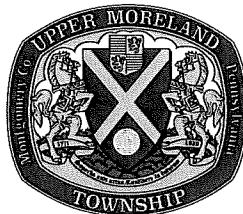


Township of Upper Moreland

117 Park Avenue

WILLOW GROVE, MONTGOMERY COUNTY, PENNSYLVANIA 19090

Telephone (215) 659-3100 Ext. 1032/1033 / Fax (215) 659-8899



Paul E. Purtell

Director of Code Enforcement

Requirements for obtaining a Permit for In-Ground and On-Ground Swimming Pools

1. Complete a Building & Electrical Permit Application.
2. ***In-Ground Pools also require a Grading Permit & a Topographic Plan prepared by a professional engineer and/or land surveyor.
3. Sketch a plot plan; see attached sample
4. **Electrical plan; see sample. This plan can be pre-approved by a 3rd party electrical plan reviewer or UM will have reviewed,
5. Pool Specifications
6. Specify pool barrier. (if installing a fence, a separate building permit is required) Door and window alarms may be required. Existing pool barriers will require approval.
7. Contractors required to provide a current state license & insurance certificate.
8. **Payment; see attached Fee Schedule & below

**Additional Fees:

- *Electrical Underwriter plan review fee due at time of permit issuance.*
- *Twp Consultant fee for Grading Plan review for **In-Ground Pools** only. Applicant responsible for reimbursement to Twp.*

In-Ground Swimming Pools require a Grading Permit Application along with a Topographic Site Plan signed and sealed. See above.

Our website at www.uppermoreland.org is available to download applications and to review our Codes Online.

If you have any questions our staff would be glad to help you through your application process. Please do not hesitate to call or e-mail us.
267-607-1032/1033.

Upper Moreland Township Building Permit Application

117 Park Avenue,
Willow Grove, PA 19090
Phone: 215-659-3100
Fax: 215-659-8899 (www.uppermoreland.org)

I. PROPERTY OWNER

Name	Address
Phone #	City, State, Zip

II. CONTRACTOR HIC

SAME AS OWNER

Name	Office #
Address	Cell #
City, State, Zip	Fax #

III. APPLICANT

SAME AS OWNER

SAME AS CONTRACTOR

Name	Relationship to owner
Address	Phone #
City, State, Zip	Fax #

IV. LOCATION

Address

V. PROPOSED WORK

Applicant may be required to provide additional documentation including, but not limited to, 1 plot plan, 2 res.sets of Construction plans or 3 comm. sealed construction & specification plans.

Indicate proposed work

Total Estimated Cost:

Applicant Signature: _____ Date: ____ / ____ / ____

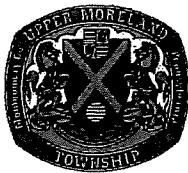
****Additional review fees by Twp. consultants may apply****

PERMIT FEE (additional \$4.50 UCC surcharge applies) See current fee schedule

\$25 for the first \$500 of cost + \$25 for the next \$500 of cost + \$15 for each additional \$1000 of cost or fraction thereof.	Paving/Driveways and pools see fee schedule	<input checked="" type="checkbox"/> Other: \$4.50 UCC Surcharge
<input type="checkbox"/> Residential C/O: \$25	<input type="checkbox"/> Commercial C/O: \$75	Total Permit Fee: \$

TOWNSHIP REVIEW

Permit #	Zoning District:	Reviewed By:	Approved By:
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Upper Moreland Township
117 Park Avenue
Willow Grove, PA 19090
215-659-3100
215-659-8899 (fax)
www.uppermoreland.org

Upper Moreland Township Electrical Permit Application

I. PROPERTY OWNER

Name	Address
Phone #	City, State, Zip

II. CONTRACTOR - HIC

SAME AS OWNER

Name	Office #
Address	Cell #
City, State, Zip	Fax #

III. APPLICANT

SAME AS OWNER

SAME AS CONTRACTOR

Name	Relationship to owner
Address	Phone #
City, State, Zip	Fax #

IV. LOCATION

Address

V. INSPECTION AGENCY

<input type="checkbox"/> Bureau Veritas 1-877-392-9445	<input type="checkbox"/> Code Inspections 215-672-9400	<input type="checkbox"/> Commonwealth Elec 717-664-2347
<input type="checkbox"/> Middle Atlantic 215-322-2626	<input type="checkbox"/> Middle Department 215-244-1919	<input type="checkbox"/> Municipal Insp Corp 215-673-4434
<input type="checkbox"/> United Inspection 215-542-9977	<input type="checkbox"/> Other	

***Please Note: 3rd party review required for all Electrical Permit Applications. Sending your plans directly to the 3rd party is recommended to speed up permit issuance. Above are a list of Electrical Underwriters Registered with UMT for additional information and their fees.

