County of San Diego

DEPARTMENT OF ENVIRONMENTAL HEALTH & QUALITY
PUBLIC SWIMMING POOL PROGRAM
P.O. BOX 129261, SAN DIEGO, CA 92112-9261
www.sdcountyplancheck.org
Plan Check Scheduling Line: (858) 505-6660

POOL, SPA, WADER - MINOR REMODEL, RENOVATION, SINGLE EQUIPMENT CHANGE PLAN SUBMITTAL PACKAGE

A public pool is defined in the California Building Code, Title 24 as an artificial basin, chamber, or tank constructed or prefabricated with impermeable surfaces that is used or intended to be used, for public swimming, diving, or recreational activities. Any renovation or remodeling to the pool or its ancillary facilities is required to be reviewed by this Department via plan submission (Title 24-3103B).

This packet can be used to draw or sketch your proposed pool/spa/wader Minor Remodel or Renovation scope of work and submit to our department for review and approval. You may draw your own plans using this document as guidance, but all items listed in this document must be represented in your submitted plans. Operators are required to have all plans approved prior to the start of construction work to prevent any additional costs that would be incurred if modifications are needed should changes be noted on the plans. For single equipment changes, unless replacing the equipment with a unit of the exact same make, manufacturer, and model number, a submittal is required. **All items provided on the following pages are required unless otherwise noted.**

Definitions:
"Minor Remodel" means the remodeling of a Body of Water that includes resurfacing or replastering, decking work, above ground equipment changes, enclosure changes, and related ancillary facility modifications.

"Renovation" means making modifications to an existing Body of Water that include replacement or changes to the below ground plumbing of a Body of Water, including surge tanks and main drain alterations.

"Single Equipment Change" means the replacement of an existing single piece of equipment with a unit of the same function, in the same location, and meets similar specifications as the existing equipment. NOTE: Skimmers, Suction Vacuum Release Systems (SVRS), Drain Covers, and Underwater Lighting are not considered single equipment changes. ***For a single equipment change, complete page 2 and 3 only (one application per body of water).***

- **Page 2** – For your Scope of Work, check all that applies.
- **Page 2** – Sign and date acknowledgment.
- **Page 3-5** – Complete these pages for each Body of Water (BOW) with a Scope of Work.
- **Page 6-17** – Complete applicable Scope of Work documents. Provide specification sheets and plan drawings as indicated that are relevant to your Scope of Work.
- **Page 18** – Pool Signage Requirements. Any work done will require that all existing signage is updated to meet current code.
- **Page 19-21** – Example overhead drawings.
- **Page 22-24** – Draw or attach your own overhead drawings per body of water.
- **Page 25-27** – Turnover Times and Other Formulas

SCOPE OF WORK

Once this packet is complete, submit all information online by clicking here, or visiting our submittal portal at https://publicservices.sandiegocounty.gov/CitizenAccess/Default.aspx.

FACILITY INFORMATION	
FACILITY NAME: _____	FACILITY ADDRESS: _____
CHECK ALL THAT APPLY	
☐ DECK – *Complete pg. 15-16*	☐ RESURFACE – *Complete pg. 8*
☐ ENCLOSURE – *Complete pg. 11-14*	☐ SKIMMER – *Complete pg. 3-5*
☐ EQUIPMENT CHANGES – *Complete pg. 3-5*	☐ SPLIT MAIN DRAIN/EQUALIZER(S) – *Complete pg. 10*
☐ HANDRAIL ADDITION/CHANGES – *Complete pg. 9*	☐ SUMP CHANGE – *Complete pg. 10*
☐ RESTROOMS AND OTHER ANCILLARY FACILITIES - *See checklist for public pool ancillary facilities on pg. 17 and submit architectural drawings.*	☐ UNDERGROUND PLUMBING LINES AND/OR SURGE TANK EXTERIOR TO BOW - *Complete pg. 3-5 and submit separate plumbing schematic*
PROVIDE A VALID CALIFORNIA CONTRACTOR'S LICENSE RELEVANT TO THE PROPOSED SCOPE OF WORK: License #: _____	

SIGNATURE AND ACKNOWLEDGEMENT

I declare under penalty of perjury that to the best of my knowledge and belief, the description of use and information contained on this application and plans are correct and true. I hereby consent to all necessary inspections made pursuant to law and incidental to the issuance of this review and the operation of this business. I also agree to conform to all conditions, orders, and directions, issued pursuant to the California Health and Safety Code, and all applicable County and City Ordinances. I understand that if the plans are incomplete due to a lack of any of the required information, the plans will be rejected and upon resubmission, a plan recheck fee will be charged. I am aware that plan check fees are not fully refundable once plans are reviewed. Plans are valid for one year after stamp of approval and must be restamped within 60 days of expiration or they will be purged. Any changes to the released documents will be submitted and filed with the County of San Diego, Department of Environmental Health and Quality. I understand and hereby consent to any information I provide on this permit application to be considered a public record subject to disclosure under the California Public Records Act.

Authorized Signature: _____ Date: _____

OFFICE USE ONLY

SCHEDULING INFORMATION	APPROVAL STAMP
Plans are approved by the Department of Environmental Health and Quality, Food, Water, and Housing Division and contingent on the final inspection. Contact your plan check specialist or the scheduling line at (858) 505-6660 at least 10 working days in advance to schedule an inspection at the office. Our office is located at: 5500 Overland Ave, Suite 170, San Diego CA 92123 Hours: 8:00AM – 4:00PM (Closed for lunch from 12:00PM– 1:00PM)	

COMPLETE THIS SECTION FOR EACH BODY OF WATER (INCLUDE ADDITIONAL SHEETS IF NECESSARY)

BODY OF WATER INFORMATION					
Body of Water Type:			Location of Body of Water:		
Surface Area *(ft²)*:	Capacity *(gallons)*:	Turnover Rate:	Pipe Material *(e.g. PVC sch. 40)*:	No. of Return Inlets: Floor: _____ Wall: _____	Year Built:
Shell: ☐ Gunite & Plaster *(white only)* ☐ Other (*describe)*:	Handholds: ☐ Bull-nosed ☐Cantilevered Deck ☐ Perimeter Gutter ☐ Other (*describe)*:		No. of Skimmers:	Equalizer Lines Provided: ☐YES ☐ NO	
			Main Drain Suction Outlet Symmetrically Split (3ft. in a "T" Configuration) ☐ YES ☐ NO		
Suction Line Sizes:	Water Source:		Equalizer Lines Outlet Symmetrically Split (3ft. in a "T" Configuration) ☐ YES ☐ NO		
Return Line Sizes:	Fill Type/Size *(in)*:		Spa Jet Suction Outlet Symmetrically Split (3ft. in a "T" Configuration) ☐YES ☐ NO		

COMPLETE EXISTING EQUIPMENT FOR EACH BODY OF WATER & PROPOSED EQUIPMENT CHANGES IF APPLICABLE (PROVIDE SPECIFICATION SHEETS FOR ALL NEW EQUIPMENT)

EQUIPMENT SPECIFICATIONS			
Type of Equipment	**Existing Make and Model**	**Proposed New Make and Model**	**Maximum GPM**
Recirculation Pump[1,2]			NOT APPLICABLE
			NOT APPLICABLE
			NOT APPLICABLE
Booster Pump[2]			NOT APPLICABLE
			NOT APPLICABLE
			NOT APPLICABLE
Main Drain Cover[3]			Floor/Wall:
Booster Drain Cover			Floor/Wall:
Equalizer Drain Cover			Floor/Wall:
Filter			NOT APPLICABLE
Chemical Treatment System			NOT APPLICABLE
Heater			NOT APPLICABLE
Skimmers[4]			NOT APPLICABLE
SVRS[4]			NOT APPLICABLE
Underwater lighting with GFCI *Light shall be white[4]			NOT APPLICABLE

[1] For variable speed pumps, complete Operational Time and Speed Setting Form on pg. 7

[2] See maximum flow rate sheet on pg. 6

[3] A single suction outlet that is not unblockable, shall be equipped with a device/system to prevent physical entrapment.

[4] Skimmers, Suction Vacuum Release Systems (SVRS), Drain Covers, and Underwater Lighting are not considered single equipment changes.

