

### Legend

- Electoral Area Boundary
- Building Footprint (Approximate)
- Watercourse
- Parks (RDN)
- Normal Water Surface
- Englishman River Delta
- Undefined Coastal Flood Hazard Area

Flood Level (m)  
(Includes Freeboard)

Flood Extents

Flood Elevation Contour

Floodplain Limit

#### Notes and Limitations

- This floodplain map is an administrative tool which depicts the estimated flood levels and floodplain limits for the designated flood event within the map area. Flooding may occur to levels above the estimated flood levels, and outside the estimated floodplain limits. The Regional District of Nanaimo does not assume any liability for the accuracy of the estimated flood levels and floodplain limits shown on this map.
- The flood levels and floodplain limits depicted on this map represent a combination of the river flood level and the coastal stillwater flood level that were derived from independently modelled flood scenarios. The highest flood levels for a given location should govern. Floodplain limits are not delineated for tributary creeks. This map should be considered together with complementary studies such as master drainage plans.
- The designated flood event for the Englishman River depicted on this map is a 200-year return period peak instantaneous flood event having a statistical annual exceedance probability (probability of a flood event of equal or greater magnitude occurring in a given year) of approximately 0.5%. The river flow has been increased by 25% over the current (2020) value to account for projected climate change impacts. A freeboard allowance of 0.6 m has been added to account for: (1) hydrologic and hydraulic modelling uncertainties, (2) local hydraulic effects such as waves and surges, and (3) some degree of river and delta processes. However, the freeboard allowance does not account for significant changes in channel shape or location.
- The downstream coastal flood level reflects astronomical tides, a 200-year return period storm surge, and a freeboard allowance of 0.6 m, but does not include an allowance for wave effects. The coastal flood level has been increased by 1.0 m to account for the effects of relative sea level rise to Year 2100.
- The area designated as "Undefined Coastal Flood Hazard Area" refers to coastal floodplain limits beyond the river floodplain limits that have not been defined as part of this work.
- This map shows a delineation of the Englishman River delta. This area may be subject to additional processes and hazards.
- This map does not provide information on the potential for site-specific flood-related hazards such as bank erosion, aggradation, debris accumulation and sudden shifts in river channel alignment.
- Users should note the dates of base mapping, aerial photography, and ground or bathymetric surveys, as well as the date of map publication. Subsequent development or geomorphic changes may render map information obsolete.
- Topography used in the mapping is based on LIDAR data that may not accurately reflect the current ground elevation. For site-specific application, the flood level can be related to the ground elevation by topographic survey.
- When adopted by bylaw, the Regional District of Nanaimo is responsible for land use regulation within the floodplain limits depicted on this map. Information on floodplain management can be found in the BC Flood Hazard Area Land Use Management Guidelines.

#### Notes on Map Data, Data Sources and Dates:

- Cadastral information supplied by ParcelMap BC / Land Title and Survey Authority of British Columbia (accessed September 30, 2020)
- Property addressing, building footprints, and landmarks supplied by Regional District of Nanaimo (accessed January 06, 2021)
- Hydrology features supplied by National Hydrology Network (accessed June 29, 2017)
- Parks, Ecological Reserves and Protected areas supplied by DataBC and Regional District of Nanaimo (accessed January 06, 2021)
- Road features supplied by Digital Road Atlas (accessed March 4, 2020)
- Topography was collected by LIDAR. Sources and dates as follows: GeoBC (2019)

