

## Notes to Users

- 1. Please refer to the **Disclaimer** below.
- 2. Please review the associated project report before referring to the maps: Northwest Hydraulic Consultants Ltd. (NHC). 2022. 'Haida Gwaii Coastal Flood and Erosion Study – Planning for Sea Level Rise and Tsunami Hazards'. Report prepared for North Coast Regional District, Village of Masset, Village of Port Clements, and Village of Daaiing Giids. NHC project number 3006196. Tsunami model results shown correspond to an earthquake with a 3.
- magnitude of 9.2 from the Alaska-Aleutian Subduction Zone. Please refer to the project report for additional information on tsunami source.
- 4. Water level for tsunami hazard assessment consists of future Higher High Water Mean Tide (HHWMT) which at the Village of Port Clements and Juskatla corresponds to elevations of 2.2 m and 1.3 m above the Canadian Geodetic Vertical Datum of 2013 (CGVD2013) for 1 m of relative sea level rise, respectively, and elevations of 3.2 m and 2.3 m CGVD2013 for 2 m of relative sea level rise, respectively. HHWMT is defined as the average from all the higher high waters from 19 years of tidal predictions.
- 5. Inundation maps show the tsunami inundation level for emergency planning which includes a safety factor. This safety factor was applied by increasing by 50% the vertical distance of the maximum water surface above a reference plane corresponding to HHWMT. It should be noted that inundation levels mapped do not include any freeboard nor any setback.
- 6. The accuracy of the inundation extents is limited by the accuracy of the available bathymetric and topographic data as well as uncertainties associated to the numerical modelling approach used. Please refer to the project report for a discussion on modelling and mapping limitations.
- 7. The accuracy of inundation mapping is limited by the accuracy of the available orthoimagery basemap. Horizontal shifts between mapping and the basemap may vary approximately from 5 m up to 20 m.
- 8. These maps provide results for one possible tsunami scenario with associated earthquake magnitude and rupture mechanism. Tsunami hazards and associated effects can vary for different tsunami scenarios that may occur.
- 9. Inundation maps do not reflect all risks associated with a tsunami. Strong currents and floating debris can be significant hazards.
- 10. The influence that stream flow may have on the propagation and inundation of tsunamis in rivers and creeks was not captured by the tsunami numerical model.
- 11. Other areas for which tsunami hazards were assessed include the Village of Masset, Tow Hill, Tlell, Village of Daajing Giids, and Sandspit. Associated maps can be found in separate map series.

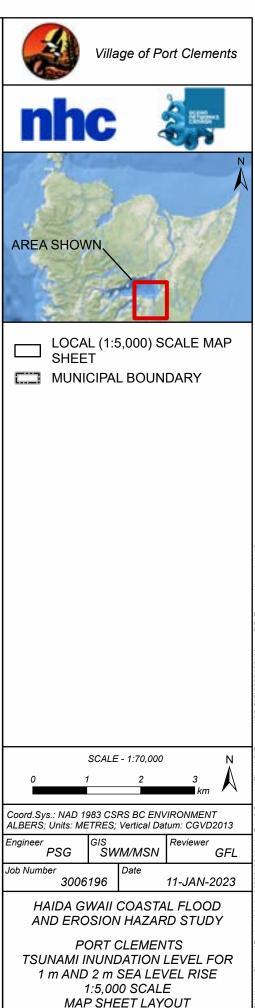
## **Data Sources and References**

- 1. Imagery basemaps from Esri and Maxar.
- 2. Ferry route and municipal boundary data from GeoBC.

