



City of Duncan OCP Bylaw 2030 D.P. AREA Excerpts

Development Permit Areas

1. Multi Family Residential Areas
2. Downtown
3. Highway 1 Corridor
4. Other Commercial Areas
5. Natural Environment
6. Hazard Lands
7. Development Approval Information Areas

See Map 2 – Development Permit Areas

Development Permit Area Policies

- 12.1.1 Where land is subject to more than one Development Permit Area designation, a single development permit is required. The application will be subject to the requirement of all applicable development permit areas and associated guidelines.
- 12.1.2. Development within designated development permit areas may be exempt from development permit requirements in the following circumstances:
- (a) Construction or additions to a single-family or two-family dwelling on a single lot.
 - (b) Building additions less than 50 m² (538.2 sq. ft.).
 - (c) Construction within a building that does not require exterior alterations.
 - (d) Construction of buildings or structures less than 10 m² in area.
 - (e) Minor alterations to the exterior of a building or structure that do not change the form or character of the development, e.g. minor changes to design, exterior finish, or landscaping.
 - (f) Minor additions to existing dwellings, emergency repairs to existing structures and public walkways where a potential safety hazard exists.
 - (g) Replacement of exterior finishes using the same or similar materials and colours.
 - (h) Any development or construction that does not require a building permit or sign permit.
 - (i) Addition of canopies or other decorative building features such as mullions and windows.
 - (j) Replacement of sign or canopy faces with no change in location, size, or type of signage.
 - (k) Any building excluded from the requirement of a development permit by Council.
 - (l) Public works and services such as the construction, repair and maintenance of City services by the City of Duncan, or its authorized agents and contractors, provided DPA Guidelines are met.
 - (m) Emergency procedures to prevent, control or reduce fires, flooding, erosion or other immediate threats to life and property provided said activities are reported to the City of Duncan immediately.

- (n) The cutting of hazardous trees that the City considers present an immediate danger to the safety of persons or are likely to damage public or private property.
- (o) Removal of invasive non-native vegetation using appropriate active control methods including hand clearing, pruning, mowing, excavation, and planting of appropriate native species.
- (p) Planting and maintenance of indigenous trees, shrubs or groundcover within a Protection Area, for the purpose of restoring or enhancing habitat values and/or soil stability, such planting is carried out in accordance with guidelines or directions provided by the City.
- (q) Planting of non-indigenous vegetation in a Protection Area that does not contravene the guidelines set out.
- (r) Habitat improvement activities undertaken by the City, Provincial or Federal agencies.
- (s) Trail projects approved by the City.
- (t) A passage or trail not more than 1.5 metres in width cleared of vegetation, which does not involve the removal of any tree greater than 5 metres in height or with a diameter at breast-height (DBH) of 10 centimetres.

12.1.3 Information, relevant to the project being considered, to be submitted with Development Permit applications may include:

- (a) *Legal information*, including copies of the current certificate of title, copies of all statutory rights-of-way and covenants, including one set in legal size.
- (b) *Development information*, including: conceptual site plan; location of all buildings and structures; building elevations; grading of building heights; architectural style (detailing, exterior finish, materials, colour of buildings, treatment of entrances, roofs); landscape plan (extent and nature of landscaping, indoor/ outdoor space relationships, and recreational area design); siting and layout of parking areas, driveways, and loading areas; and. All plans and drawings (including a coloured isometric artistic rendering of buildings) are to be prepared by a professional architect or designer.
- (c) *Development data*, including site area, site coverage, floor space, parking requirements, and number of units.
- (d) *Servicing information*, including existing and proposed water, sanitary and storm sewer services, and access.
- (e) *Site Context Information*, including sketches or photographs of the proposed development in relation to the surrounding neighbourhood.

12.1.4 Additional information may be required to determine the impact of the proposed activity or development. As an example (but not limited to) the following professional reports may be required:

- (a) *Transportation Study*, including traffic patterns and flows.
- (b) *Infrastructure Analysis*, including evaluation of local infrastructure capacity.
- (c) *Public Facilities Evaluation*, including inventory of facilities such as schools and parks, and future demand estimates.
- (d) *Environmental Assessment*, including inventories of native vegetation, wildlife and habitat, and evaluation of potential impacts.

12.1.5 In accordance with Section 920(2)(a) of the *Local Government Act*, Council may issue development permits that vary the City of Duncan's Zoning Bylaw, or any bylaw established under Division 7 or 11 of the *Act*.

Council shall consider issuing development permits that vary applicable bylaws for one or more of the following:

- variances that are 'minor' in nature, or which do not reduce the bylaw requirement by more than 50%;
- variances that facilitate conformance with the applicable design guidelines;
- variances to achieve an objective or policy stated in the City's Official Community Plan.

A development variance permit shall be required where the proposed variance does not meet one or more of the above noted criteria.

12.1.6 Violations of Development Permit Area requirements include:

(a) Every person who:

1. violates any provision of a Development Permit Area;
2. causes or permits any act or thing to be done in contravention or violation of any provision of a Development Permit Area;
3. neglects to do or refrains from doing any act or thing required under a Development Permit Area;
4. carries out, causes or permits to be carried out any development in a manner prohibited by or contrary to a Development Permit Area;
5. fails to comply with an order, direction or notice given under a Development Permit Area; or
6. prevents or obstructs or attempts to prevent or obstruct the authorised entry of the Administrator, or person designated to act in the place of the Administrator;
7. commits an offence under this Bylaw.

(b) Each day's continuance of an offence constitutes a new and distinct offence.

12.1.7 A person who commits an offence against this Bylaw is liable, upon conviction in a prosecution under the *Offence Act*, to the maximum penalties prescribed under the *Community Charter* for each offence committed by that person.

12.1.8 If any section, sentence, clause, phrase, word or schedule of the Development Permit Areas is for any reason held to be invalid by the decision of any Court of competent jurisdiction, the invalid portion shall be severed and the decision that it is invalid shall not affect the validity of the remainder of the Development Permit Area.

1 – Multi Family DP Area

12.2 DPA 1 – MULTI-FAMILY RESIDENTIAL AREAS

	Form and Character/ Revitalization
Category	
Justification	<p>The justification for this designation is to ensure that Council has the ability to secure necessary information and establish conditions for multi-family developments to ensure that their form and character is of high quality and compatible with surrounding uses.</p> <p>A high standard of design can help to integrate new forms and higher densities of housing into existing neighbourhoods. It can also create more livable residential development that contributes positively to the urban form and encourages a strong sense of neighbourhood. The benefits of well designed, well built multi-family development are long-term. To encourage a high standard of livability and overall quality that meets the community's and occupants' expectations for medium and high density housing types, development permits will be required for new multi-family development.</p>
Objective	<p>The objective of this Development Permit area designation is to ensure that new multi-family residential development:</p> <ol style="list-style-type: none">1. Provides a healthy, safe and livable environment for residents;2. Minimizes its impact on the local environment;3. Provides for vehicular as well as pedestrian needs in a safe manner;4. Is compatible with surrounding land uses;5. Complements the social and environmental goals of this Plan; and6. Is constructed to high standards, both materially and aesthetically.
Application	<p>Where some element of the design does not comply with a guideline, a justification stating the divergence and the reason should be made. The City may diverge from the guidelines where a compelling rationale, which preserves the intent of the guidelines, is supplied.</p> <p>Variations may be considered for: required setbacks from front, rear, and/or side yard lot lines, and where the intent of the variance is to create an improved building envelope, minimize environmental impact, better relationship between buildings within a multi-family residential development, or where a setback is adjacent to park land or existing uses where the impact of the variance(s) being sought relate to the variance would be minimal or minimized through screening or a significant change in elevation. Variations may also be approved for pedestrian sidewalk location and width, and for lighting requirements.</p>
Guidelines	<p>The following guidelines are specifically applicable to multi-family residential sites.</p> <p><i>Applicants should provide a checklist or statement indicating how their proposal complies with these guidelines. Where some element of the design does not comply with a guideline, a justification stating the divergence and the reason should be made. Council may diverge from the guidelines where a compelling rationale that preserves the intent of the guidelines is supplied.</i></p>

Integration with the Existing Area

The orientation, scale, form, height, setback, materials, and character of new intensive residential developments are controlled by development permits to ensure compatibility with existing neighbourhoods and the surrounding community.

- The orientation, scale, form, height, and materials proposed for multi-family residential developments should reflect characteristics that are consistent with the context, scale and character of the surrounding neighbourhood to achieve visual harmony and neighbourliness. Sites in older neighbourhoods should be developed in a manner that improves the neighbourhood.

Environmental Impact

- New multi-family residential developments should minimize the impact on their environment, where practical, by siting buildings in such a way that residential units are sited around, in harmony with, and compatible with the natural topography and existing natural features (such as mature trees).
- The City may approve variances where the siting of buildings can be shown to lessen environmental impact.

Orientation

Site design is one of the most critical aspects of a successful project. Decisions made at the conceptual design stage have repercussions throughout the design development process.

- New multi-unit residential development should:
 - Maintain, enhance, or create view corridors or vistas (e.g. between buildings, along/ from roadways, and to natural features such as Mt. Prevost and Mt. Tzouhalem, Somenos Marsh, and the Cowichan River).
 - Allow sunlight penetration.
 - Ensure that units have their façade facing the street.
 - Minimize visual intrusion onto the privacy of surrounding homes.
 - Minimize the casting of shadows onto the private outdoor space of adjacent residential units.
- Apartment buildings should have at least one common entrance or foyer facing the street, at street level.
- New housing should front or appear to front abutting roadways.
- Townhouse buildings should, when oriented to the street, have at least one unit with an entrance facing the street, and appear to front onto the public road through the use of exterior treatments and through the provision of pedestrian walkways linked to the street.
- Pedestrian walkways to building entrances, parking, and/or recreational areas should have a hard slip resistant surface with a defined border of alternate material or texture to distinguish the sides or ends of paths. Layouts, width and grading must accommodate people with disabilities. Safety considerations must include clear sight lines to and from as many points as possible, such as parking lots and road entrances.

