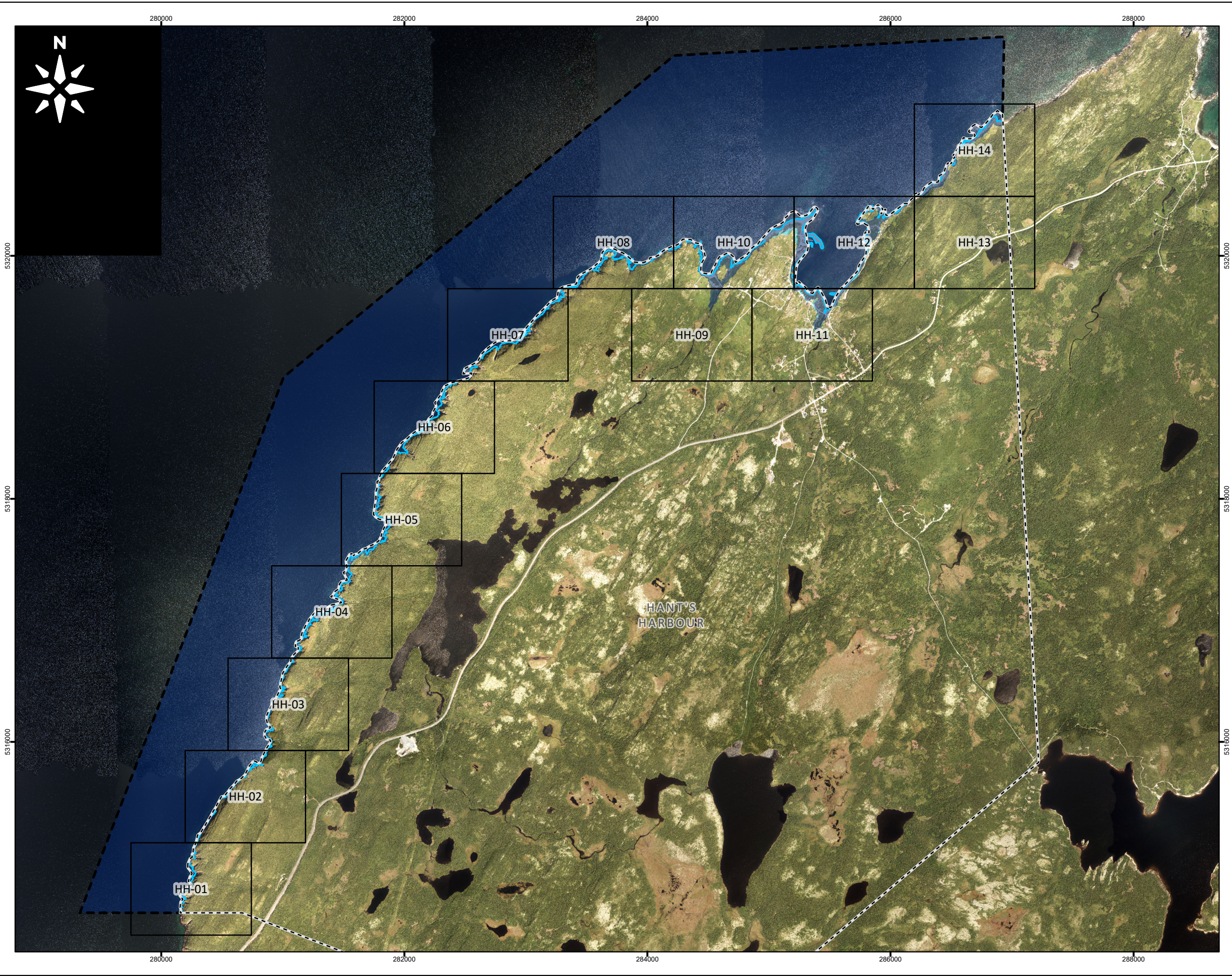




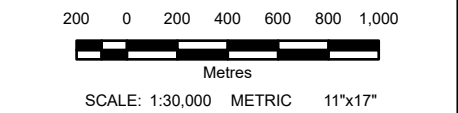
LEGEND:

- Coastline
- Limit of Mapping
- Map Extent
- Municipal Boundary
- 1:20 Year Wave Run Up
- 1:100 Year Wave Run Up

NOTES:

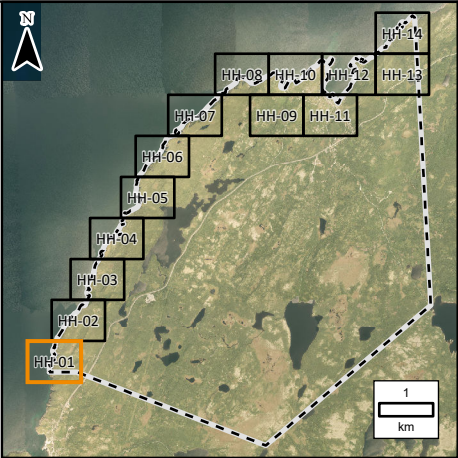
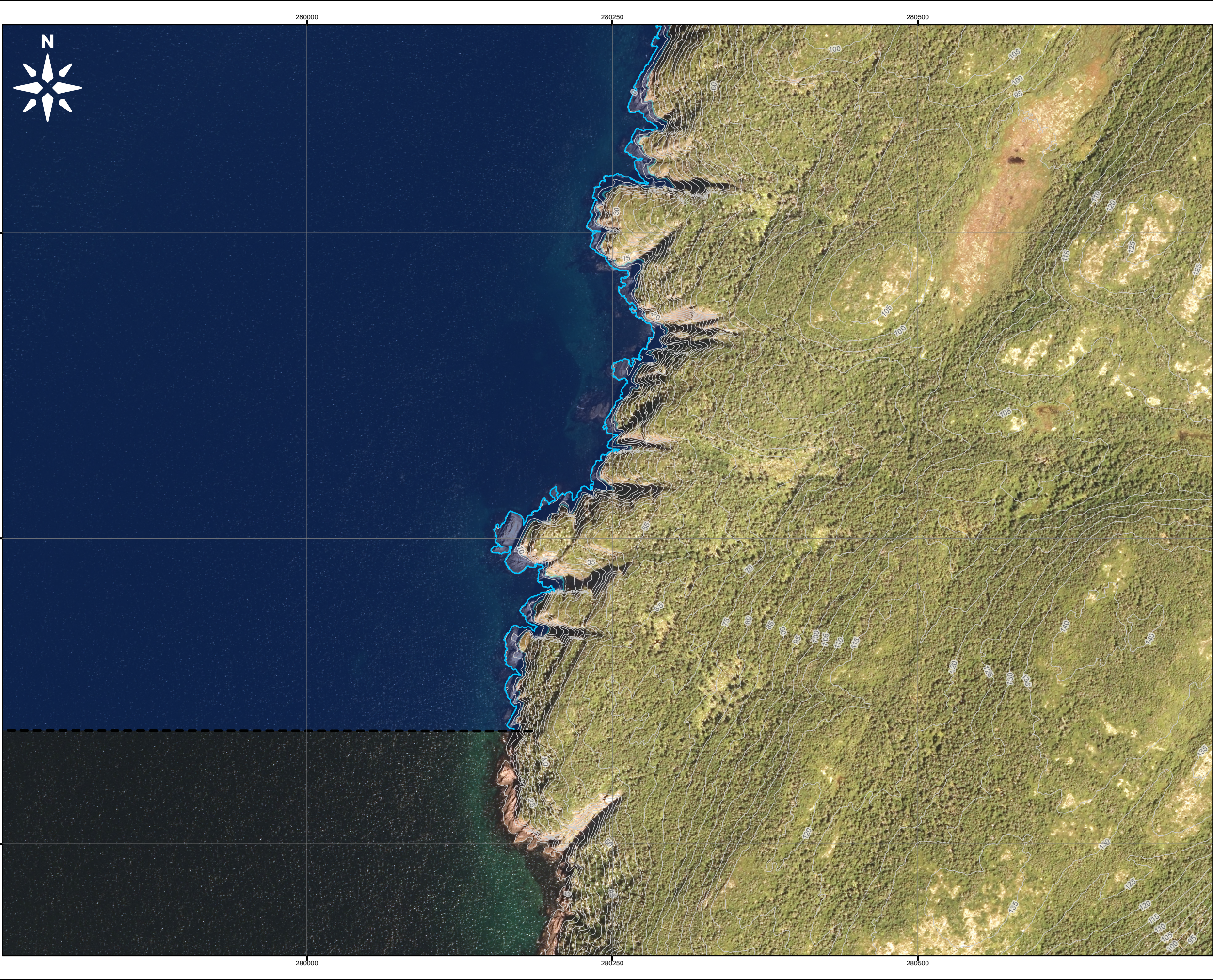
1. Imagery is supplied by the Government of Newfoundland and Labrador. (Capture date: 2020)

