



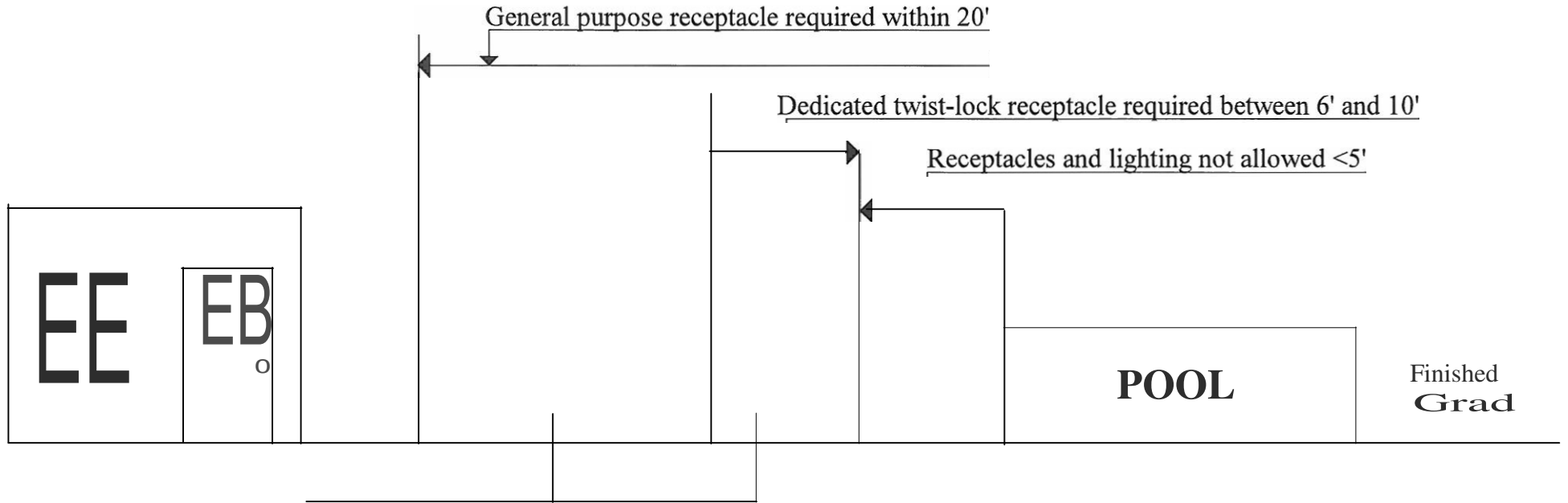
## Middle Department Inspection Agency Inc.

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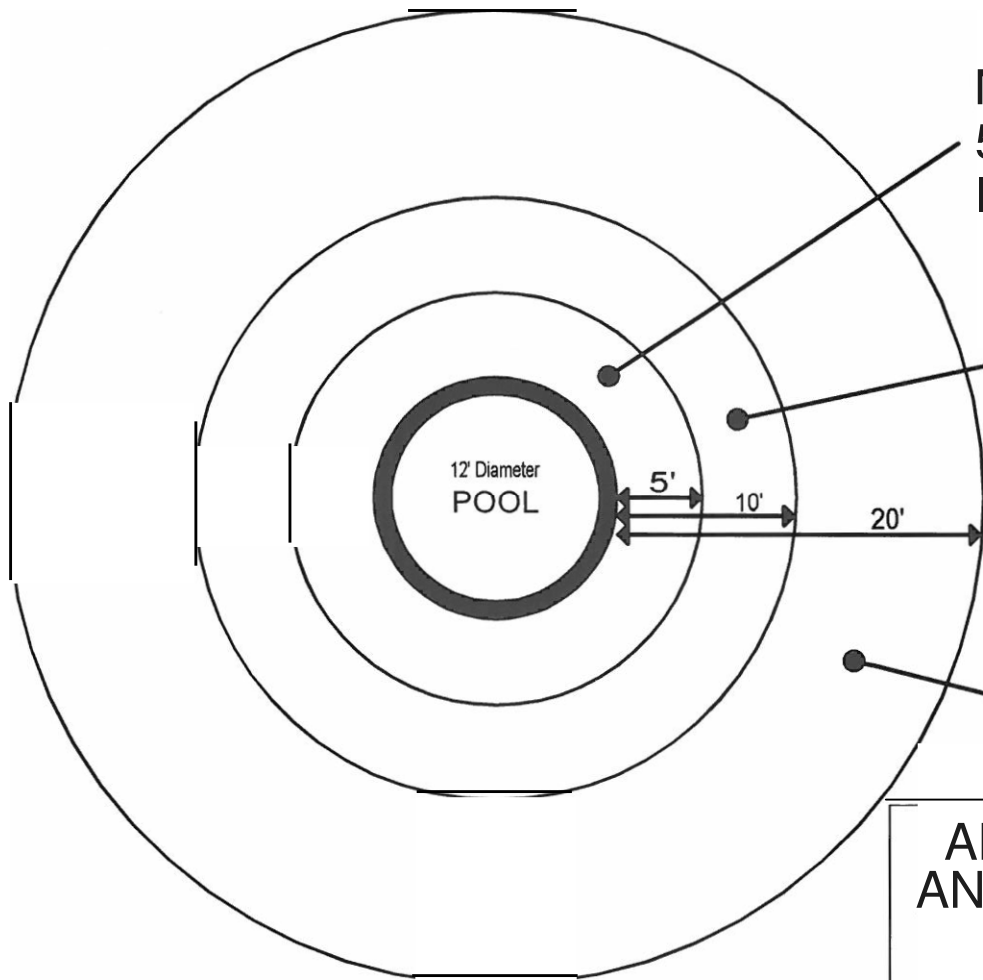
### BASIC POOL WIRING AND BARRIER REQUIREMENTS

