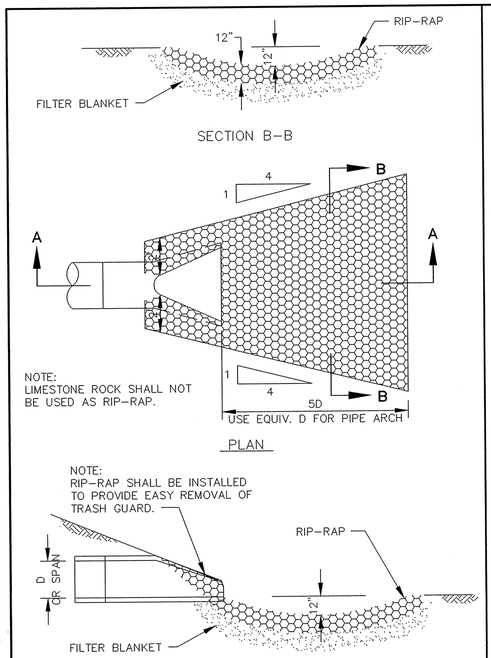
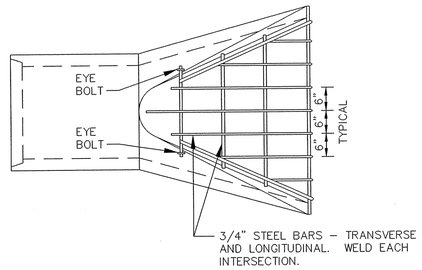
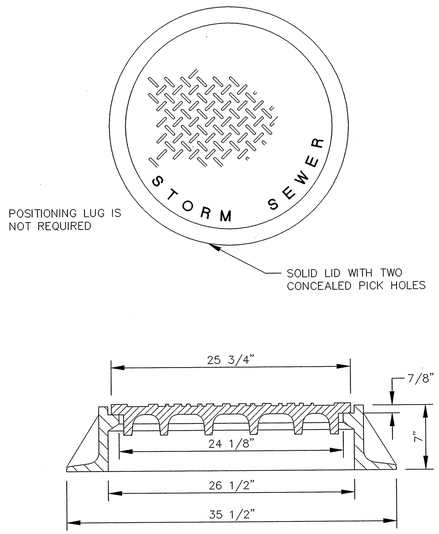


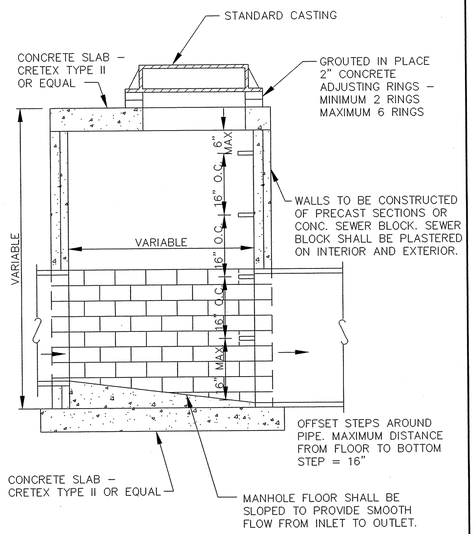
RIP-RAP INSTALLATION



TRASH GUARD



STANDARD MANHOLE CASTING



NOTE:

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

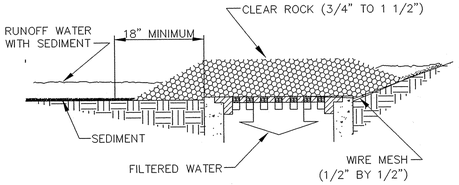
SLAB TOP MANHOLE

Westwood
Westwood Professional Services, Inc
104 Marty Drive, Suite 3
Buffalo, MN 55313
612 682-2587

PREPARED FOR:
D.R. Horton, INC.
3459 Washington Drive
Suite 204
Eagan, Minnesota 55122

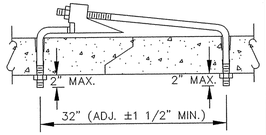
CONTRACTOR: RYAN CONTRACTING, INC.

