OF GRANULAR BEDDING SHALL BE INCLUDED IN THE BID PRICES FOR PIPE ITEMS.

CLASS C PIPE BEDDING



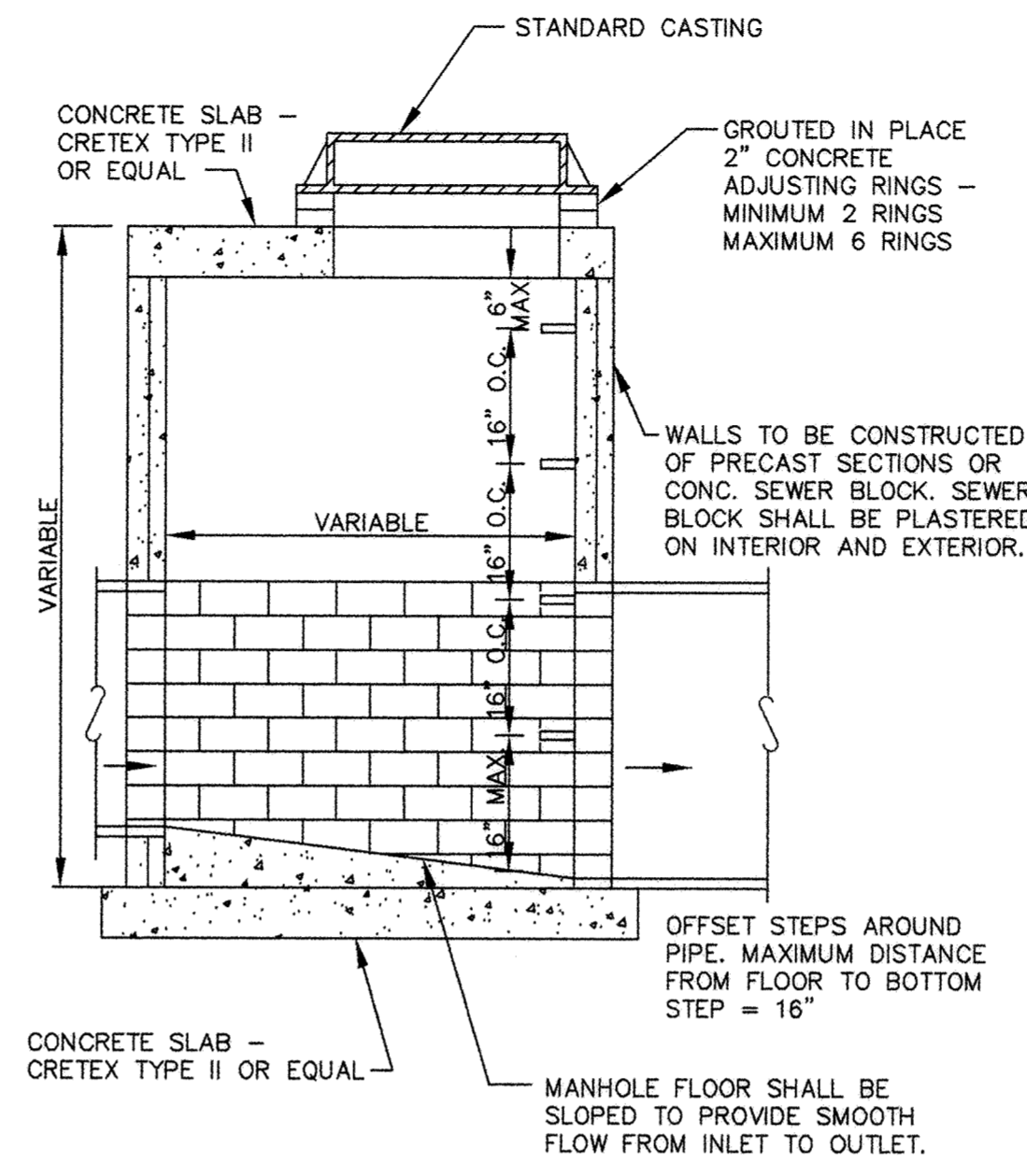
ELEVATION

TRASH GUARD



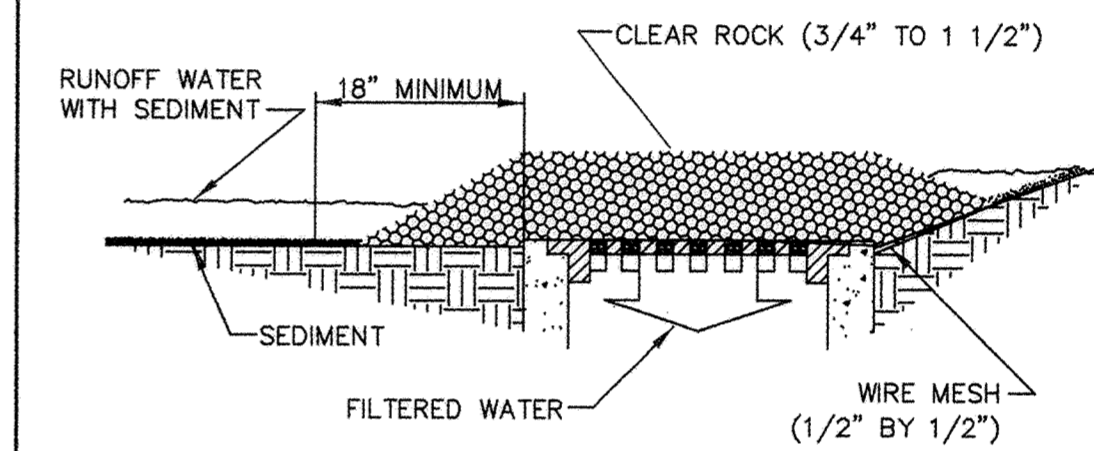