1. A number 8 or larger solid copper wire bonding wire is required between all metallic parts of the pool structure, pump motor, and other metallic parts within 5 feet of the inside wall of the pool. Walls of a metal pool structure or the reinforcing steel of a concrete pool shall be used as the bonding grid. NEC Section 680.26.
2. A 125 volt, 15 or 20-amp general purpose GFCI receptacle is required within 6 to 20 feet of the inside wall of pool. NEC Section 680.22 A3.
3. A single locking type 125 volt GFCI receptacle for the circulation and/or sanitation system is permitted – no less than 6 ft (1.83M) – from the inside wall of the pool with a weather tight "in-use" type cover. NEC Section 680.22 A1.
4. If the pump motor is hard wired, a disconnect switch is required at the motor, and must be GFCI protected. NEC 680.228.
5. Wiring to the pump motor and associated equipment must be installed in electrical conduit with the minimum cover as required by table 300.5 of the NEC. (12 inches for 120 Volt in PVC conduit).
6. Wiring to the pump motor must be done with 3 conductors, including a green insulated ground wire, minimum size of number 12. NEC Section 680.21 A1.
7. U.F.type, direct burial wire, CANNOT be used for a pump motor circuit. NEC Section 680.21 A1.
8. Any of the wiring methods recognized in Chapter 3 of the 2008 NEC shall be permitted to be used in the interior of one family dwelling unit for the pump motor circuit, NEC 680.21 A4.
9. The flexible cord, if used for the pump motor, cannot exceed 3 feet in length, with number 12 bond wire. NEC Section 680.21 AS.
10. All electrical outlets (receptacle or direct connect) shall now be protected, including pool motors, with GFCI's. (120V or 240V) NEC 680 22(A)(4).
11. Perimeter surfaces with rebar or wire mesh shall be bonded in four uniformly spaced points around the perimeter of the pool. NEC 680.268(2).
12. An intentional pool water bond must be a minimum of 9 sq inches shall be installed in direct contact with the water. NEC 680.26C.
13. All pool wiring shall conform with Article 680 of the 2008 National Electric Code.
14. An outdoor swimming pool shall be surrounded by a barrier that is at least 48 inches above grade. Openings in the barrier shall be 4 inches or less. Gates other than the pedestrian access gates shall have a self-latching device. Where the release mechanism of the self-locking device is located less than 54" from the bottom of the gate, the release mechanism and opening shall comply with the following:
  - a. The release mechanism shall be located on the pool side of the gate at least 3" below the top of the gate; and,
  - b. The gate and barrier shall have no openings larger than ½" within 18" of the release mechanism.

# ELECTRICAL TIPS FOR SWIMMING POOL INSTALLATIONS



Branch circuit for permanent pools (those capable of being filled with over 42" of water) shall be pulled in electrical non-metallic tubing (pvc). Burial depth shall be a minimum of 18". Receptacles shall be GFCI protected.



No receptacles or lighting within 5' of the pool. No buried electric lines within 5' of the pool.

Single twist-lock receptacle allowed for pump >5' and <10'. No overhead electric lines within 10'.

120 volt convenience outlet shall be located within 10' to 20' of the pool.

**ALL RECEPTACLES SERVING THE POOL AND ALL OUTDOOR RECEPTACLES SHALL BE GFCI PROTECTED**