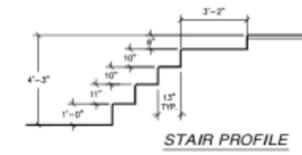
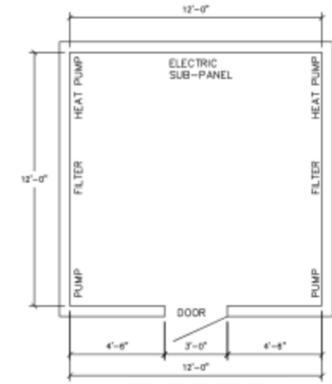


**POOL PLAN**



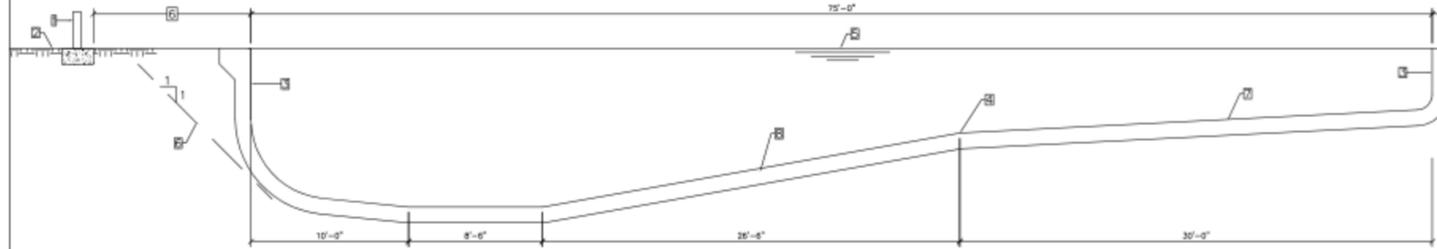
**STAIR PROFILE**



**EQUIPMENT ROOM**

**STRUCTURAL NOTES:**

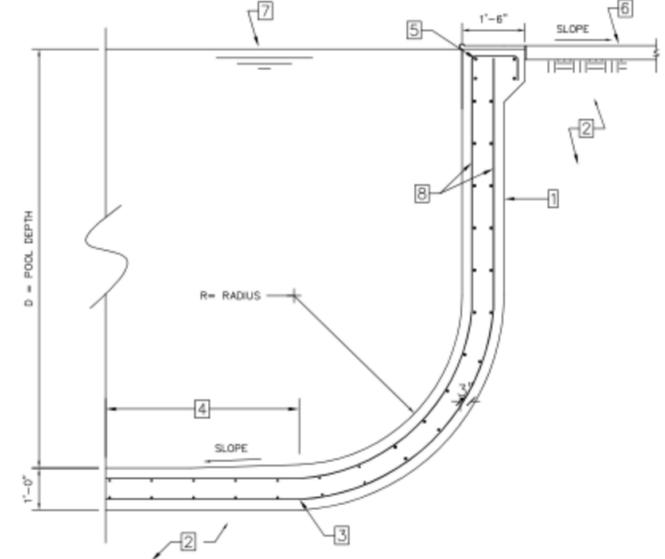
- 1) CODE: 2006 IBC
- 2) CONCRETE: ASTM C-94-00,  $f_c=2500$  PSI @ 28 DAYS, AGGREGATES ASTM C-33-01
- 3) REINFORCING: ASTM A615-00, GRADE 40,  $f_y = 40$  KSI FOR NO.4 BAR AND SMALLER, AND GRADE 60,  $f_y = 60$  KSI FOR NO. 5 AND LARGER.
- 4) POOL DESIGN IS BASED ON POOL WALLS SUPPORTED BY SOIL. WATER MUST BE DRAINED BEFORE REMOVING ANY SOIL BEHIND THE WALLS.
- 5) CONCRETE POOL IS POURED IN PLACE AGAINST FIRM NATIVE AND UNDISTURBED SOIL OR COMPACTED SOIL TO 95% OF MODIFIED PROCTOR PER ASTM D1557 TO PROVIDE ADEQUATE SUPPORT FOR POOL PRESSURE.
- 6) POOL DESIGN DOES NOT ALLOW ANY SURCHARGE LOADS FROM ADJACENT STRUCTURE.
- 7) CONCRETE DECK AND SURROUNDING GRADE SHALL SLOPE AWAY FROM POOL.
- 8) LAP ALL REINFORCING BAR SPLICES 40 BAR DIAMETER.
- 9) PNEUMATICALLY PLACED MONOLITHIC GUNITE CONCRETE SHALL BE USED IN PLACING POOL.
- 10) ALL WORK SHALL MEET CURRENT BUILDING CODES AND CITY CODES AND ORDINANCES.