Parksville

Inland Island Hwy

Alberni Hwy

## Englishman River Regulatory River Floodplain Map

KWL Project No. 536.020

Figure A-2

Date June 4 2021

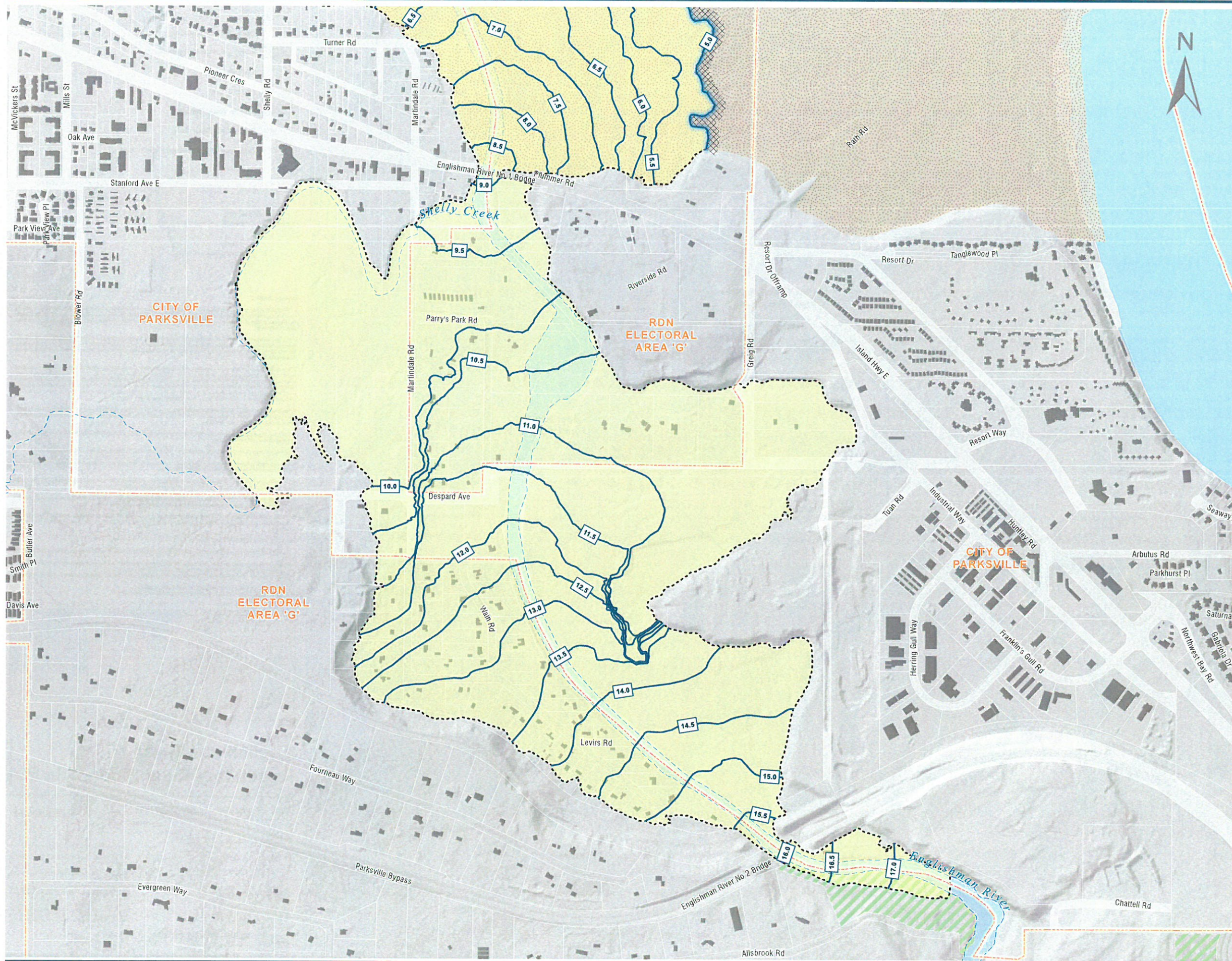
Scale 0 50 100 200 (m)  
1:10,000

Coordinate System: NAD 1983 UTM Zone 19N  
Vertical Datum: Canadian Geodetic Vertical Datum of 2013 (CGVD2013)  
Scale Disclaimer: The map scale of 1:10,000 is only valid on a 11"x17" print.  
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Prepared By: J.L.  
Checked By: JTM

REGIONAL DISTRICT OF NANAIMO

KERR WOOD LEIDAL consulting engineers





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Parksville

Inland Island Hwy

Alberni Hwy

## Englishman River Regulatory River Floodplain Map

KWL Project No. 536.020

Date June 4 2021

Scale 0 50 100 200 (m)  
1:10,000

Figure A-1

Coordinate System: NAD 1983 UTM Zone 10N  
Vertical Datum: Canadian Geodetic Vertical Datum of 2013 (CGVD2013)  
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