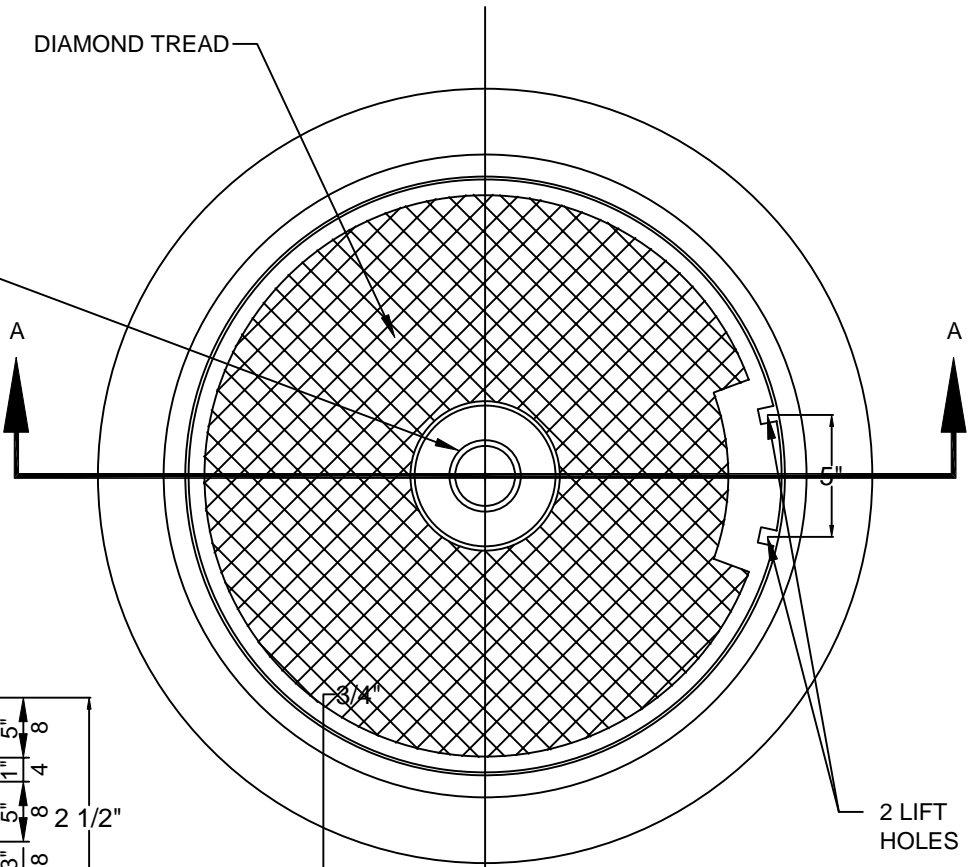


COVER INSERT

DIAMOND TREAD

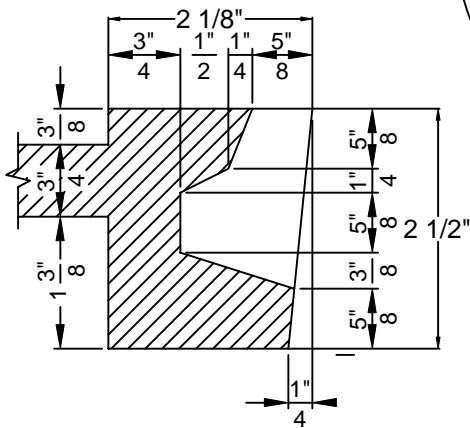
A

A



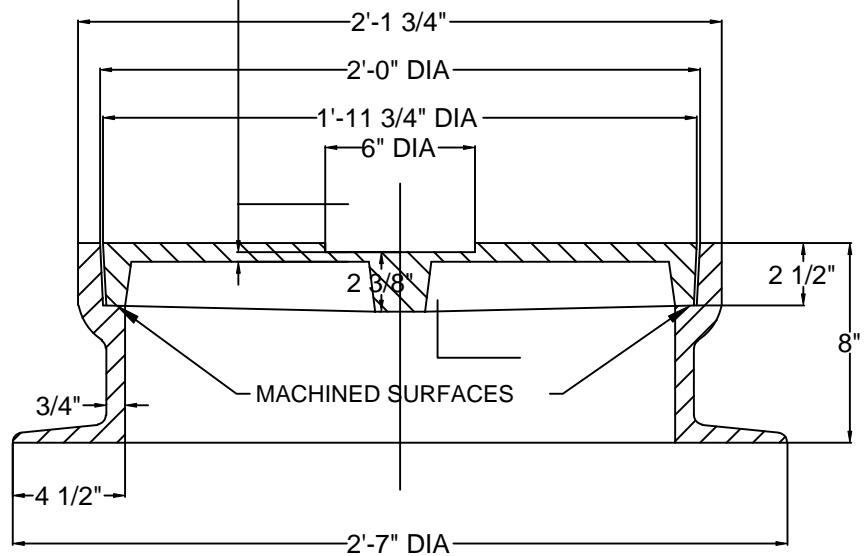
2 LIFT HOLES

PLAN



LIFT HOLE SECTION

**MINIMUM AVG. WEIGHTS**  
**FRAME . . . 210 LBS.**  
**COVER . . . 145 LBS.**  
**TOTAL . . . 355 LBS.**



SECTION A-A

NOTE:

