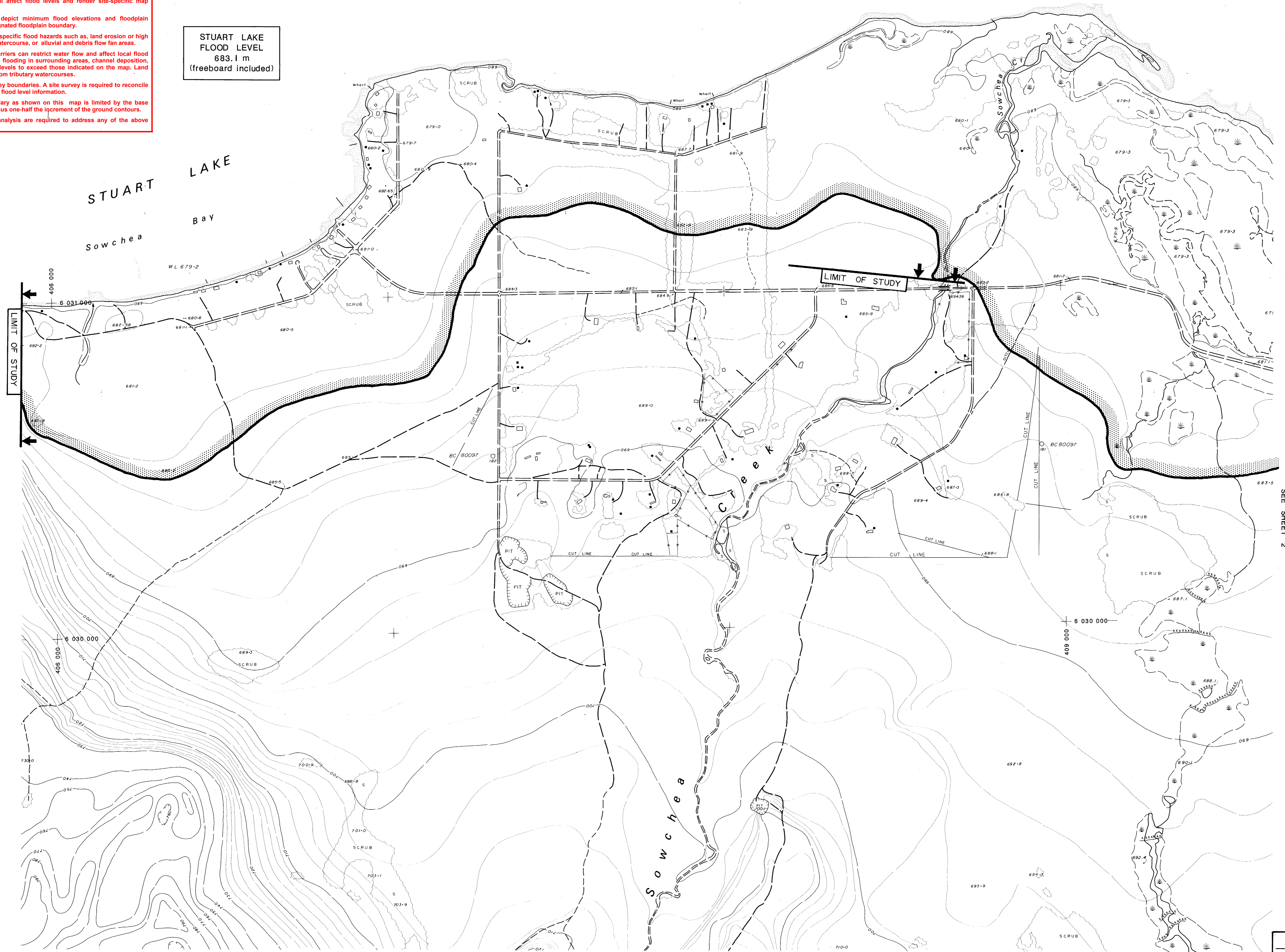


**Use and Limitations of Floodplain Maps**

- Users must note the dates of base mapping, aerial photography, river surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel (natural or constructed) will affect flood levels and render site-specific map information obsolete.
- Floodplain maps are administrative tools which depict minimum flood elevations and floodplain boundaries. Flooding may occur outside of the designated floodplain boundary.
- Floodplain maps do not provide information on site-specific flood hazards such as, land erosion or high water velocity, sudden shifts in the channel of the watercourse, or alluvial and debris flow fan areas.
- Other sources of water, roads, railways or other barriers can restrict water flow and affect local flood levels. As well, obstructions such as ice and debris, flooding in surrounding areas, channel deposition, groundwater or other phenomena can cause flood levels to exceed those indicated on the map. Land adjacent to a floodplain may be subject to flooding from tributary watercourses.
- Floodplain maps do not indicate or locate legal survey boundaries. A site survey is required to reconcile property location, ground elevations, and designated flood level information.
- The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
- Professional assistance and detailed engineering analysis are required to address any of the above considerations.

STUART LAKE  
FLOOD LEVEL  
683.1 m  
(freeboard included)



SEE SHEET 2

**NOTES**

Produced by: British Columbia Water Management Branch, Special Projects Section, Floodplain Mapping Program.

Survey: River survey done by Survey Section, Water Management Branch, Project 89 05 F029, May 1989.

Mapping: Base mapping done by Map Production Division, Surveys and Resource Mapping Branch, Project 89-1377, dated Aug. 1990.

**FLOODPLAIN DATA**

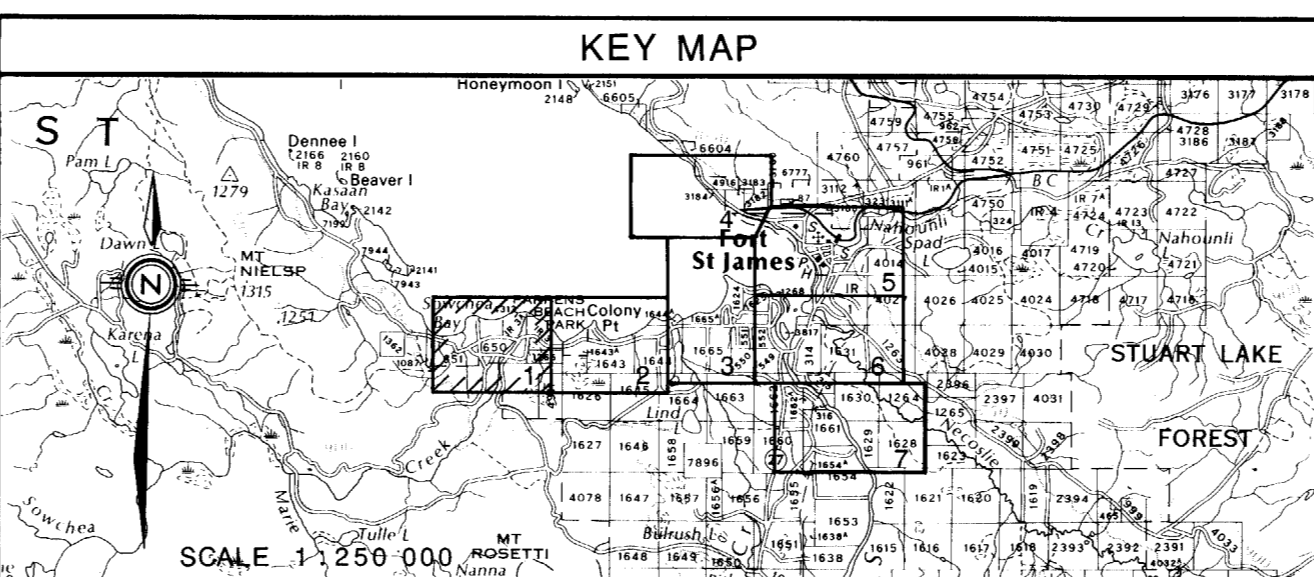
1. The floodplain areas as depicted on this map have been interm designated pursuant to the Canada/British Columbia Floodplain Mapping Agreement (1988) by the Minister of the Environment for Canada and the Minister of Environment for British Columbia.
2. Flooding may still occur outside of the interm designated floodplain areas. The Ministers do not assume any liability by reason of the interm designation or failure to interm designate areas on this map.
3. The Designated Flood has a statistical frequency of occurrence of once every 200 years.
4. The flood levels were computed using a standard step method modelling technique, assuming open water flow conditions.
5. The floodplain limits assume the absence of all dykes.
6. The floodplain limits and flood levels include an allowance for freeboard.
7. The floodplain limits are not established on the ground by legal survey.
8. The floodplain limits are not delineated for side streams and tributaries.
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.
10. MAPS AVAILABLE FROM THE MINISTRY OF CROWN LANDS, SURVEYS AND RESOURCE MAPPING BRANCH, MAPS B.O., MAP AND AIR PHOTO SALES, VICTORIA, B.C.

**LEGEND**

DESIGNATED FLOODPLAIN LIMIT

FLOOD LEVEL (Freeboard included) 200 Year Frequency

(METRES G.S.C. DATUM)



**REVISIONS**

No.	DESCRIPTION	DATE

**ISSUE OF MAPPING**

DATE: **SEPT. 30, 1991**

DRAWN: T. E.

CHECKED: \_\_\_\_\_

RIVER SURVEY: M. P.

DESIGNED: B. B.

