

## 12.5 Development Permit Area 3 – Natural Hazards

### PURPOSE

The purpose of DPA 3 – Natural Hazards is to...

- protect development from hazardous conditions.

### OBJECTIVES

Natural hazards (also known as geohazards) may either pose a risk to development or influence the design of the site, buildings, and structures. Depending on the nature of the hazard and the specific circumstances of a particular property, portions of a property may be undevelopable if the hazards cannot be eliminated, reduced, or mitigated.

The objective of this DPA is to identify all natural hazards that may impact a proposed development and to protect that development from the identified hazards.

### APPLICATION

1. All land in Duncan may be subject to geohazards or natural hazards, including steep slopes in excess of 30% and areas experiencing a high water table. In the case of steep slopes, the area within 20 m of the top of bank and toe of slope of steep slopes is a geohazard area. Some of these geohazards are identified on Map 2 – Environmentally Sensitive and Hazard Areas. The entire City is designated Development Permit Area 3 – Natural Hazards, including both mapped and unmapped hazards.
2. Unless exempted, a Development Permit is required within this DPA prior to subdivision, siting, construction, or moving of buildings or other structures, land alteration, soil disturbance, cutting, trimming or removal of trees and other vegetation, and installation or construction of works and services.

### EXEMPTIONS

3. The following activities and development are exempt from the requirement to obtain a Development Permit:
  - (a) Invasive species management, provided that the work is carried out in accordance with best management practices for invasive species management.
  - (b) Environmental restoration work carried out by an environmental non-profit society or similar community group under the direction and supervision of a qualified professional.
  - (c) Landscaping of existing landscaped areas, provided that the boundaries or extent of the existing landscaped area does not expand.
  - (d) Landscaping outside of steep slope areas or areas within 20 m of the toe of slope or top of slope of steep slope areas.
  - (e) Land alteration outside of steep slope areas or areas within 20 m of the toe of slope or top of slope of steep slope areas.
  - (f) Removal of a tree, or portion of a tree, determined by an arborist in an arborist report to be a hazard tree posing an imminent risk to human life or buildings. Arborist and arborist report have the same meaning as in the City's tree protection bylaw.
  - (g) Interior renovations to existing buildings and structures.
  - (h) Exterior renovations to existing buildings and structures that do not change the footprint of the buildings or structures.

- (i) A development comprised of up to two dwelling units on a single parcel, including additions to existing buildings, unless the development falls within a steep slope hazard area, in which case the development is only exempt subject to the provision of a comprehensive geotechnical assessment prepared in accordance with these guidelines and registration of a geotechnical covenant on title that includes the geotechnical assessment. In the case of a steep slope area and any applicable geotechnical setbacks, a reference or explanatory plan prepared by a BC Land Surveyor identifying the covenant area must be attached to the covenant.
- (j) Any work undertaken by the City, its contractors, and agents, provided that the principles of these guidelines are adhered to.

## GUIDELINES

4. All proposed development will be reviewed for consistency with provincial and federal best management practices. These best management practices may be used to determine the conditions in the Development Permit authorizing the proposed development.
5. The recommendations identified in the reports and assessments provided with the Development Permit application must be followed at all stages of the proposed development and may form part of the Development Permit.
6. Existing vegetation on steep slopes must be maintained to control erosion and slope stability, with the exception of invasive species removal. Access improvements on steep slopes, such as footpaths and stairways, must be designed to avoid disturbance of existing vegetation and adverse impacts to natural slope drainage.
7. Subdivision configurations and development must be designed to maintain and incorporate existing site topography. Significant land alteration to create flat parcels or large retaining walls is not supported.
8. Special natural features such as rock outcroppings, significant trees, watercourses, and ridgelines must be protected. Physical development is not supported directly on steep slopes. Stormwater must be directed away from areas that may be subject to erosion or slope instability.
9. Underground parking is generally not supported below the peak annual water table where regular, ongoing pumping would be required to remove groundwater from the parking area. If it can be demonstrated through a geotechnical assessment and design measures that underground parking is feasible without regular, ongoing pumping, underground parking may be supported.