V. PROPOSED WORK (***Electrical plans required; 2 sets****)

Indicate proposed work

Total Estimated Cost:

Applicant Signature: _____ Date: ____ / ____ / ____

PERMIT FEE (\$25 per \$1,000 of estimated cost, plus \$4.50 UCC surcharge fee)

Total Permit Fee: \$

TOWNSHIP REVIEW

Permit #:	Reviewed By:	Approved By:
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Upper Moreland Township
117 Park Avenue
Willow Grove, PA 19090
215-659-3100
215-659-8899 (fax)
www.uppermoreland.org

Upper Moreland Township Fee Schedule

Note: \$4.50 UCC surcharge required for all Building, Plumbing, Electrical, HVAC and Fire permits

I. NEW BUILDING

Residential	Apartment / Multiple Dwelling	Commercial / Industrial / Institutional
\$300 per 1500 ft ² + \$100 for each additional 500 ft ² or fraction thereof. Includes basements and garages.	\$200 per unit	\$400 per 1000 ft ² + \$250 for each additional 1000 ft ² or fraction thereof.
Certificate of Occupancy: \$50 Plan review: \$25 Driveway: \$25	Certificate of Occupancy: \$125 Plan review: \$100 Parking lot: \$50	Certificate of Occupancy: \$125 Plan review: \$100 Parking lot: \$50

II. BUILDING: ADDITIONS & ALTERATIONS

Additions, decks, repairs, roofing, siding, demolition, etc: \$25 for the first \$500 of cost + \$25 for the next \$500 of cost plus \$15 for each additional \$1000 of cost or fraction thereof.	Residential Certificate of Occupancy: \$25 Non-Residential Certificate of Occupancy : \$75
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III. HVAC & FIRE PROTECTION

Heating: \$75 for the first \$2000 of cost + \$20 for each additional \$1000 of cost or fraction thereof.	Heat pump: \$20 Gas or oil burner (replacement): \$15
A/C \$20 for the first \$1000 of cost + \$5 for each additional \$1000 of cost or fraction thereof. (Max fee \$1500) Exhaust Hood Systems: \$75 for the first \$2000 of cost + \$20 for each additional \$1000 of cost or fraction thereof.	All fire permits: Sprinkler, Fire Alarm, Wet & Dry Chemical: \$75 for the first \$2000 of cost + \$20 for each additional \$1000 of cost or fraction thereof + review fee.

IV. PLUMBING

Fixtures	Fixtures in new construction: \$50 for the first five fixtures; \$8 for each additional fixture			
	New fixtures on existing drain line: \$20 for the first fixture; \$10 for each additional fixture			
	Replacement fixtures: \$20 for the first fixture; \$10 for each additional fixture			
Water Distribution System	New Construction	Water Service	Alterations	
	Residential	\$25	\$25	\$20
	Commercial	\$35	\$35	\$25
Miscellaneous	New sewer connection: \$100	Water heater: \$25		
	Sewer repair / replacement: \$75	Garbage disposal: \$25 / \$15 if replacement		

V. ELECTRICAL

\$25 per \$1000 of cost or fraction thereof

VI. ZONING

Application Type	Fee
Single family residential	\$400
Two family dwelling / Duplex	\$500
Commercial, industrial, institutional or multiple dwelling:	\$750
Postponed or continued hearing (single family residential)	\$200
Postponed or continued hearing (all others)	\$400
Miscellaneous	Fee
Zoning use permit (residential)	\$50
Zoning use permit (non-residential)	\$75
Zoning map	Large \$4 & Small \$2
Zoning / Land Development code books	\$15
Zoning certificate	\$100, duplicate copy: \$5
Curative amendment	\$1000
Conditional use	\$1000
Change of zoning	\$1000

