

Title: **Dawson City and Klondike Valley Flood Mapping Study
Composite Flood Hazard Map - Yukon River
5% Annual Exceedance Probability (AEP)**

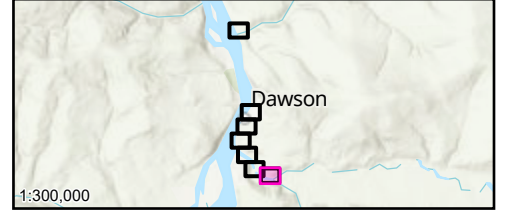
Client/Project:
Government of Yukon
Department of Environment
Water Resources Branch

Project: 123222713

Project Location: Dawson, Yukon
Prepared by MANDERSON on 2025-07-29
Requested by JMUIRHEAD on 2024-03-30
Review by JMUIRHEAD on 2025-07-29

- WSC Stations
- ▲ Ground Elevations of Interest
- ◆ HPW Drainage Culverts
- 57
517.2 Cross-Section Number WSE (m) Along Cross-Section
- Bridge
- Surveyed Culvert Location
- Highway
- Local Road
- Major Contour (5m)
- Minor Contour (1m)
- Surveyed Cross-Sections Used in Hydraulic Model
- Tr'ondëk Hwëch'in Settlement Land
- Inundation Under Modelled Open Water Runs
- Inundation Under Modelled Breakup Ice Jam Runs
- Approximate 50% AEP Open Water Flood Inundation
- Composite Open Water and Ice Jam Inundation Extent
- Ice Coverage in Breakup Jam Scenarios

Map Publication Date: 7/29/2025
0 25 50 75 100 125 m
(At original document size of 11x 17) 1:2,500



Notes
 1. Coordinate System: NAD 1983 CSRS UTM Zone 7N Vertical Datum: CGVD2013, Geoid: CGG2013a
 2. Data Sources: GeoYukon, Canada Lands Survey (CLS) CCM 982, CANVEC
 3. Flood hazard extents shown on these maps are based on LIDAR collected in July, 2019 and topographical and bathymetric data that was collected in June and September 2024.
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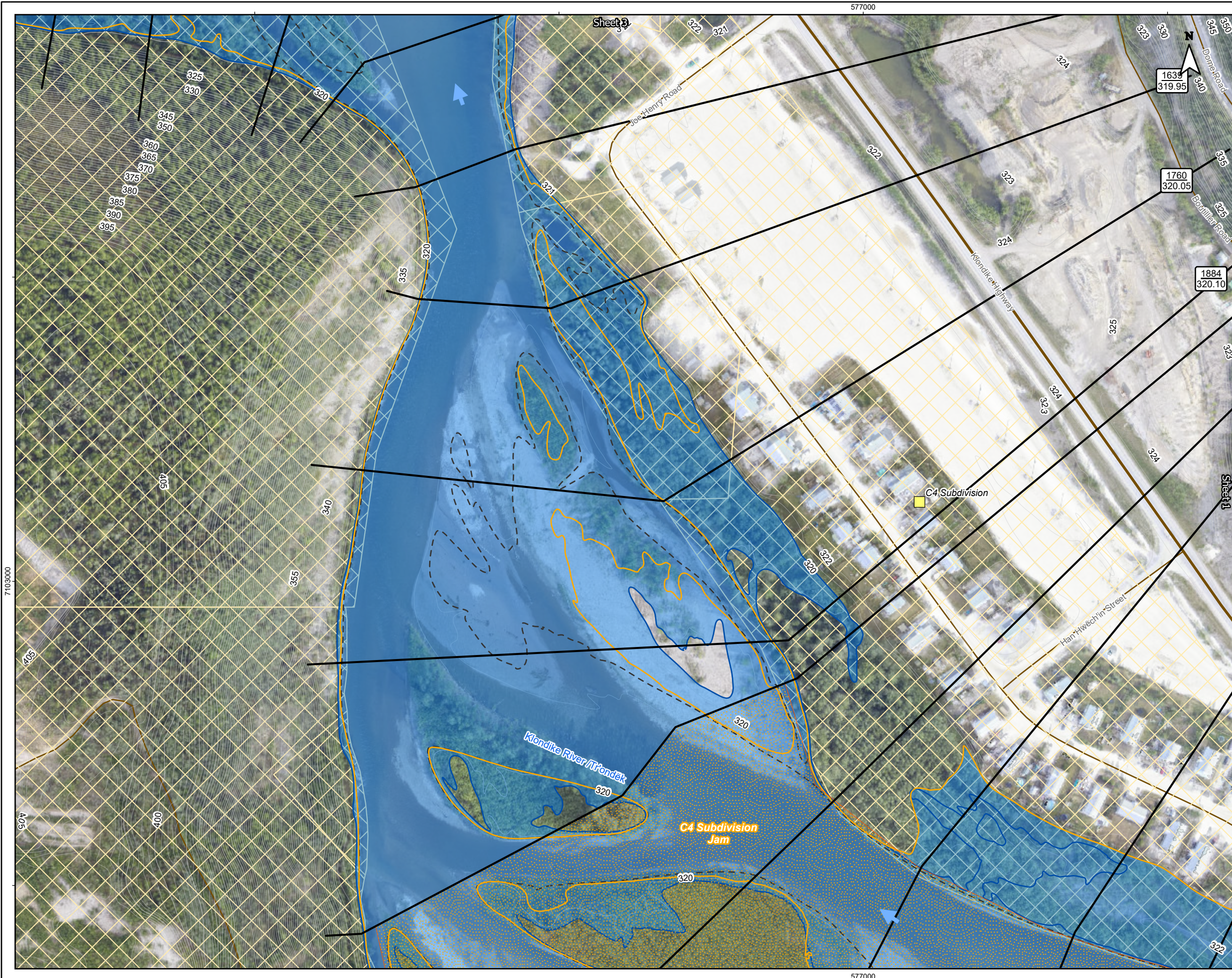


