

NOTE:
ADA ACCESS INTO THE POOL AND SPA IS NOT REQUIRED OF THE HOME OWNER ASSOCIATION AS LONG AS THE POOL AND SPA ARE OPEN ONLY TO THE RESIDENTS AND THEIR GUESTS. IF THE POOL AND SPA ARE EVER OPENED FOR PUBLIC USE, ADA LIFT ACCESS WILL BE REQUIRED.

SPA NOTES:
 • SYSTEM SHALL INCORPORATE TWO 15 MINUTE PATRON ACTIVATED TIMER FOR EACH COMBINED THERAPY PUMP & BLOWER CIRCUIT (IF PROVIDED)
 • INSTALL A HARTFORD LOOP FOR EACH BLOWER (IF PROVIDED)
 • A CLOCK SHALL BE VISIBLE FROM SPA
 • SEE EMERGENCY SHUT-OFF NOTES

RECIRCULATION NOTES

- The main drain grate shall be at the deepest point of the pool and the depth shall not deviate more than 3" from the side wall depth.
- Plastic pipe exposed to sunlight shall be coated for UV protection.
- Plastic Pipe shall have NSF-PW seal of approval.
- Wall inlets shall be directionally adjustable and do not protrude into the pool.
- Disposal of pool wastewater shall conform to State and County requirements.
- Pool makeup water supply shall be from an approved potable water system and shall have an air break at point of fill.
- Chlorine and pH adjustment feeders shall be electrically interlocked with the operation of the recirculation pump.
- The lip of the gutter (if used) shall be uniformly level with a maximum tolerance of 1/4" between high & low areas.
- When flow is split within equipment area, provide equal pipe lengths & fittings from split to region of flow.
- Floor returns (if used) shall be flush with pool surface and flow adjustable.
- Wall inlets (if used) shall be minimum 12" below water depth.

Spa Rules

- No food or beverages in pool or on wet deck.
- No glass or animals within fenced pool area (or 50' from unfenced pool).
- Bathing Load: 6 persons.
- Pool Hours: DAWN to DUSK
- Shower before entering pool.
- Maximum water temperature 104°F
- Children under 12 must have adult supervision
- Pregnant women, small children, people with health problems and people using alcohol, narcotics or other drugs that cause drowsiness should not use spa pools without first consulting a doctor.
- Maximum use 15 minutes
- DO NOT SWALLOW THE POOL WATER.

SPA REGULATIONS SIGN DETAILS

- All letters shall be a MIN. of 1" in height except "NO DIVING" shall be 4" high.
- Sign shall be legible from the pool deck.
- The pool shall NOT be open for swimming at night unless the requirements for lighting, as specified in FBC 454.1.4.2, FBC 454.1.2.3.5, FBC 454.1.8.13, and rule 64E-9.008 (7), FAC, are met.

REQUIRED SPA SIGNAGE
SCALE: N.T.S.

Swimming Pool Rules

- No food or beverages in pool or on wet deck.
- No glass or animals within fenced pool area (or 50' from unfenced pool).
- Bathing Load: 30 persons.
- Pool Hours: DAWN to DUSK
- Shower before entering pool.
- DO NOT SWALLOW THE POOL WATER.

NO DIVING

POOL REGULATIONS SIGN DETAILS

- All letters shall be a MIN. of 1" in height except "NO DIVING" shall be 4" high.
- Sign shall be legible from the pool deck.
- The pool shall NOT be open for swimming at night unless the requirements for lighting, as specified in FBC 454.1.4.2, and rule 64E-9.008 (7), FAC, are met.
- The sign shall contain at a minimum information in FBC 454.1.2.3.5 and rule 64E-9.008 (6), FAC.

REQUIRED POOL SIGNAGE
SCALE: N.T.S.

DEPTH MARKINGS FOR POOL

- All depth markings shall be tile.
- Depth markings shall indicate depth within 3 inches when measured 3 feet from pool wall at normal water level.
- Depth markings shall be maximum 25 feet in perimeter distance apart.
- Depth markings & "No Diving" signs shall have letters & numbers a min. 4 inches high in contrasting color. "No Entry" markings shall be slip resistant tile w/ 4" letters.
- Wall markings shall be placed at the back of the gutter. With prior approval, marking may be located on the pool wall at the water level.
- A RED 4 inch International "NO DIVING" symbol may be substituted for "NO DIVING" tiles.
- Deck markings shall be within 2 feet of the water.
- Horizontal markings shall have slip resistant finish.

Wall Marking	Deck Marking
A 3 FT	3 FT
B 3 FT 6 IN	NO DIVING 6 IN
C 4 FT	NO DIVING 4 FT
D 4 FT	NO DIVING 4 FT
D 5 FT	NO DIVING 5 FT
	NO DIVING

MUST VERIFY DEPTH AT MARKER LOCATION
 FBC 454.1.1 REQD. POOL SIZING
 UNITS SERVED: 156
 NON-TRANSIENT: 0.75 GPM/UNIT
 REQD. FLOW: 117 GPM MIN.
 REQD. VOL. AT 3 HR. TURNOVER FOR SIZING PURPOSES: 21,060 GAL MIN

GENERAL NOTES FOR POOL

- This POOL & SPA will serve 156 units for MARQUESA ISLES making application for initial construction permit.
- Code Compliance Florida Building Code Section 464 6th Ed. 2017, Florida Admin Code (2016 64E-9, FAC).
- Electrical equipment wiring & installation including the grounding of pool components shall conform to the 2014 edition of the National Electrical Code® (NEC®) and the 6th ed. of the 2017 FBC Building Chapter 27. Written evidence shall be provided from the electrical contractor of compliance with the National Electrical Code.
- Overhead service wiring shall be installed within an area extending a distance of 10 feet horizontally away from the inside edge of the pool walls.
- Provision shall be made for storage of chemicals under roof where access is restricted from unauthorized persons. (Provided by owner).
- Access to pool deck must meet ADA requirements.
- No pool tile smaller than 2" on a side shall be used.
- Pool structure shall be constructed of concrete, watertight, free from structural cracks, & shall have a nontoxic, light in color, smooth, slip resistant finish. Pits and crevices more than 3/16" deep not allowed.
- The pool wet deck shall be uniformly sloped at a min. of 2% to a max. of 4% away from the pool or to deck drains to prevent standing water. Wet deck finishes shall be designed for such use & installed in accordance with manufacturer's specifications.
- Pool curbs, ladders, hand rails, & shall be constructed of concrete or other nonabsorbent material having a smooth slip resistant finish. Pits and crevices more than 3/16" deep not allowed.
- Vertical clearance above the pool deck shall be at least 7 feet.
- A min. of (1) rinse shower shall be provided on the deck within the perimeter of the pool, spa, or interactive water feature.
- Contractor to field route piping & connect to existing using best practices & shortest runs following schematic shown on plans. Where possible eliminate high points in piping, place vent line(s) only if necessary.

IF FIELD CONDITIONS DO NOT ALLOW CONSTRUCTION AS SHOWN ON THESE PLAN(S), OR THE CONTRACTOR CHOOSES TO USE DIFFERENT EQUIPMENT OR METHODS, CONTACT THE ENGINEER FOR REVIEW & MODIFICATION.

SANITARY FACILITY REQUIREMENTS

- Sanitary facilities shall be provided & labeled for each sex & must be located within a 200' walking distance to the nearest water's edge of each pool or spa.
- For pools up to 2,500 square feet the min. fixture sets are men's room (1) ea. of a urinal, water closet, & lavatory. The women's restroom shall have (1) water closet & (1) lavatory.
- Outside access shall be provided for bathers at outdoor pools & if they are not visible from any portion of the pool deck, signs shall be posted showing directions to the facilities.
- Directions to sanitary facilities shall be legible from any portion of the pool deck with letters a min. 1 inch high.
- Sanitary facility floors & all interior access ways or hallways to the facilities shall be concrete or other nonabsorbent material & shall have a smooth slip resistant finish.
- Carpets, duckboards, & footbaths are prohibited.
- Sanitary facility floors shall slope to floor drains.
- A hose bib with vacuum breaker shall be provided within 25' of restrooms to allow for ease of cleaning.
- Intersection of floor & wall must be covered.
- Diaper changing tables shall be provided at facilities that cater to families with small children.

SPA POOL EMERGENCY SHUT OFF NOTES

- The emergency shut off switch shall interrupt the operation of both the recirculation & therapy pumps.
- The switch shall be clearly labeled & located 5 ft beyond & within sight of the spa.
- Provision shall be made for a min. 80 decibel audible alarm near the spa to sound continuously until deactivated when such a device is incorporated.
- The following additional rule sign shall be visible by the spa which reads, "ALARM INDICATES SPA PUMPS OFF. DO NOT USE SPA WHEN ALARM SOUNDS UNTIL ADVISED OTHERWISE."

MARQUESA ISLES SPA:
 PERIMETER: 28 LF FLOW: 50 GPM
 AREA: 64 SF BATH LOAD: 6
 VOLUME: 984 GAL TURNOVER: 20 MINS

SPA RECIRCULATION EQUIPMENT:

- Spa Heater(s) - PENTAIR, MASTERTEMP, 250K BTU (NG)
- Filtration System - SEE SHEET 3 (AQUAWORK ATFSBPCA OR VAKPAK CS52PCV-13L)
- Spa Drain Cover - AQUASTAR 1216 VGB, 460 GPM @ 1.5 FPS
- Main Drain Cover - AQUASTAR 1216 VGB, 460 GPM @ 1.5 FPS
- Hydrostatic Relief Valve
- Skimmer(s) - HAYWARD SP1082
- Wall Return Fittings & Grate - HAYWARD SP1419D
- Static Line Fitting & Grate - HAYWARD SP1022 & SP1026
- Underwater Light(s) - HAYWARD, ASTROLITE II SPA LIGHTING, ARG46 OR EQUAL (300W/12V, 50 FT CORD)
- Weatherproof Junction Box(es) - DAYTON 4RG46 OR EQUAL
- Fixture Housing - HAYWARD SP0601U
- S.S.T.L. Handrail(s) - FIELD VERIFY LENGTHS
- DURANICHE PVC HOUSING
- Spa Sign - "SPA REGULATIONS" SEE NOTES
- Transformer(s) - INTERMATIC, 100W/12V INTERMATIC
- Test Kit - TAYLOR 2005 COMPLETE
- Vapor Retardant Cover

MARQUESA ISLES POOL:
 PERIMETER: 156 LF FLOW: 150 GPM
 AREA: 1,132 SF BATH LOAD: 30
 VOLUME: 35,107 GAL TURNOVER: 3.9 HRS

