# The Corporation of the Village of Midway

### BYLAW NO. 293

A Bylaw to designate certain lands within the Village of Midway as floodplain and to set flood levels and floodplain setbacks pursuant to Section 910 of the Municipal Act

WHEREAS the Village of Midway may enact a floodplain management bylaw pursuant to Section 910 of the Municipal Act, where it considers that flooding may occur on land;

AND WHEREAS Environment Canada and BC Environment have cooperatively produced floodplain mapping for the portion of the Kettle River which flows through the Village's corporate limits, which identifies certain lands as being flood prone;

AND WHEREAS BC Environment has identified, in areas not covered by Floodplain Maps, appropriate floodplain setbacks from bodies of water and watercourses, along with appropriate floodplain elevations;

AND WHEREAS the purpose of a floodplain management bylaw is to reduce the risk of injury, loss of life, and damage to buildings and structures due to flooding. However, the Village of Midway 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 the Council of the Village of Midway in open and public meeting assembled, enacts the following:

#### 1. Title

This Bylaw may be cited as the "Village of Midway Floodplain Management Bylaw No. 293, 1997."

#### Administration

- (a) The Building Inspector or other person appointed by Council will administer the Bylaw.
- (b) This Bylaw shall apply to all lands lying within the corporate limits of the Village of Midway.
- (c) This Bylaw includes Schedule 'X' Floodplain Maps, being Drawings 93-13-1 and 93-13-2 (Sheets 1 and 2 of 8) of Floodplain Mapping for the Kettle River Midway-Rock Creek-Westbridge, dated September 30, 1997 which are attached hereto and form part of this Bylaw.

#### 3. Interpretation

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

ALLUVIAL FAN means the alluvial deposit of a stream where it issues from a steep mountain valley or gorge upon a plain or at the junction of a tributary stream with the main stream;

COUNCIL means the Council of the Corporation of the Village of Midway;

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 streamflow data available. Where the flow of a large watercourse is controlled by a major dam, the designated flood shall be set on a site specific basis:

DESIGNATED FLOOD LEVEL means the observed or calculated elevation for the Designated Flood, which is used in the calculation of the Flood Construction Level;

FREEBOARD means a vertical distance added to a Designated Flood Level, used to establish a Flood Construction Level;

FLOOD CONSTRUCTION LEVEL (FCL) means the Designated Flood Level plus the allowance for Freeboard and is used to establish the elevation of the underside of a wooden floor system or top of concrete slab for habitable buildings. In the case of mobile home, the ground level or top of concrete or asphalt pad, on which it is located shall be no lower than the above described elevation. It also establishes the minimum crest level of a standard dyke. Where the Designated Flood Level cannot be determined or where there are overriding factors, an assessed height above the Natural Boundary of the waterbody or above the Natural Ground Elevation may be used;

FLOODPLAIN means a lowland area, whether diked, floodproofed or not which, by reasons of land elevation, is susceptible to flooding from an adjoining watercourse, ocean, lake or other body of water and for administration purposes is taken to be that area submerged by the Designated Flood plus Freeboard:

FLOODPROOFING means the alteration of land or structures either physically or in use to reduce or eliminate flood damage and includes the use of building setbacks from waterbodies to maintain a Floodway and to allow for potential erosion. Floodproofing may be achieved by all or a combination of the following:

- Building on fill, provided such fill does not interfere with flood flows of the watercourse, and is adequately protected against floodwater erosion;
- 2. Building raised by structural means such as foundation walls, columns, etc.;
- 3. A combination of fill and structural means.

FLOODWAY means the channel of the watercourse and those portions of the Floodplains which are reasonably required to discharge the flood flow of a Designated Flood. A minimum required Floodway shall be equal to the width of the channel within the Natural Boundary plus a minimum setback of thirty (30.0) metres from the Natural Boundary on each side of the channel or channels unless otherwise approved;

G.S.C. means Geodetic Survey of Canada datum elevation;

HABITABLE AREA means any space or room within a building or structure, including a manufactured home, which is or can be used for human occupancy, commercial sales, or storage of goods, possessions or equipment (including furnaces) which would be subject to damage if flooded;

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 (Land Act, Section 1). In addition, the natural boundary includes the best estimate of the edge of dormant or old side channels and marsh areas;

NON-CONFORMING means any existing building located on floodprone land which does not meet floodproofing requirements set out in any pertinent bylaw, regulation or covenant;

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.

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 DYKES means those 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, Lands and Parks, and maintained by an ongoing authority such as a local government body;

TOP OF BANK means the point at which the upward ground level becomes less than one (1.0) vertical to four (4.0) horizontal, and refers to the crest of the bank or bluff where the slope clearly changes into the natural upland bench; or as designated by the Minister of Environment, Lands and Parks or his Designated Official;

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 having a drainage area of 2 square kilometres or more upstream of the point of consideration, or as designated by the Ministry of Environment, Lands and Parks, or a Designated Official.

