

SANTA ROSA FIRE DEPARTMENT
FIRE PREVENTION BUREAU
STANDARD

July 1, 2010



UTILITY, ENCROACHMENT, CIP OR UTILITY
CERTIFICATE FOR WATER SUPPLY

PURPOSE:

The Fire Department participates in the development review process for water system improvements in the Utility, Encroachment or CIP process. We evaluate site plans and maps to ensure that previously applied Fire Department conditions are included in development plans. We review comments from Planning and Engineering activity and verify that the proposal will comply with Fire Department requirements related to access, water supply and the Wildland Urban Interface

CODE REFERENCES:

- California Fire Code, as adopted by the City of Santa Rosa
- City Design Guidelines
- City Design and Construction Standards
- Fire Department "General Development" Bulletin

ATTACHEMENTS:

- Fire Department "General Development" Bulletin

REQUIRED INSPECTIONS:

- Subdivision and/or Final Acceptance of Improvements

PERMIT INFORMATION:

- If a private fire service water main/hydrant system is to be installed, the Fire Department "Underground Fire Main" permit will be required
- Encroachment Permit for work in the public right-of-way

FILE REVIEW

We perform a file review and access Permits Plus to determine previous review activity. This information is needed to ensure that your project will satisfy the specific requirements of your development.

PLAN REVIEW

- WATER SUPPLY** – SRCC 18-44.508.1. Estimate the fire flow required with the information provided.
 - 18.44.508.4. The minimum fire flow for the project must be determined.
 - 18.44.508.4. If fire flow cannot be determined because of lack of information (construction type, size of project, number of stories), you must supply a fire flow analysis of the project.
 - 18.44.508.4. If the capability of the utility system to support the required fire flow is questionable, you will be required to supply a hydraulic analysis.

Standard

Utility, Encroachment, CIP or Utility Certificate For Water Supply

- 18.44.B105.1. If undesignated; for One & two family dwellings minimum of 1500 gpm unless if located in the WUI where 2500 gpm minimum is required.
 - 18.44.B205.2. Multi-family and commercial minimum is 2500 gpm whether located in or out of WUI.
 - City Water Standards. Coordinate with Utilities on the best location for connections or taps that will develop the necessary flow and potentially improve looping.
 - City Water Standards. Dead-end water mains of 8" diameter or smaller must have a hydraulic analysis to demonstrate capability.
- ❑ **FIRE HYDRANTS** – SRCC 18-44.508.5. Fire hydrants shall be spaced along City streets at 500 feet in residential areas and 300 feet in commercial areas.
- City Water Standards. Hydrant style: One & two dwellings can utilize the residential hydrant. Multi family residential and commercial must install the commercial (double steamer) hydrant.
 - 18.44.C105.1.f. Special note, 300 foot spacing for One & Two Family within the WUI.
 - 18.44.C105.1. Hydrants must be placed along fire department expected access routes. Do not place hydrants at the head of cul-de-sac's or at the end of long commercial driveways.
 - 18.44.C105.1.c. If a divided street, hydrants are required along both sides of the street and also staggered.
 - 18.44.580.5.1. Where flag lots are present and homes are set back from the street, a fire hydrant must be located within 150 feet of all points of the first story as measured by an unobstructed route or an on-site fire hydrant is required.
 - 18.44.105.7.10. Private fire hydrant design and installation is a separate permit issued by the Fire Department. If the system is private, ensure that the plan specifies to submit to the Fire Department for review, approval and permit. If not, use the encroachment permit stamp (provided by fire).
- ❑ **FIRE SPRINKLERS** – SRCC 18-16.903.2, 903.2.18. Note this requirement on your plans or if an approved alternate method request has been accepted.
- An approved fire sprinkler system shall be installed in all new buildings. See 18.44.903.2.18.1 for exceptions related to Group U, pool houses, detached garages, motor vehicle fueling, non-combustible carports and B & M occupancies less than 500 ft².
- ❑ **WATER CONNECTION** – City Water Standard 880. If a fire department connection (FDC) is placed on the backside of the double detector check (DDC); the proximity to fire department access is of importance. If yard hydrants are present, we do not permit a FDC on the backside of the DDC. If the DDC is only supplying fire sprinklers, an FDC on the back of the DDC is permissible if it is congruent with fire department operations.
- ❑ **RESIDENTIAL METER SIZING** – City Water Standard 863 & 865. For one and two family dwellings, ensure the meter size and the lateral (corporation stop to meter box) is of sufficient size to supply a residential fire sprinkler system. Generally, 1.5 inch is sufficient for one and two family dwellings.