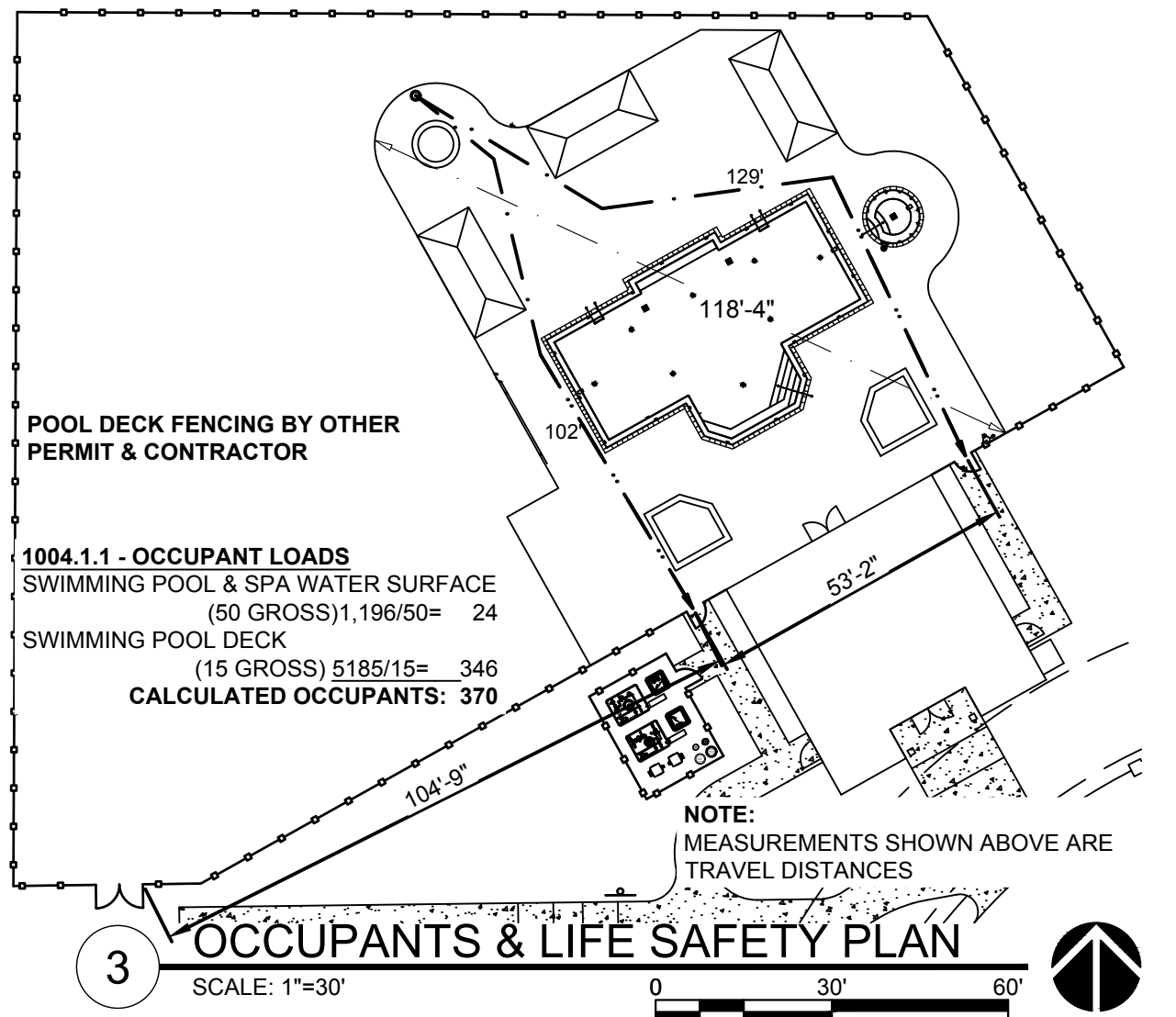
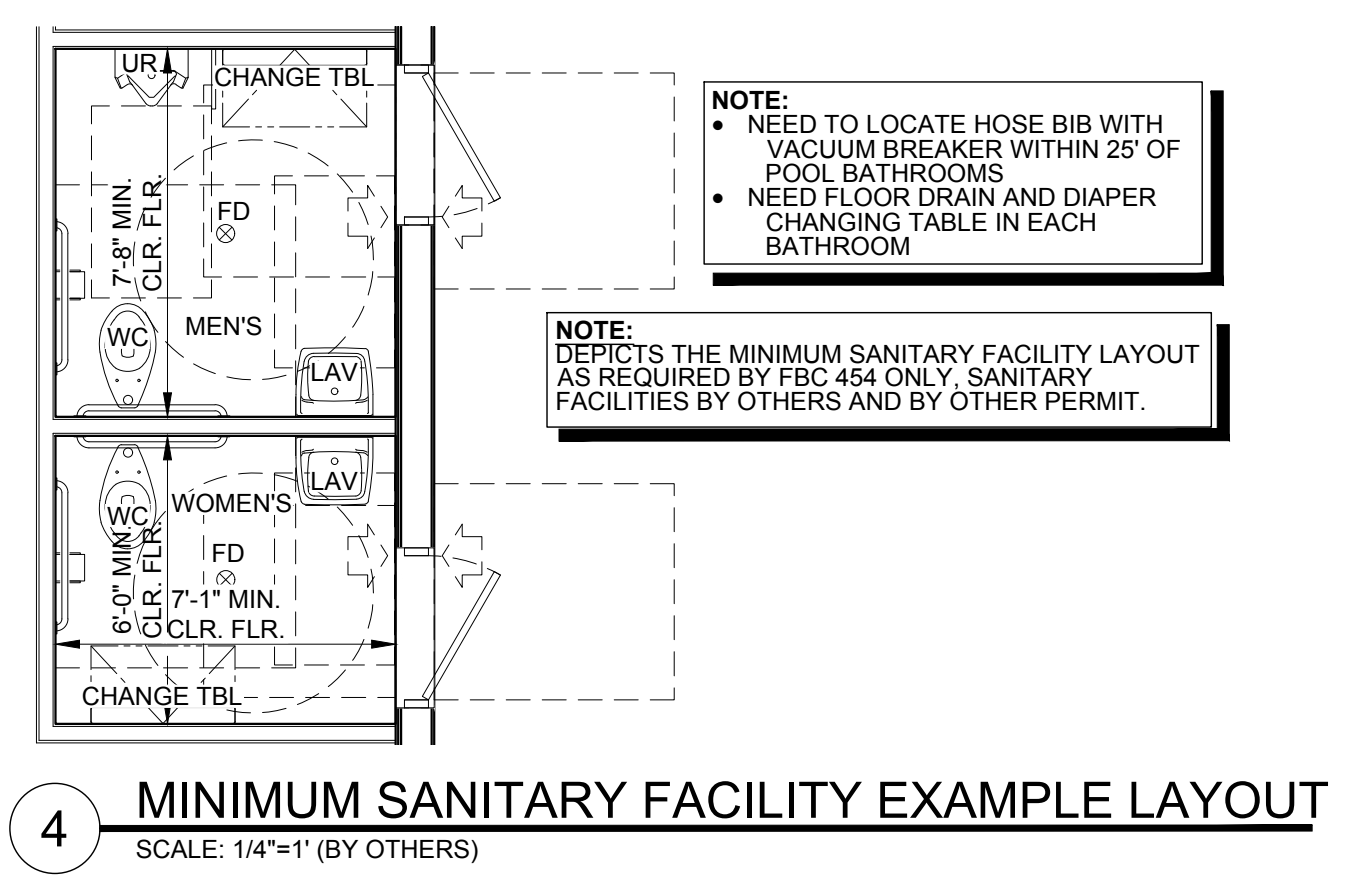
POOL RECIRCULATION EQUIPMENT:

- Pool Heater(s) - PENTAIR, MASTERTEMP, 400K BTU (NG)
- Filtration System - SEE SHEET 3 (AQUAWORK ATFSBPCA OR VAKPAK CS540V-13L)
- Main Drain Cover - AQUASTAR 1216 VGB, 460 GPM @ 1.5 FPS
- Hydrostatic Relief Valve
- Gutter Drains - HAYWARD SP1019
- Floor Return Inlets - HAYWARD SP1424
- Static Line Fitting & Grate - HAYWARD SP1022 & SP1026
- Vacuum Fitting & Spring Loaded Cover
- Underwater Light(s) - HAYWARD, ASTROLITE SERIES, SP08160 (300W/12V, 50 FT CORD) INCANDESCENT
- Weatherproof Junction Box(es) - DAYTON 4RG46 OR EQUAL
- S.S.T.L. Handrail(s) - FIELD VERIFY LENGTHS
- DURANICHE PVC HOUSING
- Intermastic, 100W/12V
- Weatherproof Junction Box(es) - DAYTON 4RG46 OR EQUAL
- S.S.T.L. Handrail(s) - FIELD VERIFY LENGTHS
- S.S.T.L. Crossbraced Ladder(s) - 3 TREAD
- Plastic Leaf Skimmer
- Pool Sign - "POOL REGULATIONS" SEE NOTES
- Test Kit - TAYLOR 2005 COMPLETE
- Vapor Retardant Cover
- 50 FT. Floating Vacuum Hose
- Fair Pole Hanger Brackets
- 16' Anodized Aluminum Pole
- Life Hook
- 20" Life Ring & 35 feet 1/2" dia. nylon line
- 20" Life Ring Holder
- 18" pool brush
- Vapor Retardant Cover

SPECIFICATIONS
SCALE: N.T.S.

THESE PLANS COMPLY WITH 2017 FBC 6TH ED. SECTION 454.1

5 PROPOSED SITE PLAN
SCALE: 1/8"=1'



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 LICENSE No. 33678
 STATE OF FLORIDA
 PROFESSIONAL ENGINEER

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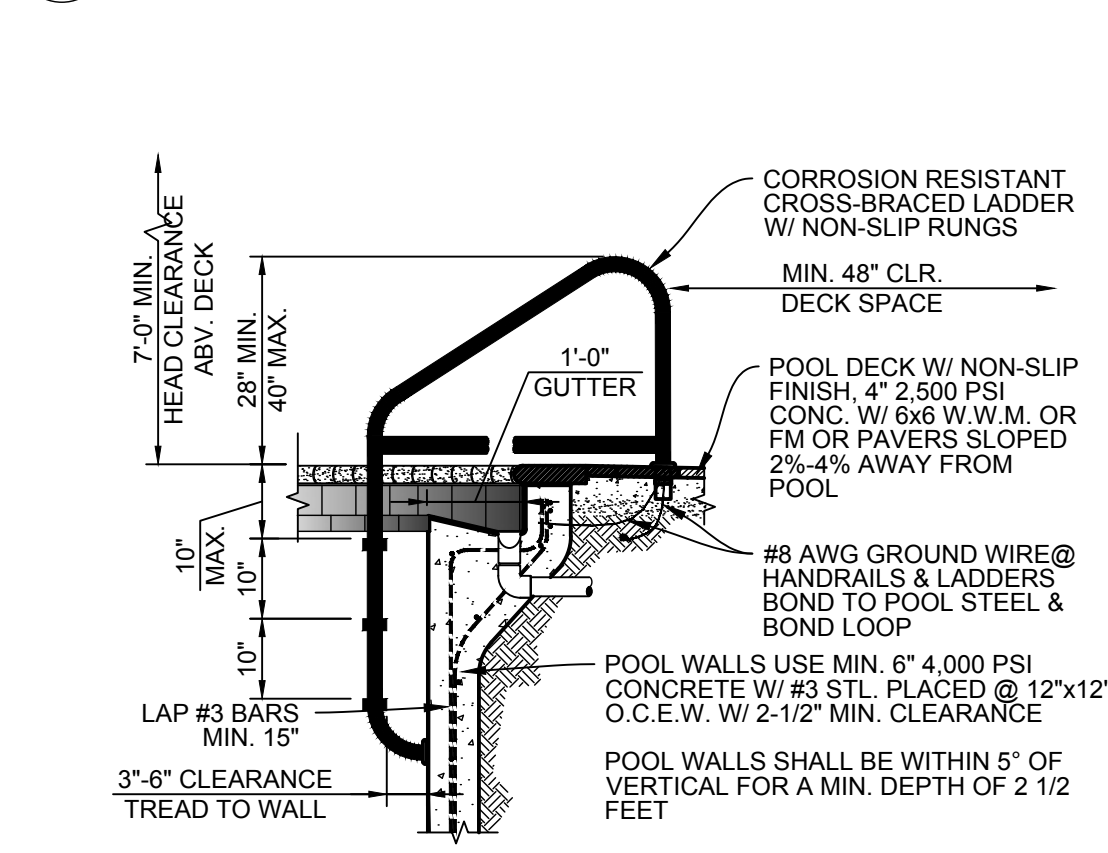
MARQUESA ISLES POOL & SPA NAPLES, FL COLLIER COUNTY

PREPARED FOR WATERSCAPES

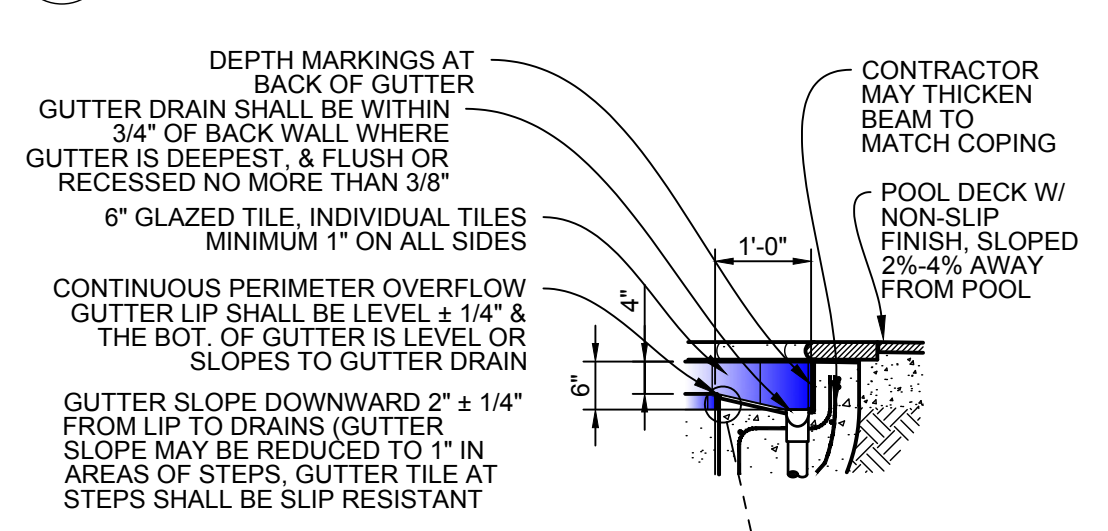
SHEET 1
SHEET 1 OF 4

ORIG. DWG. 36"x24" (ARCH D)

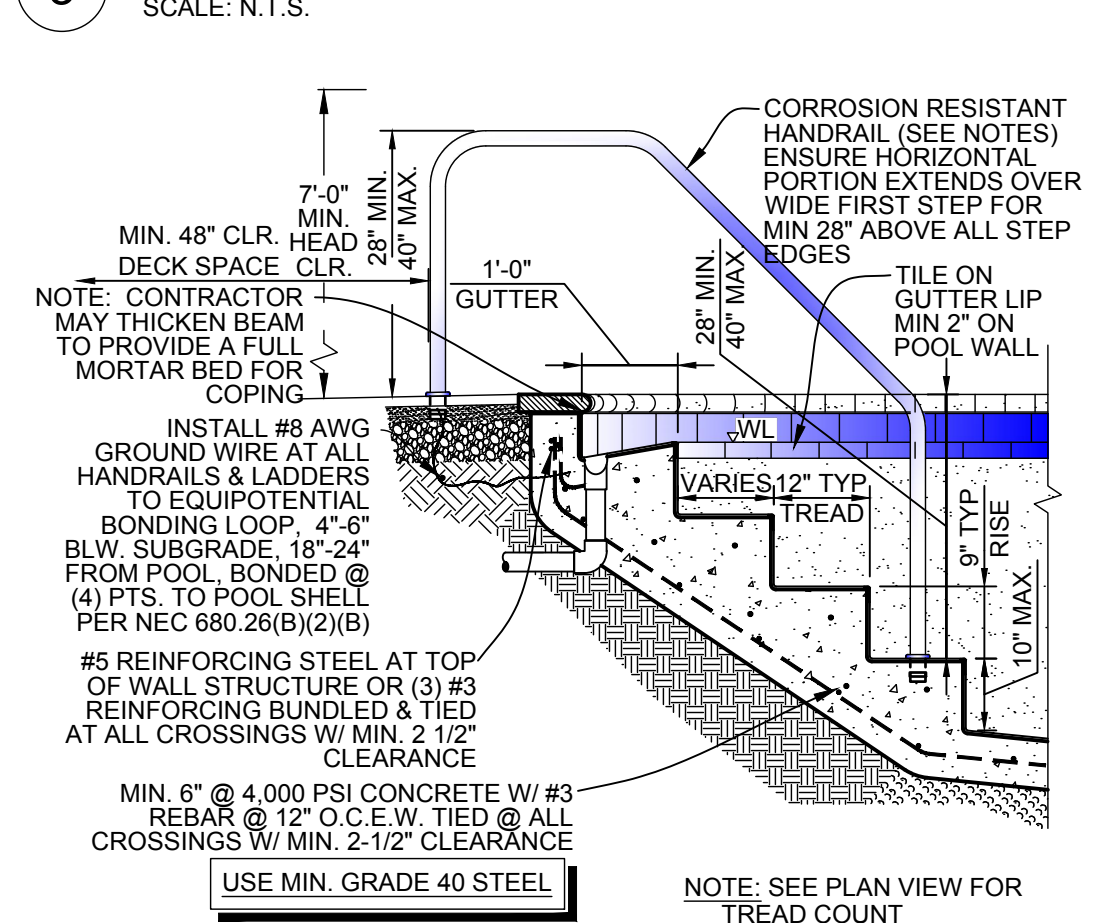
5 POOL DEEP END SECTION
SCALE: N.T.S.



