STATE OF CALIFORNIA – GOVERNMENT OPERATIONS AGENCY GOVERNOR EDMUND G. BROWN JR.

BUILDING STANDARDS COMMISSION
2525 Natomas Park Drive, Suite 130
Sacramento, California 95833-2936
(916) 263-0916 FAX (916) 263-0959

February 18, 2015

Ron Stock
City Administrator
City of Weed
550 Main Street
Weed, CA 96094

RE: Ordinance # 421-2014

Dear Mr. Stock:

This letter is to advise you of our determination regarding the referenced ordinance with express findings received from your agency on January 23, 2015.

Our review finds the submittal to contain one ordinance modifying provisions of the 2013 California Building Standards Code in Title 24, California Code of Regulations (code), and express findings complying with Health and Safety Code §§17958.7 and 18941.5. The code modification is accepted for filing and is enforceable. This letter attests only to the satisfaction of the cited law for filing of local code amendment supported by an express finding with the Commission. The Commission is not authorized by law to evaluate the merit of the code modification or the express finding.

Local modifications to the code are specific to a particular edition of the code. They must be readopted and filed with the Commission in order to remain in effect when the next triennial edition of the code is published.

On a related matter, should your city receive and ratify Fire Protection District ordinances making modifications to the code, be advised that Health and Safety Code §13869.7(c) requires such ratified ordinances and express findings to be filed with the Department of Housing and Community Development, Division of Codes and Standards, State Housing Law Program, rather than this Commission. Also, ordinances making modifications to the energy efficiency standards of the code may require approval from the California Energy Commission pursuant to Public Resources Code §25402.1(h)(2).

If you have any questions or need any further information, you may contact me at (916) 263-0916.

Sincerely,

Enrique M. Rodriguez
Associate Construction Analyst

cc: Chron
Local Filings

ORDINANCE NO. 421-2014

AN ORDINANCE OF THE CITY OF WEED AMENDING CHAPTER 16.04 OF THE MUNICIPAL CODE OF THE CITY OF WEED AMENDING THE CALIFORNIA FIRE CODE

WHEREAS, the major risk of fires within the City of Weed is from wildfires and automatic residential fire systems are ineffective in such situations; and

WHEREAS, in many locations within the City, including Angel Valley, water service is provided by water mains as small as two inches in diameter; and

WHEREAS, if all of the structures damaged by the Boles Fire were to be rebuilt with automatic residential fire sprinkler systems the City's infrastructure would be unable to provide sufficient water supply to operate these systems; and

WHEREAS, sufficient funds are not available to upgrade the City's infrastructure to meet the level of service required to provide sufficient pressure to serve all of the structures damaged by the Boles Fire if automatic residential fire sprinkler systems were installed; and

WHEREAS, the City's utility funds will be stressed financially due to the loss of twenty percent of the utility's customers and this prohibits the City from borrowing sufficient funds to upgrade the City's infrastructure.

The Council of the City of Weed do ordain as follows:

Section 1. Findings and Conclusions

(a) Findings. Pursuant to Sections 17958.5 and 17958.7 of the State of California Health and Safety Code, the City Council of the City of Weed finds that the following changes or modifications are needed and are reasonably necessary because of certain local climatic, geological, and topographic conditions.

(b) Local Conditions. The following local conditions make necessary the changes and modification in the California Fire Code and the State Building Standards Code in order to provide a reasonable degree of fire and life safety in the City.

(1) Climatic.

a. Precipitation and Relative Humidity.

Weed has a warm-summer Mediterranean climate according to the Köppen climate classification system. Precipitation averages 23.64 a year. Eighty-seven percent falls during the months of October through April and 13 percent from May through September.

Typically, 8 percent of rainfall occurs during the fire season. This is a dry period of four to five months. Additionally, the area is subject to recurrent drought. The Climatic region is currently in a drought phase that has lasted four years. Droughts can be expected locally in the future. Relative humidity remains in the middle range most of the time. It ranges from 38 to 71 percent during the spring, summer, and fall; and from 67 to 89 percent in the winter.

b. Temperature.