1. BOTH FRAME AND COVER ARE MACHINED ON HORIZONTAL BEARING SURFACES.

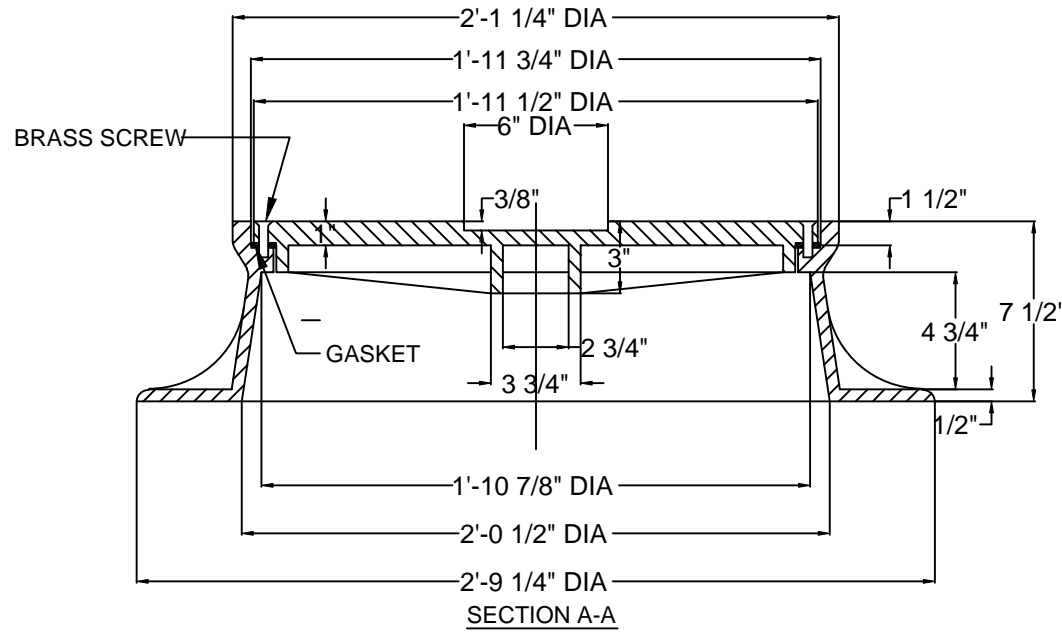
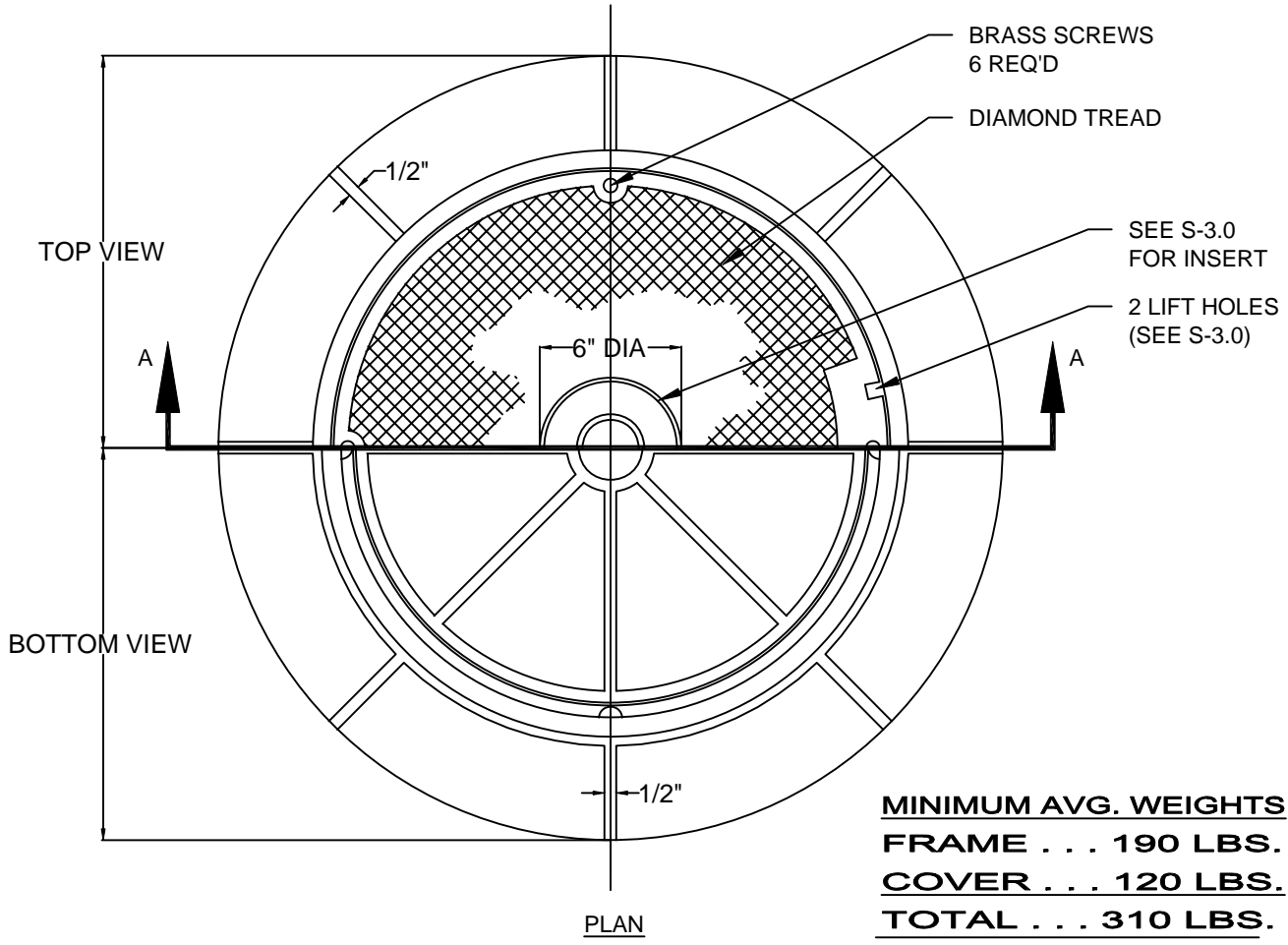
**MANHOLE FRAME AND COVER**  
**24-INCH DIAMETER (MHC-1)**

REVISION & DATE



**ARLINGTON COUNTY, VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL SERVICES**

**DRAWING NO.**  
**S-3.0**



**NOTE:**  
 1. FURNISH 4-3/8" x 2 1/2" BRASS COUNTERSUNK CAP SCREWS  
 AND FLEXIBLE PLASTIC GASKET BETWEEN COVER AND FRAME SEAT.