4 POOL LADDER SECTION
SCALE: N.T.S.



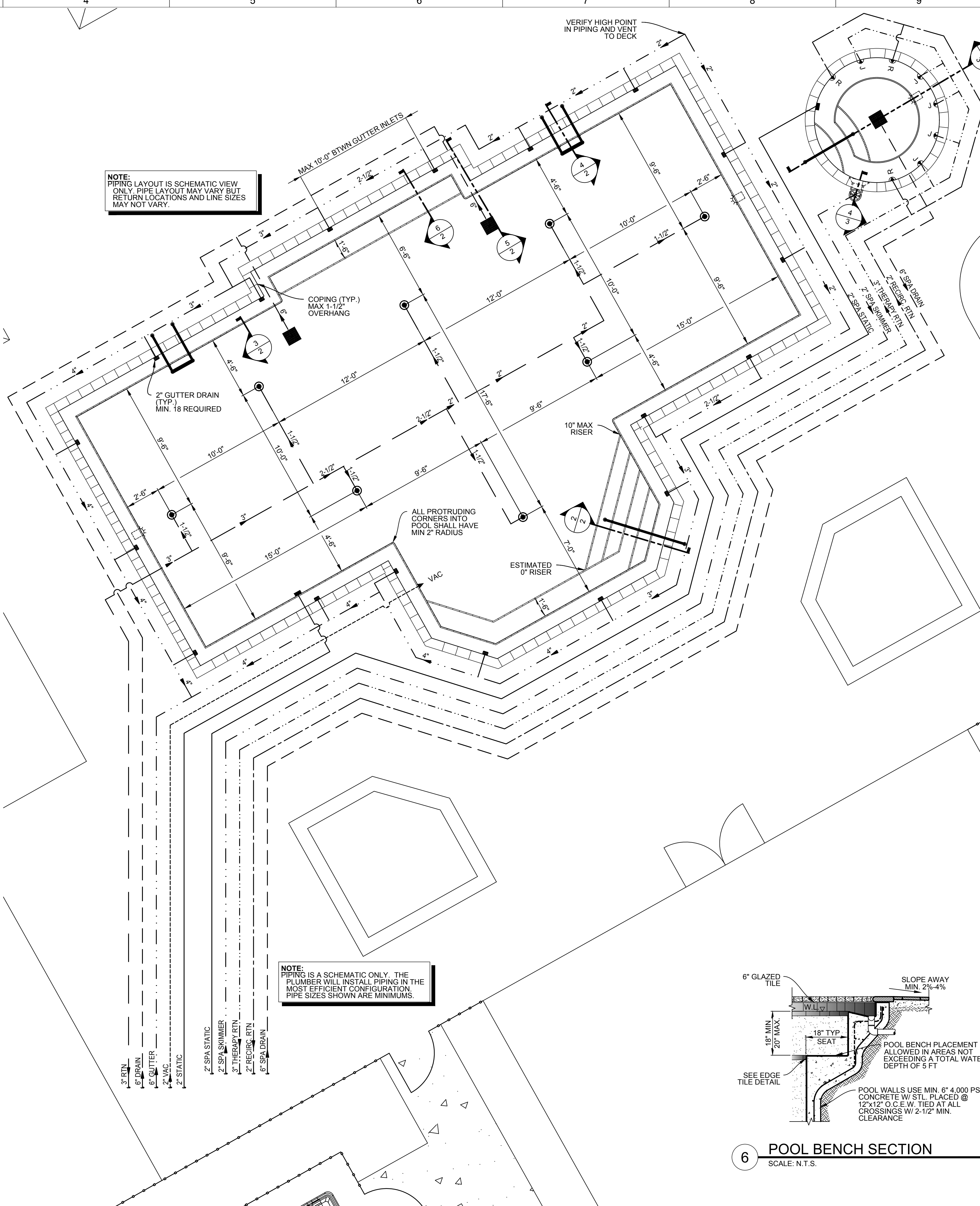
3 POOL EDGE TILE DETAIL
SCALE: N.T.S.



2 POOL STEP SECTION
SCALE: N.T.S.



1 PROPOSED PLUMBING LAYOUT
SCALE: 1/4\"/>



EQUIPMENT AREA REQUIREMENTS

- 1. Equipment designated by the manufacturer for outdoor use may be located in an equipment area, all other equipment must be located in an equipment room or enclosure.
- 2. Plastic pipe subject to a period of prolonged sunlight exposure must be coated to protect it from ultraviolet light degradation.
- 3. An equipment area shall be surrounded with a fence at least 4 ft high on all sides not confined by a building or equivalent structure, using a self-closing and self-latching gate with a locking device shall be provided if necessary for access.
- 4. All fencing or installed gates, shall be at least 4 ft high on all sides & using members spaced that shall not allow passage of a 4 inch diameter sphere.
- 5. An equipment room shall be protected on at least three sides and overhead. The fourth side may be a gate, fence, or open if otherwise protected from unauthorized entrance.
- 6. An equipment enclosure shall be lockable or otherwise protected from unauthorized access. This access security shall be installed on all pool equipment areas.
- 7. The equipment enclosure, area or room floor shall be of concrete or other nonabsorbent material having a smooth slip resistant finish and shall have positive drainage, including a sump pump if necessary.
- 8. Ancillary equipment, such as a heater, not contained in an equipment enclosure or room shall necessitate a fenced equipment area as described above.
- 9. Equipment enclosures or rooms shall have either forced draft or cross ventilation.
- 10. All below-grade equipment rooms shall have a stairway access with forced draft ventilation or a fully lowered door and powered intake within 6 inches of the floor.
- 11. Where stairway access is not necessary to carry heavy items into the below grade room or vault, a ship's ladder may be used if specified by the design engineer who must consider anticipated workload including equipment removal, and the ladder slope, tread height and width and construction material of the ladder.
- 12. The opening to the equipment room or area shall be a minimum of three feet by six feet and shall provide easy access to the equipment.
- 13. A hose bib with vacuum breaker shall be located in the equipment room or area.
- 14. The equipment enclosure, room or area shall provide a minimum 24" clear working space in front of equipment to access & perform routine operations. Contractor to verify this space & requirements with mfr. recommendations prior to construction. Conflicts require that the contractor to contact the manufacturer before proceeding.
- 15. Clearance shall be provided for all equipment as prescribed by the manufacturer to allow normal maintenance operation and removal without disturbing other piping or equipment.
- 16. Equipment enclosures, rooms or areas shall not be used for storage of chemicals emitting corrosive fumes or for storage of other items to the extent that entrance to the room for inspection or operation of the equipment is impaired.
- 17. In rooms with fixed ceilings, the minimum height shall be 7 ft.
- 18. Equipment enclosures, rooms or areas shall be lighted to provide 30 foot candles of illumination at floor level.

PROTECTIVE BARRIER / FENCE NOTES

- 1. The fence barrier must be at least 4 feet high and shall be constructed of a barrier with components that could allow a young child to crawl under, squeeze through, or climb over the barrier.
- 2. The fence barrier must be placed around the perimeter of the pool deck and must be separate from any fence, wall, or other enclosure surrounding the yard unless the fence, wall, or other enclosure or portion thereof is situated on the perimeter of the pool, is being used as part of the barrier, and meets the barrier requirements of this section.
- 3. Gates that provide access to swimming pools must open outward away from the pool and be self closing and equipped with a self latching locking device. The release mechanism must be located on the pool side of the gate and so placed that it cannot be reached by a young child over the top or through any opening or gap (minimum 54" above deck, or 3' below top of gate if on pool side).
- 4. A wall of a cabana or equipment room may serve as part of the barrier.
- 5. A barrier may not be used as a permanent structure, equipment, or similar object to be used for climbing the barrier.
- 6. Instead of a fence, permanent natural or man-made features such as bulkheads, canals, lakes, navigable waterways, etc. adjacent to a pool may be permitted as a barrier when approved. When evaluating such barrier features, the applicable governing body may perform on-site and review evidence, such as surveys, aerial photographs, water management agency standards and specifications, and any other similar documentation to verify at minimum, the following: the barrier feature is not subject to natural changes, deviations, or alterations and is capable of providing an equivalent level of protection as that provided by a structure, and the barrier feature clearly impedes, prohibits or restricts access to the pool.

STEP NOTES FOR SPA

- 1. Stairs shall have a minimum tread width of 10 inches and minimum tread length of 12 inches.
- 2. Stair risers shall be a maximum of 12 inches and shall be uniform between the top and bottom treads.
- 3. The front 1/2 inch to 2 inches of the tread and top two inches of the riser shall be tile, dark in color, contrasting with the interior of the pool. Tile shall be slip resistant.
- 4. The handrail shall be anchored in the bottom step and the deck.
- 5. Handrails and ladders shall be grade #304 stainless steel with mirror finish.
- 6. Handrails shall extend at least 28 to 40 inches above each step edge and deck.
- 7. Secure each ladder and handrail to deck and pool with deck anchor sockets covered with escutcheon plates.
- 8. Ladders shall be cross-braced and extend 28 inches above deck.
- 9. Ladder treads shall be slip resistant and have 3" clearance to pool wall.
- 10. The top rung of ladders shall be at the water level on open gutter pools, on all other type pools to a maximum 12" below the deck or curb.

STEP & LADDER NOTES FOR POOL

- 1. Stairs shall have a minimum tread width of 10 inches and minimum tread length of 24 inches (12 inches for spa.)
- 2. Stair risers shall be a maximum of 10 inches and shall be uniform between the top and bottom treads.
- 3. The front 1/2 inch to 2 inches of the tread and top two inches of the riser shall be tile, dark in color, contrasting with the interior of the pool. Tile shall be slip resistant.
- 4. The handrail shall be anchored in the bottom step and the deck.
- 5. Handrails and ladders shall be grade #304 stainless steel with mirror finish.
- 6. Handrails shall extend at least 28 to 40 inches above each step edge and deck.
- 7. Secure each ladder and handrail to deck and pool with deck anchor sockets covered with escutcheon plates.
- 8. Ladders shall be cross-braced and extend 28 inches above deck.
- 9. Ladder treads shall be slip resistant and have 3" clearance to pool wall.
- 10. The top rung of ladders shall be at the water level on open gutter pools, on all other type pools to a maximum 12" below the deck or curb.

OUTDOOR POOL LIGHTING NOTES

- 1. Artificial lighting shall be provided at all swimming pools which are to be used at night so that all portions of the pool, including the bottom, may be readily seen without glare.
- 2. Overhead lighting shall provide a minimum of 3 foot candles of illumination at the pool water surface and pool deck surface if 1/2 watt sq ft pool area provided in under water lighting.
- 3. Underwater lighting shall be a minimum of 1/2 watt per square foot of pool water surface area to allow night swimming with 3 foot candles overhead lighting if to be open after dusk.
- 4. When underwater lighting is less than 1/2 watt per sq ft pool area, overhead lighting shall provide 15 foot candles on pool surface and wet deck areas if to be open after dusk.
- 5. Underwater lighting shall utilize transformers and low voltage circuits with each underwater light being grounded.
- 6. The maximum voltage for each underwater light shall be 15 volts, and the maximum incandescent lamp size shall be 300 watts.
- 7. The location of underwater lights shall be such that the illumination is as uniform as possible and shall not be less than 18 inches below the normal operation water level or according to manufacturer specifications.
- 8. All underwater lights which depend upon submerison for safe operation shall have protection from overheating when not submerged.
- 9. When LED lights are used, the equivalent incandescent watts illumination shall be stated from manufacturer information.

ADDITIONAL STRUCTURAL NOTES

- Use minimum ASTM A815 Grade 40 Steel
- Lap #3 bars minimum 15"
- Lap #5 bars minimum 25"
- 6" Shell thickness and 2-1/2" concrete coverage are minimums
- Use 4,000 psi concrete
- It is highly recommended to use shotcrete and to have nozzle man or supervisor of shoot to hold an ACI Nozzleman Certification.
- Contractor / Owner required to:
 - Obtain a soils report for the pool area to confirm a minimum 2,000 psf soil bearing capacity
 - When buried debris is encountered or questionable conditions are indicated at the work site prior / during construction, a subsurface consultant shall conduct boring(s) in the area of the pool to confirm soil bearing capacity, clear of buried debris, & verify existing ground water level
 - All modified soils & earth fill under proposed pool area shall meet a soil density and compaction minimum of 95% modified proctor without settlement.

