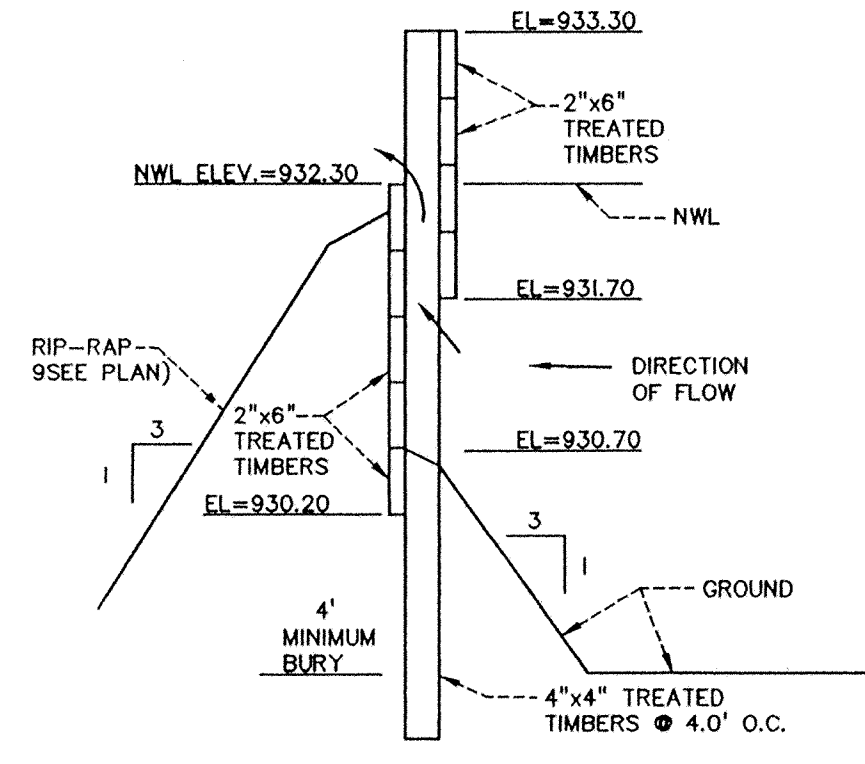
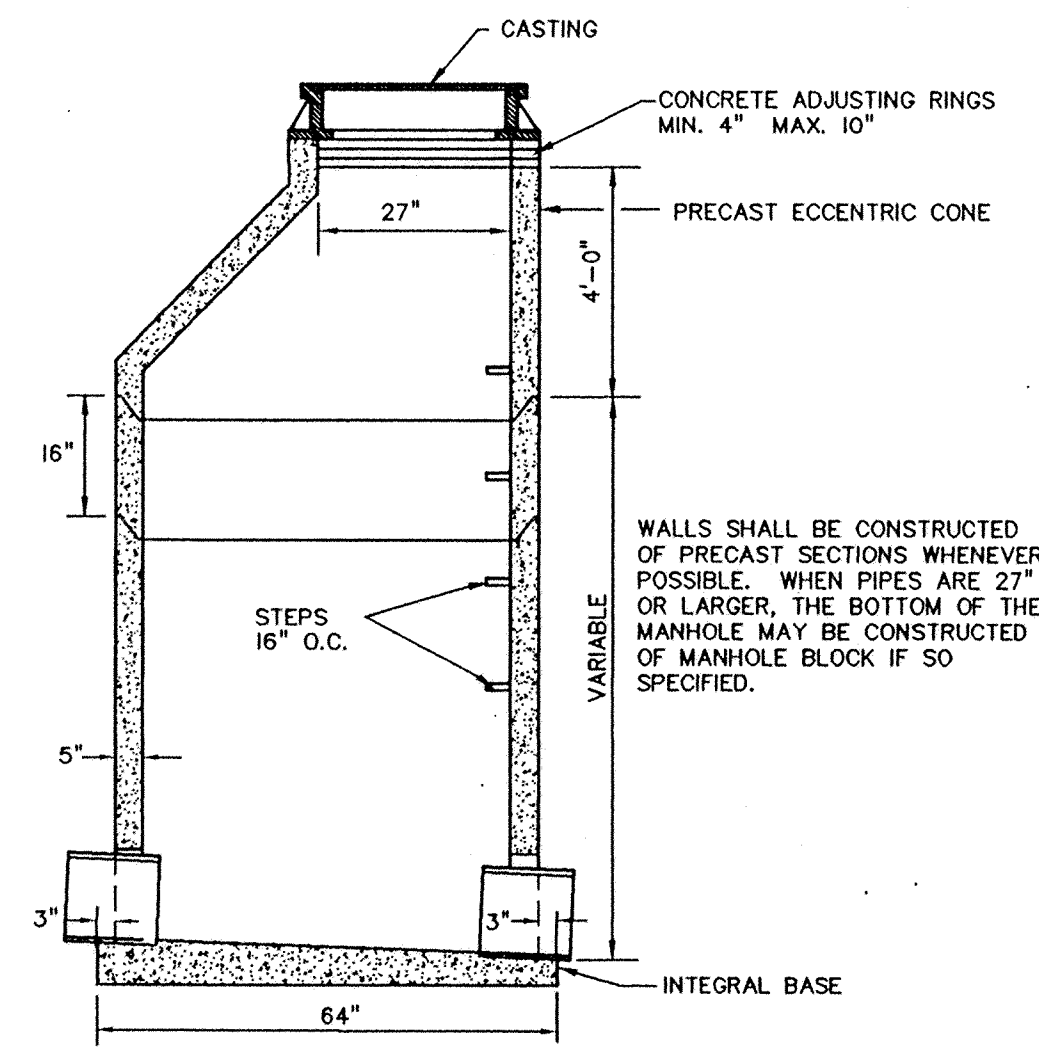


