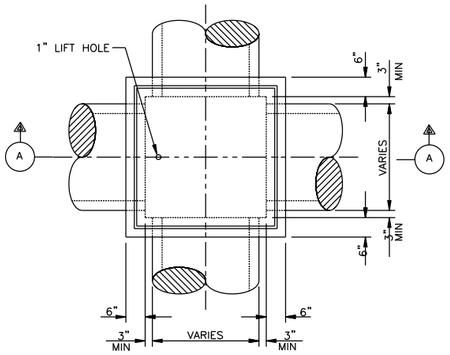
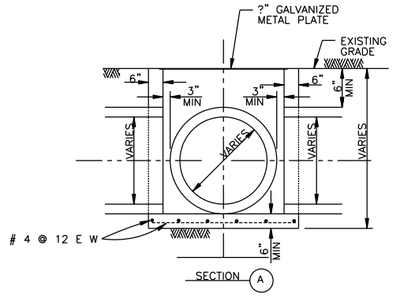
NOTES:

1. DETAIL TO BE USED WHERE STORM SEWER SIZE IS 24" DIA OR LESS.
2. FOR SEWERS GREATER 24" DIA USE TYPE "C "MANHOLE.
3. DIMENSIONS NOTED WITH A "?" ARE TO BE SPECIFIED BY THE PROJECT ENGINEER ON THE PLANS



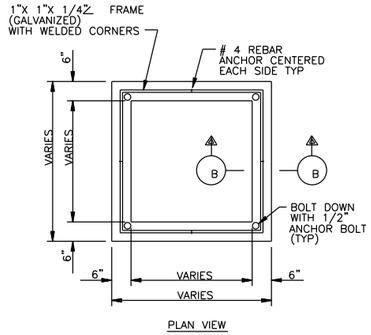
PLAN VIEW



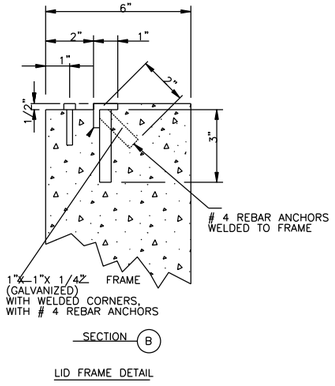
JUNCTION BOX DETAIL

NOTES TO SPECIFIER:

1. WALLS TO BE 6" CONCRETE (WALLS TO BE 8" THICK IF CONSTRUCTED OF BRICK).
2. NOT TO BE USED IN STREET. FOR AREA BETWEEN CURB AND PROPERTY LINE ONLY.
3. DIMENSIONS NOTED WITH A ? ARE TO BE SPECIFIED BY THE PROJECT ENGINEER ON THE PLANS.

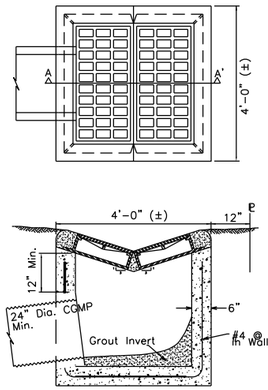


PLAN VIEW



LID FRAME DETAIL

JUNCTION BOX WITH LID FOR A MAXIMUM OF 24" DIAMETER STORM SEWER



MAINTENANCE BERM INLET BOX

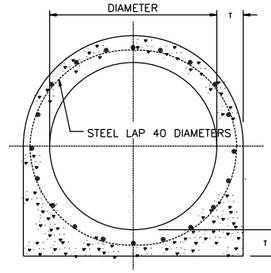
REINFORCED MONOLITHIC CONCRETE STORM SEWERS					
DIAMETER IN INCHES	MINIMUM THICKNESS IN INCHES (T)	ELLIPTICAL REINFORCEMENT		LONGITUDINAL REINFORCEMENT	
		SIZE NO	SPACING INCHES	SIZE NO	NO OF BARS
36	5	4	9?	4	12
42	5-1/2	4	9?	4	12
48	5?	4	8?	4	16
54	6	4	8	4	16
60	7	4	9	4	16
66	7	4	9	4	20
72	7?	4	8	5	20
78	7?	4	6?	5	20
84	7?	5	9	5	24
90	8	5	8?	5	24
96	8	5	7	5	28
102	8?	5	6?	5	28
108	8?	5	6	5	32
114	9	6	8	5	32
120	9	6	7?	5	36

