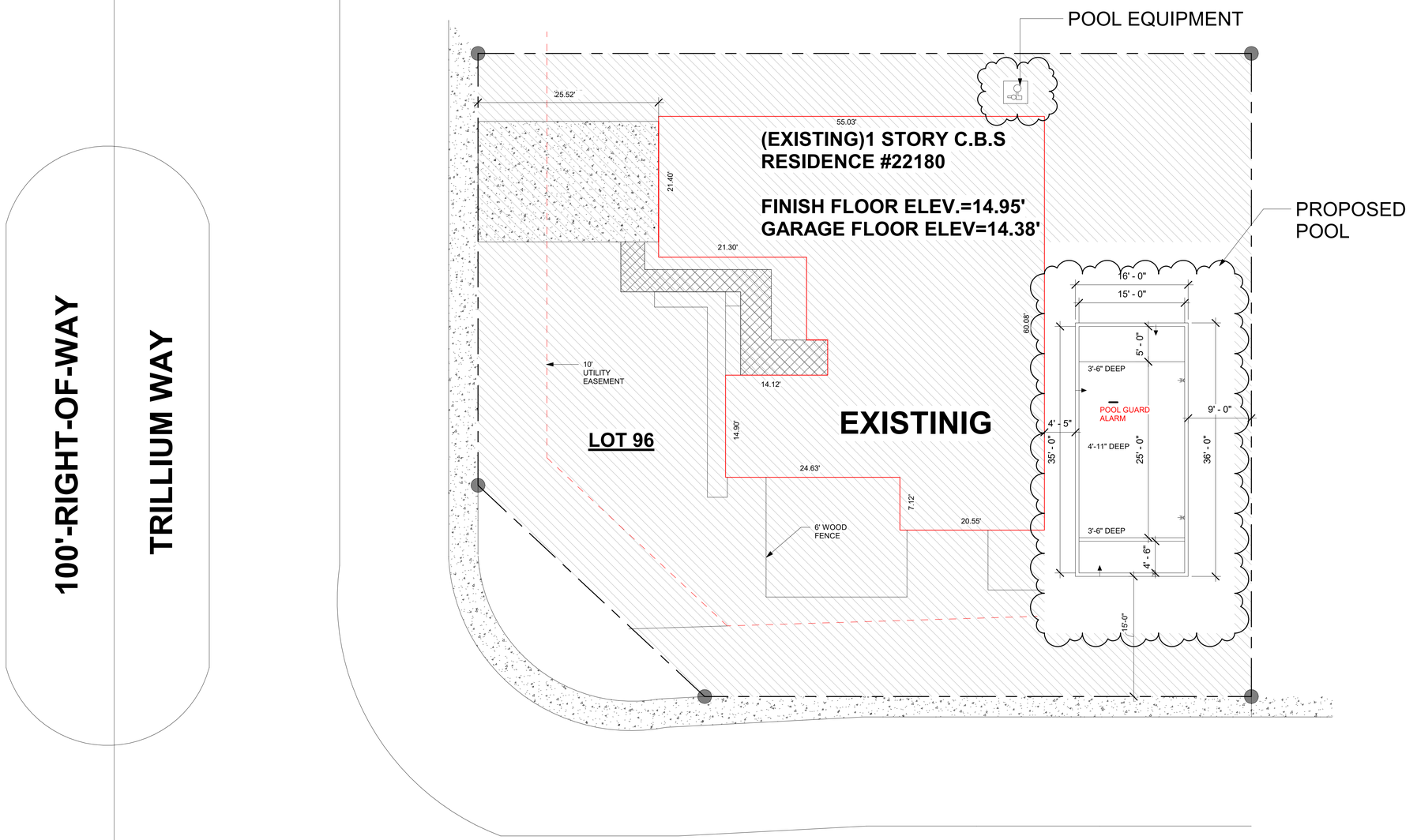


POOL SPECIFICATIONS VALUE

LENGTH:	**35 ft. 0 in.**
WIDTH:	**15 ft. 0 in.**
MIN. DEPTH:	**3 ft. 6 in.**
MAX. DEPTH:	**4 ft. 11 in.**
AREA:	**525 s.f**
PERIMETER:	**100 ft**
GALLONS:	**16,500**
INLETS:	**(3) WALL 1-1/2" DIRECTIONAL INLETS**
LIGHT(S):	**(2) 5G LED 12V – PENTAIR**
PUMP:	**(1) PENTAIR INTELLIFLO i1 VARIABLE SPEED**
FILTER:	**CARTRIDGE C200 – PENTAIR**
MAIN DRAINS:	**AQUASTAR 32CDFL101**
SKIMMER 2	
MAIN DRAINS:	**(2) ANTIVORTEX – HAYWARD**

ALL DOORS AND WINDOWS PROVIDING DIRECT ACCESS FROM THE HOME TO THE POOL SHALL BE EQUIPPED WITH AN EXIT ALARM COMPLYING WITH UL 2017 THAT HAS A MINIMUM SOUND PRESSURE RATING OF 85 DB A AT 10 FEET (3048 MM). ANY DEACTIVATION SWITCH SHALL BE LOCATED AT LEAST 54 INCHES (1372 MM) ABOVE THE THRESHOLD OF THE ACCESS.

FENCE/GATES DESIGN TO BE IN COMPLIANCE WITH POOL SAFETY BARRIER REQUIREMENTS FBC R4501.17

R4501.17.1.4
WHERE THE BARRIER IS COMPOSED OF HORIZONTAL AND VERTICAL MEMBERS AND THE DISTANCE BETWEEN THE TOPS OF THE HORIZONTAL MEMBERS IS LESS THAN 45 INCHES THE HORIZONTAL MEMBERS SHALL BE LOCATED ON THE SWIMMING POOL SIDE OF THE FENCE. SPACING BETWEEN VERTICAL MEMBERS SHALL NOT EXCEED 1 3/4 INCHES IN WIDTH. WHERE THERE ARE DECORATIVE CUTOUTS WITHIN VERTICAL MEMBERS, SPACING WITHIN THE CUTOUTS SHALL NOT EXCEED 1 3/4 INCHES IN WIDTH.

R4501.17.1.5
WHERE THE BARRIER IS COMPOSED OF HORIZONTAL AND VERTICAL MEMBERS AND THE DISTANCE BETWEEN THE TOPS OF THE HORIZONTAL MEMBERS IS 45 INCHES OR MORE, SPACING BETWEEN VERTICAL MEMBERS SHALL NOT EXCEED 4 INCHES. WHERE THERE ARE DECORATIVE CUTOUTS WITHIN VERTICAL MEMBERS, SPACING WITHIN THE CUTOUTS SHALL NOT EXCEED 1 3/4 INCHES IN WIDTH.

R4501.17.1.6
MAXIMUM MESH SIZE FOR CHAIN LINK FENCES SHALL BE A 2-1/4 INCH SQUARE UNLESS THE FENCE IS PROVIDED WITH SLATS FASTENED AT THE TOP OR BOTTOM WHICH REDUCE THE OPENINGS TO NO MORE THAN 1 3/4 INCHES.

R4501.17.1.7
WHERE THE BARRIER IS COMPOSED OF DIAGONAL MEMBERS, THE MAXIMUM OPENING FORMED BY THE DIAGONAL MEMBERS SHALL BE NO MORE THAN 13/4 INCHES.

NOTES:

IF WATER SOURCE IS A PRIVATE WELL – PRE-FILTER WATER TO FILL POOL.

ALL METALLIC ITEMS WITHIN 5'-0" OF WATER'S EDGE OF POOL TO BE BONDED WITH #8 SOLID INSULATED WIRE (U.L. LISTED) FROM POOL STEEL. ALL GROUND WIRES CONNECTED TO STEEL WITH BRASS GROUND LUGS… G.F.I. OUTLET 10' MIN. AND 20' MAX. FROM POOL.