COMPLETE THIS SECTION FOR EACH BODY OF WATER (INCLUDE ADDITIONAL SHEETS IF NECESSARY)

BODY OF WATER INFORMATION					
Body of Water Type:			Location of Body of Water:		
Surface Area *(ft²)*:	Capacity *(gallons)*:	Turnover Rate:	Pipe Material *(e.g. PVC sch. 40)*:	No. of Return Inlets: Floor: _____ Wall: _____	Year Built:
Shell: ☐ Gunite & Plaster *(white only)* ☐ Other (*describe)*:	Handholds: ☐ Bull-nosed ☐Cantilevered Deck ☐ Perimeter Gutter ☐ Other (*describe)*:		No. of Skimmers:	Equalizer Lines Provided: ☐YES ☐ NO	
			Main Drain Suction Outlet Symmetrically Split (3ft. in a "T" Configuration) ☐ YES ☐ NO		
Suction Line Sizes:	Water Source:		Equalizer Lines Outlet Symmetrically Split (3ft. in a "T" Configuration) ☐ YES ☐ NO		
Return Line Sizes:	Fill Type/Size *(in)*:		Spa Jet Suction Outlet Symmetrically Split (3ft. in a "T" Configuration) ☐YES ☐ NO		

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EQUIPMENT SPECIFICATIONS			
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			NOT APPLICABLE
			NOT APPLICABLE
Booster Pump[2]			NOT APPLICABLE
			NOT APPLICABLE
			NOT APPLICABLE
Main Drain Cover[3]			Floor/Wall:
Booster Drain Cover			Floor/Wall:
Equalizer Drain Cover			Floor/Wall:
Filter			NOT APPLICABLE
Chemical Treatment System			NOT APPLICABLE
Heater			NOT APPLICABLE
Skimmers[4]			NOT APPLICABLE
SVRS[4]			NOT APPLICABLE
Underwater lighting with GFCI *Light shall be white[4]			NOT APPLICABLE

[1] For variable speed pumps, complete Operational Time and Speed Setting Form on pg. 7

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COMPLETE THIS SECTION FOR EACH BODY OF WATER (INCLUDE ADDITIONAL SHEETS IF NECESSARY)

BODY OF WATER INFORMATION					
Body of Water Type:			Location of Body of Water:		
Surface Area *(ft²)*:	Capacity *(gallons)*:	Turnover Rate:	Pipe Material *(e.g. PVC sch. 40)*:	No. of Return Inlets: Floor: _____ Wall: _____	Year Built:
Shell: ☐ Gunite & Plaster *(white only)* ☐ Other (*describe)*:	Handholds: ☐ Bull-nosed ☐Cantilevered Deck ☐ Perimeter Gutter ☐ Other (*describe)*:		No. of Skimmers:	Equalizer Lines Provided: ☐YES ☐ NO	
			Main Drain Suction Outlet Symmetrically Split (3ft. in a "T" Configuration) ☐ YES ☐ NO		
Suction Line Sizes:	Water Source:		Equalizer Lines Outlet Symmetrically Split (3ft. in a "T" Configuration) ☐ YES ☐ NO		
Return Line Sizes:	Fill Type/Size *(in)*:		Spa Jet Suction Outlet Symmetrically Split (3ft. in a "T" Configuration) ☐YES ☐ NO		

COMPLETE EXISTING EQUIPMENT FOR EACH BODY OF WATER & PROPOSED EQUIPMENT CHANGES IF APPLICABLE (PROVIDE SPECIFICATION SHEETS FOR ALL NEW EQUIPMENT)

EQUIPMENT SPECIFICATIONS			
Type of Equipment	**Existing Make and Model**	**Proposed New Make and Model**	**Maximun GPM**
Recirculation Pump[1,2]			NOT APPLICABLE
			NOT APPLICABLE
			NOT APPLICABLE
Booster Pump[2]			NOT APPLICABLE
			NOT APPLICABLE
			NOT APPLICABLE
Main Drain Cover[3]			Floor/Wall:
Booster Drain Cover			Floor/Wall:
Equalizer Drain Cover			Floor/Wall:
Filter			NOT APPLICABLE
Chemical Treatment System			NOT APPLICABLE
Heater			NOT APPLICABLE
Skimmers[4]			NOT APPLICABLE
SVRS[4]			NOT APPLICABLE
Underwater lighting with GFCI *Light shall be white[4]			NOT APPLICABLE

[1] For variable speed pumps, complete Operational Time and Speed Setting Form on pg. 7

[2] See maximum flow rate sheet on pg. 6

[3] A single suction outlet that is not unblockable, shall be equipped with a device/system to prevent physical entrapment.

[4] Skimmers, Suction Vacuum Release Systems (SVRS), Drain Covers, and Underwater Lighting are not considered single equipment changes.

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MAXIMUM SYSTEM FLOW RATE WORKSHEET

This worksheet is intended for use by the contractor or permittee for existing permitted pool facilities proposing a minor remodel/renovation. Use either option to obtain and provide the maximum system flow rate.

Option 1: If the flow meter is installed per manufacture specification, backwash the filter and restart the pump system. If the pump is a variable speed pump, set the pump to its highest speed setting. Observe the flow meter and document the reading here in Gallons Per Minute (GPM).

Flow Meter Reading: _____ (GPM)

Option 2: If the pump has an installed vacuum gauge and pressure gauge, backwash the filter and restart the pump system. If the pump is a variable speed pump, set the pump to its highest speed setting. Observe the gauge readings, document them here, and perform the below calculations.

A) Vacuum Gauge: _____ Hg X 1.13 = _____

B) Pressure Gauge: _____ PSI X 2.31 = _____

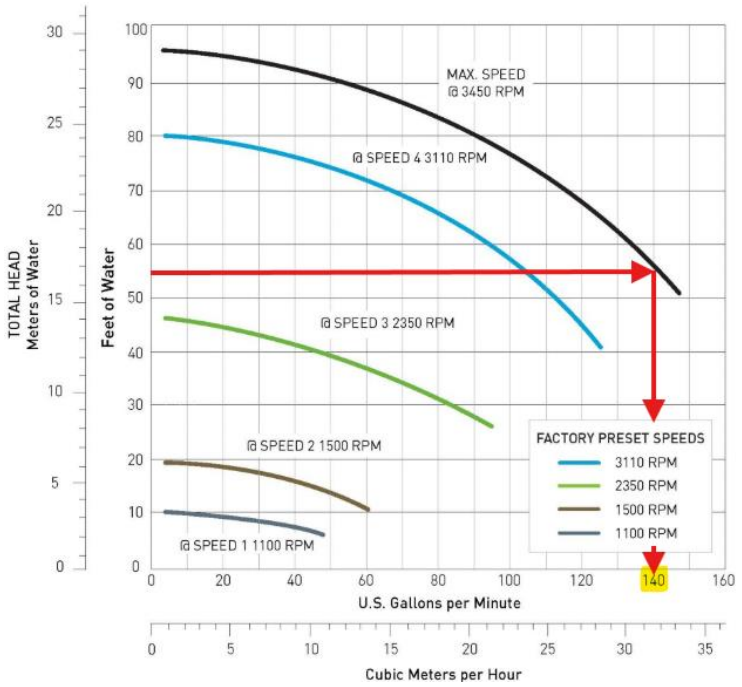
(A) + (B) = _____ Total Dynamic Head (TDH)

C) Flow Rate Based on Pump Curve: _____ (GPM)

After calculating the system TDH, review the pump model's pump curve found in their specification sheet to determine the maximum system flow rate.

See hypothetical pump curve below with a calculated TDH of 55 and a 140 GPM flow rate at the highest setting of 3450 RPM:

Option 3: Use this option for drain cover replacements if not choosing option 1 or 2. Look at the pump curve, and for its highest speed setting find the highest possible flow rate. In the above hypothetical pump curve, the highest setting is 3450 RPM and it's highest flow rate is 158 GPM at 50 TDH.



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Variable Speed Pump

Operational Time and Flow Settings Form

FACILITY NAME: _____

FACILITY ADDRESS: _____

OWNER NAME: _____

PROJECT/RECORD NUMBER: _____

During operational hours, set the pump(s) to maintain the flow rate between ____ GPM and ____GPM.

PUMP #	PUMP SERVICING	PROGRAMMED OPERATIONAL HOURS	FLOW RATE (GPM)

Print Name: _____ Date: _____

Signature: _____ Title: _____

A COPY OF THIS SHEET MUST BE MAINTAINED IN A PROTECTIVE COVERING ON SITE IN THE EQUIPMENT ROOM

RESURFACE REQUIREMENTS

Resurfacing a Body of Water? ☐ Yes ☐No

If yes, initial each box below acknowledging the following requirements will be met.

☐ Pool shell finish is white, and all horizontal surfaces to include step/bench trim are nonslip.

