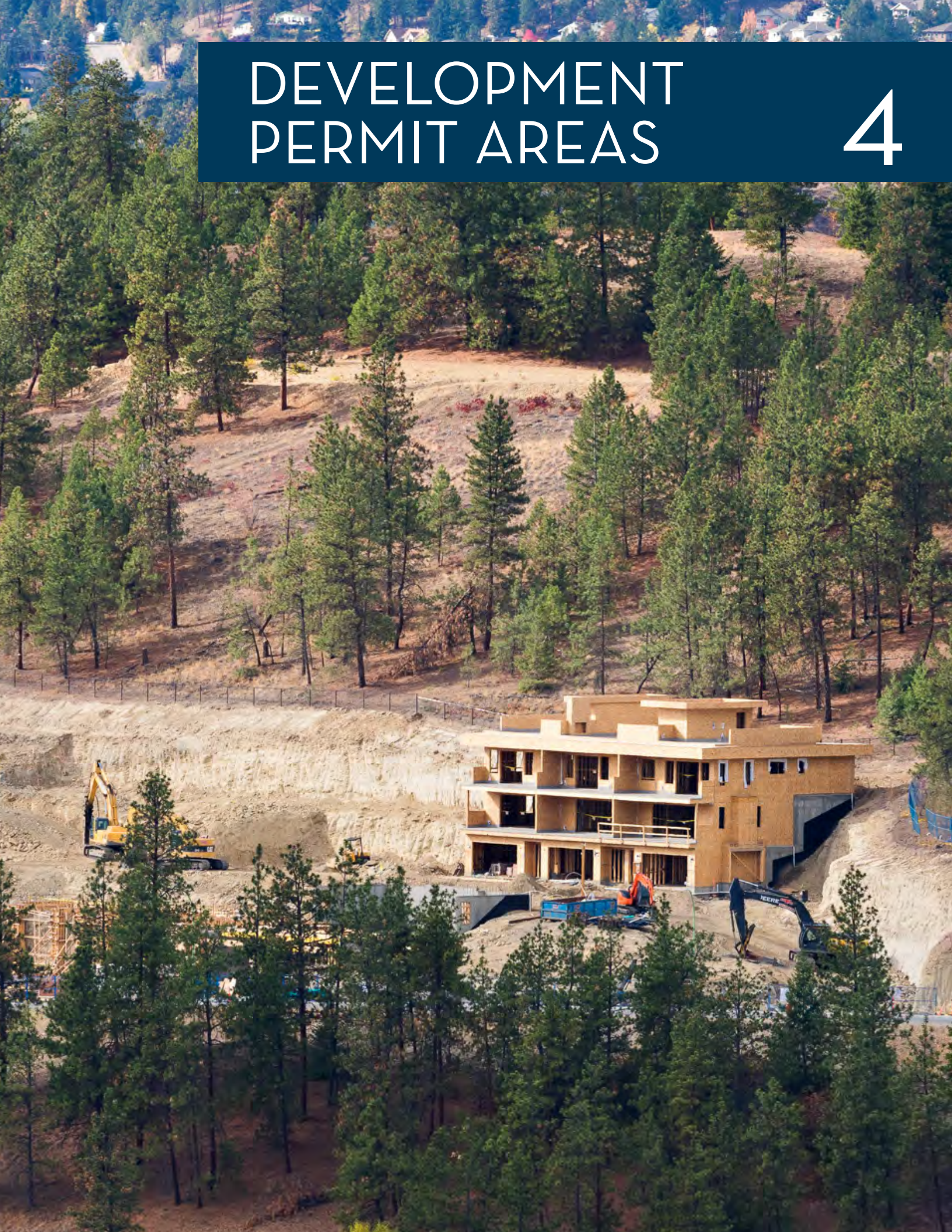
DEVELOPMENT PERMIT AREAS 4



4.1 DEVELOPMENT PERMIT AREA GUIDELINES

The Local Government Act (LGA) gives authority to local governments to create Development Permit Areas, which contain guidelines for development to achieve certain objectives or address specific conditions. Development Permit Areas may be established for:

- Protection of the natural environment, its ecosystem and biological diversity
- Protection of development from hazardous conditions
- Protection of farming
- Revitalization of an area in which commercial use is permitted
- Establishment of objectives for the form and character of intensive residential development, commercial, industrial or multi-family residential development, and development in a resort region
- Promotion of energy and water conservation
- Promotion of the reduction of **greenhouse gas** emissions

West Kelowna has General Development Permit Guidelines that apply to all Development Permit Areas (DPAs), as well as ten specific DPAs that are described as follows:

1. Commercial DPA
2. Industrial and Business Park DPA
3. Westbank Urban Centre DPA
4. Boucherie Urban Centre DPA
5. Neighbourhood Centre DPA
6. Multiple Family and Intensive Residential DPA
7. Hillside DPA (as generally identified on Schedule 3)
8. Aquatic Ecosystem DPA (as generally identified on Schedule 3)
9. Sensitive Terrestrial Ecosystem DPA (as generally identified on Schedule 4)
10. Wildfire Interface DPA (as generally identified on Schedule 4)

Where land is subject to more than one DPA designation only one Development Permit application is required. However, the application is subject to the requirements of each applicable DPA, as well as the General Guidelines. In some cases, it may be possible to process small scale development applications using a *Minor Development Permit* process. Applicants should review their proposal with staff at a pre-application meeting in the early preparation stages of assembling an application to determine the scale of process required.

4.1.1 Development Permit Requirements and Compliance

1. DP Required Before Development. In all Development Permit Areas, unless exempt a Development Permit must be approved before land is subdivided or development occurs, including but not limited to land clearing, land disturbance, preparation for the construction of services or roads, blasting, and construction of, addition to or alteration of a building or structure.
2. DP Compliance Required During Development. For all developments which have been issued a Development Permit, development of the site and related impacts of adjacent properties must be carried out in accordance with the conditions stipulated within the applicable Development Permit(s)."


DOCKSIDE
MARINE CENTRE
KAL TIRE
KAL TIRE
FREE

4.2 GENERAL GUIDELINES - ALL DPAS

4.2.1 General Guidelines Applicability

The General Guidelines apply to all development on lands within the City of West Kelowna that require a Development Permit, and must be read in conjunction with any other Development Permit Area Guideline that a proposed development falls under.

4.2.2 Purpose

In accordance with the *Local Government Act*, the purpose of the General Guidelines is to promote a high standard of development across West Kelowna that contributes to the Community Vision (Section 1.4) and a city that respects and preserves its environment. In addition, refer to each specific Development Permit Area for its designated purpose.

4.2.3 General Guidelines Exemptions

The following developments are exempt from the guidelines under the General Development Permit Area Guidelines. If the development is exempt from all other Development Permit Area Guidelines, then no Development Permit is required.

1. Proposed maintenance or repair of existing landscape that does not include excavation.
2. Emergency works, including tree cutting, if necessary to remove an immediate danger or hazard, where rehabilitation and restoration work to the satisfaction of West Kelowna will occur following the emergency.
3. The removal of trees and shrubs designated:
    a. As hazardous by an **ISA Certified Arborist;** or
    b. As host trees by the Sterile Insect Release Program and a report has been provided to the satisfaction of the City that identifies the affected trees or shrubs prior to their removal.
3. Construction of, or regular and emergency City maintenance of municipal infrastructure or buildings, where the proposed works are conducted in a manner that is consistent with the objectives of the Development Permit Guidelines, and endorsed by the Director of Development.
4. The implementation of a fish habitat mitigation or restoration plan that is authorized by the senior government ministry or agency with jurisdiction.
5. The activity is conducted under direction of Emergency Management BC.
6. Maintenance and repair of building envelopes, so long as there are no changes to the previous design, colour scheme or materials used.
7. The site has been assessed by a qualified professional who has provided a report (to the satisfaction of the City) which concludes that the proposed development would have no significant impact on the environment and/or is not subject to a hazardous condition; or the activity occurs on land designated provincial **Agricultural Land Reserve** and is considered normal farm practice as designated by the B.C. Farm Industry Review Board (FIRB).

4.2.4 General Guidelines - All DPAs Design Principles

The General Guidelines - All DPAs Design Principles promote a high standard of development across West Kelowna. All projects subject to a Development Permit will support the following Principles:

1. Ensure that the Community Vision is reflected in new growth and (re)development.
2. Ensure that policy direction of the OCP is realized through the fair implementation and administration of development guidelines.
3. Encourage attractive, built-forms that contribute to and enhance the general character of all development within the City, with a greater focus on guidelines for higher intensity mixed-use, multi-unit residential, commercial, business park or industrial development supporting walkable, complete neighbourhoods.
4. Encourage development that sensitively integrates and enhances with surrounding neighbourhoods.
5. Promote development that respects the natural environment, hillside and agricultural characteristics of the community.

4.2.5 General Guidelines - All DPAs

Framework

1. All development must address each applicable guideline, regardless of the term used such as consider, encourage, may, should or must. If a guideline does not apply or cannot be met, the applicant must provide written justification to the satisfaction of the City as to why the project cannot be designed to align with the guideline, or why the guideline does not apply.

2. In accordance with the *Local Government Act*, security may be required as a condition of Development Permit issuance to ensure that permit conditions are met, construction happens in a manner with minimal disruption to surrounding areas, and appropriate landscaping or restoration works are completed.
3. Development must abide by the *Heritage Conservation Act* and known or unrecorded archaeological sites are not to be altered without a separate permit from the BC Archaeology Branch.
4. In general, development permit conditions will reflect Best Management Practices produced by the Province of BC.
5. Figures and images have been provided within the guidelines for illustrative purposes only, and where there is any conflict with a specific guideline, the content of the guideline shall take precedent.

Protection of Natural Environment

6. Development may be regulated, including revisions to and rejections of Development Permit applications where inconsistent with the guidelines to protect the environment, which includes groundwater quality, **watercourses**, **riparian areas** and **leavestrips**, significant trees and vegetation, and **steep slopes** and areas subject to erosion. To ensure this protection, the City may regulate all land clearing, land grading, irrigation works, and landscaping, and may require lands to remain free of development.
7. Mature stands of trees, significant and landmark trees and associated understory vegetation should be protected. The City may require a plan prepared by an **ISA certified arborist** and/or a **Qualified Environmental Professional (QEP)** detailing measures required to preserve and maintain trees and vegetation before, during and after the development.
8. Existing native vegetation should be preserved where possible for habitat value and to protect against erosion and slope failure. Where a site has been previously cleared or will be cleared during development, a revegetation plan prepared by a **QEP** may be required. Areas of undisturbed bedrock exposed to the surface or natural sparsely vegetated areas may not require planting. Vegetation species used in replanting, restoration and enhancement should be selected to suit the soil, light and groundwater conditions of the site, should be native to the Okanagan Valley, and be selected for erosion control and/or fish and wildlife habitat values as needed.
9. When environmental features are to be preserved, the following must also be considered:
    a. How the preservation of environmental features can be coordinated with wildlife values to preserve habitat and wildlife corridors; and
    b. How wildfire risk can be minimized.

Grading and Drainage

10. Site development should not dramatically change the natural topography of the site, and grading requirements should be resolved within the property boundary. Cut and fill should be minimized and blended to the existing terrain. The City may require a Site Grading Plan to confirm adherence to this guideline.
11. Where areas with significant environmental features are required to be preserved, the City may restrict the manipulation of grades in these areas and site design should consider preservation areas.
12. All applications must include a Sediment and Erosion Control Plan outlining measures to reduce the risk of the release of sediment overland or into any **watercourse** prior, during and after development, including consideration of stormwater systems, creeks and streams that cross jurisdictional boundaries.
13. The City typically requires applications to include a Stormwater Management Plan and/or Drainage Plan. This plan must address long-term water quality, water quantity and erosion control measures required to minimize negative impacts on fish habitat and demonstrate compliance with City stormwater management policies and plans. The plan should include, where possible, on-site detention and slow release into the system, and consideration for bioswales, rain gardens, and rainwater harvesting (for on-site landscaping needs). Use of **Low Impact Development** techniques is encouraged.

Public Trails

14. To provide for the protection of and access to natural features, and to promote pedestrian rather than vehicular access in as many areas as possible, where possible, public trails should be continued, created, and secured on the lands. The City may require or accept the grant of trails as a condition of subdivision or Development Permit approval, where trails within the City's identified transportation network are not typically eligible to meet *LGA* park land dedication requirements. Trails should be designed and constructed to the trail standard specified in applicable bylaws, or to the satisfaction of the City.

Environmental Monitoring

15. Where an **Environmental Report** is required, the Report must include a monitoring plan to aid in compliance with the terms of the assessment during and post construction. Monitoring must be performed by a qualified consultant, and included in any applicable cost estimates for the recommended time period.

4.2.6 Form and Character General Guidelines - All DPAs

Site Planning and Related Building Design

1. Site planning and building design should:
    a. Minimize impacts on agricultural lands.
    b. Preserve and incorporate views to Lake Okanagan and Mount Boucherie.
    c. Maximize opportunities for solar exposure, daylight penetration, natural ventilation and utilization of green technologies.
    d. Maintain the scenic beauty and hillside character of West Kelowna. Development should be sufficiently set back from ridgelines and building heights adjacent to ridgelines minimized so that ridgelines are seen predominantly as a continuous line of natural terrain and/or vegetation.
    e. Where the process of site development causes unavoidable gaps or interruptions in the ridgeline, trees and vegetation should be planted so that the ridgeline is continuously vegetated.
    f. Present an architectural style that is consistent with, or enhances its physical surroundings including consideration for FireSmart Principles.
    g. Ensure design considers building amenities and services through the following design considerations:
        i. *Locate outdoor amenities to take best advantage of the climate (e.g.: include spaces that allow the sun and shade, or screening from rain);*
        ii. *Locate storage, loading, servicing and utility areas (including recycling and garbage) away from the public street frontage within or at the rear of,building(s), or adjacent to a service lane, where it is suitably screened in order to reduce negative visual impacts while still allowing for natural surveillance opportunities, and does not impact pedestrian circulation; and*
        iii. *Design garbage and recycling storage areas with consideration for animal-proofing; and*
        iv. *Specifically for any multi-unit residential development, utility metres should not be located on the front facade of the building.*
    h. Visually integrate buildings into the natural hillside setting and reduce the perceived massing of structures through the following design considerations:
        i. *Cut buildings into the hillside and use stepped foundations;*
        ii. *Terrace multi-story buildings down slopes;*
        iii. *Encourage roof pitches that reflect the slope of the natural terrain;*
        iv. *Utilize architectural treatments that provide three-dimensional relief and reveals to minimize the perceived massing; and*
        v. *Avoid the construction of solid fences and long retaining walls that impose highly visible and artificial lines on the hillside.*
2. Outdoor storage areas (for equipment, machinery, goods, or materials) and staging areas are required to be located to the rear of sites and away from the **public realm**, and will be visually screened using a combination of landscaping, berms, decorative walls and/or fencing when viewed from the public street and adjacent residential uses.
3. Design of multiple-unit developments should include routes and pathways that will allow maintenance contractors to gain access to all parts of the site that require maintenance with machinery.
4. Where developments include multiple buildings within a complex or site, the following building siting and design considerations are encouraged:
    a. Consider whether a building or cluster of buildings should have a distinct character, or individual identifying characters or features as appropriate to the use and surrounding area; and
    b. Where permitted by the City's Zoning Bylaw, consider the clustering of structures to allow for concentrated vegetative areas, either retained as natural areas or landscaped as a site feature.

Building Form and Materials

5. Development is encouraged to utilize building form and architectural composition to generate visual interest, identity, and a **sense of place**.
6. Development is encouraged to utilize varied roof lines, and to break up roofs on larger structures to provide architectural and visual interest. Special consideration may be given in industrial, commercial or mixed-use developments for flat roof lines where combined with architectural detailing along the upper floor.
7. Buildings design should incorporate elements such as projections, recesses, glazing, varied materials, colours, and textures to add interest and break up larger building volumes. Visual interest may be heightened through the use of:
    a. Variation in height and massing, as well as horizontal and vertical articulation;
    b. Architectural focal points, especially at site and building entrances;
    c. Variation and hierarchy of window shapes, styles, sizes and placement in a logical and consistent manner, including more complex dormers, bays window and balconies as appropriate, and window detailing such as decorative trim, shutters and mullions.
    d. The use of an integrated, consistent material and colour palette is encouraged, with variation achieved, for example, through use of accent colours and/or cladding materials.
8. Exterior building design should utilize glazing and high-quality materials (such as stone, wood, brick, finished concrete, or other masonry) as the primary component of street-facing elevations. Reflective

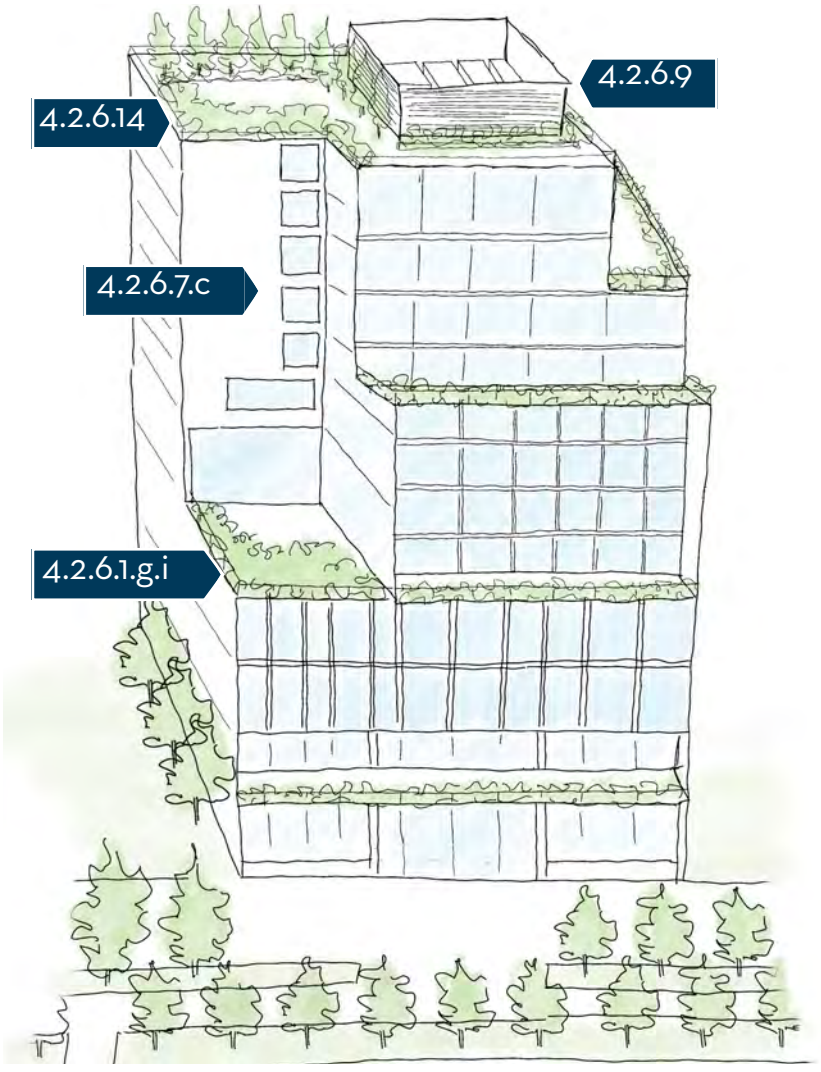


Figure 16. High-Rise Mixed-Use Example

glazing is not permitted. Exterior materials are encouraged to complement the natural environment of the Okanagan Valley and should be sufficiently durable to withstand the typical climate in this area. Natural or cultured stone exterior walls or structures are encouraged and should not be painted or stained.

