

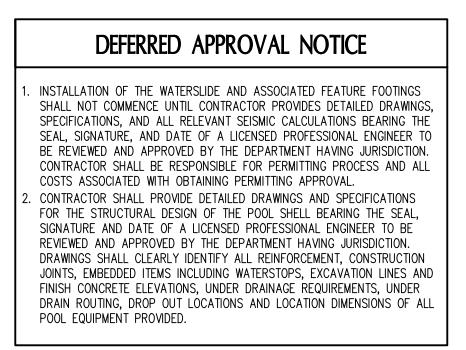
DESIGN DATA				
	UNITS	POOL		
LENGTH	FT.	VARIES		
WIDTH	FT.	VARIES		
WATER SURFACE AREA	SQ. FT.	4,285		
PERIMETER	FT.	434'-5"		
VOLUME	GALLON	87,615		
CIRCULATION SYSTEM & FILTERS				
POOL TURNOVER RATE	HOUR	1.95		
RECIRCULATION RATE	GPM	750		
FILTRATION RATE (MAX. DESIGN)	GPM/SQ. FT.	15.0		
FILTER AREA REQUIRED	SQ. FT.	50.0		
FILTRATION RATE (ACTUAL)	GPM/SQ. FT.	13.5		
FILTRATION AREA (ACTUAL)	SQ. FT.	55.4		
FILTER BACKWASH RATE	GPM/SQ. FT.	15.0		
BACKWASH FLOW RATE (PER FILTER)	GPM	416		
SURGE CAPACITY	GALLON	4,369		
SEWER CAPACITY	GPM	REFER TO PLUMBING		
DESIGN FILL RATE	GPM	61		
DESIGN FILL TIME	HOUR	24		
BATHER LOAD	PERSON	299		
MAXIMUM FACILITY OCCUPANCY	PERSON	458		

### GENERAL POOL NOTES

- . 🗢 DENOTES WATER DEPTH FROM WATER LEVEL.
- 2. POOL FINISH SHALL BE EPOXY PAINT WITH TILE DEPTH MARKINGS AND WARNING SIGNS.
- 3. ALL POOL FLOOR AREAS 42" AND SHALLOWER AND ALL STAIR TREADS SHALL HAVE A SLIP RESISTANT FINISH.
- 4. TYPICAL POOL DIMENSIONS SHOWN ARE FROM INSIDE FINISHED POOL WALL.
- 5. REFER TO POOL STRUCTURAL DRAWINGS FOR ALL DIMENSIONS RELATING TO THE THICKNESS OF THE POOL SHELL.
- 6. THE JUNCTION BETWEEN THE SWIMMING POOL WALL AND THE FLOOR SHALL BE COVED WITH A MAXIMUM 6" RADIUS.
- 7. DEPTH MARKERS AND WARNING SIGNS ARE SHOWN IN APPROXIMATE LOCATIONS. DEPTH MARKERS AND WARNING SIGNS SHALL NOT EXCEED 25'-0" APART FROM EACH OTHER, AND SHALL BE PLACED AT EVEN
- FOOT INTERVALS PER LOCAL CODE.
  8. ALL PROPRIETARY NAMES MENTIONED ARE TO DESIGNATE PERFORMANCE STANDARDS. EQUIVALENT PRODUCTS SHALL BE SUBMITTED FOR APPROVAL.
- 9. SLIP RESISTANT DECK FINISH REQUIRED. REFER TO ARCHITECT.
- REFER TO PLUMBING FOR DECK DRAINS AND HOSE BIBBS.
   ALL SURFACE WATER SHALL DRAIN AWAY FROM THE POOL.
- 12. REFER TO ELECTRICAL FOR GFI OUTLETS ON POOL DECK.
- 13. ELECTRICAL INSPECTOR SHALL APPROVE INSTALLATION OF BONDING GRID FOR POOL REINFORCING AND ALL POOL EMBEDS PRIOR TO PLACEMENT OF CONCRETE.
- 14. NO GROUND WATER SHALL BE ALLOWED TO RISE ABOVE ANY PORTION OF THE POOL BOTTOM DURING CONSTRUCTION.
- 15. ALL METALLIC PORTIONS OF PLAY FEATURES SHALL BE EPOXY COATED STAINLESS STEEL.

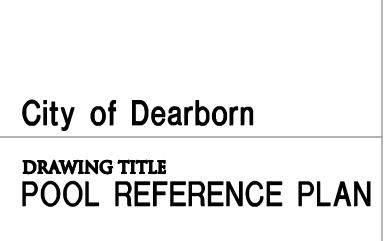
DRAWING INDEX		
SHEET	DESCRIPTION	
SP0.0	POOL REFERENCE PLAN	
SP1.0	POOL PLAN & SECTIONS	
SP1.1	POOL DETAILS	
SP1.2	POOL DETAILS	
SP2.0	POOL LOCATION POINT PLAN	
SP3.0	POOL SUCTION PIPING PLAN	
SP3.1	POOL RETURN PIPING PLAN	
SP4.0	POOL MECHANICAL ROOM PLAN & SECTIONS	
SP4.1	SURGE TANK PLAN & SECTIONS	
SP4.2	POOL MECHANICAL DETAILS	
SP4.3	POOL MECHANICAL DETAILS	
SP4.4	POOL MECHANICAL DETAILS	
SP5.0	POOL SYSTEMS SCHEMATIC	
SP6.0	POOL STRUCTURAL PLAN	
SP6.1	POOL STRUCTURAL DETAILS	
SP6.2	POOL STRUCTURAL SECTIONS	

POOL ALTERNATES
DEDUCT ALTERNATE #1 – PROVIDE 76' POOLSIDE WATERSLIDE, ITEM #65–370, IN LIEU OF THE FIBERGLASS WATERSLIDES AND TOWER STRUCTURE DETAILED ON THE DRAWINGS AND SPECIFIED IN SECTION 131413. THE FEATURE PUMPS AND PIPING SHALL BE REPLACED WITH A SINGLE 2" SCHEDULE 80 PVC SUPPLY OFF OF THE RECIRCULATION PUMP CAPABLE OF 20 GPM FLOW. WATER DEPTH TO BE MODIFIED FROM 3.5' IN THE BASE BID AT THE SLIDE PLUNGE ARE TO 4.0' PER MANUFACTURER'S REQUIREMENTS.





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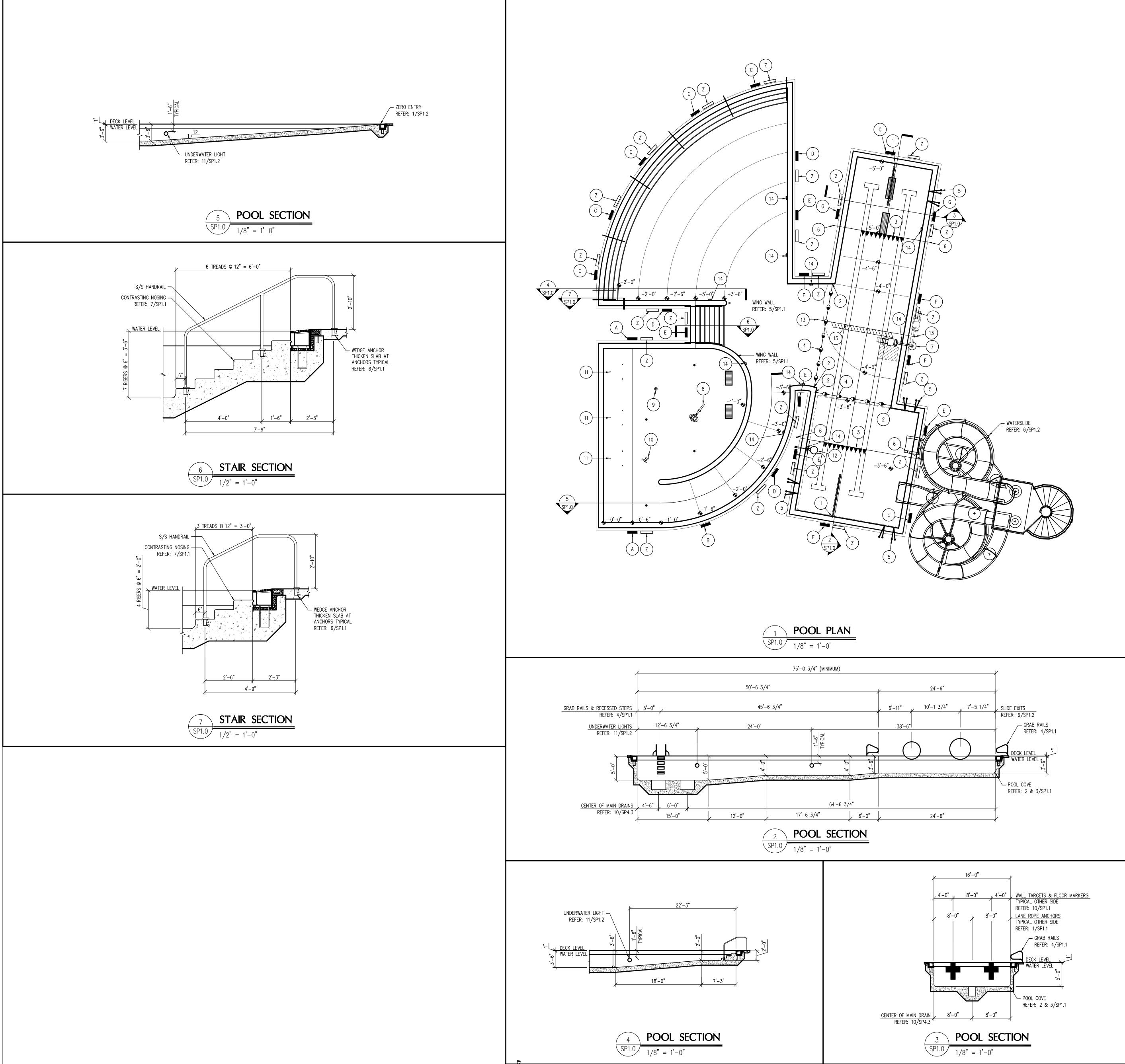


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**REGISTRATION SEAL** 





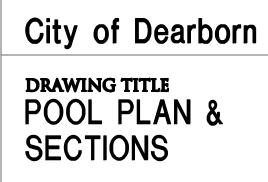


DEPTH & WARNING SIGNAGE SCHEDULE SIGNAGE ID A 0 FT 6 IN В 1 FT 6 IN С 2 FT 0 IN D 2 FT 6 IN E 3 FT 6 IN F 4 FT 0 IN G 5 FT 0 IN Z NO DIVING 😰

POOL EQUIPMENT LEGEND				
LEGEND	ID	ITEM		
•	1	CUP ANCHOR REFER: 1/SP1.1		
•	2	SAFETY ROPE CUP ANCHOR REFER: 1/SP1.1		
	3	BACKSTROKE PENNANT		
	4	SAFETY ROPE		
ΛΝ	5	GRAB RAILS AND RECESSED STEPS REFER: 4/SP1.1		
•	6	STANCHION POST AND ANCHOR REFER: 8/SP1.1		
	7	POOL LIFT AND ANCHOR REFER: 10/SP1.2		
	8	TWIST N SPILL FEATURE REFER: 3/SP1.2		
۲	9	FUNBRELLA FEATURE REFER: 4/SP1.2		
ŝæ	10	SPIN SPRAY NO1 FEATURE REFER: 5/SP1.2		
0	(11)	BUBBLER FEATURE REFER: 2/SP1.2		
<del>.</del>	(12)	WATER BASKETBALL REFER: 11/SP1.1		
Image: Water volleyball and anchor Refer: 12/Sp1.1				
N.	14	4 UNDERWATER LIGHT REFER: 11/SP1.2		
	N/A	DEPTH MARKERS REFER: 9/SP1.1		
	N/A	WARNING SIGNS REFER: 9/SP1.1		
N/A		PORTABLE LIFEGUARD CHAIR		



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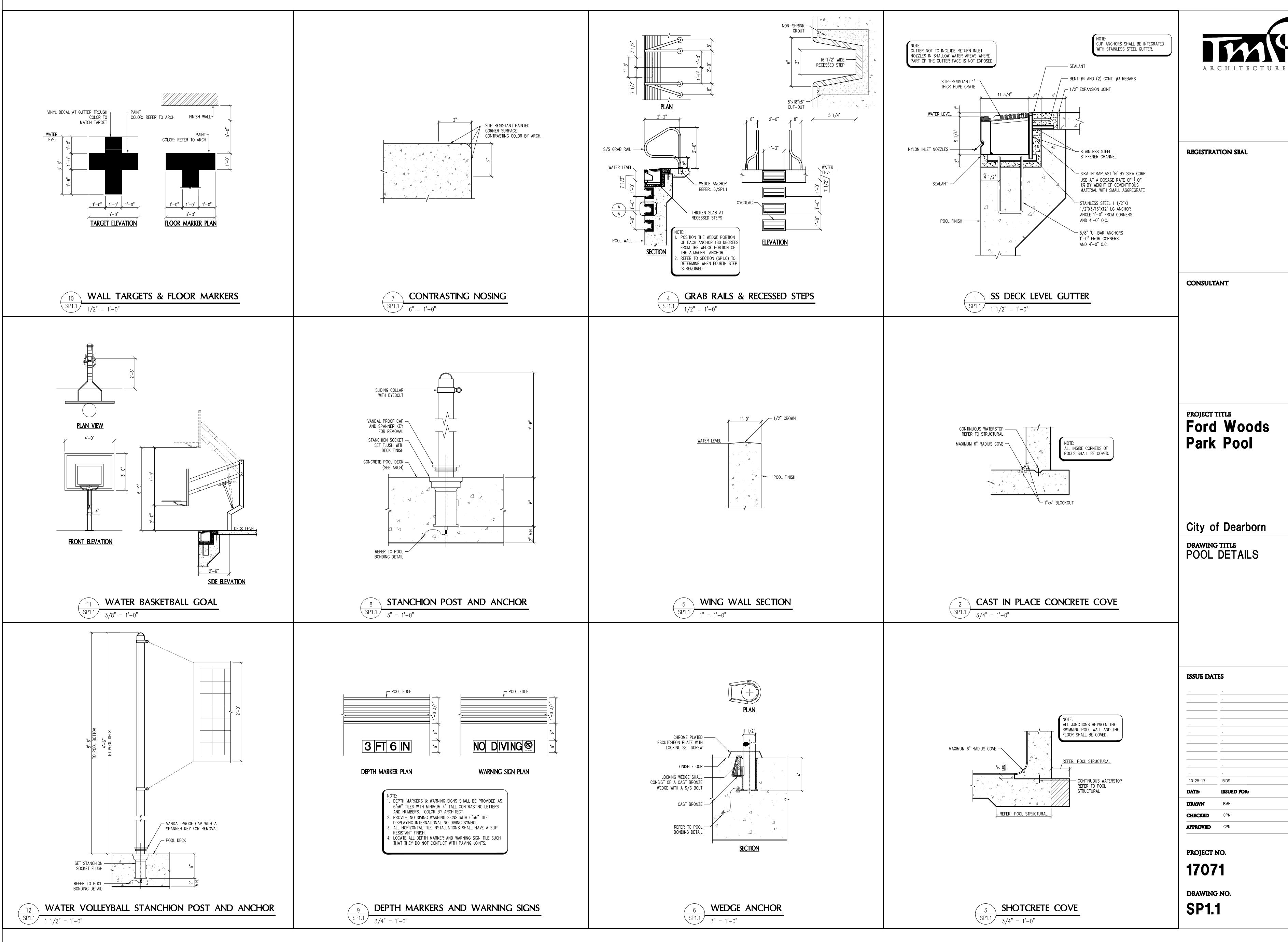
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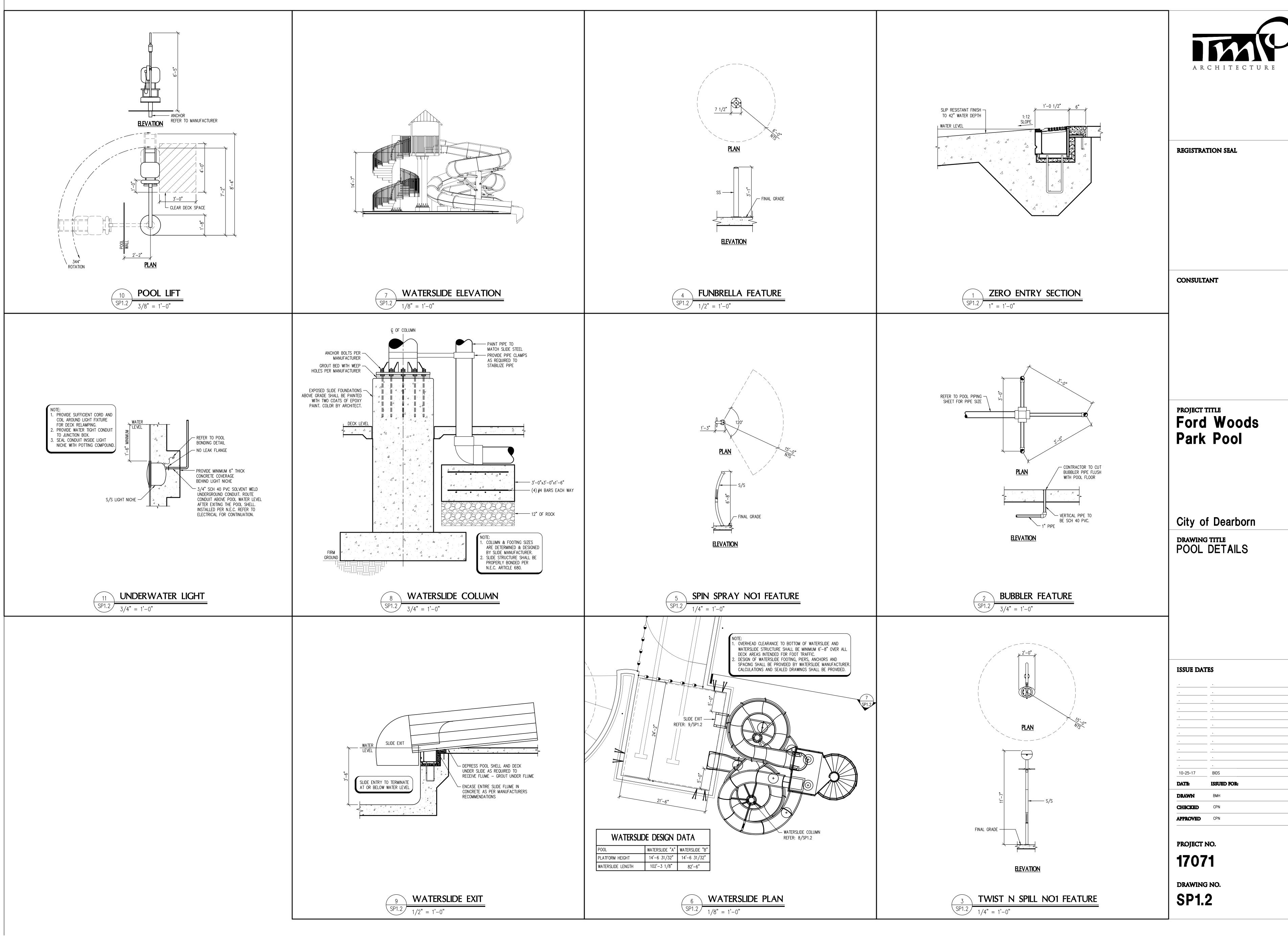