VII. SIGNS (no UCC charge)

Up to 40 ft ² : \$40	>40 ft ² : \$75	Temporary signs (28 days only): \$15
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VIII: CONTRACTOR'S LICENSE

Contractor's license: \$75	Additional stickers: \$1.50	J Journeyman: \$25	Apprentice plumber: \$10
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IX: GRADING (permit needed for 20 cubic yards or more) Topographic plan required

< 50 yards ³ : \$20	50 to <250 yards ³ : \$25	250 to <500 yards ³ : \$30	500 to <1000 yards ³ : \$35
> 1000 yards ³ : \$55 for each 1000 yards ³ or fraction thereof	Engineering review per invoice		

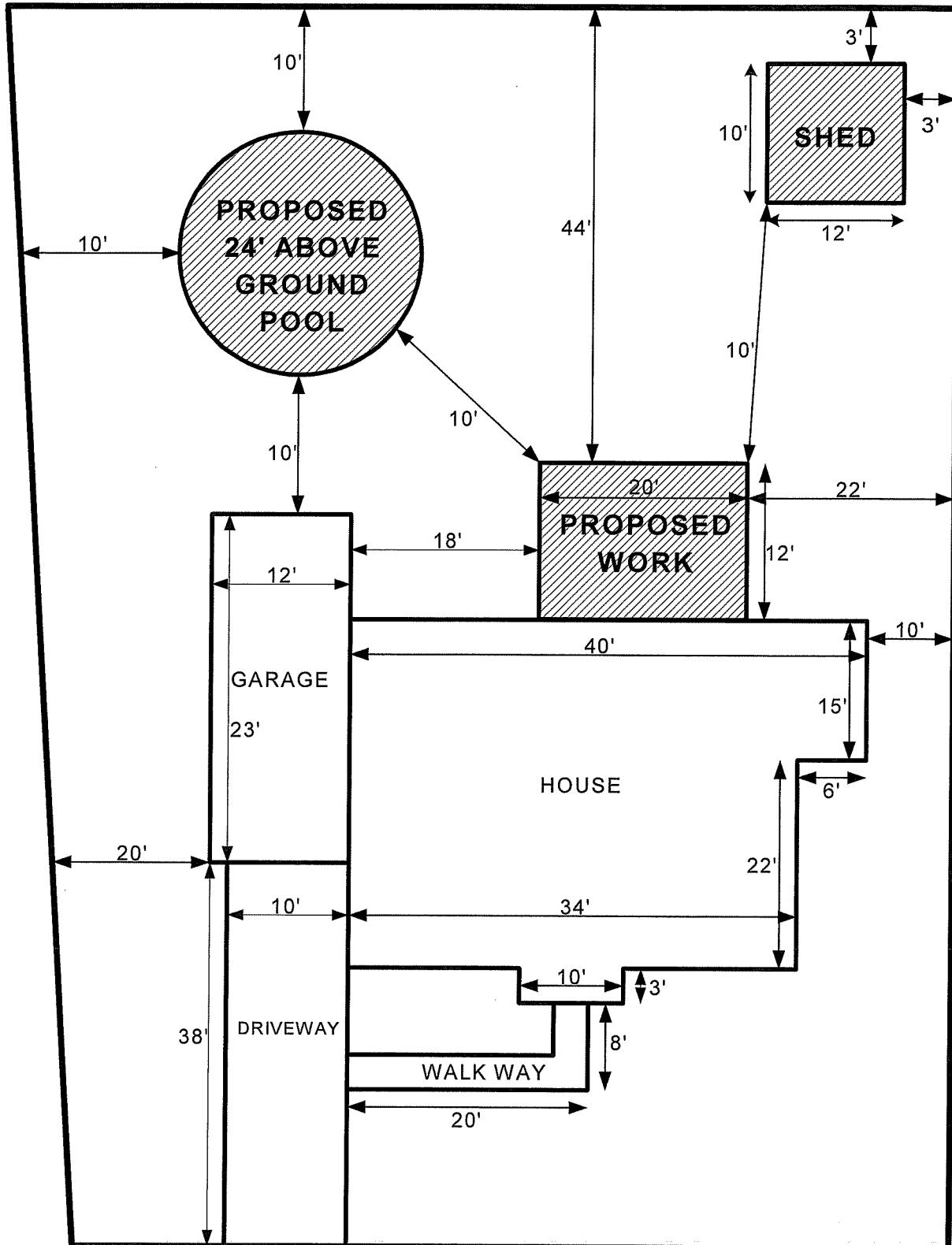
X: PAVING / DRIVEWAYS

New residential driveway: \$40	New commercial driveway/lot: \$75	Overlay existing: \$30 per \$1000 of cost or fraction thereof
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XI: MISCELLANEOUS

Portable Storage Units: \$40 for the first 60 days & \$20 for renewal of additional 30 days.	Wells: Res. \$25 Comm. \$50	Pools: \$30 for each \$1000 of cost or fraction thereof
Amusement devices: \$150 for the first device, \$50 for each additional device		Curbs, sidewalks and/or apron: \$30
Street opening: \$25 for 20 ft ² + \$2 for each additional 10 ft ² or fraction thereof		

Sample Plot Plan:



123 Sample Street

RECEIVED

AUG 13 2014

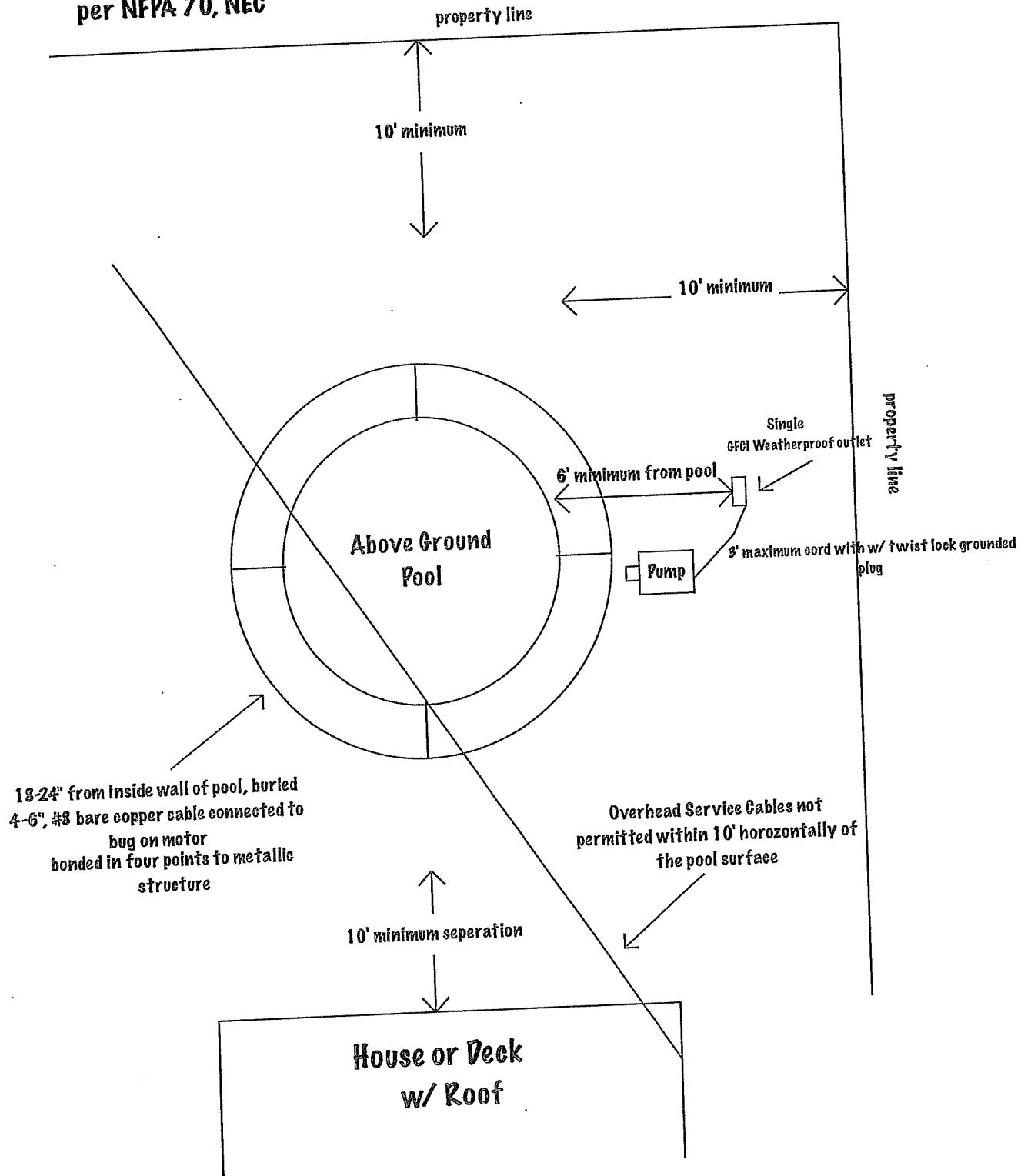
UPPER MORELAND
CODE ENFORCEMENT

Electrical Requirements for Above-ground Swimming Pools

1. GFCI (ground fault circuit interrupter) protected receptacle required between 6 and 20 feet from the pool.
2. Pool pump receptacle must be twist lock, GFCI protected with an in-use cover located minimum 6 feet from pool.
3. Conduit for pool pump shall be minimum 18" cover.
4. Pool pump receptacle shall be mounted on a post usually 4" x 4" pressure treated
5. Pool pump motor needs to be bonded to pool with a #8 solid copper wire
6. Pool pump receptacle feed wires shall be individual conductors in PVC or metal (rigid or intermediate). All wiring methods must have an insulated copper ground conductor not smaller than #12. UF cable not allowed.
7. All metal within 5 feet of inside wall of pool shall be bonded to the pool with #8 solid copper
8. Bonding connectors shall be stainless steel, brass, copper or copper alloy.
9. The pool pump motor shall be listed and labeled for swimming pool use.
10. If the pool ladder is metal, it must be bonded to the pool
11. A minimum 9 square inch conductive plate shall be installed in contact with the water. The plate must be included in the bonding network. This plate can be satisfied with a metallic fill pipe or a metal filter basket.
12. The perimeter area surrounding the pool, including at a minimum the lawn, must be bonded to the bonding grid. This can be accomplished by burying a #8 bare copper conductor 4 inches into the soil and tied to the pool pump external binding post. For nonconductive pool shells (fiberglass an example) bonding at four points shall not be required. See Article 680.26 for specifics.

