

2 OVERALL AQUATIC LAYOUT ALTERNATE 2
PLAN VIEW
1/8" = 1'-0"



1 OVERALL AQUATIC LAYOUT - ALTERNATE 1
PLAN VIEW
1/8" = 1'-0"

Manitowoc WI
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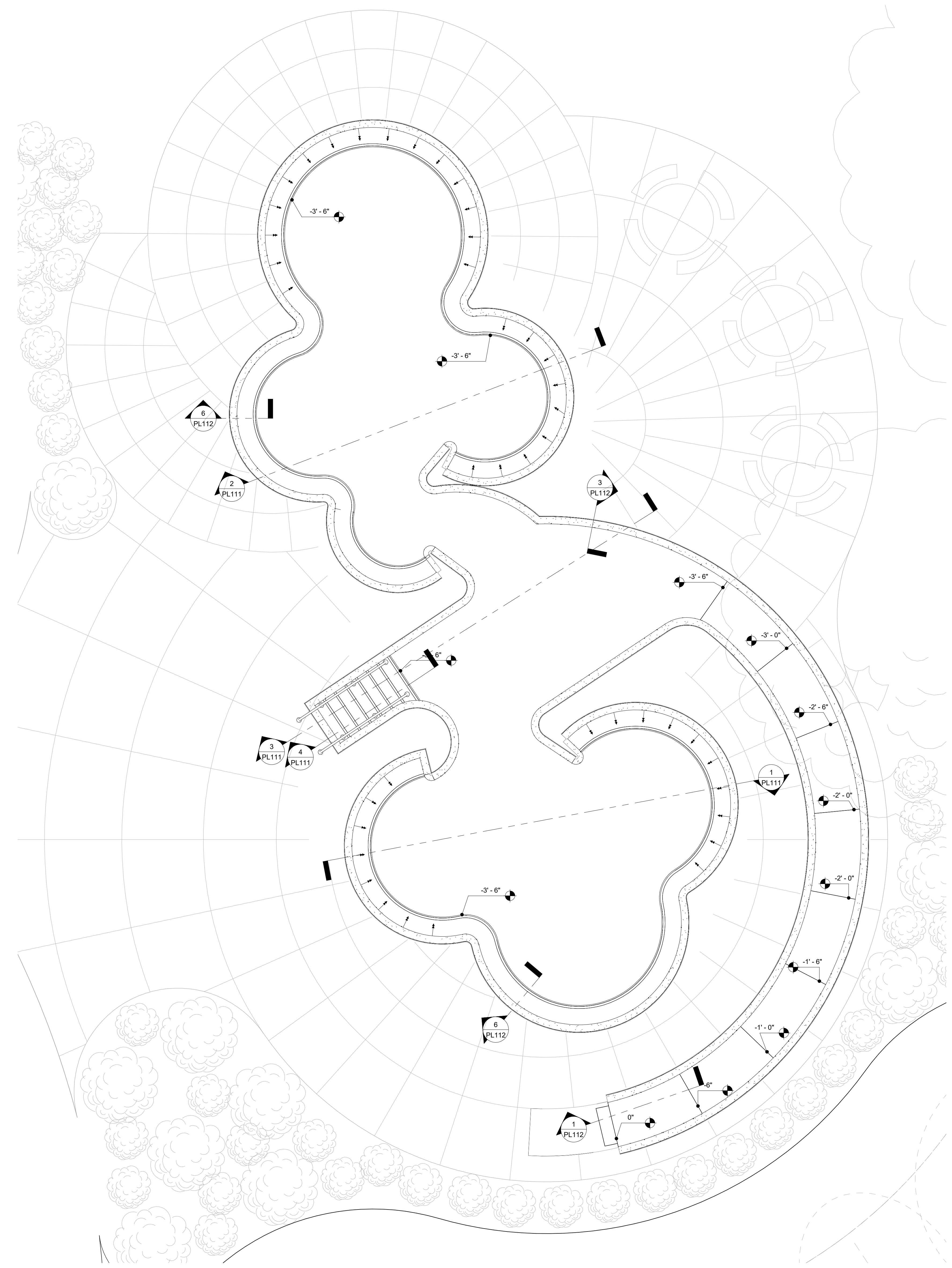
REVISION SCHEDULE		
Number	Description	Date

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

OVERALL AQUATIC PLAN

PL100

POOL ALT 1 - A-WARMING POOL 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	0.79	GPM/FT ²	
BACKWASH RATE	5715	GPM	
PATRON LOAD	123	PERSONS	
POOL ALT 1 - A 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
	-	-	-



