



South Adams County Fire Department

6050 Syracuse Street, Commerce City, CO 80022

Phone: 303-288-0835 | www.sacfd.org

Private Water Systems/ Fire Sprinkler Service Lines

Submittal Process: The following items are required for a Private Water System/ Fire Sprinkler Service Lines Plan Review submittal. Failure to provide the following may require a Review Denial or Resubmittal. All submittals shall have a South Adams County Fire Department Plan Review Application attached.

Drawings Requirements:

- Electronic plans in .pdf format. Please submit files in an unlocked and unsecured state for plan review.
- Stamped by a PE.
- Indicate the approximate scale, northern direction, and date the drawing was completed.
- Private fire service mains and appurtenances shall be installed and maintained in accordance with South Adams County Water and Sanitation District and National Fire Protection Association Standard 24.
- Underground water supply contractors installing private fire service mains and appurtenances shall be licensed with the State of Colorado Division of Fire Prevention and Control as a Fire Suppression Systems Contractor – Underground. The State of Colorado License shall be submitted to the South Adams County Fire Department.
- Private service lines shall be installed with the top of the pipe one foot below frost line (top of the pipe shall be a minimum of 48 inches below finished grade).
- Private fire service mains and appurtenances including specification data sheets shall be submitted to the South Adams County Fire Department for review and approval.
- Private fire hydrants shall be painted red and marked in accordance with National Fire Protection Association Standard 291.
- Fire flow tests shall be conducted in accordance with National Fire Protection Association Standard 291 and documentation provided to the South Adams County Fire Department for final approval of the private water supply system.
- A three (3) foot clear space shall be maintained around the circumference of fire hydrants.
- Inspections and tests on private fire service mains and appurtenances shall be in accordance with South Adams County Water and Sanitation District Standards, NFPA 13 Standard, and NFPA 24 Standard. The South Adams County Fire Department will inspect and witness the installation of the private water main, private fire hydrants, fire service line, the 2-hour hydrostatic test, and the flushing of the pipe. The South Adams

County Water and Sanitation District will conduct the inspection on the private water line tie into their system and the chlorination and clean water tests on the private water mains and fire service line.

- Hydrants should be classified in accordance with their rated capacities [at 20 psi residual pressure or other designated value] as follows:
 - (1) Class AA - Rated capacity of 1,500 gpm or greater
 - (2) Class A – Rated capacity of 1,000-1,499 gpm
 - (3) Class B – Rated capacity of 500-999 gpm
 - (4) Class C – Rated capacity of less than 500 gpm
- The tops and nozzle caps should be painted with the following capacity-indicating color scheme to provide simplicity and consistency with colors used in signal work for safety, danger, and intermediate condition:
 - (1) Class AA – Light blue - Sherwin Williams 400 Series Safety Blue SW 4086
 - (2) Class A – Green - Sherwin Williams 400 Series Safety Green SW 4085
 - (3) Class B – Orange - Sherwin Williams 400 Series Safety Orange SW 4083
 - (4) Class C – Red -Sherwin Williams 400 Series Safety Red SW 4081
- Mueller hydrant defenders security devices shall be placed on all private fire hydrants and Master Lock breakaway padlocks shall be installed on the defenders.

Fire Sprinkler Services Lines Requirements:

- Electronic plans in .pdf format. Please submit files in an unlocked and unsecured state for plan review.
- Stamped by a PE.
- Indicate the approximate scale, northern direction, and date the drawing was completed.
- Private fire service lines and appurtenances shall be installed and maintained in accordance with South Adams County Water and Sanitation District and National Fire Protection Association Standard 24.
- Underground water supply contractors installing private fire service mains and appurtenances shall be licensed with the State of Colorado Division of Fire Prevention and Control as a Fire Suppression Systems Contractor - Underground. The State of Colorado License shall be submitted to the South Adams County Fire Department.
- Private service lines shall be installed with the top of the pipe one foot below frost line (top of the pipe shall be a minimum of 48 inches below finished grade).
- Private fire service lines including specification data sheets for all material shall be submitted to the South Adams County Fire Department for review and approval prior to construction.
- Inspections and tests on private fire service mains and appurtenances shall be in accordance with South Adams County Water and Sanitation District Standards, NFPA 13 Standard, and NFPA 24 Standards. The South Adams County Fire Department will inspect and witness the installation of the fire service line, the 2-hour hydrostatic test, and the flushing of the pipe. The South Adams County Water and Sanitation District will conduct the chlorination and clean water test.