



DATE	03/23/2018	SHEET NO	1 OF 4
PROJECT	SEWER GUIDELINE FOR MANHOLE SIZING		
WO/CO ACCT NO			
DRAFTED BY	GS	REVIEWED BY	ARMANDO ARROYO

GERENAL NOTES:

1. THE MINIMUM MANHOLE DIAMETER SHALL BE 48" PER SB-53.

SEWER MAIN (inches)	MAXIMUM BRANCH SIZE (inches)	MH SIZE (inches)		CLEAR OPENING (inches)	
		UP TO 19'	20' & DEEPER	UP TO 19'	20' & DEEPER
8 - 15	10	48	60	24	36
18	*NO BRANCH	48	60	24	36
18 - 33	12	60	60	GREATER THAN 24 USE 36	36
36	*NO BRANCH	60	60	36	36
36	15	72	72	36	36
42	*NO BRANCH	72	72	36	36
* UNLESS OTHERWISE APPROVED BY EMWD ENGINEER					

2. FOR SEWER MAINS GREATER THAN 42" IN DIAMETER OR WITH A DEPTH THAT EXCEEDS 25 FEET IN DEPTH, SPECIAL DESIGN AND STRUCTURAL DETAILS FOR THE MANHOLE SHALL BE SHOWN ON THE PLANS.

3. STANDARD DRAWINGS:

- a. SB-53 - PRECAST REINFORCED CONCRETE STANDARD 48" & 60" I.D. MANHOLES
- b. SB-54 - PRECAST REINFORCED CONCRETE STANDARD 60" & 72" I.D. FLAT TOP MANHOLES

4. LINED MANHOLES:

- a. IF THE SEWER HAS A SLOPE OF 7% OR GREATER, ALL THE MANHOLES WILL BE LINED.
- b. WHERE THERE IS A CHANGE IN SLOPE, FROM STEEP TO FLAT IN THE DIRECTION OF FLOW, OF 5% OR GREATER, THE MANHOLE AT THE GRADE CHANGE AND THE NEXT MANHOLE UPSTREAM WILL BE LINED.
- c. EXISTING TERMINUS MANHOLES THAT WILL HAVE NEW FORCE MAIN DISCHARGES WILL BE LINED PER REQUIREMENTS SET BELOW. NEW TERMINUS MANHOLES SHALL BE PRE-CAST PREDL OR ARMOROCK MANHOLES. THE MANHOLE SHALL BE FITTED WITH A MANHOLE ODOR ELIMINATOR SYSTEM (MOE™). THIS IS A COVER FILTER SYSTEM DESIGNED TO REMOVE ODORS FROM VENTED MANHOLES.
- d. THE MANHOLE LININGS SYSTEM SHALL BE SPECIFICALLY MANUFACTURED FOR HIGHLY CORROSIVE ENVIRONMENTS CAUSED BY IMMERSION AND INTERMITTENT IMMERSION IN MUNICIPAL WASTEWATER. MINIMUM TOTAL DRY THICKNESS OF COATING SYSTEM SHALL BE 125 MILS.
 - i. SAUREISEN SEWER GUARD GLAZE NO. 210G. SURFACE PREPARATION INCLUDING SEUREISEN UNDERLAYMENT NO. F-120 OR NO. 209 FILLER COMPOUND, ABRASIVE BLASTING, MIXING, APPLICATION, AND CURING SHALL BE AS RECOMMENDED BY MANUFACTURER. MINIMUM THICKNESS SHALL BE 125 MILS.
 - ii. CARBOLINE PER STANDARD SPEC 11200
 - iii. TNEMEC PER STANDARD SPEC 11200

5. MANHOLE COATINGS:

- a. WHERE GROUNDWATER IS ENCOUNTERED, ALL VCP PIPE SHALL BE TREATED FOR ABSORPTION RESISTANCE PER EMWD'S SPECIFICATIONS. IN ADDITION, MANHOLES SHALL BE WATERPROOFED WITH "BARRICOAT-R", PH. NO. 800-527-7092 OR BY W.R. MEADOWS "MEL-ROL-LM", PH. NO. 800-342-5976 OR APPROVED EQUAL.

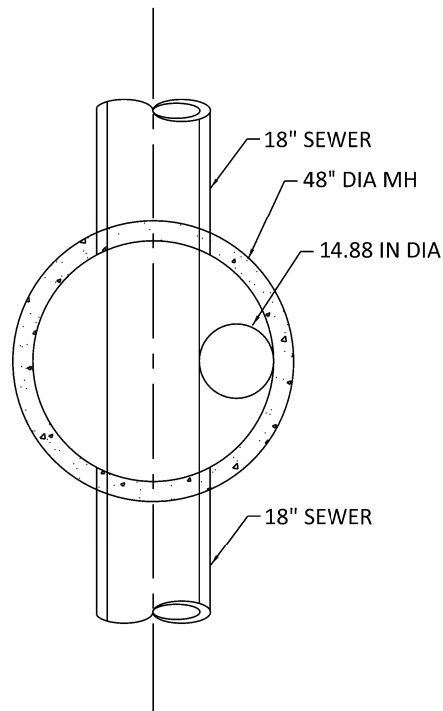
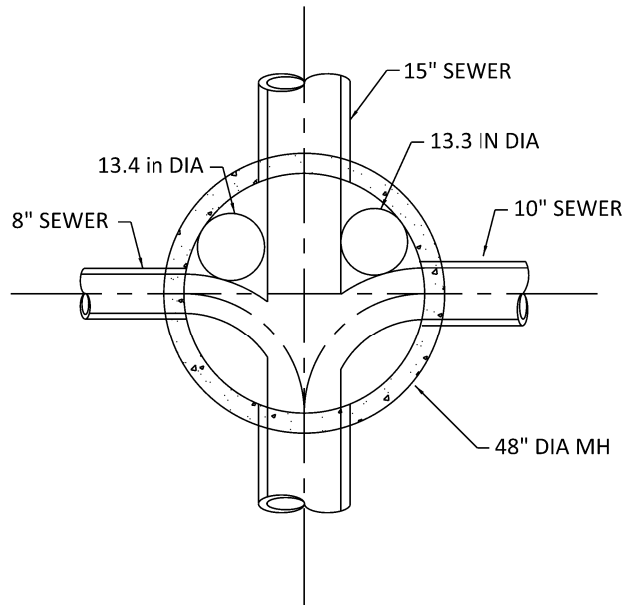
6. TYPICAL BASE CHANNELIZATION DETAILS (SEE DETAIL DRAWING)