Figure No. **DC-5-02** Sheet 02 of 07

Title: **Dawson City and Klondike Valley Flood Mapping Study
Composite Flood Hazard Map - Yukon River
5% Annual Exceedance Probability (AEP)**

Client/Project:
Government of Yukon
Department of Environment
Water Resources Branch

Project: 123222713

Project Location: Dawson, Yukon

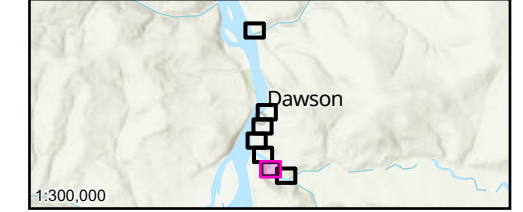
Prepared by MANDERSON on 2025-07-29
Requested by JMUIRHEAD on 2024-03-30
Review by JMUIRHEAD on 2025-07-29

- Community Developments
- Tr'ondék Hwéché In Settlement Land
- Inundation Under Modelled Open Water Runs
- Inundation Under Modelled Breakup Ice Jam Runs
- Approximate 50% AEP Open Water Flood Inundation
- Composite Open Water and Ice Jam Inundation Extent
- Ice Coverage in Breakup Jam Scenarios
- Ground Elevations of Interest
- Cross-Section Number WSE (m) Along Cross-Section
- Highway
- Local Road
- Major Contour (5m)
- Minor Contour (1m)
- Surveyed Cross-Sections Used in Hydraulic Model

Map Publication Date: 7/29/2025

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(At original document size of 11x 17) 1:2,500