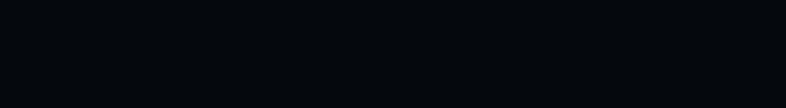
## Disclaimer

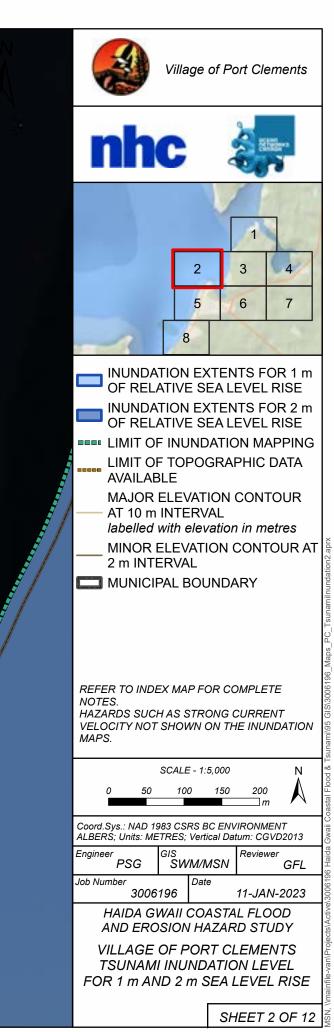
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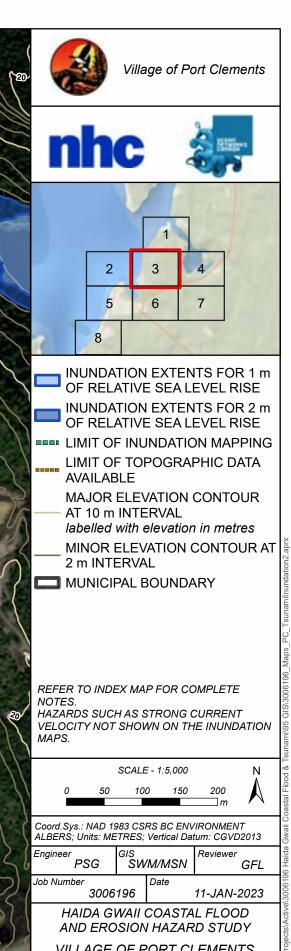