ENGINEER: R. J. Wilford

**HAY & COMPANY CONSULTANTS INC.**

HYDROTECHNICAL ENGINEERING

ENVIRONMENT CANADA / ENVIRONNEMENT CANADA

BRITISH COLUMBIA MINISTRY OF ENVIRONMENT / COLOMBIE-BRITANNIQUE MINISTÈRE DE L'ENVIRONNEMENT

CANADA BRITISH COLUMBIA FLOODPLAIN MAPPING AGREEMENT / L'ACCORD CANADA COLOMBIE-BRITANNIQUE SUR LA CARTOGRAPHIE DES PLAINES D'INONDATION

FILE No. 09-0000-S.1

N.T.S. MAP No. 93K

SCALE 1:5 000

NEGATIVE No.

DRAWING No. 89-42-1

REV. SHEET 1 of 7

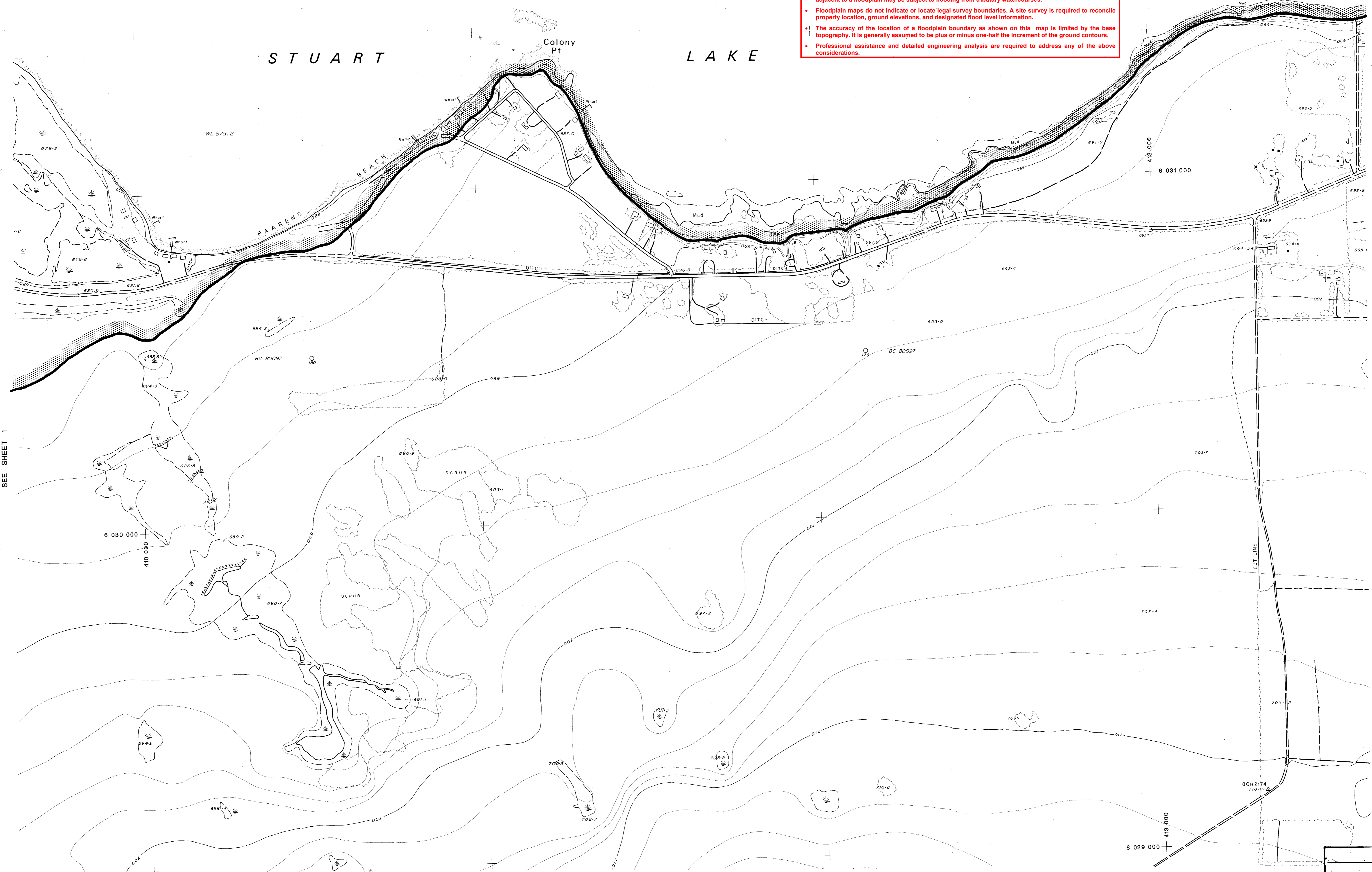
APPROVED: \_\_\_\_\_



STUART LAKE  
FLOOD LEVEL  
683.1 m.  
(freeboard included)

**Use and Limitations of Floodplain Maps**

- Users must note the dates of base mapping, aerial photography, river surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel (natural or constructed) will affect flood levels and render site-specific map information obsolete.
- Floodplain maps are administrative tools which depict minimum flood elevations and floodplain boundaries. Flooding may occur outside of the designated floodplain boundary.
- Floodplain maps do not provide information on site-specific flood hazards such as, land erosion or high water velocity, sudden shifts in the channel of the watercourse, or alluvial and debris flow fan areas.
- Other sources of water, roads, railways or other barriers can restrict water flow and affect local flood levels. As well, obstructions such as ice and debris, flooding in surrounding areas, channel deposition, groundwater or other phenomena can cause flood levels to exceed those indicated on the map. Land adjacent to a floodplain may be subject to flooding from tributary watercourses.
- Floodplain maps do not indicate or locate legal survey boundaries. A site survey is required to reconcile property location, ground elevations, and designated flood level information.
- The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
- Professional assistance and detailed engineering analysis are required to address any of the above considerations.



SEE SHEET 1

SEE SHEET 3

**NOTES**

Produced by: British Columbia Water Management Branch, Special Projects Section, Floodplain Mapping Program.

Surveys: River survey done by Surveys Section, Water Management Branch, Project 89 09 F029, May 1989.

a) Horizontal control based on provincial network.

b) Elevations are in metres and are referred to Geodetic Survey of Canada datum. (1) indicates Survey Monument.

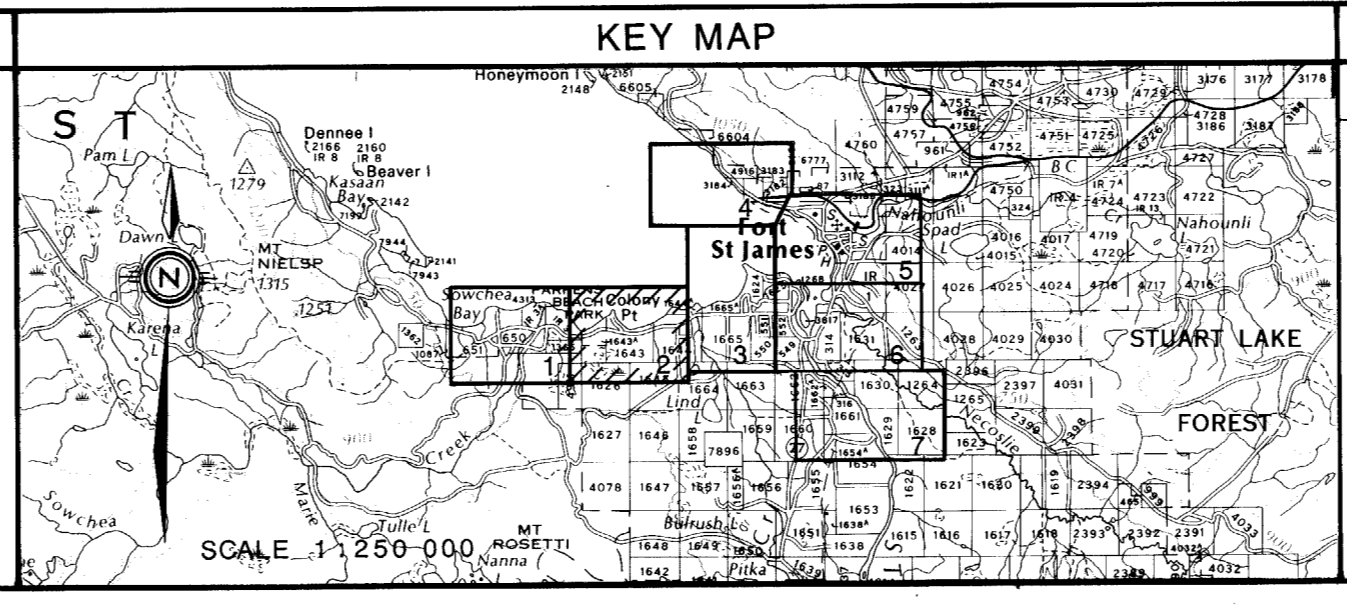
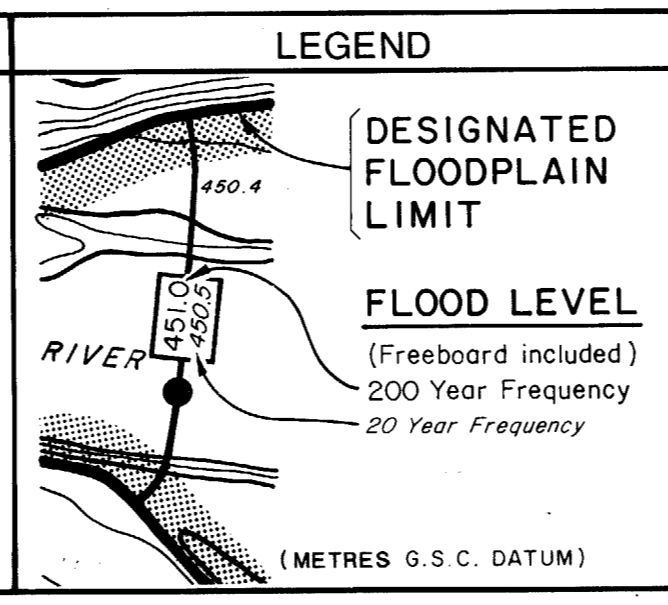
Mapping: Base mapping done by Map Production Division, Surveys and Resource Mapping Branch, Project 83-1371, dated Aug. 1980.

a) Contour interval 2 metres and greater; spot elevations shown to 0.1 metres, with accuracy to  $\pm 0.5$  metres, except where noted.

b) Grid origin referred to U.T.M. Projection Zone 10.