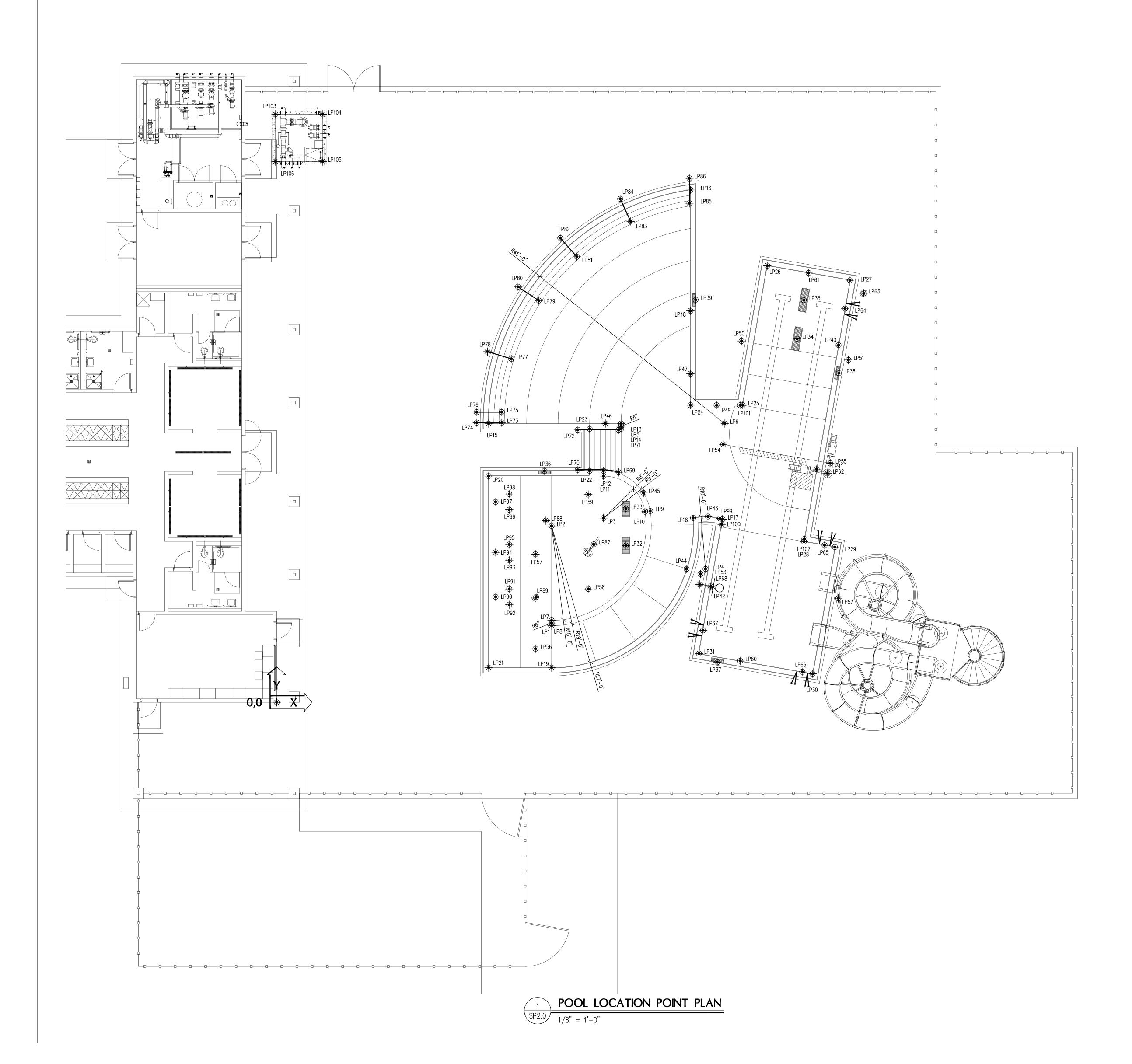


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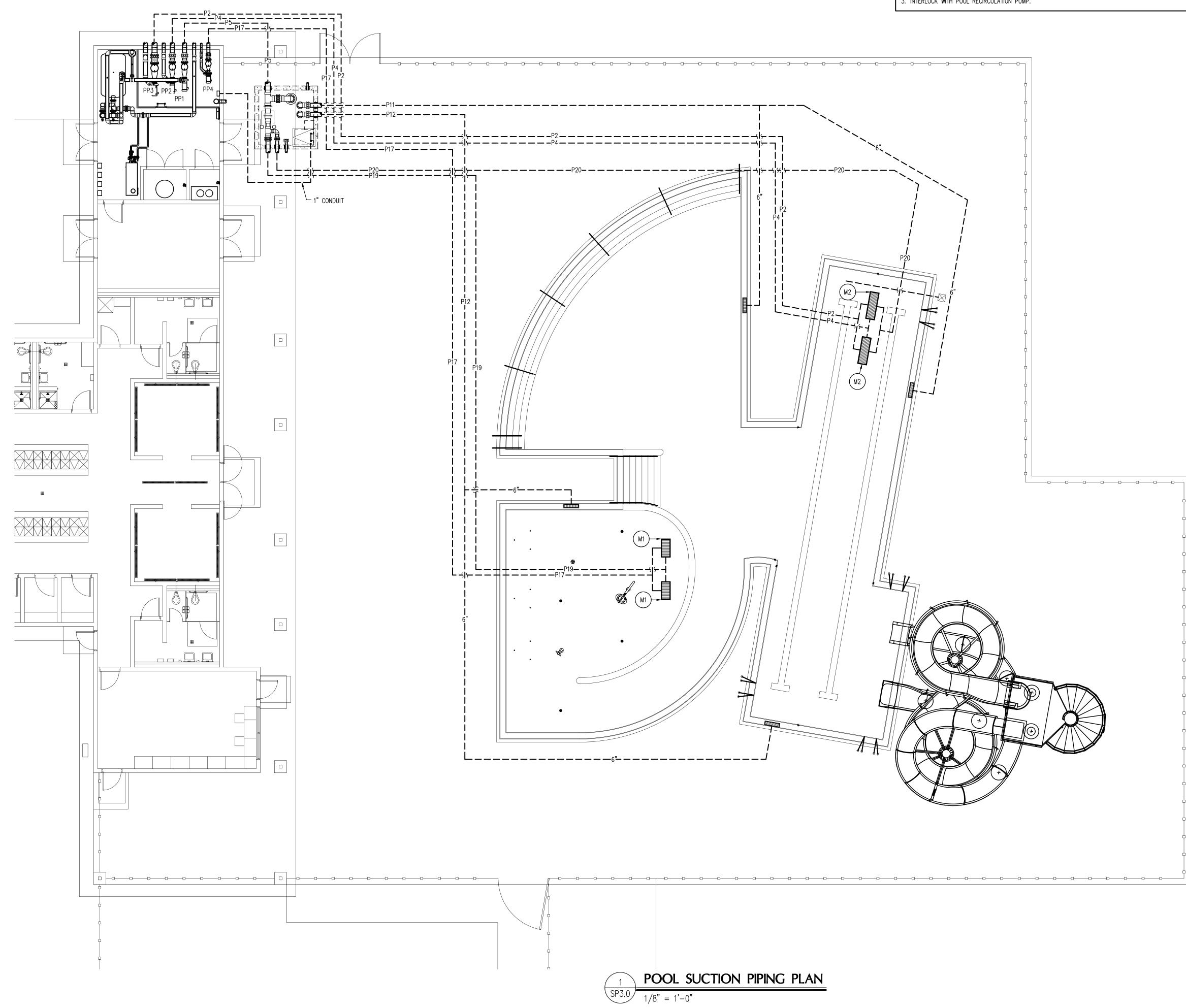


	Ĺ	OCATION	POINT SCHEDULE
LP#	X	Y	DESCRIPTION
1 2	52'-4 1/2" 52'-4 1/2"	15'-1 1/4" 33'-7 1/4"	ARC CENTER POINT ARC CENTER POINT
3	62'-3 1/4"	35'-1 1/4"	ARC CENTER POINT
4	81'-8 1/4"	<u>25'-5"</u>	ARC CENTER POINT
5 6	65'-7 1/2" 85'-4 1/2"	52'-7 1/4" 53'-1 1/4"	ARC CENTER POINT ARC CENTER POINT
7	52'-4 1/2"	15'-7 1/4"	ARC END POINT
8	52'-4 1/2"	14'-7 1/4"	ARC END POINT
9 10	71'-2" 70'-2"	36'-5 1/2" 36'-3 3/4"	ARC END POINT ARC END POINT
10	62'-3 1/4"	43'-1 1/4"	ARC END POINT
12	62'-3 1/4"	44'-1 1/4"	ARC END POINT
13	65'-7 1/2" 65'-7 1/2"	53'-1 1/4" 52'-1 1/4"	ARC END POINT
14 15	40'-4 1/2"	53'-1 1/4"	ARC END POINT ARC END POINT
16	78'-9 3/4"	97'-7 1/2"	ARC END POINT
17	84'-11 1/4"	34'-10 1/2"	ARC END POINT
18 19	79'-4" 52'-4 1/2"	35'-1 1/2" 6'-7 1/4"	ARC END POINT ARC END POINT
20	40'-4 1/2"	43'-1 1/4"	CONSTRUCTION POINT
21	40'-4 1/2"	6'-7 1/4"	CONSTRUCTION POINT
22 23	59'-7 1/2" 59'-7 1/2"	44'-1 1/4" 52'-1 1/4"	CONSTRUCTION POINT CONSTRUCTION POINT
23	78'-9 3/4"	56'-7 1/4"	CONSTRUCTION POINT
25	88'-9 1/4"	56'-7 1/4"	CONSTRUCTION POINT
26 27	93'-5 1/2" 109'-2 3/4"	83'-2 1/2" 80'-5"	CONSTRUCTION POINT CONSTRUCTION POINT
27	109-2 3/4	<u> </u>	CONSTRUCTION POINT
29	106'-4 1/4"	29'-7"	CONSTRUCTION POINT
30 31	102'-1 1/4" 80'-5 1/4"	5'-5 1/2"	CONSTRUCTION POINT
31 32	80'-5 1/4" 66'-6 1/2"	9'-3 1/4" 29'-10 1/2"	CONSTRUCTION POINT CENTER OF MAIN DRAIN
33	66'-6 1/2"	36'-10 1/2"	CENTER OF MAIN DRAIN
34	99'-1 1/2"	69'-3"	CENTER OF MAIN DRAIN
35 36	100'-5 1/4" 51'-0 1/4"	76'-7 3/4" 44'-1 1/4"	CENTER OF MAIN DRAIN GUTTER DROPOUT BOX
37	83'-11 1/4"	7'-7 3/4"	GUTTER DROPOUT BOX
38	107'-1 1/2"	62'-8 3/4"	GUTTER DROPOUT BOX
39 40	79'-9 3/4" 107'-0 1/2"	76'-8 1/2" 68'-0 3/4"	GUTTER DROPOUT BOX UNDERWATER LIGHT
41	102'-10 1/2"	44'-5"	UNDERWATER LIGHT
42	82'-8 1/4"	22'-1"	UNDERWATER LIGHT
43 44	82'-1 3/4" 78'-1 1/4"	35'-4 3/4" 25'-5 1/4"	UNDERWATER LIGHT UNDERWATER LIGHT
45	69'-10 3/4"	39'-10 3/4"	UNDERWATER LIGHT
46	62'-7 1/2"	53'-1 1/4"	UNDERWATER LIGHT
47 48	78'-9 3/4" 78'-9 3/4"	62'-7 1/4" 74'-7 1/4"	UNDERWATER LIGHT UNDERWATER LIGHT
40 49	83'-9 1/2"	56'-7 1/4"	UNDERWATER LIGHT
50	88'-6 3/4"	68'–10"	STANCHION POST ANCHOR
51	108'-11"	<u>65'-3"</u>	STANCHION POST ANCHOR
52 53	107'-0" 80'-8 3/4"	19'-10" 24'-5 1/2"	STANCHION POST ANCHOR STANCHION POST ANCHOR
54	85'–1"	49'-1 3/4"	VOLLEYBALL STANCHION POST ANCHOR
55	105'-5 1/4"	45'-6 1/2"	VOLLEYBALL STANCHION POST ANCHOR
56 57	49'-3 3/4" 49'-3 3/4"	10'-2 1/2" 28'-2 1/2"	FLOOR INLET FLOOR INLET
58	59'-4 1/4"	21'-7 1/4"	FLOOR INLET
59	59'-4 1/4"	39'-7 1/4"	FLOOR INLET
60 61	88'-3 3/4" 101'-4"	7'-10 3/4" 81'-9 3/4"	LANE ROPE ANCHOR LANE ROPE ANCHOR
62	104'-11 1/4"	43'-7 1/4"	POOL LIFT ANCHOR
63	111'-10"	77'-11 1/4"	SIGHT SUMP
64 65	108'-3 1/4" 104'-4 1/2"	75'-0" 29'-11 1/4"	GRAB RAILS & RECESSED STEPS GRAB RAILS & RECESSED STEPS
66	100'-1 1/2"	5'-9 3/4"	GRAB RAILS & RECESSED STEPS
67	81'-2 1/2"	13'-8 1/2"	GRAB RAILS & RECESSED STEPS
68 69	80'-6 3/4" 65'-1 3/4"	22'-5 1/2" 43'-10"	WATER BASKETBALL
69 70	65-1-3/4 57'-4-1/2"	<u>43'-10"</u> 44'-3 1/2"	HANDRAIL END POINT HANDRAIL END POINT
71	65'-1 1/2"	51'–11"	HANDRAIL END POINT
72	57'-4 1/2"	51'-11"	HANDRAIL END POINT
73 74	42'-10 1/2" 38'-1 1/2"	53'-3 3/4" 53'-3 1/2"	HANDRAIL END POINT HANDRAIL END POINT
75	42'-10 1/2"	55'-3 3/4"	HANDRAIL END POINT
76	38'-1 1/2"	55'-3 1/2"	HANDRAIL END POINT
77 78	44'-8 1/2" 40'-2"	65'-5 1/2" 66'-10"	HANDRAIL END POINT HANDRAIL END POINT
79	49'-11 1/4"	76'-6 3/4"	HANDRAIL END POINT
80	45'-11 1/2"	79'-2"	HANDRAIL END POINT
81 82	57'-2 1/4" 54'-0 1/4"	84'-11" 88'-5 1/2"	HANDRAIL END POINT HANDRAIL END POINT
83	67'-5 1/4"	91'-7 3/4"	HANDRAIL END POINT HANDRAIL END POINT
84	65'-5 1/4"	95'-11 1/4"	HANDRAIL END POINT
85 86	78'-7 1/2" 78'-7 1/2"	95'-1" 99'-10"	HANDRAIL END POINT HANDRAIL END POINT
86 87	60'-4 3/4"	<u> </u>	TWIST N SPILL FEATURE
88	51'-3 1/2"	34'-7 1/2"	FUNBRELLA FEATURE
89 90	49'-5 1/4" 41'-8 1/2"	20'-1" 20'-1 1/4"	SPIN SPRAY NO1 FEATURE BUBBLER
90 91	41-8 1/2	20-1 1/4 21'-7 1/4"	BUBBLER
92	44'-3 3/4"	18'-7 1/4"	BUBBLER
93	44'-3 3/4" 41'-8 1/2"	<u>27'-1"</u>	BUBBLER
94 95	41'-8 1/2" 44'-3 3/4"	28'-7" 30'-1"	BUBBLER BUBBLER
96	44'-3 3/4"	36'-8 1/4"	BUBBLER
97	41'-8 1/2"	38'-2 1/4"	BUBBLER
98 99	44'-3 3/4" 84'-5 1/2"	39'-8 1/4" 35'-0 1/4"	BUBBLER SAFETY ROPE ANCHOR
100	84'-9 1/4"	33'-10 3/4"	SAFETY ROPE ANCHOR
101	88'-3 1/4"	56'-7 1/4"	SAFETY ROPE ANCHOR
102 103	100'-6 1/4" -2 3/4"	31'-1 1/2" 112'-0 1/2"	SAFETY ROPE ANCHOR SURGE TANK CONTRUCTION POINT
103	8'-9 1/4"	112'-0 1/2"	SURGE TANK CONTRUCTION POINT
105	8'-9 1/4"	103'-0 1/2"	SURGE TANK CONTRUCTION POINT
106	-2 3/4"	103'-0 1/2"	SURGE TANK CONTRUCTION POINT



