THE CORPORATION OF THE CITY OF GRAND FORKS

BYLAW NO. 1402

A BYLAW TO DESIGNATE CERTAIN LAND WITHIN THE CITY OF GRAND FORKS AS FLOODPLAIN AND TO SET FLOODPLAIN SETBACKS PURSUANT TO SECTION 969 OF THE MUNICIPAL ACT

WHEREAS the City of Grand Forks may enact a floodplain management bylaw, pursuant to Section 969 of the <u>Municipal Act</u> where it considers that flooding may occur on the land;

AND WHEREAS Environment Canada and B.C. Environment have cooperatively produced floodplain mapping for the Kettle and Granby Rivers which identify certain flood prone properties within the City of Grand Forks;

AND WHEREAS the purpose of a floodplain management bylaw is to reduce the risk of injury, loss of life and damage to the buildings and structures due to flooding. However, the City of Grand Forks does not represent to any person that any building or structure, including a manufactured home, used, located or constructed in accordance with the provisions of a floodplain management bylaw will not be damaged by flooding nor that injury or loss of life due to flooding will not occur;

NOW THEREFORE Council for the Corporation of the City of Grand Forks, in open and public meeting assembled, **ENACTS** as follows:

1.0 Title

This bylaw may be cited as the "City of Grand Forks Floodplain Management Bylaw No. 1402, 1993".

2.0 Administration

- 2.1 The Building Inspector or other such person appointed by Council will administer this bylaw.
- 2.2 This bylaw shall apply to all of the City of Grand Forks.
- 2.3 The provision of this bylaw include Drawing Numbers 90-34-5 through 90-34-7 of the Environment Canada/BC Environment

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Floodplain Mapping for the Kettle and Granby Rivers in the Grand Forks Area, which are attached to and form part of this bylaw as Schedule "X".

3.0 Interpretation

For the purposes of this bylaw, the following definitions apply:

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DESIGNATED FLOOD means a flood which may occur in any given year of such magnitude as to equal a flood having a 200-year recurrence interval based on a frequency analysis of unregulated historic flood records or by regional analysis where there is inadequate stream flow data available.

DESIGNATED FLOOD LEVEL means the observed or calculated elevation for the designated flood, which is used in the calculation of the flood construction level.

DWELLING UNIT means a self contained unit consisting of one or more rooms, designated, occupied or intended for occupancy, as a separate household with sleeping, cooking and sanitary facilities, but specifically excluding recreation vehicles.

FARM BUILDING means a building or part thereof which is associated with and located on land devoted to the practice of farming and used essentially for the housing of equipment or livestock or the production, storage, processing, marketing and selling of agricultural and horticultural produce or feeds.

FLOOD CONSTRUCTION LEVEL means a designated flood level plus freeboard, or where a designated flood level cannot be determined, a specified height above a natural boundary, natural ground elevation or any obstruction that could cause ponding.

FLOODPLAIN means an area, which is susceptible to flooding from an adjoining watercourse, lake or other body of water.

FLOODPLAIN SETBACK means the required minimum distance from the natural boundary or other reference line of a watercourse, lake or other body of water to any landfill or structural support required to elevate a floor system or pad above the flood construction level so as to maintain a floodway and allow for potential land erosion.

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FREEBOARD means a vertical distance added to a designated flood level used to establish a flood construction level.

HABITABLE AREA means any space or room, including a manufactured home that is used for dwelling purposes, business, or the storage of goods, which are susceptible to damage by floodwater;

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LANDFILL means sand, gravel, earth, rock or any combination thereof, placed or deposited by man, to raise the level of the ground but does not include building or construction debris.

MANUFACTURED HOME means any structure, whether ordinarily equipped with wheels or not, that is designed, constructed or manufactured to be moved from one place to another by being towed or carried and to provide a dwelling house or premises and which conforms to the requirements of the British Columbia Building Code;

NATURAL BOUNDARY means the visible high watermark 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 and includes the edge of dormant side channels of any lake, river, stream, marsh or other body of water;

NATURAL GROUND ELEVATION means the undisturbed ground elevation prior to site preparation;

PAD means a paved surface on which blocks, posts, runners or strip footings are placed, for the purpose of supporting a Manufactured Home or a concrete pad for supporting a Habitable Area;

STANDARD DYKE means a dyke built to a minimum crest elevation equal to the Flood Construction Level and meeting standards of design and construction approved by the Ministry of Environment and maintained by an ongoing authority such as a local government body.