**FLOODPLAIN DATA**

- The floodplain areas as depicted on this map have been interim 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. Flooding may still occur outside of the interim designated floodplain areas. The Ministers do not assume any liability by reason of the interim designation or failure to interim designate areas on this map.
- The Designated Flood has a statistical frequency of occurrence of once every 200 years.
- The flood levels were computed using a standard step method modelling technique, assuming open water flow conditions.
- The floodplain limits assume the absence of all dykes.
- The floodplain limits and flood levels include an allowance for freeboard.
- The floodplain limits are not established on the ground by legal survey.
- The floodplain limits are not delineated for side streams and tributaries.
- 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.
- MAPS AVAILABLE FROM THE MINISTRY OF CROWN LANDS, SURVEYS AND RESOURCE MAPPING BRANCH, MAPS B.C., MAP AND AIR PHOTO SALES, VICTORIA, B.C.



**REVISIONS**

No.	DESCRIPTION	DATE

ISSUE OF MAPPING DATE: **SEPT. 30, 1991**

DRAWN: T. E.

CHECKED: \_\_\_\_\_

RIVER SURVEY: M. P.

DESIGNED: B. B.

ENGINEER: *R.J. Wilford*

ENVIRONMENT CANADA INLAND WATERS / BRITISH COLUMBIA MINISTRY OF ENVIRONMENT

ENVIRONMENT CANADA ENCL. INTERIEURES / COLOMBE-BRITANNIQUE MINISTÈRE DE L'ENVIRONNEMENT

CANADA BRITISH COLUMBIA FLOODPLAIN MAPPING AGREEMENT / L'ACCORD CANADA COLOMBE-BRITANNIQUE SUR LA CARTOGRAPHIE DES PLAINES D'INONDATION

**FLOODPLAIN MAPPING**  
**STUART RIVER & LAKE**  
AT FORT ST. JAMES  
(Includes Necostie River & Nahounli Creek)

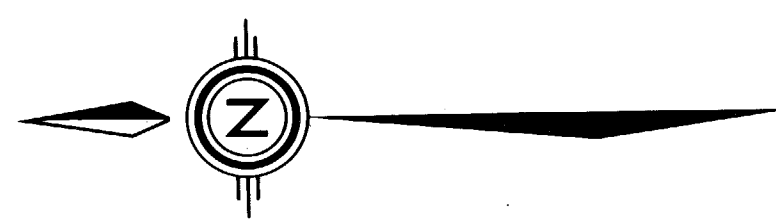
Scale in metres: 0 100 200 300 400 500m

APPROVED: *Quobal*

**HAY & COMPANY**  
CONSULTANTS INC.  
ONE WEST 7TH AVE., VANCOUVER, B.C. V6M 4P2

FILE No. 09-0000-S-1  
N.T.S. MAP No. 93K  
SCALE 1:5 000  
NEGATIVE No.  
DRAWING No. 89-42-2  
REV. SHEET 2 of 7





416 000 +  
6 034 000

414 000 +  
6 034 000



STUART LAKE  
FLOOD LEVEL  
683.1 m  
(freeboard included)

**Use and Limitations of Floodplain Maps**

- Users must note the dates of base mapping, aerial photography, river surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel (natural or constructed) will affect flood levels and render site-specific map information obsolete.
- Floodplain maps are administrative tools which depict minimum flood elevations and floodplain boundaries. Flooding may occur outside of the designated floodplain boundary.
- Floodplain maps do not provide information on site-specific flood hazards such as, land erosion or high water velocity, sudden shifts in the channel of the watercourse, or alluvial and debris flow fan areas.
- Other sources of water, roads, railways or other barriers can restrict water flow and affect local flood levels. As well, obstructions such as ice and debris, flooding in surrounding areas, channel deposition, groundwater or other phenomena can cause flood levels to exceed those indicated on the map. Land adjacent to a floodplain may be subject to flooding from tributary watercourses.
- Floodplain maps do not indicate or locate legal survey boundaries. A site survey is required to reconcile property location, ground elevations, and designated flood level information.
- The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
- Professional assistance and detailed engineering analysis are required to address any of the above considerations.

S T U A R T L A K E

SEE SHEET 2

**NOTES**

Produced by: British Columbia Water Management Branch, Special Programs Section, Floodplain Mapping Program.

Survey: River survey done by Surveys Section, Water Management Branch, Project 88 09 F029, May 1989.

Mapping: Base mapping done by Map Production Division, Surveys and Resource Mapping Branch, Project 83-1377, dated Aug 1980.

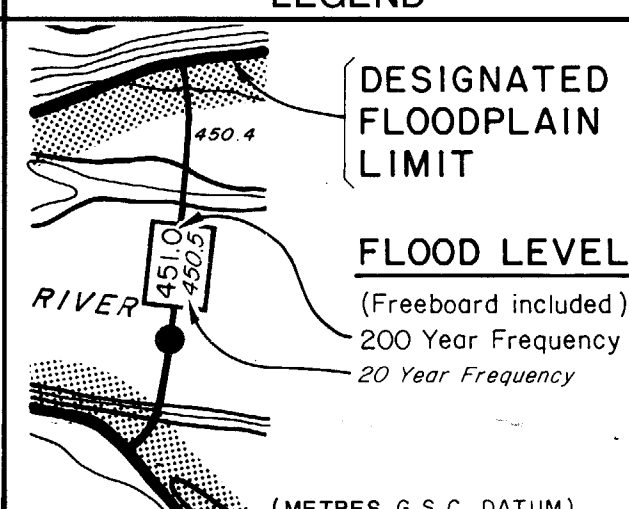
a) Contour Interval 2 metres and greater; spot elevations shown to 0.1 metres with accuracy to ± 0.5 metres, except where noted.

b) Grid origin referred to U.T.M. Projection Zone 10.

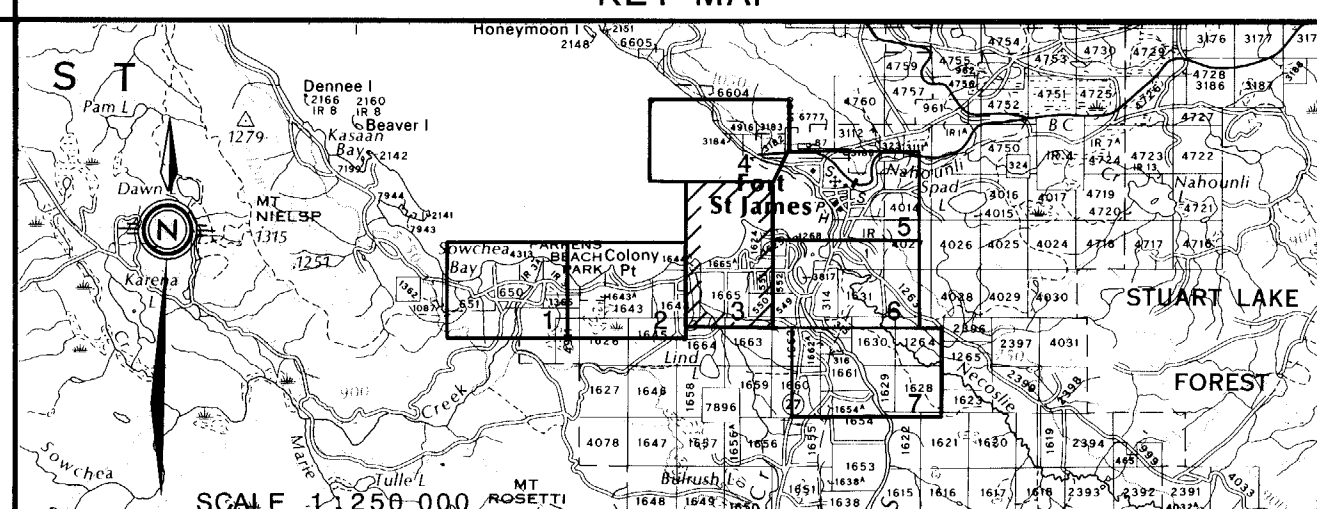
**FLOODPLAIN DATA**

1. The floodplain areas as depicted on this map have been interin 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.
2. Flooding may still occur outside of the interin designated floodplain areas. The Ministers do not assume any liability by reason of the interin designation or failure to interin designate areas on this map.
3. The designated Flood has a statistical frequency of occurrence of once every 200 years.
4. The flood levels were computed using a standard step method modelling technique, assuming open water flow conditions.
5. The floodplain limits assume the absence of all dykes.
6. The floodplain limits and flood levels include an allowance for freeboard.
7. The floodplain limits are not established on the ground by legal survey.
8. The floodplain limits are not delineated for side streams and tributaries.
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.
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.