RECORD DRAWINGS

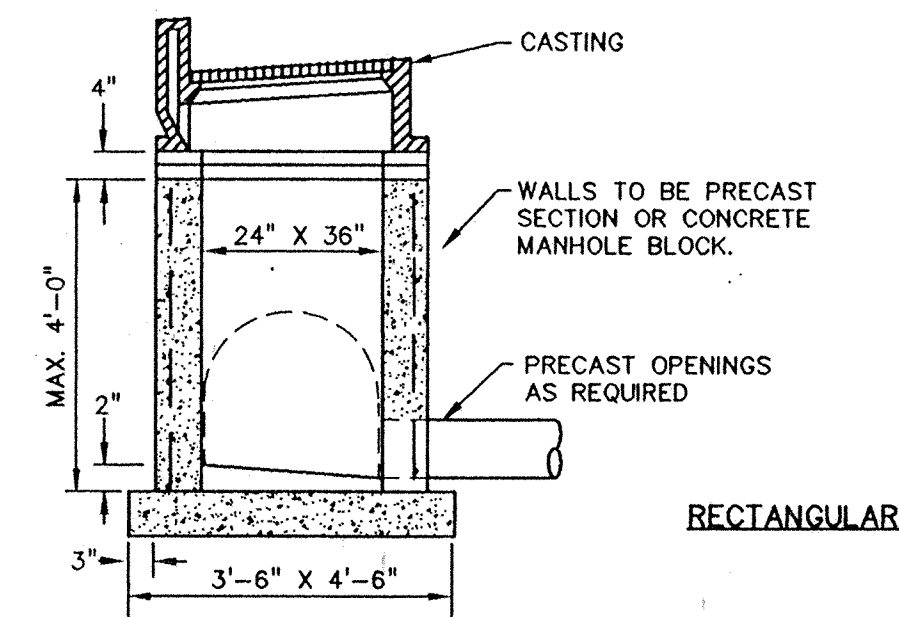


WOODEN SKIMMER

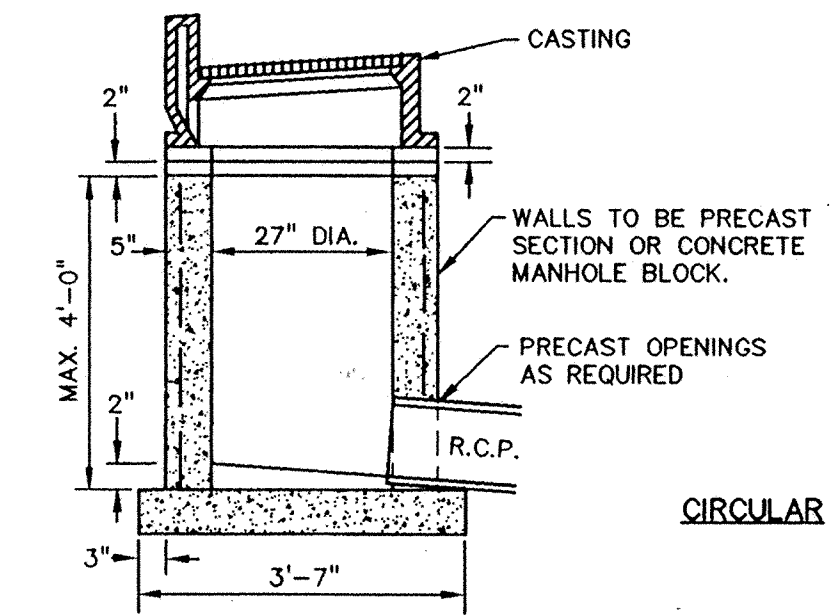


- NOTES:
1. WHEN MANHOLE DEPTH IS LESS THAN 8' OR CASTING IS RECTANGULAR, A SLAB TOP SHALL BE USED IN PLACE OF THE CONE. THE SLAB SHALL BE SUITABLE FOR AASHTO HS 20 HIGHWAY LOADINGS. THE SLAB SHALL BE ON A MORTAR BED.
 2. MANHOLE INVERT SHALL BE SLOPED TO PROVIDE SMOOTH FLOW FROM INLET TO OUTLET.
 3. MANHOLE JOINTS MAY BE MADE WITH CEMENT MORTAR INSIDE AND OUT.

STANDARD STORM SEWER MANHOLE (D-01)

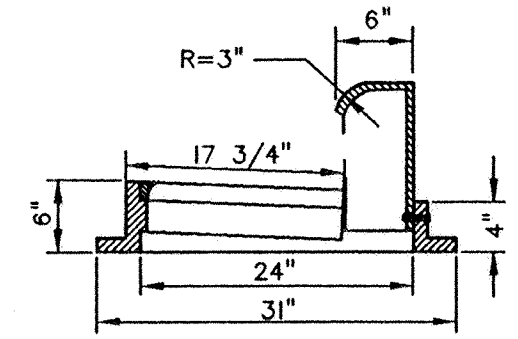
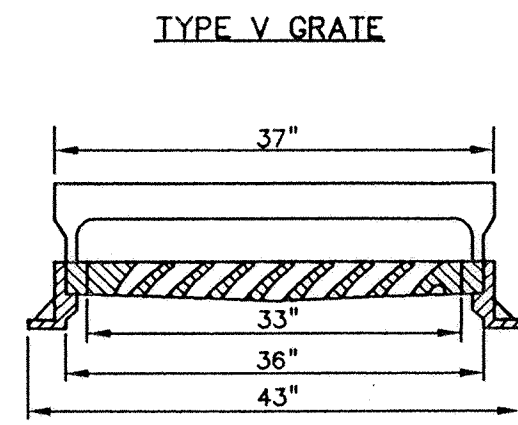
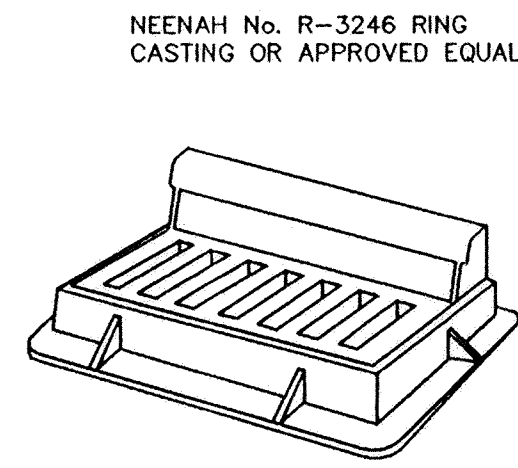


- NOTES:
1. CONCRETE ADJUSTING RINGS, MIN. 4" MAX 10" NO MINIMUM WITH FINAL ADJUSTMENT.
 2. CONCRETE BASE SHALL BE 6" POURED IN PLACE OR 5" PRECAST SLAB.