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PIPING LEGEND		
LEGEND	QTY.	ITEM
LEISURE POOL		
$\square$	1	SIGHT SUMP REFER: 9/SP4.3
	4	GUTTER DROPOUT BOX REFER: 6/SP4.2
	4	MAIN DRAIN REFER: 10/SP4.3
	4	FLOOR INLET REFER: 8/SP4.3
	N/A	BELOW GRADE PIPING



	PIPE SCHEDULE
ID	DESCRIPTION
P1	8" FROM PP3 TO OPEN FLUME WATERSLIDE
P2	10" FROM POOL MAIN DRAINS TO PP3
Р3	6" FROM PP2 TO CLOSED FLUME WATERSLIDE
P4	8" FROM POOL MAIN DRAINS TO PP2
P5	10" FROM POOL MAIN DRAINS TO PP1
P6	2" FROM PP4 TO TWIST N SPILL FEATURE
P7	2" FROM PP4 TO FUNBRELLA FEATURE
P8	2" FROM PP4 TO SPIN SPRAY FEATURE
P9	4" FROM PP4 TO BUBBLERS
P10	6" FROM POOL FILTERS TO INTEGRATED GUTTER SYSTEM
P11	8" FROM POOL GUTTER DROPOUT BOXES TO SURGE TANK
P12	8" FROM POOL GUTTER DROPOUT BOXES TO SURGE TANK
P13	4" FROM FILL FUNNEL TO SURGE TANK
P14	6" FROM PP1 TO POOL FILTERS
P15	6" FROM POOL FILTERS TO BACKWASH FUNNEL
P16	3" SURGE TANK VENT TO ATMOSPHERE
P17	6" FROM POOL MAIN DRAINS TO PP4
P18	3" FROM P14 TO BACKWASH FUNNEL
P19	8" FROM POOL MAIN DRAINS TO P5
P20	6" FROM POOL MAIN DRAINS TO P5
P21	3" FROM POOL FILTERS TO ZERO ENTRY FLOOR INLETS

PUMP SCHEDULE								
ID	DESCRIPTION	MANUFACTURER	MODEL	GPM	TDH	HP	NPSHR	NOTES
PP1	RECIRCULATION PUMP REFER: 1/SP4.2	РАСО	40129LC	750	75	20	11.93	1,2,3,4
PP2	ENCLOSED FLUME WATERSLIDE PUMP REFER: 1/SP4.2	PACO	40129LC	500	40	7.5	6.51	1,2,3,4,5
PP3	OPEN FLUME WATERSLIDE PUMP REFER: 1/SP4.2	PACO	60123LC	1,000	42	15	4.57	1,2,3,4,5
PP4	FEATURE PUMP REFER: 1/SP4.2	PACO	4012ALC	300	30	5	5.95	1,2,3,4,5
NOTE:					-	-		

THE MANUFACTURER INDICATED IS BASIS OF DESIGN. PUMP MANUFACTURERS: ITT MARLOW, GRISWOLD, PACO OR AURORA SHALL BE CONSIDERED EQUAL PROVIDED THEY MEET SPECIFICATIONS AS INDICATED IN BID DOCUMENTS. PROVIDE WITH 460 VOLT, 3 PHASE, 60HZ, 1750 RPM MOTOR. 3. PROVIDE WITH CHECK VALVE.

4. PROVIDE VARIABLE FREQUENCY DRIVE. 5. PROVIDE REMOTE PUMP START. 6. PROVIDE EMERGENCY STOP.

CHEMICAL FEED PUMP SCHEDULE							
ID	DESCRIPTION	MANUFACTURER	MODEL	TUBE #	HP	FLOW (GAL/DAY)	NOTES
	CHLORINATION BOOSTER PUMP REFER: 7/SP4.2	STENNER	45M4	4	FRAC	35	1,2,3
	ACID FEED PUMP REFER: 3/SP4.2	STENNER	45M3	3	FRAC	22	1,2,3

- PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERATIONAL PIPING SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.
- PIPE SIZES INDICATED ARE NOMINAL, I.P.S. UNLESS OTHERWISE NOTED, ALL OVERHEAD PIPING SHALL BE TIGHT TO UNDERSIDE OF
- STRUCTURE OR SLAB. ALL BALANCING VALVES AND BUTTERFLY VALVES SHALL BE PROVIDED WITH POSITION
- INDICATORS AND MAXIMUM ADJUSTABLE STOPS (MEMORY STOPS).
- ALL VALVES SHALL BE INSTALLED SO THAT THE VALVE REMAINS IN SERVICE WHEN THE EQUIPMENT OR PIPING ON THE EQUIPMENT SIDE OF THE VALVE IS REMOVED.
- PROVIDE CHAIN WHEEL OPERATORS FOR ALL VALVES IN EQUIPMENT ROOMS MOUNTED GREATER THAN 7'–0" ABOVE FINISHED FLOOR; CHAIN SHALL EXTEND TO 7'–0" ABOVE FINISHED FLOOR LEVEL.
- INSTALL ALL PIPING WITHOUT FORCING OR SPRINGING. ALL PIPING WORK SHALL BE COORDINATED WITH ALL TRADES AND SITE CONDITIONS. OFFSETS, EXPANSION LOOPS, OR TRANSITIONS IN PIPING AROUND OBSTRUCTIONS SHALL BE PROVIDED AT NO ADDITIONAL COST TO THE OWNER.
- ALL PIPING INDICATED SHALL BE CONSIDERED DIAGRAMMATIC. 10. ALL SWIMMING POOL PIPING ROUTED BELOW THE POOL SHELL SHALL BE CONCRETE ENCASED SCHEDULE 40 PVC. REFER: 12/SP4.3
- ALL UNDERGROUND OR EXPOSED SWIMMING POOL PIPING SHALL BE SCHEDULE 80 PVC, UNLESS OTHERWISE NOTED. CONTRACTOR SHALL REFER TO PLANS AND SPECIFICATIONS FOR ANY SPECIFIC REQUIREMENTS REGARDING PLACEMENT AND BACKFILLING OF BELOW GRADE POOL
- PIPE. 2. ALL DIMENSIONS INDICATED FROM THE FINISH WALL SURFACE AND DO NOT ACCOUNT FOR ANY VARIATIONS IN EITHER GRADE OR SLOPE DISTANCES.
- 3. THE CHEMICAL SENSOR LINE SHALL BE A 3/4" TO 1" DIAMETER, SCHEDULE 80 PVC PIPE EXTENDED FROM THE WET CELL SENSOR TO ITS RESPECTIVE FILL FUNNEL AND THE BACKWASH CATCH BASIN OR PUMP SUCTION.
- 14. ALL FLOOR INLETS SHALL BE ADJUSTED TO ACHIEVE AN EVEN FLOW DISTRIBUTION THROUGHOUT SYSTEMS.
- 15. ALL PIPE TEES SHALL BE SIZED FOR LARGEST PIPE CONNECTION.
- 16. ACID VENT PIPING TO ATMOSPHERE 17. ALL GUTTER DROPOUT LINES SHALL SLOPE 1/8" PER FOOT MINIMUM
- POOL PIPING WINTERIZATION NOTES

ANTI-FREEZE. REFER: 11/SP4.3

- ALL POOL PIPING SHALL HAVE THE CAPABILITY TO BE DRAINED FOR WINTERIZATION. (OUTDOOR POOLS ONLY) ALL POOL SUCTION AND GRAVITY PIPING SHALL BE INSTALLED WITH A CONSTANT SLOPE TO
- THE MAIN DRAINS AND/OR SURGE TANK. ALL POOL RETURN PIPING SHALL HAVE THE ABILITY TO COMPLETELY DRAIN TO THE 2"
- WINTERIZATION LINE AS SHOWN ON THE DRAWINGS. ALL POOL SUCTION AND RETURN PIPING SHALL SLOPE BACK TO THE POOL MECHANICAL ROOM. A WINTERIZATION TAP AND VALVE SHALL BE PROVIDED ON PIPING ALLOWING THE ABILITY FOR
- ALL PIPING TO BE COMPLETELY DRAINED. BLOW OUT ALL PIPES BY MEANS OF AN AIR BLOWER AND A WINTERIZATION TAP. CAP ALL PIPES. FOR ADDED PROTECTION AGAINST FREEZING PIPES, THE PIPES CAN BE FILLED WITH

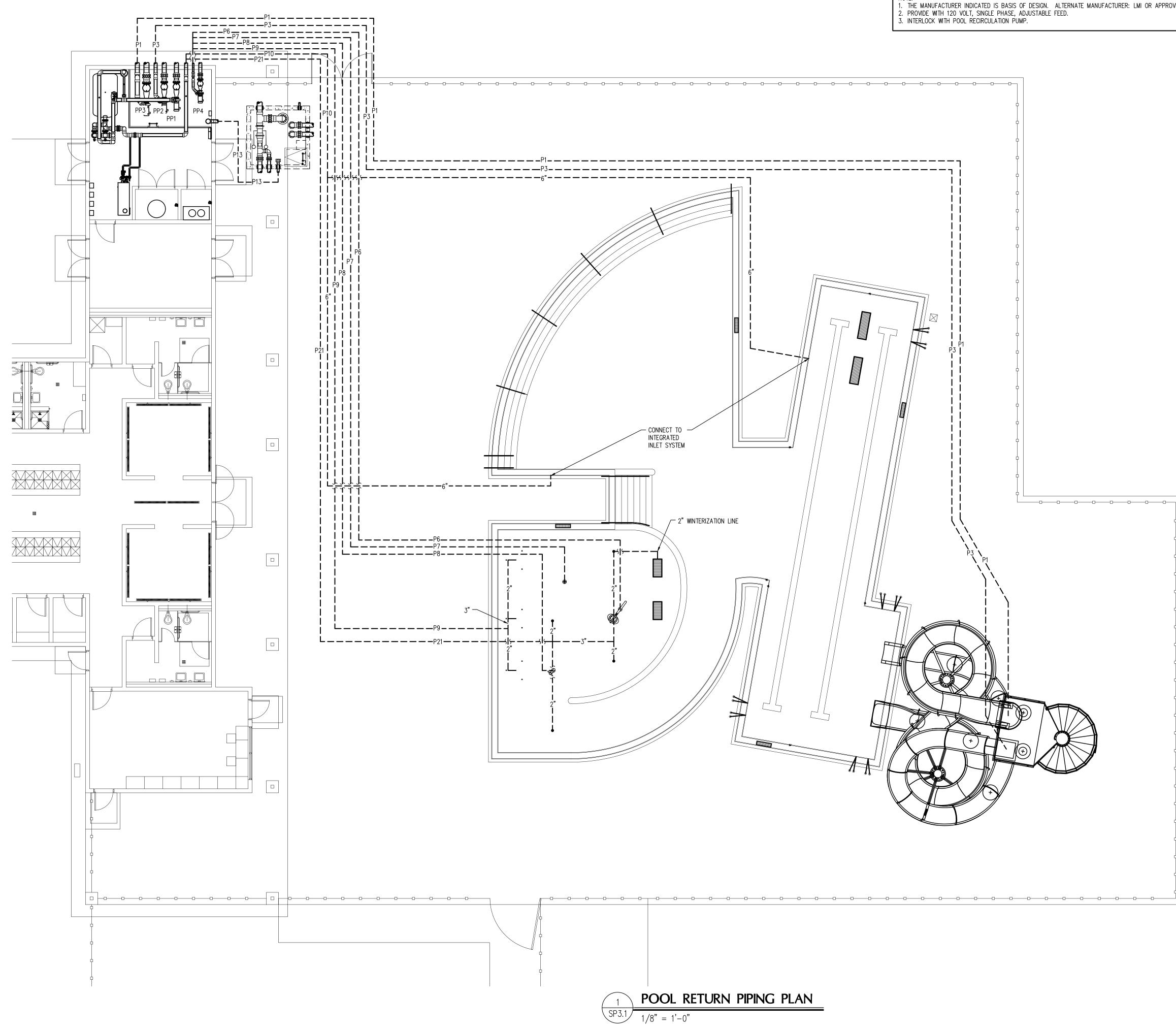
ID	DESCRIPTION	SIZE	QTY	DESIGN FLOW (GPM)	DESIGN VELOCITY (FPS) EACH
M1	ZERO ENTRY	18X36	2	500	0.47
M2	LAP LANES	18X54	2	2,050	1.28

2. OPEN AREA IS BASED ON MANUFACTURER'S DATA. 3. THE INSTALLED LIFE OF THE MAIN DRAIN COVER SHALL BE 10 YEARS. 4. ALL MAIN DRAINS SHALL BE INSTALLED IN THE POOL FLOOR. WALL SUMPS WILL NOT BE PERMITTED.