**LEGEND**



**KEY MAP**



**REVISIONS**

No.	DESCRIPTION	DATE

**ISSUE OF MAPPING**

DATE: **SEPT. 30, 1991**

DRAWN: T. E.

CHECKED: \_\_\_\_\_

RIVER SURVEY: M. P.

DESIGNED: B. B.

ENGINEER: *R.A. Walker*

ENVIRONMENT CANADA / ENVIRONNEMENT CANADA  
BRITISH COLUMBIA MINISTRY OF ENVIRONMENT / COLOMBIE-BRITANNIQUE MINISTÈRE DE L'ENVIRONNEMENT

CANADA BRITISH COLUMBIA FLOODPLAIN MAPPING AGREEMENT / L'ACCORD CANADA COLOMBIE-BRITANNIQUE SUR LA CARTOGRAPHIE DES PLAINES D'INONDATION

**FLOODPLAIN MAPPING  
STUART RIVER & LAKE  
AT FORT ST. JAMES**  
(Includes Necoslie River & Nahounli Creek)

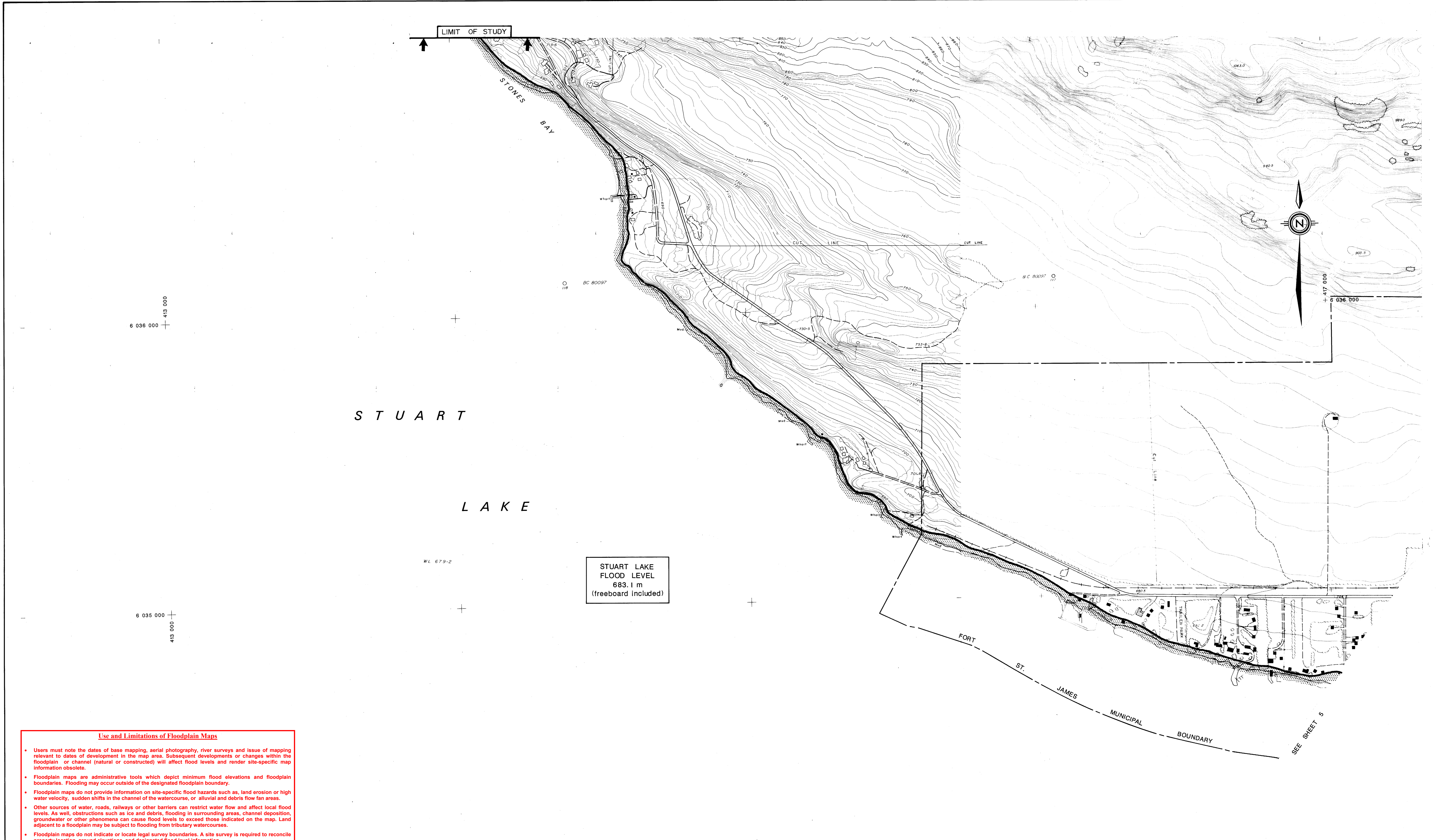
Scale in metres: 0 100 200 300 400 500m

RECOMMENDED: *[Signature]* APPROVED: *[Signature]*

FILE No.: 09-0000-S.1  
N.T.S. MAP No.: 93K  
SCALE: 1:5 000  
NEGATIVE No.:  
DRAWING No.: REV. 89-42-3  
SHEET 3 of 7

**HAY & COMPANY**  
CONSULTANTS INC.  
HYDROTECHNICAL ENGINEERING  
ONE WEST 7TH AVE., VANCOUVER, B.C. V6Y 1L5 (604) 675-6281





- Use and Limitations of Floodplain Maps**
- Users must note the dates of base mapping, aerial photography, river surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel (natural or constructed) will affect flood levels and render site-specific map information obsolete.
  - Floodplain maps are administrative tools which depict minimum flood elevations and floodplain boundaries. Flooding may occur outside of the designated floodplain boundary.
  - Floodplain maps do not provide information on site-specific flood hazards such as, land erosion or high water velocity, sudden shifts in the channel of the watercourse, or alluvial and debris flow fan areas.
  - Other sources of water, roads, railways or other barriers can restrict water flow and affect local flood levels. As well, obstructions such as ice and debris, flooding in surrounding areas, channel deposition, groundwater or other phenomena can cause flood levels to exceed those indicated on the map. Land adjacent to a floodplain may be subject to flooding from tributary watercourses.
  - Floodplain maps do not indicate or locate legal survey boundaries. A site survey is required to reconcile property location, ground elevations, and designated flood level information.
  - The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
  - Professional assistance and detailed engineering analysis are required to address any of the above considerations.

**NOTES**

Produced by: British Columbia Water Management Branch, Special Projects Section, Floodplain Mapping Program.

Survey: River survey done by Surveys Section, Water Management Branch, Project 89 09 F028, May 1989.

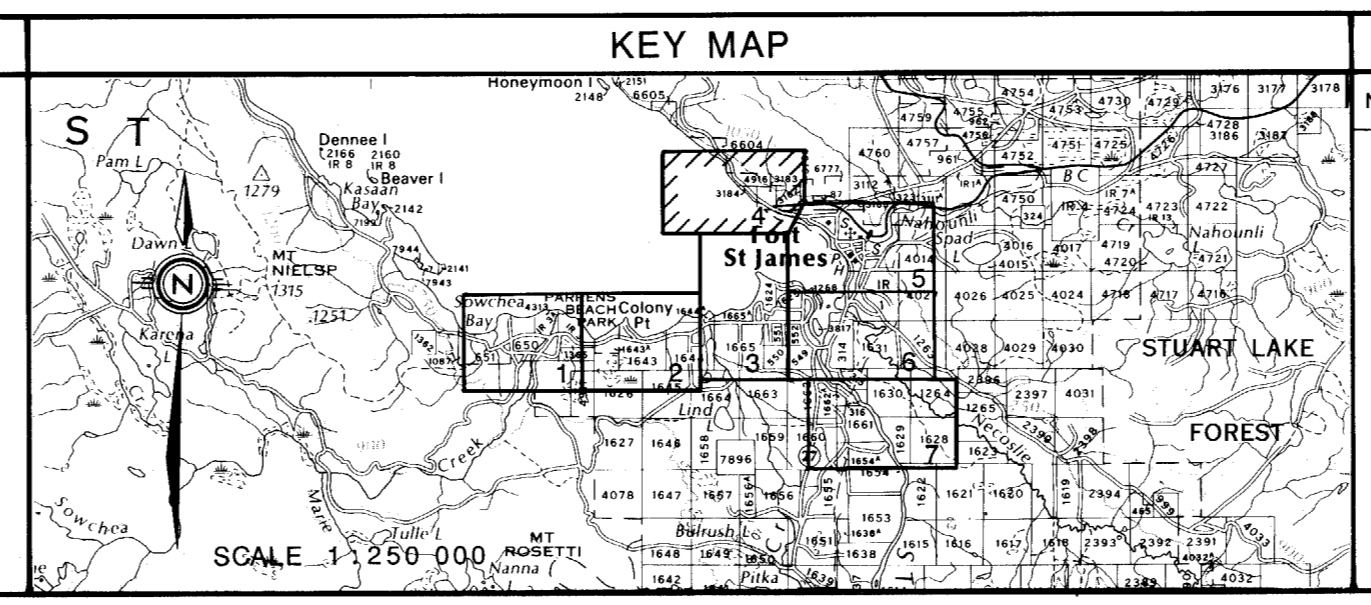
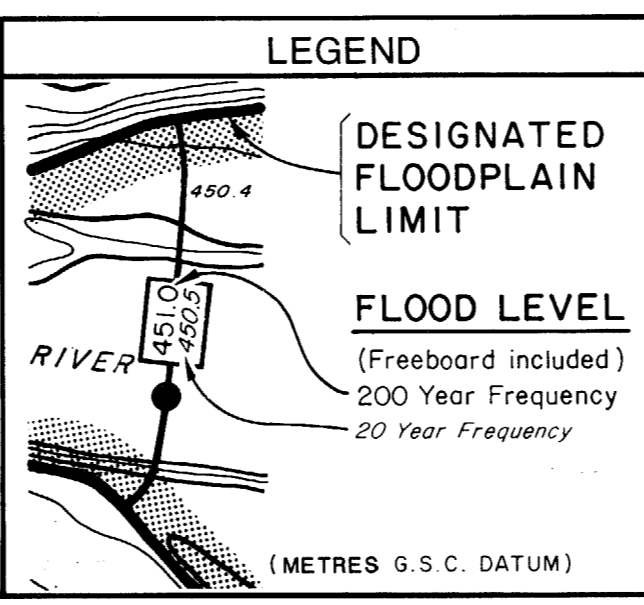
Mapping: Base mapping done by Map Production Division, Surveys and Resource Mapping Branch, Project 83-137T, dated Aug 1980.