6 POOL BENCH SECTION
SCALE: N.T.S.

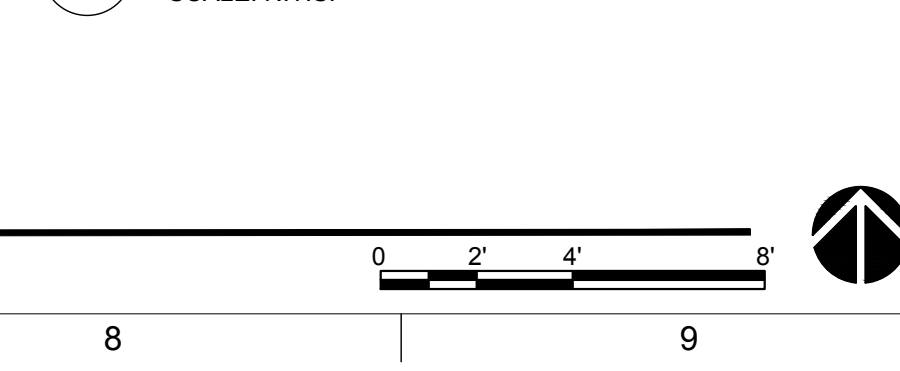


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Table with columns: PROJ. NO., DWG BY, CHKD BY, CREA BY, DRAWING, PRINTED, SCALE, AD NOTED. Values: 17128, KLT, CMB/UKK, CMB/UKK, 10-Jan-18, 10-Jan-18, 10-Jan-18, 10-Jan-18.

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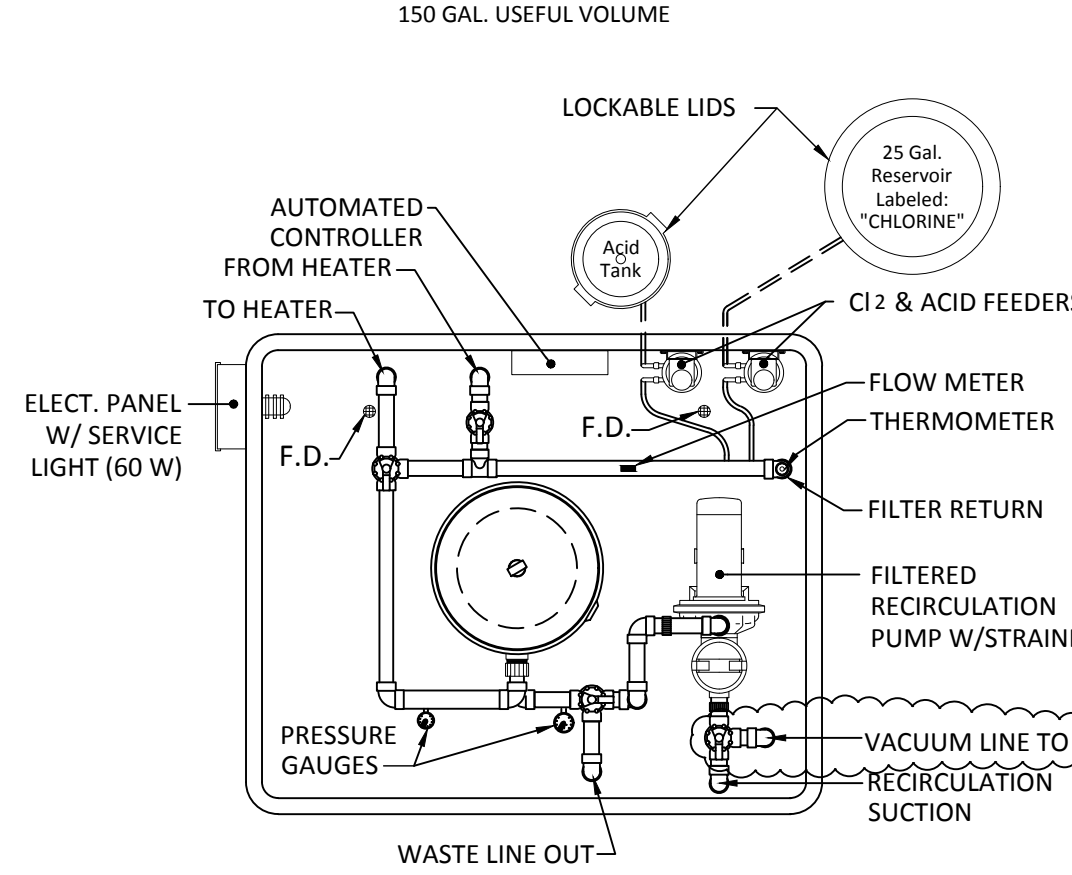
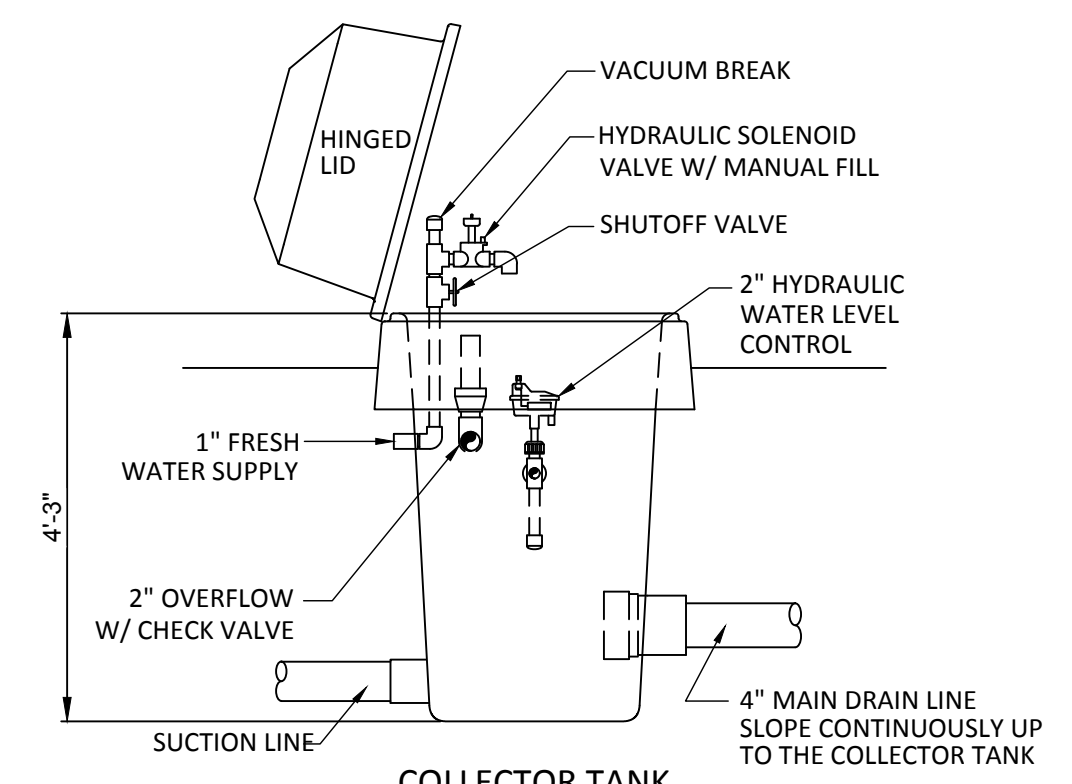
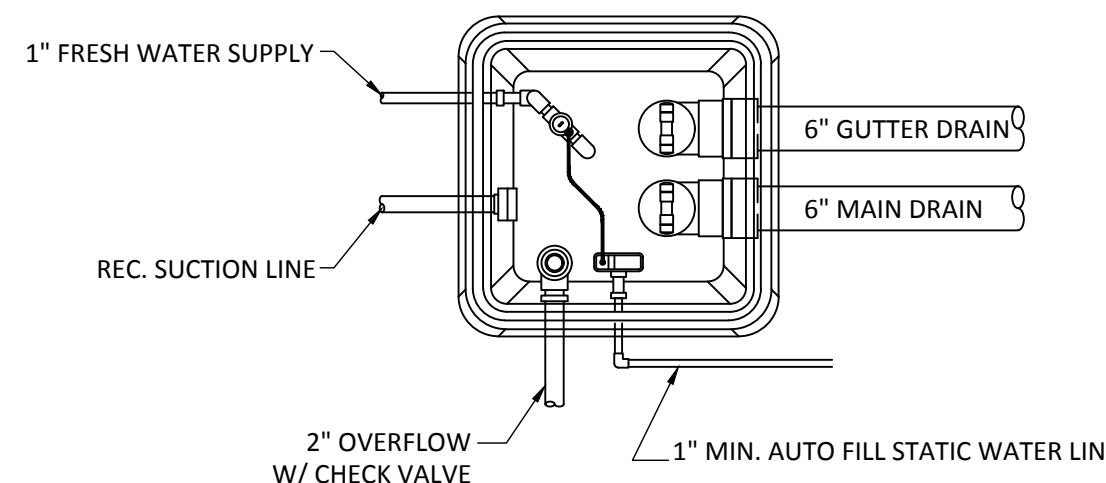
MARQUEESA ISLES POOL & SPA NAPLES, FL COLLIER COUNTY PREPARED FOR WATERSCAPES SHEET 2 OF 4

THESE PLANS COMPLY WITH 2017 FBC 6TH ED. SECTION 454.1. Build it! Collier County. STAMPS AREA - NOT FOR CONSTRUCTION WITHOUT DEPARTMENT APPROVAL ON PLANS.

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NOTES:

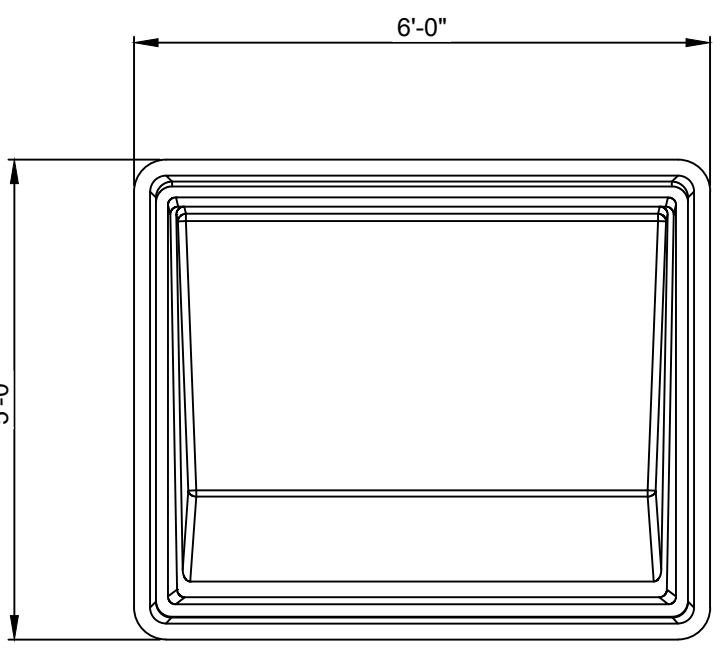
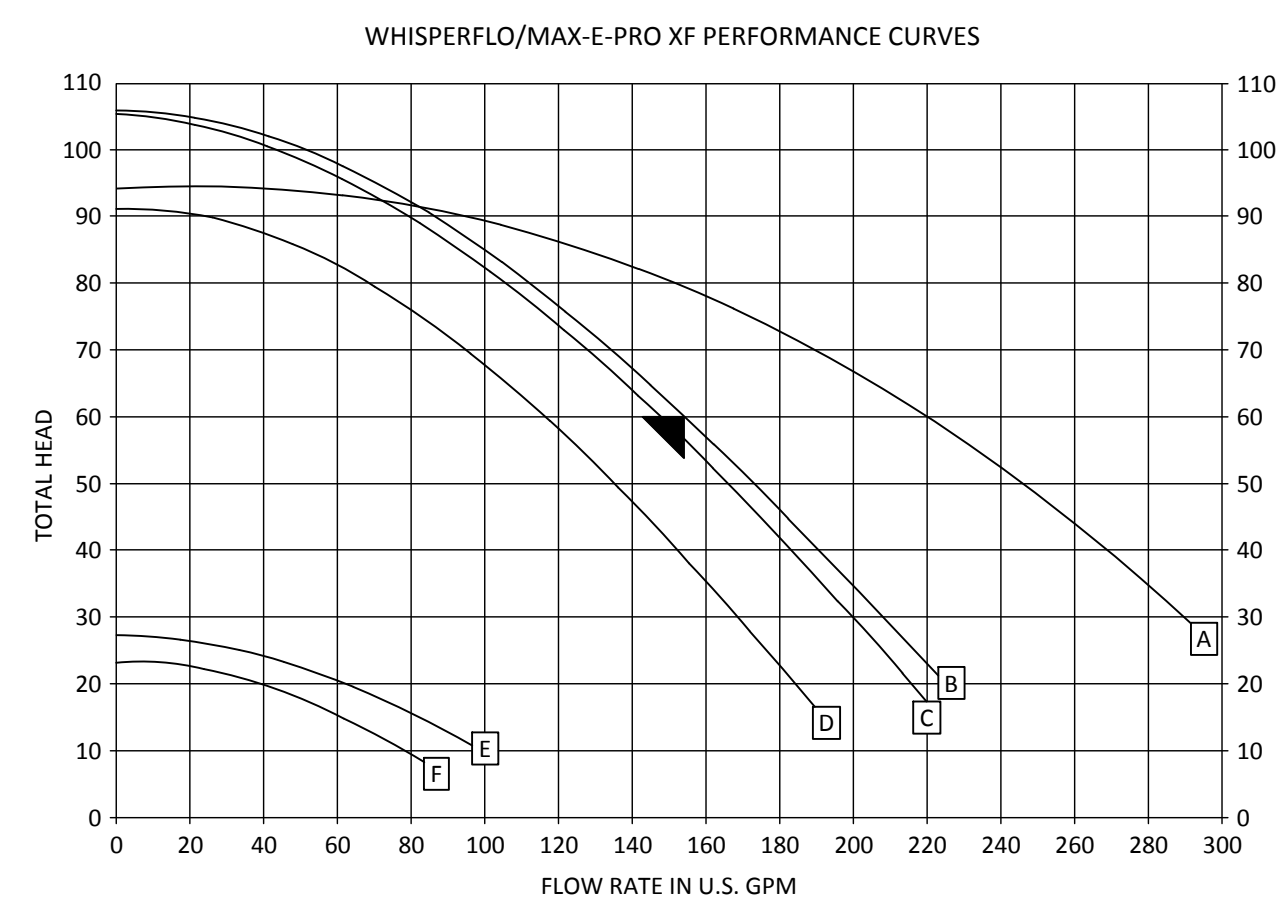
- PLUMBING - ALL PIPE & FITTINGS SHALL BE SCHEDULE 40 PVC PER ASTM D1785 AND N.S.F. APPROVED AND STAMPED FOR POTABLE WATER APPLICATIONS. JOINTS TO BE SOLVENT WELDED PER ASTM D2855. ALL PLUMBING AND MATERIALS TO CONFORM TO FLORIDA BUILDING CODE 2017 - 6TH EDITION.
- ELECTRICAL - ALL ELECTRICAL EQUIPMENT WIRING, INSTALLATION AND GROUNDING OF POOL COMPONENTS SHALL CONFORM TO NATIONAL FIRE PROTECTION ASSOC. 70, NATIONAL ELECTRICAL CODE (N.E.C.) LATEST EDITION AND ALL APPLICABLE LOCAL CODES. CHEMICAL FEED PUMPS TO BE INTERLOCKED WITH THE RECIRCULATION PUMP.
- EQUIPMENT - ALL PUMPS, FILTERS AND DISINFECTION EQUIPMENT SHALL BE TESTED AND APPROVED BY THE PERTINENT MANUFACTURER USING THE NSF/ANSI STANDARD 50 AND LISTED AS APPROVED BY THE NSF.
- THE FILTER ROOM FLOOR IS SLIP RESISTANT AND SLOPED TO FLOOR DRAINS.
- ALL PLASTIC PIPING SUBJECT TO PROLONGED SUNLIGHT EXPOSURE MUST BE COATED TO PROTECT IF FROM ULTRAVIOLET LIGHT DEGRADATION.
- EACH WASTE LINE SHALL HAVE A UNIQUE AIR GAP. WASTE LINES FROM DIFFERENT SOURCES (E.G. POOL, SPA, OVERFLOW, SUMP PUMP) SHALL NOT BE TIED TOGETHER BUT MAY DISCHARGE INTO A COMMON SUMP OR RECEPTACLE.
- THE WASTE LINE MUST BE CONNECTED TO AN APPROVED WASTE DISPOSAL SYSTEM ACCORDING TO LOCAL OR STATE CODES.
- ALL COLLECTOR TANKS SHALL HAVE COVER INTERLOCKS AND SLOPE TO THE TANK DRAIN.
- AN AUTOMATIC AND MANUAL WATER MAKEUP CONTROL MUST BE PROVIDED TO MAINTAIN THE WATER LEVEL AT THE LIP OF THE OVERFLOW GUTTER OR AT THE MOUTH OF THE RECESSED AUTOMATIC SKIMMERS AND MUST DISCHARGE THROUGH AN AIR GAP INTO A FILL PIPE OR COLLECTOR TANK. OVER THE RIM FILL SPOUTS ARE PROHIBITED.
- A RATE OF FLOW INDICATOR, READING IN GPM, SHALL BE INSTALLED ON THE FILTER RETURN LINE. THE RATE OF FLOW INDICATOR SHALL BE PROPERLY SIZED FOR THE DESIGN FLOW RATE AND SHALL BE CAPABLE OF MEASURING FROM ONE HALF TO AT LEAST ONE-AND-ONE-HALF TIMES THE DESIGN FLOW RATE. THE CLEARANCES UPSTREAM AND DOWNSTREAM FROM THE RATE OF FLOW INDICATOR SHALL COMPLY WITH THE MANUFACTURER'S INSTALLATION SPECIFICATIONS.
- THESE PLANS HAVE BEEN PREPARED IN COMPLIANCE WITH THE 2017 FLORIDA BUILDING CODE - 6TH EDITION.