5. THE ENGINEER OF RECORD IS CERTIFYING THE CUSTOM PRE-FABRICATED OR FIELD-FABRICATED SUMP DESIGN IS IN COMPLIANCE WITH ASME/ANSI A112.19.8-2007 IN REGARDS TO MAXIMUM ALLOWABLE FLOW THROUGH THE COVER. REFER TO MAIN DRAIN SCHEDULE. THE SUCTION OUTLET COVER DESIGN HEREIN MEETS THE NSF TESTING IN REGARDS TO THE SPECIFIED FRAME AND GRATE. MEETING THE DESIGN CONSIDERATIONS OF THE COVER/GRATE LOADINGS, DURABILITY, FINGER AND LIMB ENTRAPMENT ISSUES, COVER/GRATE SECONDARY LAYER OF PROTECTION, AND OTHER FEATURES SPECIFIC TO THE SITE AND IN CONFORMANCE TO THE ASME/ANSI A112.19.8-2007.

REGISTRA	TION SEAL
CONSULT	ANT
<b>PROJECT</b>	
Ford	Woods
Park	Pool
City o	f Dearborn
DRAWING	; TITLE
POOL	SUCTION PIPING
	SUCTION PIPING
POOL	SUCTION PIPING
POOL PLAN	
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POOL PLAN PLAN SUE 041 SSUE 041 SSUE 041 SCHECKED APPROVED	TES

l	PIPIN	G LEGEND		
LEGEND QTY. ITEM				
LEISURE POOL				
$\boxtimes$	1	SIGHT SUMP REFER: 9/SP4.3		
	4	GUTTER DROPOUT BOX REFER: 6/SP4.2		
	4	MAIN DRAIN REFER: 10/SP4.3		
۲	4	FLOOR INLET REFER: 8/SP4.3		
	N/A	BELOW GRADE PIPING		



	PIPE SCHEDULE
ID	DESCRIPTION
P1	8" FROM PP3 TO OPEN FLUME WATERSLIDE
P2	10" FROM POOL MAIN DRAINS TO PP3
P3	6" FROM PP2 TO CLOSED FLUME WATERSLIDE
P4	8" FROM POOL MAIN DRAINS TO PP2
P5	10" FROM POOL MAIN DRAINS TO PP1
P6	2" FROM PP4 TO TWIST N SPILL FEATURE
P7	2" FROM PP4 TO FUNBRELLA FEATURE
P8	2" FROM PP4 TO SPIN SPRAY FEATURE
P9	4" FROM PP4 TO BUBBLERS
P10	6" FROM POOL FILTERS TO INTEGRATED GUTTER SYSTEM
P11	8" FROM POOL GUTTER DROPOUT BOXES TO SURGE TANK
P12	8" FROM POOL GUTTER DROPOUT BOXES TO SURGE TANK
P13	4" FROM FILL FUNNEL TO SURGE TANK
P14	6" FROM PP1 TO POOL FILTERS
P15	6" FROM POOL FILTERS TO BACKWASH FUNNEL
P16	3" SURGE TANK VENT TO ATMOSPHERE
P17	6" FROM POOL MAIN DRAINS TO PP4
P18	3" FROM P14 TO BACKWASH FUNNEL
P19	8" FROM POOL MAIN DRAINS TO P5
P20	6" FROM POOL MAIN DRAINS TO P5
P21	3" FROM POOL FILTERS TO ZERO ENTRY FLOOR INLETS

	PUMP SCHEDULE							
ID	DESCRIPTION	MANUFACTURER	MODEL	GPM	TDH	HP	NPSHR	NOTES
PP1	RECIRCULATION PUMP REFER: 1/SP4.2	PACO	40129LC	750	75	20	11.93	1,2,3,4
PP2	ENCLOSED FLUME WATERSLIDE PUMP REFER: 1/SP4.2	PACO	40129LC	500	40	7.5	6.51	1,2,3,4,5
PP3	OPEN FLUME WATERSLIDE PUMP REFER: 1/SP4.2	PACO	60123LC	1,000	42	15	4.57	1,2,3,4,5
PP4	FEATURE PUMP REFER: 1/SP4.2	PACO	4012ALC	300	30	5	5.95	1,2,3,4,5
NOTE:								

 THE MANUFACTURER INDICATED IS BASIS OF DESIGN. PUMP MANUFACTURERS: ITT MARLOW, GRISWOLD, PACO OR AURORA SHALL BE CONSIDERED EQUAL PROVIDED THEY MEET SPECIFICATIONS AS INDICATED IN BID DOCUMENTS.
 PROVIDE WITH 460 VOLT, 3 PHASE, 60HZ, 1750 RPM MOTOR.
 PROVIDE WITH CHECK VALVE.

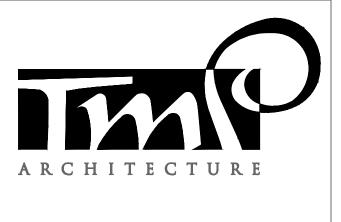
PROVIDE VARIABLE FREQUENCY DRIVE.
 PROVIDE REMOTE PUMP START.
 PROVIDE EMERGENCY STOP.

CHEMICAL FEED PUMP SCHEDULE							
ID	DESCRIPTION	MANUFACTURER	MODEL	TUBE #	HP	FLOW (GAL/DAY)	NOTES
PP5	CHLORINATION BOOSTER PUMP REFER: 7/SP4.2	STENNER	45M4	4	FRAC	35	1,2,3
PP6	ACID FEED PUMP REFER: 3/SP4.2	STENNER	45M3	3	FRAC	22	1,2,3
2. PRC	E MANUFACTURER INDICATED IS BASIS OF DVIDE WITH 120 VOLT, SINGLE PHASE, AD	JUSTABLE FEED.	ATE MANUFACTURE	R: LMI OR AF	PROVED	EQUAL.	L

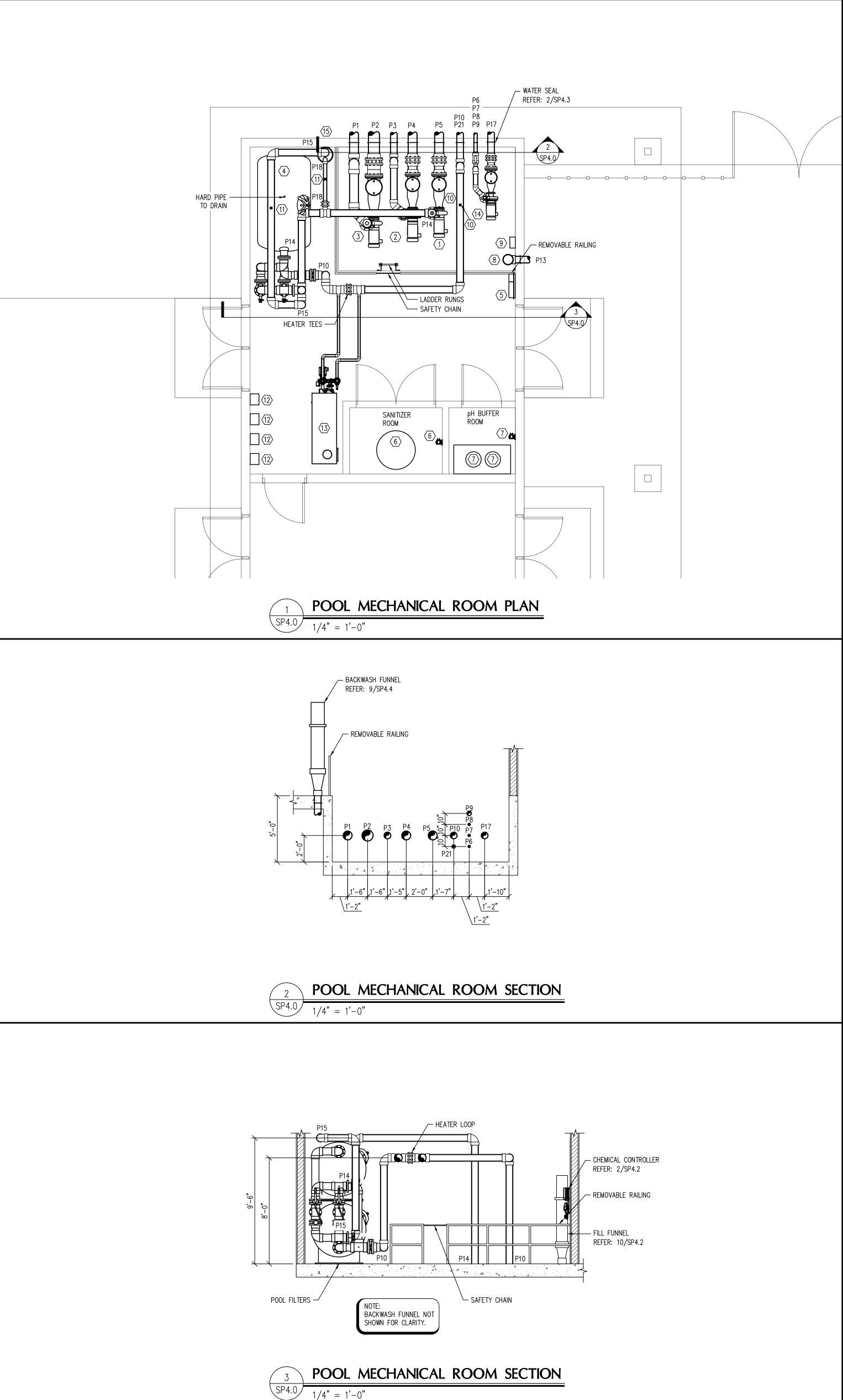
## GENERAL PIPING NOTES

- PROVIDE ALL MATERIALS AND EQUIPMENT AND PERFORM ALL LABOR REQUIRED TO INSTALL COMPLETE AND OPERATIONAL PIPING SYSTEMS AS INDICATED ON THE DRAWINGS, AS SPECIFIED AND AS REQUIRED BY CODE.
- 2. PIPE SIZES INDICATED ARE NOMINAL, I.P.S. 5. UNLESS OTHERWISE NOTED, ALL OVERHEAD PIPING SHALL BE TIGHT TO UNDERSIDE OF
- STRUCTURE OR SLAB. 4. ALL BALANCING VALVES AND BUTTERFLY VALVES SHALL BE PROVIDED WITH POSITION
- INDICATORS AND MAXIMUM ADJUSTABLE STOPS (MEMORY STOPS). 5. ALL VALVES SHALL BE INSTALLED SO THAT THE VALVE REMAINS IN SERVICE WHEN THE
- EQUIPMENT OR PIPING ON THE EQUIPMENT SIDE OF THE VALVE IS REMOVED.
- PROVIDE CHAIN WHEEL OPERATORS FOR ALL VALVES IN EQUIPMENT ROOMS MOUNTED GREATER THAN 7'-0" ABOVE FINISHED FLOOR; CHAIN SHALL EXTEND TO 7'-0" ABOVE FINISHED FLOOR LEVEL.
- INSTALL ALL PIPING WITHOUT FORCING OR SPRINGING.
   ALL PIPING WORK SHALL BE COORDINATED WITH ALL TRADES AND SITE CONDITIONS. OFFSETS, EXPANSION LOOPS, OR TRANSITIONS IN PIPING AROUND OBSTRUCTIONS SHALL BE PROVIDED
- AT NO ADDITIONAL COST TO THE OWNER.9. ALL PIPING INDICATED SHALL BE CONSIDERED DIAGRAMMATIC.10. ALL SWIMMING POOL PIPING ROUTED BELOW THE POOL SHELL SHALL BE CONCRETE ENCASED
- SCHEDULE 40 PVC. REFER: 12/SP4.311. ALL UNDERGROUND OR EXPOSED SWIMMING POOL PIPING SHALL BE SCHEDULE 80 PVC, UNLESS OTHERWISE NOTED. CONTRACTOR SHALL REFER TO PLANS AND SPECIFICATIONS FOR ANY
- SPECIFIC REQUIREMENTS REGARDING PLACEMENT AND BACKFILLING OF BELOW GRADE POOL PIPE. 12. ALL DIMENSIONS INDICATED FROM THE FINISH WALL SURFACE AND DO NOT ACCOUNT FOR ANY
- VARIATIONS IN EITHER GRADE OR SLOPE DISTANCES.
  13. THE CHEMICAL SENSOR LINE SHALL BE A 3/4" TO 1" DIAMETER, SCHEDULE 80 PVC PIPE EXTENDED FROM THE WET CELL SENSOR TO ITS RESPECTIVE FILL FUNNEL AND THE BACKWASH
- CATCH BASIN OR PUMP SUCTION. 14. ALL FLOOR INLETS SHALL BE ADJUSTED TO ACHIEVE AN EVEN FLOW DISTRIBUTION
- THROUGHOUT SYSTEMS. 15. ALL PIPE TEES SHALL BE SIZED FOR LARGEST PIPE CONNECTION.
- 16. ACID VENT PIPING TO ATMOSPHERE
- 17. ALL GUTTER DROPOUT LINES SHALL SLOPE 1/8" PER FOOT MINIMUM
- POOL PIPING WINTERIZATION NOTES 1. ALL POOL PIPING SHALL HAVE THE CAPABILITY TO BE DRAINED FOR WINTERIZATION. (OUTDOOR POOLS ONLY)
- 2. ALL POOL SUCTION AND GRAVITY PIPING SHALL BE INSTALLED WITH A CONSTANT SLOPE TO THE MAIN DRAINS AND/OR SURGE TANK.
- 3. ALL POOL RETURN PIPING SHALL HAVE THE ABILITY TO COMPLETELY DRAIN TO THE 2" WINTERIZATION LINE AS SHOWN ON THE DRAWINGS.
- 4. ALL POOL SUCTION AND RETURN PIPING SHALL SLOPE BACK TO THE POOL MECHANICAL ROOM. A WINTERIZATION TAP AND VALVE SHALL BE PROVIDED ON PIPING ALLOWING THE ABILITY FOR ALL PIPING TO BE COMPLETELY DRAINED.
- 5. BLOW OUT ALL PIPES BY MEANS OF AN AIR BLOWER AND A WINTERIZATION TAP. CAP ALL PIPES. FOR ADDED PROTECTION AGAINST FREEZING PIPES, THE PIPES CAN BE FILLED WITH ANTI-FREEZE. REFER: 11/SP4.3

CONSULT	ANT
	Woods Pool
City of	f Dearborn
drawing POOL PLAN	RETURN PIPING
ISSUE DAT	ES
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**REGISTRATION SEAL** 



		(15)	BACKWASH FUNNEL REFER: 9/SP4.4
	PIPE S	SCHED	DULE
ID	DESCRIPTION		
P1	8" FROM PP3 TO OPEN FLU	ME WATE	RSLIDE
P2	10" FROM POOL MAIN DRAIN	IS TO PP	3
Р3	6" FROM PP2 TO CLOSED FI	LUME WA	TERSLIDE
P4	8" FROM POOL MAIN DRAINS	S TO PP2	2
P5	10" FROM POOL MAIN DRAIN	IS TO PP	1
P6	2" FROM PP4 TO TWIST N S	SPILL FEA	TURE
Ρ7	2" FROM PP4 TO FUNBRELL	A FEATU	RE
P8	2" FROM PP4 TO SPIN SPR	AY FEATU	JRE
P9	4" FROM PP4 TO BUBBLERS		
P10	6" FROM POOL FILTERS TO	INTEGRAT	TED GUTTER SYSTEM
P11	8" FROM POOL GUTTER DRO	POUT BO	DXES TO SURGE TANK
P12	8" FROM POOL GUTTER DRO	POUT BO	DXES TO SURGE TANK
P13	4" FROM FILL FUNNEL TO SI	URGE TAI	NK
P14	6" FROM PP1 TO POOL FILT	ERS	
P15	6" FROM POOL FILTERS TO	BACKWAS	SH FUNNEL
P16	3" SURGE TANK VENT TO A	TMOSPHE	RE

	EQUIPMENT SCHEDULE
ID	ITEM
	POOL
$\langle 1 \rangle$	RECIRCULATION PUMP (PP1) REFER: 1/SP4.2
2	ENCLOSED FLUME WATERSLIDE PUMP (PP2 REFER: 1/SP4.2
$\langle 3 \rangle$	OPEN FLUME WATERSLIDE PUMP (PP3) REFER: 1/SP4.2
4	FILTER SYSTEM
5	CHEMICAL CONTROLLER REFER: 2/SP4.2
6	CHLORINATION SYSTEM (PP4) REFER: 7/SP4.2
$\langle 7 \rangle$	ACID SYSTEM (PP5) REFER: 3/SP4.2
8	FILL FUNNEL REFER: 10/SP4.2
9	WATER LEVEL CONTROLLER REFER: 1/SP4.4
(10)	FLOW METER SENSOR REFER: 11/SP4.2
(11)	IMPACT FLOW METER REFER: 1/SP4.3
(12)	VFD
(13)	HEATER REFER: 5/SP4.3
<u>&lt;14</u>	FEATURE PUMP (PP4) REFER: 1/SP4.2
(15)	BACKWASH FUNNEL REFER: 9/SP4.4
	-