Special Note: The above statements are illustrative of Code requirements only. Strict adherence to all Article 680 requirements is mandatory.

**Recommended Minimum
Aboveground Pool
Electrical Requirements
per NFPA 70, NEC**



Electrical Diagram Sample

permanent *residential* spas shall be controlled in accordance with the requirements of APSP 15.

SECTION 304 FLOOD HAZARD AREAS

304.1 General. The provisions of Section 304 shall control the design and construction of pools and spas installed in *flood hazard areas*.

[BS] 304.2 Determination of impacts based on location. Pools and spas located in *flood hazard areas* indicated within the *International Building Code* or the *International Residential Code* shall comply with Section 304.2.1 or 304.2.2.

Exception: Pools and spas located in *riverine flood hazard areas* that are outside of designated floodways and pools and spas located in *flood hazard areas* where the source of flooding is tides, storm surges or coastal storms.

[BS] 304.2.1 Pools and spas located in designated floodways. Where pools and spas are located in designated floodways, documentation shall be submitted to the code official that demonstrates that the construction of the pools and spas will not increase the design flood elevation at any point within the jurisdiction.

[BS] 304.2.2 Pools and spas located where floodways have not been designated. Where pools and spas are located where design flood elevations are specified but floodways have not been designated, the applicant shall provide a floodway analysis that demonstrates that the proposed pool or spa and any associated grading and filling, will not increase the design flood elevation more than 1 foot (305 mm) at any point within the jurisdiction.