IF ENCLOSURE IS REQUIRED ADD SCREEN OR FENCE AROUND POOL OR PROPERTY.
GATES TO BE SELF-CLOSING AND SELF-LATCHING.
PROVIDE DOOR AND WINDOW ALARMS AS REQUIRED.

STEEL OVERLAP @ 48 TIMES DIAMETER.

ESTABLISH THE LOCATION OF ALL UTILITIES AT SWIMMING POOL CONSTRUCTION SITE AND HOLD MINIMUM CLEARANCE DIMENSIONS ESTABLISHED BY THE LOCAL REGULATORY AGENCY.
ALLOW MIN. 10' HORIZONTAL CLEARANCE FROM OVERHEAD ELECTRIC LINES TO POOL WATER.

DECK SHALL HAVE A SLIP-RESISTANT FINISH WITH NO SHARP EDGES AND BE POSITIVELY SLOPED FOR DRAINAGE.

PROVIDE WEEP HOLES AND DEWATERING PUMPS AND ANY OTHER METHODS NECESSARY TO PREVENT THE POSSIBILITY OF THE POOL FLOATING DUE TO HYDROSTATIC UPLIFT PRESSURE WHEN THE POOL IS EMPTY.

BACKFILLING OF THE POOL SHALL BE DONE CAREFULLY TO ASSURE THAT NO DAMAGE TO THE PIPING OCCURS AND BACKFILLING SHALL BE DONE WITH CLEAN SOIL FREE FROM ORGANICS AND DEBRIS AND SHALL BE COMPACTED SO THAT NO VOIDS EXIST PROVIDING A FIRM BEARING FOR THE DECK.

ALL PIPING TO BE PVC SCHEDULE 40 MINIMUM AND ALL POOL PIPING SHALL BE TESTED AND PROVED TIGHT TO THE SATISFACTION OF THE ADMINISTRATIVE AUTHORITY, UNDER A STATIC WATER OR AIR PRESSURE TEST OF NOT LESS THAN 35 PSI (241 KPA) FOR 15 MINUTES.

THIS IS NOT A DIVING POOL.

SWIMMING POOL FILL HOSE TO BE EQUIPPED WITH VACUUM BREAKER.

LOCATE POOL RETURNS DOWN 18" MIN. BELOW THE POOL BEAM.

GATOR ENGINEERING ASSOCIATES, INC.
11390 TEMPLE STREET
COOPER CITY, FL. 33330
TEL: (954) 434-5905 FAX: (954) 434 -5904
CERTIFICATE OF AUTHORIZATION NUMBER 30230

SEAL

DATE:
REGINA ROBO-JACKSON,
P.E. FL P.E. NO.: 38550

22180 TRILLIUM POOL

REVISIONS

NO.	DATE	DESCRIPTION

GEA PROJECT NO.: 60000
DATE: 09-09-2024
SCALE: AS SHOWN
DESIGNED BY: R.R.J.
DRAWN BY: I.B.
CHECKED BY: R.R.J.
APPROVED BY: R.R.J.

SHEET TITLE

OF

GATOR ENGINEERING
ASSOCIATES, INC.
1390 TEMPLE STREET
COCONUT CREEK, FL 33071
TEL. (954) 434-5905 FAX. (954) 434-5904
CERTIFICATE OF AUTHORIZATION NUMBER
30230

SEAL

DATE:
REGINA ROSA-JACKSON,
P.E. FL P.E. NO.: 38580

22180 POOL TRILLIUM POOL FENCE

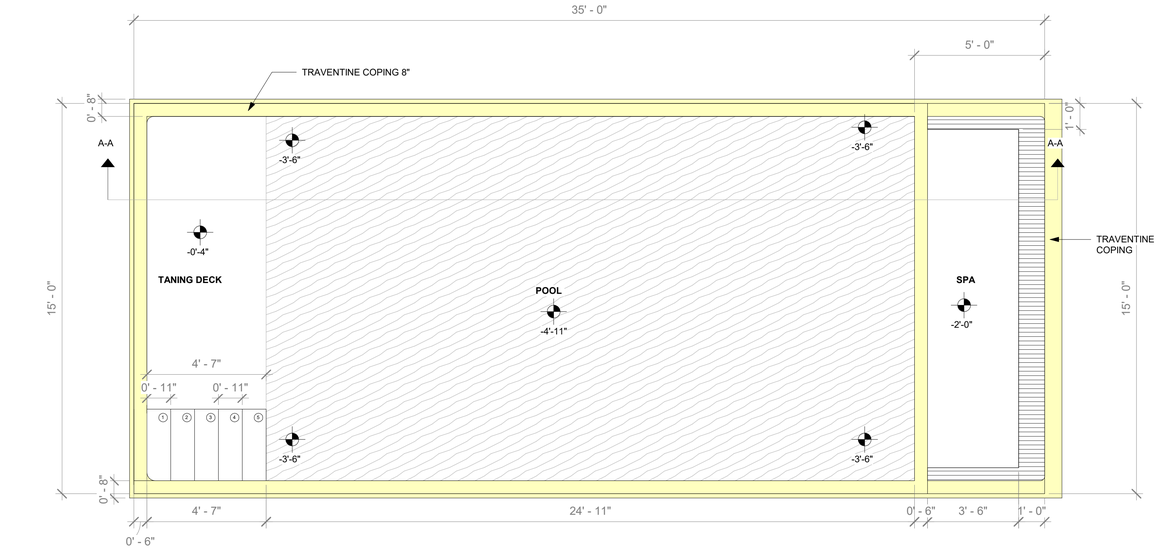
REVISIONS

NO.	DESCRIPTION

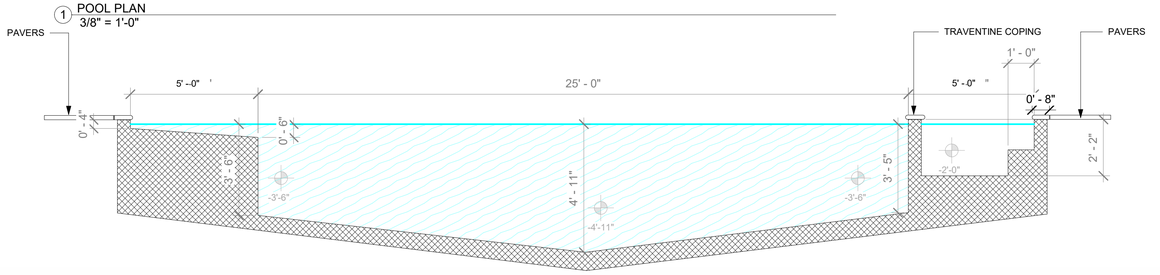
GEA PROJECT NO.: 00000
DATE: 00-00-2024
SCALE: AS SHOWN
DESIGNED BY: R.R.J.
DRAWN BY: I.R.
CHECKED BY: R.R.J.
APPROVED BY: R.R.J.