WATERCOURSE means any natural or man made depression with well defined banks and a bed 0.6 metres or more below the surrounding land serving to give direction to a current of water at least six (6) months of the year or more upstream of the point of consideration.

4.0 Floodplain Designation

The following lands are designated as Floodplain;

- (1) All land lying within the Designated Floodplain Limit, as shown on Schedule "X", attached hereto.
- (2) All lands which are below the Flood Levels specified in Section 5.1 or within the Floodplain Setbacks specified in Section 5.2 of this bylaw.

5.0 Floodplain Specifications

5.1 Flood Levels

The following elevations are specified as Flood Levels, except that where more than on flood level is applicable, the higher elevation shall be the flood level

- 1) 1.5 metres above the natural boundary of any watercourse, lake or other body of water;
- 2) Notwithstanding Section 5.1(1), within those areas designated in Section 4.0(1) of this bylaw, the specified Flood Levels shall be interpolated from the "200 year frequency Flood Level", identified on Schedule "X", attached hereto.

5.2 Floodplain Setbacks

The following distances are specified as Floodplain Setbacks, except that where more than on floodplain setback is applicable, the greater distance shall be the setback

- 1) 30 metres from the natural boundary of the Kettle or Granby Rivers;
- 2) 7.5 metres from the landside toe of any standard dyke;
- 3) 15 metres from the natural boundary of any other watercourse;
- 4) 7.5 metres from the natural boundary of any lake, marsh or pond.

6.0 Application of Floodplain Specifications

- 6.1 Pursuant to Section 969(5) of the <u>Municipal Act</u>, after a bylaw has specified Flood Levels and Floodplain Setbacks for a designated floodplain:
 - the underside of any floor system or the top of any pad supporting any space or room, including a manufactured home that is used for dwelling purposes, business or the storage of goods which are susceptible to damage by floodwater shall be above the specified level, and

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- any landfill required to support a floor system or pad shall not extend within any setback from a watercourse or body of water specified by this bylaw.
- 3) structural support or compacted fill or a combination of both may be used to elevate the underside of the floor system or the top of the pad above the Flood Levels specified in Section 5.1. The structural support and/or fill shall be protected against scour and erosion from flood flows, wave action, ice and other debris.
- 4) the Building Inspector or such other person appointed by Council to administer this bylaw may require that a British Columbia Land Surveyor's certificate be required to verify compliance with the Flood Levels and Floodplain Setbacks specified in Section 5.1 and 5.2 and that the cost of such verification shall be assumed by the land owner.

7.0 **General Exemptions**

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Notwithstanding the flood construction level requirements cited in this bylaw, the following types of developments are exempted from the requirements as it pertains to the flood construction levels specified in Section 5.1 of this bylaw:

- a renovation of an existing building or structure that does not involve an addition thereto;
- an addition to a building or structure that would increase the size of the building or structure by less than 25 percent of the floor area existing at the date of adoption of this bylaw, provided that the degree of conformity regarding setbacks is not increased;

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- that portion of a building or structure to be used as a carport, garage or entrance fover;
- farm buildings other than dwelling units and closed-sided livestock housing;
- hot water tanks and furnaces behind standard dykes;
- closed-sided livestock housing behind standard dykes;
- heavy industry behind standard dykes;
- on-loading and off-loading facilities associated with water-oriented industry and portable sawmills;
- farm dwelling units provided that they are located on parcels 8 hectares or greater in size that are located within the Agricultural Land Reserve, provided that they are located with the underside of a wooden floor system or the top of the pad of an habitable area (or in the case of a manufactured home or unit, the top of pad or the ground surface on which it is located) no lower than 1 metre above the natural ground elevation taken at any point on the perimeter of the building, or no lower than the flood construction levels specified in Section 5.1 of this bylaw, whichever is lesser;
- closed sided livestock housing not behind standard dykes provided that they are located with the underside of a wooden floor system or the top of the pad (or in the case of a manufactured home or unit, the top of pad or the ground surface on which it is located) no lower than 2 metre above the natural ground elevation taken at any point on the perimeter of the building, or no lower than the flood construction levels specified in Section 5.1 of this bylaw, whichever is lesser;
- industrial uses, other than main electrical switchgear, provided that the are located with the underside of a wooden floor system or the top of the pad (or in the case of a manufactured home or unit, the top of pad or the ground surface on which it is located) no lower than 1 metre above the natural ground elevation taken at any point on the perimeter of the building, or no lower than the flood construction levels specified in Section 5.1 of this bylaw, minus freeboard. Main electrical switchgear shall be no lower than the flood construction level.

