

**CONSOLIDATED VERSION
THE CORPORATION OF THE CITY OF COURTENAY**

BYLAW NO. 1743

Whereas the City of Courtenay, where it is considered that flooding may occur on land,
2097 may enact a floodplain bylaw pursuant to Section 910 of the Municipal Act, RSBC 1996.

And Whereas, the City of Courtenay considers the adoption of a floodplain management bylaw as a way of reducing the risk of injury, loss of life, and damage to buildings and structures due to flooding;

And Whereas, the Minister of Environment has designated the Floodplain for the Courtenay, Puntledge, and Tsolum Rivers within the municipal boundaries of the Corporation of the City of Courtenay,

Now Therefore, the Council of the Corporation of the City of Courtenay in open meeting assembled, enacts as follows:

Part 1 Definitions

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

Building Inspector means the Chief Building Inspector and his deputies as employed by the City of Courtenay;

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 a 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 Part 3 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;

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 of 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.

A graphic illustration of terms used in this bylaw for reference purposes only is shown on Schedule A, attached hereto and forming part of this bylaw.

Part 2 Administration

2.1 Application

This bylaw shall be applicable to all land, buildings and structures within the corporate limits of the Corporation of the City of Courtenay.

2.2 Other Legislation

Nothing contained in this bylaw shall relieve any person from the responsibility to ascertain whether their proposed development complies with all applicable enactments.

2.3 General Prohibitions

No person shall construct any building or structure contrary to the provisions of this bylaw.

2.4 Inspection

The Building Inspector may enter, at all reasonable times, upon any premises subject to the regulations of this bylaw to ascertain whether such regulations are being obeyed. The Building Inspector may not enter any occupied dwelling unit without having obtained the consent of the occupier or, where such consent has been refused or cannot be obtained, without having given the occupier at least 24 hours' notice.

2.5 Violation

Any person who violates any of the provisions of this bylaw, or who suffers or permits any act or thing to be done in contravention of this bylaw, or who neglects to do or refrains from doing any act or thing which is required to be done by any of the provisions of this Bylaw, shall be deemed to have violated the provisions of this Bylaw.

2.6 Penalty

Any person who violates the provisions of this Bylaw is liable on summary conviction to a penalty not exceeding Two Thousand (\$2,000.00) Dollars or imprisonment for a period not exceeding thirty (30) days.

Each day during which such violation is continued shall be deemed to constitute a new and separate offence.

2.7 Authority of the Building Inspector

The Building Inspector is hereby authorized to:

- a) administer this Bylaw;
- b) keep records of all documents connected to the administration of this Bylaw, and such documents shall be available for public viewing upon request;
- c) take such action, or direct such action at the expense of the applicant, as he may deem necessary in order to establish whether any method or type of construction or materials used in construction of any building, conforms with the provisions of all relevant legislation;
- d) order the correction or cessation of any construction which is proposed, being done, or has been done in contravention of this Bylaw;
- e) require that a British Columbia Land Surveyor's certificate be provided to verify compliance with the Flood Construction Levels and Floodplain Setbacks specified in Part 4(a) and (b). The cost of verification shall be assumed by the land owner.

2.8 Severability

If any provision of this Bylaw is found invalid by a court of competent jurisdiction, such decision shall not affect the validity of the remaining portions of this Bylaw.

Part 3 Floodplain Designation

The following land is designated as Floodplain:

- (a) Land Shown as Floodplain on Schedule B – "Floodplain of the Courtenay, Puntledge and Tsolum Rivers", attached hereto and forming part of this bylaw;
- (b) Land lower than the Flood Construction Levels specified in Part 4 (a);
- (c) Land within the Floodplain Setbacks specified in Part 4 (b).

Part 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 B – “Floodplain of the Courtenay, Puntledge and Tsolum River”;
 - ii. 1.5 metres above the Natural Boundary of Morrison Creek, Piercy Creek, Millard Creek, or any other watercourse;
 - iii. 1.5 metres above the Natural Boundary of the sea;
 - iv. 1.5 metres above the Natural Boundary of any lake, marsh or pond;
- 2673 v. The Flood Construction Levels shown on Schedule B – “Floodplain of the Courtenay, Puntledge and Tsolum River” shall be increased by 0.8 metres in the areas of tidal influence.