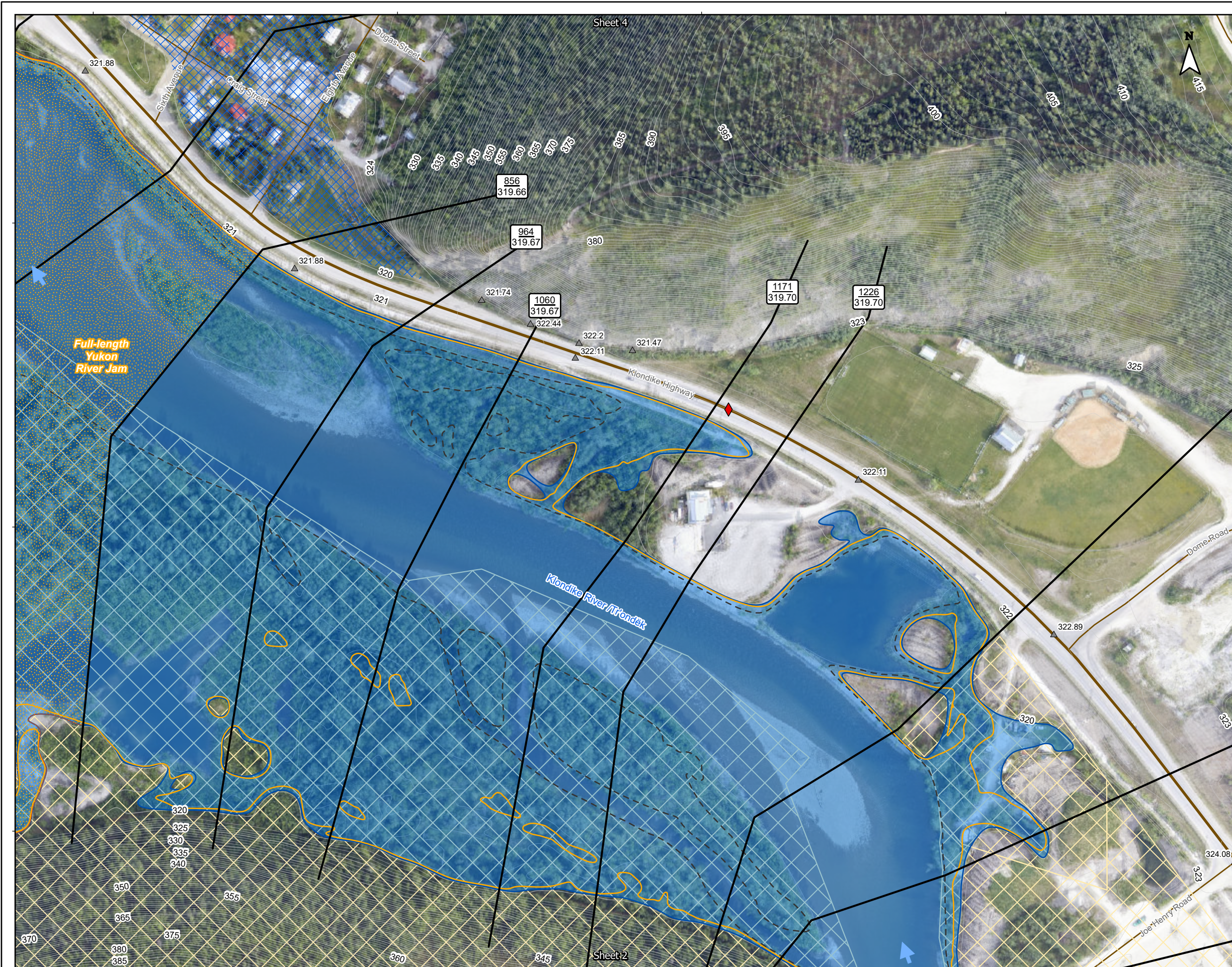
Notes

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Composite Flood Hazard Map - Yukon River
5% Annual Exceedance Probability (AEP)**

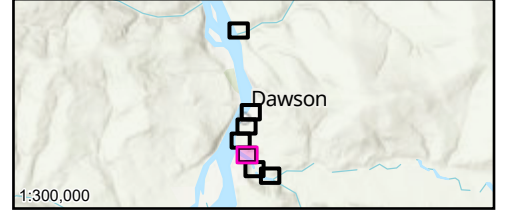
Client/Project:
Government of Yukon
Department of Environment
Water Resources Branch

Project: 123222713

Project Location: Dawson, Yukon
Prepared by MANDERSON on 2025-07-29
Requested by JMUIRHEAD on 2024-03-30
Review by JMUIRHEAD on 2025-07-29

- ▲ Ground Elevations of Interest
- ◆ HPW Drainage Culverts
- 57 / 517.2 Cross-Section Number WSE (m) Along Cross-Section
- Highway
- Local Road
- Major Contour (5m)
- Minor Contour (1m)
- Surveyed Cross-Sections Used in Hydraulic Model
- Tr'ondëk Hwëch'in Settlement Land
- Inundation Under Modelled Open Water Runs
- Inundation Under Modelled Breakup Ice Jam Runs
- Approximate 50% AEP Open Water Flood Inundation
- Composite Open Water and Ice Jam Inundation Extent
- Area Protected by Dike
- Ice Coverage in Breakup Ice Jam Scenarios

