



CITY OF MANTECA COMMUNITY DEVELOPMENT DEPARTMENT

1001 West Center Street • Manteca, CA 95337 • FAX (209) 923-8955
Building Safety Division (209) 456-8550 • Community Development/Planning Division (209) 456-8500

Swimming Pools

NOTE: Check with your homeowners' association and architectural review committee for Conditions, Covenants & Restrictions (CC&R's). The City of Manteca has no regulatory authority to enforce or notify permit applicants of CC&R requirements, nor deny permits for non-compliance of CC&R's.

WHEN IS NO PERMIT REQUIRED?

A building permit **is not required** for the following per California Building Code, Section 105.2(9):

- **Prefabricated swimming pools** accessory to a Group R-3 occupancy that are less than 24 inches (610 mm) deep, do not exceed 5,000 gallons and are installed entirely above ground.



WHEN IS A PERMIT REQUIRED?

The installation of **any swimming pool other than described above** requires a building permit. You must submit plans for review and approval and the work must pass inspections.

See page 2 for a complete list of documents required for submittal.

SWIMMING POOL "STANDARD PLAN" SIGNATURE REQUIREMENT

ESTABLISHED FEBRUARY 5, 1997 (REVISED 11/3/98 & 4/23/07)

All gunite shell swimming pools with steel reinforcing require engineered drawings.

Various methods of getting the engineer's acknowledgement are acceptable: 1) wet-signing the site plan; 2) adding the project address to the standard plan and wet-signing it; 3) providing a signed statement from the engineer, using the engineer's letterhead, acknowledging responsibility for the plans and calculations at the address where pool is being installed (*this may be faxed **from** the engineer's office **directly to** the Building Inspection Division at 456-8500*). *The intent is to acquire the engineer's acknowledgment that he/she intends for his/her design to be used for the specific proposed site. Simply using an engineer's standard design without their consent does not assign any liability to them and, in fact, places a level of responsibility on the contractor or owner that is inappropriate.*

If site conditions are inconsistent with the standard plan conditions, i.e.: setbacks from structures, retaining wall conditions, slopes, etc., the engineer who prepared the pool plans will be required to address such conditions by submitting revised plans for Building Division review and approval.

EXCEPTION: Vinyl or fiberglass pools which are not of structural gunite may be exempted from this requirement when the excavation does not exceed four feet in depth. This is consistent with the Section 105.2(4) CBC exemption for retaining walls of similar depth or less. (*Pools designed to be placed above ground do not fit in this category.*)

PLAN SUBMITTAL REQUIREMENTS

Submit two (2) complete sets of all plans and calculations, plus one (1) extra site plan.

Pool plans and calculations and two of the site plans must be wet-signed by the pool engineer.

Each submittal, five (5) pages or more and all supporting documents must be accompanied by an electronic copy of plans in PDF form.

See page 1 of this handout for the Standard Plan Signature Requirements.

In addition to a completed Building Permit application, your submittal must include the following:

1. SITE PLAN (wet-signed by the pool engineer) shall show:

- a. The address of the property where the pool is being constructed.
- b. The scale at which the plan is drawn.
- c. Lot dimensions and location of any easements
- d. Location/dimensions of all existing covered structures on the property.
- e. Proposed location of the pool/spa and equipment. Indicate the distance from the pool to property line(s) and to any buildings.
- f. The dimensions and volume of the pool.
- g. Method of providing drainage (see pages 6 and 7 of this handout). *The deck and the yard should be contoured to provide a drainage gradient of at least 1% toward approved drainage facilities (this is normally the street). Show location & size of all deck drains, interceptor drains and drainage lines. Drainage lines must be sufficient to drain water that accumulates around the pool as well as rainwater runoff from the roof onto the pool deck. (A 3" drain should handle 1644 square feet and a 4" drain should handle 3760 square feet per Table 11-2, California Plumbing Code). Drainage lines cannot be corrugated or flexible without prior Building Safety Division approval.*
- h. The location of any electrical outlets and the distance from the outlets to the pool. *All outlets must be GFCI protected and at least 6 feet from the pool. One outlet must be placed between 6' and 20' from the pool (Article 680.22(A)3 2010 California Electrical Code).*
- i. The location and type of fence or barrier that will be used, including latch and locking mechanisms at all entrances accessible to pool area.

