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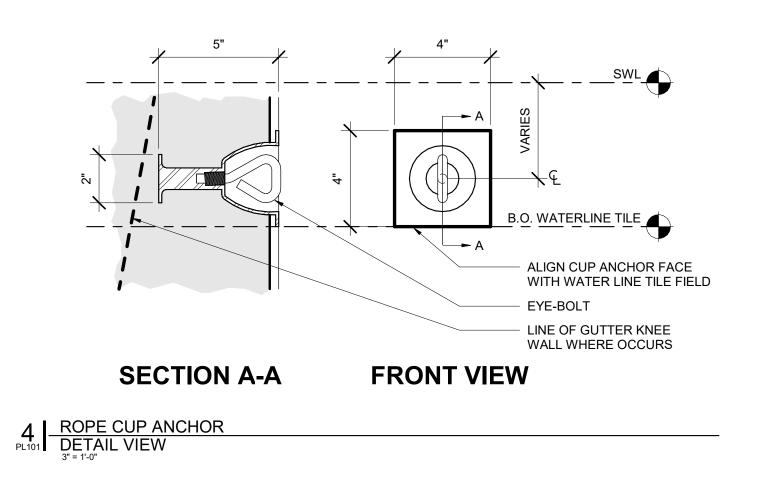
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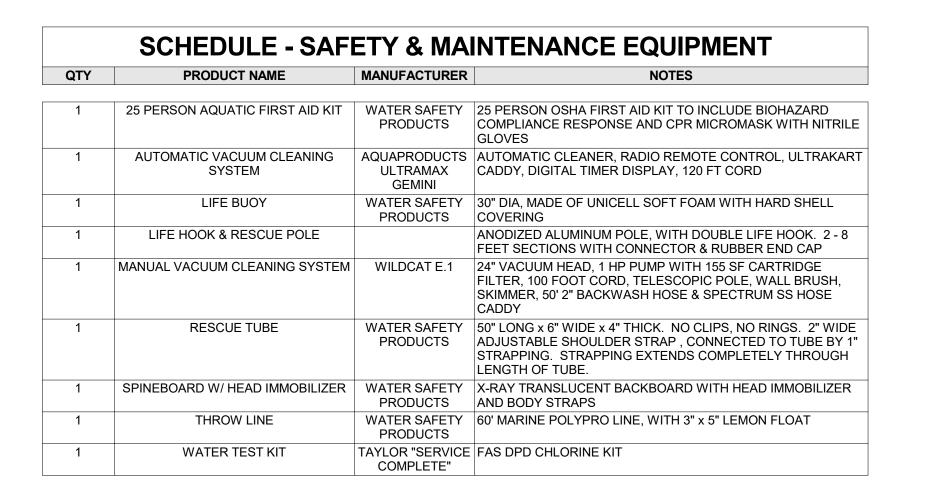
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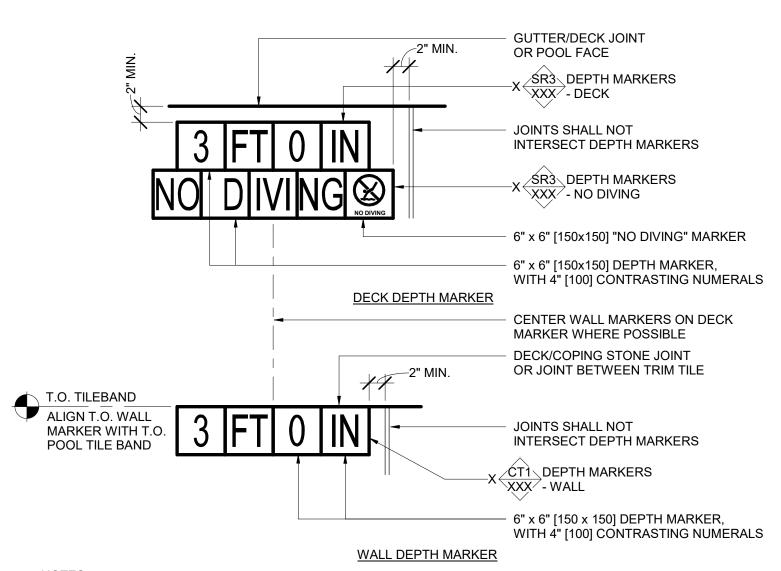
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REVISION SCHEDULE

ISSUE DATE: 07/18/14
PROJECT NUMBER: 19039
DRAWN BY: EWL
CHECKED BY: Checker OVERALL AQUATIC PLAN







- NOTES:

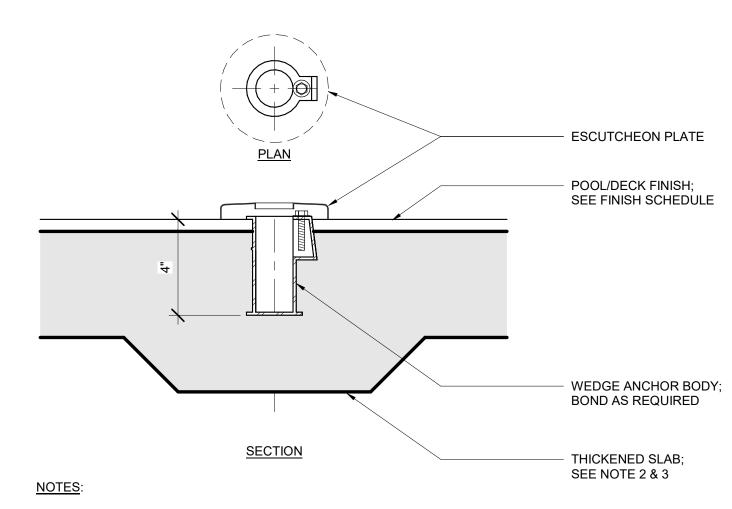
 1. —— WALL DEPTH MARKER AT LOCATIONS AS INDICATED ON PLAN BY THIS SYMBOL.

 2. EXCLUDE "NO DIVING" MARKER TILES AT POOL WALL DEPTH MARKER LOCATIONS AND AT POOL
- DEPTHS GREATER THAN 5'-0".

 DEPTH MARKERS SHALL BE LEGIBLE FROM INSIDE THE POOL AND FROM THE POOL DECK.

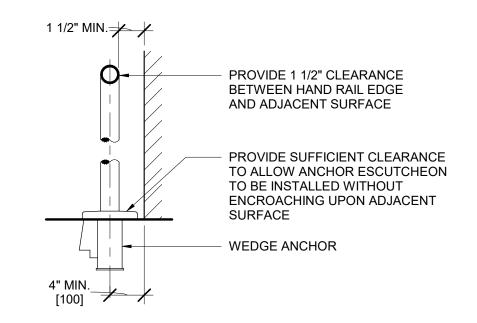
 THE POOL CONTRACTOR SHALL BE RESPONSIBLE FOR LOCATING MARKINGS ACCURATE TO WITHIN ONE INCH OF THE CONSTRUCTED WATER DEPTHS AT LOCATIONS INDICATED ON PLAN AT A MAX
- 25'-0" SPACING AND IN ACCORDANCE WITH LOCAL CODE REQUIREMENTS.

 5. DEPTH MARKER TEXT SHALL INDICATE THE ACTUAL POOL DEPTH WITHIN 3" AT NORMAL OPERATING WATER LEVEL WHEN MEASURED 3'-0" FROM POOL WALL. CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING PROPER TEXT FOR EACH MARKER LOCATION.
- 6. MARKINGS SHALL BE INSTALLED FLUSH WITH SURROUNDING SURFACES AND RECESSED IF NECESSARY.
- 7. ALL MARKINGS INSTALLED ON HORIZONTAL SURFACES SHALL HAVE A SLIP RESISTANT FINISH.
- DEPTH MARKER DECK & WALL



- INSTALL ANCHORS IN LINE WITH RAIL.
 CONCRETE CLEAR COVER AT ANCHOR SHALL BE 3" MINIMUM. THICKEN
- SLAB IF NECESSARY TO ACHIEVE MINIMUM COVER.

 WHEN SECOND LAYER OF CONCRETE IS LOCATED DIRECTLY BELOW SLAB
 IN WHICH ANCHOR IS PLACED (I.E. STAIRS), CLEAR COVER OF CONCRETE AT
 ANCHOR IN UPPER SLAB SHALL BE 2" MINIMUM.
- 2 WEDGE ANCHOR

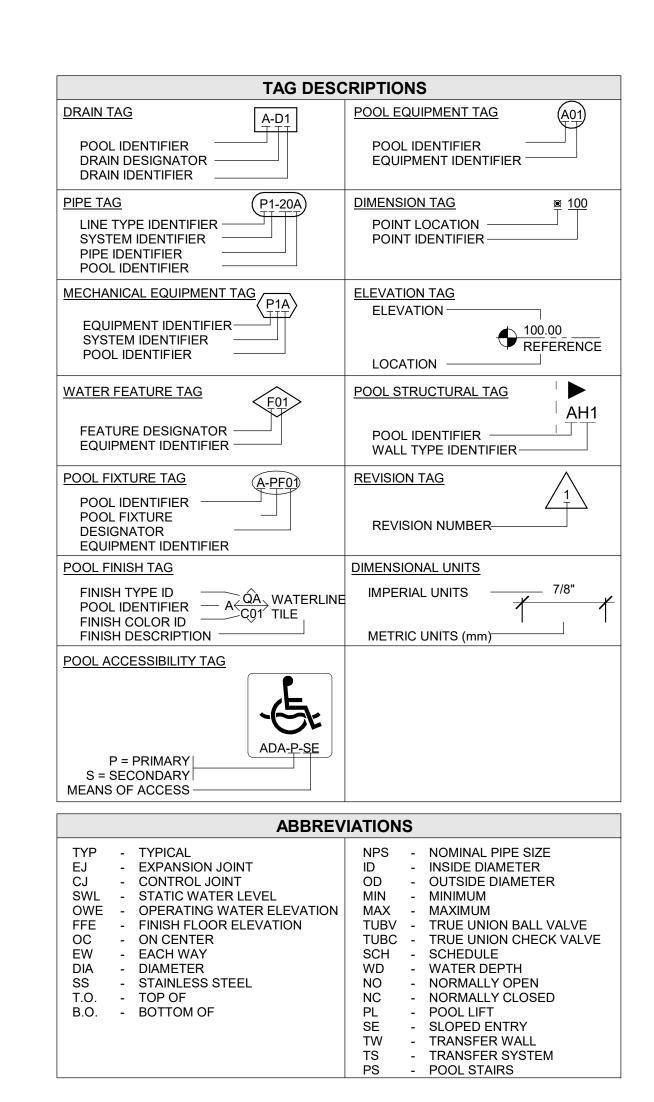


NOTES:

1. CONTRACTOR TO PURCHASE AND INSTALL RAIL GOODS IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS OF PARTIES HAVING JURISDICTION.

2. CONTRACTOR TO VERIFY HANDRAIL DIMENSIONS PRIOR TO FABRICATION.

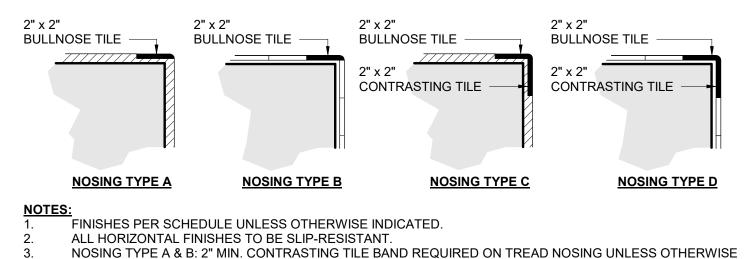
RAILING OFFSET TO ADJACENT SURFACE



LEGEND - FINISHES & COLOR CODES - POOL A							
		FINISHES		COLORS			
AREA	FINISH ID	FINISH	COLOR ID	COLOR	NOTES		
HANDHOLD	LB	LIGHT BROOM	C01	AS SELECTED BY ARCHITECT	STEGMEIER EDGE		
HORIZONTAL SURFACE (WET)	QA	QUARTZ AGGREGATE	C06	LIGHT COLOR			
HORIZONTAL SURFACE (WET)	SR1	1"x1" SLIP RESISTANT TILE	C01	AS SELECTED BY ARCHITECT			
ROLLBACK	LB	LIGHT BROOM	C01	AS SELECTED BY ARCHITECT	ZERO ENTRY		
STAIR AND BENCH NOSING - CONSTRASTING	SR2	2"x2" SLIP RESISTANT TILE	C07	CONTRASTING TO POOL FINISH - AS SELECTED BY ARCHITECT			
STEGMEIER EDGE	LB	LIGHT BROOM	C01	AS SELECTED BY ARCHITECT	STEGMEIER EDGE		
TILE - TRIM TILE	SR1	1"x1" KEYSTONE TILE	C01	AS SELECTED BY ARCHITECT			
TILE - WATERLINE	KT1	1"x1" KEYSTONE TILE	C01	AS SELECTED BY ARCHITECT			
VERTICAL SURFACE (WET)	QA	QUARTZ AGGREGATE	C06	LIGHT COLOR			

LEGEND - FINISHES & COLOR CODES - POOL B					
		FINISHES		COLORS	
AREA	FINISH ID	FINISH	COLOR ID	COLOR	NOTES
	T				1
HANDHOLD	LB	LIGHT BROOM	C01	AS SELECTED BY ARCHITECT	STEGMEIER EDGE
HORIZONTAL SURFACE (WET)	QA	QUARTZ AGGREGATE	C06	LIGHT COLOR	
HORIZONTAL SURFACE (WET)	SR1	1"x1" SLIP RESISTANT TILE	C01	AS SELECTED BY ARCHITECT	
ROLLBACK	LB	LIGHT BROOM	C01	AS SELECTED BY ARCHITECT	ZERO ENTRY
STAIR AND BENCH NOSING - CONSTRASTING	SR2	2"x2" SLIP RESISTANT TILE	C07	CONTRASTING TO POOL FINISH - AS SELECTED BY ARCHITECT	
STEGMEIER EDGE	LB	LIGHT BROOM	C01	AS SELECTED BY ARCHITECT	STEGMEIER EDGE
TILE - TRIM TILE	SR1	1"x1" KEYSTONE TILE	C01	AS SELECTED BY ARCHITECT	
TILE - WATERLINE	KT1	1"x1" KEYSTONE TILE	C01	AS SELECTED BY ARCHITECT	
VERTICAL SURFACE (WET)	QA	QUARTZ AGGREGATE	C06	LIGHT COLOR	

LEGEND - FINISHES & COLOR CODES - POOL C					
		FINISHES	COLORS		
AREA	FINISH ID	FINISH	COLOR ID	COLOR	NOTES
SPRAY PAD DECK	LB	LIGHT BROOM	C01	AS SELECTED BY ARCHITECT	SLIP RESISTANT



NOSING TYPE A & B: 2" MIN. CONTRASTING TILE BAND REQUIRED ON TREAD NOSING UNLESS OTHERWISE NOTED.
 NOSING TYPE C & D: 2" MIN. CONTRASTING TILE BAND REQUIRED ON TREAD NOSING AND TOP OF RISER UNLESS OTHERWISE NOTED.