a) Contour interval 2 metres and greater; spot elevations shown to 0.1 metres, with accuracy to ± 0.5 metres, except where noted otherwise.

b) All elevations referred to U.T.M. Projection Zone 10.

**FLOODPLAIN DATA**

1. The floodplain areas as depicted on this map have been interim 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. Flooding may still occur outside of the interim designated floodplain areas. The Ministers do not assume any liability by reason of the interim designation or failure to interim designate areas on this map.
2. The Designated Flood has a statistical frequency of occurrence of once every 200 years.
3. The flood levels were computed using a standard step method modelling technique, assuming open water flow conditions.
4. The floodplain limits assume the absence of all dykes.
5. The floodplain limits and flood levels include an allowance for freeboard.
6. The floodplain limits are not established on the ground by legal survey.
7. The floodplain limits are not delineated for side streams and tributaries.
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 either through local municipalities or the Ministry of Environment.
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.



**REVISIONS**

NO.	DESCRIPTION	DATE

**ISSUE OF MAPPING**

DATE: **SEPT. 30, 1991**

DRAWN: T. E.

CHECKED: \_\_\_\_\_

RIVER SURVEY: M. P.

DESIGNED: B. B.

ENGINEER: *E. J. Whelan*

**FLOODPLAIN MAPPING**

**STUART RIVER & LAKE**

AT FORT ST. JAMES

(Includes Necoslie River & Nahounli Creek)

Scale in metres: 0 100 200 300 400 500m

ENVIRONMENT CANADA / ENVIRONNEMENT CANADA

BRITISH COLUMBIA MINISTRY OF ENVIRONMENT / COLOMBIE-BRITANNIQUE MINISTÈRE DE L'ENVIRONNEMENT

ENVIRONMENT CANADA / ENVIRONNEMENT CANADA

BRITISH COLUMBIA MINISTRY OF ENVIRONMENT / COLOMBIE-BRITANNIQUE MINISTÈRE DE L'ENVIRONNEMENT

Scale in metres: 100m 0 100 200 300 400 500m

RECOMMENDED: *[Signature]*

APPROVED: *[Signature]*

**HAY & COMPANY**

CONSULTANTS INC.

HYDROTECHNICAL ENGINEERING

ONE WEST 7TH AVE., VANCOUVER, B.C. V6Y 1L5

FILE No. 09-0000-S.1

N.T.S. MAP No. 93K

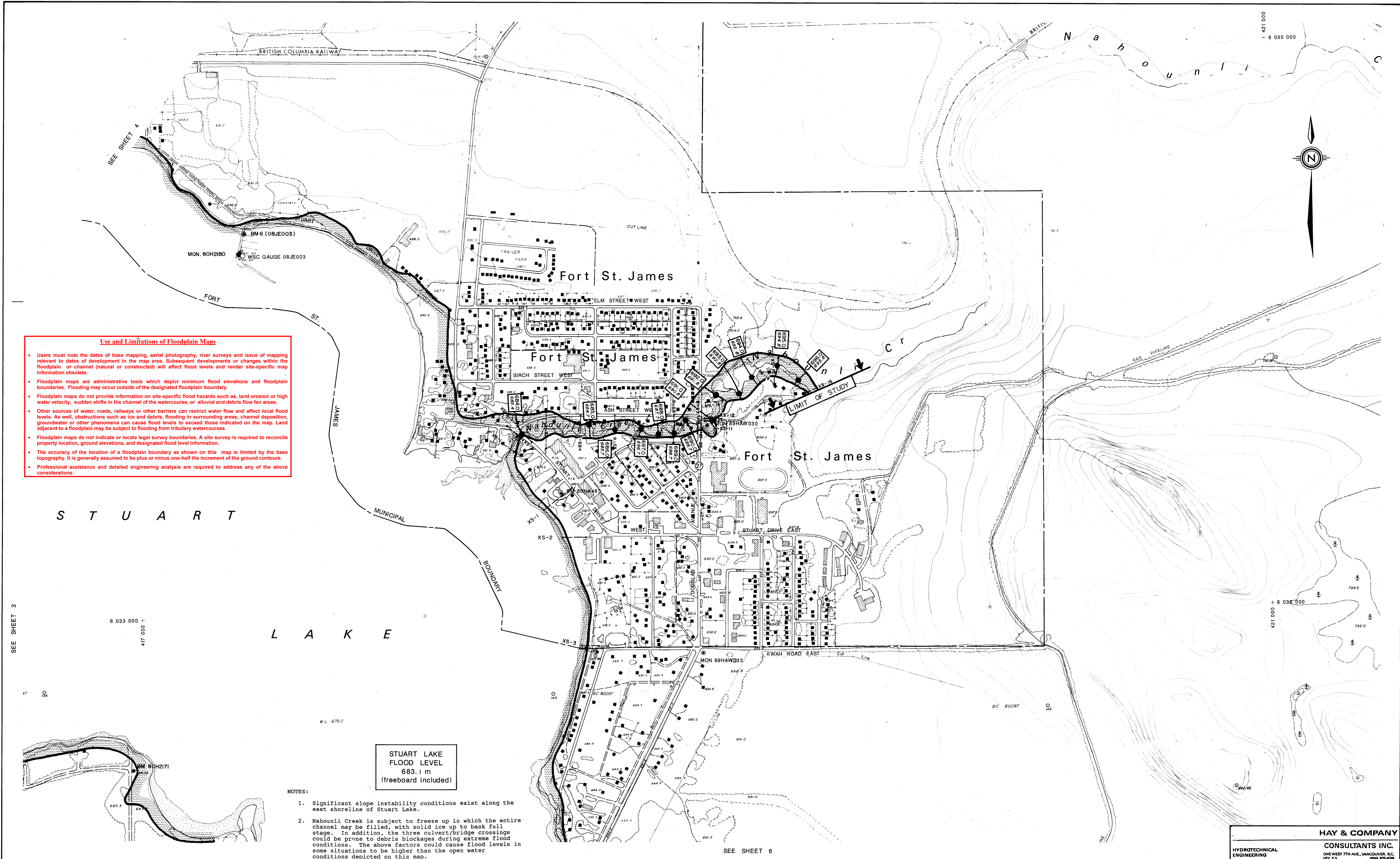
SCALE 1:5 000

NEGATIVE No. \_\_\_\_\_

DRAWING No. REV. 89-42-4

SHEET 4 of 7





**Use and Limitations of Floodplain Maps**

- Users must note the dates of base mapping, aerial photography, river surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel (natural or constructed) will affect flood levels and render site-specific map information obsolete.
- Floodplain maps are administrative tools which depict minimum flood elevations and floodplain boundaries. Flooding may occur outside of the designated floodplain boundary.
- Floodplain maps do not provide information on site-specific flood hazards such as, land erosion or high water velocity, sudden shifts in the channel of the watercourse, or alluvial and debris flow fan areas.
- Other sources of water, roads, railways or other barriers can restrict water flow and affect local flood levels. As well, obstructions such as ice and debris, flooding in surrounding areas, channel deposition, groundwater or other phenomena can cause flood levels to exceed those indicated on the map. Land adjacent to a floodplain may be subject to flooding from tributary watercourses.
- Floodplain maps do not indicate or locate legal survey boundaries. A site survey is required to reconcile property location, ground elevations, and designated flood level information.
- The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
- Professional assistance and detailed engineering analysis are required to address any of the above considerations.

STUART LAKE FLOOD LEVEL 683.1 m (freeboard included)

- NOTES:
1. Significant slope instability conditions exist along the east shoreline of Stuart Lake.
  2. Nahounli Creek is subject to freeze up in which the entire channel may be filled, with solid ice up to bank full stage. In addition, the three culvert/bridge crossings could be prone to debris blockages during extreme flood conditions. The above factors could cause flood levels in some situations to be higher than the open water conditions depicted on this map.