SHEET TITLE

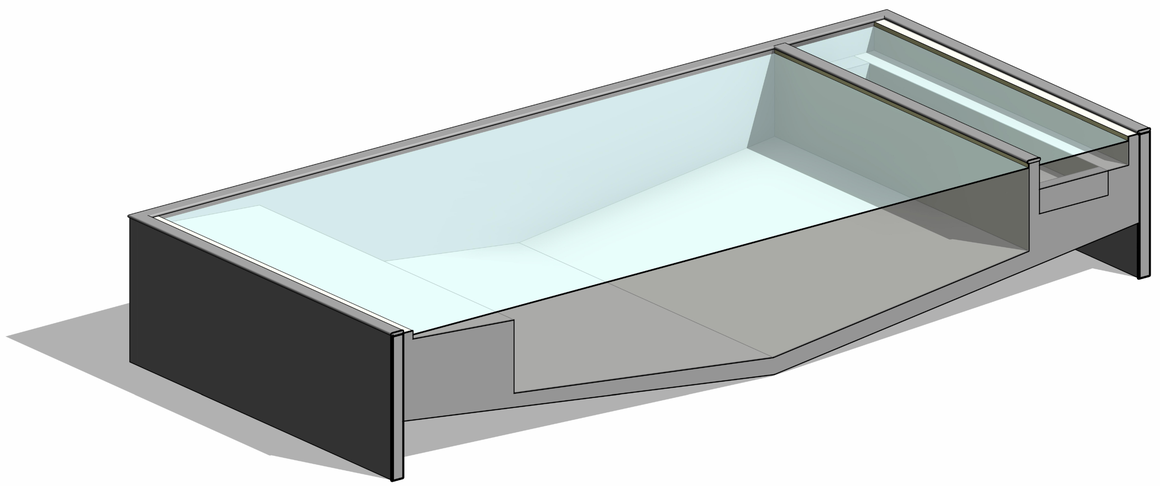
OF



① POOL PLAN
3/8" = 1'-0"

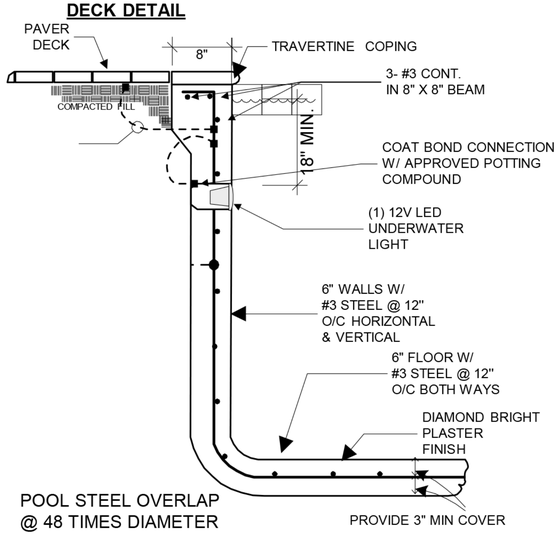


② POOL SECTION
3/8" = 1'-0"

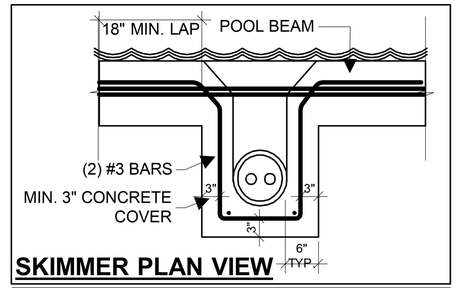


POOL 3D SECTIONAL VIEW

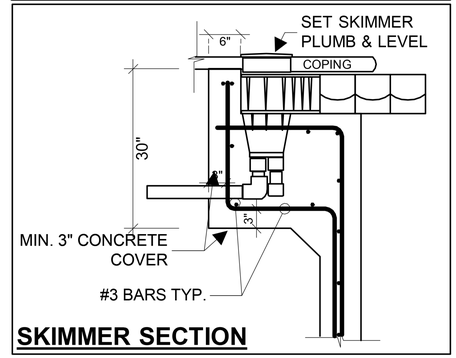
DECK DETAIL



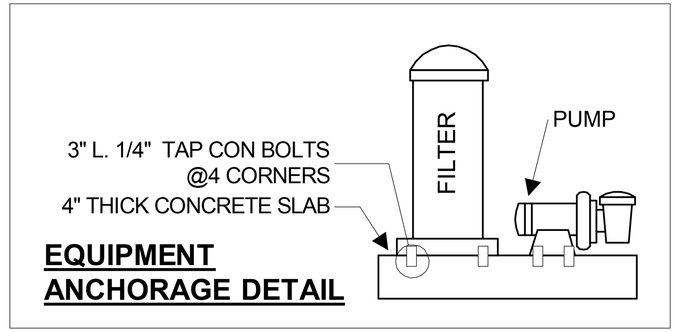
STRUCTURAL DETAIL



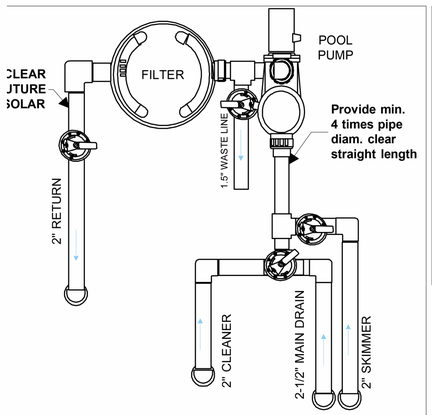
SKIMMER PLAN VIEW



SKIMMER SECTION

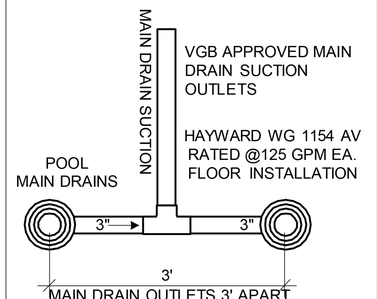


EQUIPMENT ANCHORAGE DETAIL



FILTER DETAIL

ANTI-ENTRAPMENT AND VGB COMPLIANCE



GATOR ENGINEERING ASSOCIATES, INC.
11390 TEMPLE STREET
COOPER CITY, FL 33330
TEL: (954) 434-5905 FAX: (954) 434-5904
CERTIFICATE OF AUTHORIZATION NUMBER 30230

SEAL

DATE:
REGINA ROBO--JACKSON, P.E. FL P.E. NO.: 36580

22180 TRILLIUM POOL

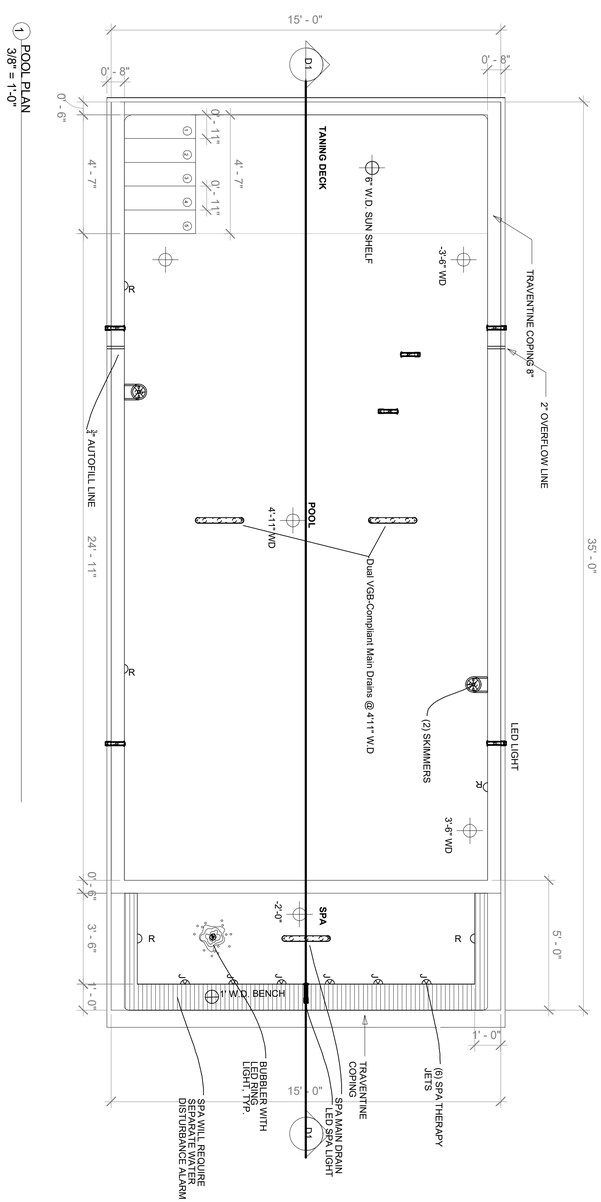
REVISIONS

NO.	DATE	DESCRIPTION

GEA PROJECT NO.: 00000
DATE: 05-03-2024
SCALE: AS SHOWN
DESIGNED BY: R.R.J.
DRAWN BY: I.R.
CHECKED BY: R.R.J.
APPROVED BY: R.R.J.

