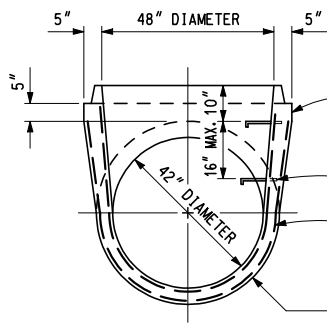


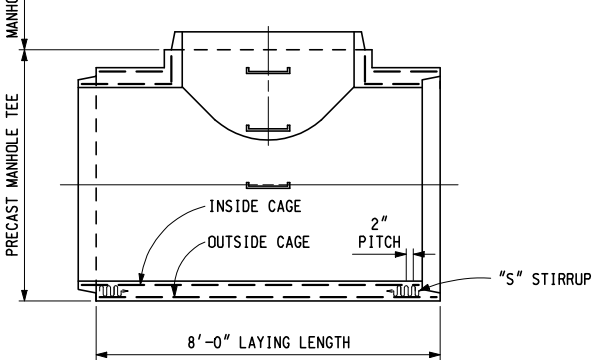
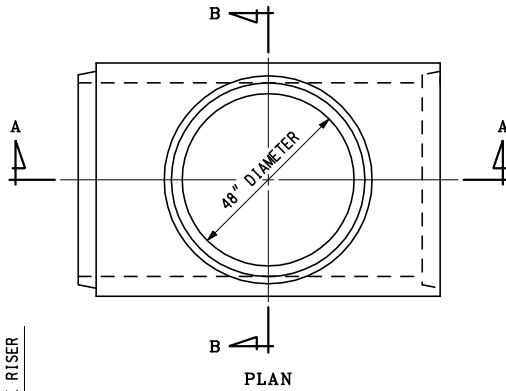
SECTION A - A



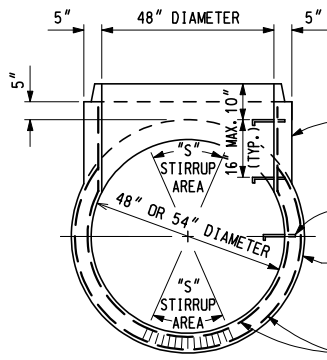
SECTION B - B

MANHOLE RISER COLLAR SHALL BE CAST MONOLITHICALLY WITH THE MAIN PIPE  
 STEP (SEE NOTES)  
 STEEL REINFORCEMENT SHALL BE AS SPECIFIED IN CURRENT A.S.T.M. C-76 AND C-478  
 WALL THICKNESS SHALL BE AS SPECIFIED IN CURRENT A.S.T.M. C-76

42" PRECAST MANHOLE TEE



SECTION A - A

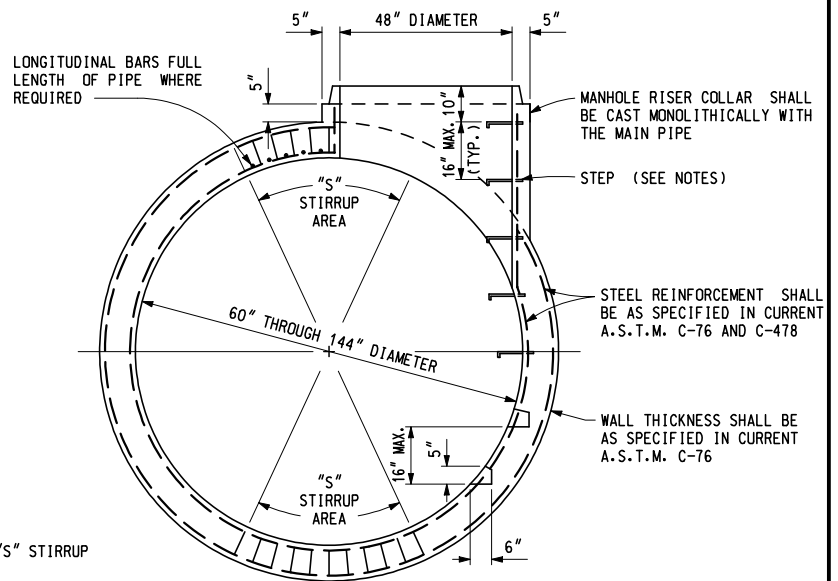
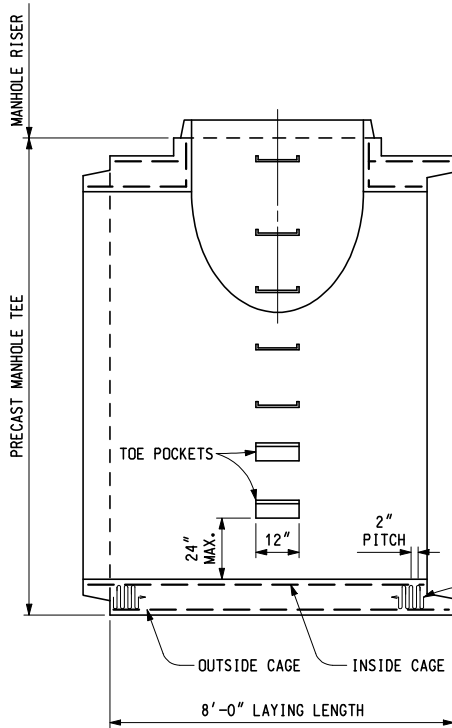
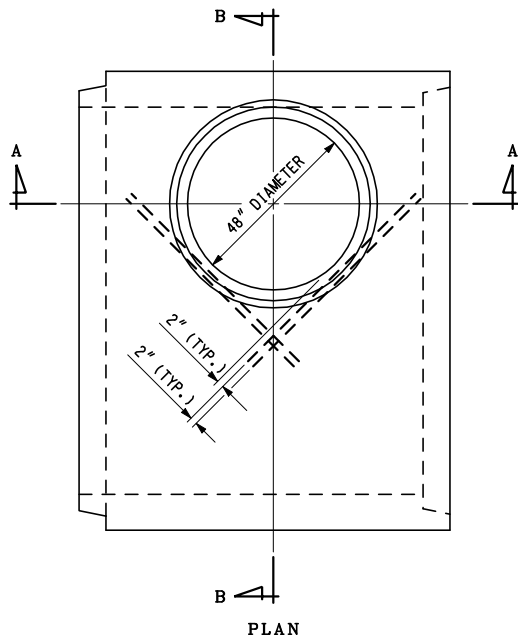


