



# Macomb Township

## Building Department

54111 Broughton Road, Macomb, Michigan 48042

Phone (586) 992-0710

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[building@macomb-mi.gov](mailto:building@macomb-mi.gov)

[www.macomb-mi.gov](http://www.macomb-mi.gov)

## Swimming Pool and Spa Requirements

A building permit and electrical permit is required for a swimming pool containing 24" inches or more of water. A mechanical permit is also required when a pool heater is installed.

### APPLICATION FOR POOL PERMITS – REQUIREMENTS:

1. Complete application; if a pool company is involved have them submit the application along with a copy of their builder's license, driver's license and workman's comp & liability insurance certificates. A copy of the contract for pool installation required.
2. Submit two (2) copies of fully dimensioned drawn to scale plot plans (see sample) obtained from the building department, showing pool elevation, location of pool, distances to property lines and all structures, and overhead and underground cables and all easements. (see attached) For inground pools the distance from pool decking to property lines, and location of pool equipment.
3. Additional Information  
Impervious surface calculations worksheet (does not include pool). Gas piping/gas meter sizing worksheet, inground pool worksheet and inground pool affidavit. These forms are available on the township website under additional forms.
4. Submit two copies of construction plans or pool brochures, including suction entrapment avoidance documentation.
5. A Soil Erosion permit or letter of exception is required for all inground pools within 500' of a county drain.
6. A bond must be posted prior to picking up the permit.  
\$250.00 Above-ground pool  
\$1000.00 In-ground pool

### LOCATION OF OUTDOOR POOLS:

1. There shall be a distance of not less than ten (10') feet between the edge of water and any building including the main structure. **NOTE:** Spas may be located not less than five (5') feet from the main structure.

2. There shall be a distance of not less than seven and one half (7'.5") feet between the edge of water and the side property line. There shall be a distance of not less than six (6') feet between the edge of water and the rear property line.
3. Call **Miss Dig (1-800-482-7171)** for reference as to the location of the underground electric prior to any excavation for pools or spas **(pools shall not be located over or within five (5') feet of any such service and cannot be located within ten (10') feet of any overhead wires).**
4. Outside faucets shall have a vacuum breaker when a yard hose is used to filling the pool. This is to prevent pool water from backing up into the water system.
5. All pools less than 48" inches in height from grade shall be completely enclosed by a pool code fence or barrier not less than four (4') feet in height for protection of the general public. The gates shall swing away from pool area and have a self-closing and self-locking device with latches placed 54" above grade on the outside of the gate to comply with locally adopted code; or may be equipped with an approved safety cover.
6. Where an above ground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure and where the means of access is a ladder or steps, the ladder or steps shall be capable of being secured, locked or removed to prevent access or the ladder or steps shall be surrounded by a barrier that meets the requirements of the code. All doors with direct access to the pool shall be equipped with an alarm which produces an audible warning when the door or its screen or window, is opened.
7. Pools and pool heaters must be installed according to the manufacturer's specifications. All pools must be installed according to all applicable State of Michigan construction codes.
8. Inground pools also require grade elevations at the top of the pool, rear property corners, side yard elevations and the house elevation at the brick ledge.
9. An electrical bonding grid inspection is required prior to the sand inspection.
10. Pool and/or decking that encroach into a side or rear yard easement must have prior approval from the Water & Sewer Department.
11. A separate fence permit is required.
12. Allow **48 hrs.** for final inground pool inspection.
- \* **A complete list of pool requirements can be found in the 2015 International Swimming Pool & Spa Code and also the Macomb Township Zoning Ordinance.**



# ELECTRICAL WIRING REQUIREMENTS FOR SWIMMING POOLS

PERMANENTLY INSTALLED SWIMMING POOLS ARE THOSE THAT ARE CONSTRUCTED IN THE GROUND OR PARTIALLY IN THE GROUND, AND ALL OTHERS CAPABLE OF HOLDING WATER WITH A DEPTH GREATER THAN 42 INCHES (1067 MM)