CASTING SHALL BE NEENAH R-1733 OR EQUAL

STANDARD MANHOLE CASTING

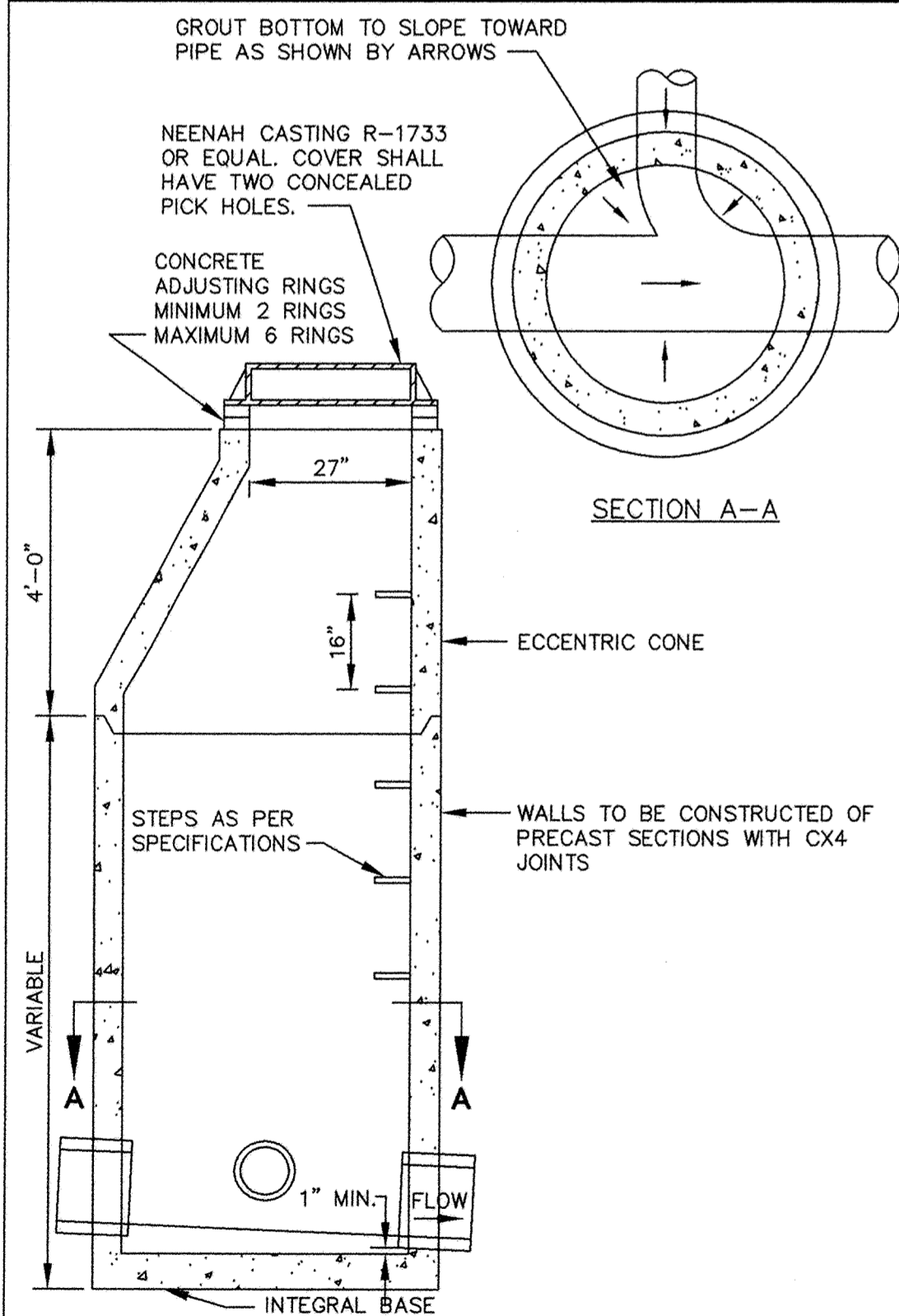


NOTE: THIS TYPE MANHOLE SHALL BE USED WHEN SPECIFIED OR WHEN THE MANHOLE DEPTH IS LESS THAN EIGHT FEET.

