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NAPA COUNTY BOARD OF SUPERVISORS Board Agenda Letter

TO: Board of Supervisors
FROM: Gabrielle Avina for Ernie Loveless - Fire Chief
County Fire Department
REPORT BY: Gabrielle Avina, Fire Marshal, 967-1421
SUBJECT: Discussion of the 2007 California Building Standards Code

RECOMMENDATION

Director of the Conservation, Development and Planning Department and the County Fire Chief will provide an update on the status of the 2007 California Building Standards Code adoption, discuss staff recommendations for proposed amendments to the Codes designed to improve structure and wildland fire risk, and request direction from the Board before returning in November with proposed amendments.

EXECUTIVE SUMMARY

With the adoption of the triennial code adoption of the California Building Standards Code due by January 1, 2008 staff from the Conservation, Development and Planning Department and the County Fire Department would like to discuss possible code revisions and request direction from the Board.

FISCAL IMPACT

Is there a Fiscal Impact? No

ENVIRONMENTAL IMPACT

ENVIRONMENTAL DETERMINATION: The proposed action is not a project as defined by 14 California Code of Regulations 15378 (State CEQA Guidelines) and therefore CEQA is not applicable.

BACKGROUND AND DISCUSSION

The triennial code adoption process for the California Building Standards Code has arrived. Once the California Buildings Standards Codes are published, local jurisdictions have 180 days from when the Codes are published [July 2007] to adopt the codes and may include local amendments that address local climatic, geographic or topographic characteristics as well as their public expectation of acceptable risk, demographics, economic conditions, public safety infrastructure and loss history. One of the priorities of the Planning Director and the Fire Chief in developing recommendations for the amendments to the California Codes is the desire to have standardized codes throughout the county. Both the County Building Official and the County Fire Marshal have been working with the other building and fire departments in Napa County to standardize and simplify the proposed amendments to the building and fire codes. We would like to discuss our recommendations for these amendments and get direction from the Board of Supervisors so that staff can present amendments and proceed with the required readings and adoption of the codes for an effective date of January 1, 2008.

The County Fire Department is recommending two significant changes to the 2007 California Building Standards Code and the current codes we are operating under today. Staff is recommending that the County adopt a local ordinance that would require residential sprinkler systems in all newly constructed residential structures and a roof standard that is slightly more restrictive than what the code already requires.

Residential sprinkler systems are primarily life safety systems designed to keep a fire from spreading while occupants evacuate and the fire department responds. Sprinkler systems typically contain a fire with the activation of a single sprinkler head and minimal amounts of water limiting the spread of the fire and deadly heat and smoke. Because of long response times, current fire department staffing levels, limited water resources for firefighting and the size and complexity of many of the new homes constructed in the County a residential sprinkler ordinance would improve fire department response outcomes and help to mitigate structure fire risk in Napa County.

Residential sprinkler systems have been required in parts of Napa County for almost twenty years. The City of Napa has required them since 1989, American Canyon since 1991, Marin County since the early 1990's and Sonoma County since 2003. Fire Officials from the Cities of St. Helena, Calistoga and the Town of Yountville have also indicated that they will be recommending residential sprinkler ordinances during this code adoption. In 2006 the Conservation, Development and Planning Department issued approximately 70 permits for new residences in Napa County.

The biggest disadvantage of residential sprinkler systems is that they add costs to construction. A number of local contractors have estimated actual costs on new systems. The prices below indicate prices for the sprinkler system including design and installation of overhead piping and sprinkler heads.

Axcel Fire Systems-

Track Homes- \$ 2.25 to \$ 2.75 per square foot

Custom Homes- \$ 3.00 to \$ 3.75 per square foot

Simplex Grinnel

Track Homes- \$ 2.00 per square foot

Custom Homes- \$ 3.25 per square foot

Leduc & Dexter Incorporated

Track Homes- \$ 1.90 per square foot

Custom homes- \$ 3.20 per square foot

Prices will vary based on the size of the home, height of ceilings and architectural details.

Another cost associated with a sprinkler system is the cost of the water supply system. There are two basic types of water supply for sprinkler systems; those attached to a water meter (supplied by the water district) and those attached to a well/water tank. There are a number of configurations for the well/water tank scenario and the prices below indicate estimates on the cost of the water supply for the sprinkler system.

1. The system can be as simple as an upgrade of the well pump which is a scenario for wells with adequate water flow. The upgrade from the traditional well pump to a pump capable of supplying the domestic and the fire sprinklers is approximately \$ 700.
2. If the well is not capable of supplying the water flow of the sprinkler system and domestic system a booster pump and 400 gallon water storage tank will supply the sprinkler system. Total cost including materials, labor and installation is approximately \$ 2,850.
3. Another installation option would be to install the required 2,500 gallon water storage tank required for fire flow and also use that as the water storage for a sprinkler system with the booster pump for a total cost of \$ 5,300.

Total price estimates for residential sprinkler installation in a 2,500 square foot residence. Track home with municipal water connection- \$ 5,000
Custom Home with adequate well- \$ 8,700
Custom Home with 400 gallon tank- \$ 10,850
Custom Home with 2,500 water storage- \$ 13,300

The price estimates for water supply were estimates by Leduc and Dexter Incorporated in Santa Rosa. Leduc and Dexter has experience installing systems in both Sonoma and Napa counties.

Using a conservative estimate of \$ 250 per square feet to build in Napa County the price estimates fall in line with the industry standard that the system will cost 1-2% of the total construction costs. Quite often more money is spent on flooring or countertops.

The other change from our current codes that we are recommending is the requirement for more fire resistive roof coverings in our wildland areas. The 2007 California Building Code requires a Class A roof material for all new structures or new roofs in very high fire hazard severity zones and a Class B roof for the high and moderate fire hazard severity zones. Staff recommends that requiring only Class A roofs in all State Responsibility Areas (SRA) will improve the wildland fire threat that exists in the SRA in Napa County. Staff has contacted two local roofing contractors to determine cost impacts and both roofing contractors stated they are only installing Class A, and did not price or estimate Class B roofs. Even treated wood shakes which are generally a Class B can be made into a Class A with the addition of an underlying fire barrier material. With the wildland fire history in Napa County we recommend that newly constructed buildings in wildland areas install roofing materials that offer the best fire resistance.

Napa County can improve the fire risk and improve fire department response outcomes by requiring additional built in fire protection for newly constructed buildings in Napa County. The two recommendations above address the structure fire risk and improve the wildland fire risk for construction in some of our most fire prone areas in the county and also in areas of the County where the fire department response times are the greatest.

SUPPORTING DOCUMENTS

None

CEO Recommendation: Approve

Reviewed By: Helene Franchi