☐ Directional eyeball fittings will be installed.
**Angled return lines do not require directional eyeball fittings.*

☐ Step and/or bench trim must be of contrasting color to the white shell finish.
State the actual color here _____

☐ For spas: the emergency shut-off switch is present and shuts off both filtration and jet pumps on a single switch. If none is present, one must be installed.

☐ Waterline tiles must be of contrasting color to the white shell finish.
State the actual color here _____

Depth markers at the waterline to be added or replaced?☐ Yes ☐No

If yes, initial each box below acknowledging the following requirements will be met.

☐ Installed per Title 24 Pool Code figure 31B-8 (see deck sheet pg. 15-16).

☐ Pools with skimmer systems the depth markers shall be high at the waterline which typically will result in the depth markers being submerged approximately 50 percent.

☐ For pools with perimeter overflow systems where coping cantilevers over the gutter, depth markers may be positioned at the face of the cantilevered coping, the back wall above the gutter, or immediately below the waterline which will result in the depth markers being completely submerged.

☐ For pools with rim flow gutters, depth markers shall be positioned immediately below the waterline which will result in the depth markers being completely submerged.

For pools deeper than 5ft, are tiles to be installed at 4 ½ foot depth line? ☐Yes ☐No

Lane/target lines are added/replaced ☐Yes ☐No

If yes, initial each box below acknowledging the following requirements will be met.

☐ Depth line: straight line of slip resistant tile a minimum of 4 inches (102 mm) and not greater than 6 inches (152 mm) wide of a color contrasting with the background of the pool shell across the bottom of the pool where the water depth is 4 ½ feet (1372 mm). Depth line to extend from one side of the pool to the opposite side of the pool. State the actual color here_____

☐ Lane markers: Slip resistant lane lines at the bottom of the pool shall not exceed 12 inches (305 mm) in width.

HANDRAILS

Installing Handrails? ☐Yes ☐No

If yes, initial each box acknowledging the below requirements will be met.

	Installing handrails at a spa requires that 2 handrails be installed at spa step entrance. Only one handrail is required for stair widths of 12 feet or less in pools.
	Installed handrails meet dimension and installation requirements depicted below.
	Any changes to actual steps must adhere to the requirements below and is NOT considered a minor remodel or minor renovation. If changes are made to the actual steps, do not use this form, plans need to be submitted – Refer to Pool Plan Review and Construction Guide

Add any additional comments here:

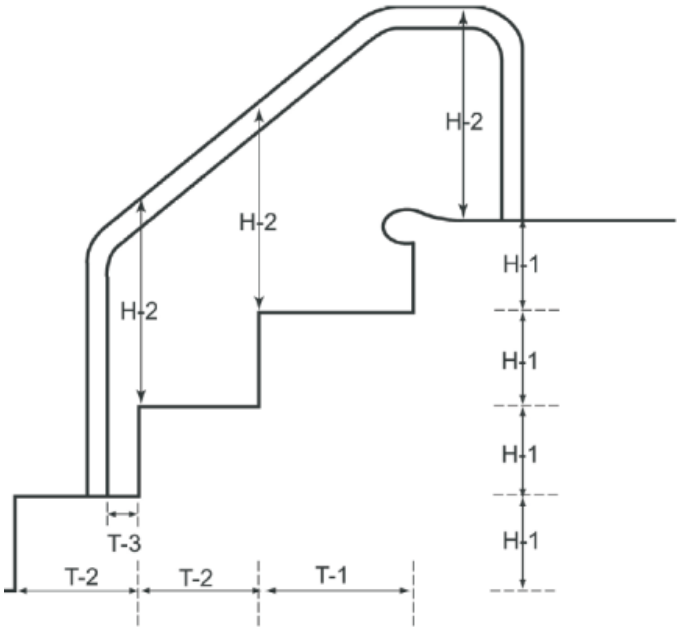


Table 31B-7 Stair and Handrail Dimensions

DIMENSION	T-1 STANDARD	T-1 TRIANGULAR, CONCAVE, CONVEX	T-2	T-3	W-1	H-1	H-2
Minimum	14"	21"	12"	3"	24"	6"	28"
Maximum	18"	24"	16"	—	—	12"	36"

PLUMBING

Main drains or equalizers to be split? ☐Yes ☐No

If yes, initial each box acknowledging the below requirements will be met.

☐ The suction outlets shall be hydraulically balanced and symmetrically plumbed through one or more "T" fittings and shall be separated by a distance of at least 3 feet (915 mm) in any dimension between the suction outlets.

☐ All suction outlets shall be equipped with suction fittings that meet the ANSI/APSP-16 2017 or successor performance standard.

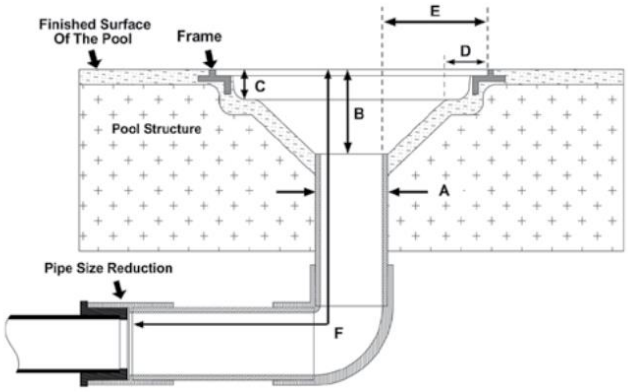
New drain covers to be installed? ☐Yes ☐No

If yes, initial each box acknowledging the below requirements will be met.

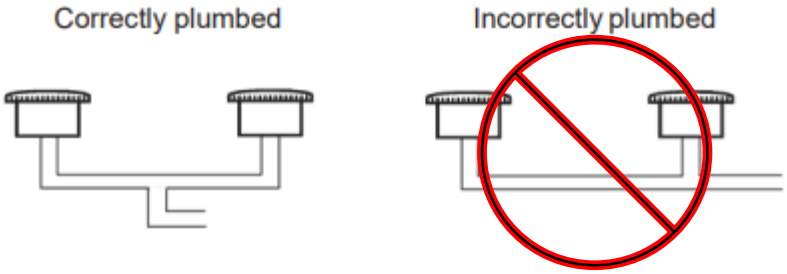
☐ Each drain cover's maximum flow capacity must meet or exceed the maximum flow capacity of the pump (see pg. 6)

☐ All suction outlets shall be equipped with suction fittings that meet the ANSI/APSP-16 2017 or successor performance standard.

☐ All field fabricated sump requirements must be completed per manufacturer's specifications. Attach manufacturer specification sheet. Values for A-F can be found in the manufacture's specification sheet.



A. Specified PVC Pipe Size _____
B. Minimum Sump Depth _____
C. Minimum Ledge Depth _____
D. Maximum Ledge Width _____
E. Minimum Pipe Offset _____
F. Minimum Length Before Reduction _____



ENCLOSURE

Enclosure to be repaired or modified? ☐Yes ☐ No

If yes, initial each box acknowledging the below requirements will be met.

Provide a drawing to scale showing that requirements below will be met. Submit a separate packet for each standalone enclosure.

	Pool enclosures shall be constructed over hard or permanent material equivalent to concrete. Enclosure of pools built after July 1, 1994 may NOT reduce pool deck to less than 4 feet.
	Horizontal members spaced at least 48 inches apart.
	All holes or gaps in the enclosure, doors, and/or gates are 4 inches or less.
	Planters, climbable structures, or vegetation shall not be permitted immediately adjacent to the fence within a 5-foot radius as measured from the top of the enclosure (see pg. 12).
	Masonry or stone columns are a minimum 5 feet tall, smooth, and non-climbable.
	If chain link is used, openings are not greater than 1 ¾ inches measured horizontally. Also, where the barrier is composed of diagonal members, the maximum opening formed by the diagonal members shall be no more than 1 ¾ inches.
	Fencing and gates shall be constructed out of a durable material such as wood, metal, masonry, plexiglass, or vinyl. Fencing and gates shall be installed so they are stable and secure and are at a minimum 5 feet tall.
	All gates and doors exiting the pool area open into a public area or walkway accessible by all patrons of the pool. Gates and doors open outward away from the pool except where otherwise prohibited by law.
	Gates and doors equipped with self-closing and self-latching devices. Hand activated door or gate opening hardware shall be located 42-44 inches above deck or walkway. Double doors to be independently self-closing and self-latching.
	The pool enclosure has at least one means of egress without a key for emergency purposes. Unless all gates or doors are so equipped, those gates and/or doors which allow egress without a key shall be clearly and conspicuously labeled in letters at least 4 inches high “EMERGENCY EXIT.”
	Gates and doors are capable of being locked during times when the pool is closed.
	Enclosure meets minimum requirements depicted in Figure 31B-4 and 31B-5.
	All required signage will be updated. See pg. 18 for reference.