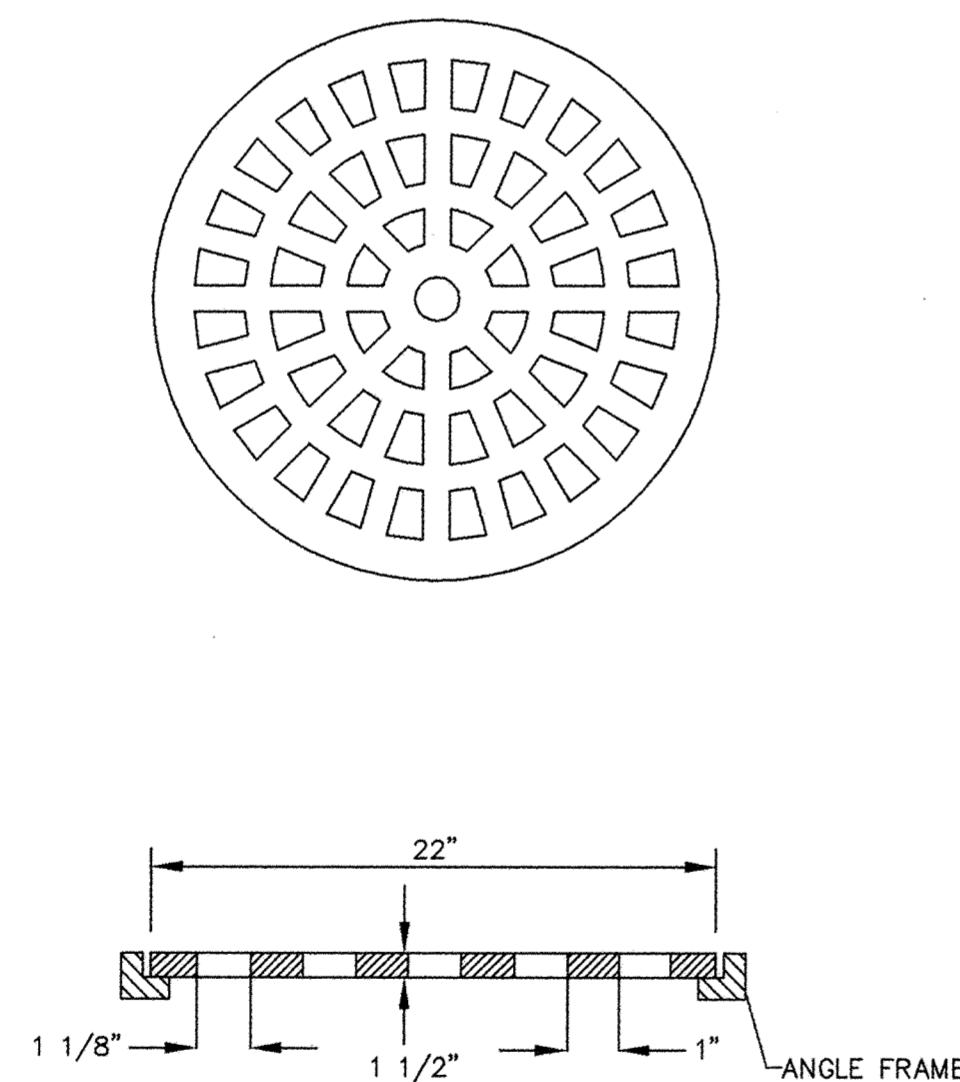
SLAB TOP MANHOLE



CATCH BASIN SEDIMENTATION BARRIER