2. Climate change impacts on wave effects are incorporated by considering mid-century and late-century relative sea level projections (RCP 8.5) from the IPCC Fifth Assessment Report, obtained through the ClimateData.ca project.



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Horizontal Projection: North American Datum 1983 CSRS (NAD83), Modified Transverse Mercator Projection (MTM) Zone 1. Elevations are in metres above sea level (MSL), Canadian Geodetic Vertical Datum 2013 (CGVD2013).

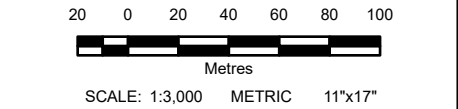
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NO.	YYMMDD	DESCRIPTION	ISSUED BY	CHECK BY
REVISIONS / ISSUE				
				
CLIMATE CHANGE FLOOD HAZARD MAPPING STUDY FOR FERRYLAND, BRIGUS, HEART'S DELIGHT, WINTERTON & HANT'S HARBOUR				
CLIMATE CHANGE AND CURRENT DEVELOPMENT CONDITION (CLC-CD)				
WAVE RUN UP - OVERVIEW MAP				
DECEMBER 2025		FIGURE 18.1	REV:	0



LEGEND:

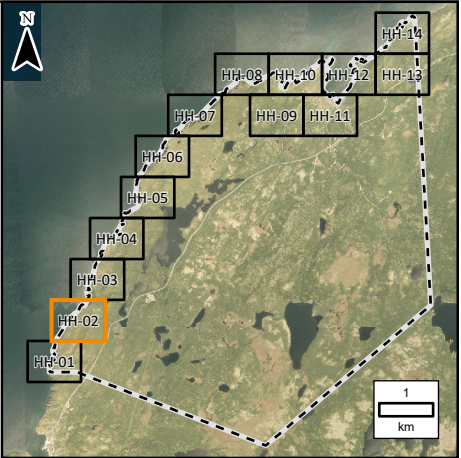
- 1:20 Year Wave Run Up
- 1:100 Year Wave Run Up
- Coastline
- 5m LiDAR Contour
- Limit of Mapping
- Wave Run Up Transect

- NOTES:**
- Imagery is supplied by the Government of Newfoundland and Labrador. (Capture date: 2020)
 - Topography shown was developed by KGS Group from the HRDEM from Natural Resources Canada (NRCAN). (Capture date: June and July, 2020)
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Horizontal Projection: North American Datum 1983 CSRS (NAD83), Modified Transverse Mercator Projection (MTM) Zone 1. Elevations are in metres above sea level (MSL), Canadian Geodetic Vertical Datum 2013 (CGVD2013).

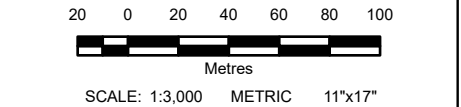
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NO.	YYMMDD	DESCRIPTION	ISSUED BY	CHECK BY
REVISIONS / ISSUE				
				
CLIMATE CHANGE FLOOD HAZARD MAPPING STUDY FOR FERRYLAND, BRIGUS, HEART'S DELIGHT, WINTERTON & HANT'S HARBOUR				
CLIMATE CHANGE AND CURRENT DEVELOPMENT CONDITION (CLC-CD)				
WAVE RUN UP - HH-01				
DECEMBER 2025		FIGURE 18.2		REV: 0



LEGEND:

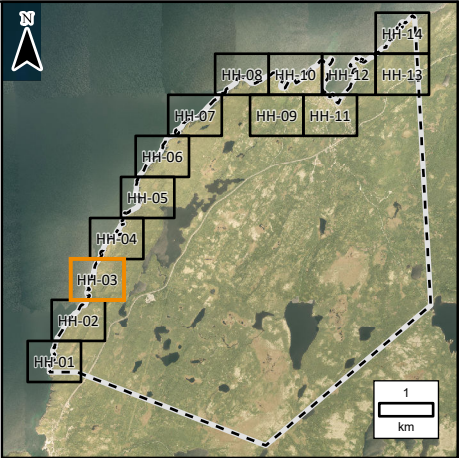
- 1:20 Year Wave Run Up
- 1:100 Year Wave Run Up
- Coastline
- 5m LiDAR Contour
- Limit of Mapping
- Wave Run Up Transect

- NOTES:**
1. Imagery is supplied by the Government of Newfoundland and Labrador. (Capture date: 2020)
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Horizontal Projection: North American Datum 1983 CSRS (NAD83), Modified Transverse Mercator Projection (MTM) Zone 1, Elevations are in metres above sea level (MSL), Canadian Geodetic Vertical Datum 2013 (CGVD2013).

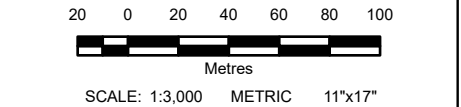
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REVISIONS / ISSUE					
					
CLIMATE CHANGE FLOOD HAZARD MAPPING STUDY FOR FERRYLAND, BRIGUS, HEART'S DELIGHT, WINTERTON & HANT'S HARBOUR					
CLIMATE CHANGE AND CURRENT DEVELOPMENT CONDITION (CLC-CD) WAVE RUN UP - HH-02					
DECEMBER 2025		FIGURE 18.2		REV:	0



LEGEND:

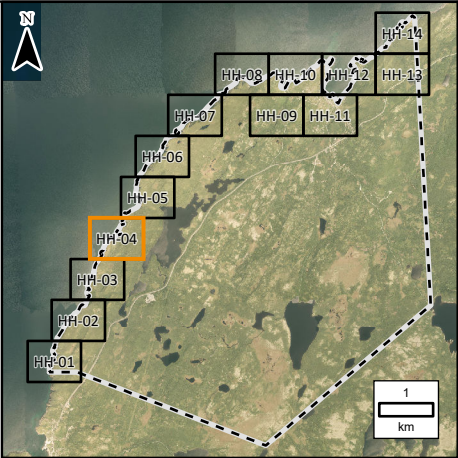
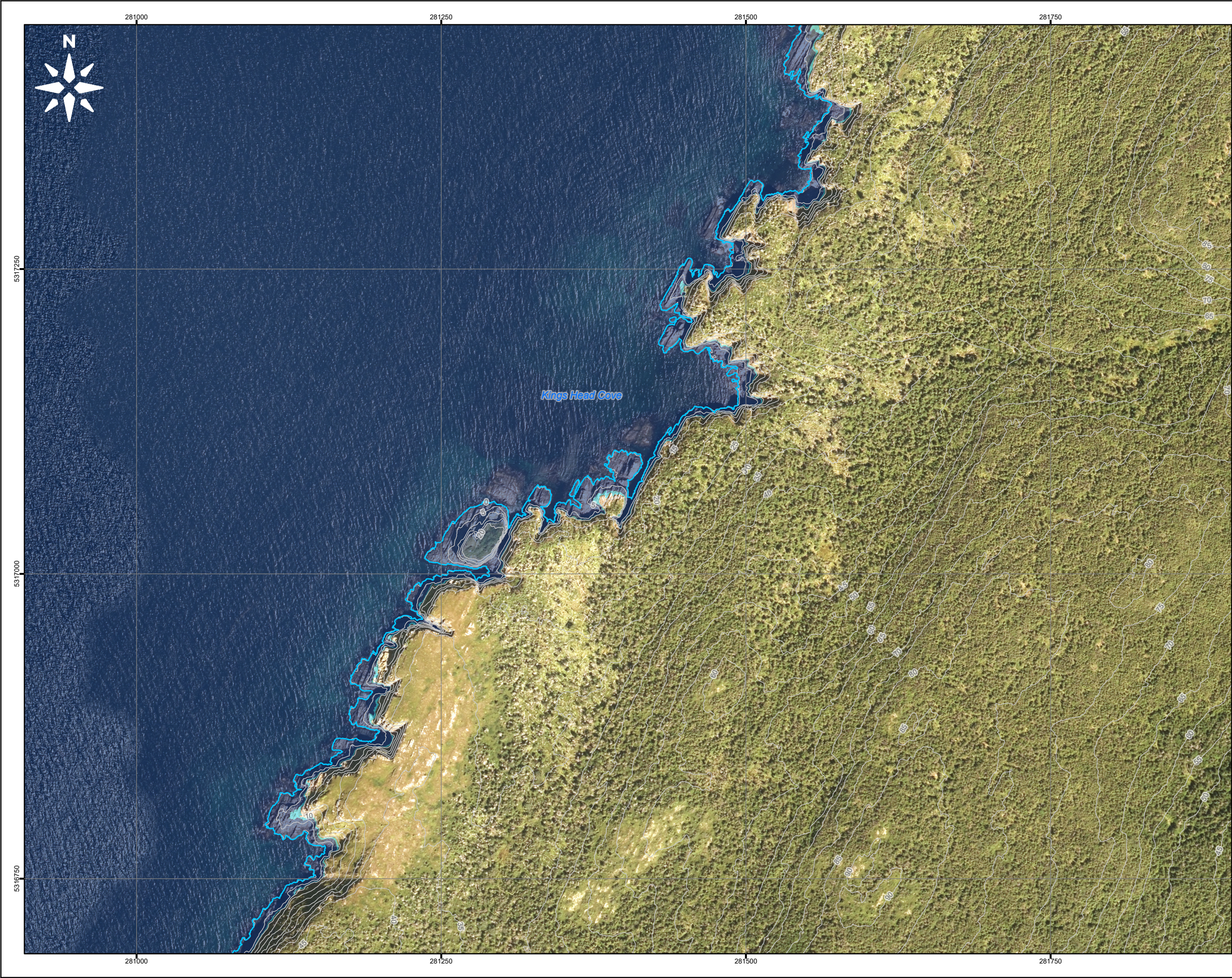
- 1:20 Year Wave Run Up
- 1:100 Year Wave Run Up
- Coastline
- 5m LiDAR Contour
- Limit of Mapping
- Wave Run Up Transect

- NOTES:**
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Horizontal Projection: North American Datum 1983 CSRS (NAD83), Modified Transverse Mercator Projection (MTM) Zone 1. Elevations are in metres above sea level (MSL), Canadian Geodetic Vertical Datum 2013 (CGVD2013).

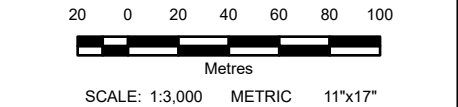
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	NO.	YYMMDD	DESCRIPTION	ISSUED BY	CHECK BY
REVISIONS / ISSUE					
					
CLIMATE CHANGE FLOOD HAZARD MAPPING STUDY FOR FERRYLAND, BRIGUS, HEART'S DELIGHT, WINTERTON & HANT'S HARBOUR					
CLIMATE CHANGE AND CURRENT DEVELOPMENT CONDITION (CLC-CD) WAVE RUN UP - HH-03					
DECEMBER 2025			FIGURE 18.2		REV: 0



LEGEND:

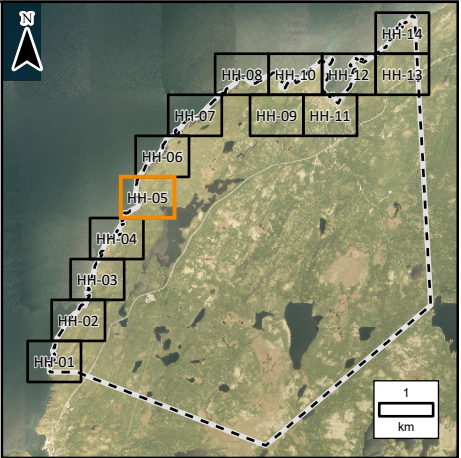
- 1:20 Year Wave Run Up
- 1:100 Year Wave Run Up
- Coastline
- 5m LiDAR Contour
- Limit of Mapping
- Wave Run Up Transect

- NOTES:**
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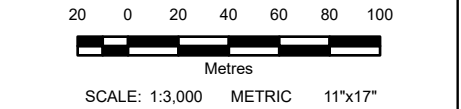
All units are metric and in metres unless otherwise specified.
Horizontal Projection: North American Datum 1983 CSRS (NAD83), Modified Transverse Mercator Projection (MTM) Zone 1. Elevations are in metres above sea level (MSL), Canadian Geodetic Vertical Datum 2013 (CGVD2013).