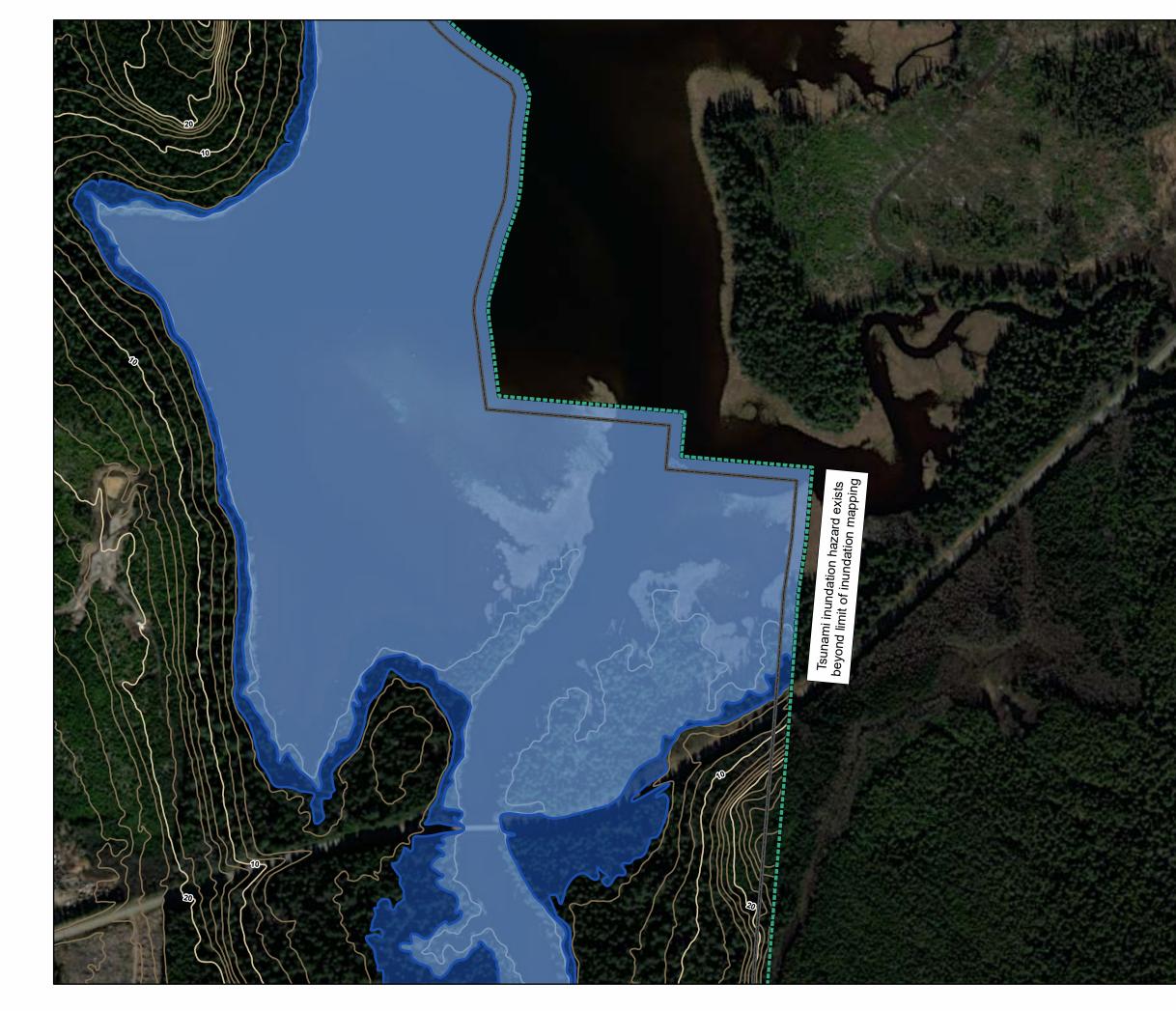


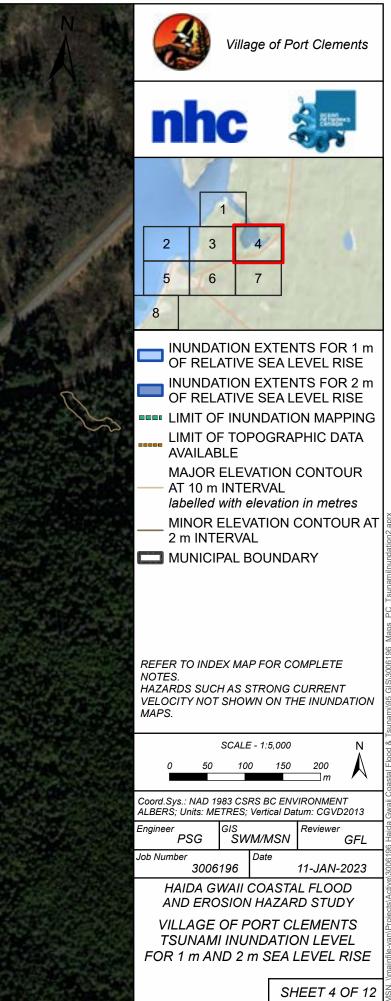






VILLAGE OF PORT CLEMENTS TSUNAMI INUNDATION LEVEL FOR 1 m AND 2 m SEA LEVEL RISE





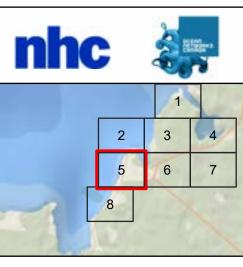
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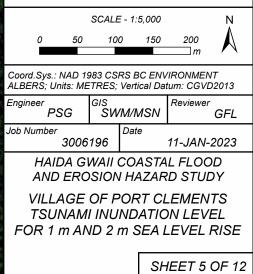