9. All roof top mechanical equipment and antennas should be screened from public view, including adjacent buildings, roads, and pedestrian corridors.
10. Lighting design shall utilize full cut-off, flat lens luminaries, or other lighting forms that minimize light trespass onto other properties and reduce glare or light pollution above the horizontal plane when lighting building exteriors, road and parking lots, as well as consider high efficiency low energy options.
11. All projects shall be designed according to the principles of **Crime Prevention Through Environmental Design (CPTED)** and should be prepared to demonstrate this adherence to the City.
12. Where possible, building design and materials should:
    a. Explore the incorporation of green energy technologies like wind or solar, and incorporate them into the design if feasible;
    b. Utilizing sustainable and locally sourced building materials; and
    c. Consider adaptive reuse of existing building stock before considering demolition of existing buildings, where possible, or materials should be salvaged, recycled and reused wherever possible.
13. Development is encouraged to incorporate **green building** strategies and operational systems to reduce water use and waste, increase energy efficiency, and reduce **greenhouse gas (GHG)** emissions.
14. Consider incorporating building and site elements that mitigates the impact of extreme heat events such as green roof and wall technologies, shade trees for buildings and pedestrian areas, expanding vegetated areas to reduce use of asphalt and concrete, artificial shading measures such as canopies, permeable and other "cool" ground surface treatments and back up power generators to ensure buildings remain cool during extreme weather events. Green roof and wall technologies must be considered together with FireSmart principals.
15. All development should maximize sun penetration to pedestrian levels and to outdoor activity areas, including the consideration options for stacked buildings to expose more units to sunlight, open space, and views.
16. Patio areas and balconies should be designed to provide privacy for residents and screen stored items.
17. In multi-unit residential developments, building forms and floor plans that maximize the number of corner units and dwellings with exterior access on two sides are strongly encouraged to facilitate natural ventilation and daylight access, while at the same time providing an interactive connection to the street.

Ground Level Design and Relationship to the Street

18. The primary building façade should be positioned parallel to the primary street frontage contributing to a well-defined street edge and attractive street presence.
19. The ground-level design should contribute to an interesting and vibrant street experience that:
    a. Does not position blank walls facing a public street;
    b. Utilizes a high proportion of transparent glazing for the ground-level exterior wall, balanced with other materials, colours, and patterns to provide texture and variety along the facade, with consideration for reduced glazing requirements for residential only uses where permitted at the ground level of any building;
    c. Incorporates building recesses and variations in the facade setback at the ground-level to create interesting reveals, pockets, and edges between units in the same building; and
    d. Provides frequent entrances, at least one every 10 metres, into retail or commercial units at ground-level.
20. The main floor should also be accentuated through use of materials, paving, and architectural elements that visually "tie" the building together and anchor it to the ground by layering those materials and the design through to the street. It is important on the main ground-level floor:

a. To use materials (either different from the rest of the building or in a unique way) that differentiate and accent the main floor; and

b. Provide a strong visual base to the building.

21. Buildings will be placed and oriented on site to ensure good sight lines for vehicular and pedestrian traffic.

22. Primary pedestrian routes and building accesses will be clearly visible and accessible from the public street, utilizing defining elements including sidewalks, landscaping, and lighting.

23. Buildings should provide weather protection over all exterior pedestrian building entrances with adequate lighting for the comfort and protection of pedestrians, with the following consideration:

a. Awnings, light fixtures and other similar features should be architecturally integrated into the design of the building;

b. Development with ground-level commercial or institutional uses are encouraged to incorporate canopies or other structures along the building face to provide continuous shelter from rain and snow along the entire building frontage, with consideration for variation and architectural interest; and

c. Entrances to multiple unit residential buildings are encouraged to include also wind protection for pedestrians.

24. Exposed concrete foundations are discouraged, and landscaping or finishing treatments are required to soften the visual impact of the foundation. Finishing treatments may also include texturing, colour matching to the building, or other architectural features.

What are the 6 Crime Prevention Through Environmental Design (CPTED) Principles?

The goal of applied CPTED principles is to prevent crime by designing a physical environment that positively influences human behaviour. The theory is based on six principles:

1. *Natural Surveillance - maximizing residents' ability to observe semi-public spaces through lighting, landscaping, clear sightlines, and other design forms that enhance visibility to reduce crime opportunities.*
2. *Natural Access Control - controlling access points to a property to decrease crime opportunity. Fences, low walls, landscaping, and distance are examples that when combined with natural surveillance can reduce the desire to enter a property to engage in criminal activity.*
3. *Territorial Reinforcement - supporting residents to assume informal ownership of public spaces by creating clear activity zones and avoiding the creation of dead spaces. When residents see spaces around their homes as their own, they are more likely to care and exert some positive influence over them.*
4. *Activity Support - support community, cultural and cultural connectivity by planning social programs/groups, cultural events/festivals, and physical infrastructure (such as linked walkways) throughout a community to link and strengthen interconnection, communication and inclusivity of surrounding neighbourhoods.*
5. *Maintenance - providing regularly scheduled maintenance to a property such as graffiti removal, litter clean-ups and beautification signals that the area is cared for and safe.*
6. *Threshold Capacity - creating land use diversity to provide the necessary conditions to support wellness, sustainable social and physical environments, multiple community interests and positive social interactions. For example, too many bars or nightclubs might destabilize a community.*

How does CPTED help support the Community Vision?

By designing buildings and spaces that specifically consider these principles, we support safer spaces for all users which encourages people to interact with the building and spaces that they live in and move through, creating a more active, vibrant community.

4.2.7 Form and Character Low-Rise Building Height General Guidelines - All DPAs

In addition to the other applicable guidelines, the following guidelines apply specifically to developments that are within a Form and Character DPA, and which are either:

- Mixed-use or commercial buildings of less than four storeys in height;
- Institutional uses; or
- Residential buildings of less than four storeys in height, and include three or greater dwelling units, or for three or greater duplex buildings.

Low Rise Mixed-Use, Institutional and Commercial

1. Further to the general guidelines related to ground-level design, these types of buildings should have an enhanced design focus on distinctive building detail and architectural features not just at the ground level but between the first and second storey. This should include incorporating business signage as part of architectural design elements, such as building projections, etc. such that signage is less obtrusive.
2. Low-rise mixed-use and commercial buildings will provide a sensitive transition to the surrounding planned and existing development by:
    a. Transitioning front setbacks to align with adjacent uses.
    b. Considering additional stepbacks above the second or third storey when adjacent to lower buildings.

Walk-Up Apartments (3 storeys or less)

3. Buildings will address the primary public street frontage through the orientation of massing, entrances, primary windows, patios, and other features, as appropriate.
4. Developments are encouraged to include a publicly accessible front yard or amenity space between the building and the street.
5. Patios at the ground level, balconies on upper levels or other private outdoor amenity spaces should be provided.

Townhouses (3 Units or Greater) and Duplexes (3 Buildings or Greater)

6. Buildings will address the primary public street frontage through the orientation of massing, entrances, primary windows, patios, and other features, as appropriate.
7. Developments will include landscaped front yards between the building and street frontage.
8. Developments are encouraged to incorporate street- facing patios and private amenity spaces. Where rooftop patio accesses are included, they should be set back and sited on the roof appropriately to not create a negative massing impact to the street or adjacent properties.
9. Buildings are encouraged to utilize articulation, varied materials, colours, and massing strategies to define individual units within the complex to create a visually interesting street appeal.
10. Building form and placement should sensitively address its surroundings through transitioning front setbacks and building heights to align with adjacent uses.
11. When accessed from a public street via private driveways, driveways should be paired to maximize uninterrupted landscape areas along the street and maximize on-street parking opportunities;

Figure 17. Low-Rise Mixed-Use Example

Figure 18. Townhouse Example

4.2.8 Form and Character Mid-Rise Building Height General Guidelines - All DPAs

In addition to the other applicable guidelines, these guidelines apply specifically to mid-rise developments that are within a Form and Character DPA, including all buildings that are four storeys or greater, but less than 7 storeys.

Building Form and Scale

1. Further to the general guidelines related to ground-level design to contribute to an interesting streetscape, mid-rise buildings greater than four storeys must incorporate a horizontal stepback above the third storey to create the impression of a podium or base building distinct from the upper levels.
   a. Developments are encouraged to utilize larger stepbacks than the minimum requirement to facilitate functional outdoor amenity space such as green roofs, terraces, or balconies, where feasible.
   b. Developments will soften the scale and vertical impression of the podium building through vertical and horizontal articulation of the façade, setbacks, building recesses, use of varying materials and textures, and other architectural features.
   c. Roof line architectural detailing should be used to complete the building and tie the design of the whole building together.
2. A Shadow Analysis may be required for all buildings greater than four storeys, where adjacent to existing or anticipated low-rise development, or agricultural or park uses. Wind studies may also be required for development sites within Boucherie/ Westbank Centres and Neighbourhood Centres.
3. A Visual Impact Assessment that shows the impact of the building on views from adjacent neighbourhoods may be required.
4. Balconies or other private outdoor amenity spaces on upper levels of mid-rise buildings should be designed as integral parts of the building massing and design, and not appear as an additive feature.

Figure 19. Mid-Rise Building Form Example

4.2.9 Form and Character High-Rise Building Height General Guidelines - All DPAs

In addition to the other applicable guidelines, these guidelines apply specifically to high-rise developments that are within a Form and Character DPA, including all buildings that are 7 storeys or greater.

Building Form and Scale

1. For high-rise buildings, incorporate a horizontal stepback above the third storey to create the impression of a podium or base building distinct from the upper levels.
   a. Developments are encouraged to utilize larger stepbacks to facilitate functional outdoor amenity space such as green roofs, terraces or balconies, where feasible.
   b. Developments will soften the scale and vertical impression of the podium building through vertical and horizontal articulation of the façade, setbacks, building recesses, use of varying materials and textures, and other architectural features.

Figure 20. High Rise Building Form Example

2. Further to the general guidelines on ground level design and podium design noted above, high-rise buildings should have an enhanced design focus on distinctive building detail and architectural features on the tower portions and not just at the ground and podium levels to ensure building interest extends upward from the **streetscape**, by continuing to incorporate features such as:
    a. Utilizing a high proportion of transparent glazing on the tower portions of the buildings;
    b. Including building recesses and variations in the façade setback which, for example, can create interesting reveals and edges between units in the same building; and.
    c. Providing variation and delineation through materials, colour palette, patterns, and textures along façades.
3. Tower designs (7 storeys or greater) above the podium level will incorporate consideration of building massing, siting and design to appropriately minimize the negative impacts they may have on adjacent properties and neighbourhoods, including shadowing, wind, and access to views to Mount Boucherie and Lake Okanagan. This should include the use of stepbacks, articulation, glazing and building separation, as well as other strategies. The applicant is required to submit the following studies in support of their application, where applicable:
    a. Sun/ shadow study when the City determines there is the potential for shadows caused by the development to impact the use and enjoyment of surrounding and anticipated development, including parks and agricultural uses.
    b. View corridor impact analysis when the City determines there is potential to redesign the building or site to reduce impact on views to Lake Okanagan and Mount Boucherie from adjacent properties.
    c. Wind study when the City determines there is a risk of wind tunneling from the construction of a building or cluster of buildings on the surrounding and anticipated development.
4. High-rise buildings will maintain adequate light penetration and privacy for adjacent properties, typically in the form of a podium and tower configuration which avoids long, unbroken building spans and large, bulky tower elements.
    a. Design of these buildings should include a base, middle and top tower elements using features like building stepbacks, transition in building shape, vertical and horizontal articulation, and distinguishing architectural elements.
    b. Where two buildings (greater than 7 storeys) are proposed on the same site, the tower portions of the buildings should be separated by a minimum distance of 15 metres.
    c. Building towers (greater than 7 storeys) should maintain a minimum separation distance of 20 metres to other towers on immediately adjacent properties, and/or 10 metres to the adjacent property line of a potential future high-rise site.
5. A Visual Impact Assessment that shows the impact of the building on views from adjacent neighbourhoods may be required.

4.2.10 Accessibility General Guidelines - All DPAs

1. Site planning, building and sign design should incorporate Universal Design principles to accommodate people with different levels of mobility and sensory abilities.
2. All entries to public, commercial, institutional, and shared multi-family residential buildings will include grade accessible entries suitable for all users.
3. All **publicly accessible spaces** and private amenity spaces throughout developments must consider universal accessibility requirements.
4. In residential development:
    a. A variety of residential units are encouraged to be universally accessible, or wheelchair accessible at minimum; and
    b. Building design should consider inclusion of adaptable design to allow for flexibility in unit types and future conversion options to accommodate universal accessibility requirements.

4.2.11 Pedestrian and Streetscape General Guidelines - All DPAs

Access, Parking and Circulation

1. Development will provide designated and accessible pedestrian access routes that are safe and direct, with clearly defined routes from building entrances to public sidewalks, parking areas, common amenity areas, transit stops,and other highly utilized areas as applicable, in consideration of pedestrian desire lines.
2. Development will clearly delineate and provide separation between vehicular routes (especially loading/ servicing and truck access) and pedestrian routes to minimize all potential conflicts and make pedestrian routes easy to distinguish. Where separation is not possible, special design treatment may be required to ensure safe pedestrian movement.
3. Where sites contain more than one building, buildings should be connected by internal sidewalks or pathways.
4. Pedestrian walkways and circulation routes should utilize varied paving/material treatment, raised walkways, pavement marking and signage, or similar features to distinguish them, and be developed with adequate lighting, street furniture, and landscaping to present a safe, universally accessible, attractive and comfortable environment.
5. Visitor parking, where required by the City's Zoning Bylaw, should be easily identifiable and located close to building entrances, or on large sites conveniently located throughout the site.
6. Parking areas are encouraged to provide for alternative modes of transportation, such as bicycle/e-bike storage and racks, motorcycle parking, preferential parking for carpool users, and electric vehicle .
7. All development that is required by the City's Zoning Bylaw to include bicycle parking for visitors and residents should locate it near building entrances and in areas that are accessible and highly visible from the public street, without negatively impacted pedestrian circulation.
8. Large, primary parking areas are encouraged to be provided in underground structures, at the rear or side of buildings, and in centralized parking facilities, or a combination thereof. Parking will not be permitted within the front yard setback of a development, except where no other layout is available. Underground parking areas should include adequate safety features and weather-proofed access points.
9. Where parkades are incorporated into a buildings design, all parkade entries including overhead doors, gates, open or other entries should be sited to the side or rear of the building and recessed into the buildings design so as to not impact the buildings relationship to the street or pedestrian comfort.
10. Where surface or above-grade structured parking areas are visible from the public street, strategies including tree planting, berming, decorative walls, fencing, hedging, and architectural design elements should be used to screen or otherwise obscure these areas.
11. Where parking is permitted at the front of a building, the number of spaces should be limited to the minimum number required to accommodate client and visitor parking. Employee and service parking and all loading areas should be located to the side and rear of buildings, or underground.
12. Where larger surface parking is unavoidable, development is encouraged to break up large parking areas into smaller lots defined by landscaping to minimize the amount of paved surface area.
13. Maximize shading on site through landscaping or other design features, particularly in surface parking areas and pedestrian circulation routes to enhance the comfort of users and to reduce the heat island effect.
14. Surface parking areas are encouraged to provide on- site bio-retention facilities such as bioswales and rain gardens to manage stormwater runoff on site.
15. As per the City's Zoning Bylaw, surface parking areas will be:
    a. Defined by concrete curbing; and
    b. Constructed of a solid surface, or of a porous material such as permeable pavers/concrete which maximizes rainwater absorption. Permeable, granular surfaces may be acceptable if treated to prevent dust pollution.

4.2.12 Landscape General Guidelines - All DPAs

In addition to the Landscape General Guidelines noted within this section, there are specific Hillside Revegetation and Renaturalization guidelines applicable to landscaping within a Hillside context. In some cases, the Hillside DPA Guidelines are meant to supercede the General Guidelines in order to address the unique challenges associated with landscaping on steep slope. Please refer to the Hillside DPA Guidelines as applicable.

Landscape Designs

1. Landscaping on private property should respect and improve the **streetscape** and **public realm.** All areas not used for buildings, parking stalls, driveways or outdoor storage should be landscaped.
2. Landscape plans must include the required minimum landscape **buffer** between commercial, residential, industrial or institutional development and lands designated as **Agricultural Land Reserve**, as per the City's Zoning Bylaw.
3. Development should utilize trees and landscaping throughout the site to define boundaries, reinforce circulation routes, enhance pedestrian conditions, and optimize stormwater management.
4. Development is encouraged to provide landscaping features that absorb on site stormwater runoff such as rain gardens and bioswales.
5. Where property is adjacent to a public road or public pedestrian corridor, street trees should be introduced in the front setback of a property, except where street trees are already required within the boulevard as part of the road cross-section. Consistent with the Urban Forest Strategy once completed and relevant policies, tree species should be selected to be appropriate for their location, and planting should be provided as follows:
    a. 25-30 m^3 of soil per tree is recommended, in areas with significant hard surfaces, the utilization of soil cells over structural soil is encouraged to meet this standard;
    b. Tree species adjacent to boulevards should be high-branching deciduous trees to prevent sightline interference on the roadway, and be a species approved by the City; and
    c. Trees must be irrigated by the private property owner and be located on private property.
6. Landscape designs should:
    a. Complement the natural vegetation and hillsides of West Kelowna;
    b. Integrate and augment existing landscape into the proposed site and landscape design, including the retention of any existing trees, wherever possible.
7. Planting plans should include a selection of local or adapted species to West Kelowna, prioritizing drought-tolerant species that provide habitat, nesting, pollination, or other biodiversity benefits.
8. Landscape elements that provide other municipal benefits such as stormwater retention or filtration, local food production, or user interaction are encouraged.

Water Conservation and Energy Efficiency

9. The following design elements should be incorporated into landscape plans to conserve the use of water:
    a. **Xeriscaping** and drought-tolerant native landscape materials;
    b. Irrigation, when used, should be an automated, underground system that conforms to Irrigation Industry Association of BC (IIABC) standards;
    c. The use of irrigated grass lawns should be minimized and used only for special effect and purpose (e.g. around a main entrance or where the lawn will be used as a play area), where grass lawns are used, explore the inclusion of artificial turf or drought-tolerant grass mixes; and
    d. The use of human-made water features and fountains is discouraged. If used, human-made water features or fountains should utilize recirculated water or be connected to a cistern designed for the collection of natural rain water.

Figure 21. General Guidelines Parking Example

10. Where possible, utilize landscaping to reduce building energy consumption:
    a. Incorporate deciduous trees that allow sunlight penetration in areas that need winter solar exposure;
    b. Use landscaping to shade buildings in summer; and
    c. Use green roof technologies and climbing vines to further insulate buildings.

Landscaping in Parking Areas

11. Landscape plans for parking and traffic areas should include:
    a. Concrete curbs to protect landscaping from adjacent parking or vehicular traffic. These curbs should include cuts to allow stormwater from parking areas to flow through the vegetation;
    b. Sufficient planting zones that are designed to act as stormwater features, allowing for the goal of all stormwater accumulated within the parking lot to enter a vegetated zone before entry into the stormwater network;
    c. Paving solutions that are permeable or direct water to planted zones;
    d. Consideration of fire and building code requirements as well as pedestrian access and safety; and
    e. Landscape islands located throughout parking areas to visually break up large expanses of parking, meeting the City's Zoning Bylaw requirements at a minimum, including:

Figure 22. Landscaping in a Parking Area Example

i. A variety of trees/shrubs/perennials that provide shade and accommodate snow storage;

ii. Locations distributed throughout the parking areas (between internal collectors, aisles that provide direct access to parking stalls, and at the mid and end of parking stall aisles); and

iii. Landscaped areas between parking stalls provided at minimum intervals.

12. As per the City's Zoning Bylaw, provide for snow deposition within parking areas in locations that do not impact landscaping. Additionally, where snow storage is planned for other hard surfaced areas, ensure the location does not impact required parking or site circulation.

Technical Landscape Considerations

13. The preparation of landscape plans by a member of the B.C. Society of Landscape Architects or other Professional approved by the Director of Development is required. All plant material, preparations, requirements and contractor's work should meet or exceed the Canadian Landscape Standard, Latest Edition, published by the Canadian Society of Landscape Architects (CSLA) / Canadian Nursery Landscape Association.
14. Landscape plans should include a proposed planting plan indicating proposed and existing plant material, a grading/drainage plan indicating proposed and existing grades, and a materials plan indicating proposed surface treatment location of and specifications for fencing. Plans should also show the location of existing trees and landscaping, including retaining walls and landscape beds.
15. Landscape plans should show the following:
    a. Unless a groundcover, all shrub material should be at least a 2 gallon (#2) size pot, and
    b. Coniferous trees a minimum of 1.5 metres in height and deciduous trees a minimum of 6.0 centimetre caliper dbh.