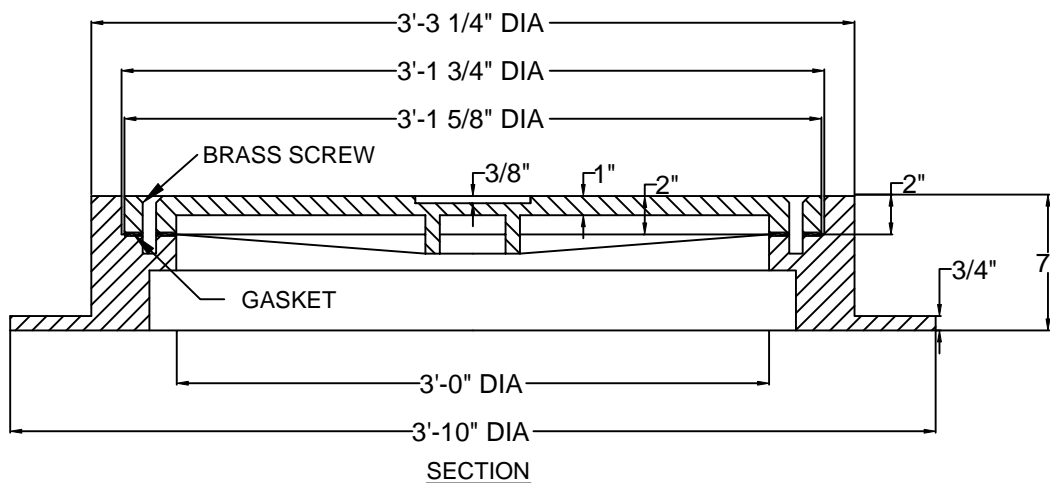
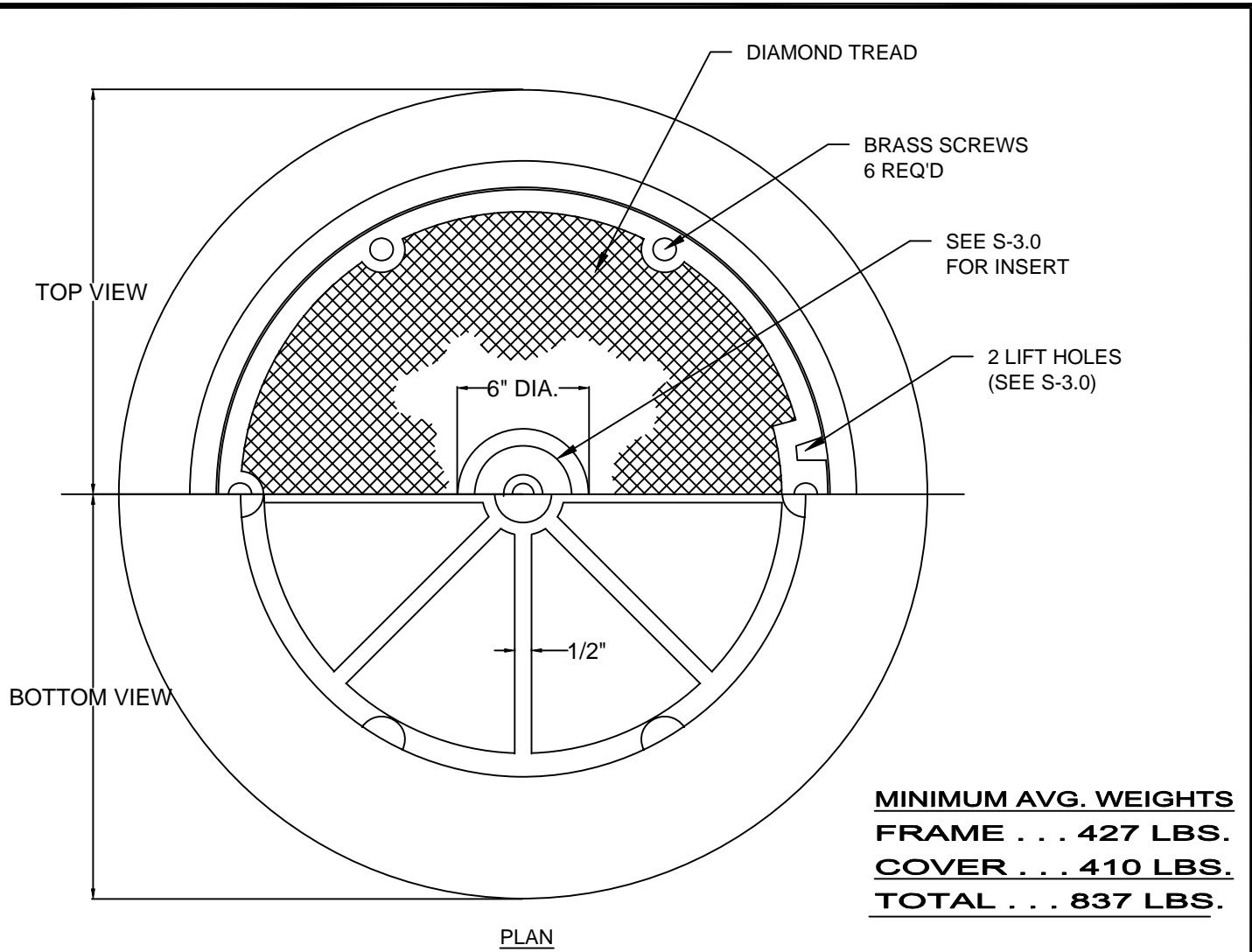
**MANHOLE FRAME AND COVER  
 24-INCH BOLTED (MHC-2)**

REVISION & DATE	



**ARLINGTON COUNTY, VIRGINIA  
 DEPARTMENT OF ENVIRONMENTAL SERVICES**

**DRAWING NO.  
 S-3.1**



NOTE:

1. FURNISH 6-3/8" x 3" BRASS COUNTERSUNK CAP SCREWS AND FLEXIBLE PLASTIC GASKET BETWEEN COVER AND FRAME SEAT.

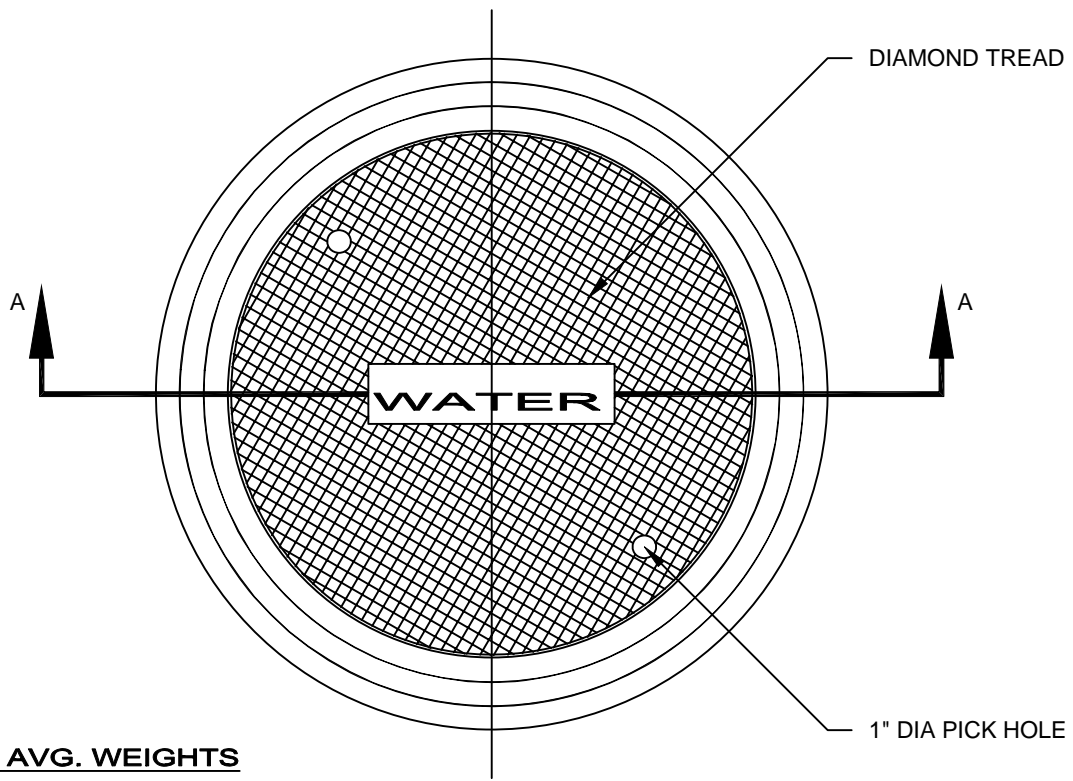
**MANHOLE FRAME AND COVER  
36-INCH BOLTED (MHC-3)**

REVISION & DATE	



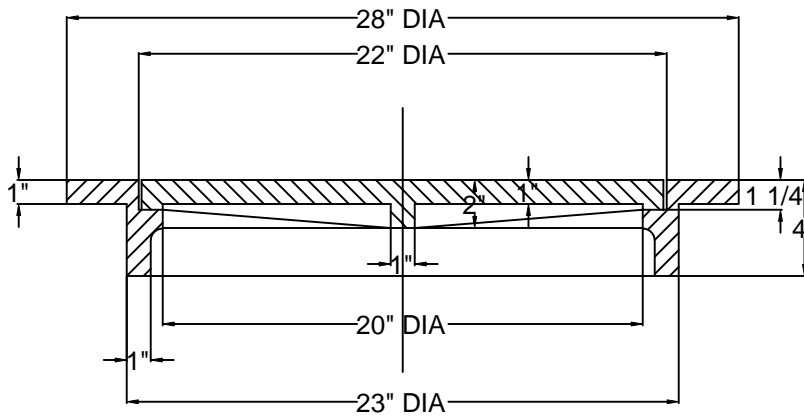
**ARLINGTON COUNTY, VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL SERVICES**