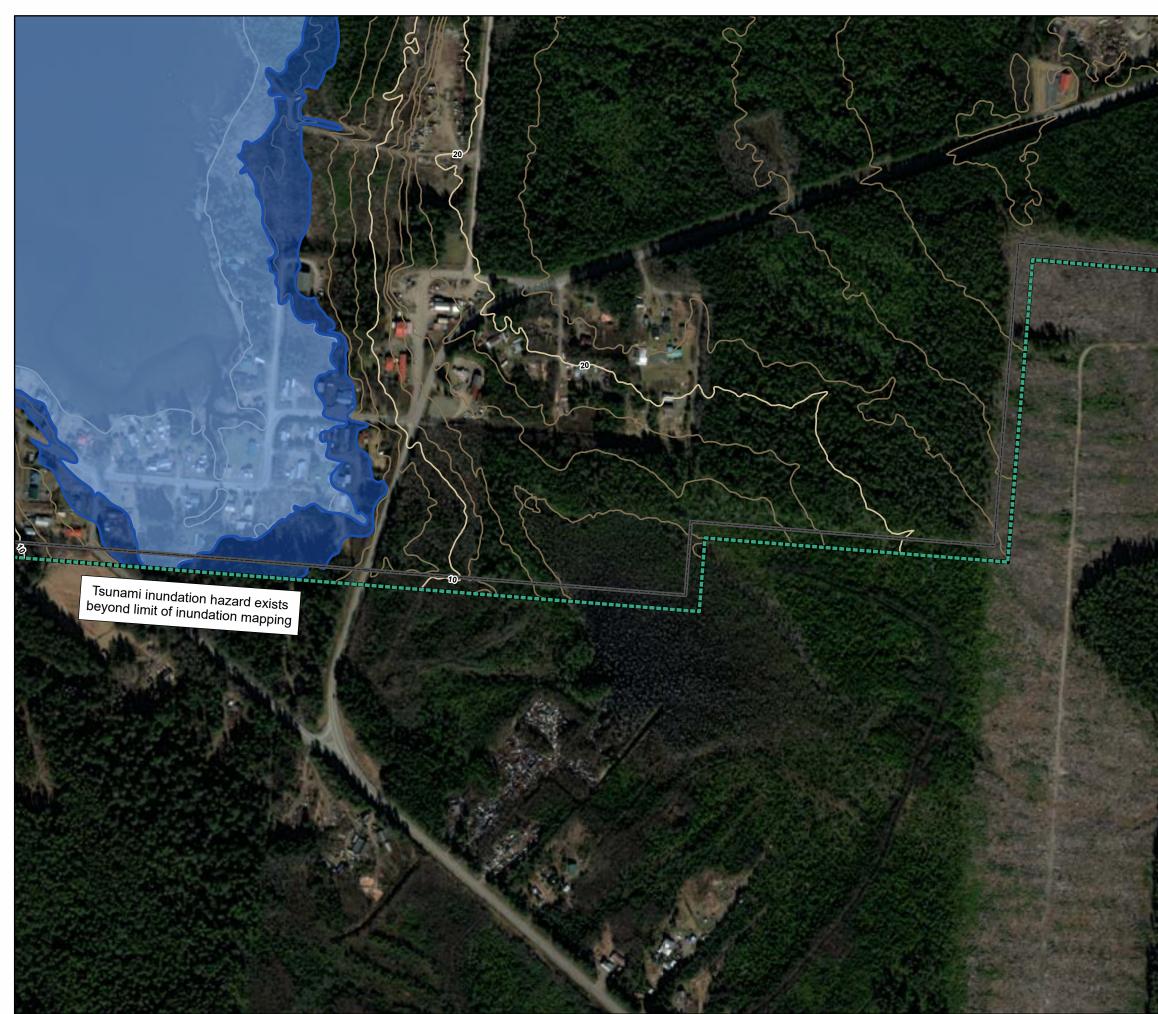


- INUNDATION EXTENTS FOR 1 m OF RELATIVE SEA LEVEL RISE
- INUNDATION EXTENTS FOR 2 m OF RELATIVE SEA LEVEL RISE
- **LIMIT OF INUNDATION MAPPING**
- LIMIT OF TOPOGRAPHIC DATA AVAILABLE MAJOR ELEVATION CONTOUR
- AT 10 m INTERVAL
- labelled with elevation in metres MINOR ELEVATION CONTOUR AT 2 m INTERVAL
- MUNICIPAL BOUNDARY