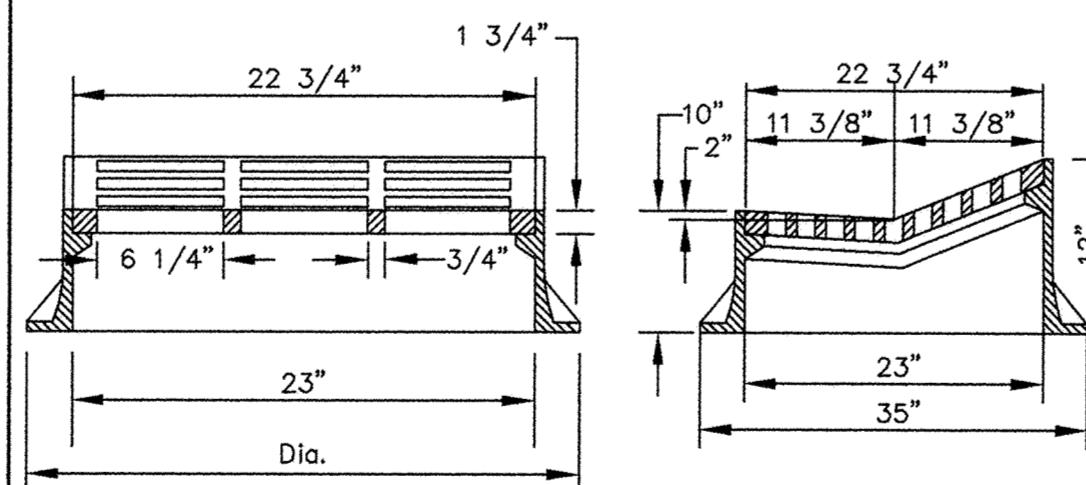
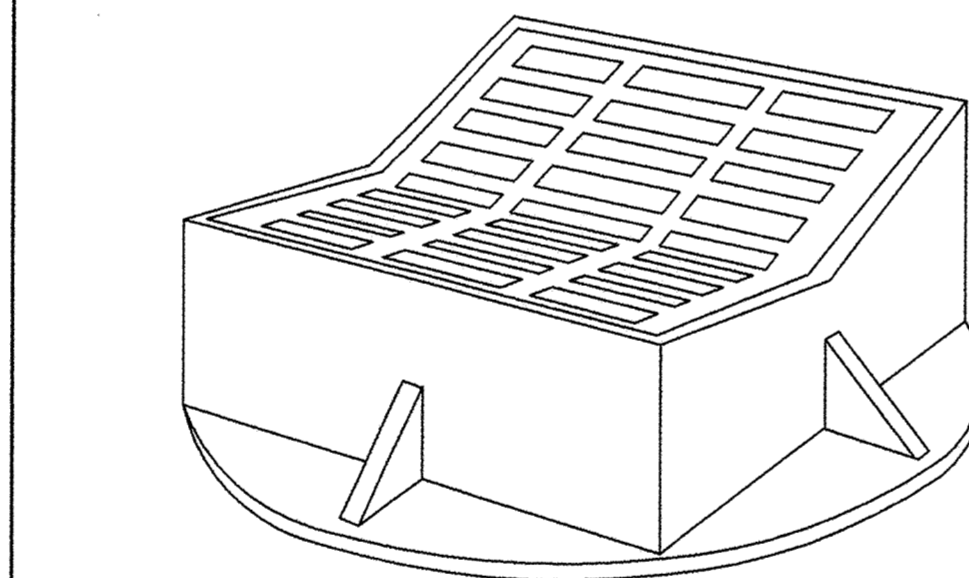


