TOWN OF SIDNEY **POLICY AND PROCEDURES**

TITLE:	FLOOD CONSTRUCTION LEVEL			
Type:	Council X	Administrative		
Approved:	Council – April 24, 2017	#2017.11.176	Ref:	DV-014
Amended:	Council - June 10, 2019 Council - September 28, 2026	#2019.25.297 #2026.24.406	Page:	1 of 1

1. Purpose

The purpose of this policy is to establish Flood Construction Levels for new construction to ensure development responds to identified flood hazards.

2. Application of Policy

This policy applies to all new construction.

3. Interpretation

Terms used in this policy shall have the same meaning as those found in the BC Building Code, the BC Flood Hazard Area Land Use Management Guidelines, and regulations contained in the Town of Sidney's Official Community Plan and Zoning Bylaws that were in force on the date of adoption of this policy, unless specified in section 4 of the policy.

4. Definitions

Flood Mapping: Refers to the Town's Enhanced Flood Inundation Modelling and Mapping Project completed in 2025.

Wave Effect Zones: Zones are delineated in the Flood Mapping on each FCL map to indicate coastal areas that could be vulnerable to wave effects (i.e. runup, overtopping, wave-induced erosion). These zones extend 30 m inland from the Designated Flood Level (DFL) or crest of the shoreline slope.

Flood Construction Level (FCL): For the purposes of this Policy, FCL shall have the same meaning as provided in the BC Flood Hazard Area Land Use Management Guidelines and shall be measured to the underside of the floor system or the top of concrete slab, as applicable.

Backshore Flood Construction Level: FCL value that is applicable for coastal areas outside of defined Wave Effect Zones.

Foreshore Flood Construction Level: FCL values that are applicable for coastal areas within the defined Wave Effect Zones.

5. Interim Flood Construction Level

The Town of Sidney requires all applicants for Building Permits where construction is subject to, or likely to be subject to, flooding resulting from storm surge, tides, waves, and projected sea level rise to provide a report and a Flood Assurance Statement from a qualified Professional Engineer confirming that the land may be used safely for the purpose intended.

Specifically, the Town has determined that all proposals to build structures for habitation or business below the applicable Flood Construction Level (FCL) identified in the flood mapping

will require a report from a qualified Professional Engineer. The applicable FCL shall be determined based on the location of the subject property relative to the mapped Backshore and Wave Effect Zone areas shown in the Appendix. Land located outside the Wave Effect Zones are subject to a Backshore FCL of 4.12 m geodetic elevation. Land located within the Wave Effect Zones shall be subject to the Foreshore FCL identified for the property in the FCL Maps contained in the Appendix. Where more than one FCL applies to a property according to the mapping in the Appendix, the property shall be subject to the highest applicable FCL.

The Engineer's report shall review local conditions and set a site-specific FCL in line with best practices for flood mitigation and the BC Flood Hazard Area Land Use Management Guidelines. Proposed ancillary floor areas for storage of goods, etc. that are below the FCL are susceptible to flood damage and must be listed in the report along with intended usages. In order to be accepted, the report must state that these ancillary floor areas may be safely used if constructed below the FCL. The Engineer's report shall be submitted to the Town and accepted prior to issuance of a Building Permit.

Where the property in question is located in a Development Permit Area, the Engineer's report shall be submitted to the Town and accepted prior to issuance of a Development Permit.

Prior to issuance of a Building Permit, a Section 219 covenant must be registered on the title of the property with the Engineer's report and associated building plans attached. The covenant shall notify future owners of the property of the susceptibility to flooding and hold the Town of Sidney harmless from future claims and damages.

APPENDIX: Flood Construction Level (FCL) Maps from the Town's Flood Mapping Project



IF NOT 50 mm ADJUST SCALES
SCALE(S) SHOWN ARE INTENDED FOR ANSI D SIZE DRAWINGS UNLESS NOTED OTHERWISE

DEVELOPMENT AND USE OF FLOODPLAIN MAPS IN BC

Flood plain maps are an important tool to help First Nations and local governments make informed decisions about land use, development, and flood-related policies. Flood plain maps also support First Nations and local government emergency preparedness and response roles. In the case of local governments these maps help them fulfill their responsibilities for land use planning and flood plain management, under the *Local Government Act*. Good information about potential flood depth, extent, and velocity can inform different kinds of planning and decision making such as:

- Informing land use planning policies and development decisions;
- Assessing potential impacts to people and other community values and assets;
- Preparing or updating emergency response plans; and
- Informing other flood mitigation and climate adaptation measures.

It is generally recommended that First Nations and local governments use the best available information to inform their flood-related policies, plans, and bylaws. It is the purview of the local government to determine when bylaw updates are appropriate, as well as the information used to do so. Flood construction levels and setbacks are included on some of the maps produced in this project. These are suggested flood construction levels and setbacks, based on the expertise and judgement of qualified professionals and available guidance. The maps are intended as a tool that may be used by local governments in establishing local government flood construction levels and setbacks.

When using the flood plain maps for decisions, planning, or flood responses, please be aware of the accuracy limitations in the flood levels and flood extents provided in those maps. For example, limitations could include limited topographic and coastal bathymetry survey data, limited metocean data, limited historical flood data, and uncertainties in the science of climate change impacts.

These flood plain maps were produced by the respective consulting companies following practices described in the applicable federal[1] and provincial[2] guidelines and in accordance with generally accepted engineering and geoscience practices.

[1] *Federal Flood Mapping Guideline Series.*
[2] *BC Floodplain Mapping and Geomatics guidelines; FLNRORD's Specification for Airborne LiDAR (2020); Coastal Floodplain Mapping Guidelines and Specifications (2011); EGBC Professional Practice Guidelines – Floodplain Mapping in BC (2017) and Legislated Flood Assessments in a Changing Climate in BC (2018); FLNRORD's Flood Hazard Area Land Use Management Guidelines (2018).*

GENERAL NOTES

1. Please refer to the limitations disclaimer below.
2. These maps were produced by Associated Engineering (B.C.) Ltd. and DHI Water & Environment (Inc.) for the Town of Sidney in conjunction with the Enhanced Flood Inundation Modelling & Mapping Project Report (2025). This report provides context and information that may be valuable in understanding these maps.
3. The hydraulic analysis assumes no change in foreshore and beach profile. Erosion and deposition within the supratidal, intertidal and subtidal zones are expected to occur over time and may alter flood levels and extents.
4. Flood maps represent coastal storm flooding and do not consider other forms of flooding which may result from riverine, tsunami, storm water, ground water and other processes. The mapped coastal storm flooding results do not include compound flood effects from multiple flood sources.
5. The accuracy of the floodplain extents is limited by the accuracy of the available metocean data and climate projection data, the hydraulic model, and the digital surface representation of the local topography (i.e. bare-earth) and bathymetry.
6. Floodplain maps should be regarded as an administrative tool that indicates flood hazard including flood levels and extents for a designated flood. A Qualified Professional must be consulted for site-specific engineering analysis.
7. In addition to the above, the following statements apply to all flood modelling:
   a. The flood extent limits are not established on the ground by legal survey.
   b. Building control elevations should be based on field survey and established benchmarks (converted as necessary to match the vertical datum and origin referenced on these maps).

Relative Sea Level Rise:
1. Relative Sea Level Rise (RSLR) adjustments were applied to the Designated Flood Level and Flood Construction Levels to account for sea level rise. RSLR is an absolute increase in mean sea level, incorporating the effects of land subsidence or uplift.
2. Refer to the Enhanced Flood Inundation Modelling & Mapping Project Report (2025) for further information on sea level rise and associated time horizons.

Flood Construction Level (FCL):
1. The recommended Flood Construction Level (FCL) reflects the highest value from three relative sea level rise (RSLR) scenarios (0.0 m, 0.5 m, and 1.0 m). This ensures development planning is based on the most conservative approach, providing protection until sea levels rise by up to 1.0 m in Sidney.
2. The mapped FCL includes a 0.6 m freeboard allowance.
3. Foreshore FCL values are applicable to all areas within defined Wave Effect Zones for the respective reach to which it applies.
4. For coastal areas outside of defined Wave Effect Zones, a "backshore FCL" equal to the DFL plus freeboard is applicable. The Backshore FCL includes an allowance of 1 m RSLR.

