

## Appendix B. Development Permit Area Regulatory Guidelines (Natural Environment and Hazardous Conditions)

The City of Vernon has regulatory guidelines for six Development Permit Areas (DPAs):

- DPA 1 – Terrestrial Ecosystem
- DPA 2 – Aquatic Ecosystem
- DPA 3 – Hillside Development
- DPA 4 – Wildfire Hazard
- DPA 5 – Flood Hazard
- DPA 6 – Form and Character

This Appendix presents the regulatory guidelines for DPAs 1 to 5, including any permit exemptions. See [Appendix C](#) for the regulatory guidelines for DPA 6 (Form and Character Design Guidelines).

The justification and objectives for establishing DPAs under the *Local Government Act* (LGA) (S. 488) are provided in [Chapter 6](#). Also see [Map 6.1](#), [Map 6.2](#), and [Map 6.3](#), which define the geographic areas where the DPAs apply.

The City may require one or more of the following studies to support development approval consideration in any DPA, in accordance with the LGA (S. 484):

- a. Construction Management Plan
- b. Environmental Assessment
- c. Erosion and Sediment Control Plan
- d. Functional Servicing Report
- e. Geotechnical Study
- f. Parking Demand Analysis
- g. Shadow Study
- h. Site Access and Servicing Plan
- i. Stormwater Management Study
- j. Traffic Impact Assessment
- k. Tree Inventory and Assessment
- l. Wildfire Hazard Assessment
- m. Other studies as deemed necessary.

## DPA 1 – Terrestrial Ecosystem Guidelines

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### 1.1 Application

A Major Development Permit is required prior to any proposed development in DPA 1 – Terrestrial Ecosystem of the Official Community Plan, excluding:

1. Renovations for which the building footprint is not extended beyond 50 m<sup>2</sup> and **environmentally sensitive areas** (ESAs) are protected from any new disturbance.
2. Properties for which a Development Permit has already been registered on title identifying the ESA, the conditions of the permit have been met, and the existing permit protects the entire identified ESA.
3. Properties for which a covenant has been registered on title which effectively protects the entire ESA, and all of the conditions of the covenant have been met, and the proposed development will not affect any portion of the ESA.
4. Normal farm practices in accordance with the *Farm Practices Protection Act*.
5. Actions necessary to prevent immediate threats to life and property to the discretion of the City.
6. Works undertaken by the City of Vernon, Regional District of North Okanagan, provincial or federal government, or their authorized agents where appropriate measures have been undertaken to satisfy the applicable development permit area guidelines.

A Minor Development Permit is required for development proposed within DPA 1 – Terrestrial Ecosystem of the Official Community Plan that does not satisfy the above exemptions nor requires a subsequent building permit.

### 1.2 Criteria

Where disturbance within a Terrestrial Ecosystem Development Permit Area cannot be avoided, the following information must be provided to support the DPA 1 Development Permit application in order to ensure habitat protection, connectivity, and functionality through mitigation, compensation, and restoration of project impacts:

## Context

- 1.2.1. A detailed environmental assessment of the property, signed and sealed by a Qualified Environmental Professional working within their scope of practice, including:
  - a. Consideration for alignment with relevant provincial and federal legislation including the *Wildlife Act*, *Migratory Birds Convention Act* and *Species at Risk Act*;
  - b. The identification and assessment of sensitive ecosystems on site, including a list of plant and animal species found or expected to be found on or adjacent to the site with specific attention to those that are endangered, threatened, or of special concern, invasive species, and corridors to accommodate known movement of species;
  - c. The identification of any separate approval processes that may be required to facilitate development (e.g. *Riparian Areas Protection Regulation* or *Water Sustainability Act* instream works);
  - d. An assessment of the potential impacts on natural features and functions including the methods used and appropriate mitigation or compensation measures;
  - e. Recommended measures to protect the ESA prior to site disturbance, during the construction process, and post construction; and
  - f. Site plans at an appropriate scale, indicating the project location (including building footprints and limits of disturbance), site features, and activities in relation to the ESA.
- 1.2.2. A restoration plan and associated cost estimate for environmental monitoring, maintenance, and restoration works, prioritizing vegetation that is native to British Columbia.
- 1.2.3. Where disturbance cannot be mitigated, the principle of net gain will be followed. A Qualified Environmental Professional must demonstrate how an increase to the quality and quantity of functional habitat within the ESA will be achieved, such that any areas restored will be of better ecological value and shall be contiguous with the original ESA.
- 1.2.4. To protect the ESA the following will be required:
  - a. Development should be located in the least **environmentally sensitive areas** on site, such as previously disturbed areas, to minimize environmental impacts.
  - b. Development activity should be minimized during sensitive breeding or nesting windows, as determined by a Qualified Environmental Professional and following the Province of BC's *Develop with Care Environmental Guidelines*.
  - c. Erosion and sediment control measures shall be installed prior to site disturbance to sufficiently identify the ESA and protect it from encroachment.