**DRAWING NO.  
S-3.2**



**MINIMUM AVG. WEIGHTS**  
**FRAME . . . 120 LBS.**  
**COVER . . . 95 LBS.**  
**TOTAL . . . 215 LBS.**

PLAN



SECTION A-A

NOTE:

1. FRAME AND COVER ARE GRAY CAST IRON ASTM A-48 CLASS 30 (MIN).

**22"x28" FRAME AND COVER  
 FOR 24" I.D. WATER METER BOX**

REVISION & DATE



**ARLINGTON COUNTY, VIRGINIA**  
 DEPARTMENT OF ENVIRONMENTAL SERVICES

**DRAWING NO.**  
**W-9.7**



COVER INSERT

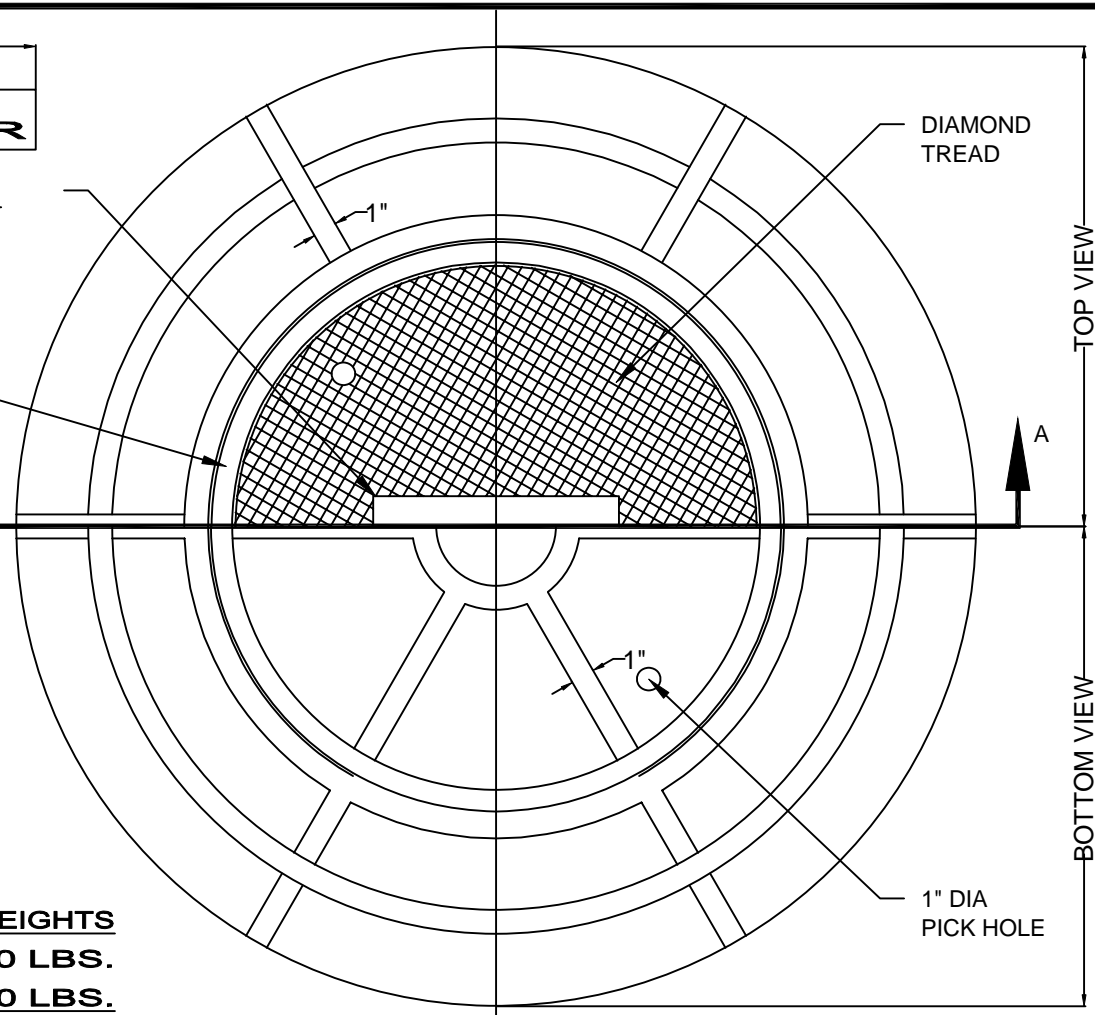
DIAMOND TREAD

1" BORDER

A

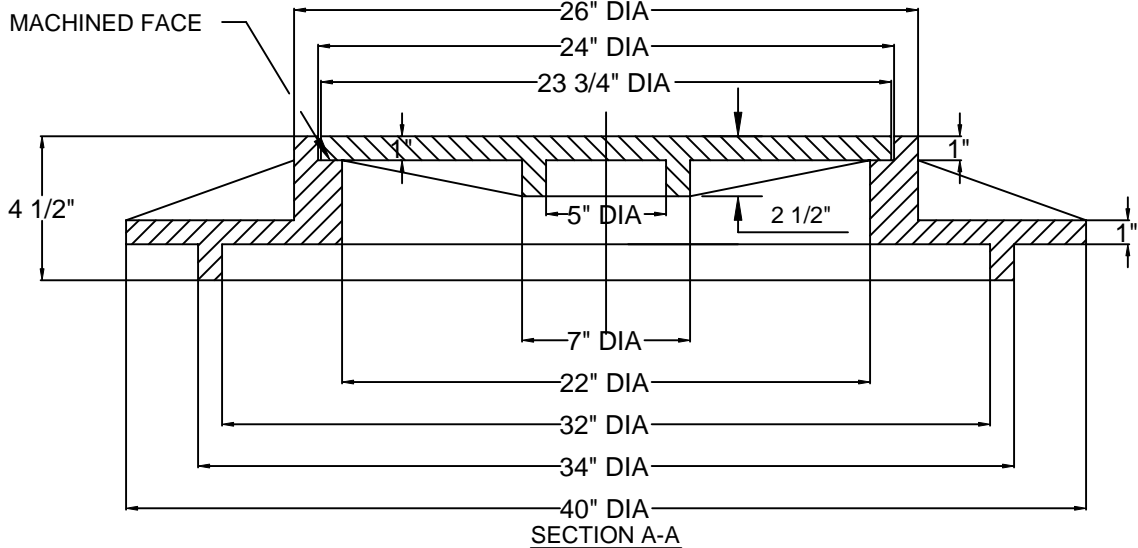
TOP VIEW

BOTTOM VIEW



**MINIMUM AVG. WEIGHTS**  
**FRAME . . . 390 LBS.**  
**COVER . . . 110 LBS.**  
**TOTAL . . . 500 LBS.**

PLAN



SECTION A-A

NOTES:

1. FRAME AND COVER ARE GRAY CAST IRON ASTM A-48 CLASS 30 (MIN).
2. BOTH FRAME AND COVER ARE MACHINED ON HORIZONTAL BEARING SURFACES.

