

TOWN OF GOLDEN

BYLAW NUMBER 963

Being a Bylaw of the Town of Golden to identify floodplain areas.

WHEREAS the Town of Golden, where it is considered that flooding may occur on land, may enact a floodplain bylaw pursuant to Section 969 of the Municipal Act;

NOW THEREFORE, the Council of the Town of Golden, in open meeting assembled,

HEREBY ENACTS AS FOLLOWS: (except those notes in italics which are provided for information only and do not form part of this bylaw;)

The purpose of the floodplain management provisions is to reduce the risk of injury, loss of life, and damage to buildings and structures due to flooding. However, neither the Town of Golden nor the Province of British Columbia represent to any person that any building or structure, including a mobile home, used, constructed or located in accordance with the following provisions will not be damaged by flooding.

1. DEFINITIONS

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

ALLUVIAL FAN means an 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;

FLOOD CONSTRUCTION LEVEL or FLOOD 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;

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

FLOODPLAIN means an area which is susceptible to flooding from a watercourse, lake, or other body of water and that which is designated in Section 2 of this bylaw;

FLOODPLAIN SETBACK means the required minimum distance from the Natural Boundary 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;

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

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

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, as defined in Section 1 of the Land Act, and also includes the edge of dormant side channels of any lake, river, stream, 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;

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 or his Designated Official;

WATERCOURSE means any natural or man made depression with well defined banks and a bed 0.6 meters 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.

2. FLOODPLAIN DESIGNATION

The following land is designated as Floodplain:

- a) Schedule 'A' - 'Floodplain Hazard Maps - Columbia and Kicking Horse Rivers', attached hereto and forming part of this bylaw;
- b) Land shown as Floodplain as Schedule 'B' - 'Hospital Creek Alluvial Fan Hazard Map', attached hereto and forming part of this bylaw;
- c) Land lower than the Flood Construction Levels specified in Section 4a;
- d) Land within the Floodplain Setbacks specified in Section 4b.

3. SPECIAL POLICY AREA

Development on land in each Special Policy Area delineated on Schedule 'B' to this bylaw is governed by Section 734(2) of the Municipal Act and is subject to the minimum Flood Construction Level and setback requirements specified in Section 4.

Special Policy Areas include alluvial and debris torrent fans and areas adjacent to watercourses which are subject to high velocity flows, therefore require the assessment of a suitably qualified Professional Engineer.

General Exemptions, approved by the Minister of Environment, Lands and Parks, apply to Special Policy Areas and are outlined in Section 6.

4. FLOODPLAIN SPECIFICATIONS

a) Flood Construction Levels:

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

- i) the Flood Construction Level for a specific property, as determined by interpolation from those Flood Construction Levels shown on Schedule A - 'Floodplain of Columbia and Kicking Horse Rivers', attached hereto and forming part of this bylaw;
or where floodplain mapping is not available,
- ii) 1.5 meters above the Natural Boundary of Hospital Creek and Edelweiss Creek;
- iii) 1.5 meters above the Natural Boundary of any lake, marsh, or pond;
- iv) 0.6 meters above the Natural Ground Elevation or any obstruction that could cause ponding, whichever is higher, for land within Hazard Class Zone 1 as delineated in Schedule 'B';
- v) 1.0 meters above the Natural Ground Elevation or 0.6 meters above any obstruction that could cause ponding, or the Flood Construction Level specified in an Engineer's report prepared pursuant to Section 734(2) of the Municipal Act, whichever is highest, for those areas within a Special Policy Area as delineated in Schedule 'B' - 'Hospital Creek Alluvial Fan Hazard Map'.

b) Floodplain Setbacks:

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

- i) 30 meters from the Natural Boundary of Columbia River and Kicking Horse River;
- ii) 15 meters from the Natural Boundary of Hospital Creek and Edelweiss Creek;
- iii) 7.5 meters from the Natural Boundary of a lake, marsh, or pond;
- iv) 7.5 meters from any Standard Dyke right-of-way, or structure for flood protection or seepage control.