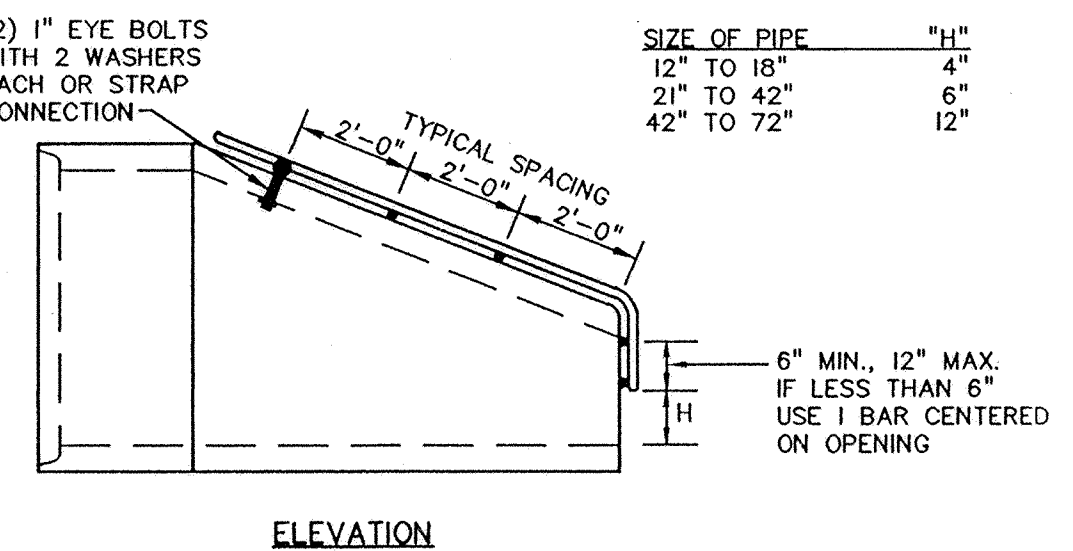
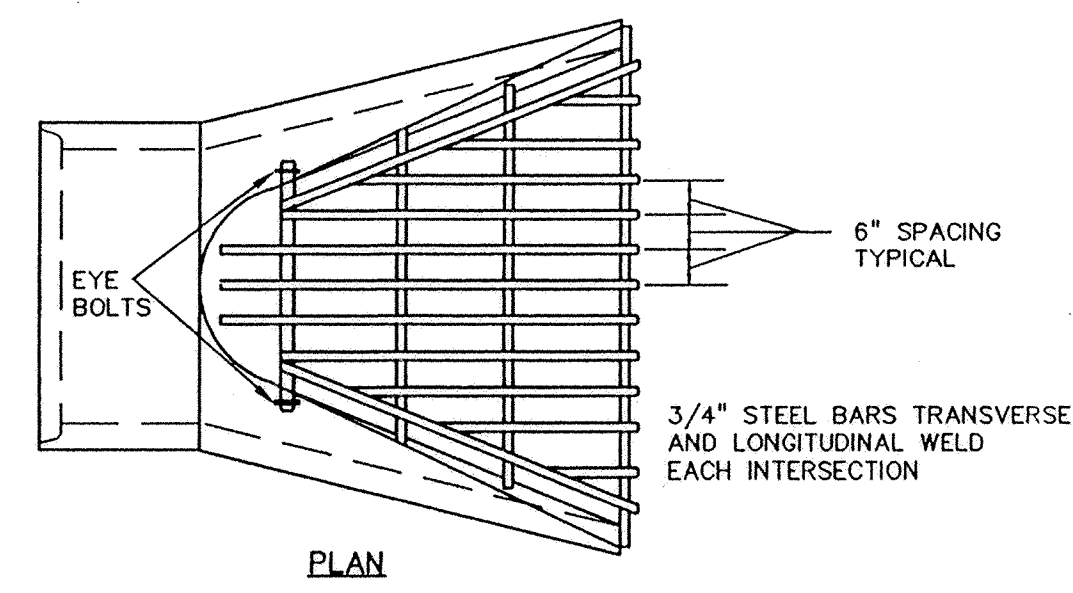


SHALLOW STORM SEWER MANHOLE OR CATCH BASIN (D-03)

PRIME CONTRACTOR/UTILITIES: C.W. HOULE, INC.
 CURB & GUTTER: HALVORSON CONCRETE, INC.
 STREETS: BAUERLY BROS., INC.
 INSPECTION: HOWARD R. GREEN CO.
 SURVEY: JOHN OLIVER & ASSOCIATES, INC.
 EARTHWORK: SOIL-CON, INC.
 RECORD DRAWINGS: FRED FRITSCHEL, JOHN OLIVER & ASSOCIATES, INC.
 CONSTRUCTED: 1998

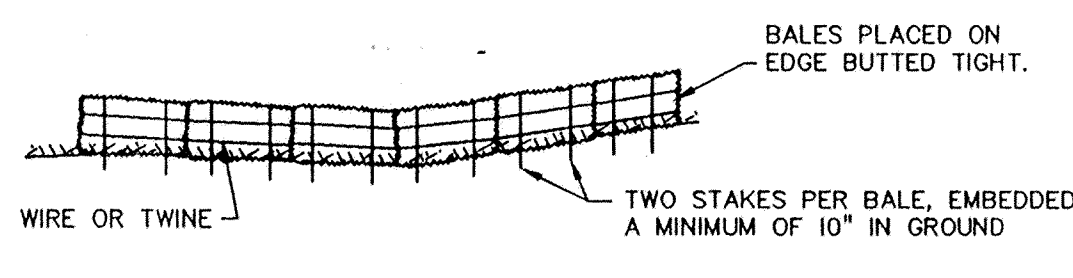


STANDARD INLET CASTINGS (C-03)

