# REGIONAL DISTRICT OF NANAIMO BYLAW NO. 1872, 2023

# A BYLAW TO ESTABLISH REGIONAL DISTRICT OF NANAIMO FLOOD HAZARD MITIGATION BYLAW NO.1872,2023

WHEREAS Section 523 and Section 524 of the *Local Government Act* respectively enables a local government to require runoff controls and designate land as a floodplain and specify building controls on land subject to flooding;

AND WHEREAS the Regional District of Nanaimo Board has considered the application of the Provincial Flood Hazard Area Land Use Management Guidelines dealing with flood hazards;

NOW THEREFORE, the Board of the Regional District of Nanaimo, in open meeting assembled, enacts the following pursuant to Section 523 and Section 524 of the *Local Government Act*:

# 1. Purpose

The purpose of this bylaw is to take into account flood hazards and set out practical measures to reduce the risk of flood impacts to citizens of the Regional District of Nanaimo. Under this Bylaw, development is protected from the impacts of flood hazards by the establishment of minimum standards for sites which contain or are adjacent to identified flood hazard(s). The standards contained in this Bylaw are intended to minimize public and private losses due to flooding and provide criteria necessary to regulate proposed development activities located within floodplain areas.

#### 2. Citation

This bylaw may be cited for all purposes as the "Regional District of Nanaimo Flood Hazard Mitigation Bylaw No. 1872, 2023".

# 3. Application

This Bylaw applies within the boundaries of the Regional District of Nanaimo Electoral Areas A, C, E, F, G and H.

# 4. Severability

Headings in this Bylaw are for convenience only and must not be construed as defining or limiting its scope or intent. If any part of this Bylaw is held to be invalid by a court of competent jurisdiction, the invalid part is severed and the remainder continues to be valid.

# 5. Interpretation

Unless otherwise provided in this Bylaw, words and phrases used herein have the same meanings as in the *Local Government Act*, *Community Charter*, or *Land Title Act*, as the context and circumstances may require. A reference to a statute in this Bylaw refers to a statute of the Province of British Columbia unless otherwise indicated, and a reference to any statute, regulation, bylaw, other enactment, or professional practice guidelines refers to that enactment or guideline as it may be amended or replaced from time to time.

For the purposes of this bylaw:

**Crawlspace** means the space at or below natural grade between the underside of the joists of the floor above and the floor slab or the ground surface below.

**Flood Construction Level** means the minimum elevation specified in this Bylaw of the underside of a floor system or top of any structural support for any *Habitable Area* including any Manufactured Home.

**Floodplain** means an area of low-lying ground, whether diked, flood proofed, or not which, by reasons of land elevation, is susceptible to flooding from an adjoining river, sea, lake or other body of water.

**Habitable Area** means any room or space within a building or structure, used for human occupancy, commercial sales, or storage of goods, possessions or equipment (including furnaces) which would be subject to damage if flooded, and excludes any *Crawlspace*.

**Landfill** means the placement of soil, gravel or similar structural material on the surface of land to achieve an applicable *Flood Construction Level*.

Manager means the Manager of Building and Bylaw Services or the Manager of Current Planning for the Regional District of Nanaimo, the deputies of such persons appointed by the Regional District of Nanaimo, or another person appointed by the Regional District of Nanaimo to act in place of the Manager of Building and Bylaw Services or the Manager of Planning.

Manufactured Home means a dwelling unit designed to be moved on site; ready for occupancy except for installation onto a *Pad* or raised foundation, connection of utilities, and some incidental assembly. Specifically excludes recreational vehicles.

**Natural Boundary** means the visible high water mark of any lake, river, stream, the sea or other body of water where the presence and action of the water are so common and usual and so long continued in all ordinary years as to mark upon the soil of the bed of the lake, river, stream, the sea or other body of water a character distinct from that of the banks thereof, in respect of vegetation and the nature of the soil itself. The *Natural Boundary* also includes the

edge of dormant or old side channels and marsh areas.

**Pad** means a durable surface on which blocks, posts or runners are placed for the purpose of supporting a *Manufactured Home*, or other *Habitable Area*.

**Provincial Guidelines** means policies, strategies, objectives, standards, guidelines and environmental management plans, in relation to flood control, flood hazard management and development of lands that is subject to flooding, prepared and published or commissioned by the Minister under Section 5 of the *Environmental Management Act*.

**Qualified Professional** means a person who is registered or licensed under the provisions of the *Professional Governance Act* and qualified to conduct a flood hazard assessment pursuant to the Engineer and Geoscientists of British Columbia's "Professional Practice Guidelines for Flood Hazard Assessment".

