



Flood Plain Designation and Protection Bylaw

WHEREAS:

It is desirable to minimize the risk of injury, loss of life, and property damage due to flooding;

Council has considered Provincial Guidelines respecting flood control; and

The *Local Government Act*, section 910, authorizes Council to enact a bylaw to designate flood plains within the City and to make regulations in relation to flood control, flood hazard management and development of land that is subject to flooding;

The Council of the City of Richmond enacts as follows:

PART 1. DESIGNATION OF FLOOD PLAIN

1.1 The following areas of the City are designated as **flood plain**:

- (a) The flood plain of the Fraser River in the vicinity of the City as shown on Schedule A.
- (b) The flood plain of the Gulf of Georgia in the vicinity of the City as shown on Schedule A.

PART 2. SETBACK REQUIREMENTS

2.1 No landfill or structural support required to support a floor system or **pad** shall be constructed, reconstructed, moved, extended or located:

- (a) where a **standard dike** exists, within 7.5 metres of a dike right of way;
- (b) where a **standard dike** does not exist, within 30 metres of a dike right of way; or
- (c) where a dike right of way does not exist and land is situated within the dike alignment, within 30 metres of the **natural boundary**.

PART 3. ELEVATION REQUIREMENTS

- 3.1 Except as otherwise expressly permitted in this bylaw, a person shall not construct, reconstruct, move, extend or locate the finished concrete floor, underside of any floor system damageable by flood waters, or the top of any **pad** supporting any space or room, including a **manufactured home** below the **flood plain construction level**, as shown in Schedule B, where the building, structure, or **manufactured home** is used or could be used for the purpose of dwelling, business, or the storage of goods susceptible to damage by flood water.
- 3.2 Subject to section 3.3, the **flood plain construction level** may be achieved by:
- (a) structural elevation of the underside of any floor system, or the top of any pad supporting any space or room, that is or could be used for a dwelling, business, or storage purpose;
 - (b) by adequately compacted landfill on which any building is to be constructed or manufactured home or unit located; or
 - (c) by a combination of both structural elevation and landfill.
- 3.3 Where landfill is used to achieve the **flood plain construction level**, no portion of the landfill slope shall be closer than the setbacks established in section 2.1 for
- (a) the **natural boundary**; or
 - (b) the inboard side of any dike right of way,
- and the face of the landfill slope shall be protected against erosion from flood flows, wave action, ice or other debris.
- 3.4 No area below the **flood plain construction level** shall be used for the installation of furnaces or other fixed equipment susceptible to damage by flood water.

PART 4. GENERAL EXEMPTIONS

- 4.1 In respect of all parcels within **Area A**, as shown in Schedule B, the elevation requirements of Part 3 do not apply to a building or structure where the underside of the floor system, or the top of the **pad** supporting any space or room, including a **manufactured home**, is located at least 0.3 metres above the highest level of the crown of any **road** that is adjacent to the parcel.
- 4.2 In respect of a parcel within **Area A**, as shown in Schedule B, which is used for a commercial or industrial use, the elevation requirements of Part 3 do not apply to a building where:

- (a) the main entrance to the building is located three (3) metres or less from the boundary of a **road**; and
 - (b) the underside of the floor system, or the top of a **pad** supporting any space or room within that building is located at the same elevation as the highest level of any **road** that is adjacent to that parcel.
- 4.3 In respect of a parcel within the **Steveston Village Area**, the elevation requirements of Part 3 do not apply. In respect to the **Steveston Village Area**, the top side of the floor system or the top of the **pad** supporting any space or room of a building or structure, including a manufactured home, shall not be below the existing level of a City sidewalk, (or if no sidewalk, the **road**) that is adjacent to the parcel.
- 4.4 The elevation requirements of Part 3 do not apply to:
- (a) the renovation of an existing building or structure that does not include an addition to the building or structure;
 - (b) an addition to a building or structure that would increase the size of the building or structure by less than twenty-five (25%) percent of the floor area of the building existing as of the date of adoption of this Bylaw;
 - (c) that portion of a building or structure to be used as a carport or garage;
 - (d) enclosed underground parking areas where an unobstructed non mechanized means of pedestrian access and egress is provided above the **flood plain construction level** and where a sign is permanently posted at all points of entry that the parking area is not protected from inundation by flood waters;
 - (e) farm buildings other than dwelling units.

PART 5. SITE SPECIFIC EXEMPTIONS

- 5.1 In respect of a parcel located within an area protected by a **standard dike**, an exemption pursuant to section 910(5) of the *Local Government Act* from any requirement or requirements of Part 2 or Part 3 may be granted by the **Director**, subject to any terms and conditions the **Director** considers necessary or advisable, if:
- (a) the **Director** is of the opinion that the exemption is consistent with the **Provincial Guidelines**; or

- (b) the **Director** receives a report, certified by a **professional engineer** or **professional geoscientist** and experienced in geotechnical engineering, that
- (i) the land may be used safely for the use intended, and
 - (ii) protection from a flood of the magnitude used for modelling purposes in the Lower Fraser River Hydraulic Model, 2006 can be achieved through an engineered design without reliance on a **standard dike**.