STANDARD MANHOLE



CASTING SHALL BE NEENAH R-4370 TYPE C OR EQUAL

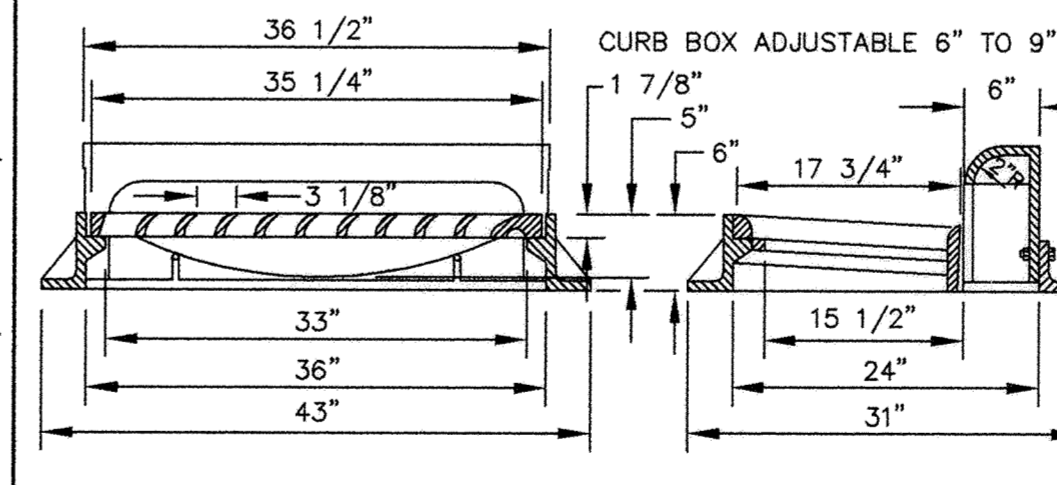
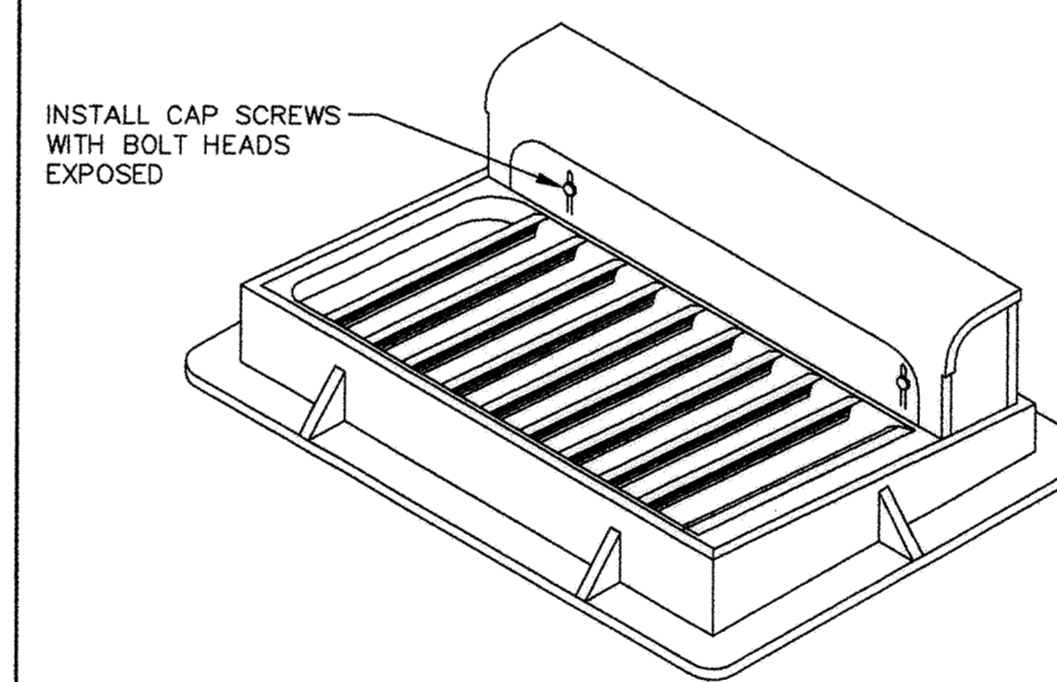
GRATE CASTING



