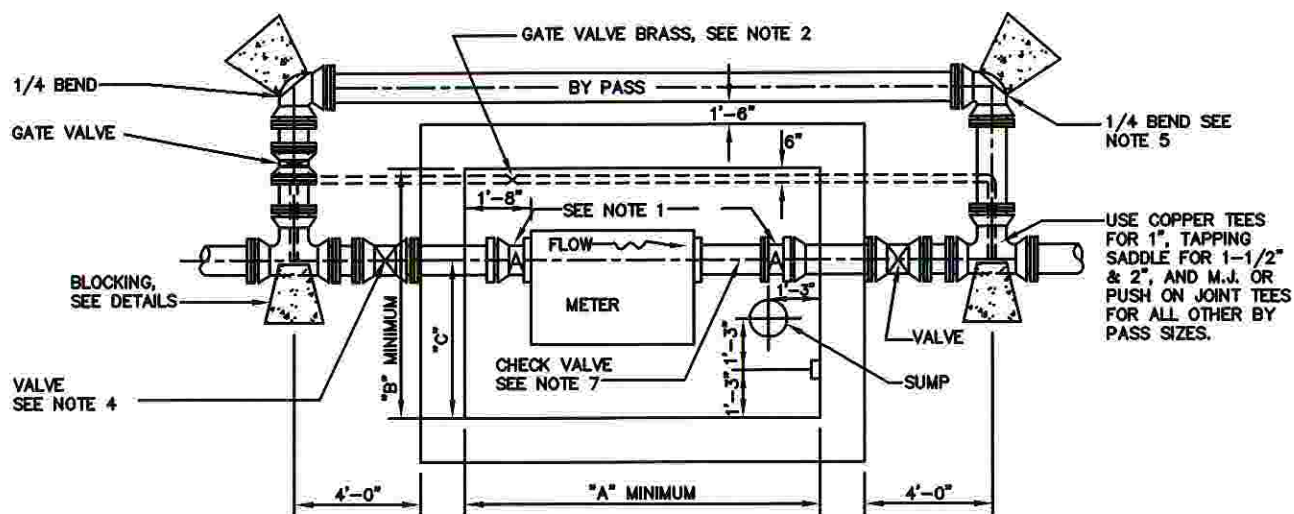


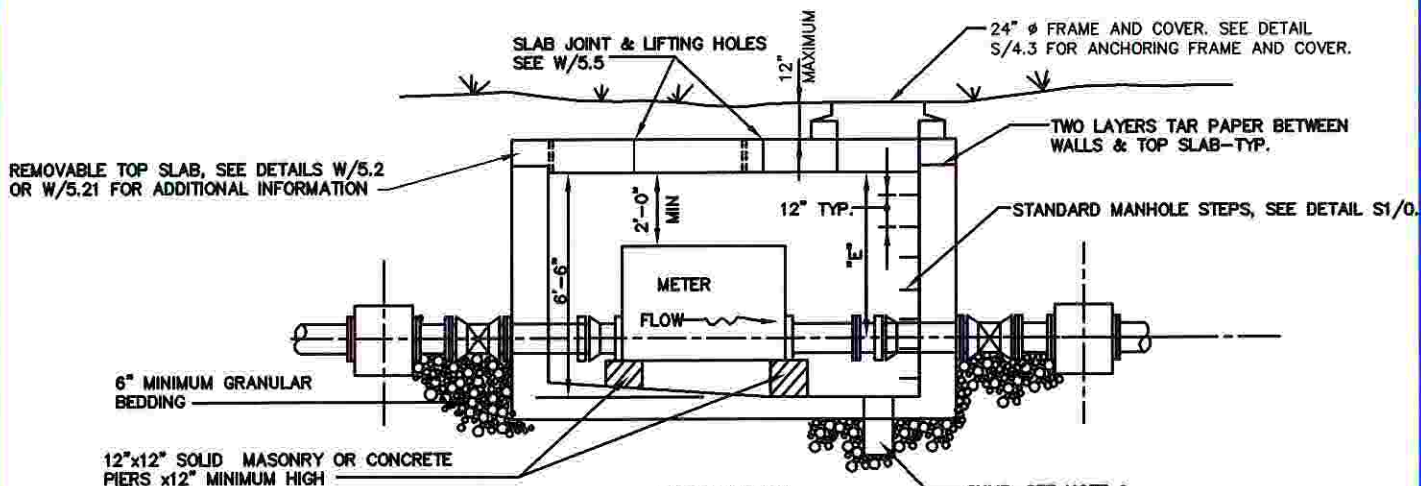
**SECTION IV- WATER DETAILS -SUPERCEDED****TABLE OF CONTENTS**