Regional District means the Regional District of Nanaimo.

**Regulatory Floodplain Map** means the digital versions of river and coastal floodplain maps referred to in Section 12 of this Bylaw, held in the offices of the Regional District and printed copies of which are attached to this Bylaw as Schedules A through E, and in the event of any inconsistency between the digital version of a map and a printed copy, the digital version shall govern the matter.

Sea means The Strait of Georgia also known as the Salish Sea.

**Setback** means the required minimum distance, measured horizontally, that a structural support or *Landfill*, required to elevate a floor system or *Pad* to meet or exceed the *Flood Construction Level*, must be separated from the *Natural Boundary* to maintain a floodway and to allow for potential erosion.

Watercourse means any natural or man-made depression with well-defined banks and a bed 0.6 metres or more below the natural elevation of the surrounding land serving to give direction to, or acting as a retention area for, a current of water for an average of at least six months of the year or having a drainage area of two square kilometers. Roadside ditches are not considered a *Watercourse* for the purpose of this bylaw.

#### 6. Enforcement

- (a) In accordance with Section 16 of the *Community Charter*, the Manager is authorized, at all reasonable times, to enter on property, and to enter property without the consent of the owner or occupier, to inspect and determine whether this Bylaw has been contravened.
- (b) No person shall obstruct a Manager engaged in the administration or enforcement of this Bylaw.

- (c) Every person who contravenes a provision of this Bylaw; causes or permits an act or thing to be done in contravention to any provision of this Bylaw; neglects or omits to do anything required by this Bylaw; or fails to comply with an order, direction or notice made or delivered under this Bylaw commits an offence and is liable, upon conviction, to the penalties prescribed under this Bylaw and the *Offence Act*.
- (d) Every person who contravenes a provision of this Bylaw shall, upon summary conviction, be liable to a penalty of up to \$5,000.00 per offence.
- (e) Each day that an offence occurs constitutes a separate offence.

# 7. No Representations

(a) By the enactment, administration or enforcement of this Bylaw, the Regional District does not represent to any person that any building or structure, including a Manufactured Home, located, constructed, or used in accordance with the regulations of this Bylaw or an approved exemption from this Bylaw or in accordance with any advice, information, direction or guidance provided by the Regional District in the course of administration of this Bylaw will be safe from damage or destruction by flooding or that persons and animals within or in the vicinity of those buildings or structures will be protected from death or injury by flooding.

#### 8. General Prohibitions

(a) No person shall construct, build, erect or place or allow to be built, erected, or placed any building or structure contrary to the provisions in this bylaw or s. 524 of the *Local Government Act*.

# 9. Flood Hazard Areas

The following mapped areas are designated as Floodplain.

- (a) Land within a Floodplain extent indicated on the **Nanaimo River** Regulatory River Floodplain Maps, dated February 15, 2023, prints of which are attached to this Bylaw as **Schedule A**.
- (b) Land within a Floodplain extent indicated on the **Little Qualicum River** Regulatory River Floodplain Maps, dated January 17, 2022, prints of which are attached to this Bylaw as **Schedule B**.
- (c) Land within a Floodplain extent indicated on the **Englishman River** Regulatory River Floodplain Maps, dated June 4, 2021, prints of which are attached to this Bylaw as **Schedule C**.
- (d) Land within the **Coastal Floodplain** extent indicated on the Regulatory Coastal Floodplain Maps, dated April 25, 2022, with the exception of Area B, District of

Lantzville, City of Parksville, the Town of Qualicum Beach and IR Lands, prints of which are attached to this Bylaw as **Schedule D**.

- (e) Those portions of Strata Lots 1 through 400, of District Lot 215, Alberni District, Plan VIS5160, lying below 121.7 metres Geodetic Survey of Canada Datum, lying within the area indicated as **Horne Lake Floodplain** on the Horne Lake Regulatory Floodplain Maps dated October 25, 2022, prints of which are attached to this Bylaw as **Schedule E**.
- (f) Any other land lying less than 3 metres above the Natural Boundary of the Englishman River, Little Qualicum River, Milestone River, Nanaimo River, or French Creek, and within a horizontal distance of 200 metres of the *Natural Boundary* of that Watercourse; and,
- (g) Any other land lying less than 1.5 metres above the Natural Boundary of an adjacent Watercourse, lake, pond, marsh or swamp and within a horizontal distance of 100 metres of the Watercourse, lake, marsh or swamp.