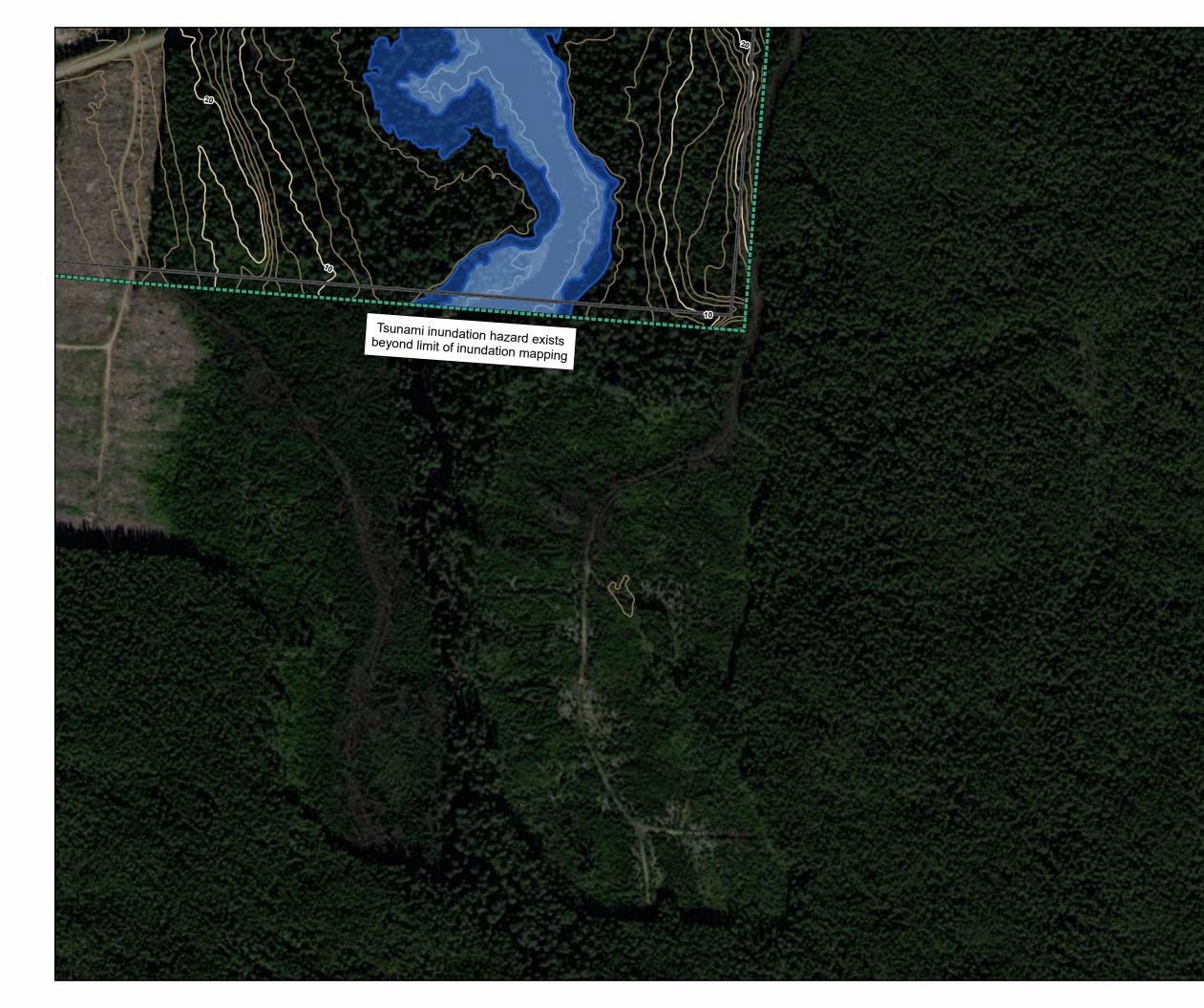
## REFER TO INDEX MAP FOR COMPLETE

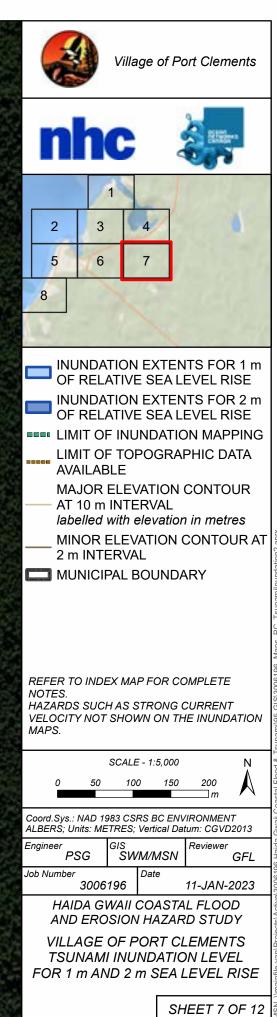
NOTES. HAZARDS SUCH AS STRONG CURRENT VELOCITY NOT SHOWN ON THE INUNDATION MAPS.

