

POOL & DECK AREA CALCULATIONS:

160'-0"	LINEAL FEET POOL PERIMETER
5,060	SF DECK AREA INCLUDING POOL (total impervious surface)
-1,500	SF POOL SURFACE AREA
3,560	SF DECK AREA (actual walking surface)
5,060	SF DECK AREA INCLUDING POOL
-2,604	SF OF 6'-0" BOUNDARY AROUND POOL (including pool)
2,456	SF DECK AREA (for occupancy calculation, see below)

SQUARE FOOTAGE NOTE:
DECK AREA SQUARE FOOTAGE CALCULATIONS HAVE BEEN DERIVED FROM COMBINATION OF CIVIL AND ARCHITECTURAL DESIGN DRAWINGS PROVIDED BY CLIENT. OF THE PROPOSED SITE WORK AND BUILDING(S), ONLY WALKING DECKS AND COVERED PORCH AREA OF STRUCTURES, WITHIN THE FENCED IN POOL AREA, ARE INCLUDED. SEE PLANS BY OTHERS. SQUARE FOOTAGE OF ENCLOSED ROOMS OF BUILDINGS NOT INCLUDED.

Occupancy Calculation per 2018 NCBC:

Pool Surface Area	1,500 SF / 50 = 30
Deck Area	2,456 SF / 15 = 164
Total people	194

Occupancy Calculation per Environmental Health Rules:

Pool Surface Area 5' deep or less	1,500 SF / 15 = 100
Pool Surface Area greater than 5' deep	3,000 SF / 24 = 125
Spa Surface Area	0 SF / 10 = 0
Spa Surface Area of interactive attractions	0 SF / 24 = 0
Total people	125

PLUMBING FIXTURE REQUIREMENTS PER 2018 NCBC & 2018 NCPG

LINE USE	WATER CLOSETS			URINALS			LAVATORIES			SHOWERS		SINKING FOUNTAINS	
	MALE	FEMALE	FAMILY	MALE	FEMALE	FAMILY	MALE	FEMALE	FAMILY	REGULAR	ACCESSIBLE		
Total EXISTING	0	0	0	0	0	0	0	0	0	0	0	0	
Total NEW	1	2	0	1	2	0	1	2	0	1	1	1	
194 REQUIRED	1	2	0	1	2	0	1	2	0	1	1	1	

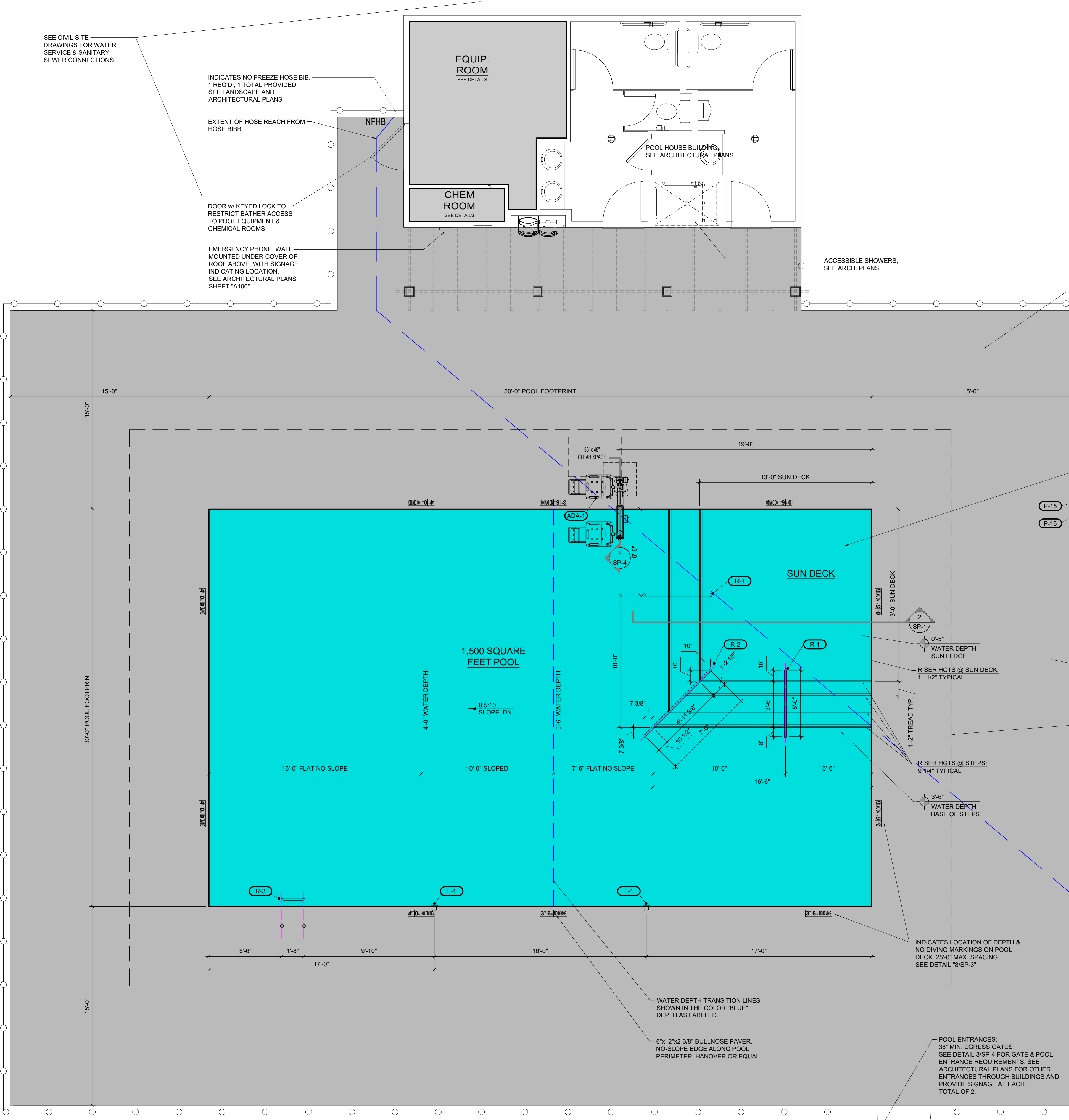
PLUMBING FIXTURE REQUIREMENTS PER ENVIRONMENTAL HEALTH RULES

LINE USE	WATER CLOSETS			URINALS			LAVATORIES			SHOWERS		SINKING FOUNTAINS	
	MALE	FEMALE	FAMILY	MALE	FEMALE	FAMILY	MALE	FEMALE	FAMILY	REGULAR	ACCESSIBLE		
Total EXISTING	0	0	0	0	0	0	0	0	0	0	0	0	
Total NEW	1	2	0	1	2	0	1	2	0	1	1	1	
100 REQUIRED	1	2	0	1	2	0	1	2	0	1	1	1	

POOL DATA

DESCRIPTION	VALUE	UNIT TYPE
POOL DIMENSIONS	30'-0" x 50'-0"	FEET
POOL DEPTHS	0'-5" TO 4'-0"	FEET
POOL SURFACE AREA	1,500	SQUARE FEET
POOL PERIMETER	160'-0"	LINEAR FEET
POOL VOLUME	35,000	GALLONS
MINIMUM TURNOVER RATE	6	HOURS
MINIMUM FLOW RATE REQUIRED	98	GALLONS PER MINUTE
DESIGN FLOW RATE PROVIDED	126	GALLONS PER MINUTE
DESIGN PUMP HEAD	65 min.	FEET
FILTER TYPE	SAND	
FILTER COUNT (PLUMBED IN PARALLEL)	1	
FILTER AREA (PER FILTER)	7.06	SQUARE FEET
TOTAL FILTER AREA	7.06	SQUARE FEET
FILTER FLOW RATE REQUIRED @ 20GPM/FT ² (PER FILTER)	98	GALLONS PER MINUTE
MAXIMUM FILTER FLOW RATE PROVIDED @ 20GPM/FT ² (PER FILTER)	143	GALLONS PER MINUTE
REQUIRED MINIMUM REQ'D FILTER TURNOVER CAPACITY @ 20GPM/FT ² @ EVERY 6 HOURS	35,000	GALLONS (PER FILTER)
PROVIDED DESIGN FILTER TURNOVER CAPACITY @ 20GPM/FT ² @ EVERY 6 HOURS	45,360	GALLONS (PER FILTER)
SKIMMER COUNT (MIN. 1 PER 400 SF SURFACE AREA)	6	
FLOW PER SKIMMER (MIN. 20 GPM EACH PER DESIGN FLOW RATE)	21	GALLONS PER MINUTE
RETURN COUNT (MIN. 1 PER 20 GPM DESIGN FLOW RATE)	7	
FLOW PER RETURN (PER DESIGN FLOW RATE)	18	GALLONS PER MINUTE
NUMBER OF BATHERS PER ENVIRONMENTAL HEALTH DEPT. RULES.	100	PEOPLE
CHEMICAL STORAGE ROOM REQUIRED	13.3	SQUARE FEET
CHEMICAL STORAGE ROOM PROVIDED	17.9	SQUARE FEET

HOURS OF OPERATION:
POOL HAS MULTI-COLORED L.E.D. LIGHTING SYSTEM, AND POOL WILL NOT BE OPEN DURING NIGHT TIME HOURS. OPEN TIMES ARE RESTRICTED TO DAYLIGHT HOURS ONLY.



ALL WALKING SURFACES OF DECK AND WALKWAYS TO HAVE SLIP RESISTANT FINISHED SURFACES, BY LIGHT BROOM FINISH PER SPECIFICATION BELOW:
MASTERFORMAT SECTION 03 30 00 CAST-IN-PLACE CONCRETE:
IMMEDIATELY AFTER FLOAT FINISHING, SLIGHTLY ROUGHEN TRAFFICKED SURFACE BY BROOMING WITH FIBER-BRISTLE BROOM PERPENDICULAR TO MAIN TRAFFIC ROUTE.

POOL ENTRANCES:
38" MIN. EGRESS GATES
SEE DETAIL 3/8P-4 FOR GATE & POOL ENTRANCE REQUIREMENTS. SEE ARCHITECTURAL PLANS FOR OTHER ENTRANCES THROUGH BUILDINGS AND PROVIDE SIGNAGE AT EACH. TOTAL OF 2.

ALL WALKING SURFACES OF POOL TO HAVE SLIP RESISTANT FINISH, DIAMOND BRITE POOL FINISH, BY SGM, Inc. SEE SPEC SHEET SP-7 DETAIL FOR "P-17" FOR MORE INFORMATION.

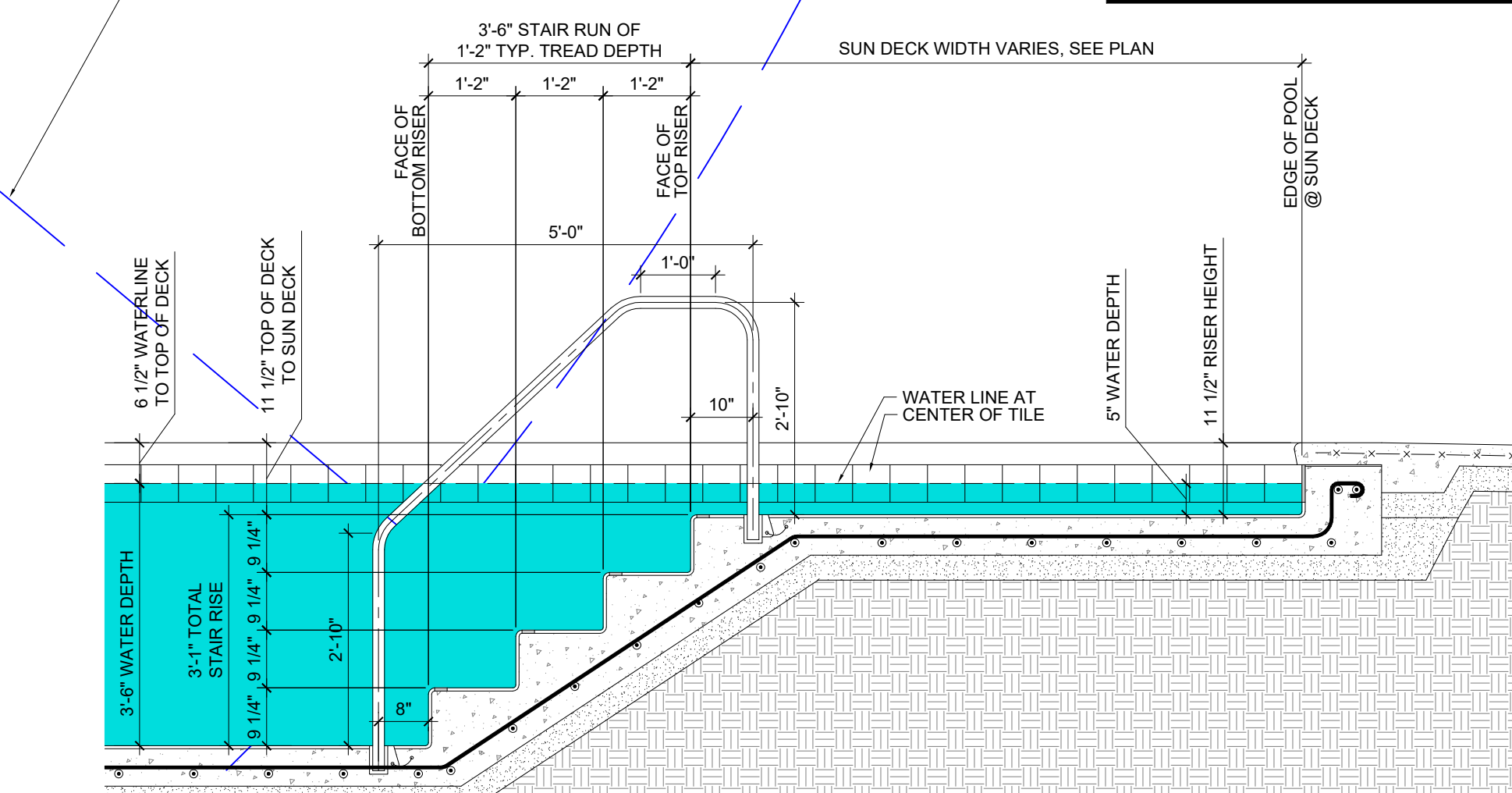
SAFETY LIFE HOOK POLE COMBO AND THROWING ROPE TO BE INSTALLED WITHIN REACH OF POOL DURING RESCUE ATTEMPT. SUGGESTED LOCATION SHOWN TO BE SURFACE MOUNTED ON FENCE. SIMILAR CONSPICUOUS LOCATIONS WITHIN FENCE AREA ARE ACCEPTABLE.

PERIMETER OF FENCE, SEE DETAIL "3/SP-4"
PERIMETER OF CONCRETE DECK SEE SITE PLANS FOR DESIGN

5,060 SF DECK AREA INSIDE OF FENCE INCLUDES 1,500 SF OF POOL (total impervious deck surface)

2,604 SQUARE FEET OF 6'-0" CLEAR AREA AROUND POOL PERIMETER (INCLUDES SF OF POOL), NOT INCLUDED IN DECK AREA CALCULATION

INDICATES REACH OF 100' WATER HOSE FROM BIB ATTACHMENT POINT



1 POOL AREA & LAYOUT PLAN
SP-1

SCALE: 1/4" = 1'-0"

2 POOL SECTION
SP-1
TYPICAL DECK LEDGE AND STAIRS AT SUN DECK

SCALE: 1/2" = 1'-0"

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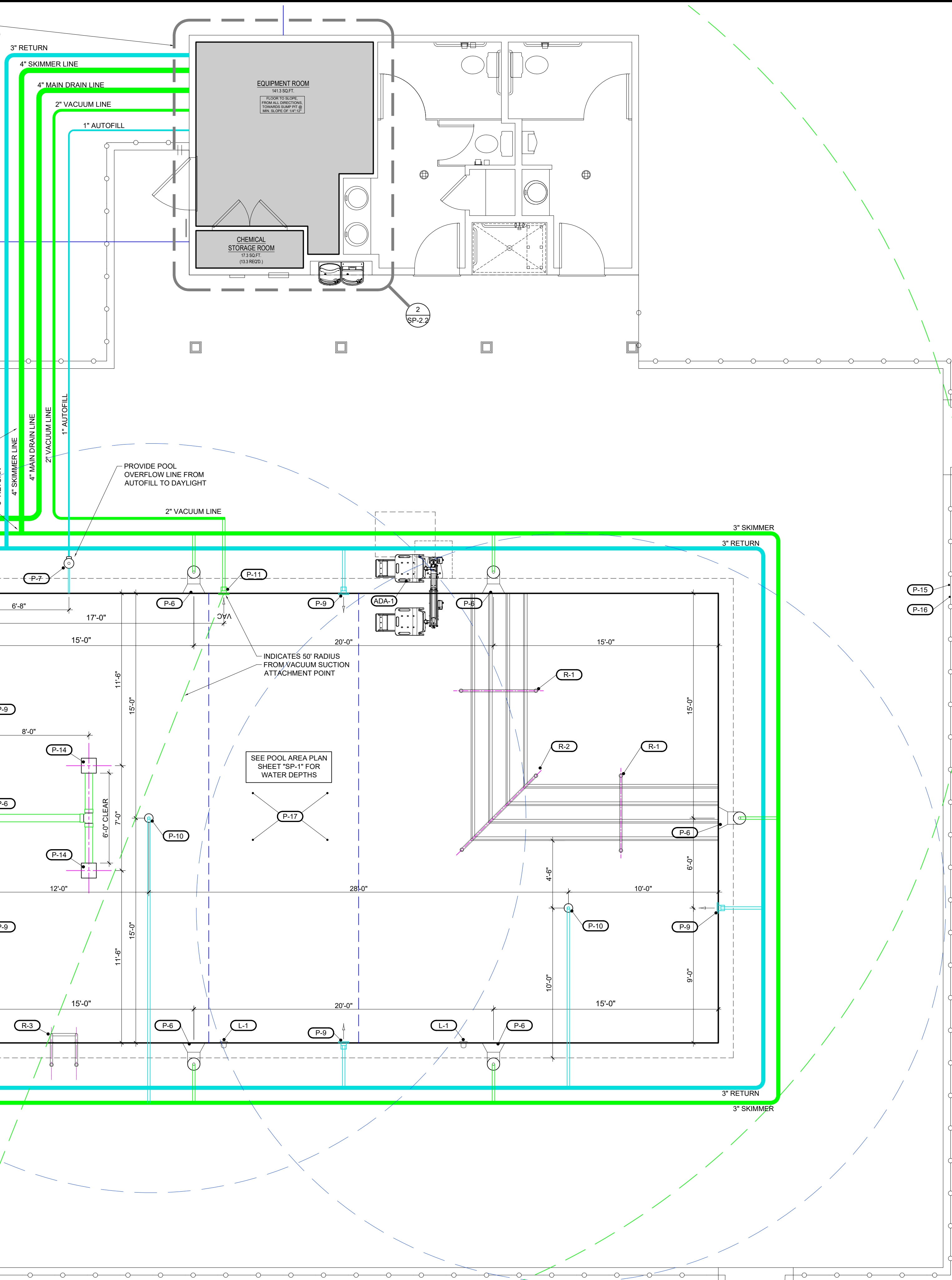
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20106
ROBERT S. BARTLETT
ENGINEER
3-22-2024

Rev. Description: [Table with 2 columns: Rev., Description]

Title Sheet: **POOL AREA PLAN**
Project: **Swimming Pool Caitlin Crossing**
Lillington, NC

Drawn by: M. Morgan
Issue Date: 3-22-2024
Project Number:
Sheet: **SP-1**

LINES ROUTED INTO PUMP ROOM AS REQUIRED & FIELD CONDITIONS PERMIT. SEE "PUMP ROOM PIPING PLAN" FOR ENLARGED DETAIL.



