

**TO:** CITY MANAGER **DATE:** 2003 01 14

**FROM:** DIRECTOR ENGINEERING **FILE:** 40-03-01  
DIRECTOR PLANNING & BUILDING

**SUBJECT: FLOOD HAZARD MANAGEMENT**

**PURPOSE:** To recommend that Council write to local MLA's, the Minister of Water, Land and Air Protection, Minister of Finance and the Premier to emphasize the importance of Financial assistance for flood hazard management

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**RECOMMENDATION:**

- 1. **THAT** Council advise the Premier, Ministers of Finance and Water, Land and Air and local MLA's of the importance of financial assistance to Local Government for Flood Hazard Management.

**R E P O R T**

**1.0 BACKGROUND**

Council at its regular meeting of December 16, 2002 received correspondence from the UBCM requesting that Council write to local MLA's, the Premier, Minister of Finance and the Minister of Water, Land and Air Protection (MWLAP) to emphasize the importance of financial assistance for flood hazard management. Council subsequently requested a staff report to discuss the issues arising and its potential impact on the City.

**2.0 DISCUSSION**

- 1. General

The area in Burnaby most susceptible to the threat of flooding from high runoff is the Big Bend where significant areas lie within the flood plain area. The City has undertaken significant dyking programs to protect this area in recent years with assistance from Provincial Government grants from the Flood Protection Assistance Fund.

The Province, through MWLAP, is proposing a new model for flood hazard management

in the Province. There are five elements to the new program; integration, flood plain development, structural works, flood response and emergency planning, and orphan dikes. Of these elements three may have impact on the City; flood plain development; structural works, and flood response and emergency planning. In addition the Flood Protection Assistance Fund, which provides Financial aid to local government for diking and other flood control measures, is due to end in 2003/2004.

## 2. Development Flood Proofing Requirements

In 1983, Council adopted the current Fraser River Flood Plain Bylaw. The Bylaw applies to designated lands within the Big Bend, as shown on Figure 1, *attached*. Within this designated flood plain area, the Bylaw establishes a minimum building elevation for flood proofing purposes. The City, through the development approval process, ensures that new construction conforms to the requirements of the Bylaw.

The City has also recognized that areas in the Big Bend, outside of the lands designated in the Bylaw, may be subject to flooding. In general, the area shown on Figure 2, *attached*, may be subject to flooding during times of coincident high water levels in the Fraser River and heavy runoff. In response, the City has adopted a practice of generally recommending appropriate flood proof elevations for new development within the Big Bend area. The Bylaw requirements and recommended flood proofing elevations are generally achieved through filling of development property to the appropriate levels.

The Ministry is involved in the approval process for development within the designated flood plain as Ministry consent is currently required for the subdivision of property. Subdivision applications are circulated to the Ministry for review, at which time the Ministry may specify conditions for its consent of the subdivision. Ministry requirements are then incorporated into the conditions for subdivision approval. In addition, the City's Bylaw makes provision for an exemption or relaxation from the requirements of the Bylaw, for special circumstances, by way of an application to the Ministry of Water, Land and Air Protection.

Staff anticipate that the proposed changes would significantly reduce the role of the Ministry in the review of development applications, and for consideration of specific exemptions referenced in the Bylaw. In general terms however, given that the City has an adopted Fraser River Flood Plain Bylaw, the changes at the ministry are not expected to result in any significant impact on the effectiveness of the current measures employed in Burnaby to minimize losses that could be caused by flood water in the Big Bend.

With respect to development approval, implementation of the new model for flood hazard management may result in a need for the City to review the current Bylaw, and

the process used to determine subdivision requirements within the Fraser River Flood Plain, to ensure the continuation of the prevailing level of protection provided under the current system.

### 3. Structural Works

The City has achieved flood protection for the Big Bend area through a combination of filling through development and construction of dykes to protect the remaining low lying areas of the flood plain. Currently, these flood protection works are substantially complete with only one small section remaining to be constructed. Contingency plans are in place to protect this area in the event of a major flood event. Those dykes that were required outside of the development areas were constructed with the assistance of grants from the province's flood protection assistance program, most recently in 1999 and 2000.

The City provides all funding for maintenance of these works. The proposed changes for the implementation and management for the provision of structural works are not expected to have a significant impact on the City as our dyking system is substantially complete. The potential exception is the loss of capital funding for design and construction of the remaining section of dykes from the Flood Protection Assistance Program. However, for a number of smaller municipalities and regional districts, loss of funding from the provincial government could have a significant impact on their ability to construct and maintain flood protection works and in the interest of maintaining a Province wide ability to respond to flood hazards staff support continuance of financial support for flood hazard management.