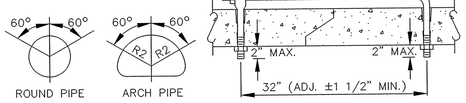
RECORD DRAWING
CONFORMING TO CONSTRUCTION RECORDS.
BY S. HUTTNER DATE 7/20/01
WESTWOOD PROFESSIONAL SERVICES

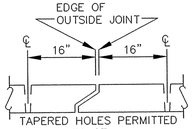


CATCH BASIN SEDIMENTATION BARRIER

PIPE SIZE	THREAD DIAMETER
12 15 18 21 24 27	5/8" ROLLED THREADS (SEE NOTE 4)
30 33 36 42 48 54 60 66	3/4" CUT OR ROLLED
72 78 84 90 96 102 108 120 132	1" CUT OR ROLLED



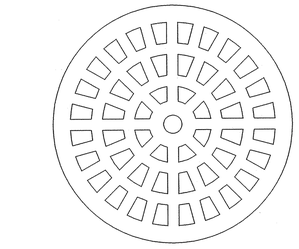




PLACEMENT OF HOLES

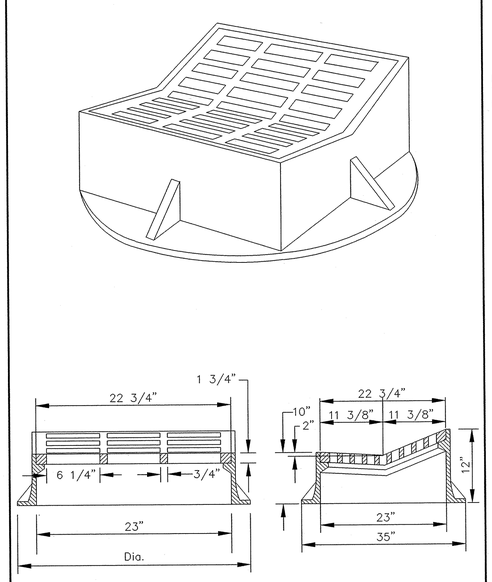
NOTE:
1. HOLES SHALL BE CAST-IN OR DRILLED 16" FROM OUTSIDE EDGE OF JOINT.
2. NUTS AND WASHERS ARE NOT REQUIRED ON INSIDE OF PIPE WITH 27" DIAMETER OR LESS.
3. TIES ARE NOT REQUIRED FOR BELL PIPE 24" AND SMALLER. ON OTHER SIZES, TIE MAY BE INSERTED FROM INSIDE.
4. CUT THREADS MAY BE USED IF WASHER AND NUT ARE USED.
5. PIPE SIZES LISTED ARE INSIDE DIAMETER OF ROUND PIPE OR EQUIVALENT DIAMETER OF PIPE ARCH.

CONCRETE PIPE JOINT TIES



CASTING SHALL BE NEENAH R-4370 TYPE C OR EQUAL

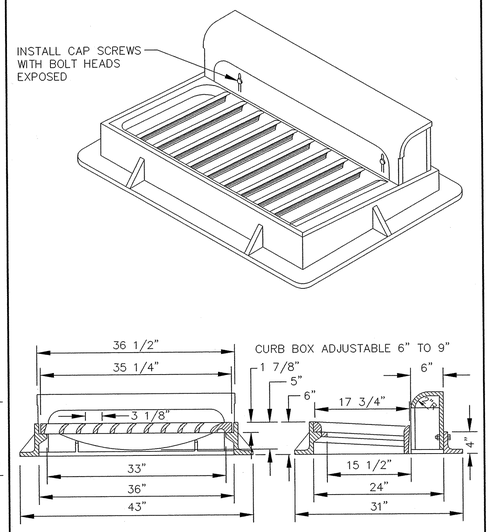
GRATE CASTING



CASTINGS SHALL BE NEENAH R-3508-A2 OR EQUAL

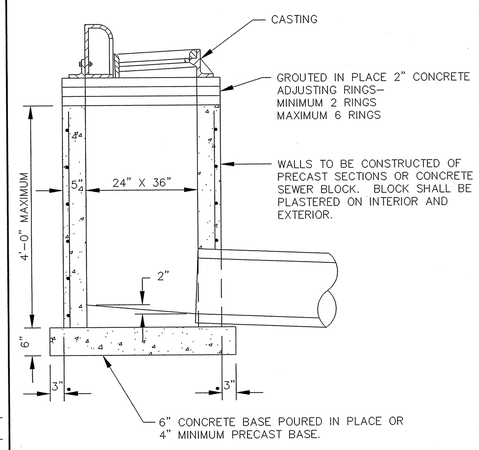
NOTE:
THIS TYPE INLET CASTING SHALL BE USED WHEN SPECIFIED.

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

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
STORM SEWER DETAILS

SHEET NO.
30
OF
32

DRAWING NUMBER
TROTT1-4.99
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