**24"x40" FRAME AND COVER  
 FOR 36" I.D. WATER METER BOX**

REVISION & DATE



**ARLINGTON COUNTY, VIRGINIA**  
**DEPARTMENT OF ENVIRONMENTAL SERVICES**

**DRAWING NO.**  
**W-9.8**

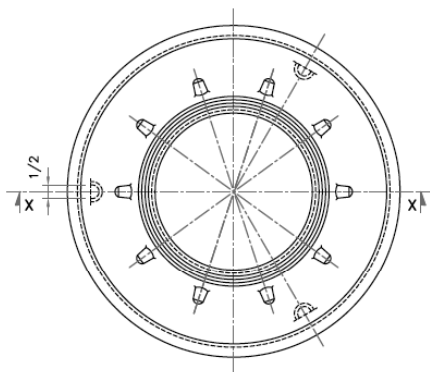
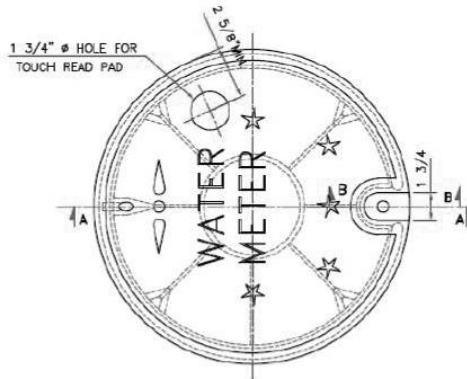
# CAPITOL FOUNDRY OF VA, INC.

2856 CRUSADER CIRCLE  
VIRGINIA BEACH, VA 23453

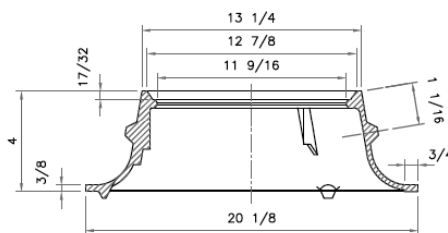
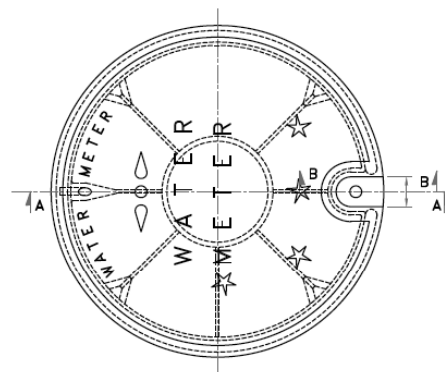
PHONE: (757) 427-9431

FAX: (757) 427-9308

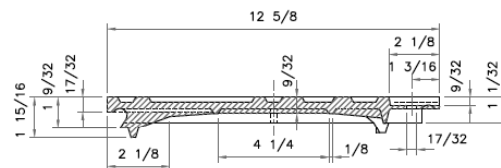
www.capitolfoundry.net



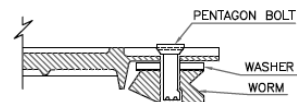
PLAN (FRAME)



SECTION XX



SECTION AA

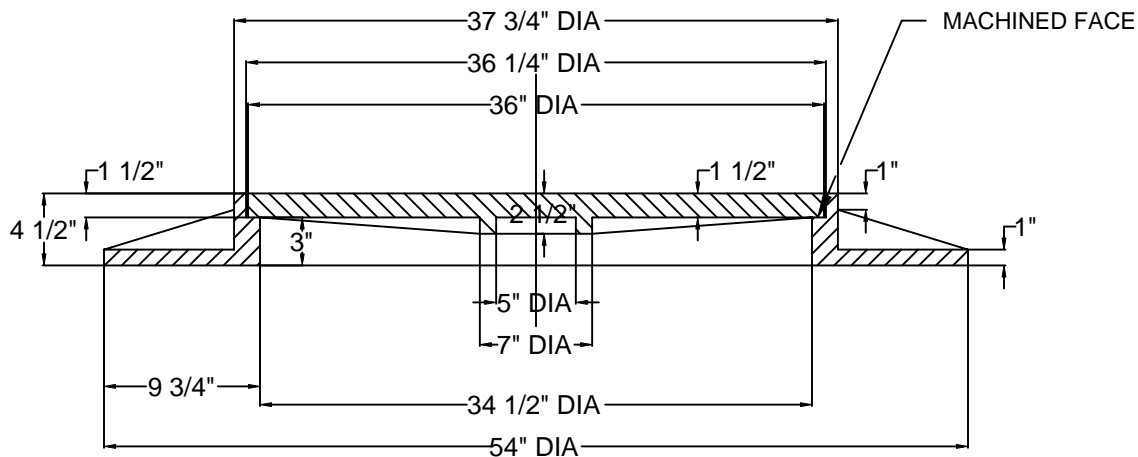
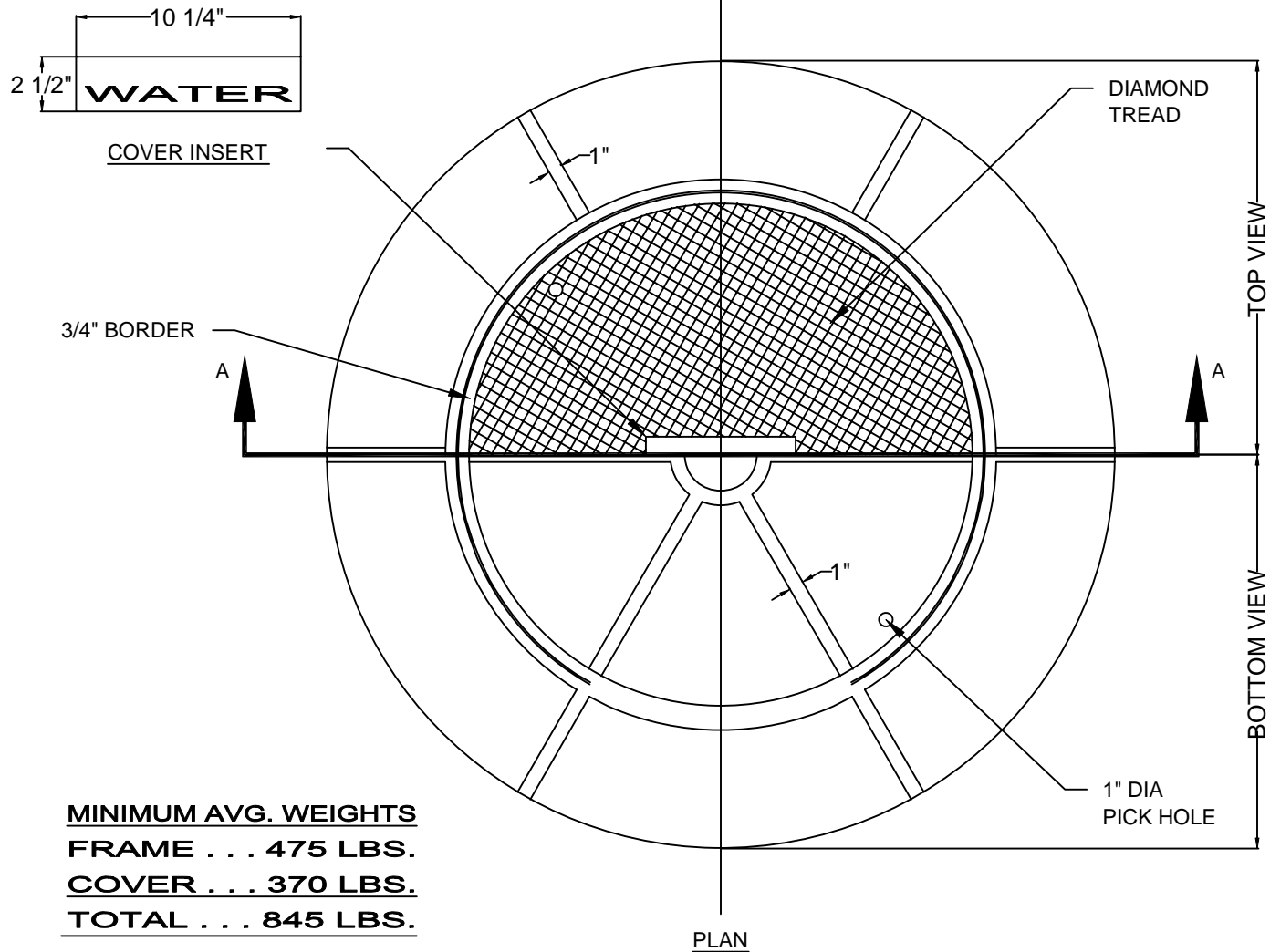