UNLESS OTHERWISE NOTED.
ALL PERIMETER OVERFLOW GUTTER LIP TOLERANCES SHALL BE INSTALLED LEVEL +/-1/16" MAXIMUM ELEVATION TOLERANCES UNLESS OTHERWISE SPECIFIED.

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Manitowoc √ Expansion

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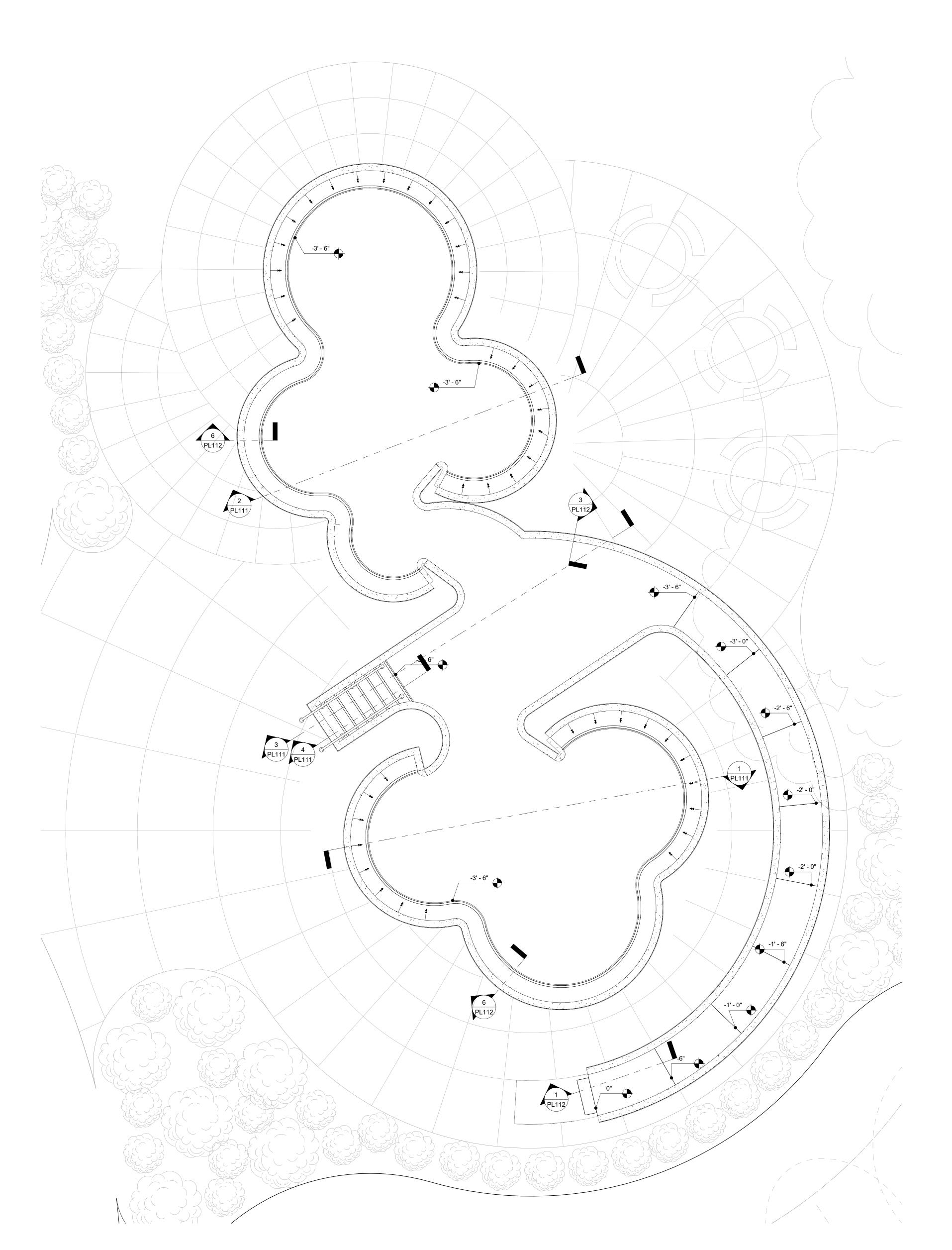
REVISION SCHEDULE

Number Description Da

ISSUE DATE: 07/18/14
PROJECT NUMBER: 19039
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CHECKED BY: Checker

PL101

GENERAL DETAILS AND SCHEDULES



POOL ALT 1 - A-	WARMING P	OOL DAT	Α		
DESCRIPTION	QTY	UNITS			
POOL PERIMETER	0	FEET			
WATER SURFACE AREA	1,536	SQUARE FEET			
POOL VOLUME	33,726	GALLONS			
CIRCULATION RATE	302	GPM			
TURNOVER/VOLUME/FLOW	60 MIN.	2,552	GAL.	43	GP
TURNOVER/VOLUME/FLOW	120 MIN.	31,174	GAL.	260	GP
FILTRATION RATE	0.79	GPM/FT ²			
BACKWASH RATE	5715	GPM			
PATRON LOAD	123	PERSONS			
POOL A	ALT 1 - A FEATURES				
DESCRIPTION	QTY	(GPM/ea)	(GPM)	
TEEN HYDROJETS	24	20.00	4	80.00	
ADULT HYDROJETS	17	20.00	3	40.00	
6' WATERFALL	1	120.00	1	20.00	
5' WATERFALL	1	100.00	1	00.00	
	_	_		_	

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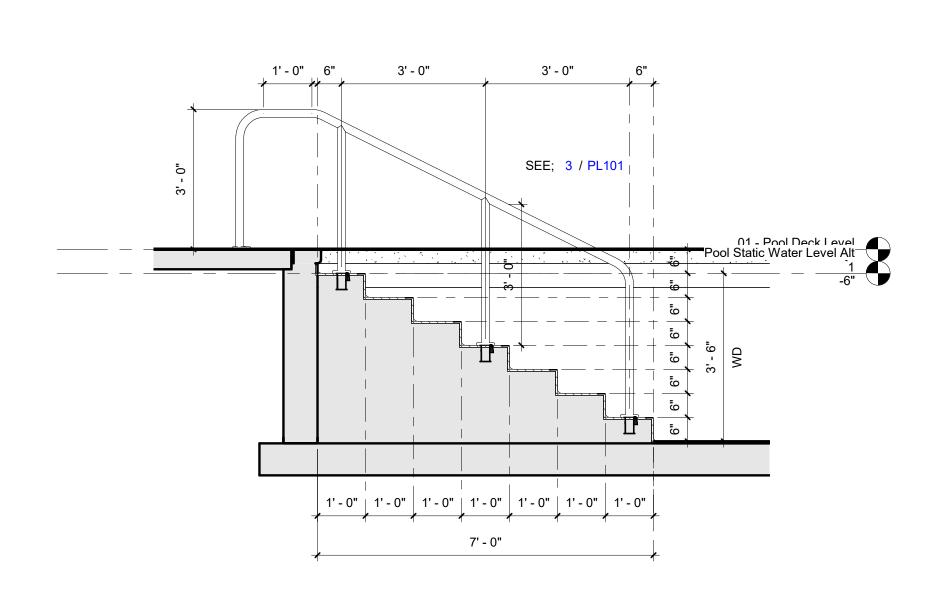
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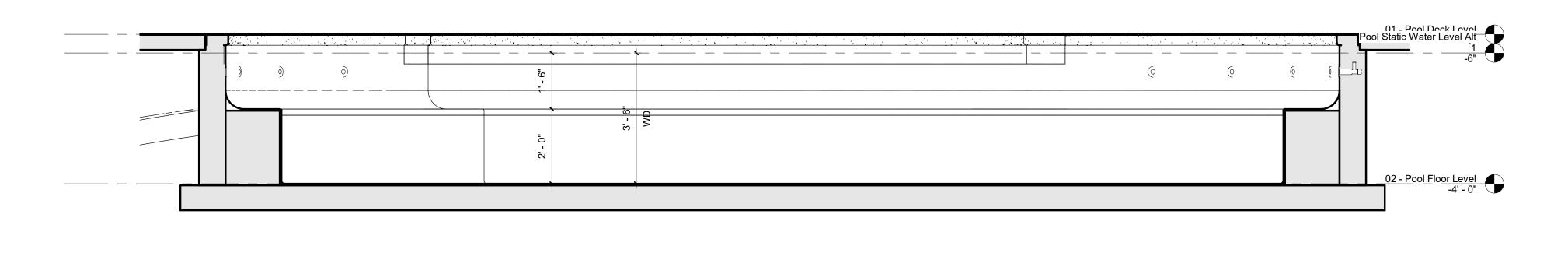
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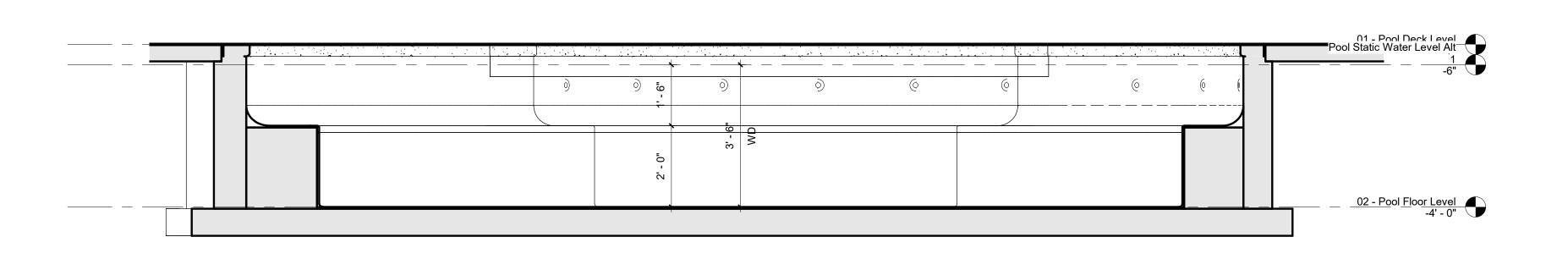
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ALTERNATE 1 - POOL A - WARMING
POOL PLAN

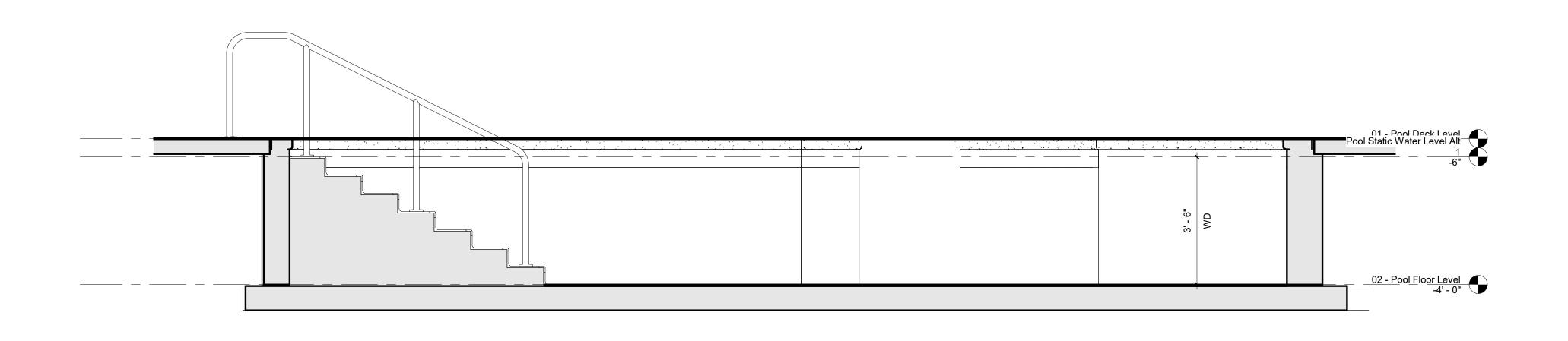




PL1111 POOL A - WARMING POOL
SECTION VIEW
1/2" = 1'-0"



PL111 POOL A - WARMING POOL
SECTION VIEW
1/2" = 1'-0"



