

RE: SPRINKLER BYLAW

MUNICIPAL MANAGER'S RECOMMENDATION:

1. THAT the recommendation of the Director Planning & Building Inspection be adopted.

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TO: Municipal Manager 1989 October 24
FROM: Director Planning & Building Inspection
SUBJECT: Sprinkler Bylaw

PURPOSE: To respond to an inquiry made during the 1989 Sept. 25 meeting of Council about the creation of a "Sprinkler Bylaw" similar to that proposed by the City of Vancouver.

RECOMMENDATION:

1. THAT this report be received for information purposes.

REPORT

BACKGROUND:

At the regular Council Meeting held on 1989 September 25, staff were requested to investigate the creation of a "Sprinkler Bylaw" for Burnaby, similar to that recently proposed by the City of Vancouver.

CONTEXT:

Residential fires in North America are responsible for extensive property damage and a significant number of deaths and injuries. There is a growing realization that having effective fire suppression capability in a fire department is alone not enough to deal with this problem. One of the best ways to reduce continuing fire fatalities and property loss is through the use of smoke alarms, which are now mandatory in new residential construction, and sprinkler systems. When a fire occurs in a residential building equipped with a smoke detection and "quick response" fire suppression system, the smoke detectors will activate permitting the occupants to evacuate the building and notify the fire department at the earliest possible time. Before the fire department arrives, "quick response" sprinklers will have controlled or extinguished the fire. See the attached graph in Appendix A.

There is currently wide spread pressure to mandate the installation of sprinkler systems in all institutional and residential occupancies. There are currently at least seven Canadian and approximately 200 American jurisdictions that have or plan to have some form of mandatory residential sprinkler legislation.

The major obstacle to the widespread use of residential sprinklers seems to be cost. Currently, the cost of installing a residential sprinkler system in a single-family dwelling is approximately \$0.80 to \$1.50 per square foot. An additional cost may be incurred if a larger water connection is required. On the other side of the coin, society has to subsidize fire losses and injuries through increasing fire and health insurance premiums and municipal taxes.

BYLAW AUTHORITY:

The City of Vancouver Building Bylaw No. 6134 is established pursuant to the Vancouver City Charter. The City is currently proposing to revise the bylaw to make the installation of "Quick Response" sprinklers mandatory in all new residential construction, including single- and two-family dwellings. Since the major obstacle to the widespread use of residential sprinklers seems to be cost, the City proposes, in anticipation of considerable resistance from the public and the housing industry, to establish a set of development and construction standards which will recognize the superior fire protection of sprinkler systems. These standards will increase design flexibility for developers and thereby reduce overall construction costs to offset the additional cost of installing sprinklers.

Building construction in Burnaby must comply with the provisions of the 1985 B.C. Building Code, which has been enacted pursuant to Section 740.(1) of the Municipal Act and which has been adopted throughout the Province. Section 740.(3) of the Act reads in part, "A provision of a municipal bylaw that purports to deal with matters regulated under this section, and that is inconsistent with the code or regulations, is of no force and effect and shall be deemed to be repealed." Accordingly, Burnaby does not have the authority to establish a bylaw requiring the mandatory installation of residential sprinklers.


It should be noted that the B.C. Building Code is based on the National Building Code. The National Building Code's Standing Committees on Fire Protection, Occupancy, and Housing and Small Buildings have formed a Joint Task Group to study the implications of the mandatory installation of automatic sprinkler systems in houses. The recommendations of that task force are expected to be available to the Standing Committee shortly, and will in all probability be given consideration in formation of the 1990 edition of the National Building Code and/or the B.C. Building Code. The subject is also under consideration by the Building Safety Advisory Council which has been formed by the B.C. Minister of Municipal Affairs as an industry oriented advisory group reporting directly to the Minister on provincial building and fire safety regulations.

CONCLUSION:

The creation of a municipal bylaw dealing with the mandatory installation of quick response sprinklers in new residential construction is currently beyond the jurisdiction of municipal council. As the subject is already under active review by code revision groups, it is suggested that at this time the matter should appropriately be left in the hands of provincial code review authorities to be dealt with as a possible B.C. Building Code amendment. Staff will monitor the code review process and report back to Council as necessary.

The Burnaby Fire Department concurs with this report.