NOTE: DIMENSIONS NOTED WITH A ? ARE TO BE SPECIFIED BY THE PROJECT ENGINEER ON THE PLANS.

STORM SEWER REINFORCED MONOLITHIC CONCRETE

NOTE TO SPECIFIER:

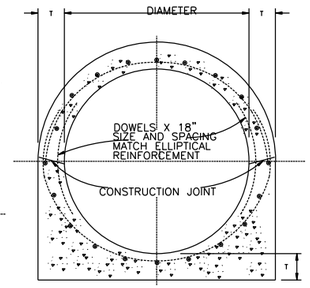
MIN DEPTH: 2.0' COVER ON 36" TO 3.5' ON 54"
MAX DEPTH: 24' TO FLOW LINE OF 60" TO 120"
REINFORCING COVER = 2"



TYPICAL SECTION

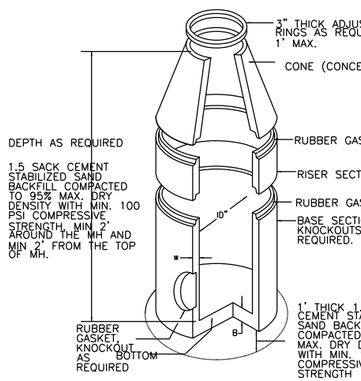
STANDARD DETAIL
REINFORCED MONOLITHIC CONCRETE STORM SEWERS

T = MINIMUM THICKNESS



TYPICAL SECTION

REINFORCING STEEL DETAIL FOR MONOLITHIC CONCRETE SEWERS WHEN BUILT IN HALF SECTIONS

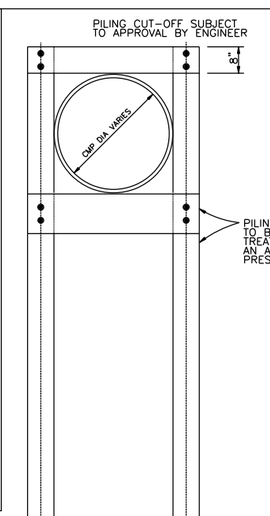


DIMENSIONS AND WEIGHTS			
I.D. SIZE (in)	W (in)	B (in)	RISER WT/LF (lb)
48	5	6	868
60	6	8	1300
72	7	8	1811
96	9	8	3090

NOTE:

1. CLASS 1 CONCRETE WITH A DESIGN STRENGTH OF 4000 PSI AT 28 DAYS. RATED FOR H-20 LOADING.
2. PRECAST CONCRETE MANHOLE CONFORMING TO ASTM C478. STRUCTURAL REINFORCEMENT CONFORMING TO ASTM 615A.
3. LIFTING INSERTS AS REQUIRED.
4. ALL JOINTS SHALL BE SEALED WITH APPROVED GASKET.
5. LARGER INSIDE DIAMETER MANHOLES SHALL BE REQUIRED IF LESS THAN 1' OF WALL SURFACE IS LEFT BETWEEN OPENINGS OR AS SPECIFIED BY ENGINEER.
6. ALL MANHOLES IN OPEN DITCH AND ABOVE FINISHED GRADE SHALL HAVE HINGED FRAME AND COVER.
7. ALL MANHOLES IN PAVED AREAS SHALL HAVE BLOCK OUT (SEE MISC. DETAIL SHEET).