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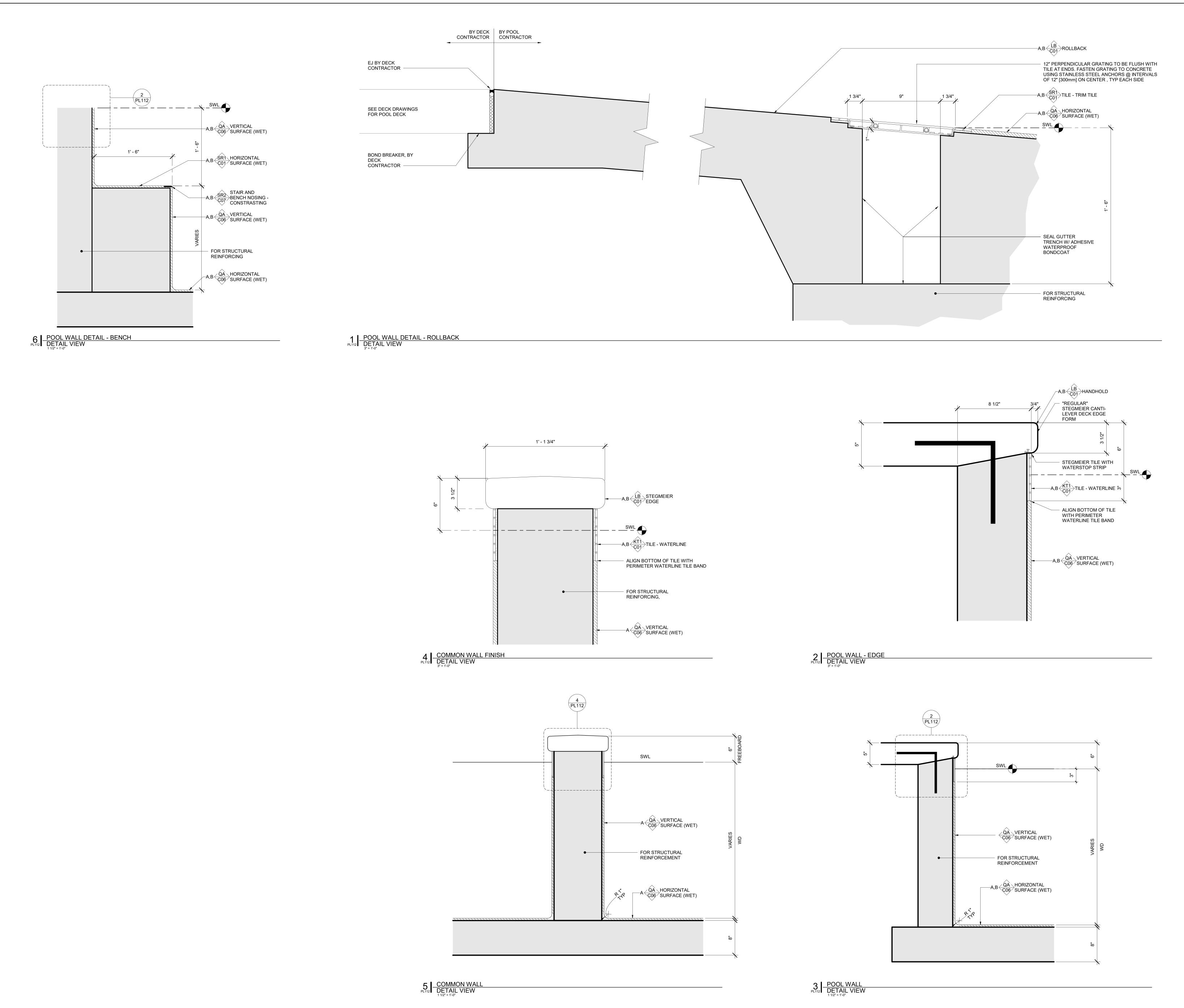
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REVISION SCHEDULE Description

ISSUE DATE: 02/25/19 PROJECT NUMBER: 19039 DRAWN BY: EWL CHECKED BY: Checker ALTERNATE 1 - POOL A - WARMING POOL SECTIONS



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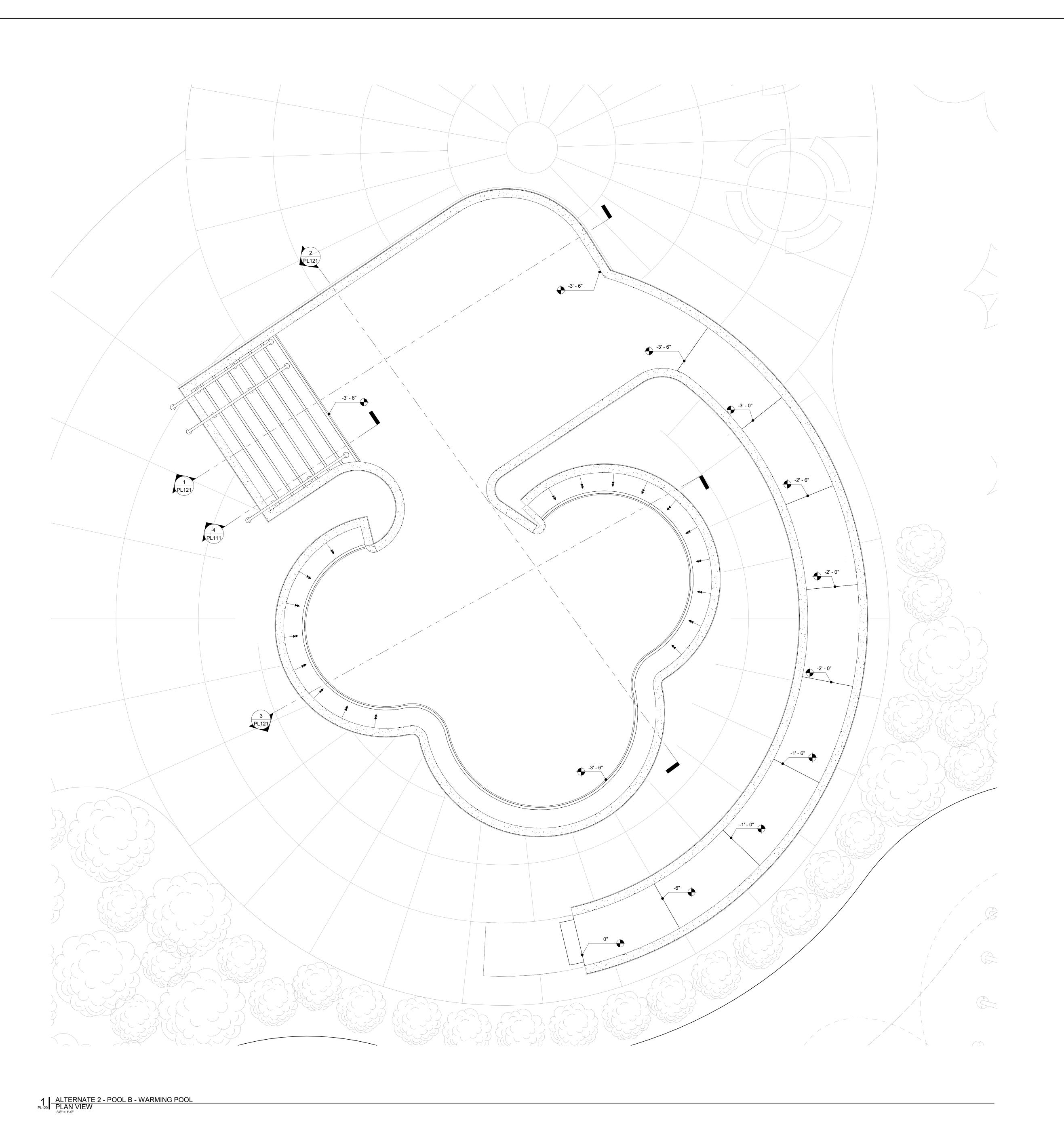
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REVISION SCHEDULE
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ISSUE DATE: 02/25/19
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POOLS A & B - WARMING POOL DETAILS



POOL ALT 2 - B-	WARMING P	OOL DAT	A	
DESCRIPTION	QTY	UNITS		
POOL PERIMETER	0	FEET		
WATER SURFACE AREA	1,106	SQUARE FEET		
POOL VOLUME	23,997	GALLONS		
CIRCULATION RATE	221	GPM		
TURNOVER/VOLUME/FLOW	60 MIN.	2,552	GAL. 43	GPM
TURNOVER/VOLUME/FLOW	120 MIN.	21,445	GAL. 179	GPM
FILTRATION RATE	0.58	GPM/FT ²	·	
BACKWASH RATE	5715	GPM		
PATRON LOAD	74	PERSONS		
POOL A	ALT 2 - B FEATURES			
DESCRIPTION	QTY	(GPM/ea)	(GPM)	
HYDROJETS	17	20.00	340.00	
5' WATERFALL	1	100.00	100.00	
	-	-	-	

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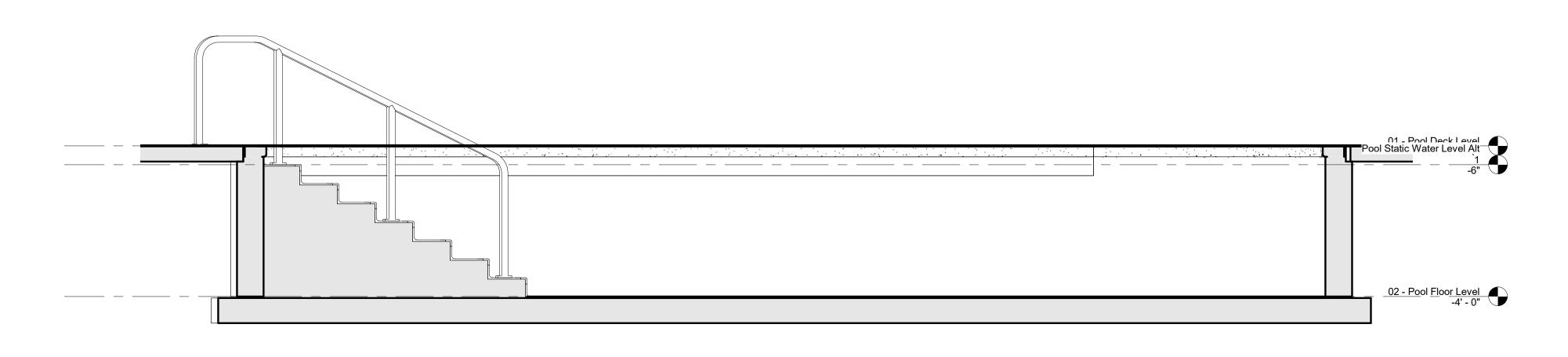
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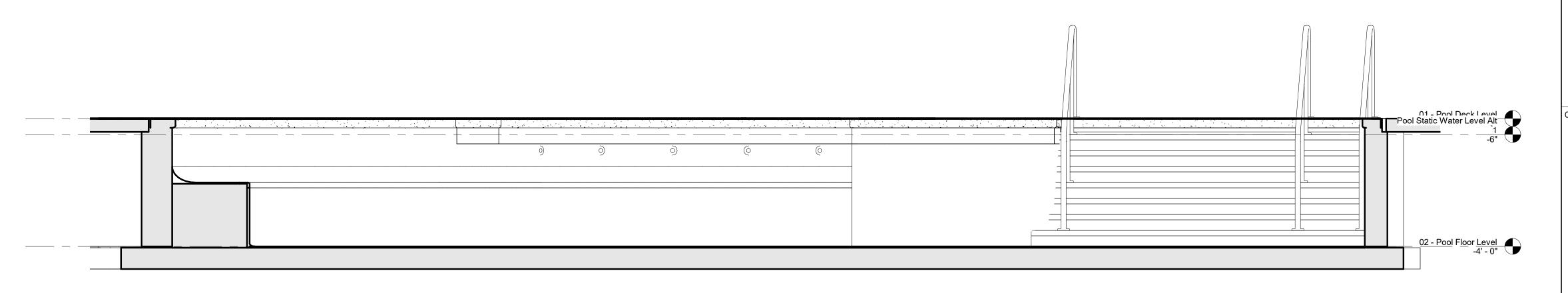
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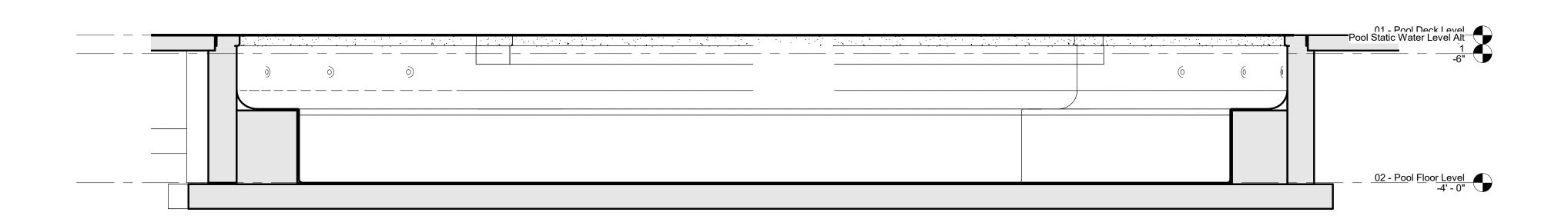
ALTERNATE 2 - POOL B - WARMING



1 POOL B - WARMING POOL SECTION VIEW



PL121 POOL B - WARMING POOL SECTION VIEW



PL121 POOL B - WARMING POOL
SECTION VIEW
1/2" = 1'-0"