CHANGE IN PIPE SIZE AT TEE CONNECTION FOR SKIMMER LINE & LOOP

PROVIDE POOL OVERFLOW LINE FROM AUTOFILL TO DAYLIGHT

INDICATES 50' RADIUS FROM VACUUM SUCTION ATTACHMENT POINT

SEE POOL AREA PLAN SHEET "SP-1" FOR WATER DEPTHS

25' RADIUS FROM RETURN INLETS SHOWN IN THE COLOR "BLUE"

50' RADIUS OF VACUUM LINES SHOWN IN THE COLOR "GREEN"

PLUMBING ARRANGEMENT SHOWN IS DIAGRAMMATIC. GENERAL CONTRACTOR IS ALLOWED TO ADJUST ARRANGEMENT DURING INSTALLATION AS FIELD CONDITIONS REQUIRE. WITH THE EXCEPTION OF INCREASING THE LINEAL FOOTAGE OF PIPING RUNS AND/OR NUMBER OF ELBOWS & TEES HIGHER THAN 10% OF WHAT IS SHOWN. CONTACT DESIGNER IMMEDIATELY WITH DISCREPANCIES.

POOL EQUIPMENT SCHEDULE			
MARK	DESCRIPTION	MANUFACTURER	MODEL
P-1	MAIN POOL WATER PUMP - VARIABLE SPEED INTEGRATED STRAINER w/ BASKET w/ SPARE BASKET PROVIDED.	HAYWARD	TRISTAR V3 650 2.7 HP / 230V 1PH
P-2	3" NOMINAL DIAMETER FIBERGLASS SAND FILTER, 141 GPM FLOW RATE, 7.2 FILTER AREA, 300# SAND	HAYWARD	HCF236
P-3	CHLORINE / BROMINE FEEDER, WITH FLOW INDICATOR, 10-1/4" DIA. x 47" HIGH	PENTAIR	300-26X
P-4	HORSE FLOW RATE INDICATOR, 45 - 240 GPM, SURFACE MOUNTED TO 3" SCH-40 PVC RETURN LINE	BLUE WHITE	F-3030XP
P-5	ORNL LOGIC 4 RELAY BASE PANEL, SURFACE MOUNTED, 15.5" x 21.4" x 7"D	HAYWARD	HLBASE
P-6	SKIMMER w/ 2" x 1-1/2" SLIP REDUCERS EQUALIZER HOLES TO BE PLUGGED CLOSED	STA-RITE	U-3 086501404
P-7	AUTOFILL VALVE	POOLMISER	PM-101
P-8	MULTI-PORT PREPLUMBED VALVE KIT FOR FILTERS 2" UNION CONNECTION, 125 GPM	HAYWARD	HCV275
P-9	EYEBALL BULKHEAD, 2" x 1-1/2" SLIP BODY, WITH EYEBALL INLET FITTING, 1-1/2" MPF, 3/4" ORIFICE	Custom Molded Products & PENTAIR	2554-200-000 & 54021
P-10	4" WHITE, ADJUSTABLE FLOOR RETURN	AQUASTAR	API-25-1106
P-11	SAFETY VACUUM LOCK WALL FITTING FOR HOSE ATTACHMENT	AQUASTAR	API-201-0001
P-12	711 SERIES BUTTERFLY VALVE KIT w/ GALV. BOLTS	LASCO	LAS-56-3149
P-13	BALL VALVE SCH 40 PVC (see plan for sizes req'd.)	CHARLOTTE PIPE	X000X
P-14	12x12x18 FIBERGLASS SUMP DRAIN w/ 6" PORT, WITH 15"x15" OUTLET COVER, ANTI-ENTRANCEMENT	A.S.A. MFG. INC.	FPK-50-812-18-6 5218101
P-15	SAFETY LIFE HOOK & 12' LONG ALUMINUM POLE, LOCATED ON SITE WITHIN FENCED AREA OF POOL	PENTAIR	R221026 & R191106
P-16	Equalizer Cover Approved L&L Ribs & 80' Long Ribs, LOCATED ON SITE WITHIN FENCED AREA OF POOL	POOL STYLE MAINTENANCE	361 & 374
P-17	DIAMOND BRITE, EXPOSED AGGREGATE POOL FINISH SLIP RESISTANT	SGM Inc. OR EQUAL	BLUE QUARTZ
R-1	3" SKIMMER		
R-2	3" RETURN		
R-3	3" SKIMMER		
V-1	2" VACUUM LINE		
V-2	2" VACUUM LINE		
L-1	4" MAIN DRAIN LINE		
L-2	4" MAIN DRAIN LINE		
L-3	4" MAIN DRAIN LINE		
L-4	4" MAIN DRAIN LINE		
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L-99	4" MAIN DRAIN LINE		
L-100	4" MAIN DRAIN LINE		

ALL EQUIPMENT TO BE INSTALLED PER MANUFACTURERS SPECIFICATIONS.

1 POOL FIXTURES & PIPING PLAN
SP-2.1

SCALE: 1/4" = 1'-0"

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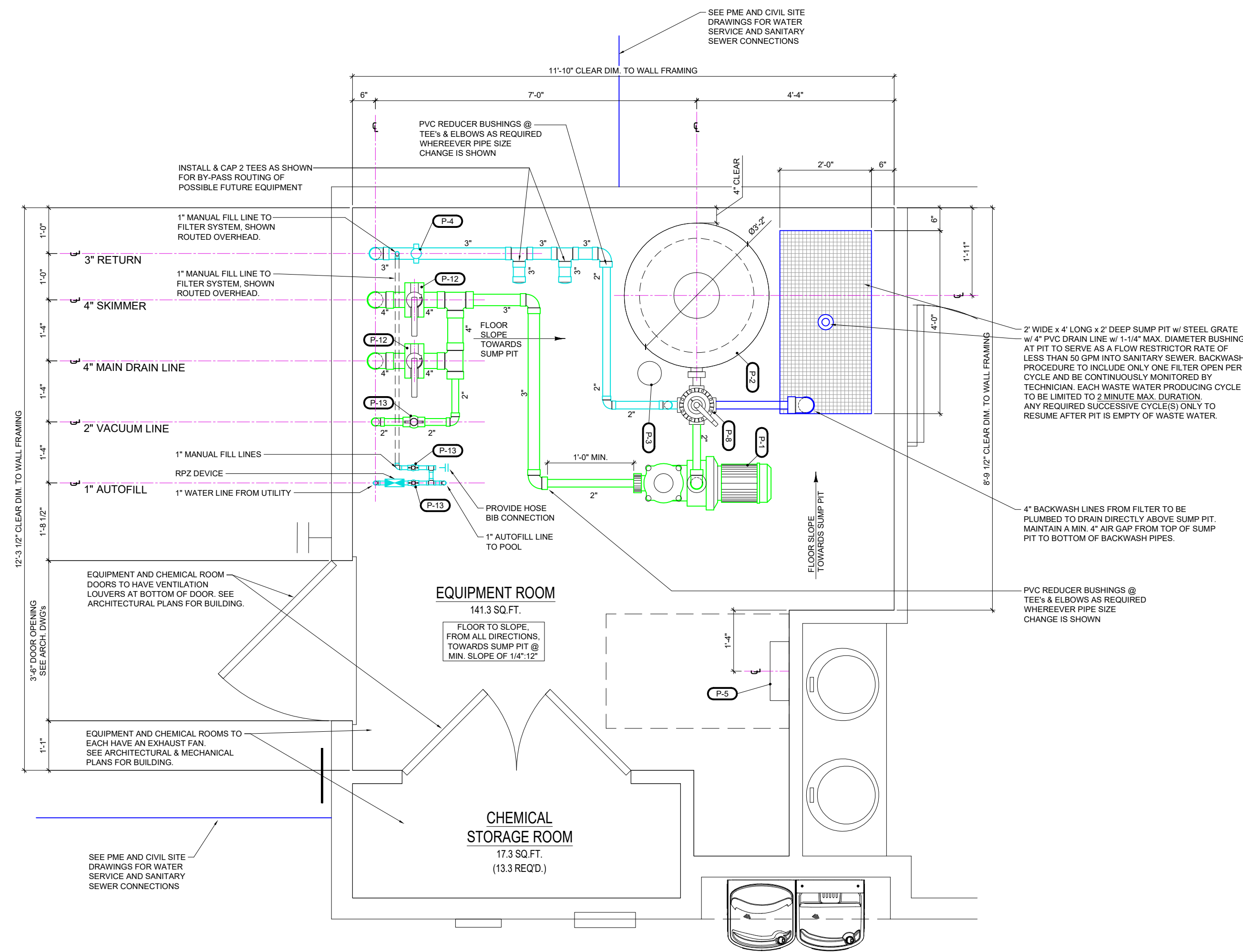
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Rev.	Date:	Description:

Title Sheet:
POOL FIXTURES & PIPING PLAN

Project:
Swimming Pool
Caitlin Crossing
Lillington, NC

Drawn by: M. Morgan
Issue Date: 3-22-2024
Project Number:
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SP-2.1

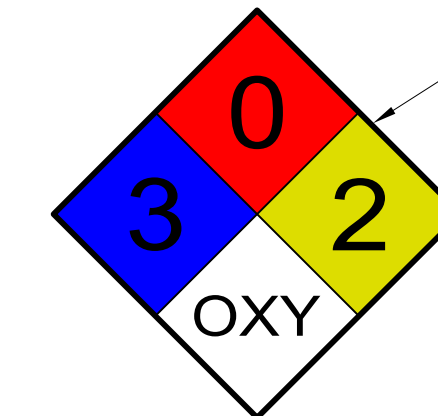


1 **PUMP ROOM PIPING PLAN**
SP-2.2

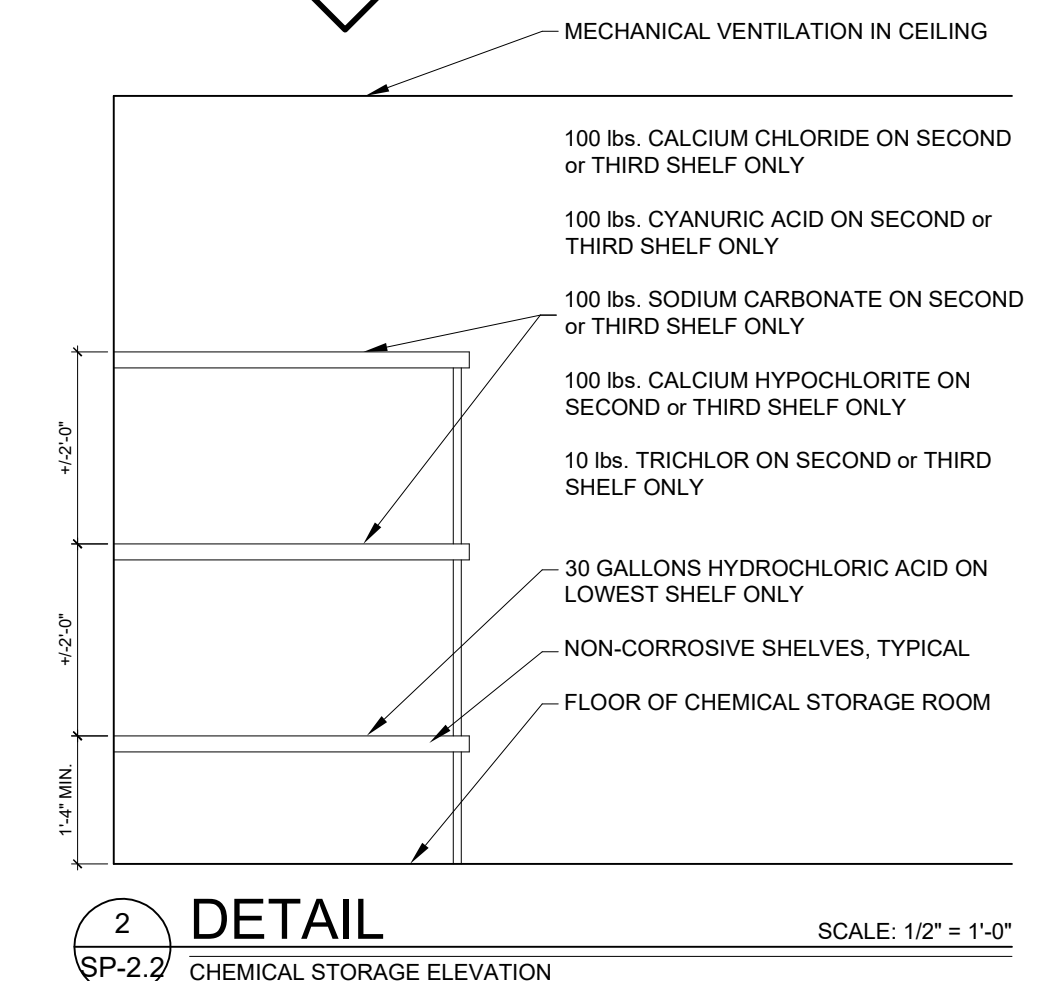
SCALE: 1/2" = 1'-0"

POOL EQUIPMENT SCHEDULE			
MARK	DESCRIPTION	MANUFACTURER	MODEL
P-1	MAIN POOL WATER PUMP - VARIABLE SPEED INTEGRATED STRAINER & BASKET w/ SPARE BASKET PROVIDED.	HAYWARD	TRISTAR VS 990 2.7 HP 1.230V 1PH
P-3	CHLORINE / BROMINE FEEDER, WITH FLOW INDICATOR, 10-1/4" DIA. x 40" HIGH	PENTAIR	300-20X
P-5	OMNILOGIC 4 RELAY BASE PANEL, SURFACE MOUNTED, 15.75" x 2.11" x 6"D	HAYWARD	HLBASE
P-7	AUTOFILL VALVE	POOLMSER	PM-101
P-9	EYEBALL BULKHEAD, 2" x 1-1/2" SLIP BODY, WITH EYEBALL INLET FITTING, 1-1/2" MPT, 3/4" ORIFICE	Custom Molded Products & PENTAIR	2524-200-000 & 540021
P-11	SAFETY VACUUM LOCK WALL FITTING FOR HOSE ATTACHMENT	AQUASTAR	API-201-0001
P-13	BALL VALVE SCH 40 PVC (see plan for sizes req'd.)	CHARLOTTE PIPE	XXXXX
R-1	12x12x1/8 FIBERGLASS SUMP DRAIN w/ 6" PORT, WITH 1/2" REVE OUTLET COVERS, ANTI-ENTRAPMENT	A.S.A. MFG. INC. AQUASTAR	FKK-50-812-18-6 1210101
R-15	SAFETY LIFE HOOK & 1/2" LONG ALUMINUM POLE, LOCATED ON SITE WITHIN FENCED AREA OF POOL	PENTAIR	R221028 & R191106
R-16	OSM Guard Approved Life Ring & 80' Long Rope	POOLSTYLE MAINTENANCE	361 & 374
R-17	DIAMOND BRITE, EXPOSED AGGREGATE POOL FINISH SLIP RESISTANT	SJM Inc. OR EQUAL	BLUE QUARTZ
R-2	STAIR RAIL, 60" MARINE GRADE ADA 3-BEND STAINLESS STEEL, RATED FOR SALTWATER	S.R. SMITH	3HR5ADA-MG
R-3	STAIR RAIL, 84" MARINE GRADE ADA 3-BEND STAINLESS STEEL, RATED FOR SALTWATER	S.R. SMITH	7HR4ADA-MG
R-4	POOL LADDER, 3 TREADS, STAINLESS STEEL, RATED FOR SALTWATER	S.R. SMITH	VLLS-103S-MG
L-1	UNIVERSAL COLOR LOGIC, 12V LED LIGHT, MOUNTED 4" MIN. BELOW WATER LINE	HAYWARD	LPCUS1110

ALL EQUIPMENT TO BE INSTALLED PER MANUFACTURERS SPECIFICATIONS.