## 1) Pool Pump Receptacle (Outlet) and Wiring Method

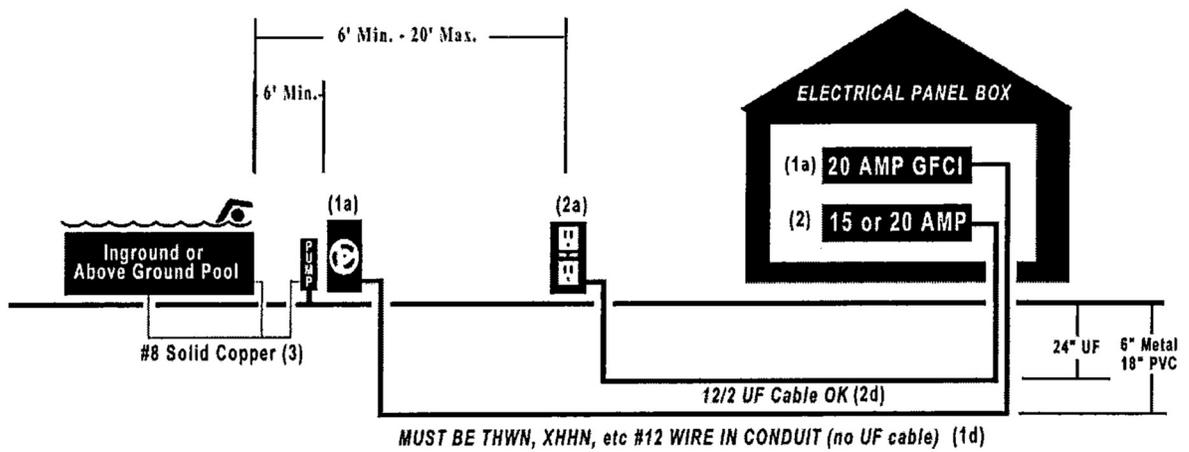
- A. If a pump motor receptacle is located between 6' – 10' from the inside pool wall, the receptacle must be a single twist-lock outlet, grounded, and GFCI protected. Maximum flexible cord length for pump is 3 ft.
- B. Receptacle must have a weatherproof cover that can be closed when the cord is plugged in. (In-use type/bubble cover)
- C. Circuit for the pump motor shall not be less than #12 AWG insulated copper grounding wire, and must be in conduit. (except when within a building the wire can change to NM (cannot use NM wire in underground conduits))
- D. Conduit
  - I. PVC – All PVC conduit must be buried at least 18" deep
  - II. Metal – All Rigid Metal conduit must be at least 6" deep

## 2) Convenience Receptacle (Outlet) and Wiring Method

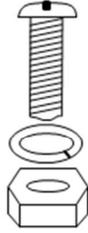
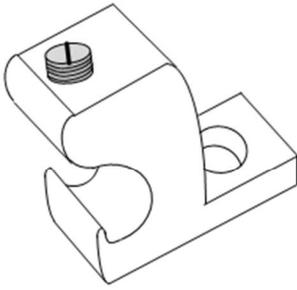
- A. At least one (1) 15 – or 20 – ampere convenience receptacle must be located not closer than 6' but not further than 20' from the outside pool wall (can be existing and/or wired with any approved wiring method)
  - I. Convenience receptacle must be Ground Fault Circuit Interrupter (GFCI) protected.
  - II. Must have a weatherproof cover where exposed to the weather (In-use type bubble cover)
  - III. Must be separate from the pool pump receptacle wiring.
- B. Burial Depths
  - I. UF cable if buried must be at least 24" deep
  - II. PVC – All PVC conduit must be buried at least 18" deep
  - III. Metal – All Rigid Metal conduit must be at least 6" deep

## 3) Bonding the Pool

- A. All metal parts (walls, metal, posts, ladders, etc) must be bonded together using a #8 (or larger) solid copper wire.
- B. Must use non-corrosive clamps, listed for pool use.
- C. A minimum of nine (9) square inches of metal must be in contact with the water to bond the water (*2 most common methods are a bonded metal plate in the skimmer, or a 12" long non-corrosive metal pipe sectioned into the pump system*)