Map Publication Date: 7/29/2025
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Notes
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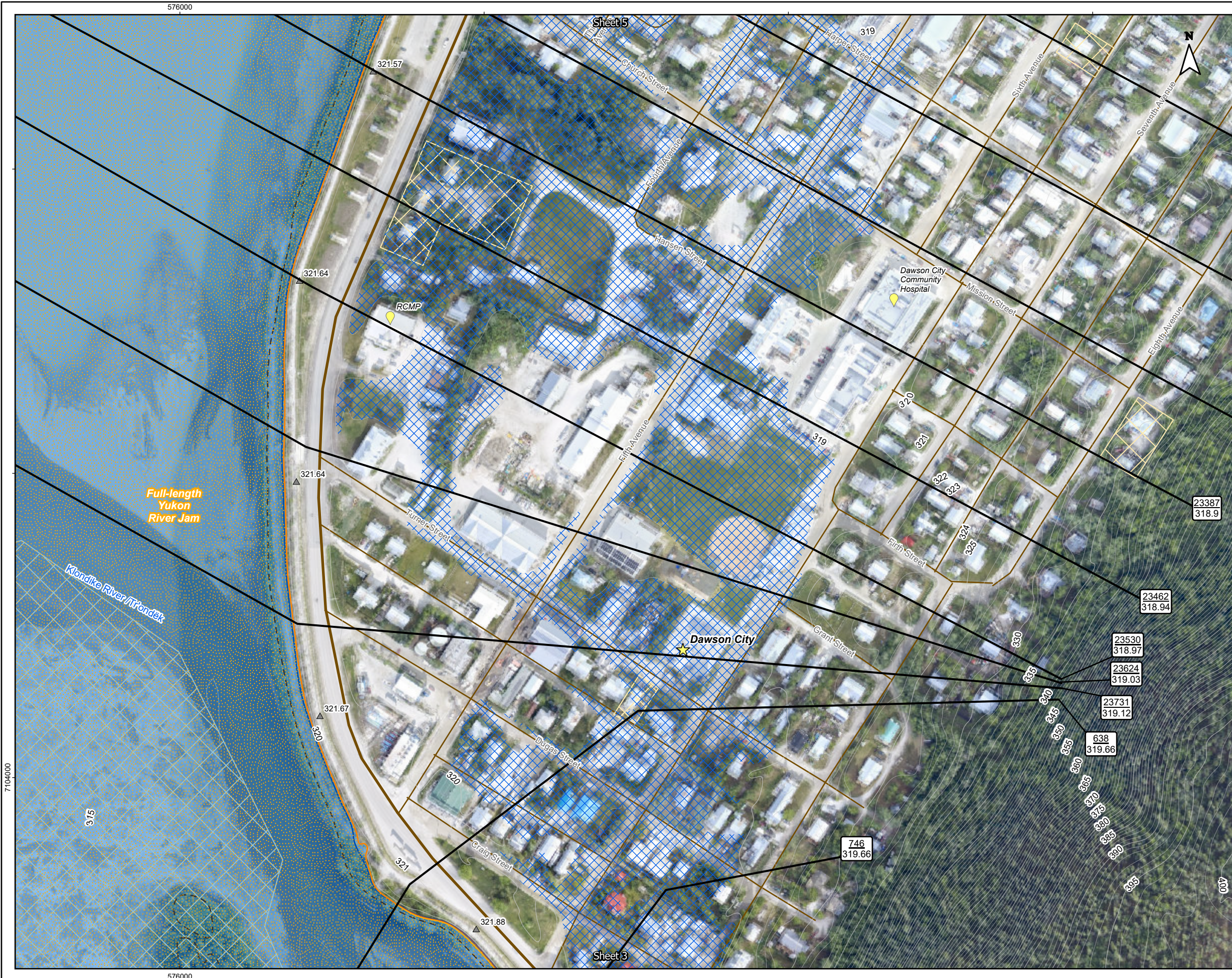


Figure No. **DC-5-04** Sheet 04 of 07

Title: **Dawson City and Klondike Valley Flood Mapping Study
Composite Flood Hazard Map - Yukon River
5% Annual Exceedance Probability (AEP)**

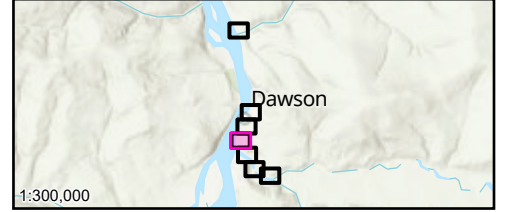
Client/Project:
Government of Yukon
Department of Environment
Water Resources Branch

Project: 123222713

Project Location: Dawson, Yukon
Prepared by MANDERSON on 2025-07-29
Requested by JMUIRHEAD on 2024-03-30
Review by JMUIRHEAD on 2025-07-29