2. STEEL OR CONSTRUCTION DRAWINGS shall show:

- a. The address of the property where the pool is being constructed.
- b. Wet signature of the engineer (see "Standard Plan Signature Requirements" on the first page of this handout) or must be listed by an approved listing company or organization such as the International Code Council (ICC).

3. STRUCTURAL CALCULATIONS shall be:

- a. Wet signed by a licensed engineer.
- b. **EXCEPTION:** For above-ground pools installed below grade, manufacturer's literature stating conditions for below-ground installations or generic engineering provided by the manufacturer is acceptable.

ABOVE-GROUND POOL REQUIREMENTS:

Unless your above-ground pool is exempt from needing a Building Permit because it meets the size and installation requirements shown on page 1, the following will apply:

1. A site plan must be submitted, providing all information shown above except "method of drainage."
2. Engineering *may not* be required. See "Exception" under Item #3 above.

ZONING REGULATIONS and GENERAL GUIDELINES

Pool construction is not allowed in a Public Utility Easement. Contact the Community Development Department for additional information: (209) 456-8500. Pool contractor will be responsible for replacement of any curb, gutter, or sidewalk cracked or broken during construction activities.

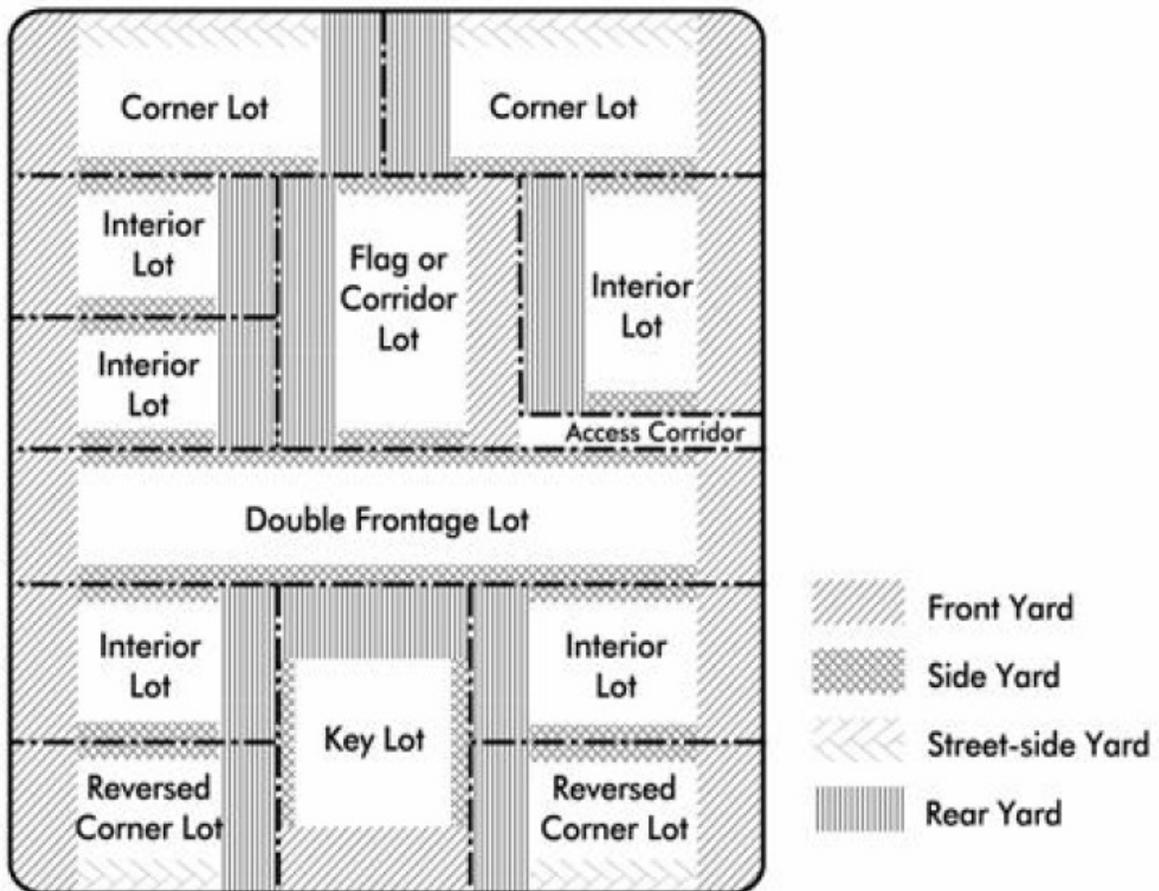
The following are general guidelines regarding the placement of a pool or spa and its equipment. Prior to building, digging, or making an addition or modification to any existing structure, it is strongly suggested that you verify any easements, setbacks, or other regulatory conditions that may affect your property.