Reach:
1. A defined segment of the coastline characterized by relatively uniform physical and hydrodynamic conditions, within which wave effects and flood hazard characteristics are assumed to be similar.
2. Coastal wave analysis is conducted at representative transects within each reach, and mapped Flood Construction Level (FCL) results are reported per reach.
3. Reach extents have been carefully chosen, such that wave effects and flood hazard characteristics are assumed to be similar over that reach length. Some properties in Sidney are located at reach boundaries; therefore being located where Foreshore FCL values change. It is recommended to adopt the higher FCL value in these instances. Relaxation in FCL values can be recommended through site-specific assessment by a qualified professional.

Wave Effect Zone:
1. Wave Effect Zones are delineated on each map to indicate coastal areas that could be vulnerable to wave effects (i.e. runup, overtopping, wave-induced erosion). These zones extend 30 m inland from the Designated Flood Level (DFL) or crest of the shoreline slope.
2. A foreshore FCL is provided for all areas within a defined wave effect zone.
3. Wave Effect Zones are only displayed for reaches that are expected to be significantly impacted by wave effects.

Designated Flood Level (DFL):
1. Still water level for the 200-year return period, including sea level rise allowance, tide and storm surge (and excluding wave effects).
2. Also referred to as the design static flood level.

Setbacks:
1. Minimum setback should be 15m horizontal distance, measured landward from the HHWLT + 1m RSLR. The HHWLT including 1 m RSLR is assumed to be the future natural boundary.
2. Coastal setbacks should be established, intending to limit the risk to proposed development from debris, wave breaking, coastal erosion and risk transference to adjacent properties.
3. Site-specific geomorphic hazard analysis should be completed to inform potential adjustments to setbacks prior to any development planning.

DATA SOURCES

1. 2023 LiDAR was provided by the Town of Sidney.
2. Aerial imagery was provided by the Town of Sidney and supplemented by Bing.
3. Roadway and coastal feature GIS data was acquired from the iMap BC Portal.

DISCLAIMER

These maps have been prepared by Associated Engineering (B.C.) Ltd. and DHI Water & Environment (Inc.) as part of the Enhanced Flood Inundation Modelling & Mapping Project. The information and data contained herein represent Associated Engineering (B.C.) Ltd. and DHI's best professional judgement in light of the knowledge and information available to Associated Engineering (B.C.) Ltd. and DHI Water & Environment (Inc.) at the time of preparation and were prepared in accordance with generally accepted engineering and geoscience practices.

The services provided by Associated Engineering (B.C.) Ltd. and DHI Water & Environment (Inc.) in the preparation of this study were conducted in a manner consistent with the level of skill ordinarily exercised by members of the profession currently practicing under similar conditions. No other warranty expressed or implied is made.

This document and associated project deliverables may be used and relied upon by the Town of Sidney, its officers, and employees as well as all orders of government and other public and private sector organizations to understand coastal flood hazards for specific flood scenarios. The floodplain maps produced as part of this project are intended to inform decision-making in support of land use planning, flood mitigation, emergency preparedness and response and adaptation to a changing climate. Associated Engineering (B.C.) Ltd., DHI Water & Environment (Inc.) and the Town of Sidney are not liable in any way whatsoever, to any party, for any injury, loss, or damage suffered by such parties arising from the misuse, misinterpretation, or reliance upon, this report or any of its contents.

LEGEND

- TOWN OF SIDNEY MUNICIPAL BOUNDARY
- MAP VIEWPORTS

0 200 400 600 800 1,000 m

Coordinate System: NAD 1983 CSRS UTM ZONE 10N
Units: METERS; Vertical Datum: CGVD 2013

MAP LOCATION



Sidney

This project is funded by the Government of Canada and the Government of B.C.

Enhanced Flood Inundation Modelling & Mapping Project

RECOMMENDED FLOOD CONSTRUCTION LEVEL MAPS

INDEX MAP

SHEET 0 OF 8

AE PROJECT No.	20232825-00
SCALE	AS SHOWN
ENGINEER	D. FORDE
GIS	N. FANOS
REVIEWER	M. HUIBAN
REV	A
DATE	20251201
DESCRIPTION	ISSUED AS FINAL

Associated Engineering

DHI



IF NOT 50 mm ADJUST SCALES

SCALES SHOWN ARE INTENDED FOR ANSI D SIZE DRAWINGS UNLESS NOTED OTHERWISE

LEGEND

- DESIGNATED FLOOD LEVEL EXTENT (m CGVD2013) FOR 1 m RELATIVE SEA LEVEL RISE
- 30 m WAVE EFFECT ZONE
- FORESHORE FLOOD CONSTRUCTION LEVEL
- BACKSHORE FLOOD CONSTRUCTION LEVEL
- REACH BOUNDARIES
- REACH NUMBER
- TOWN OF SIDNEY BOUNDARY
- PROPERTY LINES
- CONTOURS (5 m INTERVALS)
- ROADS

NOTES

1. For further information, see the Index Map and methodologies outlined in the report entitled: Enhanced Flood Inundation Modelling & Mapping Report (2025).
2. 2023 LiDAR data provided by the Town of Sidney was corrected to common datum (CGVD2013), to create a Digital Elevation Model (DEM) for the study area. The flood levels are based on this DEM.
3. Aerial imagery was provided by the Town of Sidney and supplemented by Bing.
4. Results are based on statistical metocean data analyses and 2D spectral wave modelling. Spectral wave model calibration was completed using the best available data. However, uncertainty remains due to data limitations and future conditions.
5. Floodplain mapping is based on current oceanographic and hydraulic conditions. Coastal flood hazards may shift over time due to shoreline erosion, sediment deposition, sea level rise, storm surge impacts, and changes in coastal geomorphology.
6. FCLs are reported for each reach. Reach boundary lines and labels are provided to indicate extent of each reach.
7. Foreshore FCL values are applicable to all areas within defined Wave Effect Zones for the respective reach to which it applies.
8. DFL values are provided for the scenario of 1 m Relative Sea Level Rise.
9. For coastal areas outside of defined Wave Effect Zones, a "backshore FCL" equal to the DFL plus freeboard is applicable. The Backshore FCL includes an allowance of 1 m RSLR and is constant for all reaches in the project area.
10. The recommended Flood Construction Level (FCL) reflects the highest value from three relative sea level rise (RSLR) scenarios (0.0 m, 0.5 m, and 1.0 m). This ensures development planning is based on the most conservative approach, providing protection until sea levels rise by up to 1.0 m in Sidney. Please refer to the Enhanced Flood Inundation Modelling & Mapping Report for further information on sea level rise.
11. Minimum setback should be 15m horizontal distance, measured landward from the HHWLT + 1m RSLR. It is recommended that site-specific analyses be undertaken, with regard to setback, for any proposed development within the Wave Effect Zone. Smaller setback may be reasonable in areas with non-erodible shorelines and/or more sheltered conditions.
12. Professional judgment has been applied to remove isolated "dry island" artifacts from the modelled flood extent.
13. Please refer to the cover sheet attached to this map set for further information and terminology definitions.