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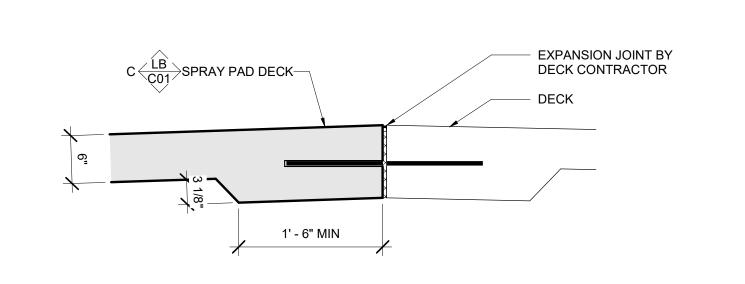
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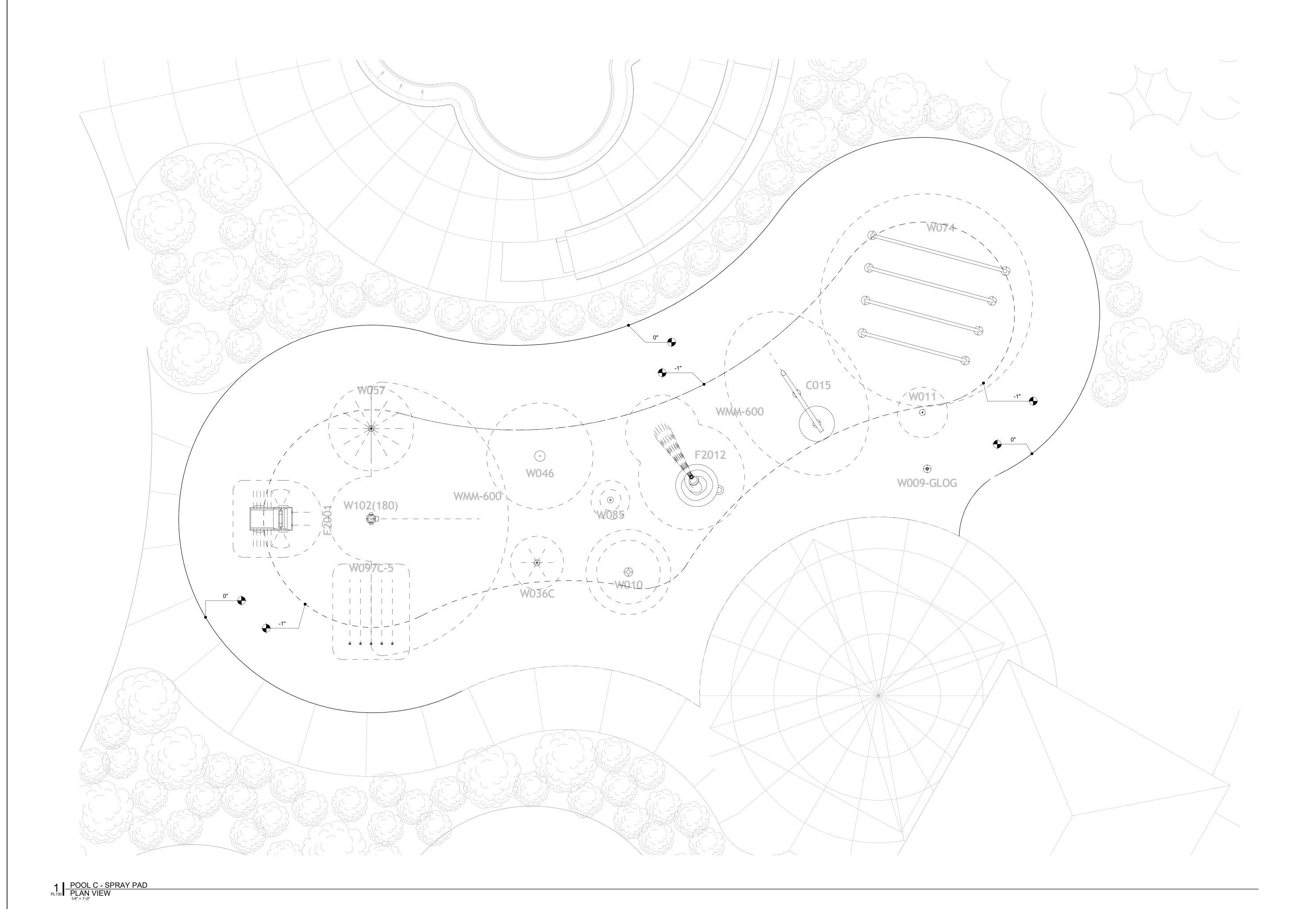
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ALTERNATE 2 - POOL B - WARMING POOL SECTIONS



POOL B-S	PRAY PAD [)ATA		
DESCRIPTION	QTY	UNITS		
POOL PERIMETER	235' - 7"	FEET		
WATER SURFACE AREA	2,702	SQUARE FEE	Τ	
SURGE TANK - SPRAY PAD STORAGE VOLUME	4,000	GALLONS		
CIRCULATION RATE	128	GPM		
TURNOVER/VOLUME/FLOW	25 MIN.		0 GAL. 0	GPM
FILTRATION RATE	6.47	GPM/FT ²		
BACKWASH RATE	296	GPM		
PATRON LOAD	180	PERSONS		
POO	OL B FEATURES			
DESCRIPTION	QTY	(GPM/ea)	(GPM)	
C015 - ZEN SHOWER	1	40.00	40.00	
F1006 - TIMMY TIGER SHARK AQUA SLIDE	1	8.00	8.00	
F2046 - SIMON SEA DRAGON AQUA SPRAYER	1	15.00	15.00	
F3021 - LIL'STARFISH AQUA SPOUT	1	3.00	3.00	
W071 - WATER FLOWER	1	10.00	10.00	
W073 - GEYSERINO	1	58.00	58.00	
W091 - BUBBLER	1	35.00	35.00	
W097C-6 - OVER N' UNDER	1	18.00	18.00	
W280 - POPP DROPP	1	3.00	3.00	
W290C(45) - LITTLE SQWERTS FISH	2	6.00	12.00	

2 PL130	SPRAY PAD EDGE		
PL130	DETAIL VIEW		



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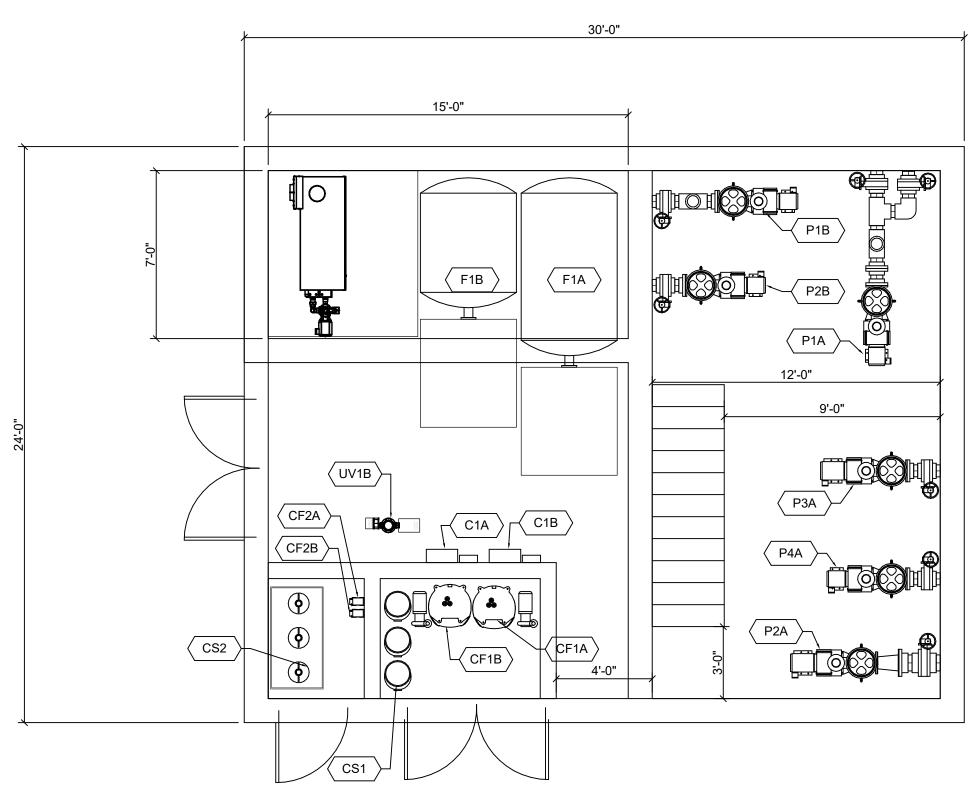
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POOL C - SPRAY PAD PLAN



1	ALT 1 MECHANCIAL ROOM SAND PLAN VIEW
PL400	PLAN VIEW 1/4" = 1'-0"

POOL C-S	PRAY PAD D	DATA			
DESCRIPTION	QTY	UNITS			
POOL PERIMETER	235' - 7"	FEET			
WATER SURFACE AREA	2,702	SQUARE FEE	ΞT		
SURGE TANK - SPRAY PAD STORAGE VOLUME	0	GALLONS			
CIRCULATION RATE	0	GPM			
TURNOVER/VOLUME/FLOW	25 MIN.		0 GAL.	0	GPM
FILTRATION RATE	#DIV/0!	GPM/FT ²			
#DIV/0!	#DIV/0!	GPM			
PATRON LOAD	180	PERSONS			
POO	OL C FEATURES				
DESCRIPTION	QTY	(GPM/ea)		(GPM)	
C015 - ZEN SHOWER	1	40.00		40.00	
F1006 - TIMMY TIGER SHARK AQUA SLIDE	1	8.00		8.00	
F2046 - SIMON SEA DRAGON AQUA SPRAYER	1	15.00		15.00	
F3021 - LIL'STARFISH AQUA SPOUT	1	3.00		3.00	
W071 - WATER FLOWER	1	10.00		10.00	
W073 - GEYSERINO	1	58.00		58.00	
W091 - BUBBLER	1	35.00		35.00	
W097C-6 - OVER N' UNDER	1	18.00		18.00	
W280 - POPP DROPP	1	3.00		3.00	
W290C(45) - LITTLE SQWERTS FISH	2	6.00		12.00	
	-	-		-	

		E	EQUIPMENT SO	CHEDULE
ID	ITEM	QTY.	MANUFACTURER	BASIS OF DESIGN
P1B	FILTRATION PUMP	1	PENTAIR PUMP	EQ SERIES, EQKT 750, 236 GPM, @ 78 TDH, 750 HP, 230/460 VOLT, 3 PHASE, 60HZ, 3450 RPM, ODP MOTOR, END SUCTION, SELF PRIMING, CLOSE COUPLED
P2B	ACTIVITY PUMP	1	PENTAIR PUMP	EQ SERIES, EQKT-500, 202 GPM, @ 71' TDH, 5 HP, 230/460 VOLT, 3 PHASE, 60HZ, 3450 RPM, ODP MOTOR, END SUCTION, SELF PRIMING, CLOSE COUPLED, PROVIDE WITH INTEGRAL 6" x 6" STRAINER AND EXTRA STRAINER BASKET.
F1B	FILTER		NEPTUNE BENSON, INC.	SHFFG SERIES, #4848SHFFG, 48" DIAMETER FIBERGLASS TANK, 70" LENGTH, 19.7 SQUARE FEET OF TOTAL SURFACE AREA, 11.96 GPM/S.F. OF FILTER AREA, PROVIDE WITH DUAL LEVER STAINLESS STEEL LINKAGE, MANUALLY BACKWASH ONE TANK AT A TIME
UV1B	U.V. CHAMBER	1	ETS	MODEL ECF-210-4V, 4" CONNECTIONS, 208V, 60 Hz, 1 PHASE, 1.0 kW, PROVIDE WITH CONTROL PANEL ECF-A-220.
C1B	CHEMICAL CONTROLLER	1	BECS TECHNOLOGY	BECSys5 CONTROLLER, CONTINUOUS MONITORING AND CONTROL, WITH SENSORS AND FLOW ASSEMBLY FOR pH RANGE 0-14, ORP RANGE -1000 TO + 1000mV, TEMPERATURE RANGE 0 TO 100 DEGREES C., FREE CHLORINE RANGE 0 TO 20 ppm, TOTAL CHLORINE RANGE 0 TO 20 ppm, PROVIDE COMBINED CHLORINE SYSTEM WITH UV CONTROL, TDS SENSOR 0 TO 10,000 PPM, WITH FLOW CELL, FLOW RANGE 0 TO 8800 GPM, COMPUTER INTERFACE AND REQUIRED SOFTWARE WITH REQUIRED CONNECTING KITS.
CF1B	CHLORINATOR	1	ARCH CHEMICALS	PULSAR 45, 45 POUND CAPACITY, 2 TO 45 LBS/DAY OUTPUT, WITH 1 HP RECIRCULATION PUMP, VENTURI, SOLENOID VALVE, AND CONNECTIONS FOR STANDARD INSTALLATION, USE PULSAR PLUS BRIQUETTES (CALCIUM HYPOCHLORITE) FOR DISINFECTANT, PROVIDE WITH EXTRA TABLET STRAINER
CS1	CHEMICAL STORAGE	1	CHEMICAL SUPPLIER	BUCKETS OF CALCIUM HYPOCHLORITE PROVIDED BY OWNER'S CHEMICAL SUPPLIER
CF2B	CHEMICAL FEED PUMP	1	STENNER	SERIES, #,TOGALLONS PER DAY OUTPUT, 120 VOLTS, USE MURIATIC ACID FOR pH CONTROL. PROVIDE WITH WEIGHTED FOOT STRAINER.
CS2	CHEMICAL STORAGE	1	CHEMICAL SUPPLIER	CARBOYS FURNISHED BY OWNERS CHEMICAL SUPPLIER. 30% TO 40% CONCENTRATION SULFURIC ACID. PROVIDE WITH LAB SAFETY SUPPLY SECONDARY CONTAINMENT BASINS," WIDE," LONG," DEEP, AND OPTIONAL RAMP, POLYETHYLENE CONSTRUCTION.
FM1B	FLOW METER	1	SIGNET	2551 MAG METER, INSERTION STYLE MAGNETIC FLOW SENSOR, MODEL #3-2551-P11. PROVIDE WITH FIELD MOUNT FLOW TRANSIMITTER (MODEL #3-9900-1), AND UNIVERSAL MOUNTING KIT (MODEL #3-8050). PROVIDE WITH -" DIAMETER PVC SADDLE INSERTION FITTING. FLOWMETER SHALL BE WALL MOUNTED. DESCRIPTION, DESIGN FLOW, PIPE SIZE MAIN, GPM,"
FP1B	FLOW METER	1	SIGNET 7310 POWER SUPPLY	MODEL#7310-2024, 115 VAC/24VDC, 1.0A POWER SUPPLY. POWER SUPPLIES TO BE FURNISHED WITH NEMA 4X ENCLOSURE.
AF1A	WATER LEVEL CONTROL	1	AQUATICONTROL TECHNOLOGY	ELC-800r-SS, ELC-800r SERIES CONTROLLER, SINGLE SENSING, SURGE TANK SENSING APPLICATION WITH FEET OF CABLE

