

Prepared In the Office of:

# AECOM

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DOCUMENT NOT CONSIDERED FINAL  
UNLESS ALL SIGNATURES COMPLETED

## UTILITY CONSTRUCTION

3/4" ALL-THREAD STEEL ROD (CUT TO LENGTH)  
1' DIP NIPPLE  
GATE VALVE  
MECH. JOINT CONNECTIONS  
THRUST BLOCKING PER STD. NO. 5.19

**ROD REQUIREMENTS**

BRANCH SIZE	NO. OF RODS
4"	2 EA.
6"	2 EA.
8"	4 EA.
12"	4 EA.
16"	6 EA.
20"	6 EA.
24"	6 EA.

**GENERAL NOTES**

- ONCE INSTALLED AND TIGHT, THE STEEL RODS AND BOLTS SHALL BE COATED WITH 2 COATS OF BITUMINOUS BASE PAINT.
- CONCRETE SHALL NOT CONTACT BOLTS OR ENDS OF MECHANICAL FITTINGS.
- 2500 PSI CONCRETE CLASS B REQUIRED.

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UNDERGROUND CLAMPS AS MANUFACTURED BY STELLAR CORP. OR EQUAL SIZED APPROPRIATE TO VALVE. CLAMPS BOLTED TO STEEL RODS.  
3/4" THREADED STEEL RODS  
USE 2500 PSI CONCRETE IN FOOTINGS

1. RODS SHOULD EXTEND TO TOP OF PIPE CROWN.  
2. X x Y MUST EQUAL THE SQUARE FOOTAGE OF THE AREA AS SHOWN IN THE TABLE BELOW.  
3. COAT EXPOSED STEEL RODS AND CLAMPS WITH BITUMINOUS BASE PAINT.

BEARING SURFACE AREA FOR VALVE FOOTINGS

VALVE SIZE	PSF	4'	6'	8'
BRICKSAND, POOR SOIL	1,000	3	7	12
GRAVEL, COURSE SAND	1,600	2	5	8
SOFT CLAY	2,000	2	4	6
FABRY (RY) CLAY, CLEAN (RY) SAND	4,000	1	2	3
DRY CLAY, COMPACT SAND	8,000	1	1	2
POOR ROCK	10,000	1	1	2

NOTE: THIS STANDARD IS TO BE USED FOR PVC SEWER FORCE MAINS OR PRIVATE WATER SERVICE ONLY.

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NOTES:

- SEE CONSTRUCTION SPECIFICATIONS.
- SEE STANDARD DETAIL FOR THRUST BLOCK LOCATIONS.
- CONCRETE SHALL BE 2500 P.S.I. REINFORCING BARS SHALL BE DEFORMED AND TIED TOGETHER.
- TRENCH BOTTOM WIDTH IN VICINITY OF THRUST BLOCK(S) INSTALLATION SHALL BE MINIMUM WIDTH.
- BACKFILL TAMPED IN 6" LAYERS.

THRUST COLLAR  
UNDISTURBED SOIL  
"Y" BAR  
"X" BAR  
O.D. PIPE  
3' MIN. CLEAR.

**REINFORCING REQUIREMENTS**

REINFORCING BAR SCHEDULE						
I.D. PIPE	REBAR SIZE	"X" BAR LENGTH	"X" BAR WGT.	"Y" BAR LENGTH	"Y" BAR WGT.	NO. REQD.
6"-36"	#5	2'-2"+O.D. PIPE	1.043 LBS./FT	1'-1"	1.1 LBS. EA.	X-24, Y-12
48"	#6	3'-0"+O.D. PIPE	1.502 LBS./FT	1'-3"	1.9 LBS. EA.	X-24, Y-12

REINFORCING BAR SCHEDULE						
I.D. PIPE	"A"	"B"	"C" - 6'-16", 20'-24", 30'-36", 48"			
6"-36"	1'-4"	1'-7"	2'	3'	4'	
48"	1'-8"	1'-9"				6'

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GRADE 3/6" MIN. ABOVE TOP OF PIPE

SECTION  
PLAN  
TRENCH WIDTH  
A  
B  
C

**TEE**

TEE	A	B	C
6"x6"x6"	2'0"	1'0"	1'0"
8"x8"x8"	2'0"	1'0"	1'0"
8"x8"x8"	2'4"	1'0"	1'6"
12"x12"x12"	2'4"	1'0"	1'6"
12"x12"x12"	2'6"	1'0"	1'6"
12"x12"x12"	2'8"	1'6"	1'10"
16"x16"x16"	2'6"	1'6"	1'10"
16"x16"x16"	2'6"	1'6"	1'10"
16"x16"x16"	2'10"	1'6"	2'0"
16"x16"x16"	2'10"	1'6"	2'0"
20"x20"x20"	2'6"	1'8"	2'2"
20"x20"x20"	2'6"	1'8"	2'2"
20"x20"x20"	2'10"	1'8"	2'2"
20"x20"x20"	2'10"	1'10"	2'2"

**TEE**

TEE	A	B	C
20"x20"x20"	3'2"	2'0"	3'0"
24"x24"x24"	2'6"	1'8"	2'6"
24"x24"x24"	2'6"	1'8"	2'6"
24"x24"x24"	2'10"	1'8"	2'6"
24"x24"x24"	2'10"	2'0"	3'0"
24"x24"x24"	3'2"	2'0"	3'0"
24"x24"x24"	3'6"	2'0"	3'6"
30"x30"x30"	2'6"	1'8"	3'4"
30"x30"x30"	2'6"	1'8"	3'4"
30"x30"x30"	2'10"	1'8"	3'4"
30"x30"x30"	3'6"	1'10"	3'8"
30"x30"x30"	3'6"	2'0"	3'8"
30"x30"x30"	3'10"	2'6"	4'0"
30"x30"x30"	4'2"	3'0"	4'4"

2500 P.S.I. CONCRETE CLASS B REQUIRED

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