0 20 40 60 80 100 m

Coordinate System: NAD 1983 CSRS UTM ZONE 10N
Units: METERS; Vertical Datum: CGVD 2013

MAP LOCATION



Sidney

Enhanced Flood Inundation Modelling & Mapping

RECOMMENDED FLOOD CONSTRUCTION LEVEL MAPS

SHEET 1 OF 8

AE PROJECT No.	2023-2825
SCALE	1:1000
ENGINEER	D. FORDE
GIS	N. FANOS
REVIEWER	M. HUIBAN
REV	A
DATE	20251201
DESCRIPTION	ISSUED FOR FINAL

Associated Engineering

DHI



IF NOT 50 mm ADJUST SCALES

SCALES SHOWN ARE INTENDED FOR ANSI D SIZE DRAWINGS UNLESS NOTED OTHERWISE

LEGEND

- DESIGNATED FLOOD LEVEL EXTENT (m CGVD2013) FOR 1 m RELATIVE SEA LEVEL RISE
- 30 m WAVE EFFECT ZONE
- FORESHORE FLOOD CONSTRUCTION LEVEL
- BACKSHORE FLOOD CONSTRUCTION LEVEL
- REACH BOUNDARIES
- REACH NUMBER
- TOWN OF SIDNEY BOUNDARY
- PROPERTY LINES
- CONTOURS (5 m INTERVALS)
- ROADS

NOTES

1. For further information, see the Index Map and methodologies outlined in the report entitled: Enhanced Flood Inundation Modelling & Mapping Report (2025).
2. 2023 LiDAR data provided by the Town of Sidney was corrected to common datum (CGVD2013), to create a Digital Elevation Model (DEM) for the study area. The flood levels are based on this DEM.
3. Aerial imagery was provided by the Town of Sidney and supplemented by Bing.
4. Results are based on statistical metocean data analyses and 2D spectral wave modelling. Spectral wave model calibration was completed using the best available data. However, uncertainty remains due to data limitations and future conditions.
5. Floodplain mapping is based on current oceanographic and hydraulic conditions. Coastal flood hazards may shift over time due to shoreline erosion, sediment deposition, sea level rise, storm surge impacts, and changes in coastal geomorphology.
6. FCLs are reported for each reach. Reach boundary lines and labels are provided to indicate extent of each reach.
7. Foreshore FCL values are applicable to all areas within defined Wave Effect Zones for the respective reach to which it applies.
8. DFL values are provided for the scenario of 1 m Relative Sea Level Rise.
9. For coastal areas outside of defined Wave Effect Zones, a "backshore FCL" equal to the DFL plus freeboard is applicable. The Backshore FCL includes an allowance of 1 m RSLR and is constant for all reaches in the project area.
10. The recommended Flood Construction Level (FCL) reflects the highest value from three relative sea level rise (RSLR) scenarios (0.0 m, 0.5 m, and 1.0 m). This ensures development planning is based on the most conservative approach, providing protection until sea levels rise by up to 1.0 m in Sidney. Please refer to the Enhanced Flood Inundation Modelling & Mapping Report for further information on sea level rise.
11. Minimum setback should be 15m horizontal distance, measured landward from the HHWLT + 1m RSLR. It is recommended that site-specific analyses be undertaken, with regard to setback, for any proposed development within the Wave Effect Zone. Smaller setback may be reasonable in areas with non-erodible shorelines and/or more sheltered conditions.
12. Professional judgment has been applied to remove isolated "dry island" artifacts from the modelled flood extent.
13. Please refer to the cover sheet attached to this map set for further information and terminology definitions.

0 20 40 60 80 100 m

Coordinate System: NAD 1983 CSRS UTM ZONE 10N
Units: METERS; Vertical Datum: CGVD 2013

MAP LOCATION



Sidney

Enhanced Flood Inundation Modelling & Mapping

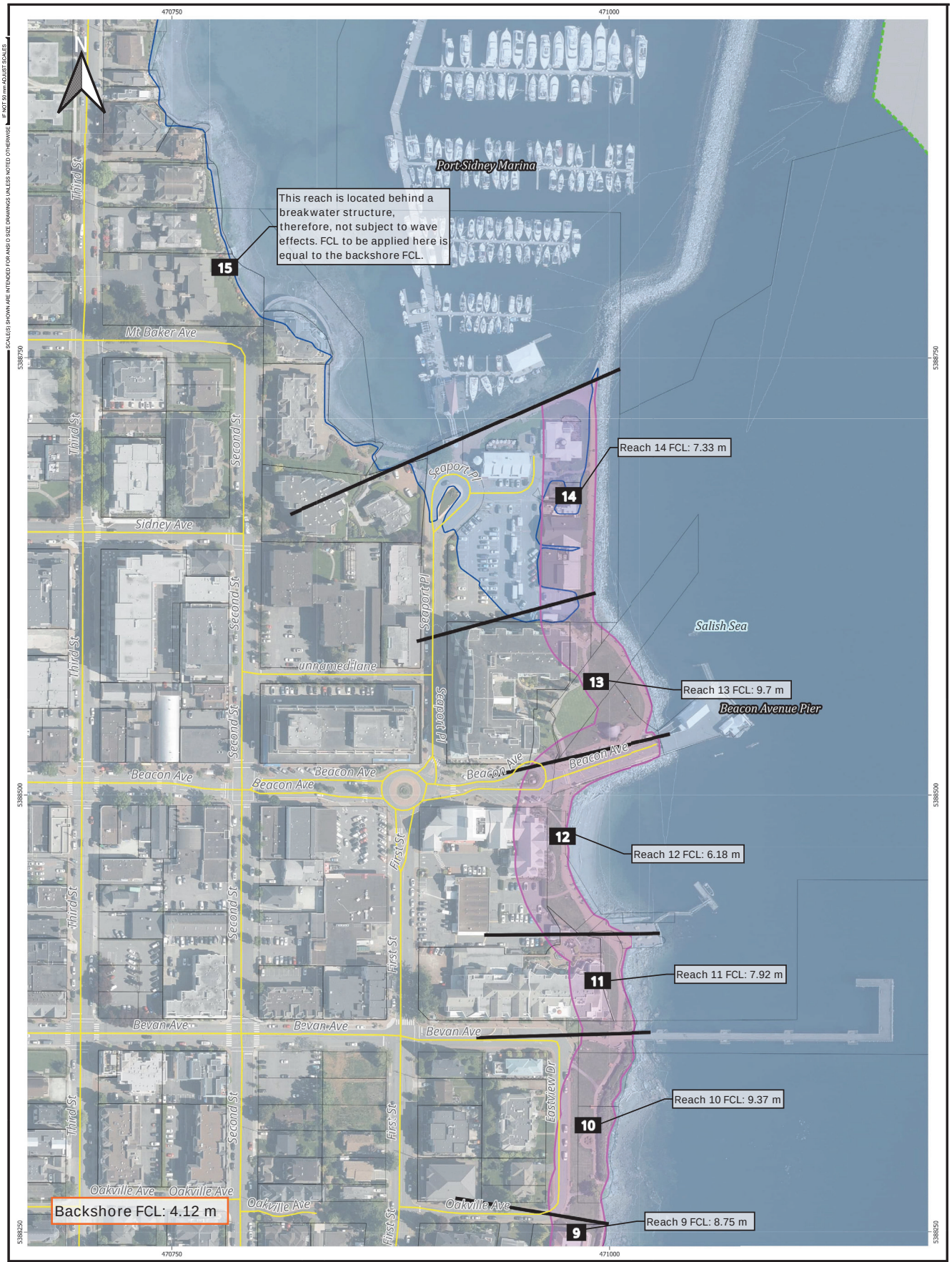
RECOMMENDED FLOOD CONSTRUCTION LEVEL MAPS

SHEET 2 OF 8

AE PROJECT No.	2023-2825
SCALE	1:1500
ENGINEER	D. FORDE
GIS	N. FANOS
REVIEWER	M. HUIBAN
REV	A
DATE	20251201
DESCRIPTION	ISSUED FOR FINAL