**Form,
Character, and
Building
Materials**

- Visual privacy will be achieved by such measures as:
 - fencing of all parking areas that face neighbouring residences with a solid material to prevent headlights disturbing neighbours;
 - locating private outdoor space so that it is not overlooked from roads or other residential buildings; and
 - locating, staggering or recessing entrances to individual units.

New buildings should respect the scale and character of neighbouring properties to achieve some visual harmony and neighbourliness.

- New multi-unit residential development should utilize:
 - Variations in the character of rooflines (e.g.: gables and dormers).
 - Complementary roof styles and pitches.
 - Screened rooftop mechanical equipment incorporated into overall architectural treatment of building.
 - Building materials that are compatible with, and enhance, surrounding development.
 - Building materials that contribute towards an appearance of solid, quality construction and long term durability.
 - Stepped or alternate massing to break up the volume of a building to avoid a boxlike appearance.
 - Articulated walls detailed with varied cladding material, windows and doors, and patio features to create visual interest.
 - Window trim or casings and details on the fascia of the building, such as belt-courses, to enhance visual interest.
 - Complimentary exterior finishes including roofing materials, window treatments, door styles and other finishing details.
 - Maximized sound attenuation between units, between public roads and units, and between adjacent land uses and units.
 - Porches and windows overlooking the street to increase personal interaction and safety.
- Where multi-family units face single-family areas, buildings should be designed to convey a single-family appearance. This may be achieved by design features such as stepping back the building mass from the street or providing pitched roofs with varied roof lines.
- The size and siting of buildings should reflect the size and scale of adjacent development and complement the surrounding uses. To achieve this, height and setback restrictions may be imposed as a condition of the development permit.
- Multi-unit residential buildings or mixed commercial/ residential buildings in commercial areas with a zero front setback should be designed so that the upper storeys are stepped back from the building footprint, with lower building heights along the street front.
- Site lighting should provide personal safety for residents and visitors and be of the type that reduces glare and does not cause the spill over of light onto adjacent residential sites. Generally, lighting should be evenly distributed with night time visibility for 20 metres.

- Safety will be addressed by such means as: making entrances visible to other residents and the public road; avoiding dark or shadowy spaces on the site; and ensuring adequate lighting in all public and semi-public areas.

Landscaping

- Landscaping should be provided with the objective of providing:
 - An effective transitional buffer through the use of open space, landscaping and edge treatment, where practical, to protect the privacy of occupants of properties adjacent to residential development.
 - A consistent visual image between adjacent properties along the streetscape.
 - Low-height vegetation between adjacent driveways to mitigate the visual impact of paved surfaces.
 - Some effective screening at the time of planting.
 - Landscaped pedestrian walkways to and from buildings and parking areas.
 - An attractive streetscape to screen off-street parking, services, and storage areas, and to enhance the overall development.
- All areas not covered by buildings, structures, and parking should be fully landscaped.
- Natural vegetation should be retained where possible to enhance the character of the development and integrate it with the existing landscape.
- Significant stands of trees, where present, should be preserved.
- An underground irrigation system should be incorporated into landscaping except for areas left in a natural state.
- Landscape screening should be provided along all property lines abutting neighbouring properties at least 1.5m high.
- Garbage containers and utility kiosks should be screened by solid fencing or landscaping or a combination of the two.
- The use of plant species which are native and may be considered drought resistant is encouraged in all landscaping.
- Landscaping should be designed to maintain sight lines for personal safety, and to avoid physical obstructions for people with disabilities.

Loading Areas, Utility and Storage Structures

- Loading areas, utility and storage structures (including garbage receptacles) should be located in a safe and convenient location on-site (preferably not in any required front or exterior side yard setback) so that they do not impede vehicular or pedestrian traffic or sight lines, where possible cluster these structures.
- Utility and storage structures (including garbage receptacles) in landscaped areas should be permitted only when integrated with the landscaping in a manner that is unobtrusive, does not deteriorate the plantings and landscape material within the landscaped area; and does not interfere with sight lines.

Parking

- Loading areas, utility and storage structures (including garbage receptacles) should be screened from adjacent roads and residential properties either by decorative fencing or by landscaping, or a combination of the two, with a minimum height of 1.8 m. The use of chain link fencing is not encouraged.
- Garbage receptacles should be stored outdoors with a solid enclosure on all sides, which cannot be seen through, with a minimum height of 1.5m.
- The storage of toxic, combustible or potentially hazardous material such as liquid petroleum products, fertilizers, herbicides and pesticides outside buildings is prohibited.
- Wiring (on-site and existing) should be placed underground where possible.
- New multi-family residential developments are required to provide private off-street parking in accordance with the City of Duncan's Zoning Bylaw.
- Parking areas should be located away from the street, whenever feasible, to create a more aesthetic and functional design.
- Private parking areas must be designed with the following features:
 - close access to main building entrances;
 - clearly marked, well lit pedestrian routes;
 - appropriate signage to assist people in locating pathways and building entrances;
 - adequate lighting that eliminates dark or shadow areas; and
 - opportunity for casual surveillance from a number of locations.
- Parking areas and internal access roads should be constructed using a permeable surface, alternatively other rainfall capture facilities (catch basins and landscaping) should be used to mitigate the environmental impact of the first 30 minutes of peak runoff flows (see also Policy 10.3.3).
- Internal access roads should be wide enough to permit easy negotiation to parking areas by automobiles and emergency vehicles and should clearly form and efficient circulation system.
- Parking areas should be made attractive by:
 - Breaking up surface parking areas and other large areas of paved surfaces with landscape planting. Ideally, parking should be separated by landscaped areas into clusters of no more than 6 to 10 parking spaces.
 - Considering staggering parking landscape islands and introducing curves to parking aisles, in larger sites and in areas with a strong natural landscape character, to further break the rigid geometry of parking areas.
 - Using contrasting paving materials to mark clear pedestrian routes through large parking lots, or from the street to the building and placing special emphasis on points of conflict between people and cars to improve visibility, enhance safety, and provide aesthetic appeal.
 - Considering parking lots as pedestrian spaces first, with cars as a secondary use (this can lead to a design which enhances pedestrian safety and comfort).

Open Space and Amenity Areas

- Underground parking will be provided for any multi- unit residential buildings exceeding four storeys.
- Open space must be provided that allows for active play areas and/or passive activities such as enjoying sunlight, views, and landscaping.
- The provision and location of play and recreation areas should reflect the needs of the anticipated residential population.
- Design features such as entry courts or seating in open areas should be encouraged to foster social interaction and a sense of community within medium or high density residential development.
- In developments intended for family living, adequate storage and places for outdoor play should be provided. Play areas must be safely accessible without interference by vehicular traffic and are to be located to permit visual supervision by residents.
- Where appropriate, safe and distinct pedestrian routes should be provided connecting to other residential and commercial land uses in the community and to parks, open spaces and trails.
- Spaces should be defined through design features to differentiate private, semiprivate, and public use areas within and around the project. This may be achieved through use of material changes, grade changes, exterior walls, screening, and landscaping.

Personal Safety

- The impact the design of the building has on the individual safety should be considered, e.g. avoid recesses, dark alcoves, the creation of hiding spots, and isolated areas. Refer to the Checklist for Safety Planning and Design (Appendix 9).
- The basic principals of Crime Prevention through Environmental Design (CPTED) should be incorporated into building and site planning/ design.

2 – Downtown DP Area

12.3 DPA 2 – DOWNTOWN

Form and Character/ Revitalization

Category

Justification

The justification for this designation is to ensure that Council has the ability to secure necessary information and establish conditions for developments within the Downtown (see Map 2) to ensure that their form and character is of high quality and compatible with surrounding uses. The underlying intention of the guidelines is to help create an economically viable, safe and beautiful downtown that will provide an appropriate setting for the diverse activities and needs of residents, business interests, public agencies and visitors.

Objective

The City wishes to encourage sensitively integrated, high quality redevelopment within Downtown. These guidelines give physical design direction for urban growth, conservation and change. The City of Duncan supports and promotes the idea that Downtown is the civic centre and commercial heart for the entire Cowichan Region. Downtown plays a vital role as the central meeting place for the Cowichan Valley residents as they 'go to town' to run errands and connect with others in the community. Key design objectives for downtown include:

- Retain small town feel
 - Public spaces, public art, rights of way, plazas and parks
- Create opportunities for face to face meetings
- Maintain the original hierarchy of buildings
 - Civic and public
 - Mixed use (retail and commercial plus residential)
 - Residential apartments
- Design good contemporary architecture which compliments historic structures but does not mimic them
- Avoid unrelated, fake or arbitrarily conjured, design themes
- Maintain high quality buildings and landscaping standards that reflect the importance of downtown to the region.
- Produce sustainable and ecologically sensitive design
- Preserve existing heritage building character
- Organize parking in small clusters, dispersed throughout the core and screened from view
- Design downtown buildings and spaces that consider spaces which
 - Draw youth to the core
 - Make it safe to walk at night
 - Address the needs of downtown residents
 - Celebrate diversity
- Recognize the interrelationship of adjacent land uses
- Commemorate the Cowichan River
- Develop business that compliment rather than compete with neighboring

malls

- Respond to weather conditions - protection from the summer heat and winter rains
- Create an identifiable downtown district - accessible from the highway corridor

Application

Where some element of the design does not comply with a guideline, a justification stating the divergence and reason should be made. The City may diverge from the guidelines where a compelling rationale, which preserves the intent of the guidelines, is provided.