1 POOL A - WARMING POOL
PLAN VIEW
PL110

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Expansion
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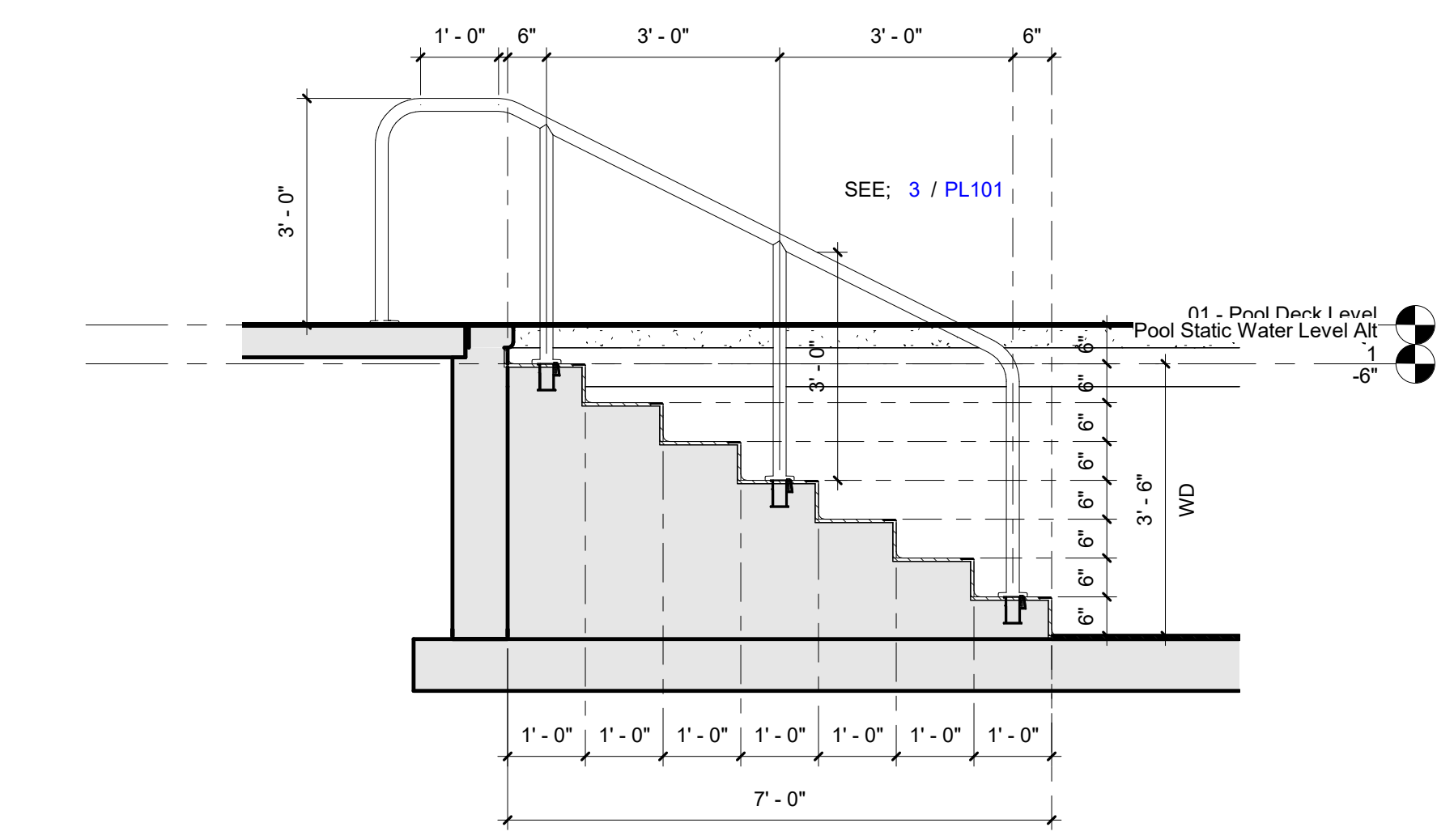
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REVISION SCHEDULE		
Number	Description	Date

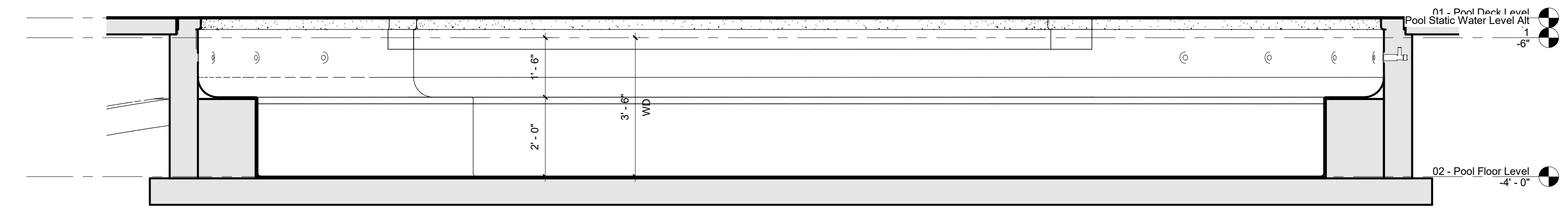
ISSUE DATE: 07/18/14
PROJECT NUMBER: 19039
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ALTERNATE 1 - POOL A - WARMING POOL PLAN