Associated Engineering

DHI



SCALES SHOWN ARE INTENDED FOR ANSI D SIZE DRAWINGS UNLESS NOTED OTHERWISE. IF NOT 59 mm ADJUST SCALES

MAP LOCATION



NOTES

1. For further information, see the Index Map and methodologies outlined in the report entitled: Enhanced Flood Inundation Modelling & Mapping Report (2025).
2. 2023 LiDAR data provided by the Town of Sidney was corrected to common datum (CGVD2013), to create a Digital Elevation Model (DEM) for the study area. The flood levels are based on this DEM.
3. Aerial imagery was provided by the Town of Sidney and supplemented by Bing.
4. Results are based on statistical metocean data analyses and 2D spectral wave modelling. Spectral wave model calibration was completed using the best available data. However, uncertainty remains due to data limitations and future conditions.
5. Floodplain mapping is based on current oceanographic and hydraulic conditions. Coastal flood hazards may shift over time due to shoreline erosion, sediment deposition, sea level rise, storm surge impacts, and changes in coastal geomorphology.
6. FCLs are reported for each reach. Reach boundary lines and labels are provided to indicate extent of each reach.
7. Foreshore FCL values are applicable to all areas within defined Wave Effect Zones for the respective reach to which it applies.
8. DFL values are provided for the scenario of 1 m Relative Sea Level Rise.
9. For coastal areas outside of defined Wave Effect Zones, a "backshore FCL" equal to the DFL plus freeboard is applicable. The Backshore FCL includes an allowance of 1 m RSLR and is constant for all reaches in the project area.
10. The recommended Flood Construction Level (FCL) reflects the highest value from three relative sea level rise (RSLR) scenarios (0.0 m, 0.5 m, and 1.0 m). This ensures development planning is based on the most conservative approach, providing protection until sea levels rise by up to 1.0 m in Sidney. Please refer to the Enhanced Flood Inundation Modelling & Mapping Report for further information on sea level rise.
11. Minimum setback should be 15m horizontal distance, measured landward from the HHWLT + 1m RSLR. It is recommended that site-specific analyses be undertaken, with regard to setback, for any proposed development within the Wave Effect Zone. Smaller setback may be reasonable in areas with non-erodible shorelines and/or more sheltered conditions.
12. Professional judgment has been applied to remove isolated "dry island" artifacts from the modelled flood extent.
13. Please refer to the cover sheet attached to this map set for further information and terminology definitions.

LEGEND

- DESIGNATED FLOOD LEVEL EXTENT (m CGVD2013) FOR 1 m RELATIVE SEA LEVEL RISE
- 30 m WAVE EFFECT ZONE
- FORESHORE FLOOD CONSTRUCTION LEVEL
- BACKSHORE FLOOD CONSTRUCTION LEVEL
- REACH BOUNDARIES
- REACH NUMBER
- TOWN OF SIDNEY BOUNDARY
- PROPERTY LINES
- CONTOURS (5 m INTERVALS)
- ROADS

Sidney

Enhanced Flood Inundation Modelling & Mapping

RECOMMENDED FLOOD CONSTRUCTION LEVEL MAPS

SHEET 3 OF 8

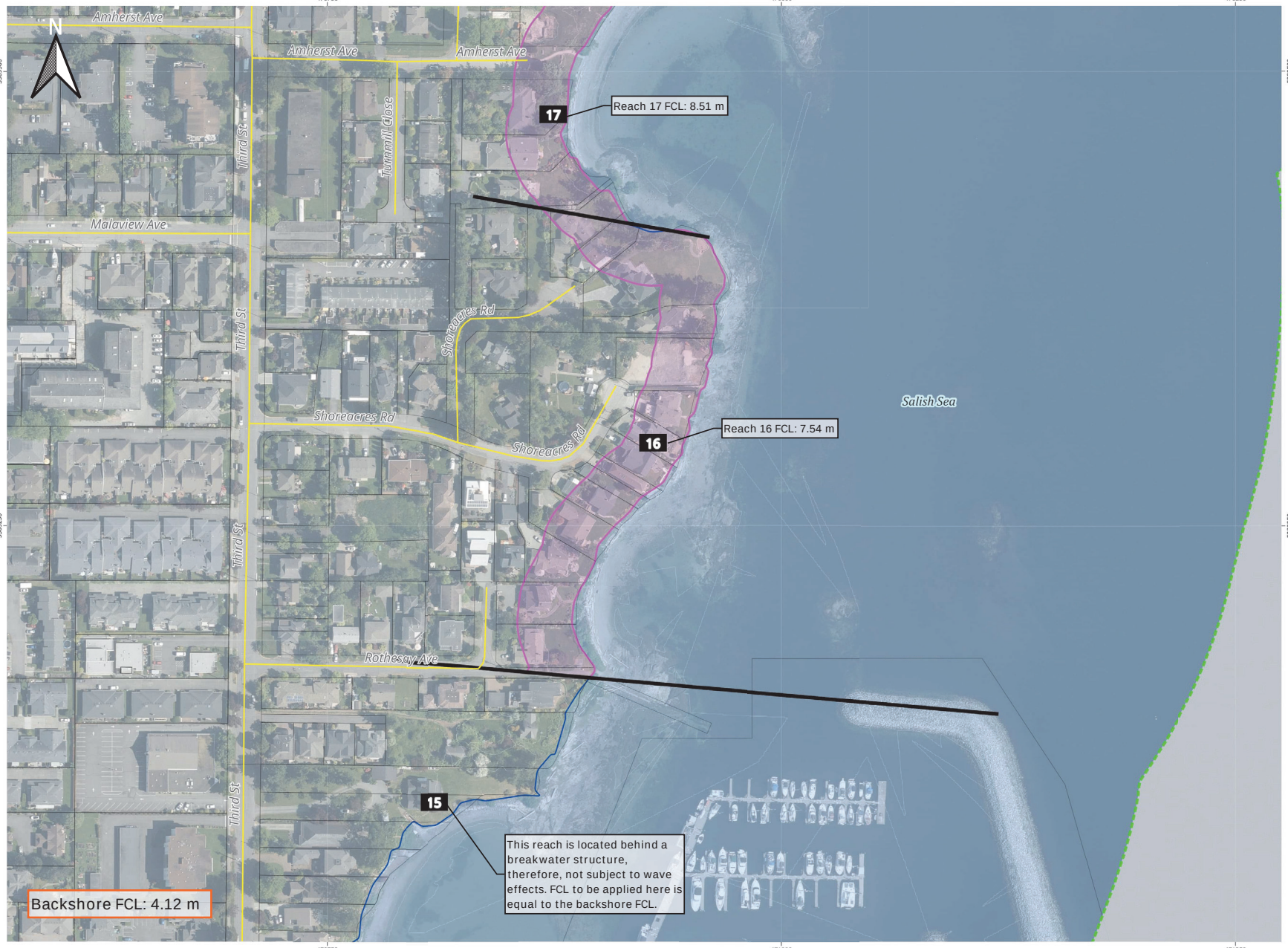
0 20 40 60 80 100 m

Coordinate System: NAD 1983 CSRS UTM ZONE 10N
Units: METERS; Vertical Datum: CGVD 2013

AE PROJECT No.	2023-2825
SCALE	1:1000
ENGINEER	D. FORDE
GIS	N. FANOS
REVIEWER	M. HUIBAN
REV	A
DATE	20251201
DESCRIPTION	ISSUED FOR FINAL

Associated Engineering

DHI



IF NOT 50 mm ADJUST SCALES
SCALES SHOWN ARE INTENDED FOR ANSI D SIZE DRAWINGS UNLESS NOTED OTHERWISE

LEGEND

- DESIGNATED FLOOD LEVEL EXTENT (m CGVD2013) FOR 1 m RELATIVE SEA LEVEL RISE
- 30 m WAVE EFFECT ZONE
- FORESHORE FLOOD CONSTRUCTION LEVEL
- BACKSHORE FLOOD CONSTRUCTION LEVEL
- REACH BOUNDARIES
- REACH NUMBER
- TOWN OF SIDNEY BOUNDARY
- PROPERTY LINES
- CONTOURS (5 m INTERVALS)
- ROADS