POOL ALT 1- DATA									
DESCRIPTION	QTY	UNITS							
POOL PERIMETER	0	FEET							
WATER SURFACE AREA	1,536	SQUARE FEET							
POOL VOLUME	33,726	GALLONS							
CIRCULATION RATE	302	GPM							
TURNOVER/VOLUME/FLOW	60 MIN.	2,552	GAL.	43	GPM				
TURNOVER/VOLUME/FLOW	120 MIN.	31,174	GAL.	260	GPM				
FILTRATION RATE	#N/A	GPM/FT ²							
BACKWASH RATE	#N/A	GPM							
PATRON LOAD	123	PERSONS							
POOL	ALT 1 FEATURES								
DESCRIPTION	QTY	(GPM/ea)		(GPM)					
TEEN HYDROJETS	24	20.00		480.00					
ADULT HYDROJETS	17	20.00		340.00					
6' WATERFALL	1	120.00		120.00					
5' WATERFALL	1	100.00		100.00					
	-	-		-					

	AL	ı 1 S	AND EQUIPMI	ENT SCHEDULE
ID	ITEM	QTY.	MANUFACTURER	BASIS OF DESIGN
P1A	FILTRATION PUMP	1	PENTAIR PUMP	EQ SERIES, EQK750, 336 GPM, @ 68' TDH, 7.5 HP, 230/460 VOLT, 3 PHASE, 60HZ, 3450 RPM, ODP MOTOR, END SUCTION, SELF PRIMING, CLOSE COUPLED
P2A	JET PUMP	1	PENTAIR PUMP	EQ SERIES, EQK1500, 480 GPM, @ 90' TDH, 15 HP, 230/460 VOLT, 3 PHASE, 60HZ, 3450 RPM, ODP MOTOR, END SUCTION, SELF PRIMING, CLOSE COUPLED, PROVIDE WITH INTEGRAL 6" x 6" STRAINER AND EXTRA STRAINER BASKET.
P3A	JET PUMP	1	PENTAIR PUMP	EQ SERIES, EQK1000, 340 GPM, @ 90' TDH, 10 HP, 230/460 VOLT, 3 PHASE, 60HZ, 3450 RPM, ODP MOTOR, END SUCTION, SELF PRIMING, CLOSE COUPLED, PROVIDE WITH INTEGRAL 6" x 6" STRAINER AND EXTRA STRAINER BASKET.
P4A	WATERFALL PUMP	1	PENTAIR PUMP	EQ SERIES, EQK500, 220 GPM, @ 71' TDH, 5 HP, 230/460 VOLT, 3 PHASE, 60HZ, 3450 RPM, ODP MOTOR, END SUCTION, SELF PRIMING, CLOSE COUPLED, PROVIDE WITH INTEGRAL 6" x 6" STRAINER AND EXTRA STRAINER BASKET.
F1A	FILTER		NEPTUNE BENSON, INC.	SHFFG SERIES, #4872SHFFG, 48" DIAMETER FIBERGLASS TANK, 94.75" LENGTH, 27.7 SQUARE FEET OF TOTAL SURFACE AREA, 12.13 GPM/S.F. OF FILTER AREA, PROVIDE WITH DUAL LEVER STAINLESS STEEL LINKAGE, MANUALLY BACKWASH ONE TANK AT A TIME
C1A	CHEMICAL CONTROLLER	1	SANTA BARBARA CONTROL SYSTEMS	CHEMTROL MODEL#: PC2100 PPm3 ORP/HP pH/HP SCA, CONTINUOUS MONITORING AND CONTROL, 0 TO 14 pH RANGE, 200 TO 999 mV ORP RANGE, 3/4" HIGH PRESSURE PROBES, WET CELL PROBE ENCLOSURE.
H1A	HEATER	1	LOCHINVAR	COPPERFIN 2, CPN752, 750,000 BTU/HOUR INPUT, _" GAS CONNECTION, _" WATER CONNECTION, _" DIAMETER FLUE, PROVIDE WITH, CUPRO NICKEL HEAT EXCHANGER, MANUAL RESET HIGH LIMIT AND MULTI-STACK STAND. FURTHER PROVIDE WITH A.S.M.E. LABEL, RELIEF VALVE, FLOW SWITCH, OPTIONAL PUMP ON/OFF RELAY, AND ALL SAFETY DEVICE PACKAGES PER STATE AND LOCAL CODES.
CF1A	CHLORINATOR	1	ARCH CHEMICALS	PULSAR 45, 45 POUND CAPACITY, 2 TO 45 LBS/DAY OUTPUT, WITH 1 HP RECIRCULATION PUMP, VENTURI, SOLENOID VALVE, AND CONNECTIONS FOR STANDARD INSTALLATION, USE PULSAR PLUS BRIQUETTES (CALCIUM HYPOCHLORITE) FOR DISINFECTANT, PROVIDE WITH EXTRA TABLET STRAINER
CS1	CHEMICAL STORAGE	1	CHEMICAL SUPPLIER	BUCKETS OF CALCIUM HYPOCHLORITE PROVIDED BY OWNER'S CHEMICAL SUPPLIER
CF2A	ACID FEEDER	1	BLUE/WHITE	A-100N SERIES, MODEL #, TO GALLONS PER DAY OUTPUT, 120 VOLTS, USE 30% TO 40% CONCENTRATION SULFURIC ACID FOR pH CONTROL. PROVIDE WITH WEIGHTED FOOT STRAINER.
FM1A	FLOW METER	1	SIGNET	2551 MAG METER, INSERTION STYLE MAGNETIC FLOW SENSOR, MODEL #3-2551-P1-11 PROVIDE WITH FIELD MOUNT FLOW TRANSMITTER MODEL #3-9900-1 AND UNIVERSAL MOUNTING KIT MODEL #3-8050. PROVIDE WITH -" DIAMETER PVC SADDLE INSERTION FITTING. FLOW AND DESCRIPTION TO BE DISPLAYED ON TRANSMITTER.
FP1A	FLOW METER	1	SIGNET 7310 POWER SUPPLY	MODEL#7310-2024, 115 VAC/24VDC, 1.0A POWER SUPPLY. POWER SUPPLIES TO BE FURNISHED WITH NEMA 4X ENCLOSURE.
AF1A	WATER LEVEL CONTROL	1	AQUATICONTROL TECHNOLOGY	ELC-800r-SS, ELC-800r SERIES CONTROLLER, SINGLE SENSING, SURGE TANK SENSING APPLICATION WITH FEET OF CABLE

30'-0"	
CF1A P1B P2B P1A P1A P2B P3A P3A P4A P4A P2A P2A P2A P2A P2A P2A P2A P2A P2A P2	24'-0"
ALT 1 MECHANCIAL ROOM DEFENDER PLAN VIEW 1/4" = 1'-0"	

POOL C-S	PRAY PAD D	ATA			
DESCRIPTION	QTY	UNITS			
POOL PERIMETER	235' - 7"	FEET			
WATER SURFACE AREA	2,702	SQUARE FEET	Τ		
SURGE TANK - SPRAY PAD STORAGE VOLUME	4,000	GALLONS			
CIRCULATION RATE	128	GPM			
TURNOVER/VOLUME/FLOW	25 MIN.	(GAL.	0	GPM
FILTRATION RATE	6.47	GPM/FT ²			
BACKWASH RATE	296	GPM			
PATRON LOAD	180	PERSONS			
POC	OL B FEATURES				
DESCRIPTION	QTY	(GPM/ea)		(GPM)	
C015 - ZEN SHOWER	1	40.00		40.00	
F1006 - TIMMY TIGER SHARK AQUA SLIDE	1	8.00	8.00 8.00		
F2046 - SIMON SEA DRAGON AQUA SPRAYER	1	15.00 15.00			
F3021 - LIL'STARFISH AQUA SPOUT	1	3.00		3.00	
W071 - WATER FLOWER	1	10.00		10.00	
W073 - GEYSERINO	1	58.00		58.00	
W091 - BUBBLER	1	35.00		35.00	
W097C-6 - OVER N' UNDER	1	18.00		18.00	
W280 - POPP DROPP	1	3.00		3.00	
W290C(45) - LITTLE SQWERTS FISH	2	6.00		12.00	
	-	-		-	

		<u> </u>	EQUIPMENT SO	CHEDULE
ID	ITEM	QTY.	MANUFACTURER	BASIS OF DESIGN
P1B	FILTRATION PUMP	1	PENTAIR PUMP	EQ SERIES, EQKT 750, 236 GPM, @ 78 TDH, 750 HP, 230/460 VOLT, 3 PHASE, 60HZ, 3450 RPM, ODP MOTOR, END SUCTION, SELF PRIMING, CLOSE COUPLED
P2B	ACTIVITY PUMP	1	PENTAIR PUMP	EQ SERIES, EQKT-500, 202 GPM, @ 71' TDH, 5 HP, 230/460 VOLT, 3 PHASE, 60HZ, 3450 RPM, ODP MOTOR, END SUCTION, SELF PRIMING, CLOSE COUPLED, PROVIDE WITH INTEGRAL 6" 6" STRAINER AND EXTRA STRAINER BASKET.
F2B	FILTER	1	NEPTUNE BENSON, INC.	REGENERATIVE MEDIA FILTER, MODEL SP-27-48-487, 381 SQUARE FEET OF FILTER AREA, 0.62 GPM/S.F. OF FILTER AREA, PROVIDE WITH PERLITE MEDIA OR APPROVED EQUAL.
AC1	AIR COMPRESSOR	1	NEPTUNE BENSON, INC.	SHARED WITH POOL A
UV1B	U.V. CHAMBER	1	ETS	MODEL ECF-210-4V, 4" CONNECTIONS, 208V, 60 Hz, 1 PHASE, 1.0 kW, PROVIDE WITH CONTROL PANEL ECF-A-220.
C1B	CHEMICAL CONTROLLER	1	SANTA BARBARA CONTROL SYSTEMS	CHEMTROL MODEL#: PC2100 PPm3 ORP/HP pH/HP SCA, CONTINUOUS MONITORING AND CONTROL, 0 TO 14 pH RANGE, 200 TO 999 mV ORP RANGE, 3/4" HIGH PRESSURE PROBES, WET CELL PROBE ENCLOSURE.
CF1B	CHLORINATOR	1	ARCH CHEMICALS	PULSAR 140, 100 POUND CAPACITY, 5 TO 140 LBS/DAY OUTPUT, WITH 1 HP RECIRCULATION PUMP, VENTURI, SOLENOID VALVE, AND CONNECTIONS FOR STANDARD INSTALLATION USE PULSAR PLUS BRIQUETTES (CALCIUM HYPOCHLORITE) FOR DISINFECTANT, PROVIDE WITH EXTRA TABLET STRAINER
CS1	CHEMICAL STORAGE	1	CHEMICAL SUPPLIER	BUCKETS OF CALCIUM HYPOCHLORITE PROVIDED BY OWNER'S CHEMICAL SUPPLIER
CF2B	CHEMICAL FEED PUMP	1	STENNER	SERIES, #,TOGALLONS PER DAY OUTPUT, 120 VOLTS, USE MURIATIC ACID FOR pH CONTROL. PROVIDE WITH WEIGHTED FOOT STRAINER.
CS2	CHEMICAL STORAGE	1	CHEMICAL SUPPLIER	CARBOYS FURNISHED BY OWNERS CHEMICAL SUPPLIER. 30% TO 40% CONCENTRATION SULFURIC ACID. PROVIDE WITH LAB SAFETY SUPPLY SECONDARY CONTAINMENT BASINS," WIDE," LONG," DEEP, AND OPTIONAL RAMP, POLYETHYLENE CONSTRUCTION.
FM1B	FLOW METER	1	SIGNET	2551 MAG METER, INSERTION STYLE MAGNETI FLOW SENSOR, MODEL #3-2551-P11. PROVID WITH FIELD MOUNT FLOW TRANSIMITTER (MODEL #3-9900-1), AND UNIVERSAL MOUNTING KIT (MODEL #3-8050). PROVIDE WITH -" DIAMETER PVC SADDLE INSERTION FITTING. FLOWMETER SHALL BE WALL MOUNTED. DESCRIPTION, DESIGN FLOW, PIPE SIZE MAIN, GPM,"
FP1B	FLOW METER	1	SIGNET 7310 POWER SUPPLY	MODEL#7310-2024, 115 VAC/24VDC, 1.0A POWE SUPPLY. POWER SUPPLIES TO BE FURNISHED WITH NEMA 4X ENCLOSURE.
AF1B	WATER LEVEL CONTROL	1	AQUATICONTROL TECHNOLOGY	ELC-800r-SS, ELC-800r SERIES CONTROLLER, SINGLE SENSING, SURGE TANK SENSING APPLICATION WITH FEET OF CABLE

	POOL B DEFNEDER MECHANICAL EQUIPMENT LIST Copy 1
PL400	DETAIL VIEW NOT TO SCALE

- VERIFY EQUIPMENT PAD HEIGHT REQUIREMENTS FROM MANUFACTURER AND PROVIDE SHOP DRAWINGS TO POOL ENGINEER. VERIFY ALL OPENINGS, PENETRATIONS, AND ELEVATIONS AND PROVIDE SHOP D
- COORDINATE AL REFER TO STR REFER TO ARC AND FINISHED I
- REFER TO PL10 SUPPORT PIPES ALL SUPPORTS, TANK(S) SHALL BE STAINLESS STEEL.