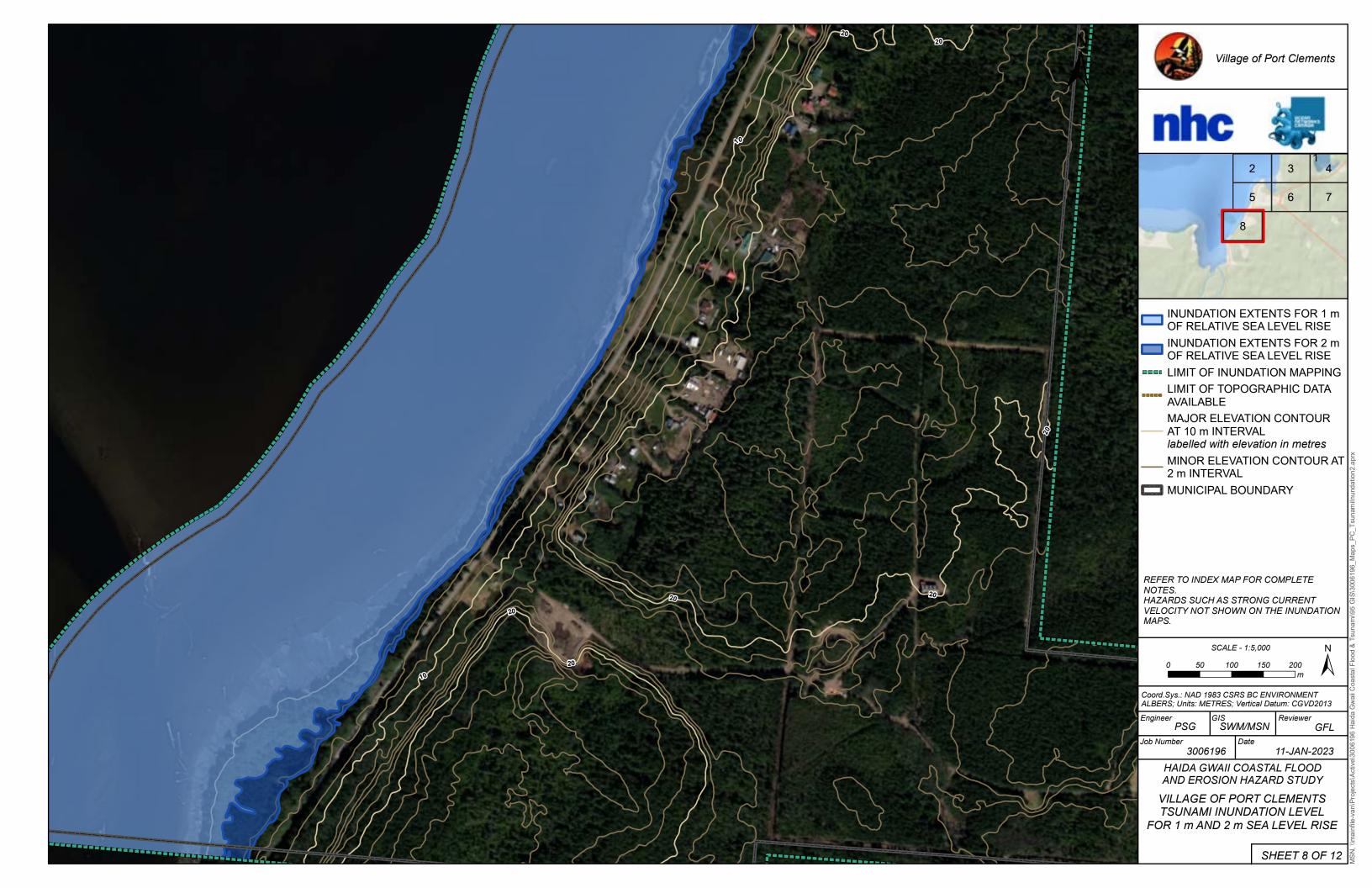


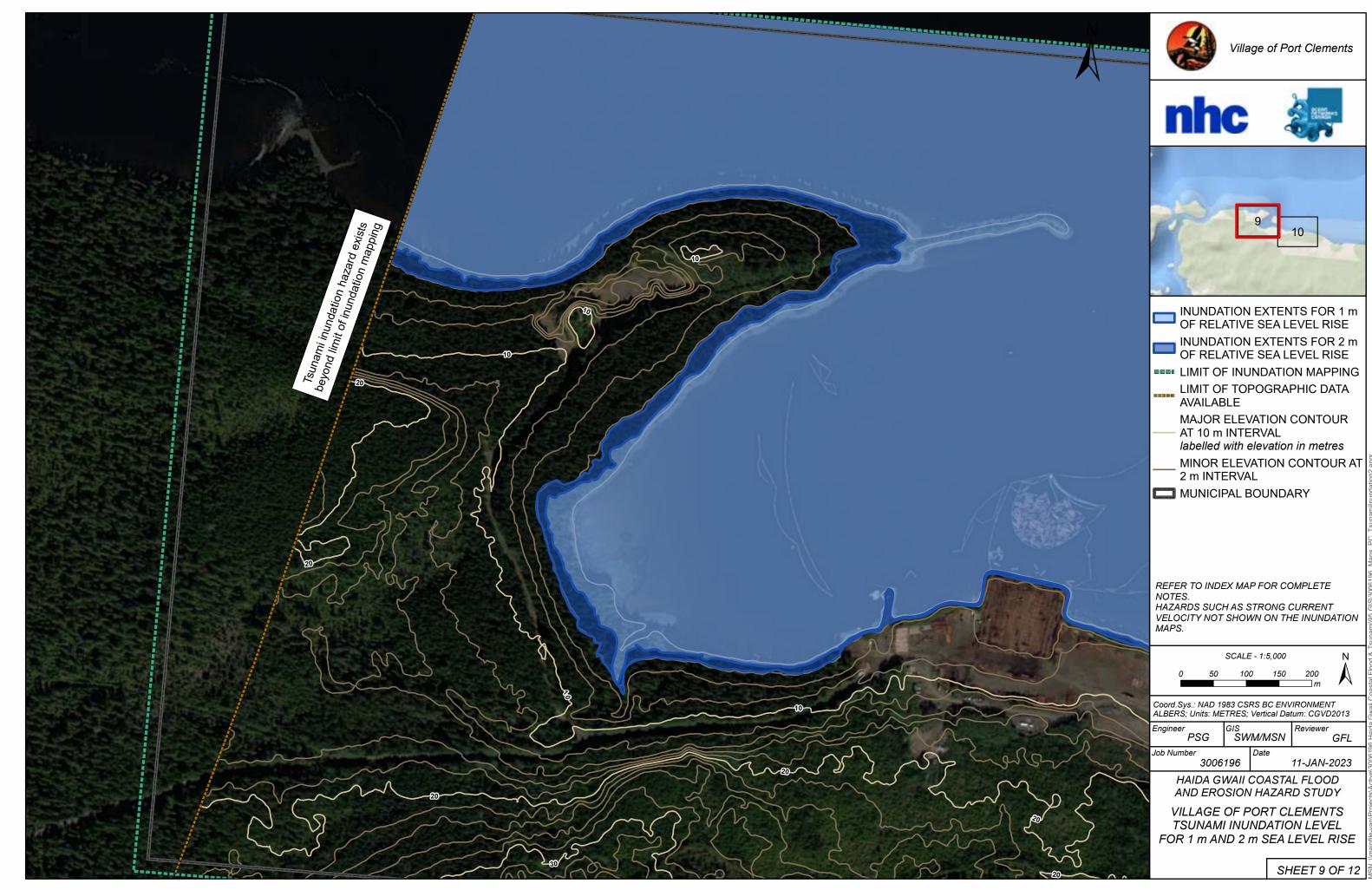


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	<ul> <li>INUNDATION EXTENTS FOR 1 m OF RELATIVE SEA LEVEL RISE</li> <li>INUNDATION EXTENTS FOR 2 m OF RELATIVE SEA LEVEL RISE</li> <li>LIMIT OF INUNDATION MAPPING</li> <li>LIMIT OF TOPOGRAPHIC DATA AVAILABLE</li> <li>MAJOR ELEVATION CONTOUR AT 10 m INTERVAL <i>labelled with elevation in metres</i></li> <li>MINOR ELEVATION CONTOUR AT 2 m INTERVAL</li> <li>MUNICIPAL BOUNDARY</li> </ul>