5.2 Without limiting other terms and conditions that the **Director** considers necessary or advisable in granting an exemption under this Part, the **Director** may require that a person enter into a covenant under Section 219 of the *Land Title Act* against the title of the parcel, at that person's expense, which covenant may include, without limitation, provisions that

- (a) identify reliance on a report required pursuant to Section 5.1 (b);
- (b) impose duties and restrictions on the owner of the parcel; and
- (c) release and indemnify the **City** with respect to any flooding of the property or flood damage to land, structures and contents thereof.

5.3 A person seeking an exemption shall complete an application in a form provided by the **City** and submitted in accordance with the instructions on the application.

5.4 Any reports, covenants, materials or other requirements that are or may be imposed as a condition of exemption under this Part shall be at the sole expense of the person seeking an exemption.

5.5 This bylaw is not a substitute for any requirements under Section 56 of the *Community Charter* or amendments thereto.

PART 6. OFFENCE AND PENALTY

6.1 A person who contravenes a regulation or requirement of this bylaw commits an offence and on conviction is liable to a fine of \$10,000, and in the case of a continuing offence, each day that the offence continues is a separate offence.

PART 7. NO REPRESENTATION

7.1 By the enactment, administration or enforcement of this bylaw, the **City** does not represent to any person that any building, structure or manufactured home

located, constructed or used in accordance with the provisions of this bylaw, or in accordance with conditions, terms, information, advice, direction or guidance provided by the City in the course of administering this bylaw, will not be damaged by flooding or flood water.

PART 8. INTERPRETATION AND CITATION

8.1 In this Bylaw:

Area A means that part of the City lying within the boundaries of "Area A" as shown on Schedule "B" to this Bylaw;

City means the City of Richmond;

Director means the Director of Building Approvals or a person designated by the Director to act in his or her absence;

flood plain means a lowland area, whether or not diked or floodproofed, which, by reasons of land elevation, is susceptible to flooding from an adjoining **watercourse**, river, ocean, lake or other body of water, and that is designated as flood plain in Part 1 of this bylaw;

flood plain construction level means the elevation level, measured in metres **GSC**, established in Schedule B of this bylaw;

floodway means the channel of a **watercourse** and those portions of the **flood plain** that are reasonably required to discharge a flood flow;

GSC means Geodetic Survey of Canada datum;

manufactured home means a structure manufactured as a unit, intended to be occupied at a place other than its place of manufacture, and designed as a dwelling unit, and includes mobile homes, but specifically excludes recreation vehicles;

natural boundary means the visible high water mark of any lake, river, stream or other body of water where the presence and action of the water are so common and usual and so long continued in all ordinary years as to mark upon the soil of the bed of the lake, river, stream or other body of water a character distinct from that of the banks thereof, in respect to vegetation as well as in respect to the nature of the soil itself. For coastal areas, the **natural boundary** shall include the natural limit of permanent terrestrial vegetation. In addition, the **natural boundary** includes the best estimate of the edge of dormant or old side channel and marsh areas;

pad means a paved surface on which blocks, posts, runners or strip footings are placed for the purpose of supporting a **manufactured home** or unit;

professional engineer means an engineer who is registered or licensed in British Columbia under the provisions of the *Engineers and Geoscientists Act* and amendments thereto;

professional geoscientist means a geoscientist who is registered or licensed in British Columbia under the provisions of the *Engineers and Geoscientists Act* and amendments thereto;

Provincial Guidelines means the policies, strategies, objectives, standards, guidelines and environmental management plans, in relation to flood control, flood hazard management and development of land that is subject to flooding, as contained within the *Flood Hazard Area Land Use Management Guidelines* dated May, 2004, published by the Province of British Columbia, and any amendments or revisions thereto;

road includes a highway, street, lane, sidewalk, right of way or any other way open to public use, or a private right of way intended for vehicular traffic, but does not include a trail;

setback means a withdrawal of a building or landfill from the natural boundary or other reference line to maintain a **floodway** and to allow for potential land erosion;

standard dike means a dike that is built to a minimum crest elevation and meeting standards of design and construction approved by the Ministry of Environment and as may be required by the City, whichever standard is higher, and that is maintained by the local government body;

Steveston Village Area means that part of the City shown on Schedule B of this Bylaw as being "At Sidewalk Elevation"; and

watercourse means any natural or man-made depression with well-defined banks and bed at least 0.6 metres or more below the surrounding land serving to give direction to a current of water at least 6 months of the year, or that has a drainage area of 2 square kilometres or more upstream of the point of consideration.