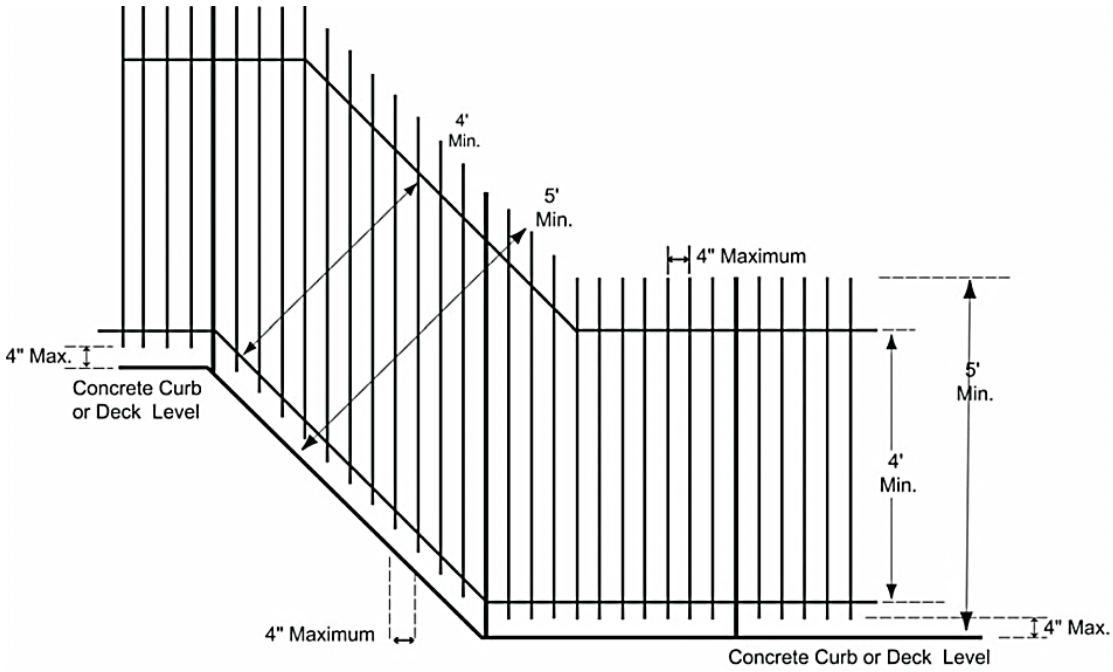
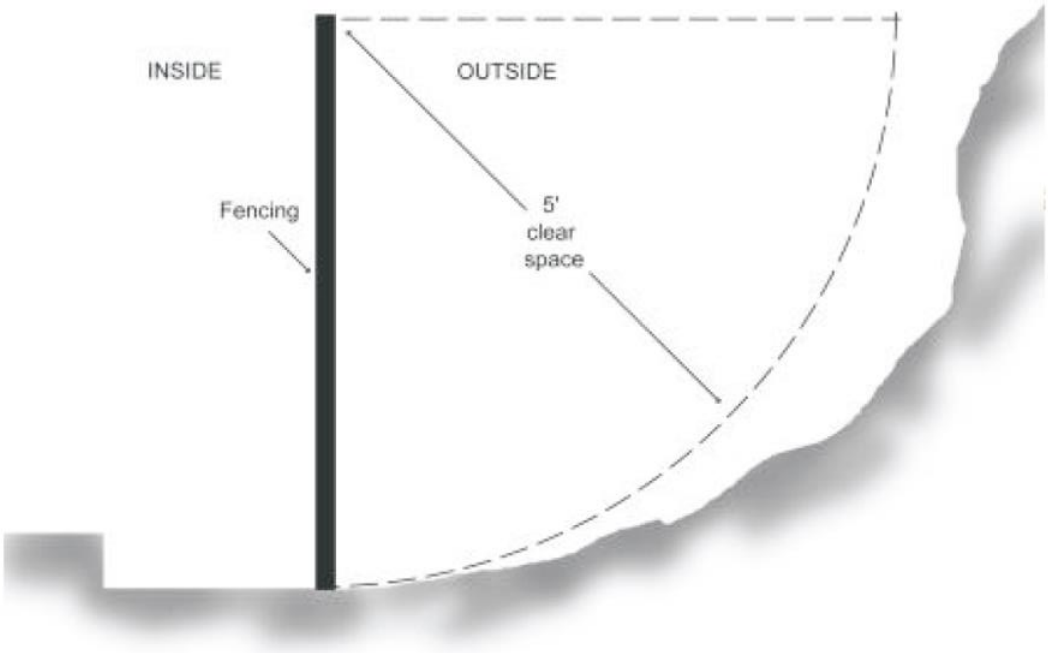


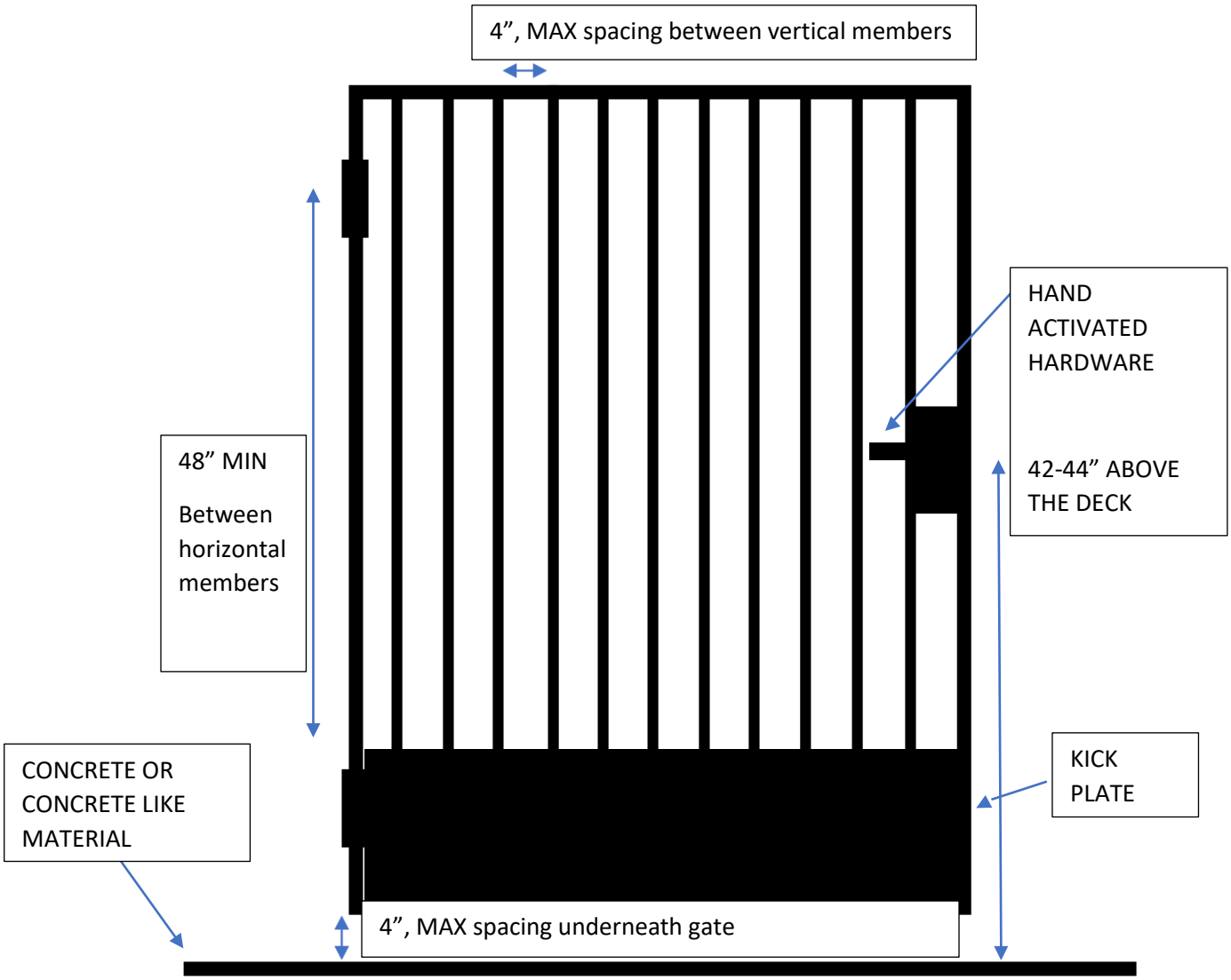
Figure 31B-4 Perpendicular Fencing Dimensions on Sloping Ground Figure