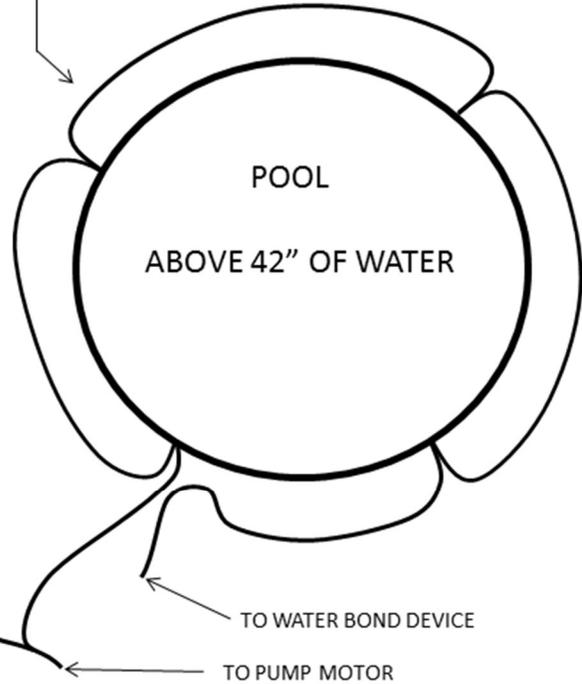


**Building Permits are Required for MOST  
Swimming Pools. Please Check with Your  
Municipality Before Installing a Swimming Pool.**



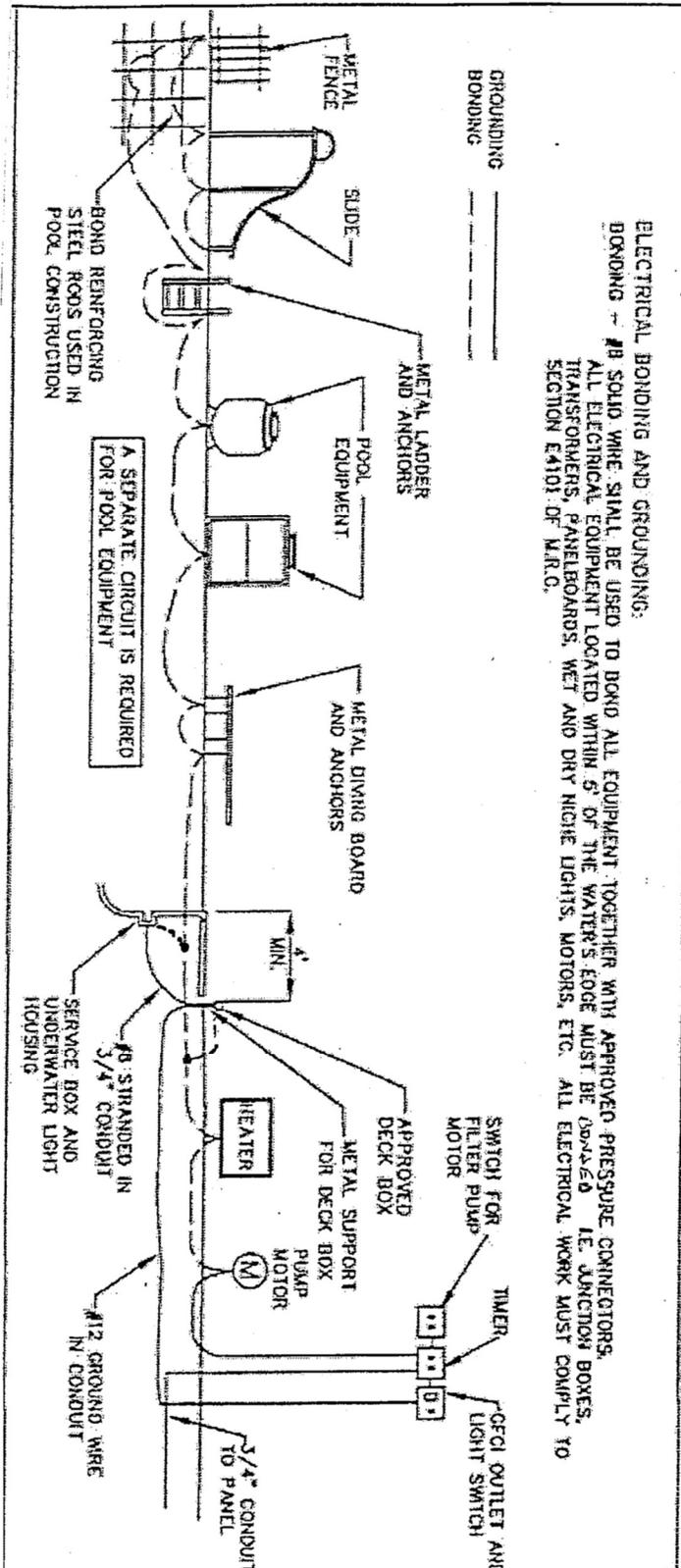
2015 MICHIGAN RESIDENTIAL CODE  
PERMANENT POOL BONDING &  
GROUNDING #8 SOLID BARE COPPER,  
18" - 24" FROM POOL 4" - 6" DEEP  
**MUST HAVE 4 POINTS OF  
ATTACHMENT TO POOL STEEL**