- d. Consideration for wildlife corridor connectivity and buffers between development and ESAs shall be prioritized to facilitate habitat linkages.
- e. Identification of tree stands and individual trees with environmental value, including mechanism for protection during and post development shall be provided.
- f. The registration of a Section 219 covenant on the title shall be considered as necessary to ensure long-term protection of the ESA.

## **Regulatory Flexibility**

- 1.2.5. Varying other bylaw requirements (e.g. building setbacks or height) may be considered to facilitate safeguarding an ESA, particularly where it can facilitate development on the remainder of the lot while avoiding ESA disturbance.

## **DPA 2 – Aquatic Ecosystem Guidelines**

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### **2.1 Application**

A Major Development Permit is required prior to any proposed development in DPA 2 – Aquatic Ecosystem of the Official Community Plan, excluding:

- 1. Non-structural renovations for which the building footprint is not altered and the Streamside Protection and Enhancement Area (SPEA) is protected from any new disturbance.
- 2. Properties for which a Development Permit has already been registered on title reflecting the extent of proposed disturbance, the conditions of the permit have been met, and the existing permit protects the entire identified SPEA.
- 3. Actions necessary to prevent immediate threats to life and property to the discretion of the City.
- 4. Normal farm practices in accordance with the *Farm Practices Protection Act*.
- 5. Development associated with an authorization under Section 35(2)(b) or (c) of the *Fisheries Act*.
- 6. Works undertaken by the City of Vernon, Regional District of North Okanagan, provincial or federal government, or their authorized agents where appropriate measures have been undertaken to satisfy the applicable development permit area guidelines.

A Minor Development Permit is required for development proposed within DPA 2 – Aquatic Ecosystem of the Official Community Plan which does not satisfy the above exemptions nor requires a subsequent building permit.

## 2.2 Criteria

Where disturbance within a water-based **environmentally sensitive area** cannot be avoided, the following information must be provided to support the DPA 2 Development Permit application in order to ensure habitat protection, connectivity, and functionality through mitigation, compensation, and restoration of the impact:

### Context

- 2.2.1. A *Riparian Areas Protection Regulation* assessment completed by a Qualified Environmental Professional and:
- approved by the City; or
  - approved by the Province for any assessments including proposed development within the SPEA defined in accordance with the regulation.
- 2.2.2. A restoration plan and associated cost estimate for environmental monitoring and restoration works, prioritizing vegetation that is native to British Columbia, which meets or exceeds applicable municipal landscaping requirements.
- 2.2.3. Where disturbance cannot be mitigated, the principle of net gain will be followed. A Qualified Environmental Professional must demonstrate how an increase to the quality and quantity of functional habitat within the **riparian area** will be achieved, such that any areas restored will be of better ecological value and shall be contiguous with the original **riparian area**.

### Regulatory Flexibility

- 2.2.4. Varying other bylaw requirements (e.g. building setbacks or height) may be considered to facilitate safeguarding a SPEA, particularly where it can facilitate development on the remainder of the lot while avoiding SPEA disturbance.

## DPA 3 - Hillside Development Guidelines

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### 3.1 Application

A Development Permit is required prior to any proposed development in DPA 3 – Hillside Development of the Official Community Plan, excluding:

1. Development that is consistent with the lot grading plan approved at the time of subdivision.
2. Lot consolidation, road dedication, or a lot line adjustment subdivision where a new building footprint is not proposed.
3. Development where the proposed building envelope is outside of the steep slope area and construction or grading will not impact the steep slope area.

4. Building alterations which are limited to the addition, replacement, or alteration of doors, windows, trim, or roofs and would not impact existing the existing building footprint, landscaping, or lot access.
5. Normal farm practices in accordance with the *Farm Practices Protection Act*.
6. Actions necessary to prevent immediate threats to life and property to the discretion of the City.
7. Works undertaken by the City of Vernon, Regional District of North Okanagan, provincial or federal government, or their authorized agents where appropriate measures have been undertaken to satisfy the applicable development permit area guidelines.