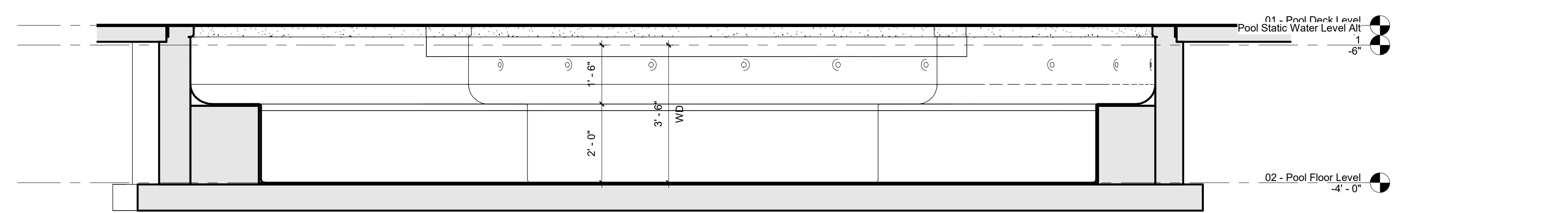
PL110



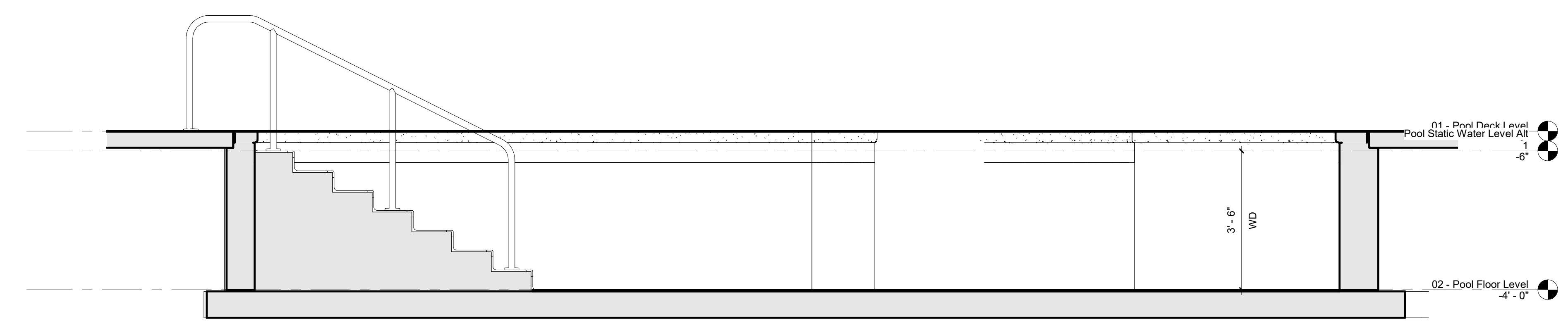
4 POOL A - WARMING POOL STAIRS
SECTION VIEW
1/2" = 1'-0"