5. APPLICATION OF FLOODPLAIN SPECIFICATIONS

- a) Pursuant to Section 969(5) of the Municipal Act, after a bylaw has specified Flood Construction Levels and Floodplain Setbacks:
- "i) 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 that 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."
- b) Structural support or compacted landfill 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 4(a). The structural support and/or landfill shall be protected against scour and erosion from flood flows, wave action, ice and other debris.
- c) The Building Inspector may require that a British Columbia Land Surveyor's certificate be required to verify compliance with the Flood Construction Levels and Floodplain Setbacks specified in Sections 3(a) and (b). The cost of verification shall be assumed by the land owner.

6. GENERAL EXEMPTIONS

Pursuant to Section 969(6) of the Municipal Act, the Minister of Environment, Lands and Parks may exempt or relax types of developments from the requirements of Section 969, subject to conditions he may impose. The general exemptions and relaxations which have been approved by the Minister are provided for information purposes on Schedule 'C' of this bylaw.

7. SITE-SPECIFIC EXEMPTIONS

An application by a property owner to the Minister of Environment, Lands and Parks for a site-specific exemption or relaxation shall be completed upon a form provided by the Town of Golden which is attached as Schedule 'B' and submitted in accordance with the instructions on the application.

8. This Bylaw may be cited for all purposes as "Floodplain Management Bylaw Number 963, 1995."
9. This Bylaw shall take effect upon its adoption by the Council of the Town of Golden.

READ A FIRST TIME, this 25th day of September, 1995.

READ A SECOND TIME, this 25th day of September, 1995.

READ A THIRD TIME, this 16th day of October, 1995.

Approved under the provisions of Section 969 of the Municipal Act on this 10 day of June, 1996.

L O Riordan
MINISTER OF ENVIRONMENT, LANDS
AND PARKS

ADOPTED, this 24th day of June, 1996.

[Signature]
MAYOR

[Signature]
CLERK

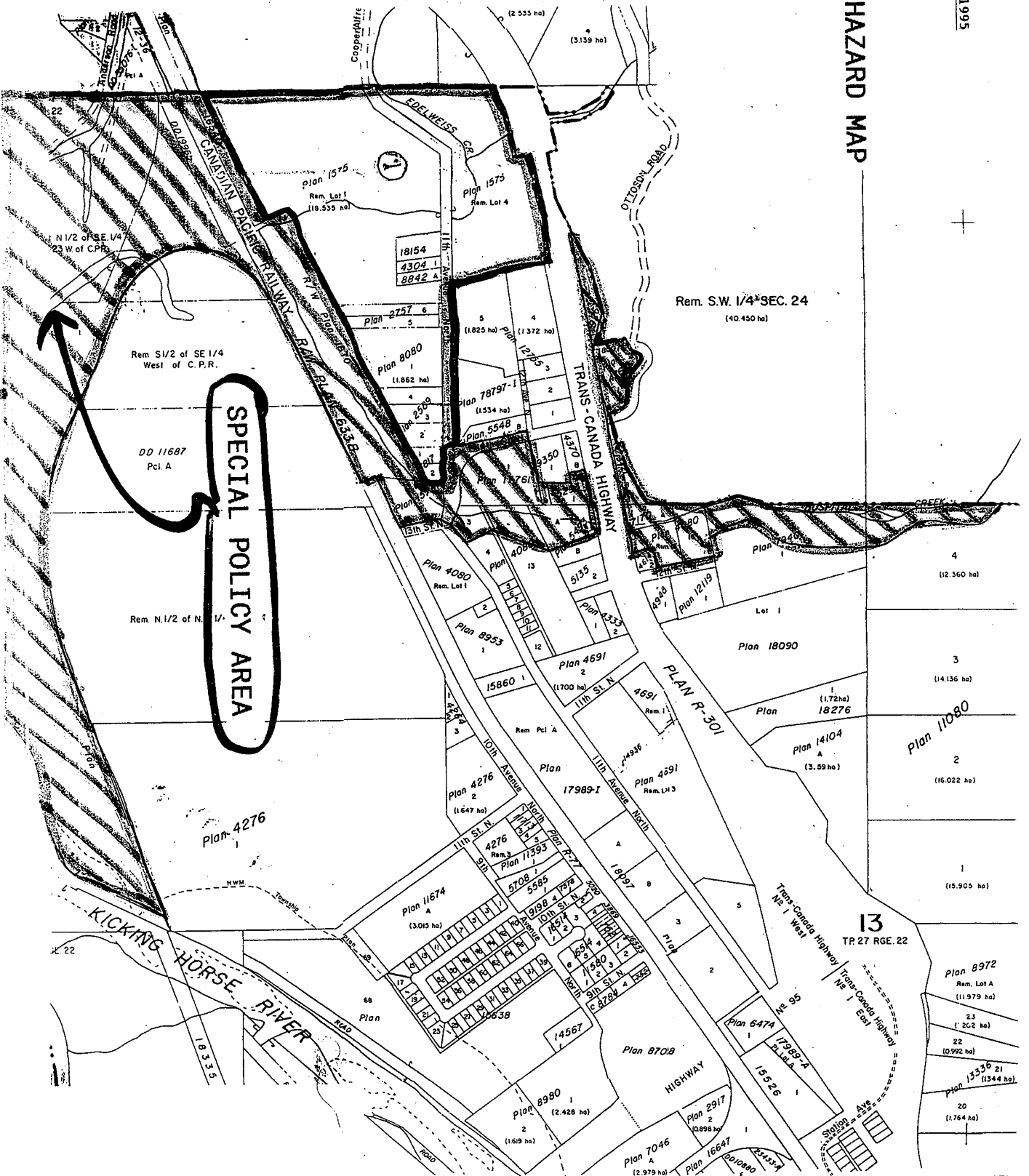
Certified to be a true and correct copy
of Bylaw 963, cited as "Floodplain
Management Bylaw Number 963, 1995."

