

# Engineering Report for Swimming Pool Plans

Design Compliance with Subpart 6-1  
NYS Sanitary Code

## For Office Use Only

Computer # \_\_\_\_\_ Date \_\_\_\_\_

### Section A

- General:
1. Owner of Pool \_\_\_\_\_
  2. Name of Pool \_\_\_\_\_
  3. City, Town, Village \_\_\_\_\_ County \_\_\_\_\_
  4. (Check One)      New Pool       Change to Existing Pool
  5. Type of Pool (check as applicable)  
Indoor Pool  <sub>1</sub>      Outdoor Pool  <sub>2</sub>      Spa Outdoor  <sub>3</sub>      Spa Indoor  <sub>4</sub>  
Wading Pool  <sub>5</sub>      White Water Slide  <sub>6</sub>      Wave Pool  <sub>7</sub>      Other  <sub>8</sub>  
Movable Bottom Pool  <sub>9</sub>      Special Purpose Pool  <sub>10</sub>
  6. Anticipated Date of Start of Construction \_\_\_\_\_
  7. Estimated Date of Completion \_\_\_\_\_

### Section B

#### Pool Configuration:

1. Type of Construction \_\_\_\_\_
2. Length \_\_\_\_\_ Width \_\_\_\_\_ Area \_\_\_\_\_
3. Shape:      Rectangle  <sub>1</sub>      Square  <sub>2</sub>      L-Shaped  <sub>3</sub>      Z-Shaped  <sub>4</sub>  
                  U-Shaped  <sub>5</sub>      Oval  <sub>6</sub>      Other  <sub>7</sub>
4. Depths Minimum \_\_\_\_\_ Maximum \_\_\_\_\_
5. Pool Capacity \_\_\_\_\_ gallons
6. Transition Slope Shallow to Deep End \_\_\_\_\_ In Shallow End \_\_\_\_\_

### Section C

#### Bather Capacity:

1. Maximum Number of Bathers Permitted to Use Pool at One Time \_\_\_\_\_  
[(Shallow Area Less Than 5') ÷ 15 + (Deep Area Greater Than 5' Depth - 300 x No. of Diving Boards) ÷ 25]
2. Spa Bather Capacity: Area ÷ 10 = \_\_\_\_\_

### Section D

#### Water Supply:

- Water Source:
1. Drinking Water \_\_\_\_\_
  2. Water for Sanitary Use \_\_\_\_\_
  3. Water Source for Swimming Pool Use \_\_\_\_\_
  4. Quantity Available \_\_\_\_\_ gpm
  5. Capacity of Fill Pipe \_\_\_\_\_ gpm
  6. Method Used to Prevent Interconnection or Back Siphonage \_\_\_\_\_
  7. Fill Pipe (describe method, size, location) \_\_\_\_\_

Section E

Deck Equipment

1. Ladders: Number \_\_\_\_\_ Locations \_\_\_\_\_
2. Physically Disabled Access  Yes  No If yes, describe \_\_\_\_\_
3. Diving Boards \_\_\_\_\_ ft. Above Water, Depth of Diving Area \_\_\_\_\_ ft., Length \_\_\_\_\_  
 \_\_\_\_\_ ft. Above Water, Depth of Diving Area \_\_\_\_\_ ft., Length \_\_\_\_\_  
 Water depth under starting blocks \_\_\_\_\_ ft.
4. Deck Slide Location \_\_\_\_\_
5. Location of 4" Stripe \_\_\_\_\_
6. Depth Markers: Spacing \_\_\_\_\_ Height of Numerals \_\_\_\_\_ Material \_\_\_\_\_
7. Fencing/Barrier Height \_\_\_\_\_ ft.
8. Max. Opening Verticals/Horizontal/Under Fence \_\_\_\_\_
9. Self-Closing Gates  Yes  No
10. Positive Latching Device  Yes  No
11. Height of Latch Above Grade \_\_\_\_\_ inches
12. Elevated Lifeguard Chairs: No. & Location \_\_\_\_\_
13. Recessed Steps: Riser \_\_\_\_\_ inches Tread \_\_\_\_\_ inches
14. Stairs: Tread \_\_\_\_\_ inches Riser \_\_\_\_\_ inches