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



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



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

Manitowoc WI Expansion

Enter address here

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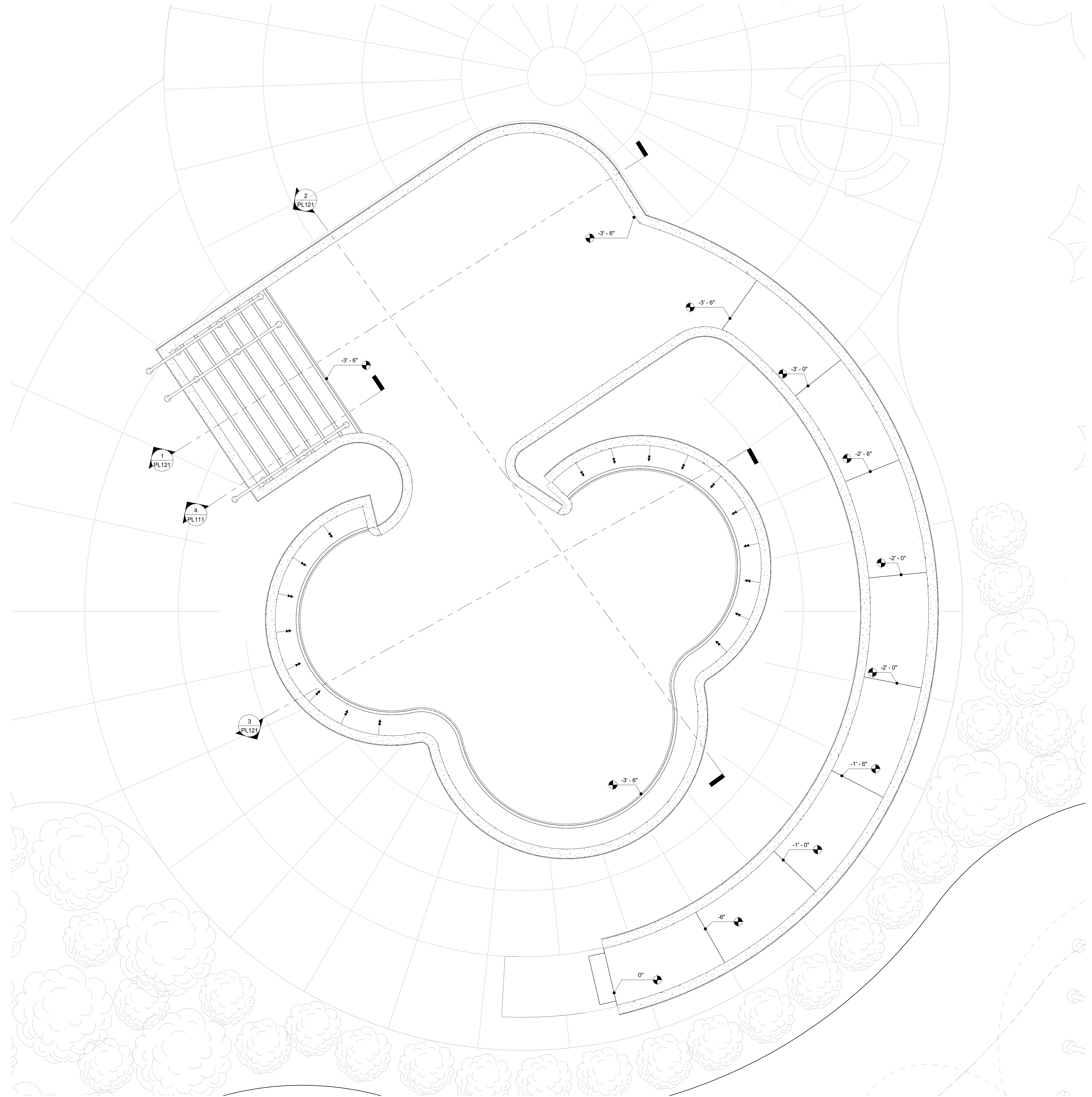
REVISION SCHEDULE		
Number	Description	Date

ISSUE DATE: 02/25/19
PROJECT NUMBER: 19039
DRAWN BY: EWL
CHECKED BY: Checker

ALTERNATE 1 - POOL A - WARMING POOL SECTIONS

PL111

POOL ALT 2 - B-WARMING POOL DATA			
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



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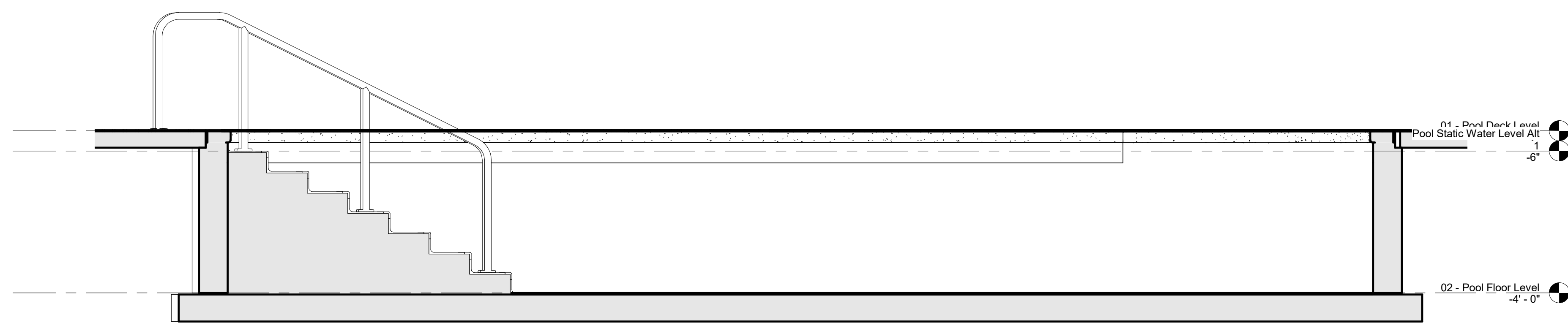
REVISION SCHEDULE		
Number	Description	Date