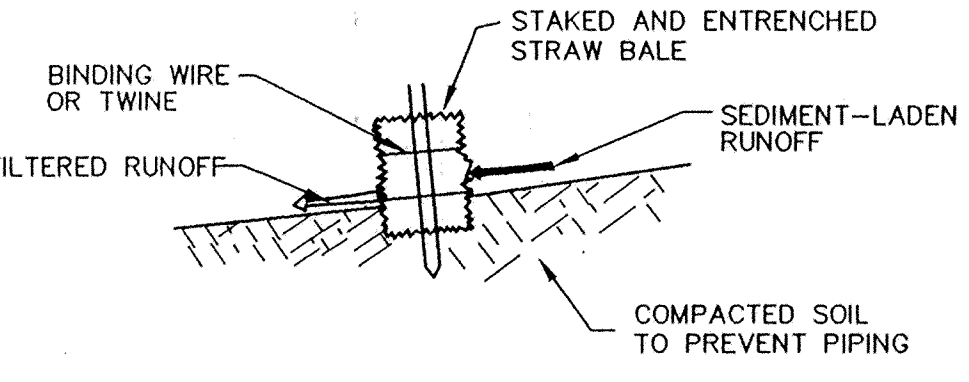


- NOTES:
1. TRASH GUARD TO BE GALVANIZED AFTER FABRICATION.
 2. THE SIZE OF EACH TRASH GUARD WILL VARY TO FIT APRON.
 3. THE LAST 3 PIPE JOINTS SHALL BE TIED.

TRASH GUARD FOR CONCRETE PIPE (D-06)