Variations may be considered for: height or required setbacks from front, rear, and/or side yard lot lines, and where the intent of the variance is to create an improved building envelope, minimize environmental impact, create a better relationship between and among buildings or where a setback is adjacent to park land or existing uses where the impact of the variance(s) being sought relative to the variance would be minimal or minimized through screening or a significant change in elevation.

Guidelines

The following guidelines are specifically applicable to the area of Downtown identified as DP – 2. (See Map 2.)

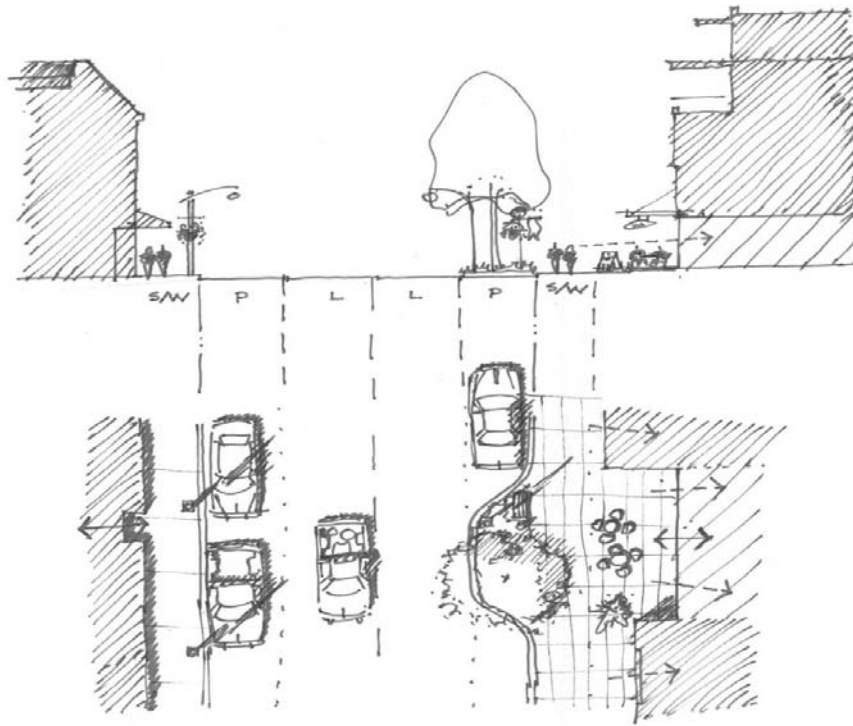
Applicants should provide a checklist or statement indicating how their proposal complies with these guidelines. Where some element of the design does not comply with a guideline, a justification stating the divergence and the reason should be made. Council may diverge from the guidelines where a compelling rationale that preserves the intent of the guidelines is supplied.

Design of the Public Realm

The design guidelines for private property are informed by the vision for the public realm. The following guidelines express the vision for Downtown:

- Downtown is a defined precinct, illustrated and reinforced by such measures as the pavement materials used in the City Square.
- Downtown is walkable, with sidewalks and a series of pathways which include streets, lanes, alleys and short-cuts.
- Markers, landscaping materials and other creative materials help to direct people and encourage exploration, rather than relying too much on signage and simple wayfinding.

- Nodes are established and celebrated throughout Downtown; paths connect and intersect with them and places are created – people meet, pause, sit and encounter others in the community. This could include the installation of benches or other seating/resting areas.
- Landmarks such as public art, interesting landscape features, even buildings, are located in special places to help orient people to various features and provide identifiable places for people to rendezvous.



A
Less like this

- A This side of the street has:
- a minimum-sized sidewalk
 - a single entrance with no view to the activities in the building
 - no landscaping (except a hanging flower basket)
 - a continuous parking band
 - no set-back.

The building is 3 storeys high plus the one storey fake sloped roof.

B
More like this

- B This side has:
- a sidewalk that is wider to accommodate more pedestrians in the commercial core
 - building setbacks that vary to make small squares for outdoor uses
 - landscape and tree 'bulges' that bring greenery into the downtown (note that in this example, the private development is coordinated with the public right-of-way design)
 - a more transparent ground floor to allow building activities to visually 'spill' into the street
 - a building with an extra floor drawn to the set-back with a stepped back top floor
 - public amenity concessions such as public art, open space, street trees and landscaping, special paving and street furniture etc.

**Building Form,
Siting, Height
and Massing**

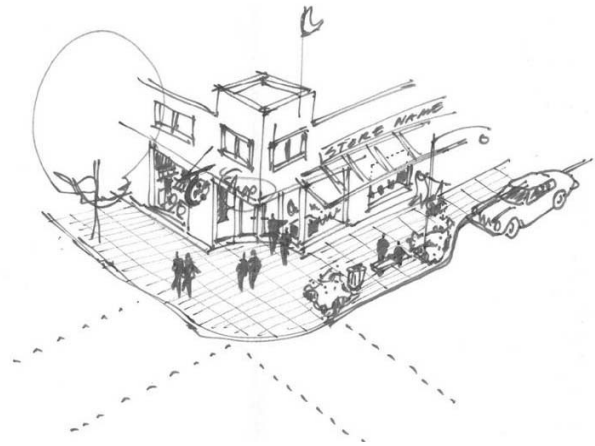
The siting of buildings can define the relationship between the public street and a private development and can establish a unique sense of place for the downtown. Height and massing of a building are integral components of a distinctive form for the community. The space along any right of way creates the dominant presence that people experience and create an atmosphere.

- Each building and location will present a unique set of design imperatives. Generally, the siting of the building should not crowd the pedestrian realm, sending the message that the pedestrian area is unimportant, yet the building should provide a defined edge and consistent street edge that is inviting to people.
- View corridors or vistas (e.g. between buildings and to natural features such as Mt. Prevost and Mt. Tzualem should be maintained, enhanced, or created.
- Buildings should not expose their service and refuse areas to the street

Less like this



More like this

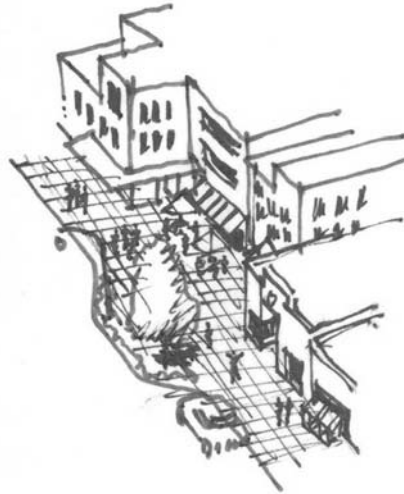


- Corner buildings should be sited so they are:
 - Set back to allow small gathering places.
 - Conducive to pedestrian movement.
 - Afford commercial exposure on both elevations.
 - Provide display windows or where there is no commercial activity encourage high architectural detail.
- Build-to lines are preferred over set-backs (with the exception of corner lots) which allow too much variation and unpredictable, undefined space.
- Where buildings are set back, they shall not have parking between their front façade and the street, rather there should be hard and soft landscape treatment, public art, gathering places or other attractive elements.
- A minimum of 75% of a building's principal or front façade must be between 2 and 2.5 metres from the property line in the downtown core – i.e. most of

the building should be close to the street edge.

- The City may approve variances where the siting of buildings can be shown to lessen environmental impact.

Illustration of the effects of variable build-to lines.



Architecture

Along with the street pattern, there are a number of historic buildings in Duncan that contribute to creating a dignified presence in Downtown. It is imperative that new and redeveloped buildings (material and architecture) subscribe to the same high standards of design and construction.

- Where restoration of an existing historic building is proposed, heritage elements should be retained and reinforced and should adhere to the guidelines established by the City of Duncan.
- Large expanses of featureless walls should be avoided.
- False fronts should be avoided.
- Materials should be used consistently and in unison so that all aspects of the building are considered to be in public view.
- The materials and finishes for retaining walls, fences and or other architectural screening devices should be composed and considered with those of adjacent buildings.
- The traditional technique of retail and mixed commercial storefronts should be used to encourage street continuity and casual window-shopping along the sidewalk.
- Doorways and bay windows should be inset from the property line with windows, to maximize retail window area.
- Protection for pedestrians from the elements should be provided using canopies, arcades and windbreaks, particularly at building entrances, along storefront facades and at transit stops.

Screening

- Berms, fences or landscaping should be used to visually separate commercial rear yards and service areas from adjacent and nearby buildings.
- Service areas into the building should be incorporated into the site design to screen them from view.

Roof Design

- Exposed rooftop or ground-mounted utilities to views from nearby buildings should be avoided. Mechanical equipment appearance, noise and emissions and mitigate the negative impacts should be considered.
- Roofs should be considered as useable and possibly green outdoor space and they should be accessible from inside buildings.
- The roof of every building should be considered as visible from other buildings as the walls and windows. Roof colours and materials that imitate a material that they are not should be avoided.
- Traditional roof forms intended for low buildings types should be avoided on higher buildings.

Windows

- Mirrored glass or other opaque materials should be avoided at street level.
- Inset rather than flush windows should be encouraged.
- Mimicry of heritage windows should be avoided.

Personal Safety

- The impact the design of the building has on the individual safety should be considered e.g. avoid recesses, dark alcoves, the creation of hiding spots, and isolated areas. The Checklist for Safety Planning and Design (Appendix 9) should be referred to.
- The basic principals of Crime Prevention through Environmental Design (CPTED) should be incorporated.