A private swimming pool or spa, as defined*, shall be subject to compliance with the following regulations:

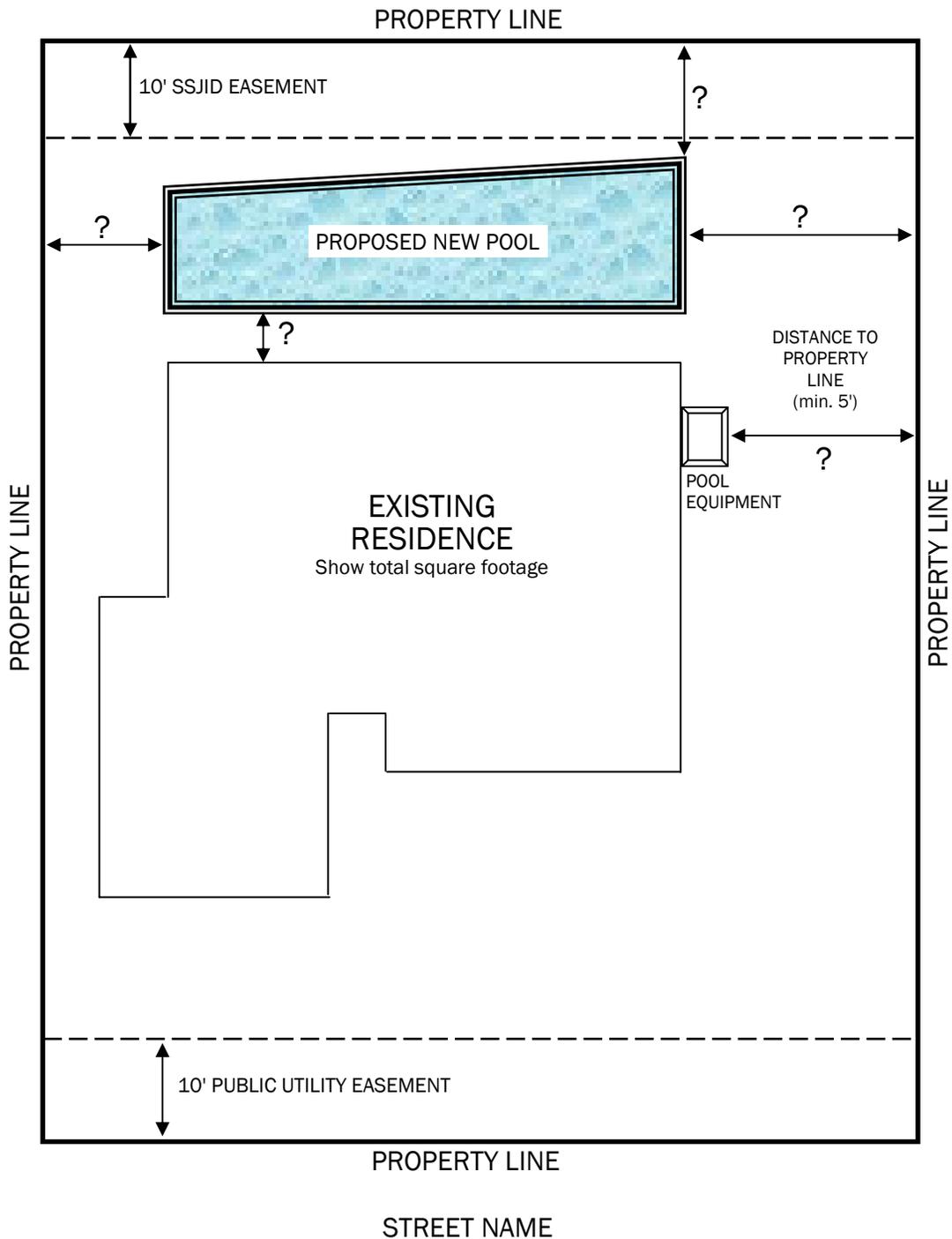
1. The pool or spa may not be closer than five (5) feet to the property line (measured at waters edge).
2. Swimming pool or filtration equipment shall not be located on the front yard or street side yard.
3. The swimming pool or spa area, or the entire property or yard area on which it is located, shall be enclosed by a masonry wall, chain-link or solid fence not less than six feet in height so as to prevent uncontrolled access by children. All gates and doors opening through such enclosures shall be equipped with a self-closing and self-latching device and installed in accordance with current building code requirements.