16. Except where the British Columbia Landscape Standard designates a greater depth based on severity of compaction and grading at the plant site, the following minimum depth of topsoil to amended organic soils on all landscaped areas of a property is required:
    a. Shrubs – 45 centimetres.
    b. Groundcovers or grass/sod – 30 centimetres.
    c. Trees – 30 centimetres around and to a depth of 60 centimetres for as large an area as possible.
    d. Boulevards – should include minimum depths of 90 centimetres for planting beds that include street trees.
17. All landscape beds should be treated with a minimum 50 millimetre depth of landscape mulch which may include bark mulch, pea gravel or shredded mulch. Paving, gravel or mulch should not be considered primary landscaping elements.
18. All replanting shall be maintained by the property owner for a minimum of 2 years from the date of completion of the planting. During this two-year time period, unhealthy, dying or dead stock will be replaced at the owner's expense in the next regular planting season.
19. Certain types of plants may harbour damaging diseases or pests that can be transmitted to commercial orchards and vineyards in the Okanagan. To reduce the risk of disease or pest damage, the following types of plants are not permitted:
    a. All trees of the genus MALUS (apples or crabapples, including all ornamental or flowering crabapples);
    b. All trees of the genus PYRUS (pears, including Asian and ornamental pears);
    c. All trees of the genus PRUNUS (flowering cherries and flowering plum);
    d. All plants of the genus CYDONIA (quince);
    e. All non-native plants of the genus JUNIPERUS (juniper);
    f. All non-native trees of the genus CRATAEGUS (hawthorn);
    g. The BERBERIS vulgaris (common barberry) plant;
    h. All plants of the genus CHAENOMELES (flowering quince or japonica);
    i. All plants of the genus AILANTHUS (s: altissima or tree of heaven or stinking sumac);
    j. All plants as outlined in RDCO Noxious Weed Control Bylaw; and
    k. Other detrimental species as may be defined from time to time by the Ministry of Agriculture and Food, or other agencies as applicable.

4.2.13 Fencing and Streetscape General Guidelines - All DPAs

1. Fencing and landscape edges should be used when territorial definition, privacy, and security are desired, but should also contribute positively to the **streetscape** and not detract from the **public realm**. The amount of visual screening an edge feature provides should be appropriate to its corresponding use.
2. Fencing will appear as an integrated feature of the site, utilizing a design and materials that complement the principal buildings on the site.
3. Between residential and industrial uses, or where residential use abuts a highway, decorative noise attenuation fencing may be desirable.
4. Landscaping is encouraged on the public-facing side of all fences to soften the visual appearance.

Screening

5. Fences and landscaped edges should be used to visually screen storage areas and unsightly land uses from view. When used to screen an area, fences should follow the following design guidance:
    a. Be constructed of wood, stone, masonry or high quality composites.
    b. When combined with a landscape screen, decorative metal and wrought iron is encouraged but must ensure that the design is wildlife friendly (i.e. no chance of impalement).
    c. In industrial areas, when combined with landscaping, black coated chain link or galvanized chain link is acceptable.
    d. Fencing materials must be consistent with the City's Zoning Bylaw, which generally prohibits the use of adhoc materials and barbed wire or other high security fencing except where necessary for agricultural or industrial settings.

Figure 23. General Guidelines Fencing Example

4.2.14 Signage General Guidelines - All DPAs

1. Signs should be consistent with the City's Sign Bylaw, and either complement or enhance the adjacent areas, utilizing materials and lighting that presents a quality aesthetic.
2. The location of all signs (including wayfinding markers) should be shown on application design drawings and landscape plans. Development on larger sites are encouraged to include:
   a. Wayfinding markers to key areas, such as primary entrances and parking areas;
   b. Signage at every entrance identifying the location of individual units for emergency service provision;
   c. Complementary design features suitable to the proposed building design and use.
3. Entry signage for residential development, should be ground oriented and located within a landscaped area.
4. Sign lighting and illumination should be oriented so that it does not create light pollution above the horizontal plane, or glare on public roads, neighbouring buildings or residential areas.
5. Fascia signage should be designed as an integral part of the architecture of a building, or where a building is existing, signage design should be well-coordinated with building design.
6. Freestanding signs are encouraged to be ground oriented, mounted on a masonry base and should be unlit or externally lit.
7. Universal design principles should be incorporated to communicate to a range of ages and diversity of abilities.
8. All signage should be of similar size for multi-tenant buildings.
9. A comprehensive sign plan shall be provided as part of any form and character development permit application and should meet the intent and provisions of this section.
10. Where development is adjacent to key gateway corridors to the City, consideration of additional gateway signage to address community needs is encouraged, along with the potential for appropriate cultural and landscaping improvements.

Figure 24. Signage Example

4.3 COMMERCIAL DPA GUIDELINES

4.3.1 Area

The Commercial Development Permit Area (DPA) applies to all lands within the CWK where commercial or commercial-mixed use development is permitted outside the Urban or Neighbourhood Centres. These guidelines must be read in conjunction with any other applicable guidelines.

4.3.2 Purpose

In accordance with the *Local Government Act*, the purpose of these guidelines is intended to inform the form and character of commercial development. They encourage opportunities for vibrant, safe and successful businesses that contribute to a pedestrian- friendly environment and integrate sensitively into their neighbourhoods.

4.3.3 Commercial DPA Exemptions

A Development Permit will not be required for any of the following:

1. Improvements or renovations to building interiors that do not result in a change to a property's parking requirement.
2. Minor exterior renovations, maintenance, repairs or replacements that involve no additions; and that do not change the general form and character of a building, or that make improvements to the form and character at the discretion of the City;
3. Additions up to 200 square metres to a principal building or 40 square metres to an accessory building, as defined by the City's Zoning Bylaw, provided that:
    a. The addition results in less than a 10% increase in the floor area of the principal building;
    b. There is no change to the required parking, landscaping, environmental measures, or access to the site; and
    c. There is no change to the general form and character of a building, or it improves the form and character at the discretion of the City.

4.3.4 Commercial DPA Design Principles

The Commercial DPA Design Principles communicate the high-level intentions of these Development Permit Guidelines and reflect the vision and objectives of the OCP. All projects subject to a Development Permit under this area will support the following Principles:

1. Foster commercial development that is attractive to a diversity of both customers and businesses.
2. Encourage development that sensitively integrates and enhances the surrounding neighbourhood.
3. Improve the **streetscape** by requiring **pedestrian scale** design that will contribute positively to the pedestrian experience.

4.3.5 Commercial DPA Guidelines

In addition to the General Guidelines, these guidelines apply to all developments under the Commercial DPA.

Site Planning

1. Proposed Developments should be designed to integrate sensitively into the existing and planned scale and aesthetic of the surrounding area, considering the existing and planned features of the surrounding area, including building massing, height, and siting or setbacks.
2. Commercial development adjacent to residential uses should have an enhanced focus on the sensitive transition to neighbouring residential areas, as well as ensuring parking, servicing and utility areas are located away from or visually screened from public and neighbouring views. At a minimum, this should include special consideration of:
    a. Thoughtful site design and building siting to mitigate the impact of traffic, noise, lighting, and other environmental conditions; and
    b. Fencing and landscape/screening.
3. Any commercial development on West Kelowna's waterfront must create and maintain public access to the waterfront, while mitigating any negative impacts of new development through appropriate siting and setback to ensure public enjoyment of the waterfront is maintained and significantly enhanced.

Building Form and Scale

4. Building forms and floor plans that maximize the number of corner units and units with exterior access on two sides are strongly encouraged to facilitate natural ventilation and daylight access.
5. Commercial development should utilize high quality materials that reflect or enhance the character of the adjacent area, such as brick, metal, wood, and stone and avoid materials such as vinyl panels and stucco, with consideration for coordination of the materials within any proposed site signage.

Figure 25. Commercial Guidelines Example

Ground Level Design and Relationship to the Street

6. Further to the general guidelines related to ground level design, development within the Commercial DPA should pay additional consideration to how building design integrates with the surrounding neighbourhood given that these areas may be located within unique settings adjacent to non-commercial uses.
7. Development on corner lots should include the following:
   a. Facades that include street entrances and windows along both street elevations.
   b. A corner focal point, such as a corner entrance, bay window, tower or similar design feature.
8. Notwithstanding the general guidelines related to canopies along the full building frontage of ground-level commercial development, in the Commercial DPA, the focus is on ensuring that weather protection is provided over all exterior pedestrian building entrances with adequate lighting for the comfort and protection of pedestrians, rather than along the entire building face. As this type of commercial development is located outside of the Centres, this reduced standard is based on the likelihood of a lesser volume of pedestrian traffic along the public street.

9. Notwithstanding the general guidelines related to fencing, in the Commercial DPA decorative metal fencing or screening through landscaping is the preferred method when fencing is necessary, and chain link fencing is generally not permitted in commercial developments, especially along high visibility street frontages.

Circulation and Parking

10. Notwithstanding the general requirements related to parking, parking areas in between the development and primary public street are not permitted in new commercial developments. Parking should be located underground, at the rear or buildings, or in central parking facilities. Larger, multi-building developments may develop a shared surface parking lot within the interior of the site that is adequately screened from the public street to the satisfaction of the City.
11. Providing bicycle storage areas and end-trip facilities such as showers and change rooms for employees is encouraged, even where not required by the City's Zoning Bylaw.

Amenity Space

12. Developments are encouraged to provide enough space within their setback to accommodate an outdoor patio/display area for businesses to act as public gathering spaces and amenities in support of the commercial development.
13. Where a mixed-use within the Commercial DPA has more than 20 residential units, the development must include the provision of outdoor recreational facilities and amenities.
    a. Facilities such as an outdoor children's play space, senior's outdoor amenity areas, and community gardens should be matched to the intended users, and should be scaled in size and complexity to match the scope and scale of the proposed development.
    b. Balconies or other private outdoor amenity spaces on upper levels should be designed as integral parts of the building massing and design, and not appear as an additive feature.
14. For a tourist commercial development within the Commercial DPA, the development should include facilities and amenities for the tourists that they draw to the area as well as for the benefit of the surrounding local community.

4.4 INDUSTRIAL AND BUSINESS PARK DPA GUIDELINES

4.4.1 Area

The Industrial and Business Park Development Permit Area (DPA) applies to all development under the Industrial and Business Park land use designations. These DPA Guidelines must be read in conjunction with any other applicable guidelines.

4.4.2 Purpose

In accordance with the *Local Government Act*, the purpose of these Guidelines is to inform the design and character of employment-focused development to realize functional, safe and attractive industrial and business park environments throughout West Kelowna. This includes capitalizing on opportunities to diversify employment types and attract new economic development supported by improvements to design and functionality of the street and pedestrian infrastructure, compatibility with neighbouring land uses, and taking advantage of centrally located lands along the Highway 97 corridor and identified key streets.

4.4.3 Industrial and Business Park DPA Exemptions

A Development Permit will not be required for any of the following:

1. Improvements or renovations to building interiors that do not result in a change to a property's parking requirement.
2. Repairs or minor renovations to building exteriors that do not alter the form or character of the building or impact surrounding properties.
3. Additions of up to 200 square metres to a principal building or 40 square metres to an accessory building, as defined by the City's Zoning Bylaw, provided that:
    a. The addition results in less than a 10% increase in the floor area of the principal building; and
    b. There is no change to the required parking, landscaping, environmental measures, or access to the site.

4.4.4 Industrial and Business Park DPA Design Principles

The Industrial and Business Park DPA Design Principles communicate the high-level intentions of these Development Permit Guidelines and reflect the vision and objectives of the OCP. All projects subject to a Development Permit under this area will support the following Principles:

1. Promote and reinforce efficient use of industrial lands through site design of vacant sites or redevelopment of under-utilized sites, with a focus on access, site circulation and building design for large-scale primary industrial activities.
2. Maintain and enhance the Business Park by exploring opportunities in building design and form to accommodate new and emerging employment types which may include research and technology, light manufacturing and production, studios, laboratories, and ancillary commercial offices.
3. Use high-quality building and landscape design to attract investment and new uses to the Industrial and Business Park land use base.
4. Encourage flexible design which can respond to evolving community and market conditions to support the Industrial and Business Park land use base.
5. Development or re-development of existing smaller lots (as compared to larger industrial parcels of the area) is encouraged, where appropriate, to allow building forms that would accommodate smaller scale uses such as "incubator" facilities or "maker" spaces and other start-up, high-tech, and creative industries.
6. Enhance the pedestrian, transit and cycling environment through site planning, landscaping and built form to create a safe and comfortable experience for all users.
7. Utilize building design to minimize adverse impacts on adjacent properties and create appropriate transitions to other surrounding land uses.

4.4.5 Industrial and Business Park DPA Guidelines

In addition to the General Guidelines, these guidelines apply to all developments under the Industrial and Business Park DPA.

Site Planning and Landscaping

1. Notwithstanding the general requirement for outdoor storage areas to be located to the rear of sites, consideration may be given within the Industrial and Business Park DPA for outdoor storage areas to be located in other locations on the site where the:
    a. Entire site is being used for outdoor storage; or
    b. Outdoor storage area does not encroach upon the required minimum setbacks, and landscape buffers are proposed to adequately screen the use from the public street; or
    c. Outdoor storage materials being stored are 2.0 metres or less in height, and landscape buffers are proposed to adequately screen the use from the public street.

2. Given the potential for larger buildings and impervious surface area within this DPA, site planning should incorporate accessible greenspace and landscaped green roofs, where appropriate, to help manage stormwater runoff, reduce heat island effect, and improve site amenity.
3. Consider building forms that support smaller lot development, where appropriate, to facilitate the establishment of uses including light/small-scale manufacturing, incubator facilities or "maker" spaces, start-up businesses, or other creative industries that support the primary industrial- employment use.

Ground Level Design and Relationship to the Street

4. Notwithstanding the general requirements for form and character as it relates to site and building design, the focus within the Industrial and Business Park DPA is on the areas along a public street, or where viewed from a public street.
5. Office, reception, or sales components of a development, where present, should be located closest to the street to enhance visibility and pedestrian access, with the plant, warehouse, or similar component positioned towards the rear of site.
6. Loading and service doors are encouraged to be oriented away from the public street frontage, either to the rear or side of a street-facing building.
7. Existing street trees should be maintained, and new tree plantings encouraged, to enhance street edge definition and enhance visual screening and noise attenuation.
8. Chain link fencing along high visibility street frontages is generally discouraged. If necessary for security, a chain link or solid fence should include dense landscape screening such as a hedge, or other beautification measures, on the street side of the fence within the property boundary.

Access, Parking and Circulation

9. Notwithstanding the general requirements related to the location for parking, within the Industrial and Business Park DPA, consideration may be given for alternate surface parking locations where required operationally, and all landscaping and buffering requirements have been met.

Figure 26. Industrial & Business Park Example

10. Notwithstanding the general requirements related to surface treatment and curbing requirements related to parking areas, within the Industrial and Business Park DPA, consideration may be given to allow permeable, granular surfaces if treated to prevent dust pollution, and reduced curbing requirements when located to the rear of the site.
11. Additional focus within the Industrial and Business Park DPA should be given to ensure the safe separation of loading/servicing and truck access from pedestrian routes to minimize all potential conflicts.

Building Form and Materials

12. Notwithstanding building form and material requirements within the general guidelines, within the Industrial and Business Park DPA, consideration may be given to more simple design features to accommodate operational requirements related to industrial uses, such as larger or boxier buildings, larger doors and garage doors, more building openings, and/or specific access/circulation patterns. Where these design features are utilized, proof of the operational requirement must be provided with the development application.
13. The use of different exterior materials to distinguish between components of a building (for example, a plant/warehouse from offices/sales area) is encouraged.
14. Metal siding will not be permitted for street-facing and high visibility components of a development (sales, offices, reception areas) but may be permissible for industrial buildings provided that it is incorporated into a high-quality overall design and aesthetic. In general, untreated concrete block, and vinyl or plastic siding is not permitted.
15. Multi-storey, buildings with a mix of uses (such as those containing industrial and ancillary commercial office/sales components) should be designed to accommodate industrial uses on the ground floor by providing generous first floor heights of at least 5.5 metres.

Transition to Sensitive Land Uses

Where an industrial or intensive business park use is adjacent to another land use including residential, institutional, parks and open space, or other uses determined to be sensitive, the following guidelines will apply:

Figure 27. Industrial & Business Park Example

16. Mitigation measures, including separation distance, landscaping and screening, and other siting and design strategies, are encouraged to create an appropriate transition. Where more intense impacts are anticipated, an impact study to determine potential impacts and propose mitigation measures may be required. Mitigation measures could include:

    a. Providing landscaping, berms, decorative walls, fencing or other measures to reduce noise, fumes, light, and other potential impacts on adjacent uses, which may be in addition to any screening requirements in the City's Zoning Bylaw;

    b. Locating parking and site entrances for heavy vehicles, service vehicles and trucks at an appropriate distance from residential properties;

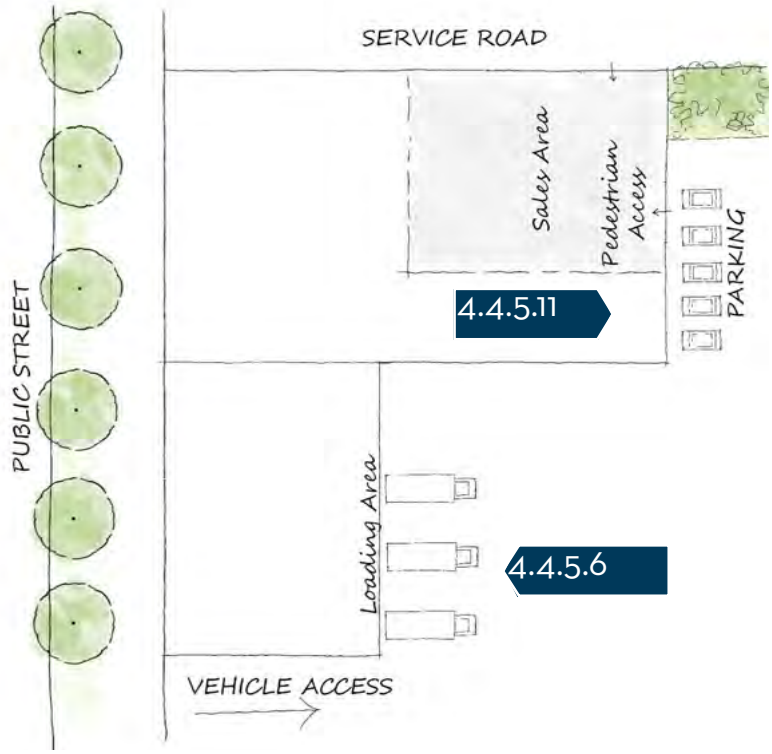


Figure 28. **Industrial and Business Park Example - Relation to Street**

    c. Increasing the horizontal separation of acute noise, emissions, odour or dust producing sources within an industrial development from adjacent residential and other sensitive uses;

    d. Considering the specific size, dimensions, intensity or other characteristics of the individual site and operation during development of the site and building design; and

    e. Utilizing available technologies to reduce/eliminate the impacts of noise, odours, dust, **greenhouse gases** and other emissions, and to protect the environment through consideration of impacts on air, water, and soil quality.

17. Industrial buildings greater than two storeys and located on corner lots, lots adjacent to residential or institutional properties or next to public spaces should be stepped down in height toward the adjoining street(s), adjacent building(s), or public space, and/or use architectural elements and detailing to give the effect of a stepped down or reduced mass.

18. Office, reception and sales areas, or other non-industrial components of a development, may contribute to the creation of a **buffer** between industrial activities and adjacent sensitive uses. Similarly, smaller scale businesses which do not produce noxious or undesirable impacts on surrounding properties—such as offices, studios, technology, or light manufacturing—may serve as part of a transitional **buffer** to sensitive land uses.