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CLIMATE CHANGE FLOOD HAZARD MAPPING STUDY FOR FERRYLAND, BRIGUS, HEART'S DELIGHT, WINTERTON & HANT'S HARBOUR					
CLIMATE CHANGE AND CURRENT DEVELOPMENT CONDITION (CLC-CD)					
WAVE RUN UP - HH-04					
DECEMBER 2025			FIGURE 18.2		REV: 0



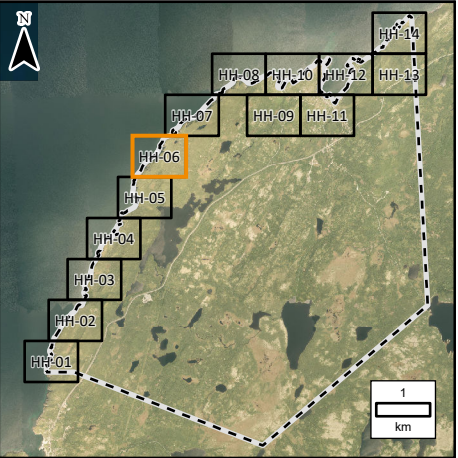
- LEGEND:**
- 1:20 Year Wave Run Up
 - 1:100 Year Wave Run Up
 - Coastline
 - 5m LiDAR Contour
 - Limit of Mapping
 - Wave Run Up Transect

- NOTES:**
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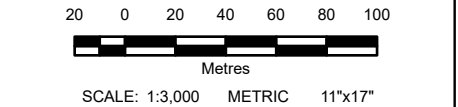
All units are metric and in metres unless otherwise specified.
Horizontal Projection: North American Datum 1983 CSRS (NAD83), Modified Transverse Mercator Projection (MTM) Zone 1. Elevations are in metres above sea level (MSL), Canadian Geodetic Vertical Datum 2013 (CGVD2013).

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REVISIONS / ISSUE					
					
CLIMATE CHANGE FLOOD HAZARD MAPPING STUDY FOR FERRYLAND, BRIGUS, HEART'S DELIGHT, WINTERTON & HANT'S HARBOUR					
CLIMATE CHANGE AND CURRENT DEVELOPMENT CONDITION (CLC-CD) WAVE RUN UP - HH-05					
DECEMBER 2025		FIGURE 18.2		REV:	0



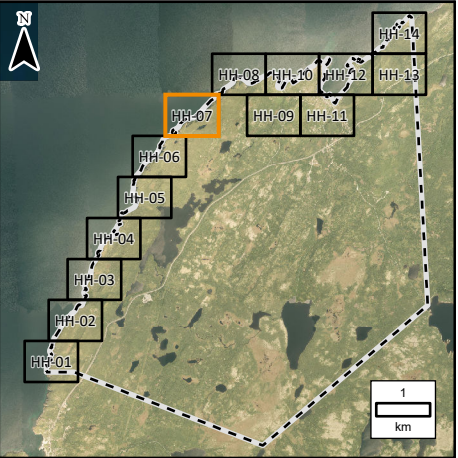
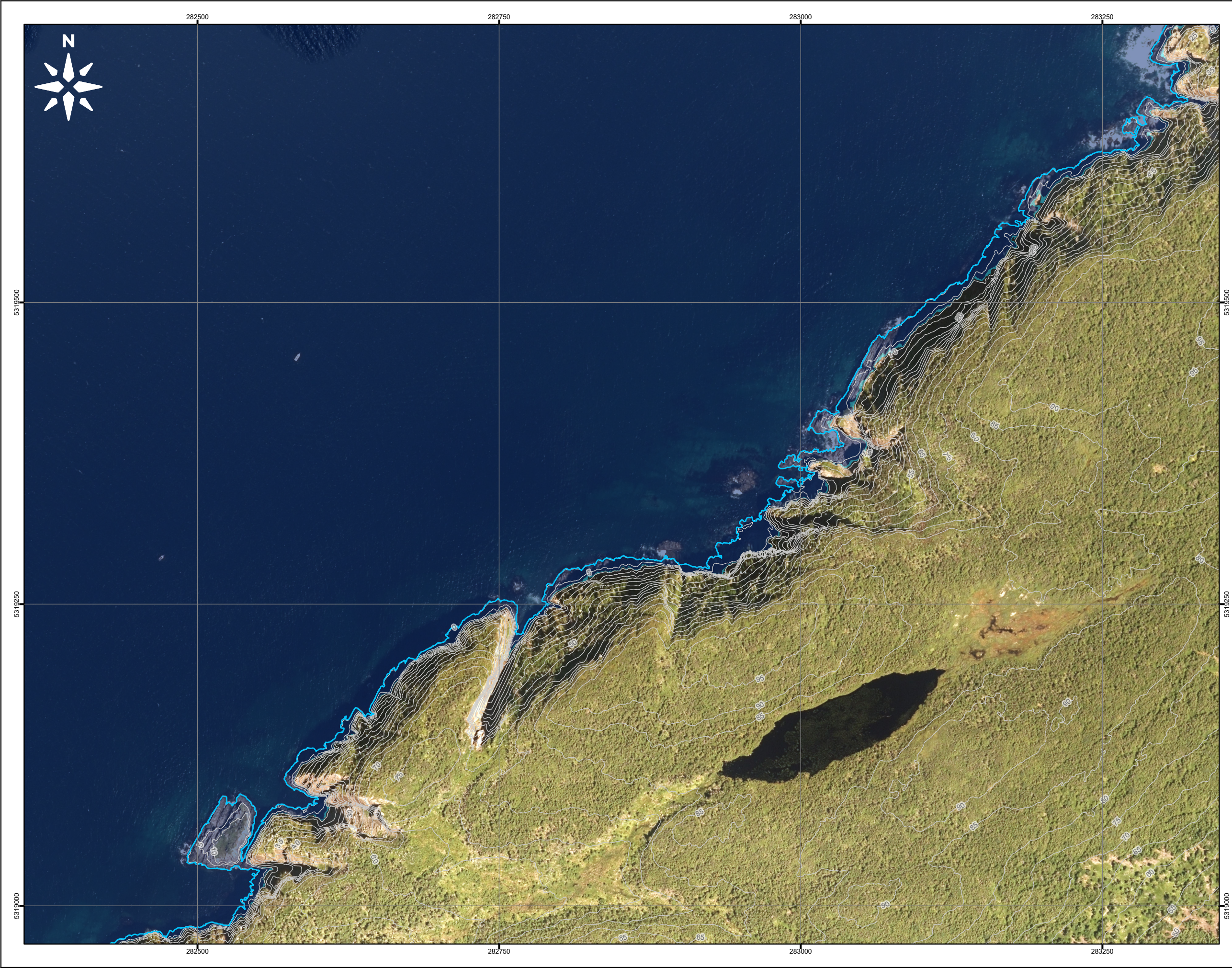
- LEGEND:**
- 1:20 Year Wave Run Up
 - 1:100 Year Wave Run Up
 - Coastline
 - 5m LiDAR Contour
 - Limit of Mapping
 - Wave Run Up Transect

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Horizontal Projection: North American Datum 1983 CSRS (NAD83), Modified Transverse Mercator Projection (MTM) Zone 1. Elevations are in metres above sea level (MSL), Canadian Geodetic Vertical Datum 2013 (CGVD2013).