#### 4. Floodplain Designation

The following lands are designated as Floodplain:

- (a) All land lying within the Designated Floodplain Limit as shown on Schedule 'X', attached hereto and forming part of this Bylaw.
- (b) All other lands which are below the Flood Construction Levels specified in Section 5(a) or within the Floodplain Setbacks specified in Section 5(b) of this Bylaw.

#### Floodplain Specifications 5.

#### (a) Flood Construction Levels

The following elevations are specified as Flood Construction Levels, except where more than one Flood Construction Level is applicable, the higher elevation shall be the specified Flood Construction Level:

(i) within those areas designated in Section 4(a) of this Bylaw, the specified Flood Construction Levels shall be interpolated from the "200 year frequency Flood Construction Level" identified on Schedule 'X' attached hereto;

or where floodplain mapping is not available,

- 3 metres above the natural boundary of Boundary Creek, except for lands located on (ii)the Boundary Creek alluvial fan. For land located with the limits of the fan as delinated on the accompanying schedule, "Schedule B""
  - \* one point five (1.5) metres above the natural boundary of Boundary Creek within the Floodway; or
  - \* zero point six (0.6) metres above the surrounding ground at any point on the perimeter of the habitation or business area building, or zero point six (0.6) metres above the crown of the adjacent road or highway, whichever is the higher; OP
  - \* an elevation which will give protection to structure to the standard of the Designated Flood event."
- (iii) 1.5 m above the natural boundary of any other watercourse, lake, marsh or pond.

#### Floodplain Setbacks (b)

The following distances are specified Floodplain Setbacks, except that where more than one Floodplain Setback is applicable, the greater distance shall be the Floodplain Setback;

- Thirty point zero (30.0) metres from the (i) natural boundaries of the Kettle River and Boundary Creek;
- Seven point five (7.5) metres from the (ii)
- natural boundary of any lake, marsh, or pond; Seven point five (7.5) metres from any Standard Dyke right-of-way or structure for (iii) flood protection or seepage control.
- Fifteen point zero (15.0) metres from the natural boundary of any other water course; (iv)

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## 8. Application of Floodplain Specifications

- (a) Pursuant to Section 910(5) of the <u>Municipal Act</u>, after a bylaw has specified Flood Construction 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
  - (ii) 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 the bylaw or the Minister of Environment, Lands and Parks.
  - (iii) 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 Construction Levels specified in Section 5(a). The structural support and/or fill shall be protected against scour and erosion from flood flows, wave action, ice and other debris.
  - (iv) 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 provided to verify compliance with the Flood Construction Levels and Floodplain Setbacks specified in Section 5(a) and 5(b) and that the cost of such verification shall be assumed by the land owner.

#### 7. General Exemptions

Pursuant to Section 910(6) of the <u>Municipal Act</u>, the Minister of Environment, Lands and Parks may exempt types of development from the requirements of Section 910, subject to conditions he may impose.

### Site-Specific Exemptions

Applications by property owners to the Minister of Environment, Lands and Parks for site-specific exemptions pursuant to Section 910(6) of the <u>Municipal Act</u> shall be completed on the form attached hereto as Schedule 'B' and submitted in accordance with the instructions provided.

#### 9. Violation

Every person who violates any provision of this Bylaw, or who causes or suffers or permits any act or thing to be done in contravention of, or in violation of, any provision of this Bylaw, or who neglects to do or refrains from doing anything required to be done under provisions of this Bylaw, shall be guilty of an offence of this Bylaw.

#### 10. Penalty

Every person guilty of an offence of this bylaw shall be liable on summary conviction to a penalty not exceeding two thousand dollars (\$2,000.00) for each offence, and costs of

READ A FIRST TIME this 15th day of December, 1997.

READ A SECOND TIME this 15th day of December, 1997.

READ A THIRD TIME this 15th day of December, 1997.

THIRD READING RESCINDED this 17th day of August, 1998.

INTRODUCED A THIRD TIME AS AMENDED this 17th day of August, 1998.

Village of Midway Floodplain Management Bylaw No. 293, 1997 APPROVED under the provisions of Section 910 of the <u>Municipal Act</u> this 1997 day of November, 1998.

Designated official for the Minister of Environment

Lands and Parks

NOTICE ADVERTISED pursuant to Section 839 of the <u>Municipal Act</u> this 24TH. day of NOVEMBER and 1ST, day of DECEMBER, 1998.

RECONSIDERED AND FINALLY ADOPTED this 7TH. day of DECEMBER, 1998.

Administrator

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I, R.J. Hatton, Administrator for the Village of Midway, hereby certify the foregoing to be a true and correct copy of Bylaw No. 293 cited as "Village of Midway Floodplain Management Bylaw No. 293, 199"

Administrator