

# FLORIDA BUILDING CODE R4501

THE POOL CONTRACTOR IS RESPONSIBLE FOR FURNISHING ALL DETAIL DESIGN REQUIREMENTS FOR EACH INDIVIDUAL POOL IN ACCORDANCE WITH THE FLORIDA BUILDING CODE, AND ALL CONSTRUCTION SHALL MEET ALL APPLICABLE CODES INCLUDING PLUMBING, ELECTRICAL, AND GAS. PIPING SHALL BE SCH. 40 PVC, NSFPM, MAX. PRESSURE VELOCITY 10 FPS, SUCTON 6 FPS. THE POOL PLAN SHALL SHOW THE DESIGN PLUMBING AS PER THE SAMPLE WITH THE INFORMATION REQUIRED SHOWN. MAIN DRAIN PLUMBING SHALL BE TWO DRAINS SEPARATED BY 3' WITH APPROVED ANS/ASME A112.19.8 2009 COVERS, AS AN ALTERNATE THE APPROVED DRAINS MAY BE PLACED ON DIFFERENT PLANES. THE TWO DRAINS SHALL HAVE A COMMON SUCTON LINE. SUCTON GRATES MAY BE USED IF APPROVED AT A MAXIMUM OF 1 1/2 FPS AND THE SUCTON PRING IS RECESSED FROM THE GRATE THE DISTANCE EQUAL TO THE SUCTON PIPE SIZE. SKIMMERS DO NOT REQUIRE PROTECTION AND MUST BE DESIGNED FOR A MINIMUM 25 gpm. THE FOLLOWING SHALL BE LABELED WITH LABEL MARKER TAPE AT THE FILTER LOCATION: PIPES, VALVES, PUMP(S) OFF SWITCH.

## ELECTRICAL REQUIREMENTS:

-WIRING AND BONDING AND ALL ELECTRICAL TO COMPLY WITH CHAPTER 42, FLORIDA BUILDING CODE 6TH EDITION-RESIDENTIAL, AND NEC 2014.  
 -NO OUTLET OR OVERHEAD POWER WITHIN 10' IF WITHIN 15' PROTECT BY GFI, TRANSFORMER MIN. 10' FROM POOL, 8" ABOVE WATER, J BOX 4' FROM POOL, BRASS TO J BOX OR TRANSFORMER WHICH EVER IS FIRST EXCEPT WHERE PVC IS APPROVED.

## SPECIAL SPA REQUIREMENTS:

-MAXIMUM WATER DEPTH 4', MAXIMUM SEAT DEPTH 28" MAX.  
 -FLOOR SLOPE 1:12  
 -STEPS: MIN. TREAD 10" X 12", 7" MIN. RISER, 12" MAX. RISER EXCEPT THE BOTTOM STEP MAY BE 14" IF IT IS THE SEAT. INTERMEDIATE TREADS AND RISERS TO BE UNIFORM. IF THE SPA IS OPERATED INTERMITTENTLY IT SHALL HAVE A ONE HOUR TURNOVER. IF CONTINUOUS A SIX HOUR TURNOVER. MAXIMUM TEMPERATURE 104 DEGREES.  
 -MEET ANS/NSP ARTICLE XVII, SAFETY INSTRUCTION/SAFETY SIGNS.  
 -PRESSURE TEST PIPING AT 35 PSI FOR 15 MINUTES OR MEET LOCAL CODE IF GREATER.