SHEET TITLE

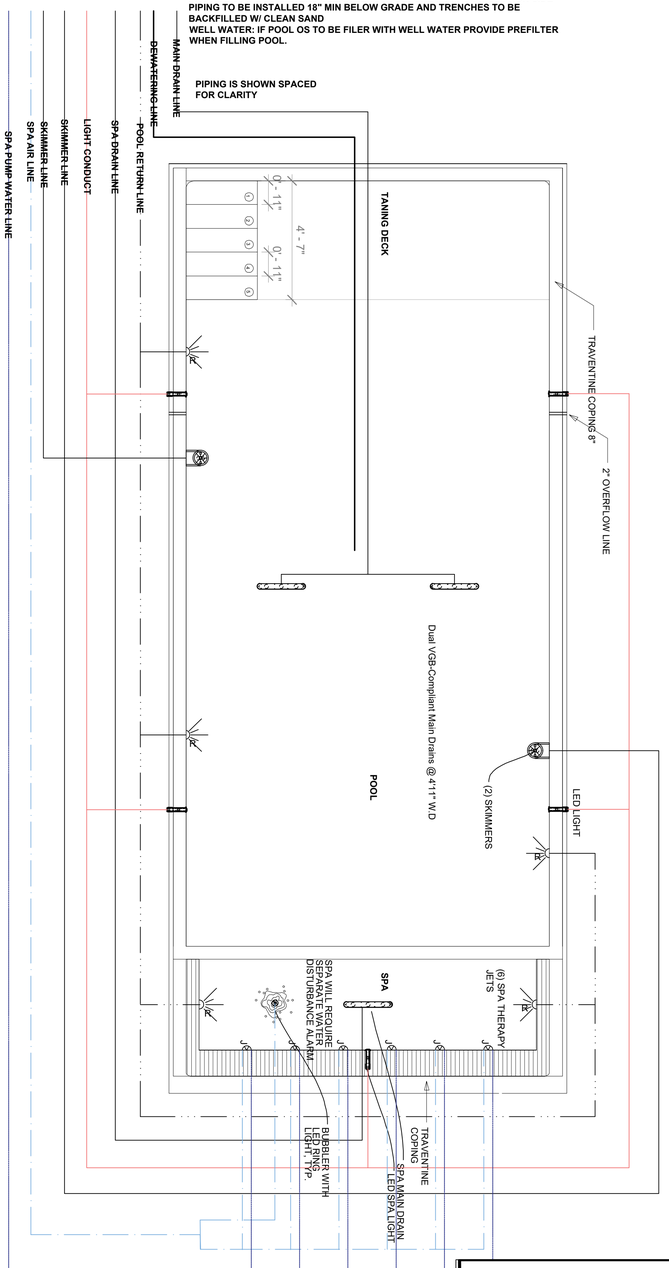
OF

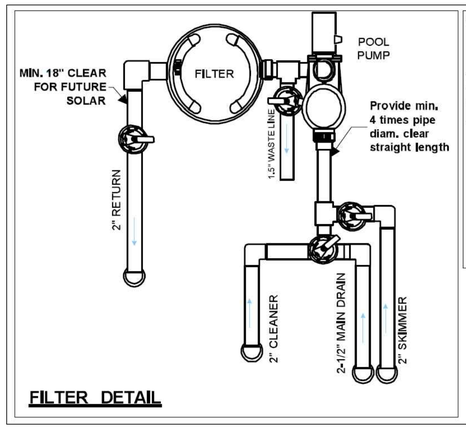


1 POOL PLAN
3/8" = 1'-0"

PIPING NOTES:
ALL PIPING TO BE PVC SCHEDULE 40 MINIMUN AND ALL PRESSURE PIPING AND ALL MAIN DRAIN PIPING MUST BE PRESSURE TESTED PRIOR TO CONCRETE. PROVIDE 5 PIPE DIAMETERS CLEAR LENGTH BEFORE PUMPS ON SUCTION SIDE PIPING TO BE INSTALLED 18" MIN BELOW GRADE AND TRENCHES TO BE BACKFILLED W/ CLEAN SAND
WELL WATER: IF POOL OS TO BE FILER WITH WELL WATER PROVIDE PREFILTER WHEN FILLING POOL.

PIPING IS SHOWN SPACED FOR CLARITY



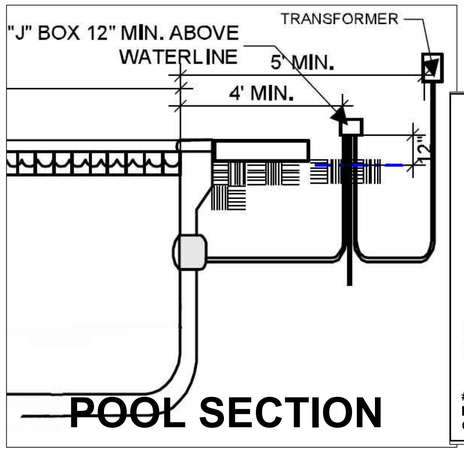


FILTER DETAIL

LEGEND:

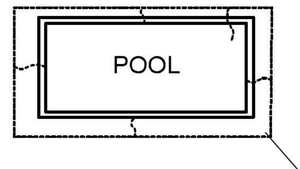
- (R) - RETURN LINE
- - ELEVATION
- - 2-WAY VALVE
- - 3-WAY VALVE
- - CHECK VALVE
- - BUTTERFLY VALVE
- - SKIMMER
- - VALVE ACTUATOR
- NTS - NOT TO SCALE

1. TIME SWITCH MUST BE INSTALLED TO ALLOW POOL OWNERS TO RUN THE POOL FILTRATION PUMP ONLY DURING PEAK HOURS
2. POOL FILTRATION PIPING MUST BE SIZED SO THAT THE VELOCITY DOES NOT EXCEED 8FPS IN THE RETURN LINE AND 6FPS IN THE SUCTION LINE.
3. FILTER AREA BASED ON 6 HOUR TURN OVER FLOW RATE
4. FILTER PUMPS - A MIN. OF 4 PIPE DIAMETERS SHALL BE INSTALLED BEFORE PUMP.
5. INLET FITTINGS SHALL BE DIRECTIONAL.
6. PROVIDE A MIN. 18" OF HORIZONTAL OR VERTICAL PIPE BETWEEN FILTER AND HEATER OR DEDICATED SUCTION AND RETURN LINES SHALL BE INSTALLED TO ALLOW FOR FUTURE ADDITION OF SOLAR HEATING EQUIPMENT.



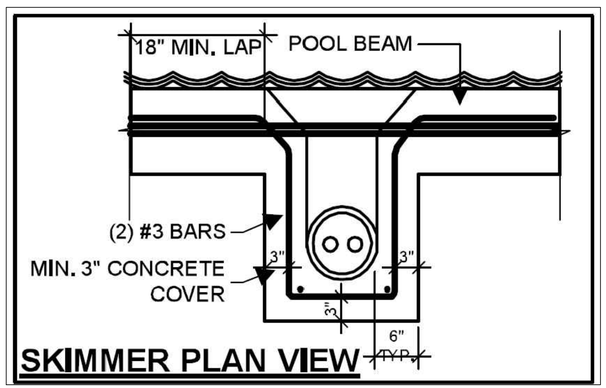
POOL SECTION

EQUIPOTENTIAL BONDING GRID



PER 2017 NEC (680.26C "EQUIPOTENTIAL BONDING GRID"): #8 AWG WIRE BURIED IN SAND 6" DOWN AND 24" HORIZONTALLY BEYOND THE INSIDE WALLS OF POOL.

#8 AWG BARE SOLID COPPER BONDING JUMPER SHALL BE INSTALLED IN AT LEAST FOUR (4) LOCATIONS AROUND PERIMETER OF THE POOL OR SPA.