**POOL PROFILE**

**KEY NOTES:**

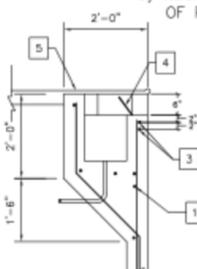
- 1) ADJACENT WALLS AND FOOTINGS.
- 2) FINISH GRADE.
- 3)  $\frac{3}{8}$ " WATERPROOF PLASTER FINISH.
- 4) POOL FLOOR INFLECTION POINT.
- 5) MAXIMUM WATER LEVEL.
- 6) MAINTAIN A DISTANCE BETWEEN POOL AND ANY ADJACENT FOOTING SO THAT AN IMAGINARY FOOTING PRESSURE LINE SLOPE 1:1 MUST CLEAR POOL WALL.
- 7) SLOPE POOL FLOORS A MAXIMUM 10:1 AT SHALLOW END.
- 8) SLOPE POOL FLOORS A MAXIMUM 10:3 AT DEEP END.
- 9) ADJACENT DESCENDING SLOPES, MAINTAIN 10'-0" MINIMUM CLEAR FROM EDGE OF POOL TO DESCENDING SLOPES AND RETAINING WALL STRUCTURES.



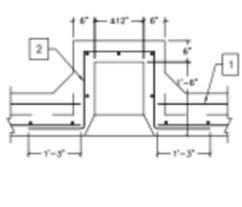
**POOL CROSS SECTION**

- 1) CONCRETE WALL THICKNESS PER TABLE
- 2) TYPICAL UNDISTURBED SOIL OR FILL COMPACTED TO 95% OF ASTM D1557.
- 3) REINFORCING BAR LAP = 48 \* BAR DIAMETER.
- 4) TYPICAL 12" THICK CONCRETE FLOOR WITH #4 BAR @ 12" O.C. EACH DIRECTION
- 5) BOND BEAM WITH (4)-#4 BARS CONT.
- 6) SLOPE DECK  $\frac{1}{4}$ " : 12"
- 7) WATER LEVEL.
- 8) VERTICAL WALL REINFORCING PER TABLE

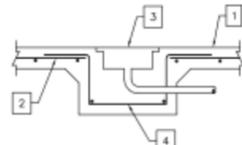
POOL DEPTH 'D'	RADIUS 'R'	WALL THICKNESS 't'	VERTICAL STEEL 'As'	HORIZONTAL STEEL	BOTTOM SLAB THICKNESS	FLOOR REINF.
0 ≤ 3'-0"	1'-0"	12"	#4 @ 12" O.C. BOTH SIDES	#4 @ 12" O.C. BOTH SIDES	12"	#4 @ 12" O.C. TOP & BOTTOM BOTH DIRECTIONS
4'-0"	1'-0"					
5'-0"	1'-6"					
6'-0"	2'-6"					
7'-0"	3'-6"	12"	#4 @ 6" O.C. $F_y=60$ KSI OR $F_y=60$ KSI	#4 @ 12" O.C. BOTH SIDES		
8'-0"	4'-6"					
9'-0"	5'-0"		#5 @ 8" O.C.			
10'-0"	5'-0"	14"	$F_y=60$ KSI			



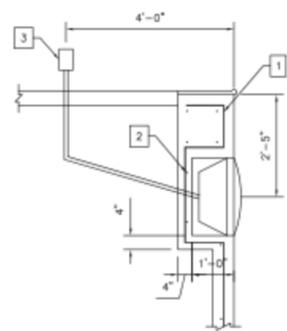
**SECTION**



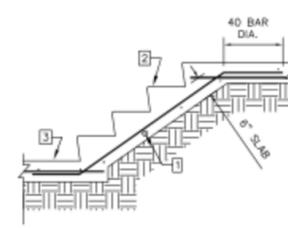
**PLAN**



**MAIN DRAIN DETAIL**



**LIGHT DETAIL**



**CONCRETE STAIRS IN POOL**

- 1) NO.4 BAR AT 12" O.C. EACH DIRECTION. BEND END OF HORIZONTAL BARS INTO ADJACENT WALL.
  - 2) STEP PROFILE PER PLANS
  - 3) CONCRETE SLAB PER PLAN.
- NOTE:  
SEE DRAWINGS FOR NUMBER OF STEPS, TREAD AND RISER SHAPE AND TREATMENT

REVISIONS	BY
OWNER 3/3/2011	NGM
OWNER 3/3/2011	NGM

THESE DRAWINGS ARE PREPARED FOR THE EXCLUSIVE USE OF THE PROJECT IDENTIFIED ABOVE. A WRITTEN AUTHORIZATION FROM THE ENGINEER OR ARCHITECT IS REQUIRED FOR THE USE OF THESE DRAWINGS TO CONSTRUCT OR ALTERATION OF THESE DRAWINGS OR ALTERATION OF THESE DRAWINGS WITHOUT THE WRITTEN AUTHORIZATION FROM PROFESSIONAL ENGINEERING SERVICES, INC. CONSTITUTE A FRAUD AND SHALL BE SUBJECT TO LEGAL ACTION.

CLIENT: VIRGIN ISLANDS GUNITE POOL  
PROJECT: LSJ LLC SWIMMING POOLS  
ADDRESS: LITTLE ST. JAMES, USVI

**PROFESSIONAL ENGINEERING SERVICES, INC**  
P.O. BOX 1941 LAKE HANNAH AZ 85646  
2169 SWANSON AVE STE 4 LHC AZ 85403  
TEL: (520) 453-9955 FAX: (520) 453-9933

EXPIRES: 3-31-2013

PREPARED BY:  
CHECKED BY: NGM  
DATE: 2/4/2011  
SCALE: AS SHOWN  
JOB NUMBER: PES110117

SHEET  
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OF 1