WHAT YOU NEED WITH YOU

- Quick Permit Application (if the hot tub is proposed on a deck or balcony, the Quick Permit Application may no longer be used; instead a Remodel Permit Application is required along with plans stamped and signed by an IL architect or structural engineer).
- Permit fee. Please refer to the building permit fee chart. That permit fee includes an electrical permit but not a plumbing permit. The permit fee will increase if a plumbing and/or other permit is also required.
- Plat of survey or site plan showing the locations, dimensions, and set backs of all existing and proposed improvements. Setbacks from property lines vary by zoning districts.

WHAT YOU SHOULD KNOW

- No work can begin prior to a permit being issued.
- If the property is a landmark or located within an historic district, a Certificate of Appropriateness (COA) is required.
- Many subdivisions have private covenants and restrictions which supersede City zoning requirements. The City does not enforce covenants and restrictions. It is recommended that property owners check with the homeowner's association prior to commencing any work.
- Hot tub decks higher than 30 inches above grade must have guardrails. Permanent stairs having more than 3 risers must have handrails. Open portions of stair risers shall not allow the passage of a 4 inch sphere. Hot tub decks and stairs must be built as specified in the City of Elgin Quick Guide to Stair, Stoops, and Ramps.
- Before you dig to install your fence, contact JULIE at 1-800-892-0123 to locate utility lines.
- Inspections are required at various steps in the process (see REQUIREMENTS No. 4 below). Contact the City of Elgin to schedule the inspections.

REQUIREMENTS

The following requirements are only a partial list of the locally adopted codes. This list represents the most-common items that require compliance. All City of Elgin ordinances and adopted codes must be complied with as determined by the building official.

1. **Plumbing Requirements:**
   a) Black iron pipe (schedule 40), wrapped or coated with a weather resistant material. The pipe shall be installed to be a minimum of 12 inches below grade to the top of the pipe.
   b) Approved plastic pipe can be installed outdoors, underground only. Plastic pipe shall be permitted to terminate above-ground only where an anodeless riser is used. The plastic pipe shall be installed to be a minimum of 18 inches below grade to the tip of the plastic pipe.
   c) Connections made outdoors and underground between metallic and plastic piping shall be made with fittings conforming to either ASTM D 2513 or ASTM F 1973.
   d) An electrically continuous corrosion-resistant tracer wire (minimum 14 AWG copper) or tape shall be buried with the plastic pipe to facilitate locating by JULIE. One end shall be brought above ground at the building wall or riser.

2. **Electrical Requirements - All requirements of the 2014 National Electrical Code, Article 680, including, but not limited to the following, shall be complied with:**

a) Over head electrical conductors (electric or telephone) and metal clothes lines must be located at least 10 feet from the inside wall of the hot tub. Uninsulated overhead utility lines must be at least 25 feet in any direction from the water's edge [Table 680.8 & figure 680.8]. Underground conductors (electrical, cable TV, phones lines, etc.) not associated with hot tub equipment must be located at least 5 feet from the inside wall of the hot tub.

b) Receptacles that provide power for water-pump motors or for other loads directly related to the circulation and sanitation system shall be located at least 10 feet from the inside walls of the hot tub, or not less than 6 feet from the inside walls of the hot tub if they meet **all** of the following conditions:
   a. Consist of single receptacles.
   b. Employ a locking configuration.
   c. Are of the grounding type.
   d. Have GFCI protection (using a GFCI type circuit breaker, per City of Elgin Amendments).

c) An additional, GFCI protected, general purpose receptacle on a separate circuit from the hot tub pump motor (general purpose circuit) shall be provided at least six feet from the inside wall of the hot tub, but not more than 20 feet from the inside wall of the hot tub.

d) GFCI protected conductors shall not occupy the same raceway (conduit) as non-GFCI protected conductors.

e) The receptacle must be of the grounding type and protected by a ground fault circuit interrupter. Copper conductors no smaller than #12 AWG and a green insulated copper equipment grounding conductor sized per NEC Table 250.122, but not smaller than #12 AWG ground wire must be used. This equipment grounding conductor must be bonded to all metal boxes.

f) The hot tub pump motor must be listed by an independent third party testing lab to UL Standard 1081. A "CSA" listing label is not acceptable. A "CSA-US", "UL", "ETL", or "Intertek" label is acceptable.

