

Pool, Spa and Hot Tub Guidelines

The following general information relates to your building permit application, the materials required and the basic construction of above/under/semi-underground swimming pools and hot tub or spa installations within the Village limits. *You can assist the Building Department and prevent delays in issuing your permit by submitting the correct information for each item.*

- Pool/Hot Tub/Spa Permit:** Required PRIOR to beginning construction or installation.
- Plat of Survey:** Required showing location, size of pool/spa (length, width, depth) and the distance from all property lines/primary structure/ flood plains/pipeline easements. Equipment location should also be indicated.
- Set Back Requirements:** Pools must maintain a minimum of 6 feet from any rear or interior property line and not closer than 10 feet from the nearest wall of the principal building or structure, provided the property does not have any easements larger than 6 feet. Structures/surfaces/equipment are not permissible in any easements or septic fields. Spas/hot tubs must maintain a minimum of 6 feet away from any rear or interior property lines, but do not have a restriction on proximity to the principal building. Both must maintain a minimum of 5 feet from underground electrical lines and 18 inches between lines. The following parts of pools shall NOT be placed under existing electric service-drop conductors or any other open overhead wiring nor shall such wiring be installed above the following: pools and the area extending 10 feet horizontally from the inside of the walls of the pool, diving structure, observation stand, tower or platform. (High voltage lines may require an increase in the minimum distance horizontally from the pool wall and overhead line.) Windows in walls, enclosures or fences containing or facing hot tubs, spas or whirlpools where the bottom exposed edge of the window is less than 60 inches measured vertically above any standing or walking surface and that is more than 60 inches (5 feet) measured horizontally and in a straight line from the water's edge shall be considered a hazardous location and will require tempered glass (R308).
- Lot Coverage:** Per Village Code 10-3-11-E: Percentage Of Required Yard Occupied: Detached accessory buildings or structures shall not occupy more than twenty five percent (25%) of the area of a required rear yard.
- Pool/Hot Tub/Spa Brochure or Plan:** Attach brochures and plans indicating the material, size, framing, and design of the pool/hot tub/spa. Manufacturers specifications are required for review against the building code. Provide specifications for the pool equipment, fold-up ladders, fence latching, pool topper/fencing, or alarms/covers.
- Easements:** Pool/hot tub/spas OR equipment shall NOT be located within any easement, including gas pipeline easements or designated flood routes.
- Safety Barriers :** A minimum of 4 feet fencing is required around pools, at least 6 feet away from underground pool walls. Fencing must be installed prior to adding water to the pool. Protection guards/toppers around above ground pools are required if no fence is installed around the yard. Protection guards/toppers must be adequate enough to supply an overall barrier 4 feet from grade. If a yard fence will not be in place, a fold up lockable ladder or gate is required for safety. All fence gate swings must have an outward swing from the backyard or pool. Gates should have a self-latching and self-closing mechanism. The latches shall be placed on

the pool side at least 3 inches from the top of the gate or 54 inches from the threshold of the gate or otherwise made inaccessible to small children. A dwelling house or accessory building may be used as part of such fence, however must have an audible warning/alarm (listed and labeled according to UL 2017) or powered safety cover in compliance with ASTM F 1346. Alarms shall be listed and labeled in accordance with UL 2017, and the deactivation switch must be located at least 54 inches above the threshold of the door. Spas/hot tubs with a safety cover which complies with ASTM F 1346 shall be exempt from providing extra barriers.

Weight Support: All spas and hot tubs must be installed upon an approved surface designed to support the weight load per manufacturers specifications.

Temporary Barriers: Temporary fencing, a minimum of 4 feet high, must be in place during construction and remain until the permanent fence/barrier is installed.

Electrical: Rigid metal, non-corrosive/galvanized conduit or PVC is acceptable. 18 inches deep for PVC, or 6 inches for rigid metallic conduit. Schedule 80 is preferred/recommended, but schedule 40 is allowed if it is rated for underground. All conductors must be copper. No Romex is allowed. If electric is installed, please indicate so at the time of application. Grounding in conduit should include #12 AWG copper cable. (See below for additional information.) GFCI outlets should be located anywhere on the exterior of the home. GFCI receptacles shall be located a minimum of 6 feet from and not more than 20 feet from the inside wall of pools and outdoor spas and hot tubs.

Gas: Anodeless Risers or corrosive resistance protective coating over metallic is acceptable. G2415.11.2 – Pipe protected coatings and wrappings shall be approved for the application and shall be factory applied. Uncoated threaded or socket welded joints may NOT be used where corrosion is known to occur. Minimum of 8” deep. One continuous length of PE Pipe, and two above ground joints. NO underground joints. Before any system of piping is put in service or concealed/backfilled, it shall be tested to ensure that it is gas tight. Testing, inspection and purging of piping systems shall comply with code G2417.

Plumbing: Suction outlets to be designed and installed in accordance with ANSI/APSP-7.

Protection Against Corrosion: Metallic piping or tubing exposed to corrosive action, such as soil condition or moisture, shall be protected in an approved manner.

Bonding: See attached diagram.

Grounding: NO ground rods are to be installed. The following equipment shall be grounded per code E4205.1:

1. Through-wall lighting assemblies and underwater luminaries other than those low-voltage lighting products listed for the application without a grounding conductor.
2. All electrical equipment located within 5 feet of the inside wall of the pool, spa or hot tub.
3. All electrical equipment associated with the recirculating system of the pool, spa or hot tub.
4. Junction boxes.
5. Transformer and power supply enclosures.
6. Ground-fault circuit-interrupters.

7. Panel boards that are not part of the service equipment and that supply any electrical equipment associated with the pool, spa or hot tub.

Grading/Retaining Walls:

If being installed on a slope, stamped structural drawings by a design professional must be submitted. If there is a grade difference greater than 30 inches, a guardrail/handrail must be installed.

Inspections:

A field verification of pool location and J.U.L.I.E. lines is required PRIOR to release of any permits and starting any work to ensure location is compliant. Once the permit is released, inspections will be required prior to backfilling, prior to covering underground gas or electrical lines, prior to pouring any concrete, once bonding is complete, and in all cases, a final inspection is required. (Inspections will vary based on individual projects.) At final inspection it is required that all fencing and safety mechanisms are installed PRIOR to filling the pool, unless directed otherwise by manufacturers specifications, in order to receive an approval to occupy the pool.

Damage Bond:

Any work requiring heavy equipment to travel over Village infrastructure (parkway, curbs and public walks) will require that a \$5,000 Damage Bond be posted, and the original & signed bond given to the Village, to protect against any possible damage to infrastructure. Once construction is finalized, and the Village Engineer can confirm the positive status of the infrastructure, the Damage Bond will be released back to the applicant.