SECTION BB

## BALTIMORE SPIKED METER BOX FRAME & LID

ASTM A-48 CLASS 35B / AASHTO M-105

ITEM # MBX-3437\*



**NOTES:**

1. FRAME AND COVER ARE GRAY CAST IRON ASTM A-48 CLASS 30 (MIN).
2. BOTH FRAME AND COVER ARE MACHINED ON HORIZONTAL BEARING SURFACES.

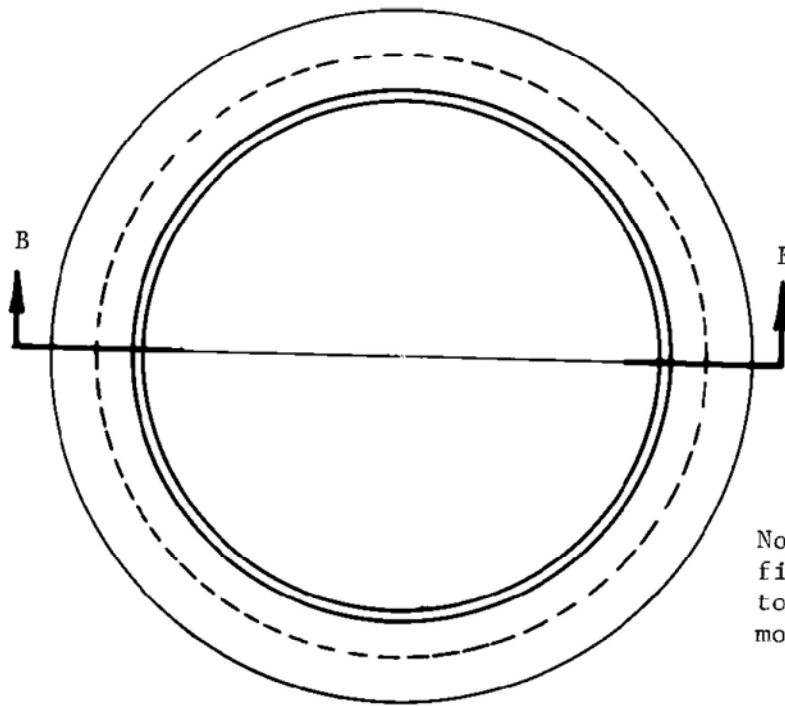
**36"x54" FRAME AND COVER  
FOR CONCRETE WATER METER VAULT**

REVISION & DATE

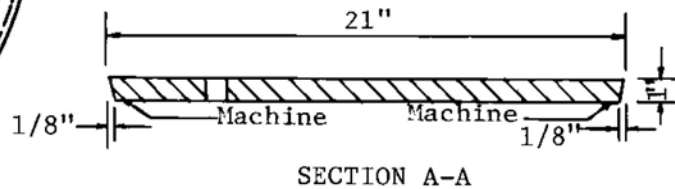
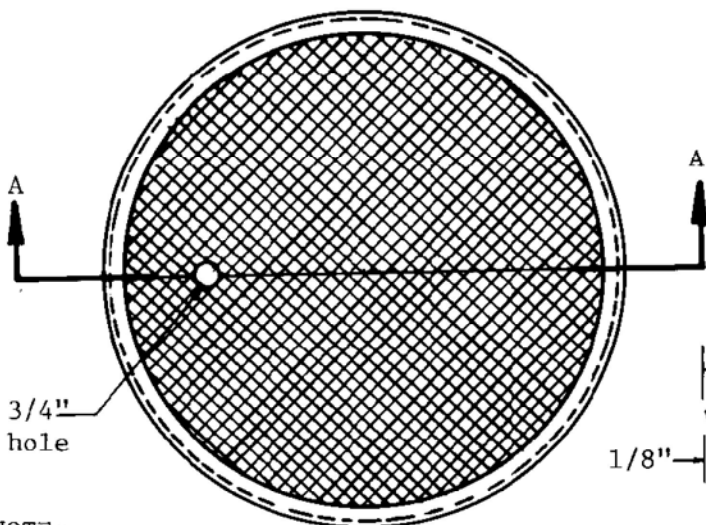
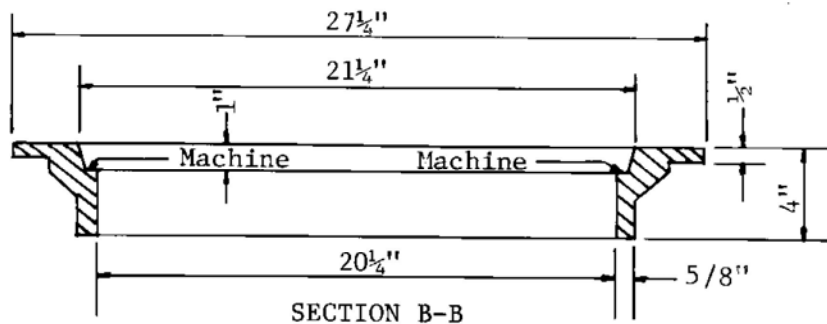


**ARLINGTON COUNTY, VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL SERVICES**

**DRAWING NO.  
W-9.9**



Note: Cover must be set firmly within frame to prevent rocking movement.



NOTE:  
This frame and cover available as Temple Foundry pattern #1235 or equal.