Building Entrances

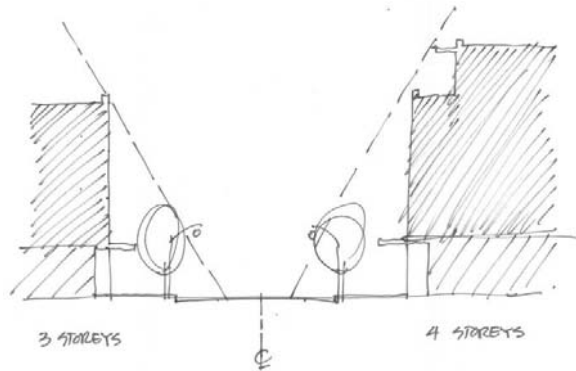
A properly placed and clearly visible entrance enhances the role of the streetscape and creates an easily readable environment. By placing building entrances in a simple and straight-forward relationship to the principal frontage street, the orientation and general level of comfort of the building for site users is improved and thereby the economic success and vitality of Downtown.

- Entrances should be clearly visible and directly accessible from the principal frontage street. If this is not possible, an architectural element such as a gateway or archway may be used to signify and indicate the entrance.
- Entry design should be in scale and character with the building and carefully integrated with the overall architectural approach.
- Details and finishing materials should avoid fakery and the application of imported themes and thematic elements especially at entryways.
- Entrances, universally accessible to people with mobility challenges should

be utilized.

Buildings stepped back at upper floors help reduce or eliminate the negative effects of taller structures by allowing the same view of sky and daylight as lower buildings, as well as reducing the visual impact of the upper floor.

The benefit of an extra floor can also be used to help sponsor an improvement to the public realm. This affords a balance between private benefit and public good.



Courtyards

It is important to add interest and adventure for those exploring on foot. Courtyards provide such an element and can enhance the urban experience.

- When a courtyard faces the street, minimum setback should be approximately 3 metres (10 feet).
- Private through-courtyards should have complimentary street furniture elements and paving materials similar to those on the public streetscape, to present a seamless relationship between public and semi-public space.
- The effects of lighting, alcoves and landscaping on personal safety should be considered.

Building Materials

The City does not wish to impose or prescribe the use of particular materials on buildings, however it is useful to establish criteria which encourage the use of certain materials to promote consistency and a cohesive presentation throughout the Downtown core.

- Locally produced high quality and authentic materials such as locally produced or manufactured concrete, wood, brick and stone should be used. Fake materials should be avoided.
- If stucco is to be used, cement stuccos are preferred as the look is more authentic and light reflective. Additionally, they are compatible with heritage buildings as a result of how they were traditionally made.

Colours

- Natural and locally inspired or derived colours are preferred. Ideally, the predominate colour palette will come from integrally coloured natural materials such as stone, wood and brick.
- Exterior paint colours for heritage buildings should conform to the historical colour palette developed by Benjamin Moore paints.
- The use of high intensity, black and fluorescent colours is strongly discouraged.
- Building trim and accent areas may feature brighter colours, including primary colours.
- The use of artificial materials (those that are made to appear as something they are not such as vinyl siding, mirrored glass, molded 'river rock'] is not

permitted.

- HardiPlank siding is permitted.

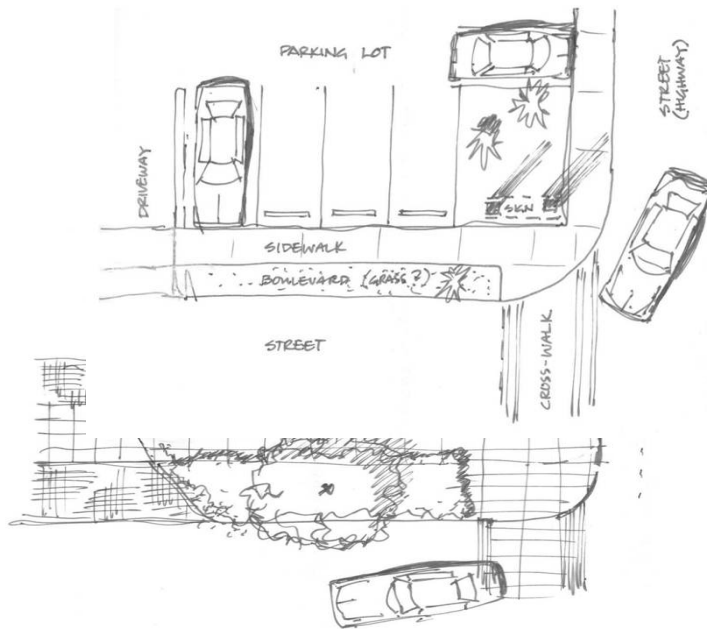
Surface Parking

As the need for parking is crucial to commercial success, surface lots have become a dominant feature in the urban landscape and therefore have a disproportionate influence on the visual character of Downtown. Every effort should be made to mitigate the impact of parking so as to correct the imbalance of the auto over the pedestrian environment.

- Parking behind or under buildings should be located:
 - Where this is not possible or practical, parking spaces should be provided at the side of buildings or as a last resort, located no closer than 4 metres from the front property line and behind screening.
- Parking to the property line shall not be permitted.
- Alternatively, remote parking (parking located off site but within easy walking distance (100 to 150 metres) should be allowed. Cash in lieu of providing parking stalls (Bylaw 1784) is another option for developers wishing to forego on-site parking.
- Lots (and cars) should be screened by landscaping and/or fencing. Fence material should be compatible with the exterior finishes of adjacent buildings.
- Parking spaces near pedestrian paths should extend 0.5 metres beyond the standards, to allow for car overhang. (standard stall length ranges from 5.5 to 5.7m).
- Parking lots of neighbouring developments should be linked with one another via pedestrian pathways or laneways.
- Parking layout should facilitate the safe movement of pedestrians by providing walkways separate from the traffic lane. Pedestrian routes should be designed to appear as conventional pedestrian sidewalks, giving priority to pedestrian movement within the lot.
- Tree planting and other landscaping features at intervals should be encouraged throughout the lot as their canopy provides shade and their height mitigates safety issues regarding sight lines.
 - The suggested standard is no less than one tree for every four stalls of 90 degree parking.
- Parking should conform to universal accessibility regulations.
- Design for maximum efficiency, including smaller parking stalls for compact cars to reduce the overall land requirements
- Top-shielded lighting should be used to minimize dispersion of light.
- Surfaces: whenever possible, permeable paving surfaces should be used, in conjunction with contamination traps, in order to minimize storm drain use and the effects of the run-off.
 - The use of concrete, preferred unit concrete pavers) made with

high-fly ash content is more ecologically sound than asphalt and therefore its use encouraged. In addition, its lighter colour is more suited to the hot Cowichan Valley climate as it absorbs less solar heat and reduces excessive heat radiation back into the atmosphere.

- Arbours, archways and pergolas can be used to highlight parking site entries.
- Security and safety should be planned for though good parking lot design:
 - Windows and public areas should be located to allow for passive surveillance of parking areas.
 - The creation of recessed entrances, alcoves or other enclosures commonly associated with garbage areas should be avoided.
 - Lighting in parking lots should not be higher than 5 metres from the ground (see lighting section).



- Parking lot right against sidewalk
- Sidewalks along side of moving traffic
- Driveway crosses over sidewalk
- Large corner radius (encourages fast turns)
- No relief/refuge at corner for pedestrians

Less like this

- Planted Boulevard between sidewalk and traffic
- Corner 'bulge' for more planting and trees
- Special paving for pedestrian areas
- Bench and refuse container
- Planted screen in front of parking (if parking must be at "street edge")

Access

Cars are welcome in Downtown, however, poorly designed parking and driving lanes will undermine its appearance and safety and pedestrians will disappear. Good parking and access design will tame traffic, increase predictability and reduce conflicts.

- Building any new driveway accesses that cross sidewalk should be avoided; where possible, use rear lane access.
- Where driveway access already exists or is necessary, the driveway should be paved with special paving materials (e.g. brick, stamped concrete).

- Large expanses of asphalt are to be avoided.
- A rumble-strip of paving (minimum of 2.5 metres wide for the width of the driveway) across the driveway should be located in the private property side of the sidewalk, to warn drivers of the pedestrian sidewalk crossing. The strip should have a distinct texture and look that is complimentary to the pavement designs of the City square, with mortared stone or heavily textured concrete.
- Where the sidewalk crosses the driveway, the sidewalk should be maintained at grade. It should never be discontinued and, if possible, should not dip down to accommodate an apron.
 - Where possible, the apron should be on the boulevard. Where this is not practical, there should be paved strip on the driveway access on both sides of the sidewalk.
- Loading and delivery areas shall be confined to the rear of buildings.
- Access points for corner sites should be located as far from the intersection as possible.

This



Not this



Structured Parking

- Where there is underground or structured parking, the sidewalk should be maintained at grade and the pavement should be marked to alert both drivers and pedestrians of the up-coming intersection.
 - Attention to sightlines (both driver and pedestrian) is especially important in this compact urban environment.
- Shared access between landowners is encouraged.
- Designing for personal safety (see **Appendix 9**) and crime prevention (CPTED Principals) is of paramount importance
 - This includes issues associated with appropriate levels and locations of lighting.
- Screening of service areas and unsightly equipment and machinery (air systems etc.) should be attractive and contribute to a feeling of safety.
- The exterior design should be integrated architecturally to look like a commercial building rather than institution or warehouse.

- Designs should pay attention to the aesthetics of parking infrastructure details such as ticket booths.