NOTE: Shown above is a typical wrought iron fence detail. All horizontal members on alternative enclosures (i.e. brick wall) shall not protrude more than ½" so as to not create a foot hold



31B-5 Effective Fencing Height

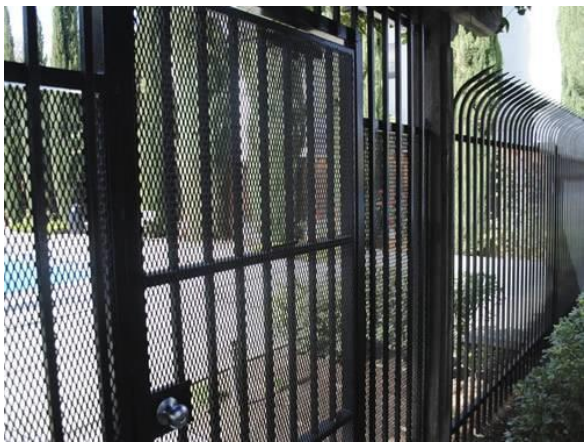
TYPICAL WROUGHT IRON GATE DETAIL



*Mesh not shown above for clarity. See example to the right. Mesh screening or other material preventing reach through of gate shall be installed on the EXTERIOR of the gate, flush to the kickplate and covering entirety of gate and adjacent fence panel.

Not shown is keyless egress mechanism on interior of gate.

Double doors must be independently self-closing and self-latching.



Illustrate Enclosure Here and/or Attach Specification Sheet

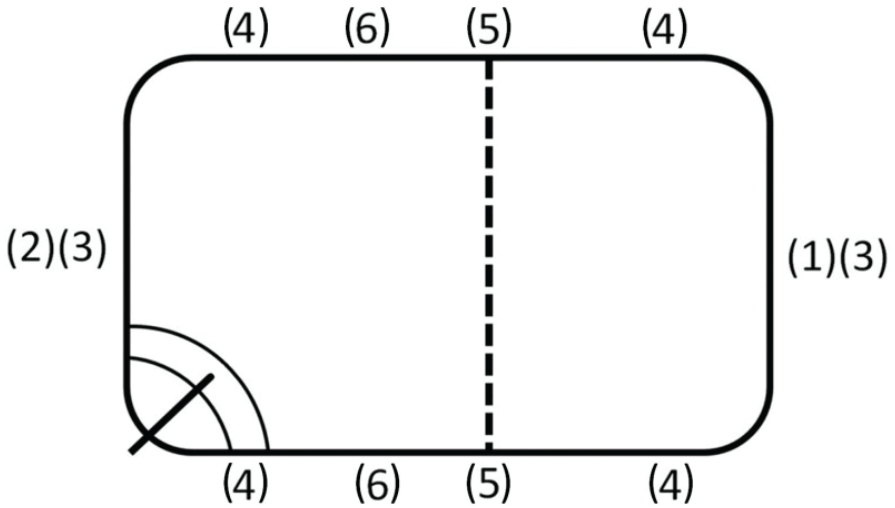
See pg. 12-13 for requirements

DECK

Deck to be repaired or modified? ☐Yes ☐No

If yes, initial each box acknowledging the below requirements will be met.

	Continuous and unobstructed 4-foot minimum width deck that is made of slip resistant (dynamic coefficient of friction equal to or greater than .42), cleanable, nonabrasive concrete or like material must be provided flush with the top of the pool and extend completely around the pool. The deck width shall be measured from the poolside edge of the coping lip.
	Deck slope is a minimum of one eighth (1/8) inch per foot but no more than one quarter (1/4) inch per foot away from the pool to a deck drainage system and constructed to prevent standing water.
	Construction joints where pool or spa coping meets the deck are watertight. The maximum voids between adjoining concrete slabs or between concrete slabs and expansion joint material is three-sixteenths (3/16) inch.
	Landscaping and planters are not located within 4 feet of any pool.
	Non-slip deck markers on deck are positioned as in Title 24 Pool Code figure 31B-8. See below.
	Non-slip no dive markers installed adjacent to depth markers and positioned as in Title 24 Pool Code figure 31B-8. See below.
	On the coping or on the deck, the depth markers shall be placed as close as possible but no more than 3 feet (914 mm) from the pool water.
	Coping installed as per diagram on pg. 16.



Depth Marker Locations

Notes for Figure 31B-8

1. Maximum depth.

2. Minimum depth.

3. Each end of pool.

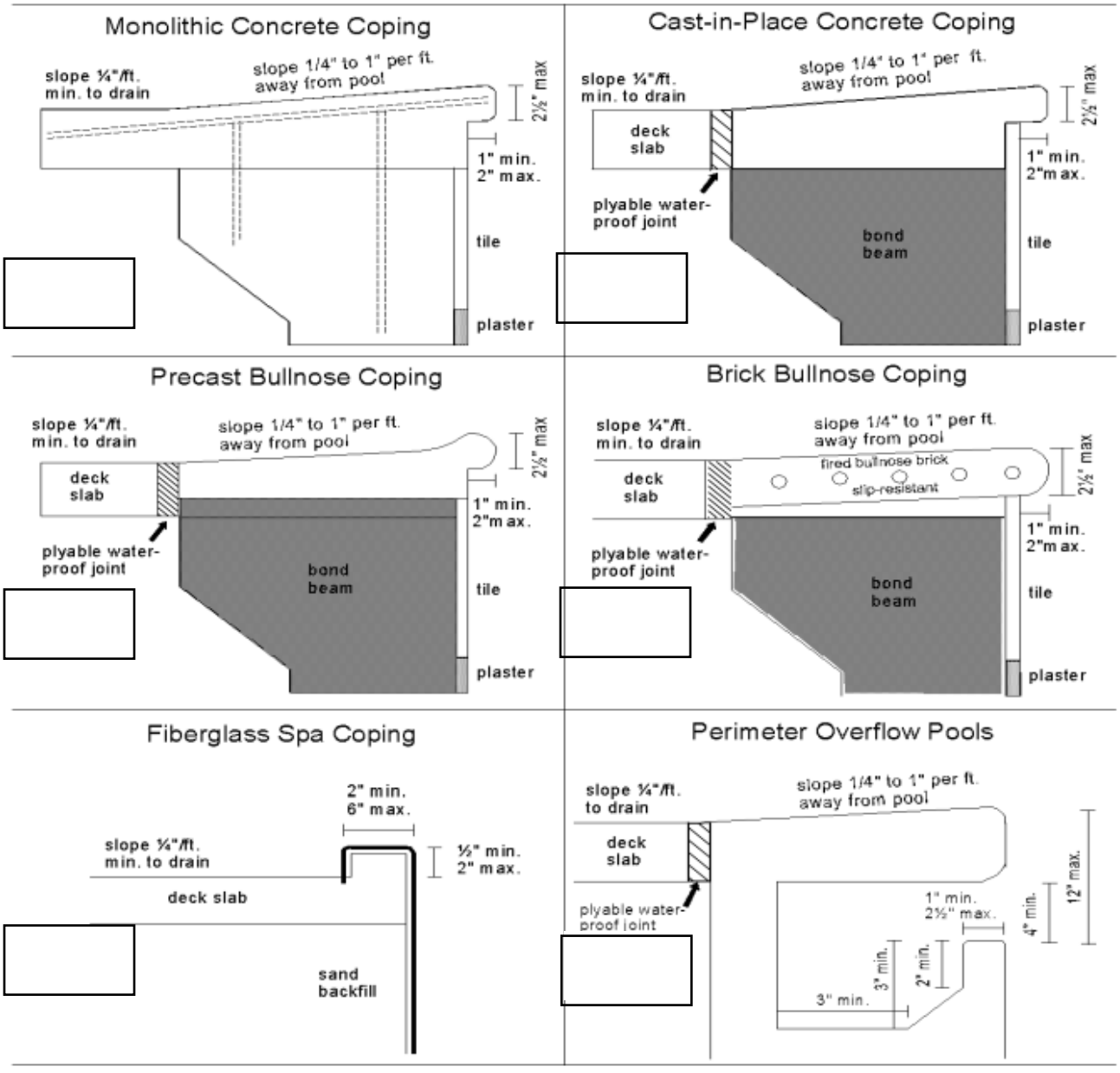
4. Both sides at the shallowest and deepest part of pool.