HAZARDOUS MATERIAL SIGN TO BE POSTED ON EQUIPMENT ROOM AND CHEMICAL STORAGE ROOM WALLS



2 **DETAIL**
SP-2.2 CHEMICAL STORAGE ELEVATION

SCALE: 1/2" = 1'-0"



PE Seal

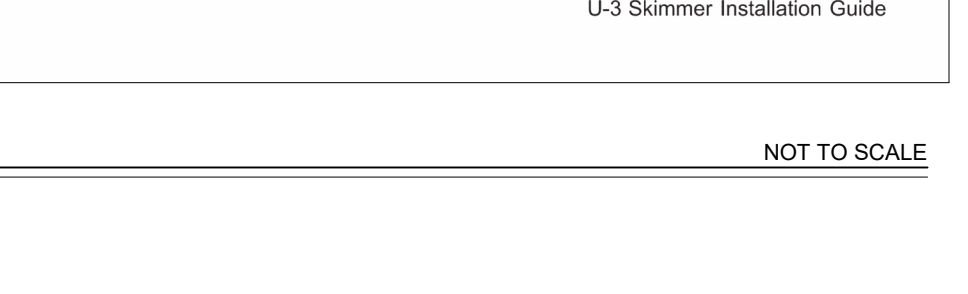
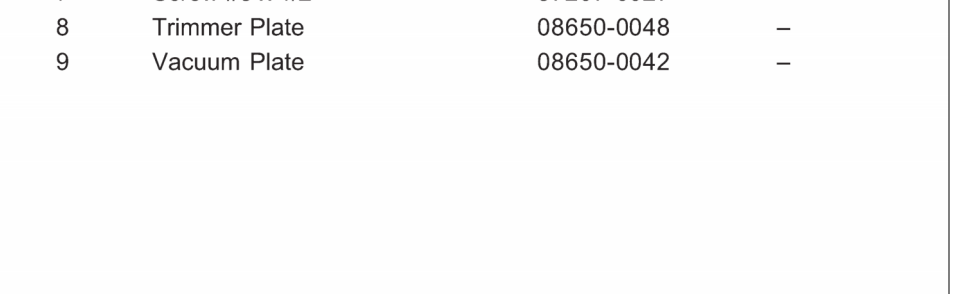
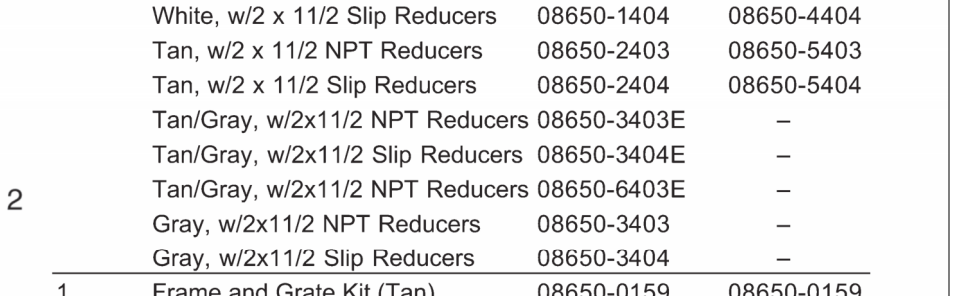
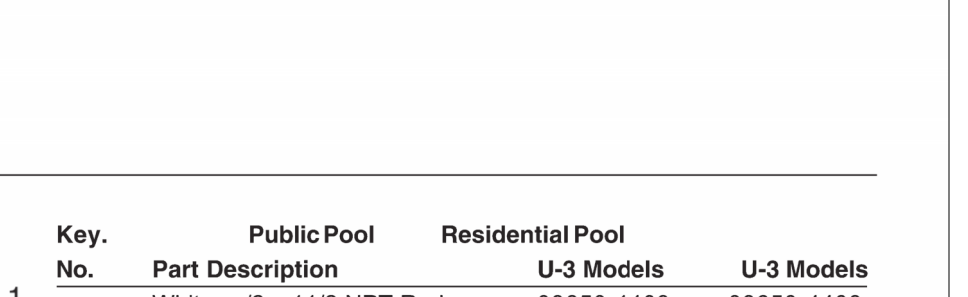
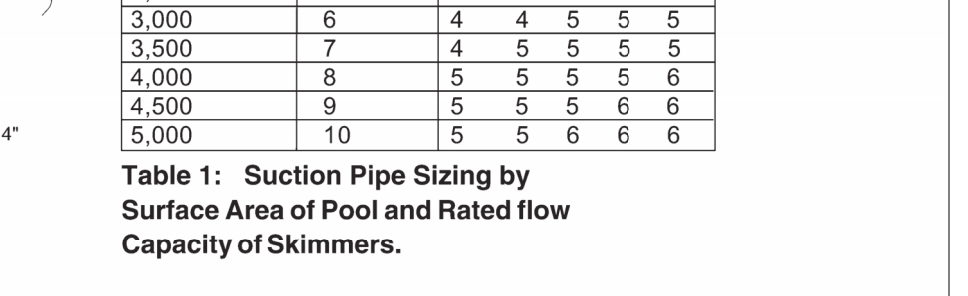
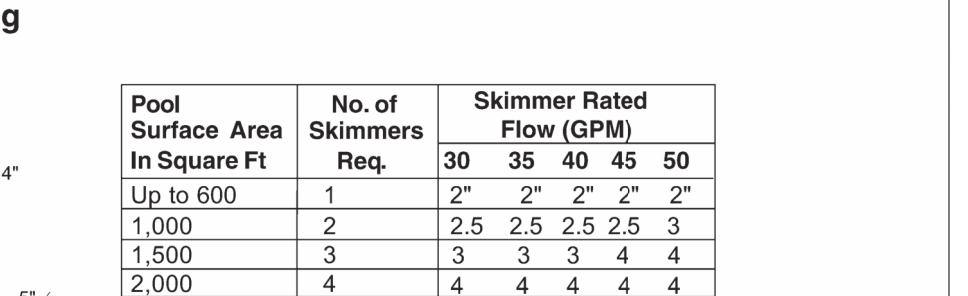
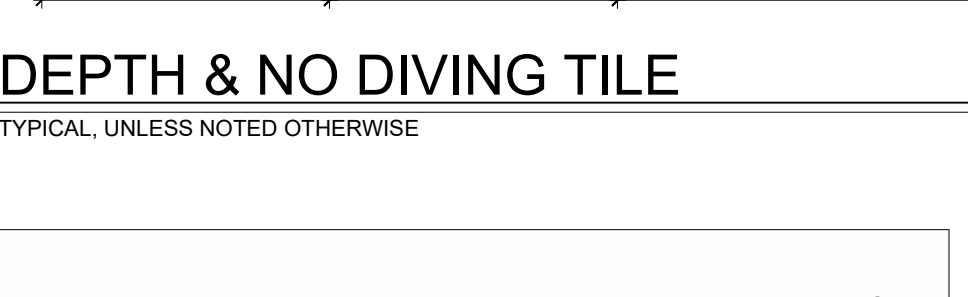
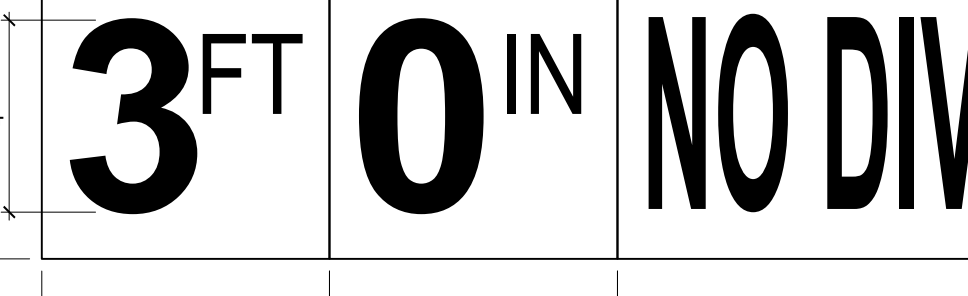
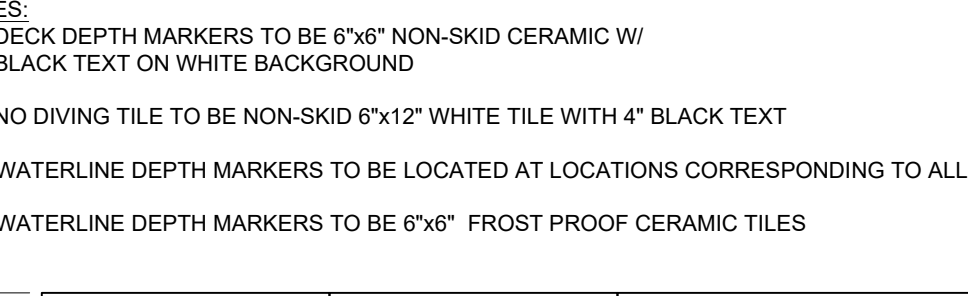
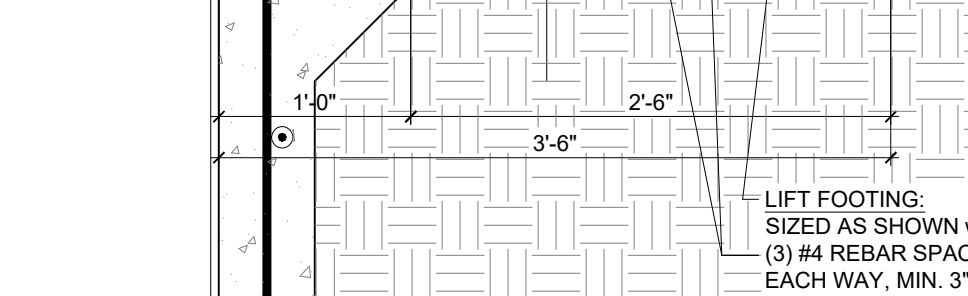
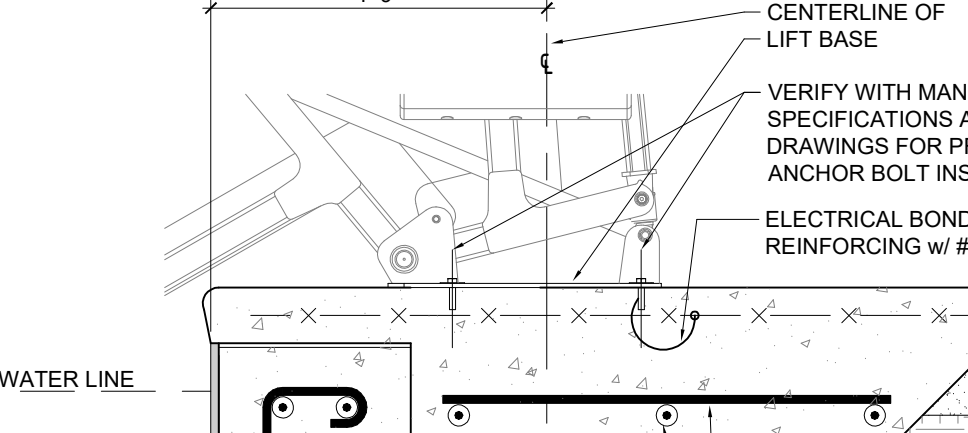
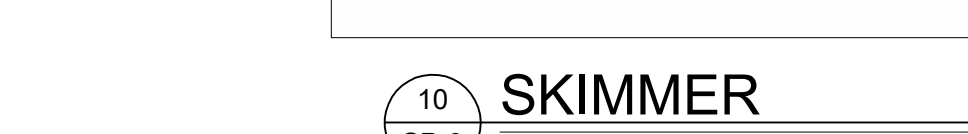
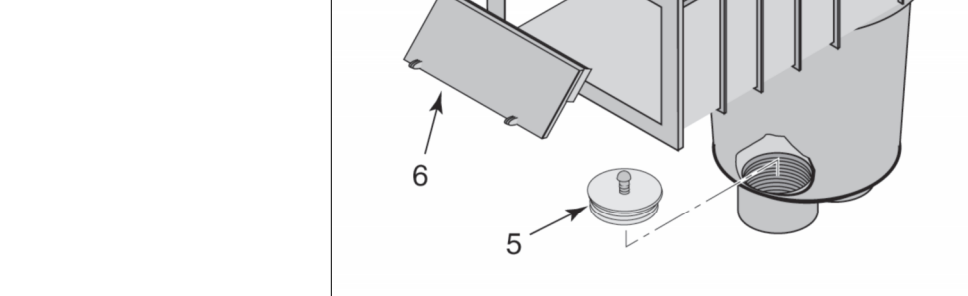
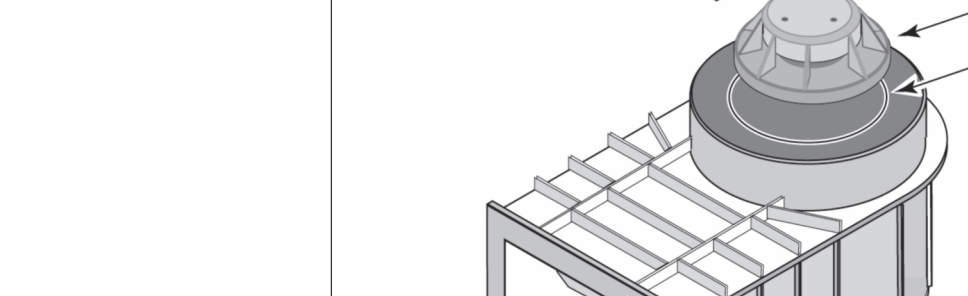
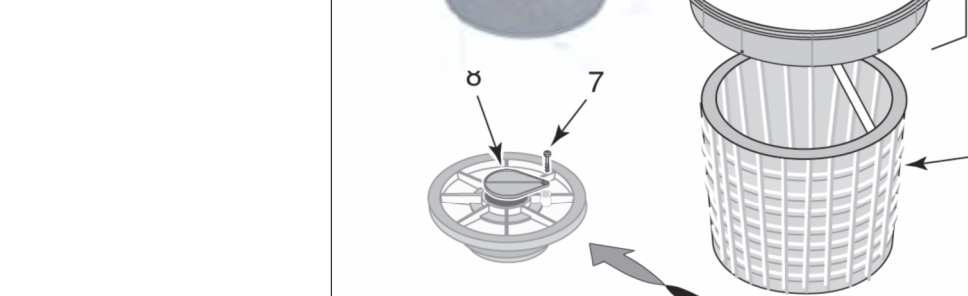
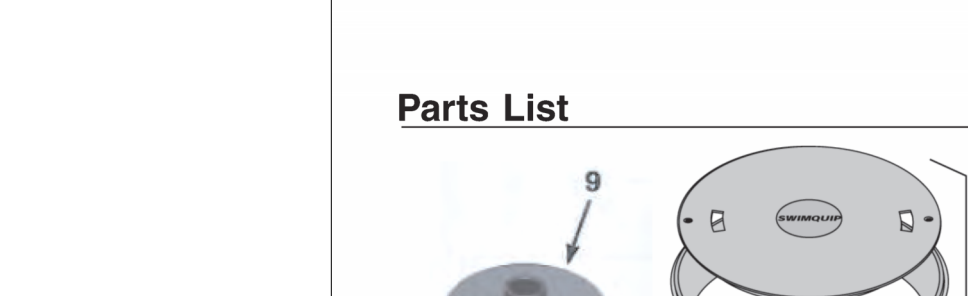
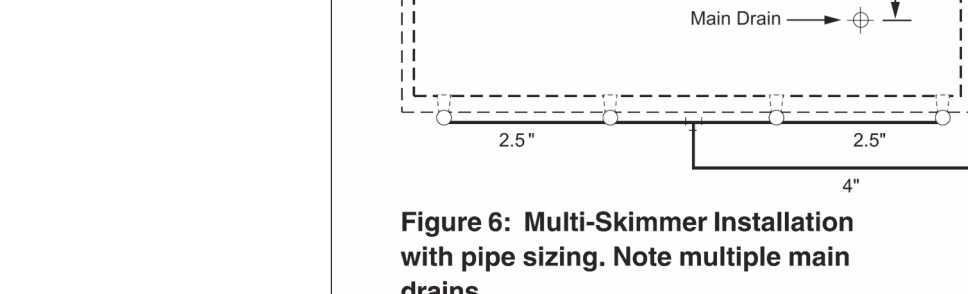
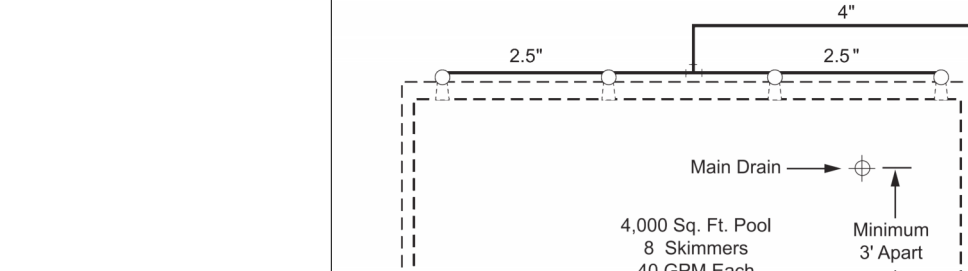
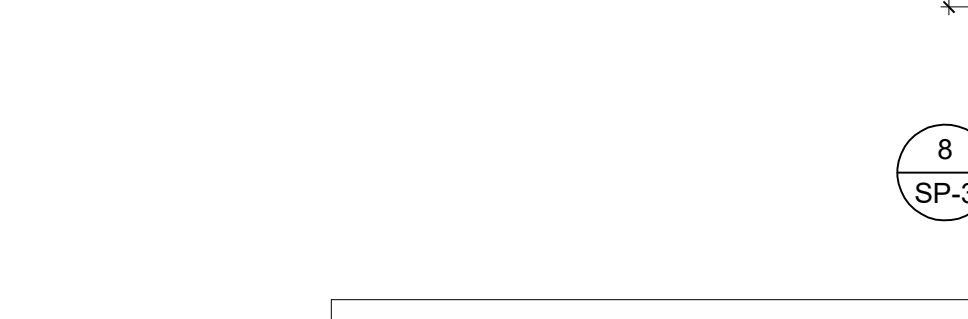
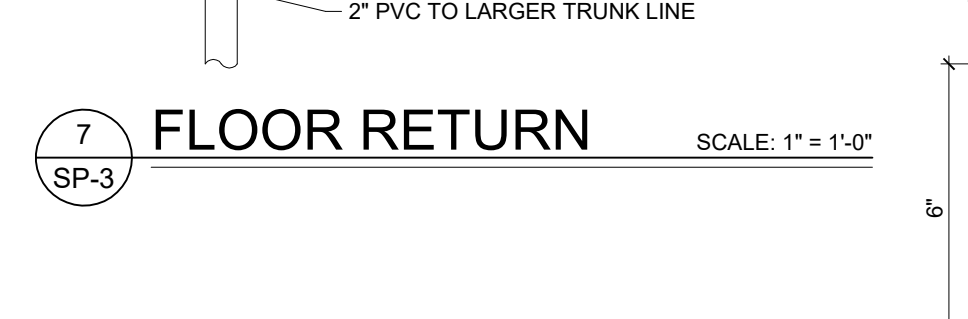
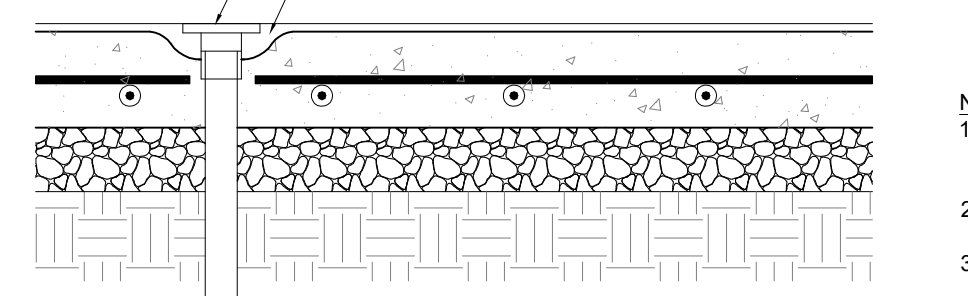
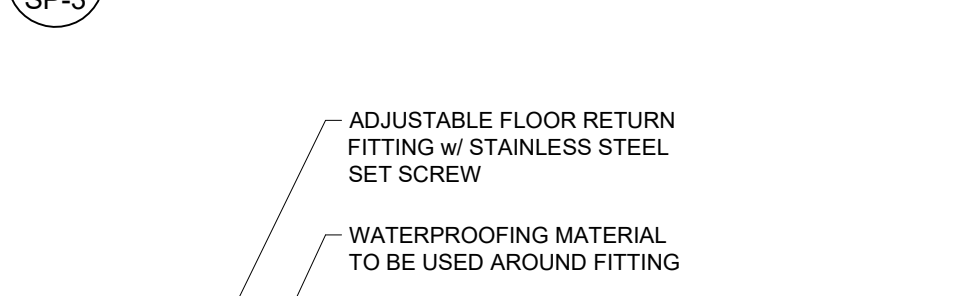
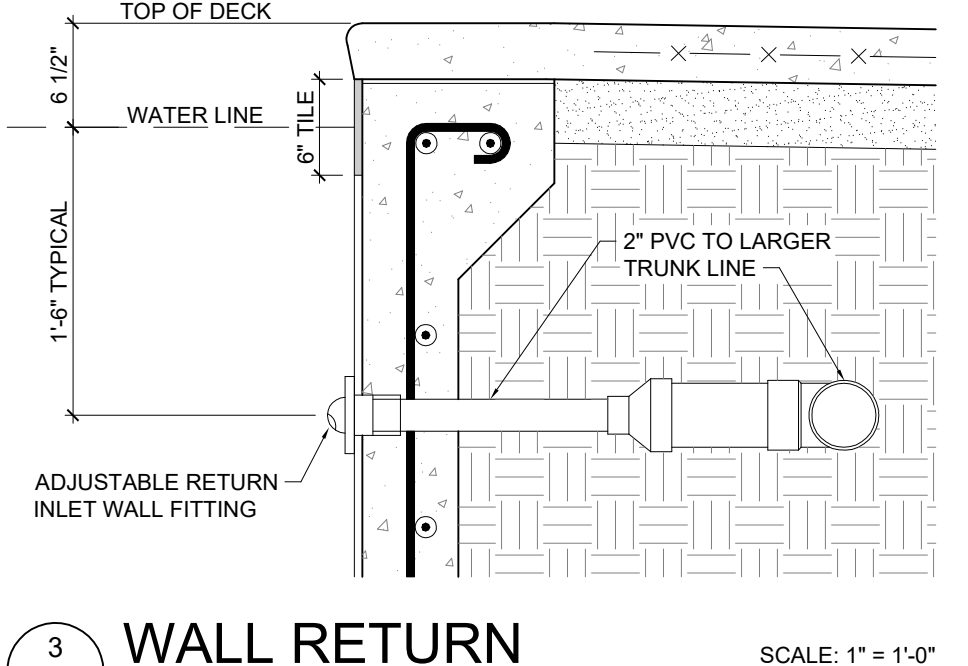
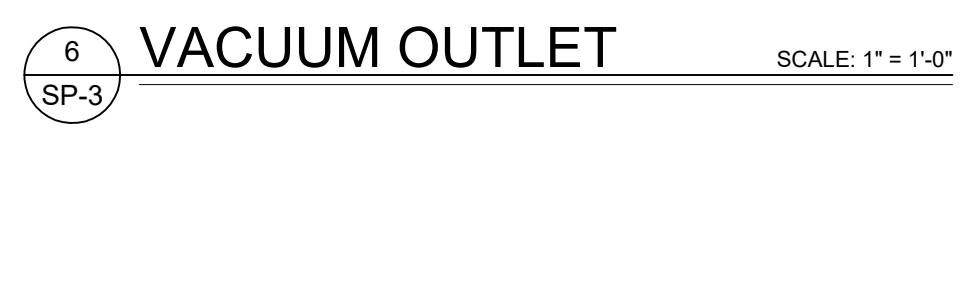
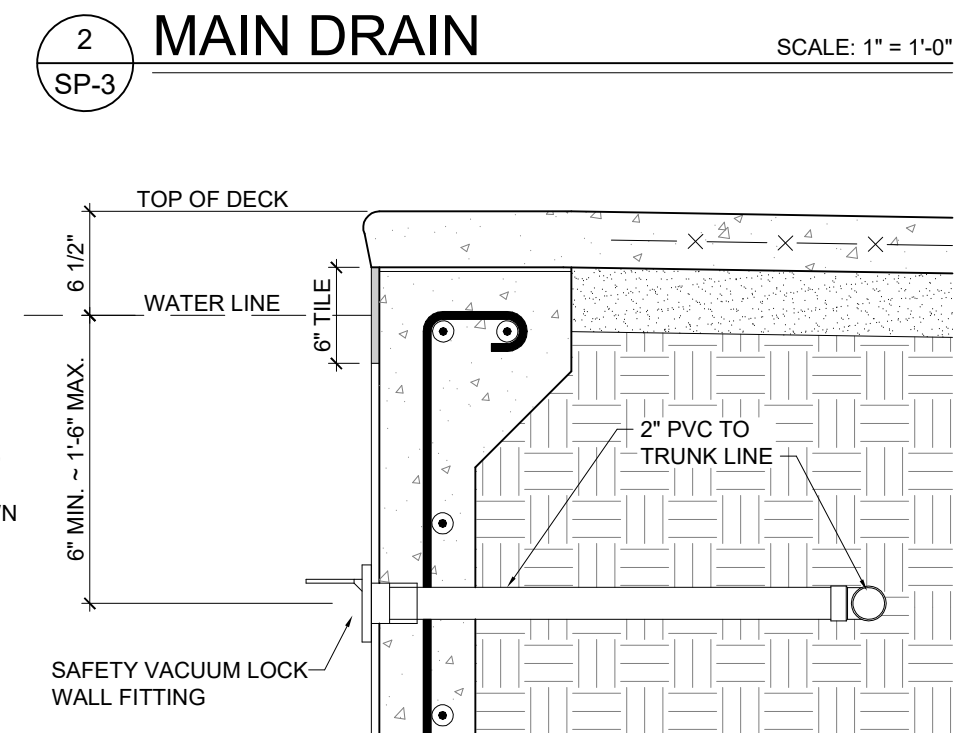
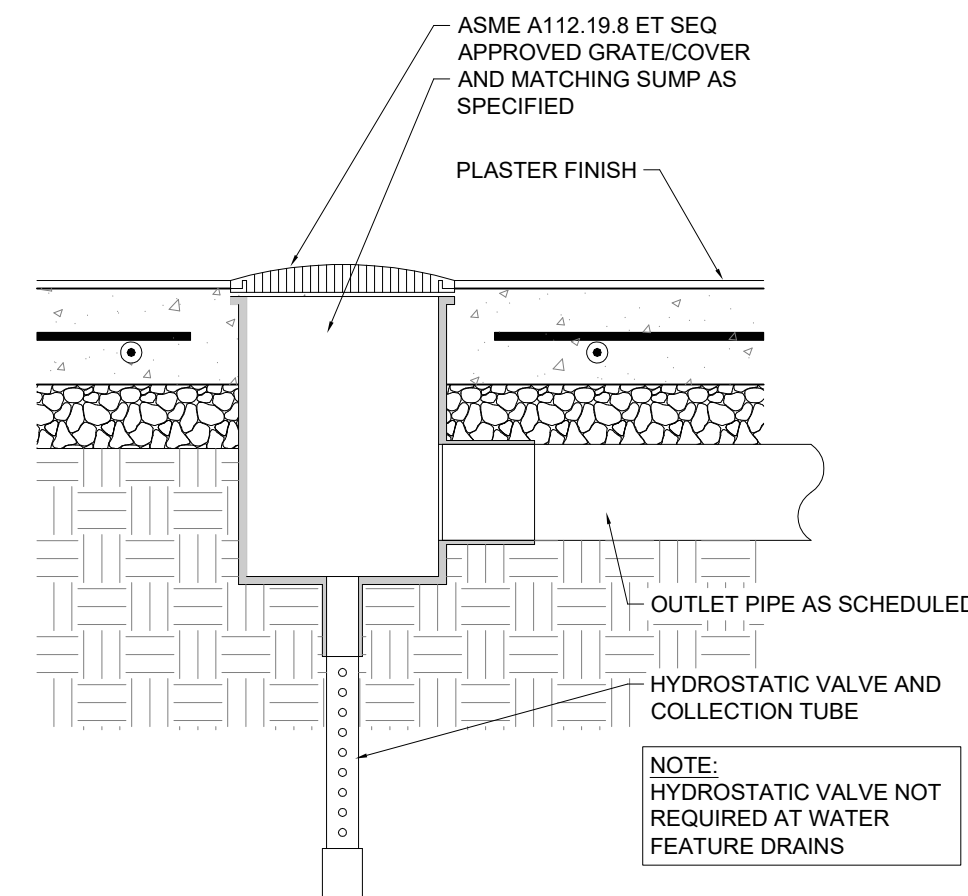
Rev. Description: Date:

Title Sheet: **PUMP ROOM PIPING PLAN**

Project: **Swimming Pool
Caitlin Crossing
Lillington, NC**

Drawn by: M. Morgan
Issue Date: 3-22-2024
Project Number:
Sheet: **SP-2.2**

General Contractor:
Raleigh Pools, LLC
Matthew Nuss, Project Manager
mobile (919) 610-6658
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1400 Smith Reno Road
Raleigh, NC 27603



POOL REINFORCING SCHEDULE					
POOL WATER DEPTH	≤ 4'-0"	≤ 6'-0"	≤ 7'-6"	≤ 9'-0"	≤ 10'-0"
WALLS					
REQ'D THICKNESS	7"	8"	9"	9"	9"
REBAR HORZ. & VERT.	#4's @ 9" O.C. EACH WAY	#4's @ 9" O.C. EACH WAY	#5's @ 9" O.C. EACH WAY	#6's @ 9" O.C. EACH WAY	#7's @ 9" O.C. EACH WAY
FLOORS					
REQ'D THICKNESS	7"	7"	7"	8"	8"
REBAR	#4's @ 9" O.C. EACH WAY	#4's @ 9" O.C. EACH WAY	#4's @ 9" O.C. EACH WAY	#4's @ 9" O.C. EACH WAY	#4's @ 9" O.C. EACH WAY

- GENERAL STRUCTURAL NOTES:**
- ALL CONSTRUCTION MATERIALS AND METHODS SHALL CONFORM TO THE STATEWIDE BUILDING CODE AND TO THE SPECIFICATIONS AND STANDARDS OF THE LOCAL BUILDING INSPECTIONS OFFICE.
 - CONTRACTOR SHALL COORDINATE AND VERIFY ALL DIMENSIONS PRIOR TO BEGINNING WORK, WITH ANY DISCREPANCY BROUGHT TO THE ATTENTION OF THE DESIGNER.
 - CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF SUBGRADE CONDITIONS.
 - ASSUMED MINIMUM SOIL BEARING CAPACITY 2000 P.S.F.
 - ALL "POOL WALKING DECK" CONCRETE TO BE NORMAL WEIGHT CONCRETE WITH 4000 P.S.I. MINIMUM @ 28 DAY STRENGTH.
 - ALL "POOL SHELL" CONCRETE TO BE SHOTCRETE WITH 4000 P.S.I. MINIMUM @ 28 DAY STRENGTH, WITH NON-SLIP PLASTER FINISH COAT.
 - WELDED WIRE FABRIC TO CONFORM TO ASTM A-185 MATERIAL AND HAVE 12" LAPS.
 - ALL DECKS TO SLOPE AWAY FROM THE POOL AND TOWARDS METHOD OF DRAINAGE AT A SLOPE OF 1/4" TO 1/2" RISE PER 12" RUN.