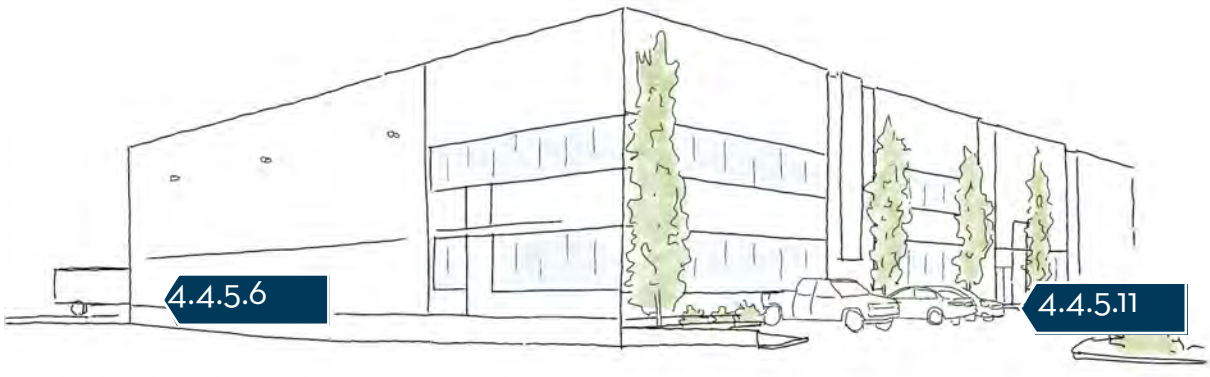


Figure 29. **Industrial and Business Park Example - Relation to Street**

Additional Form and Character Considerations for Business Park Buildings

In addition to the Industrial and Business Park DPA Guidelines, these guidelines apply specifically to all developments with a Business Park land use designation.

19. Consider building forms that support opportunities to maintain and enhance the Business Park as a hub for various employment uses and ancillary services, including but not limited to equipment sales, light production/manufacturing, offices, show rooms, warehousing/storage, research and technology/ biotechnology laboratories, media production and studios (film/television/news). Siting for any ancillary light Industrial uses should be located where appropriate and impacts to adjacent properties can be mitigated.
20. Alternative or atypical building form and design may be considered for the development of new and emerging employment types in the Business Park to provide flexibility for uses including those identified under Design Principles (Section 4.4.4.2).
21. Development will improve the public street interface by requiring **pedestrian scale** design and infrastructure, where appropriate. This may include widening the pedestrian network in places to create public or **privately owned publicly accessible spaces (POPS)**, where appropriate, to enhance the **streetscape** and provide areas for local employees as a social gathering area.

Figure 30. Industrial and Business Park Example

4.5 WESTBANK URBAN CENTRE DPA

4.5.1 Area

The Westbank Urban Centre Development Permit Area (DPA) applies to all developments on lands designated as Westbank Urban Centre, including the Mixed-Use Corridor, Commercial Core, and Residential Shoulder Land Use Designations. These guidelines must be read in conjunction with any other applicable guidelines.

4.5.2 Purpose

In accordance with the *Local Government Act*, the purpose of these guidelines is to shape the form and character of development within the Westbank Urban Centre, fostering an attractive, dense, and walkable urban district that offers a full range of residential, commercial, institutional/civic, and recreational uses.

4.5.3 Westbank Urban Centre DPA Exemptions

Within this Development Permit Area, a Development Permit will not be required for the following:

1. Improvements or renovations to the interior of a building that do not result in a change to a property's parking requirement.
2. Repairs or minor renovations to the exterior that do not alter the form or architectural elements of the building and do not impact surrounding properties.

4.5.4 Westbank Urban Centre DPA Design Principles

The Westbank Urban Centre DPA Design Principles communicate the high-level intentions of these Development Permit Guidelines and reflect the vision and objectives of the OCP. All projects subject to a Development Permit under this Area will support the following Principles:

1. Development and built form contribute to a vibrant, walkable, and mixed-use Urban Centre, which benefits the broader community and fosters a sense of civic pride.
2. Development recognizes, complements, and enhances the existing character of the areas surrounding the Westbank Urban Centre, both in terms of architectural scale and design.
3. Site and building design facilitate the use of active and public transportation, supporting increased access and connectivity to these networks and infrastructure where possible, including key infrastructure such as the Westbank Exchange.
4. Exterior and interior spaces, and connections to adjoining spaces, are designed to be accessible for people of all ages and abilities.
5. Development prioritizes a pedestrian-orientated ground level and generous **public realm**, creating a highly engaging, comfortable, and safe experience appropriate to an urban centre.
6. Development responds to and sensitively transitions to areas surrounding the Westbank Urban Centre DPA.
7. Alternative design considerations may be supported for the development of **affordable housing** projects.

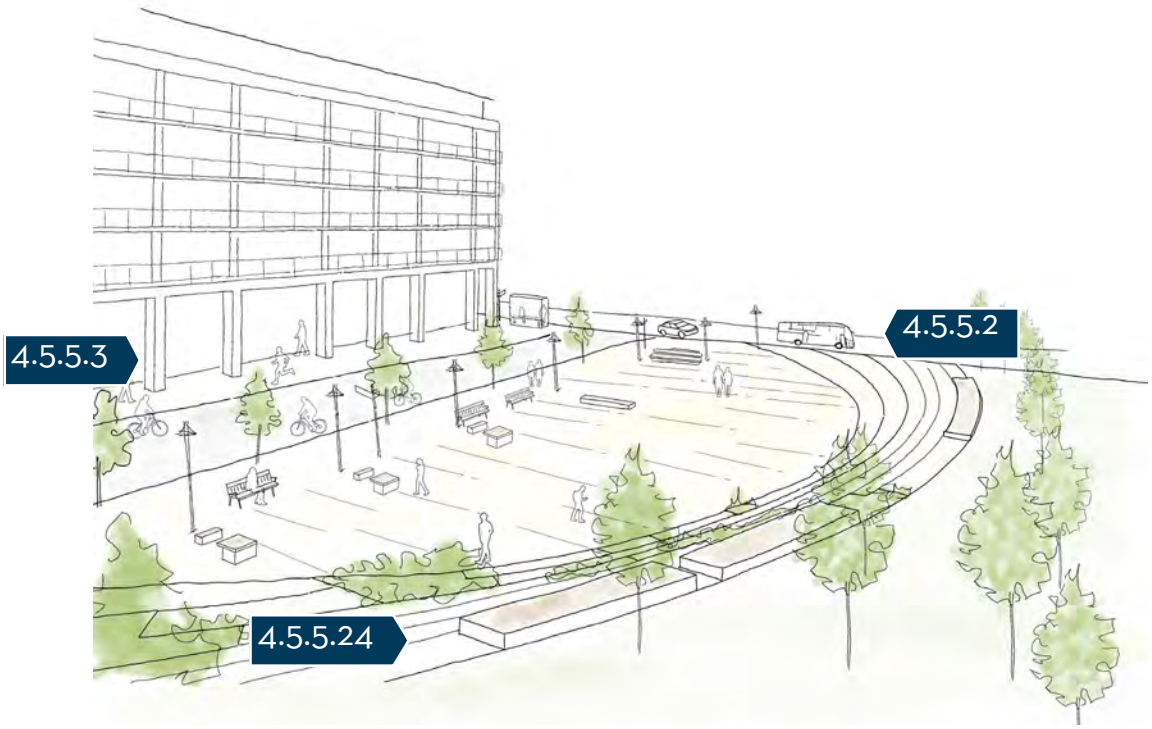


Figure 31. Illustration showing publicly accessible gathering spaces in a Westbank Urban Centre setting with active transportation options.

4.5.5 Westbank Urban Centre DPA Guidelines

In addition to the General Guidelines, these guidelines apply to all developments under the Westbank Urban Centre DPA.

Site and Building Design

1. Site planning and design will respond to the opportunities and challenges presented by the site location and context, including views, open spaces, street networks, lot size and shape, and natural landscapes to promote attractive and welcoming spaces.
2. New development will create consistent connections and/or extensions, as appropriate, to the surrounding pedestrian, vehicular, and cycling networks through site design and site access points.
3. Buildings will be oriented and designed to front on the primary public street, with additional focus on street-facing entrances and architectural features that contribute to an engaging and attractive pedestrian experience.
4. Development on larger sites and which may be located within long city blocks may be required to provide a mid-block pedestrian connection through the site to promote a finer-grain urban experience. Mid-block connections should include:
    a. A concrete sidewalk at least 2.0 metre wide;
    b. Appropriate lighting and landscaping along the entire connection; and,
    c. Building frontage that contains commercial and/or residential with primary entrances.
5. New buildings that are sited adjacent to a public park, recreation area or privately-owned, **publicly accessible open spaces** may be encouraged where appropriate to design the face of the building to create an active frontage including building entrances and architectural detailing such as a high proportion of glazing or other features which create a physical and/or visual connection to the space. At the discretion of the City, certain public parks or other public spaces may be considered inappropriate based on conflicting uses and/or other operational considerations.
6. Development adjacent to Highway 97 or on the Brown Road Mixed-Use Corridor should utilize attractive landscaping, architectural detail, and other strategies to present an aesthetically appealing street edge in the Westbank Urban Centre. Parking areas and outdoor storage yards between buildings and Hwy 97

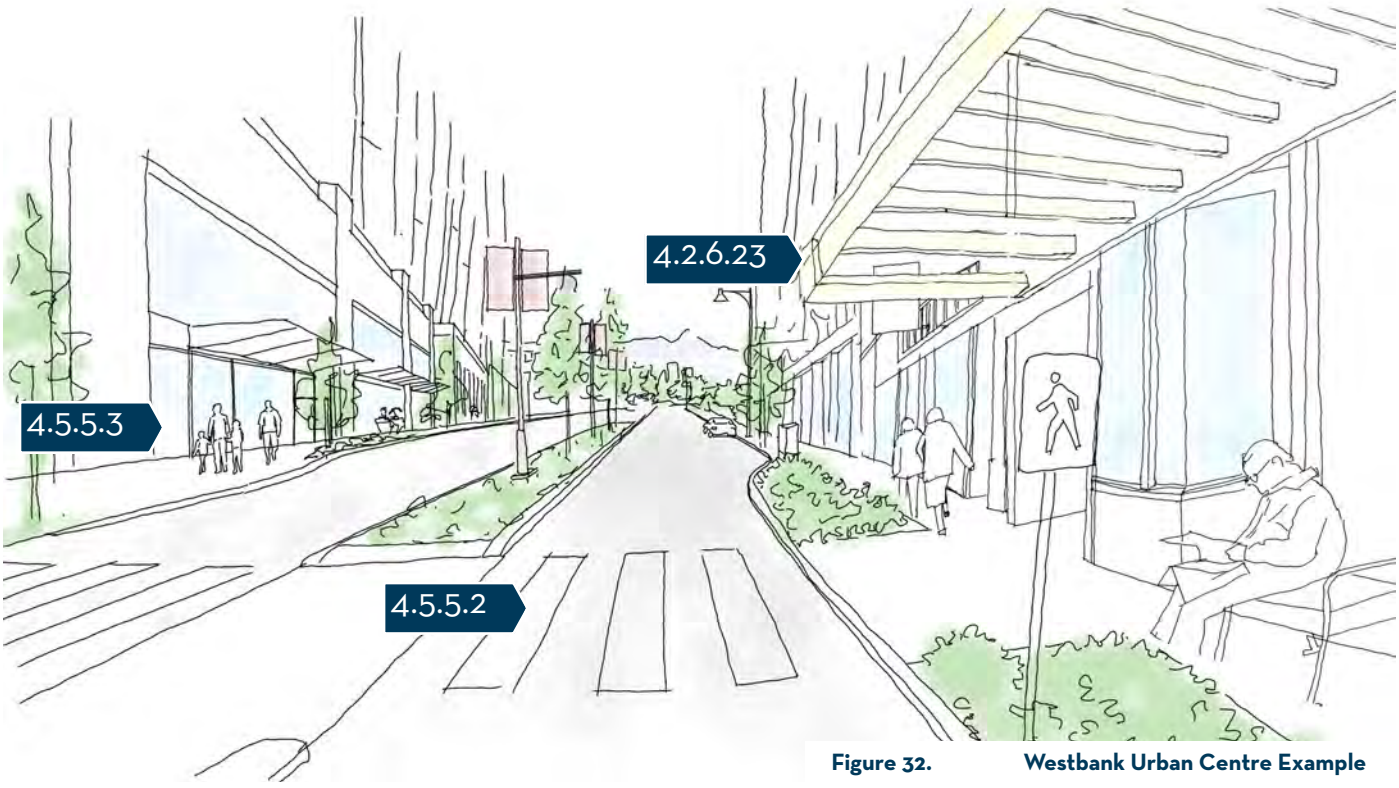


Figure 32. Westbank Urban Centre Example

or Brown Road will not be permitted in new development and should be located at the rear of the site, unless in the case of development on larger sites with multiple buildings, where co-location of parking within the interior of the site is permitted.

Access, Parking and Circulation

7. Parking for mid- and high-rise development in the Westbank Urban Centre will be provided underground, within the building or at the rear of the site, and obscured from view from the public street frontage. Developments on larger sites with multiple buildings are permitted at the discretion of the City to co-locate their parking, servicing, and utility areas (including garbage and recycling) in a location within the interior of the site that is visually screened through landscaping or fencing.
8. Parking uses will not be permitted between the primary public roadway and a street-facing building entrance, except where permitted within road right- of-way.
9. Vehicular accesses should be designed to allow the potential for future shared access with neighbouring properties to minimize the number of access points and impact to traffic flow.
10. Development will provide drop-off, loading areas, and barrier free parking stalls near main building entrances and locate servicing, general parking, and utility uses at the rear of buildings to avoid conflict with pedestrian circulation and comfort.
11. Driveways, parkade entrances, and garages that face the primary public street are discouraged, and should be located at the rear or interior of the site where feasible, or otherwise minimized by integrating or recessing them into the architectural facade.

Building Form and Scale

12. Development with long, continuous building spans along the public street frontage will break-up the physical and visual mass through articulation of the building mass and features such as entrances, projections, recesses, and mid-block connections. Buildings of all sizes should incorporate architectural detailing to create a sense of interest.
13. Architectural features including the building style, colour and materials should be utilized to enhance and complement the character of the adjacent and wider neighbourhood context.
14. Buildings should introduce visual appeal through use of high-quality materials such as masonry, wood, glass, steel, and concrete. The use of less durable and resilient materials such as stucco or vinyl paneling should be minimized.
15. Buildings should incorporate high-quality and durable landscaping into their design, including the use of native species, which will be resilient over time in higher-traffic areas.
16. With regard to building height and scale, development will generally transition down towards surrounding lower density areas and land uses, including from the Mixed-Use Corridor and Commercial Core to the Residential Shoulders.

Ground Level Design and Relationship to the Street

17. Base or podium buildings will provide a street wall, to a maximum height of three storeys, which frames the public right-of-way at a **pedestrian scale**, shaping the ground level experience through use of architectural features and detailing, high quality materials, and creation of visual contrast from tower components, where applicable.
18. Development will provide a comfortable pedestrian experience with adequate space between the building and adjacent road for sidewalk and street furnishings. Developments with ground-level commercial space should include an area within the setback for businesses to create outdoor patios or displays, without encroaching into the pedestrian throughway.
19. Street level building design should incorporate features providing for the all-season comfort of pedestrians, including canopies, awnings, overhangs, and other structures providing protection from the elements.

Figure 33. **Westbank Urban Centre Example**

20. Building entrances will be:
    a. Oriented to the **public realm** and clearly defined using architectural and wayfinding features to be easily identifiable, including to those with limited vision or other abilities and designed with universal design best practices; and
    b. Directly linked to the **streetscape** and pedestrian network through appropriate pathways, which are to be universally accessible.
21. Ground level commercial, and mixed-uses on corner lots should feature:
    a. Facades that include street entrances and windows along both street elevations.
    b. A corner focal point, such as a corner entrance, bay window, tower, or similar design feature.

Figure 34. Westbank Urban Centre Example

22. Developments with ground-level residential uses should contribute to an active and vibrant street life by utilizing:
    a. Street-facing windows, entrances, high-quality landscaping, and other design features that contribute to a more engaging experience; and
    b. Front yards and/or porches and amenity areas.
23. Mid- and high-rise buildings will emphasize the street level and its architectural treatment as distinct from the tower component of a building, with particular attention to the pedestrian experience.

Amenity Space

24. Medium and higher density mid and high-rise development must consider provision of the following amenities for their development, which are scaled in size and complexity to match the scope and scale of the proposed development to ensure a quality experience for residents and visitors:
    a. High-quality, functional public outdoor amenity space, such as a plaza, park or other gathering spaces, which are accessible to all residents and directly connected to the **public realm**. Such spaces will be designed and maintained at the cost of the developer/property owner.
    b. Private indoor and outdoor amenity spaces including courtyards, social/ event rooms, accessible terraces or green roofs, gyms, or other facilities. Such spaces should be accessible to occupants of all ages and abilities.
25. Lower density low and mid-rise development with more than 20 residential units are encouraged to provide outdoor recreational facilities and amenities for their development. Facilities such as an outdoor children's play space, senior's outdoor amenity areas, and community gardens should be matched to the intended users. Townhouse developments may provide for this requirement within designated private at-grade back or front yard areas where the designated at grade space is 25 m2 or greater.
26. All developments with multi-unit residential or multi- unit commercial uses are required to create a secure and easily accessible bicycle parking/storage area as per the City's Zoning Bylaw and encouraged at the ground level. Multi-unit commercial uses are encouraged to include end-trip facilities such as showers and change rooms for commercial tenants, even where not required by the City's Zoning Bylaw.

4.6 BOUCHERIE URBAN CENTRE DPA

4.6.1 Area

The Boucherie Urban Centre Development Permit Area (DPA) applies to all developments on lands designated as Boucherie Urban Centre. These guidelines must be read in conjunction with any other applicable guidelines.

4.6.2 Purpose

In accordance with the *Local Government Act*, the purpose of these guidelines is to shape the form and character of development within the Boucherie Urban Centre, creating a vibrant, mixed- use neighbourhood that offers a variety of housing, commercial services, recreational uses, and connections to Mount Boucherie.

Figure 35. **Boucherie Urban Centre Example**

4.6.3 Boucherie Urban Centre DPA Exemptions

Within this Development Permit Area, a Development Permit will not be required for the following:

1. Improvements or renovations to the interior of a building that does not result in a change to a property's parking requirements.
2. Repairs or minor renovations to the exterior that do not alter the form or architectural elements of the building and do not impact surrounding properties.

4.6.4 Boucherie Urban Centre DPA Design Principles

The Boucherie Urban Centre DPA Design Principles communicate the high-level intentions of these Development Permit Guidelines and reflect the vision and objectives of the OCP. All projects subject to a Development Permit within this Area will support the following Principles:

1. Development contributes to a welcoming mixed-use neighbourhood and the evolution of an alternate urban centre on the east side of West Kelowna.
2. Development recognizes, respects, and enhances the unique natural characteristics and civic appeal of the Mount Boucherie area.
3. Exterior and interior spaces, and connections to adjoining spaces, are designed to be accessible for people of all ages and abilities.
4. Site and building design support the use of active and public transportation, including enhanced connectivity to these networks and infrastructure where possible, including key infrastructure such as the Boucherie Mountain Transit Exchange.
5. Development prioritizes a pedestrian-oriented ground plane and generous **public realm**, creating an engaging, comfortable, and safe experience for all.
6. Development supports the establishment of a community event and entertainment hub in and around the arena at the base of Mount Boucherie.
7. Development responds to and sensitively transitions to areas surrounding the Boucherie Urban Centre Development Permit Area.
8. Development fosters the establishment of Ross Road, Cameron Road and Westgate Road as lively and attractive **high streets**.
9. Alternative design considerations may be supported for development of **affordable housing** projects.

4.6.5 Boucherie Urban Centre DPA Guidelines

In addition to the General Guidelines, these guidelines apply to all developments under the Boucherie Urban Centre DPA.

Site and Building Design

1. Site design will respond to the opportunities and challenges presented by the site location and context, including views, open spaces, street networks, lot size and shape, and natural landscapes to promote attractive and welcoming spaces unique to the Boucherie DPA.
2. Development adjacent to Highway 97 or Westgate Road should have an enhanced focus on presenting an attractive and pedestrian- oriented street edge, including use of siting, landscaping and architectural elements. Parking areas and outdoor storage yards between buildings and Highway 97 will not be permitted and should be located at the rear or interior of the site where sufficiently screened.
3. Mid-rise buildings will reduce the impact on the street, including shadowing the street and adjacent uses, using setbacks, stepbacks, and articulation.