### CATCH BASIN FRAME AND COVER

REVISION & DATE

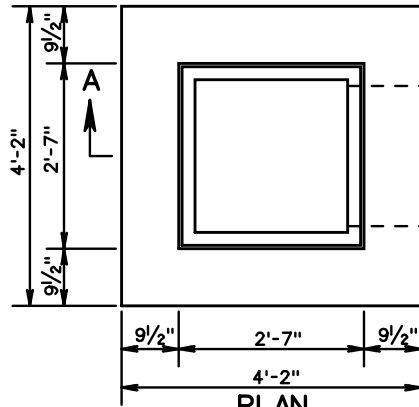


ARLINGTON COUNTY, VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL SERVICES

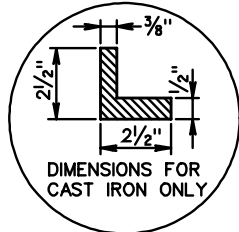
DRAWING NO.  
D-1.13



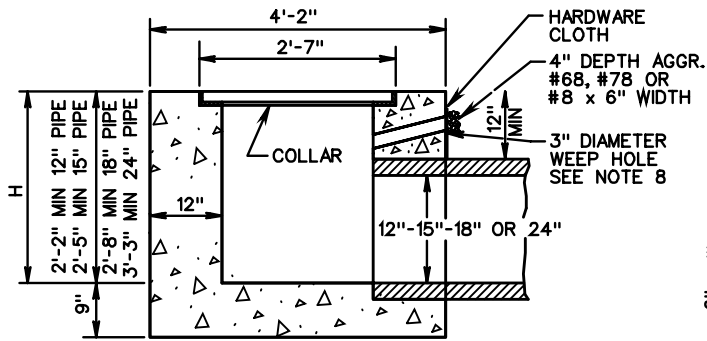
DI-1



PLAN  
(GRATE REMOVED)



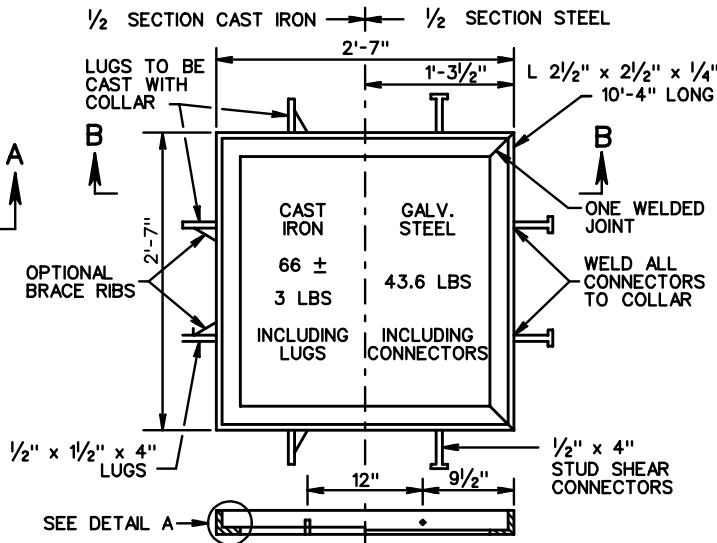
DETAIL A



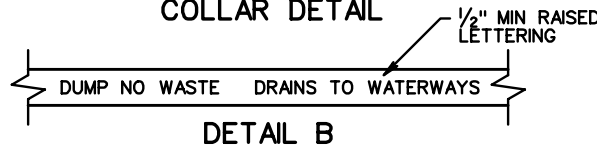
SECTION A-A  
CONCRETE QUANTITIES FOR MIN. DEPTH

12" CONCRETE PIPE - 1.440 CU. YD. CONCRETE  
 15" CONCRETE PIPE - 1.528 CU. YD. CONCRETE  
 18" CONCRETE PIPE - 1.620 CU. YD. CONCRETE  
 24" CONCRETE PIPE - 1.817 CU. YD. CONCRETE

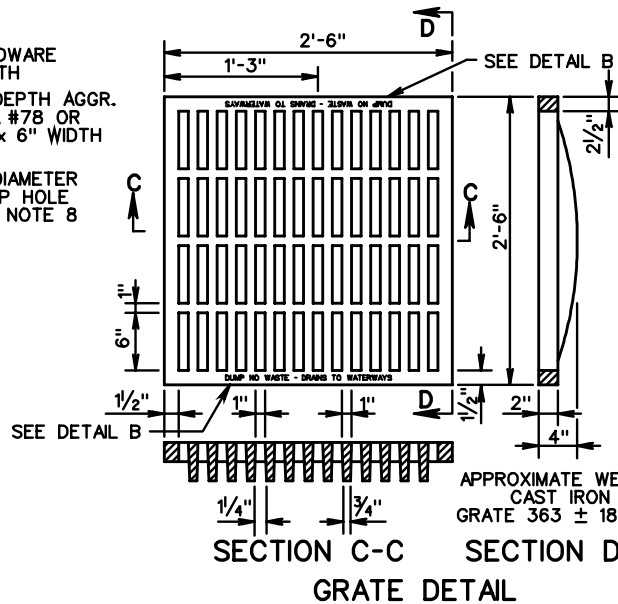
ADD 0.469 CU. YD. PER  
 ADDITIONAL FOOT OF DEPTH.



SECTION B-B  
COLLAR DETAIL



DETAIL B



SECTION C-C SECTION D-D  
GRATE DETAIL

**NOTES**

1. DEPTH OF INLET (H) TO BE SHOWN ON PLANS. FOR DEPTH GREATER THAN 10' USE STANDARD DI-1A
2. THE "H" DIMENSION SHOWN ON THE STANDARDS AND SPECIFIED ON THE PLANS WILL BE MEASURED FROM THE INVERT OF THE OUTFALL PIPE TO THE TOP OF THE STRUCTURE. PLAN "H" DIMENSIONS ARE APPROXIMATE ONLY FOR ESTIMATING PURPOSES AND THE ACTUAL DIMENSIONS SHALL BE DETERMINED BY THE CONTRACTOR FROM FIELD CONDITIONS.
3. WHEN SPECIFIED ON THE PLANS THE INVERT IS TO BE SHAPED IN ACCORDANCE WITH STANDARD IS-1. THE COST OF FURNISHING AND PLACING ALL MATERIALS INCIDENTAL TO THE SHAPING IS TO BE INCLUDED IN THE BID PRICE FOR THE STRUCTURE.
4. IN THE EVENT THE INVERT OF THE OUTFALL PIPE IS HIGHER THAN THE BOTTOM OF THE STRUCTURE, THE INVERT OF THE STRUCTURE SHALL BE SHAPED WITH CEMENT MORTAR TO PREVENT STANDING OR PONDING OF WATER IN THE STRUCTURE. THE COST OF FURNISHING AND PLACING ALL MATERIALS INCIDENTAL TO INLET SHAPING IS TO BE INCLUDED IN THE BID PRICE FOR THE STRUCTURE.
5. STEPS ARE TO BE PROVIDED WHEN H IS 4'-0" OR GREATER. FOR DETAILS SEE STANDARD ST-1.
6. THIS ITEM MAY BE PRECAST OR CAST-IN-PLACE.
7. #4 X 8" SMOOTH DOWELS AT APPROXIMATELY 12" C-C TO BE PLACED IN ALL AREAS ADJACENT TO ABUTTING CONCRETE TO PREVENT SETTLEMENT. IN LIEU OF DOWELS A 2"X4" NOTCH MAY BE PROVIDED. SEE STANDARD T-DI-3, 4 FOR ALTERNATE DESIGN.
8. 3" DIAMETER WEEP HOLE WITH 12"X12" PLASTIC HARDWARE CLOTH 1/4" MESH OR GALVANIZED STEEL WIRE, MINIMUM WIRE DIAMETER 0.03", NUMBER 4 MESH HARDWARE CLOTH ANCHORED FIRMLY TO THE OUTSIDE OF THE STRUCTURE.
9. CAST IN PLACE CONCRETE IS TO BE CLASS A3 (3000 PSI). PRECAST CONCRETE IS TO BE 4000 PSI.
10. ANY ALTERNATE METHODS OF ANCHORAGE MEETING THE APPROVAL OF THE ENGINEER MAY BE SUBSTITUTED FOR THE CAST IRON LUGS AS SHOWN HEREON.
11. DUMP NO WASTE DRAINS TO WATERWAY LETTERING IS REQUIRED ON ALL DI-1 GRATES. LOCATION OF LETTERING MAY VARY BY MANUFACTURER.