1 12	o month role of their birds of boxes to solve minit
P13	4" FROM FILL FUNNEL TO SURGE TANK
P14	6" FROM PP1 TO POOL FILTERS
P15	6" FROM POOL FILTERS TO BACKWASH FUNNEL
P16	3" SURGE TANK VENT TO ATMOSPHERE
P17	6" FROM POOL MAIN DRAINS TO PP4
P18	3" FROM P14 TO BACKWASH FUNNEL
P19	8" FROM POOL MAIN DRAINS TO P5
P20	6" FROM POOL MAIN DRAINS TO P5
P21	3" FROM POOL FILTERS TO ZERO ENTRY FLOOR INLETS

- GENERAL POOL MECHANICAL ROOM NOTES
- 1. POOL PUMPS, STRAINERS, AND HEATERS SHALL BE INSTALLED ON HOUSEKEEPING PADS UNLESS NOTED OTHERWISE.
- 2. EQUIPMENT ROOM FLOOR SHALL SLOPE 1/4" TO 1/2" TO FLOOR DRAINS.
- 3. PUMP PIT FLOOR SHALL SLOPE MIN 1/4" TO 1/2" TO SUMP PIT. REFER TO PLUMBING.
- 4. THE FLOOR DRAINS INDICATED ARE IN APPROXIMATE LOCATIONS. REFER TO PLUMBING. 5. PROVIDE HOSE BIBBS FOR HOUSE CLEANING PURPOSES. REFER BUILDING MECHANICAL DRAWINGS.
- 6. THE INSIDE SURFACES OF THE BACKWASH CATCH BASIN SHALL BE WATERPROOFED. REFER TO SPECIFICATION.
- VENTILATION OF POOL MECHANICAL ROOM AND CHEMICAL STORAGE AREAS PER LOCAL, STATE AND INTERNATIONAL MECHANICAL CODE MINIMUM. REFER TO MECHANICAL.
- THE FOLLOWING INFORMATION SHALL BE LAMINATED AND POSTED IN THE POOL MECHANICAL ROOM: BACKWASH PROCEDURE, POOL FILLING & DRAINING, VALVE REFERENCE CHART, POOL MECHANICAL ROOM PLAN, POOL PIPING SCHEMATICS & POOL SYSTEMS SCHEMATICS.
- 9. REFER TO MECHANICAL FOR HVAC SYSTEMS DESIGN. 10. REFER TO ARCHITECTURAL DRAWINGS FOR LADDER RUNGS, SAFETY CHAIN, & REMOVABLE RAILING AT PUMP PIT.
- <u>PIPING</u>
- . MINIMUM 7'-0' CLEARANCE BENEATH ALL OVERHEAD PIPING. 2. PROVIDE AND SUPPORT OVERHEAD AND VERTICAL PIPING PER SPECIFICATION REQUIREMENTS.
- 3. LABEL AND IDENTIFY ALL PIPING IN COMPLIANCE WITH THE SPECIFICATIONS.
- ALL FLOW METERS SHALL BE SIZED TO MATCH THE PIPE ON WHICH IT IS INSTALLED. PROVIDE PRESSURE GAUGES ON INFLUENT AND EFFLUENT SIDE OF EACH FILTRATION SYSTEM AND A FULL LINE SIZE FLOW METER ON FILTER RETURN.
- . THE BACKWASH PIPING SHALL TERMINATE NO CLOSER THAN 6" ABOVE THE FLOOD RIM OF THE BACKWASH FUNNEL OR TWICE THE PIPE DIAMETER, WHICHEVER IS GREATER.
- 6. HYDROSTATICALLY TEST ALL PIPING AT 50 PSI FOR TWO HOURS AND MAINTAIN A PRESSURE OF 20 PSI IN ALL PIPING THROUGHOUT CONSTRUCTION. SECURE ALL FIXTURES PER SPECIFICATION REQUIREMENTS BEFORE HYDROSTATIC TEST.
- <u>FILTERS</u> 1. ALL FILTER SUPPORTS SHALL BE SEISMICALLY RATED FOR THE SEISMIC ZONE IN WHICH IT IS INSTALLED IN ACCORDANCE WITH LOCAL AND/ OR STATE REQUIREMENTS.
- 2. FILTER MANUFACTURER SHALL CERTIFY FILTER MEDIA. 3. VALVES SHALL BE PROVIDED TO BACKWASH EACH FILTER VESSEL INDEPENDENTLY.
- 4. FILTER TANK ASSEMBLIES SHALL BEAR THE NATIONAL SANITATION FOUNDATION SEAL OF APPROVAL FOR A MAXIMUM FLOW RATE OF 20 GPM PER SQUARE FOOT OF FILTER MEDIA.
- 5. THE BACKWASH THROTTLING VALVE(S) HANDLE SHALL BE REMOVED AND TURNED OVER TO THE OWNER ONCE THE BACKWASH FLOW RATE(S) HAVE BEEN TESTED, ADJUSTED AND BALANCED.
- 6. PROVIDE 1" DIAMETER, SCHEDULE 80 PIPE FROM THE AUTOMATIC AIR VENT ON EACH FILTER VESSEL TO THE NEAREST FLOOR DRAIN OR BACKWASH CATCH BASIN. THE VENT PIPE SHALL BE SLOPED TO THE DRAIN. . VESSEL SHALL BE BACKWASHED AT NO LESS THAN 15.0 GPM/SF.

### CHEMICAL TREATMENT

- 1. CHEMICAL FEED REQUIREMENTS REFER TO THE POOL SYSTEMS SCHEMATIC(S) ON SP5.0.
- INTERLOCK POOL CIRCULATION PUMP(S) WITH ITS CORRESPONDING WATER CHEMISTRY CONTROLLER, CHEMICAL FEED PUMP(S), AND HEATER(S).
- 3. PROVIDE SIGNAGE ON CHEMICAL ROOM DOORS IN COMPLIANCE WITH THE STATE FIRE CODE. REFER 9/SP4.2. SECURE CHEMICAL METERING PUMP FEED LINES TO WALL AND/OR OVERHEAD WITH CLIPS OR DEVICES THAT DO NOT CRIMP,
- DISTORT OR ALLOW HIGH AND LOW AREAS IN TUBING RUNS. PROVIDE CHECK VALVE AND SHUT-OFF VALVE BEFORE LINES ENTER POOL RETURN PIPING.
- WATER CHEMISTRY CONTROLLERS SHALL CONTROL THE SANITIZING SYSTEM AND PH CONTROL SYSTEM AND SHUT THEM DOWN UPON LOSS OF SAMPLE STREAM FLOW. 6. THE CHEMICAL CONTROL SYSTEM BYPASS LINE SHALL SAMPLE WATER AFTER THE FILTERS AND BEFORE THE HEATER BYPASS LINE.
- <u>PUMPS</u> . PROVIDE INFLUENT AND EFFLUENT GAUGES FOR EACH PUMP. PRESSURE GAUGES HAVE A RANGE OF 0-100 PSI. COMPOUND GAUGES HAVE A RANGE OF 0–30 HG / 0–60 PSI.
- ELECTRICAL
- 1. GFCI'S PROVIDED AT OUTLETS. REFER TO ELECTRICAL.
- 2. POOL EQUIPMENT ROOM AND CHEMICAL STORAGE AREAS SHALL BE PROVIDED WITH ARTIFICIAL LIGHTING SUFFICIENT TO ILLUMINATE ALL EQUIPMENT AND SUPPLIES. REFER TO ELECTRICAL.
- 3. PROVIDE ELECTRICAL CONNECTION TO POOL HEATERS. REFER TO ELECTRICAL.

		PUMP S	CHEDULE					
ID	DESCRIPTION	MANUFACTURER	MODEL	GPM	TDH	HP	NPSHR	NOTES
PP1	RECIRCULATION PUMP REFER: 1/SP4.2	PACO	40129LC	750	75	20	11.93	1,2,3,4
PP2	ENCLOSED FLUME WATERSLIDE PUMP REFER: 1/SP4.2	PACO	40129LC	500	40	7.5	6.51	1,2,3,4,5
PP3	OPEN FLUME WATERSLIDE PUMP REFER: 1/SP4.2	PACO	60123LC	1,000	42	15	4.57	1,2,3,4,5
PP4	FEATURE PUMP REFER: 1/SP4.2	PACO	4012ALC	300	30	5	5.95	1,2,3,4,5

NOTE 1. THE MANUFACTURER INDICATED IS BASIS OF DESIGN. PUMP MANUFACTURERS: ITT MARLOW, GRISWOLD, PACO OR AURORA SHALL BE CONSIDERED EQUAL PROVIDED THEY MEET SPECIFICATIONS AS INDICATED IN BID DOCUMENTS. 2. PROVIDE WITH 460 VOLT, 3 PHASE, 60HZ, 1750 RPM MOTOR.

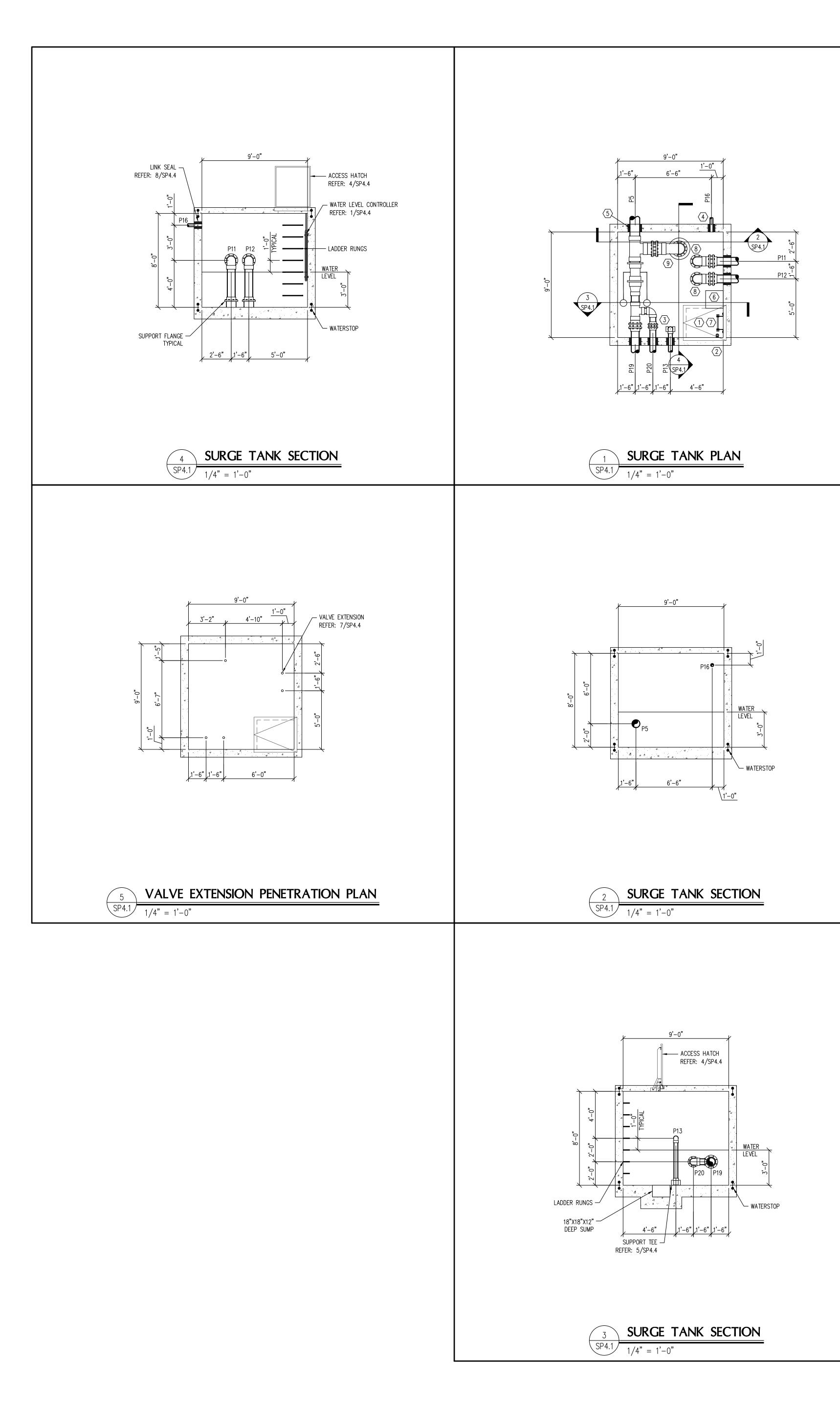
3. PROVIDE WITH CHECK VALVE. 4. PROVIDE VARIABLE FREQUENCY DRIVE.

5. PROVIDE REMOTE PUMP START. 6. PROVIDE EMERGENCY STOP.

	CHEMIC	Cal feed p	UMP SCHE	DULE			
ID	DESCRIPTION	MANUFACTURER	MODEL	TUBE #	HP	FLOW (GAL/DAY)	NOTES
PP5	CHLORINATION BOOSTER PUMP REFER: 7/SP4.2	STENNER	45M4	4	FRAC	35	1,2,3
PP6	ACID FEED PUMP REFER: 3/SP4.2	STENNER	45M3	3	FRAC	22	1,2,3
NOTE: 1. THE	E MANUFACTURER INDICATED IS BASIS OF	DESIGN. ALTERN	ATE MANUFACTURE	R: LMI OR AF	PROVED	EQUAL.	-

PROVIDE WITH 120 VOLT, SINGLE PHASE, ADJUSTABLE FEED.
 INTERLOCK WITH POOL RECIRCULATION PUMP.

REGISTRA	TION SEAL
CONSULT	ANT
PROJECT 7	
	Woods
Park	Pool
City o	f Dearborn
	TITLE MECHANICAL
ROOM	PLAN &
SECTI	ONS
ISSUE DAT	ES
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10-25-17 DATE:	BIDS ISSUED FOR:
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SP4.	U
JF 4.	



### SURGE TANK NOTES

- 1. A WATERPROOFING COATING SHALL BE PROVIDED TO ALL INTERIOR SURFACES OF SURGE
- TANK INCLUDING LID. PROVIDE WATER TIGHT PIPE PENETRATIONS AND INTERFACES WITHIN THE SURGE TANK.
- REFER TO POOL STRUCTURAL DRAWINGS FOR SURGE TANK STRUCTURAL SHELL DESIGN.
- 4. SLEEVES IN SLAB OVER SURGE TANK FOR VALVE EXTENSIONS POSITIONED DIRECTLY ABOVE SURGE TANK VALVES BELOW SHALL BE COORDINATED.
- 5. DRILL 1" DIAMETER HOLE ON TOP OF ELBOW. TYPICAL ALL GUTTER DROPOUT LINES.
- 6. LADDER RUNGS SHALL BE PROVIDED.
- 7. REFER TO POOL STRUCTURAL DRAWINGS FOR WATER STOPS.
- 8. PVC ANTI-VORTEX PLATE SHALL BE MINIMUM 2.5 TIMES CONNECTING PIPE DIAMETER UP TO 24" AND 4" A.F.F.
- 9. SUPPORT FLANGE WITH FOUR (4) LEGS EQUAL TO NOMINAL PIPE DIAMETER, BUT NOT
- LESS THAN 6" A.F.F. 10. PROVIDE 18"x18"x12" DEEP SUMP LOCATED NEAR ACCESS HATCH.