PENINGS, PENETRATIONS, AND ELEVATIONS AND PRAWINGS TO POOL ENGINEER. ALL PIPING AND EMBEDMENTS WITH AFFECTED TRADES.	WATER TECHNOLOGY INC.	neuman pools inc.
RUCTURAL DRAWINGS FOR FUTURE CORED OPENINGS. CHITECTURAL PLANS FOR ACTUAL ROOM DIMENSIONS FLOOR ELEVATIONS. 102-1 FOR REINFORCEMENT AT PIPE PENETRATIONS.	World Leaders in Aquatic Planning, Design and Engineering 100 Park Avenue Beaver Dam, WI 53916 t 920.887.7375 WTI JOB #19039	We care enough to build it better. W9684 Beaverland Parkway Post Office Box 413 Copyright © 2016 Voice: 920.885.3366 Toll Free: 800.444.0312 Fax 920.885.3371 www.neumanpools.com
ES PER PL401-1 THRU 7. S, BRACING, FASTENERS AND HARDWARE IN THE SURGE	This Document and the ideas, contained therein are the sole	renderings and other contents property of Water

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Neuman Group

Voice: 920.885.3366 Toll Free: 800.472.1214 Fax: 920.885.3371

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CONSULTANTS

	ALT 1	DEF	ENDER EQUIF	PMENT SCHEDULE
ID	ITEM	QTY.	MANUFACTURER	BASIS OF DESIGN
P1A	FILTRATION PUMP	1	PENTAIR PUMP	EQ SERIES, EQK750, 336 GPM, @ 68' TDH, 7.5 HP, 230/460 VOLT, 3 PHASE, 60HZ, 3450 RPM, ODP MOTOR, END SUCTION, SELF PRIMING, CLOSE COUPLED
P2A	JET PUMP	1	PENTAIR PUMP	EQ SERIES, EQK1500, 480 GPM, @ 90' TDH, 15 HP, 230/460 VOLT, 3 PHASE, 60HZ, 3450 RPM, ODP MOTOR, END SUCTION, SELF PRIMING, CLOSE COUPLED, PROVIDE WITH INTEGRAL 6" x 6" STRAINER AND EXTRA STRAINER BASKET.
РЗА	JET PUMP	1	PENTAIR PUMP	EQ SERIES, EQK1000, 340 GPM, @ 90' TDH, 10 HP, 230/460 VOLT, 3 PHASE, 60HZ, 3450 RPM, ODP MOTOR, END SUCTION, SELF PRIMING, CLOSE COUPLED, PROVIDE WITH INTEGRAL 6" x 6" STRAINER AND EXTRA STRAINER BASKET.
P4A	WATERFALL PUMP	1	PENTAIR PUMP	EQ SERIES, EQK500, 220 GPM, @ 71' TDH, 5 HP, 230/460 VOLT, 3 PHASE, 60HZ, 3450 RPM, ODP MOTOR, END SUCTION, SELF PRIMING, CLOSE COUPLED, PROVIDE WITH INTEGRAL 6" x 6" STRAINER AND EXTRA STRAINER BASKET.
F1A	FILTER	1	NEPTUNE BENSON, INC.	REGENERATIVE MEDIA FILTER, MODEL SP-27-48-487, 381 SQUARE FEET OF FILTER AREA, 0.88 GPM/S.F. OF FILTER AREA, PROVIDE WITH PERLITE MEDIA OR APPROVED EQUAL.
AC1	AIR COMPRESSOR	1	NEPTUNE BENSON, INC.	DEFENDER COMPRESSOR AND WATER SEPARATOR, 2HP, 1 PHASE, 120V, 135 PSI MAXIMUM PRESSURE, 30 GALLON TANK, CAST IRON TWIN CYLINDER COMPRESSOR PUMP, PART #12213. WATER SEPARATOR MODEL AMG350, 1/2" PORT SIZE.
C1A	CHEMICAL CONTROLLER	1	SANTA BARBARA CONTROL SYSTEMS	CHEMTROL MODEL#: PC2100 PPm3 ORP/HP pH/HP SCA, CONTINUOUS MONITORING AND CONTROL, 0 TO 14 pH RANGE, 200 TO 999 mV ORP RANGE, 3/4" HIGH PRESSURE PROBES, WET CELL PROBE ENCLOSURE.
Н1А	HEATER	1	LOCHINVAR	COPPERFIN 2, CPN752, 750,000 BTU/HOUR INPUT, _" GAS CONNECTION, _" WATER CONNECTION, _" DIAMETER FLUE, PROVIDE WITH VENT KIT MODEL#, CUPRO NICKEL HEAT EXCHANGER, MANUAL RESET HIGH LIMIT AND MULTI-STACK STAND. FURTHER PROVIDE WITH A.S.M.E. LABEL, RELIEF VALVE, FLOW SWITCH, OPTIONAL PUMP ON/OFF RELAY, AND ALL SAFETY DEVICE PACKAGES PER STATE AND LOCAL CODES.
CF1A	CHLORINATOR	1	ARCH CHEMICALS	PULSAR 140, 100 POUND CAPACITY, 5 TO 140 LBS/DAY OUTPUT, WITH 1 HP RECIRCULATION PUMP, VENTURI, SOLENOID VALVE, AND CONNECTIONS FOR STANDARD INSTALLATION, USE PULSAR PLUS BRIQUETTES (CALCIUM HYPOCHLORITE) FOR DISINFECTANT, PROVIDE WITH EXTRA TABLET STRAINER
CS1	CHEMICAL STORAGE	1	CHEMICAL SUPPLIER	BUCKETS OF CALCIUM HYPOCHLORITE PROVIDED BY OWNER'S CHEMICAL SUPPLIER
CF2A	ACID FEEDER	1	BLUE/WHITE	A-100N SERIES, MODEL #, TO GALLONS PER DAY OUTPUT, 120 VOLTS, USE 30% TO 40% CONCENTRATION SULFURIC ACID FOR pH CONTROL. PROVIDE WITH WEIGHTED FOOT STRAINER.
FM1A	FLOW METER	1	SIGNET	2551 MAG METER, INSERTION STYLE MAGNETIC FLOW SENSOR, MODEL #3-2551-P1-11 PROVIDE WITH FIELD MOUNT FLOW TRANSMITTER MODEL #3-9900-1 AND UNIVERSAL MOUNTING KIT MODEL #3-8050. PROVIDE WITH -" DIAMETER PVC SADDLE INSERTION FITTING. FLOW AND DESCRIPTION TO BE DISPLAYED ON TRANSMITTER.
FP1A	FLOW METER	1	SIGNET 7310 POWER SUPPLY	MODEL#7310-2024, 115 VAC/24VDC, 1.0A POWER SUPPLY. POWER SUPPLIES TO BE FURNISHED WITH NEMA 4X ENCLOSURE.
AF1A	WATER LEVEL CONTROL	1	AQUATICONTROL TECHNOLOGY	ELC-800r-SS, ELC-800r SERIES CONTROLLER, SINGLE SENSING, SURGE TANK SENSING APPLICATION WITH FEET OF CABLE

POOL ALT 1 - A-WARMING POOL DATA

POOL ALT 1 - A FEATURES

0 FEET

5715 GPM 123 PERSONS

(GPM/ea) 20.00 20.00 120.00 100.00

1,536 SQUARE FEET

1,536 SQUARE FEET

33,726 GALLONS

302 GPM

60 MIN. 2,552 GAL. 43 GPM

120 MIN. 31,174 GAL. 260 GPM

0.79 GPM/FT²

(GPM) 480.00 340.00 120.00 100.00

DESCRIPTION

POOL VOLUME CIRCULATION RATE

POOL PERIMETER WATER SURFACE AREA

FILTRATION RATE

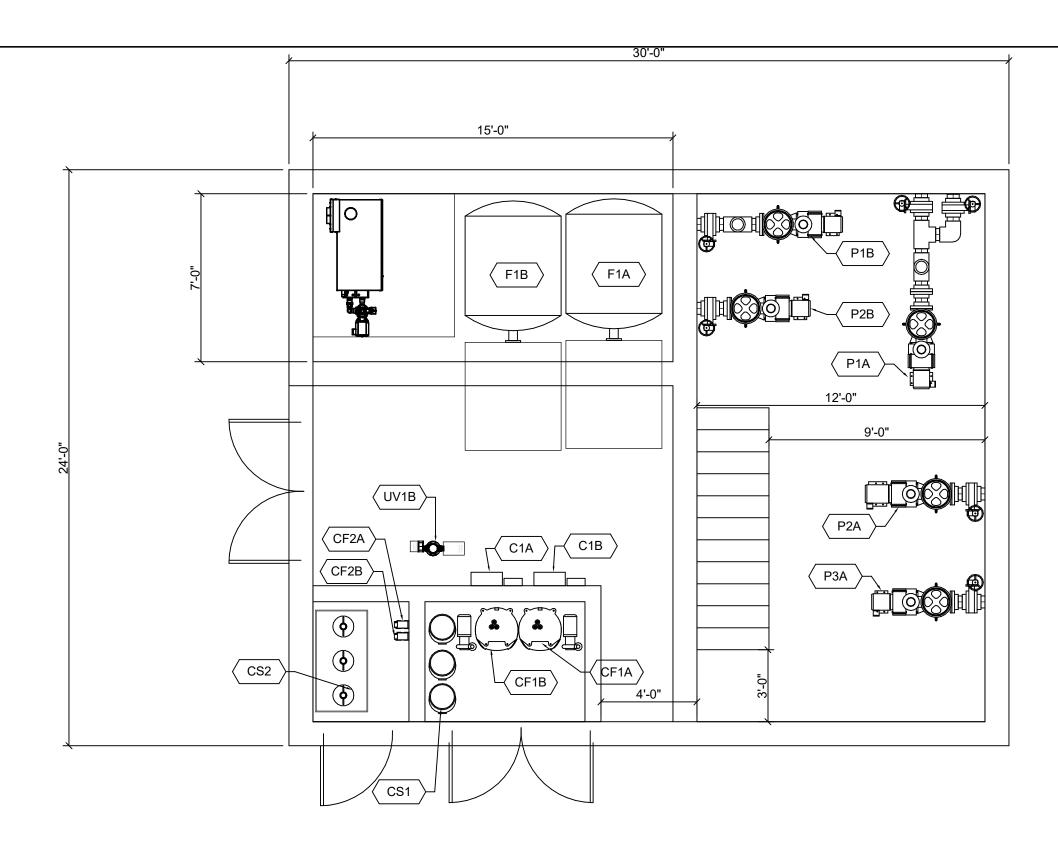
BACKWASH RATE PATRON LOAD

DESCRIPTION TEEN HYDROJETS ADULT HYDROJETS 6' WATERFALL 5' WATERFALL

TURNOVER/VOLUME/FLOW TURNOVER/VOLUME/FLOW

REVISION SCHEDULE					
Number	Description	Dat			
ISSUE D	ATE: 10/12/17				
PROJEC [*]	T NUMBER: 19039				
DRAWN	I BY: Author				
	D BY: Checker				

PLAN



ALT 2 MECHANCIAL ROOM SAND PLAN VIEW 1/4" = 1'-0"

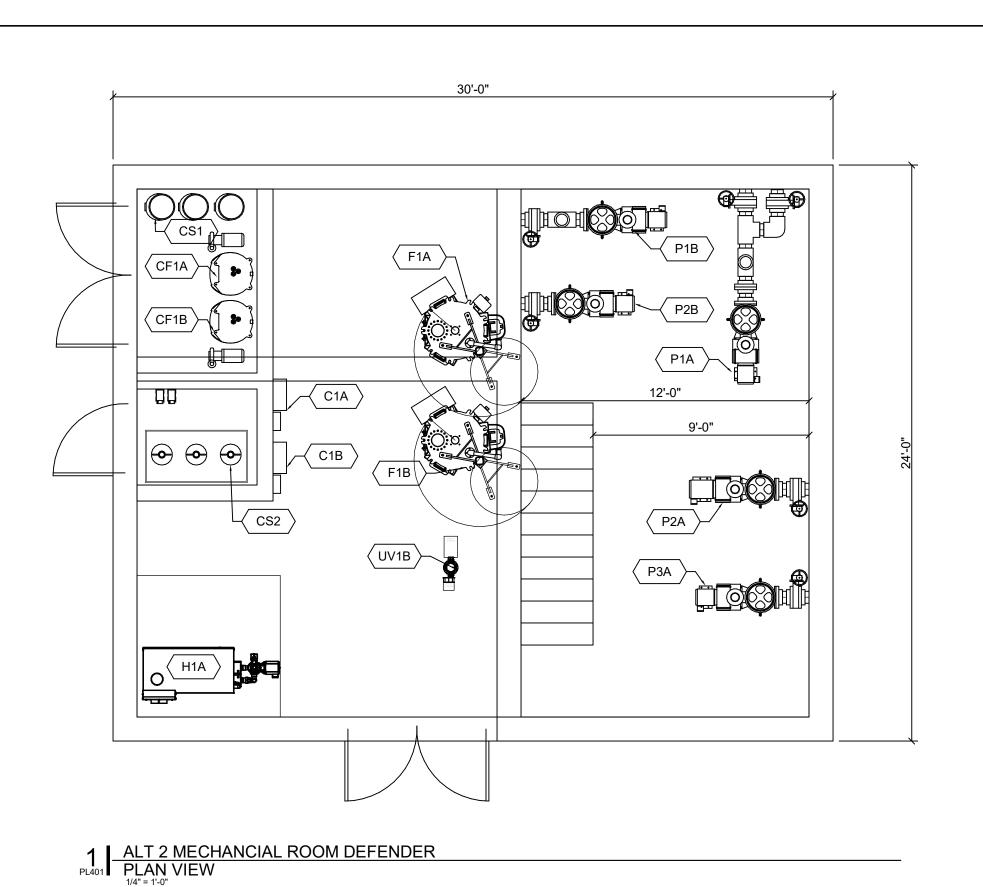
POOL C-S	PRAY PAD D	DATA		
DESCRIPTION	QTY	UNITS		
POOL PERIMETER	235' - 7"	FEET		
WATER SURFACE AREA	2,702	SQUARE FEE	Т	
SURGE TANK - SPRAY PAD STORAGE VOLUME	4,000	GALLONS		
CIRCULATION RATE	128	GPM		
TURNOVER/VOLUME/FLOW	25 MIN.	(0 GAL.	0 GPN
FILTRATION RATE	6.47	GPM/FT ²	·	
BACKWASH RATE	296	GPM		
PATRON LOAD	180	PERSONS		
PO	OL B FEATURES			
DESCRIPTION	QTY	(GPM/ea)	(GPN	Л)
C015 - ZEN SHOWER	1	40.00	40.0	0
F1006 - TIMMY TIGER SHARK AQUA SLIDE	1	8.00	8.00)
F2046 - SIMON SEA DRAGON AQUA SPRAYER	1	15.00	15.0	0
F3021 - LIL'STARFISH AQUA SPOUT	1	3.00	3.00)
W071 - WATER FLOWER	1	10.00	10.0	0
W073 - GEYSERINO	1	58.00	58.0	0
W091 - BUBBLER	1	35.00	35.0	0
W097C-6 - OVER N' UNDER	1	18.00	18.0	0
W280 - POPP DROPP	1	3.00	3.00)
W290C(45) - LITTLE SQWERTS FISH	2	6.00	12.0	0
	-	-	-	