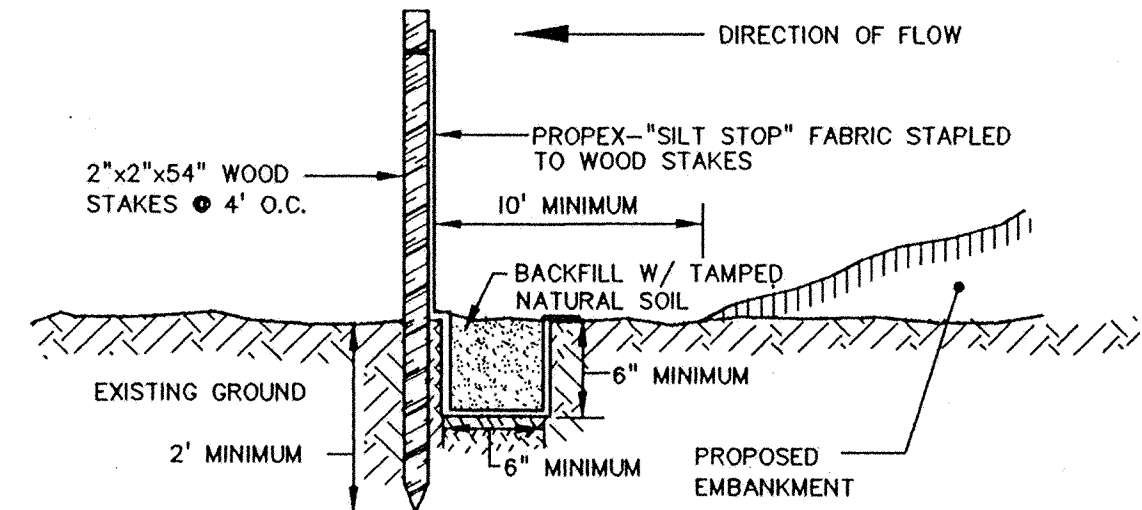


PROPERLY INSTALLED STRAW BALE BARRIER

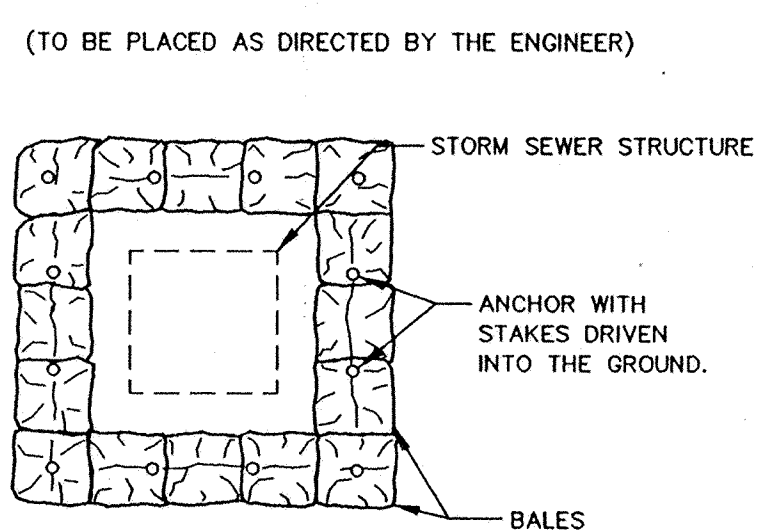


- NOTES:
1. THE BALES SHOULD BE TRENCHED 4" INTO THE GROUND AND SHOULD BE STAKED BY STEEL FENCE POSTS OR 2"x2" WOOD STAKES. THE STAKES SHOULD BE ANGLED TOWARDS THE PREVIOUSLY LAID BALE.