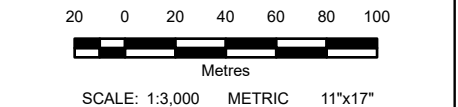
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CLIMATE CHANGE FLOOD HAZARD MAPPING STUDY FOR FERRYLAND, BRIGUS, HEART'S DELIGHT, WINTERTON & HANT'S HARBOUR						
CLIMATE CHANGE AND CURRENT DEVELOPMENT CONDITION (CLC-CD) WAVE RUN UP - HH-06						
DECEMBER 2025			FIGURE 18.2		REV:	0



LEGEND:

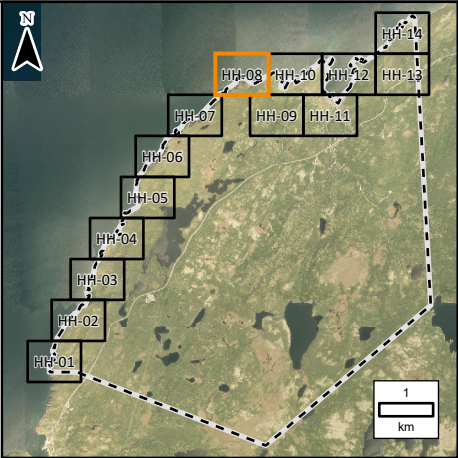
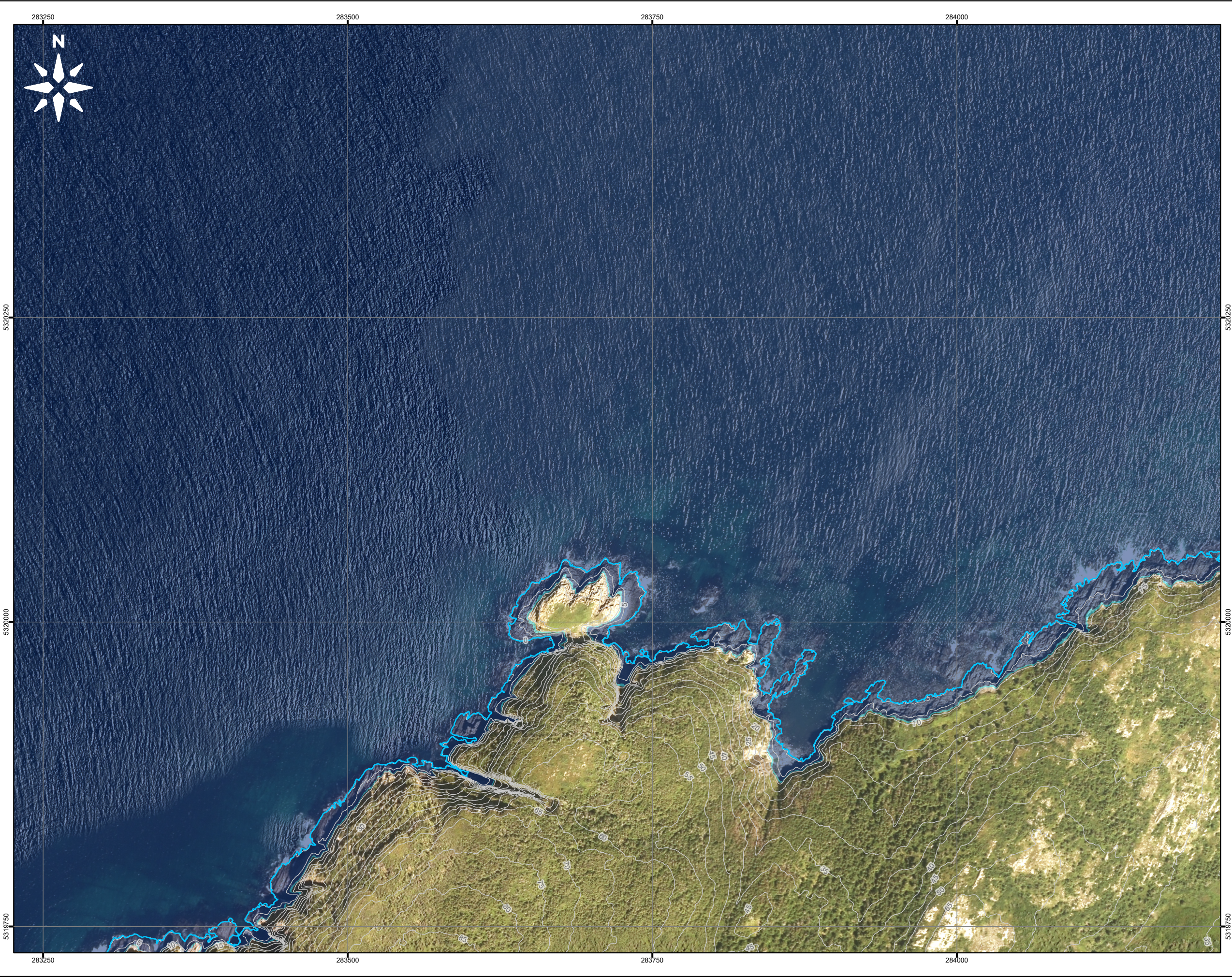
- 1:20 Year Wave Run Up
- 1:100 Year Wave Run Up
- Coastline
- 5m LiDAR Contour
- Limit of Mapping
- Wave Run Up Transect

- NOTES:**
- Imagery is supplied by the Government of Newfoundland and Labrador. (Capture date: 2020)
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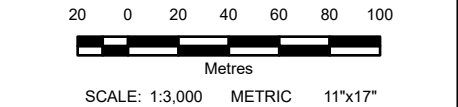
All units are metric and in metres unless otherwise specified.
Horizontal Projection: North American Datum 1983 CSRS (NAD83), Modified Transverse Mercator Projection (MTM) Zone 1. Elevations are in metres above sea level (MSL), Canadian Geodetic Vertical Datum 2013 (CGVD2013).

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REVISIONS / ISSUE					
					
CLIMATE CHANGE FLOOD HAZARD MAPPING STUDY FOR FERRYLAND, BRIGUS, HEART'S DELIGHT, WINTERTON & HANT'S HARBOUR					
CLIMATE CHANGE AND CURRENT DEVELOPMENT CONDITION (CLC-CD) WAVE RUN UP - HH-07					
DECEMBER 2025			FIGURE 18.2		REV: 0



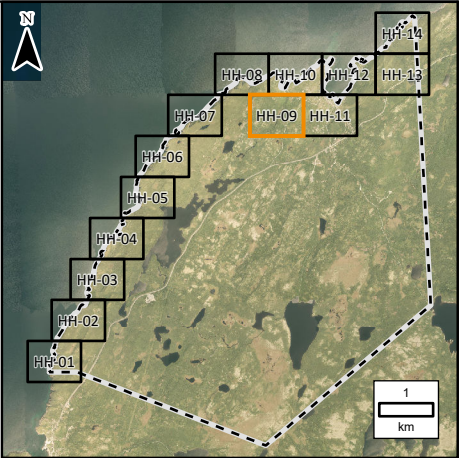
- LEGEND:**
- 1:20 Year Wave Run Up
 - 1:100 Year Wave Run Up
 - Coastline
 - 5m LiDAR Contour
 - Limit of Mapping
 - Wave Run Up Transect

- NOTES:**
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Horizontal Projection: North American Datum 1983 CSRS (NAD83), Modified Transverse Mercator Projection (MTM) Zone 1. Elevations are in metres above sea level (MSL), Canadian Geodetic Vertical Datum 2013 (CGVD2013).