**Swimming pool or spa means: Pool, pond, lake, or open tank capable of containing water to a depth greater than one and one-half (1-1/2) feet at any point.*

FIGURE 17.100.060-3 LOT TYPES



SAMPLE SITE PLAN



- 1) Show lot dimensions and total square footage of all covered areas.
- 2) Check with the Planning Division for setback requirements: (209) 456-8500
- 3) Check with Community Development Department for location of any utility easements: (209) 456-8500

REQUIRED INSPECTIONS

The following inspections are required.

To schedule an inspection, call the inspection recorder at (209) 456-8552.

Requests left before 4:00 p.m. will be scheduled for the next business day.

A. POOL STEEL & LOCATION - *The following will be checked:*

- Distance of pool from house and property lines
- Water lines – Pump to 50 lbs. (Section 609.4 - 2010 California Plumbing Code)
- Gas line, if applicable – (Pump to no less than 1-1/2 times the proposed maximum working pressure but not less than 3 psi irrespective of design pressure. Gauge shall be 1/10 pound increments or less)
- Location of pool equipment (minimum 15' from neighbor's house)
- Underground electrical
- Grounding of pool steel, diving board, wet niche shell & light (must be compatible)
- The pool steel for conformance with plans
- Clearance from overhead electrical to comply with 680.8 CEC

B. POOL DECK – *The following will be checked:*

- Thickness of the pool deck
- Installation of equipotential bonding grid system installed per Article 680.26, 2010 CEC
- Grounding to any metal within 60" of the pool deck
- Drainage and drain lines (all drainage must go to front of lot)
- Clearance from the siding or stucco to the pool deck (2" minimum required)

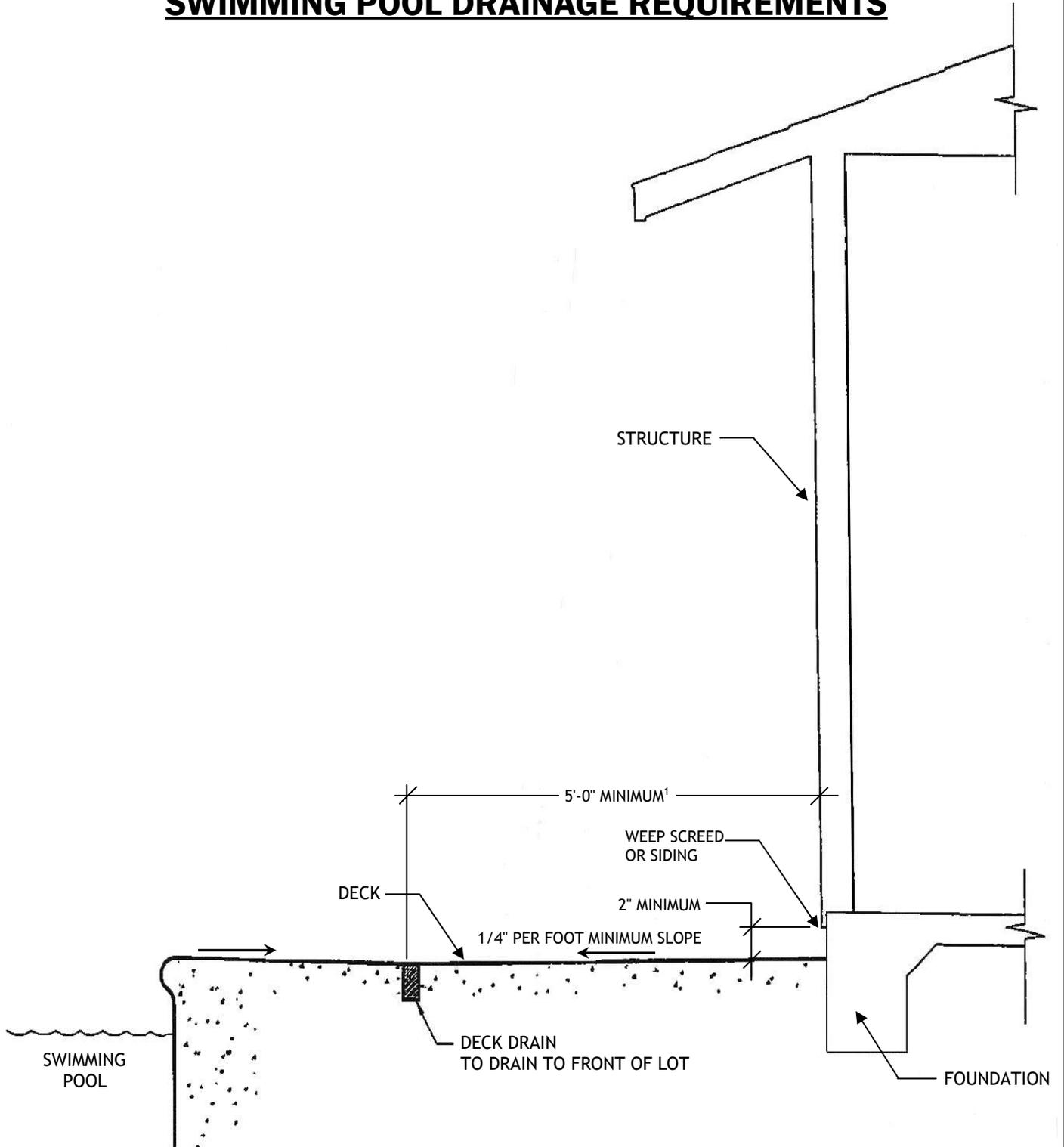
C. PRE-PLASTER & POOL FINAL – *The following will be checked:*