		PUMP SO	CHEDULE					
ID	DESCRIPTION	MANUFACTURER	MODEL	GPM	TDH	HP	NPSHR	NOTES
PP1	RECIRCULATION PUMP REFER: 1/SP4.2	PACO	40129LC	750	75	20	11.93	1,2,3,4
PP2	ENCLOSED FLUME WATERSLIDE PUMP REFER: 1/SP4.2	PACO	40129LC	500	40	7.5	6.51	1,2,3,4,5
PP3	OPEN FLUME WATERSLIDE PUMP REFER: 1/SP4.2	PACO	60123LC	1,000	42	15	4.57	1,2,3,4,5
PP4	FEATURE PUMP REFER: 1/SP4.2	PACO	4012ALC	300	30	5	5.95	1,2,3,4,5

NOTE:
 THE MANUFACTURER INDICATED IS BASIS OF DESIGN. PUMP MANUFACTURERS: ITT MARLOW, GRISWOLD, PACO OR AURORA SHALL BE CONSIDERED EQUAL PROVIDED THEY MEET SPECIFICATIONS AS INDICATED IN BID DOCUMENTS.
 PROVIDE WITH 460 VOLT, 3 PHASE, 60HZ, 1750 RPM MOTOR.
 PROVIDE WITH CHECK VALVE.
 PROVIDE VARIABLE FREQUENCY DRIVE.

5. PROVIDE REMOTE PUMP START.

6. PROVIDE EMERGENCY STOP.

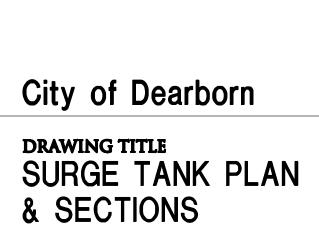
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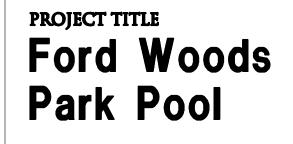
I	EQUIPMENT SCHEDULE
ID	ITEM
	POOL NAME
$\langle 1 \rangle$	ACCESS HATCH REFER: 4/SP4.4
2	WATER LEVEL CONTROLLER(S) REFER: 1/SP4.4
$\langle 3 \rangle$	SUPPORT TEE REFER: 5/SP4.4
4	SURGE TANK VENT REFER: 6/SP4.4
5	LINK SEAL REFER: 8/SP4.4
6	SUMP
$\langle 7 \rangle$	LADDER RUNGS
8	SUPPORT FLANGE
9	ANTI-VORTEX PLATE

	PIPE SCHEDULE
ID	DESCRIPTION
P1	8" FROM PP3 TO OPEN FLUME WATERSLIDE
P2	10" FROM POOL MAIN DRAINS TO PP3
P3	6" FROM PP2 TO CLOSED FLUME WATERSLIDE
P4	8" FROM POOL MAIN DRAINS TO PP2
P5	10" FROM POOL MAIN DRAINS TO PP1
P6	2" FROM PP4 TO TWIST N SPILL FEATURE
P7	2" FROM PP4 TO FUNBRELLA FEATURE
P8	2" FROM PP4 TO SPIN SPRAY FEATURE
P9	4" FROM PP4 TO BUBBLERS
P10	6" FROM POOL FILTERS TO INTEGRATED GUTTER SYSTEM
P11	8" FROM POOL GUTTER DROPOUT BOXES TO SURGE TANK
P12	8" FROM POOL GUTTER DROPOUT BOXES TO SURGE TANK
P13	4" FROM FILL FUNNEL TO SURGE TANK
P14	6" FROM PP1 TO POOL FILTERS
P15	6" FROM POOL FILTERS TO BACKWASH FUNNEL
P16	3" SURGE TANK VENT TO ATMOSPHERE
P17	6" FROM POOL MAIN DRAINS TO PP4
P18	3" FROM P14 TO BACKWASH FUNNEL
P19	8" FROM POOL MAIN DRAINS TO P5
P20	6" FROM POOL MAIN DRAINS TO P5
P21	3" FROM POOL FILTERS TO ZERO ENTRY FLOOR INLETS



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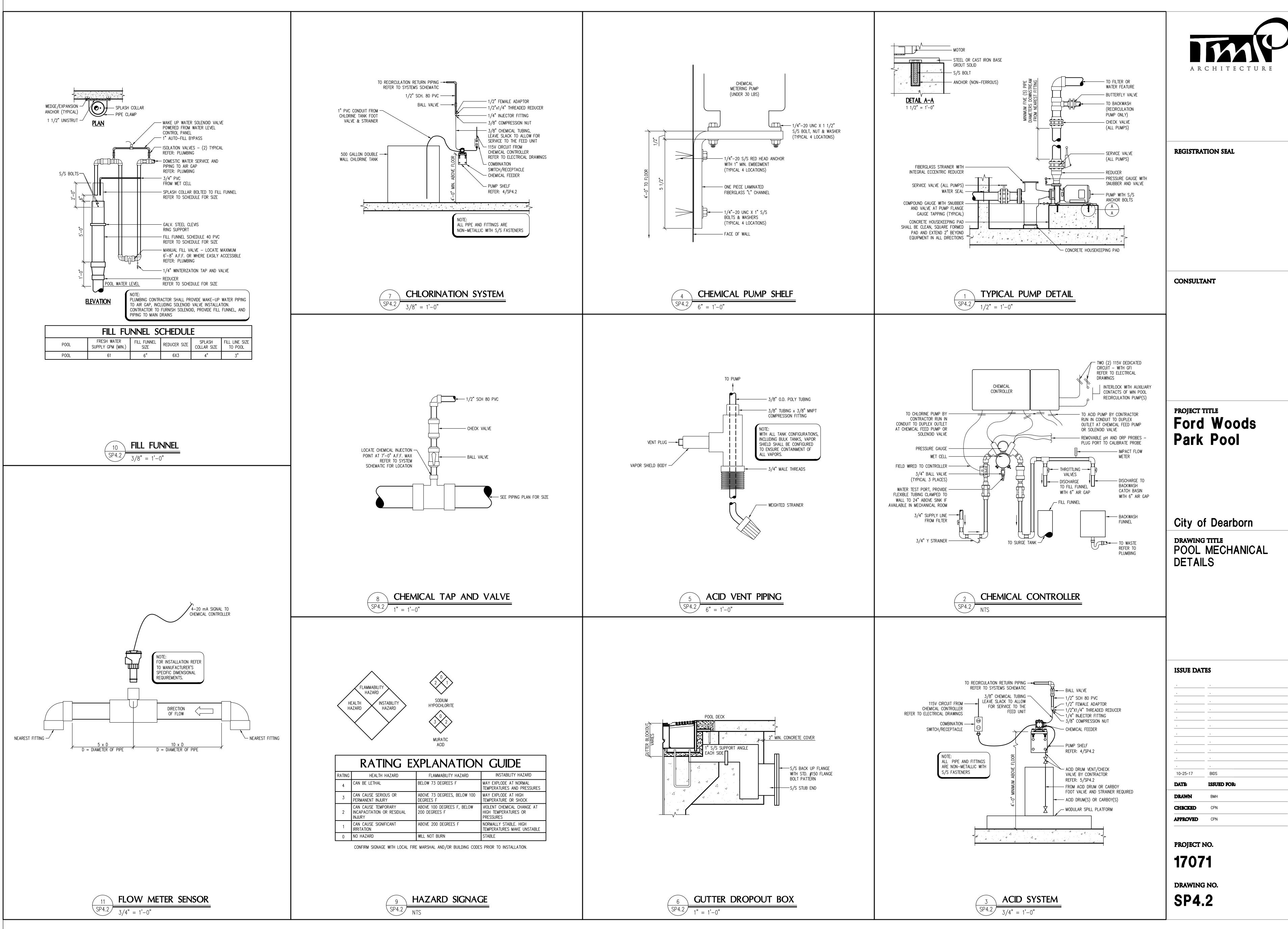




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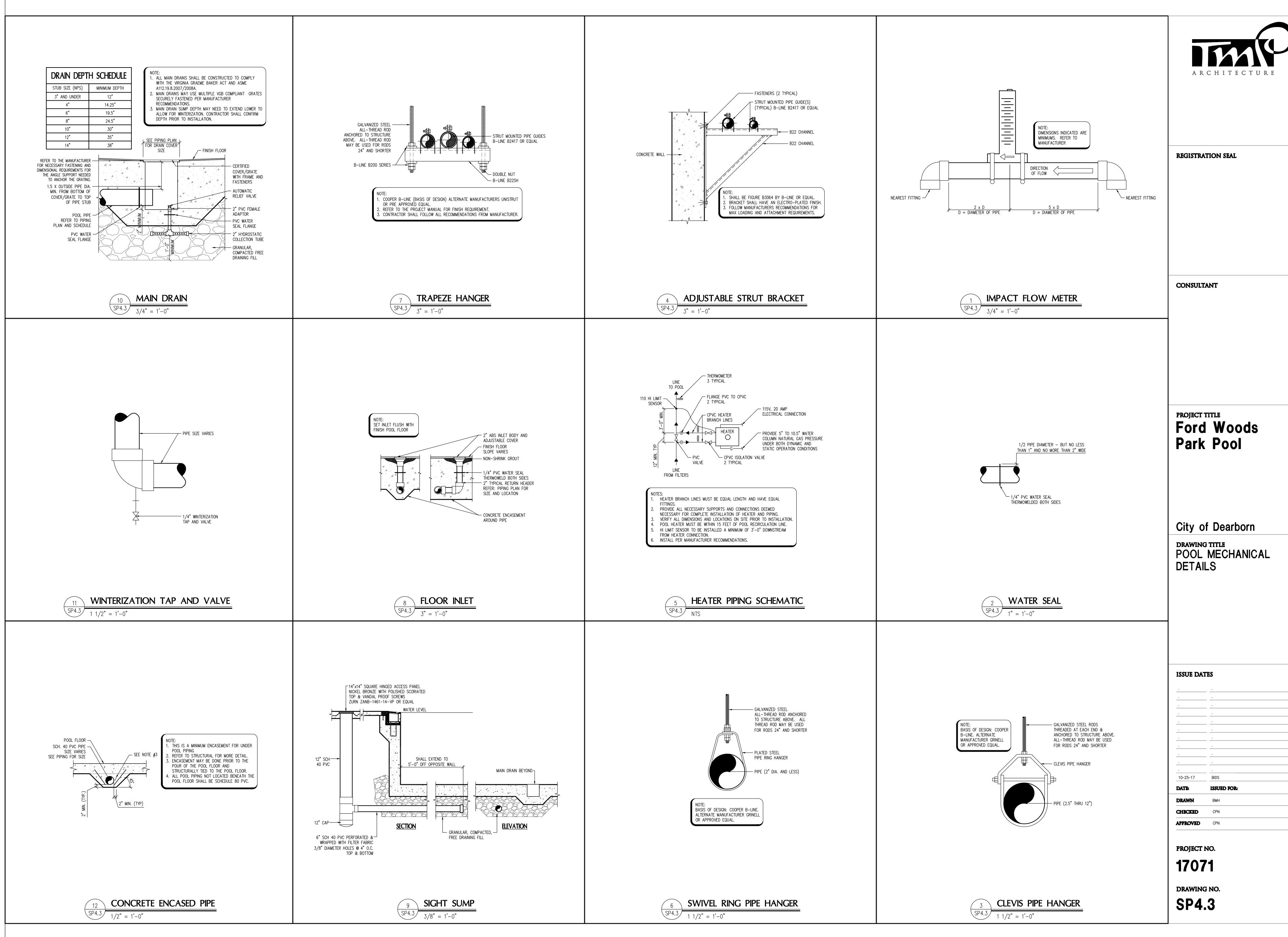
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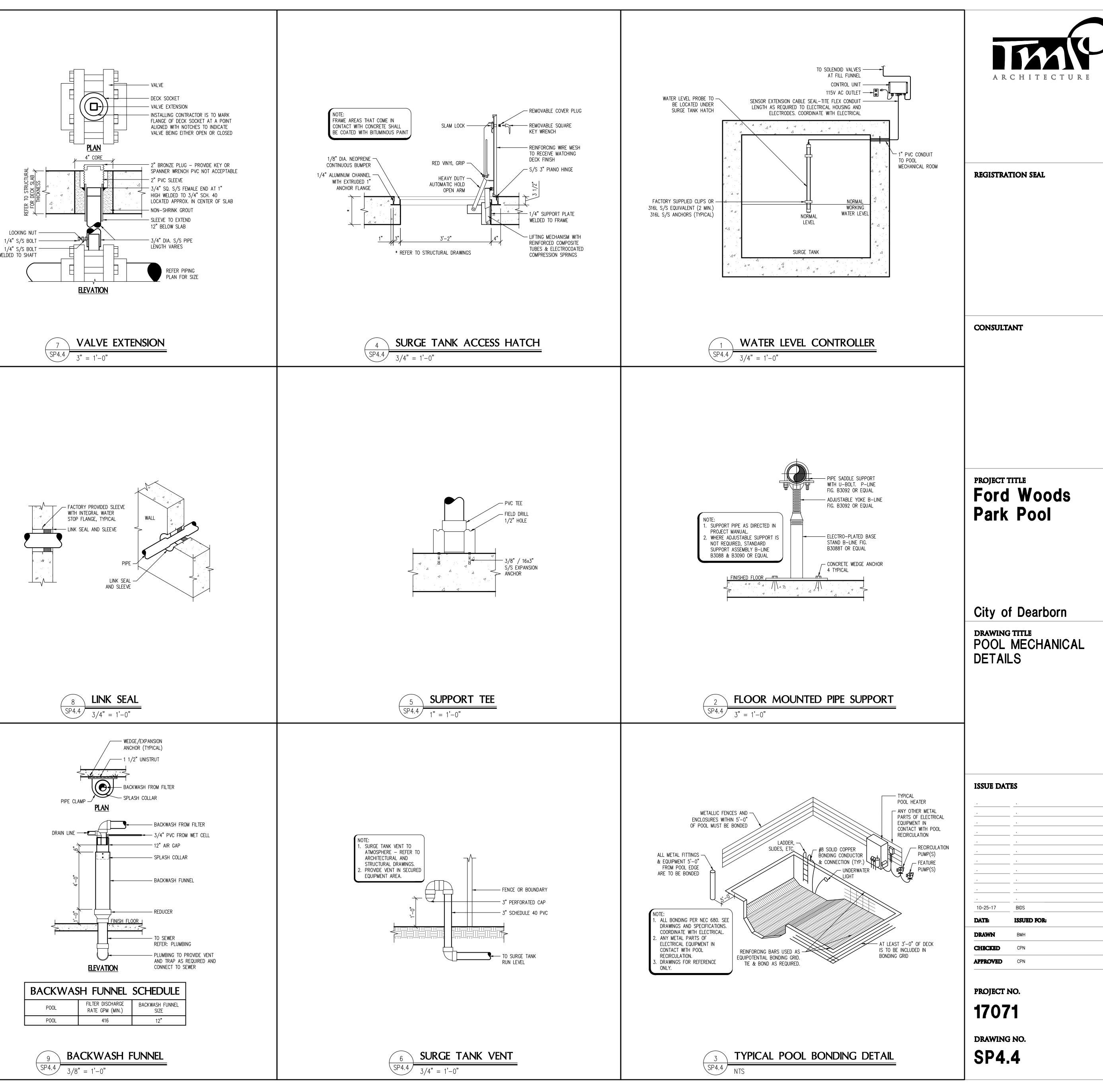