Dated this 19th day of October, 1995.

Betty Briggs, Deputy Clerk
CLERK

CHEDULE 'B'

HOSPITAL CREEK ALLUVIAL FAN HAZARD MAP



FLOODPLAIN MANAGEMENT BYLAW NUMBER 963, 1995

SCHEDULE 'C'

Floodplain Management Provisions
General Exemptions

1. The following types of development are exempt from the requirement of Section 969(5)(a) of the Municipal Act, as it pertains to the Flood Construction Levels specified in Section 3(a) of this bylaw:
 - i) A renovation of an existing building or structure that does not involve an addition thereto;
 - ii) An addition to a building or structure, at the original non-conforming floor elevation, that would increase the size of the building or structure by less than 25 percent of the ground floor area (excluding carports or garages) existing at the date of adoption of this bylaw, provided that the degree of nonconformity regarding setback is not increased;
 - iii) That portion of a building or structure to be used as a carport, garage or entrance foyer;
 - iv) Farm buildings other than dwelling units and closed-sided livestock housing;
 - v) Hot water tanks and furnaces behind Standard Dykes;
 - vi) Closed-sided livestock housing behind Standard Dykes;
 - vii) Heavy Industry behind Standard Dykes;
 - viii) On-loading and off-loading facilities associated with water-oriented industry and portable sawmills.

2. The following types of development are exempt from the requirement of Section 969(5) of the Municipal Act, as it pertains to the Flood Construction Levels specified in Section 3(a) of this bylaw, subject to the following conditions:
 - i) Farm Dwelling Units: Farm dwelling units on parcel sizes 8.1 hectares, or greater, located within the Agricultural Land Reserve, shall be located with the underside of a wooden floor system or the top of the Pad of any Habitable Area (or in the case of a manufactured home, the top of Pad or the ground surface on which it is located) no lower than 1.0 meters 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 3(a) of this bylaw, whichever is the lesser.
 - ii) Closed-sided Livestock Housing: Closed-sided livestock housing not behind Standard Dykes shall be located with the underside of the wooden floor system or the top of the Pad (or in the case of a manufactured home, the top of the Pad or the ground surface on which it is located) no lower than 1.0 meters 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 3(a) of this bylaw, whichever is the lesser.

- iii) Industrial Uses: Industrial uses, other than main electrical switchgear, shall be located with the underside of a wooden floor system or the top of the Pad (or in the case of a manufactured home, the top of the Pad or the ground surface on which is is located) no lower than the Flood Construction Levels specified in Section 3(a) of this bylaw, minus Freeboard. Main electrical switchgear shall be no lower than the Flood Construction Level.

As approved by the Minister of Environment, Lands and Parks,

this 10 day of June, 1996.

MOE