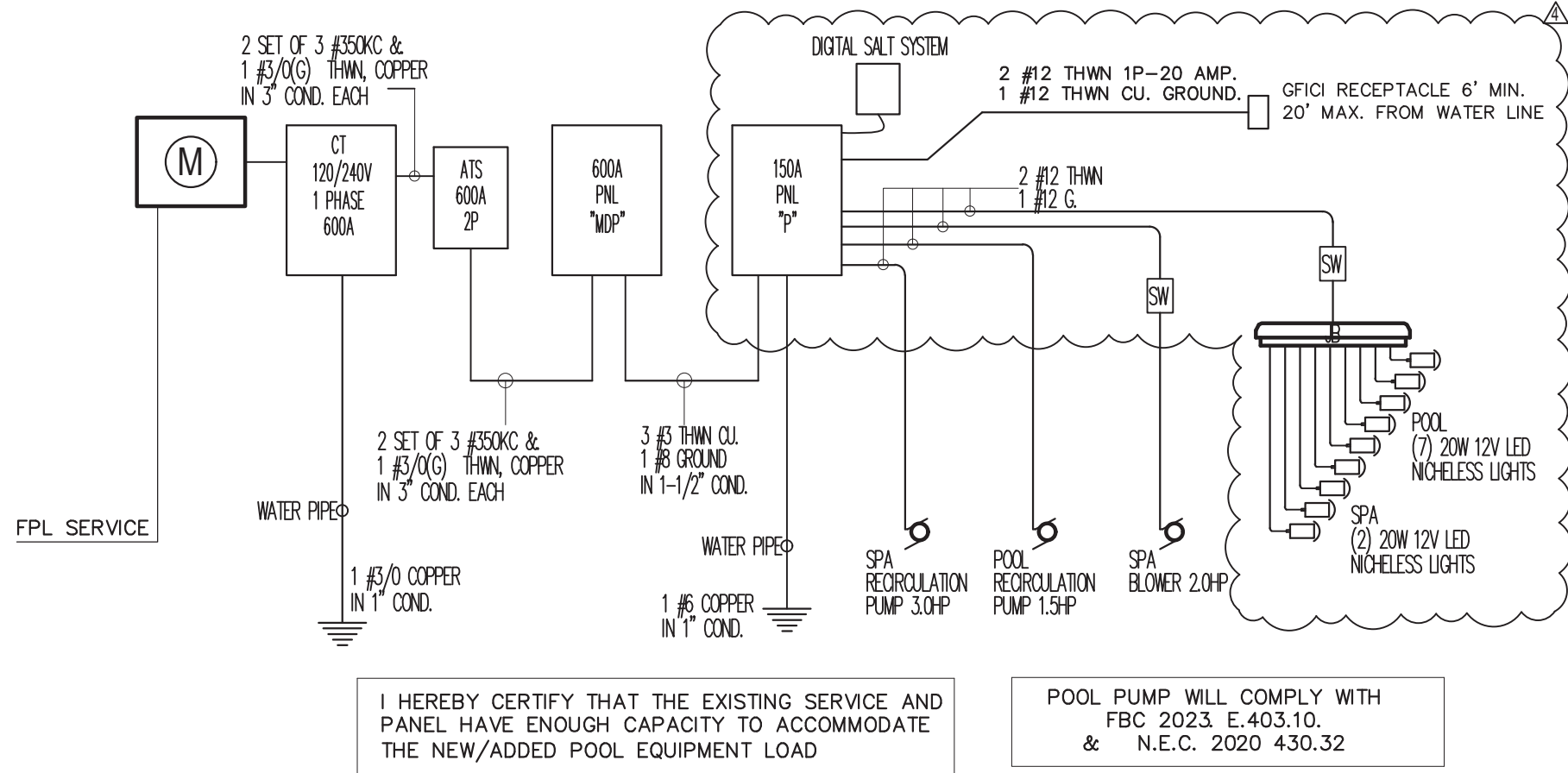
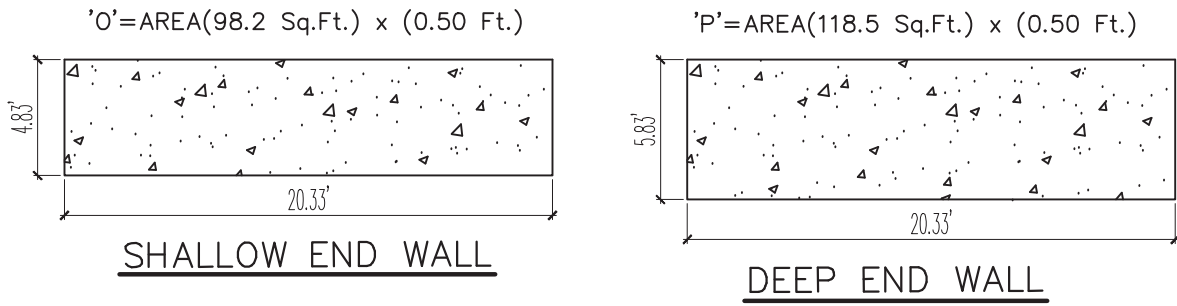