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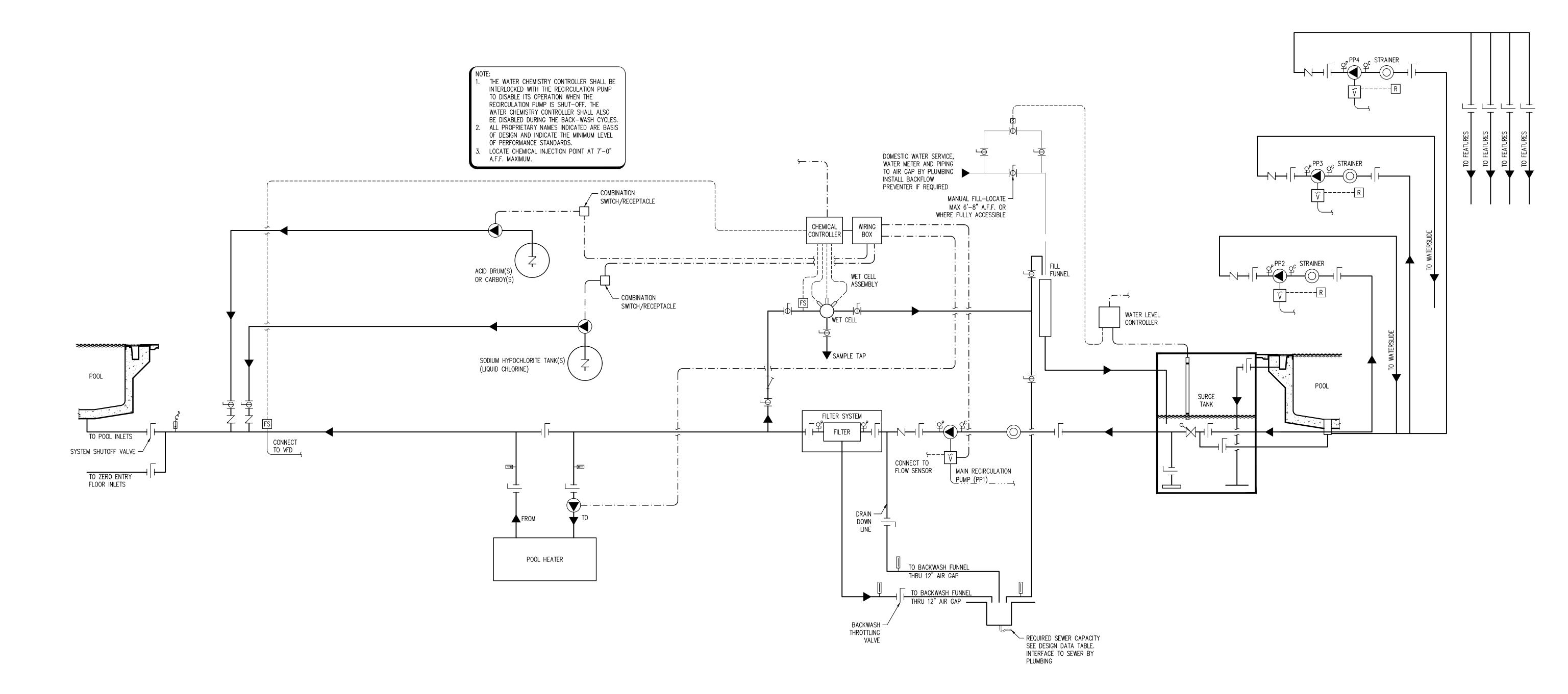
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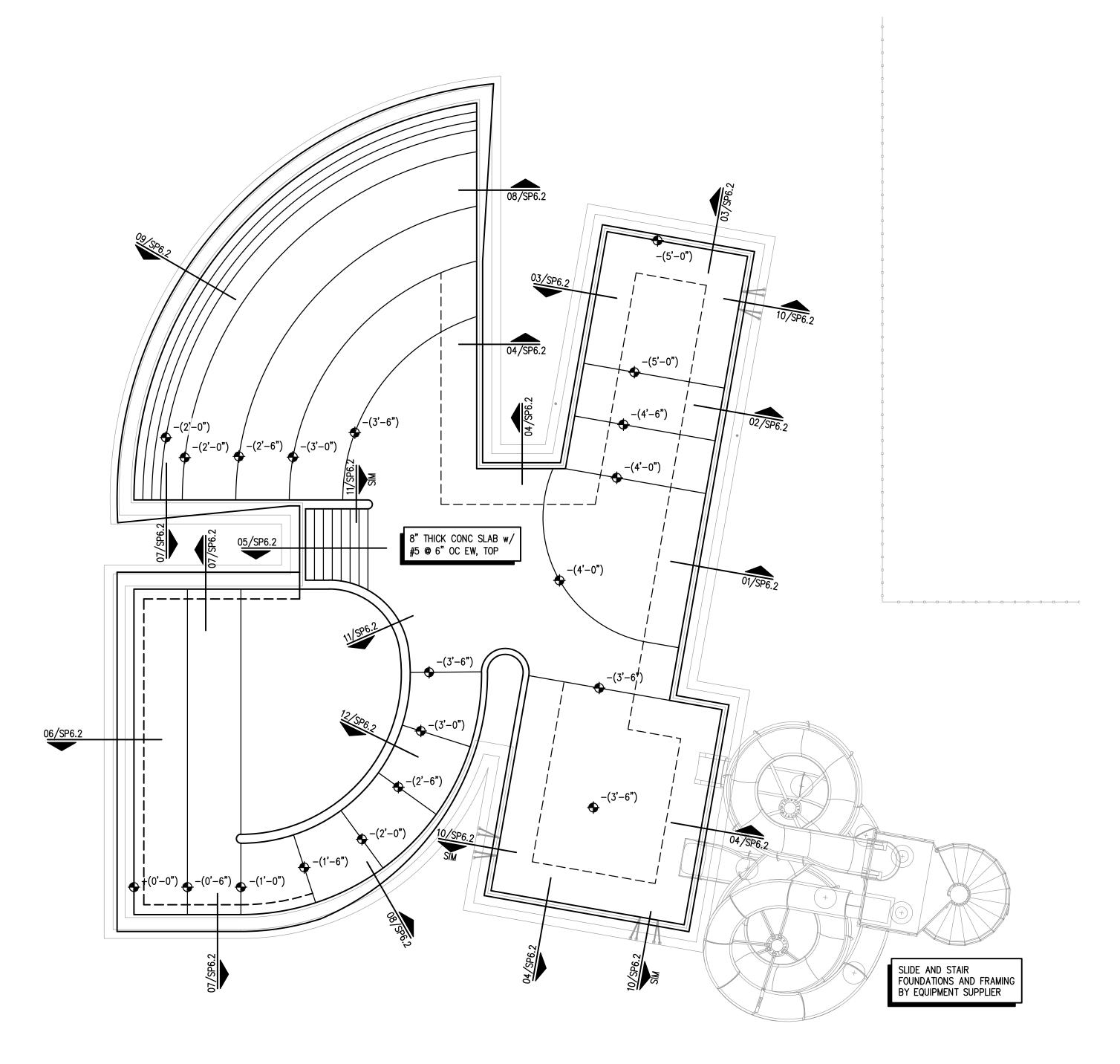
SCHEM	ATIC LEGEND
LEGEND	ITEM
◀	FLOW DIRECTION
Г	BUTTERFLY VALVE
	BALL VALVE
	GATE VALVE
$\rightarrow$	MODULATING FLOAT VALVE
	PRESSURE REDUCING VALVE
	SOLENOID VALVE
	SWING GATE CHECK VALVE
—∳—	THREE WAY VALVE
$\dashv \Box \vdash$	DUCK BILLED VALVE
	PUMP
$\bigcirc$	HAIR AND LINT STRAINER
-++	"Y" STRAINER
F	FLOW METER
FI	FLOW INTERLOCK
FS	FLOW SENSOR
μ	IMPACT FLOW METER
	VENTURI FLOW METER
$\langle W \rangle$	WATER METER
	AUTOMATIC AIR VENT
H <sup>MV</sup>	MANUAL AIR VENT
P <sup>P</sup>	PRESSURE GAUGE AND COCK
C	COMPOUND GAUGE AND COCK
م ا	DIGITAL TEMP SENSOR
<b>↓</b>	THERMOMETER
G	GEAR
A	PNEUMATIC ACTUATOR
S	SOLENOID
C=	POWER CORD
	FLOW CONTROL VALVE
$\widetilde{V}$	VARIABLE FREQUENCY DRIVE
R	REMOTE START/STOP
Ε	EMERGENCY STOP
	LOW VOLTAGE CONTROL
	WATER LINE
	1 PHASE POWER
-···· <u></u> ···· <u></u>	3 PHASE POWER
	VENT LINE
	CO <sub>2</sub> LINE
N	NETWORK LINE

PROJECT 1	TITI.E
	Woods
rark	Pool
City o	f Dearborn
DRAWING	; TITLE
POOL	SYSTEMS
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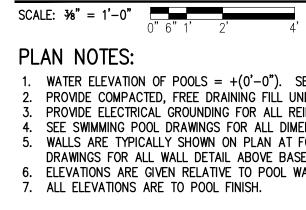
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# POOL STRUCTURAL PLAN







N PLAN NORTH

WATER ELEVATION OF POOLS = +(0'-0"). SEE CIVIL DRAWINGS FOR CORRELATION TO ACTUAL SITE ELEVATION.
 PROVIDE COMPACTED, FREE DRAINING FILL UNDER ALL POOL BOTTOM SLABS. SEE NOTE PF1 ON SHEET SP6.1.
 PROVIDE ELECTRICAL GROUNDING FOR ALL REINFORCING AND EMBEDDED ITEMS, SEE ELECTRICAL DRAWINGS.
 SEE SWIMMING POOL DRAWINGS FOR ALL DIMENSIONS NOT SHOWN.
 WALLS ARE TYPICALLY SHOWN ON PLAN AT FOUNDATION LEVEL. SEE DETAILS & COORDINATE WITH SWIMMING POOL DRAWINGS FOR ALL WALL DETAIL ABOVE BASE SLAB.
 ELEVATIONS ARE GIVEN RELATIVE TO POOL WATER SURFACE, UNO. COORDINATE WITH SWIMMING POOL DRAWINGS.
 ALL ELEVATIONS ARE TO POOL FINISH.





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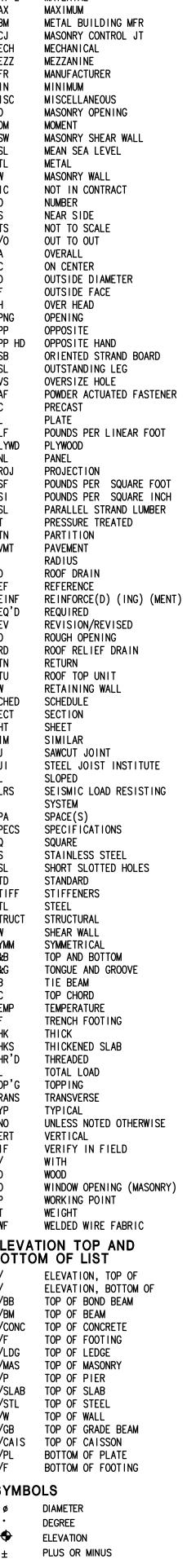


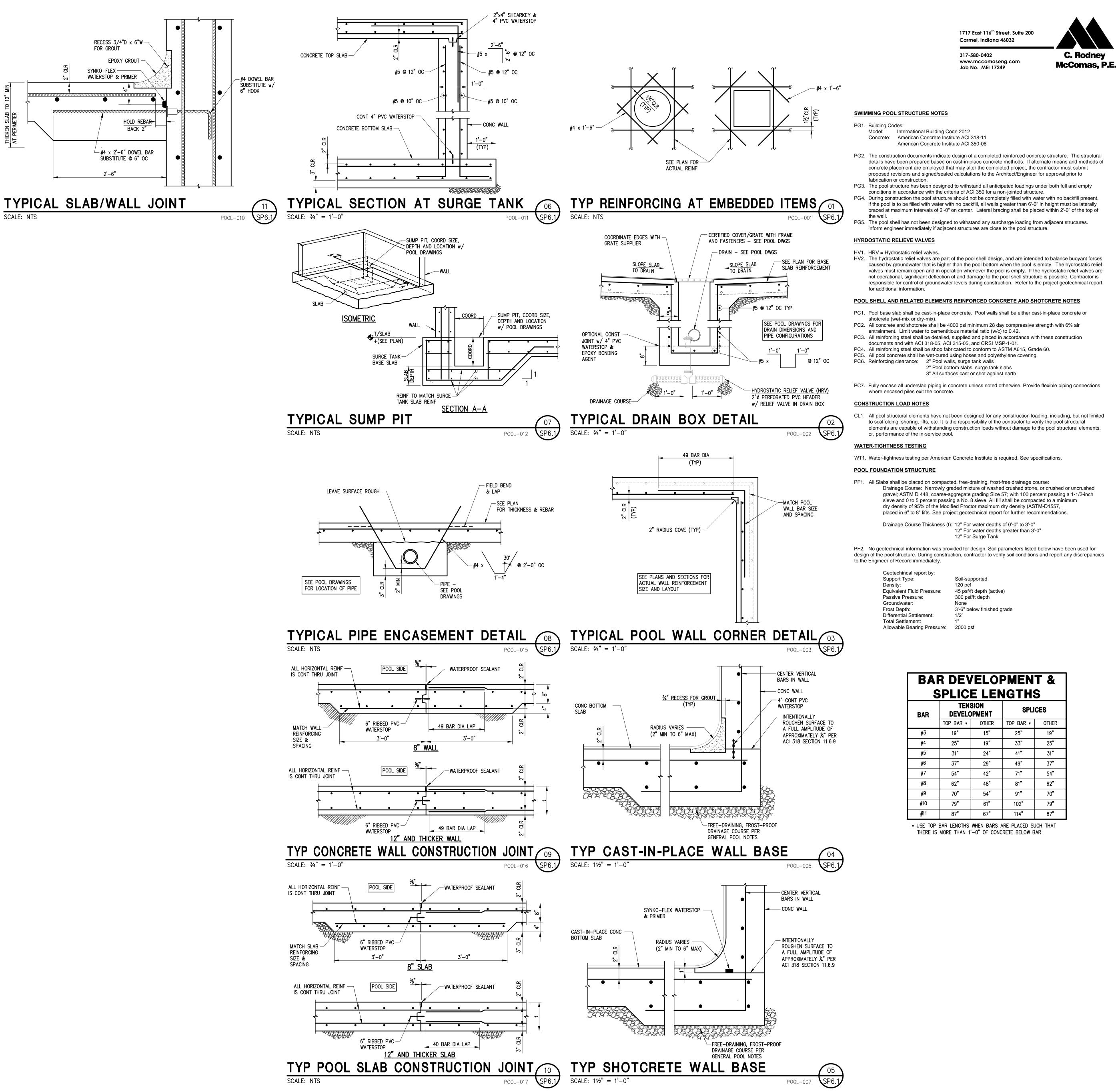
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ARCHITECTURE