- Pool fence/barrier/door alarms (*If the homeowner will not be home for the inspection, the homeowner may complete the exit alarm form on page 11 of this handout and leave it for the inspector*)
- GFCI receptacle
- Pool equipment – grounding & installation
- Pool electrical – Breaker electrical panel, equipment connection
- Wet niche fixture: shell & light (must be compatible)
- Drainage to front of lot
- Glazing within 5' of pool must be tempered (Section 2406.9, 2010 CBC)
- Clearance from deck to siding or stucco, minimum 2"
- All pool equipment must be listed by a nationally recognized testing laboratory
- Pool pumps 1 hp and above require variable speed (California Energy Code 150p.)

D. LINER & ABOVE-GROUND POOLS – *The following must be inspected if applicable:*

- GFCI receptacle
- Pool light grounding
- Grounding of diving boards and rails
- Ground to motor (pool equipment)
- Breaker size at main panel
- Anchorage of motor
- Specifications on approved plans
- Site plan clearances and conditions
- Pool fence/barrier – door alarms
- Glazing within 5' of pool must be tempered (Section 2406.9, 2010 California Building Code)
- Clearance from overhead electrical wires for compliance with Article 680-8 California Electrical Code

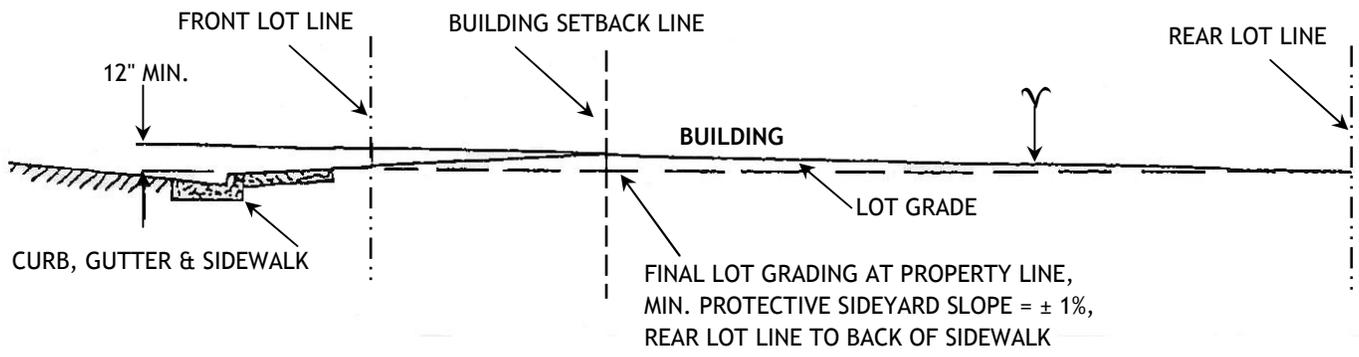
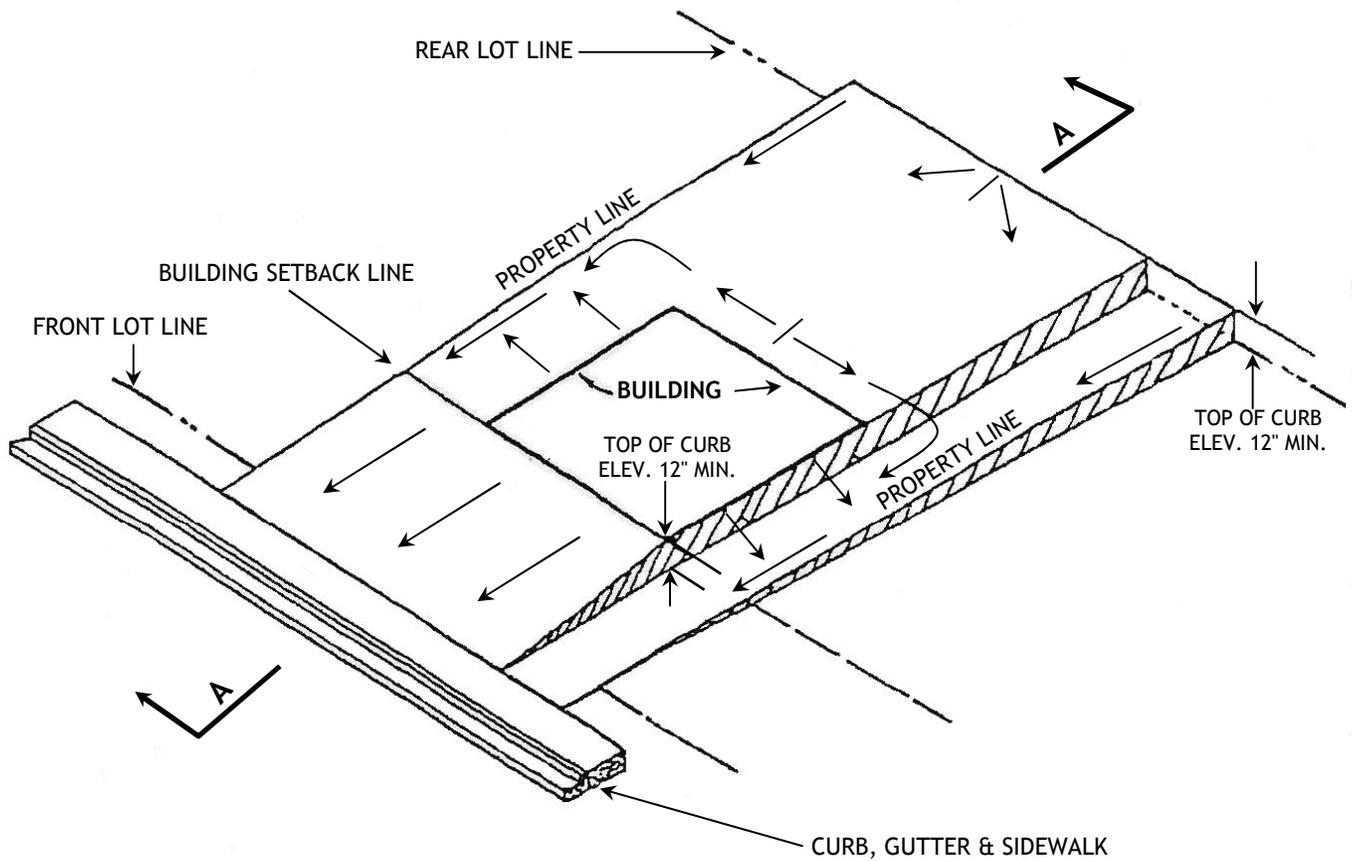
SWIMMING POOL DRAINAGE REQUIREMENTS



NOTES:

1. THE DECK DRAIN MUST BE LOCATED 5'-0" MINIMUM FROM THE STRUCTURE. PRIOR APPROVAL BY THE BUILDING SAFETY DIVISION IS REQUIRED IF THE DISTANCE IS LESS THAN 5'-0". A DRAINAGE PLAN ALSO WILL BE REQUIRED FOR APPROVAL BY BUILDING SAFETY BEFORE A PERMIT WILL BE ISSUED.