Temperatures have been recorded as high as 38 degrees Celsius (100.4 degrees Fahrenheit). Average summer highs are in the 27 to 28 degree Celsius range (low 80s Fahrenheit). Temperatures have been recorded as low as -25 degree Celsius (-12 degrees Fahrenheit). It is typical for

temperatures to remain below zero for 300-400 consecutive hours during January.

c. Winds.

Prevailing winds are from the west or southwest. However, winds are experienced from virtually every direction at one time or another. Velocities are generally in the 7 to 13 Kilometers per hour range (4 to 8 miles per hour). High sixty Kilometers per hour winds (low 40 miles per hour) are experienced occasionally and winds up to 98 Kilometers per hour (60 miles per hour) have been registered locally. During the winter half of the year, strong, gusty winds from the north and west move through the area for several days and may create extremely dry conditions.

d. Impact.

The above-referenced local climatic conditions affect the acceleration, intensity, and size of fire in the community. Times of little or no rainfall, of low humidity, and high temperatures create extremely dangerous conditions, particularly as they relate to structure fires and conflagrations. The winds experienced in this area can have a tremendous impact upon structure fires of buildings in close proximity to one another commonly found in the City of Weed. Winds can carry sparks and burning brands to other structures, thus spreading the fire and causing conflagrations. Heavy vegetation together with the wind can literally create a blow torch effect. Thus, winds and dry periods expose the entire community to the threat of conflagration.

(2) Geological.

a. Seismicity.

Although Mount Shasta is an active volcano and there are periodic low magnitude tremors regularly, the City of Weed is located in a low risk area as identified by the United States Geological Service.

b. Impact.

Earthquakes can cause damage to electrical transmission facilities which, in turn, cause power failures while at the same time starting fires. Cities that experience significant earthquakes also experience damage to the water system. The combination of multiple fires and water system damage increase the fire hazards present in such communities. Due to the low risk of earthquakes in the City of Weed, geological conditions mitigate or lessen the risk of fire in the community.

(3) Topographic.

a. Soils.

The City of Weed is built on deposits from the four series of eruptive episodes which formed the present mountain known as Mount Shasta, a composite volcano. The mountain was built during the past 250,000 years with the first eruptive episode forming the Sargents Ridge cone. Later eruptions added Misery Hill near the mountain's top and Shastina, the secondary summit. Finally the last cycle produced the Hotlum dome which forms the present summit. Each episode began with violent eruptions from a central vent that sent hot flows of rock and gas sweeping down the mountain's flanks. The soils of the City of Weed are primarily from the flow that occurred 9,400 years ago during the episode that built Shastina. Black Butte, lying between the City of Weed and the City of Mount Shasta is an example of a plug dome formed on the flank

of Mount Shasta. Black Butte is now largely mantled by a steep apron of loose blocks. However, it is not a cinder cone, as some believe, but part of Mount Shasta's volcanic center.

b. Vegetation.

Highly combustible tree cover in addition to dry grass and brush are common throughout the areas adjacent to the City. The surrounding area frequently experience forest fires. The City is often threatened by such fires and particularly buildings with wood roofs and sidings.

c. Surface Features.

The arrangement and location of natural and man-made surface features, including hills, creeks, steep slopes, housing developments, commercial developments, streets and roads, combine to limit feasible response routes for fire resource. Fires moving through steep terrain can move 16-30 times faster than on level ground. Erratic terrain and erratic winds can cause fires to grow in an unpredictable manner.

d. Buildings, Landscaping and Terrain.

There are many concentrations of houses and other buildings with untreated wood siding in the City which are in close proximity to one another. There are many such buildings to which access to all but one side is made virtually impossible due to landscaping, fences, utility poles and lines, slopes or other buildings.

e. Electrical Transmission.

Above-ground electrical power transmission lines suspended on poles and towers exist throughout the City. Many power line poles are located adjacent to streets and roads and many of the transmission wires are suspended above dry vegetation and untreated wood sided structures.

f. Impact.