Signage

Storefront signs contribute to the form and character of a community. Elements such as: continuity in the number of signs per location, orientation, size, style and materials, help create a cohesive identity for the downtown, allowing customers to easily identify their destination as they circulate the core.

- All signage must conform to the provision of the City's Sign Bylaw.
- Signs should complement the architectural design and materials of the buildings and the adjacent landscape.
- Applicants must provide a 'sign plan' which identifies the location and style of the various signs, illustrating consistency in signage throughout the development.
- Building identification is encouraged, for the benefit of both pedestrians and drivers, particularly at street corners. Reverse lit design (*see inset*) is preferred. Back lit signs shall not be permitted.
- Signs can be printed onto awnings but the lettering must be modest in size and carefully integrated into the scale of the canopy. The intended viewing audience for such a sign, is the pedestrian across the street, or the slow-moving driver.

Canopy Design

Canopies provide interest and diversity to the streetscape as well as vital shelter from the elements. Often canopies and awnings are an after-thought - installed after the building has been designed and built. This is unfortunate.

- Canopies and awnings should be intentionally designed as an integral part of the architecture.
- Canopies shall not be back lit.
- Barrel awnings should be avoided.
- Fabric colours should not be garish, rather subdued and complimentary to the surrounding built and natural environment.

Public Art

The private realm offers an excellent opportunity to enrich the visual experience, attract attention and expression as well as support existing public art (totem poles and some mural paintings) in the public realm. Public art promotes investment, community ownership, and pride.

- Any new development or redevelopment shall incorporate public art into its design. (See Section 8.3.)
- Accommodate external murals (two dimensional).
- Sculpture installations are strongly encouraged (three dimensional).
- Art installed in private lobbies should be visible from the street, when possible. The inclusion of artworks into the design enhances both the private development and the public realm.

Lighting

Adequate lighting will result in increased safety by illuminating paths for pedestrians, making pedestrians visible to drivers and generally discouraging crime. In addition, better lighting will encourage more walking at night, resulting in improved health and more vibrant street life after dark.

- Lighting standards of a more human scale shall be encouraged (3-4 metres above the ground).
- High level lighting is not necessary in the core, nor should it be allowed.
- Ensure pedestrian walkways and vehicular access points are well and warmly lit, including any cut-through paths or alleyways that are created on a site.
- Lighting that results in glare into adjacent residential properties should be avoided.
- Overhead wiring should be buried or relocated where possible.
 - Minimize the number of hydro lines crossing the street.

Landscaping

Investment in landscaping will have profoundly beneficial results. The City understands that the imperative to make Downtown 'greener' is both a public and private responsibility.

- Every development shall plan and maintain substantial areas of small and large shrubbery and trees.
- Even in zero lot-line situations, some form of vegetation shall be considered as part of every commercial development.
- Tree installations should be coordinated with the City's Public Works department.
- Plant species should be indigenous or compatible and should require only nominal seasonal watering. See the City's Planting Plan (Appendix 10) to ensure the development landscaping plan is compatible and complimentary.
- Columnar trees should be reserved for wide areas in the public realm such as boulevards and parking lots to create shade.
- Trees and other planting which have less invasive roots are desired.
- Landscaping should be designed to maintain sight lines for personal safety, and to avoid physical obstructions for people with disabilities.
- A Landscape Plan, developed by a certified Landscape Architect, should be submitted as part of the development application, to ensure appropriate, interesting and sustainable landscaping is installed.

Vacant Sites

Neglected, vacant sites leave a negative first impression. This is exacerbated by garbage, graffiti and vandalism.

- Temporary fencing should be avoided and all perimeters of private properties should be treated as determining elements of the public realm. Ambient lighting for safety and visual interest should be included.
- Sites left undeveloped for an extended time shall be landscaped or in some way mitigated to avoid looking as though they are abandoned and uncared for.

3 – Highway 1 Corridor DP Area

12.4 DPA 3 – HIGHWAY 1 CORRIDOR

Form and Character/ Revitalization

Category

Justification

The justification for this designation is to help create an economically viable, safe and beautiful gateway corridor that effectively balances the Highway's chief function, moving vehicles through town safely and efficiently and improving access to businesses by all modes of transportation. In addition, the guidelines will ensure that Council has the ability to secure necessary information and establish conditions for developments along the Highway Corridor (See Map 2) by way of building form and character as well as improvements to the public right of way.

Objective

The City wishes to encourage high quality, thoughtfully placed and positioned development along the Corridor, so that the Corridor still functions as a highway, but presents as a vibrant mainstreet, typical of a busy urban centre. Travel movements, by all modes, are improved by:

- Consolidating driveways
- Sharing parking lots
- Improving cycling and walking facilities including crossings
- Providing a buffer between the roadway's moving traffic and the sidewalk
- Improving crossing facilities
- Installing a boulevard and corner bulges to reduce the vast feel of the expansive roadway.

The 'mainstreet' feel can be achieved by bringing buildings close to the street, widening sidewalks, creating areas for social interaction, and designing the ground floor commercial areas to support window shopping, thereby encouraging more 'walk-by' traffic.

Application

Where some element of the design does not comply with a guideline, a justification stating the divergence and the reason shall be made. The City may diverge from the guidelines where a compelling rationale, which preserves the intent of the guidelines, is supplied.

Variations may be considered where the intent of the variance is to create an improved building envelope, minimize environmental impact, create a better relationship between and among buildings or where a setback is adjacent to park land or existing uses where the impact of the variance(s) being sought relative to the variance would be minimal or minimized through screening or a significant change in elevation.

Guidelines

The following guidelines are specifically applicable to the area of the Highway Corridor identified as DP -2 (See Map 2).

Applicants should provide a checklist or statement indicating how their proposal complies with these guidelines. Where some element of the design does not comply with a guideline, a justification stating the divergence and the reason should be

made. Council may diverge from the guidelines where a compelling rationale that preserves the intent of the guidelines is supplied.

Design of the Public Realm

The design guidelines for private property are informed by the vision for the public realm. The following guidelines express the vision for the Highway Corridor:

- Sidewalks along the corridor shall be 3m wide to match the scale of the expansive roadway. Where appropriate, the sidewalk and building setback can present as one wide pedestrian area, where retail goods and café tables can be placed, to animate the area.
- A landscaped buffer zone with trees and other landscaping will soften the impact of the moving traffic along the Highway.
 - Where right of way is limited, a reciprocal easement with building owners can be negotiated, that allows the sidewalk to be placed on private property leaving room for green space.
- The corridor shopping area's walkability is further enhanced by a series of pathways which wind in between buildings, and connect to adjacent uses, creating lanes, alleys and short-cuts, mitigating the effects of large buildings and block faces.
- Markers, landscaping materials and other creative materials help to direct people and encourage exploration, rather than relying too much on signage and simple wayfinding.
- Nodes (concentrated and cohesive areas of activity or commercial enterprise) are established and celebrated throughout the corridor; paths connect and intersect with them and places are created – people meet, pause, sit and encounter others in the community. This shall include the installation of benches or other seating/resting areas, garbage cans, public art, etc.
- Landmarks such as public art, interesting landscape features, even buildings, are located in special places to help orient people to various features of the area and to provide identifiable places for people to rendezvous.

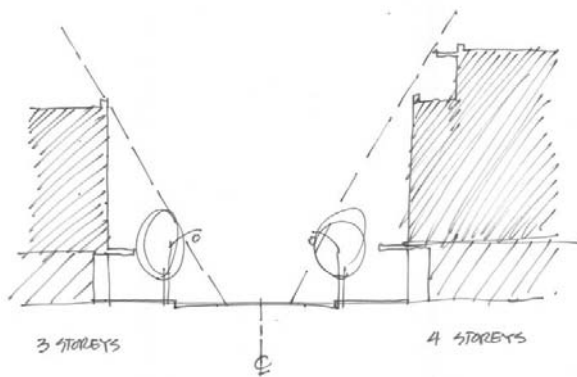


This public realm design is appropriate for a major corridor with high volumes and heavy traffic. Sidewalks are effectively widened by setting back buildings to allow for an expanded public realm that is animated by way of the creation of an outdoor room where goods are displayed and cafés put out seating. Pedestrians are further buffered by way of a landscaped boulevard and significant trees

Building Form, Siting, Height and Massing

The siting of buildings can define the relationship between the public street and a private development. The location and placing of buildings within their sites can help to define much needed edges and distinguish the area as a unique 'place'.

- A build-to line to guide the placing of buildings and other significant elements of private development should be established. Each building and location will present a unique set of design imperatives and the line should therefore be located through careful study and concept development. As a general principle, the siting of the building should provide a defined and consistent street edge that is inviting to people.
 - This definition will give three-dimensional form and a significant presence to the street space as well as to the buildings and their commercial occupants.
- Moderately tall buildings are appropriate for this area due to the width of the roadway - a step back or screening above the 3rd floor shall be used.



Stepped back upper floors help reduce or eliminate the negative effects of taller structures by allowing the same view of sky and daylight as lower buildings, as well as reducing the visual impact of the upper floor.

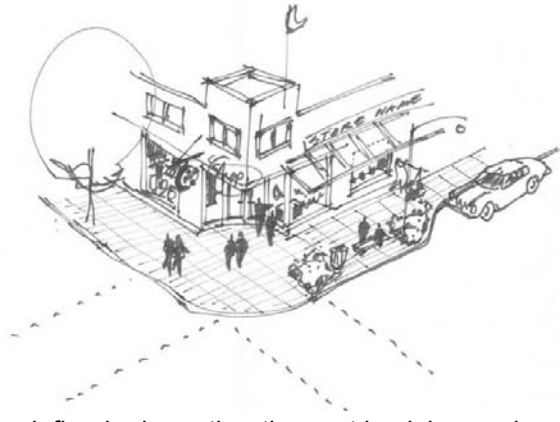
The benefit of an extra floor can also be used to help sponsor an improvement to the public realm. This makes a balance between private benefit and public good.