**NOTES**

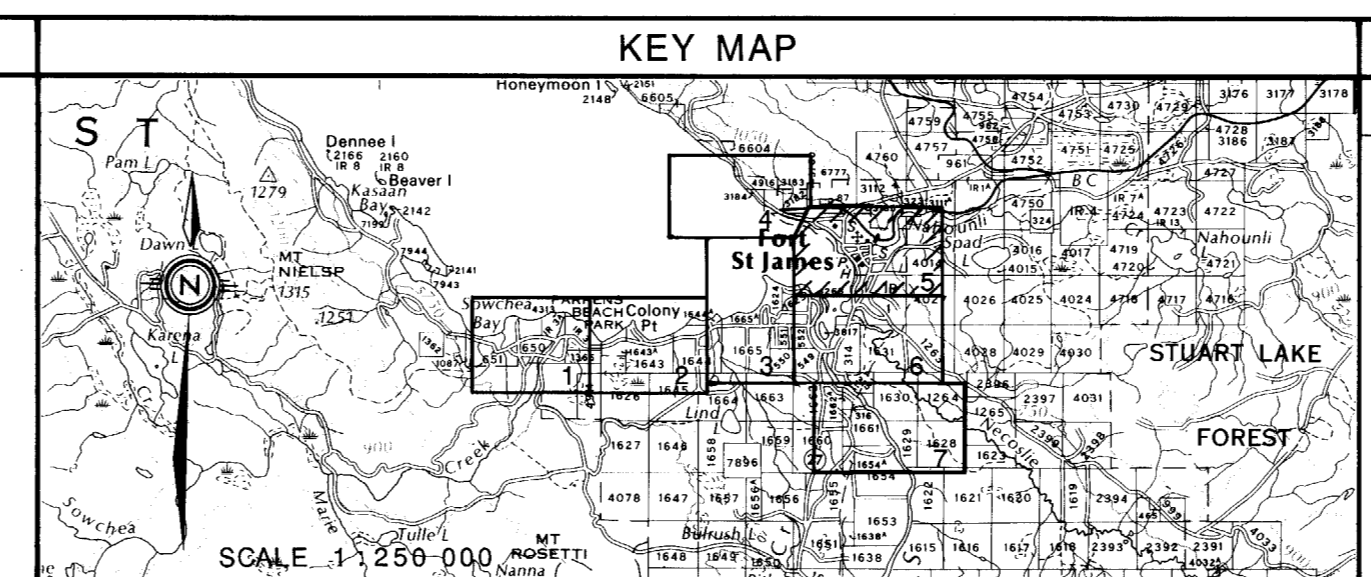
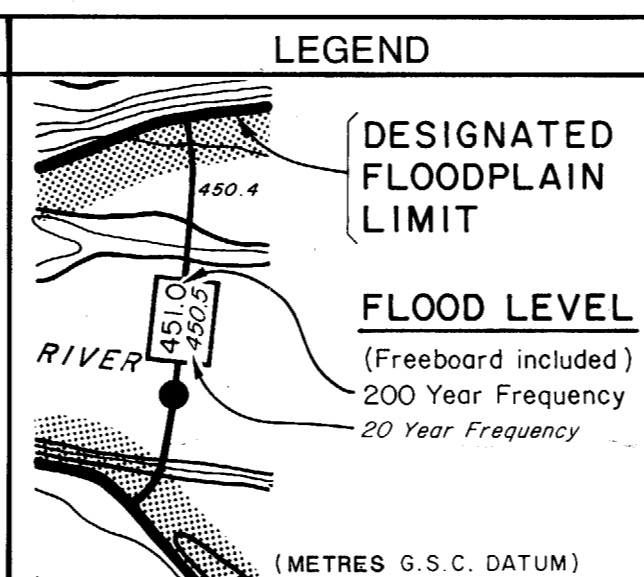
Produced by: British Columbia Water Management Branch, Special Projects Section, Floodplain Mapping Program.

Survey: River survey done by Survey Section, Water Management Branch, Project 89 09 F026, May 1989.  
 a) Horizontal control based on provincial datum.  
 b) Elevations are in metres and are referred to Geodetic Survey of Canada datum. (⊙ indicates Survey Monument)

Mapping: Base mapping done by Map Production Division, Survey and Resource Mapping Branch, Project 83-1271, dated Aug 1980.  
 a) Contour Interval 2 metres and greater; spot elevations shown to 0.1 metres, with accuracy to ± 0.5 metres, except where noted.  
 b) Grid of origin referred to U.T.M. Projection Zone 10.

**FLOODPLAIN DATA**

1. The floodplain areas as depicted on this map have been interim designated pursuant to the Canada/British Columbia Floodplain Mapping Agreement (1983) by the Minister of the Environment for Canada and the Minister of Environment for British Columbia. Flooding may still occur outside of the interim designated floodplain areas. The Ministers do not assume any liability by reason of the interim designation or failure to interim designate areas on this map.
2. The Designated Flood has a statistical frequency of occurrence of once every 200 years.
3. The flood levels were computed using a standard step method modelling technique, assuming open water flow conditions.
4. The floodplain limits assume the absence of all dikes.
5. The floodplain limits and flood levels include an allowance for freeboard.
6. The floodplain limits are not established on the ground by trial survey.
7. The floodplain limits are not delineated for side streams and tributaries.
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 either through local municipal titles or the Ministry of Environment.
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.



**REVISIONS**

No.	DESCRIPTION	DATE

**ISSUE OF MAPPING**

DATE	SEPT. 30, 1991
DRAWN	T. E.
CHECKED	
RIVER SURVEY	M. P.
DESIGNED	B. B.
ENGINEER	R. J. Walbank
RECOMMENDED	[Signature]
APPROVED	[Signature]

**HAY & COMPANY CONSULTANTS INC.**  
 HYDROTECHNICAL ENGINEERING  
 ONE WEST 7TH AVE., VANCOUVER, B.C. V6Y 1L5  
 (604) 675-6281

FILE No. 09-0000-S.1  
 N.T.S. MAP No. 93K  
 SCALE 1:5 000  
 NEGATIVE No.  

**FLOODPLAIN MAPPING**  
**STUART RIVER & LAKE**  
 AT FORT ST. JAMES  
 (Includes Necoslie River & Nahounli Creek)

100m 0 100 200 300 400 500m  
 Scale in metres

DRAWING No. 89-42-5  
 REV.  

SHEET 5 of 7

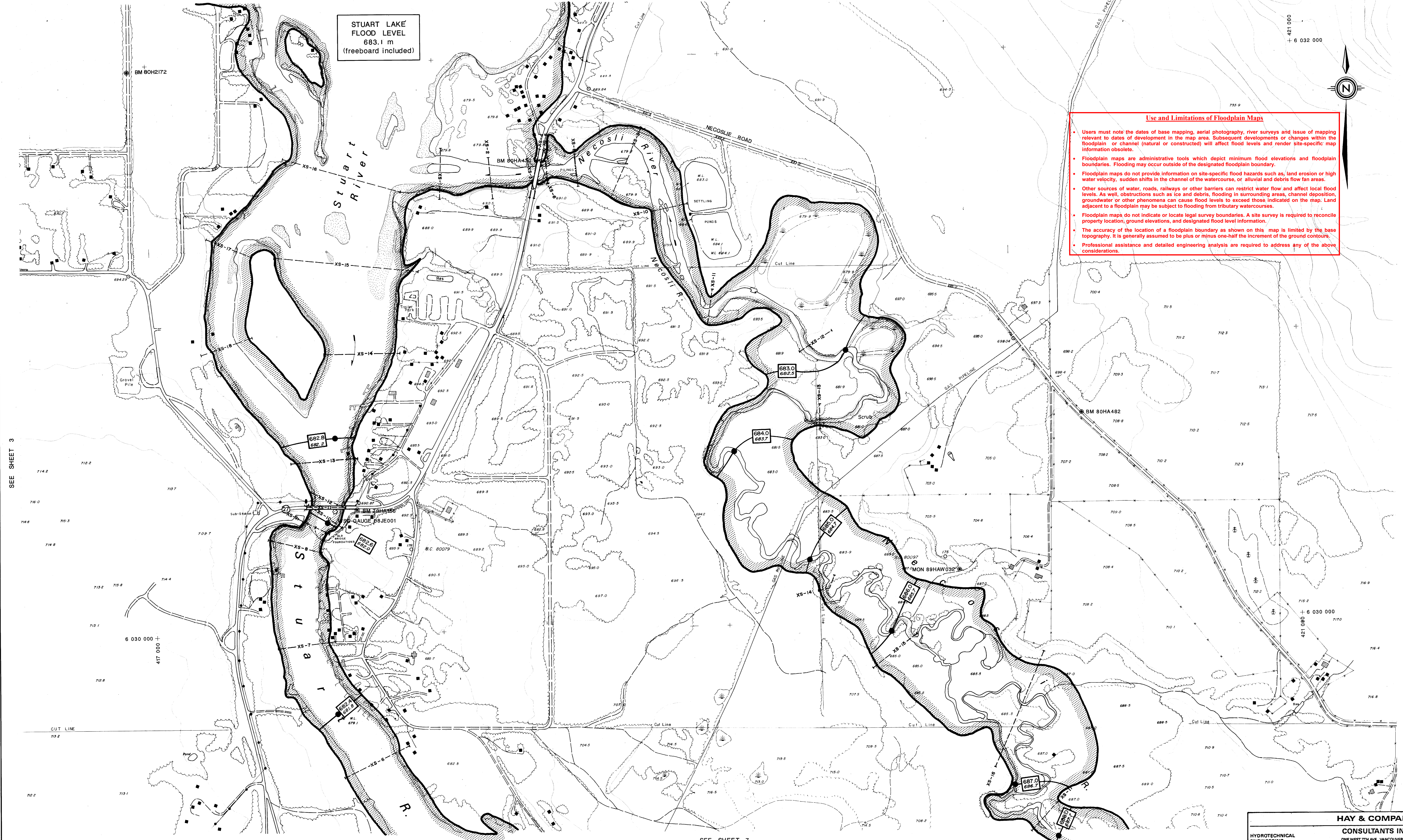


SEE SHEET 5

STUART LAKE  
FLOOD LEVEL  
683.1 m  
(freeboard included)

**Use and Limitations of Floodplain Maps**

- Users must note the dates of base mapping, aerial photography, river surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel (natural or constructed) will affect flood levels and render site-specific map information obsolete.
- Floodplain maps are administrative tools which depict minimum flood elevations and floodplain boundaries. Flooding may occur outside of the designated floodplain boundary.
- Floodplain maps do not provide information on site-specific flood hazards such as; land erosion or high water velocity, sudden shifts in the channel of the watercourse, or alluvial and debris flow fan areas.
- Other sources of water, roads, railways or other barriers can restrict water flow and affect local flood levels. As well, obstructions such as ice and debris, flooding in surrounding areas, channel deposition, groundwater or other phenomena can cause flood levels to exceed those indicated on the map. Land adjacent to a floodplain may be subject to flooding from tributary watercourses.
- Floodplain maps do not indicate or locate legal survey boundaries. A site survey is required to reconcile property locations, ground elevations, and designated flood level information.
- The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
- Professional assistance and detailed engineering analysis are required to address any of the above considerations.