(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 metres from the Natural Boundary of Puntledge River, Tsolum River, and Courtenay River;
 - ii. 15 metres from the Natural Boundary of Morrison Creek, Piercy Creek, Millard Creek, or any other watercourse;
 - iii. 15 metres from the Natural Boundary of the sea;
 - iv. 7.5 metres from the Natural Boundary of the lake, marsh, or pond;
- (c) For the purposes of this bylaw, the division line between the sea and the Courtenay River is at 21st Street.

Part 5 Application of Floodplain Specifications

2097 (a) Pursuant Section 910 of the Municipal Act, RSBC 1996,

- 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 the Flood Construction Level specified in Part 4(a) of this bylaw,
 - 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 this bylaw or the Minister of Environment.
- (a) 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 Part 4(a). The structural support or landfill shall be protected against scour and erosion from flood flows, wave action, ice and other debris.

Part 6 Site Specific Exemptions

An Application by a property owner to the Minister of Environment, Lands and Parks for a site-specific exemption shall be completed upon a form provided by the City of Courtenay and submitted in accordance with the instructions on the application as outlined in Schedule D, attached hereto and forming part of this bylaw.

Part 7 Title and Adoption

This bylaw may be cited as “The City of Courtenay Floodplain Management Bylaw No. 1743, 1994.”

Read a first time this 7th day of February, 1994

Read a second time this 7th day of February, 1994

Read a third time this 7th day of February, 1994

2673 Approved by the Minister of Environment pursuant to Section 910 of the Municipal Act, RSBC 1996 this 10th day of March 1994

Reconsidered, finally passed and adopted this 21st day of March, 1994.

Ronald Vern Webber
Mayor

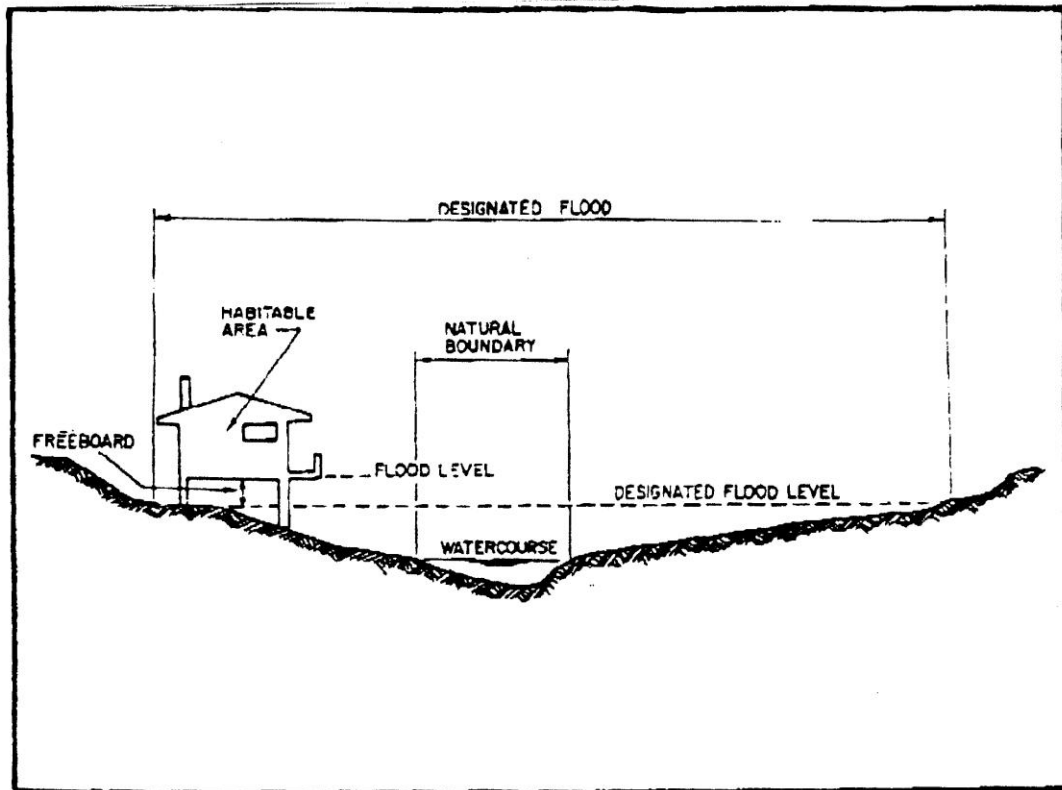
D. Pelletier
Clerk

CITY OF COURTENAY

BYLAW NO. 1743

SCHEDULE "A"