TYPICAL LOT GRADING DETAIL



SECTION A-A

SWIMMING POOL SAFETY REQUIREMENTS

POOL GLAZING REQUIREMENTS

Section 2406.4.9, 2010 California Building Code - Glazing in walls and fences used as the barrier for indoor and outdoor swimming pools or spas shall be safety glazing meeting the requirements of Sections 2406.4.9.1–2406.4.9.2 of the 2010 CBC when all of the following conditions are present:

1. The bottom edge of the glazing is less than 60 inches above the walking surface of the pool side of the glazing.
2. The glazing is within 5 feet of a swimming pool or spa water's edge.

ENCLOSURE/BARRIER/SAFETY REQUIREMENTS (REVISED 4/30/07)

All pools and spas must meet the following California Health & Safety Code Requirements:

CALIFORNIA CODES / HEALTH AND SAFETY CODE / SECTION 115920-115929

115920. This act shall be known and may be cited as the Swimming Pool Safety Act.

115921. As used in this article the following terms have the following meanings:

- a. "Swimming pool" or "pool" means any structure intended for swimming or recreational bathing that contains water over 18 inches deep. "Swimming pool" includes in-ground and above-ground structures and includes, but is not limited to, hot tubs, spas, portable spas, and non-portable wading pools.
- b. "Public swimming pool" means a swimming pool operated for the use of the general public with or without charge, or for the use of the members and guests of a private club. Public swimming pool does not include a swimming pool located on the grounds of a private single-family home.
- c. "Enclosure" means a fence, wall, or other barrier that isolates a swimming pool from access to the home.
- d. "Approved safety pool cover" means a manually or power-operated safety pool cover that meets all of the performance standards of the American Society for Testing and Materials (ASTM), in compliance with standard F1346-91.
- e. "Exit alarms" means devices that make audible, continuous alarm sounds when any door or window, that permits access from the residence to the pool area that is without any intervening enclosure, is opened or is left ajar. Exit alarms may be battery operated or may be connected to the electrical wiring of the building.

115922. (a) Commencing January 1, 2007, except as provided in Section 115925, whenever a building permit is issued for construction of a new swimming pool or spa, or any building permit is issued for remodeling of an existing pool or spa, at a private, single-family home, it shall be equipped with at least one of the following seven drowning-prevention safety features:

1. The pool shall be isolated from access to a home by an enclosure that meets the requirements of Section 115923.
2. The pool shall incorporate removable mesh pool fencing that meets *American Society for Testing and Materials (ASTM) Specifications F 2286* standards in conjunction with a gate that is self-closing and self-latching and can accommodate a key-lockable device.
3. The pool shall be equipped with an approved safety pool cover that meets all requirements of the *ASTM Specifications F 1346*.
4. The residence shall be equipped with exit alarms on those doors providing direct access to the pool.
5. All doors providing direct access from the home to the swimming pool shall be equipped with a self-closing, self-latching device with a release mechanism placed no lower than 54 inches above the floor.
6. Swimming pool alarms that, when placed in pools, will sound upon detection of accidental or unauthorized entrance into the water. These pool alarms shall meet and be independently certified to the *ASTM Standard F 2208* "Standards Specification for Pool Alarms" which includes surface motion, pressure, sonar, laser, and infrared type alarms. For purposes of this article, "swimming pool alarms" shall not include swimming protection alarm devices designed for individual use, such as an alarm attached to a child that sounds when the child exceeds a certain distance or becomes submerged in water.
7. Other means of protection, if the degree of protection afforded is equal to or greater than that afforded by any of the devices set forth above, and have been independently verified by an approved testing laboratory as meeting standards for those devices established by the ASTM or the American Society of Mechanical Engineers (ASME).

(b) Prior to the issuance of any final approval for the completion of permitted construction or remodeling work, the local building code official shall inspect the drowning safety prevention devices required by this act and if no violations are found, shall give final approval.