LUGS AND HARDWARE TO BE NONFERROUS  
METAL (STAINLESS STEEL, BRONZE, BRASS,  
COPPPER). LUGS TO BE LISTED FOR DIRECT  
BURIAL. **MACHINE SCREWS ONLY**



**BOND ALL METAL WITHIN 5' OF POOL BONDING GRID**

**ELECTRICAL BONDING AND GROUNDING:**  
**BONDING - #8 SOLID WIRE SHALL BE USED TO BOND ALL EQUIPMENT TOGETHER WITH APPROVED PRESSURE CONNECTORS.**  
 ALL ELECTRICAL EQUIPMENT LOCATED WITHIN 5' OF THE WATER'S EDGE MUST BE DERATED, I.E. JUNCTION BOXES, TRANSFORMERS, PANELBOARDS, WET AND DRY NICHE LIGHTS, MOTORS, ETC. ALL ELECTRICAL WORK MUST COMPLY TO SECTION E4101 OF M.R.C.



# STORABLE SWIMMING POOLS

## ELECTRICAL WIRING REQUIREMENTS

Storable pools are those that are constructed on or above the ground, and are capable of holding water to a maximum depth of 42 inches (1.0 M), or a pool with non metallic, molded polymeric walls, or inflatable fabric walls regardless of dimension. (The maximum water depth of 42" does not apply to inflatable swimming pools).

### 1. Storable Pool Pumps

- a. A cord-connected pool filter must incorporate an approved system of double insulation or equivalent.
- b. Cord-connected pool filter pumps must be provided with a ground-fault circuit interrupter (GFCI) that is an integral part of the attached plug or located in the power supply cord within 12" of the attached plug.

### 2. Receptacle (Outlet) and Wiring Method for Storable Pool Pump

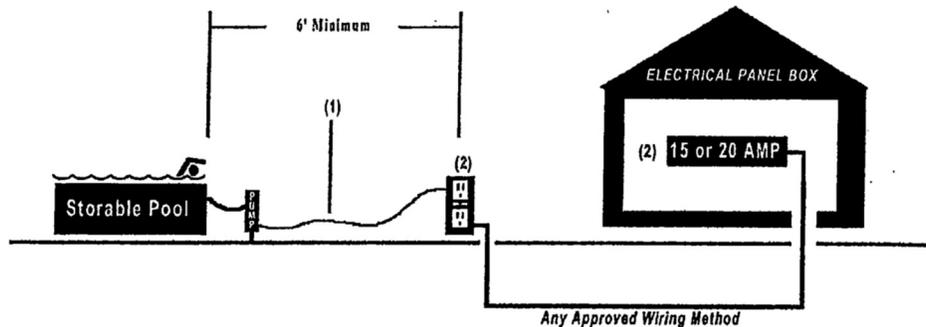
- a. Receptacles cannot be located within 6' of the inside wall of a storable pool.
- b. The receptacle must be grounded and must be ground fault circuit interrupter (GFCI) protected.
- c. Receptacle must have a weatherproof cover that can be closed when the cord is plugged in. (In-use type cover)