 2. SOIL SHOULD BE COMPACTED ON THE UPSLOPE SIDE OF BALES. LOOSE STRAW SHOULD BE WEDGED BETWEEN THE BALES.

EROSION CONTROL STRAW BALE CHECK DAM (E-01)



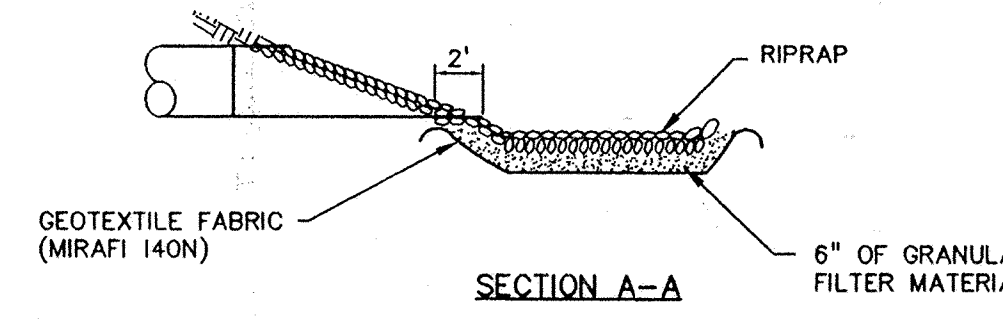
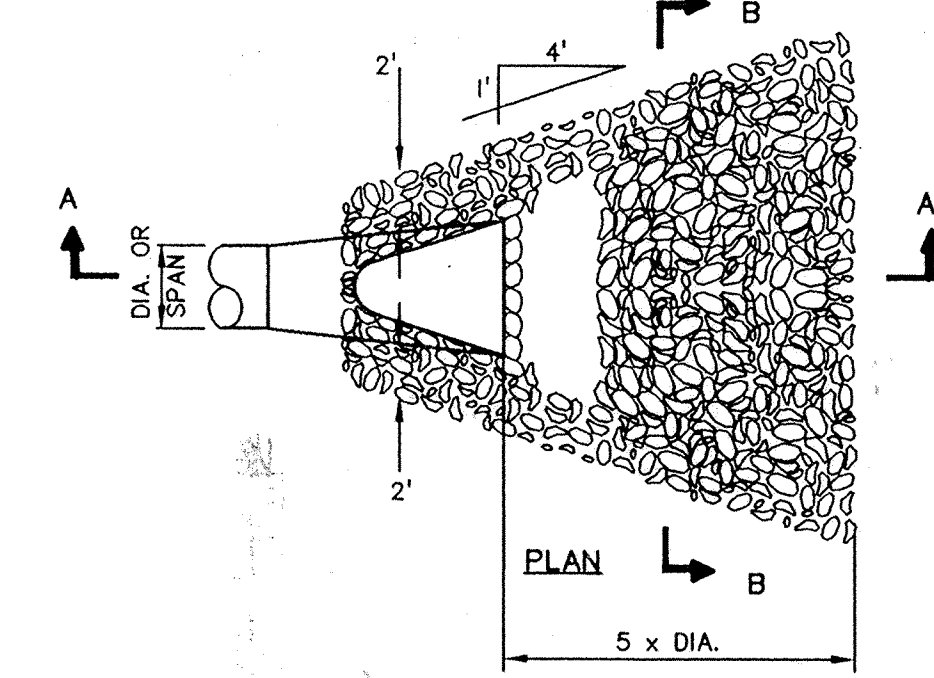
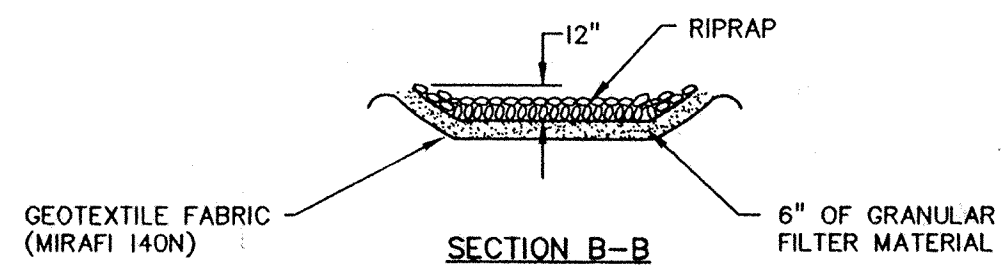
SILT FENCE