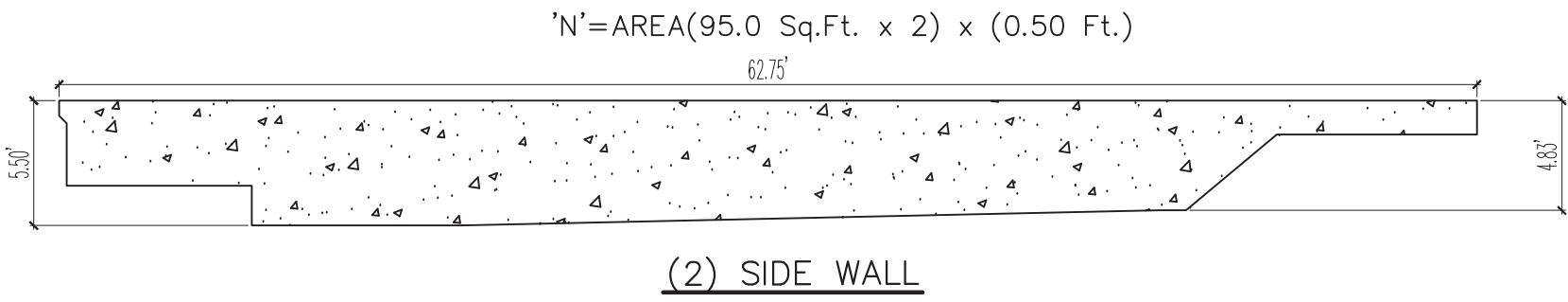