4. All development adjacent to Mount Boucherie must maintain a visible and welcoming public access to any existing trails or access points, as well as consider strategies to appropriately minimize any negative impacts that development may have resulting from shadowing, wind, or access to views of Mount Boucherie.
5. Site design will ensure buildings are oriented to front and engage the public street, where buildings that are along Ross Road, Cameron Road, or Westgate Road shall be designed to address these streets with primary entrances and allow a setback to create public space that can be used by pedestrians or ground-level businesses. Development that is located on the corners of two of these roads are encouraged to utilize corner entrances to facilitate continuity between the two streets.
6. New development will create consistent connections and/or extensions, as appropriate, to the surrounding pedestrian, vehicular, and cycling networks through site design and site access points.
7. Site planning on lots adjacent to or near the Boucherie Mountain Exchange should include convenient and direct pedestrian and cycling connections between Ross Road and the Boucherie Mountain Exchange to encourage transit-supportive development. These linkages should be welcoming, integrated into the larger pedestrian network, and:
    a. Be of sufficient width for an urban environment.
    b. Include appropriate lighting.
    c. Be well landscaped or have commercial uses fronting directly onto the connections.
    d. Include design elements such as street furniture, decorative paving materials, wayfinding markers and public art, where appropriate.

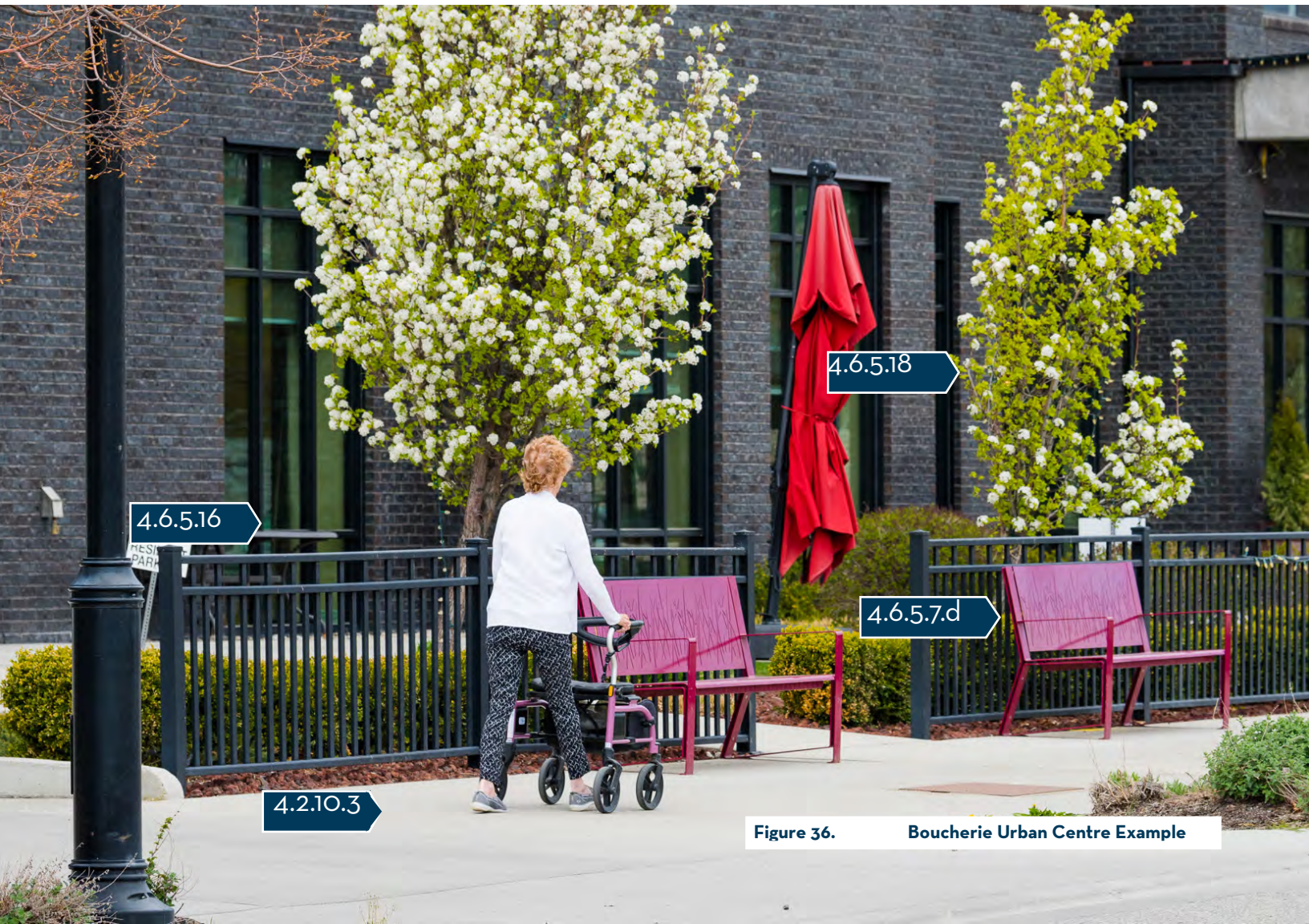


Figure 36. Boucherie Urban Centre Example

8. New buildings that are sited adjacent to a public park, recreation area or privately-owned, **publicly accessible open spaces** may be encouraged where appropriate to design the face of the building to create an active frontage including building entrances and architectural detailing such as a high proportion of glazing or other features which create a physical and/or visual connection to the space. At the discretion of the City, certain public parks or other public spaces may be considered inappropriate based on conflicting uses and/or other operational considerations.

Access, Parking and Circulation

9. Parking for mid- and high-rise development in the Boucherie Urban Centre will be provided underground or at the rear of the site, and obscured from view from the public street frontage. Developments on larger sites with multiple buildings are permitted at the discretion of the City to co- locate their parking, servicing, and utility areas (including garbage and recycling) in a location within the interior of the site that is visually screened through landscaping or fencing.
10. Parking uses will not be permitted between the primary public roadway and a street-facing building entrance, except where permitted within road right- of-way.
11. Development will provide drop-off, loading areas, and barrier free parking stalls near main building entrances and locate servicing, general parking, and utility uses at the rear of buildings to avoid conflict with pedestrian circulation and comfort.
12. Driveways, parkade entrances, and garages that face the primary public street are discouraged, and should be located at the rear or interior of the site where feasible, or otherwise minimized by integrating or recessing them into the architectural facade.

Building Form and Scale

13. With regard to building height and scale, development will generally transition mass and height downward as it approaches lower density areas and land uses outside the Boucherie Urban Centre, encouraging the use of:
    a. Stepbacks and setbacks along upper levels to minimize shading/overlook;
    b. Transitions down in height to reduce massing as it approaches the lower density areas; and
    c. Increased horizontal separation at the base of buildings, where necessary to provide a **buffer** to sensitive uses.

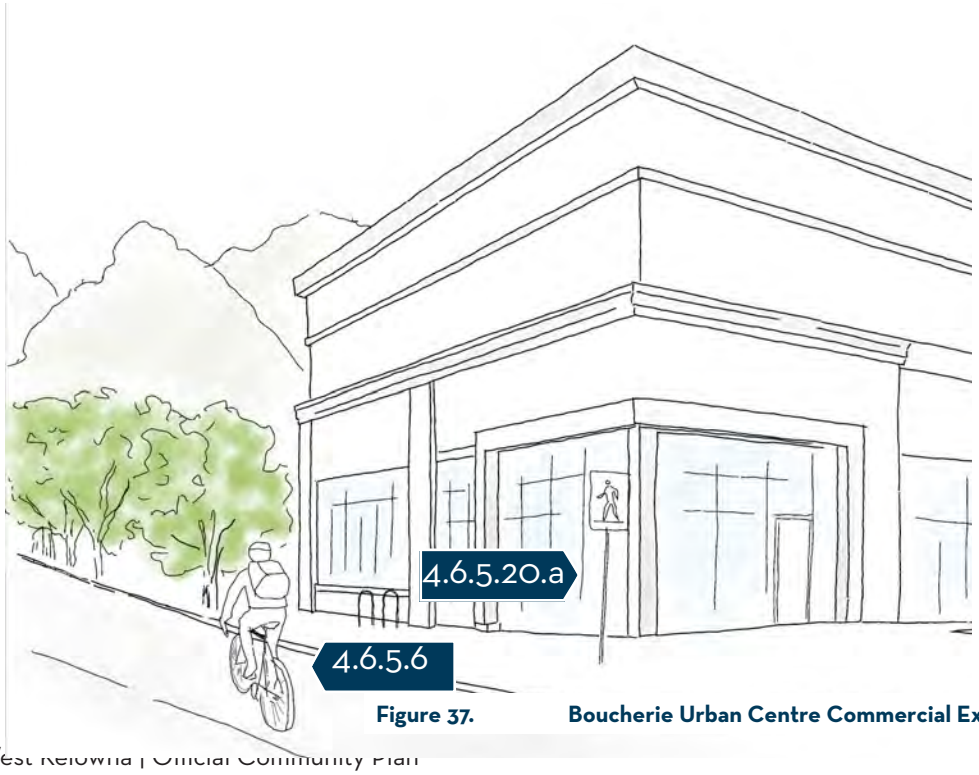


Figure 37. Boucherie Urban Centre Commercial Example

14. Development with long, continuous building spans along the public street frontage will break-up the physical and visual mass through articulation of the building mass and features such as entrances, projections, recesses, and mid-block connections. Buildings of all sizes should incorporate architectural detailing to create a sense of interest.
15. Architectural features including the building style, colour, and material palette should be utilized to reflect and enhance the natural features of Mount Boucherie, including the prominent use of timber and stone, and massing which respects views to Mount Boucherie.

Ground Level Design and Relationship to Street

16. Further to the general guidelines related to ground level design, an enhanced focus in the Boucherie Urban Centre DPA will ensure buildings contribute to an attractive street wall, which frames the public right-of-way at a **pedestrian scale**, shaping the ground level experience through use of architectural features and detailing, high quality materials components, as applicable to the building use.
17. Development will provide a comfortable pedestrian experience with adequate space between the building and adjacent road for sidewalk and street furnishings. Developments with ground-level commercial space should include an area for businesses to create outdoor patios or displays, without encroaching on pedestrian throughway.
18. Buildings should incorporate landscaping that features generous plantings, including native species and, where suitable, the use of the existing topography to weave the natural appeal of Mount Boucherie into the Urban Centre.
19. Multi-unit and commercial building entrances will be oriented to the **public realm** and clearly defined using architectural and wayfinding features to be easily identifiable, and designed with universal design best practices.
20. Ground level commercial uses on corner lots should feature:
    a. Facades that include street entrances and windows along both street elevations.
    b. A corner focal point, such as a corner entrance, bay window, tower, or similar design feature.

Figure 38. **Illustration showing street relationship elements preferred in Boucherie Urban Centre**

21. Developments with ground-level residential uses should contribute to an active and vibrant street life by utilizing:
    a. Street-facing windows, entrances, high-quality landscaping, and other design features that contribute to a more engaging experience.
    b. Front yards and/or porches and amenity areas.

Amenity Space

22. Medium and higher density mid and high-rise development must consider provision of the following amenities for their development, which are scaled in size and complexity to match the scope and scale of the proposed development to ensure a quality experience for residents and visitors:
    a. High-quality, functional public outdoor amenity space, such as a plaza, park or other gathering spaces, which are accessible to all residents and directly connected to the public realm. Such spaces will be designed and maintained at the cost of the developer/property owner.
    b. Private indoor and outdoor amenity spaces including courtyards, social/ event rooms, accessible terraces or green roofs, gyms, or other facilities. Such spaces should be accessible to occupants of all ages and abilities.
23. Lower density low and mid-rise development with more than 20 residential units are encouraged to provide outdoor recreational facilities and amenities for their development. Facilities such as an outdoor children's play space, senior's outdoor amenity areas, and community gardens should be matched to the intended users. Townhouse developments may provide for this requirement within designated private at-grade back or front yard areas where the designated at grade space is 25 m2 or greater.
24. All developments with multi-unit residential or multi- unit commercial uses are required to create a secure and easily accessible bicycle parking/storage area as per the City's Zoning Bylaw and encouraged at the ground level. Multi-unit commercial uses are encouraged to include end-trip facilities such as showers and change rooms for commercial tenants, even where not required by the City's Zoning Bylaw.

4.7 NEIGHBOURHOOD CENTRE DPA

4.7.1 Area

The Neighbourhood Centre Development Permit Area (DPA) applies to all developments on lands designated as a Neighbourhood Centre. These guidelines must be read in conjunction with any other applicable guidelines.

4.7.2 Purpose

In accordance with the *Local Government Act*, the purpose of these guidelines is to shape the form and character of development within the Neighbourhood Centre DPA's, intending to create local, mixed-use nodes within walking distance of existing neighbourhoods. Neighbourhood Centres will provide a variety of housing types, retail, services, and public amenities. These areas will be lower-scale and more localized than the Urban Centres, serving the day-to- day needs of nearby residents, while still containing a mix of uses and densities that contribute to complete communities and attractive destinations throughout West Kelowna.

Figure 39. Neighbourhood Centres Example

4.7.3 Neighbourhood Centre DPA Exemptions

Within this DPA, a Development Permit will not be required for the following:

1. Improvements or renovations to the interior of a building that do not result in a change to a property's parking requirement.
2. Repairs or minor renovations to the exterior that do not alter the form or architectural elements of the building and do not impact surrounding properties.

4.7.4 Neighbourhood Centre DPA Design Principles

The Neighbourhood Centre DPA Design Principles communicate the high-level intentions of these Development Permit Guidelines and reflect the vision and objectives of the OCP. All projects subject to a Development Permit under this area will support the following Principles:

1. Create a lively, walkable Neighbourhood Centre offering local services, amenities, and employment opportunities, which is sensitively integrated into the surrounding neighbourhood.
2. Develop a low- to mid-rise, mixed-use character of moderate density to encourage an active street life and **public realm**.
3. Utilize architectural and urban design that is reflective of and enhances the character of the existing community.
4. Introduce a higher density of commercial uses and housing types that support daily trips comfortably achieved within the neighbourhood and through active and public transportation from nearby areas.
5. Integrate publicly accessible gathering spaces and recreational opportunities that directly serve residents of the adjacent neighbourhoods.
6. Development responds to and sensitively transitions to areas surrounding the Neighbourhood Development Permit Area.
7. Alternative design considerations may be supported for development of **affordable housing** projects.

4.7.5 Neighbourhood Centre DPA Guidelines

In addition to the General Guidelines, these guidelines apply to all development within the Neighbourhood Centre DPA's.

Site and Building Design

1. Site planning and design will respond to the opportunities and challenges presented by the site location and context, including views, open spaces, street networks, lot size and shape, and the natural landscape (including topography, vegetation, and waterways) to promote attractive and welcoming spaces unique to each Neighbourhood Centre.
2. Site development on lands with no previous development activity should introduce a pedestrian- oriented street grid that integrates with the surrounding transportation network.
3. Buildings will be orientated to face the primary public street, utilizing street-facing entrances and architectural features that contribute to an engaging and attractive pedestrian experience. Multi-building developments that utilize a parking lot at the interior of the site should also be designed with entrances that face the interior.
4. New buildings that are sited adjacent to a public park, recreation area or privately-owned, **publicly accessible open spaces** may be encouraged where appropriate to design the face of the building to create an active frontage including building entrances and architectural detailing such as a high proportion of glazing or other features which create a physical and/or visual connection to the space. At the discretion of the City, certain public parks or other public spaces may be considered inappropriate based on conflicting uses and/or other operational considerations. Where feasible, all development shall maintain a barrier-free access point to any park, trail, or other open space that was accessible from the public street prior to development.

5. Significant natural and recreational areas within Neighbourhood Centres will be preserved unless otherwise directed by a specific area plan or policy, or a privately-owned, publicly-accessible open space is provided to the satisfaction of the City. Development will be encouraged to take advantage of such community assets by facilitating access where possible.
6. The natural topography of lands within the Neighbourhood Centre DPA's should be preserved and highlighted as much as possible.

Access, Parking and Circulation

7. Site redevelopment should be oriented such that the existing street pattern of the adjacent neighbourhood is maintained or that a new pattern demonstrates an improved network and pedestrian condition. For example, introducing a more fine-grain grid pattern within a curvilinear street network, or providing additional mid-block crossings could be considered an improved condition.
8. Multi-building developments should provide public, universally accessible pedestrian access that is safe and convenient throughout the site.
9. Developments are encouraged to coordinate with the City to design space for a future bus connection, including room for benches, shelter, signage, and a pull-out lane, where required.
10. Driveways and garages that face the primary public street are discouraged, and should be located at the rear or interior of the site where feasible.
11. Surface parking lots will not be permitted between the primary public roadway and street-facing building entrances.
12. Developments are encouraged to coordinate and co-locate parking and site access in one location, preferably underground in or in a structure, rather than having separate locations for each development, in order to minimize the overall land use, urban design, and financial impacts of dedicated parking uses.
13. Provide drop-off, loading areas and barrier free parking stalls near main building entrances, and locate servicing, general parking and utility uses at the rear of buildings to avoid conflict with pedestrian circulation and comfort.

Building Form and Scale

14. All development at the edge of neighbourhood centres should employ site and building design strategies to sensitively transition between the Neighbourhood Centre and the surrounding neighbourhood, minimizing impact from noise and other activity.
    a. Multi-building development should transition to shorter, less dense building forms as it approaches the edge of the neighbourhood centre. This can be accommodated through reductions in height, stepbacks, setbacks, and site planning.
    b. Single building development should utilize setbacks, stepbacks and other building design strategies as it approaches the edge of the Neighbourhood Centre.
15. Development with long building spans along public street frontage will break up the physical and visual mass through articulation of the building and features such as entrances, projections, recesses, breezeways, and mid-block connections, where appropriate.
16. Architectural features including the building style, colour, texture, and materiality should be utilized to complement and enhance the character of the adjacent and wider neighbourhood context. Buildings should introduce visual appeal through use of high- quality materials such as masonry, wood, glass, steel, and concrete. The use of less durable and resilient materials such as stucco or vinyl paneling should be minimized.

Ground-Level Design and Relationship to the Street

17. Building entrances will be:
    a. Oriented to the **public realm** and clearly defined using architectural and wayfinding features to be easily identifiable, including to those with limited vision or other abilities and designed with universal design best practices; and

b. Directly linked to the **streetscape** and pedestrian network through appropriate pathways, which are to be universally accessible.

18. Developments with at-grade commercial uses that are adjacent to low-density residential areas outside of the Neighbourhood Centre DPA will mitigate the impacts of sound, light, and traffic through design, utilizing strategies such as:
    a. Orientation of patios, entrances, and other high-activity areas away from low-density residential uses that are directly beside (does not include uses separated by a roadway) the development;
    b. Use of landscaping, topography, fencing or other strategies to screen and **buffer** adjacent properties; and
    c. Maintaining an appropriate setback or separation distance between properties.
19. Buildings will have sufficient front setbacks to create animated street-facing spaces, including areas places for street furniture, patios, display areas and front yards.
20. Development with ground-level commercial or mixed-uses will incorporate canopies to provide shelter from rain and snow along the building frontage.
21. Ground level commercial and mixed-uses on corner lots should feature:
    a. Facades that include street entrances and windows along both street elevations.
    b. A corner focal point, such as a corner entrance, bay window, tower, or similar design feature.
22. Developments with ground-level residential uses should contribute to an active and vibrant **streetscape** by utilizing:
    a. Street-facing windows, entrances, high-quality landscaping, and other design features that contribute to a more engaging experience.
    b. Front yards and/or porches and amenity areas.
23. The appearance of garage and service entrances should be minimized by integrating or recessing them into the architectural façade and setting them behind main building entrances.

Building Design Specific to Mid-Rise Buildings in Neighbourhood Centres

In addition to the Neighbourhood Centre DPA Guidelines, the following guidelines apply specifically to developments that are over three storeys within the Neighbourhood Centre DPA.

24. Notwithstanding the general guidelines related to mid-rise buildings requiring a horizontal stepback above the third storey for buildings that are greater than four storeys, in the Neighbourhood Centre DPA all mid-rise buildings that are greater than three storeys will require a horizontal stepback above the second storey. This is to ensure that the building form creates a less imposing feature, and supports a neighbourhood scale that is differentiated from those within Urban Centres.
25. Mid-rise buildings will reduce the impact on the street, including shadowing the street and adjacent uses, using setbacks, stepbacks, and articulation. Mid- rise development adjacent to low-density residential uses will transition down in height as it approaches the lower density areas and may be required to employ horizontal separation to provide a **buffer** in some cases.
26. The massing of the building should introduce setbacks and stepbacks to minimize sun/shading on adjacent areas, transition building mass and height towards smaller-scale development, and reduce any impact on views to Lake Okanagan and Mount Boucherie from adjacent properties.
    a. Applicants may be required to submit a sun/ shadow study when the City determines there is the potential for shadows caused by the development to impact the use and enjoyment of adjacent properties.