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Top Slab Details for Vaults	W/5.5





PLAN-TOP SLAB REMOVED



SECTION

**NOTES:**

1. CONNECTING PIECES LABELED "A" MAY BE EITHER FLG. & M.J. OR PUSH ON JOINT BELL 8" LAYING LENGTH OR OR FLG. & P. E. 12" LAYING LENGTH.
2. BY-PASS PIPE 1", 1 1/2", & 2" SHALL BE COPPER TYPE "K" INSTALLED THROUGH VAULT WITH APPROPRIATE SIZE GATE VALVE INSIDE VAULT. ALL OTHER BY-PASS PIPE SHALL BE OUTSIDE OF VAULT.
3. ALL PIPE 3" AND LARGER DIAMETER SHALL BE D.I. CLASS 51.
4. PROVIDE VALVE BOXES & EXTENSION STEMS ON ALL EXTERIOR VALVES PER DETAIL W/2.2.
5. BLOCK ALL TEES AND BENDS, SEE DETAILS.
6. FOR "A","B","C","E", & "F" DIMENSIONS, SEE W/5.1.
7. CHECK VALVE IS REQUIRED WHEN MORE THAN ONE CONNECTION SERVES ON-SITE SYSTEM.
8. VAULTS TO BE EITHER CAST IN PLACE CONCRETE (DETAIL W/5.3) OR PRECAST CONCRETE (DETAIL W/5.4).
9. SUMP SHALL BE 12" DIAMETER CONCRETE OR CLAY PIPE 2'-0" LONG PLACED WITH MINIMUM 8" GRANULAR BEDDING ALL AROUND, CAPPED OR PLUGGED @ BOTTOM AND PROVIDED WITH 1/2' MESH SCREEN OVER TOP OF SUMP.
10. FOR 2" METER USE COPPER TUBING WITH 2"x1" COPPER TEES FOR BY-PASS, COPPER TO N.P.T. BRASS ADAPTORS, BRASS VALVES, BRASS PIPE NIPPLES, AND CONNECT TO METER FLANGES W/A.S.A. CLASS 125 COMPANION FLANGES TAPPED FOR 2" N.P.T.

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*Rafael R. Huergo*  
Chief Engineer

STANDARD DETAIL

COMPOUND, DETECTOR  
CHECK AND F.M. METER  
INSTALLATION

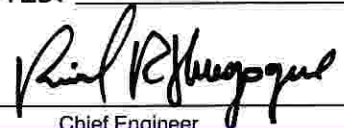
W  
5.0

METER SIZE	BYPASS SIZE	W/CHECK VALVE	W/O CHECK VALVE	B	C	E
		A	A			
COMPOUND METERS						
2"	1"	5'-7"	4'-11"	4'-10"	2'-5"	3'-1"
3"	1-1/2'	6'-2"	5'-4"	5'-0"	2'-6"	3'-2 1/2"
4"	2'	6'-9"	5'-9"	5'-0"	2'-6"	3'-4"
6"	3"	7'-6"	6'-4"	5'-3"	2'-8"	3'-5"
8"	4"	9'-0"	6'-10"	5'-4"	2'-8"	3'-9"
10"	6"	9"-2"	7'-4"	5'-10"	2'-11"	3'-11"
DETECTOR CHECK METERS						
4"	2"	_____	4'-9"	5'-7"	3'-1"	3'-1"
6"	3"	_____	5'-3"	5'-10"	3'-2"	3'-5"
8"	4"	_____	5'-7"	6'-2"	3'-5"	3'-11"
10"	6"	_____	6-4"	6'-6"	3'-7"	4'-2"
F.M. METERS						
4"	2"	7'-2"	6'-1"	6'-0"	3'-9"	3'-2"
6"	4"	8'-6"	7'-1"	6'-6"	4'-3"	3'-7"
8"	6"	9'-4"	7'-9"	7'-3"	4'-9"	4'-0"
10"	8"	11'-1"	9'-0"	8'-0"	5'-6"	4'-7"