5. At the break in the bottom slope between the shallow and deep end.

6. Along the perimeter of the pool at distances not to exceed 25 feet.

Coping to be repaired or modified? ☐Yes ☐ No

Select the coping type to be installed and initial acknowledging the specific requirements for each coping type will be met.



RESTROOM AND OTHER ANCILLARY FACILITIES

Restrooms and/or ancillary facilities to be repaired or modified? ☐Yes ☐No

If yes, initial each box acknowledging the below requirements will be met.

The following items are needed on plans to be acceptable for plan review approval. If all occupied units are less than 300 feet walking distance from pool, provide a scaled detail indicating such. To determine the number of fixtures, one pool user is considered for every 15 square feet of pool water surface area (divided by two for each gender).

☐ Show separate toilet rooms for each gender. One toilet for every 60 women and one toilet for every 75 men.

☐ Show urinal(s) in men's room, and lavatories in toilet rooms. One urinal for every 75 men. One lavatory for every 80 pool users.

☐ State "hot water maximum 110°F to shower and lavatories, not controlled by the bather". When a common hot water heater is used for lavatories, showers and laundry or other use, indicate the device that will be used to limit hot water to 110°F. Soap in dispensers to be at showers and lavatories.

☐ State that walls and ceilings are washable and moisture resistant in toilet rooms and showers and give an acceptable finish schedule. Suggested walls for shower and behind urinals, lavatories and toilets are ceramic tile, FRP, etc.

☐ State and show on plans and finish schedules, the floors for toilets, showers, and walkways to and from the pool area. Indicate the following items:

A. State or show non-slip and non-absorbent, unglazed, ceramic tile (2 X 2" max size), or broom finish concrete etc. Submit samples if other than broom finish concrete or unglazed 1x1" or 2 X 2" ceramic tile. It is advisable to include tests for slip coefficient as an aide to determine slip resistance.

B. State or show continuous coving, 5", with a 3/8" minimum radius cove up walls. If broom finish concrete, then show 5" min. curb or stem wall with the radius. A 'slimfoot' ceramic base may be acceptable on sealed concrete. Provide a sample.

☐ Show floor drains and indicate floors are sloped ¼" per foot to drains (for both restrooms and pool equipment room).

☐ Dressing Room: Not required if adjacent to living quarters, regardless of the distance from the pool to the farthest unit.

☐ Bather Shower: Not required if adjacent to living quarters. If installed, provide shower floor and wall schedules. Show shower floor sloped to sewer drain sufficient distance out from showerhead to intercept and confine shower water. One shower to be provided for every 50 pool users per gender. NOTE: A rinse shower does not substitute for a bather shower if required.

☐ Drinking Fountain: Required if toilet facilities present. If no toilet facilities are present, then no drinking fountain is required. One drinking fountain for the first 250 pool users and an additional one for every 200 pool users or fraction thereof.

☐ A diaper change station to be made available. If placed in restrooms, ensure in both men and women restrooms.

☐ Potable water hose bibb(s) protected with backflow device to be located so that all portions of the pool deck may be reached with a 75-foot length of hose.

SIGNAGE

Signage to be replaced or modified? ☐Yes ☐No

If yes, initial each box acknowledging the below requirements will be met.

All signs shall have clearly legible letters or numbers not less than 4 inches high, unless otherwise specified, affixed to a wall, pole, gate, or similar permanent structure in a location visible to all pool users. Post the following safety signs:

☐ **No lifeguard.** Where no lifeguard service is provided a sign shall be posted "NO LIFEGUARD ON DUTY." The sign shall also state in letters at least 1 inch high "Children should not use pool without adult guardian in attendance."

- Exception: "No lifeguard sign" requirement does not apply to spray grounds that have no standing water.

☐ **Pool user capacity.** A sign shall indicate the maximum number of pool users permitted for each pool.

- Spa pool. The pool user capacity of a spa pool shall be based on one pool user for every 10 square feet of pool water surface area.
- Other pools. The pool user capacity for all other pools shall be based on one pool user for every 20 square feet of pool water surface area.
- Exception: Pool user capacity requirements and signs do not apply to wading pools or spray grounds.

☐ **Artificial respiration and cardiopulmonary resuscitation sign.** Illustrated diagram with text at least ¼ inch high of artificial respiration and cardiopulmonary resuscitation (CPR) procedures.

☐ **Emergency sign.** Emergency telephone number 9-1-1 with numbers not less than 4 inches. The number of the nearest emergency services and the name and street address of the pool facility in lettering at least 1 inch high.

☐ **No diving sign.** "NO DIVING" sign posted conspicuously in the pool area for pools less than 6 feet in depth.

☐ **No use after dark.** Where pools were constructed for which lighting was not required, a sign with clearly legible letters not less than 4-inches high shall be posted in a prominent place near each entrance to the pool area. This sign shall state "NO USE OF POOL ALLOWED AFTER DARK".

☐ **Keep closed.** "KEEP GATE CLOSED" or "KEEP DOOR CLOSED" sign on exterior side of gates/doors leading into pool enclosure areas.

☐ **Diarrhea.** A sign in letters at least 1 inch high and in a language or diagram that is easily readable shall be posted to be visible from each entrance which states that persons having currently active diarrhea or who have had active diarrhea within the previous 14 days shall not be allowed to enter the pool water.

☐ **Warning sign for a spa.** Warning sign for spa use at least 1 inch high stating "Caution":

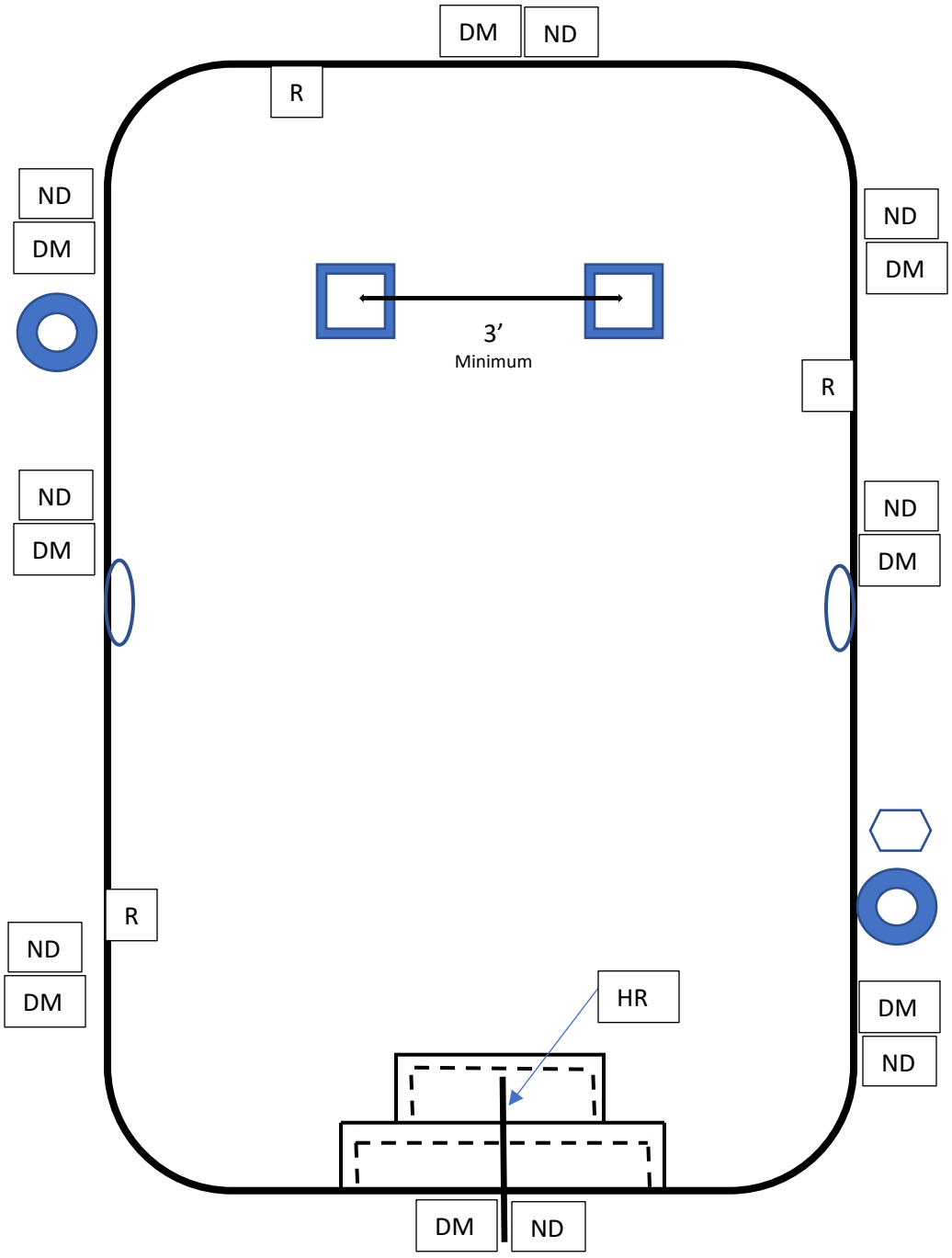
- Elderly persons, pregnant women, infants and those with health conditions requiring medical care should consult with a physician before entering the spa.
- Children should not use pool without adult supervision.
- Hot water immersion while under the influence of alcohol, narcotics, drugs or medicines may lead to serious consequences and is not recommended.
- Do not use alone.
- Long exposure may result in hyperthermia, nausea, dizziness or fainting.