ISSUE DATE: 07/05/19
PROJECT NUMBER: 19039
DRAWN BY: EWL
CHECKED BY: Checker

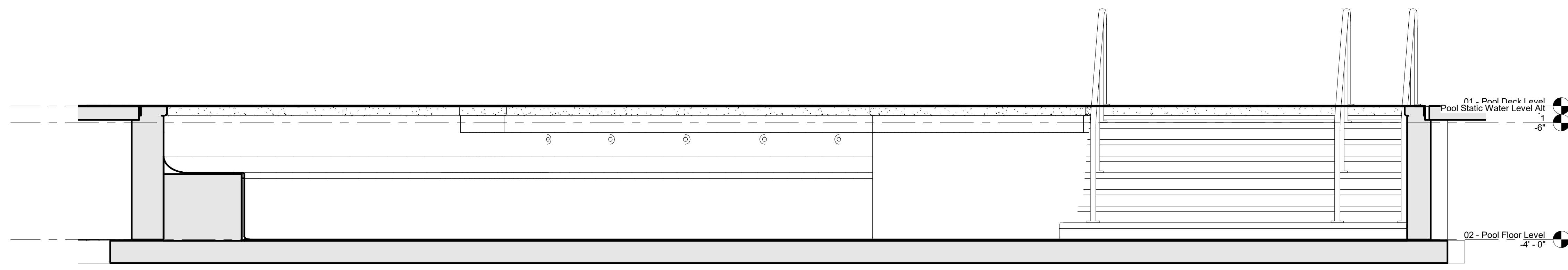
ALTERNATE 2 - POOL B - WARMING POOL

PL120

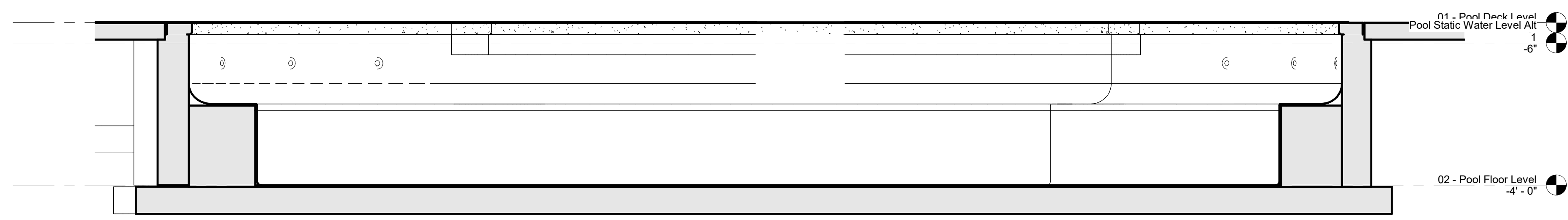
1 | ALTERNATE 2 - POOL B - WARMING POOL
PLAN VIEW
3/8" = 1'-0"