SECTION B - B

MANHOLE RISER COLLAR SHALL BE CAST MONOLITHICALLY WITH THE MAIN PIPE  
 STEP (SEE NOTES)  
 WALL THICKNESS SHALL BE AS SPECIFIED IN CURRENT A.S.T.M. C-76  
 STEEL REINFORCEMENT SHALL BE AS SPECIFIED IN CURRENT A.S.T.M. C-76 AND C-478

48" AND 54" PRECAST MANHOLE TEE

	 ENGINEER OF CONSTRUCTION & TECHNOLOGY	ENGINEER - ROAD DESIGN  ENGINEER OF DESIGN	MICHIGAN DEPARTMENT OF TRANSPORTATION BUREAU OF HIGHWAY TECHNICAL SERVICES STANDARD PLAN FOR	
	PREPARED BY DESIGN DIVISION DRAWN BY: <u>B.L.T.</u> CHECKED BY: <u>W.K.P.</u>	 ENGINEER OF MAINTENANCE  ENGINEER OF TRAFFIC AND SAFETY	DEPARTMENT DIRECTOR Gregory J. Rosine BY: CHIEF ENGINEER/DEPUTY DIRECTOR BUREAU OF HIGHWAY TECHNICAL SERVICES	<b>PRECAST MANHOLE TEES</b> 12-21-2001 F.H.W.A. APPROVAL 2-26-2001 PLAN DATE <b>R-3-B</b> SHEET 1 OF 2



60" THROUGH 144" PRECAST MANHOLE TEE

NOTES:

STACK SECTIONS SHALL BE ACCORDING TO STANDARD PLAN R-1-SERIES UNLESS OTHERWISE NOTED ON THIS PLAN.

STACK SECTIONS SHALL BE LOCATED ON LEFT OR RIGHT SIDE OF SEWER AS SPECIFIED ON THE PLANS.

GRANULAR MATERIAL CLASS III SHALL BE USED IN BACKFILLING AROUND ALL STRUCTURES THAT FALL WITHIN 1:1 INFLUENCE LINES FROM THE EDGE OF PAVEMENT OR BACK OF CURB.

STEPS SHALL BE OF AN APPROVED DESIGN AND MADE FROM CAST IRON, ALUMINUM, OR PLASTIC COATED STEEL. RUNGS SHALL BE A MINIMUM OF 10" IN CLEAR LENGTH, DESIGNED TO PREVENT THE FOOT FROM SLIPPING OFF THE END. THE MINIMUM HORIZONTAL PULL OUT LOAD SHALL BE 400 LBS. THE MINIMUM VERTICAL LOAD SHALL BE 800 LBS.

ALL SIZES AND FLOW LINES OF PIPES, AND ELEVATIONS FOR TOP AND BOTTOM OF STRUCTURES, SHALL BE DETERMINED FROM THE PLANS AND CONSTRUCTIONS REQUIREMENTS.

PRECAST MANHOLE TEE SHALL BE THE SAME CLASS AS THE EXISTING CONCRETE SEWER. THE PIPE SHALL CONFORM TO A.S.T.M. C-76 AND THE RISER TO A.S.T.M. C-478.

MICHIGAN DEPARTMENT OF TRANSPORTATION  
BUREAU OF HIGHWAY TECHNICAL SERVICES STANDARD PLAN FOR

PRECAST MANHOLE TEES

12-21-2001 F.H.W.A. APPROVAL	2-26-2001 PLAN DATE	R-3-B	SHEET 2 OF 2
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