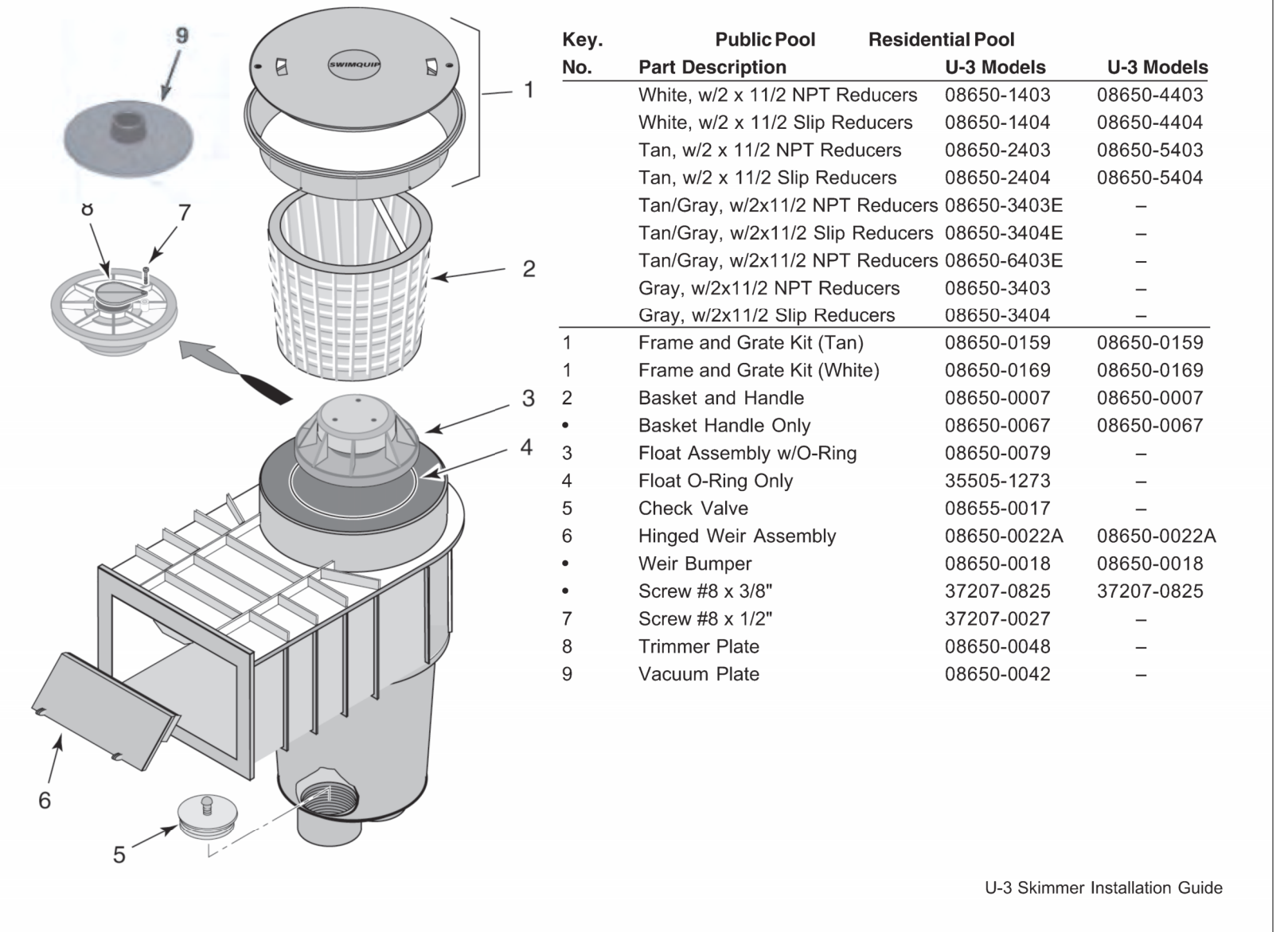
REINFORCING STEEL
 REINFORCING BARS SHALL BE DEFORMED BILLET STEEL BARS CONFORMING TO ASTM A - 615 SPECIFICATIONS. MINIMUM YIELD STRENGTH (FY) REINFORCING BARS 40,000 PSI
 UNLESS OTHERWISE DETAILED, PROTECTIVE CONCRETE COVER FOR REINFORCING STEEL SHALL NOT BE LESS THAN:
 (A) CONCRETE CAST AGAINST AND PERMANENTLY EXPOSED TO EARTH 3".
 (B) CONCRETE EXPOSED TO EARTH OR WEATHER #5 & SMALLER 1-1/2", #6 & LARGER 2".
 MINIMUM TENSION LAP SPLICE LENGTHS (F'c = 3,000PSI)
 #3 = 18"
 #4 = 22"
 #5 = 27"
 #6 = 32"
 #8 = 42"
 ALL REINFORCING INTERSECTIONS TO BE JOINED WITH WIRE TIES.

Multi-Skimmer Installation and Pipe Sizing

Pool Surface Area In Square Ft	No. of Skimmers Req.	Skimmer Rated Flow (GPM)				
		30	35	40	45	50
Up to 600	1	2"	2"	2"	2"	2"
1,000	2	2.5	2.5	2.5	2.5	3
1,500	3	3	3	3	4	4
2,000	4	4	4	4	4	4
2,500	5	4	4	4	4	5
3,000	6	4	4	5	5	5
3,500	7	4	5	5	5	5
4,000	8	5	5	5	6	6
4,500	9	5	5	5	6	6
5,000	10	5	5	6	6	6

Table 1: Suction Pipe Sizing by Surface Area of Pool and Rated flow Capacity of Skimmers.

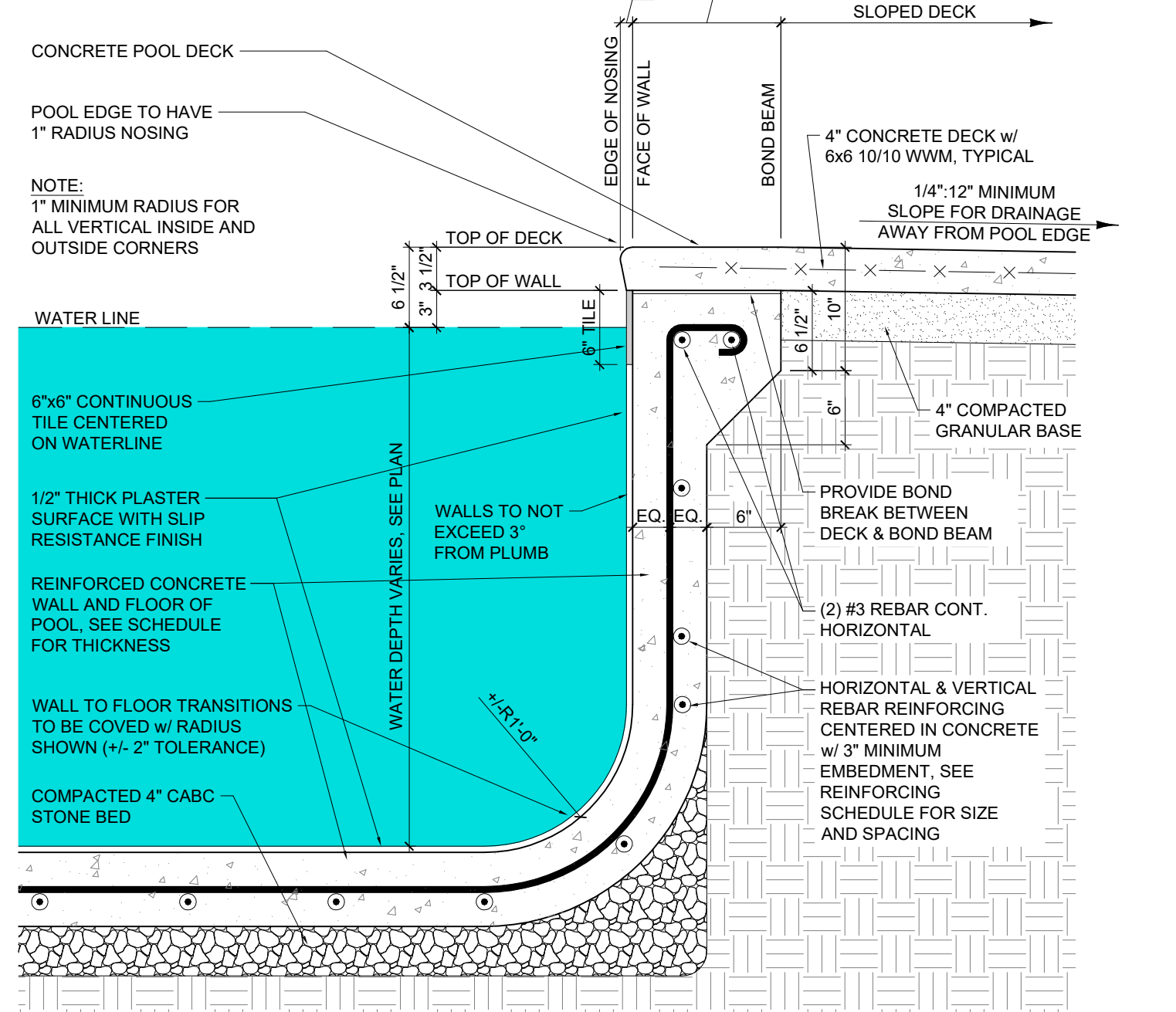
Figure 6: Multi-Skimmer Installation with pipe sizing. Note multiple main drains.



U-3 Skimmer Installation Guide

NOT TO SCALE

ALL WALKING SURFACES OF POOL TO HAVE SLIP RESISTANT FINISH, DIAMOND BRITE POOL FINISH, BY SGM, Inc. SEE SPEC SHEET SP-7 DETAIL FOR "P-17" FOR MORE INFORMATION.

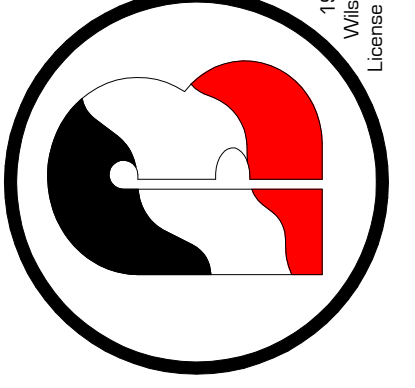


SCALE: 1" = 1'-0"

TYPICAL, UNLESS NOTED OTHERWISE

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 Raleigh, NC 27603

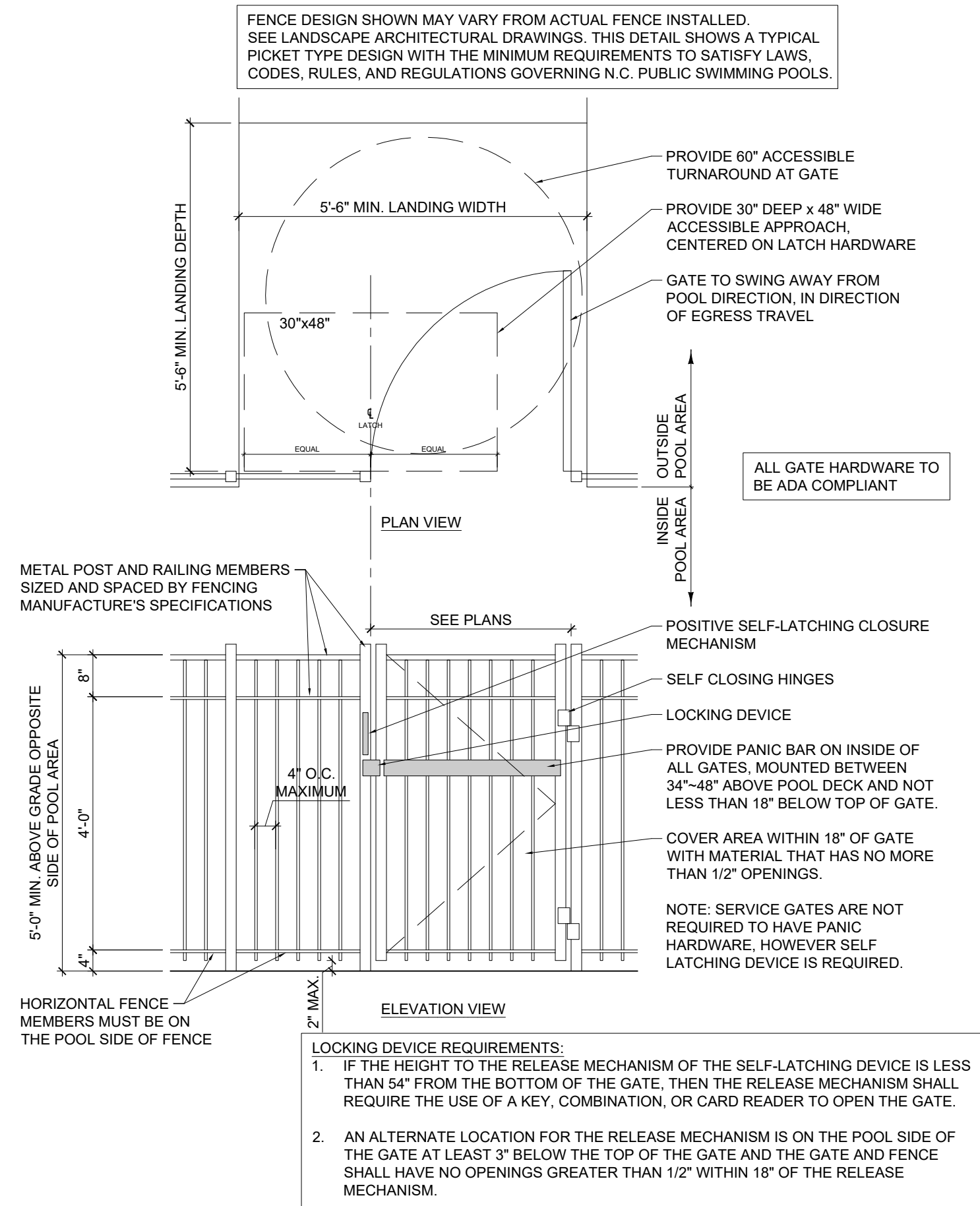
BARTLETT
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Rev.	Date:	Description:

Title Sheet:
DETAILS & SECTIONS
 Project:
Swimming Pool
 Caitlin Crossing
 Lillington, NC

Drawn by: M. Morgan
 Issue Date: 3-22-2024
 Project Number:
 Sheet:
SP-3



3 DETAIL
SP-4 PERIMETER FENCE & GATE
SCALE: 1/2" = 1'-0"



4 SIGNAGE
SP-4 POSTED AS REQUIRED WHEN THERE IS NO LIFEGUARD IS ON DUTY. EXAMPLE SIGN, ACTUAL SIGN MAY VARY.



5 SIGNAGE
SP-4 EXAMPLE SIGN, ACTUAL SIGN MAY VARY.



6 SIGNAGE
SP-4 POSTED AS REQUIRED NEAR SHOWERS OR RESTROOM.

- GENERAL PLUMBING NOTES:**
1. WATER SUPPLY SERVING THE SWIMMING POOL AND ALL PLUMBING FIXTURES INCLUDING DRINKING FOUNTAINS, LAVATORIES, TOILETS, AND SHOWERS, IS AN APPROVED PUBLIC SYSTEM IN ACCORDANCE WITH 15A NCAC 18C BY PLUMBING CONTRACTOR.
 2. THE WATER DISTRIBUTION SYSTEM SERVING THE SWIMMING POOL AND AUXILIARY FACILITIES WILL BE PROTECTED AGAINST BACKFLOW WATER INTRODUCED INTO THE POOL THROUGH A REDUCED PRESSURE PRINCIPLE BACKFLOW PREVENTER MODEL 009M3 QT (OR EQUAL)
 3. SUPPLIED AND INSTALLED BY PLUMBING CONTRACTOR
 4. SEWAGE WILL BE DISPOSED OF IN AN APPROVED PUBLIC SEWER SYSTEM BY PLUMBING CONTRACTOR.
 5. THERE WILL BE NO DIRECT PHYSICAL CONNECTION BETWEEN THE SEWER SYSTEM AND ANY DRAIN FROM THE SWIMMING POOL OR CIRCULATION SYSTEM. OVERFLOW FROM THE SWIMMING POOL, AND DISCHARGES FROM THE CIRCULATION SYSTEM, WILL BE DISCHARGED THROUGH A SUITABLE AIR GAP SO AS TO PRECLUDE THE POSSIBILITY OF BACKFLOW INTO THE SWIMMING POOL OR THE SWIMMING POOL PIPING SYSTEM.
 6. HYDROSTATIC RELIEF VALVE TO BE PROVIDED AT THE DEEPEST POINT OF THE POOL
 7. SWIMMING POOL PIPING IS DESIGNED TO REDUCE FRICTION LOSSES TO A MINIMUM AND CARRY THE REQUIRED QUANTITY OF WATER AT A MAXIMUM VELOCITY NOT TO EXCEED 6 FEET PER SECOND FOR SUCTION PIPING AND 10 FEET PER SECOND FOR DISCHARGE PIPING
 8. ALL SWIMMING POOL PLUMBING PIPING SHALL BE NSF APPROVED SCHEDULE 40 PRESSURE RATED RIGID PVC.
 9. ALL PIPE TO BE PRESSURE TESTED PRIOR TO CONCRETE PLACEMENT
 10. FLEXIBLE PIPING WILL NOT BE USED
 11. ALL EXPOSED PLUMBING AND VALVES WILL BE LABELED ACCORDING TO USE

- POOL RULES**
1. NO RUNNING.
 2. NO BOISTEROUS OR ROUGH PLAY.
 3. NO DIVING ALLOWED IN AREAS OF THE POOL LESS THAN 5 FEET DEEP OR IN POOLS NOT APPROVED FOR DIVING.
 4. CHILDREN SHOULD NOT USE THE SWIMMING POOL WITHOUT ADULT SUPERVISION.
 5. ADULTS SHOULD NOT SWIM ALONE.
 6. NO PERSON UNDER THE INFLUENCE OF ALCOHOL OR DRUGS SHOULD USE THE POOL.
 7. NO PERSON WITH SKIN, EYE, EAR OR NASAL INFECTIONS ALLOWED IN THE POOL.
 8. NO PERSONS WITH COMMUNICABLE DISEASE ALLOWED IN THE POOL.
 9. NO ANIMALS OR PETS ALLOWED IN THE POOL OR ON THE DECK.
 10. NO GLASS ALLOWED IN THE POOL OR ON THE DECK.
 11. ALL PERSONS USING POOL DO SO AT THEIR OWN RISK. OWNERS AND MANAGEMENT ARE NOT RESPONSIBLE FOR ACCIDENTS OR INJURIES.
 12. POOL IS FOR PRIVATE USE. MEMBERS AND GUESTS ONLY.
 13. MANAGEMENT RESERVES THE RIGHT TO DENY USE OF THE POOL TO ANYONE AT ANY TIME.
 14. THIS POOL IS OPEN FROM A.M. TO P.M.
 15. THE MAXIMUM NUMBER OF SWIMMERS ALLOWED IN THE POOL IS
 16. A FIRST AID KIT IS LOCATED
 17. EMERGENCY TELEPHONE (OR OTHER NOTIFICATION DEVICE) IS LOCATED