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



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



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

Manitowoc WI Expansion

Enter address here

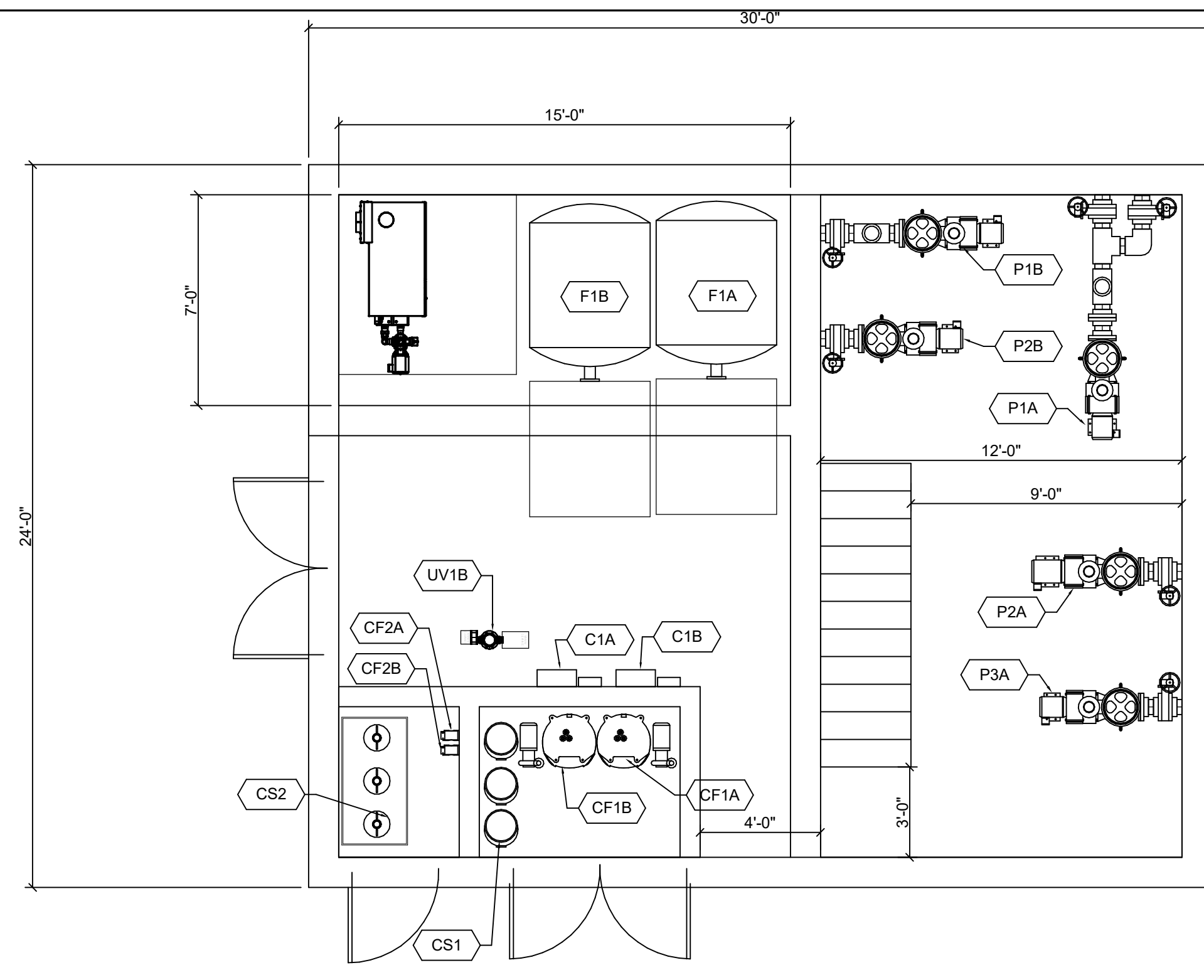
CONSULTANTS

REVISION SCHEDULE		
Number	Description	Date

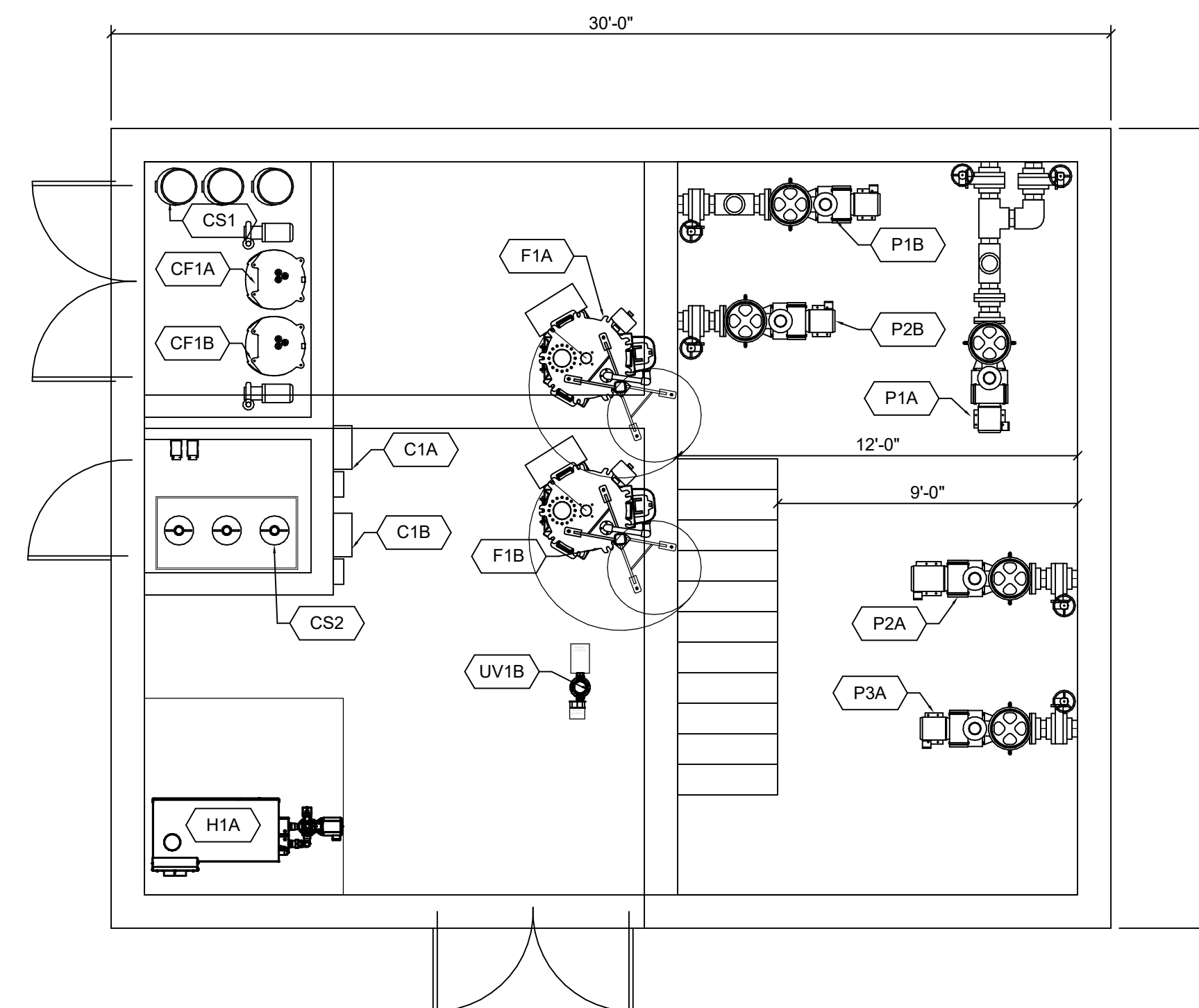
ISSUE DATE: 07/05/19
PROJECT NUMBER: 19039
DRAWN BY: EWL
CHECKED BY: Checker

