COUNCIL AGENDA: 09/16/08
ITEM: 8.1

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: HONORABLE MAYOR AND CITY COUNCIL

FROM: Vilcia Rodriguez

SUBJECT: **SEE BELOW**

DATE: September 2, 2008

Approved Deanna Santana

Date 9/2/08

SUBJECT: FIREFIGHTER ELEVATOR ORDINANCE [Community and Economic Development Committee referral 08/28/08 – Item (g)]

On August 25, 2008 a report was presented to the Community and Economic Development Committee on the Firefighter Elevator Ordinance.

For lack of quorum, this item was forwarded to the full Council for action. Attached you will find the report that was presented to the Community and Economic Development Committee.

Vilcia Rodriguez
VILCIA RODRIGUEZ
Senior Executive Analyst

Attachment

CED COMMITTEE: 08-25-08
ITEM: g.

CITY OF SAN JOSE
CAPITAL OF SILICON VALLEY

Memorandum

TO: COMMUNITY AND ECONOMIC DEVELOPMENT COMMITTEE

FROM: DARRYL VON RAESFELD
FIRE CHIEF

SUBJECT: **FIREFIGHTER HIGHRISE ELEVATOR ORDINANCE**

DATE: August 8, 2008

Approved Paul Krutt Date 8/14/08

COUNCIL DISTRICT: City-Wide

RECOMMENDATION

It is recommended that Council direct the City Attorney to draft an ordinance amending Section 17.12.630 of the San Jose Municipal Code to require that new high rise buildings be constructed with at least one elevator installed with additional safety features to provide increased firefighter protection for use in emergencies.

OUTCOME

If the Community and Economic Development Committee accepts staff's recommendation, it will be cross-referenced on the City Council agenda for action.

BACKGROUND

The San Jose Fire Department has evaluated the operational effectiveness of numerous systems for fighting fires and handling other emergencies in high-rise buildings. This has been an on-going process, especially since the adoption of the Department's High Rise Firefighting Operational Plan in March 1996.

Through this process Fire personnel identified systems to enhance firefighting capabilities in high-rise buildings. San Jose currently benefits from existing ordinances that require sprinkler and standpipe systems in all high-rise buildings. In addition, in January 2005, an ordinance was approved amending Title 17 of the San Jose Municipal Code to add new Section 17.12.630 requiring additional firefighter protections for high rise buildings, including a Firefighter Breathing Air Replenishment System.

A high rise building is defined as any building having floors used for human occupancy located more than seventy five feet (75') above the lowest level of the fire department vehicular or personnel access; whichever access is more restrictive, as determined by the Fire Chief.

Fires in high rise buildings create a number of challenges for firefighters. One of the main challenges is access to the fire. Current San Jose Fire practice prohibits firefighters from using elevators when there is a fire in a high rise building, and instead requires them to walk up to the fire floor, carrying all of their hoses and equipment. The National Fire Protection Association estimates this task to take two minutes per floor (and assumes a fairly high level of firefighter physical fitness). As an example, if there were a fire on the 18th floor of City Hall, it would take firefighters 36 minutes walk up 18 flights of stairs, after arrival on scene.

ANALYSIS

The value of firefighters being able to use elevators safely during fires in high rise buildings is that they will gain access to the fire in minutes rather than hours, allowing them to get needed equipment to the emergency without having to carry it up numerous flights of stairs. Elevator use will allow quick access moving the firefighting equipment and creates less fatigue which allows firefighters to start fighting the fire in a more timely fashion. Earlier initiation of emergency operations can reduce the impact of fire growth and provide earlier rescue for victims. Elevators could also be used to move dozens of full air bottles at a time to the Staging floor, to replace empty bottles used during fire attack or rescue operations.

The concern among firefighters about using elevators in high-rise building fires relates to problems that occurred fifteen to thirty years ago. Between 1977 and 1992 there were only four fatalities, two of which were firefighters falling down an elevator shaft. Those incidents took place in older buildings which did not have many of the safety features required today. Following those incidents, Building Codes and Elevator Construction Standards were modified to address existing problems. Among those changes were requirements for fire-rated elevator shafts, emergency power supplies, and two-way communications. In addition, elevators were required to provide Phase I and Phase II emergency operations that provide automatic safety recall in certain conditions and allow firefighters to manually override the lockout features. There have been no firefighter fatalities because of elevator use in high rise building fires since 1993. All high rise buildings in San Jose have a full fire sprinkler protection system, and new fire and building codes have helped create safer buildings that are more fire resistant. If the ordinance is approved, SJFD will modify existing policy language to allow use of elevators in high rise emergencies.

This proposed ordinance would not require installation of any additional elevators. It would require additional protection for at least one of the elevators that are required in high rise buildings. Performance elements that the proposed ordinance will address include protecting the elevator shaft from fire, smoke and water intrusion; protecting the electrical components from failure; and providing a dedicated power supply with emergency backup. These requirements will ensure a higher degree of certainty that the elevator would be safe to use in the event of a fire.

Developers have been experiencing difficulties implementing the Breathing Air Replenishment System and are requesting alternatives to the requirement to install that system. The Firefighter Elevator concept has been discussed with the Rules and Open Government Committee, most recently on January 30, 2008. In addition, the Fire Marshal has met with a group representing all of the developers currently building or planning new high rise buildings in San Jose several times since October 2007. That group is participating in the development of technical specifications for this proposed ordinance which would provide a better alternative for replenishing air supply than the Breathing Air Replenishment System, and thus eliminate the need for that system. The proposed amendment to Section17.12.630 would replace language requiring that system with language requiring the Firefighter Elevator.

EVALUATION AND FOLLOW-UP

Staff will continue to conduct public outreach to local developers who build high-rise buildings.

Staff will bring a proposed ordinance back to the City Council with a recommendation for an amended ordinance.

PUBLIC OUTREACH/INTEREST

This is being coordinated with local developers likely to be effected by this ordinance.

COORDINATION

This memo has been coordinated with the Department of Planning, Building, and Code Enforcement and the City Attorney's Office.

COST SUMMARY/IMPLICATIONS

There are no cost implications to the City.

CEQA

CEQA: Not a project.

DARRYL VON RAESFELD
Fire Chief

For questions please contact Dave Schoonover, Deputy Chief, at 408-535-7792.