## GENERAL DESIGN REQUIREMENTS

-DESIGN, CONSTRUCTION AND WORKMANSHIP SHALL BE IN CONFORMITY WITH THE REQUIREMENTS OF APS/ICC 3, APS/ICC 4, APS/ICC 5, AND APS/ICC 6 AND APS/ICC 7 BASED ON THE POOL TYPE.  
 -SEE NSP FOR DIVING WATER ENVELOPES.  
 -SLIDES SHALL MEET THE MANUFACTURE'S INSTALLATION REQUIREMENTS.  
 -ALL POOLS WHETHER PUBLIC OR PRIVATE SHALL BE PROVIDED WITH A LADDER OR STEPS IN THE SHALLOW END WHERE THE WATER DEPTH EXCEEDS 24 INCHES (610 MM). IN PRIVATE POOLS WHERE WATER DEPTH EXCEEDS 5 FEET (1524 MM) THERE SHALL BE LADDERS, STAIRS OR UNDERWATER BENCHES/ SWIM-OUTS IN THE DEEP END, WHERE MANUFACTURED DIVING EQUIPMENT IS TO BE USED, BENCHES OR SWIM-OUTS SHALL BE RECESSED OR LOCATED IN A CORNER.  
 -CIRCULATION SYSTEMS, COMPONENTS AND EQUIPMENT SHALL COMPLY WITH NSF 50. -THE MAXIMUM TURNOVER RATE IS 12 HOURS. FILTERS SHALL HAVE AN AIR RELEASE AND- PUMPS 3 HP AND LESS SHALL MEET ANS/UL 1081

SAMPLE ONLY. EACH APPLICATION FOR PERMIT SHALL BE BASED ON A TOTAL DYNAMIC HEAD OF 60 ft.

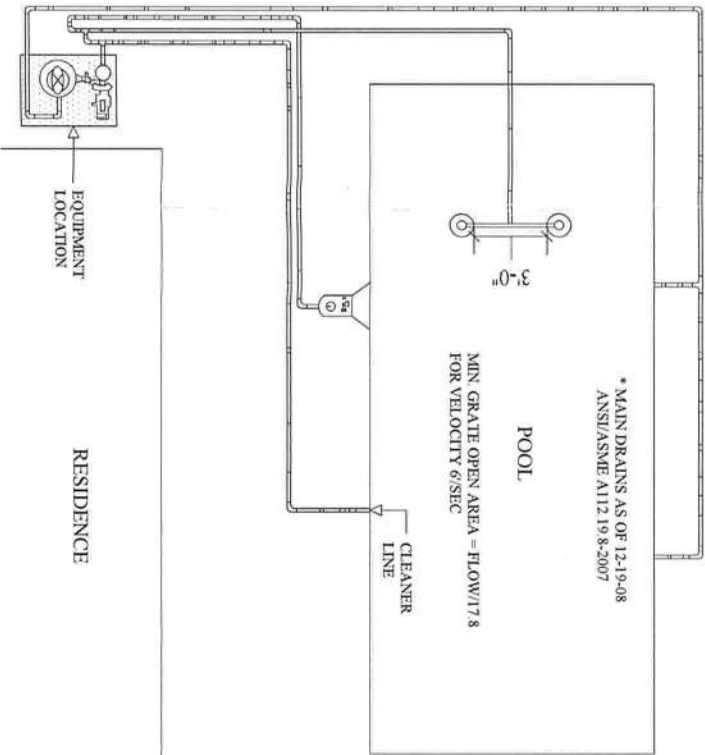
Determine System Flow Rate:

Minimum Flow Rate Required: 35gpm per skimmer (Required: 1 Skimmer per 800 sq ft)  
 Pool Volume: 500 sq. ft. x 4 ave depth x 7.481 gal/cf = 15,000 gallons  
 Turnover Time in Hours: 6 hours x 60 min/hr = 360 minutes  
 Flow Rate: 15,000 gallons / 360 minutes = 42 gpm