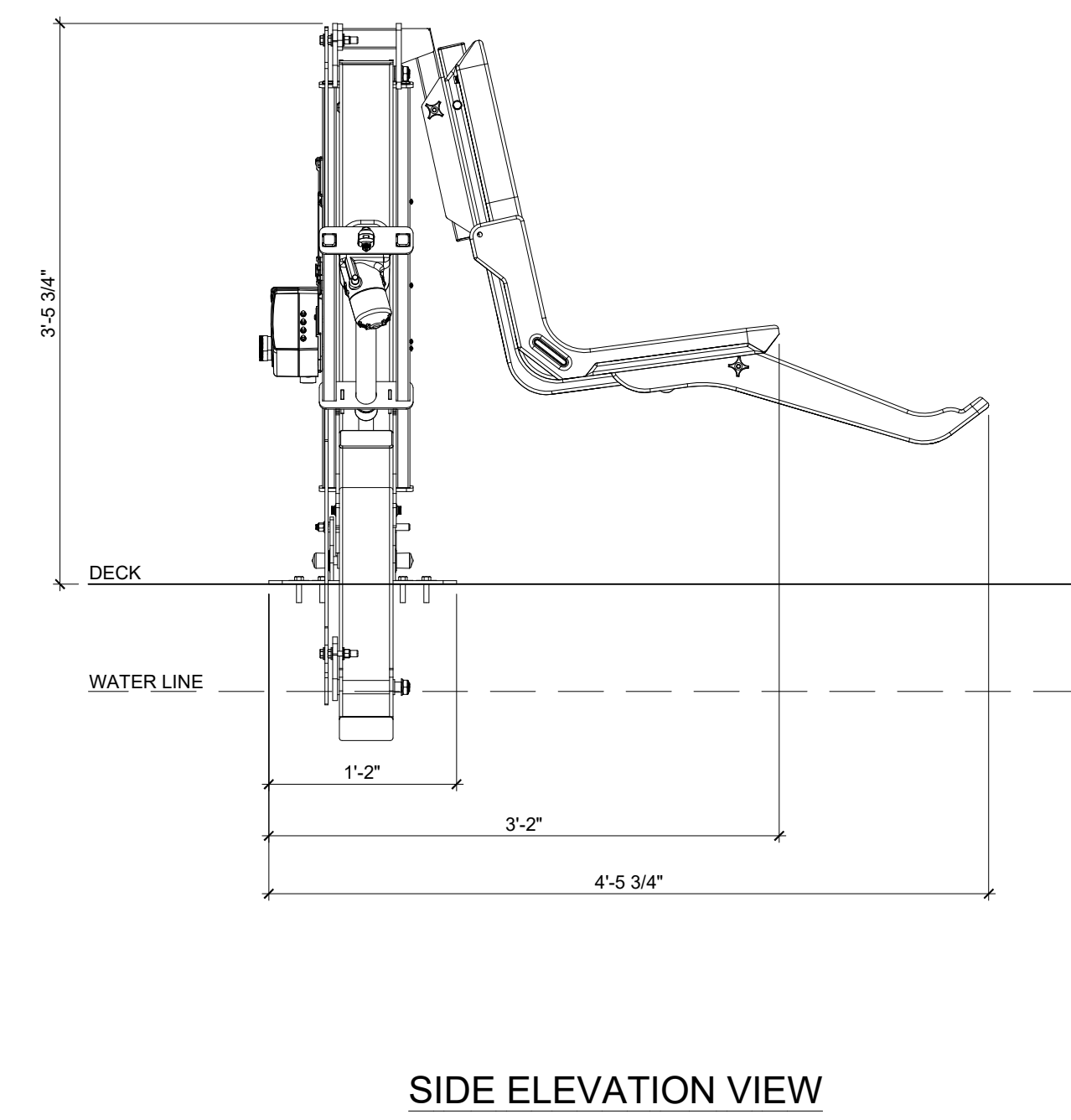
7 SIGNAGE
SP-4 POSTED AT ALL BATHER POOL ENTRANCES. EXAMPLE SIGN, ACTUAL SIGN MAY VARY.

- POOL SIGNAGE NOTES:**
1. NON-SKID NO DIVING AND DEPTH MARKER TILES WILL BE LOCATED AT THE DECK NO GREATER THAN 25" ON CENTER AS MEASURED AT THE PERIMETER OF THE POOL
 2. FROST PROOF DEPTH MARKER TILE WILL BE LOCATED AT THE WATERLINE AT EACH DECK DEPTH MARKER LOCATION
 3. ALL SIGNAGE REQUIRED TO MEET 15A NCAC 18A, AND ANY CITY AND/OR COUNTY CODES WILL BE PROVIDED.
 4. COLORS CHOSEN FOR TEXT TO BE OF HIGH CONTRAST WITH BACKGROUND
 5. SWIMMING POOLS THAT DO NOT HAVE AT LEAST ONE LIFEGUARD ON DUTY, SHALL HAVE A SIGN POSTED WITH LEGIBLE LETTERS OF AT LEAST FOUR INCHES IN HEIGHT STATING: "WARNING-NO LIFEGUARD ON DUTY". SEE DETAIL "4/SP-4".
 6. WADING POOLS THAT DO NOT HAVE AT LEAST ONE LIFEGUARD ON DUTY INSIDE THE WADING POOL ENCLOSURE SHALL HAVE A SIGN SHALL POSTED WITH LEGIBLE LETTERS OF AT LEAST FOUR INCHES IN HEIGHT STATING: "WARNING-NO LIFEGUARD ON DUTY". SEE DETAIL "4/SP-4".
 7. ALL BATHER ENTRANCES SHALL HAVE SIGNS POSTED WITH A MINIMUM LETTER SIZE OF ONE INCH STATING: "CHILDREN SHOULD NOT USE THE SWIMMING POOL WITHOUT ADULT SUPERVISION", AND: "ADULTS SHOULD NOT SWIM ALONE". SEE DETAIL "7/SP-4".
 8. ALL SIGNS SHALL BE MOUNTED PERMANENTLY.

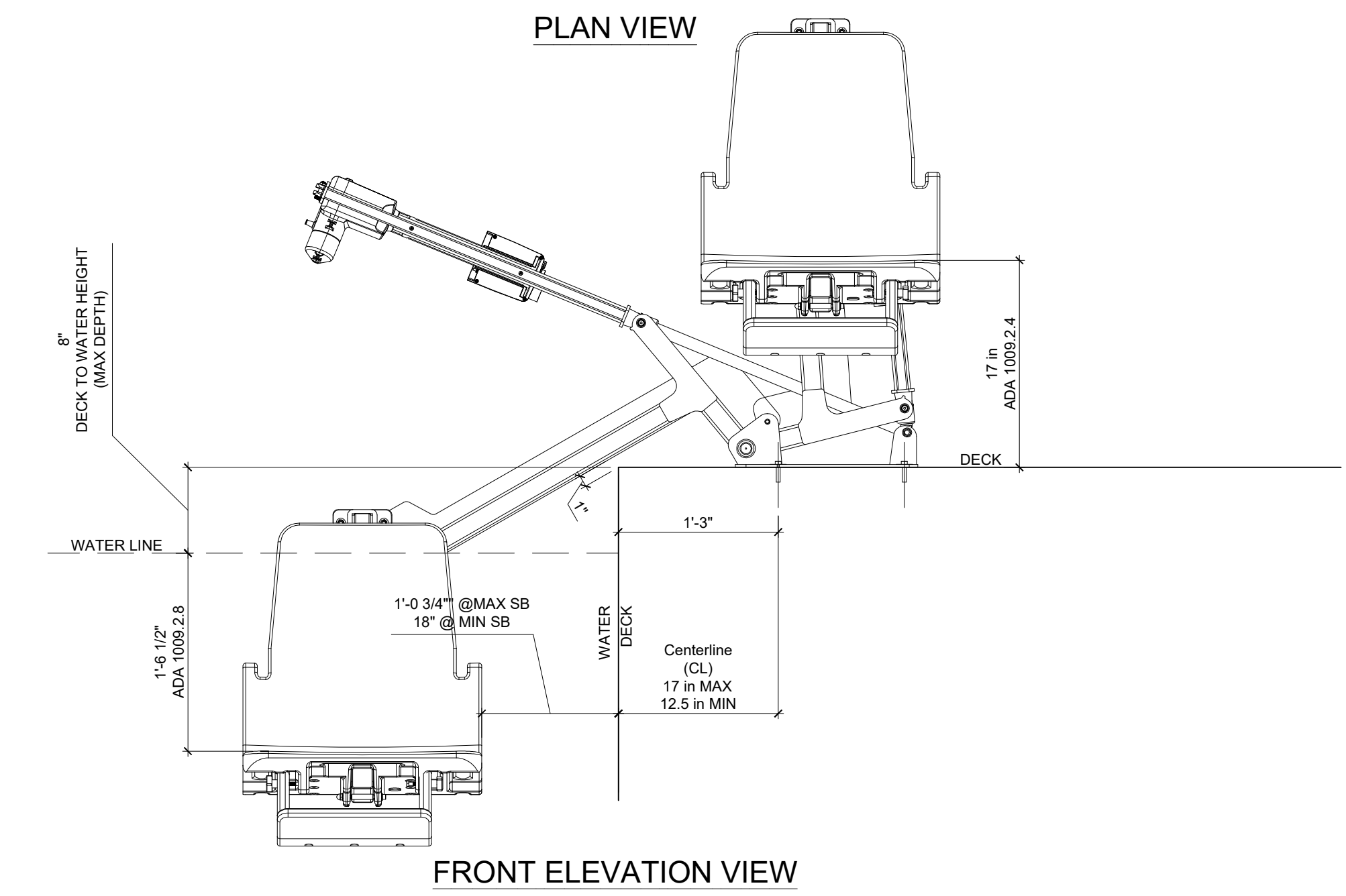
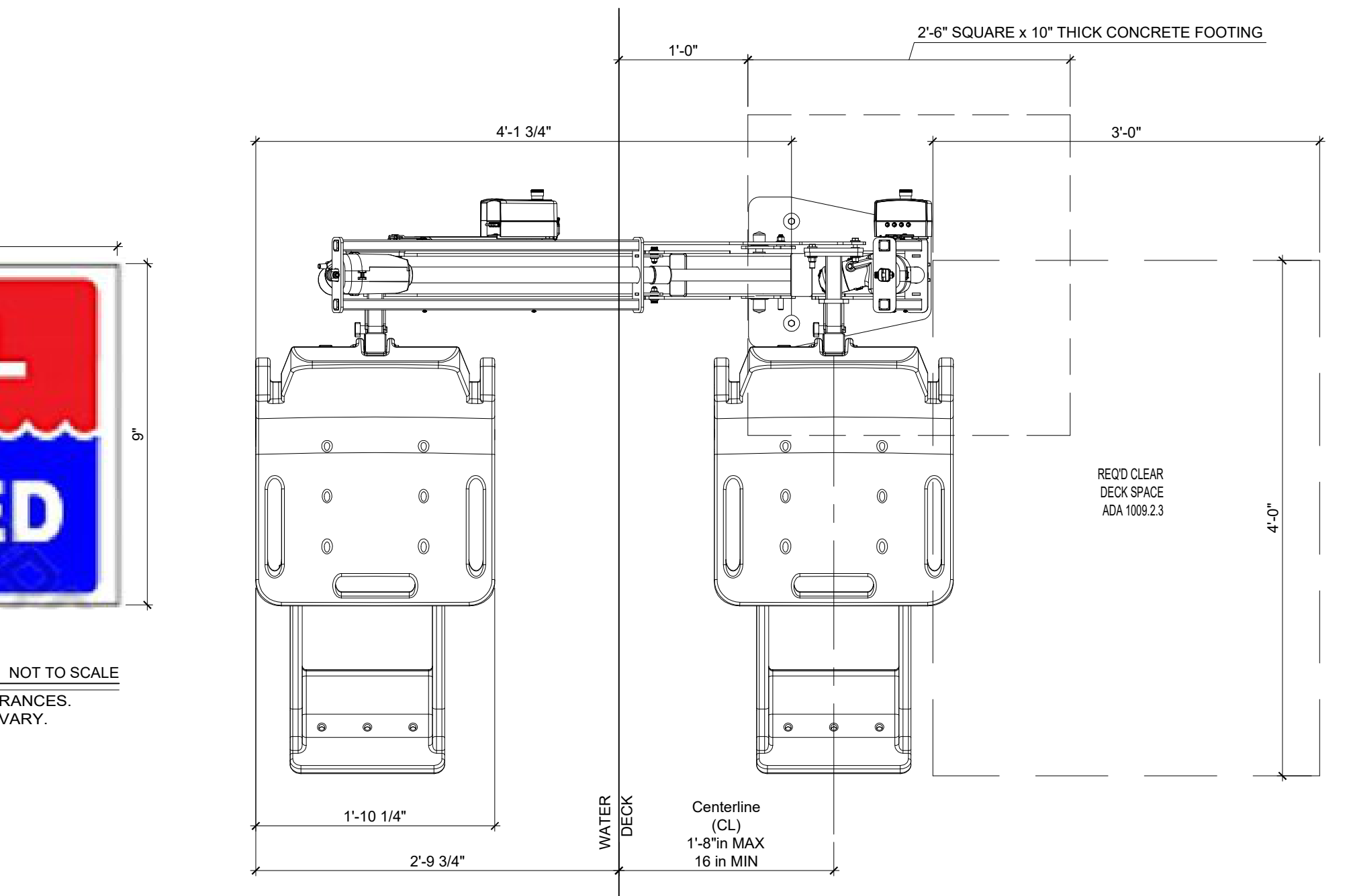
- BARRIER NOTES:**
1. GROUND LEVEL DOORS AND WINDOW OPENINGS FROM OCCUPIED BUILDINGS TO INSIDE THE POOL ENCLOSURE SHALL BE SELF-CLOSING OR CHILD PROTECTED BY MEANS OF A BARRIER OR AUDIBLE ALARM.
 2. ALL ACCESS GATES SHALL OPEN AWAY FROM THE POOL. RELEASE ON THE LATCH OF THE LATCH ON THE SELF CLOSING LATCH SHALL BE ACTIVATED:
 - a. AT A HEIGHT NO LESS THAN 54 INCHES ABOVE GRADE FOR WIRE MESH ACCESS GATES AND AT A HEIGHT NO LESS THAN 54 INCHES ABOVE THE HORIZONTAL BOTTOM RAIL OF A PICKET/ORNAMENTAL ACCESS GATE OR
 - b. ON THE POOL SIDE OF THE GATE AT A DISTANCE OF NO LESS THAN THREE INCHES BELOW THE TOP OF THE GATE PROVIDED.
 - c. THERE SHALL BE NO OPENING GREATER THAN 1/2" WITHIN 18 INCHES OF WHERE THE LATCH RELEASE IS ACTIVATED WHEN THE GATE IS CLOSED.

- CHEMICAL STORAGE ROOM & CHEMICAL ROOM NOTES:**
1. THE CHEMICAL STORAGE ROOM AND EQUIPMENT ROOMS SHALL BE DRY WEATHERPROOF STRUCTURES WITH A MINIMUM CEILING HEIGHT OF 7'.
 2. THE CHEMICAL STORAGE ROOM SHALL HOUSE A DRY SHELVING AREA MINIMUM OF 6' ABOVE THE FLOOR.
 3. ADEQUATE LIGHTING SHALL BE PROVIDED IN BOTH THE CHEMICAL STORAGE AND EQUIPMENT ROOMS SO THAT ALL VALVES, PIPES, EQUIPMENT, AND SHELVING ARE WELL LIT.
 4. CONTINUOUS FORCED VENTILATION WHICH DIRECTS THE DISCHARGE AIR AWAY FROM THE POOL IS REQUIRED. THE SWITCH FOR THE FORCED VENTILATION SHALL NOT BE WIRED INTO THE LIGHT SWITCH AND SHALL BE WIRED FOR CONTINUOUS OPERATION.
 5. THE DOOR TO THE EQUIPMENT ROOM SHALL BE PROVIDED WITH A DOOR WITH A PERMANENT LOCK WHICH MUST BE KEPT LOCKED WHEN NOT IN USE BY THE POOL OPERATOR.
 6. ALL VALVES, AND CONTROL DEVICES SHALL BE CLEARLY LABELED AND VISIBLE.
 7. A MINIMUM OF 3' OF CLEAR WALKING SPACE SHALL BE PROVIDED TO ALLOW ACCESS TO ALL EQUIPMENT.
 8. THE EQUIPMENT ROOM FLOOR SHALL SLOPE TOWARDS THE FLOOR DRAIN / BACKWASH PIT A MINIMUM OF 1/4" PER 1'.
 9. A HOSE BIB WITH APPROVED BACKFLOW PREVENTION DEVICE WILL BE PROVIDED WITHIN THE EQUIPMENT ROOM.