CASTINGS SHALL BE NEENAH R-3508-A2 OR EQUAL

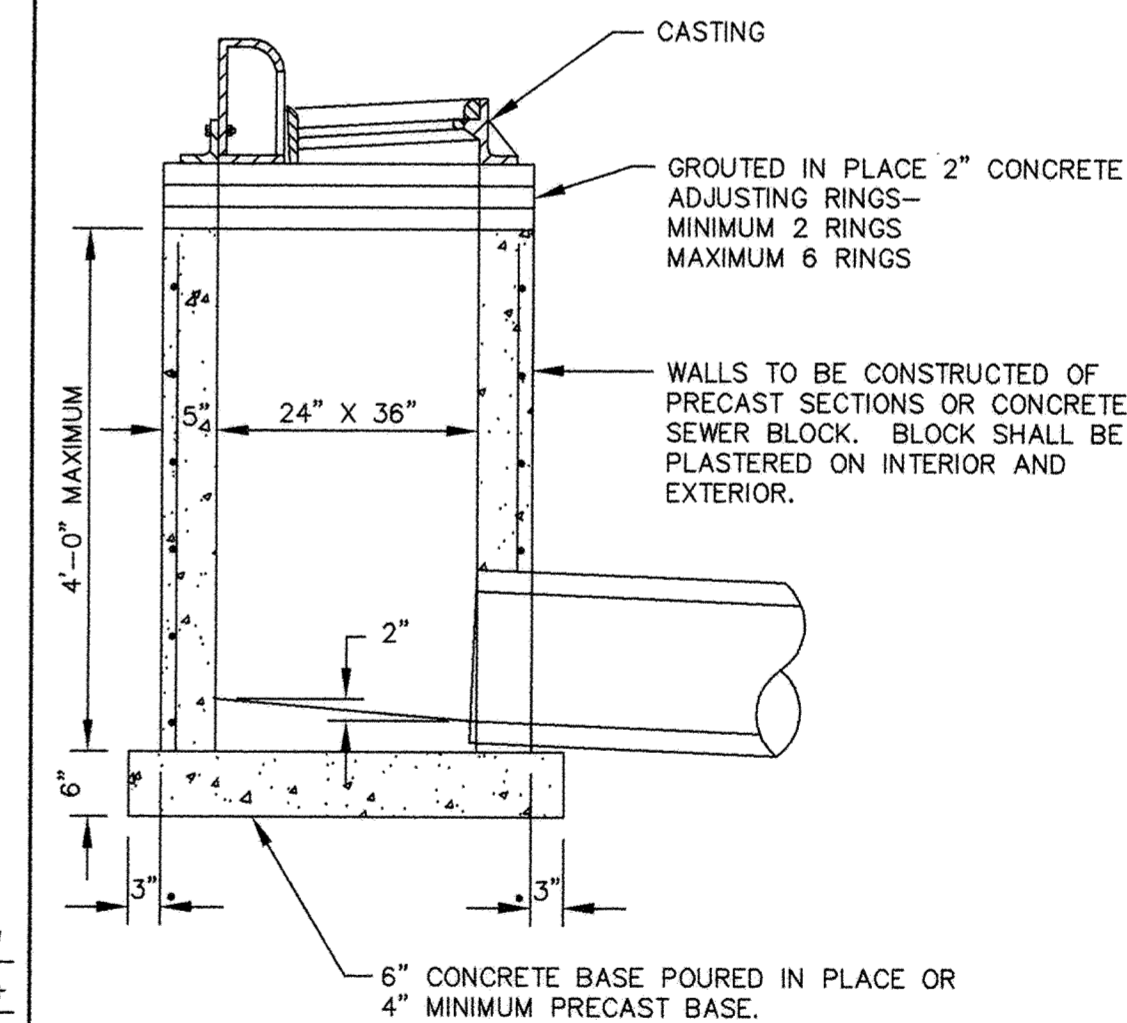
NOTE: THIS TYPE INLET CASTING SHALL BE USED WHEN SPECIFIED.

STANDARD INLET CASTING



CASTINGS SHALL BE NEENAH R-3067-V OR EQUAL

STANDARD INLET CASTING



NOTE: REINFORCING SHALL CONSIST OF A SINGLE LINE OF STEEL WIRE FABRIC HAVING AN AREA OF NOT LESS THAN 0.17 SQ. IN. PER FOOT OF HEIGHT.

SHALLOW CATCH BASIN

DRAWN	EY	DATE	11/18/05
CHECKED	NA	SCALE	NA
PROJECT	NA	CITY	NA
APPROVED			

**STORM SEWER DETAILS**  
**HILLSIDE ESTATES 10TH ADDITION**  
 CITY OF ELK RIVER, MINNESOTA

OWNER/DEVELOPER  
**RIVERSIDE COMPANIES**  
 19230 EVANS STREET, SUITE 115  
 ELK RIVER, MINNESOTA  
 PHONE: 763-241-1801

DATE	BY	REVISIONS
04/10/07	EY	AS-BUILT PER CITY

**D3**

RECORD PLAN  
2006