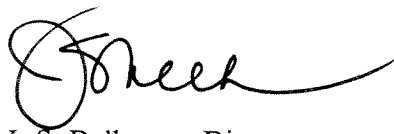
### 4. Flood Response and Emergency Planning

As a component of the City's Emergency Plan staff have developed a Flood and Evacuation Plan that was last updated in 1999 as part of our response to the predicted high runoff. As such, the City is prepared from an emergency planning perspective to deal with Flood Hazard Management. Similar to structural works, lack of funding assistance could impair some local governments ability to develop and implement flood emergency plans.

## 3.0 CONCLUSION

The Ministry of Water, Land and Air Protection is proposing a new model for flood hazard management in the province. The impact of the legislative changes on the City will primarily affect the City through loss of grant funding for design and construction of flood protection

works. The impact on smaller communities and regional districts could be significant and may limit their ability to provide adequate flood hazard management within their jurisdictions. As such, staff recommend that Council support UBCM's request and write to the Premier, Minister of Finance and the Minister of Water, Land and Air Protection and local MLA's to emphasize the importance to local government of funding for flood hazard management.



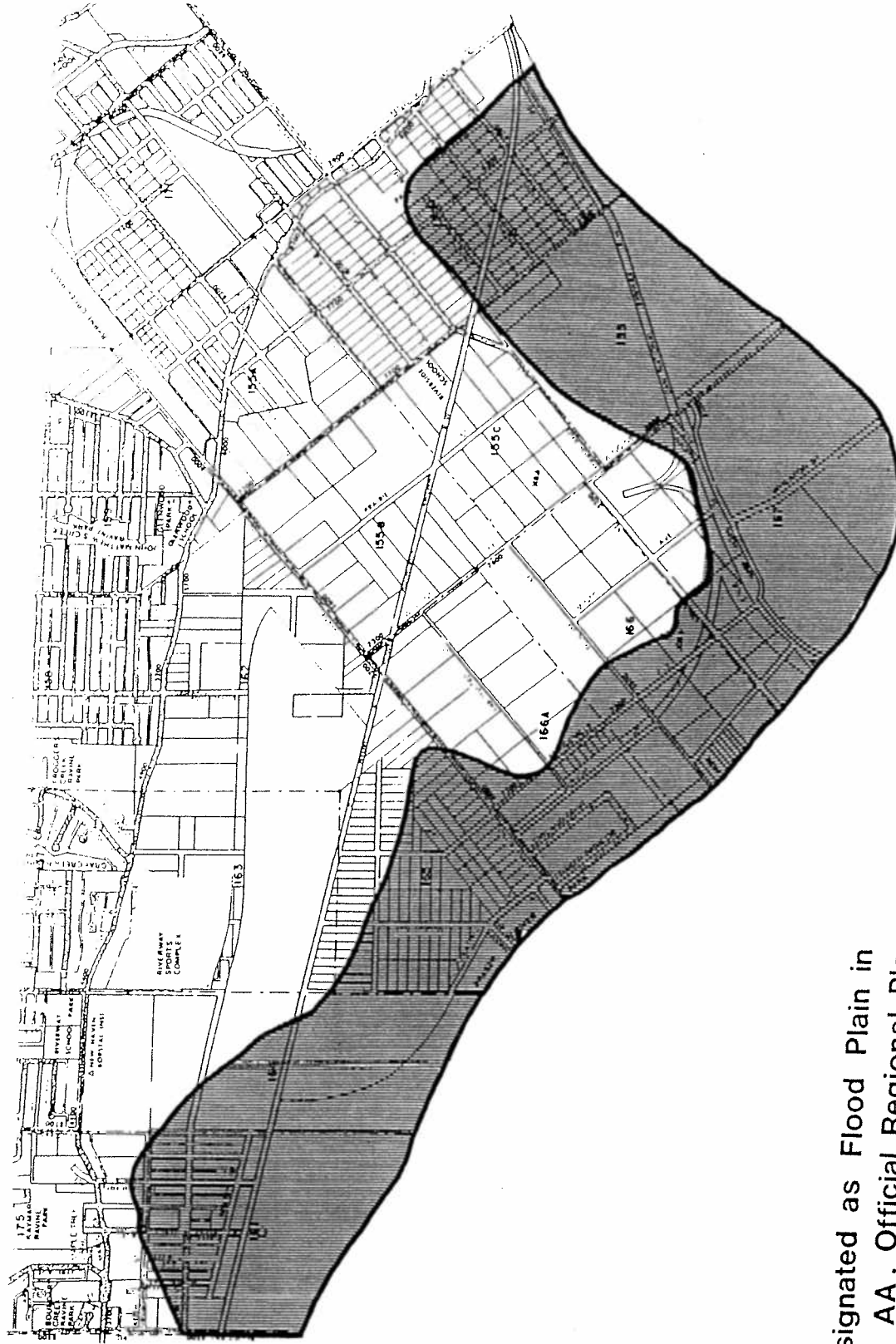
J. S. Belhouse, Director  
PLANNING & BUILDING



