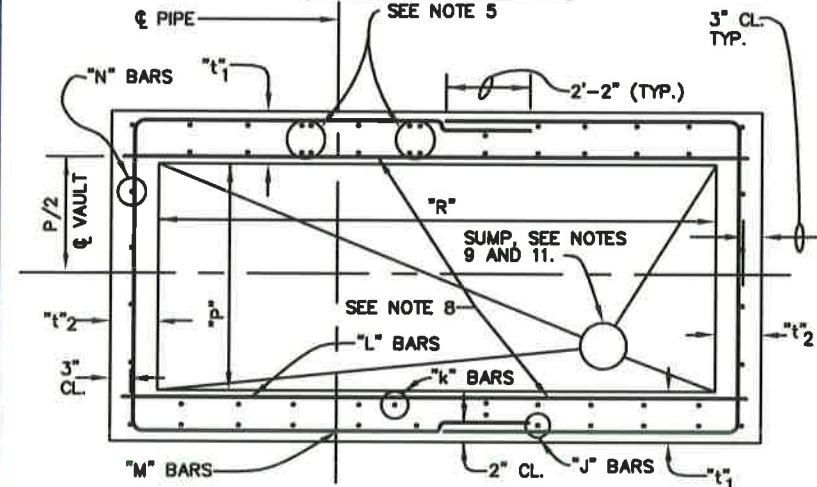
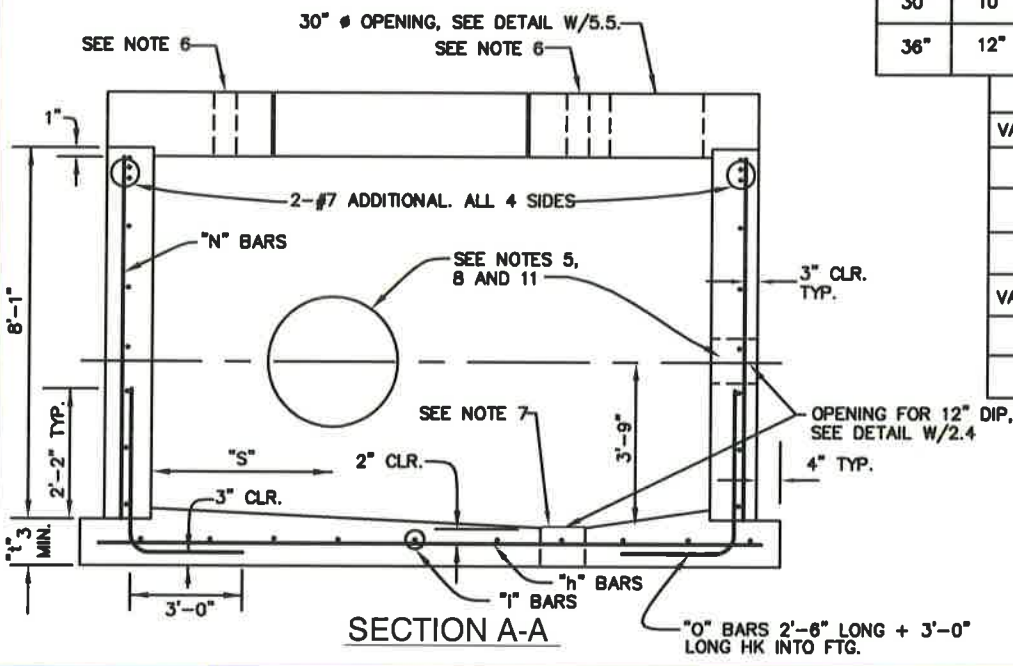


NOTE: FOR 30" AND 36" VALVES VAULTS REFER TO DETAIL W/5.21, "Q" 9'-0", THICKNESS AND REINFORCING

TOP SLAB-PLAN



PLAN-TOP SLAB REMOVED



SECTION A-A

CAST IN PLACE CONCRETE VAULT NOTES

1. $f'_c = 4000$ PSI. @ 28 DAYS
2. $f_y = 60,000$ PSI.
3. VAULTS ARE DESIGNED FOR THE FOLLOWING CONDITIONS
 - A. H2O LOADING & 1'-0" COVER + IMPACT (WATER TABLE 4'-0" BELOW FINISHED GRADE)
 - B. 5'-0" COVER & 2'-0" SURCHARGE. (WATER TABLE 4'-0" BELOW FINISHED GRADE)
4. PRECAST VAULT.
 - A. CONTRACTOR MAY USE PRECAST VAULTS, SEE SPECIFICATIONS FOR SUBMITTAL REQUIREMENTS.
 - B. MONOLITHICALLY CASE WALLS AND BASE SLAB.
 - C. IF THE BOTTOM SLAB IS NOT SLOPED, PROVIDE MINIMUM 1" THICK CEMENT MORTAR WEARING COURSE SLOP TO SUMP @ 1/4"/LF.
5. PROVIDE ADDITIONAL "N" BARS 6'-0" LONG EACH SIDE OF ALL PIPES PASSING THROUGH WALLS.
6. PROVIDE 5" ϕ HOLE IN TOP SLAB CENTERED OVER VALVE OPERATING NUTS. PROVIDE VALVE BOXES PER DETAIL W/5.5.
7. SLOPE BASE OF VAULT TO DRAIN @ 1/4"/LF.
8. PROVIDE ADDITIONAL. "M" BARS x 6'-0" LONG TOP & BOTTOM OF ALL PIPES PASSING THRU WALL.
9. FOR SUMP SEE DETAILS W/2.4 AND W/2.4a.
10. FOR PIPING AND VALVE CONFIGURATION AND ADDITIONAL DETAILS, SEE DETAILS W/2.4 AND W/2.4a.
11. PROVIDE RUBBER ANNULAR HYDROSTATIC SEALING DEVICES FOR PIPE THROUGH WALL CONNECTIONS, PROVIDE PIPE OPENING LARGE ENOUGH TO ALLOW FLANGE OR BELL JOINT TO PASS THROUGH.

VALVE SIZE	t ₁	t ₂	t ₃	"P"	"R"	"S"
30"	10"	8"	8"	8'-6"	14'-0"	4'-6"
36"	12"	8"	8"	8'-6"	16'-0"	5'-0"

REINFORCING BAR SIZES				
VALVE SIZE	"h"	"i"	"j"	"k"
30"	#4@12"	#5@5"	#5@7"	#4@12"
36"	#4@12"	#5@5"	#5@8"	#4@10"

REINFORCING BAR SIZES				
VALVE SIZE	"L"	"M"	"N"	"O"
30"	#4@10"	#5@7"	#5@7"	#5@7"
36"	#4@12"	#5@8"	#5@8"	#5@8"

WASHINGTON
SUBURBAN
SANITARY
COMMISSION

APPROVED: 9/28/16

Chief Engineer

STANDARD DETAIL
CAST IN PLACE CONCRETE
VAULT FOR 30-INCH AND 36-INCH
HORIZONTAL VALVES

W
2.5a