



<b>AGENCY:</b>	City Council
<b>MEETING DATE:</b>	March 10, 2014
<b>DEPARTMENT:</b>	CDD
<b>PREPARED BY:</b>	M Jones
<b>PRESENTED BY:</b>	M Jones

## AGENDA ITEM SUMMARY

**TITLE:**

**RECEIVE REPORT AND PROVIDE DIRECTION TO STAFF REGARDING POSSIBLE AMENDMENTS TO FORT BRAGG MUNICIPAL CODE CHAPTER 15.06 "AUTOMATIC FIRE SPRINKLER AND ALARM SYSTEMS"**

**ISSUE:**

The City Council first adopted a fire sprinkler ordinance in 1985, and it was amended in 1997, 1999, 2003, and 2007. The purpose of the ordinance is to ensure that new construction and significant remodels include installation of automatic fire sprinklers. Recent amendments included requiring installation of automatic fire suppression systems in all new commercial buildings and in projects that require a building permit and which include remodel, repair and/or maintenance activities with a value of more than \$50,000.

In 2013, two significant commercial remodels were completed without the installation of automatic sprinkler systems. This matter was addressed by the City Council on April 8, 2013. During the meeting one property owner agreed that the cost of the remodel exceeded the \$50,000 limit and that property owner: 1) opened a deposit account with the City in the amount of \$40,000 as a guarantee for installation of the automatic sprinklers; 2) pulled building permits; and 3) currently is installing the sprinklers as directed by City Council. Staff obtained an independent third-party valuation of the remodel work, which indicted costs in excess of the \$50,000 threshold and the owner was ordered to install fire sprinklers. The owner contested the valuation and filed an administrative appeal of the staff decision. Upon appeal, the City Manager (the appeal authority) determined that there was insufficient evidence that the property owner had exceeded the \$50,000 threshold and that the ordinance was ambiguous as it applied to remodels such as the subject project (see Attachment 1, Determination of Administrative Appeal- Swithenbank).

The process of defining the cost for the Swithenbank remodel made it clear that: 1) key language in the ordinance should be modified to clarify the basis of including and valuing the remodel, repair and/or maintenance work; 2) the approval process for the sprinkler valuation should be revised; and 3) a clear appeal process should be defined in a revised ordinance. This staff report and attached modifications to the ordinance seek to address these three issues.

**RECOMMENDED ACTION:**

Provide direction to staff regarding fire sprinkler ordinance. Staff recommends that the Council either provide direction or refer the matter to the Community Development Committee for further discussion and recommendations.

**ALTERNATIVE ACTION(S):**

None

**ANALYSIS:**

In order to understand the benefits of automatic sprinklers, a basic knowledge of fire behavior is illustrative. The typical accidental fire begins as a slow growth, smoldering process which may last

from a few minutes to several hours. During this period heat generation increases, producing light to moderate volumes of smoke. During this early stage automatic suppression can control the fire before significant losses occur. Once flames appear the fire rapidly changes from a relatively minor situation to a serious event with rapid flame and heat growth. Ceiling temperatures can exceed 1,000° C (1,800° F) within the first minutes. Within 3–5 minutes, the room ceiling acts like a broiler, raising temperatures high enough to "flash" which simultaneously ignites all combustibles in the room. At this point, most contents will be destroyed and humans cannot survive. Successful fire suppression is dependent on extinguishing flames before, or immediately upon, flaming combustion and, for this, automatic suppression systems are essential. Automatic fire suppression systems are activated by heat (+165 degrees) at the individual sprinkler head so unintentional triggering of the system (by burning toast for example) is impossible.

The benefits of automatic fire suppression systems are well documented and these include:

- Reduced death and injury to residents, employees and fire-fighters. The risk of dying from a fire is reduced by about 80% in a sprinklered home, compared with a non-sprinklered home.
- Reduced value of property loss, for example property damage in hotel fires has been reduced by 78 percent in sprinklered buildings compared to non-sprinklered buildings. The average loss in a home with sprinklers is \$1,945, while the average loss for a home without sprinklers is \$17,067.
- Reduced fire insurance costs.

Additionally the cost to install sprinkler systems is low; it averages about \$1.35/SF for new construction, according to a report from the Fire Protection Research Foundation. People pay similar amounts for carpet upgrades.

A draft redline version of proposed modifications to the Fire Sprinkler Ordinance is attached (Attachment 2). The proposed changes to the City's fire sprinkler ordinance will help ensure that the benefits of fire sprinklers are extended equitably to all remodel/repair and maintenance projects that exceed \$50,000 in value over a three year period, by instituting the following:

1. Clarify that the \$50,000 remodel, maintenance and repair threshold is relative to the value/price of the improvements, which includes the cost of materials, installation, profit and overhead.
2. Require completion of a Sprinkler Valuation Form (see draft, Attachment 3) at time of the submission of a building permit. Currently valuation is estimated by the applicant on the building permit, and there is no way to check the veracity of the valuation for remodel projects. Additionally many of the components of the value of a project (from a sprinkler installation perspective) are not included in the valuation for building permit purposes, such as interior painting and finishes.
3. Define an appeal process that places the burden on the applicant to prove, with evidence, that the value of the completed work is less than \$50,000. It takes a significant amount of staff time to deal with uncooperative applicants who do not provide cost data in a timely or complete way. This will make it the applicant's responsibility to provide the required information for an appeal.

**FISCAL IMPACT:**

The installation of automatic sprinkler systems will reduce fire-fighting costs associated with responding to calls for service by the Fire Department. Thus the project will have a net positive fiscal impact on the City by reducing the cost of fire services.

**IMPLEMENTATION/TIMEFRAMES:**

Implementation of a modified ordinance depends on timeframes for review and approval of the ordinance.

**ATTACHMENTS:**

1. September 9, 2013 Determination of Administrative Appeal (Swithenbank)
2. Draft redline of Chapter 15.06: Automatic Fire Sprinkler and Alarm Systems
3. Draft Sprinkler Valuation Form for Remodels, Maintenance and Repair Projects

**NOTIFICATION:**

1. Steve Orsi, Fire Chief
2. Steve Wells, Fire Marshal

**City Clerk's Office Use Only**

Agency Action <input type="checkbox"/> Approved <input type="checkbox"/> Denied <input type="checkbox"/> Approved as Amended Resolution No.: _____    Ordinance No.: _____ Moved by: _____    Seconded by: _____ Vote: _____ <input type="checkbox"/> Deferred/Continued to meeting of: _____ <input type="checkbox"/> Referred to: _____
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