NOTES

1. For further information, see the Index Map and methodologies outlined in the report entitled: Enhanced Flood Inundation Modelling & Mapping Report (2025).
2. 2023 LiDAR data provided by the Town of Sidney was corrected to common datum (CGVD2013), to create a Digital Elevation Model (DEM) for the study area. The flood levels are based on this DEM.
3. Aerial imagery was provided by the Town of Sidney and supplemented by Bing.
4. Results are based on statistical metocean data analyses and 2D spectral wave modelling. Spectral wave model calibration was completed using the best available data. However, uncertainty remains due to data limitations and future conditions.
5. Floodplain mapping is based on current oceanographic and hydraulic conditions. Coastal flood hazards may shift over time due to shoreline erosion, sediment deposition, sea level rise, storm surge impacts, and changes in coastal geomorphology.
6. FCLs are reported for each reach. Reach boundary lines and labels are provided to indicate extent of each reach.
7. Foreshore FCL values are applicable to all areas within defined Wave Effect Zones for the respective reach to which it applies.
8. DFL values are provided for the scenario of 1 m Relative Sea Level Rise.
9. For coastal areas outside of defined Wave Effect Zones, a "backshore FCL" equal to the DFL plus freeboard is applicable. The Backshore FCL includes an allowance of 1 m RSLR and is constant for all reaches in the project area.
10. The recommended Flood Construction Level (FCL) reflects the highest value from three relative sea level rise (RSLR) scenarios (0.0 m, 0.5 m, and 1.0 m). This ensures development planning is based on the most conservative approach, providing protection until sea levels rise by up to 1.0 m in Sidney. Please refer to the Enhanced Flood Inundation Modelling & Mapping Report for further information on sea level rise.
11. Minimum setback should be 15m horizontal distance, measured landward from the HHWLT + 1m RSLR. It is recommended that site-specific analyses be undertaken, with regard to setback, for any proposed development within the Wave Effect Zone. Smaller setback may be reasonable in areas with non-erodible shorelines and/or more sheltered conditions.
12. Professional judgment has been applied to remove isolated "dry island" artifacts from the modelled flood extent.
13. Please refer to the cover sheet attached to this map set for further information and terminology definitions.

0 20 40 60 80 100 m

Coordinate System: NAD 1983 CSRS UTM ZONE 10N
Units: METERS; Vertical Datum: CGVD 2013

MAP LOCATION



Sidney

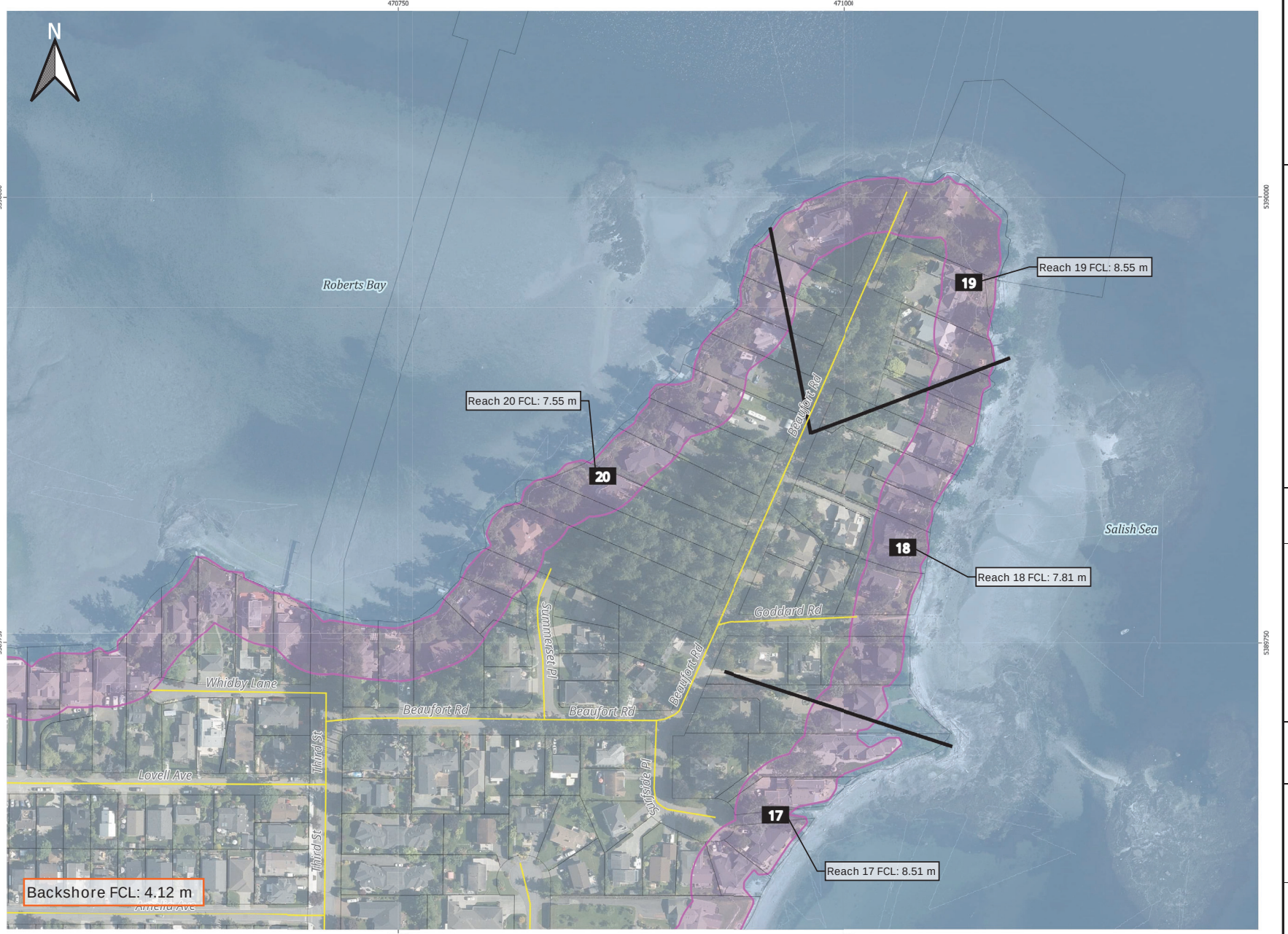
Enhanced Flood Inundation Modelling & Mapping

RECOMMENDED FLOOD CONSTRUCTION LEVEL MAPS

SHEET 4 OF 8

AE PROJECT No.	2023-2825
SCALE	1:1000
ENGINEER	D. FORDE
GIS	N. FANOS
REVIEWER	M. HUIBAN
REV	A
DATE	20251201
DESCRIPTION	ISSUED FOR FINAL

Associated Engineering
DHI



SCALES SHOWN ARE INTENDED FOR ANSI D SIZE DRAWINGS UNLESS NOTED OTHERWISE. IF NOT 50 mm ADJUST SCALES

LEGEND

- DESIGNATED FLOOD LEVEL EXTENT (m CGVD2013) FOR 1 m RELATIVE SEA LEVEL RISE
- 30 m WAVE EFFECT ZONE
- FORESHORE FLOOD CONSTRUCTION LEVEL
- BACKSHORE FLOOD CONSTRUCTION LEVEL
- REACH BOUNDARIES
- REACH NUMBER
- TOWN OF SIDNEY BOUNDARY
- PROPERTY LINES
- CONTOURS (5 m INTERVALS)
- ROADS