The above listed local topographical conditions increase the magnitude, exposure, and accessibility problems associated with the fire hazards which arise within the City. Recently a significant emergency event occurred, an area wide conflagration, and public safety resources had to be prioritized to mitigate the greatest threat. Other variables tended to intensify the situation, such as:

1) The damage to the City's water system;
2) The extent of roadway damage and the amount of debris blocking the roadways;
3) Climatic conditions (dry weather with high winds);
4) Time of day which intensified the risk to life during normal business hours; and
5) The likelihood that small fires will rapidly grow to conflagration proportions.

4. Conclusion.

Local climatic, geologic and topographic conditions impact fire prevention efforts, and the frequency, spread, acceleration, intensity, and size of fires which involve buildings in this community. Further, the local climatic geologic and topographic conditions increase the likelihood of conflagration and the freezing of interior water lines thus limiting the value of automatic fire suppression systems. Therefore, it is found to be reasonably necessary that the California Fire Code and State Building Standard Code to mitigate the effects of the risks associated with the above conditions.

Section 2. California Fire Code Amendment. Section 16.04.060 of the Weed Municipal Code is adopted to read in its entirety as follows:

16.04.060 - Chapter 9 of the California Fire Code, as adopted and applied by the City of Weed, is amended as follows:

1. Section 903.2 is amended to read as follows:

"Where required. Approved automatic sprinkler systems in new buildings and structures shall be provided in the locations described in Section 903.2.1 through 903.2.12, however, a variance can be granted by the city administrator for the installation of automatic sprinkler systems in single-family and duplex structures if the following are present:

a. The floor area of the occupancy is not 2,000 square feet or greater for a single-family structure and is not 3,000 square feet or greater for a duplex.
b. The building location does not exceed a maximum running time of three minutes or a maximum of five minutes average response time from the City's Fire Station.
c. The building is not located within the Very High Fire Hazard Severity Zones identified in RMC Section 8.16.080.
d. The property owner can show to the satisfaction of the City Administrator that the installation of an automatic sprinkler system is a financial hardship. Evidence of financial hardship shall include a copy of the property owner's homeowner's insurance policy covering the building destroyed in the Boles Fire. If the insurance policy is a replacement cost policy, the property owner will be deemed not to have proven a financial hardship.
e. The building is being constructed or reconstructed following destruction by the Boles Fire on September 15, 2014.

Section 3. California Residential Code Amendment. Section 16.04.070 of the Weed Municipal Code is adopted to read in its entirety as follows:

"16.04.070 - Chapter 3 of the California Residential Code, as adopted and applied by the City of Weed, is amended as follows:

1. Section R313.2 is amended to add the following exception:

Exception: An automatic residential fired sprinkler system shall not be required when a variance is granted by the City Administrator under the provisions of Section 903.2 of the California Fire Code as amended by the City of Weed.

Section 4. Existing Building Permits. Any building permit issued on or after September 15, 2014, and prior to the effective date of this ordinance may be amended to permit modification and removal of the automatic sprinkler system if the property owner requests a variance and is granted a variance under section 2 of this ordinance.

Section 5. The city attorney is hereby authorized to prepare a summary of the ordinance as required by Government Code section 36933.

Section 6. The city clerk is hereby authorized to publish the summary and post certified copies of the full text of the proposed and then adopted ordinances as required by Government Code section 36933.

Section 7. This ordinance shall take effect and be in force thirty (30) days after its passage.

Section 8. This ordinance shall be published in the Weed Press, a newspaper of general circulation in the

City of Weed, within fifteen (15) days after its passage.

I HEREBY CERTIFY the foregoing ordinance was introduced for first reading at a regular meeting of the City Council of the City of Weed held the 13th day of November, 2014, and thereafter adopted at a regular meeting of said Council held the 8th day of January, 2015, by the following vote to wit:

AYES: Council Members Green, Greene, Hall, Palfini, and Sutton
NOES: None
ABSENT: None

Mayor, City of Weed

ATTEST:

City Clerk, City of Weed