☐ **Emergency shut off.** "Emergency shut off switch" for spa in letters at least 1 inch high posted at the emergency shut off switch.

☐ **Spray grounds and splash pads.** A sign posted at each spray ground, visible from any part of the spray ground, stating "CAUTION: WATER IS RECIRCULATED. DO NOT DRINK."

☐ **Wave pool.** A sign in letters at least 1 inch high shall be posted that describes the requirements for wave pools found in Section 115952 (a through c), California Health and Safety Code.

EXAMPLE- POOL OVERHEAD DIAGRAM

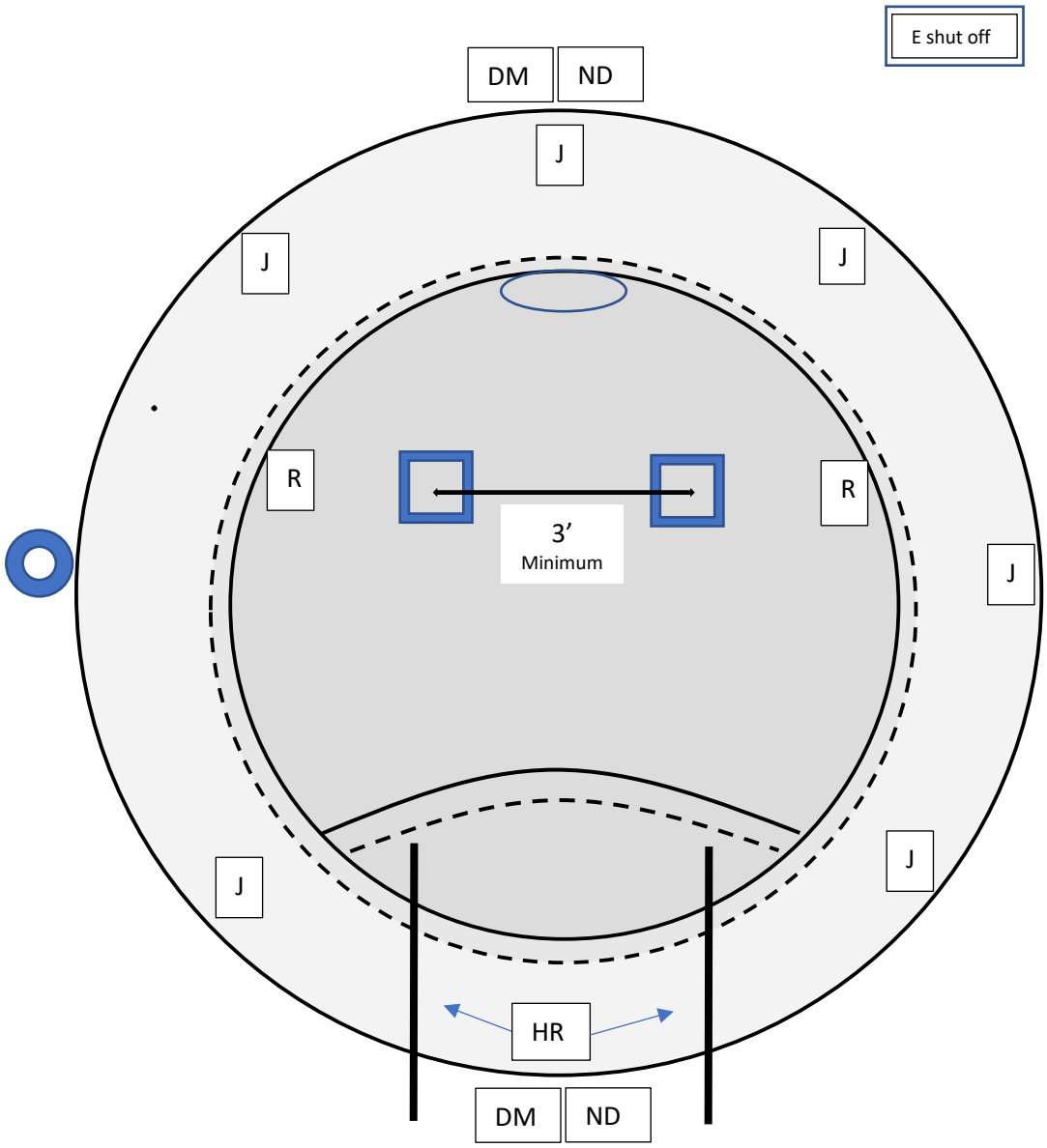


LEGEND: Skimmer Underwater Light Main Drain ND No Diving Maker

DM Depth Marker Auto fill Step trim. Color: Black HR Handrail

R Return

EXAMPLE- SPA OVERHEAD DIAGRAM



LEGEND: Skimmer

E shut off — Shut off switch for both recirculation and jet pumps

Underwater Light

Main drain

ND — No diving maker

J — Jet

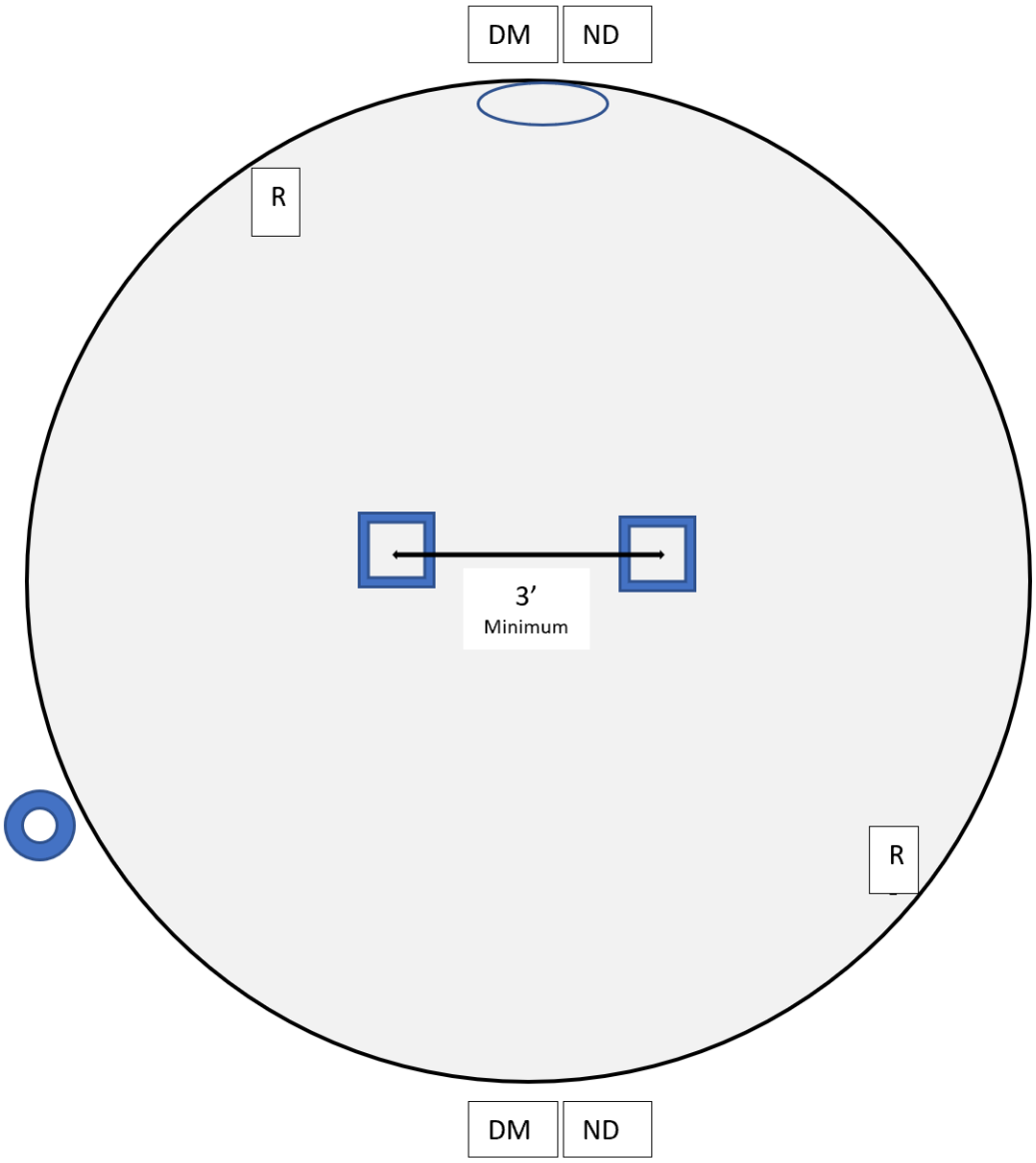
DM — Depth Marker

HR — Handrail

Return

Step Trim. Color: Black

EXAMPLE- WADER OVERHEAD DIAGRAM



LEGEND: skimmer

R Return

Underwater Light

Main drain

DM Depth Marker

No diving maker

*NOTE: This example assumes a wader depth of 12” max. If the wader is greater than 12” to a maximum depth of 18” then a step, handrail, and step trim with contrasting color is required. Show these on the plan.

Illustrate Pool Overhead Diagram

Here See pg. 19 For example

Illustrate Spa Overhead Diagram

Here See pg. 20 for example