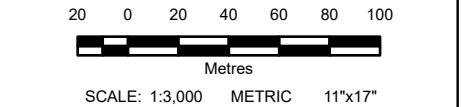
➡	0	25/12/19	ISSUED WITH FINAL REPORT	ALW	DSB
	NO.	YYMMDD	DESCRIPTION	ISSUED BY	CHECK BY
REVISIONS / ISSUE					
					
CLIMATE CHANGE FLOOD HAZARD MAPPING STUDY FOR FERRYLAND, BRIGUS, HEART'S DELIGHT, WINTERTON & HANT'S HARBOUR					
CLIMATE CHANGE AND CURRENT DEVELOPMENT CONDITION (CLC-CD)					
WAVE RUN UP - HH-08					
DECEMBER 2025			FIGURE 18.2		REV: 0



LEGEND:

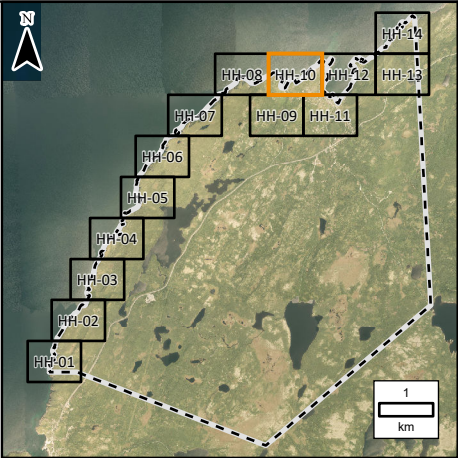
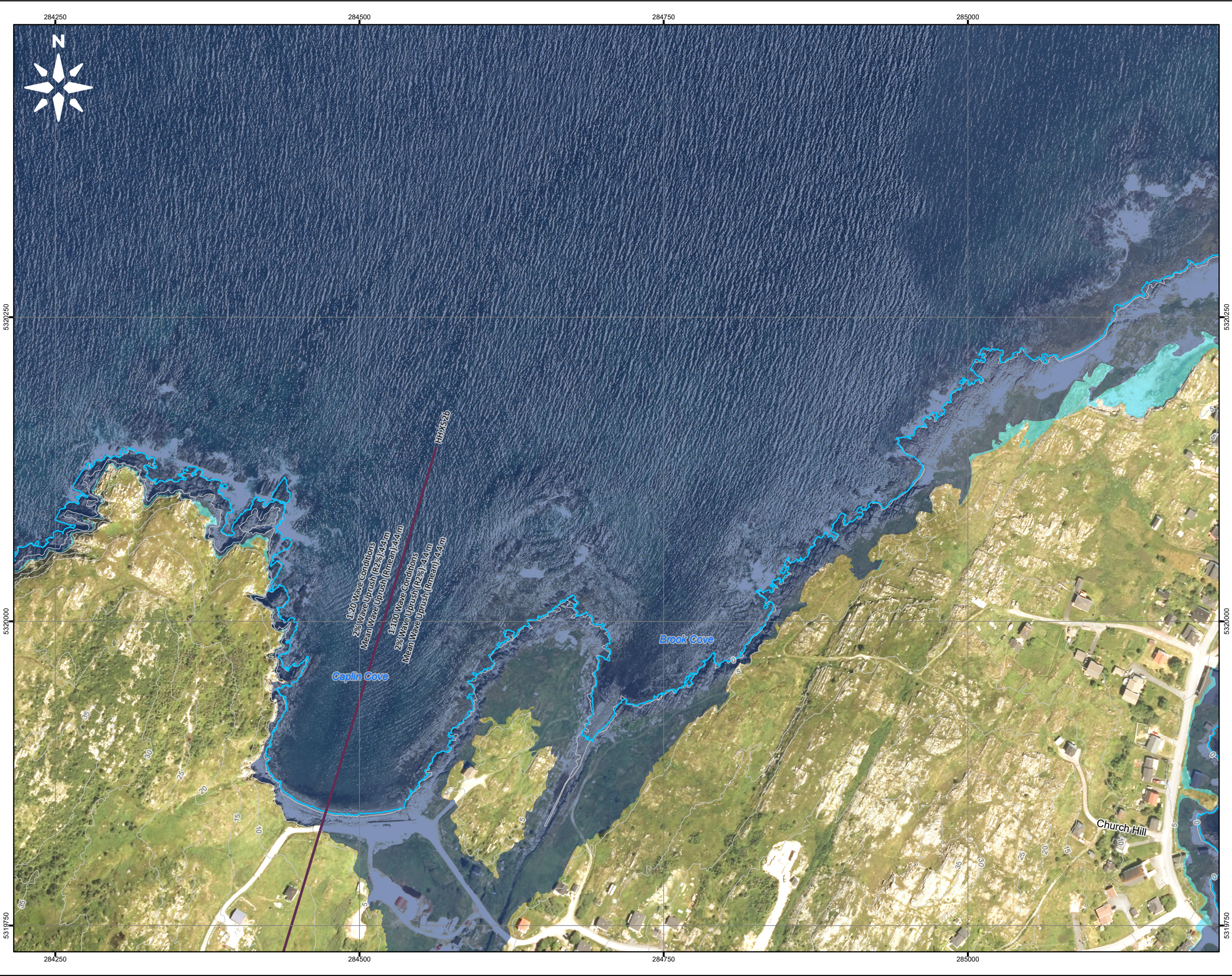
- 1:20 Year Wave Run Up
- 1:100 Year Wave Run Up
- Coastline
- 5m LiDAR Contour
- Limit of Mapping
- Wave Run Up Transect

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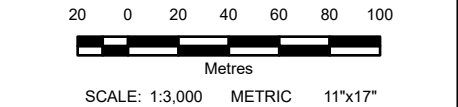
All units are metric and in metres unless otherwise specified.
Horizontal Projection: North American Datum 1983 CSRS (NAD83), Modified Transverse Mercator Projection (MTM) Zone 1. Elevations are in metres above sea level (MSL), Canadian Geodetic Vertical Datum 2013 (CGVD2013).

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CLIMATE CHANGE FLOOD HAZARD MAPPING STUDY FOR FERRYLAND, BRIGUS, HEART'S DELIGHT, WINTERTON & HANT'S HARBOUR					
CLIMATE CHANGE AND CURRENT DEVELOPMENT CONDITION (CLC-CD) WAVE RUN UP - HH-09					
DECEMBER 2025		FIGURE 18.2		REV:	0



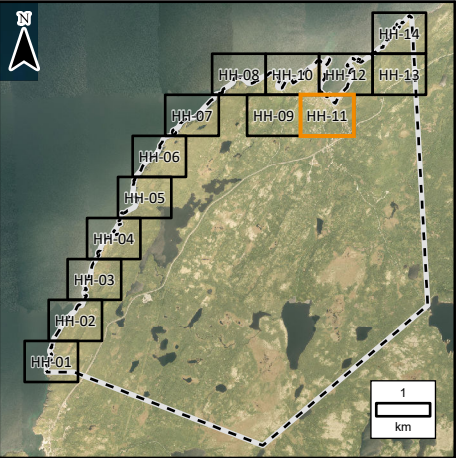
- LEGEND:**
- 1:20 Year Wave Run Up
 - 1:100 Year Wave Run Up
 - Coastline
 - 5m LiDAR Contour
 - Limit of Mapping
 - Wave Run Up Transect

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Horizontal Projection: North American Datum 1983 CSRS (NAD83), Modified Transverse Mercator Projection (MTM) Zone 1. Elevations are in metres above sea level (MSL), Canadian Geodetic Vertical Datum 2013 (CGVD2013).