		E	EQUIPMENT SO	CHEDULE
ID	ITEM	QTY.	MANUFACTURER	BASIS OF DESIGN
P1B	FILTRATION PUMP	1	PENTAIR PUMP	EQ SERIES, EQKT 750, 236 GPM, @ 78 TDH, 750 HP, 230/460 VOLT, 3 PHASE, 60HZ, 3450 RPM, ODP MOTOR, END SUCTION, SELF PRIMING, CLOSE COUPLED
P2B	ACTIVITY PUMP	1	PENTAIR PUMP	EQ SERIES, EQKT-500, 202 GPM, @ 71' TDH, 5 HP, 230/460 VOLT, 3 PHASE, 60HZ, 3450 RPM, ODP MOTOR, END SUCTION, SELF PRIMING, CLOSE COUPLED, PROVIDE WITH INTEGRAL 6" x 6" STRAINER AND EXTRA STRAINER BASKET.
F1B	FILTER		NEPTUNE BENSON, INC.	SHFFG SERIES, #4848SHFFG, 48" DIAMETER FIBERGLASS TANK, 70" LENGTH, 19.7 SQUARE FEET OF TOTAL SURFACE AREA, 11.96 GPM/S.F. OF FILTER AREA, PROVIDE WITH DUAL LEVER STAINLESS STEEL LINKAGE, MANUALLY BACKWASH ONE TANK AT A TIME
UV1B	U.V. CHAMBER	1	ETS	MODEL ECF-210-4V, 4" CONNECTIONS, 208V, 60 Hz, 1 PHASE, 1.0 kW, PROVIDE WITH CONTROL PANEL ECF-A-220.
C1B	CHEMICAL CONTROLLER	1	BECS TECHNOLOGY	BECSys5 CONTROLLER, CONTINUOUS MONITORING AND CONTROL, WITH SENSORS AND FLOW ASSEMBLY FOR pH RANGE 0-14, ORP RANGE -1000 TO + 1000mV, TEMPERATURE RANGE 0 TO 100 DEGREES C., FREE CHLORINE RANGE 0 TO 20 ppm, TOTAL CHLORINE RANGE 0 TO 20 ppm, PROVIDE COMBINED CHLORINE SYSTEM WITH UV CONTROL, TDS SENSOR 0 TO 10,000 PPM, WITH FLOW CELL, FLOW RANGE 0 TO 8800 GPM, COMPUTER INTERFACE AND REQUIRED SOFTWARE WITH REQUIRED CONNECTING KITS.
CF1B	CHLORINATOR	1	ARCH CHEMICALS	PULSAR 45, 45 POUND CAPACITY, 2 TO 45 LBS/DAY OUTPUT, WITH 1 HP RECIRCULATION PUMP, VENTURI, SOLENOID VALVE, AND CONNECTIONS FOR STANDARD INSTALLATION, USE PULSAR PLUS BRIQUETTES (CALCIUM HYPOCHLORITE) FOR DISINFECTANT, PROVIDE WITH EXTRA TABLET STRAINER
CS1	CHEMICAL STORAGE	1	CHEMICAL SUPPLIER	BUCKETS OF CALCIUM HYPOCHLORITE PROVIDED BY OWNER'S CHEMICAL SUPPLIER
CF2B	CHEMICAL FEED PUMP	1	STENNER	SERIES, #,TOGALLONS PER DAY OUTPUT, 120 VOLTS, USE MURIATIC ACID FOR pH CONTROL. PROVIDE WITH WEIGHTED FOOT STRAINER.
CS2	CHEMICAL STORAGE	1	CHEMICAL SUPPLIER	CARBOYS FURNISHED BY OWNERS CHEMICAL SUPPLIER. 30% TO 40% CONCENTRATION SULFURIC ACID. PROVIDE WITH LAB SAFETY SUPPLY SECONDARY CONTAINMENT BASINS," WIDE," LONG," DEEP, AND OPTIONAL RAMP, POLYETHYLENE CONSTRUCTION.
FM1B	FLOW METER	1	SIGNET	2551 MAG METER, INSERTION STYLE MAGNETIC FLOW SENSOR, MODEL #3-2551-P11. PROVIDE WITH FIELD MOUNT FLOW TRANSIMITTER (MODEL #3-9900-1), AND UNIVERSAL MOUNTING KIT (MODEL #3-8050). PROVIDE WITH -" DIAMETER PVC SADDLE INSERTION FITTING. FLOWMETER SHALL BE WALL MOUNTED. DESCRIPTION, DESIGN FLOW, PIPE SIZE MAIN, GPM,"
FP1B	FLOW METER	1	SIGNET 7310 POWER SUPPLY	MODEL#7310-2024, 115 VAC/24VDC, 1.0A POWER SUPPLY. POWER SUPPLIES TO BE FURNISHED WITH NEMA 4X ENCLOSURE.
AF1A	WATER LEVEL CONTROL	1	AQUATICONTROL TECHNOLOGY	ELC-800r-SS, ELC-800r SERIES CONTROLLER, SINGLE SENSING, SURGE TANK SENSING APPLICATION WITH FEET OF CABLE

POOL	ALT 2- DATA	4			
DESCRIPTION	QTY	UNITS			
POOL PERIMETER	0	FEET			
WATER SURFACE AREA	1,106	SQUARE FEET			
POOL VOLUME	23,997	GALLONS			
CIRCULATION RATE	221	GPM			
TURNOVER/VOLUME/FLOW	60 MIN.	2,552	GAL.	43	GPM
TURNOVER/VOLUME/FLOW	120 MIN.	21,445	GAL.	179	GPM
FILTRATION RATE	11.23	GPM/FT ²			
BACKWASH RATE	296	GPM			
PATRON LOAD	74	PERSONS			
POOL	ALT 2 FEATURES				
DESCRIPTION	QTY	(GPM/ea)		(GPM)	
HYDROJETS	17	20.00	,	340.00	
5' WATERFALL	1	100.00		100.00	
	-	-			

ID	ITEM	QTY.	MANUFACTURER	BASIS OF DESIGN
P1A	FILTRATION PUMP	1	PENTAIR PUMP	EQ SERIES, EQK750, 241 GPM, @ 68' TDH, 7.5 HP, 230/460 VOLT, 3 PHASE, 60HZ, 3450 RPM, ODP MOTOR, END SUCTION, SELF PRIMING, CLOSE COUPLED
P2A	JET PUMP	1	PENTAIR PUMP	EQ SERIES, EQK1500, 480 GPM, @ 90' TDH, 15 HP, 230/460 VOLT, 3 PHASE, 60HZ, 3450 RPM, ODP MOTOR, END SUCTION, SELF PRIMING, CLOSE COUPLED, PROVIDE WITH INTEGRAL 6" x 6" STRAINER AND EXTRA STRAINER BASKET.
РЗА	WATERFALL PUMP	1	PENTAIR PUMP	EQ SERIES, EQK500, 100 GPM, @ 80' TDH, 5 HP, 230/460 VOLT, 3 PHASE, 60HZ, 3450 RPM, ODP MOTOR, END SUCTION, SELF PRIMING, CLOSE COUPLED, PROVIDE WITH INTEGRAL 6" x 6" STRAINER AND EXTRA STRAINER BASKET.
F1A	FILTER		NEPTUNE BENSON, INC.	SHFFG SERIES, #4848SHFFG, 48" DIAMETER FIBERGLASS TANK, 69.34" LENGTH, 19.7 SQUARE FEET OF TOTAL SURFACE AREA, 12.25 GPM/S.F. OF FILTER AREA, PROVIDE WITH DUAL LEVER STAINLESS STEEL LINKAGE, MANUALLY BACKWASH ONE TANK AT A TIME
C1A	CHEMICAL CONTROLLER	1	SANTA BARBARA CONTROL SYSTEMS	CHEMTROL MODEL#: PC2100 PPm3 ORP/HP pH/HP SCA, CONTINUOUS MONITORING AND CONTROL, 0 TO 14 pH RANGE, 200 TO 999 mV ORP RANGE, 3/4" HIGH PRESSURE PROBES, WET CELL PROBE ENCLOSURE.
H1A	HEATER	1	LOCHINVAR	COPPERFIN 2, CPN502, 500,000 BTU/HOUR INPUT, _" GAS CONNECTION, _" WATER CONNECTION, _" DIAMETER FLUE, PROVIDE WITH VENT KIT MODEL#, CUPRO NICKEL HEAT EXCHANGER, MANUAL RESET HIGH LIMIT AND MULTI-STACK STAND. FURTHER PROVIDE WITH A.S.M.E. LABEL, RELIEF VALVE, FLOW SWITCH, OPTIONAL PUMP ON/OFF RELAY, AND ALL SAFETY DEVICE PACKAGES PER STATE AND LOCAL CODES.
CF1A	CHLORINATOR	1	ARCH CHEMICALS	PULSAR 45, 45 POUND CAPACITY, 2 TO 45 LBS/DAY OUTPUT, WITH 1 HP RECIRCULATION PUMP, VENTURI, SOLENOID VALVE, AND CONNECTIONS FOR STANDARD INSTALLATION, USE PULSAR PLUS BRIQUETTES (CALCIUM HYPOCHLORITE) FOR DISINFECTANT, PROVIDE WITH EXTRA TABLET STRAINER
CS1	CHEMICAL STORAGE	1	CHEMICAL SUPPLIER	BUCKETS OF CALCIUM HYPOCHLORITE PROVIDED BY OWNER'S CHEMICAL SUPPLIER
CF2A	ACID FEEDER	1	BLUE/WHITE	A-100N SERIES, MODEL #, TO GALLONS PER DAY OUTPUT, 120 VOLTS, USE 30% TO 40% CONCENTRATION SULFURIC ACID FOR pH CONTROL. PROVIDE WITH WEIGHTED FOOT STRAINER.
FM1A	FLOW METER	1	SIGNET	2551 MAG METER, INSERTION STYLE MAGNETIC FLOW SENSOR, MODEL #3-2551-P1-11 PROVIDE WITH FIELD MOUNT FLOW TRANSMITTER MODEL #3-9900-1 AND UNIVERSAL MOUNTING KIT MODEL #3-8050. PROVIDE WITH -" DIAMETER PVC SADDLE INSERTION FITTING. FLOW AND DESCRIPTION TO BE DISPLAYED ON TRANSMITTER.
FP1A	FLOW METER	1	SIGNET 7310 POWER SUPPLY	MODEL#7310-2024, 115 VAC/24VDC, 1.0A POWER SUPPLY. POWER SUPPLIES TO BE FURNISHED WITH NEMA 4X ENCLOSURE.
AF1A	WATER LEVEL CONTROL	1	AQUATICONTROL TECHNOLOGY	ELC-800r-SS, ELC-800r SERIES CONTROLLER, SINGLE SENSING, SURGE TANK SENSING APPLICATION WITH FEET OF CABLE

5 I	POOL A ALT 2 SAND MECHANICAL EQUIPMENT LIST PLAN VIEW
PL401	PLAN VIEW



POOL C-SPRAY PAD DATA						
DESCRIPTION	QTY	UNITS				
POOL PERIMETER	235' - 7"	FEET				
WATER SURFACE AREA	2,702	02 SQUARE FEET				
SURGE TANK - SPRAY PAD STORAGE VOLUME	0	GALLONS				
CIRCULATION RATE	0	GPM				
TURNOVER/VOLUME/FLOW	25 MIN.	(GAL. 0 GPM			
FILTRATION RATE	#DIV/0!	GPM/FT ²				
#DIV/0!	#DIV/0!	GPM				
PATRON LOAD	180	PERSONS				
PO	OL C FEATURES					
DESCRIPTION	QTY	(GPM/ea)	(GPM)			
C015 - ZEN SHOWER	1	40.00	40.00			
F1006 - TIMMY TIGER SHARK AQUA SLIDE	1	8.00	8.00			
F2046 - SIMON SEA DRAGON AQUA SPRAYER	1	15.00	15.00			
F3021 - LIL'STARFISH AQUA SPOUT	1	3.00	3.00			
W071 - WATER FLOWER	1	10.00	10.00			
W073 - GEYSERINO	1	58.00	58.00			
W091 - BUBBLER	1	35.00	35.00			
W097C-6 - OVER N' UNDER	1	18.00	18.00			
W280 - POPP DROPP	1	3.00	3.00			
W290C(45) - LITTLE SQWERTS FISH	2	6.00	12.00			
	-	-	-			