ILLUSTRATION OF TERMS



CITY OF COURTENAY

BYLAW NO. 1743

SCHEDULE "B"

FLOODPLAIN MANAGEMENT BYLAW

FLOODPLAIN OF THE

**COURTENAY, PUNTLIDGE AND
TSOLUM RIVERS**

(CONTAINS TWO MAP SHEETS)



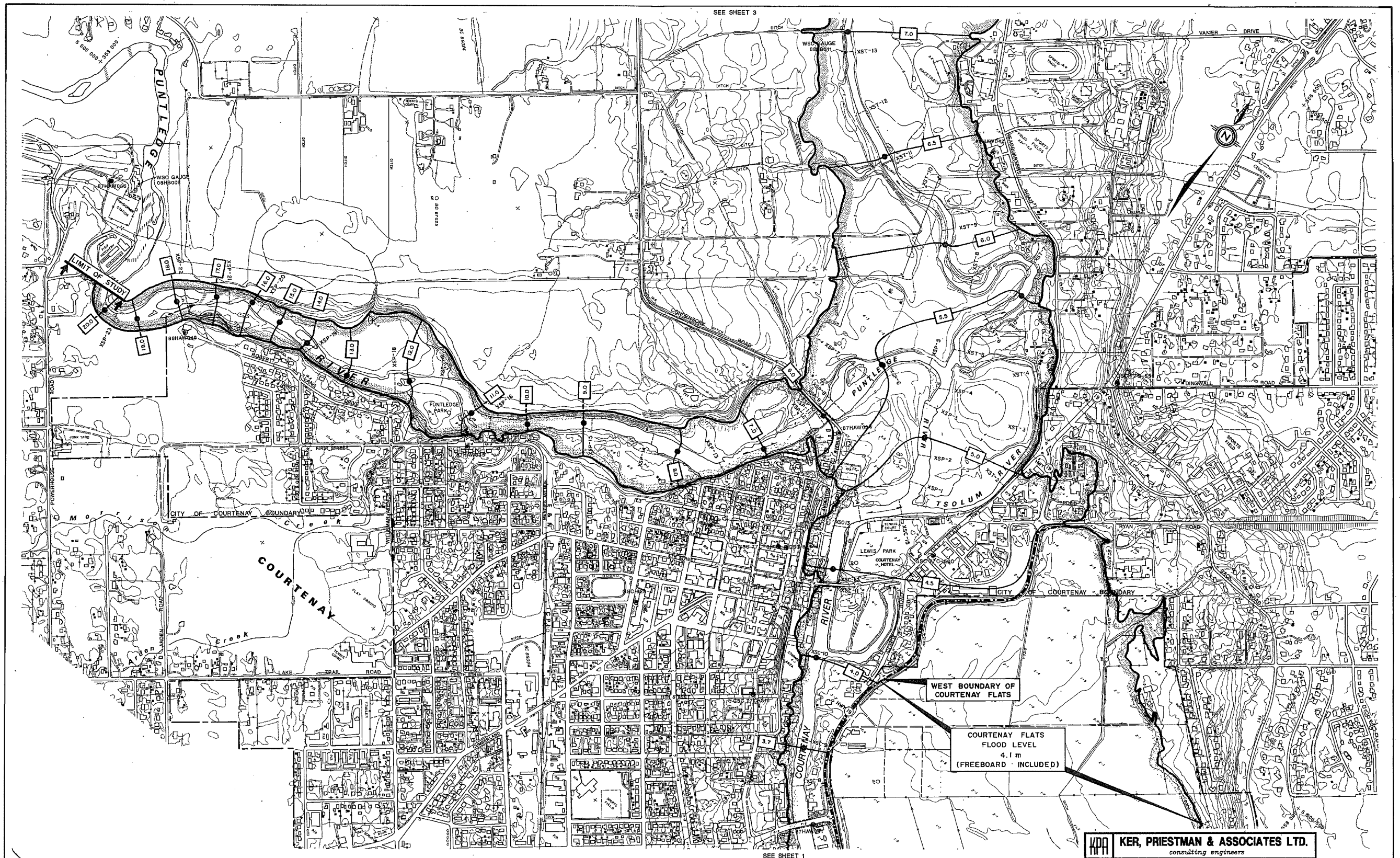
June, 1993

NOTE: THIS MAP IS A REPRESENTATION OF THE FLOODPLAIN AREA REFERRED TO IN THIS BYLAW. IT IS INTENDED FOR REFERENCE PURPOSES ONLY AND FOR THE CONVENIENCE OF THE READER OF THIS BYLAW.



