July 1, 2010

SANTA ROSA FIRE DEPARTMENT
FIRE PREVENTION BUREAU STANDARD

SANTA ROSA FIRE DEPARTMENT
FIRE PREVENTION BUREAU STANDARD

SINGLE FAMILY DWELLING REMODEL / ALTERATION

PURPOSE

This standard outlines the general Fire Department requirements for alterations to single family dwellings. Information contained herein applies to typical instances and may not address all circumstances.

CODE REFERENCES

California Fire Code (CFC)
Santa Rosa City Code (SRCC)
Fire Department Wildland Urban Interface (WUI) Standard
Single Family Dwelling Alteration Checklist

REQUIRED PERMITS - Separate permits are required for:

Conditional Use Permit (zoning)
Building Permit (construction)
Fire Underground water supply (for on-site private fire protection features)
Fire Sprinkler installation
Fire Alarm installation

FILE REVIEW

SUBDIVISION MAP CONDITIONS:

Review subdivision specific conditions and history to ensure the plot plan is compliant with previous conditions. Add all conditions to approval letter if not included on plans.

ENVIRONMENTAL SITE ASSESSMENT – If required, a Phase I Environmental Site Assessment shall be approved prior to issuance of any grading, demolition or construction permits.

FEES – Fire Department review fees are 100% of the Building Plot Plan review fee.

SITE PLAN

Scaled Site Plan

The plans submitted must illustrate property lines, existing/proposed structures, slopes/grades, road widths, turnarounds and hydrant locations.

WATER SUPPLY – Single family dwellings require a minimum fire flow of 1,500 GPM and 2,500 GPM for homes within a Wildland Urban Interface Fire Area (WUI). Provide a recent fire flow test if more than two years old, the applicant will be required to obtain a current flow report from Utilities.

FIRE HYDRANTS – CFC 508.1, Appendix C Table C105.1 - Fire hydrants shall be spaced along City streets at 500 ft intervals (300 ft intervals for homes within the WUIFA) and along both sides of divided streets. Where flag lots exist and homes are set back from the street, a fire hydrant must be located within 150 feet of all points of the first story of the home as measured by an approved unobstructed route. The installation of an additional hydrant (public
or private) may be required to meet this spacing (refer to Appendix C, Table 18-44.C105.1). Fire hydrant design and installation is a separate permit.

**FIRE SPRINKLERS** – SRCC 18-44.903.2.18.1 – An automatic fire sprinkler system is required for existing buildings where certain additions increase the square footage (see SRCC 18-44.903.2.18.2), or where alterations or repairs involve more than 50 percent of the structure (see SRCC 18-44.903.2.18.3). An automatic fire sprinkler system design and installation require a separate permit and may be submitted separately.

**BUILDING ADDRESSING** – CFC 505.1 – Address numbers a minimum of 4 inches in height with a ½ inch stroke, shall be affixed to the structure, be illuminated during hours of darkness, have a contrasting background, and be plainly visible and legible from the road. An additional address sign may be required at the driveway entrance for homes that are setback from a public street.

**FIRE DEPARTMENT ACCESS ROADWAY** – CFC 503.1.1 and 503.2.1 – An approved fire apparatus access roadway shall be provided and must be a minimum clearance of 20 feet wide. Buildings more than three stories in height require an approved roadway with a minimum clearance of 26 feet wide. The roadway shall extend to within 150 feet of all portions of the exterior of the first floor of the building as measured by an approved route around the exterior of the building. The roadway must be constructed to meet or exceed City Street Design Standards (SRCC 18-44.503.2.3).

**SURFACE** – CFC 503.2 Fire Department Access Roads shall be designed to support the imposed loads of fire apparatus, shall be paved, and shall meet City Street Design Standards.

**TURNING RADIUS** – CFC 503.2.4 - Access roads require a minimum 20' inside turning radius and a minimum 40' outside turning radius.

**VERTICAL CLEARANCE** – CFC 503.2.1 - Unobstructed vertical clearance of 13' 6" feet.

**GRADE** – CFC 503.2.7, City Street Design Standards – A maximum grade of 15 percent.

**TURNAROUNDS** – CFC 503.2.5 – An approved turnaround must be provided where the driveway or access road exceeds 150 feet in length and is a dead end.

**FIRE LANES** – CFC 503.3 – Required fire apparatus access roads shall be marked in accordance with California Vehicle Code Section 22500.1. The required markings shall be maintained by the property owner.

**BRIDGES** – CFC 503.2.6 – Bridges or elevated surfaces that are part of a required fire apparatus access road shall be designed, constructed and maintained in accordance with AASHTO Standard Specifications, and be designed for a live load sufficient to carry the imposed loads of fire apparatus. Vehicle load limits shall be posted with approved permanent all weather signs at both entrances of bridges. A minimum vertical clearance of 13’6” shall be provided. The maintenance of the bridge or elevated surface, all required signs and markings and vertical clearance is the responsibility of the property owner.

**TURNOUTS** – CFC 503.2.2 - One-way fire access roads or driveways in excess of 500 feet in length shall be equipped with approved turnouts when required by site-specific conditions. Required turnouts shall comply with City Street Design Standard 205.

**SECONDARY ACCESS** – CFC 503.1.2 – Additional access roads may be required where there is a potential for impairment of a single road by vehicle congestion, condition of terrain, climatic conditions, or other factors that could limit access. Required access roads must comply with City Street Design Standards.

**GATES** – CFC 503.6 – Gates across a fire apparatus access road must be approved by the Fire Department prior to installation. Approved gates must be installed a minimum of 20 feet from the roadway to allow a vehicle to stop at the gate without obstructing traffic on the primary roadway. Manually operated gates shall be equipped with an
approved Knox company key lock; the lock shall be provided and maintained by the property owner. Powered gates shall be equipped with an approved Knox company access override system. All gates shall open inward and shall be no less in width as the access way.

**WILDLAND-URBAN INTERFACE FIRE AREA (WUI)** – Plans for projects located in the WUI must demonstrate compliance with California Fire Code Chapter 47, California Building Code Chapter 7A and Santa Rosa Fire Department Vegetation Management Standard. Plans shall provide sufficient detail to demonstrate compliance. Include details of vegetation layout on property for the purpose of establishing defensible space requirements.