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June 20, 2007

Mayor and City Council  
City of Medford  
411 W. 8th Street  
Medford, OR 97520

**RE: Mandatory Residential Fire Sprinklers**

Dear Mayor and Council:

This letter is on behalf of the Home Builders Association of Jackson County, Inc. (HBA), the Chamber of Medford/Jackson County (Chamber) and the Rogue Valley Association of Realtors (RVAR) with regard to an important policy matter which requires careful review and consideration by the Council regarding the mandatory provision of residential fire sprinklers.

The International Fire Code Appendix D, Section D103.2 provides that fire access roads shall not exceed 10% grade *unless otherwise approved by the fire official*. Where streets do not meet the grade standards for fire access roads, residences may be required to have residential sprinkler systems installed. Until recently the Medford Fire Department did not enforce a 10% street grade as a general policy or practice and numerous projects were approved with street grades in excess of 10%. In fact, the Public Works Department currently allows street grades up to 15%.

Beginning in fall 2006, the Fire Department began imposing new standards that require sprinklers in every home located on a street grade in excess of 10%. In some instances this policy is being imposed on new land development applications. However in other instances the new policy is being imposed on projects that have been already been approved. In most of these projects, streets were designed and constructed before this new policy came into effect. Property owners are entitled to notice of the applicable rules before the project is designed and built. Though this policy represents a significant change, no notice was provided to the public, and to our knowledge, no public discussions were held with the City Council.

Despite repeated requests over several months that this policy change be brought before the Council for policy direction, the Fire Department has declined to do so while vigorously pursuing this new policy. The Fire Department has overstepped its

authority and the only option an affected party has to object to these conditions is a costly and time-consuming appeal.

In addition to the problem of retroactive application, the Fire Department has imposed this new policy without any clear definition as to how or where it is to be applied. For example, while the fire department has imposed this requirement, it has been unable to define how to measure grade. Currently the Fire Department states that grade is measured on any road that provides fire apparatus access from a fire station to a facility, building or portion of a building. But in practice, builders have been told to measure grade on the street in which new homes are to be located. Under the Department's latest application of grade, if any 120-foot portion of an access road has a grade in excess of 10%, then all homes taking access from that road would be required to have sprinklers. In essence, under that measurement, almost every new home in the City of Medford will require residential sprinklers. Despite this confusion, the Fire Department is requiring builders to prove they are not located on a 10% grade, yet there are no instructions as to which streets must be measured. The result is an arbitrary and capricious standard that is impossible to satisfy.

More importantly is the question of whether this street grade standard should be utilized at all. The HBA, Chamber, and RVAR urge the Council to make a careful review of this issue in a public hearing and to reject this new policy, as there is, at best, marginal evidence that sprinklers increase safety or reduce property damage, and the costs of the sprinklers far exceed their potential benefit.

There have been numerous studies conducted with regard to the effectiveness of smoke alarms and whether residential sprinklers are an effective means to increase safety. Before the City of Medford, by choice or Departmental fiat, begins making residential sprinklers mandatory, it should consider this evidence in order to make an informed decision. The increase in safety and reduction of property damage promised by fire officials may well be negligible, and must be weighed against the following evidence:

- **Technological Innovations:** technological innovations in building techniques such as advanced heating and electrical systems, fire resistant building materials, escape windows, and interconnected smoke alarms, have dramatically reduced the number of fatalities from fire over the past 20 years;
- **Most Fire Fatalities Occur in Homes without Working Smoke Detectors:** according to the U.S. Fire Administration, from 2001-2004, only 3.7% of residential fire fatalities were reported as occurring in homes with working smoke alarm system;

John  
Greg

- **Fire Fatalities Have Reduced Dramatically:** according to the Centers for Disease Control, from 1979 to 2001, the fire death rate per million persons (FDMP) dropped by 58%; this trend is expected to continue as new housing stock replaces old;
- **Installation of Sprinklers is Costly:** a conservative cost for installation of sprinklers is \$2.50 per square foot or \$6,000 for a 2400 square-foot house;
- **Sprinklers Make Homes Less Affordable:** for each \$1,000 added to the price of a home, another 250,000 potential homebuyers are priced out of the market;
- **Cost of Installing Sprinklers More Than Doubles Property Damage Costs:** nationwide, the cost of installing sprinklers for new construction more than doubles the cost of property lost to residential fires on an annual basis.
- **Sprinklers Do Not Reduce Fire Department Needs or Costs:** mandatory sprinklers are not likely to reduce fire department staffing levels as the number of stations, staff and facilities are necessary for quick response to EMS calls and even with sprinklers, the fire department must respond to the call;
- **Sprinklers Cause Water Damage:** water damage is a substantial problem with sprinklers. A standard residential system is designed for two sprinkler heads to supply 13 gallons per minute (or 260 gallons of water into a room in 10 minutes);
- **Cumbersome Maintenance:** maintenance of residential fire sprinklers is more burdensome than maintenance of smoke alarms;
- **No Evidence that Sprinklers Save Lives:** there is no evidence that residential sprinklers save lives as there have been no studies comparing fire sprinklers with smoke alarms versus smoke alarms alone; and
- **The Public Disfavors Sprinklers:** in a national study of consumers, 89% said that they felt smoke alarms did an adequate job and 28% do not want sprinklers at all, even if they were provided free of charge.

(study results from National Association of Home Builders)

There simply isn't strong evidence that residential sprinklers save lives, reduce property damage, or reduce fire-staffing needs. The problem isn't that homes do not have sprinklers; the problem is homes without working smoke alarms and these are largely older homes which would not be captured in Medford's new policy because it deals only with new housing.

As you can see, this issue deserves much more consideration by the Council and the public. The Fire Department is not required to follow a 10% street grade standard. Under the International Fire Code, the Fire Department retains discretion to allow alternate street grades. That discretion should continue so as to avoid a rule that in essence mandates residential sprinklers Citywide. Moreover, if the rules are going to change, they should not be applied retroactively. The costs are high and the apparent benefits are low. We urge the Council to review this matter, and until the Council has an opportunity to consider appropriate solutions, the City staff should cease its efforts to impose this new and costly policy.

Yours truly,

HUYCKE, O'CONNOR, JARVIS & LOHMAN, LLP

  
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SYDNEE B. DREYER

HOME BUILDERS ASSOCIATION OF  
JACKSON COUNTY, INC.

  
\_\_\_\_\_  
By: MIKE NEELEY, President

THE CHAMBER OF MEDFORD/JACKSON  
COUNTY

  
\_\_\_\_\_  
By: BRAD HICKS, President

ROGUE VALLEY ASSOCIATION OF  
REALTORS

  
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By: CERISE STEPHENS, President