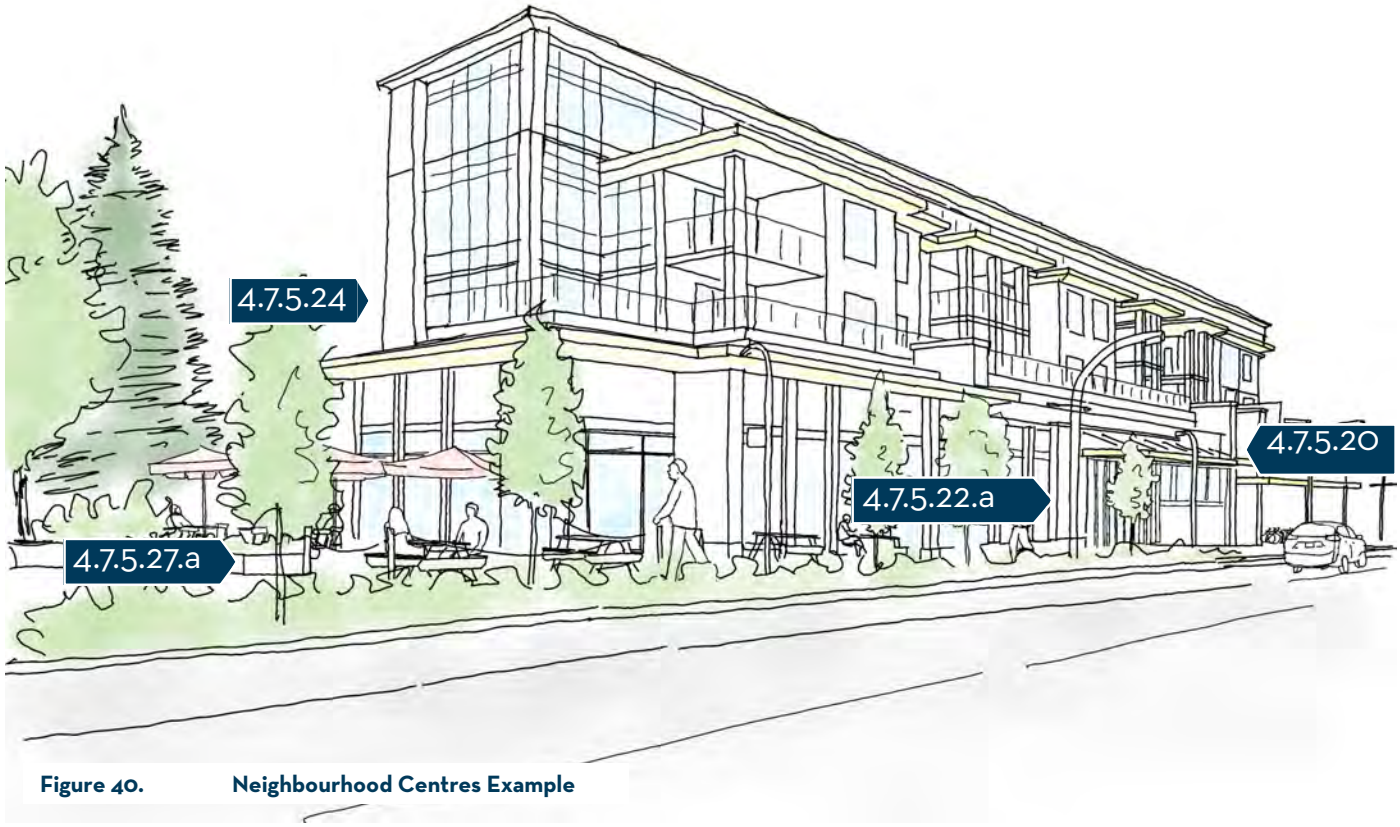


Figure 40. Neighbourhood Centres Example

Amenity Space

27. Medium density mid-rise development must consider provision of the following amenities for their development, which are scaled in size and complexity to match the scope and scale of the proposed development to ensure a quality experience for residents and visitors:
    a. High-quality, functional public outdoor amenity space, such as a plaza, park or other gathering spaces, which are accessible to all residents and directly connected to the **public realm**. Such spaces will be designed and maintained at the cost of the developer/property owner.
    b. Private indoor and outdoor amenity spaces including courtyards, social/ event rooms, accessible terraces or green roofs, gyms, or other facilities. Such spaces should be accessible to occupants of all ages and abilities.
28. Townhouse development with more than 20 residential units are encouraged to provide outdoor recreational facilities and amenities for their development. Facilities such as an outdoor children's play space, senior's outdoor amenity areas, and community gardens should be matched to the intended users. Townhouse developments may provide for this requirement within designated private at-grade back or front yard areas where the designated at grade space is 25 m2 or greater.
29. All developments with multi-unit residential or multi- unit commercial uses are required to create a secure and easily accessible bicycle parking/storage area as per the City's Zoning Bylaw and encouraged at the ground level. Multi-unit commercial uses are encouraged to include end-trip facilities such as showers and changerooms for commercial tenants, even where not required by the City's Zoning Bylaw.

4.7.6 Guidelines Specific to Gellatly Village

These guidelines apply specifically to all development that requires a Development Permit under this section and which is located within the Neighbourhood Centre designation for Gellatly Village.

1. All development in Gellatly Village directly adjacent to Gellatly Road should contribute to an active **streetscape**, including commercial uses at the ground level that provide services and amenities to both residents and the general public to support and promote enjoyment of the public waterfront.
2. Development on lands within Gellatly Village should continue the look and feel established by the multi-use path along Gellatly Road and support pedestrian-focused streets.
3. Development should consider beach shading and view impacts to Lake Okanagan and utilize massing and siting to maintain existing views from other properties and public spaces. This includes stepping down heights as development gets closer to Gellatly Road, allowing for greater heights internal to the site
4. Developments should utilize architecture and design that is reflective of a vibrant lakeside street including:
    a. Windows, balconies and entrances facing the lake;
    b. Larger front yard setbacks and building stepbacks to accommodate seating, patios, terraces, landscaping, display areas and other functional space.
    c. Unique and attractive paving patterns for public walkways
5. Developments are encouraged to co-locate their parking into a shared parking structure, either below or above ground, that is adequately screened from the public street, either in the rear or interior of the site.
6. Developments are encouraged to include structured parking areas to accommodate public parking to support and promote enjoyment of the public waterfront, and commercial services and amenities within the proposed and anticipated development within the larger neighbourhood.

Figure 41. Neighbourhood Centres Example

4.8 MULTIPLE FAMILY AND INTENSIVE RESIDENTIAL DPA

4.8.1 Area

The Multiple Family and Intensive Residential Development Permit Area (DPA) applies to all lands within CWK where multiple family and intensive residential development is permitted outside of Urban and Neighbourhood Centres. This includes townhouses, multiple family residential, and bare land strata development with three or more units, and for duplexes with three or more buildings.

4.8.2 Purpose

In accordance with the *Local Government Act*, the purpose of this Development Permit Area is to ensure that new multiple family and intensive residential development and redevelopment is attractive, incorporates a **pedestrian scale**, protects the natural environment and appropriately reflects the design values of both specific neighbourhoods and West Kelowna as a whole, while considering the context of hazardous conditions where applicable and promoting water and energy conservation in concert with consideration of reduction of **greenhouse gas** emissions. Multiple family and intensive residential design should incorporate good urban design principles for the transition between public and private realms, as well as adjacent uses.

4.8.3 Multiple Family and Intensive Residential DPA Exemptions

Within this DPA, a Development Permit will not be required for the following:

1. Improvements or renovations to the interior of a building that do not result in a change to a property's parking requirement.
2. Repairs or minor renovations to the exterior that do not alter the form or architectural elements of the building and do not impact surrounding properties.
3. Additions of up to 200 square metres to a principal building or 40 square metres to an accessory building, as defined by the City's Zoning Bylaw, provided that:
    a. The addition results in less than a 10% increase in the floor area of the principal building; and
    b. There is no change to the required parking, landscaping, environmental measures, or access to the site.

4.8.4 Multiple Family and Intensive Residential DPA Design Principles

The Multiple Family and Intensive Residential DPA Design Principles communicate the high-level intentions of these Development Permit Guidelines and reflect the vision and objectives of the OCP. All projects subject to a Development Permit under this area will support the following Principles:

1. Ensure that residential development is well designed, and sensitively transitions to and integrates with the surrounding neighbourhood through the use of architectural and urban design that is reflective of and enhances the character of the existing community.
2. Improve the **streetscape** by requiring **pedestrian scale** design and ensuring that all new development contributes positively to the pedestrian experience and adds to the **sense of place** aspects of the neighbourhood.
3. Consider how the design of new residential development can support transit and active transportation modes such as walking and cycling.
4. Ensure the provision of on-site amenities, services and gathering places to support the development.
5. Encourage sustainable design, green building practices and high quality construction.
6. Incorporate energy and water efficiency measures into residential developments.

4.8.5 Multiple Family And Intensive Residential DPA Guidelines

In addition to the General Guidelines, the following guidelines apply specifically to all Multiple Family and Intensive Residential development located outside of any identified Urban or Neighbourhood Centres.

Site Planning

1. Where multiple family and intensive residential development is located adjacent to single-family residential development or public space, the development should include special design treatment to create separation between the more and less intensive use, as follows:
   a. Provide sufficient setback treatment between multiple family or intensive residential and single residential uses.
   b. Include fencing, landscaping, berming and driveways between multiple family or intensive residential and single residential uses. Where possible, use elevation changes, rather than walls, to create a sense of privacy.
   c. To create a feeling of openness and connection between the site and its surroundings, fence panels should be open and decorative (e.g. wrought iron or custom made wood lattice, or a combination of solid posts and decorative panels) rather than solid and visually impermeable.
2. Development should maintain a strong orientation to the street and be sensitive in scale, height and setbacks to existing development.
3. Where development is located adjacent to agricultural or industrial uses, the development should create separation and screening between the uses using the City's Zoning Bylaw requirements as a minimum.
4. To reduce the potential spillover effect onto adjacent streets, multiple unit residential complexes should have an enhanced focus on:
   a. Identification of loading areas that can accommodate large scale moving trucks and the needs associated with moving, including site circulation considerations; and
   b. Provision of visitor parking and universally accessible stalls at convenient locations distributed throughout the site that considers the City's Zoning Bylaw requirement as a minimum. Where townhouse developments do not provide driveways of adequate length to accommodate additional parking in front of a garage, visitor parking should be given additional consideration.

Figure 42. **Illustration showing townhouse development with orientation to the street**

Building Form and Scale

5. Development should reflect the positive design and **sense of place** aspects of the existing neighbourhood. Design aspects of an existing neighbourhood that must be considered include building heights, form, massing, colours and materials, lighting, roof form, signage and landscaping.
6. The design should minimize overlook into neighbouring single-family residential homes and yards through strategic placement of windows and balconies on upper floors, increasing setbacks and stepping down the height of development where it is adjacent to single-family residential development.
7. Further to general guidelines regarding distinctive character elements for multi-unit development, for larger scale developments in the Multiple Family and Intensive Residential DPA special consideration should be given to variety versus continuity of the building design to ensure appropriate visual interest is achieved over the site.
8. Notwithstanding the general guidelines regarding building materials, within the Multiple Family and Intensive Residential DPA, acceptable materials may include stone, wood, acrylic, stucco, fibre cement siding, and cultured stone. In general, untreated concrete block and metal siding is unacceptable.

Amenity Space

9. Where a multiple unit complex has more than 20 residential units, outdoor recreational facilities and amenities should be encouraged. Facilities such as an outdoor children's play space, senior's outdoor amenity areas, and community gardens should be matched to the intended users. Townhouse developments may provide for this requirement within designated private at-grade back or front yard areas where the designated at grade space is 25 m2 or greater.

Figure 43. Multiple Family Example

4.9 HILLSIDE DPA

4.9.1 Area

The Hillside Development Permit Area (DPA) designation applies to all **steep slopes** with a slope angle of 20% or greater for a minimum horizontal distance of 10 meters, as generally identified on Schedule 3 Hillside and Wildfire Interface Development Permit Areas. This Area also applies where site development proposes manufactured slopes with a slope of 20% or greater for a minimum horizontal distance of 10 meters and/or that may result in the creation of hazardous conditions to people or property. A development permit is also required under this area for multiple tier retaining walls and any retaining wall over 2.5 metres in height.

(Note that the exact boundaries of a DPA may need to be determined on a site-specific basis prior to development).

4.9.2 Purpose

In accordance with the *Local Government Act*, the purpose of this DPA is to ensure that development is safe from hazardous conditions and does not adversely affect the natural environment or surrounding people or property. Hazardous conditions may be avoided when appropriate design management techniques are in place prior to development. Stormwater, erosion, and groundwater management techniques should be utilized where necessary. Innovative and flexible development patterns are encouraged where they concentrate development in less sensitive areas of **steep slopes** and where natural grades permit. Development on slopes over 20% may occur, but require site-specific consideration and a Development Permit (DP). Development on slopes greater than 30% is discouraged.

Council is not required to issue a Development Permit where existing or potentially hazardous conditions have not been satisfactorily addressed.

4.9.3 Hillside DPA Exemptions

A Hillside Development Permit is not required when it has been confirmed by the City where:

1. A parcel is less than 1 hectare in area, and less than 10% of the site contains hillsides and site modifications do not adversely impact adjacent parcels.
2. The proposed development does not include areas of 20 % slope or greater, as identified by a qualified professional.
3. A property has permanent protection of slopes greater than 20 % and has fenced or delineated this area to the satisfaction of the City.
4. There is a renovation of a building in which that building footprint and any required off street parking space or structure is not altered.
5. Construction entails only fences, solid screens or a single-tier retaining wall less than 2.5 metres in height.
6. A slope naturalization/ landscape plan has been submitted to the satisfaction of City staff prior to the submission of a building permit application for the construction of multiple tier retaining walls on a single parcel. The plan must be consistent with the Development Permit Guidelines.

4.9.4 Hillside DPA Design Principles

The Hillside DPA Design Principles communicate the high-level intentions of these Development Permit Guidelines and reflect the vision and objectives of the OCP. All projects subject to a Development Permit under this Area will support the following Principles:

1. Protect people and property from hazardous conditions in the natural environment.
2. Prevent the creation of hazardous conditions resulting from development on hillsides.
3. Protect the natural environment, its ecosystems and biological diversity on hillsides.
4. Preserve significant natural features and landscapes within the Community (e.g. rock outcroppings, talus slopes, **ravines**, hilltops and ridgelines).
5. Ensure that development on hillsides is monitored for DP compliance and that an adequate level of safety is maintained during the construction phase of an approved development plan.

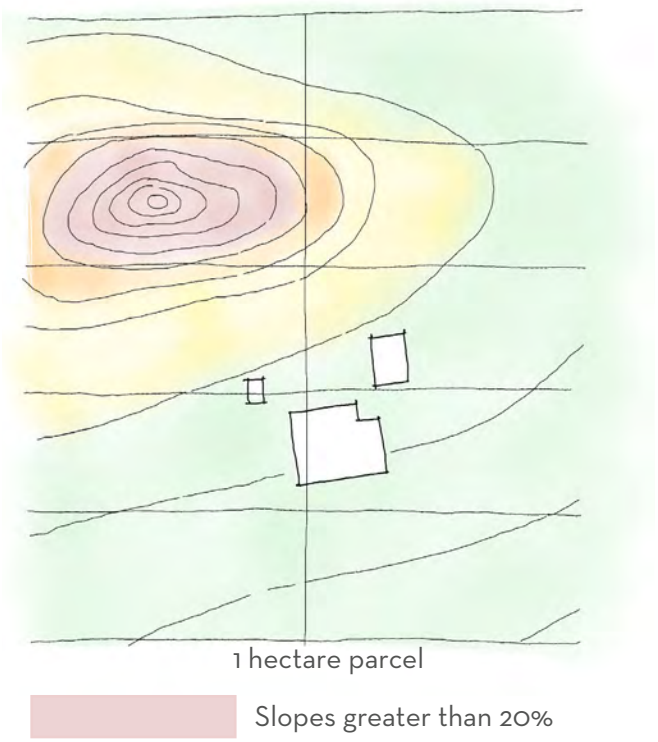


Figure 44. Diagram identifying where a development permit would not be required as less than 10% of the entire 1 hectare parcel is greater than 20% slope.

4.9.5 Hillside DPA Guidelines

In addition to the General Guidelines, the following guidelines apply specifically to all development within the Hillside DPA.

Monitoring

1. A **Qualified Environmental Professional (QEP)** is required to monitor development activities during the construction and regular reporting may be required by the City, where monitoring may include protected areas, erosion, sediment, drainage and weed control, etc.

Subdivision and Site Design

2. Hillside development should be designed to minimize impacts and disturbance to the surrounding area. This requires site planning that:
   a. Minimizes the alteration of natural grades and prioritize the retention of key natural features that reduce the visual impact of hillside development;
   b. Uses variations in parcel sizes and subdivision layout to reflect natural site contours; and
   c. Reduces the need for cuts and fills, wherever possible.
3. Protect in perpetuity natural features including rock outcroppings, ridgelines gulleys, **ravines**, escarpments, columns, cliff faces and talus slopes through registration of a covenant, park dedication, or other means as approved by the City.

Figure 45. Diagram illustrating the preference for clustering of development, retention of natural ares, and protection of hillside slopes [See 4.9.5.5, 6 & 9]

4. Development should be concentrated in flatter areas of the site.
5. A Geotechnical Report prepared by a qualified geotechnical engineer will be required with a Hillside DP application for activities that extend beyond those directly related to building permit. Where rock fall mitigation or rock cut is unavoidable, the report should provide recommendations for modifications, including blasting techniques, and to verify overall slope stability, hazard mitigation, setbacks (if necessary) and long term maintenance requirements.
6. Rockfall protection areas shall not be located on City rights-of-ways unless approved by the City.
7. Cluster development is encouraged so units or parcels are concentrated on a portion of a development site and the remainder of the site is left in its natural state. Shared driveways and parking areas are encouraged where they will minimize grading and site disturbance.
8. Roads and other routes of public access should not be situated adjacent to cliff faces, talus slopes or rock outcrops unless an acceptable level of safety is certified by a geotechnical engineer and approved by the City.
9. Utilize trails where topography prevents direct linkages to schools, parks and other community destinations through the road network.
10. Hillside development may necessitate roads that have a single row of houses fronting the street, split roads or access lanes to minimize undue disturbance to protect **steep slopes**.
11. Buildings and structures shall be situated on hillsides in accordance with setbacks required by City bylaws or greater setbacks as determined by a geotechnical engineer and approved by the City.
12. The City will require construction activities to be monitored and approved by a geotechnical engineer.

Drainage

13. Development should occur in cooperation with natural drainage patterns and associated vegetation where possible. Modifications must not cause adverse impacts on adjacent lands.
14. Surface drainage systems are encouraged to be designed to function and serve as open space corridors or passive recreation spaces. These spaces will not be considered as meeting park dedication requirements.
15. Ensure on-site drainage is designed, monitored and maintained to consider all phases of construction, recognize changing seasons, include temporary holding ponds and drainage corridors, and update drainage plans required for different phases as necessary.

Grading and Retaining

16. Site grading plans and sediment and erosion control plans should include measures to:
    a. Identify and protect 'non-disturbance areas' during the construction phase;
    b. Keep development entirely outside of potentially hazardous or unstable areas of the site;
    c. Limit unnecessary disturbance of or exposing large areas of sub-soil and parent material;
    d. Phase the clearing and removal of trees and vegetation;
    e. Monitor the site for invasive species during the entire duration of works, and include a plan to identify and efficiently control and prevent the spread of weeds; and
    f. Control sediment and erosion during construction including mitigative measures to avoid the deposit of materials onto adjacent roads and rights-of-ways, as well as off-site airborne movement (i.e. dust control).
17. The creation of manufactured slopes may require additional consideration when located adjacent to existing development, dedicated road right of way, or other public lands. Hillside design and construction must consider the following:
    a. Manufactured slopes will be designed at a maximum 2H:1V (50%) slope or less to promote stabilization, re-vegetation, and naturalization, unless otherwise approved by the City, and should be rounded or benched to produce a more natural appearance.