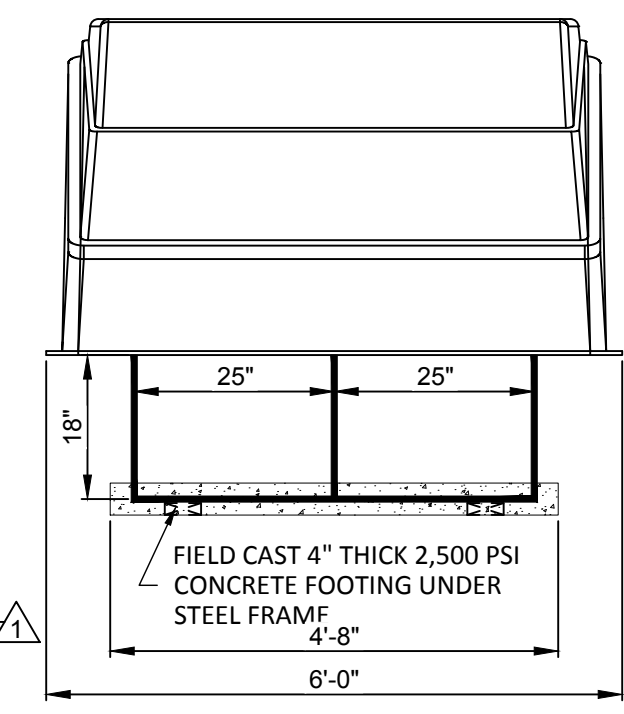
EQUIPMENT PLAN

EQUIPMENT LIST	
RECIRCULATION PUMP	STA-RITE, MAX-E-PROXF, 023013, XP-12, 3 HP WITH INTEGRAL STRAINER, 150 GPM @ 60' TDH, 230V, 1PH, 15A
FILTER	PENTAIR CLEAN & CLEAR PLUS, CCP420, PRESSURE CARTRIDGE 420 SF, 157.5 GPM MAX.
FILTER TANK SIZE	AT150, 150 GALLON CAPACITY
WATER LEVEL CONTROL	AQUATEK HYDRAULIC VALVE W/ MANUAL FILL VALVE & RESERVOIR
CHLORINE FEEDER	STENNER 45M5, 50 GPD CAPACITY, 110V
CHLORINE RESERVOIR TANK	25 GALLON WITH LOCKABLE LID
pH FEEDER	STENNER 45M2, 10 GPD CAPACITY, 110V
pH RESERVOIR TANK	5 GALLON WITH LOCKABLE LID
FLOWMETER	BLUE/WHITE F-30300P, 3", 45 TO 240 GPM RANGE
THERMOMETER	PRECISION INSTRUMENT CO B2B1-K WITH 1/2" NPT THERMOWELL 30 TO 240°F RANGE
PRESSURE GAUGE	0-60 PSI, 2" FACE DIAMETER
CHEMISTRY CONTROLLER	

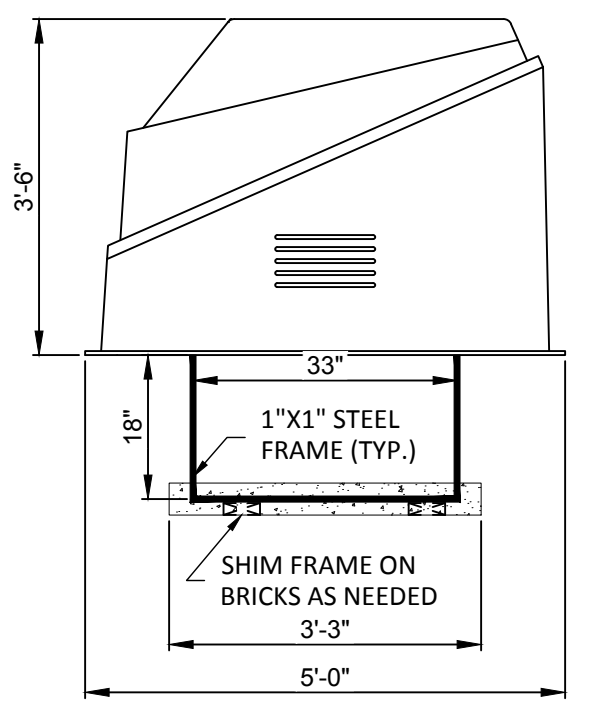
PIPE AND VALVES CHART		POOL SITE SIZE
LINE FUNCTION	EQ SIZE	
MAIN DRAIN	6"	6"
GUTTER	6"	6"
STATIC LINE	2"	2"
FRESH WATER FILL LINE	1"	
RECIRCULATION PUMP SUCTION	4"	
RECIRCULATION RETURN	3"	3"
OVERFLOW	2"	
PUMP TO WASTE	2"	
TO HEATER	3"	
FROM HEATER	3"	
VACUUM LINE TO POOL	2"	2"



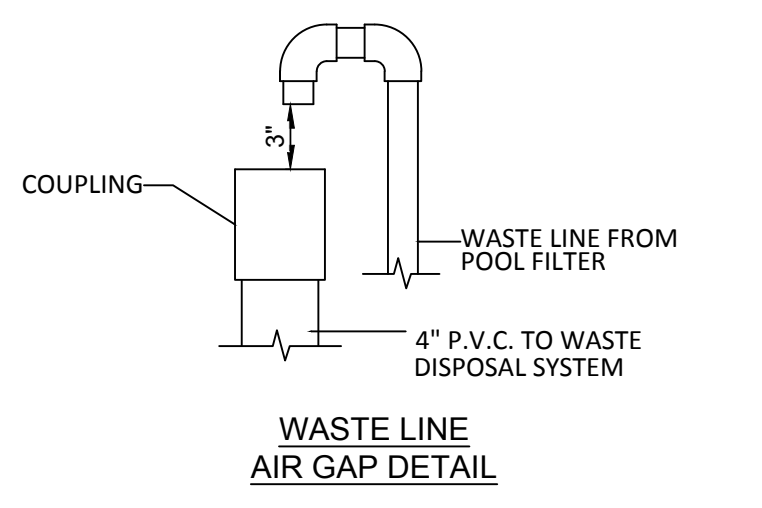
TOP VIEW



FRONT ELEVATION

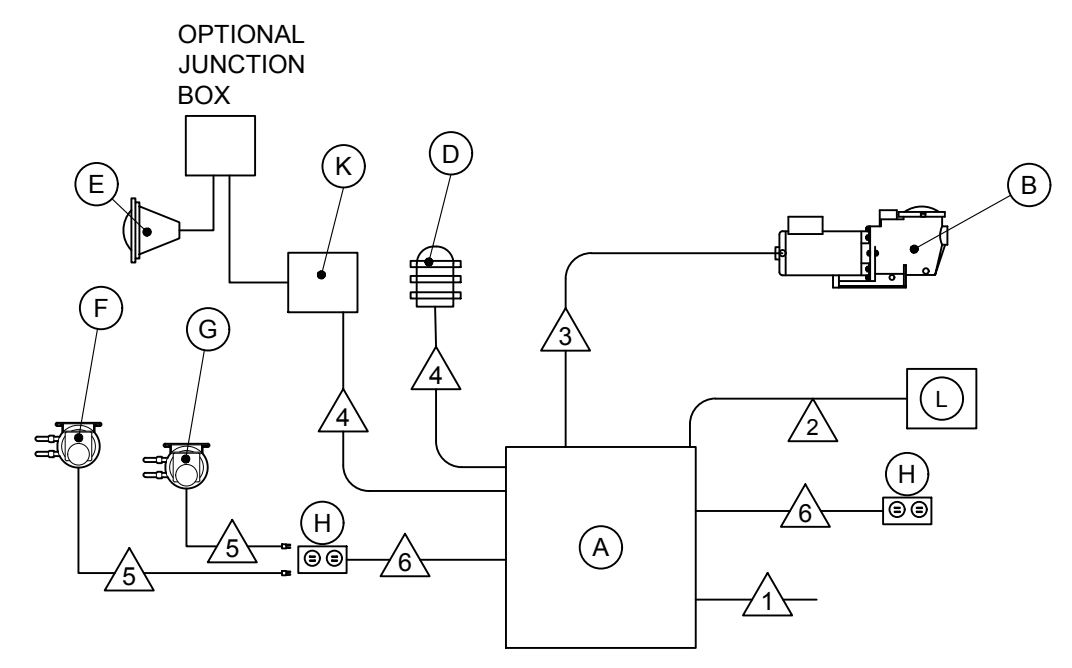


SIDE ELEVATION



WASTE LINE AIR GAP DETAIL

2 POOL COLLECTOR TANK
SCALE: N.T.S.



1 POOL ELECTRICAL SPECS
SCALE: N.T.S.

POOL FIXTURE SCHEDULE:

MARK	DESCRIPTION	VOLTAGE	MANUFACTURER & MODEL NO.
A	MAIN LUG BREAKER PANEL	120/240V	EATON, BR2024N125R
B	RECIRCULATION PUMP	230V	STA-RITE MAX-E-PROXF, XP-12, 3 HP, 15A
C	100 WATT SERVICE LIGHT FIXTURE	115V	INTERMATIC, VPXG11GCI 100W
D	POOL LIGHTS (2)	12V	HAYWARD ASTROLIGHT 300W OR EQUAL
E	CHLORINE FEEDER PUMP	115V	STENNER, 45M5
G	ACID FEEDER PUMP	115V	STENNER, 45M2
H	GFCI DUPLEX RECEPTACLE	115V	PASS & SEYMOUR
K	TRANSFORMER (2)	115V/12V	INTERMATIC PX300
L	POOL HEATER	120V	PENTAIR MASTERTEMP