ALTERNATE 2 - POOL B - WARMING POOL SECTIONS

PL121



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



1.1 ALT 2 MECHANICAL ROOM DEFENDER
PLAN VIEW
1/4" = 1'-0"

MECHANICAL PLAN NOTES:
DIVISION 13 CONTRACTOR NOTES:

- 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.
- COORDINATE ALL PIPING AND EMBEDMENTS WITH AFFECTED TRADES.
- REFER TO STRUCTURAL DRAWINGS FOR FUTURE CORED OPENINGS.
- REFER TO ARCHITECTURAL PLANS FOR ACTUAL ROOM DIMENSIONS AND FINISHED FLOOR ELEVATIONS.
- REFER TO PL 102-1 FOR REINFORCEMENT AT PIPE PENETRATIONS.
- SUPPORT PIPES PER PL401-1 THRU 7.
- ALL SUPPORTS, BRACING, FASTENERS AND HARDWARE IN THE SURGE TANK(S) SHALL BE STAINLESS STEEL.

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POOL C-SPRAY PAD DATA			
DESCRIPTION	QTY	UNITS	
POOL PERIMETER	235	7'	FEET
WATER SURFACE AREA	2,702		SQUARE FEET
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
POOL 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
F3027 - LILSTARFISH AQUA SPROUT	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-5 - OVER N' UNDER	1	18.00	18.00
W280 - POPP DROPP	1	3.00	3.00
W290C(45) - LITTLE SOWERTS FISH	2	6.00	12.00

POOL ALT 2 - DATA			
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
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

POOL C-SPRAY PAD DATA			
DESCRIPTION	QTY	UNITS	
POOL PERIMETER	235	7'	FEET
WATER SURFACE AREA	2,702		SQUARE FEET
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	
BACKWASH RATE	#DIV/0!	GPM	
PATRON LOAD	180		PERSONS
POOL 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
F3027 - LILSTARFISH AQUA SPROUT	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-5 - OVER N' UNDER	1	18.00	18.00
W280 - POPP DROPP	1	3.00	3.00
W290C(45) - LITTLE SOWERTS FISH	2	6.00	12.00

POOL ALT 2 - B-WARMING POOL DATA			
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
FILTRATION RATE	120		GPM
BACKWASH RATE	0.58	GPM/FT ²	
PATRON LOAD	5715		GPM
	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

EQUIPMENT SCHEDULE				
ID	ITEM	QTY.	MANUFACTURER	BASIS OF DESIGN
P1B	FILTRATION PUMP	1	PENTAIR PUMP	EQ SERIES, EQKT 750, 236 GPM, @ 78 TDH, 7.5 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	1	NEPTUNE BENSON, INC.	SHFG SERIES, #4848SHFFG, 48" DIAMETER FIBERGLASS TANK, 70" LENGTH, 19.7 SQUARE FEET OF TOTAL SURFACE AREA, 11.98 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	BECSYS 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, PH RANGE 0 TO 14.00 PPM, 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 OWNERS CHEMICAL SUPPLIER
CF2B	CHEMICAL FEED PUMP	1	STENNER	SERIES #... TO ... GALLONS PER DAY OUTPUT, 120 VOLTS, USE MURATIC 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, 1" WIDE, 1" LONG, 1" DEEP, AND OPTIONAL RAMP, POLYETHYLENE CONSTRUCTION.
FM1B	FLOW METER	1	SIGNET	2551 MAG METER, INSERTION STYLE MAGNETIC FLOW SENSOR, MODEL #3-2551-P-11, PROVIDE WITH FIELD MOUNT FLOW TRANSMITTER (MODEL #3-9900-1), AND UNIVERSAL MOUNTING KIT (MODEL #3-8050), PROVIDE WITH 1/2" DIAMETER PVC SADDLE INSERTION FITTING, FLOW METER 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	AQUATICCONTROL TECHNOLOGY	ELC-800-SS-... ELC-800-800 SERIES CONTROLLER, SINGLE SENSING, SURGE TANK SENSING APPLICATION WITH ... FEET OF CABLE