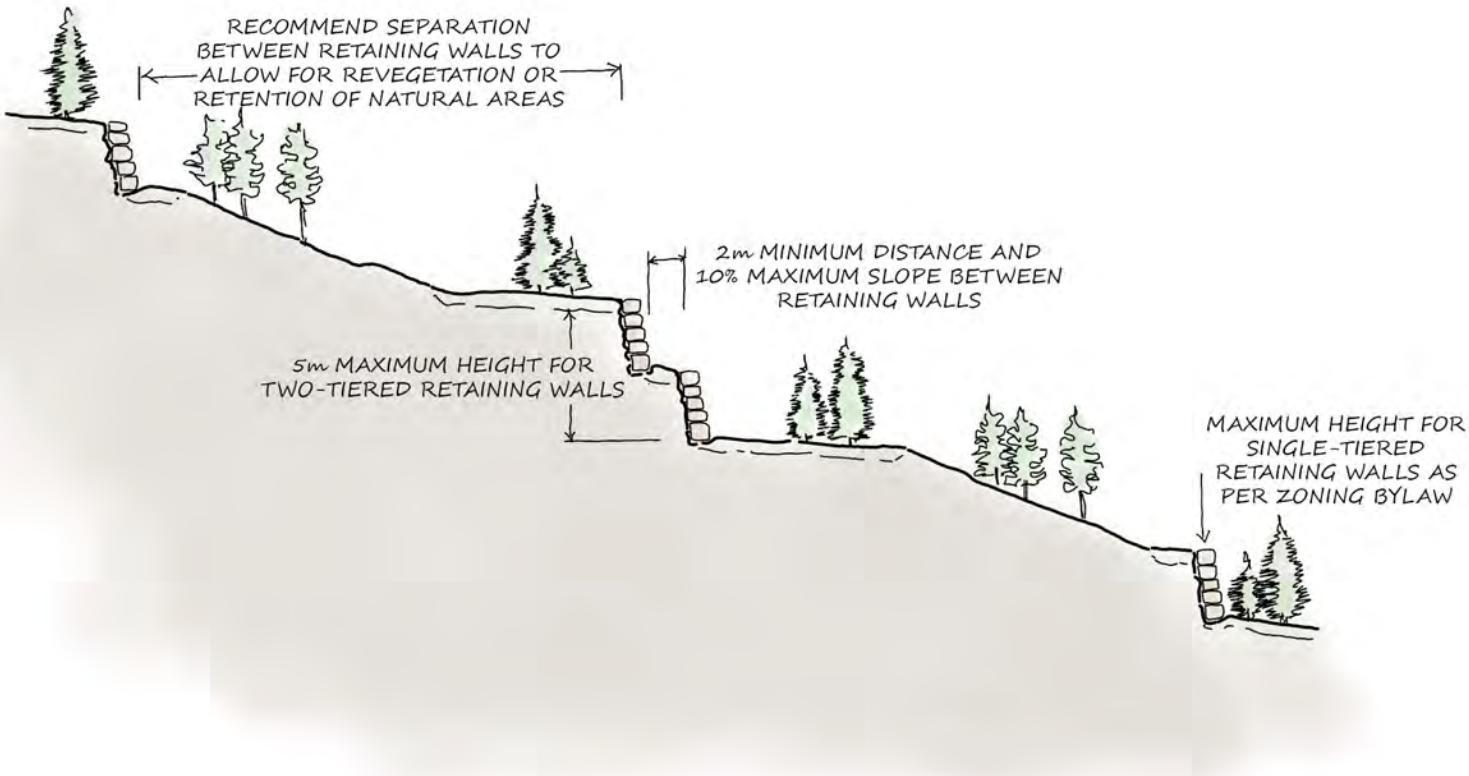


Figure 46. **Diagram indicating Grading and Retaining requirements for a retaining wall [See 4.9.5.22 & 23]**

b. Where the final slope will be greater than 2H:1V (50% slope), re-naturalization of the slope must be designed and completed under the supervision of a **QEP** and include coordination with a geotechnical engineer, including the following considerations:

    i. Slopes over 1.5H:1V (66.7% slope) are essentially not able to be revegetated and should be avoided in all circumstances, except under variable rock conditions where considered under geotechnical recommendation; and

    ii. It should be acknowledged that the area will not support any revegetation or renaturalization efforts, and other mitigation efforts should be considered where possible. This could include vegetative screening along the base of the slope, which may require a wider area to allow for rock catchment and clean out access as necessary, as well as the vegetative screening.

c. Minimize the impact to adjacent parcel through:

    i. Retention of natural features between parcels;

    ii. Increased setbacks between parcels; and

    iii. Installation of landscaping buffers

d. Larger manufactured slopes should be screened by structures or other landscape features to the satisfaction of the City in order to reduce the appearance of grading from the street and adjacent areas;

e. 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; and

f. Re-naturalization of slopes should occur as soon as possible to minimize potential for erosion and/or slope failure.

18. Any required site grading and retaining must be designed to minimize changes in height between a development site and adjacent parcel(s).

19. Where retaining walls are deemed suitable and multiple tiers are permitted in accordance with the City's Zoning Bylaw, they must be designed:
    a. With a minimum width of 2.0 metres between tiers and no greater than 10H:1V (10%)slope between tiers to accommodate screening and/or re-naturalization when designed at the maximum height;
    b. To allow for planting pockets at the base of the walls and between the tiered retaining walls to allow screen planting on several levels; and
    c. To be subtly integrate into the existing terrain, respect the natural character of the site and be of color(s), texture(s) and material(s) that complement the natural landscape.
20. Retaining walls and geogrids shall not be located on City right of ways unless approved by the City.
21. Railway ties and pressure treated wood are not considered acceptable materials for building retaining structures. Larger inter-locking blocks are not considered acceptable materials for building retaining structures in or adjacent to residential areas.

Hillside Revegetation and Renaturalization

Notwithstanding the Landscape General Guidelines applicable to all DPAs, the following additional landscaping requirements apply specifically to hillside revegetation and renaturalization. In some cases, the Hillside Guidelines are meant to supercede the General Guidelines in order to address the unique challenges associated with landscaping on a steep slope. Figure 47 provides planting examples in a hillside setting.

22. On manufactured slopes up to 5 metres in vertical height, hillside revegatation and renaturalization plans must include hydro seeding at a minimum.
23. On manufactured or disturbed slopes greater than 5 metres in vertical height, with the exception of vertical rock faces or unless approved by the City, slopes must be re-naturalized to:
    a. Mimic natural conditions under the guidance of a qualified professional and to the satisfaction of the City, where renaturalization is emphasized for locations where larger disturbances are highly visible from roadways, the lake or other common vantage point;
    b. Be designed and completed under the supervision of a qualified professional and specifically including consideration for plant species native to the location, specific solar aspect, and topography, promote plant health, minimize erosion, enhance slope stability, consider irrigation or watering methods appropriate to a hillside setting, and minimize wildfire risk;
    c. Include reference to a coordinated site grading plan with specific instructions for the construction of the slope using grading and planting methodologies to increase the ability to revegetate the slope with an emphasis on low maintenance, including the following considerations:
        i. Utilize grading and slope preparation methodologies that support revegetation efforts, such as:
            1) Ensuring grading equipment operators are well-versed in the intended final slope preparation requirements;
            2) Creating benches along the slope to prevent erosion and aid in planting and weed management;
            3) Horizontal scarification or surface roughening at base grade to aid in soil retention of final slope cover in combination of controlling equipment movement to avoid surface compaction during final slope preparation;
            4) Creating planting pockets at different levels within the slope at base grade to allow for deeper planting in less compacted soils, in-sloped to capture water runoff and provide moisture to the plantings, and clustered to aid in weed management; and
            5) Installing and anchoring large woody debris staggered across the slope in combination with live-stakes and plantings, as well as fiber rolls, straw waddles or coir logs, etc.

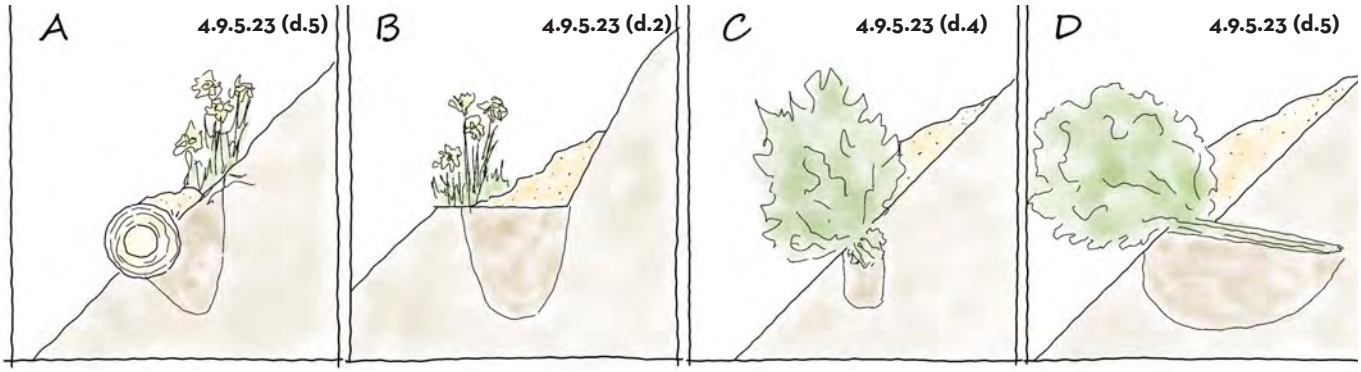


Figure 47. **Diagram illustrating planting methods more appropriate to a hillside setting**

ii. Utilize planting methodologies that support plant viability in steep slopes, such as matting logrolls, tree wells, planting pockets, reduced plant sizes to support on-site development of plant hardiness, increased plant densities to account for mortality, consideration of watering during stressful times, regular weeding to remove moisture competition, etc.;

iii. Topsoil should be retained or replaced to cover all cut and fill slopes to a minimum depth of 150 mm (6"), as directed by a qualified professional; and

iv. Rock finish or top dressing is not permitted on manufactured slopes where revegetation and/or renaturalization plans are required, except in the following circumstances:

   1) The rock finish or top dressing covers only portion of the slope and has been specifically included in the planting plan and final grading instructions for the finished slope; and

   2) Has been required by a geotechnical engineer as part of a recommendation related to slope stabilization.

v. Planting plans may include consideration for screening to include larger trees and shrubs at lower elevations or bottom of slope with smaller shrubs and grasses at higher elevations or the top of slope.

4.10 AQUATIC ECOSYSTEM DPA

4.10.1 Area

The Aquatic Ecosystem Development Permit Area (DPA) designation applies to all land as generally identified on Schedule 4 Aquatic and Terrestrial Ecosystem Development Permit Areas.

4.10.2 Purpose

In accordance with the *Local Government Act,* the purpose of this Development Permit Area is to protect the environmental and habitat value of **watercourses** and their adjacent **riparian areas**, address flood issues, and to control erosion. **Watercourses**, **riparian areas**, fish and wildlife habitat, and travel corridors act as natural water storage, drainage and purifying systems. **Riparian areas** need to remain in a largely undisturbed state in order to maintain healthy **watercourse** environments as well as protect private property from flooding and potential loss of land due to channel erosion and instability.

4.10.3Aquatic Ecosystem DPA Exemptions

An Aquatic Ecosystem Development Permit is not required when it has been confirmed by the City where:

1. A notice of the Development Permit has already been registered on property title for a permit dealing with all aquatic ecosystem issues pertaining to the current proposed development of the site, the conditions of the permit have been met, and the existing Development Permit protects the entire identified **riparian area**.
2. The Aquatic DP area has been:
    a. Identified by a **Qualified Environmental Professional (QEP)**;
    b. Permanently protected through registration of a restrictive covenant, return to Crown Land, or dedication to CWK as public park; and
    c. Marked by a British Columbia Land Surveyor and fenced to the satisfaction of the Director of Development, or designate.
4. There is a renovation of a building in which the building footprint is not altered, and the riparian area is protected from any new disturbance.
5. The activity involves a provincial tenure or permit process on Crown Land that is conducted under the auspices of the B.C. Provincial Government.
6. The activity involves a Section 11 approval under the *Water Sustainability Act,* and is consistent with the Aquatic DP Guidelines.
7. The activity has been determined to require and has received Provincial approval through a *Riparian Areas Protection Regulation* (RAPR) Assessment.

4.10.4 Aquatic Ecosystem DPA Design Principles

The Aquatic DPA Design Principles communicate the high-level intentions of these Development Permit Guidelines and reflect the vision and objectives of the OCP. All projects subject to a Development Permit under this Area will support the following Principles:

1. To broadly protect, restore and enhance aquatic ecosystems (water, wetland, riparian and broadleaf woodland).
2. To protect vital fish and wildlife features and functions, including, but not limited to, habitat, travel corridors, places of refuge and breeding areas.
3. To implement the *Provincial Riparian Areas Protection Regulation* (RAPR), or equivalent, for the protection of fish habitat.
4. To protect water quality and quantity.
5. To discourage development in areas that are susceptible to flooding as a result of proximity to a **watercourse** that could flood, as identified by the Province.

4.10.5 Aquatic Ecosystem DPA Guidelines

In addition to the General Guidelines, the following guidelines apply specifically to all development within the Aquatic Ecosystem DPA.

Site Design

1. Site design and development should be consistent with an **Environmental Report** prepared in accordance with guidelines contained in this section.
2. Minimum **buffers** for sensitive aquatic ecosystems should generally be thirty (30) metres. Alternate **buffers** may be explored where based on professional on-site assessment by a Qualified Environmental Professional (QEP), as outlined in Provincial RAPR. **Buffer** distances should reflect the objectives and guidelines of current Provincial Best Management Practices.
3. All CWK infrastructure and private development proposals will adhere to the following sequence of management objectives:
    a. Mitigate impacts to **watercourse** protection areas through appropriate project siting and design;
    b. Minimizing disturbance, and repairing or restoring damaged aquatic habitat to the former state or better; and
    c. Restore areas if repair or removal of structures or vegetation is proposed within areas of human disturbance, as defined under RAPR.
4. Demonstrate how the development plan will maintain entire intact ecosystems.
5. For land fronting Lake Okanagan, provision may be made in the development permit for recreational access and docks, in accordance with the Provincial Best Management Practices. A plan must be prepared that indicates how sediment, erosion and construction control measures will protect the **streamside protection and enhancement area (SPEA).** Restoration or enhancement of the **SPEA** will be required should it be damaged during construction.
6. For large development areas, site plans should demonstrate how access will be managed to minimize damage to any identified **watercourses** from uncontrolled access by recreational vehicles and other activities (i.e. mountain bikes, ATVs, hiking) into unplanned and unmaintained trails, bridges, and natural areas. Use of fencing, railings, barriers, groomed or marked trails may also assist in mitigating impact.

Figure 48. **Aquatic Ecosystem DPA Example**

7. To maintain natural connectivity, roads, driveways and utility corridors should not be located across riparian ecosystems. Where it can be demonstrated that alternatives are not possible, design crossings that are narrow and perpendicular to **riparian areas** and elevated in order to maintain connections.
8. Changes to surface and ground water flow can negatively impact aquatic, riparian, and wetland ecosystems. Trails, roads, construction and development should be designed to maintain the hydrology of these ecosystems.
9. Where construction will occur on existing parcels adjacent to streams or lakes that may be impacted by flooding, buildings shall meet elevation and setback requirements as outlined in the City's Zoning Bylaw, as well as the Provincial flood management guidelines.

Environmental Report

10. Applicants must provide an **Environmental Report** prepared by a **QEP** that includes the following:
    a. A Riparian Assessment addressing the RAPR, and establishing the **SPEA**.
    b. A statement of how the proposal will protect the **SPEA** (or leavestrip) and address the Provincial Best Management Practices guidelines - see **Leavestrips** below.
    c. Assessment of any proposed drainage, sediment and erosion control and its impacts on the natural ecosystem.
    d. Assessment of **sensitive ecosystems** on the site (include references to the City's Sensitive Ecosystem Inventory and Sensitive Habitat Inventory and Mapping).
    e. Assessment of the wildlife values of the site. The consultant should have an understanding of and specific expertise in Okanagan Valley wildlife species, wildlife habitat, and ecosystems.
    f. Identification of, and measures required to protect active bird nests, including minimum **buffers** in accordance with the Provincial Environmental Best Management for Urban and Rural Land Development.
    g. Where wetlands or **riparian areas** exist within the development area, include mechanisms to ensure the proper hydrological function is maintained, as prepared by a hydrologists and/or hydro-geologist.
    h. A report prepared by a professional hydrologist may be required in circumstances where the hydrological condition has been or may be significantly disturbed.

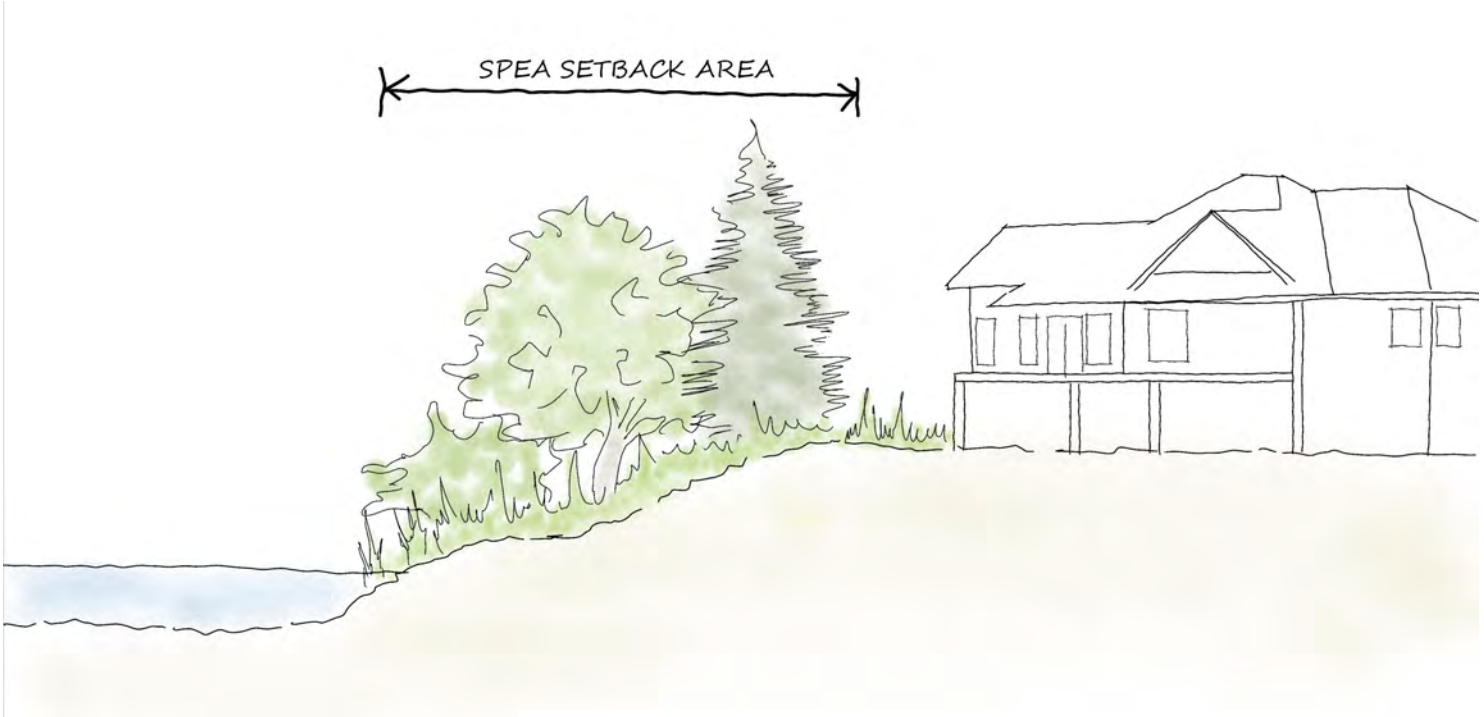


Figure 49. **Aquatic Ecosystem DPA Riparian Setback Example**

i. Demonstrate how post-development the site will maintain normal wetland and water processes such as flooding, seasonal drawdown, and groundwater recharge.

j. Where a development site has erosion potential or slope stability hazards, assessment of measures to address these issues by a professional geoscientist.

k. Identification of the location of intact riparian vegetation, as well as plans for maintenance of the vegetation, or restoration where the site has been disturbed or where invasive weeds have intruded.

l. For development of lands fronting foreshore areas, restoration of previously disturbed riparian vegetation is required and can be accommodated near the periphery of the property to maintain foreshore access.

m. A plan for connectivity of **leavestrips** and natural areas. Networks of **leavestrips,** natural areas and foreshore may provide for public access where such access is designed in a way that is not detrimental to the natural environment.

n. The timing of site work and rehabilitation.

o. An environmental monitoring plan.