SEE SHEET 3

SEE SHEET 7

**NOTES**

Produced by: British Columbia Water Management Branch, Special Projects Section, Floodplain Mapping Program.

Survey: River survey done by Surveys Section, Water Management Branch, Project 89-09 F029, May 1989. Horizontal control based on provincial network.

Elevations are in metres and are referred to geodetic survey of Canada datum. (a) indicates Survey Monument.

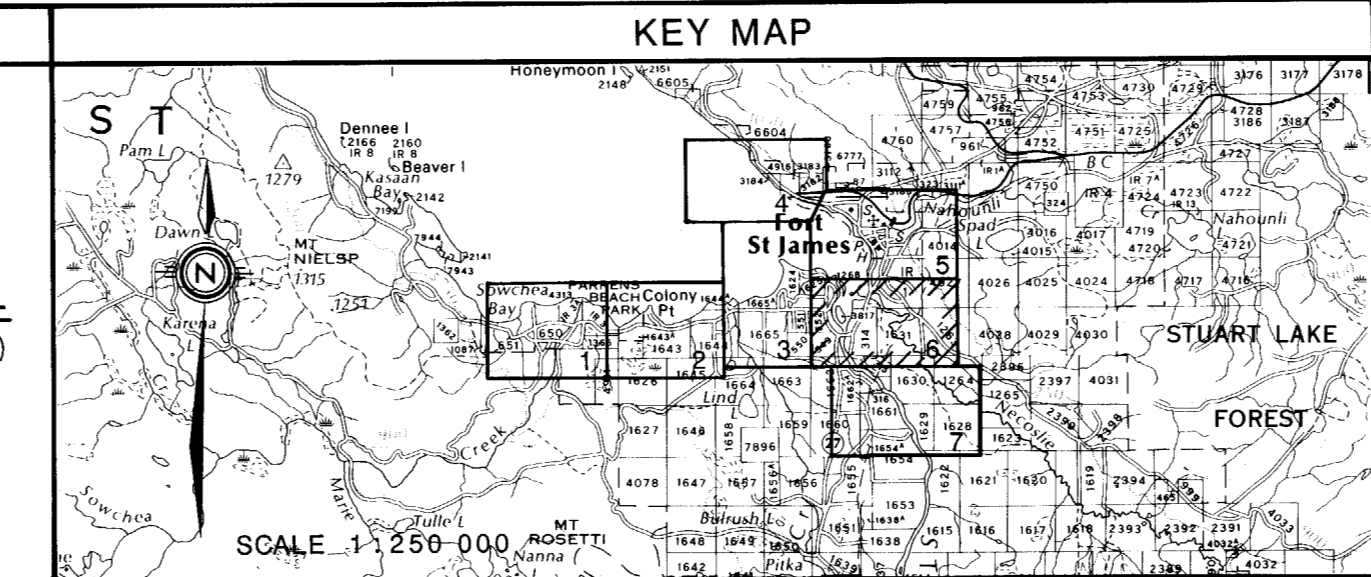
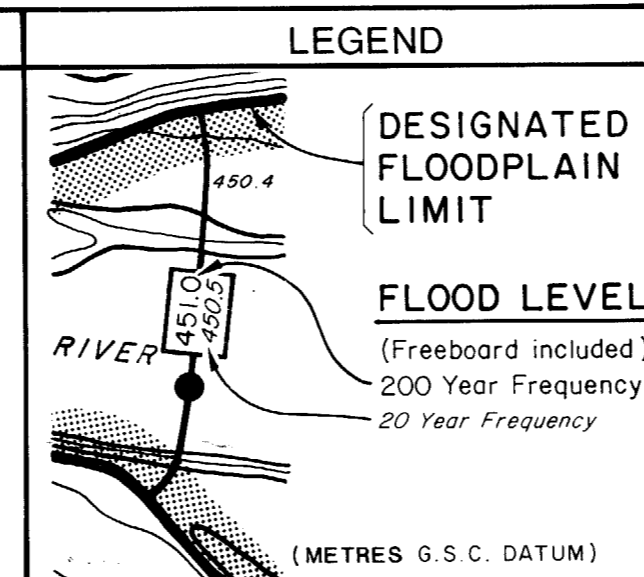
Mapping: Base mapping done by Map Production Division, Surveys and Resource Mapping Branch, Project 89-1371, dated Aug. 1980.

a) Contour interval 2 metres and greater; spot elevations shown to 0.1 metres, with accuracy to 0.5 metres, except where noted.

b) Grid origin referred to U.T.M. Projection Zone 10.

**FLOODPLAIN DATA**

1. The floodplain areas as depicted on this map have been interm designated pursuant to the Canada/British Columbia Floodplain Mapping Agreement (1987) by the Minister of the Environment for Canada and the Minister of Environment for British Columbia. Flooding may still occur outside of the interm designated floodplain areas. The Ministers do not assume any liability by reason of the interm designation or failure to interm designate areas on this map.
2. The Designated Flood has a statistical frequency of occurrence of once every 200 years.
3. The flood levels were computed using a standard step method modelling technique, assuming open water flow conditions.
4. The floodplain limits assume the absence of all dykes.
5. The floodplain limits and flood levels include an allowance for freeboards.
6. The floodplain limits are not established on the ground by legal surveys.
7. The floodplain limits are not delineated for side streams and tributaries.
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 either through local municipalities or the Ministry of Environment.
9. MAPS AVAILABLE FROM THE MINISTRY OF CROWN LANDS, SURVEYS AND RESOURCE MAPPING BRANCH, MAPS D.C., MAP AND AIR PHOTO SALES, VICTORIA, B.C.



**REVISIONS**

No.	DESCRIPTION	DATE

**ISSUE OF MAPPING**

DATE: SEPT. 30, 1991

DRAWN: T. E.

CHECKED: [Signature]

RIVER SURVEY: M. P.

DESIGNED: B. B.

ENGINEER: R. J. [Signature]

RECOMMENDED: [Signature]

APPROVED: [Signature]

**FLOODPLAIN MAPPING**

**STUART RIVER & LAKE**

AT FORT ST. JAMES

(Includes Necoslie River & Nahouli Creek)

Scale in metres

100m 0 100 200 300 400 500m

ENVIRONMENT CANADA / ENVIRONNEMENT CANADA  
BRITISH COLUMBIA MINISTRY OF ENVIRONMENT / COLOMBIE-BRITANNIQUE MINISTÈRE DE L'ENVIRONNEMENT