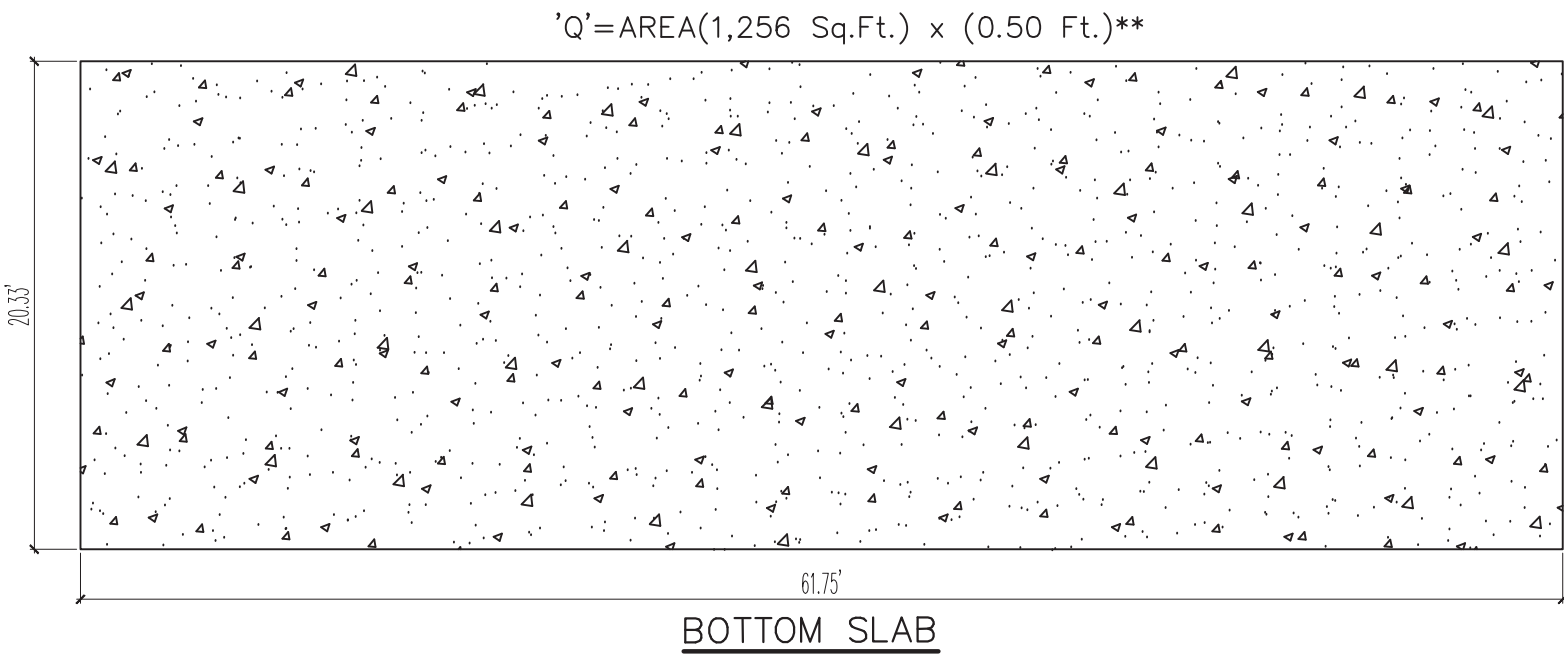
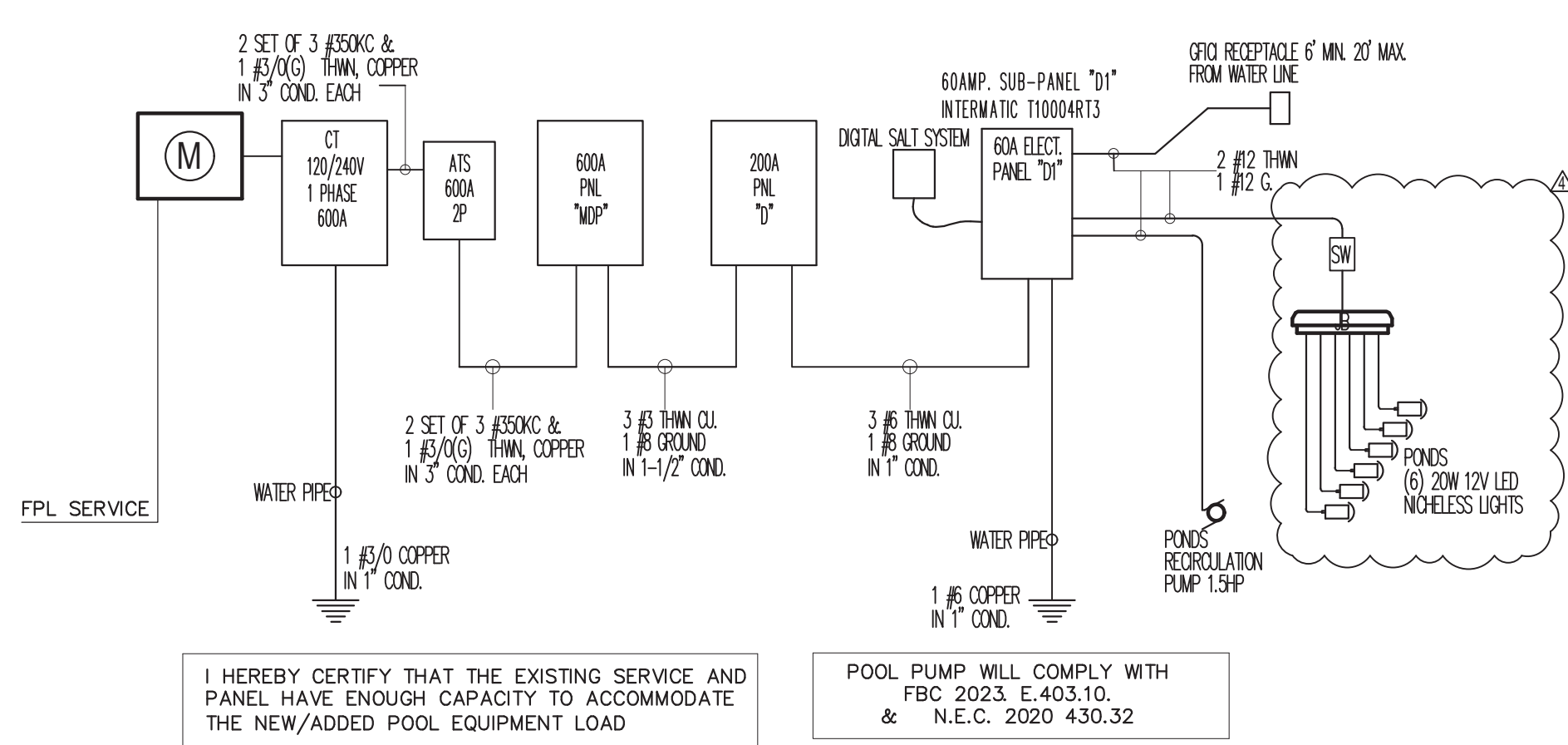