EQUIPMENT SCHEDULE					
ID	ITEM	QTY.	MANUFACTURER	BASIS OF DESIGN	
P1B	FILTRATION PUMP	1	PENTAIR PUMP	EQ SERIES, EQKT 750, 236 GPM, @ 78 TDH, 750 HP, 230/460 VOLT, 3 PHASE, 60HZ, 3450 RPM, ODP MOTOR, END SUCTION, SELF PRIMING, CLOSE COUPLED	
P2B	ACTIVITY PUMP	1	PENTAIR PUMP	EQ SERIES, EQKT-500, 202 GPM, @ 71' TDH, 5 HP, 230/460 VOLT, 3 PHASE, 60HZ, 3450 RPM, ODP MOTOR, END SUCTION, SELF PRIMING, CLOSE COUPLED, PROVIDE WITH INTEGRAL 6" x 6" STRAINER AND EXTRA STRAINER BASKET.	
F2B	FILTER	1	NEPTUNE BENSON, INC.	REGENERATIVE MEDIA FILTER, MODEL SP-27-48-487, 381 SQUARE FEET OF FILTER AREA, 0.62 GPM/S.F. OF FILTER AREA, PROVIDE WITH PERLITE MEDIA OR APPROVED EQUAL.	
AC1	AIR COMPRESSOR	1	NEPTUNE BENSON, INC.	SHARED WITH POOL A	
UV1B	U.V. CHAMBER	1	ETS	MODEL ECF-210-4V, 4" CONNECTIONS, 208V, 60 Hz, 1 PHASE, 1.0 kW, PROVIDE WITH CONTROL PANEL ECF-A-220.	
C1B	CHEMICAL CONTROLLER	1	SANTA BARBARA CONTROL SYSTEMS	CHEMTROL MODEL#: PC2100 PPm3 ORP/HPpH/HP SCA, CONTINUOUS MONITORING AND CONTROL, 0 TO 14 pH RANGE, 200 TO 999 mV ORP RANGE, 3/4" HIGH PRESSURE PROBES, WET CELL PROBE ENCLOSURE.	
CF1B	CHLORINATOR	1	ARCH CHEMICALS	PULSAR 140, 100 POUND CAPACITY, 5 TO 140 LBS/DAY OUTPUT, WITH 1 HP RECIRCULATION PUMP, VENTURI, SOLENOID VALVE, AND CONNECTIONS FOR STANDARD INSTALLATION, USE PULSAR PLUS BRIQUETTES (CALCIUM HYPOCHLORITE) FOR DISINFECTANT, PROVIDE WITH EXTRA TABLET STRAINER	
CS1	CHEMICAL STORAGE	1	CHEMICAL SUPPLIER	BUCKETS OF CALCIUM HYPOCHLORITE PROVIDED BY OWNER'S CHEMICAL SUPPLIER	
CF2B	CHEMICAL FEED PUMP	1	STENNER	SERIES, #,TOGALLONS PER DAY OUTPUT, 120 VOLTS, USE MURIATIC ACID FOR pH CONTROL. PROVIDE WITH WEIGHTED FOOT STRAINER.	
CS2	CHEMICAL STORAGE	1	CHEMICAL SUPPLIER	CARBOYS FURNISHED BY OWNERS CHEMICAL SUPPLIER. 30% TO 40% CONCENTRATION SULFURIC ACID. PROVIDE WITH LAB SAFETY SUPPLY SECONDARY CONTAINMENT BASINS," WIDE," LONG," DEEP, AND OPTIONAL RAMP, POLYETHYLENE CONSTRUCTION.	
FM1B	FLOW METER	1	SIGNET	2551 MAG METER, INSERTION STYLE MAGNETIC FLOW SENSOR, MODEL #3-2551-P11. PROVIDE WITH FIELD MOUNT FLOW TRANSIMITTER (MODEL #3-9900-1), AND UNIVERSAL MOUNTING KIT (MODEL #3-8050). PROVIDE WITH -" DIAMETER PVC SADDLE INSERTION FITTING. FLOWMETER SHALL BE WALL MOUNTED. DESCRIPTION, DESIGN FLOW, PIPE SIZE MAIN, GPM,"	
FP1B	FLOW METER	1	SIGNET 7310 POWER SUPPLY	MODEL#7310-2024, 115 VAC/24VDC, 1.0A POWER SUPPLY. POWER SUPPLIES TO BE FURNISHED WITH NEMA 4X ENCLOSURE.	
AF1B	WATER LEVEL CONTROL	1	AQUATICONTROL TECHNOLOGY	ELC-800r-SS, ELC-800r SERIES CONTROLLER, SINGLE SENSING, SURGE TANK SENSING APPLICATION WITH FEET OF CABLE	

	POOL B DEFNEDER MECHANICAL EQUIPMENT LIST Copy 1 Copy 1
PL401	PLAN VIEW

MECHANCIAL PLAN NOTES:	
DIVISION 13 CONTRACTOR NO	TES

- VERIFY EQUIPMENT PAD HEIGHT REQUIREMENTS FROM MANUFACTURER AND PROVIDE SHOP DRAWINGS TO POOL ENGINEER. VERIFY ALL OPENINGS, PENETRATIONS, AND ELEVATIONS AND PROVIDE SHOP DRAWINGS TO POOL ENGINEER. COORDINATI
- REFER TO ST REFER TO A AND FINISHE REFER TO PI

VERIFY ALL OPENINGS, PENETRATIONS, AND ELEVATIONS AND	WTI	neuman pools inc.
PROVIDE SHOP DRAWINGS TO POOL ENGINEER.		
COORDINATE ALL PIPING AND EMBEDMENTS WITH AFFECTED TRADES.	WATER TECHNOLOGY INC.	
REFER TO STRUCTURAL DRAWINGS FOR FUTURE CORED OPENINGS.	World Leaders in Aquatic Planning, Design and Engineering	We care enough to build it better.
REFER TO ARCHITECTURAL PLANS FOR ACTUAL ROOM DIMENSIONS	100 Park Avenue Beaver Dam, WI 53916 t 920.887.7375	W9684 Beaverland Parkway Voice: 920.885.3366 Post Office Box 413 Toll Free: 800.444.0312
AND FINISHED FLOOR ELEVATIONS.	WTI JOB #19039	Beaver Dam, Wisconsin 53916 Fax: 920.885.3371 Copyright © 2016 www.neumanpools.com
REFER TO PL102-1 FOR REINFORCEMENT AT PIPE PENETRATIONS.		.,,,
SUPPORT PIPES PER PL401-1 THRU 7.	This Document and the ideas,	renderings and other contents
ALL SUPPORTS, BRACING, FASTENERS AND HARDWARE IN THE SURGE	contained therein are the sole	property of Water
TANK(S) SHALL BE STAINLESS STEEL.	Technology, Inc. and may not	be disseminated, copied,

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Neuman Group

Voice: 920.885.3366 Toll Free: 800.472.1214 Fax: 920.885.3371 www.neumangroup.com

neuman pools inc

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CONSULTANTS

POOL ALT 2 - B-	WARMING P	OOL DAT	A		
DESCRIPTION	QTY	UNITS			
POOL PERIMETER	0	FEET			
WATER SURFACE AREA	1,106	SQUARE FEET			
POOL VOLUME	23,997	GALLONS			
CIRCULATION RATE	221	GPM			
TURNOVER/VOLUME/FLOW	60 MIN.	2,552	GAL.	43	GPM
TURNOVER/VOLUME/FLOW	120 MIN.	21,445	GAL.	179	GPM
FILTRATION RATE	0.58	GPM/FT ²		•	
BACKWASH RATE	5715	GPM			
PATRON LOAD	74	PERSONS			
POOL /	ALT 2 - B FEATURES				
DESCRIPTION	QTY	(GPM/ea)		(GPM)	
HYDROJETS	17	20.00		340.00	
5' WATERFALL	1	100.00		100.00	
	-	-		-	

	ALT 2 DEFENDER EQUIPMENT SCHEDULE					
ID	ITEM	QTY.	MANUFACTURER	BASIS OF DESIGN		
P1A	FILTRATION PUMP	1	PENTAIR PUMP	EQ SERIES, EQK750, 336 GPM, @ 68' TDH, 7.5 HP, 230/460 VOLT, 3 PHASE, 60HZ, 3450 RPM, ODP MOTOR, END SUCTION, SELF PRIMING, CLOSE COUPLED		
P2A	JET PUMP	1	PENTAIR PUMP	EQ SERIES, EQK1500, 340 GPM, @ 68' TDH, 15 HP, 230/460 VOLT, 3 PHASE, 60HZ, 3450 RPM, ODP MOTOR, END SUCTION, SELF PRIMING, CLOSE COUPLED, PROVIDE WITH INTEGRAL 6" x 6" STRAINER AND EXTRA STRAINER BASKET.		
P3A	WATERFALL PUMP	1	PENTAIR PUMP	EQ SERIES, EQK500, 100 GPM, @ 80' TDH, 5 HP, 230/460 VOLT, 3 PHASE, 60HZ, 3450 RPM, ODP MOTOR, END SUCTION, SELF PRIMING, CLOSE COUPLED, PROVIDE WITH INTEGRAL 6" x 6" STRAINER AND EXTRA STRAINER BASKET.		
F1A	FILTER	1	NEPTUNE BENSON, INC.	REGENERATIVE MEDIA FILTER, MODEL SP-27-48-487, 381 SQUARE FEET OF FILTER AREA, 0.63 GPM/S.F. OF FILTER AREA, PROVIDE WITH PERLITE MEDIA OR APPROVED EQUAL.		
AC1	AIR COMPRESSOR	1	NEPTUNE BENSON, INC.	DEFENDER COMPRESSOR AND WATER SEPARATOR, 2HP, 1 PHASE, 120V, 135 PSI MAXIMUM PRESSURE, 30 GALLON TANK, CAST IRON TWIN CYLINDER COMPRESSOR PUMP, PART #12213. WATER SEPARATOR MODEL AMG350, 1/2" PORT SIZE.		
C1A	CHEMICAL CONTROLLER	1	SANTA BARBARA CONTROL SYSTEMS	CHEMTROL MODEL#: PC2100 PPm3 ORP/HP pH/HP SCA, CONTINUOUS MONITORING AND CONTROL, 0 TO 14 pH RANGE, 200 TO 999 mV ORP RANGE, 3/4" HIGH PRESSURE PROBES, WET CELL PROBE ENCLOSURE.		
Н1А	HEATER	1	LOCHINVAR	COPPERFIN 2, CPN502, 500,000 BTU/HOUR INPUT, _" GAS CONNECTION, _" WATER CONNECTION, _" DIAMETER FLUE, PROVIDE WITH, VENT KIT MODEL#, CUPRO NICKEL HEAT EXCHANGER, MANUAL RESET HIGH LIMIT AND MULTI-STACK STAND. FURTHER PROVIDE WITH A.S.M.E. LABEL, RELIEF VALVE, FLOW SWITCH, OPTIONAL PUMP ON/OFF RELAY, AND ALL SAFETY DEVICE PACKAGES PER STATE AND LOCAL CODES.		
CF1A	CHLORINATOR	1	ARCH CHEMICALS	PULSAR 140, 100 POUND CAPACITY, 5 TO 140 LBS/DAY OUTPUT, WITH 1 HP RECIRCULATION PUMP, VENTURI, SOLENOID VALVE, AND CONNECTIONS FOR STANDARD INSTALLATION, USE PULSAR PLUS BRIQUETTES (CALCIUM HYPOCHLORITE) FOR DISINFECTANT, PROVIDE WITH EXTRA TABLET STRAINER		
CS1	CHEMICAL STORAGE	1	CHEMICAL SUPPLIER	BUCKETS OF CALCIUM HYPOCHLORITE PROVIDED BY OWNER'S CHEMICAL SUPPLIER		
CF2A	ACID FEEDER	1	BLUE/WHITE	A-100N SERIES, MODEL #, TO GALLONS PER DAY OUTPUT, 120 VOLTS, USE 30% TO 40% CONCENTRATION SULFURIC ACID FOR pH CONTROL. PROVIDE WITH WEIGHTED FOOT STRAINER.		
FM1A	FLOW METER	1	SIGNET	2551 MAG METER, INSERTION STYLE MAGNETIC FLOW SENSOR, MODEL #3-2551-P1-11 PROVIDE WITH FIELD MOUNT FLOW TRANSMITTER MODEL #3-9900-1 AND UNIVERSAL MOUNTING KIT MODEL #3-8050. PROVIDE WITH -" DIAMETER PVC SADDLE INSERTION FITTING. FLOW AND DESCRIPTION TO BE DISPLAYED ON TRANSMITTER.		
FP1A	FLOW METER	1	SIGNET 7310 POWER SUPPLY	MODEL#7310-2024, 115 VAC/24VDC, 1.0A POWER SUPPLY. POWER SUPPLIES TO BE FURNISHED WITH NEMA 4X ENCLOSURE.		
AF1A	WATER LEVEL CONTROL	1	AQUATICONTROL TECHNOLOGY	ELC-800r-SS, ELC-800r SERIES CONTROLLER, SINGLE SENSING, SURGE TANK SENSING APPLICATION WITH FEET OF CABLE		

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REVISION SCHEDULE