NOTES

1. For further information, see the Index Map and methodologies outlined in the report entitled: Enhanced Flood Inundation Modelling & Mapping Report (2025).
2. 2023 LiDAR data provided by the Town of Sidney was corrected to common datum (CGVD2013), to create a Digital Elevation Model (DEM) for the study area. The flood levels are based on this DEM.
3. Aerial imagery was provided by the Town of Sidney and supplemented by Bing.
4. Results are based on statistical metocean data analyses and 2D spectral wave modelling. Spectral wave model calibration was completed using the best available data. However, uncertainty remains due to data limitations and future conditions.
5. Floodplain mapping is based on current oceanographic and hydraulic conditions. Coastal flood hazards may shift over time due to shoreline erosion, sediment deposition, sea level rise, storm surge impacts, and changes in coastal geomorphology.
6. FCLs are reported for each reach. Reach boundary lines and labels are provided to indicate extent of each reach.
7. Foreshore FCL values are applicable to all areas within defined Wave Effect Zones for the respective reach to which it applies.
8. DFL values are provided for the scenario of 1 m Relative Sea Level Rise.
9. For coastal areas outside of defined Wave Effect Zones, a "backshore FCL" equal to the DFL plus freeboard is applicable. The Backshore FCL includes an allowance of 1 m RSLR and is constant for all reaches in the project area.
10. The recommended Flood Construction Level (FCL) reflects the highest value from three relative sea level rise (RSLR) scenarios (0.0 m, 0.5 m, and 1.0 m). This ensures development planning is based on the most conservative approach, providing protection until sea levels rise by up to 1.0 m in Sidney. Please refer to the Enhanced Flood Inundation Modelling & Mapping Report for further information on sea level rise.
11. Minimum setback should be 15m horizontal distance, measured landward from the HHWLT + 1m RSLR. It is recommended that site-specific analyses be undertaken, with regard to setback, for any proposed development within the Wave Effect Zone. Smaller setback may be reasonable in areas with non-erodible shorelines and/or more sheltered conditions.
12. Professional judgment has been applied to remove isolated "dry island" artifacts from the modelled flood extent.
13. Please refer to the cover sheet attached to this map set for further information and terminology definitions.

0 20 40 60 80 100 m

Coordinate System: NAD 1983 CSRS UTM ZONE 10N
Units: METERS; Vertical Datum: CGVD 2013

MAP LOCATION



Sidney

Enhanced Flood Inundation Modelling & Mapping

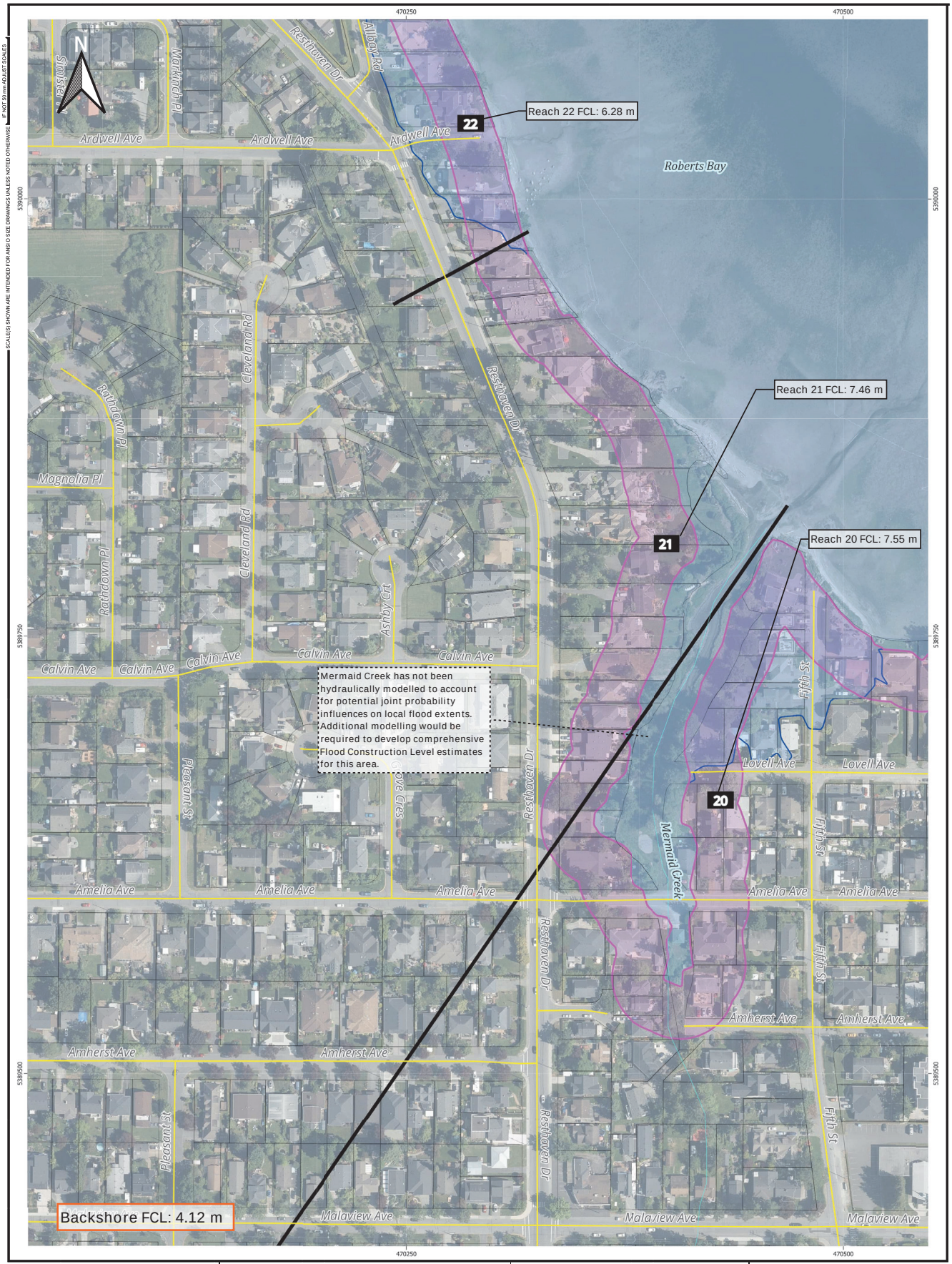
RECOMMENDED FLOOD CONSTRUCTION LEVEL MAPS

SHEET 5 OF 8

AE PROJECT No.	2023-2825
SCALE	1:1000
ENGINEER	D. FORDE
GIS	N. FANOS
REVIEWER	M. HUIBAN
REV	A
DATE	20251201
DESCRIPTION	ISSUED FOR FINAL

Associated Engineering

DHI



MAP LOCATION



NOTES

1. For further information, see the Index Map and methodologies outlined in the report entitled: Enhanced Flood Inundation Modelling & Mapping Report (2025).
2. 2023 LiDAR data provided by the Town of Sidney was corrected to common datum (CGVD2013), to create a Digital Elevation Model (DEM) for the study area. The flood levels are based on this DEM.
3. Aerial imagery was provided by the Town of Sidney and supplemented by Bing.
4. Results are based on statistical metocean data analyses and 2D spectral wave modelling. Spectral wave model calibration was completed using the best available data. However, uncertainty remains due to data limitations and future conditions.
5. Floodplain mapping is based on current oceanographic and hydraulic conditions. Coastal flood hazards may shift over time due to shoreline erosion, sediment deposition, sea level rise, storm surge impacts, and changes in coastal geomorphology.
6. FCLs are reported for each reach. Reach boundary lines and labels are provided to indicate extent of each reach.
7. Foreshore FCL values are applicable to all areas within defined Wave Effect Zones for the respective reach to which it applies.
8. DFL values are provided for the scenario of 1 m Relative Sea Level Rise.
9. For coastal areas outside of defined Wave Effect Zones, a "backshore FCL" equal to the DFL plus freeboard is applicable. The Backshore FCL includes an allowance of 1 m RSLR and is constant for all reaches in the project area.
10. The recommended Flood Construction Level (FCL) reflects the highest value from three relative sea level rise (RSLR) scenarios (0.0 m, 0.5 m, and 1.0 m). This ensures development planning is based on the most conservative approach, providing protection until sea levels rise by up to 1.0 m in Sidney. Please refer to the Enhanced Flood Inundation Modelling & Mapping Report for further information on sea level rise.
11. Minimum setback should be 15m horizontal distance, measured landward from the HHWLT + 1m RSLR. It is recommended that site-specific analyses be undertaken, with regard to setback, for any proposed development within the Wave Effect Zone. Smaller setback may be reasonable in areas with non-erodible shorelines and/or more sheltered conditions.
12. Professional judgment has been applied to remove isolated "dry island" artifacts from the modelled flood extent.
13. Please refer to the cover sheet attached to this map set for further information and terminology definitions.