Section F

Recirculation Equipment

1. Recirculation Pump:  
 Make \_\_\_\_\_ Model # \_\_\_\_\_ Turnover  $\frac{\text{gals. capacity}}{\text{gpm} \times 60} =$  \_\_\_\_\_ hrs.
2. Pipe Material Main Drain Suction Pipe Inlet Pipes Main Drain Grate  
 \_\_\_\_\_ Size \_\_\_\_\_ \_\_\_\_\_  
 \_\_\_\_\_ Length \_\_\_\_\_ \_\_\_\_\_  
 \_\_\_\_\_ Velocity \_\_\_\_\_ \_\_\_\_\_
3. Head Loss Computations, Pump Curve (attached)  Yes  No
4. Hair Catcher: Pipe Size \_\_\_\_\_ Basket Diameter \_\_\_\_\_ Depth \_\_\_\_\_
5. Vacuum Cleaner: Make \_\_\_\_\_ Type \_\_\_\_\_ Piping Size \_\_\_\_\_ Hose Length \_\_\_\_\_ ft.
6. Filters  
 Type \_\_\_\_\_ Make \_\_\_\_\_ No. \_\_\_\_\_ Filter Medium \_\_\_\_\_  
 Area Each Filter \_\_\_\_\_ x \_\_\_\_\_ x \_\_\_\_\_ = \_\_\_\_\_ sq. ft. Total Area \_\_\_\_\_  
 Filtration Rate  $\frac{\text{gpm}}{\text{sq. ft.}} =$  \_\_\_\_\_ gpm per sq. ft. Backwash Rate  $\frac{\text{gpm}}{\text{sq. ft.}} =$  \_\_\_\_\_ gpm per sq. ft.  
 Body Feeder Capacity (D.E.) \_\_\_\_\_
7. Pressure Gauges \_\_\_\_\_ 8. Rate Controllers \_\_\_\_\_ 9. Flow Meter: Make \_\_\_\_\_ Model # \_\_\_\_\_
10. Inlets  
 No. \_\_\_\_\_ Spacing \_\_\_\_\_ Depth \_\_\_\_\_ Size \_\_\_\_\_ Adjustable \_\_\_\_\_  
 Make \_\_\_\_\_ Model # \_\_\_\_\_

**Section G**

**Pool Waste Drain**

- 1. Pipe size \_\_\_\_\_ Length \_\_\_\_\_
- 2. Grate Opening Area (sq. in.) \_\_\_\_\_ Number of Grates \_\_\_\_\_
- 3. Length of Time Needed to Empty Pool \_\_\_\_\_
- 4. Describe Arrangement for Backflow Prevention \_\_\_\_\_
- 5. Main Drain: Spacing \_\_\_\_\_ Distance from the Wall \_\_\_\_\_
- 6. Gutter Type \_\_\_\_\_ Size \_\_\_\_\_ Drain Spacing \_\_\_\_\_
- 7. Surge Capacity (provided computations) \_\_\_\_\_
- 8. Skimmers: Make/Model # \_\_\_\_\_ Number \_\_\_\_\_ Location \_\_\_\_\_  
Pipe Size \_\_\_\_\_ Flow Rate Through Skimmer \_\_\_\_\_  
Equalizer Lines Provided  Yes  No  
Deck Drain Spacing \_\_\_\_\_ Slope to Drain \_\_\_\_\_

