

MEMORANDUM TO THE INDUSTRY

TO: All Builders, Developers, Engineers, Site Contractors, and Distributors Engaging in the Installation of Loudoun Water's Systems

FROM: Huy Tran P.E. LEED AP_(BD+C), Manager of Land Development Programs

DATE: September 25, 2018

SUBJECT: Revision to Loudoun Water's residential fire line detail

Loudoun Water has re-evaluated its residential fire line standard detail and is instituting a revised design and standard detail, effective immediately.

Revision to the fire line detail for residential dwellings:

- Residential dwellings no longer require individual, separate service lines and taps for the fire and domestic services.
- Loudoun Water detail W-19 (Fire Service to Single Family Attached Home) *dated Nov 2017* is eliminated and has been removed from Loudoun Water's standard details.
- All residential dwellings, with or without fire sprinklers, will utilize W-22 (Service Connection Residential) *current date Aug 2018*.
- Both the fire suppression and the domestic water supply will utilize the same single 1-inch tap and service line with all flow passing through the meter (line for sprinklers will be split after the meter and inside the structure).
- Default meter size for a single residential unit will be a $\frac{3}{4}$ -inch meter; 1-inch meters will be utilized only on single residential units that have sprinklers in order to minimize the head losses through the meter.
- Both $\frac{3}{4}$ -inch and 1-inch meters shall be installed in Loudoun Water approved manufacturers' 1-inch meter box models in order to allow the residential development industry flexibility to add the sprinkler option to the dwelling later in the building process.
- The 1-inch meters for dwellings with sprinklers will be red in color and UL rated; cost of red UL rated 1-inch meter will be \$45 more than the standard $\frac{3}{4}$ -inch meter.
- Additional availability charge will not be assessed in upsizing to a 1-inch meter, in this instance, since the 1-inch meter size is approved by Loudoun Water for the purposes of minimizing head losses for fire suppression.

- The 1-inch meter will not be issued until Loudoun Water receives passing backflow test results for the sprinkler assembly. These results shall be provided by a licensed certified tester for the property address.
- Testable backflow device to be reviewed and inspected by Loudoun County Building and Development.

Modifications to the meter issuance process (if there are sprinklers)

- Backflow device will need to be tested with the passing test results/certification provided to Loudoun Water.
- Once backflow test results have been verified by Loudoun Water, customer can request the meter through the Loudoun Water website.

This revised detail shall be effective immediately for all projects that have not been issued a Loudoun Water construction permit. For projects already issued a Loudoun Water permit and in construction, please contact your assigned Loudoun Water project engineer.

The EDM details and Approved Materials List can be accessed from the Loudoun Water website at: www.loudounwater.org/engineering-design-manual