6.1 POOL B SAND MECHANICAL EQUIPMENT LIST Copy 1
PLAN VIEW
1/4" = 1'-0"

ALT 2 SAND EQUIPMENT SCHEDULE				
ID	ITEM	QTY.	MANUFACTURER	BASIS OF DESIGN
P1A	FILTRATION PUMP	1	PENTAIR PUMP	EQ SERIES, EQKT 750, 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, 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.	SHFG 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	CHEMTRON MODEL# PC2100 PPH3 ORPH/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, CPN602, 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 OWNERS CHEMICAL SUPPLIER
CF2A	ACID FEEDER	1	BLUEWHITE	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-P-11, PROVIDE WITH FIELD MOUNT FLOW TRANSMITTER (MODEL #3-9900-1), AND UNIVERSAL MOUNTING KIT (MODEL #3-8050), PROVIDE WITH 1/2" 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	AQUATICCONTROL TECHNOLOGY	ELC-800-SS-... ELC-800-800 SERIES CONTROLLER, SINGLE SENSING, SURGE TANK SENSING APPLICATION WITH ... FEET OF CABLE

5.1 POOL A ALT 2 SAND MECHANICAL EQUIPMENT LIST
PLAN VIEW
1/4" = 1'-0"

EQUIPMENT SCHEDULE				
ID	ITEM	QTY.	MANUFACTURER	BASIS OF DESIGN
P1B	FILTRATION PUMP	1	PENTAIR PUMP	EQ SERIES, EQKT 750, 236 GPM, @ 78 TDH, 7.5 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, 0.63 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	CHEMTRON MODEL# PC2100 PPH3 ORPH/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 OWNERS CHEMICAL SUPPLIER
CF2B	CHEMICAL FEED PUMP	1	STENNER	SERIES #... TO ... GALLONS PER DAY OUTPUT, 120 VOLTS, USE MURATIC 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, 1" WIDE, 1" LONG, 1" DEEP, AND OPTIONAL RAMP, POLYETHYLENE CONSTRUCTION.
FM1B	FLOW METER	1	SIGNET	2551 MAG METER, INSERTION STYLE MAGNETIC FLOW SENSOR, MODEL #3-2551-P-11, PROVIDE WITH FIELD MOUNT FLOW TRANSMITTER (MODEL #3-9900-1), AND UNIVERSAL MOUNTING KIT (MODEL #3-8050), PROVIDE WITH 1/2" DIAMETER PVC SADDLE INSERTION FITTING, FLOW METER 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	AQUATICCONTROL TECHNOLOGY	ELC-800-SS-... ELC-800-800 SERIES CONTROLLER, SINGLE SENSING, SURGE TANK SENSING APPLICATION WITH ... FEET OF CABLE

3.1 POOL B DEFENDER MECHANICAL EQUIPMENT LIST Copy 1 Copy 1
PLAN VIEW
1/4" = 1'-0"

ALT 2 DEFENDER EQUIPMENT SCHEDULE				
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, 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 #12215, WATER SEPARATOR MODEL AMG350, 1/2" PORT SIZE.
C1A	CHEMICAL CONTROLLER	1	SANTA BARBARA CONTROL SYSTEMS	CHEMTRON MODEL# PC2100 PPH3 ORPH/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, CPN602, 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 OWNERS CHEMICAL SUPPLIER
CF2A	ACID FEEDER	1	BLUEWHITE	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-P-11, PROVIDE WITH FIELD MOUNT FLOW TRANSMITTER (MODEL #3-9900-1), AND UNIVERSAL MOUNTING KIT (MODEL #3-8050), PROVIDE WITH 1/2" 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	AQUATICCONTROL TECHNOLOGY	ELC-800-SS-... ELC-800-800 SERIES CONTROLLER, SINGLE SENSING, SURGE TANK SENSING APPLICATION WITH ... FEET OF CABLE

2.1 POOL A ALT 2 DEFENDER MECHANICAL EQUIPMENT LIST
PLAN VIEW
1/4" = 1'-0"

CONSULTANTS

REVISION SCHEDULE		
Number	Description	Date

ISSUE DATE: 02/27/19
PROJECT NUMBER: 19039
DRAWN BY: Author
CHECKED BY: Checker

ALT 2 MECHANICAL EQUIPMENT PLAN