FILE No. 09-0000-S.1

N.T.S. MAP No. 93K

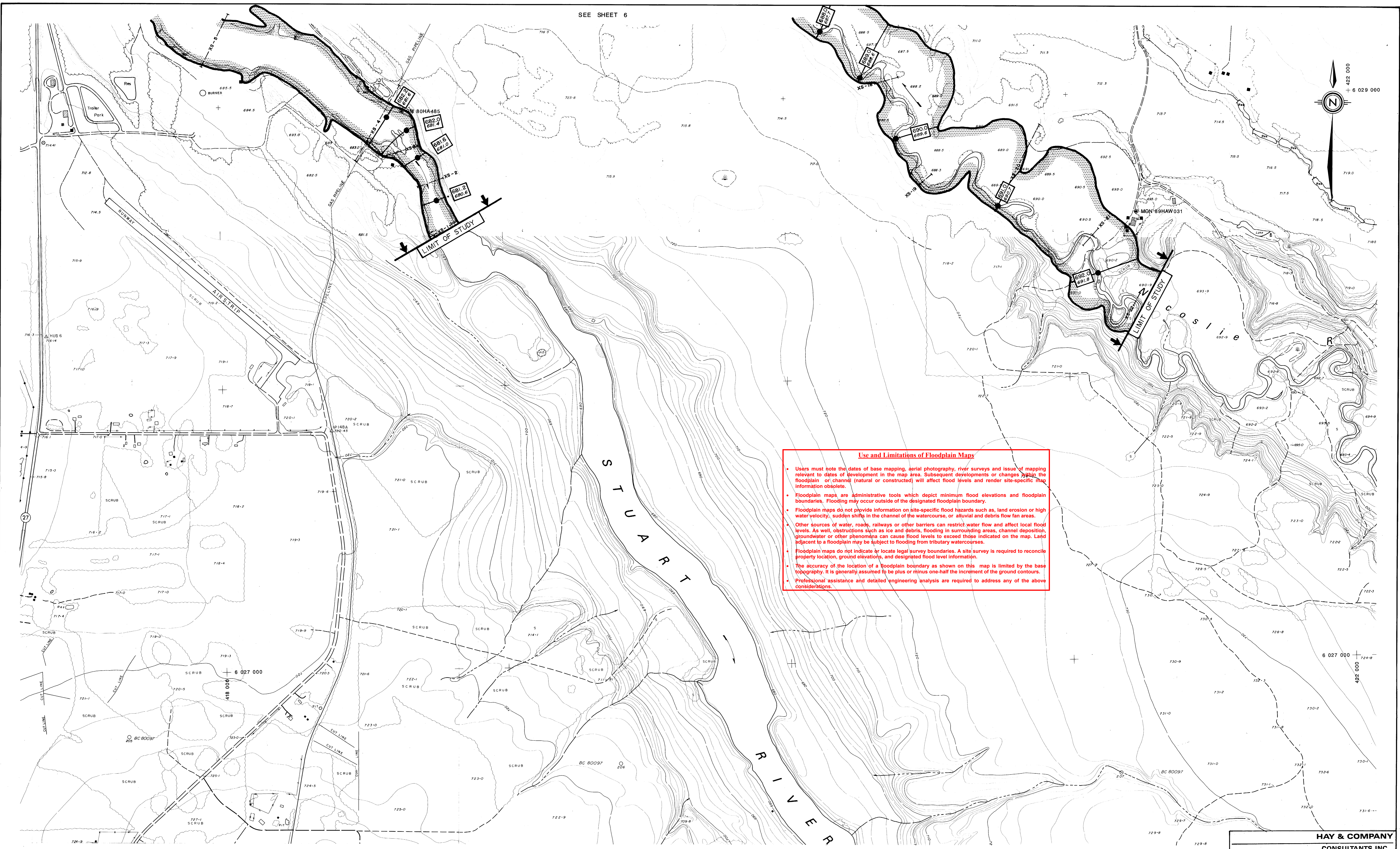
SCALE 1:5 000

NEGATIVE No.

DRAWING No. REV. 89-42-6

SHEET 6 of 7





**Use and Limitations of Floodplain Maps**

- Users must note the dates of base mapping, aerial photography, river surveys and issue of mapping relevant to dates of development in the map area. Subsequent developments or changes within the floodplain or channel (natural or constructed) will affect flood levels and render site-specific map information obsolete.
- Floodplain maps are administrative tools which depict minimum flood elevations and floodplain boundaries. Flooding may occur outside of the designated floodplain boundary.
- Floodplain maps do not provide information on site-specific flood hazards such as, land erosion or high water velocity, sudden shifts in the channel of the watercourse, or alluvial and debris flow fan areas.
- Other sources of water, roads, railways or other barriers can restrict water flow and affect local flood levels. As well, obstructions such as ice and debris, flooding in surrounding areas, channel deposition, groundwater or other phenomena can cause flood levels to exceed those indicated on the map. Land adjacent to a floodplain may be subject to flooding from tributary watercourses.
- Floodplain maps do not indicate or locate legal survey boundaries. A site survey is required to reconcile property location, ground elevations, and designated flood level information.
- The accuracy of the location of a floodplain boundary as shown on this map is limited by the base topography. It is generally assumed to be plus or minus one-half the increment of the ground contours.
- Professional assistance and detailed engineering analysis are required to address any of the above considerations.

**NOTES**

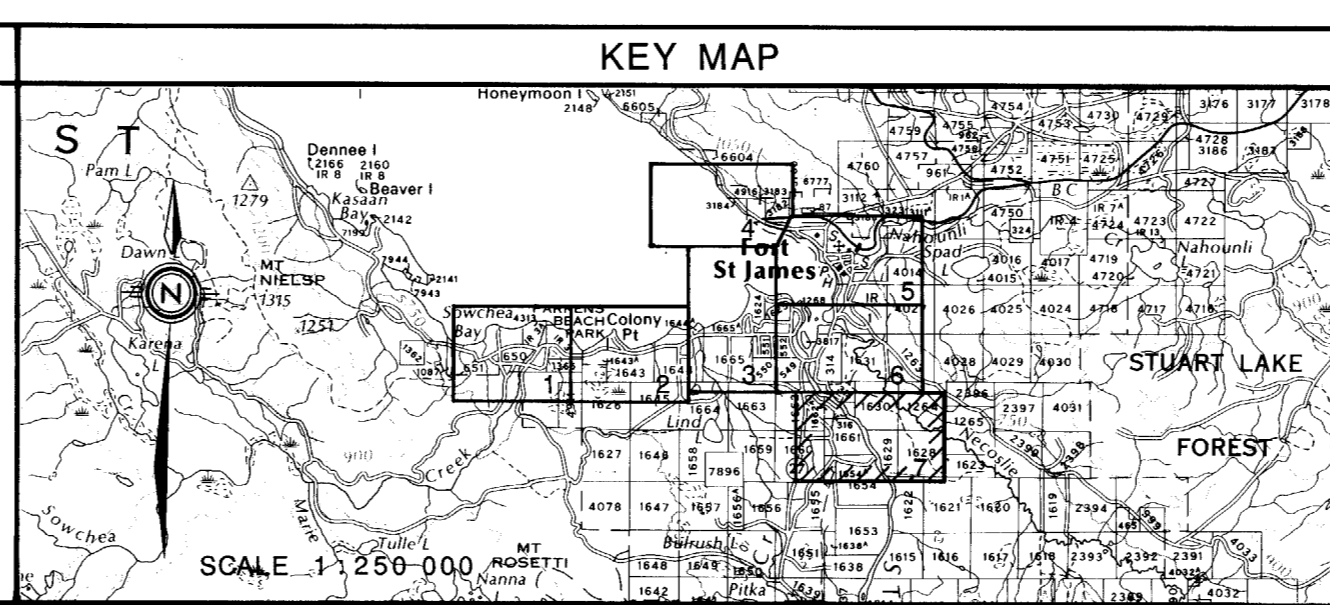
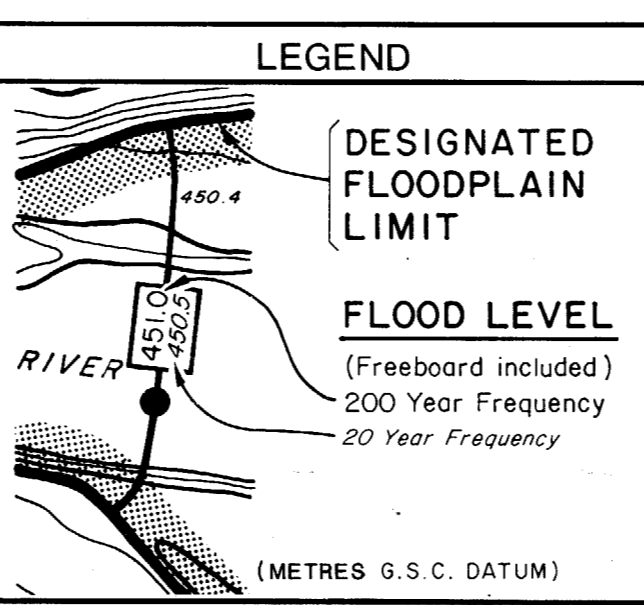
Produced by: British Columbia Water Management Branch, Special Projects Section, Floodplain Mapping Program.

Survey: River survey done by Surveys Section, Water Management Branch, Project B9 09 F029, May 1989

Mapping: Base mapping done by Map Production Division, Surveys and Resource Mapping Branch, Project B3-1371, dated Aug 1980

**FLOODPLAIN DATA**

1. The floodplain areas as depicted on this map have been interm 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.
2. The designated flood has a statistical frequency of occurrence of once every 200 years.
3. The flood levels were computed using a standard step method modelling technique, assuming open water flow conditions.
4. The floodplain limits assume the absence of all dykes.
5. The floodplain limits and flood levels include an allowance for freeboard.
6. The floodplain limits are not delineated on the ground by legal survey.
7. The floodplain limits are not delineated for side streams and tributaries.
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 either through local municipal titles or the Ministry of Environment.
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.



**REVISIONS**

No.	DESCRIPTION	DATE

**ISSUE OF MAPPING**

DATE: SEPT. 30, 1991

DRAWN: T. E.

CHECKED: \_\_\_\_\_

RIVER SURVEY: M. P.

DESIGNED: B. B.

ENGINEER: R.J. Wellwood

RECOMMENDED: \_\_\_\_\_

APPROVED: \_\_\_\_\_

**HAY & COMPANY CONSULTANTS INC.**

HYDROTECHNICAL ENGINEERING

ENVIRONMENT CANADA / MINISTRE DE L'ENVIRONNEMENT

BRITISH COLUMBIA MINISTRY OF ENVIRONMENT / COLOMBIE-BRITANNIQUE MINISTRE DE L'ENVIRONNEMENT

CANADA BRITISH COLUMBIA FLOODPLAIN MAPPING AGREEMENT / L'ACCORD CANADA COLOMBIE-BRITANNIQUE SUR LA CARTOGRAPHIE DES PLAINES D'INONDATION

FILE No. 09-0000-S.1

N.T.S. MAP No. 93K

SCALE 1:5 000

NEGATIVE No. \_\_\_\_\_

DRAWING No. REV. 89-42-7

SHEET 7 of 7