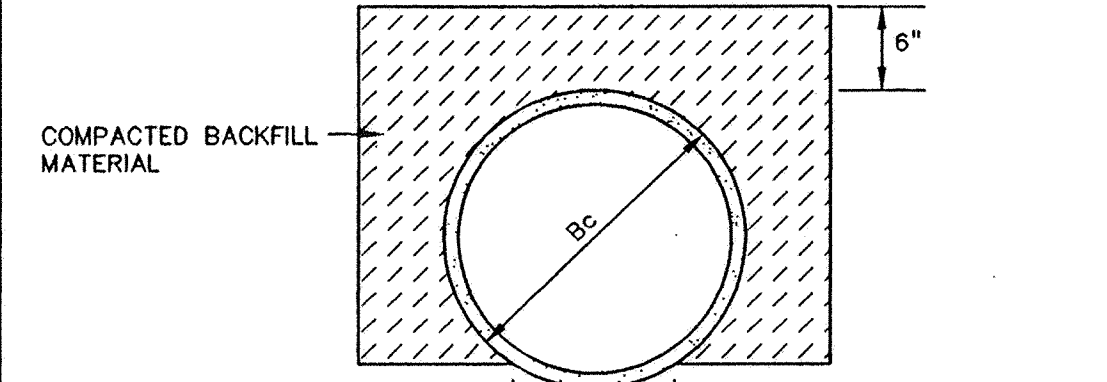
TEMPORARY BARRIER OF SEDIMENT CONTROL BALES TO PREVENT SEDIMENT-LADEN WATER FROM ENTERING INCOMPLETE STORM SEWER SYSTEM.

SUGGESTED PLACEMENT OF SEDIMENT CONTROL BALES

EROSION CONTROL MEASURES (E-02)