NOTES:

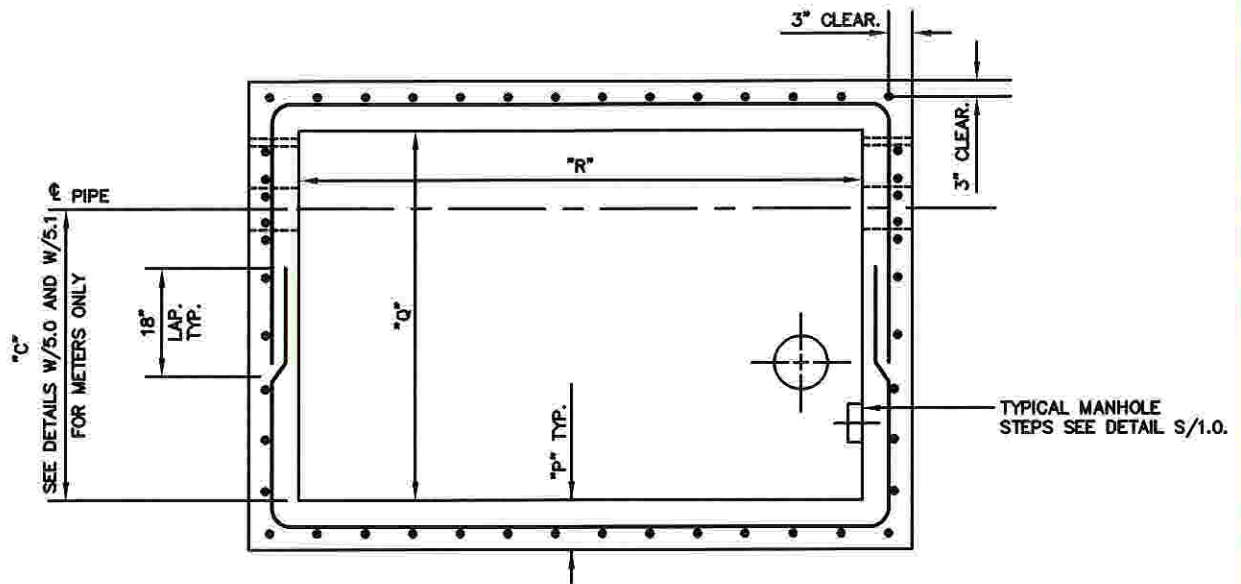
1. SEE DETAIL W/5.0 FOR METER INSTALLATION DETAILS.

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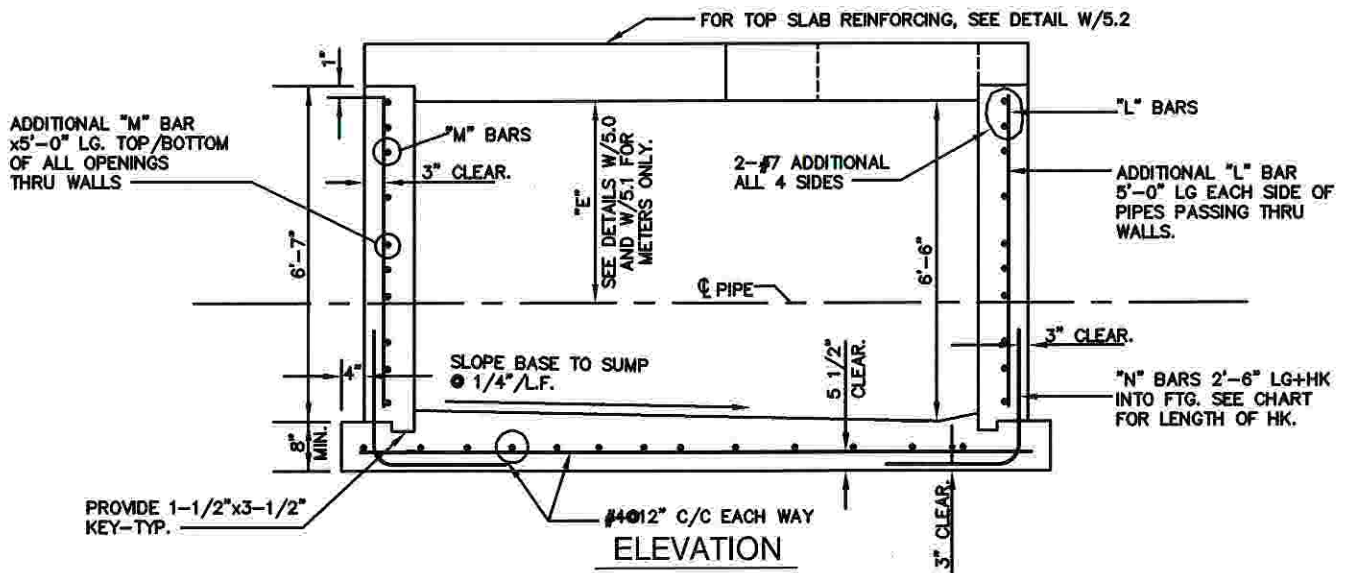
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Chief Engineer