- ★ Municipality
- Point of Interest
- ▲ Ground Elevations of Interest
- 57 / 517.2 Cross-Section Number WSE (m) Along Cross-Section
- Highway
- Local Road
- Major Contour (5m)
- Minor Contour (1m)
- Surveyed Cross-Sections Used in Hydraulic Model
- Tr'ondëk Hwëch'in Settlement Land
- Inundation Under Modelled Open Water Runs
- Inundation Under Modelled Breakup Ice Jam Runs
- Approximate 50% AEP Open Water Flood Inundation
- Composite Open Water and Ice Jam Inundation Extent
- Area Protected by Dike
- Ice Coverage in Breakup Jam Scenarios

Map Publication Date: 7/29/2025
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(At original document size of 11x 17) 1:2,500



Notes
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Figure No. **DC-5-05** Sheet 05 of 07

Title: **Dawson City and Klondike Valley Flood Mapping Study
Composite Flood Hazard Map - Yukon River
5% Annual Exceedance Probability (AEP)**

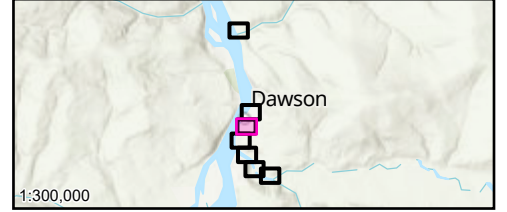
Client/Project:
Government of Yukon
Department of Environment
Water Resources Branch

Project: 123222713

Project Location: Dawson, Yukon
Prepared by MANDERSON on 2025-07-29
Requested by JMUIRHEAD on 2024-03-30
Review by JMUIRHEAD on 2025-07-29

- River Flow Direction
- Municipality
- Point of Interest
- Ground Elevations of Interest
- Cross-Section Number WSE (m) Along Cross-Section
- Highway
- Local Road
- Major Contour (5m)
- Minor Contour (1m)
- Surveyed Cross-Sections Used in Hydraulic Model
- Tr'ondëk Hwëch'in Settlement Land
- Inundation Under Modelled Open Water Runs
- Inundation Under Modelled Breakup Ice Jam Runs
- Approximate 50% AEP Open Water Flood Inundation
- Composite Open Water and Ice Jam Inundation Extent
- Area Protected by Dike
- Ice Coverage in Breakup Jam Scenarios

Map Publication Date: 7/29/2025
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Notes