FEEDER & CONDUIT SCHEDULE:

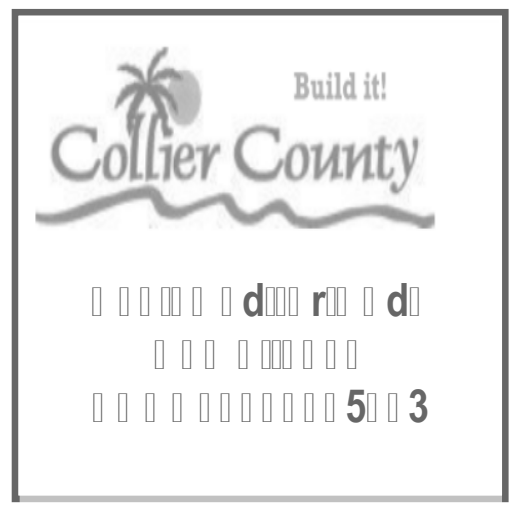
MARK	PHASE	NEUTRAL	GROUND	CONDUIT	REMARKS
1	TBD	TBD	TBD	TBD	PANEL FEED BY OTHERS
2	1-#12	1-#12		1/2"	UL SEALTITE
3	2-#12	1-#12		1/2"	UL SEALTITE
4	1-#12	1-#12	1-#12	1/2"	SEALTITE TO LIGHT
5	1-#12	1-#12	1-#12	1/2"	CORD & PLUG
6	1-#12	1-#12	1-#12	1/2"	SEALTITE TO PANEL

PANEL SCHEDULE:

CIRCUIT	POLE	TRIP	LOAD	AMPS
1	2	20A	**RECIRC. PUMP W/ (2) INTERLOCKED CHEM. FEEDS	15.0
2	1	15A	SERVICE LIGHT	1.5
3	1	20A	GFCI RECEPTACLE	15.0
4	1	15A	**POOL LIGHTS	7.8
5	1	20A	POOL HEATER MASTERTEMP	15.0
TOTAL MAXIMUM LOAD				54.3

NOTE: INSTALL ACCORDING TO NEC REQUIREMENTS & MFG RECOMMENDATIONS.
* GFCI BREAKERS ON PUMP SINGLE PHASE CIRCUITS, RATED 15A OR 20A.
** GFCI BREAKER ON 12V LIGHTS.

THESE PLANS COMPLY WITH 2017 FBC 6TH ED. SECTION 454.1



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JAMES KENT KIMES
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STATE OF FLORIDA
PROFESSIONAL ENGINEER

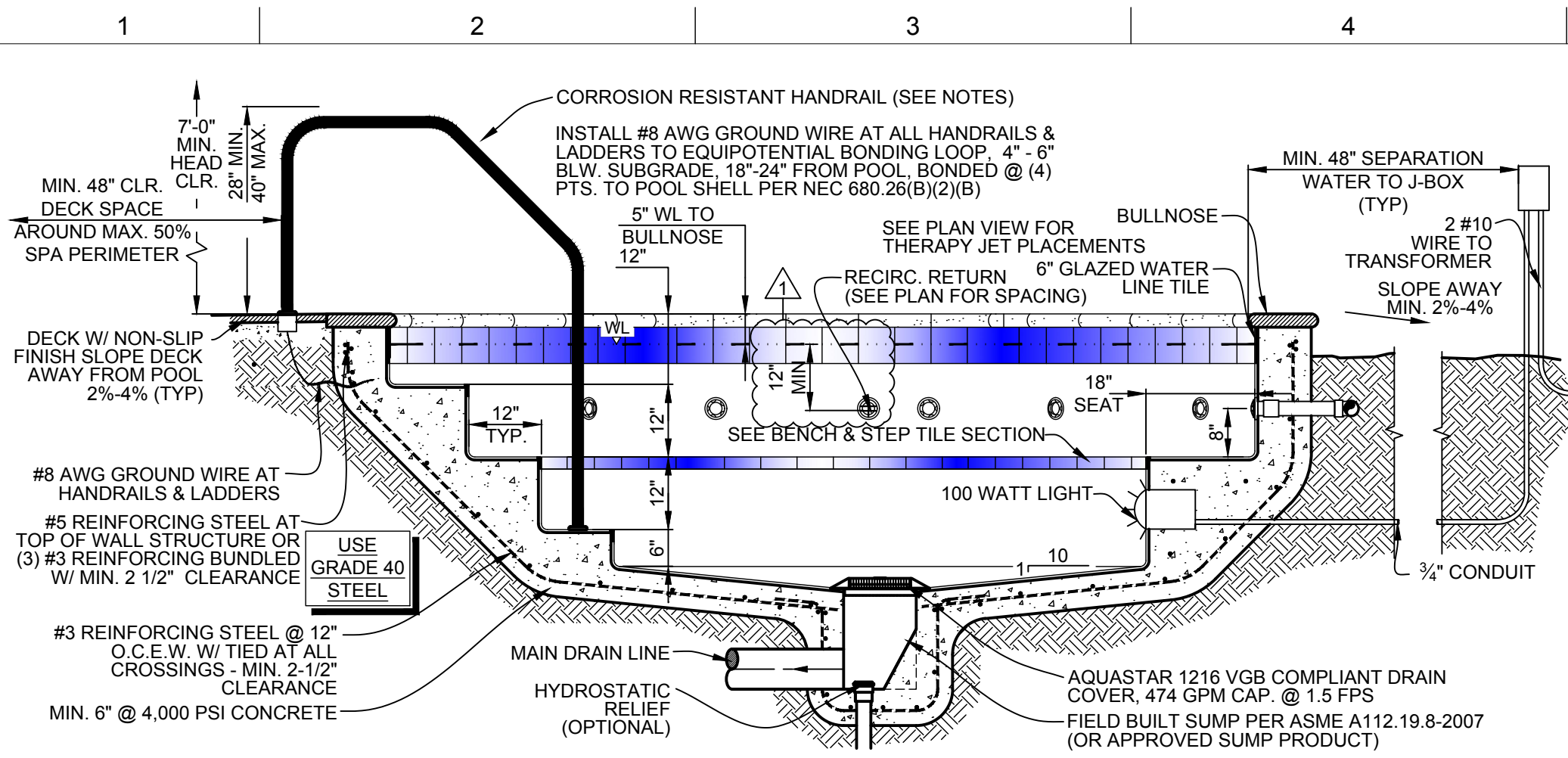
REV.	DATE	DESCRIPTION
1	10-Jan-18	SCALE AD NOTED
2	10-Jan-18	AD NOTED
3	10-Jan-18	AD NOTED
4	10-Jan-18	AD NOTED
5	5-Dec-17	HEALTH COMMENTS
6	10-Jan-18	CODE REFERENCE UPDATES

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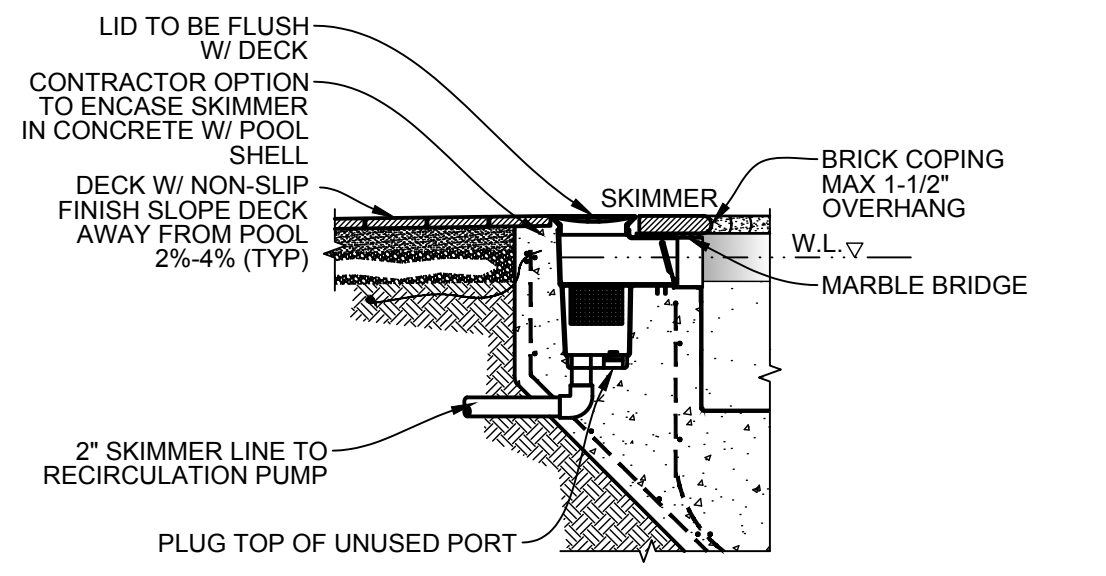
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MARQUESSA ISLES
POOL & SPA
NAPLES, FL
COLLIER COUNTY
PREPARED FOR
WATERSCAPES

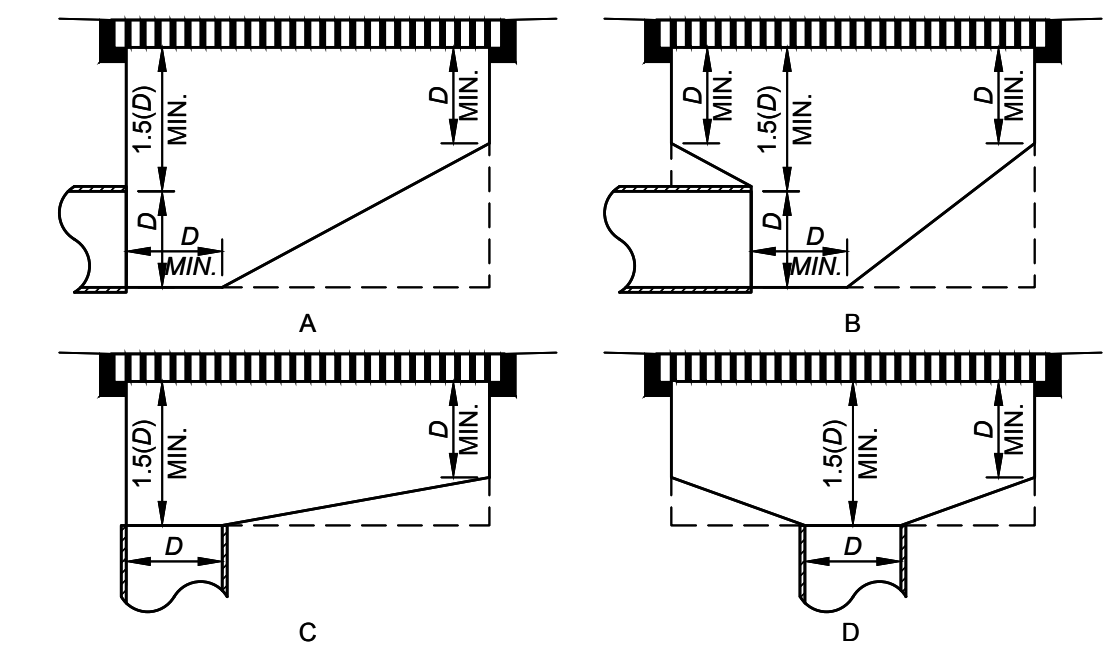
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5 SPA TYPICAL SECTION
SCALE: N.T.S.



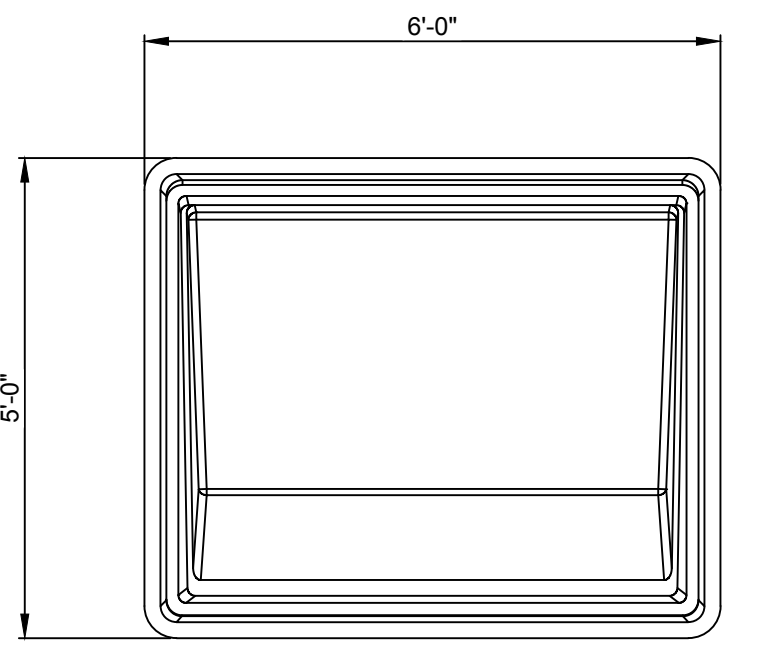
4 SPA SKIMMER SECTION
SCALE: N.T.S.