NOTES	FLOODPLAIN DATA	LEGEND	KEY MAP	REVISIONS	ISSUE OF MAPPING	ENVIRONMENT CANADA / ENVIRONNEMENT CANADA	BRITISH COLUMBIA MINISTRY OF ENVIRONMENT	BRITISH COLUMBIA FLOODPLAIN MAPPING AGREEMENT	FILE NO.
<p>Produced by: Ker, Priestman & Associates Ltd. 2800 Douglas Street Victoria, B.C.</p> <p>Survey: River surveys done by Survey Section Water Resources Branch, Project 88-000-5, dated Sept. 1988.</p> <p>a) Horizontal control based on provincial surveys.</p> <p>b) Elevation control based on Canada datum.</p> <p>c) Indicated Survey Monument.</p> <p>Mapping: Base mapping done by Map Production Division, Maps and Resource Mapping Branch, Project 88-000, dated Jan. 1989.</p> <p>a) Contour interval 1 metre and greater; spot elevations shown to 0.1 metres, with accuracy to ± 0.3 metres, except where noted.</p> <p>b) Grid origin referred to U.T.M. Projection Zone 18.</p>	<p>1. The floodplain areas as designated on this map have been designated pursuant to the Canada/British Columbia Floodplain Mapping Agreement (1988) by the Minister of the Environment for Canada and the Minister of Environment for British Columbia.</p> <p>Flooding may still occur outside of the designated floodplain areas. The Ministers do not assume any liability by reason of the designation or failure to designate areas on this map.</p> <p>2. The Designated Flood has a statistical frequency of occurrence of once every 200 years.</p> <p>3. The flood levels were computed using a standard step method modelling technique, assuming open water flow conditions.</p> <p>4. The floodplain limits assume the absence of all dykes.</p> <p>5. The floodplain limits and flood levels include an allowance for freeboards.</p> <p>6. The floodplain limits are not established on the ground by legal surveys.</p> <p>7. The floodplain limits are not delineated for side streams and tributaries.</p> <p>8. The required setback of buildings from the natural boundaries of lakes and watercourses to allow for the passage of floodwaters and possible bank erosion is not shown. This information is available through local municipalities or the Ministry of Environment.</p> <p>9. MAPS AVAILABLE FROM THE MINISTRY OF CROWN LANDS, SURVEYS AND RESOURCE MAPPING BRANCH, MAPS B.C., MAP AND AIR PHOTO SALES, VICTORIA, B.C.</p>	<p>DESIGNATED FLOODPLAIN LIMIT</p> <p>FLOOD LEVEL (Freeboard included) 200 Year Frequency</p> <p>(METRES C.S.C. DATUM)</p>		<p>1. REPLACES DRAWING AS245, SHEETS 1-3, DATED JULY, 1979.</p>	<p>DATE: SEPT. 30, 1991</p> <p>DRAWN: J.J.</p> <p>CHECKED: Y.S.</p> <p>RIVER SURVEY: M.P.</p> <p>DESIGNED: B.B.</p> <p>ENGINEER: <i>[Signature]</i></p>	<p>ENVIRONMENT CANADA / ENVIRONNEMENT CANADA</p> <p>BRITISH COLUMBIA MINISTRY OF ENVIRONMENT</p>	<p>BRITISH COLUMBIA FLOODPLAIN MAPPING AGREEMENT</p>	<p>92-2800-S.1</p> <p>N.T.S. MAP NO. 92F</p> <p>SCALE 1:5 000</p> <p>NEGATIVE No.</p> <p>DRAWING No. REV. 89-13-1</p> <p>SHEET 1 of 7</p>	