ABBRE	VIATIONS LIST ANCHOR RODS	MAT'L	MATERIAL
ACI	AMERICAN CONCRETE INSTITUTE	MAX	MAXIMUM
ADD'L	ADD I T I ONAL	MBM	METAL BUIL
ADH	ADHES I VE	MCJ	MASONRY CO
ADJ	ADJACENT	MECH	MECHAN I CAL
AESS	ARCHITECTURALLY EXPOSED	MEZZ	MEZZAN I NE
	STRUCTURAL STEEL	MFR	MANUFACTUR
AFF	ABOVE FINISHED FLOOR	MIN	MINIMUM
AGGR	AGGREGATE	MISC	
AHU	AIR HANDLING UNIT	MO	MASONRY OP
A I SC	AMERICAN INSTITUTE OF	MOM	MOMENT
	STEEL CONSTRUCTION	MSW	MASONRY SH
AISI	AMERICAN IRON AND	MSL	MEAN SEA L
	STEEL INSTITUTE	MTL	METAL
ALUM	ALUMINUM	MW	MASONRY WA
ALT	ALTERNATE	NIC	NOT IN CON
APA	AMERICAN PLYWOOD ASSOCIATION	NO	NUMBER
APPROX	APPROX I MATE	NS	NEAR SIDE
ARCH	ARCH I TECT	NTS	NOT TO SCA
ASTM	AMERICAN SOCIETY OF	0/0	OUT TO OUT
	TESTING MATERIALS	0A	OVERALL
AWS	AMERICAN WELDING SOCIETY	OC	ON CENTER
L	ANGLE	OD	OUTSIDE DI
BB	BOND BEAM	OF	OUTSIDE FA
B/B	BACK TO BACK	oh	OVER HEAD
BC	BOTTOM CHORD	Opng	OPENING
BD	BOARD	OPP	<b>OPPOSITE</b>
BLDG	BUILDING	opp HD	OPPOSITE H
BLK	BLOCK	OSB	ORIENTED S
BM	BEAM	OSL	OUTSTANDIN
BOTT	BOTTOM	OVS	OVERSIZE H
BP	BEARING PLATE	PAF	POWDER ACT
BRDG	BR I DG I NG	PC	PRECAST
BRG	BEAR I NG	PL	PLATE
BRK	BRICK	PLF	POUNDS PER
BS	BOTH SIDES	Plywd	PLYWOOD
BSMT	BASEMENT	Pnl	PANEL
BTWN	BETWEEN	PROJ	PROJECTION
BUC	BUILT UP COLUMN	PSF	POUNDS PER
с	CAMBER	PSI	POUNDS PER
C/C	CENTER TO CENTER	PSL	PARALLEL S
CANT	CANTILEVER	PT	PRESSURE T
CFS	COLD FORMED STEEL	PTN	PARTITION
CJ	CONTROL AND OR	PVMT	PAVEMENT
	CONSTRUCTION JOINT	R	RADIUS
CL	CENTERL I NE	RD	ROOF DRAIN
CLR	CLEAR	REF	REFERENCE
CMU	CONCRETE MASONRY UNIT	RE I NF	RE I NFORCE (
COL		REQ ' D	REQUIRED
COORD	COORDINATE	REV	REVISION/R
COMP	COMPACTED	ro	ROUGH OPEN
CONC	CONCRETE	Rrd	ROOF RELIE
CONN	CONNECTION	RTN RTU	RETURN ROOF TOP U
CONST CONT	CONSTRUCTION CONTINUOUS	RW	RETAINING
CTR	CENTER	SCHED	SCHEDULE
CTRD	CENTERED	SECT	SECTION
DIA	DIAMETER	SHT	SHEET
DIAG	D I AGONAL	SIM	SIMILAR
DIM	D I MENS I ON	SJ	SAWCUT JOI
DL	DEAD LOAD	SJ I	STEEL JOIS
DLT	DEEP LEG TRACK	SL	SLOPED
DO	DITTO	SLRS	SEISMIC LO
DN	DOWN	SPA	SYSTEM
DTL	DETAIL		SPACE(S)
DWG	DRAWING	SPECS	SPECIÈICAT
DWL	DOWEL	SQ	SQUARE
EA	EACH	SS	STAINLESS
EE	EACH END	SSL	SHORT SLOT
EF	EACH FACE	STD	STANDARD
ENG	ENGINEER	ST I FF	STIFFENERS
ELEV	ELEVATION	STL	STEEL
ELECT	ELECTRICAL	STRUCT	STRUCTURAL
EOD	EDGE OF DECK	SW	SHEAR WALL
EOS	EDGE OF SLAB	SYMM	SYMMETRICA
EQ	EQUAL	T&B	TOP AND BO
EQUIV		T&G	TONGUE AND
ES	EQUIVALENT EACH SIDE	ТВ	TIE BEAM
EW	EACH WAY	tc	TOP CHORD
EX	EXISTING	Temp	TEMPERATUR
EXP	EXPANSION	TF	TRENCH FOO
EXT	EXTERIOR	thk	THICK
F/	FACE OF	Thks	THICKENED
FD	FLOOR DRAIN	THR'D	THREADED
FDN	FOUNDATION	TL	TOTAL LOAD
FIN	FINISH	TOP'G	TOPPING
FLR	FLOOR	TRANS	TRANSVERSE
FLG	FLANGE	TYP	TYPICAL
FS	FAR SIDE	uno	UNLESS NOT
FTG	FOOTING	Vert	VERTICAL
GA	GAUGE	VIF	VERIFY IN
GALV	GALVANIZED	w/	WITH
GB	GRADE BEAM	WD	WOOD
GC	GENERAL CONTRACTOR	WO	WINDOW OPE
GL	GLULAM	WP	WORKING PO
GR	GRADE	WT	WEIGHT
HC HD	HOLLOW CORE HOLD DOWN		WELDED WIR
hgt Horiz	HE I GHT HOR I ZONTAL		TION TOP
HP	HIGH POINT	T/	ELEVATION,
HS	HEADED STUD	B/	ELEVATION,
HSS	HOLLOW STRUCTURAL SECTION	T/BB	TOP OF BON
ID	INSIDE DIAMETER	T/BM	TOP OF BEA
IF	INSIDE FACE	T/CONC	TOP OF CON
INFO	INFORMATION	T/F	TOP OF FOO
I NT	INTERIOR	T/LDG	TOP OF LED
I NV	INVERT	T/MAS	TOP OF MAS
JST	JOIST	T/P T/SLAB	TOP OF PIE TOP OF SLA
JT K	JOINT KIP	T/STL	TOP OF STE
KO	KNOCK OUT	T́∕W	TOP OF WAL
LB	POUND	T∕GB	TOP OF GRA
LDG	LEDGE	ť/CAIS	TOP OF CAI
LG	LONG	B/PL	BOTTOM OF
LL	LIVE LOAD	B/F	BOTTOM OF
LLH	LONG LEG HORIZONTAL	SYMB(	
LLV LNTL	LONG LEG VERTICAL	Ø	DIAMETER
LSL LONG	LONG SLOTTED HOLES LONGITUDINAL	•	DEGREE
LP	LOW POINT	∲	ELEVATION
LVL	LAMINATED VENEER LUMBER	±	PLUS OR MIN
MAS	LAMINATED VENEER LUMBER MASONRY	·	









PROJECT NO.

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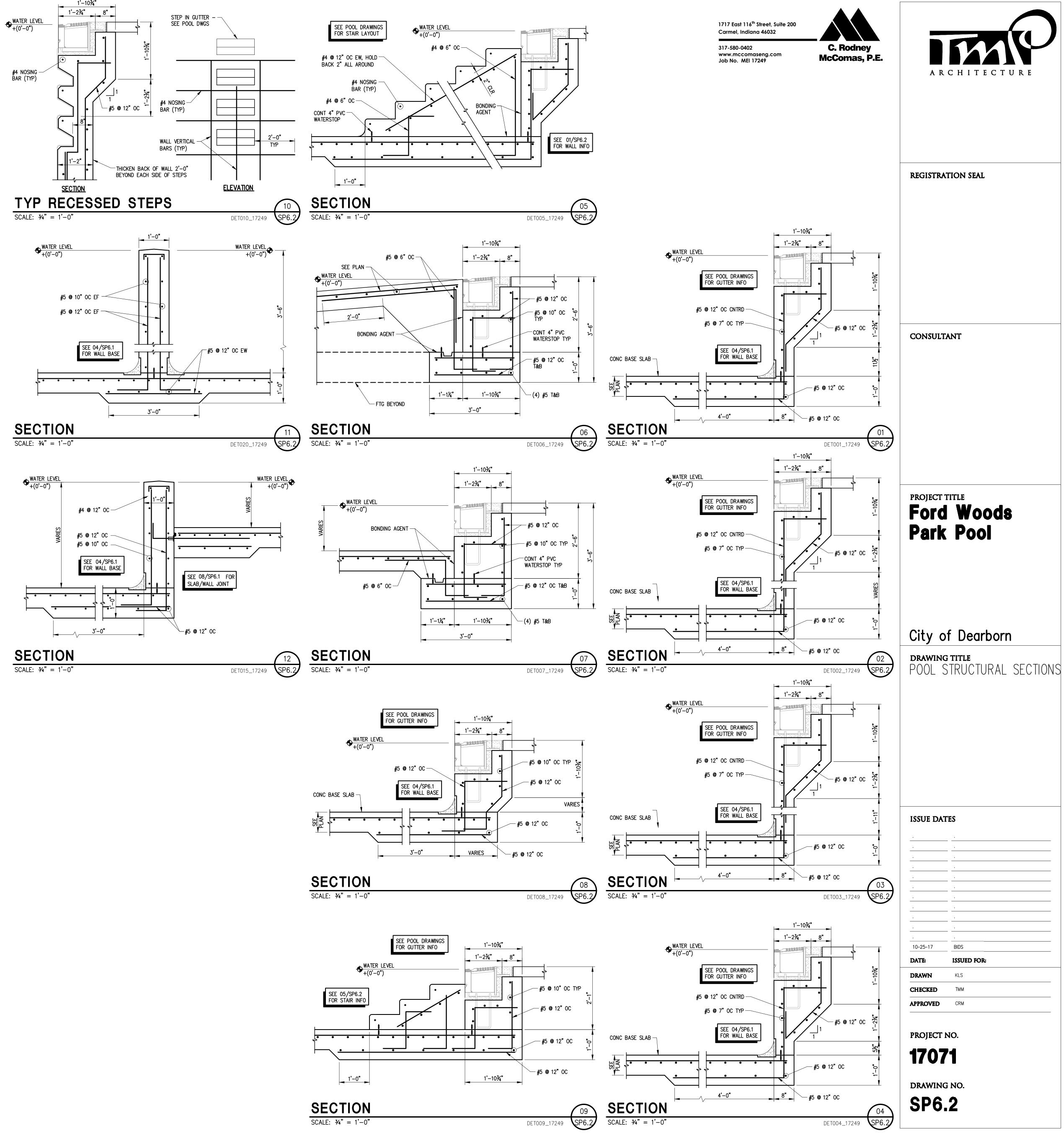
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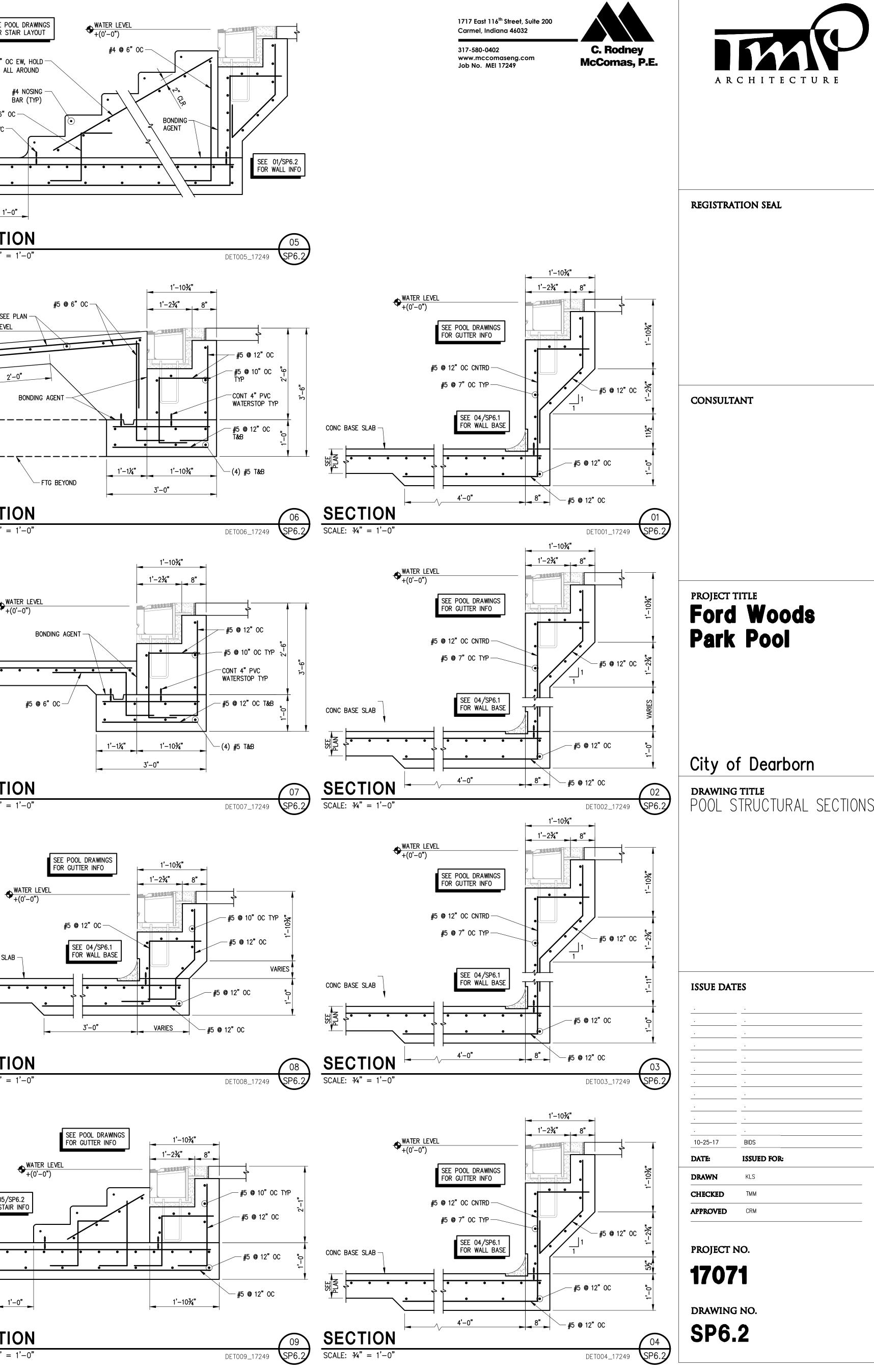


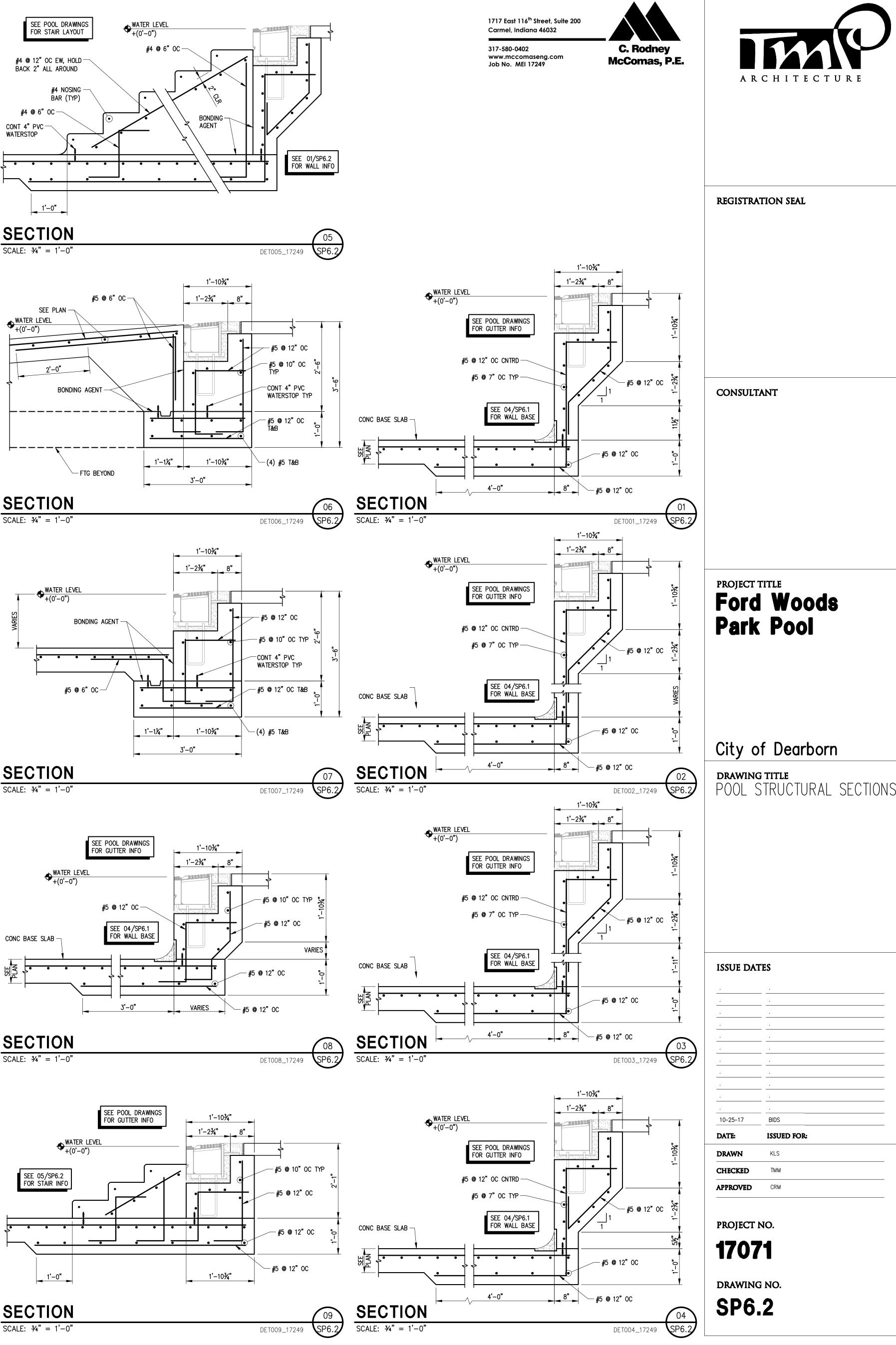
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