SKIMMER PLAN VIEW

POOL / SPA EQUIPMENT SPECIFICATIONS	
Pool Filter Suction Outlets:	WATERWAY 640-136 32" CHANNEL DRAIN - UNBLOCKABLE - NO SUBSTITUTIONS W/O ENGINEER APPROVAL
Pool Suction Sump:	INCLUDED
Skimmer(s):	(2) WATERWAY RENEGADE - NO SUBSTITUTIONS W/O ENGINEER APPROVAL
Return Inlets:	(3) Wall returns in pool; (2) Wall returns in spa; (4) (1) Wall return for sun shelf
Spa Inlets:	(8) VENTURI-STYLE
Automation:	JANDY AQUALINK RS2-30 WEB CONNECT; SALT WATER CONTROLLER
Spa Channel Drain Outlet:	WATERWAY 640-136 32" CHANNEL DRAIN - UNBLOCKABLE - NO SUBSTITUTIONS W/O ENGINEER APPROVAL
Suction Sump:	INCLUDED
Pool Light(s):	(4) JANDY WATERCOLORS NICHELESS LED, 24W
Spa Light(s):	(1) JANDY WATERCOLORS NICHELESS LED, 12W

ALL DISTURBED AREAS TO BE SODDED WITH BAHIA GRASS.

MAXIMUM 4:1 SLOPE FOR ALL FILL AND/OR EXCAVATED AREAS.

ALL DECKING IS BY OTHERS UNDER SEPARATE PLAN & PERMIT

THE POOL WILL BE EQUIPPED WITH A DEVICE CERTIFIED TO ASTM F2208 "STANDARD SAFETY SPECIFICATIONS FOR RESIDENTIAL POOL ALARMS" WHICH SOUNDS AN ALARM UPON DETECTION OF AN ACCIDENTAL OR UNAUTHORIZED ENTRANCE

ALL METAL PARTS WITHIN 5FT OF THE WATER SHALL BE BONDED.

CHEMICAL TERMITE PROTECTION PER 7TH ED (2020) FBC BUILDING SECTION 1816.1.6

THIS PLAN COMPLIES WITH 7TH ED. (2020) FBC BUILDING SECTION 454.2

SITE INFORMATION FROM SURVEY

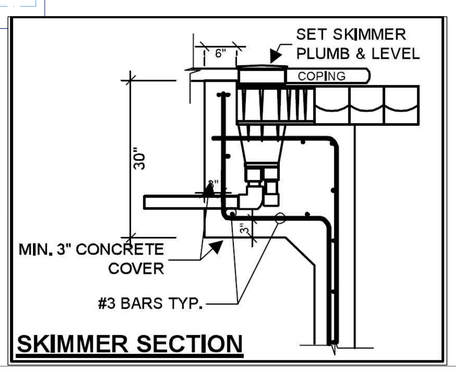
PROVIDED BY: T.B.D.
DATED: T.B.D.
PROJECT NO. T.B.D.

NOTE: ALL LOCATIONS, ELEVATIONS, UTILITIES, OR OTHER WISE MARKED DATA POINTS SHOULD REFERENCE AN ORIGINAL SIGNED & SEALED SURVEY FOR CLARIFICATIONS AND ACCURACY. KIMES ENGINEERING AND MANAGEMENT SERVICES, INC. DOES NOT TAKE ANY RESPONSIBILITY AS FOR THE ACCURACY OF EXISTING INFORMATION AND IS USING THE REFERENCED SURVEY FOR LOCATION PURPOSES AND DRAINAGE OF NEW WORK ONLY.

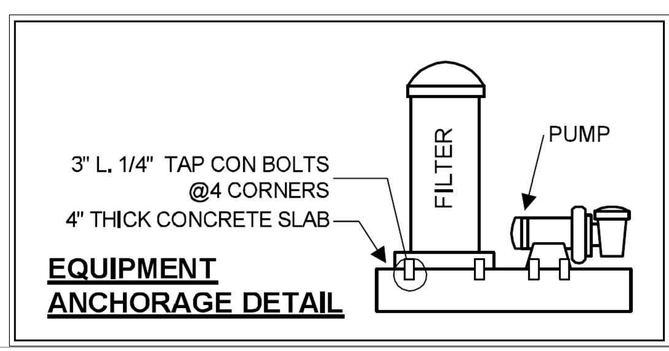
HEATED POOLS & SPAS SHALL BE EQUIPPED WITH PRODUCT PROVEN TO REDUCE HEAT LOSS
GAS HEATER REQUIRES GFCI HOOKUP - GAS TANK, LINE & HOOKUP BY SEPARATE PERMIT

WHEN YARD FENCING IS PART OF THE BARRIER, YARD FENCING SHALL MEET FBC 454.2.17.1. THE TOP OF THE BARRIER SHALL BE AT LEAST 48" ABOVE GRADE. ACCESS GATES SHALL BE EQUIPPED WITH A SELF-CLOSING & SELF-LATCHING LOCKING DEVICE LOCATED 54" HIGH ON THE POOL SIDE OF THE GATE, THAT OPEN OUTWARD FROM THE POOL AREA.

4' 8'



SKIMMER SECTION



EQUIPMENT ANCHORAGE DETAIL

GATOR ENGINEERING ASSOCIATES, INC.
11390 TEMPLE STREET
COOPER CITY, FL 33330
TEL: (954)434-5905 FAX: (954)434-5904
CERTIFICATE OF AUTHORIZATION NUMBER 30006

SEAL

DATE:
REGINA BOBO-JACKSON,
P.E. FL P.E. NO.: 38550

REVISIONS

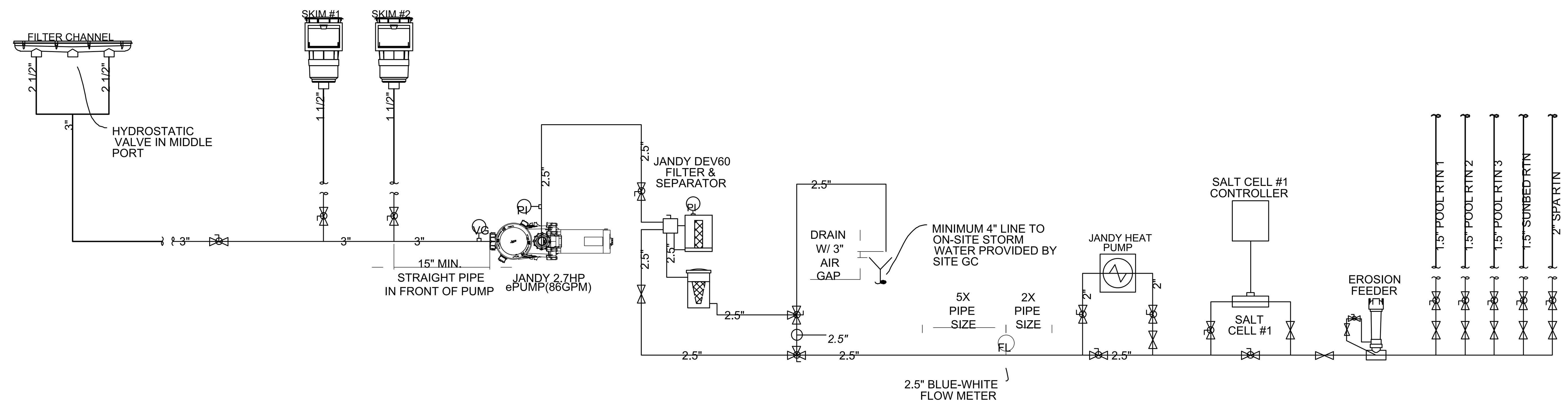
NO.	DATE	DESCRIPTION

GEA PROJECT NO. : 00000
DATE : 00-00-2024
SCALE : AS SHOWN
DESIGNED BY : R.B.J.
DRAWN BY : L.B.
CHECKED BY : R.B.J.
APPROVED BY : R.B.J.