### **3.2 Criteria**

Where disturbance on a steep slope, characterized as having a grade of 30% or greater, cannot be avoided, the following information must be provided to support the DPA 3 Development Permit application in order to ensure safe development that meets the form and character of the community:

#### **Context**

- 3.2.1. Alternative building layout opportunities, including sensitive building orientation, and shared access shall be incorporated where appropriate to minimize visual impact and preserve natural character of the hillside.
- 3.2.2. Alternative lot layout opportunities, including staggered lots, strategic road placement, sensitive lot layout, and appropriate landscaping shall be incorporated where appropriate to reduce building massing.
- 3.2.3. Buildings shall be set into the hillside and stepped up or down the slope to mimic the natural topography of the surrounding area.
- 3.2.4. Significant natural features and landforms, including ridgelines, ravines, overland drainage channels, rock outcrops, wetlands, steep slopes, and forested areas, shall be retained, protected, or enhanced to reduce visual impacts.

#### **Site Design**

- 3.2.5. Slopes of 30% or greater shall be preserved as undisturbed areas unless it is clearly demonstrated they cannot be avoided through development.
- 3.2.6. A Geotechnical Report prepared by a qualified geotechnical engineer will be required for any development within the DPA. The report is required to assess slope stability, rock fall hazards, building setbacks, associated safety recommendations, and mitigation measures.

- 3.2.7. Wire mesh, shot-concrete, and other forms of visually intrusive mechanical stabilization is not permitted unless required by a qualified geotechnical engineer and approved by the City.
- 3.2.8. On street-parking shall be restricted where alternative road standards would allow for narrow roads with less encroachment into the hillside. Parking areas off the main travel surface may be considered on a site-specific basis.
- 3.2.9. Cut and fill excavation shall be minimized to preserve natural topography, reduce visual impacts, and prevent site scarring.
- 3.2.10. Altered slopes shall appear natural with varied contours and vegetation. Sharp angles should be avoided to align with natural topography where applicable.
- 3.2.11. Retaining walls utilizing native building materials (e.g. earth berms, rock forms, or stone) should be prioritized to minimize the visual impact of cuts.
- 3.2.12. Retaining wall height and length shall be minimized. Stepped or terraced walls with landscaping is encouraged for areas where steep cuts are required.
- 3.2.13. Discourage retaining walls greater than 1.2 m in height or spaced less than 1.2 m apart for the construction of new streets and infrastructure.

### **Hillside Form and Character**

- 3.2.14. Building masses that reinforce the sensitivity of the natural topography shall be incorporated into project design.
- 3.2.15. Support integrating buildings into slopes by using buildings to retain land on properties with slopes.
- 3.2.16. Required parking shall be incorporated into the natural landscape to minimize the requirement for lot grading (e.g. avoid large flat parking areas) where feasible.
- 3.2.17. Building siting shall be staggered and screened with mature vegetation to minimize a “wall effect” of development on the surrounding area.

### **Regulatory Flexibility**

- 3.2.18. Varying other bylaw requirements (e.g. building setbacks or height) may be considered to facilitate sensitive hillside development, particularly where it can facilitate development on the remainder of the lot while avoiding steep slope disturbance.

## DPA 4 – Wildfire Hazard Guidelines

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### 4.1 Application

A Development Permit is required prior to any proposed development in DPA 4 – Wildfire Hazard of the Official Community Plan, excluding:

1. Development that demonstrates compliance with the [FireSmart BC](#) guidelines and the Community Wildfire Resiliency Plan.
2. Construction or alterations to accessory buildings or structures where the building footprint is no larger than 10 m<sup>2</sup> in area.
3. Activities covered by an existing registered covenant on title for wildfire hazard reduction, provided all covenant conditions have been met and remain unaffected.
4. Normal farm practices in accordance with the *Farm Practices Protection Act*.
5. Actions necessary to prevent immediate threats to life and property to the discretion of the City.
6. Works undertaken by the City of Vernon, Regional District of North Okanagan, provincial or federal government, or their authorized agents where appropriate measures have been undertaken to satisfy the applicable development permit area guidelines.