g) Electrical rigid steel conduit or steel intermediate metal conduit (IMC) can be used as the raceway to the receptacle and must be a minimum of 6 inches below grade. A single conduit cannot act as the support for the receptacle box. Rigid polyvinyl chloride conduit (PVC) can be used as the raceway to the receptacle and must be a minimum of 18 inches below grade. When using PVC as the raceway, the PVC cannot act as the support of the receptacle box. When using PVC conduit, provide protection for the above grade portion of the raceway, or install schedule 80 PVC raceway. PVC conduit must be listed as an electrical raceway, plumbing style (white) PVC is not allowed. The recommended mounting height for the receptacle is 12 to 18 inches above grade with a weatherproof box and receptacle cover. The weatherproof box must be securely supported. All raceways, fittings, and boxes must be listed for the use. EMT is allowed for pool wiring of a single family home, if it is mounted in or on the house. It shall not be used underground, or mounted to any other structure, like a deck or gazebo.

h) An equipotential bonding grip shall be established for all hot tub. This shall include a bare, solid copper #8 AWG or larger conductor, installed around the perimeter of the pool. This conductor shall follow the contour of the pool and be buried 4" below grade, at 12"-18" from the hot tub (this includes both paved and unpaved surfaces). The rebar or welded wire fabric used to reinforce a concrete hot tub deck must be bonded together, and be made a part of this bonding grid. This conductor shall be bonded to any metal hot tub components with stainless steel, brass or copper fittings, and to the hot tub water (ask your hot tub supplier or your local electrical supply house for fittings to be used for the purpose). It shall also be bonded to the bonding lugs of the hot tub pump motor, and the hot tub heater (if installed). This bonding conductor shall be bonded to a conductive hot tub shell, or to the un-encapsulated rebar of an in-ground hot tub at four locations, equally spaced. The bonding conductor shall not be attached to a ground rod, or to service equipment or remote panel boards.

i) One or more means of disconnect shall be provided for all hot tub pump motors. This means of disconnect shall simultaneously disconnect all ungrounded conductors for all hot tub utilization equipment except for lighting. The means of disconnect for the hot tub pump motor may be a switch in a weather-proof box and cover, or it may be the switch on the pump motor. The means of disconnect shall not be less than five feet from the inside wall of the hot tub, and shall be readily accessible.

j) Except for storable hot tub, the cord that supplies power to the filter pump must not be longer than 3 feet. Portable UL-listed pumps that have factory-installed longer cords may be used with a GFCI receptacle.

3. **Security Fences, Guardrails and Handrails - All hot tub must be designed to restrict access into the hot tub. Three options are available for restricting access:**

a) If all points of the perimeter of the hot tub are set at 4 feet or more above grade *and* if no deck adjoins the hot tub, then no fencing or guardrail is required.

b) The hot tub must be enclosed with a fence. The fence must be at least 4 feet high and must completely surround the hot tub (or the entire yard in which the hot tub is located). All openings in the fence (with the exception of those openings which allow direct access to the house) must have a self-closing, self-latching gate. The latch must be located at least 4 feet above grade or be inoperable from the outside. The fence must be constructed so that a 4 inch sphere cannot pass through at any point.

c) The hot tub must be enclosed with a Deck and Guardrail System. Hot tubs that have a deck and guardrail system instead of a security fence must have a guardrail at least 4 feet above grade and 3 feet above the deck. The guardrail must go around the entire deck, as well as any portions of the hot tub which are not bounded by a deck and which are less than 4 feet above grade. All openings in the guardrail (with the exception of those openings which allow direct access to the house or to the hot tub) must have a self-closing, self-latching gate. The latch must be located at least 4 feet above grade or be inoperable from the outside. All guardrails and handrails must be constructed so that a 4 inch sphere cannot pass through at any point. All required railing must be installed prior to filling the hot tub.

d) Where a Wall of a Dwelling Unit serves as part of the Barrier, one of the following conditions shall be met:
   a. The hot tub shall be equipped with a powered safety cover in compliance with ASTM F 1346;
   b. Doors with direct access to the hot tub through that wall shall be equipped with an alarm which produces an audible warning when the door and/or its screen, if present, are opened. The alarm shall be listed in accordance with UL 2017; or
   c. Other means of protection, such as self-closing doors with self-latching devices, which are approved by the building official, shall be acceptable so long as the degree of protection afforded is not less than the protection afforded by either Item 1 or 2 described above.

4. **Inspections Required:**
   a) Hot tub layout inspection (not required but highly recommended). This inspection should take place after the yard has been marked by J.U.L.I.E., and after the hot tub location has been marked with white spray paint.
   b) Underground electrical and underground plumbing inspections, if such work was performed, prior to backfilling (J.U.L.I.E markings must still be present at this inspection).
   c) Final electrical and final plumbing inspections, if such work was performed (Access to the electrical panel in the house is required at this time, as well as access to any sub-panels installed for or feeding the hot tub).
   d) Final hot tub inspection.

Call J.U.L.I.E. before you dig!
Dial 8-1-1 or 800-892-0123 to locate utility lines.