#### 10. Setbacks

The minimum Setback from the Natural Boundary for structural support or landfill shall be as follows, and where more than one setback is applicable, the greater shall apply.

- (a) 30 metres from the Natural Boundary of the Englishman River, Little Qualicum River, Millstone River, Nanaimo River or French Creek;
- (b) 15 metres from the Natural Boundary of any other Watercourse including a lake, marsh, or pond;
- (c) 15 metres from the Natural Boundary of the sea; and,
- (d) where a building site is at the top of a bank that is 30 degrees or more from horizontal and where the toe of the bank is subject to erosion and is less than 15 metres from a Natural Boundary, the minimum Setback from the top of bank shall be equal to 3 times the height of the bank as measured from the toe of the bank to the elevation of the building foundation at its lowest point.

# 11. Flood Construction Level

Within a designated Floodplain, the following elevations are specified as Flood Construction Levels, and where more than one Flood Construction Level is applicable, the higher elevation governs:

- (a) the elevation determined for land identified as Floodplain in Schedules A, B, or C using one of the methods described in Schedule F;
- (b) 121.7 metres Geodetic for land identified as Floodplain in Schedule E;
- (c) 3.0 metres above the Natural Boundary of the Englishman River, Little Qualicum River, Millstone River, Nanaimo River, and French Creek where none of the Schedules A, B or C specify a minimum Flood Construction Level for the parcel, and

(d) 1.5 metres above the Natural Boundary of any other Watercourse, lake, pond, marsh or swamp that is adjacent to the parcel.

#### 12. Crawispace

Crawlspace constructed below the Flood Construction Level designated by this bylaw shall meet the following requirements:

- (a) the building must be designed and anchored to resist flotation, collapse, and lateral movement of the structure resulting from hydrodynamic and hydrostatic loads, including the effects of buoyancy, and
- (b) the height of the Crawlspace, measured from the interior grade of the crawlspace to the underside of the floor system above must not exceed 1.2 meters at any point.

#### 13. Landfill

- (a) Where landfill is used to raise the natural ground elevation, a **Drainage Plan** prepared by a Qualified Professional, may be required by and to the satisfaction of the Manager. The Plan must indicate that run-off from the site, including from impervious and filled areas, will not be directed to adjacent parcels. The Plan must indicate:
  - i. existing and proposed grades of the subject parcel;
  - ii. existing grades of adjoining parcels measured 3.0 meter from the common property line;
  - iii. proposed drainage treatments including any use of detention systems or permeable materials to limit or control runoff to adjacent parcels; and,
  - iv. any other relevant information required by the Manager.
- (b) The placement of landfill shall be supervised by a Qualified Professional to ensure no net effect on adjacent parcels and the overall hydraulic conditions of the flood-prone area.

#### 14. Exemptions

This bylaw does not apply to any of the following:

- (a) habitable area on land whose natural grade is entirely above the Flood Construction Level for the parcel, or where unmapped is entirely above the Flood Construction Level specified in this bylaw.
- (b) repair or alteration of an existing building or structure (including roof repair and replacement) provided there is no expansion of the building footprint, inclusive of any cantilevered or projecting portions of the building or structure.
- (c) additions to existing buildings or structures to a maximum of 25 percent of the ground floor area that was existing on February 11, 1992, if:
  - i. the number of dwelling units is not increased;

- ii. there is no further encroachment into the Setback required by this Bylaw, and
- iii. no additional Habitable Area is constructed below the elevation of the lowest Habitable Area of the existing building or structure.
- (d) the construction of a carport, garage, entryway, porch, or accessory building containing no Habitable Area, whether or not the work requires a building permit.
- (e) on-loading and off-loading facilities associated with water-oriented industry and portable sawmills provided the main electrical switchgear is placed above the applicable Flood Construction Level specified in this Bylaw.
- (f) farm buildings other than dwelling units and closed sided livestock housing provided that the underside of the floor system or the top of a slab or Pad of any area to be occupied by livestock is at least 1.0 meter above the natural ground elevation measured at any point on the perimeter of the building, or at or above the applicable Flood Construction Level specified in this Bylaw, whichever is lower.

#### 15. Schedules

Schedules A through F are attached to and form part of this Bylaw.

# 16. Repeal

Regional District of Nanaimo Floodplain Management Bylaw No. 1469, 2006 is hereby repealed.

Introduced and read three times this 11th day of July, 2023.

Adopted this 11th day of July, 2023.

CHAIR

CORPORAT# OFFICE