TYPE "C" PRECAST STORM SEWER MANHOLE



NOTES TO SPECIFIER:

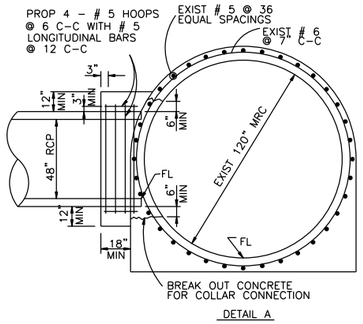
1. SOILS ENGINEER TO DETERMINE THE DEPTH TO WHICH PILE WILL BE DRIVEN.
2. PIPE SHALL CONFORM TO ASTM M-36

TIMBER SUPPORT FOR CORRUGATED METAL PIPE 48" DIAMETER OUTFALL + LARGER

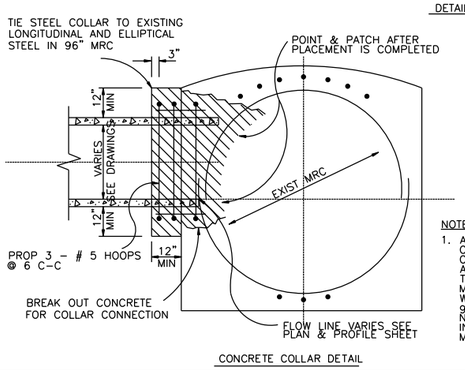
LATERAL CONNECTION TO EXISTING MONOLITHIC REINFORCED CONCRETE STORM SEWER

NOTES:

1. HOLE CUT IN WALL OF 120" MRC TO BE
2. TIE STEEL COLLAR TO EXIST LONGITUDINAL AND ELLIPTICAL STEEL WHERE APPLICABLE.



DETAIL A



CONCRETE COLLAR DETAIL

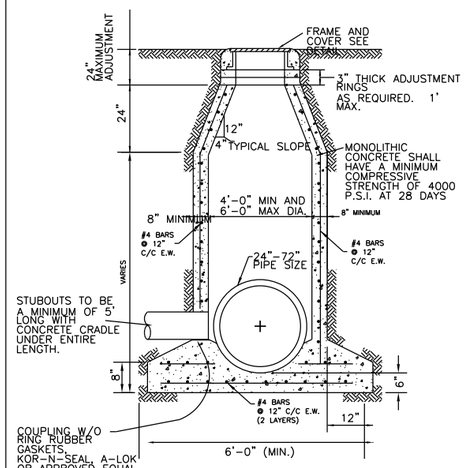
NOTE:

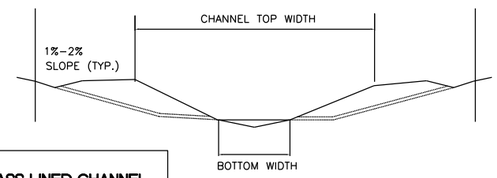
1. A CONCRETE COLLAR SHALL BE CONCRUCTED OF A ROPOSED RCP TO AN EXISTING MRC. HOLE CUT IN WALL OF EXISTING 96" MRC TO BE NEAT AND DONE IN WORKMAN LIKE MANNER.

TYPE 'C' CAST-IN-PLACE STORM SEWER MANHOLE

NOTE:

1. CONCRETE SHALL BE A MONOLITHIC POUR.
2. 1' THICK1.5 SACK CEMENT STABILIZED SAND BACKFILL COMPACTED TO 95% MAX. DRY DENSITY WITH MIN. 100 PSI COMPRESSIVE STRENGTH AROUND MANHOLE COMPACTED IN 8" LIFTS.





TYPICAL GRASS LINED CHANNEL

PLACE ENGINEERING SEAL HERE

Mont Belvieu
TEXAS

Storm Sewer Standard Details

Scale: NTS

DWG No: 300 - 01

SHEET 1 OF 4