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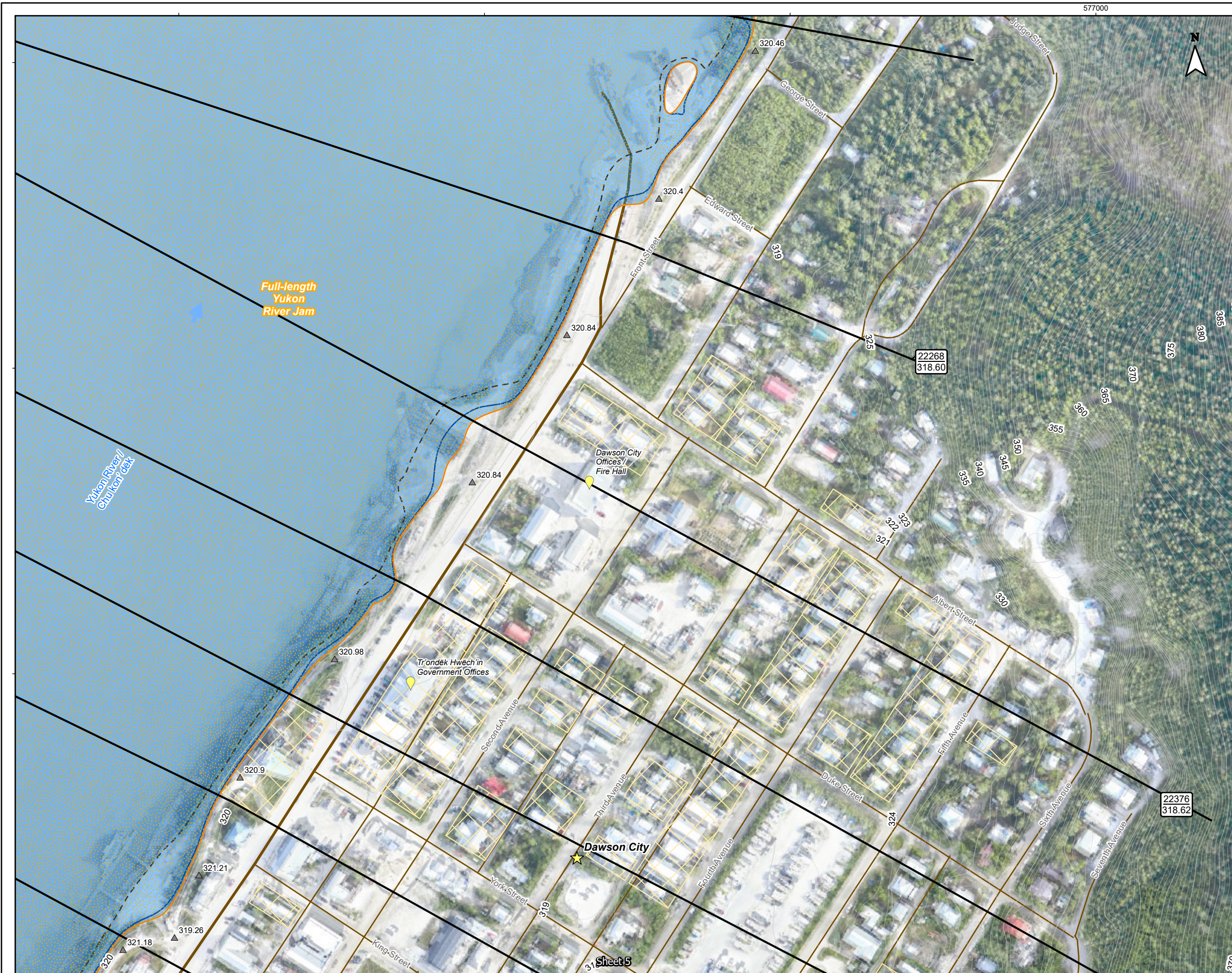
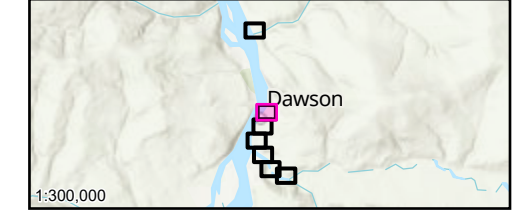


Figure No. **DC-5-06** Sheet 06 of 07
 Title: **Dawson City and Klondike Valley Flood Mapping Study Composite Flood Hazard Map - Yukon River 5% Annual Exceedance Probability (AEP)**
 Client/Project: Government of Yukon, Department of Environment, Water Resources Branch
 Project: 123222713
 Project Location: Dawson, Yukon
 Prepared by MANDERSON on 2025-07-29
 Requested by JMUIRHEAD on 2024-03-30
 Review by JMUIRHEAD on 2025-07-29

- River Flow Direction
- Municipality
- Point of Interest
- Ground Elevations of Interest
- Cross-Section Number WSE (m) Along Cross-Section
- Highway
- Local Road
- Major Contour (5m)
- Minor Contour (1m)
- Surveyed Cross-Sections Used in Hydraulic Model
- Tr'ondëk Hwëch'in Settlement Land
- Inundation Under Modelled Open Water Runs
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- Approximate 50% AEP Open Water Flood Inundation
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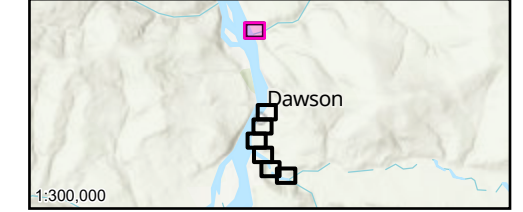
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Figure No. **DC-5-07** Sheet 07 of 07
 Title: **Dawson City and Klondike Valley Flood Mapping Study Composite Flood Hazard Map - Yukon River 5% Annual Exceedance Probability (AEP)**
 Client/Project: Government of Yukon, Department of Environment, Water Resources Branch
 Project: 123222713
 Project Location: Dawson, Yukon
 Prepared by MANDERSON on 2025-07-29
 Requested by JMUIRHEAD on 2024-03-30
 Review by JMUIRHEAD on 2025-07-29

- River Flow Direction
- Community Developments
- Ground Elevations of Interest
- Cross-Section Number WSE (m) Along Cross-Section
- Major Contour (5m)
- Minor Contour (1m)
- Surveyed Cross-Sections Used in Hydraulic Model
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- Inundation Under Modelled Open Water Runs
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This project is funded in part by the Government of Canada