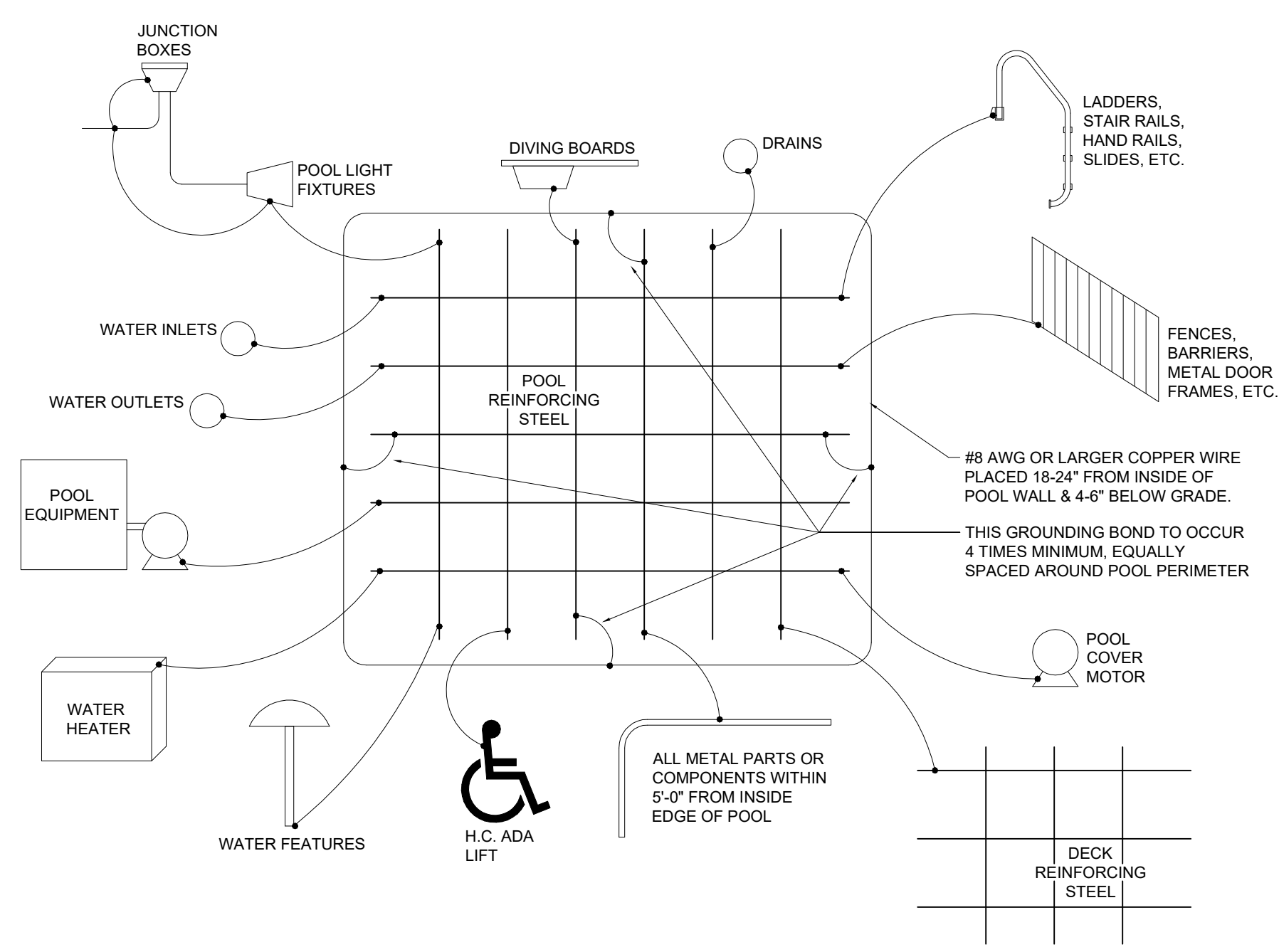
- POOL SAFETY NOTES:**
1. SAFETY EQUIPMENT WILL BE STORED IN A LOCATION CLOSE TO THE POOL WITH EASY ACCESS FOR PATRONS AND STAFF INSIDE THE POOL BARRIER.
 2. PROVIDE AN EMERGENCY TELEPHONE WITH AN INDEPENDENT LANDLINE BASED PHONE SERVICE, WITH NO LINE EXTENSIONS OR SWITCHBOARD OPERATOR, AND PERMANENTLY MOUNTED ON THE POOL DECK AREA. SEE POOL AREA PLAN FOR SUGGESTED LOCATION. NO DIRECT DIAL 911 PHONES WILL BE ALLOWED (PHONES WHICH HAVE NO DIAL PAD). A SIGN SHALL BE POSTED AT THE PHONE STATING, "EMERGENCY DIAL 911" ALONG WITH THE PHONE NUMBER AND PHYSICAL ADDRESS OF THE POOL. THE EMERGENCY PHONE SHALL BE CAPABLE OF RECEIVING CALLS WITH AN AUDIBLE RINGER.



2 POOL WALL SECTION
SP-4 S.R. SMITH, LLC - MODEL # ML300 OR EQUAL
SCALE: 1" = 1'-0"



8 SIGNAGE
SP-4 POSTED AT ALL BATHER POOL ENTRANCES. EXAMPLE SIGN, ACTUAL SIGN MAY VARY.



1 SWIMMING POOL BONDING RISER
SP-4
NOT TO SCALE

General Contractor: **Raleigh Pools, LLC**
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Professional Engineer Seal
ROBERT S. BARTLETT
20106
8-22-2024

Rev.	Date:	Description:

Title Sheet: **DETAILS & SECTIONS**
Project: **Swimming Pool Caitlin Crossing Lillington, NC**
Drawn by: M. Morgan
Issue Date: 3-22-2024
Project Number:
Sheet: **SP-4**

CMP Part Number	Compare To	Full Description
25524-200-000	215-9890, 542423	White
25524-201-000		Gray
25524-204-000		Black
25524-207-000		Dark Gray
25524-239-000		Tan

2" INSIDER WALL RETURN FITTING 2" FIP X 2" SOCKET



Pentair 3/4" Eyeball Fitting 540021 - White

Full Description

Pentair Eyeball Fitting 540021

Directional Inlet/Wall Fitting.

Features:

- 3/4" Eyeball Opening
- 1 1/2" Threaded Fitting
- Adjustable inlet direction
- Color: White

Pentair 540021

4" Adjustable Floor Return Fitting with Water Stop

FEATURES

- Diverter plate molded as one piece - no glue joints for longer lasting commercial use
- Integrated water stop helps prevent leaks
- 2" x 1 1/2" slip pipe adapter included
- Full 360-degree flow
- Flow rate up to 80 GPM
- DANGER:** Not to be used as a suction outlet
- Manufactured from engineered polymer
- UV-resistant ABS material
- 316 Stainless steel screws
- 25 per case
- Also available as return diverter plate only for remodels, repairs, etc. in 120000xx 25 per case

Part # DIV0xxx

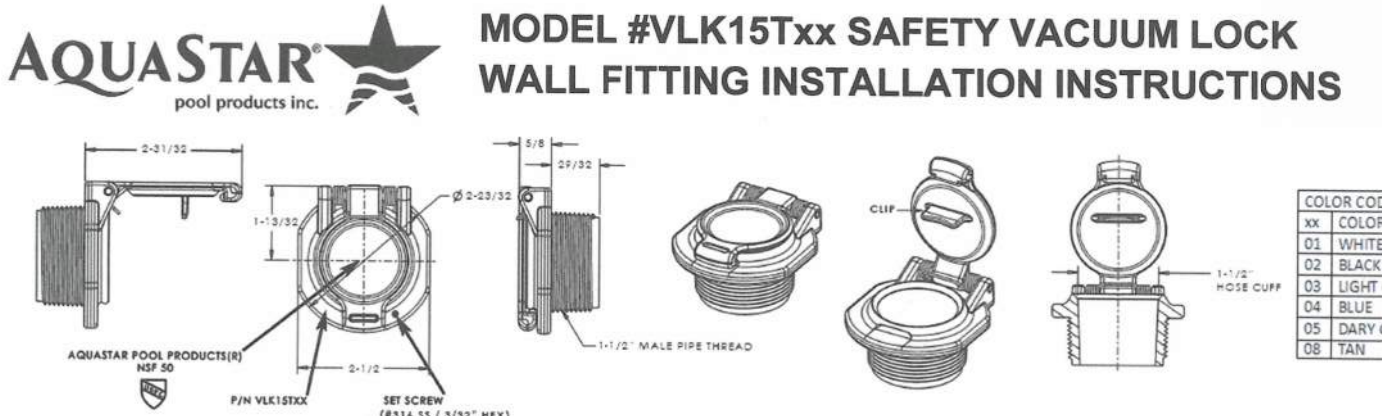
Diverter plate fits: Pentair/Sea-Rite



Part # 4DIVxxx

- Adjustable Return Body, 2" Outlet
- Adjustable Return Diverter Plate
- 2" to 1 1/2" Conversion Adapter
- 8x1-1/4" Phillips Flat Head, 316 SS, Qty 1

AQUASTAR MODEL #VLK15Txx SAFETY VACUUM LOCK WALL FITTING INSTALLATION INSTRUCTIONS



NOTE: 2" MODEL FOR COMMERCIAL & CUSTOM INSTALLATIONS COMING SOON. #VLK20Txx

-Aquastar's Safety vacuum lock wall fitting has been tested and listed by IAPMO per IAPMO SPS4 and NSF 50 Standards.

-Do not alter in anyway.

-When in need of repair, replace the whole unit.

-Install as follows:

- Add silicone sealant to 1 1/2" male threads and hand turn into 1 1/2" female threaded wall fitting already installed in pool. This fitting will be connected to the suction side of the plumbing system with a 3-way or ball valve at the equipment to adjust the flow rate
- Thread into wall fitting as far as you can and with the "arrow" pointing up. (The spring will be on top)
- Anchor set screw with a 3/32" size allen wrench
- Use screwdriver to open flap and then insert vacuum/pool cleaner hose. "Clip" on inside of flap will help hold vacuum/pool cleaner hose to wall fitting when pump is turned off.
- When not in use make sure cover flap has been snapped firmly in place.
- NEVER operate a pool/spa with an uncovered suction outlet or vacuum port.

For more information contact us or visit our website.
(877)768-2717 / (877)276-POOL (7663); Fax: / Outside the US: +1-800-420-5060 / +1-949-336-1940 -fax
http://www.aquastarproducts.com / www.aquastarpoolproducts.com

Rev 11182015

Packed in corrugated boxes

PART NUMBER	VALVE SIZE	DESCRIPTION	WTG.
V30BPKG	3	FLANGE BOLT SET GALVANIZED 3" (FOR BPV)	2.75
V40BPKG	4	FLANGE BOLT SET GALVANIZED 4" (FOR BPV)	5.75
V60BPKG	6	FLANGE BOLT SET GALVANIZED 6" (FOR BPV)	9.3
V80BPKG	8	FLANGE BOLT SET GALVANIZED 8" (FOR BPV)	11.6
V100BPKG	10	FLANGE BOLT SET GALVANIZED 10" (FOR BPV)	24
V120BPKG	12	FLANGE BOLT SET GALVANIZED 12" (FOR BPV)	27
V30BPKZ	3	FLANGE BOLT SET ZINC PLATED 3" (FOR BPV)	2.7
V40BPKZ	4	FLANGE BOLT SET ZINC PLATED 4" (FOR BPV)	5.75
V60BPKZ	6	FLANGE BOLT SET ZINC PLATED 6" (FOR BPV)	9.3
V80BPKZ	8	FLANGE BOLT SET ZINC PLATED 8" (FOR BPV)	10.55
V100BPKZ	10	FLANGE BOLT SET ZINC PLATED 10" (FOR BPV)	24
V120BPKZ	12	FLANGE BOLT SET ZINC PLATED 12" (FOR BPV)	27
V30BPKS	3	FLANGE BOLT SET STAINLESS 3" (FOR BPV)	2.7
V40BPKS	4	FLANGE BOLT SET STAINLESS 4" (FOR BPV)	5.7
V60BPKS	6	FLANGE BOLT SET STAINLESS 6" (FOR BPV)	9.25
V80BPKS	8	FLANGE BOLT SET STAINLESS 8" (FOR BPV)	10.4
V100BPKS	10	FLANGE BOLT SET STAINLESS 10" (FOR BPV)	24
V120BPKS	12	FLANGE BOLT SET STAINLESS 12" (FOR BPV)	27

Butterfly Valve Bolt Sets - Bolts, washers, and nuts sized to accommodate Colonial Plastic Butterfly valves and two PVC or CPVC flanges. Gaskets are not required when using Colonial Butterfly Valves. (Pricing Schedule B)

Galvanized

Zinc Plated

304 Stainless

Contractor Kit Includes PVC Butterfly Valve, Two Lasco PVC Van-stone Flanges, and Bolt kit. All packed in one heavy-duty corrugated carton for delivery to jobsite. One convenient part number ensures that all materials will be delivered. See the chart below to determine the part number by choosing the size and series of the Butterfly valve, and the material of the bolt kit. (Pricing Schedule K)

PART NUMBER	SIZE	BPV SERIES	BOLT KIT TYPE
KIT TO INCLUDE 411N SERIES BPV WITH M OILDED RED POLYPRO LEVER HANDLE			
KIT20411Z	2	411	ZNC
KIT20411S	2	411	SS
KIT20411G	3	411	GALV
KIT20411Z	3	411	ZNC
KIT20411S	3	411	SS
KIT20411G	4	411	GALV
KIT20411Z	4	411	ZNC
KIT20411S	4	411	SS
KIT20411G	6	411	GALV
KIT20411Z	6	411	ZNC
KIT20411S	6	411	SS
KIT20411G	8	411	GALV
KIT20411Z	8	411	ZNC
KIT20411S	8	411	SS
KIT TO INCLUDE 711N SERIES BPV WITH M OILDED BLUE ABS LEVER HANDLE			
KIT20711G	3	711	GALV
KIT20711Z	3	711	ZNC
KIT20711S	3	711	SS
KIT20711G	4	711	GALV
KIT20711Z	4	711	ZNC
KIT20711S	4	711	SS
KIT20711G	6	711	GALV
KIT20711Z	6	711	ZNC
KIT20711S	6	711	SS
KIT20711G	8	711	GALV
KIT20711Z	8	711	ZNC
KIT20711S	8	711	SS
KIT TO INCLUDE 311N SERIES BPV WITH COATED METAL STEEL LEVER HANDLE			
KIT20311G	3	311	GALV
KIT20311Z	3	311	ZNC
KIT20311S	3	311	SS
KIT20311G	4	311	GALV
KIT20311Z	4	311	ZNC
KIT20311S	4	311	SS
KIT20311G	6	311	GALV
KIT20311Z	6	311	ZNC
KIT20311S	6	311	SS


Also available through: **COLONIAL VALVE** and **LASCO Fittings, Inc.**

P-9 EYEBALL BULKHEAD & INLET FITTING
Custom Molded Products 25524-200-000 & Pentair 540021

P-10 FLOOR RETURN
Aquastar API-25-1106

P-11 SAFETY VACUUM LOCK WALL FITTING
Aquastar API-201-0001

P-12 BUTTERFLY VALVE KIT, 711 SERIES
Lasco LAS-56-3149



2" Socket White Hayward® QVC Series Compact PVC Ball Valve

Product Description

Perfect for OEM and other applications that require a reliable ball valve at an economical price. Internal components of a compact ball valve are completely encapsulated within the valve body in a one-step manufacturing process. Absolutely no danger of leakage through assembled parts; valve never requires adjustment since all internal components are sealed inside the one-piece valve body. Designed to fit into spaces too small for other valves. Ideal for applications where space and weight are critical considerations. Rated at 150 PSI @ 70°F. EPDM O-rings.

A.S.A. MFG. INC.