STANDARD DETAIL  
DIMENSIONS FOR COMPOUND,  
DETECTOR CHECK AND F.M.  
METER INSTALLATION

W  
5.1



PLAN OF VAULT-TOP SLAB REMOVED



"P"	"Q"	"R"	"L"	"M"	"N"
8"	6'-0"	6'-0"	#4@12"	#4@12"	#5@12"+2'-0" HK
8"	6'-0"	8'-0"	#4@12"	#4@12"	#5@12"+3'-0" HK
8"	6'-0"	10'-0"	#4@10"	#4@12"	#5@12"+3'-0" HK
8"	8'-0"	8'-0"	#4@10"	#4@12"	#5@10"+3'-0" HK
8"	8'-0"	10'-0"	#4@8"	#4@12"	#5@8"+3'-0" HK
8"	8'-0"	12'-0"	#4@6"	#4@12"	#5@6"+4'-0" HK

NOTES:

- SEE DETAIL W/2.5 NOTES (1) THRU (4) FOR ADDITIONAL INFORMATION.
- SEE DETAILS W/5.0 AND W/5.1 FOR METER VAULT SIZE REQUIRED AND METER INSTALLATION DETAILS.

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Chief Engineer

STANDARD DETAIL

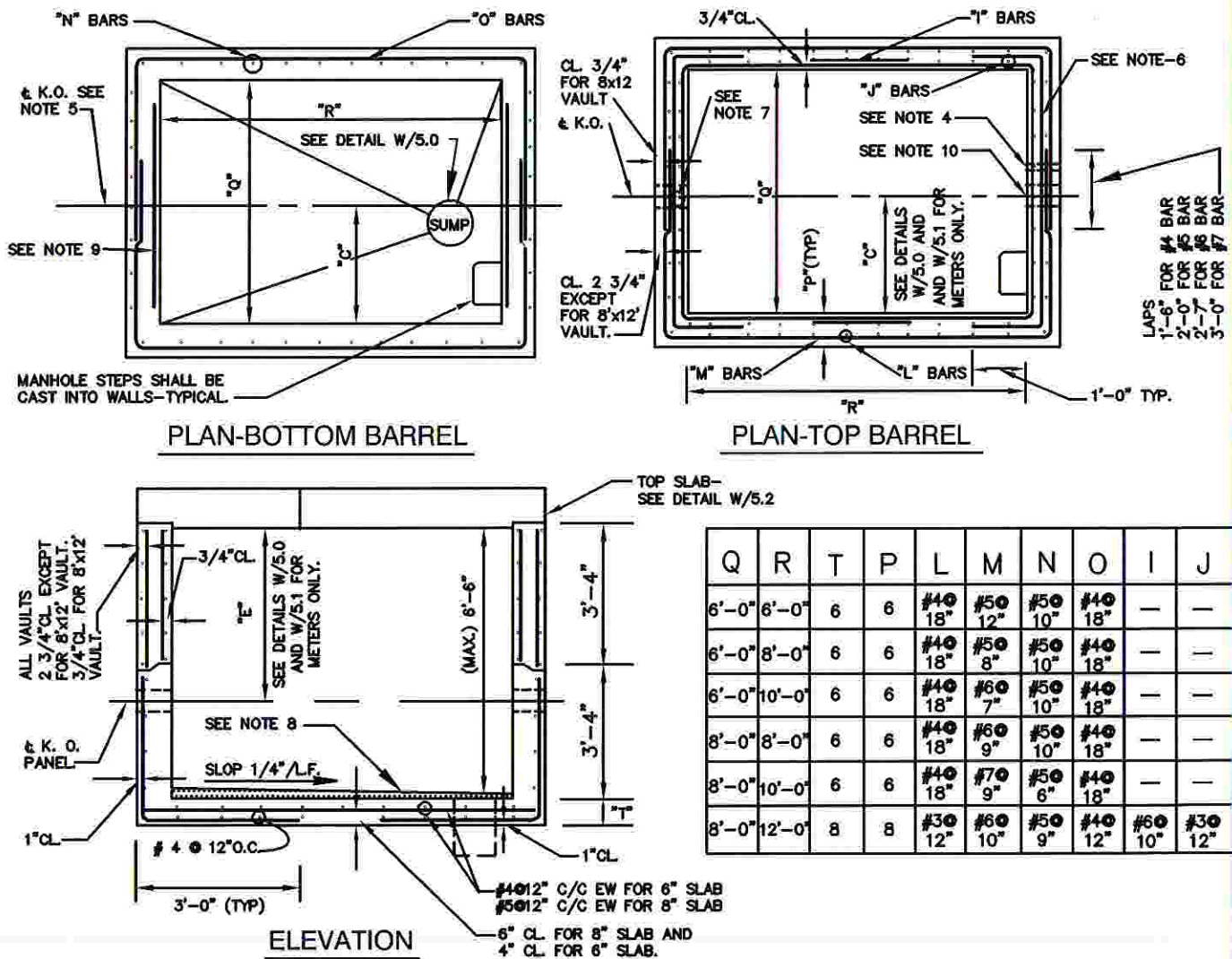
CAST IN PLACE CONCRETE  
VAULTS FOR METERS  
AND VALVES