- Where a building is located at a corner intersection, a dominant, defining vertical building is preferred. Therefore, taller massing could be accommodated and would not require stepped storeys.
- Gathering places, corner seating areas, etc Corner features are encouraged to express their unique location.
- The strip mall appearance of a long, continuous, one-story building shall be avoided.
- Monotonous uniformity is not desired.
- The longest building face need not be parallel to the public street.

Less like this



More like this



- Buildings should be brought to a defined edge rather than set back by varying amounts. Where buildings are set back, they shall not have parking between their front façade and the street, rather hard and soft landscape treatment or other element.
- Setbacks at corner locations should be large enough to permit landscaping, pedestrian amenities and other interesting features such as artwork. These are also good settings for gateway marking.
- When gas station sites are redeveloped, the building shall be brought forward, with the pumps and parking set back (reverse of the common configuration).
- When car dealerships are redeveloped, the building shall be brought forward, with a maximum of a single row of vehicles perpendicular along the frontage.
- The City may approve variances where the siting of buildings can be shown to lessen environmental impact.



An example of a gas station that orients to the pedestrian realm, by way of low, plinth signage, strong landscaping, reduced number of driveway accesses and orienting the building to the street.

Architecture

It is difficult to prescribe good design. Both the prescription of some elements and the prohibition of other ones could inhibit the necessary creative responses to architectural and site planning problems. The following guidelines are just that and are intended more to provide a checklist of considerations, rather than directives to be slavishly followed or literally applied.

- Developers shall give a higher level of attention to the architectural design of their buildings, to replace the existing utilitarian and generally

unremarkable buildings currently in place along the Corridor.

- Large expanses of featureless walls shall be avoided.
- False fronts should be avoided. Materials should be used consistently and in unison so that all aspects of the building are considered to be in public view.
- The material and finish of retaining walls, fences or other architectural screening devices should be composed with those of adjacent buildings.
- Leaving excessively wide gaps between buildings should be avoided as this interrupts the definition of the street edge and diminishes the streetscape's appearance. Both built form and landscape elements can be used to create a defined street-wall.
- The traditional technique of retail and mixed commercial storefronts should be used to encourage street continuity and casual window-shopping along the sidewalk.
- Protection for pedestrians from the elements should be provided using canopies, arcades and windbreaks, particularly at building entrances, along storefront facades, and at transit stops.

Screening

- Using berms, fences or landscaping, visually separate commercial rear yards and service areas from adjacent and nearby residential buildings.
- Service areas should be incorporated into the building and site design and screened from view.

Roof Design

- Exposing rooftop or ground-mounted utilities to views from nearby buildings should be avoided. The sound, heat and light that may originate at mechanical equipment should also be considered. Negative impacts should be mitigated.
- Roofs should be considered as useable outdoor space and made accessible from inside buildings when possible and appropriate.
- The roof of every building should be considered as visible to other buildings as the walls and windows. Roof colours and materials that imitate a material they are not should be avoided.
- Traditional roof forms intended for low building types should be avoided on higher buildings (i.e. gabled or hipped design).

Windows

- Mirrored glass or other opaque materials shall be avoided at street level.
- Inset rather than flush windows should be encouraged.
- Mimicry of heritage windows should be avoided.

Personal Safety

- The effect of the design of the building on individual safety should be considered, e.g. recesses, dark alcoves, hiding spots and isolated areas. The *Checklist for Safety Planning and Design* in Appendix 9 should be

referred to.

- The basic principals of Crime Prevention through Environmental Design (CPTED) should be incorporated.

Building Entrances

A properly placed entrance enhances the role of the streetscape by orienting towards the street, rather than only the parking lot. This makes pedestrian use more convenient and contributes to the human scale of the Corridor.

- Entrances shall be clearly visible and directly accessible from the principal frontage street. If this is not possible, an architectural element such as a gateway may be used to signify and indicate the location of the entrance.
- Entry design should be in scale and character with the building, and carefully integrated with the overall architectural approach.
- Details and finishing materials should avoid fakery and the application of imported themes and thematic elements especially at entryways.
- Entrances should be universally accessible to persons with disabilities.

Less like this



More like this



Building Materials

The City does not wish to impose or prescribe the use of particular materials on buildings, however it is important to the creation of an interesting and inviting City gateway, that buildings have some architectural merit which includes consideration of colour and material integrity. It is useful therefore, to establish criteria which encourage the use of certain materials.

- As much as possible, locally produced materials should be used.
- High quality and authentic materials such as brick (Brownsey Block) concrete, stone should be used and fake materials avoided.
- If stucco is to be used, cement stuccos are preferred as the look is more authentic and light reflective. Additionally, as a result of how they were

traditionally made, they are compatible with heritage buildings. Stucco shall not be the predominant feature.

- Natural and locally-inspired or derived colors are preferred. Ideally, the predominant colour palate will come from integrally-colored natural materials such as wood, stone and brick.
- The use of vinyl siding and mirrored glass shall not be permitted.
- Use of artificial materials (those that are made to appear as something they are not) is not permitted.

Vacant Sites

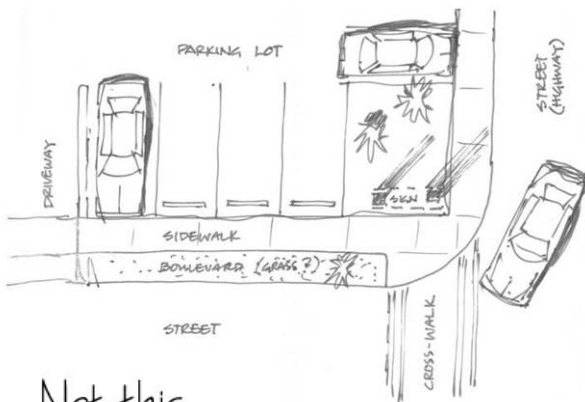
Neglected, vacant sites leave a negative first impression. This is exacerbated by garbage, graffiti and vandalism.

- Temporary fencing should be avoided and all perimeters of private properties should be treated as determining elements of the public realm , Ambient lighting should be included for safety and visual interest.
- Sites left undeveloped for an extended time shall be landscaped or in some way mitigated to avoid looking as though they are abandoned and uncared for.

Surface Parking

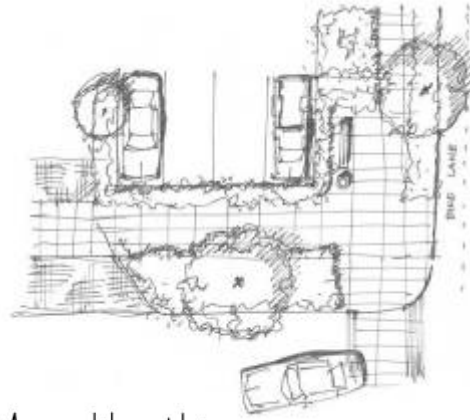
Parking lots are a commonly overlooked component of urban design yet the amount and location of land dedicated to parking makes them a dominant feature of the landscape. Every effort should be made to correct the imbalance between the vehicle and pedestrian environments.

- Parking should be located behind or under buildings. Where this is not possible or practical, parking spaces should be provided at the side of buildings, or as a last resort, located no closer than 4 m to the front property line and only if heavily landscaped.
- Lots (and cars) shall be screened by landscaping and/or fencing. Fence material must be compatible with the exterior finishes.
- Parking lots adjacent to pedestrian paths should extend 0.5 m longer than the standard, to allow for car overhang (standard stall length ranges from 5.5 to 5.7m).
- Parking layout should facilitate the safe movement of pedestrians by providing walkways separate from automobile traffic.
- Pedestrian routes should be clearly marked and be parallel to traffic aisles, cross roadways at the fewest possible points and be designed as conventional pedestrian cross-walks.
- Tree planting and other landscape features at intervals throughout parking lots shall be encouraged (i.e. to provide canopy to bring shade and to mitigate safety issues regarding sight lines). There should not be less than one tree for every four stalls of 90 degree parking.
- Universal accessibility regulations for parking should be used.
- Handicapped spaces should be located closest to the building entrance.
- Designing for maximum efficiency, including smaller parking stalls for compact cars to reduce the overall land requirements should be utilized.
- Top-shielded, lighting should be used to minimize light dispersion.



Not this

- Parking lot right against sidewalk
- Sidewalks against moving traffic
- Driveway 'over' sidewalk
- Large corner radius (encourages fast turns)
- No relief/refuge at corner for pedestrians



More like this

- Planted Boulevard between sidewalk and traffic
- Corner 'bulge' for more planting and trees
- Special paving for pedestrian areas
- Bench and refuse container
- Planted screen in front of parking (if parking must be at street edge)

- Whenever possible, permeable paving surfaces shall be used to minimize storm-water runoff and reduce storm sewer use.
- The use of concrete (preferred unit concrete pavers) with high fly ash content is more ecologically sound than asphalt and is encouraged. The lighter colour is more suited to the hot Valley climate as it absorbs less heat avoids the excessive solar heat that is radiated back into the atmosphere.
- Security and safety should be planned for through good parking lot design.
 - Locate windows and public areas to allow for passive surveillance.
 - Avoid the creation of "hiding spots" using gating or lighting recesses and alcoves and securing garbage bins.
- Lighting in parking lots should not be higher than 5 m from the ground.



Less like this

Underground /structured Parking

- Where there is underground or structured parking, the sidewalk should be maintained at grade and the pavement should be marked to alert both drivers and pedestrians of the up-coming intersection.