HEAVY DUTY FIBERGLASS SUMPS

- Rough sand control finish
- Quartz enamel general interior finish
- Phenolic Resin & resin for maximum structural strength
- Non-slip "No grouting"
- Quick Mount hardware and sealant included
- Custom configurations Manufactured - Call us today!
- Optional warranty flange

12" SQUARE INTER-EMBEDDED SECTION OUTLET COVER FOR 12" SQUARE RETROFITS OR NEW CONSTRUCTION

12" X 12" X 1.75" STRAIGHT ALUMINUM POLE

12/CS #820-12 12' STRAIGHT ALUMINUM POLE (RAI-40-2112)

- Product #: RAI-40-2112
- Mfg: PENTAIR WATER POOL & SPA, INC.
- Mfg #: R221026
- Department: SAFETY
- Product Line: Safety, Commercial
- UOM (Default): EA
- Obsolete: This product is not obsolete.
- Ship Weight (lbs): 1.07
- Dimensions: 0.00x0.00x0.00
- UPC Code: 788379007614

12/CS #153 BLUE SAFETY LIFE HOOK W/O HARDWARE (RAI-40-2132)

- Product #: RAI-40-2132
- Mfg: PENTAIR WATER POOL & SPA, INC.
- Mfg #: R221026
- Department: SAFETY
- Product Line: Safety, Commercial
- UOM (Default): EA
- Obsolete: This product is not obsolete.
- Ship Weight (lbs): 1.07
- Dimensions: 0.00x0.00x0.00
- UPC Code: 788379007614

61 24" WHITE CGA FOAM LIFE RING (PSL-42-1001)

- Product #: PSL-42-1001
- Mfg: POOLSTYLE MAINTENANCE
- Mfg #: 361
- Department: SAFETY
- Product Line: Buoy Safety Float Anchor, Commercial
- UOM (Default): EA
- Obsolete: This product is not obsolete.
- Ship Weight (lbs): 4.20
- Dimensions: 24.75x24.25x4.25
- UPC Code: 040011033611

74 BUOY HOLDER W/60' HEAVING LINE (PSL-42-1007)

- Product #: PSL-42-1007
- Mfg: POOLSTYLE MAINTENANCE
- Mfg #: 374
- Department: SAFETY
- Product Line: Miscellaneous - Safety, Commercial
- UOM (Default): EA
- Obsolete: This product is not obsolete.
- Ship Weight (lbs): 1.10
- Dimensions: 6.50x5.50x11.00
- UPC Code: 040011474599

12/CS #820-12 12' STRAIGHT ALUMINUM POLE (RAI-40-2112)

- Product #: RAI-40-2112
- Mfg: PENTAIR WATER POOL & SPA, INC.
- Mfg #: R191106
- Department: MAINTENANCE EQUIP
- Product Line: Poles - Comm
- UOM (Default): EA
- Obsolete: This product is not obsolete.
- Ship Weight (lbs): 2.17
- Dimensions: 0.00x0.00x0.00
- UPC Code: 788379006136

Coast Guard Approved Life Ring & 60' Long Rope Poolstyle or equal

Swimming Pool Caitlin Crossing
Lillington, NC

P-13 BALL VALVE SCH 40 PVC (see plan for sizes req'd.)
Charlotte Pipe Hayward or equal

P-14 12x12x18 SUMP DRAIN & OUTLET COVER,
A.S.A Mfg. Inc. FPK-50-812-18-6 & Aquastar 1216101

P-15 SAFETY LIFE HOOK & 12' LONG ALUMINUM POLE
Pentair Water Pool & Supply, Inc. or equal

P-16 Coast Guard Approved Life Ring & 60' Long Rope
Poolstyle or equal

General Contractor: **Raleigh Pools, LLC**
Matthew Nuss, Project Manager
mobile (919) 610-6658
matthew.raleighpools@gmail.com
1400 Smith Reno Road
Raleigh, NC 27603

BARTLETT
ENGINEERING & SURVEYING, PC

19006 Nash Street, North
Wilmington, NC 28404
F: 910-398-0804
www.bartlett.com

Professional Engineer
Seal 20106
8-22-2024

Rev. Description: Date: PE Seal

Tile Sheet: **EQUIPMENT SPEC SHEETS**
Project: **Swimming Pool Caitlin Crossing**
Lillington, NC

Drawn by: M. Morgan
Issue Date: 3-22-2024
Project Number:
Sheet: **SP-6**

Pool, Spa & Fountain Finishes

DIAMOND BRITE Exposed Aggregate Pool Finish

TECHNICAL DATA
 APPLICABLE STANDARDS
 ASTM International (ASTM) ANSI American National Standard Institute (ANSI)
 ASTM D 4086, ASTM E1477, ASTM E 1347

Many building departments and health departments require commercial swimming pool and spa finish coatings shall be comprised of a non-pigmented white cementitious binder and shall have a dry Lightness level (CIE L value) of 80.0 or greater and a wet Luminous Reflectance Value (CIE Y value) of 50.0 or greater. The Reflectance Value wet test shows the reflective value of a finish with "0" being the least reflective and "100" being the most reflective. Please see the recorded test values in the table below.*

Pool finish, including bottom and sides, shall be of white or light colored material determined visually to contrast least with a value of gray whiter than 50 percent black on an artist's gray scale, or shown by reflectance testing to reflect more than 50 percent of visible light. Please see the recorded test values in the table.** Please consult your state's compliance requirements for commercial pool and spa finishes.

Diamond Brite Color	CIE L Value DRY	CIE Y Value WET	Reflectance Value WET 0 - 100
PREMIUM WHITE	88.28	65.67	81
SUPER BLUE	81.09	52.3	73
BLUE	82.65	53.79	74
COOL BLUE	84.43	54.33	76
BLUE QUARTZ	84.09	54.1	67
IVORY	86.03	58.49	78
OYSTER QUARTZ	82.22	57.55	77
AQUA QUARTZ	84.08	54	66
PEARL	85.34	56.25	68
MARLIN BLUE	81.89	52.98	72
AQUA BLUE	83.83	54.06	75
CLASSIC	82.19	53.33	74
ONYX	44.54	7.71	39
FRENCH GRAY	64.2	21.5	48
TAHOE BLUE	65.13	25.07	49
MIDNIGHT BLUE	56.04	16.89	41
MOJAVE BEIGE	72.76	28.37	48
VERDE	65.28	26.27	44

***Highlighted finishes comply with Florida Building Code 454.1.2.4 for commercial use.

*Refers to Florida building and health requirements. ** North Carolina rules governing public swimming pools 15A NCAC 18A.2514 requirements.

Our material is tested and certified by independent laboratories. All data is given in good faith, however, we reserve the right to change products and specifications without notice. SGM advises interested parties to satisfy themselves as to the accuracy of any data and seek certification if appropriate.

1502 SW 2nd Place Pompano Beach, FL 33069 954.943.2288 Fax 954.943.2402

Pool, Spa & Fountain Finishes

DIAMOND BRITE Exposed Aggregate Pool Finish

TECHNICAL DATA
 APPLICABLE STANDARDS
 ASTM International (ASTM) ANSI American National Standard Institute (ANSI)
 ASTM C 1028-07 standard test method for slip resistance.

Diamond Brite	Diamond Brite Color	Reading as Ibf
Dry Slip Resistance (Rough Finish)	Pearl	0.86
	Marlin Blue	
	Classic	
	Midnight Blue	
	French Gray	
	Tahoe Blue	
	Onyx	
	Super Blue	
	Cool Blue	
	Verde	
	Mohave Beige	
	Ivory	
	Aqua Blue	
	Blue	
	Premium Quartz	
	Commercial White	
Dry Slip Resistance (Smoother Finish)	Oyster Quartz	0.73
	Blue Quartz	
	Aqua Quartz	

ANSI 118.7 standard test method for flexural strength (psi) modified.

Diamond Brite	Reading as psi.
28 days	720

Standard test method for linear shrinkage (%)

Diamond Brite	Reading as %
Dry Finish (smooth trowel)	0.73
Dry Finish (exposed)	0.86

Standard test method for tensile adhesion to concrete [N/mm²]

Diamond Brite	Reading as [N/mm ²]
NaCl 60° C Cycle	1.40
28 day	0.80

ASTM C 109 standard test method for compressive strength (psi) of hydraulic cement mortars.

Diamond Brite	Reading as psi.
24 hours	2950
7 days	5750
14 days	5970
28 days	6640

Our material is tested and certified by independent laboratories. All data is given in good faith, however, we reserve the right to change products and specifications without notice. SGM advises interested parties to satisfy themselves as to the accuracy of any data and seek certification if appropriate.

www.sgm.cc 800.641.9247

Intuitive control pad can be rotated in four directions on the pump or removed and wall mounted.

EASY UPGRADE FOR ANY POOL
 Super Pump VS 700 is a simple drop-in upgrade for Super Pump single-speed pumps up to 1.5 HP. Built with dual-voltage capability.

ENERGY-EFFICIENT DESIGN
 Built with a chemical-resistant Viton seal and accompanied by a 3-year extended warranty.

UNIVERSAL CONTROLLER COMPATIBILITY
 Super Pump VS 700 can operate in standalone mode or with any automation system—including OmniLogic® and other Hayward® systems.

110 cubic-inch strainer basket holds more debris on the pump or removed and wall mounted.

Chemical-resistant Viton® seal offers improved resistance against chemical imbalances.

Joint d'étanchéité en Viton® résistant aux produits chimiques offre une résistance améliorée contre les déséquilibres chimiques.

Wing nut drain plugs are easy to open and close for winterizing.

Beuchon de vidange avec écrou papillon facile à ouvrir et fermer en vue de la préparation pour l'hiver.

Permanent magnet, totally enclosed fan-cooled motor combines unmatched efficiency and reliability.

Moteur fermé autoténué à aimant permanent offre une efficacité énergétique fiable.

SPARE BASKET TO BE PROVIDED

SAVE UP TO 80% ENERGY COSTS

SPECIFICATIONS

MODEL NUMBER	STAND ALONE	RELAY CONTROL	HAYWARD® AUTOMATION	TOTAL HP	VOLTAGE	WARRANTY
SP267002VSP				1.65	230/115V	3 years

SUPER PUMP VS 700 DIMENSIONS (INCHES)

SUPER PUMP VS 700 PERFORMANCE COMPARISON

Compared to single-speed pumps.

hayward.pool.ca • 1-888-238-7665

Super Pump VS 700 series pumps are listed by NSF® and UL®.

Pumps • Filters • Heating • Cleaners • Sanitization • Automation • Lighting • Water Features • White Goods

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accessibility equipment

ML300

The ML300 is a flanged mounted pool lift that is ideal for a wide range of pool applications.

- Third party tested & verified ADA compliant.
- Integrated armrests.
- State of California compliant.
- 300 lb/36kg lifting capacity.
- Retrofit anchor jig is standard.
- Flange mounted with 4 anchor bolts.
- LiftOperator® Intelligent Controller.
- Powder-coated stainless steel and aluminum construction.

Model No.	Description	Shipping - (Class B)	Weight	Length	Width	Height
575-3000	ML300		200 lbs	50"	24"	38"
575-3000A	ML300, no anchor		90kg	127cm	61cm	71cm

Note: Includes battery, charger, battery console cover, water-resistant hand control, footrest, seat belt assembly, armrests and retrofit anchor jig.

Parts & Accessories

- 1001495 Battery
- 300-6900 ML300 Anchor Kit for existing deck
- 500-5200 Cover
- 300-6700A Anchors, set of 4
- 300-6800A Anchor Bolts, set of 4
- 900-1000 Seat Belt
- 970-5000 Seat Saver Cover
- 900-6000 Stability Strap
- 170-3000A Armrest Replacement (pair)

New Construction Guidelines

Scenario	Pool Lift	Anchor Jig
Order pool lift and new construction jig at same time	575-3000	500-5000 (no anchors)
Order new construction jig ahead of pool lift	575-3000N	500-5000A (comes with anchors)

Diagram showing ML300 installation details.

A completed Deck Profile form is required with your pool lift order.

srsmith.com / 800.824.4387
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P-17 DIAMOND BRITE, Exposed Aggregate Pool Finish Color: "BLUE QUARTZ" by SGM Inc.

P-18 BUBBLER PUMP, VARIABLE SPEED, HAYWARD SUPER PUMP VS700, SP267002VSP, 1.65 HP / 1PH

ADA-1 ADA POOL LIFT S.R. SMITH ML-300

ladders + rails

ADA 3-Bend Stair Rails

- Tubing: 1.90" OD
- Wall Thickness: .065"
- Stainless Steel: 304 or 316L Marine Grade* (add -MG to part number)
- Bends: 6" Radius
- Options: Powder-coating and SealedSteel Salt Friendly available
- Recommended anchors: AS-100B (order separately)
- Recommended escutcheon: EP-100F (order separately)
- * Minimum requirement for salt pools is 316L Marine Grade

Model No.	Description	A	B	C	D	E	Weight	Length	Width	Height
3HR-4ADA	4' Rail	26"	48"	34"	34"	20.38"	20 lbs	60"	42"	4"
3HR-5ADA	5' Rail	36"	60"	34"	34"	20.32"	22 lbs	72"	42"	4"
3HR-5.5ADA	5'6" Rail	32"	66"	34"	34"	19.88"	24 lbs	78"	42"	4"
3HR-6ADA	6' Rail	46"	72"	34"	34"	20.28"	26 lbs	84"	42"	4"
3HR-6.5ADA	6'6" Rail	32"	78"	34"	34"	35"	28 lbs	90"	42"	4"
3HR-7ADA	7' Rail	36"	84"	34"	34"	40"	30 lbs	96"	42"	4"
3HR-8ADA	8' Rail	30"	96"	34"	34"	53"	32 lbs	108"	42"	4"

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ladders + rails

ADA 3-Bend Stair Rails

- Tubing: 1.90" OD
- Wall Thickness: .065"
- Stainless Steel: 304 or 316L Marine Grade* (add -MG to part number)
- Bends: 6" Radius
- Options: Powder-coating and SealedSteel Salt Friendly available
- Recommended anchors: AS-100B (order separately)
- Recommended escutcheon: EP-100F (order separately)
- * Minimum requirement for salt pools is 316L Marine Grade

Model No.	Description	A	B	C	D	E	Weight	Length	Width	Height
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3HR-5.5ADA	5'6" Rail	32"	66"	34"	34"	19.88"	24 lbs	78"	42"	4"
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3HR-6.5ADA	6'6" Rail	32"	78"	34"	34"	35"	28 lbs	90"	42"	4"
3HR-7ADA	7' Rail	36"	84"	34"	34"	40"	30 lbs	96"	42"	4"
3HR-8ADA	8' Rail	30"	96"	34"	34"	53"	32 lbs	108"	42"	4"

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Economy Ladder

- Tubing: 1.90" OD
- Stainless Steel: 304 or 316L Marine Grade* (add -MG to part number)
- Treads: LTDF-101 Plastic (Econoline) or LTDF-103 Stainless Steel (Elite)
- Bends: 6" Radius
- Options: Powder-coating and SealedSteel Salt Friendly available
- Recommended anchors: AS-100B (order separately)
- Recommended escutcheon: EP-100F (order separately)
- * Minimum requirement for salt pools is 316L Marine Grade

Econoline	Shipping Weight	Elite	Shipping Weight	Description	Length	Width	Height
VLS-102E	21 lbs	VLS-102S	23 lbs	2-step ladder	61"	29"	2"
VLS-103E	23 lbs	VLS-103S	25 lbs	3-step ladder	61"	29"	2"
VLS-104E	24 lbs	VLS-104S	27 lbs	4-step ladder	66"	29"	2"

Notes:
 * For stock powder-coated products, see page 72. For stock SealedSteel Salt Friendly products, see page 73.
 * Frames extend 6 1/2" from the pool wall. Frame is secured to the pool deck with two anchor sockets on 20" centers. (Elite model) or 19" centers (Econoline model). The lower end of the frame is bent to meet the pool wall and fitted with two white rubber bumpers (VRSB-004).
 * For safety steps substitute the letter "T" at end of part number for example, VLS-103T for a two-step safety ladder.

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UCL Pool LED Color 12V/100 ft. (Expert Line)

Item #LPCUS11100
 Write a Review

EXPERT LINE® products are only available through your local pool professional.

Universal ColorLogic® color LED lighting will transform your outdoor pool environments. They're the only, UL-Listed lights to retrofit virtually any existing pool and spa with vibrant color - even those with just one light. 100% brighter* than any on the market, these energy-efficient, lights deliver spectacular color to pools with a single incandescent light or pools with colored finishes, and breakthrough cost savings and installation versatility for new pools, spas and fountains. All-plastic, low-voltage design, combined with all-plastic thin UCL Niche eliminates the need for bonding, grounding and GFEL. The thin UCL Niche also reduces cost for dig, steel and gunite because it is only 2.75 inches front-to-back and mounts to the face of the rebar grid. Pool and spa lights are UL-Listed for wall or floor installs without a rock guard and can be positioned just 4 inches from lens to water level - perfect for steps, beach entries and fountains.

- UL-Listed for installation in virtually any pool or spa niche
- 100% brighter* than any color LED light on the market
- Use up to 86% less energy than incandescent lights and last 10x longer
- 10 fixed colors and seven color-changing shows
- Can be installed in a little as 4 inches below the waterline, and on the wall or the floor without a rock guard
- 12V, 2-wire, all plastic design with no exposed metal and no GFEL for safe installation
- Programmable to match ColorLogic 4.0 or Pentair® SAiM® light shows
- Available in 30, 50, 100 and 150-foot cord lengths
- Available in Stand-Alone or Network
- Low-profile UCL Niche provides incredible installation savings for new construction
- Retrofit transformer kits available for easy high-to-low-voltage J-Box conversion
- 300-watt transformer available for multi-light installations
- Ships with smooth white and silver luster starburst trim rings. Additional rings are also available in faux chrome, black, beige, and gray
- 101 colors and 11 color-changing shows available in Network mode when used with Pro Logic®

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R-1 STAIR RAIL, 60" MARINE GRADE ADA 3-BEND S.R. SMITH 3HR5ADA-MG

R-2 STAIR RAIL, 84" MARINE GRADE ADA 3-BEND S.R. SMITH 7HR4ADA-MG

R-3 POOL LADDER S.R. SMITH VLS-103S-MG

L-1 UNIVERSAL COLOR LOGIC, 12V LED HAYWARD LPCUS1110

General Contractor: Raleigh Pools, LLC
 Matthew Nuss, Project Manager
 mobile (919) 670-6658
 matthew@raleighpools@gmail.com
 1400 Smith Reno Road
 Raleigh, NC 27603

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 F. (919) 339-0804
 www.bartlettinc.com

Professional Engineer Seal:
 Seal 20106
 Robert S. Bartlett
 License #C-151
 8-22-2024

EQUIPMENT SPEC SHEETS

Project: Swimming Pool Caitlin Crossing Lillington, NC

Drawn by: M. Morgan
 Issue Date: 3-22-2024
 Project Number: SP-7