SPA / POOL - ELECTRICAL RISER DIAGRAM



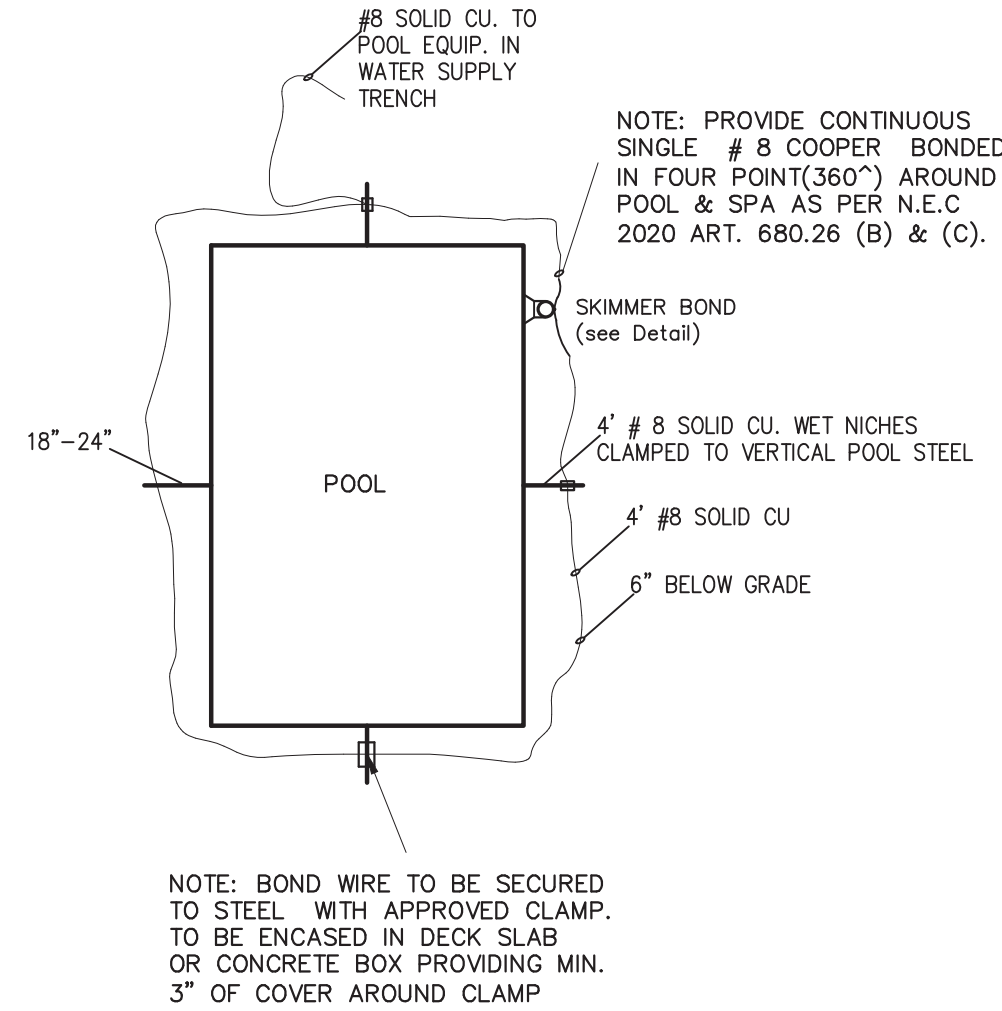
PONDS - ELECTRICAL RISER DIAGRAM

ELECTRICAL NOTES:

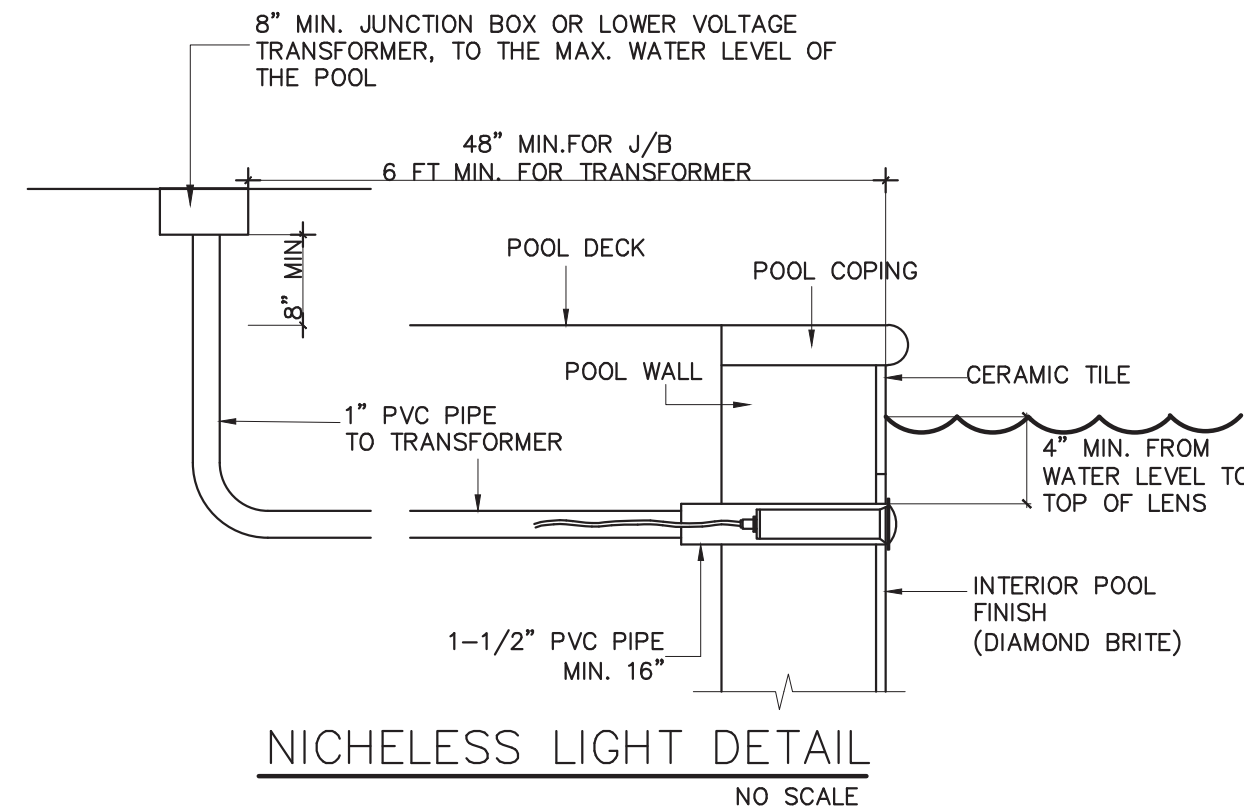
- ALL POOL ELECTRICAL WORK SHALL BE ACCOMPLISHED IN COMPLIANCE WITH FBC 2023, 8th EDITION, CHAPTER 42
- ALL POOL ELECTRICAL WORKS, GROUNDING AND BONDING MUST BE CONFORM WITH THE NEC 2020. ART. 680
- AT LEAST ONE GFCI PROTECTED, 125-VOLT RECEPTACLE OUTLET IS REQUIRED BETWEEN 6 AND 20 FEET OF THE INSIDE WALL OF THE POOL. NEC 680.22(A)(1)(RESIDENTIAL AND COMMERCIAL)
- THE EQUIPMENT GROUNDING CONDUCTOR MUST BE A MINIMUM 12 AWG COPPER. NEC 680.21(A)(1); 680.23(F)(2);680.25(8)(1)
- EQUIPOTENTIAL BONDING TO COMPLY WITH 2014 NEC 680.26(8) SHALL BE INSTALLED IN OR UNDER PAVED WALKING SURFACES FOR THREE FEET HORIZONTALLY BEYOND THE WALLS OF THE POOL. NEC 680.26(C) [4 POINTS & DECK BONDING (360 DEGREES)]
- RECEPTACLE/OUTLETS ARE NOT PERMITTED WITHIN 6 FEET OF THE INSIDE WALLS OF A POOL. NEC 680.22(A)(2)
- POOL PUMP MOTOR CIRCUITS, MUST BE PROVIDED WITH GFCI PROTECTION. NEC 680.21(C)
- LIGHTING OUTLETS MUST BE LOCATED A MINIMUM OF 5 FEET FROM THE INSIDE WALL OF A POOL OR MOUNTED A MINIMUM OF 12 FEET ABOVE THE MAXIMUM WATER LEVEL. NEC 680.22(8)(1.)
- OVERHEAD CONDUCTORS ARE NOT PERMITTED OVER THE POOL OR WITHIN 10 FEET HORIZONTALLY FROM THE EDGE OF THE POOL. FBC 424.1.4.2.4
- OVERHEAD CONDUCTORS SHALL NOT BE PERMITTED OVER THE POOL OR WITHIN 10 FEET HORIZONTALLY FROM THE EDGE OF THE POOL UNLESS PROVIDED WITH CLEARANCE TO COMPLY WITH NEC 680.8.
- A CONDUCTIVE ELEMENT THAT IS PART OF THE POOL BONDING SYSTEM MUST BE IN DIRECT CONTACT WITH THE POOL WATER. IN THE ABSENCE OF RAILS, LADDERS OR NICHES, A WATER BONDING SHALL MEET THE REQUIREMENT. NEC 680.26(C)
- ALL METAL PARTS WITHIN 5 FEET OF THE POOL MUST BE BONDED TO A COMMON BONDING GRID. NEC 680.26(8)(5)