LEGEND

- DESIGNATED FLOOD LEVEL EXTENT (m CGVD2013) FOR 1 m RELATIVE SEA LEVEL RISE
- 30 m WAVE EFFECT ZONE
- FORESHORE FLOOD CONSTRUCTION LEVEL
- BACKSHORE FLOOD CONSTRUCTION LEVEL
- REACH BOUNDARIES
- REACH NUMBER
- TOWN OF SIDNEY BOUNDARY
- PROPERTY LINES
- CONTOURS (5 m INTERVALS)
- ROADS

Sidney

Enhanced Flood Inundation Modelling & Mapping

RECOMMENDED FLOOD CONSTRUCTION LEVEL MAPS

SHEET 6 OF 8

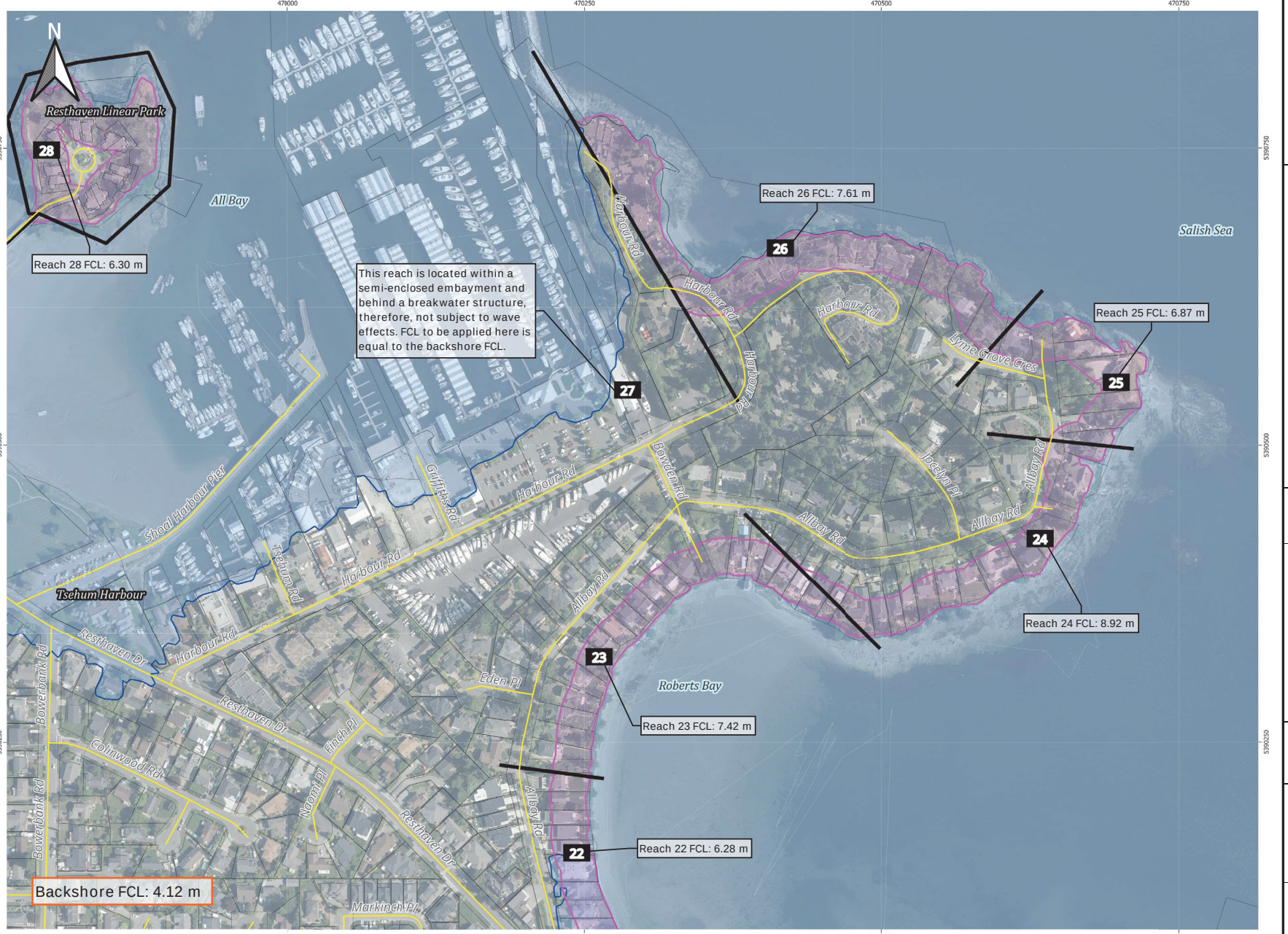
0 20 40 60 80 100 m

Coordinate System: NAD 1983 CSRS UTM ZONE 10N
Units: METERS; Vertical Datum: CGVD 2013

AE PROJECT No.	2023-2825
SCALE	1:1000
ENGINEER	D. FORDE
GIS	N. FANOS
REVIEWER	M. HUIBAN
REV	A
DATE	20251201
DESCRIPTION	ISSUED FOR FINAL

Associated Engineering

DHI



IF NOT 50 mm ADJUST SCALES
SCALES SHOWN ARE INTENDED FOR ANSI D SIZE DRAWINGS UNLESS NOTED OTHERWISE

LEGEND

- DESIGNATED FLOOD LEVEL EXTENT (m CGVD2013) FOR 1 m RELATIVE SEA LEVEL RISE
- 30 m WAVE EFFECT ZONE
- FORESHORE FLOOD CONSTRUCTION LEVEL
- BACKSHORE FLOOD CONSTRUCTION LEVEL
- REACH BOUNDARIES
- REACH NUMBER
- TOWN OF SIDNEY BOUNDARY
- PROPERTY LINES
- CONTOURS (5 m INTERVALS)
- ROADS

NOTES

1. For further information, see the Index Map and methodologies outlined in the report entitled: Enhanced Flood Inundation Modelling & Mapping Report (2025).
2. 2023 LiDAR data provided by the Town of Sidney was corrected to common datum (CGVD2013), to create a Digital Elevation Model (DEM) for the study area. The flood levels are based on this DEM.
3. Aerial imagery was provided by the Town of Sidney and supplemented by Bing.
4. Results are based on statistical metocean data analyses and 2D spectral wave modelling. Spectral wave model calibration was completed using the best available data. However, uncertainty remains due to data limitations and future conditions.
5. Floodplain mapping is based on current oceanographic and hydraulic conditions. Coastal flood hazards may shift over time due to shoreline erosion, sediment deposition, sea level rise, storm surge impacts, and changes in coastal geomorphology.
6. FCLs are reported for each reach. Reach boundary lines and labels are provided to indicate extent of each reach.
7. Foreshore FCL values are applicable to all areas within defined Wave Effect Zones for the respective reach to which it applies.
8. DFL values are provided for the scenario of 1 m Relative Sea Level Rise.
9. For coastal areas outside of defined Wave Effect Zones, a "backshore FCL" equal to the DFL plus freeboard is applicable. The Backshore FCL includes an allowance of 1 m RSLR and is constant for all reaches in the project area.
10. The recommended Flood Construction Level (FCL) reflects the highest value from three relative sea level rise (RSLR) scenarios (0.0 m, 0.5 m, and 1.0 m). This ensures development planning is based on the most conservative approach, providing protection until sea levels rise by up to 1.0 m in Sidney. Please refer to the Enhanced Flood Inundation Modelling & Mapping Report for further information on sea level rise.
11. Minimum setback should be 15m horizontal distance, measured landward from the HHWLT + 1m RSLR. It is recommended that site-specific analyses be undertaken, with regard to setback, for any proposed development within the Wave Effect Zone. Smaller setback may be reasonable in areas with non-erodible shorelines and/or more sheltered conditions.
12. Professional judgment has been applied to remove isolated "dry island" artifacts from the modelled flood extent.
13. Please refer to the cover sheet attached to this map set for further information and terminology definitions.