89-13-1
FLOODPLAIN MAP



SEE SHEET 3

SEE SHEET 1

NOTES	FLOODPLAIN DATA	LEGEND	KEY MAP	REVISIONS	ISSUE OF MAPS	AGENCIES	FILE NO.						
<p>Produced by: Ker, Priestman & Associates Ltd. 100 Douglas Street Victoria, B.C.</p> <p>Survey: River survey done by Survey Section, Water Management Branch, Project 88-P00-5, dated Sept. 1988. a) Horizontal control based on provincial datum. b) Elevations are in metres and are referred to Geodetic Survey of Canada datum, 1985 (Indication Survey Monument).</p> <p>Mapping: Base mapping done by Map Production Division, Survey and Resource Mapping Branch, Project 88-216, dated Jan. 1989. a) Contour interval 1 metre and greater; spot elevations above 20.0 metres, with accuracy to 0.3 metres, except data originally referred to U.T.M. Projection Zone 10.</p>	<p>1. The floodplain areas as depicted on this map have been designated pursuant to the Canada/British Columbia Floodplain Mapping Agreement (1986) by the Minister of the Environment for Canada and the Minister of Environment for British Columbia.</p> <p>2. The floodplain areas are shown on this map for the purpose of providing information for future floodplain mapping.</p> <p>3. The Designated Flood has a statistical frequency of occurrence of once every 200 years.</p> <p>4. The flood levels were computed using a standard step method modelling technique, assuming open water flow conditions.</p> <p>5. The floodplain limits assume the absence of all dykes.</p> <p>6. The floodplain limits and flood levels include an allowance for freeboard.</p> <p>7. The floodplain limits are not established on the ground by legal surveys.</p> <p>8. The floodplain limits are not delineated for side streams and tributaries.</p> <p>9. The required setback of buildings from the natural boundaries of lakes and watercourses to allow for the passage of floodwaters and possible bank erosion is not shown. This information is available either through local municipalities or the Ministry of Environment.</p> <p>10. MAPS AVAILABLE FROM THE MINISTRY OF CROWN LANDS, SURVEYS AND RESOURCE MAPPING BRANCH, MAPS B.C., MAP AND AIR PHOTO SALES, VICTORIA, B.C.</p>	<p>DESIGNATED FLOODPLAIN LIMIT</p> <p>FLOOD LEVEL (Freeboard included) 200 Year Frequency</p> <p>1:500 (METRES G.S.C. DATUM)</p>	<p>KEY MAP</p> <p>1:50 000</p>	<table border="1"> <thead> <tr> <th>NO.</th> <th>DESCRIPTION</th> <th>DATE</th> </tr> </thead> <tbody> <tr> <td>1.</td> <td>REPLACES DRAWING AS246, SHEETS 1-3, DATED JULY, 1979.</td> <td></td> </tr> </tbody> </table>	NO.	DESCRIPTION	DATE	1.	REPLACES DRAWING AS246, SHEETS 1-3, DATED JULY, 1979.		<p>ISSUE OF MAPS</p> <p>DATE: SEPT. 30, 1991</p> <p>DRAWN: J.J.</p> <p>CHECKED: Y.S.</p> <p>RIVER SURVEY: M.P.</p> <p>DESIGNED: B.B.</p> <p>ENGINEER: <i>[Signature]</i></p>	<p>ENVIRONMENT CANADA / ENVIROUNEMENT CANADA</p> <p>BRITISH COLUMBIA MINISTRY OF ENVIRONMENT / COLUMBIE-BRITANNIQUE MINISTRE DE L'ENVIRONNEMENT</p> <p>COUNCIL OF BRITISH COLUMBIA FLOODPLAIN MAPPING AGREEMENT / LE ACCORD CANADA COLUMBIE-BRITANNIQUE DE LA CARTOGRAPHIE DES PLAINES D'INONDATION</p>	<p>FILE NO. 92-2800-S-1</p> <p>N.T.S. MAP NO. 92F</p> <p>SCALE 1:5 000</p> <p>NEGATIVE No.</p> <p>DRAWING No. 89-13-2</p> <p>SHEET 2 of 7</p>
NO.	DESCRIPTION	DATE											
1.	REPLACES DRAWING AS246, SHEETS 1-3, DATED JULY, 1979.												

57-1-2
Flood Plain Map