This Bylaw is cited as "Flood Plain Designation and Protection Bylaw No. 8204".

FIRST READING

NOV 26 2007

SECOND READING

NOV 26 2007

THIRD READING

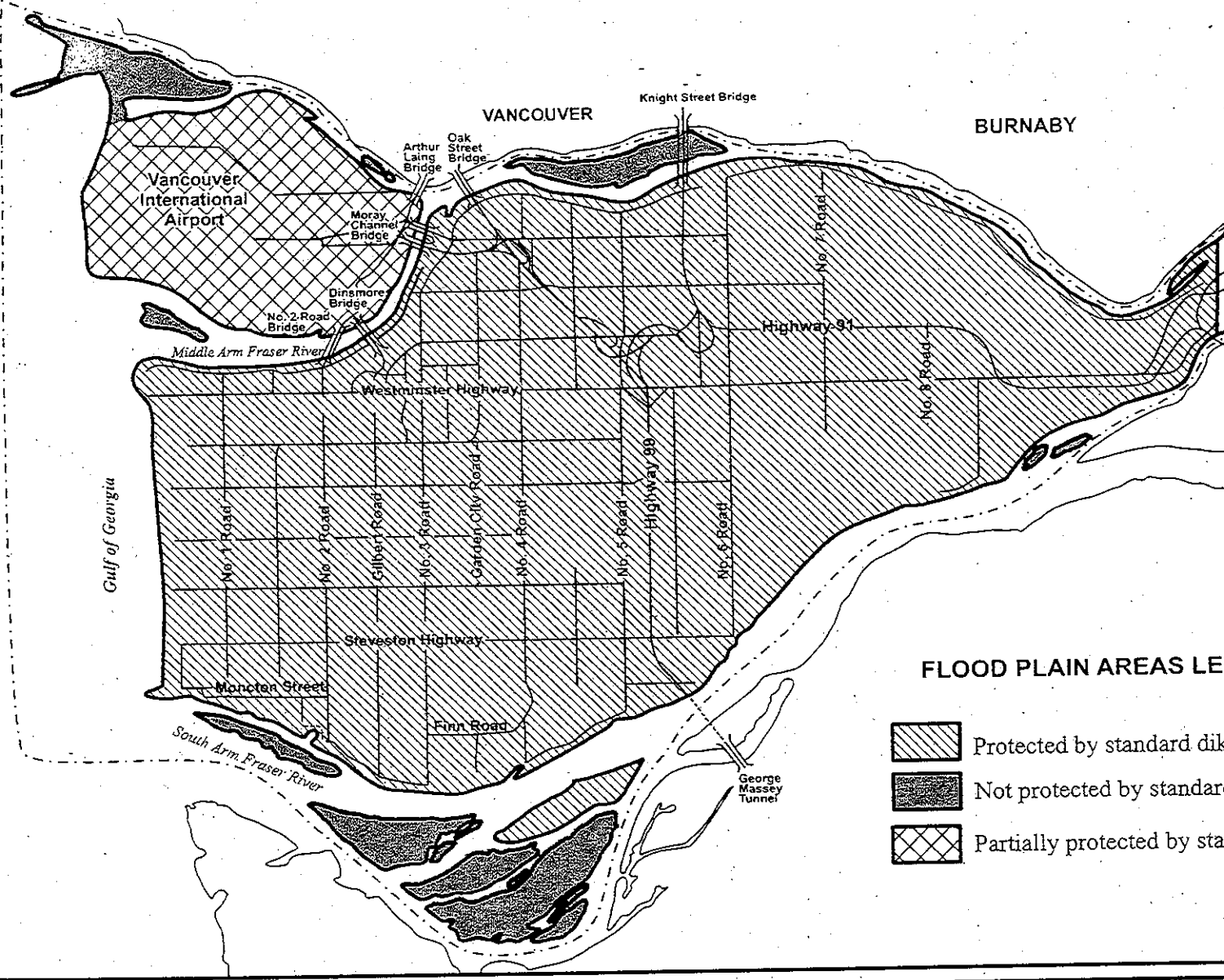
NOV 26 2007

ADOPTED




CITY OF RICHMOND
APPROVED for content by originating dept.
APPROVED for legality by Solicitor

MAYOR

CORPORATE OFFICER



FLOOD PLAIN AREAS LEGEND

-  Protected by standard dike
-  Not protected by standard dike
-  Partially protected by standard dike



Flood Plain Areas

Original Date: 03/15/07

Revision Date: 11/06/07

Note: Elevations are in G.S.C.

Schedule A attached to and forming part of Bylaw 8204

304