

### SITE PLAN PROCEDURES FOR INGROUND SWIMMING POOLS

- A. Application and approved site plan must be obtained at the Building Department. If the approved site plan is more than a 1-20 scale, redraw the site plan to a 1-20 scale on a separate sheet of paper and attach it to the original site plan. Show all easements (no freehand drawings or faxes will be accepted) and include the following:
1. Pool size and location distance dimensions from the rear of the house, from the rear and side of the lot line and the size of the decking or concrete walk around the pool. Pool, platform or other structures shall be located 10 feet from overhead electrical lines, 5 feet from underground electrical lines, 6 feet from rear lot line, 7.5 feet from side lot lines and proof of underground of utility markings by Miss Dig. No pool may be located in an easement without consent of controlling agent. Pools may not be located on sanitary field or septic tank. A 25 foot setback is required on corner lots and lots adjacent to a mile road must maintain a 30 foot rear yard setback. Inground pools must be 10 feet from house.
  2. Grade elevations of the top of the pool, rear property corners, side yard elevations and the house elevation at the brick ledge.
  3. Location and type of surrounding the pool or property. See attachments for the state barrier requirements.
- B. A \$500.00 bond must be posted at the time the permit is to be picked up.
- C. **Prior to sand inspection an electrical bonding inspection is required.**
- D. Prior to steel or sand (for fiberglass pools) inspection, you must mark the property line and a grade stake with the elevation of both the house and pool set at the front of the pool.
- E. Concrete decking or walks cannot vary from approved site plan. Any changes must be submitted on a revised site plan for approval. **NOTE:** Any variation of concrete will result in a stop work order being placed immediately.
- F. A sample site plan has been included in this packet with the requested information. Pool site plans are reviewed by the Water and Sewer Department and returned to the Building Department. **Do not** by-pass the Building Department with the site plan, since the Water and Sewer Department will not accept a pool site plan until an application has been activated.

**Site Plan Procedures Inground Swimming Pools (Continued)**

- G. Pool and/or pool decking that infringe into a rear or side yard easement must have prior approval from the Water and Sewer Department. Once approved, an Easement Encroachment must be processed along with a \$23.00 processing fee. The Macomb Township Board of Trustees grants final approval, which meets every 2<sup>nd</sup> and 4<sup>th</sup> Wednesday of each month. Instructions are included in packet.

Once all the above items are approved, the documents are returned to the Building Department for permit processing. The above process may take several weeks to complete.

Bond return process will begin after an approved final building inspection has been approved.

Any questions in regard to the site plan procedure, please call the Macomb Township Water and Sewer Department at (586) 598-0687 or the Building Department at (586) 992-0710.

**MANDATORY AFFIDAVIT  
ALL INGROUND POOLS**

I, \_\_\_\_\_ as the owner or authorized agent of the \_\_\_\_\_ pool company state that I will install the pool at \_\_\_\_\_ as per approved site plan and comments from the Macomb Township Building and Water and Sewer Departments. This includes approved elevations, pool size and location and retaining wall if required.

I will follow the township procedures for rear yard swimming pools. This includes marking of property lines and installing a grade stake with elevation of house and pool. As the permit holder, it is my responsibility to ensure the pool meets all state and township codes.

I further agree to comply with the following:

1. Give the homeowner a copy of the approved site plan and comments.
2. Post an additional copy of the approved site plan and comments on the site in a visible location.
3. Inform the homeowner that there can be no variation including concrete from the approved site plan and comments.