SHEET TITLE

OF

22180 TRILLIUM POOL



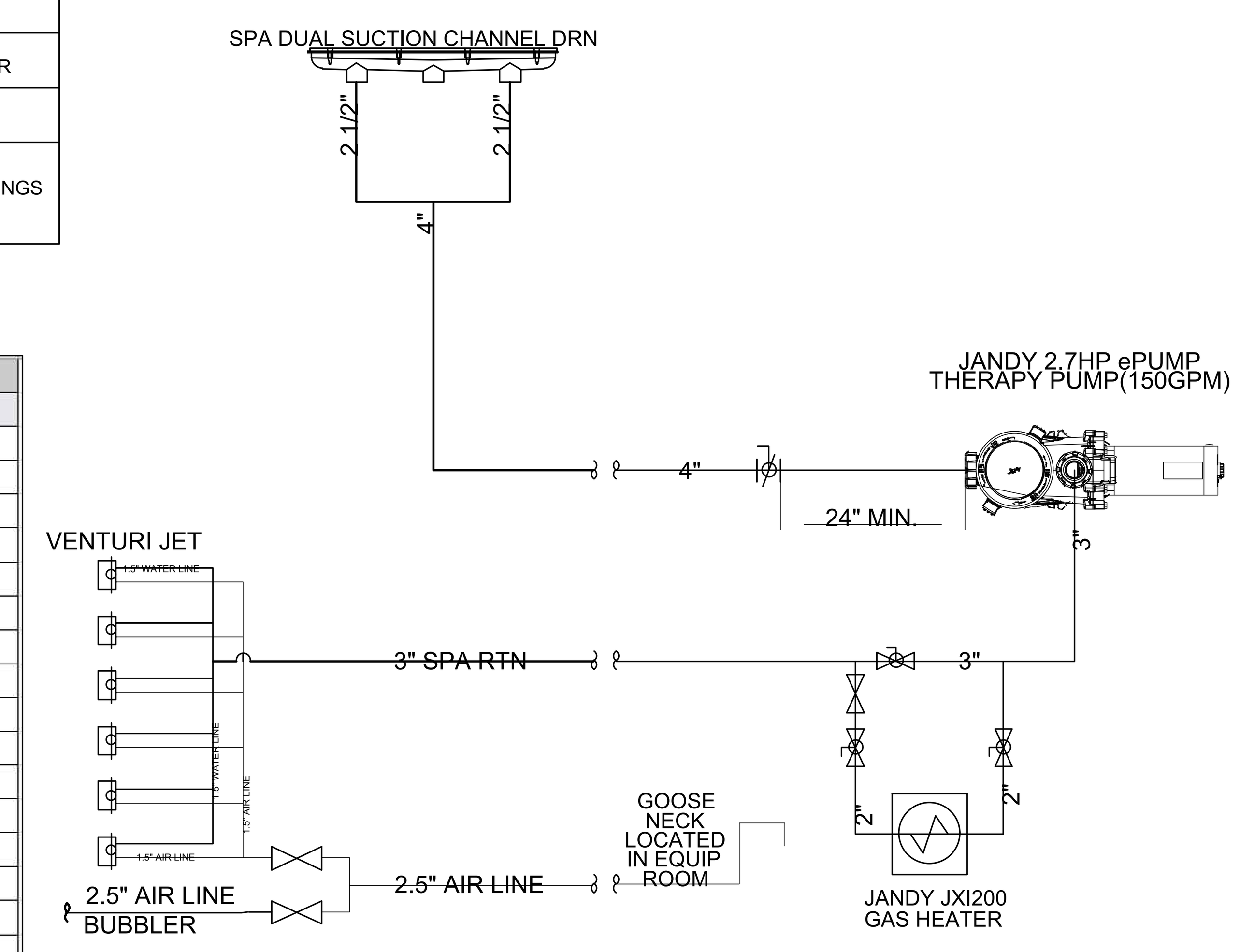
F1 FILTRATION EQUIPMENT PIPING SCHEMATIC

SCALE: N.T.S.

SCHEMATIC LEGEND			
MARK	DESCRIPTION	MARK	DESCRIPTION
	FLOW PROPORTIONING BALL VALVE	FS	FLOW SWITCH
	CHECK VALVE	PI	PRESSURE GAUGE
	3-WAY VALVE	FL	FLOW METER
	FLOW PROPORTIONING BUTTERFLY VALVE	TI	THERMOMETER
SIZE	CONCENTRIC REDUCER		

NOTE: ONLY USE CONCENTRIC OR ECCENTRIC REDUCER COUPLINGS IN FRONT OF PUMP - AVOID USING REDUCER BUSHINGS *ON SUCTION LINES*

POOL PIPING		
LABEL	DESCRIPTION	
1	FILTER PUMP MAIN DRAIN	3" (3.7 fps @ 86 gpm)
2	SKIMMER LINES 2	(3) 1.5" (4.7 fps @ 30 gpm) EA)
3	VACUUM	2"
4	FILTER BACKWASH	2.5"
5	HEAT PUMP BYPASS	2.5"
6	HEAT PUMP INLET/OUTLET	2"
7	FILTER PUMP RETURN	2.5" (5.8 fps @ 86 gpm)
8A	POOL FILTER RETURN	2.5"
8B	SPA FILTER RETURN	2"
9	PUMP TO WASTE	2.5"
10	AUTOFILL POTABLE WATER LINE	3/4"
11	AUTOFILL OVERFLOW LINE	2"
12	SPA THERAPY SUCTION	4" (3.8 fps @ 150 gpm)
13	SPA THERAPY RETURN	3" (6.5 fps @ 150 gpm)
14A	SPA THERAPY HEAT BYPASS	2.5"
14B	SPA THERAPY TO/FROM HEAT	2"
15	SPA AIR TRUNK LINE	2.5" (FROM BLOWER TO GOOSENECK)
15A	(1) BUBBLER AIR LINE	1.5"
16	VENTURI JET AIR LINES	1.5"
17	SUN BED RETURN LINES	1.5" (3.2 fps @ 20 gpm EA)



C5 SPA PIPING SCHEMATIC

SCALE: N.T.S.

PANELBOARD: POOL EQ
VOLTAGE: 120 240 1 PH 3 WIRE MAIN: 150 MBR MIN. REQD PH(2) #2/0(CU) MOUNTING SURFACE REMARKS:
TOTAL LOAD 25.1 kVA PNL FEED GND (1) #6(CU) kA IR: 22 ENSURE COPPER BUS
CND 1-1/4"

