

REVISIONS	BY

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DO NOT SET FOR CONSTRUCTION



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 CARROLLTON, TX 75010
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DRAWN	
CHECKED	
TMB	
DATE	
01/04/2021	
SCALE	

DRAWING
 20

ROUNDED ENTRANCE

BREAK OFF GROOVE OR BELL END

PIPE BARREL

PLAN

ELEVATION

SECTION

ALL SLOPES				SLOPE 1 1/2:1		SLOPE 2:1		SLOPE 3:1	
D	H	R	C	A	B	A	B	A	B
12'-24"	3'-3"	3 5/8"	2'-7"	6'-11"	3'-9"	8'-4"	5'-0"	11'-3"	7'-6"
27'	3'-6"	4"	2'-11"	7'-9"	4'-2"	9'-3"	5'-6"	12'-6"	8'-3"
30'	3'-9"	4 1/2"	3'-3"	8'-6"	4'-6"	10'-2"	6'-0"	13'-8"	9'-0"
36'	4'-3"	5 1/2"	3'-11"	10'-1"	5'-3"	12'-0"	7'-0"	16'-1"	10'-6"
42'	4'-9"	6 3/8"	4'-7"	11'-6"	6'-0"	13'-10"	8'-0"	18'-5"	12'-0"
48'	5'-3"	6 1/2"	5'-1"	12'-11"	6'-9"	15'-6"	9'-0"	20'-8"	13'-5"
54'	5'-9"	6 3/4"	5'-8"	14'-4"	7'-6"	17'-3"	10'-0"	23'-0"	15'-0"
60'	6'-3"	7"	6'-2"	15'-9"	8'-3"	18'-11"	11'-0"	25'-3"	16'-6"

T = 8' FOR DOWNSTREAM HEADWALLS, T = (R-6') FOR UPSTREAM HEADWALL

REINFORCED CONCRETE HEADWALL
(N.T.S.)

RIPRAP APRONS
MINIMUM DIMENSIONS

APRON NO.	A (WIDTH)	B (LENGTH)	C (WIDTH AT PIPE-HEADWALL)	STONE SIZE	STONE SIZE	THICKNESS
1	14.5'	12.5'	6'	6"	9"	14"

* PLACE STONE BEHIND PIPE AND HEADWALL AS NEEDED FOR COMPLETE STABILIZATION AT WEIR

NOTE: TOP OF MANHOLE TO BE LEVEL WITH FINISH GRADE UNLESS OTHERWISE NOTED OR DIRECTED BY THE ENGINEER. USE ADJUSTMENT RINGS AS REQUIRED BUT NOT TO EXCEED 12".

RING & COVER PER SITEWORK SPECIFICATIONS

2 LAYERS OF TAR PAPER

#4 CONCRETE (PER SITEWORK SPECIFICATION SECTION 02751) FULL DEPTH OF FRAME HEIGHT TO OUTSIDE EDGE OF MANHOLE

"P" = PAVEMENT THICKNESS
"F" = FRAME HEIGHT

INSET "A"

FOUNDATION SLAB AND BASE SECTION MAY BE POURED MONOLITHIC OR SEPARATELY WITH A KEYWAY. INVERT SHALL BE POURED AFTER PLACEMENT OF MANHOLE.

KEYWAY

#4 "L" BARS 18" LEGS

1" CLEAR

#4 AT 10" CENTERS EACH DIRECTION OR EQUIVALENT WELDED WIRE FABRIC

S = 0 FOR DEPTHS LESS THAN OR EQUAL TO 6'; S = 6" FOR DEPTHS GREATER THAN 6'.
T = 6" FOR DEPTHS LESS THAN OR EQUAL TO 6'; T = 12" FOR DEPTHS GREATER THAN 6'.

PLAN OF MANHOLE TOP

BASE SECTION DIMENSIONS

SIZE OF PIPE	MIN. DIA.
24" OR SMALLER	48"
30" - 36"	60"
42" - 48"	72"

GENERAL NOTES:

- PRECAST MANHOLE SHALL BE MANUFACTURED PER LATEST ASTM C478 AND C913 SPECIFICATIONS.
- THE CONFIGURATION DETAILS SHOWN ARE DESCRIPTIVE ONLY AND MAY BE VARIED TO CONFORM WITH AN ESTABLISHED MANUFACTURING PROCEDURE.
- FORMED OR CUT OUT OPENINGS SHALL BE PROVIDED WHERE PIPE INLETS AND OUTLETS ARE SHOWN ON THE PLANS.
- THE TOP OF THE INLET SHALL NOT BE SET BELOW THE TOP OF THE OUTLET PIPE.
- REINFORCEMENT SHALL BE CUT AT PIPE OPENINGS.
- WHERE PIPES DO NOT ENTER OR EXIT RADIALLY, USE NEXT LARGER SIZE MANHOLE.
- CIRCUMFERENTIAL REINFORCEMENT SIZE AND PLACEMENT SHALL BE IN ACCORDANCE WITH THE STANDARD SPECIFICATIONS TO A MAXIMUM DEPTH OF 20 FEET. OVER 20 FOOT DEPTH CIRCUMFERENTIAL REINFORCEMENT IS INCREASED TO 0.24 SQUARE INCHES STEEL REQUIRED PER LINEAR FOOT, TO A MAXIMUM DEPTH OF 30 FEET.
- FOR PIPE CONNECTIONS, A RUBBER GASKET IN ACCORDANCE WITH ASTM RUBBER GASKET SPECIFICATIONS C443 OR C923 AND CAST INTEGRALLY IN MANHOLE MAY BE USED AS AN ALTERNATE TO EXPANSIVE MORTAR.

01PRCSTMH 10/12/09

DEWATERING DEVICE DETAIL
N.T.S.

15' Min.

12" Perf. PVC

24" Min.

1" Min.

1" Min.

#2 Infiltration Stone

Prop. Pond Bottom

Filter Cloth on Sides & Bottom

Miraf 700x Filter Cloth over Wire Mesh

12" Min.

12" Dewatering Device