[BS] 304.3 Pools and spas in coastal high-hazard areas. Pools and spas installed in coastal high-hazard areas shall be designed and constructed in accordance with ASCE 24.

[BS] 304.4 Protection of equipment. Equipment shall be elevated to or above the design flood elevation or be anchored to prevent flotation and protected to prevent water from entering or accumulating within the components during conditions of flooding.

304.5 GFCI protection. Electrical equipment installed below the design flood elevation shall be supplied by branch circuits that have ground-fault circuit interrupter protection for personnel.

SECTION 305 BARRIER REQUIREMENTS

305.1 General. The provisions of this section shall apply to the design of barriers for pools and spas. These design controls are intended to provide protection against the potential drowning and near drowning by restricting access to such pools or spas. These requirements provide an integrated level of protection against potential drowning through the use of physical barriers and warning devices.

Exceptions:

1. Spas and hot tubs with a lockable *safety cover* that complies with ASTM F 1346.

2. Swimming pools with a powered *safety cover* that complies with ASTM F 1346.

305.2 Outdoor swimming pools and spas. Outdoor pools and spas and indoor swimming pools shall be surrounded by a barrier that complies with Sections 305.2.1 through 305.7.

305.2.1 Barrier height and clearances. Barrier heights and clearances shall be in accordance with all of the following:

1. The top of the barrier shall be not less than 48 inches (1219 mm) above grade where measured on the side of the barrier that faces away from the pool or spa. Such height shall exist around the entire perimeter of the barrier and for a distance of 3 feet (914 mm) measured horizontally from the outside of the required barrier.
2. The vertical clearance between grade and the bottom of the barrier shall not exceed 2 inches (51 mm) for grade surfaces that are not solid, such as grass or gravel, where measured on the side of the barrier that faces away from the pool or spa.
3. The vertical clearance between a surface below the barrier to a solid surface, such as concrete, and the bottom of the required barrier shall not exceed 4 inches (102 mm) where measured on the side of the required barrier that faces away from the pool or spa.
4. Where the top of the pool or spa structure is above grade, the barrier shall be installed on grade or shall be mounted on top of the pool or spa structure. Where the barrier is mounted on the top of the pool or spa, the vertical clearance between the top of the pool or spa and the bottom of the barrier shall not exceed 4 inches (102 mm).

305.2.2 Openings. Openings in the barrier shall not allow passage of a 4-inch-diameter (102 mm) sphere.

305.2.3 Solid barrier surfaces. Solid barriers that do not have openings shall not contain indentations or protrusions that form handholds and footholds, except for normal construction tolerances and tooled masonry joints.

305.2.4 Mesh fence as a barrier. Mesh fences, other than chain link fences in accordance with Section 305.2.7, shall be installed in accordance with the manufacturer's instructions and shall comply with the following:

1. The bottom of the mesh fence shall be not more than 1 inch (25 mm) above the deck or installed surface or grade.
2. The maximum vertical clearance from the bottom of the mesh fence and the solid surface shall not permit the fence to be lifted more than 4 inches (102 mm) from grade or decking.
3. The fence shall be designed and constructed so that it does not allow passage of a 4-inch (102 mm) sphere under any mesh panel. The maximum vertical clearance from the bottom of the mesh fence and the solid surface shall not be more than 4 inches (102 mm) from grade or decking.

4. An attachment device shall attach each barrier section at a height not lower than 45 inches (1143 mm) above grade. Common attachment devices include, but are not limited to, devices that provide the security equal to or greater than that of a hook-and-eye-type latch incorporating a spring-actuated retaining lever such as a safety gate hook.
5. Where a hinged gate is used with a mesh fence, the gate shall comply with Section 305.3.
6. Patio deck sleeves such as vertical post receptacles that are placed inside the patio surface shall be of a nonconductive material.
7. Mesh fences shall not be installed on top of onground *residential* pools.

305.2.5 Closely spaced horizontal members. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is less than 45 inches (1143 mm), the horizontal members shall be located on the pool or spa side of the fence. Spacing between vertical members shall not exceed $1\frac{3}{4}$ inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed $1\frac{3}{4}$ inches (44 mm) in width.