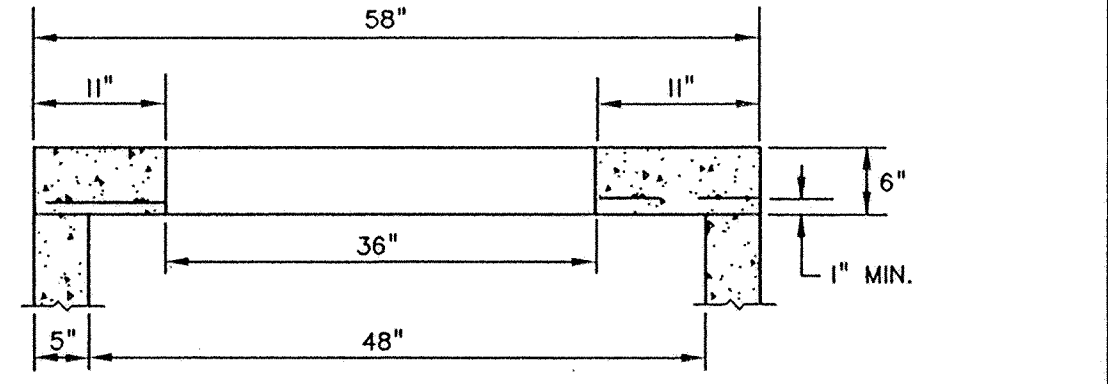
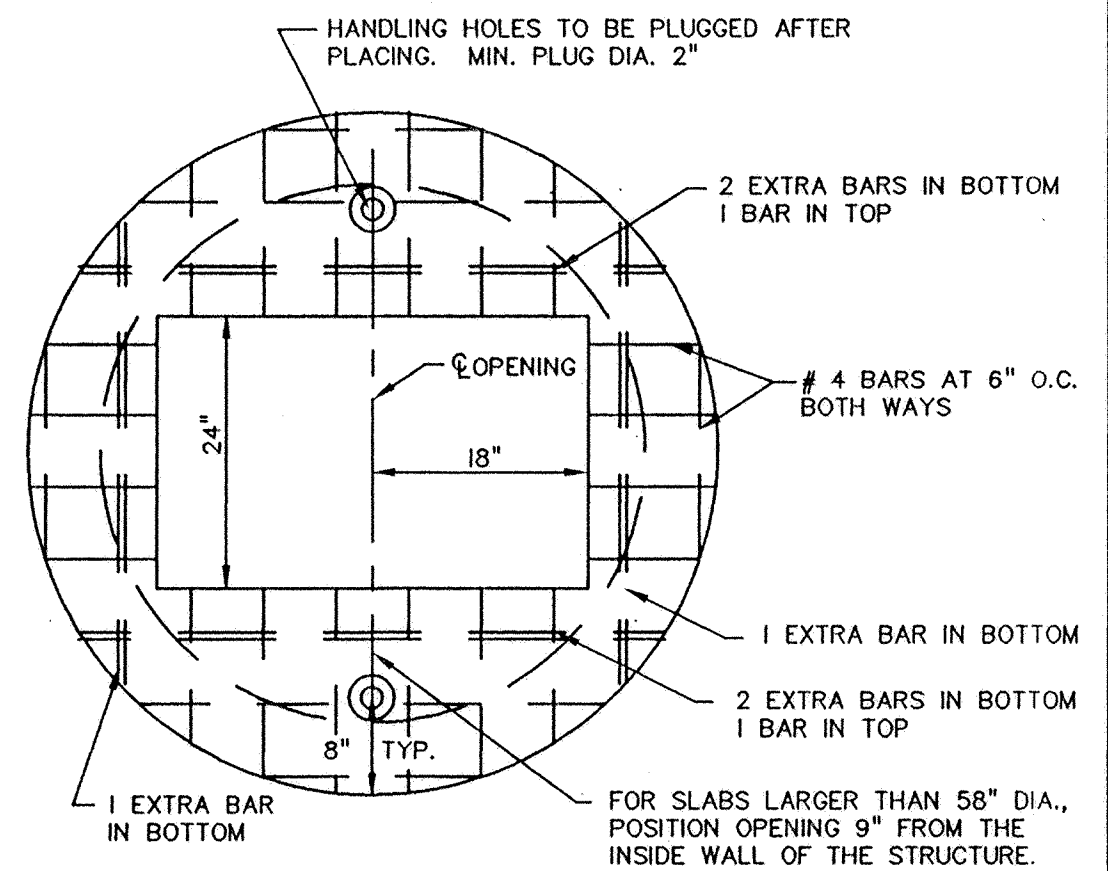
RANDOM RIPRAP (D-10)



REFERENCE:
 CONCRETE PIPE DESIGN MANUAL
 PREPARED BY AMERICAN CONCRETE PIPE INSTITUTE

NOTE:
 FOR ROCK OR OTHER INCOMPRESSIBLE MATERIALS, THE TRENCH SHOULD BE OVER EXCAVATED A MINIMUM OF 6" AND BACKFILLED WITH GRANULAR MATERIAL.

CLASS C CONCRETE PIPE BEDDING (S-10)



NOTE: SLAB SHALL BE DESIGNED FOR AASHTO, H. S. 20 LIVE LOADS.

STANDARD RECTANGULAR MANHOLE SLAB TOP (D-05)

REV. NO.	DATE	DESCRIPTION
1	5/18/99	RECORD DRAWING

DATE:	9/26/97	DESIGN BY:	GD	BC
DRAWN BY:	GD	CHECKED BY:	GD	JB
DWG FILE:	6-PPDET.	TEXT FILE:	NONE	
FILE NO.:	7024-20-03			

I hereby certify that this plan 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.

Signed: *[Signature]* Reg. No. 14960
 Date: 9/26/97

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 Civil Engineering, Land Surveying, Land Planning
 680 Dodge Avenue
 Elk River, Minnesota
 (612)441-2072 (FAX)441-5665
 201 W. Travelers Trail, Suite 200
 Burnsville, MN 55337
 (612)894-3045 (FAX)894-3049

LAFAYETTE WOODS SECOND ADDITION ELK RIVER, MN WINDSOR DEVELOPMENT L.L.P. DETAILS

SHEET NO. 6 OF 9