More like this

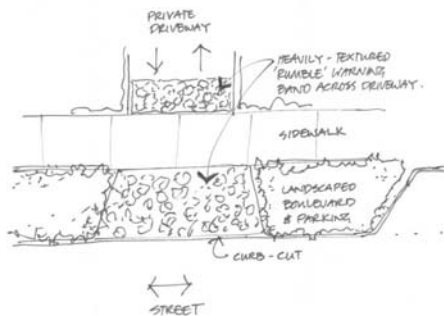
- Attention to sightlines (both driver and pedestrian) is especially important in this compact urban environment.
- Special attention to personal safety considerations, lighting, and screening (as described under previous headings) is of utmost importance when designing parkade structures.
- The design and aesthetics of the parking structure and any supplementary elements (ticket booths etc.) should be integral to the overall architecture of the building and not look like a parkade.

Vehicle Access and Parking

The pedestrian domain, the building site and the roadway must be designed with an integrated approach, ultimately resulting in a reduction for parking spaces and driveway accesses. Ideally, a customer on the Highway Corridor should be able to park once and feel comfortable walking for several blocks in either direction to access shops and services. A reduction in the number of access points reduces turning movements on the throughway, reducing conflicts and improving the function of the roadway.

Shared Access/ Shared Parking

- Neighbouring landowners are strongly encouraged to negotiate reciprocal agreements to share driveways and parking areas.
- An alternative would be to negotiate a shared lot that would serve the collective customer. This creates a similar business dynamic to a downtown, where customers park once and greater walk-by traffic is generated.
- Lots should be linked to each other with internal driveways and pedestrian access routes. These joined lots should be designed as if they were narrow, calmed lanes carrying local traffic. This approach would serve to increase internal circulation and minimize local traffic interaction with the Highway.
- Parking aisles should have well-marked pedestrian crossings, special lighting and, where space allows, sidewalks. In other words, they should be treated as small-scale, mixed- use streets and lanes.



Design driveway accesses with pedestrians in mind, by giving them the priority - with the curb flare on the boulevard, and a continuous uninterrupted sidewalk (no dip).

Different paving materials can be used to alert drivers of the sidewalk crossing and add interest and an aesthetic appeal to the hard landscaping.

Signage

Signage along the Corridor is too great in number, size and illumination, resulting in ineffective messaging, clutter, poor visibility and an unattractive viewscape. Signage should be designed for vehicular traffic, traveling at 50 km/h – not the high speeds associated with a freeway. The signs must also be oriented towards the pedestrian, if the vision for a 'mainstreet' is to be achieved. Sign effectiveness

relates not to size and quantity, but rather the design of the illumination and the location.

By regulating signage, business are put on an equal, but distinguishable footing and the cacophony of signs typical of highway frontages, is eliminated.

- All signage must conform to the provision of the City's Sign Bylaw.
- Signs should complement the architectural design and materials of the buildings and the adjacent landscape.
- Multi-tenant buildings must provide a 'sign plan' which identifies the location and style of the various signs, illustrating consistency in signage throughout the development.
- Ground-oriented, plinth-style freestanding signs are preferred to monument signs for shopping centres and multi-tenant buildings.
- Sturdy bases are preferred with associated landscaping – the area of which is greater than the sign face.
- Building identification is encouraged, for the benefit of both pedestrians and drivers, particularly at street corners.
- Reverse lit (*see inset*) design, is preferred.
- Canned, back lit signs are strongly discouraged.
- Acceptable types of illumination include: externally/indirectly lit, channel letters and neon (*see inset* for examples).

Not this



This



Canopy Design

Canopies provide interest and diversity to the streetscape, as well as shelter from the weather. Unfortunately, canopies and awnings are commonly an afterthought in the building design, resulting in an out-of-scale element that detracts from the architectural form.

- Canopy and awning design shall be integrated into the building design.
- Canopies shall not be back lit.
- Barrel awnings shall be avoided.
- Fabric colours should not be garish, rather subdued and complimentary to the surrounding built and natural environment.

Public Art

The cultural, ethnic and natural characteristics of a place are the key components to its image and identity. The most significant expression of a community's uniqueness

is in its visual arts, Private development can contribute to a common goal and benefit.

The presentation of art and sculpture along the Corridor presents a challenge, due, in part, to the excessive size and number of existing signs and the imbalance of scale where parking lots and roadways dominate the scene.

There are additional ways to draw attention to and build a tradition of public art, both within the development and outdoors along the Corridor.

- Accommodate external murals (two dimensional).
- Encourage sculpture installations (three dimensional).
- Install art in private lobbies that are visible from the street.
- Include artworks into the design, enhancing both the private development and the public realm.
 - Special focus on integrating art into the urban design of the public realm on corner lots.

Lighting

Although the roadway is adequately lit, the pedestrian realm requires consistent and organized lighting that is pedestrian oriented to address issues of visibility, safety and crime prevention.

- High level lighting shall be minimized due to adjacent commercial lighting and, if necessary, complemented with lighting standards of a more human scale (3-4 m above the ground).
- Pedestrian walkways and vehicular access points should be well and warmly lit, including any cut-through paths or alleyways that are created on a site.
- Lighting that results in glare into adjacent residential properties and to the sky should be avoided.
- Lighting in the public realm should be coordinated and perhaps of a consistent type, colour and quality.
- Overhead wiring in both private and public property should be buried or relocated away from the highly visible street. Where this is not possible, the distance between poles should be increased. Lines crossing the street should be avoided.

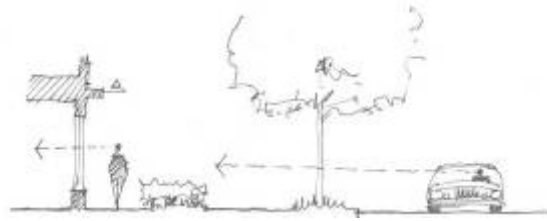
Landscaping

The City wishes to green the Corridor, both in the private and public realm, to reflect the Valley's lush countryside.

- Every development shall plant and maintain substantial areas of small and large shrubbery and trees.
- A minimum of 10% of a commercial site shall be landscaped.
- Tree species should be chosen in consideration of density and massing, and in conjunction with the design of the building.
- Plant species should be indigenous or compatible with the microclimate of the area. They should be planted to take advantage of local conditions and require only nominal seasonal watering (e.g. Katsura trees are not local, but they thrive on Vancouver Island, they provide interesting seasonal colouring

changes, and provide shade year round).

- Columnar trees/ bushes are appropriate for the private realm, especially closer to buildings. Canopied trees should be reserved for the public realm (boulevards, etc) and parking lots to create shade.
- Trees and other plants that have less invasive roots are recommended.
- A certified Landscape Architect should be consulted on every project to ensure creative, interesting, excellent landscaping designs, are developed and implemented.



Trees and shrubs can allow for visibility of shops, provided the canopies are high enough and the foliage is pruned below sightlines

4 – Other Commercial Areas DP Area

12.5 DPA 4 – OTHER COMMERCIAL AREAS

Form and Character

Category

Justification

Other commercial areas (sites outside of Downtown and the Trans Canada Highway Corridor) form an important part of the overall character of Duncan. Consequently, standards of care should be taken in the planning and design of these properties. A consistent standard for commercial development encourages owners to invest in their commercial properties, and can create a positive image for the City's commercial areas among residents and visitors.

Objective

The objective is to ensure that new commercial development:

- is compatible with surrounding land uses;
- complements the social and environmental goals of this Plan;
- is constructed to high standards, both material and aesthetic.

Guidelines

The following guidelines are specifically applicable to sites such as neighbourhood, service and tourism commercial developments which are not part of the Downtown or the Trans Canada Highway Corridor.

Applicants should provide a checklist or statement indicating how their proposal complies with these guidelines. Where some element of the design does not comply with a guideline, a justification stating the divergence and the reason should be made. Council may diverge from the guidelines where a compelling rationale that preserves the intent of the guidelines is supplied.

Local Context

The site design of commercial development is one of the most critical aspects of a successful project. Decisions made at the conceptual design stage have repercussions throughout the design development process.

- Architectural consistency within a commercial area, e.g. follow local development patterns (i.e. geometry of streets, open space and view corridors, common setbacks, streetscapes) is strongly encouraged. The continuation of such patterns should contribute to a unified visual appearance within an area.
- Compatibility with existing development with respect to the siting of buildings, exterior finish, design, scale, and height of buildings, landscaping and design of parking areas is encouraged.
- An environment that is safe, user-friendly, and visually appealing from a pedestrian perspective should be created.

- View corridors or vistas (e.g. between buildings, along/ from roadways, and to natural features such as Mt. Prevost and Mt. Tzouhalem, Somenos Marsh, and the Cowichan River) should be maintained, enhanced, or created.
- The character of neighbouring non-commercial properties should be respected to achieve some visual harmony and neighbourliness.

Transitions

Commercial areas can sometimes have negative impacts on adjacent areas. The orientation, scale, form, height, setback, materials and character of new commercial developments are controlled by development permit areas to ensure compatibility with the surrounding community.

- Buildings should be sited to ensure maximum privacy to adjacent residential properties.
- The impacts of noise, glare, shadows, and penetration into airspace on adjacent residential properties should be avoided.
- Effective transitions should be provided by a combination of the following methods:
 - fencing, combined with dense naturalized shrubbery or hedges;
 - landscaped earth berms;
 - dense shrubbery or hedges capable of impeding sound travel through to adjacent properties; and
 - trees that can grow to sufficient height to screen the commercial use from a 3 storey multi-family dwelling.
- Proposed future uses of adjacent properties should be considered in assessing the compatibility of proposed commercial developments in neighbourhoods.