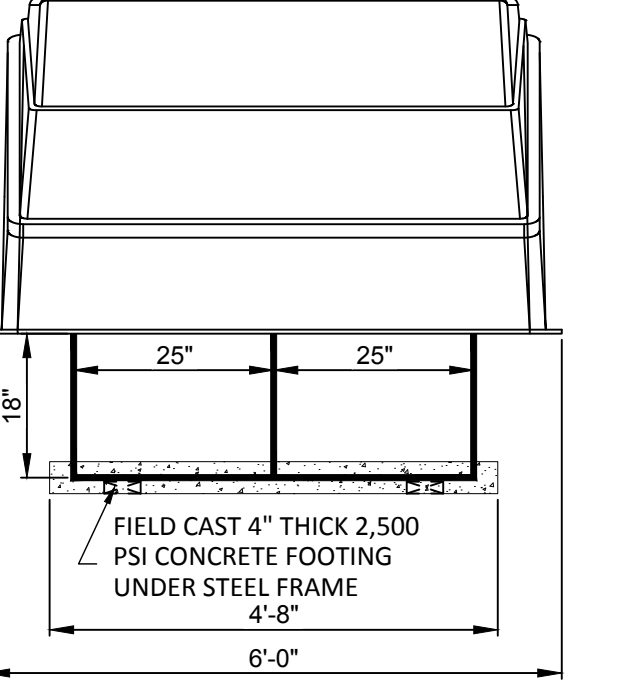
NOTE: REQUIRED SUMP DIMENSIONS UNLESS MANUFACTURER INSTRUCTIONS DIFFER.

GENERAL NOTES:
 a. D = INSIDE DIA. OF PIPE
 b. ALL DIMENSIONS SHOWN ARE MINIMUMS.
 c. ALL HIDDEN LINES INDICATE SUGGESTED SUMP CONFIGURATIONS.

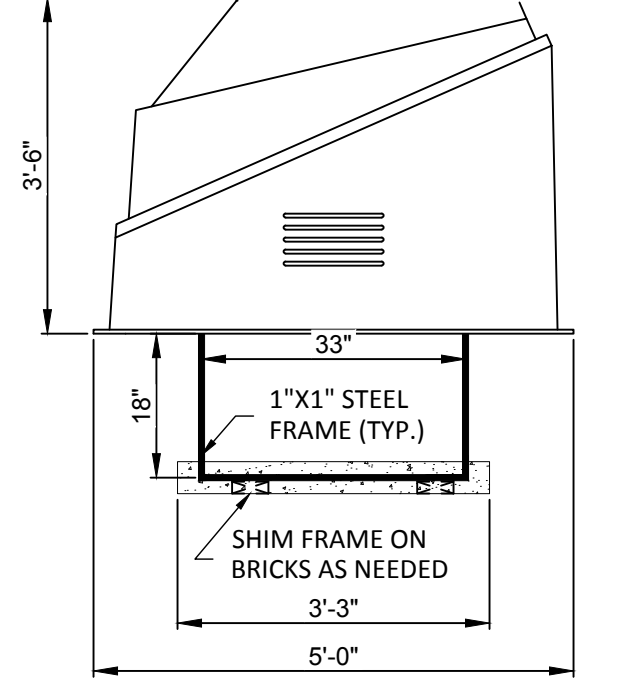
3 SUMP SECTIONS PER ASME A112.19.8-2007
SCALE: N.T.S.



TOP VIEW



FRONT ELEVATION



SIDE ELEVATION

2 SPA COLLECTOR TANK
SCALE: N.T.S.

SPA FIXTURE SCHEDULE:

MARK	DESCRIPTION	VOLTAGE	MANUFACTURER & MODEL NO.
A	MAIN LUG BREAKER PANEL	120/240V	EATON, BR2024N125R
B	GFCI DUPLEX RECEPTACLE	115V	PASS & SEYMOUR
C	100W SERVICE LIGHT	115V	INTERMATIC, VPXG11GCI 100W
D	RECIRCULATION PUMP	230V	STA-RITE, MAX-E-PRO, P66E-206L, 1.0 HP, 8A
E	THERAPY PUMP	230V	STA-RITE, MAX-E-PRO, P66H-209L, 3.0 HP, 15.0A
F	CHEMICAL CONTROLLER	115V	CES MR-1
G	CHLORINE FEEDER PUMP	115V	STENNER, 45M5
H	ACID FEEDER PUMP	115V	STENNER, 45M2
K	SPA HEATER	120V	PENTAIR MASTERTEMP
L	GFCI DUPLEX RECEPTACLE	115V	PASS & SEYMOUR
M	SPA LIGHTS (1)	12V	HAYWARD ASTROLIGHT II 100W OR EQUAL
N	TRANSFORMER (1)	115V/12V	INTERMATIC PX100

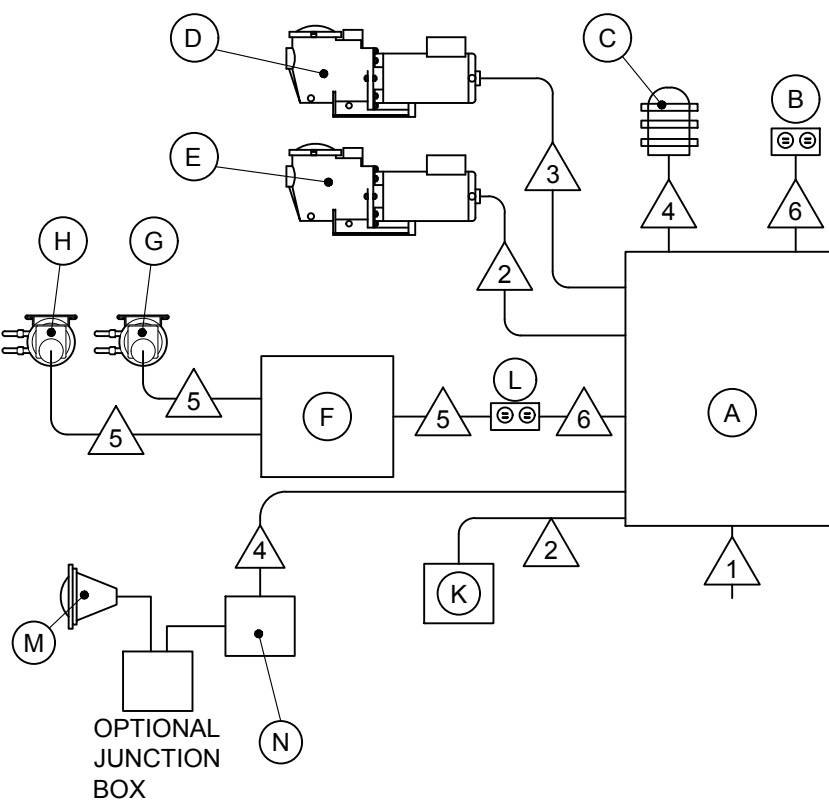
FEEDER & CONDUIT SCHEDULE:

MARK	PHASE	CONDUCTORS NEUTRAL GROUND	CONDUIT	REMARKS
1	TBD	TBD TBD	TBD	PANEL FEED BY OTHERS
2	2-#12	1-#12	1/2"	UL SEALTITE
3	2-#12	1-#12	1/2"	UL SEALTITE
4	1-#12 1-#12	1-#12	1/2"	SEALTITE TO LIGHT
5	1-#12 1-#12	1-#12	1/2"	CORD & PLUG
6	1-#12 1-#12	1-#12	1/2"	SEALTITE TO PANEL

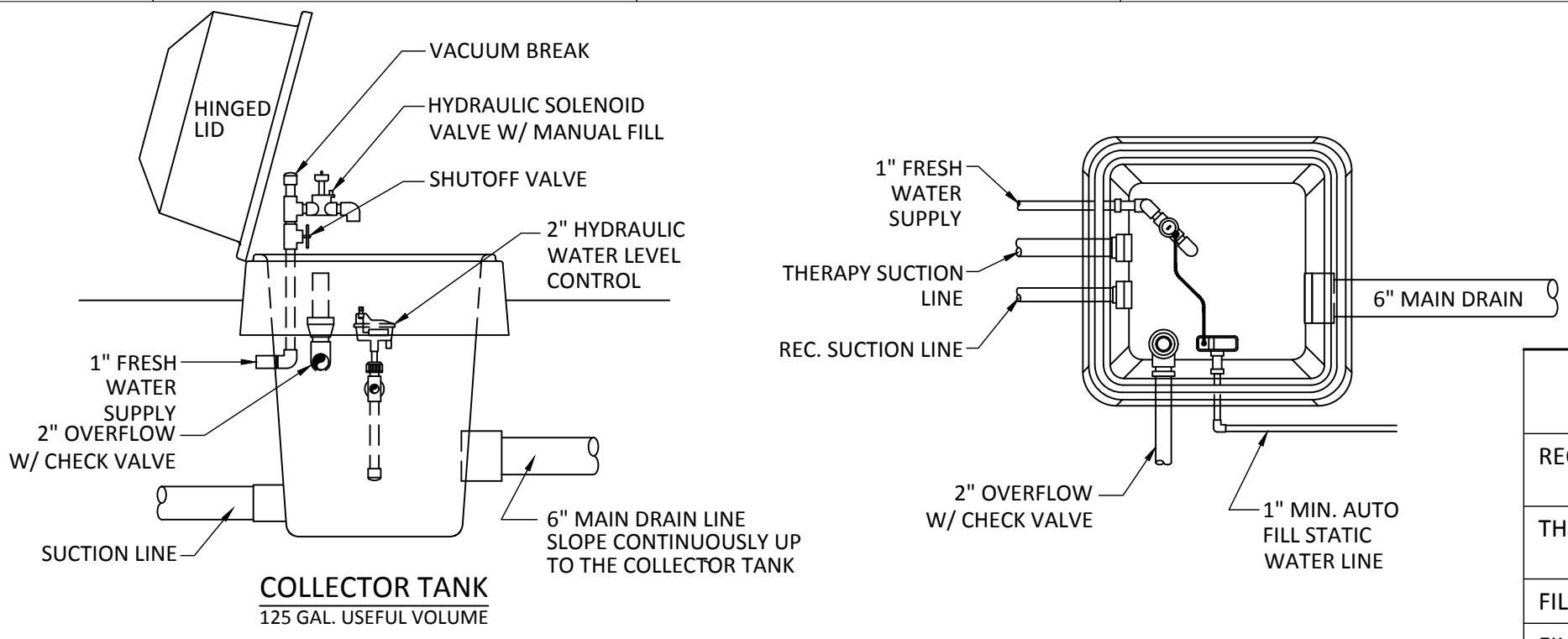
PANEL SCHEDULE:

CIRCUIT	POLE	TRIP	LOAD	AMPS	
1 PHASE, 3 WIRE, 120/240 VAC, INSULATED/BONDABLE SPLIT NEUTRAL					
1	2	20A	*SPA RECIRC. PUMP W/ (2) INTERLOCKED CHEM. FEEDS	8.0	
2	2	20A	*THERAPY PUMP	15.0	
3	1	15A	SERVICE LIGHT	1.5	
4	1	20A	GFCI RECEPTACLE	15.0	
5	1	20A	HEATER	15.0	
6	1	15A	**SPA LIGHTS	7.8	
				TOTAL MAXIMUM LOAD	62.3

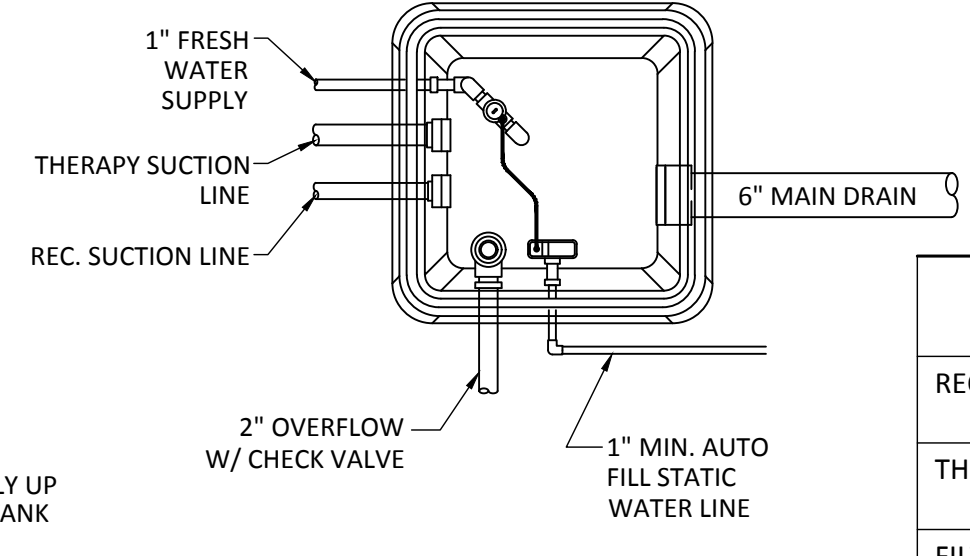
NOTE: INSTALL ACCORDING TO NEC REQUIREMENTS & MFG RECOMMENDATIONS.
 * GFCI BREAKERS ON PUMP SINGLE PHASE CIRCUITS, RATED 15A OR 20A.
 ** GFCI BREAKER ON 12V LIGHTS.