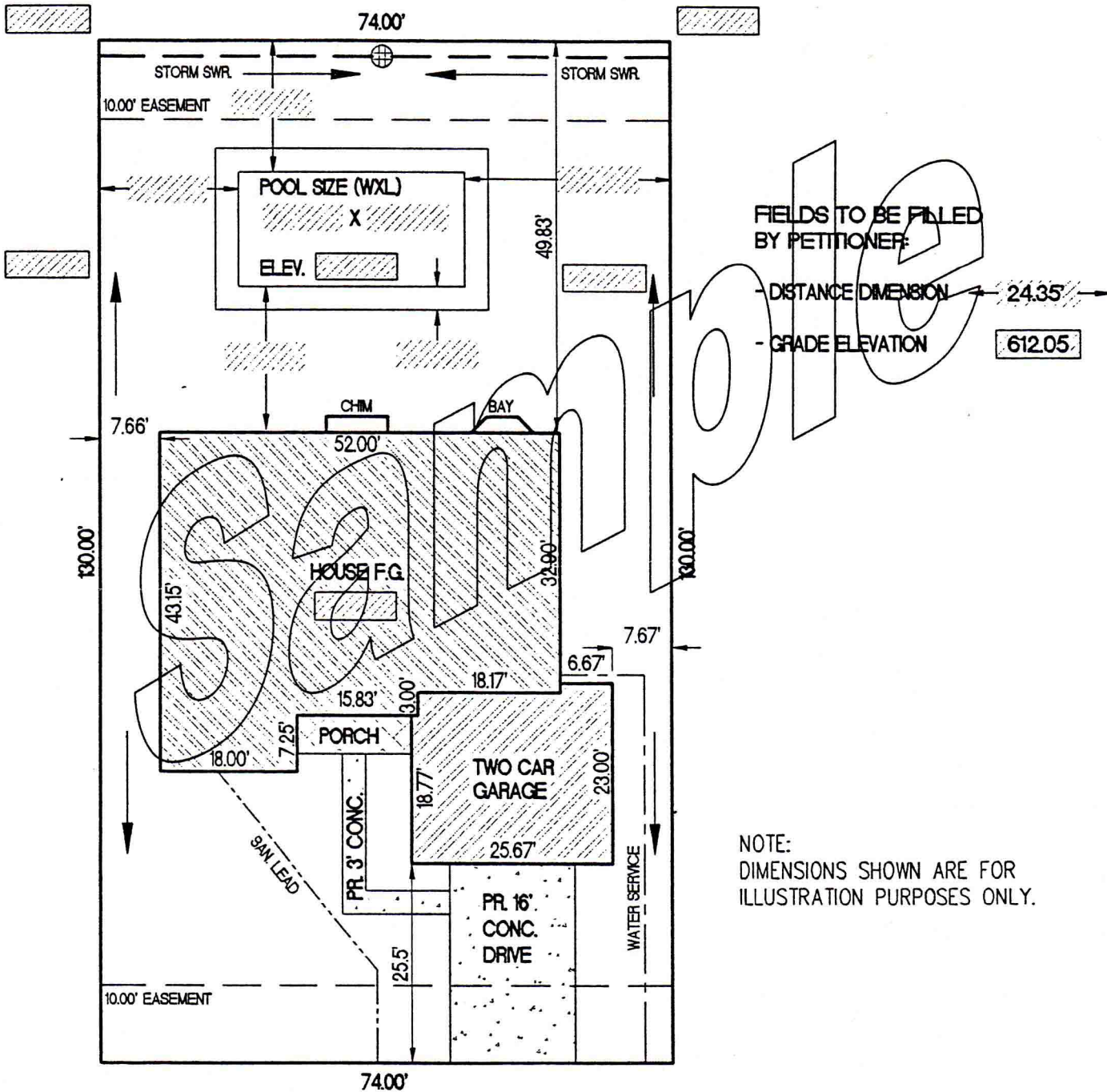
Owner/Representative \_\_\_\_\_

Address \_\_\_\_\_

Drivers License Number \_\_\_\_\_

Note: Any variation from the approved site plan will result in a stop work order and require complete resubmission for approval to both Water & Sewer and Building Department.

# SAMPLE SITE PLAN FOR POOLS



NOTE:  
DIMENSIONS SHOWN ARE FOR  
ILLUSTRATION PURPOSES ONLY.

SECTION N/A	TOWN 3 NORTH, RANGE 13 EAST	MACOMB TOWNSHIP	MACOMB COUNTY, MICHIGAN
SPALDING DeDECKER ASSOCIATES, INC.		DRAWN: ABDULRAZAK	DATE: 05-24-99
ENGINEERS SURVEYORS		APPROVED: .	DATE: .
905 SOUTH BLVD. EAST, ROCHESTER HILLS, MI 48307		SCALE: 1" = 20'	JOB NO. MA99-19
PHONE (248) 844-5400 FAX (248) 844-5404 www.spaldingdedecker.com			

## **SECTION AG105 BARRIER REQUIREMENTS**

### **AG105.1 Application.**

The provisions of this chapter shall control the design of barriers for residential swimming pools, spas and hot tubs. These design controls are intended to provide protection against potential drownings and near-drownings by restricting access to swimming pools, spas and hot tubs.

### **AG105.2 Outdoor swimming pool.**

An outdoor swimming pool, including an in-ground, aboveground or on-ground pool, hot tub or spa shall be provided with a barrier which shall comply with the following:

1. The top of the barrier shall be at least 48 inches (1219 mm) above grade measured on the side of the barrier which faces away from the swimming pool. The maximum vertical clearance between grade and the bottom of the barrier shall be 2 inches (51 mm) measured on the side of the barrier which faces away from the swimming pool. Where the top of the pool structure is above grade, such as an aboveground pool, the barrier may be at ground level, such as the pool structure, or mounted on top of the pool structure. Where the barrier is mounted on top of the pool structure, the maximum vertical clearance between the top of the pool structure and the bottom of the barrier shall be 4 inches (102 mm).
2. Openings in the barrier shall not allow passage of a 4-inch-diameter (102 mm) sphere.
3. Solid barriers which do not have openings, such as a masonry or stone wall, shall not contain indentations or protrusions except for normal construction tolerances and tooled masonry joints.
4. 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 swimming pool side of the fence. Spacing between vertical members shall not exceed 1.75 inches (44 mm) in width. Where there are decorative cutouts within vertical members, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width.
5. 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, spacing within the cutouts shall not exceed 1.75 inches (44 mm) in width.
6. Maximum mesh size for chain link fences shall be a 2.25-inch (57 mm) square unless the fence is provided with slats fastened at the top or the bottom which reduce the openings to not more than 1.75 inches (44 mm).
7. Where the barrier is composed of diagonal members, such as a lattice fence, the maximum opening formed by the diagonal members shall not be more than 1.75 inches (44 mm).
8. Access gates shall comply with the requirements of Section AG105.2, Items 1 through 7, and shall be equipped to accommodate a locking device. Pedestrian access gates shall open outward away from the pool and shall be self-closing and have a self-latching device. Gates other than pedestrian access gates shall have a self-latching device. Where the release mechanism of the self-latching device is located less than 54 inches (1372 mm) from the bottom of the gate, the release mechanism and openings shall comply with the following:
  - 8.1. The release mechanism shall be located on the pool side of the gate at least 3 inches (76 mm) below the top of the gate, and

