



Installing an Underground Fire Main

The State of Washington requirements for the installation of fire sprinkler underground piping are outlined in RCW 18.160. Here are some answers to frequently asked questions.

Q. *What is fire sprinkler underground piping?*

A. Fire sprinkler underground piping is defined as “that section of underground pipe dedicated exclusively to the fire sprinkler system that runs from the sprinkler riser to the last valve, that if closed, shuts off only the fire sprinkler system.” Fire hydrants can be served off this line, but not potable water supplies. (See enclosed diagram.)

Q. *What does it take to become a “level U” contractor?*

A. First the company must become licensed as a “level U” fire sprinkler contractor. Second the contractor must also be, or have in their full time employ, (a minimum of 20 hours per week) a “level U” certificate of competency stamp holder.

Q. *Who can design a fire sprinkler underground piping system?*

A. A registered professional engineer, or the certificate of competency holder of a “level III” contractor.

Q. *Can a “level U” contractor’s certificate of competency holder design a fire sprinkler underground?*

A. No, a “level U” contractor’s certificate of competency holder is only certified to install, not design.

Q. *If a “level U” contractor installs a fire sprinkler underground that was designed by a “level III”, does the “level U” contractor’s certificate of competency holder have to stamp the underground plans along with the designer?*

A. Yes, the “level U” contractor’s certificate of competency holder must stamp the plans of the system they are going to install. They must also stamp all the test certificates as well.

Q. *Can the certificate of competency holder of the “level III” contractor who designed the underground, stamp the test certificates for an installation installed by an unlicensed contractor?*

A. No, anyone who allows their stamp to be used on any plans, calculations, or test papers that were not prepared by, or under their immediate supervision, is subject to having their license suspended or revoked.

Q. *What is “immediate supervision”?*

A. For this application, “immediate supervision” means “employed by”.

Q. *What happens if I install a fire sprinkler underground without obtaining a Level “U” or Level “3” Fire Sprinkler Contractors license?*

A. First, if a complaint is filed with the State Fire Marshal’s Office you will be assessed a fine of not less than \$1000, or more than \$5000 {RCW18.160.120(2)}. Second, the fire sprinkler underground will have to be removed and re-installed by a State licensed Fire Sprinkler Contractor.



Tacoma Fire Department

FIRE SPRINKLER UNDERGROUND PIPING PLAN REVIEW/SUBMITTAL CHECKLIST

- 1. Completed "Application for Plan Review for Fire Protection System."
- 2. Scope of work
- 3. Three sets of scaled drawings showing work. Indicate:
 - Building envelope
 - Adjacent streets, site address, project name
 - Point of compass
 - Type of pipe
 - Pipe size
 - Type and location of thrust restraint
 - Installing contractor's name, address, telephone, fax and email (if available)
 - Installing contractor's State fire sprinkler contractor's stamp and license number
 - Designer's State fire sprinkler contractor's stamp or Professional Engineer's stamp