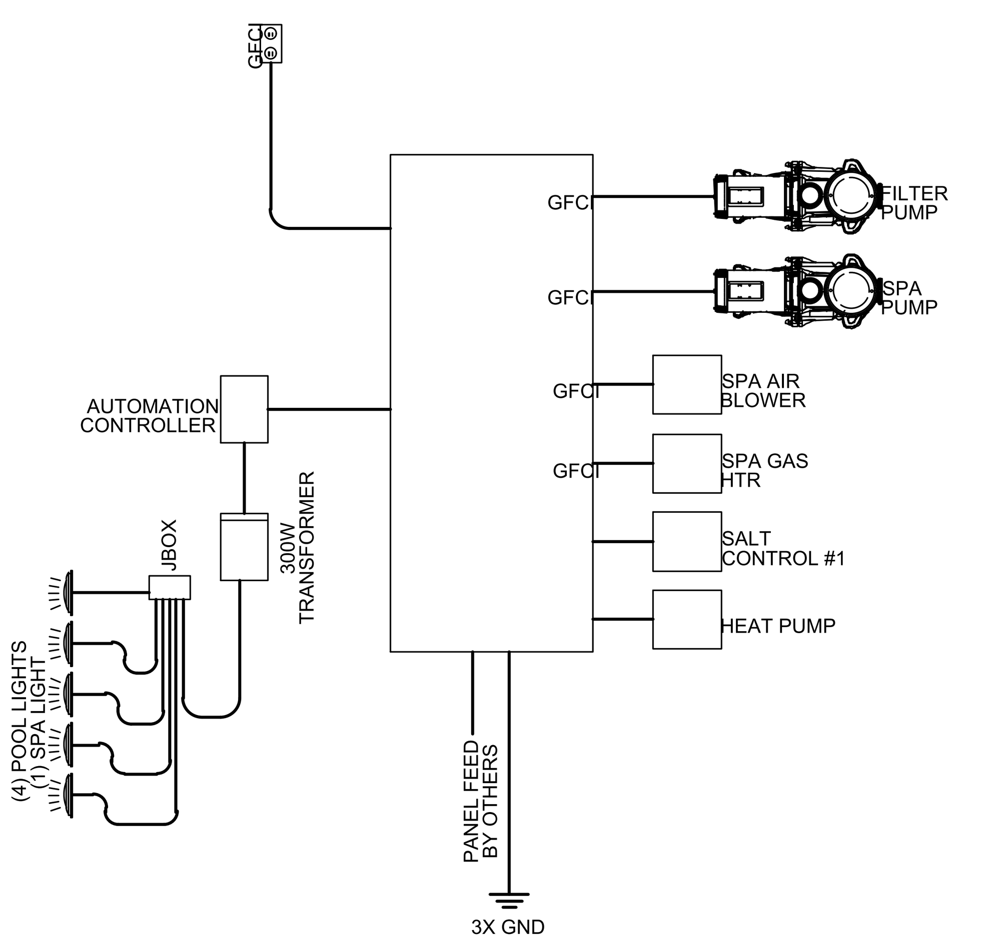
CKT	DESCRIPTION	LOAD(KVA)							BKR		CONDUCTORS				PHASE		CONDUCTORS				BKR		LOAD(KVA)							DESCRIPTION	CKT#
		LTG	REC	MTR	A/C	HTG	MISC	KIT	AMP	POLE	PH	N	GND	CND	A	B	PH	N	GND	CND	AMP	POLE	KIT	MISC	HTG	A/C	MTR	REC	LTG		
1	Filter Pump			1.3					15	2	#12		#12	1/2"	3.1		#10		#10	1/2"	30	2					1.5			Spa Air blower	2
3											#12					3.1	#10														4
5	Spa pump			2.8					20	2	#12		#12	1/2"	2		#12	#12	#12	1/2"	15	1			0.67					Gas htr	6
7											#12					2.8	#12	#12	#12	1/2"	20	1						1.5		RCPT	8
9															1.1		#12	#12	#12	1/2"	15	1		1.06						Lt XFMR	10
11	Autofill						0.1		15	1	#12	#12	#12	1/2"		0.1															12
13															0.3		#12	#12	#12	1/2"	15	1		0.3						Salt#1	14
15	Automation						1.5		20	1	#12	#12	#12	1/2"		1.5															16
17															6.3		#6		#8	1-1/4"	60	2			4.84					Heat Pump	18
19																4.8	#6								4.84						20
21															0																22
23																0															24
	TOTAL kVA	0	0	4.1	0	0	1.6	0							12.8	12.3							0	1.4	10.4	0	1.5	1.5	0	TOTAL KVA	
	AMP/PH														106	103														AMP/PH	

TOTALS				
	LIGHTING	0	X125%	0
	REECEPTICLES	1.5	NEC 220.44	1.5
	MOTORS	5.2	NEC220.18(A)	5.2
	LARGEST MTR	3.6	NEC 430.24	4.5
	A/C	0	X100%	0
	HEATING	10.4	X100%	10
	MISSCELLANEOUS	4.5	X100%	4.5
	KITCHEN	0	NEC 220.56	0
	TOTAL kVA	25.1		26 CODE kVA
	TOTAL AMPS	105		108 CODE AMPS

NOTES:
1 ADDITIONAL EQUIPMENT REQD BY MFGR (TRANSFORMER,MFR &MDL-TBD)
2 GFCI BREAKERS IN SINGLE PHASE PUMP CIRCUITS
3 GFCI BREAKERS IN SINGLE PHASE PUMP CIRCUITS
4 VFD REQD- REF. MFR. RECOMMENDATIONS FOR PUMP REQUIREMENTS

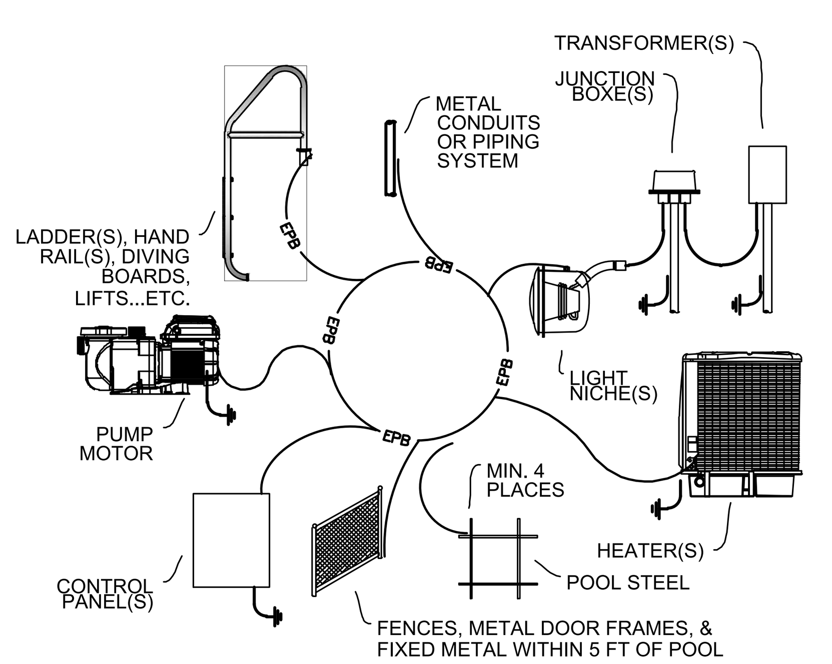
** INSTALL ALL EQUIPMENT ACCORDING TO NEC REQUIREMENTS & MFGR RECOMMENDATIONS

Pool Equipment		
LABEL	ITEM	DESCRIPTION
BA	FILTER PUMP	Jandy, ePump (VSSHP270DV2A(S)) 2.7 HP, SELF-PRIMING, w/ STRAINER, 86 GPM @ 60' TDH, 230V, 10.5A, 1Ø
BF	SALT SYSTEM	JANDY, PLC1400 (SALT CHLORINE GENERATOR) W/ POWER SUPPLY (120V, 2.5A, 1Ø)
AB	Air blower	Jandy Pro Series Blower, 2.0 HP, 240V, 4.0A, 1Ø.
BH	LIGHT TIMER	INTERMATIC (T103P) 24-HR MECH. TIME SWITCH, 120 VAC, 60HZ, DPST, INDOOR/OUTDOOR PLASTIC ENCLOSURE
BJ	LIGHT TRANSFORMER	INTERMATIC, PX300, 120V, 3A, 300W/12-14V
BK1	GAS HEATER	Jandy, JXi, 200k Btu/h, NG/LP, 84% EFF. (JXI400NC/JXI400PC) 115V, 5.8A, 1Ø
BK2	HEAT PUMP(S)	Jandy, JE2500, 110k Btu/h, HP, 5.6 C.O.P. 230V, 42A, 1Ø
BL	LIQUID POOL COVER	HEATSAVR (HS115) 115V, 0.1A, 1Ø & HEATPAIL (HS700)
BS	ELECTRONIC AUTOFILL	JANDY LEVELOR K-1100
BW	SPA THERAPY PUMP	Jandy, ePump (VSSHP270DV2A(S)) 2.7 HP, SELF-PRIMING, w/ STRAINER, 150 GPM @ 35' TDH, 230V, 10.5A, 1Ø
CB	FILTER	Jandy, DEV SeriesS SPACED @ 15 IN. (DEV60) D.E., 60 SF TOTAL, 120 GPM CAPACITY
CC	SANITIZER	CMP Powerclean Tab ULTRA VS in-line chlorinator
CF	THERMOMETER	Precision Instrument Co. (B2B1-K) 2" Dial, 30-240°F, 1/2" NPT
CL	D.E. SEPARATOR	(1) Pentair, D.E. SEPARATION TANK 100 (300005) 100 SF



A1 POOL EQUIPMENT ELECTRICAL RISER DIAGRAM

SCALE: N.T.S.