8.0 <u>Site Specific Exemptions</u>

An application by the property owner for a site-specific exemption shall be completed upon a form provided by the City, which is attached hereto as Schedule "B" and may be considered with the following provisions:

 the exemption is consistent with the Provincial Guidelines as defined in the Local Government Act; and

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- is accompanied with a professional engineer's or geoscientist's report that the property can be safely used for the intended use, at the elevation requested; and
- a Section 219 Floodplain covenant is registered on title, saving the City harmless for any damages or injuries that may occur due to flooding.

INTRODUCED this 18th day of October, 1993.

Read a **FIRST** time this 18th day of October, 1993.

Read a **SECOND** time this 18th day of October, 1993.

Read a **THIRD** time this 15th day of November, 1993.

I, Lynne Burch, City Clerk of the Corporation of the City of Grand Forks, hereby certify the foregoing to be a true and correct copy of Bylaw No. 1402, 1993" as read a **THIRD** time by the Council of the Corporation of the City of Grand Forks this 15th day of November, 1993.

	(Lynne Burch)	
City	Clerk	

The City of Grand Forks Floodplain Management Bylaw No. 1402, 1993 is approved pursuant to the provisions of Section 969 of the *Municipal Act* this 10th day of December, 1993.

NOTICE ADVERTISED this 27th day of October, 1993 and also this 3rd day of November, 1993.

RECONSIDERED, PASSED AND FINALLY ADOPTED this 18th day of April, 1994.

(Yasushi Sugimoto	<u>.</u>	(Lynne Burch)	
Y. Sugimoto – Mayor	_	J.L. Burch – City Clerk	

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CERTIFICATE

I hereby certify the foregoing to be a true copy of the City of Grand Forks Floodplain Management Bylaw No. 1402, 1993.
Clerk of the City Council of the City of Grand Forks

SCHEDULE "B"

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THE CORPORATION OF THE CITY OF GRAND FORKS APPLICATION FOR SITE SPECIFIC EXEMPTION

This form is to be fully completed and submitted by the property owner to the City of Grand Forks as a request to exempt a development from the requirements of Section 910 of the <u>Local Government Act</u>, in respect to provisions in City of Grand Forks Floodplain Management bylaw.

Applicant's Name:
Address:
Phone #:
Frione #.
(Lot, Block, Legal Subdivision, Section, Plan, Township, Range, Land District)
(Lot, Block, Legal Subdivision, Section, Fram, Fownship, Range, Land District)
City of Grand Forks
(Name of Regional District, Village, Town, City or District)
Exemption of the following development from the requirements of Section 910 of the <u>Local Government Act</u> and Section 5 of the City of Grand Forks Floodplain Management Bylaw No. 1402, is requested:
Proposed Development:
Name of Adjacent Watercourse or Body of Water:
Flood Construction Level in Bylaw No. 1402
Flood Construction Level Requested:
Floodplain Setback in Bylaw No. 1402: 30 meters from the natural boundary of the Kettle or Granby Rivers and 7.5 meters from the landside toe of any standard dyke
Floodplain Setback Requested:

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Request for Site-Specific Exemption Floodplain Management Provisions Page 2 Bylaw 1756								
	ENCLOSED ARE: (check where provided; provision of all of this information will facilitate processing of application)							
	legal map of property.							
	map indicating property location and relationship of proposed building to adjacent watercourses.							
	photos of property (proposed building location, adjacent existing development, riverbank areas, etc.).							
	professional engineer's report stating that the property can be safely used for the intended use.							
REAS	ONS FOR APPLICATION:							
Date o	of Application:							
Signat	ture of Applicant:							
Ackno	wledgement of Building Inspector:							
Application fee: \$200.00								

City of Grand Forks Floodplain Management Bylaw No. 1402, 1993