**Section H**

**Chemical Feeders and Test Equipment**

- 1. Disinfection Chemical To Be Used \_\_\_\_\_
- 2. Describe Provisions for Chemical Storage \_\_\_\_\_
- 3. Make and Type of Feeder (Model #) \_\_\_\_\_
- 4. Capacity of Feeder \_\_\_\_\_
- 5. % Strength of Solution \_\_\_\_\_ Maximum Dosage \_\_\_\_\_ Point of Application \_\_\_\_\_
- 6. Operation Control  
Alkalinity Hardness Test Kit (Range) \_\_\_\_\_ Chlorine Residual Test Kit (Range) \_\_\_\_\_  
pH Test Kit (Range) \_\_\_\_\_ pH Control Chemical to be Used \_\_\_\_\_  
Make of Feeder (Model #) \_\_\_\_\_ Automatic deactivation device provided  Yes  No

**Section I**

**Waste Disposal System**

- 1. Describe Facilities for Sanitary Waste Disposal \_\_\_\_\_
- 2. Have Plans for Facility Been Approved?  Yes  No
- 3. Describe Facilities for Pool Waste Disposal (including point of discharge) \_\_\_\_\_
- 4. Filter Wash Water \_\_\_\_\_ 5. Scum Gutter Waste \_\_\_\_\_ 6. Vacuum Cleaner Waste \_\_\_\_\_

**Section J**

**Bathroom Facilities (Numbers Provided)**

	Men	Women
Showers	_____	_____
Lavatories	_____	_____
Toilets	_____	_____
Urinals	_____	xxxx

**Section K**

**Lifesaving Equipment**

- 1. Lifesaving Equipment  
Lifeguard Chairs \_\_\_\_\_ Torpedo or Ring Buoys or Rescue Tube \_\_\_\_\_  
Reaching Pole \_\_\_\_\_ Spine Board \_\_\_\_\_  
Pocket Mask \_\_\_\_\_
- 2. First Aid: Commercially available First Aid Kit  Yes  No First Aid Room  Yes  No
- 3. Chlorine Gas Storage Location \_\_\_\_\_  
Self Contained Breathing Apparatus  Yes  No  
If Yes, Location \_\_\_\_\_

**Section L**

**Electrical and Ventilation**

1. Describe Arrangements for Ventilation \_\_\_\_\_
2. Underwater Lights:
 

Number _____	Make _____	Model # _____
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3. Deck Junction Box
 

Number _____	Make _____	Model # _____
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4. Underwriters' Certificate  Yes  No
5. Other Hazards (explain) \_\_\_\_\_
6. Overhead Illumination on Water Surface \_\_\_\_\_ ft. candles
7. Underwater Lights Watts/sq. ft. Provided \_\_\_\_\_
8. Ground Fault Circuit Interruptors Provided  Yes  No

**Section M**

**Spas**

1. Maximum Water Depth \_\_\_\_\_
2. Maximum Depth of Any Seat From Water Line \_\_\_\_\_
3. Steps: Tread Height \_\_\_\_\_ Riser Height \_\_\_\_\_
4. Deck Area Provided (Show Calculations) \_\_\_\_\_
5. Thermostatic Control: Make \_\_\_\_\_ Model \_\_\_\_\_
6. Alarm System/Timer  Yes  No
7. Air Induction System, Arrangement for Backflow Prevention \_\_\_\_\_
8. Warning Sign Area \_\_\_\_\_

**Section N**

1. Water Slides
 

Minimum Operating Water Depth _____	Slide Flume Terminus _____
Distance between sides of adjacent flumes _____ ft. Distance between side of flume and end wall _____ ft.	
2. Special Purpose Pool
 

Stair Step Riser _____	Step Tread _____	Hand Rail Height _____
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**INFORMATION:**

THIS FORM IS INTENDED TO INCLUDE FEATURES PERTINENT TO THE DESIGN AND OPERATION OF A SWIMMING POOL. THE FORM SHOULD BE USED TO SUPPLEMENT THE NARRATIVE REPORT OF THE ENGINEER OR ARCHITECT IN THE TRANSMITTAL OF PLANS TO THE HEALTH DEPARTMENT.

Signature of Designing Engineer or Architect \_\_\_\_\_

Date \_\_\_\_\_

Address \_\_\_\_\_

Professional Engineer's or Architect's License # (or apply seal) \_\_\_\_\_

Telephone Number \_\_\_\_\_