ROAD AND BRIDGE STANDARDS

SHEET 1 OF 1

REVISION DATE

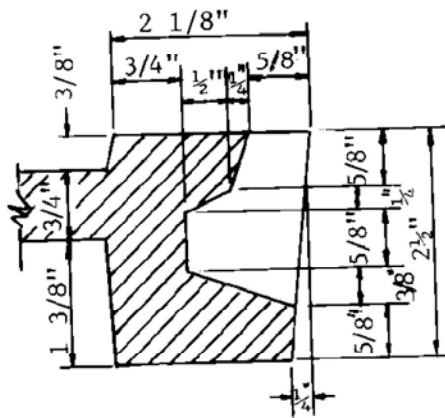
104.01

**STANDARD DROP INLET**  
 12" - 24" PIPE: MAXIMUM DEPTH (H) - 10'

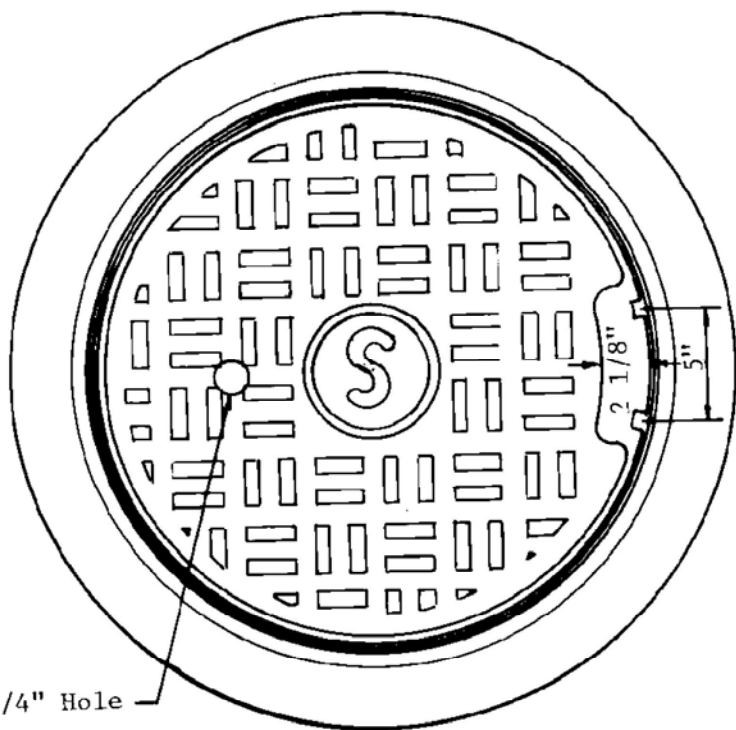
VIRGINIA DEPARTMENT OF TRANSPORTATION

SPECIFICATION  
 REFERENCE

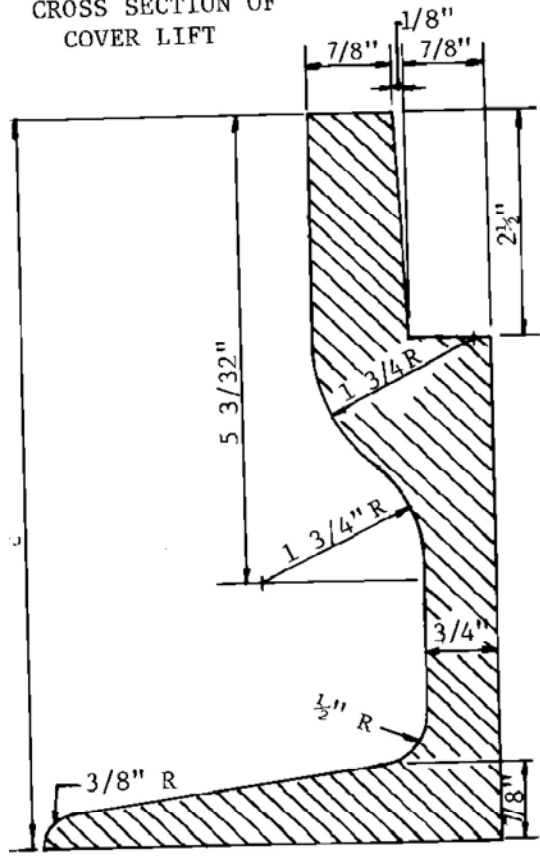
233  
 302



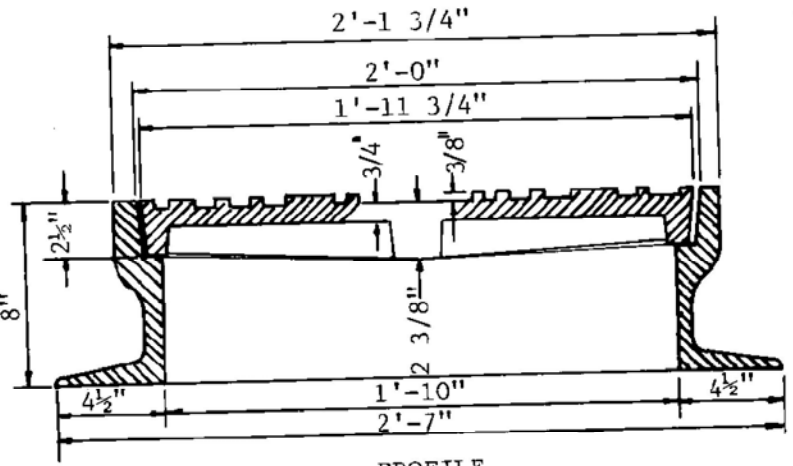
CROSS SECTION OF COVER LIFT



PLAN



CROSS SECTION OF RING



PROFILE

Minimum Average Weight	
Ring	210 lbs.
Cover	145 lbs.

NOTES:

1. This frame and cover available as pattern MH RCR-36 by Dewey Brothers, Inc. or equal.
2. If alternate grate top is specified it is available as pattern MN RCR-36A.

MANHOLE FRAME AND COVER

REVISION & DATE



ARLINGTON COUNTY, VIRGINIA  
DEPARTMENT OF ENVIRONMENTAL SERVICES

DRAWING NO.  
D-3.6