	REFER TO INDEX MAP FOR COMPLETE NOTES. HAZARDS SUCH AS STRONG CURRENT VELOCITY NOT SHOWN ON THE INUNDATION MAPS. SCALE - 1:5,000 0 50 100 150 200 m
	SCALE - 1:5,000 N 0 50 100 150 200 m m m
	Coord.Sys.: NAD 1983 CSRS BC ENVIRONMENT ALBERS; Units: METRES; Vertical Datum: CGVD2013
	Engineer     PSG     GIS SWM/MSN     Reviewer     GFL       Job Number     0006196     Date     11-JAN-2023       HAIDA GWAII COASTAL FLOOD AND EROSION HAZARD STUDY     VILLAGE OF PORT CLEMENTS TSUNAMI INUNDATION LEVEL       FOR 1 m AND 2 m SEA LEVEL RISE
	VILLAGE OF PORT CLEMENTS TSUNAMI INUNDATION LEVEL FOR 1 m AND 2 m SEA LEVEL RISE
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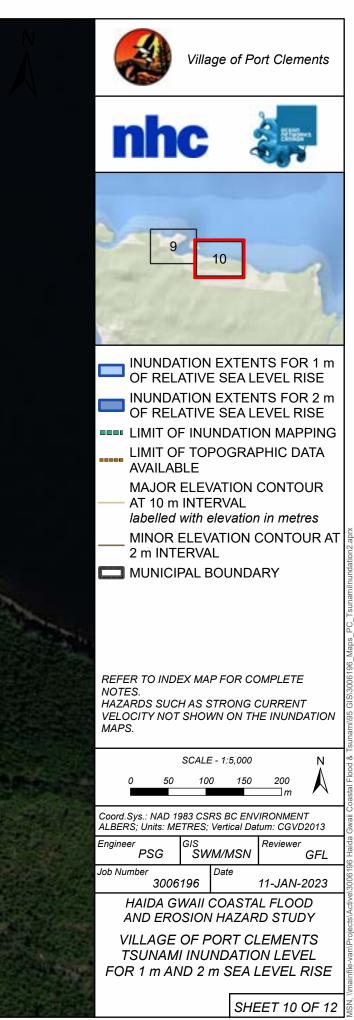




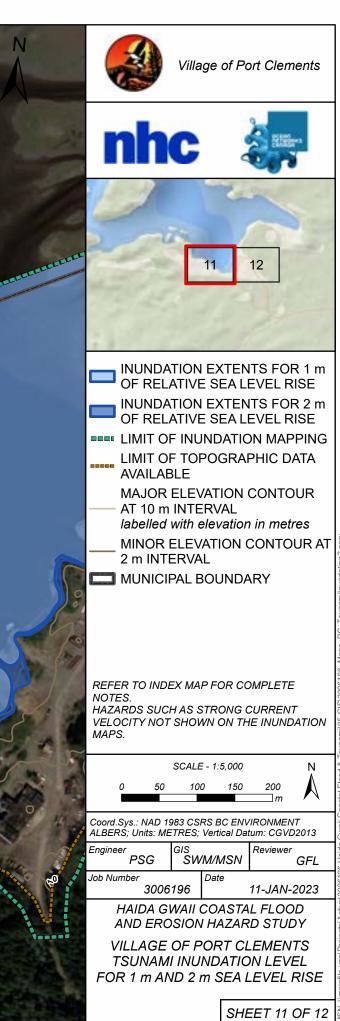








Inundation mapping not possible in this area due to insufficient topographic data. Ground with elevation lower than 1.6 m and 2.6 m (CGVD2013) is at risk of tsunami inundation for 1m and 2m of relative sea-level rise, respectively.



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