305.2.6 Widely spaced horizontal members. Where the barrier is composed of horizontal and vertical members and the distance between the tops of the horizontal members is 45 inches (1143 mm) or more, spacing between vertical members shall not exceed 4 inches (102 mm). Where there are decorative cutouts within vertical members, the interior width of the cutouts shall not exceed $1\frac{3}{4}$ inches (44 mm).

305.2.7 Chain link dimensions. The maximum opening formed by a chain link fence shall be not more than $1\frac{3}{4}$ inches (44 mm). Where the fence is provided with slats fastened at the top and bottom which reduce the openings, such openings shall be not more than $1\frac{3}{4}$ inches (44 mm).

305.2.8 Diagonal members. Where the barrier is composed of diagonal members, the maximum opening formed by the diagonal members shall be not more than $1\frac{3}{4}$ inches (44 mm). The angle of diagonal members shall be not greater than 45 degrees (0.79 rad) from vertical.

305.2.9 Clear zone. There shall be a clear zone of not less than 36 inches (914 mm) between the exterior of the barrier and any permanent structures or equipment such as pumps, filters and heaters that can be used to climb the barrier.

305.2.10 Poolside barrier setbacks. The pool or spa side of the required barrier shall be not less than 20 inches (508 mm) from the water's edge.

305.3 Gates. Access gates shall comply with the requirements of Sections 305.3.1 through 305.3.3 and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool or spa, shall be self-closing and shall have a self-latching device.

305.3.1 Utility or service gates. Gates not intended for pedestrian use, such as utility or service gates, shall remain locked when not in use.

305.3.2 Double or multiple gates. Double gates or multiple gates shall have at least one leaf secured in place and the adjacent leaf shall be secured with a self-latching device. The gate and barrier shall not have openings larger than $\frac{1}{2}$ inch (12.7 mm) within 18 inches (457 mm) of the latch release mechanism. The self-latching device shall comply with the requirements of Section 305.3.3.

305.3.3 Latches. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from grade, the release mechanism shall be located on the pool or spa side of the gate not less than 3 inches (76 mm) below the top of the gate, and the gate and barrier shall not have openings greater than $\frac{1}{2}$ inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.

305.4 Structure wall as a barrier. Where a wall of a dwelling or structure serves as part of the barrier and where doors or windows provide direct access to the pool or spa through that wall, one of the following shall be required:

1. Operable windows having a sill height of less than 48 inches (1219 mm) above the indoor finished floor and doors shall have an alarm that produces an audible warning when the window, door or their screens are opened. The alarm shall be *listed* and *labeled* as a water hazard entrance alarm in accordance with UL 2017. In dwellings or structures not required to be Accessible units, Type A units or Type B units, the operable parts of the alarm deactivation switches shall be located 54 inches (1372 mm) or more above the finished floor. In dwellings or structures required to be Accessible units, Type A units or Type B units, the operable parts of the alarm deactivation switches shall be located not greater than 54 inches (1372 mm) and not less than 48 inches (1219 mm) above the finished floor.
2. A *safety cover* that is *listed* and *labeled* in accordance with ASTM F 1346 is installed for the pools and spas.
3. An *approved* means of protection, such as self-closing doors with self-latching devices, is provided. Such means of protection shall provide a degree of protection that is not less than the protection afforded by Item 1 or 2.

305.5 Onground residential pool structure as a barrier. An onground *residential* pool wall structure or a barrier mounted on top of an onground *residential* pool wall structure shall serve as a barrier where all of the following conditions are present:

1. Where only the pool wall serves as the barrier, the bottom of the wall is on grade, the top of the wall is not less than 48 inches (1219 mm) above grade for the entire perimeter of the pool, the wall complies with the requirements of Section 305.2 and the pool manufacturer allows the wall to serve as a barrier.

2. Where a barrier is mounted on top of the pool wall, the top of the barrier is not less than 48 inches (1219 mm) above grade for the entire perimeter of the pool, and the wall and the barrier on top of the wall comply with the requirements of Section 305.2.
3. Ladders or steps used as means of access to the pool are capable of being secured, locked or removed to prevent access except where the ladder or steps are surrounded by a barrier that meets the requirements of Section 305.
4. Openings created by the securing, locking or removal of ladders and steps do not allow the passage of a 4-inch (102 mm) diameter sphere.
5. Barriers that are mounted on top of onground *residential* pool walls are installed in accordance with the pool manufacturer's instructions.