Illustrate Wader Overhead Diagram

Here See pg. 21 for example

Turnover Times and Other Formulas

Required Turnover Times		
Type of Pool	Built before Jan. 1, 1986	Built on/after Jan. 1, 1986
Swimming Pool	8 hours	6 hours
Wading Pool	2 hours	1 hour
Spa Pool	1 hour	½ hour

Flow Rate:

Flow Rate = Volume / Turnover Rate / 60

Velocity:

Velocity (V) = Flow Rate (Q) / Cross-Sectional Area of Pipe (A)
Q = Flow Rate (gal/min)
A = 3.14 x (diameter^2) / 4
V = ft/sec
Conversions:
144in^2/ft^2
ft^3/7.5gal
1min/60sec
Typical formula: (gal/min)x(1/[3.14xD^2/4])x(144in^2/ft^2)x(ft^3/7.5gal)x1min/60sec)

Common Conversions:

7.5 Gallons = 1 Cubic Foot

1 Gallon = 8.33 Pounds

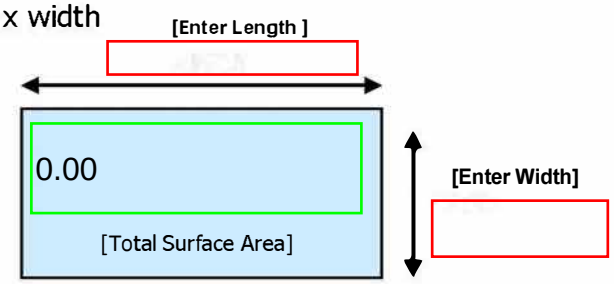
1 Liter = 0.2864 Gallons

1 Meter = 3.28 Feet

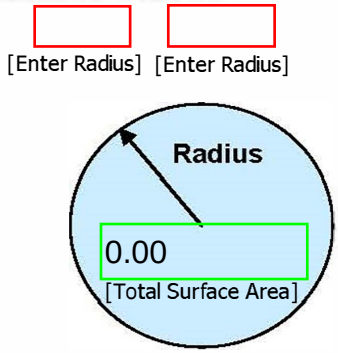
Pool Geometry Formulas

Surface Area:

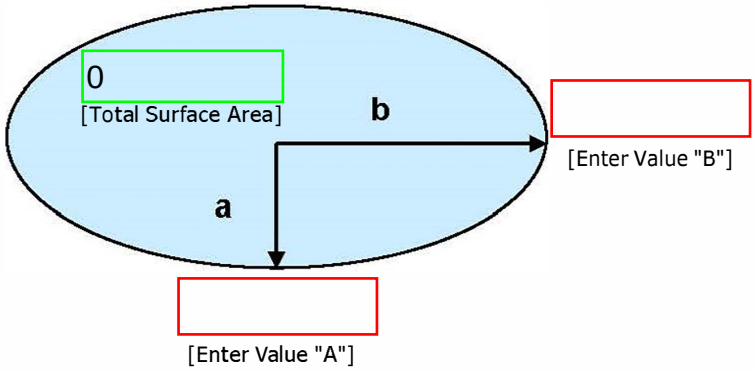
Rectangle Surface Area = length x width



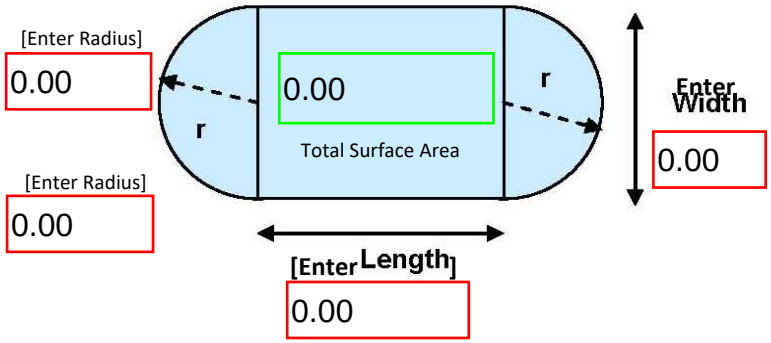
Circle Surface Area = 3.14 x radius x radius



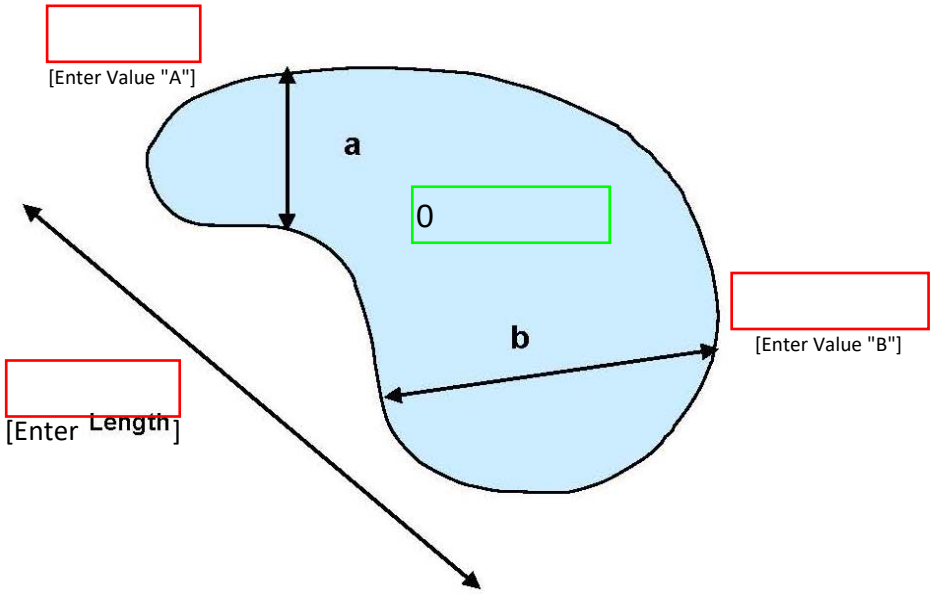
Oval Surface Area = a x b x 3.14



Oblong Surface Area = r x r x 3.14 + (length x width)



Kidney Surface Area = 0.45 x (a + b) x length



Volume: (Continuous Slope)

Volume = Surface Area x Average Depth x 7.5 (measured in gallons)

Average Depth = Depth of Deep end + Depth of Shallow end / 2

[Enter Surface Area] X [[Enter Depth of Deep End] + [Enter Depth of Shallow End] /2] X 7.5 = 0.00 [Total Volume in Gallons]