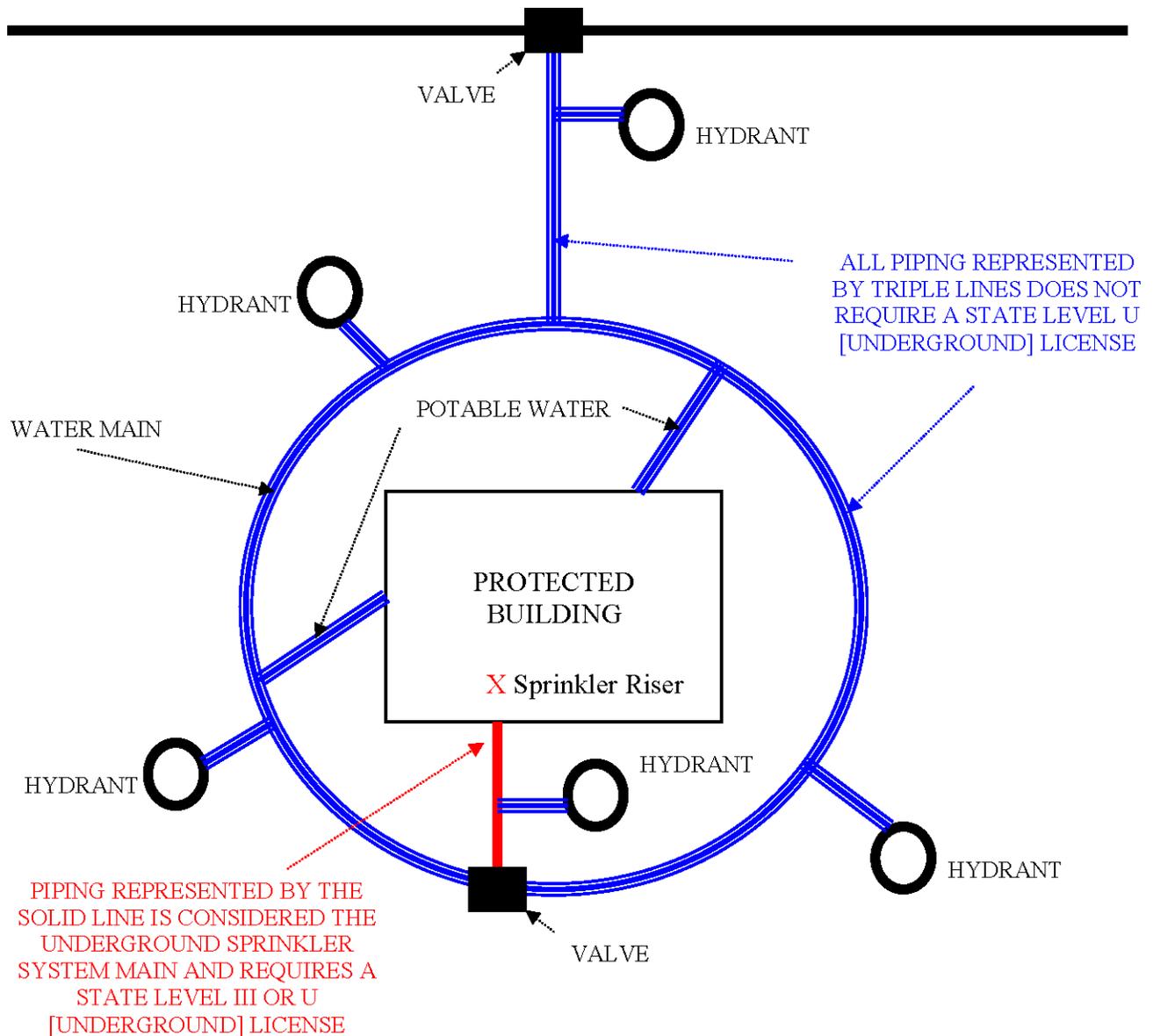
Note: Although a Level U contractor can install fire sprinkler underground for any project, the design is required to be performed by a Professional Engineer (PE) or a sprinkler contractor with Level I, II or III license. Level I can design for one and two family dwellings only (NFPA 13D systems). Level II can design for multifamily and single family dwellings (NFPA 13R and 13D systems). Level III and PE's can design for any sprinkler system (NFPA 13D, 13R and 13).

In accordance with State law, WAC 212-80, it is illegal for a contractor not licensed for fire sprinkler work to install any portion of the fire sprinkler system including the underground supply, a licensed sprinkler contractor may **NOT** supervise, certify and stamp an unlicensed contractor's work.

For questions, please contact the Tacoma Fire Department, Fire Prevention Bureau. Carl Anderson, Fire Code Official/FPE, (253) 591-5739, canderso@cityoftacoma.org, or Phil Ferrell, Deputy Fire Marshal, (253) 591-5754, pferrell@cityoftacoma.org.

Example Only

STREET WATER MAIN



The Washington State Fire Sprinkler System Contractors Licensing Law, Revised Code of Washington (R.C.W.) 18.160 and Washington Administrative Code (W.A.C.) 212-80, has defined the underground portion of a Fire Sprinkler System as the portion of the system starting at the valve furthest upstream from the system that if shut off would shut off ONLY the sprinkler system.