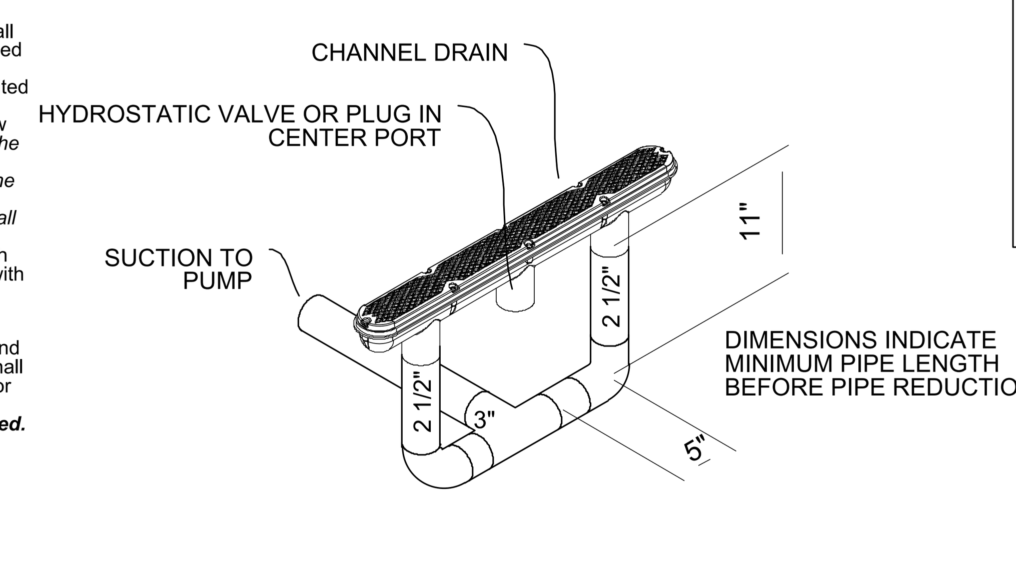


SCHEMATIC NOTES:
1. THE EQUIPOTENTIAL BONDING OF ALL CONDUCTIVE POOL SHELLS, PERIMETER SURFACES, METALLIC COMPONENTS, UNDERWATER LIGHTING, METAL FITTINGS, ELECTRICAL EQUIPMENT, AND METAL WIREWAYS/CONDUITS SHALL BE IN ACCORDANCE WITH NEC 680.26 OR AS ACCEPTED BY THE AUTHORITY HAVING JURISDICTION (AHJ.)
2. REFERENCE POOL BONDING NOTES ON SHEET PB-2

A4 TYPICAL BONDING SCHEMATIC

SCALE: N.T.S.

EQUIPOTENTIAL BONDING NOTES:
1. Equipotential bonding is required and shall be installed to reduce voltage gradients in the pool area.
2. Bonded Parts per NEC 680.26 shall be bonded together using solid copper conductors, insulated covered, or bare, not smaller than #8 AWG or with rigid metal conduit of brass or other identified corrosion-resistant metal.
3. Connections to bonded parts shall be made in accordance with NEC 250.8.
4. An #8 AWG or larger solid copper bonding conductor shall be provided to reduce voltage gradients in the pool area shall not be required to be extended or attached to remote panelboards, service equipment, or electrodes.
5. Bonding to conductive pool shells by unencapsulated structural reinforcing steel shall be bonded together by steel tie wires or a copper conductor grid shall be provided and shall be constructed of minimum #8 AWG bare solid copper conductors bonded to each other at all points of crossing (per NEC in 250.8) conforming to the contour of the pool arranged in a 12-in. by 12-in. network of conductors uniformly spaced perpendicular grid pattern with a tolerance of 4 in. secured within or under the pool no more than 6 in. from the outer contour of the pool shell.
6. The perimeter surface to be bonded shall be considered to extend for 3 ft horizontally beyond the inside walls of the pool and shall include unpaved surfaces and other types of paving.
7. Perimeter surfaces separated from the pool by a permanent wall or building 5 ft in height or more shall require equipotential bonding only on the pool side of the permanent wall or building.
8. Bonding to perimeter surfaces shall be attached to the pool reinforcing steel or copper conductor grid at a minimum of four (4) points uniformly spaced around the perimeter of the pool. Structural reinforcing steel shall be bonded in accordance with NEC 680.26(B)(1)(a).
9. When structural reinforcing steel is not available or is encapsulated in a nonconductive compound (aka fiberglass pools) at least one (1) minimum #8 AWG bare solid copper conductor shall follow the contour of the perimeter surface using only listed splices (NEC 250.8,) 18 in. to 24 in. from the inside walls of the pool and shall be secured within or under the perimeter surface 4 in. to 6 in. below the subgrade.
10. All metallic parts of the pool structure, including reinforcing metal not addressed in 680.26(B)(1)(a), shall be bonded. All metal forming shells and mounting brackets of no-niche luminaires shall be bonded (listed low-voltage lighting *systems with nonmetallic forming shells shall not require* bonding.) All metal fittings within or attached to the pool structure shall be bonded. Isolated parts that are not over 4 in. in any dimension and do not penetrate into the pool structure more than 1 in. shall not require bonding.
11. Metal parts of electrical equipment associated with the pool water circulating system, including pump motors and metal parts of equipment associated with pool covers, including electric motors, shall be bonded.
12. Pool water heaters rated at more than 50 amperes and having specific instructions regarding bonding and grounding, only those parts designated to be bonded shall be bonded and only those parts designated to be grounded shall be grounded.
13. All fixed metal parts shall be bonded including, but not limited to, metal-sheathed cables and raceways, metal piping, metal awnings, metal fences, and metal door and window *frames (except those greater than 5 ft horizontally from the inside walls of the pool or those greater than 12 ft measured vertically above the maximum water level of the pool, or as measured vertically above any observation stands, towers, or platforms, or any diving structures, shall not be required to be bonded.)*
14. Where none of the bonded parts is in direct connection with the pool water, the pool water shall be in direct contact with an approved corrosion-resistant conductive surface that exposes not less than 9 in.2 of surface area to the pool water at all times.
15. Location of copper bonding conductor, bonding jumpers, and connections shown are diagrammatic only. Contractor shall field route to determine exact location. Bonding conductor shall confirm to the shape of the pool while maintaining ***smooth radial curves - no 90° bends shall be permitted.***
16. Electrical contractor shall call for the inspection of the bonding of the pool and it's perimeter surfaces prior to cover-up of these areas.



A8 CHANNEL DRAIN PLUMBING ISOMETRIC

SCALE: N.T.S.

POOL SIZING
TOTAL GALLONS: **16,500**
TOTAL SQ. FT.: **525**
MAX. 6-HR TURNOVER: 45.8 GPM
REQ'D SKIMMERS: 1.3(roundup to 2)

DESIGN CIRCULATION FLOW / FILTER PUMP FLOW RATE: 86 GPM

SPA PUMP FLOW RATE:150 GPM

GATOR ENGINEERING ASSOCIATES, INC.
11390 TEMPLE STREET
COOPER CITY, FL 33330
TEL: (954) 434-5905 FAX: (954) 434 -5904
CERTIFICATE OF AUTHORIZATION NUMBER

SEAL

DATE:
REGINA BOBO-JACKSON,
P.E. FL P.E. NO.: 38550

22180 TRILLIUM POOL

REVISIONS
No.	DATE	DESCRIPTION

GEA PROJECT NO. : 00000
DATE : 00-00-2024
SCALE : AS SHOWN
DESIGNEG BY : R.B.J.
DRAWN BY : L.B.
CHECKED BY : R.B.J
APPROVED BY : R.B.J

SHEET TITLE

OF