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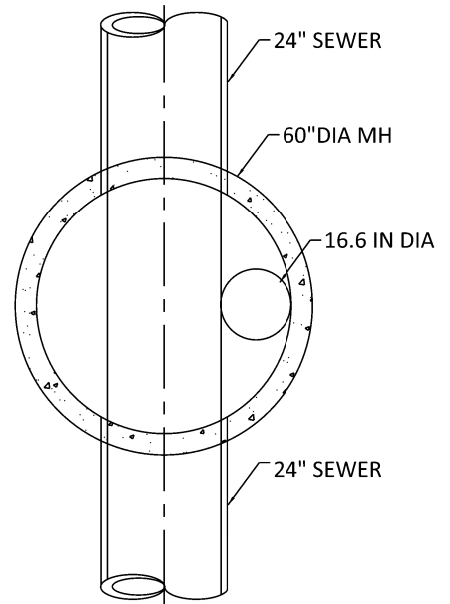
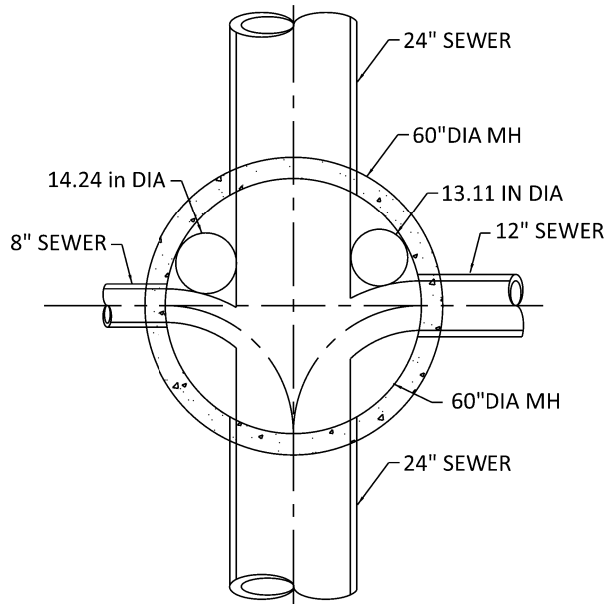
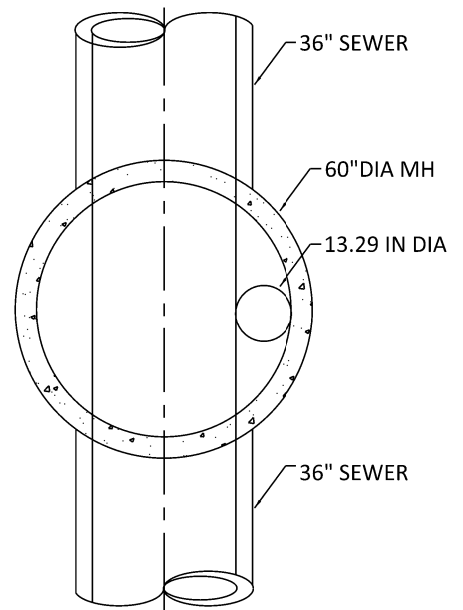
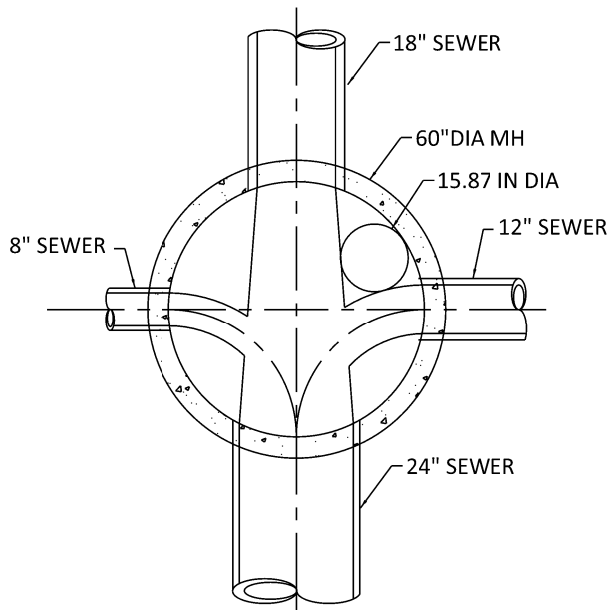


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