W  
5.3



# PRECAST CONCRETE VAULT NOTES:

1.  $f'_c=5000$  PSI. @ 28 DAYS.
2.  $f_y=60,000$  PSI.
3. VAULTS ARE DESIGNED FOR THE FOLLOWING CONDITIONS. (A). H<sub>2</sub>O LOADING & 1'-0" COVER + 35% IMPACT. (B). H<sub>2</sub>OLL + 0% IMPACT + 5'-0" MAXIMUM EARTH COVER.
4. DRILL BYPASS HOLE IN FIELD IF REQUIRED.
5. PROVIDE K.O. PANELS AT PIPE PASSING THRU WALL. NO REINFORCEMENT SHALL BE PLACED IN K.O. PANEL. MAXIMUM SIZE OF K.O. PANEL TO BE PIPE I.D. + 6" EACH SIDE.
6. PROVIDE ADDITIONAL BARS OVER K.O. AS SHOWN. SIZE AND NUMBER OF ADDITIONAL BARS TO BE SAME AS SIZE AND NUMBER OF "M" BARS DISCONTINUED DUE TO KNOCK OUT.
7. PROVIDE ADDITIONAL 2#4 BARS VERTICAL EACH SIDE OF K.O. 3'-0" LONG IN TOP AND BOTTOM BARREL.
8. 1" MINIMUM THICK CEMENT MORTAR WEARING COURSE @ SUMP.
9. PROVIDE 2#5x5'-0" LONG BELOW K.O.
10. SEE DETAILS W/5.0 AND W/5.1 FOR VAULT SIZE REQUIRED AND METER INSTALLATION DETAILS.
11. ADDITIONAL BARS PROVIDED AROUND K.O. SHALL BE 1" CLEAR OF K.O.



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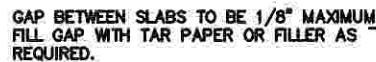
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*Rafael R. Hernandez*  
Chief Engineer

STANDARD DETAIL

PRECAST CONCRETE  
VAULTS FOR METERS.

W  
5.4



## SLAB JOINT DETAIL

1. DO NOT USE HATCHES WHERE VAULT OPENINGS ARE LOCATED IN A STREET OR OTHER LOCATIONS SUBJECTED TO HIGH DENSITY TRAFFIC.

## VALVE BOX SLAB OPENING

$$\frac{W}{5.5}$$