

TO: CITY MANAGER 2000 JUNE 21

FROM: DIRECTOR PLANNING & BUILDING

SUBJECT: AMENDMENT TO BURNABY BUILDING BYLAW NO. 6333

PURPOSE: To recommend that the Burnaby Building Bylaw be amended to provide the Chief Building Inspector with the authority to require a Building Envelope Professional be involved in the design and construction field review for all residential developments in excess of two dwelling units.

RECOMMENDATION:

- 1) **THAT** Council authorize the City Solicitor to prepare a bylaw to amend the Burnaby Building Bylaw No. 6333 to require the involvement of an accredited Building Envelope Professional on all residential projects having greater than two dwelling units.

REPORT

1.0 BACKGROUND

The design and field review of a building envelope in all its integrated aspects, for new construction and for the remediation of building envelope failures, is the responsibility of registered Architects and Professional Engineers acting as the coordinating professional for the project. Specialized services relating to the performance of building materials and assemblies is a discipline common to both the professions of Architecture and Engineering. The extent of use of these specialized services varies with the size and complexity of the building. The B.C. Building Code, at this time, allows any registered Architect or Professional Engineer to assume responsibility for the design and provision of field review for building envelope components.

Both Barrett Commission reports clearly express that the current problems have occurred due to a breakdown in the design and construction process which involves many complex variables. One major contributor, however, was considered to be a lack of understanding, training and attention to critical detailing with respect to the building envelope.

In 1995 and 1996, in an attempt to combat an unprecedented degree of building envelope failures in multi-family residential buildings, the City of Vancouver implemented, through their Building bylaw, a requirement that components of the building envelope, including roof and exterior wall components, be subject to design and significant ongoing inspections by an acceptable independent testing/inspection agency experienced in the science of building envelope performance. As an interim measure, the City of Vancouver produced a register of individuals and companies which it deemed acceptable, based on their qualifications and experience in this field. Without any other standard in place, most Lower Mainland communities, including the City of Burnaby, used the Vancouver list as an indicator of those individuals and companies having acceptable understanding and experience relative to building envelopes. The creation of this interim list was done in anticipation that the architectural and engineering professions would jointly implement a program to accredit Professional Engineers and Architects for this role. The accreditation of individuals would preclude the need to pre-qualify firms.

2.0 BUILDING ENVELOPE ACCREDITATION

The Building Envelope Professional program (BEP) was developed in response to the concerns of the Commission and the professionals. The program consists of four education modules and a requirement for an extensive amount of specific building envelope experience. The Chief Building Inspector is a representative of the City of Burnaby and the Building Officials' Association of B.C. on the joint Building Envelope Qualifications Committee established to develop and administer the program. The program, now developed and being delivered, has a sufficient number of accredited professionals now in place to permit the City of Vancouver to remove their interim list effective 2000 June 01. The requirement for a Building Envelope Professional, as accredited by either the Architectural Institute or the Association of Professional Engineers, is now contained in the City of Vancouver Building bylaw.

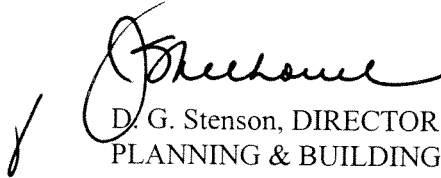
3.0 SUMMARY

Staff of the Building Department, with the assistance of the City Solicitor, are currently reviewing the existing Building bylaw with the intent to make amendments, as deemed necessary, to address the current and envisaged regulatory responsibilities.

This process is expected to take some time, therefore, considering the extent and nature of the current building envelope concerns, it is recommended that an amendment to the existing bylaw be made to provide authority to the Chief Building Inspector to require the services of a Building Envelope Professional, as accredited by the Architectural Institute of B.C. or the Association of Professional Engineers and Geoscientists of B.C. on all new or building envelope remediation projects involving residential buildings containing more than two dwelling units. Application of this requirement to single and two family dwellings, which do not normally involve design or field review by a professional, was considered to be too onerous at this time. Staff will be reviewing possible procedural changes, which may include additional inspections and moisture testing, to mitigate future problems with single and two family developments.



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D. G. Stenson, DIRECTOR
PLANNING & BUILDING

cc: Chief Building Inspector
City Solicitor