### 3. Luminaries (lights) for Storable Pools (if used)

- a. Luminaries cannot have exposed metal parts and must be listed for the purpose.
- b. Luminaries 15 volts or less must:
  - i. Have a luminaire lamp that operates at 15 volts or less.
  - ii. Have an impact-resistant polymeric lens, luminaire body and a transformer enclosure.
  - iii. Have a transformer listed for swimming pools with a primary rating not over 150 volts.
- c. Luminaries over 15 volts but not over 150 volts:
  - i. Have an impacted-resistant polymeric lens and luminaire body.
  - ii. Have ground fault circuit interrupter (GFCI) protect.

### 4. Other

- a. Building Permits are required. Secure a Building Permit prior to beginning work from the Macomb Township Building Department
- b. All receptacles located within 20' of the inside walls of a storable pool wall must be GFCI protected.





51650 CARD RD  
MACOMB TOWNSHIP  
MICHIGAN 48042

586.598.0687

# MACOMB TOWNSHIP

WWW.MACOMB-MI.GOV  
WATERANDSEWER@MACOMB-MI.GOV

## DEPARTMENT OF PUBLIC WORKS

### Pool Review

1. DPW Required Items for Review:

- Proposal drawn to scale per Township-approved plot plan
- All necessary dimensions (e.g., side yard, rear yard, dimension from house)
- All necessary grade elevations (e.g., pool elevation)

2. Retaining Wall Required:  Yes  No

3. Easement Encroachment Required:  Yes  No

**See back to find:**

- Important information on what needs to be completed for final grade inspection
- Ordinance that pertains to grading of property

#### Notes for Contractor:

- Owner must maintain proper drainage around appurtenances, such as above-ground pools, in-ground pools, concrete patios, and sheds
- Side and rear yard easement grade elevations **CANNOT** be altered.
- Property Owner Understand of Altering Grade document must be signed for permit approval.
- The pool, retaining wall and all appurtenances listed above must be confined to the homeowner's property and (if applicable) approved easement encroachment.
- Items deemed permanent by the Township are not allowed to be in the easement.

Comments:

Approved

Rejected

Review Completed by: \_\_\_\_\_

Date: \_\_\_\_\_

Kevin J. Johnson, DPW Director

SUPERVISOR	CLERK	TREASURER	TRUSTEE	TRUSTEE	TRUSTEE	TRUSTEE
Frank J. Viviano	Kristi L. Pozzi	Leon Drolet	Frank A. Cusumano Jr.	Peter J. Lucido III	Nancy J. Nevers	Charles Oliver





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DPW (586) 598-0687

## Property Owner Understanding of Altering Grade

I am the owner of \_\_\_\_\_ (Address) \_\_\_\_\_ (hereinafter “property”),

and as the undersigned, do hereby understand and agree to the terms and conditions of the Township regarding altering grade:

- The property was initially graded so that water will drain from the house to appropriate drainage swales and catch basins. These drainage swales and catch basins may be on the property, along the property lines or on a neighboring property.
- The property was initially graded so that water may drain from adjacent properties to appropriate drainage swales and catch basins. These swales may be on the property, along the property lines or on a neighboring property.
- It is my responsibility to understand how the property was initially graded as noted above prior to any project being performed on the property that may alter the grade of the property.
- If a project being performed on the property alters the grade of the property in any manner, the drainage pattern established with the initial grading of the property must be maintained. The Township shall be contacted for inspection to verify that the established drainage pattern has been maintained. Approval by the Township is required prior to another project being performed (examples on Page 3).
- Installation of any future landscaping **cannot change the drainage pattern that was established with the initial grading** of the property as noted above, since changing the drainage pattern potentially affects neighboring properties. If landscaping changes the drainage pattern or obstructs the flow of water in any way when installed or in the future, **I am responsible** for restoring the drainage pattern back to its original condition.
- I will adhere to Ordinance 15-261\* (Permit—Required.) and 15-265\*\* (Obstructing flow of surface water prohibited.).
- The representations and understanding under this document shall be binding on any heirs, assigns, successors, agents or others related to ownership of the property.