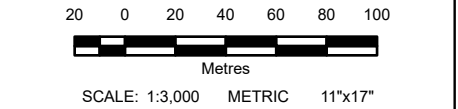
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REVISIONS / ISSUE							
							
CLIMATE CHANGE FLOOD HAZARD MAPPING STUDY FOR FERRYLAND, BRIGUS, HEART'S DELIGHT, WINTERTON & HANT'S HARBOUR							
CLIMATE CHANGE AND CURRENT DEVELOPMENT CONDITION (CLC-CD)							
WAVE RUN UP - HH-10							
DECEMBER 2025		FIGURE 18.2				REV:	0



LEGEND:

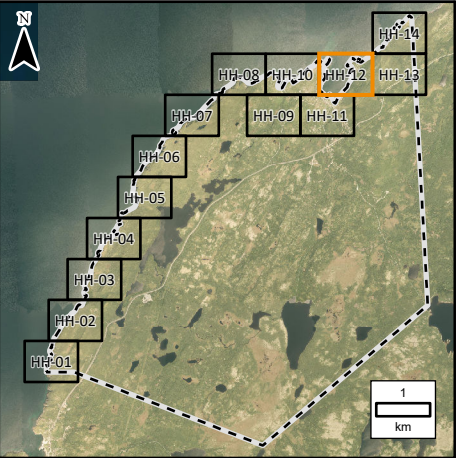
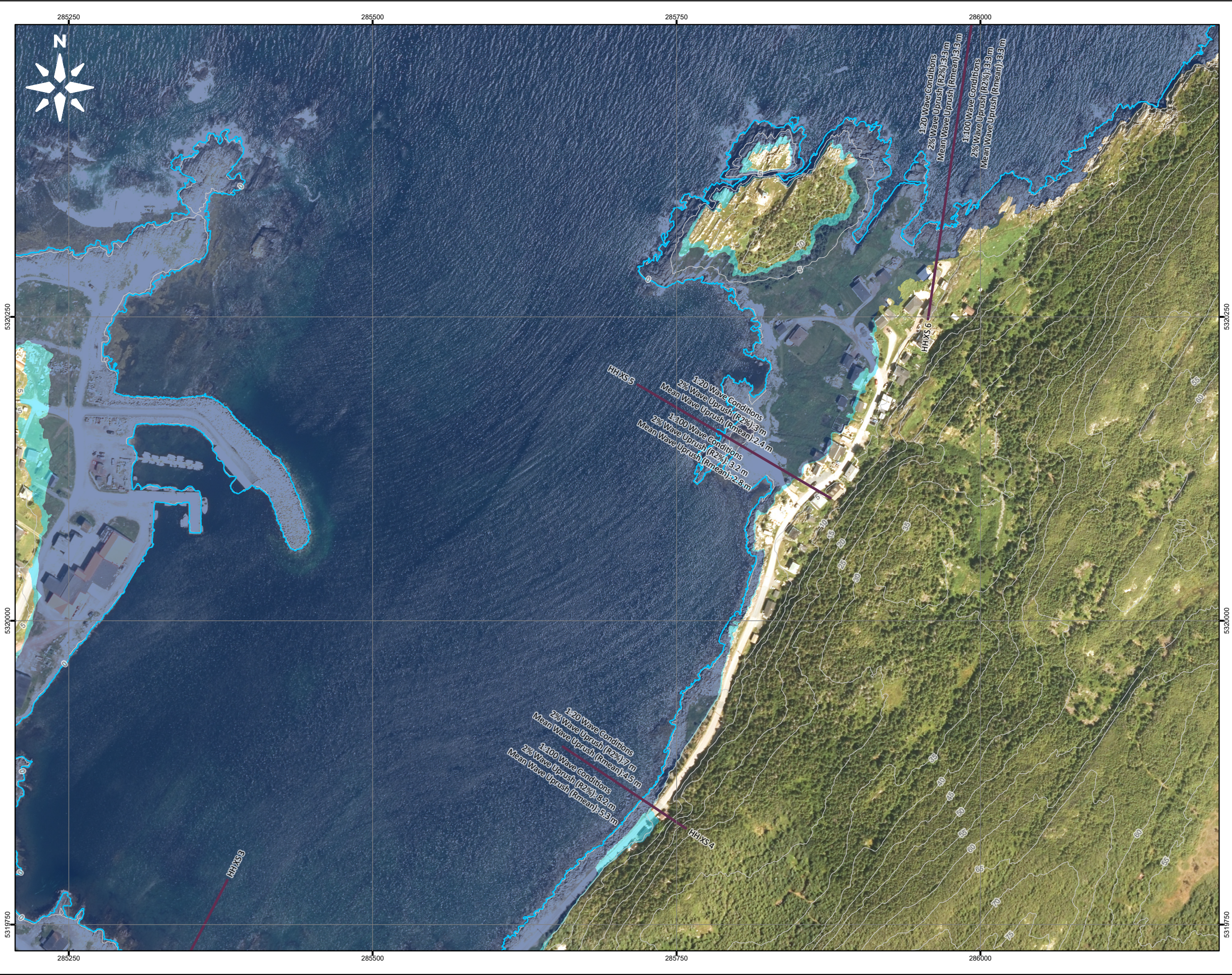
- 1:20 Year Wave Run Up
- 1:100 Year Wave Run Up
- Coastline
- 5m LiDAR Contour
- Limit of Mapping
- Wave Run Up Transect

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CLIMATE CHANGE FLOOD HAZARD MAPPING STUDY FOR FERRYLAND, BRIGUS, HEART'S DELIGHT, WINTERTON & HANT'S HARBOUR				
CLIMATE CHANGE AND CURRENT DEVELOPMENT CONDITION (CLC-CD)				
WAVE RUN UP - HH-11				
DECEMBER 2025		FIGURE 18.2		REV: 0



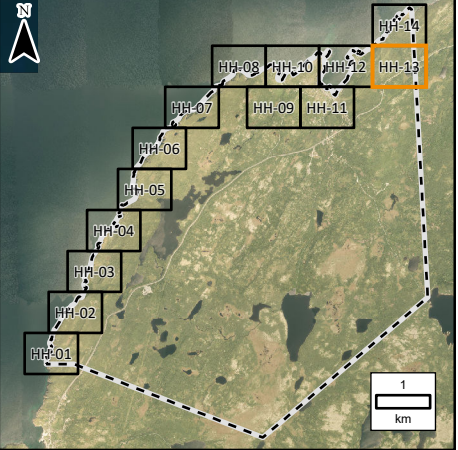
- LEGEND:**
- 1:20 Year Wave Run Up
 - 1:100 Year Wave Run Up
 - Coastline
 - 5m LiDAR Contour
 - Limit of Mapping
 - Wave Run Up Transect

- NOTES:**
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20 0 20 40 60 80 100
Metres
SCALE: 1:3,000 METRIC 11"x17"

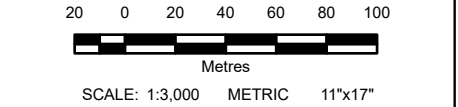
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Horizontal Projection: North American Datum 1983 CSRS (NAD83), Modified Transverse Mercator Projection (MTM) Zone 1. Elevations are in metres above sea level (MSL), Canadian Geodetic Vertical Datum 2013 (CGVD2013).