SWIMMING POOL SAFETY REQUIREMENTS, *continued*

115923. An enclosure shall have all of the following characteristics:

- a. Any access gates through the enclosure open away from the swimming pool, and are self-closing with a self-latching device placed no lower than 60 inches above the ground.
- b. A minimum height of 60 inches.
- c. A maximum vertical clearance from the ground to the bottom of the enclosure of two inches.
- d. Gaps or voids, if any, do not allow passage of a sphere equal to or greater than four inches in diameter.
- e. An outside surface free of protrusions, cavities, or other physical characteristics that would serve as handholds or footholds that could enable a child below the age of five years to climb over.

115924. (a) Any person entering into an agreement to build a swimming pool or spa, or to engage in permitted work on a pool or spa covered by this article, shall give the consumer notice of the requirements of this article.

(b) Pursuant to existing law, the Department of Health Services shall have available on the department's Web site, commencing January 1, 2007, approved pool safety information available for consumers to download.

115925. The requirements of this article shall not apply to any of the following:

- a. Public swimming pools *{Refer to California Building Code Section 3160 B for Public Swimming Pools}*
- b. Hot tubs or spas with locking safety covers that comply with the American Society for Testing Materials-Emergency Performance Specification (ASTM-ES 13-89).
- c. Any pool within the jurisdiction of any political subdivision that adopts an ordinance for swimming pool safety that includes requirements that are at least as stringent as this article.
- d. An apartment complex, or any residential setting other than a single-family home.

115928. Whenever a building permit is issued for the construction of a new swimming pool or spa, the pool or spa shall meet all of the following requirements:

- a.
 1. The suction outlet of the pool or spa for which the permit is issued shall be equipped to provide circulation throughout the pool or spa as prescribed in paragraph (2).
 2. The swimming pool or spa shall have at least two circulation drains per pump that shall be hydraulically balanced and symmetrically plumbed through one or more "T" fittings, and that are separated by a distance of at least three feet in any dimension between the drains.
- b. Suction outlets that are less than 12 inches across shall be covered with anti-entrapment grates, as specified in the ASME/ANSI Standard A 112.19.8, that cannot be removed except with the use of tools. Slots or openings in the grates or similar protective devices shall be of a shape, area, and arrangement that would prevent physical entrapment and would not pose any suction hazard to bathers.
- c. Any backup safety system that an owner of a new swimming pool or spa may choose to install in addition to the requirements set forth in subdivisions (a) and (b) shall meet the standards as published in the document, "Guidelines for Entrapment Hazards: Making Pools and Spas Safer," Publication Number 363, March 2005, United States Consumer Product Safety Commission.

FACTS & FIGURES ON CHILD DROWNINGS*

In some of the nation's Sunbelt, drowning has been the leading cause of accidental death in the home of children under 5 years old.

Each year nationwide, about 300 children under 5 years old drown in swimming pools, usually a pool owned by their family. In addition, more than 2,000 children in that age group are treated in hospital emergency rooms for submersion injuries.

Medical costs for submersion victims during the initial hospitalization alone can be quite high. Costs can range from an estimated \$4,000 for a victim who recovers fully to \$160,000 for a victim with severe brain damage. Some severely brain damaged victims have initial hospital stays in excess of 120 days and expenses in excess of \$300,000.

Following are just a few facts uncovered by the U.S. Consumer Product Safety Commission (CPSC) in a comprehensive study of drowning and submersion incidents involving children under age 5 years old in Arizona, California and Florida.

- *Seventy-five percent of submersion victims studied by CPSC were between 1 and 3 years old; 65 percent of this group were boys. Toddlers, in particular, often do something unexpected because their capabilities change daily.*
- *At the time of the incidents, most victims were being supervised by one or both parents. Forty-six percent of the victims were last seen in the house; 23 percent were last seen in the yard or on the porch or patio; and 31 percent were in or around the pool before the accident. In all, 69 percent of the children were not expected to be at or in the pool, yet they were found in the water.*
- *Submersion incidents involving children usually happen in familiar surroundings. Sixty-five percent of the incidents happened in a pool owned by the child's family and 33 percent of the incidents happened in a pool owned by friends or relatives.*
- *Pool submersions involving children happen quickly. A child can drown in the time it takes to answer a phone. Seventy-seven percent of the victims had been missing from sight for five minutes or less.*
- *Survival depends on rescuing the child quickly and restarting the breathing process, even while the child is still in the water. Seconds count in preventing death or brain damage.*
- *Child drowning is a silent death. There's no splashing to alert anyone that the child is in trouble.*

*Source: U. S. CONSUMER PRODUCT SAFETY COMMISSION, Publication No. 359