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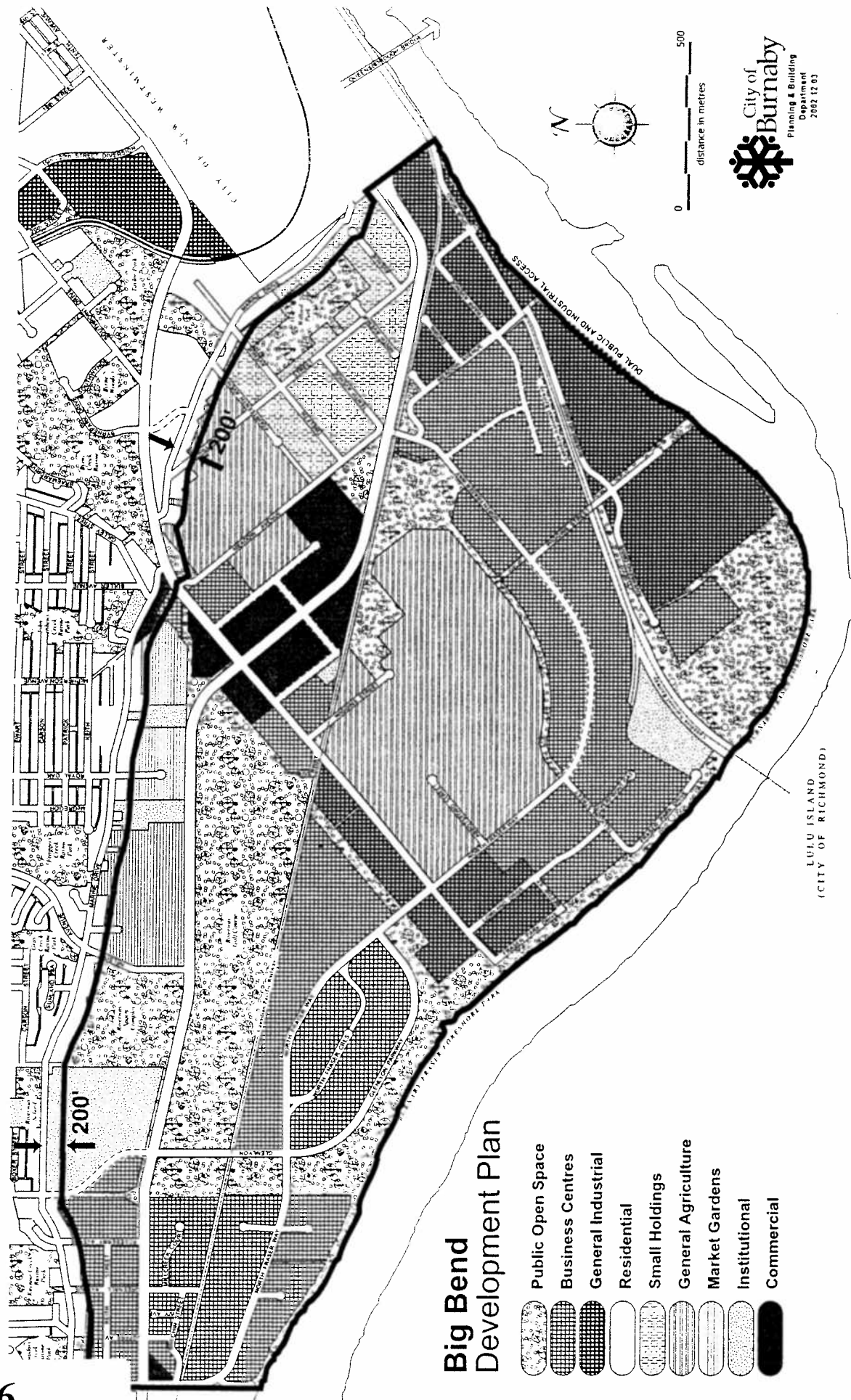
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Attachment

cc: Emergency Coordinator












Area Designated as Flood Plain in  
Schedule AA, Official Regional Plan

Figure 1  
1990 Apr. 10



### Big Bend Development Plan

-  Public Open Space
-  Business Centres
-  General Industrial
-  Residential
-  Small Holdings
-  General Agriculture
-  Market Gardens
-  Institutional
-  Commercial

 Potential Flood Plain Area Designation

Figure 2