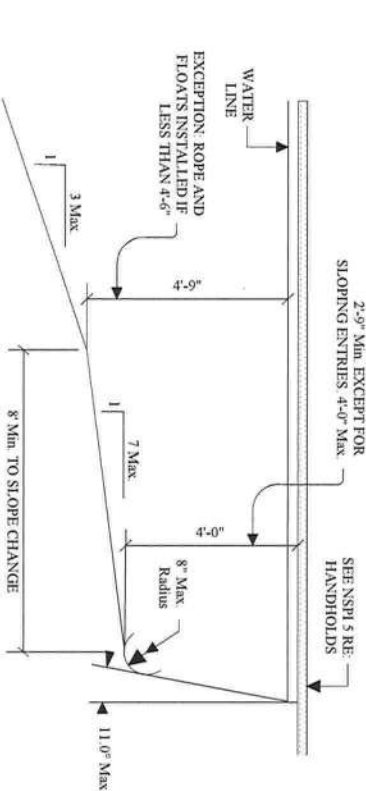
PIPE	SUCTON	PRESSURE
1 1/2"	35 GPM	65 GPM
2"	60	105
2 1/2"	90	147
3"	135	230
4"	235	396

FOR POOLS WITH VOLUME -15,000 GALS.  
 PUMP: STARTE P6660L OR HAYWARD SUPERU 1/2 HP 42 GPM 60' TUR  
 TURNOVER RATE = 6 HOURS = 360 MINS  
 FILTER: STARTE PTM 50, 50 GPM OR HAYWARD C751, 75 GPM CAPACITY  
 MAIN DRAIN: HAYWARD W61048E  
 CLEANER: HAYWARD VAC LOC

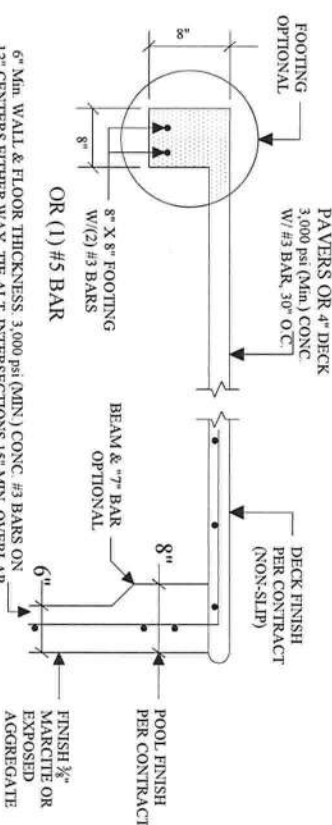
MAIN SUCTON PIPE SIZE 2"  
 SKIMMER SUCTON PIPE SIZE 2"  
 CLEANER/VAC PIPE SIZE 1 1/2"  
 RETURN SUCTON PIPE SIZE 1 1/2"



## POOL SECTION DETAIL N.T.S.



SB2836, 6-20-07  
 FOR BONDING AND GROUNDING SYSTEMS FOR SWIMMING POOLS, THE USE OF AN UNDERGROUND BONDING CONDUCTOR MADE OF #8 AWG, BARE SOLID COPPER WIRE BURIED TO A MINIMUM DEPTH OF 4 INCHES BELOW SUBGRADE, AND 18 TO 24 INCHES FROM INSIDE WALL OF A SWIMMING POOL, OR SPA, IS DEEMED A PERMISSIBLE ALTERNATIVE OR EQUIVALENT TO COMPLIANCE WITH s. 680.26(6) OF THE NATIONAL ELECTRICAL CODE.



Structural subject to suitable soil conditions.

## POOL/SPA, DECK, BEAM, WALL, FLOOR N.T.S.



IT HAS BEEN CERTIFIED THAT THESE DESIGN REQUIREMENTS ARE IN COMPLIANCE WITH THE FLORIDA BUILDING CODE R4501, 6TH EDITION 454.2-2017, ANS/APS/ICC 3, ANS/APS/ICC 4, ANS/APS/ICC 5, AND ANS/APS/ICC 6 AND ANS/APS/ICC 7, ANS/APS/ICC 14, ANS/APS/ICC 15

*[Signature]*  
 SAMUEL A. LIBERATORE P.E. #55740  
 MAY 20, 2020

## HYDRO FUN POOLS

Standard Residential Pool and/or Spa Design

G.B. COLLINS ENGINEERING P.A.  
 CERTIFICATE OF AUTHORIZATION 27934

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Sealed ✓

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