0 20 40 60 80 100 m

Coordinate System: NAD 1983 CSRS UTM ZONE 10N
Units: METERS; Vertical Datum: CGVD 2013

MAP LOCATION



Sidney

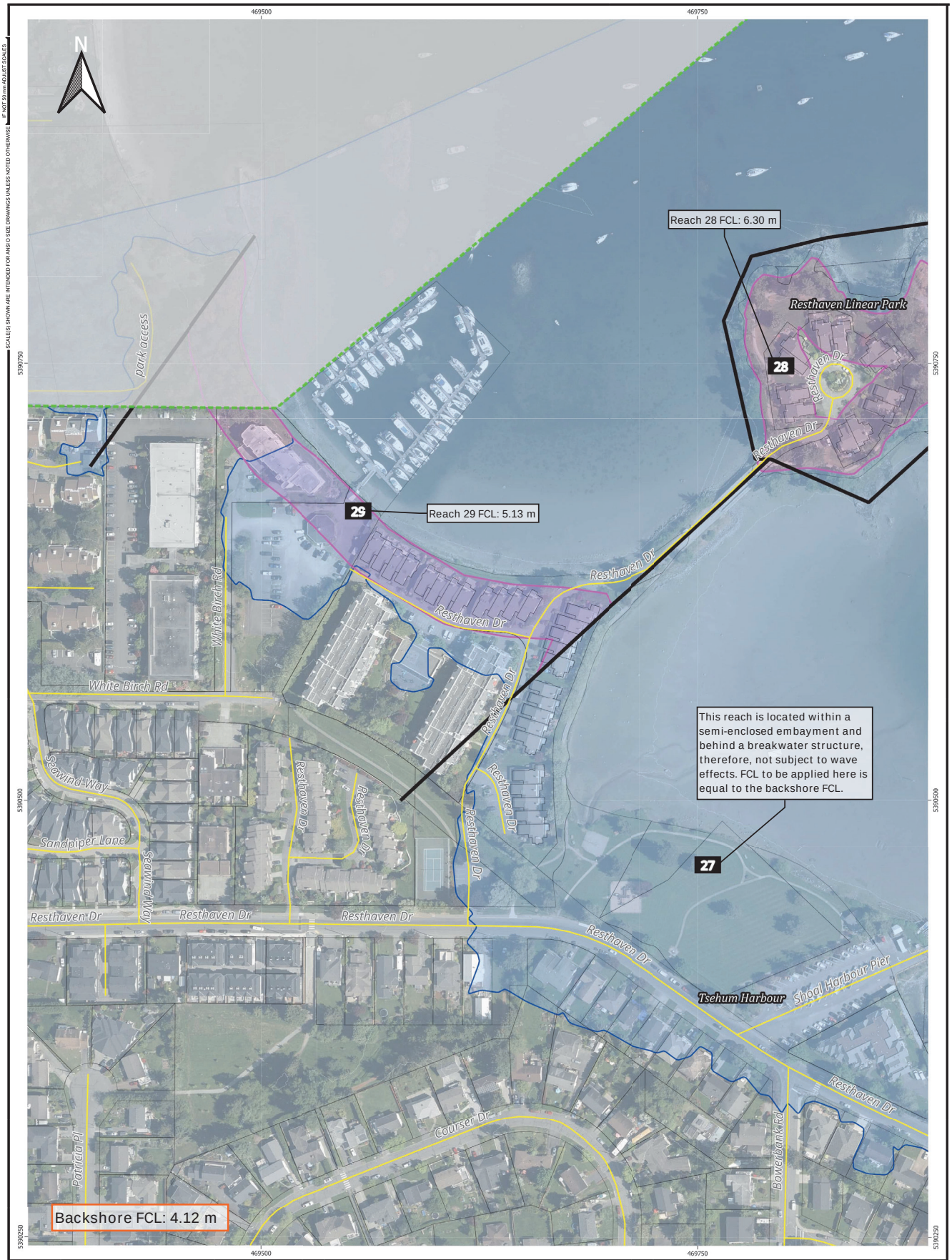
Enhanced Flood Inundation Modelling & Mapping

RECOMMENDED FLOOD CONSTRUCTION LEVEL MAPS

SHEET 7 OF 8

AE PROJECT No.	2023-2825
SCALE	1:1500
ENGINEER	D. FORDE
GIS	N. FANOS
REVIEWER	M. HUIBAN
REV	A
DATE	20251201
DESCRIPTION	ISSUED FOR FINAL

Associated Engineering
DHI



SCALE(S) SHOWN ARE INTENDED FOR ANSI D SIZE DRAWINGS UNLESS NOTED OTHERWISE. IF NOT 59 mm ADJUST SCALES.

MAP LOCATION



NOTES

1. For further information, see the Index Map and methodologies outlined in the report entitled: Enhanced Flood Inundation Modelling & Mapping Report (2025).
2. 2023 LiDAR data provided by the Town of Sidney was corrected to common datum (CGVD2013), to create a Digital Elevation Model (DEM) for the study area. The flood levels are based on this DEM.
3. Aerial imagery was provided by the Town of Sidney and supplemented by Bing.
4. Results are based on statistical metocean data analyses and 2D spectral wave modelling. Spectral wave model calibration was completed using the best available data. However, uncertainty remains due to data limitations and future conditions.
5. Floodplain mapping is based on current oceanographic and hydraulic conditions. Coastal flood hazards may shift over time due to shoreline erosion, sediment deposition, sea level rise, storm surge impacts, and changes in coastal geomorphology.
6. FCLs are reported for each reach. Reach boundary lines and labels are provided to indicate extent of each reach.
7. Foreshore FCL values are applicable to all areas within defined Wave Effect Zones for the respective reach to which it applies.
8. DFL values are provided for the scenario of 1 m Relative Sea Level Rise.
9. For coastal areas outside of defined Wave Effect Zones, a "backshore FCL" equal to the DFL plus freeboard is applicable. The Backshore FCL includes an allowance of 1 m RSLR and is constant for all reaches in the project area.
10. The recommended Flood Construction Level (FCL) reflects the highest value from three relative sea level rise (RSLR) scenarios (0.0 m, 0.5 m, and 1.0 m). This ensures development planning is based on the most conservative approach, providing protection until sea levels rise by up to 1.0 m in Sidney. Please refer to the Enhanced Flood Inundation Modelling & Mapping Report for further information on sea level rise.
11. Minimum setback should be 15m horizontal distance, measured landward from the HHWLT + 1m RSLR. It is recommended that site-specific analyses be undertaken, with regard to setback, for any proposed development within the Wave Effect Zone. Smaller setback may be reasonable in areas with non-erodible shorelines and/or more sheltered conditions.
12. Professional judgment has been applied to remove isolated "dry island" artifacts from the modelled flood extent.
13. Please refer to the cover sheet attached to this map set for further information and terminology definitions.

LEGEND

- DESIGNATED FLOOD LEVEL EXTENT (m CGVD2013) FOR 1 m RELATIVE SEA LEVEL RISE
- 30 m WAVE EFFECT ZONE
- FORESHORE FLOOD CONSTRUCTION LEVEL
- BACKSHORE FLOOD CONSTRUCTION LEVEL
- REACH BOUNDARIES
- REACH NUMBER
- TOWN OF SIDNEY BOUNDARY
- PROPERTY LINES
- CONTOURS (5 m INTERVALS)
- ROADS

Sidney

Enhanced Flood Inundation Modelling & Mapping

RECOMMENDED FLOOD CONSTRUCTION LEVEL MAPS

SHEET 8 OF 8

0 20 40 60 80 100 m

Coordinate System: NAD 1983 CSRS UTM ZONE 10N
Units: METERS; Vertical Datum: CGVD 2013

AE PROJECT No.	2023-2825
SCALE	1:1000
ENGINEER	D. FORDE
GIS	N. FANOS
REVIEWER	M. HUIBAN
REV	A
DATE	20251201
DESCRIPTION	ISSUED FOR FINAL

Associated Engineering

DHI