**\*Ordinance 15-261:** *Except for agricultural purposes, it shall be unlawful for any person to change the drainage pattern of any land by excavating, grading, or filling without first obtaining a written permit therefore from the superintendent.*

**\*\*Ordinance 15-265:** *It shall be unlawful for any person to interfere with, modify or obstruct the flow of surface water across any property in any manner different from the approved site grading plan.*

\_\_\_\_\_  
Property Owner Name (Print)

\_\_\_\_\_  
Property Owner Signature

\_\_\_\_\_  
Date

**A photocopy of a valid  
Driver's License must  
accompany the signature for  
verification purposes.**



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## EXAMPLES

### ***Example 1: I am installing a pool.***

- The pool permit is specifically for installation of a pool.
- The established drainage pattern must be maintained in its original condition or as approved by the Township as part of the Pool Review before any landscaping (another project) is started.
- The Township must inspect and approve the grading of the property before another project commences.
- If landscaping is installed, it is the responsibility of the property owner to place the landscaping so as not to block access to utilities within easements or impede the established drainage pattern.

### ***Example 2: I am installing landscaping.***

- No permit is necessary to install landscaping, however, the established drainage pattern of the property must be maintained.
- Typical concerns with landscape installation:
  - Trees or shrubs planted too close to the property line, and the raised area under the trees directs water onto the neighboring property. This is considered an alteration to the established drainage pattern.
  - Trees, shrubs, and landscape beds are installed in rear yard easements. If the landscaping blocks access to the utilities within the easement or impedes water from flowing to or through the drainage swale, it is considered an alteration to the established drainage pattern.
- If landscaping is installed in a location that alters the established drainage pattern, it is the responsibility of the property owner to move the landscaping as necessary to restore the established drainage pattern.
- Landscaping is not to be planted blocking hydrants, electrical meters, transformer pads, etc.



# Department of Public Works

51650 Card Road, Macomb, MI, 48042  
586-598-0687

Kevin Johnson, DPW Director

## Final Pool Grade Inspection

Property Address: \_\_\_\_\_ Inspection Date: \_\_\_\_\_

### REVIEW OF:

- Side yard grading between houses (both sides)
- Rear property line grading
- Side yard swales/property line restored
- Rear yard swale (if drainage is on this parcel)
- Catch basin
- \_\_\_\_\_

**Side and rear yard easement grade elevations cannot be altered.**

### PRE-FINAL POOL GRADE RESTORATION INSPECTION:

1. All pre-existing drainage swales are to be restored, in place, with correct elevations, as was approved at time of Final Grade & Iron Inspection. Side yard drainage to be a shared swale on the side yard property line. Rear yard swales to be restored according to rear yard storm sewer location or to match existing dependent on storm sewer location.
2. Side yard and rear yard elevations at the side and rear property lines are to match existing. There can be no altering of elevations at existing common property lines.

**Ordinance 15-261:** Except for agricultural purposes, it shall be unlawful for any person to change the drainage pattern of any land by excavating, grading filling, or plantings such as trees, shrubs, or gardens without first obtaining a written permit therefore from the Superintendent.

**Ordinance 15-265:** It shall be unlawful for any person to interfere with, modify, or obstruct the flow of surface water across any property in any manner different from the approved site grading plan.

Comments:


**APPROVED**                       **DENIED**

Inspector: \_\_\_\_\_

Date: \_\_\_\_\_

Print Name