



## *BUILDING AND FIRE SAFETY*

# **Guidelines For Automatic Fire Sprinkler Systems and Underground Fire Line Plan Submittals**

- 1.0 Plans, Permits, Calculations and Material Submittals**
  - 1.1 Complete plans for aboveground and underground components should be submitted for approval in advance of installation. Approval shall be obtained from the Fire Department prior to installation. Upon the completion of the City's Plan Review Application and payment of the plan review deposit fee, four sets of drawings (with required supporting materials) shall be submitted to the Fire Department for review.**
  - 1.2 Complete listings and manufacturers technical data sheets for all system materials shall be included with underground and sprinkler system plan submittals. All materials shall be listed for fire service and approved by the Fire Department prior to installation.**
  - 1.3 Plans and supporting documentation shall substantially comply with the submittal requirements within UBC Standard 9, NFPA 13, Chapter 6.1 and NFPA Chapter 14.**
  - 1.4 Hydraulic calculations shall be calculated back to the point of the flow test. The hydrant system shall meet the fire flow requirements as required by the California Fire Code.**
  - 1.5 All thrust blocks on private fire hydrant lines and fire sprinkler laterals shall be calculated as required by NFPA 24 and the Uniform Plumbing Code. Calculations shall be submitted and the resulting dimensions of thrust blocks shall be shown on the plans.**
  - 1.6 Underground system plans shall note the following inspection requirements.**
    - a. Thrust-block pre-pour, trench and backfill inspection.**
    - b. Underground hydrostatic test.**
    - c. Underground flush.**
    - d. Weld inspection and special inspection requires (when applicable)**
    - e. The responsible sprinkler contractor shall provide a completed "Contractors Material and Test Certificate for Underground Piping" as required by NFPA 24 at the time of final underground inspection.**
    - f. Contact the Fire Department at (805) 875-8050 48 hours in advance to schedule an inspection.**
  - 1.7 The location of the fire department connection shall be within 100 feet of a fire hydrant.**
  - 1.8 The responsible civil engineer shall coordinate underground design with the responsible fire protection designer/engineer.**
  - 1.9 On site fire hydrants, post indicator valves and fire department connections less than three feet from face of curbs or when no curb is provided shall be protected by guard posts set in concrete. Steel posts shall not be less than 4 inches in diameter and concrete filled. Construction details shall be provided on the plans.**
  - 1.10 Backflow devices and their locations shall be approved by the City of Lompoc's Water Department. Call (805) 875-8010 for any questions.**

- 1.11 Fire department connections shall be installed at apparatus access roads in locations approved by the Fire Department. The fire department connections shall extend between 30" and 36" above finished grade.
- 1.12 Fire department connections, test valves, gauge and related fire sprinkler system devices shall have a minimum of three feet clearance for servicing and inspection.
- 1.13 At least one inspection test valve shall be located at the remote system area. (In the upper story and the connection be piped from the end of the most remote branch line)
- 1.14 The discharge area for the main drain and inspector's test valve shall be protected with a concrete splash pad to prevent damage to landscaping during testing (when applicable)
- 1.15 Obstructions such as light fixtures, beams and similar obstructions shall not interfere with the engineered spray patterns of sprinkler heads. Additional drawings or details may be required to insure that potential obstructions are considered in the design. The sprinkler contractor is responsible for coordinating and resolving conflicts in coverage patterns.
- 1.16 Sprinkler heads shall not be installed directly below automatic smoke and heat vents.
- 1.17 Seismic bracing of piping and equipment shall be clearly detailed on the plans. When required additional structural calculations may be required.
- 1.18 No building required to have an automatic fire protection system shall pass final building inspection or be issued a certificate of occupancy until the fire protection system has passed final inspection.
  - a. Note on the plans that the "Contractor's Material and Test Certificate for Aboveground Piping" shall be required to be completed and given to the Fire Department prior to Final Inspection.
- 1.19 The person responsible for their preparation shall sign all plans.
- 1.20 Separate plans and submittals for high pile storage, hazardous occupancies and/or special equipment may be required.

#### Wet Pipe Sprinkler Components