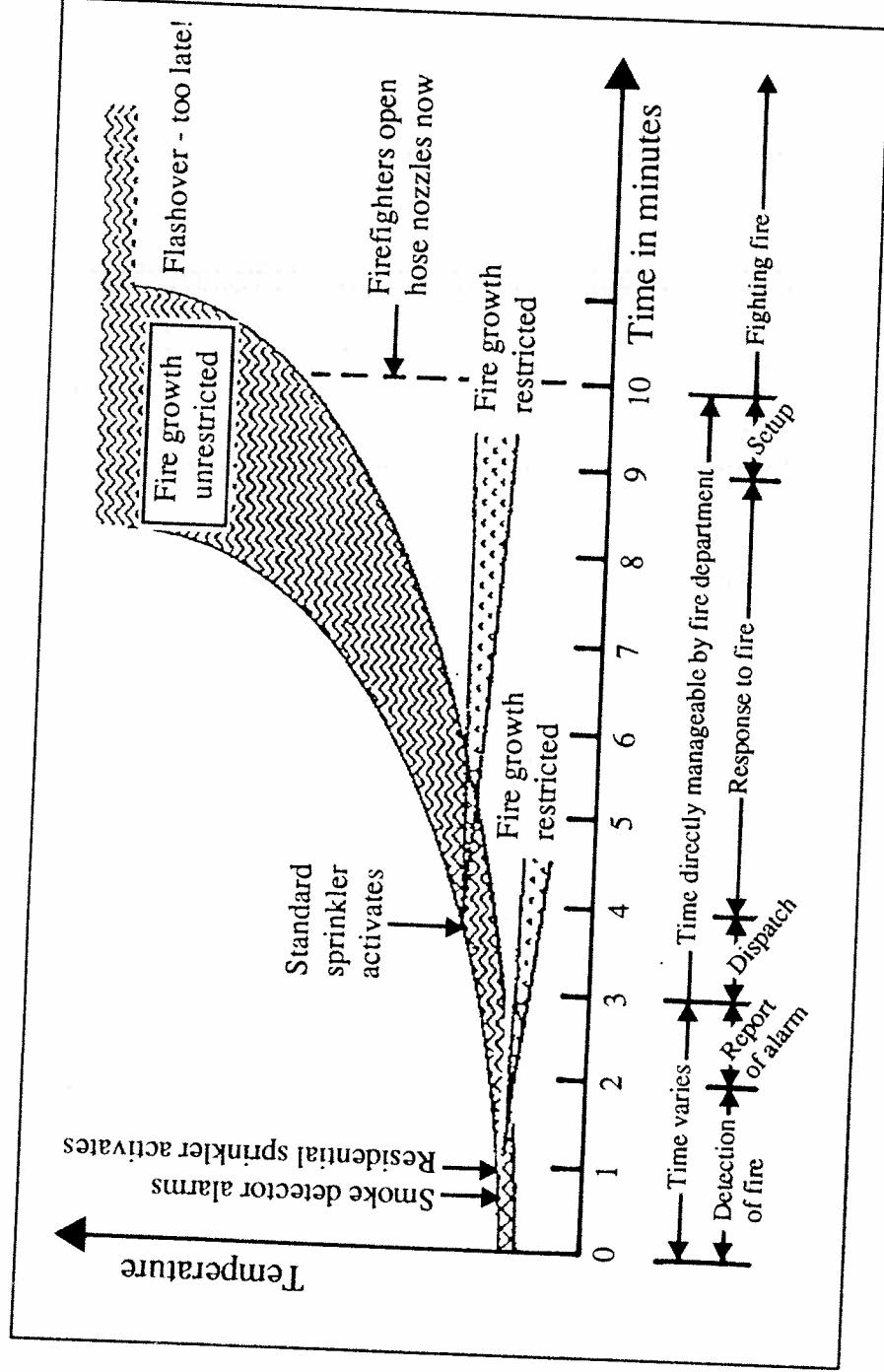
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A.L. Parr
DIRECTOR PLANNING &
BUILDING INSPECTION

c.c. Chief Building Inspector
F.P.O. Attention: Don Ward

ITEM 16
 MANAGER'S REPORT NO. 70
 COUNCIL MEETING 89/10/30

Potential fire growth within residential suites



NOTE: All times based upon national averages.

Appendix A