NOTE: Bonding Within 5 feet of the Pool Wall

Once the grid or conductor material is under the walkway surrounding the pool and connected to the outer pool shell, any exposed metal within 5 feet of the surrounding interior pool wall must also be bonded to that underground conductor system by a No. 8 AWG copper conductor. This includes metal pool ladders, metal fencing, doors, window frames, and even steel conduit or cable within the first 5 feet surrounding the pool. This bonding requirement also extends to the pool electrical equipment and applicable lighting, minus any double-insulated water pump motors and pool water heaters greater than 50 amps, that have their own special bonding requirements from the manufacturer. (2020 NEC 680.4)



POOL BOND SCHEMATIC



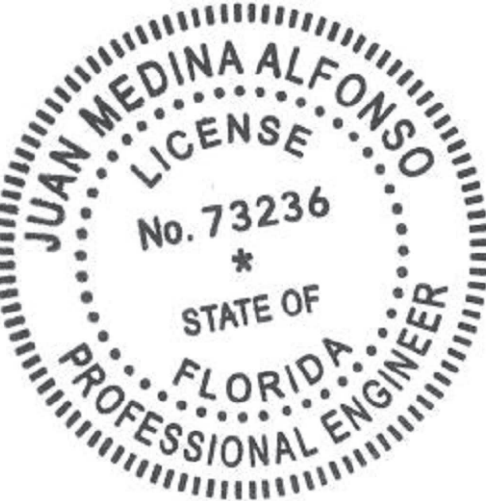
NICHELESS LIGHT DETAIL
NO SCALE

LOAD CALCULATION	PNL"P"	PNL"P"
SQUARE FEET OF CONDITION SPACE	0	0
GENERAL LIGHTING AT 3 W.S.F	0	0
SMALL APPLIANCES CIRCUITS	0	0
SMALL APPLIANCES LOAD	0	0
RANGE / OVEN OR COOK TOP	0	0
DOUBLE OVEN	0	0
DRYER	0	0
HOT WATER HEATER	0	0
SPRINKLER PUMP	1,000	1,000
POOL EQUIPMENT	2,000	0
SPA EQUIPMENT	1,000	0
OTHER LIGHTING	1,000	1,000
WASHER	0	0
REFRIGERATOR	0	0
DISHWASHER	0	0
DISPOSAL	0	0
MICROWAVE	0	0
GARAGE DOOR OPENER & GATE MOTOR	0	0
WHIRPOOL	0	0
OTHER LOAD 120V (EXHAUST FAN, FOUNTAIN)	0	0
LOAD 240V (E.V CHARGER, ELEVATOR, KITCHENETTE, STEAM UNIT)	0	0
CONNECTED LOAD WHTOUT A/C LOAD	5,000	2
FIRST 10000 AT 100%	5,000	2
REST AT 40%	0	0
A/C LOAD AT 100%	0	0
TOTAL	5,000	2,000
AT 240 VOLT	21	9