1 SPA ELECTRICAL SPECS
SCALE: N.T.S.

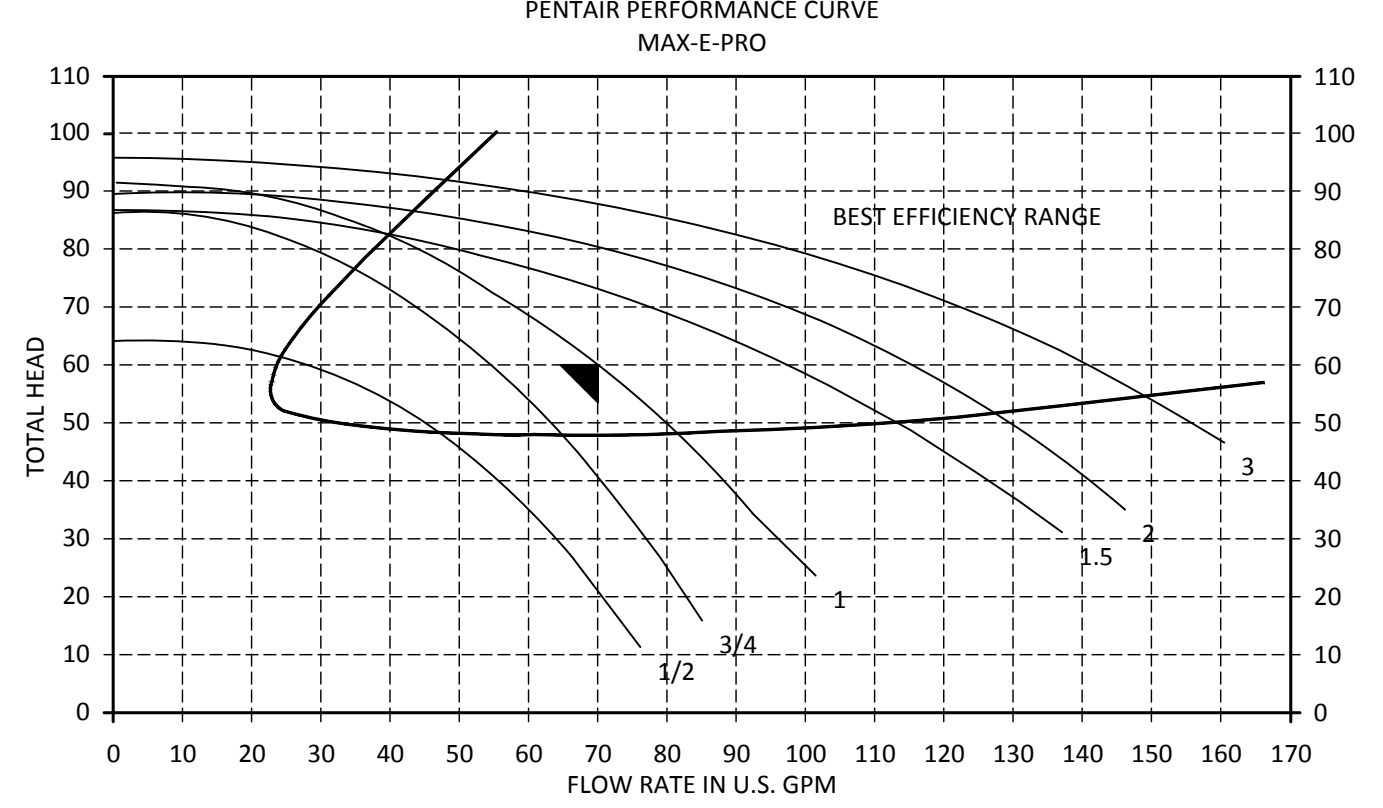


COLLECTOR TANK
125 GAL. USEFUL VOLUME



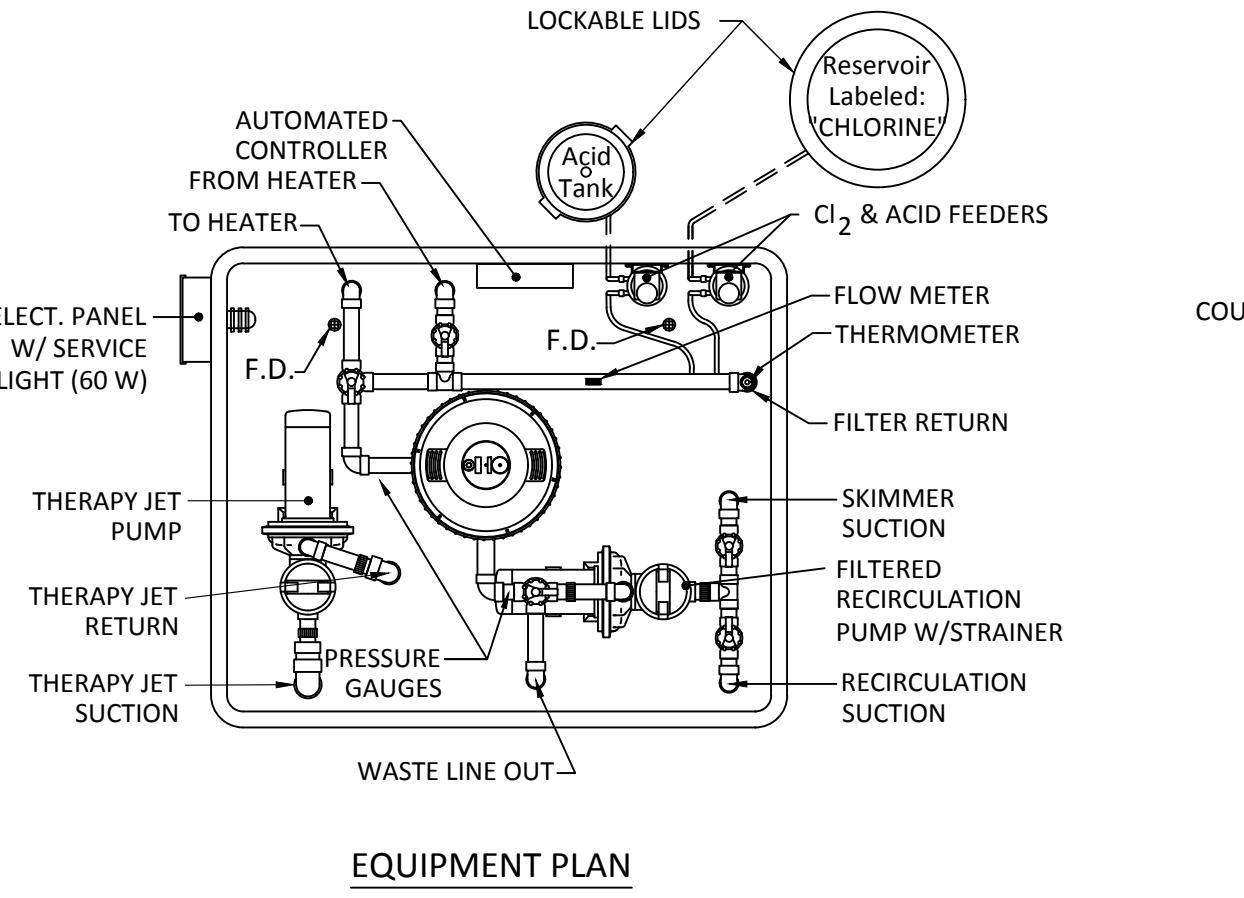
EQUIPMENT LIST

RECIRCULATION PUMP	STA-RITE, MAX-E-PRO, P66E-206L, 1 HP W/ STRAINER, 70 GPM @ 60' TDH, 115/230V, 1PH, 16.0/8.0A, THROTTLED TO 50 GPM
THERAPY PUMP	STA-RITE, MAX-E-PRO, P66H-209L, 3 HP W/ STRAINER, 150 GPM @ 50' TDH, 230V, 1PH, 15.0A
FILTER	STA-RITE, PLM150, PRESSURE CARTRIDGE 150 SF / 56 GPM MAX
FILTER TANK SIZE	AT125, 125 GALLON CAPACITY
WATER LEVEL CONTROL	AQUAWORX HYDRAULIC VALVE W/ MANUAL FILL VALVE & RESERVOIR
CHLORINE FEEDER	STENNER 45M5, 50 GPD CAPACITY, 110V
CHLORINE RESERVOIR TANK	25 GALLON WITH LOCKABLE LID
pH FEEDER	STENNER 45M2, 10 GPD CAPACITY, 110V
pH RESERVOIR TANK	25 GALLON WITH LOCKABLE LID
FLOWMETER	BLUE/WHITE F-30200P, 2", 20 TO 120 GPM RANGE
THERMOMETER	PRECISION INSTRUMENT CO B281-K WITH 1/2" NPT THERMOWELL 30 TO 240°F RANGE
PRESSURE GAUGE	0-60 PSI, 2" FACE DIAMETER
CHEMISTRY CONTROLLER	CES MR1



PIPE AND VALVES CHART

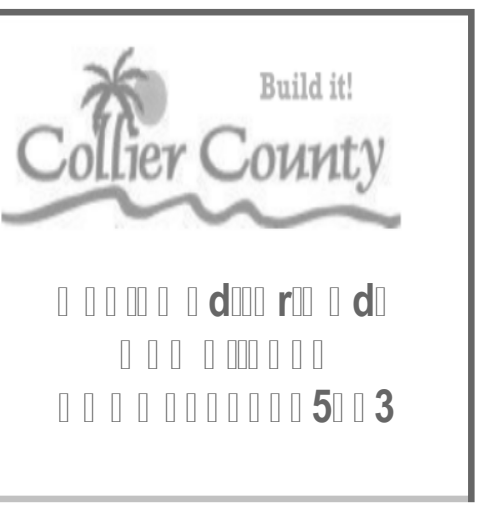
LINE FUNCTION	EQ SIZE	SPA SITE SIZE
MAIN DRAIN	6"	6"
SKIMMER	2"	2"
STATIC LINE	2"	2"
FRESH WATER FILL LINE	1"	
RECIRCULATION PUMP SUCTION	3"	
RECIRCULATION RETURN	2"	2"
THERAPY PUMP SUCTION	4"	
THERAPY RETURN	3"	3"
OVERFLOW	2"	
PUMP TO WASTE	2"	
TO HEATER	2"	
FROM HEATER	2"	



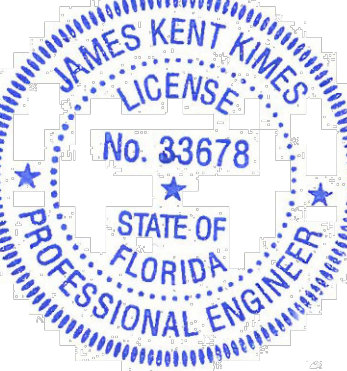
EQUIPMENT PLAN

- NOTES:**
- PLUMBING - ALL PIPE & FITTINGS SHALL BE SCHEDULE 40 PVC PER ASTM D1785 AND N.S.F. APPROVED AND STAMPED FOR POTABLE WATER APPLICATIONS. JOINTS TO BE SOLVENT WELDED PER ASTM D2855. ALL PLUMBING AND MATERIALS TO CONFORM TO FLORIDA BUILDING CODE 2017 - 6TH EDITION.
 - ELECTRICAL - ALL ELECTRICAL EQUIPMENT WIRING, INSTALLATION AND GROUNDING OF POOL COMPONENTS SHALL CONFORM TO NATIONAL FIRE PROTECTION ASSOC. 70, NATIONAL ELECTRICAL CODE (N.E.C.) LATEST EDITION AND ALL APPLICABLE LOCAL CODES. CHEMICAL FEED PUMPS TO BE INTERLOCKED WITH THE RECIRCULATION PUMP.
 - EQUIPMENT - ALL PUMPS, FILTERS AND DISINFECTION EQUIPMENT SHALL BE TESTED AND APPROVED BY THE PERTINENT MANUFACTURER USING THE NSF/ANSI STANDARD 50 AND LISTED AS APPROVED BY THE NSF.
 - THE FILTER ROOM FLOOR IS SLIP RESISTANT AND SLOPED TO FLOOR DRAINS.
 - ALL PLASTIC PIPING SUBJECT TO PROLONGED SUNLIGHT EXPOSURE MUST BE COATED TO PROTECT IT FROM ULTRAVIOLET LIGHT DEGRADATION.
 - EACH WASTE LINE SHALL HAVE A UNIQUE AIR GAP. WASTE LINES FROM DIFFERENT SOURCES (E.G. POOL, SPA, OVERFLOW, SUMP PUMP) SHALL NOT BE TIED TOGETHER BUT MAY DISCHARGE INTO A COMMON SUMP OR RECEPTACLE.
 - THE WASTE LINE MUST BE CONNECTED TO AN APPROVED WASTE DISPOSAL SYSTEM ACCORDING TO LOCAL OR STATE CODES.
 - ALL COLLECTOR TANKS SHALL HAVE COVER INTERSECTIONS AND SLOPE TO THE TANK DRAIN.
 - AN AUTOMATIC AND MANUAL WATER MAKEUP CONTROL MUST BE PROVIDED TO MAINTAIN THE WATER LEVEL AT THE LIP OF THE OVERFLOW GUTTER OR AT THE MOUTH OF THE RECESSED AUTOMATIC SKIMMERS AND MUST DISCHARGE THROUGH AN AIR GAP INTO A FILL PIPE OR COLLECTOR TANK. OVER THE RIM FILL SPOUTS ARE PROHIBITED.
 - A RATE OF FLOW INDICATOR, READING IN GPM, SHALL BE INSTALLED ON THE FILTER RETURN LINE. THE RATE OF FLOW INDICATOR SHALL BE PROPERLY SIZED FOR THE DESIGN FLOW RATE AND SHALL BE CAPABLE OF MEASURING FROM ONE HALF TO AT LEAST ONE-AND-ONE-HALF TIMES THE DESIGN FLOW RATE. THE CLEARANCES UPSTREAM AND DOWNSTREAM FROM THE RATE OF FLOW INDICATOR SHALL COMPLY WITH THE MANUFACTURER'S INSTALLATION SPECIFICATIONS.
 - THESE PLANS HAVE BEEN PREPARED IN COMPLIANCE WITH THE 2017 FLORIDA BUILDING CODE - 6TH EDITION.

THESE PLANS COMPLY WITH 2017 FBC 6TH ED. SECTION 454.1



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 AIFSS-55 (60 GPM)



NO.	DATE	DESCRIPTION
1	10-Jan-18	AD NOTED
2	10-Jan-18	AD NOTED
3	10-Jan-18	AD NOTED
4	10-Jan-18	AD NOTED
5	5-Dec-17	HEALTH COMMENTS
6	10-Jan-18	CODE REFERENCE UPDATES

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MARQUESSA ISLES POOL & SPA NAPLES, FL COLLIER COUNTY
 PREPARED FOR WATERSCAPES