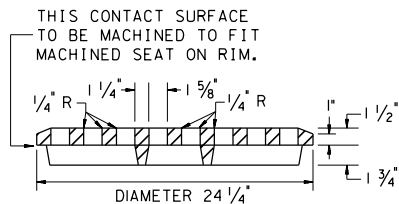


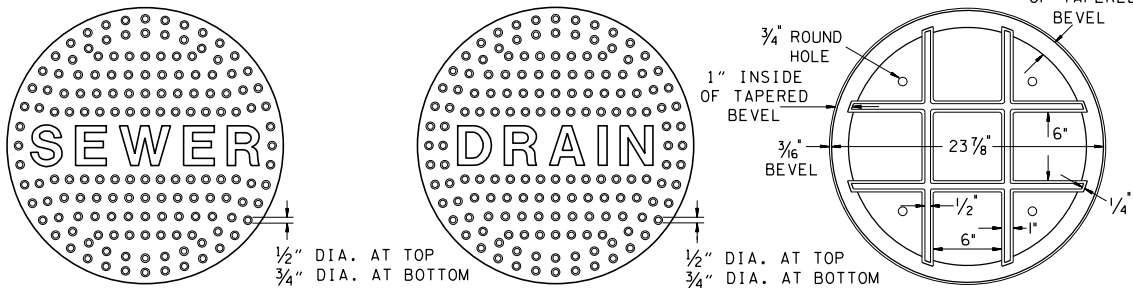
TOP VIEW

BOTTOM VIEW



SECTIONAL VIEW

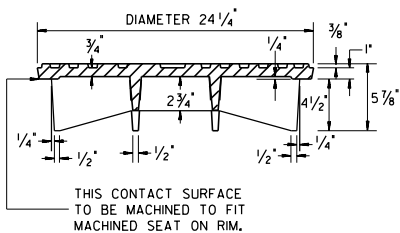
TYPE A MANHOLE COVER WITH OPEN GRATE
(WEIGHT OF COVER - 150 POUNDS)



TOP VIEW
TYPE B MANHOLE COVER
(SANITARY SEWER)

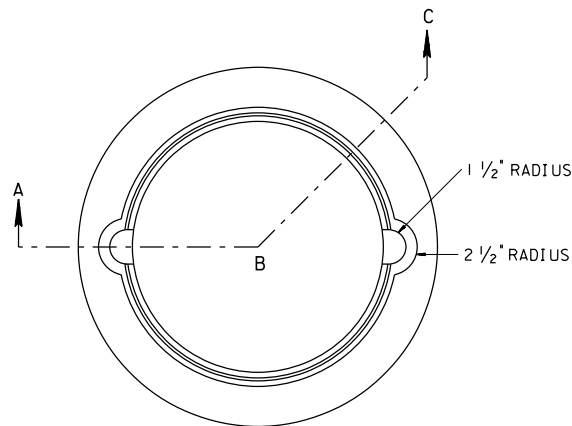
TOP VIEW
TYPE C MANHOLE COVER
(STORM SEWER)

BOTTOM VIEW
FOR BOTH TYPE B
AND C COVERS

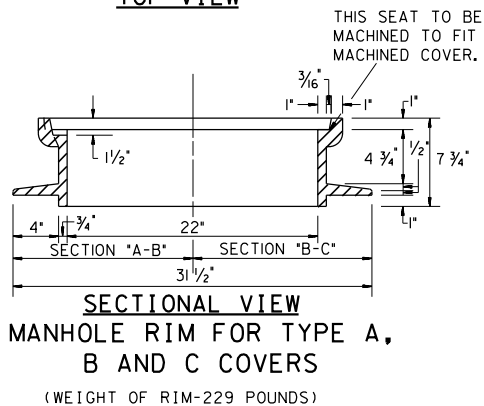


SECTIONAL VIEW
FOR BOTH TYPE B AND C COVERS

TYPE B AND C MANHOLE COVERS
(WEIGHT OF EITHER COVER - 165 POUNDS)



TOP VIEW



SECTIONAL VIEW
MANHOLE RIM FOR TYPE A,
B AND C COVERS
(WEIGHT OF RIM-229 POUNDS)

REV. 1-15-73: USE OF ALUMINUM STEPS RESTRICTED.

REV. 1-01-76: CHANGED DRAWING NUMBER FROM S-M-3 TO D-MH-4 (CASTINGS DETAILS ADAPTED FROM OLD DRAWING NUMBER S-M-2a).

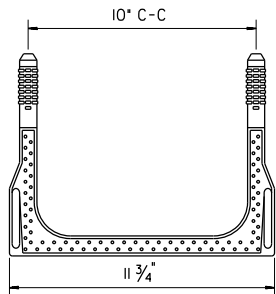
REV. 7-17-81: CORRECTED THICKNESS ON ALUMINUM STEP. DELETED NOTE REGARDING STEP SUBSTITUTION.