Leavestrips

12. A leavestrip for the protection and restoration of the riparian ecosystem is to remain undisturbed near watercourses. The leavestrip is intended to protect and restore the riparian ecosystem, and to accommodate the dynamic nature of the hydrologic system, maintain water quality, base flows, and natural drainage patterns. The leavestrip should remain untouched by development and left in its natural condition, or, if damaged by previous use or construction, the leavestrip ecosystem should be restored or enhanced.
13. A leavestrip, at minimum, is inclusive of the **SPEA** if determined as part of a riparian assessment, where the location and width of a leavestrip should be determined by a **QEP** in accordance with the following:
    a. The minimum requirements of the Provincial RAPR;
    b. Whether the **watercourse** is fish bearing;
    c. Whether the **watercourse** has downstream water intakes;
    d. The proximity to **stream** or lakeshore spawning areas;
    e. The location of natural wetland and riparian ecosystem communities;
    f. The location of important denning or nesting habitat;
    g. Ecosystem continuity off site and in the larger area;
    h. The potential impact of existing and proposed land uses on the subject property;
    i. Confirmation of the existence of any unauthorized fill and/or retaining structures;
    j. The potential impact of existing and proposed land uses on adjacent lands;
    k. Where applicable, potential impact of livestock storage, on-site septic disposal, fuel storage, aggregate extraction, or other sources of potential surface or groundwater contamination;
    l. The extent of land clearing, berming, or removal of vegetation and topsoil;
    m. The natural slope of the land;
    n. For agricultural operations, Ministry of Agriculture and Food Best Management Practices for agricultural building setbacks from **watercourses** in farming areas; and
    o. Other Aquatic Ecosystem DP Guidelines.

14. For the purpose of determining the leavestrip, where a **QEP** must determine the natural boundary of a **watercourse**:
    a. Where a lake is gauged, the **QEP** may use the gauged high water mark, and will take wave action into account where applicable;
    b. Where indicators on the shoreline show that high water mark is not applicable at that site, a technical rationale must be provided by the **QEP** for determining the natural boundary on a site-specific basis and in accordance with the Provincial RAPR methodology; and
    c. Where the **QEP** has determined the site is subject to unauthorized fill, the **QEP** must use the historic natural boundary in determination of the leavestrip on Okanagan Lake.
15. All **leavestrips** may be required to be identified along their perimeter during all phases of construction, by means such as brightly coloured snow fencing, in order to prevent any accidental disturbance.

4.11 SENSITIVE TERRESTRIAL ECOSYSTEM DPA

4.11.1 Area

The Sensitive Terrestrial Ecosystem Development Permit Area (DPA) designation applies to all land as generally identified on Schedule 4 Aquatic and Terrestrial Ecosystem Development Permit Areas as having upland environmental values that require consideration and protection but that have not already been designated in Aquatic Ecosystem DPA.

4.11.2 Purpose

In accordance with the *Local Government Act*, the purpose of this Development Permit Area is to protect rare and fragile terrestrial ecosystem types located within the boundaries of West Kelowna.

The central Okanagan basin of British Columbia is an area of great ecological significance within both the province of B.C. and Canada as a whole. It is an area with high biodiversity values, and many rare and endangered ecosystems, plant and animal species. This DPA is intended to protect habitat for endangered species of native, rare vegetation or wildlife, and provide wildlife corridors and secondary habitat within West Kelowna.

4.11.3 Sensitive Terrestrial Ecosystem DPA Exemptions

A Sensitive Terrestrial Ecosystem Development Permit is not required when it has been confirmed by the City where:

1. A site inspection and professional report has been completed and submitted by a **Qualified Environmental Professional (QEP)** with experience in rare and endangered species demonstrating that all **sensitive ecosystem** attributes of the site have been lost due to previously approved development.
2. A notice of the development permit has already been registered on property title dealing with terrestrial ecosystem issues pertaining to the current proposed development of the site, and the existing development permit protects the **sensitive ecosystem** identified on site.
3. The Sensitive Terrestrial DP area has been:
    a. Identified by a **QEP**;
    b. Permanently protected through registration of a restrictive covenant, or dedication to CWK as public park; and
    c. Marked by a British Columbia Land Surveyor and fenced to the satisfaction of the Director of Development, or designate.
4. There is a renovation of a building or structures in which the building footprint is not altered more than 10 square metres in area.
5. The activity involves water management works conducted under the auspices of the Regional Water Manager.

Figure 50. Sensitive Terrestrial Ecosystem DPA Example

4.11.4 Sensitive Terrestrial Ecosystem DPA Design Principles

The Sensitive Terrestrial Ecosystem DPA Design Principles communicate the high-level intentions of these Development Permit Guidelines and reflect the vision and objectives of the OCP. All projects subject to a Development Permit under this Area will support the following Principles:

1. To identify, protect and minimize the disturbance of sensitive terrestrial ecosystems within the City.
2. To preserve rare and endangered native vegetation, wildlife and wildlife habitat.
3. To ensure that land development is carefully planned to protect environmentally sensitive areas.
4. To ensure that wildfire management strategies are implemented in an ecologically sensitive manner which mimics the effect of historic natural fire cycles in the region.
5. To conserve sensitive terrestrial ecosystems in a relatively natural state while supporting rural and urban land uses.

4.11.5 Sensitive Terrestrial Ecosystem DPA Guidelines

In addition to the General Guidelines, the following guidelines apply specifically to all development within the Sensitive Terrestrial Ecosystem DPA.

Site Design

1. Ensure development considers relevant provincial legislation, such as the *Migratory Bird Convention Act*, *BC Wildlife Act* and *Species at Risk Act*.
2. Site design and development should be consistent with an **Environmental Report** prepared in accordance with the guidelines contained in this section.
3. Settlement, construction, land disturbance, and other development are discouraged within sensitive terrestrial ecosystems.
4. For large development areas, site plans should demonstrate how access will be managed to minimize damage to any identified sensitive terrestrial ecosystems from uncontrolled access by recreational vehicles and other activities (i.e. mountain bikes, ATVs, hiking) via unplanned and unmaintained trails, bridges, and natural areas. Use of fencing, railings, barriers, groomed or marked trails may also assist in mitigating impact.
5. Developments and subdivisions should be designed to protect endangered, threatened, or vulnerable species and plant communities, including critical habitat and consideration of **buffered** areas.
6. Where disturbance cannot be mitigated, compensation for on-site loss may be acceptable with the intention of no net loss of critical habitat overall in the vicinity of the project.
7. Where possible, development should be designed to conserve or promote snags, standing dead trees and potential wildlife recruitment trees, especially located within or adjacent to areas of higher ESA values.
8. Avoid the creation of isolated islands of ecosystems. Corridors should be provided between sensitive terrestrial ecosystems to create interconnectedness especially for critical wildlife travel routes.
9. Applicants must provide an **Environmental Report** prepared by an **QEP** together with other professionals, as the project warrants, that includes the following:
    a. Assessment from an environmental perspective of the proposed drainage, sediment and erosion control, storm drainage systems, and slope stability (consistent with the City's Subdivision and Development Bylaw).
    b. Identification and assessment of **sensitive ecosystems** on the site (include references to the City's Sensitive Ecosystem Inventory).
    c. Identification of stands of trees and individual trees where they have environmental value, and include mechanisms for protection during and post construction.

d. Assessment of the wildlife values of the site. The consultant or team of consultants should have an understanding of wildlife biology, especially for species at risk, geomorphology, environmental assessment, and development planning in British Columbia. Specific expertise in Okanagan Valley wildlife species, wildlife habitat, and ecosystems is highly preferred.

e. Identification of the location of **buffers** required to protect sensitive terrestrial ecosystems, including recommendations for fencing along **buffers** where adjacent development and activity is anticipated.

f. Identification of, and measures required to protect active bird nests, including minimum **buffers** in accordance with the Provincial Environmental Best Management for Urban and Rural Land Development.

g. Include an assessment of how the development site can help restore the natural cycle of low intensity fire once common to the Okanagan prepared by a qualified professional with experience in mitigating wildfire risk.

h. A plan for restoration of the site where the site has been disturbed or where invasive weeds have intruded.

i. The timing of site work and rehabilitation.

j. An environmental monitoring plan.

Figure 51. Sensitive Terrestrial Ecosystem DPA Example

4.12 WILDFIRE INTERFACE DPA

4.12.1 Area

The Wildfire Interface Development Permit Area (DPA) designation applies to new residential construction and large residential additions on all lands identified on Schedule 3 Hillside and Wildfire Interface Development Permit Areas.

4.12.2 Purpose

In accordance with the *Local Government Act,* the purpose of this Development Permit Area is to identify areas that may be affected by wildfire and reduce the risk that new residences and large residential additions that may be negatively affected by wildfire. The Okanagan has a naturally dry climate and there are many large forested areas within West Kelowna. Because of this, wildfire is an ever-present threat. Reducing wildfire hazard involves a multi- layered approach that includes education, community prevention activities, as well as subdivision design, and building and landscape design that include **FireSmart** measures. This Development Permit Area is only one of the tools necessary to address wildfire risk in CWK.

4.12.3 Wildfire Interface DPA Exemptions

A Wildfire Development Permit is not required when it has been confirmed by the City where:

1. An applicant has submitted building permit plans for construction of principal buildings or structures that show compliance with these guidelines, and the owner has entered into a restrictive covenant for compliance with the plans submitted which has been registered on the title of the property;
2. The proposal is for construction of or alterations to accessory buildings or structures where the building footprint is no larger than 10 square meters in area; or
3. A covenant has already been registered on property title for wildfire hazard reduction, and the conditions in the covenant have all been met and will not be affected by the current proposed activity.

4.12.4 Wildfire Interface DPA Design Principles

The Wildfire Interface DPA Design Principles communicate the high-level intentions of these Development Permit Guidelines and reflect the vision and objectives of the OCP. All projects subject to a Development Permit under this Area will support the following Principles:

1. To regulate development so as to protect life and property from wildfire hazard.
2. To reduce the susceptibility to wildfire of new construction or large additions near the provincial forest interface, or the interface with large forested parcels or parks.
3. To encourage wildfire hazard reduction methods that support restoration of natural environment, and mimic the effect of historic natural fire cycles. Such as, thinning and spacing trees and vegetation, removal of debris and dead material from the ground, removal of lower tree branches and using fire as a fuel management tool.
4. To support measures designed to improve forest health on lands adjacent to development.
5. To support **FireSmart** measures with design guidelines based upon the following 3 typical priority zones as outlined in "FireSmart, FireSmart begins at Home Manual":
    a. Priority 1A zone of 1.5 meters (Non-combustible zone) and Priority 1 zone of 10 metres from the building established for flat land. While these guidelines represent some minimum requirements, it is advisable to consider a larger Priority 1 zone for properties on a slope, especially on the downhill side.
    b. Priority 2 zone begins 10 metres (30 feet) from a building and extends to 30 metres (100 feet) depending upon topography. The more the land slopes, the more the zone should be extended.
    c. Priority 3 zone begins 30 metres from a building and extend to 200 metres or more. High intensity crown fires that occur in this zone may be a potential high source of burning embers.

4.12.5 Wildfire Interface DPA Guidelines

In addition to the General Guidelines, the following guidelines apply specifically to all development within the Wildfire Interface DPA, where the guidelines may reduce the level of the threat to structures from wildfire but do not eliminate it.

1. Wildfire Hazard Rating - Site design and development should be consistent with a Wildfire Hazard Assessment prepared by a qualified registered professional forester or professional engineer with experience in fire safety and prepared in accordance with guidelines contained in this section. Where development or construction is proposed, the report must indicate recommendations to reduce the Wildfire Hazard rating to a low to moderate risk. Any works required to reduce the risk to the required level must be completed as a condition of development.
2. Roofing – Roof covering shall conform to Class A, B or C fire resistance as referenced in the BC Building Code as a critical action to reduce the number one cause of building losses during a wildfire event. Roofing material has several classifications with Class A being the most fire resistant. Some materials that either fall within the rating system or, can be obtained in forms that meet Class A, B or C requirements, include composite (asphalt and fibreglass) shingles, concrete or clay tile, metal roofing, and factory treated wood shake roofing.
3. Exterior Wall Finishes – Any material used for exterior wall finishes should be non-combustible or ignition resistant siding material such as stucco, metal siding, brick, rock, cement shingles, concrete block, poured concrete, logs or heavy timbers as defined in the BC Building Code, and as described in the "Fire Smart Home Development Guide" to reduce the second highest risk factor associated with building materials during a wildfire event.

Figure 52. Wildfire DPA Materials Example

4. Chimneys – All chimneys should have spark arrestors made of 12 gauge (or better) welded or woven wire mesh with mesh openings of less than 12 millimetres to reduce the hazard as source of sparks, and as a way for burning embers to enter a building.
5. Eaves, vents, and openings – Install screen over or behind all vents with 3 millimeter non-combustible mesh OR install ember-resistant ASTM (American Society for Testing and Materials) rated vents. Unprotected eaves call allow burning embers to enter and also allow flames that are spreading up a wall to penetrate into the roof structure.

Figure 53. Wildfire DPA Ember Resistance Example

6. Windows and glazing – All windows should be double- paned or tempered to increase the ability to withstand glass shattering from the heat of a fire and reduces the potential to create openings for fire and burning debris to enter the building.
7. Balconies, decks and porches -
   a. Decks, balconies, patios, porches and similar building extensions attached to, or within 10 meters of a home should have a continuous, ignition resistant or non-combustible top surface, and also consideration of vulnerability of decks to fire from below.
   b. Manufactured homes should be skirted with a fire resistant material as outlined in the previous guideline for exterior wall finishes.
8. Wildfire Mitigation - To reduce wildfire hazard, complete modification of vegetation within Priority Zones as follows:
   a. Priority Zone 1A - Non-Combustible Zone, the most important, is 0-1.5 meters from the perimeter of the structure and its extensions, including under projections (balconies, porches, decks, cantilevered floors, pier foundations). The key focus in this zone should be on the use of non-combustible surface materials, such as mineral soil, pavement, concrete, concrete pavers, and stone/rock.
   b. Priority Zone 1 - is within 10 meters of the building. Without fuel modification in this critical area, the fire intensity and the rate of spread can make firefighting difficult or impossible. The key focus in this zone should manage cultivated/natural vegetation to minimize ember ignition, minimize surface fire spread and manage the short distance radiant heat transfer by:

      i. Using appropriate plant selection by:

      - Choosing plants that are less combustible and burn with less intensity, such as deciduous shrubs (shrubs that lose their leaves in the winter), broad-leaved evergreen shrubs (such as bearberry, Oregon grape, cotoneaster or rhododendrons), perennials, annuals and trimmed grass.
      - Not planting evergreen trees and shrubs such as junipers, mugo pines or coniferous evergreen hedges within the 10 meter zone;

      ii. Creating breaks in vegetation and organic surface continuity, such as increased plant spacing within the 10 meter zone and use non-combustible landscape mulches/surface materials;

      iii. Reducing heavy vegetation concentrations; and

iv. Maintaining distance between vegetation and structure;

v. Ensuring combustible fuel sources are not located next to a building, such as firewood or pruning debris.

Mitigation of this zone must be appropriate for topography and surrounding fire environment conditions, including conditions of Priority Zones 2 and 3.

c. Priority Zone 2 - begins 10 metres (30 feet) from a building and extends to 30 metres (100 feet) depending upon topography. The more the land slopes, the more the zone should be extended. Radiant heat and burning embers originating from an area this close to a structure may cause it to burn. Vegetation and potential fuels in this area should be managed to reduce fire intensity and rate of spread by methods such as removing dead needles, dead wood and combustible debris from the ground, removing any tree limbs within 2 metres of the ground, and spacing trees so that no tree limb is closer than 3 metres to the next.

9. Existing Trees - It is not advisable to retain existing mature coniferous evergreen trees within 10 meters (Priority 1 zone) of the building. Any coniferous evergreen trees that are to be retained on the property that lie within 10 meters (Priority 1 zone) of the building should:

   a. Have limbs pruned such that they are at least 2 meters above the ground.

   b. Be spaced so that they have 3 meters between crowns. (In other words, the tips of the branches of a tree are no closer than 3 metres to the tips of the branches of another).

   c. No limbs should be within 3 meters of the building or attachments such as balconies.

   d. Should the choice be made to retain pre- existing evergreen trees in the Priority 1 area, white pine, ponderosa pine and western larch have a medium flammability while most other coniferous evergreens have high flammability.

10. Where development or construction is proposed to vary from the Wildfire Interface Design Guidelines, a report by a registered professional forester or a professional engineer with experience in fire safety will be required indicating that the susceptibility to wildfire has not increased.

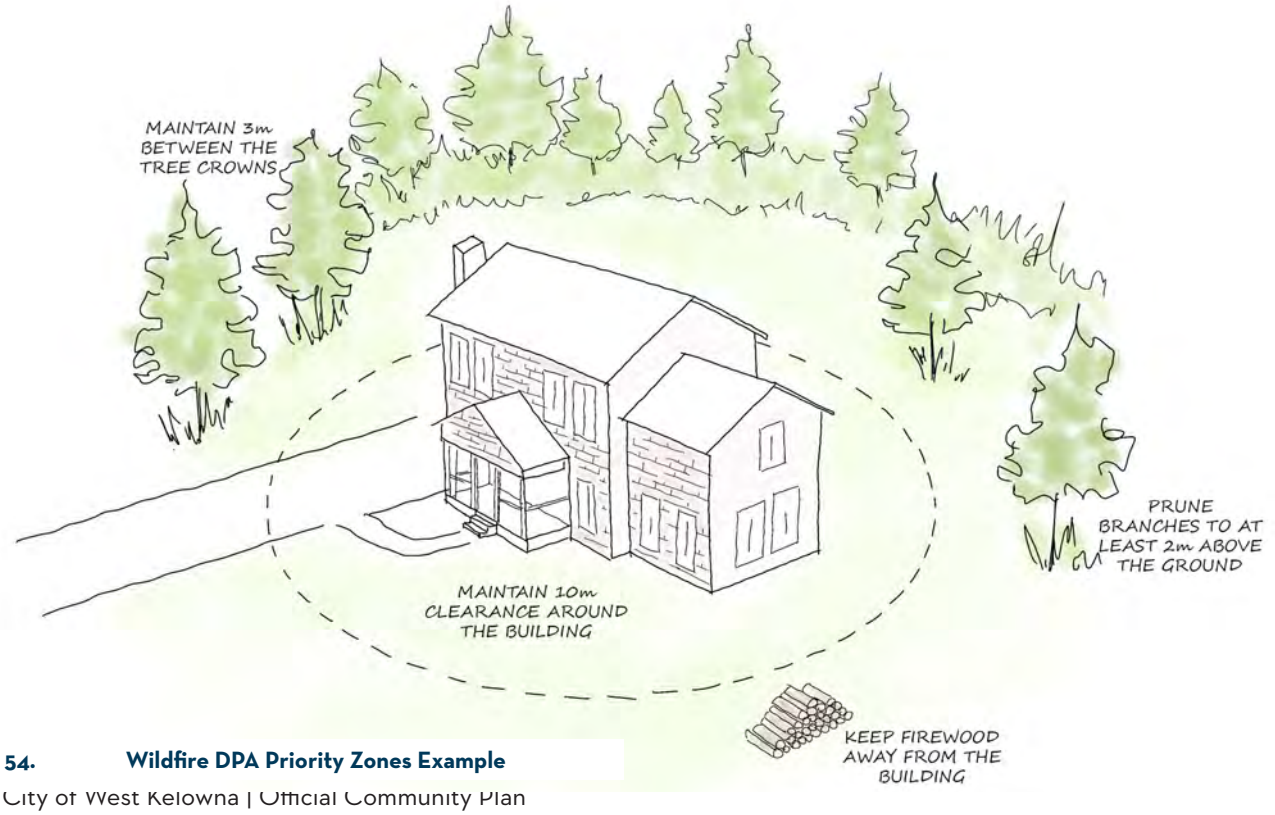


Figure 54. Wildfire DPA Priority Zones Example