PANEL "P"														TYPE:	LOAD CENTER
VOLTS: 120/240V, 1PH, 3W														ENCLOSURE: NEMA 3R	
BUS: 150 A														MOUNTING: SURFACE	
MAIN: 150A M.C.B.														SERVING: POOL	
AIC: 10,000															
CKT	DESCRIPTION	COND	WIRE	LOAD	TRIP	POLE	A	B	POLE	TRIP	LOAD	WIRE	COND	DESCRIPTION	CKT
GFI 1	GENERATOR CHARGER	1/2	12	1500	20	1	+	+	2	20	1500	12	1/2	BLOWER 2 HP	2
GFI 3	EXTERIOR OUTLET	1/2	12	*	20	1	+	+	2	20	1500	12	1/2		4
GFI 5							+	+	2	20	1500	12	1/2		6
GFI 7	SPA PUMP	1/2	12	2000	20	2	+	+	2	20	1500	12	1/2	POOL PUMP 1.5 HP	8
GFI 9							+	+	1	20	500	12	1/2		10
GFI 11	JACUZZI PUMP	1/2	12	1500	20	2	+	+	2	40	4000	8	3/4	POOL LIGHTS	12
GFI 13							+	+	-	-	-	-	-	WET SAUNA	14
GFI 15	STEAM UNIT	3/4	8	7500	40	2	+	+	-	-	-	-	-	SPACE	16
GFI 17	RECEPTACLE	1/2	12	1000	20	1	+	+	-	-	-	-	-	SPACE	18
GFI 19	HEATER CONTROL	1/2	14	150	15	1	+	+	1	20	500	12	1/2	SPA LIGHTS	20
* SEE LOAD CALCULATION														GFI: PROVIDE GFI CIRCUIT BREAKER N.C: NON CONCURRENT LOAD	

ELECTRICAL PANEL SCHEDULE "D1" (INTERMATIC T10004RT3)													
Type: M.L.O.										Mains: See Riser			
Mounting: SURFACE										Bus Rating: 60 Amps			
Location: See Plan										Rating: 10 KAIC			
Enclosure: Nema 3R										Voltage: 120/240 V, 1PH, 3W			
Remarks	Cond Size	Wire	LOAD (VA) 100%	Pole	Trip	Ckt No	Ckt No	Trip	Pole	LOAD (VA) 100%	Wire	Cond Size	Remarks
PONDS LIGHTS	1/2"	12	180	1	20	1	2	30	2	1,500	12	1/2"	PONDS PUMP 1.5 HP (GFCI)
IRRIGATION PUMP (GFCI)	1/2"	12	1,000	2	20	3	4						SPACE
SPACE						5	6						SPACE
TOTAL LOAD @ 100% :2,670 VA 11.1A OK													
FEEDER: 3 #6 THWN													
GROUND: 1#8 COPPER 1" CONDUIT													

MTeam
PROJECT CORP.
PH: 786-554-5741
PH: 786-451-5076



JUAN MEDINA ALFONSO P.E.
MA ENGINEERING SOLUTION, CORP.
LICENCE# 73236

THIS ITEM HAS BEEN DIGITALLY SIGNED AND SEALED BY JUAN MEDINA ALFONSO, PE ON THE DATE ADJACENT TO THE SEAL. PRINTED COPIES OF THIS DOCUMENT ARE NOT CONSIDERED SIGNED AND SEALED AND THE SIGNATURE MUST BE VERIFIED ON ANY ELECTRONIC COPIES.
DATE: 04/30/2026

PROJECT
- SWIMMING POOL WITH SPA
- TWO FRONT PONDS
OWNER
9601 SW 53 AVE. LLC
9601 SW 53 AVENUE
MIAMI, FL 33156

REVISIONS

NO.	DATE
4	04/30/2026

DATE: 11/03/2025

SCALE: AS PER PLAN

NO. SHEET 1 OF 1

DRAWING NO.

SP-4