REV. 7-11-88: ADDED POLYETHYLENE COATED ALUMINUM STEPS.

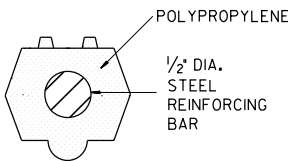
REV. 2-14-91: REDREW AND REORGANIZED SHEET. ADDED STEEL REINFORCED COPOLYMER POLYPROPYLENE PLASTIC MANHOLE SAFETY STEP.

REV. 5-27-01: GENERAL REVISION.

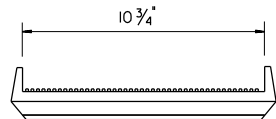
REV. 8-01-12: GENERAL REVISION.



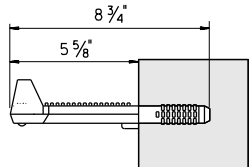
PLAN VIEW



SECTIONAL VIEW

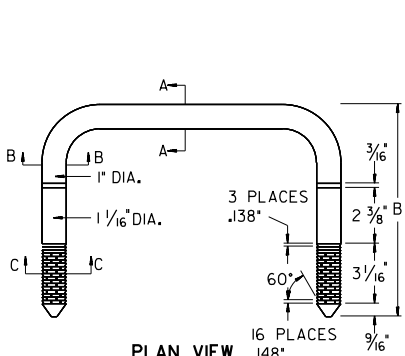


FRONT VIEW

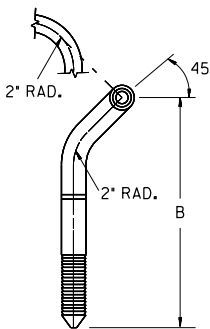


MATERIAL SPECIFICATIONS	
THE POLYPROPYLENE, CONFORMING TO AN ASTM D-4101 SPECIFICATION, IS INJECTION MOLDED AROUND A 1/2" ASTM A-615 GRADE 60 STEEL REINFORCING BAR. THIS STEP EASILY MEETS THE REQUIREMENTS OF ASTM C-478, AASHTO M-199 AND OSHA INSTRUCTION STD 1-1.9.	

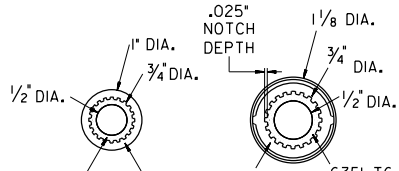
10 INCH PLASTIC MANHOLE STEP



PLAN VIEW



SECTION A-A



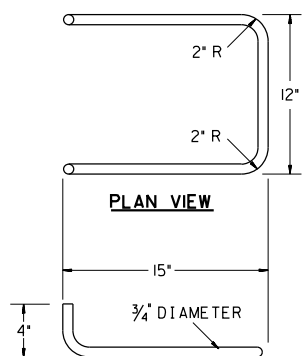
SECTION B-B

SECTION C-C

WIDTH OF STEP TABLE	
DIMENSION A	DIMENSION B
12"	8 3/4"
14"	8 3/4"
16"	8 3/4"
16"	9 7/8"

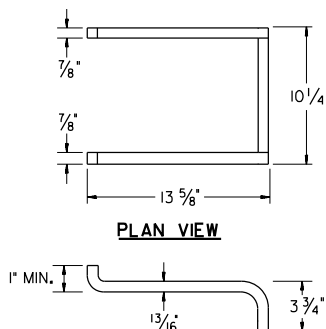
MATERIAL SPECIFICATIONS	
① ALUMINUM: 6351-T6, CSA-S157-1969 (CSA-HA5)	
② POLYETHYLENE: LOW DENSITY, VIRGIN MATERIAL.	

POLYETHYLENE COATED ALUMINUM STEPS



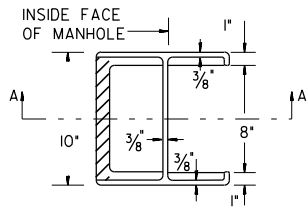
PLAN VIEW

SIDE VIEW
WROUGHT IRON STEPS

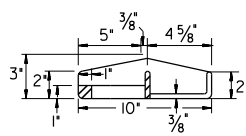


PLAN VIEW

SIDE VIEW
ALUMINUM STEPS
(FOR USE WITH BRICK MASONRY MANHOLES ONLY)



PLAN VIEW



SECTION A-A

CAST-IRON STEPS

MINOR REVISION -- FHWA APPROVAL NOT REQUIRED.

STATE OF TENNESSEE
DEPARTMENT OF TRANSPORTATION

STANDARD
NO. 3
MANHOLE CASTINGS
AND STEPS

NOT TO SCALE

AUG. 72

D-MH-4