305.6 Natural barriers. In the case where the pool or spa area abuts the edge of a lake or other natural body of water, public access is not permitted or allowed along the shoreline, and required barriers extend to and beyond the water's edge not less than 18 inches (457 mm), a barrier is not required between the natural body of water shoreline and the pool or spa.

305.7 Natural topography. Natural topography that prevents direct access to the pool or spa area shall include but not be limited to mountains and natural rock formations. A natural barrier approved by the governing body shall be acceptable provided that the degree of protection is not less than the protection afforded by the requirements of Sections 305.2 through 305.5.

SECTION 306 DECKS

306.1 General. Decks shall be designed and installed in accordance with the *International Residential Code* or the *International Building Code*, as applicable in accordance with Section 102.7.1, except as provided in this section.

306.2 Slip resistant. Decks, ramps, coping, and similar step surfaces shall be slip resistant and cleanable. Special features in or on decks such as markers, brand insignias, and similar materials shall be slip resistant.

306.3 Step risers and treads. Step risers for decks of public pools and spas shall be uniform and have a height not less

than $3\frac{3}{4}$ inches (95 mm) and not greater than $7\frac{1}{2}$ inches (191 mm). The tread distance from front to back shall be not less than 11 inches (279 mm). Step risers for decks of *residential* pools and spas shall be uniform and shall have a height not exceeding $7\frac{1}{2}$ inches (191 mm). The tread distance from front to back shall be not less than 10 inches (254 mm).

306.4 Deck steps handrail required. Public pool and spa deck steps having three or more risers shall be provided with a handrail.

306.5 Slope. The minimum slope of decks shall be in accordance with Table 306.5 except where an alternative drainage method is provided that prevents the accumulation or pooling of water. The slope for decks, other than wood decks, shall be not greater than $\frac{1}{2}$ inch per foot (1 mm per 24 mm) except for ramps. The slope for wood and wood/plastic composite decks shall be not greater than $\frac{1}{4}$ inch per 1 foot (1 mm per 48 mm). Decks shall be sloped so that standing water will not be deeper than $\frac{1}{8}$ inch (3.2 mm), 20 minutes after the cessation of the addition of water to the deck.

306.6 Gaps. Gaps shall be provided between deck boards in wood and wood/plastic composite decks. Gaps shall be consistent with *approved* engineering methods with respect to the type of wood used and shall not cause a tripping hazard.

306.6.1 Maximum gap. The open gap between pool decks and adjoining decks or walkways, including joint material, shall be not greater than $\frac{3}{4}$ inch (19.1 mm). The difference in vertical elevation between the pool deck and the adjoining sidewalk shall be not greater than $\frac{1}{4}$ inch (6.4 mm).

306.7 Concrete joints. Isolation joints that occur where the pool coping meets the concrete deck shall be water tight.

306.7.1 Joints at coping. Joints that occur where the pool coping meets the concrete deck shall be installed to protect the coping and its mortar bed from damage as a result of the anticipated movement of adjoining deck.

306.7.2 Crack control. Joints in a deck shall be provided to minimize visible cracks outside of the control joints caused by imposed stresses or movement of the slab.

306.7.3 Movement control. Areas where decks join existing concrete work shall be provided with a joint to protect the pool from damage caused by relative movement.

306.8 Deck edges. The edges of decks shall be radiused, tapered, or otherwise designed to eliminate sharp corners.

TABLE 306.5
MINIMUM DRAINAGE SLOPES FOR DECK SURFACES

SURFACE	MINIMUM DRAINAGE SLOPE (INCH PER FOOT)
Carpet	$\frac{1}{2}$
Exposed aggregate	$\frac{1}{4}$
Textured, hand-finished concrete	$\frac{1}{8}$
Travertine/brick-set pavers, public pools or spas	$\frac{3}{8}$
Travertine/brick-set pavers, residential pools or spas	$\frac{1}{8}$
Wood	$\frac{1}{8}$
Wood/plastic composite	$\frac{1}{8}$

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.