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CLIMATE CHANGE FLOOD HAZARD MAPPING STUDY FOR FERRYLAND, BRIGUS, HEART'S DELIGHT, WINTERTON & HANT'S HARBOUR				
CLIMATE CHANGE AND CURRENT DEVELOPMENT CONDITION (CLC-CD)				
WAVE RUN UP - HH-12				
DECEMBER 2025		FIGURE 18.2		REV: 0



- LEGEND:**
- 1:20 Year Wave Run Up
 - 1:100 Year Wave Run Up
 - Coastline
 - 5m LiDAR Contour
 - Limit of Mapping
 - Wave Run Up Transect

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 - Climate change impacts on wave effects are incorporated by considering mid-century and late-century relative sea level projections (RCP 8.5) from the IPCC Fifth Assessment Report, obtained through the ClimateData.ca project.

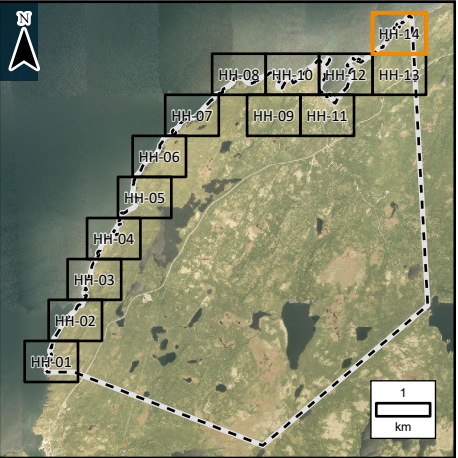
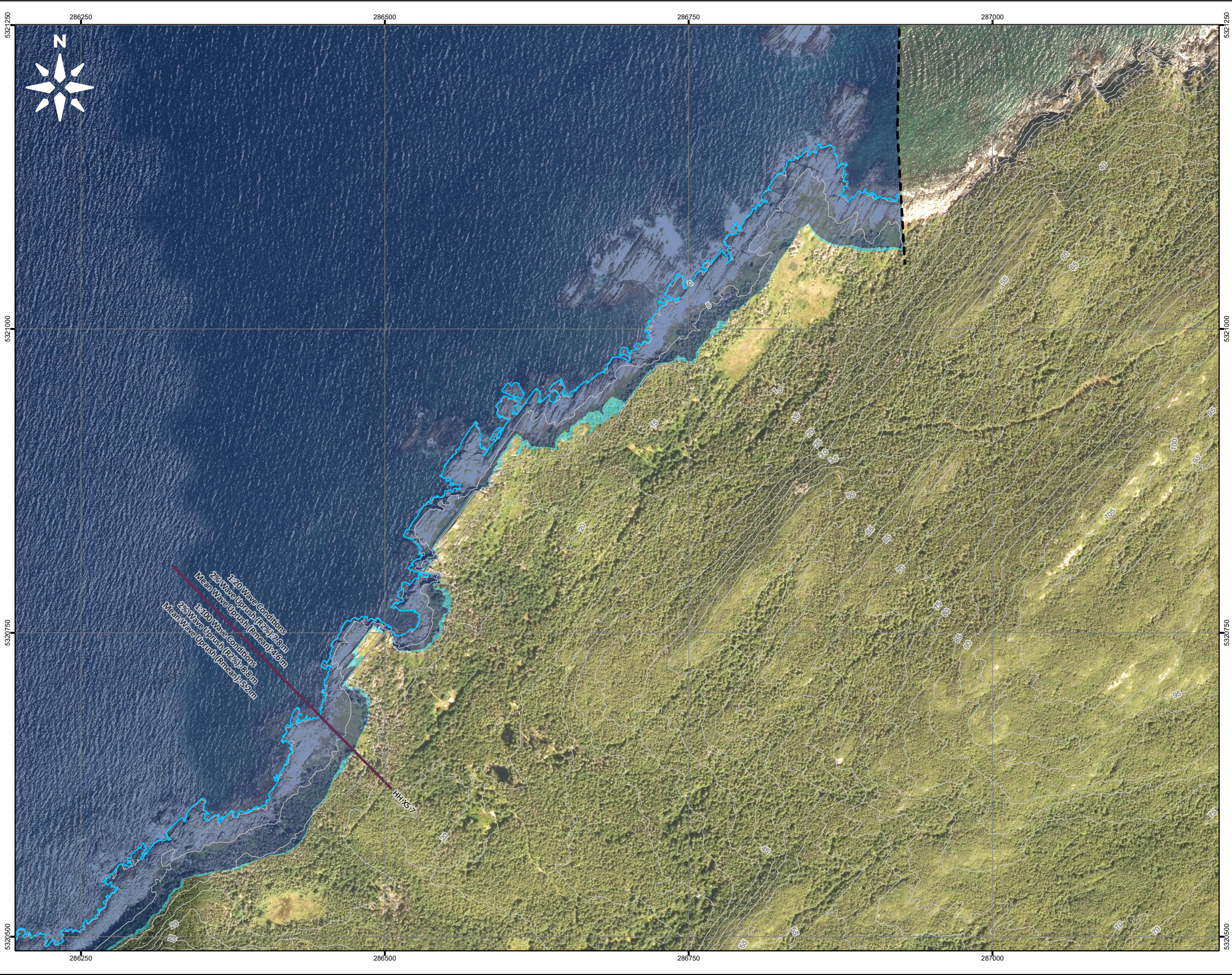


All units are metric and in metres unless otherwise specified.
Horizontal Projection: North American Datum 1983 CSRS (NAD83), Modified Transverse Mercator Projection (MTM) Zone 1. Elevations are in metres above sea level (MSL), Canadian Geodetic Vertical Datum 2013 (CGVD2013).

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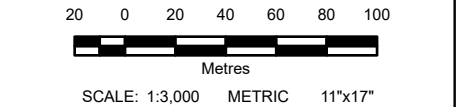
REVISIONS / ISSUE	

CLIMATE CHANGE FLOOD HAZARD MAPPING STUDY FOR FERRYLAND, BRIGUS, HEART'S DELIGHT, WINTERTON & HANT'S HARBOUR	
CLIMATE CHANGE AND CURRENT DEVELOPMENT CONDITION (CLC-CD) WAVE RUN UP - HH-13	
DECEMBER 2025	FIGURE 18.2
	REV: 0



- LEGEND:**
- 1:20 Year Wave Run Up
 - 1:100 Year Wave Run Up
 - Coastline
 - 5m LiDAR Contour
 - Limit of Mapping
 - Wave Run Up Transect

- NOTES:**
- Imagery is supplied by the Government of Newfoundland and Labrador. (Capture date: 2020)
 - Topography shown was developed by KGS Group from the HRDEM from Natural Resources Canada (NRCAN). (Capture date: June and July, 2020)
 - Climate change impacts on wave effects are incorporated by considering mid-century and late-century relative sea level projections (RCP 8.5) from the IPCC Fifth Assessment Report, obtained through the ClimateData.ca project.



Horizontal Projection: North American Datum 1983 CSRS (NAD83), Modified Transverse Mercator Projection (MTM) Zone 1. Elevations are in metres above sea level (MSL), Canadian Geodetic Vertical Datum 2013 (CGVD2013).

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REVISIONS / ISSUE

CLIMATE CHANGE FLOOD HAZARD MAPPING STUDY FOR FERRYLAND, BRIGUS, HEART'S DELIGHT, WINTERTON & HANT'S HARBOUR		
CLIMATE CHANGE AND CURRENT DEVELOPMENT CONDITION (CLC-CD) WAVE RUN UP - HH-14		
DECEMBER 2025	FIGURE 18.2	REV: 0