8.2. The gate and barrier shall have no opening greater than 0.5 inch (12.7 mm) within 18 inches (457 mm) of the release mechanism.

9. Where a wall of a dwelling serves as part of the barrier one of the following conditions shall be met:

9.1. The pool shall be equipped with a powered safety cover in compliance with ASTM F 1346; or

9.2. All doors with direct access to the pool through that wall shall be equipped with an alarm which produces an audible warning when the door and its screen, if present, are opened. The alarm shall be listed in accordance with UL 2017. The audible alarm shall activate within 7 seconds and sound continuously for a minimum of 30 seconds after the door and/or its screen, if present are opened and be capable of being heard throughout the house during normal household activities. The alarm shall automatically reset under all conditions. The alarm system shall be equipped with a manual means, such as touchpad or switch, to temporarily deactivate the alarm for a single opening. Such deactivation shall last for not more than 15 seconds. The deactivation switch(es) shall be located at least 54 inches (1372 mm) above the threshold of the door; or

9.3. Other means of protection, such as self-closing doors with self-latching devices, which are approved by the governing body, shall be acceptable so long as the degree of protection afforded is not less than the protection afforded by Item 9.1 or 9.2 described above.

10. Where an aboveground pool structure is used as a barrier or where the barrier is mounted on top of the pool structure and the means of access is a ladder or steps, then:

10.1. The ladder or steps shall be capable of being secured, locked or removed to prevent access, or

10.2. The ladder or steps shall be surrounded by a barrier which meets the requirements of Section AG105.2, Items 1 through 9. When the ladder or steps are secured, locked or removed, any opening created shall not allow the passage of a 4-inch-diameter (102 mm) sphere.

### **AG105.3 Indoor swimming pool.**

All walls surrounding an indoor swimming pool shall comply with Section AG105.2, Item 9.

### **AG105.4 Prohibited locations.**

Barriers shall be located so as to prohibit permanent structures, equipment or similar objects from being used to climb the barriers.

### **AG105.5 Barrier exceptions.**

Spas or hot tubs with a safety cover which complies with ASTM F 1346, as listed in Section AG107, shall be exempt from the provisions of this appendix

## **SECTION AG106 ENTRAPMENT PROTECTION FOR SWIMMING POOL AND SPA SUCTION OUTLETS**

### **AG106.1 General.**

Suction outlets shall be designed to produce circulation throughout the pool or spa. Single outlet systems, such as automatic vacuum cleaner systems, or other such multiple suction outlets whether isolated by valves or otherwise shall be protected against user entrapment.

### **AG106.2 Suction fittings.**

All Pool and Spa suction outlets shall be provided with a cover that conforms with ANSI/ASME A112.19.8M, or a 12 × 12 drain grate or larger, or an approved channel drain system.

**Exception:** Surface skimmers

### **AG106.3 Atmospheric vacuum relief system required.**

All pool and spa single or multiple outlet circulation systems shall be equipped with atmospheric vacuum relief should grate covers located therein become missing or broken. Such vacuum relief systems shall include at least one approved or engineered method of the type specified herein, as follows:

1. Safety vacuum release system conforming to ASME A112.19.17, or
2. An approved gravity drainage system

### **AG106.4 Dual drain separation.**

Single or multiple pump circulation systems shall be provided with a minimum of two (2) suction outlets of the approved type. A minimum horizontal or vertical distance of three (3) feet shall separate such outlets. These suction outlets shall be piped so that water is drawn through them simultaneously through a vacuum relief-protected line to the pump or pumps.

### **AG106.5 Pool cleaner fittings.**

Where provided, vacuum or pressure cleaner fitting(s) shall be located in an accessible position(s) at least (6) inches and not greater than twelve (12) inches below the minimum operational water level or as an attachment to the skimmer(s).

**"IMPORTANT"**  
**Effective 8/1/2008**

**ELECTRICAL CODE REQUIREMENTS FOR  
SWIMMING POOL INSTALLATIONS**

**With the Adoption of the 2006 Michigan Residential Code and the 2005 National Electrical Code, there are significant changes to bonding requirements on both above ground and inground swimming pools.**

***Do not install a swimming pool unless you know these changes clearly!***

**If bonding inspections are not complete, pools will need to be removed.**

**For questions, please contact the Electrical Inspector at (586) 992-0710.**