### 4.2 Criteria

Where development within Wildfire Interface Area 2 or 3 cannot be avoided, the following information must be provided to support the DPA 4 Development Permit application in order to ensure safe development that meets the form and character of the community:

#### Context

- 4.2.1. A report from a registered professional forester or a professional engineer with experience in fire safety shall be required to indicate that the susceptibility to wildfire has not increased.

## Site Design

- 4.2.2. Where modifications to site vegetation are required to reduce wildfire hazard, the following [FireSmart](#) BC guidelines shall be taken into consideration in relation to the proposed building or structure:
- a. Immediate Zone (0–1.5 m) – Entirely clear of vegetation and combustible material.
  - b. Intermediate Zone (1.5–10 m) – Preferably landscaped using fire-resistant vegetation and non-combustible materials.
  - c. Extended Zone (10–30 m) – Selectively remove coniferous trees to maintain a minimum of three metres of horizontal space between tree crowns.
- 4.2.3. Coniferous evergreen vegetation within 10 m of a building should be removed. If retention is necessary, implement the following measures:
- a. Prune limbs so they are at least 2 m above the ground and a minimum of three metres away from the nearest building or attachment (e.g. a balcony); and
  - b. Prioritize the retention of fire-resistant plants and trees.

## Form and Character

- 4.2.4. Construction materials should conform to the following guidelines based on the BC Building Code to mitigate wildfire risks:
- a. Exterior wall finishes shall be comprised of non-combustible or ignition resistant siding material (e.g. stucco, metal siding, brick, concrete, or heavy timber).
  - b. Roofing shall conform to Class A, B, or C fire resistance standards; acceptable roofing materials include but are not limited to, composite shingles, concrete or clay tile, metal roofing, or treated wood shake roofing.
  - c. Windows shall be double-paned or tempered to reduce potential for fire and burning debris to enter a building.
  - d. External vents and soffits shall be screened with 3 mm metal mesh or be comprised of ember-resistant material.
  - e. Balconies, decks, and patios shall feature a continuous, ignition resistant or non-combustible top surface.
  - f. Manufactured homes shall be skirted with a fire-resistant material suitable that conforms to the exterior wall finish requirements described above.

## Regulatory Flexibility

- 4.2.5. Varying other bylaw requirements (e.g. building setbacks or height) may be considered to facilitate development that reduces wildfire hazards.

## DPA 5 – Flood Hazard Guidelines

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### 5.1 Application

A Development Permit is required prior to any proposed development in DPA 5 – Flood Hazard of the Official Community Plan, excluding:

1. Development outside of the Floodway or Floodplain Setback area, that meets the Flood Protection Requirements or General Exemption criteria in Sections 7 and 8 of the Floodplain Management Bylaw.
2. Public works and services and maintenance activities carried out by, or on behalf of the City.
3. Minor alterations or repairs to existing roads, paths or driveways, provided that there is no further disturbance of land or vegetation.
4. Planting of vegetation, habitat creation, restoration, or enhancement works, or removal of trees or vegetation, in accordance with City and provincial enactments.
5. Normal farm practices in accordance with the *Farm Practices Protection Act*.

### 5.2 Criteria

Where the Flood Hazard DPA applies, the following information must be provided to support the DPA 5 Development Permit application in order to ensure safe development that meets the form and character of the community:

#### Context

- 5.2.1. Development shall be located in the least hazardous part of the subject property and constructed in a location and manner that will maximize the safety of residents and property.
- 5.2.2. Development shall not increase the risk, hazard to, or vulnerability of other properties or structures.

#### Site Design

- 5.2.3. Maintain and restore vegetation along all creek banks and Floodplain Setback areas to minimize erosion and protect slope stability.
- 5.2.4. Preserve natural floodplain regimes through siting that allows normal creek processes, including erosion, channel migration, and anticipated flooding, to occur. Where appropriate this may include action such as grading to deflect flood water and allow for floodways or pooling of floodwater.

## **Form and Character**

- 5.2.5. In connection with renovations to any permanent structure, where reasonable shall:
- a. Reduce flood hazard to the existing permanent structure by raising the habitable area to Flood Construction Levels; and
  - b. Reduce or eliminate the potential for flood damage by using construction methods that allow for occasional wetting and drying.

## **Regulatory Flexibility**

- 5.2.6. Varying other bylaw requirements (e.g. building setbacks or height) may be considered to facilitate development that minimizes the hazard to or vulnerability of others on the floodplain.