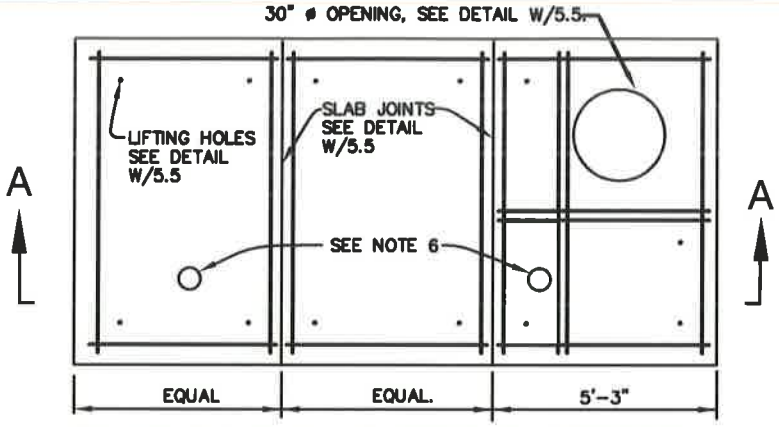
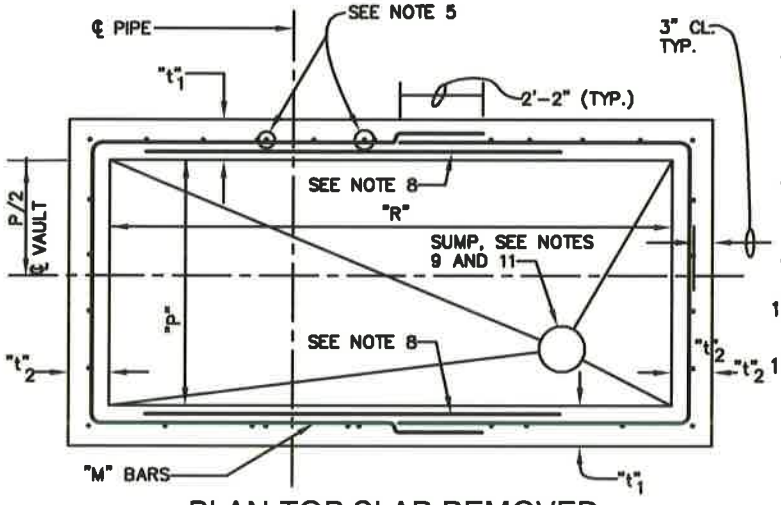
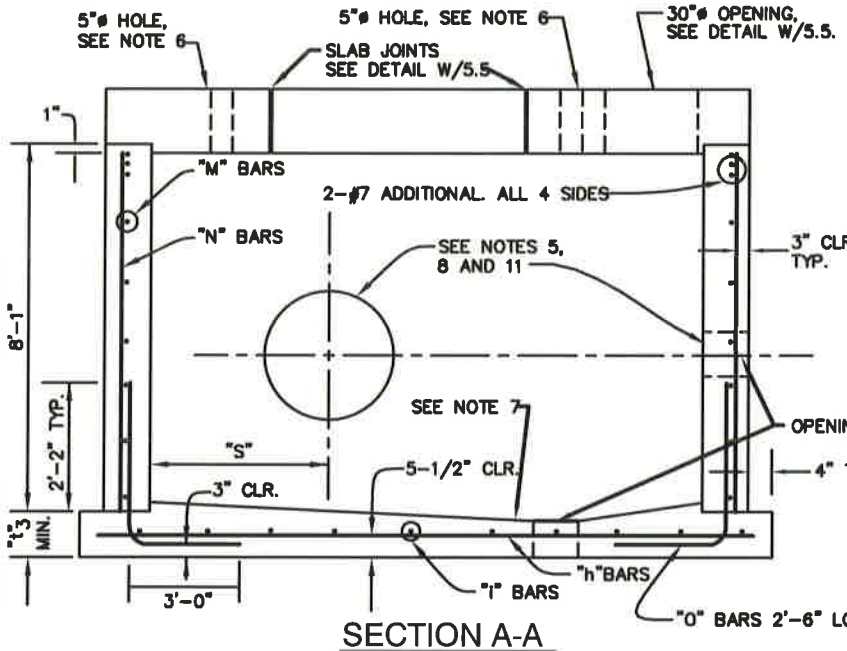


SEE DETAIL W/5.2 FOR TOP SLAB THICKNESS AND REINFORCEMENT

TOP SLAB-PLAN



PLAN-TOP SLAB REMOVED



SECTION A-A

CAST IN PLACE CONCRETE VAULT NOTES

1. f'c =4000 PSI. @ 28 DAYS
2. fy= 60,000 PSI.
3. VAULTS ARE DESIGNED FOR THE FOLLOWING CONDITIONS
   A. H20 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" ø 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"
16"	8"	8"	8"	7'-0"	11'-0"	3'-6"
20"	8"	8"	8"	7'-0"	11'-0"	3'-6"
24"	8"	8"	8"	7'-0"	12'-0"	4'-0"

	REINFORCING BAR SIZES				
VALVE SIZE	"h"	"I"	"M"	"N"	"O"
16"	#4@12"	#4@12"	#5@12"	#5@8"	#6@8"
20"	#4@12"	#4@12"	#5@12"	#5@8"	#6@8"
24"	#4@12"	#4@12"	#5@12"	#5@8"	#6@8"

WASHINGTON SUBURBAN SANITARY COMMISSION

APPROVED: 9/28/16

Chief Engineer

STANDARD DETAIL

CAST IN PLACE CONCRETE VAULT FOR 16-INCH, 20-INCH, AND 24-INCH HORIZONTAL VALVES

W 2.5