Coordinate Building and Site Design

- Architectural design and building materials should be of a high standard to ensure a character of development that signifies quality, stability and permanence.
- Similar design characteristics, colours, materials and textures that are harmonious throughout, without being identical to separate buildings within a larger commercial complex should be used.
- The use of brick, finished concrete, architecturally faced block, stucco, or wood for exterior finishes, excluding roof treatments are encouraged. The use of untreated or unfinished concrete, metal, or aluminium as a final building finish is not encouraged.
- Monolithic structures (i.e. box stores) and long expanses of straight walls facing the roadway should be avoided. Visual interest should be created using variations in height, building orientation, roof treatment, and frequent window spacing to give the impression of small blocks. The maximum uninterrupted length of a building facing the public road must not be more than 15 metres before a major break.
- Large expanses of any one material should be avoided, unless effective architectural details are used to break up the visual monotony.

- All sides of a building should be consistent in detail and character.
- Elements should be incorporated into walls facing roadways and adjacent residential areas that add variety and vertical definition such as windows, entrances, and sloped roofs.
- Where building elevations are visible from adjacent roads or properties, these elevations should be finished and treated similarly to the front elevation.
- Buildings should be located close to the front lot line.
- Variations in the character of rooflines, sloping roof lines, gables and dormers should be utilized. Flat roofs are discouraged. However, other interesting roof treatments will be considered.
- Unsightly roof elements, including mechanical equipment and vents should be enclosed by roof parapets or other forms of solid screening.
- Protection from the elements should be provided through the use of awnings, roof or building overhangs. Coverings should be a minimum of 1.5 m and no higher than 3 m in height.

Screening and Landscaping

- Landscaping should be provided with the objective of providing:
 - An effective transitional buffer through the use of open space, landscaping and edge treatment, where practical, to protect the privacy of occupants of properties adjacent to residential development.
 - A consistent visual image between adjacent properties along the streetscape.
 - Low-height vegetation between adjacent driveways to mitigate the visual impact of paved surfaces.
 - Some effective screening at the time of planting.
 - Landscaped pedestrian walkways to and from buildings and parking areas.
 - An attractive streetscape to screen off-street parking, services, and storage areas, and to enhance the overall development:
 - All areas not covered by buildings, structures, and parking should be fully landscaped;
 - Natural vegetation should be retained where possible to enhance the character of the development and integrate it with the existing landscape;
 - Significant stands of trees, where present, should be preserved;
 - An underground irrigation system must be incorporated into landscaping except for areas left in a natural state;
 - Landscape screening must be provided along all property lines abutting neighbouring properties at least 1.5m high; and
 - Garbage containers and utility kiosks are to be screened by solid fencing or landscaping or a combination of the two.

- A solid decorative fence or landscaped strip/ screen not less than 1.5 m high composed of grass, earth berms, shrubs, trees, hedges, other vegetation, or a combination of these should be provided in the following areas:
 - along the property edge next to roadways;
 - between parking areas, roadways and buildings;
 - between different parking areas;
 - between buildings and parking areas; and
 - along rear and interior side lot lines adjacent to a zone which permits residential use.
- The use of indigenous plant species and species which may be considered drought resistant is encouraged in all landscaping.
- Existing trees should be maintained and enhanced by additional plantings wherever possible, allowing adequate exposure to business fronts.
- Landscaping should be designed to maintain sight lines for personal safety, and to avoid physical obstructions for people with disabilities.
- Landscaping should be designed to maintain sight lines for personal safety, and to avoid physical obstructions for people with disabilities.
- A landscaped screen, not less than 1m in width and not less than 1 m in height where more than 3 parking spaces are provided is required.
- All plant material and contractors' work should meet or exceed the standards of the BC Nursery Trades Association or the BC Society of Landscape Architects.
- The use of fences or retaining walls along the public road frontage should be avoided. Where fences or walls are provided, they should be no more than 10 m long without a break or jog, a maximum of 1.5 m in height, and architecturally detailed.
- Public art and street furniture should be incorporated.

**Loading Areas,
Utility and
Storage
Structures**

- Loading areas, utility and storage structures (including garbage receptacles) should be located in a safe and convenient location on-site (preferably not in any required front or exterior side yard setback), so that they do not impede vehicular or pedestrian traffic or sight lines and, where possible, these structures should be clustered.
- Utility and storage structures (including garbage receptacles) should only be permitted in landscaped areas when integrated with the landscaping in a manner that is unobtrusive, does not deteriorate the plantings and landscape material within the landscaped area; and does not interfere with sight lines.
- Loading areas, utility and storage structures (including garbage receptacles) should be screened from adjacent roads and residential properties either by decorative fencing or by landscaping, or a combination of the two, with a minimum height of 1.8 m. The use of chain link fencing is not encouraged.
- Garbage receptacles stored outdoors should be surrounded with a solid enclosure on all sides, that cannot be seen through, with a minimum height of 1.5 m.

- The storage of toxic, combustible or potentially hazardous material such as liquid petroleum products, fertilizers, herbicides and pesticides outside buildings is prohibited.
- Wiring (on-site and existing) should be placed underground, where possible.

Signs

- All signage should conform to the provisions of the City's Sign Bylaw.
- All signs should be coordinated architecturally with the overall design of buildings and landscaping. Multi-unit buildings should have unit signs of compatible size, arrangement and character.
- The use of fascia type signs (on building surfaces) and awning mounted signs is encouraged. Spot lighting is preferred to backlit signs.
- Variances may be permitted to allow signage constructed using tubular neon, provided that the signage is complimentary to the form and character of the commercial building, is in keeping with surrounding commercial development, and does not negatively impact neighbouring residential areas.

Surface Parking and Access

- Parking areas should be located away from the street, preferably at the rear, to create a more aesthetic and functional design.
- Safe and convenient access for cars to parking areas and people from cars to buildings should be provided. Parking areas should be designed with the following features:
 - close access to main building entrances;
 - clearly marked, well lit pedestrian routes;
 - appropriate signage to assist people in locating pathways and building entrances;
 - adequate lighting that eliminates dark or shadow areas; and
 - opportunity for casual surveillance from a number of locations.
- Access for vehicles should be separated from pedestrian walkways, provide safe separation distances from nearby road junctions and not encourage left turns onto or from roads of a collector status or higher where alternatives are available.
- On-site roadways should provide safe and convenient access for emergency and service vehicles.
- Disabled or drop-off/ pick-up parking should be located close to building entrances.
- Bicycle parking, preferably covered, should be provided.
- Vehicular access to parking, loading, storage, and refuse areas through residential areas (and abutting residential uses) is discouraged.
- Parking areas and internal access roads should be constructed using a permeable surface, alternatively other rainfall capture facilities (catch basins and landscaping) should be used to mitigate the environmental impact of the first 30 minutes of peak runoff flows (see also Policy 10.3.3).

- Variances for reductions in off-street parking requirements, may be permitted where the request for such variances is supported by a Parking Demand Study for the proposed use, prepared for the City of Duncan by a qualified professional. The Parking Demand Study may consider proximity to bicycle routes and public transit as mitigating factors in determining the demand for off-street parking.
- Concrete curbs, boulevards, and sidewalks should be provided along all road frontages.

Structured Parking

- Where there is underground or structured parking, the sidewalk should be maintained at grade and the pavement should be marked to alert both drivers and pedestrians of the up-coming intersection.
 - Attention to sightlines (both driver and pedestrian) is especially important in this compact urban environment.
- Shared access between landowners is encouraged.
- Design for personal safety (See Appendix 9) and crime prevention (CPTED Principals) is of paramount importance.
 - This includes issues associated with appropriate levels and locations of lighting.
- Screening of service areas and unsightly equipment and machinery (air systems etc.) should be attractive and contribute to a feeling of safety.
- The exterior design should be integrated architecturally to look like a commercial building rather than institution or warehouse.
- Designs should pay attention to the aesthetics of parking infrastructure details such as ticket booths.

Drive-through windows

Businesses may require drive-through windows as an important part of their service. Special care must be taken in site planning and locating drive-through facilities to avoid traffic congestion on-site and conflict with neighbouring properties.

- Drive-through windows and associated stacking lanes and equipment should be screened from adjacent properties and from adjacent public sidewalks.
- Adequate stacking length should be allowed for in vehicular circulation to avoid interfering with non-related pedestrian and vehicle movement.
- Screening and covering of drive-through windows should be integrated with the design of the building.

Shared Road Access With Neighbours

The amount of frontage devoted to vehicle access can be significant. Where neighbouring commercial developments each provide their own multiple access points, the street frontage becomes fragmented. This breaks the continuity of the sidewalk or safe pedestrian path along the street, and creates multiple conflict points between cars and pedestrians.

- Wherever possible, combined access to main roads with neighbouring commercial property should be sought and, where achieved, secured by way of a reciprocal access easement registered on title.

Storm Water Management

- Stormceptors™, or equivalent approved equipment, should be incorporated to remove oil wastes and sediments from storm water.
- Storm water discharges should be designed based on Best Management Practices as recommended in the publication titled *Urban Runoff Quality Control Guidelines for BC* (Ministry of Environment).

Lighting

- Sufficient lighting to ensure pedestrian and vehicle safety should be provided.
- Lighting should be designed to minimize the illumination of any adjacent residential properties.
- Lighting should be designed to minimize its impact on the night sky. Outdoor lighting is the main source of light pollution. To minimize this impact, outdoor lighting should be regulated to control the quantity, quality and direction of night lighting.
- Light standards should be in keeping with the overall development of the property.
- Building frontages should be well-lit to clearly identify the business. Ground level businesses are encouraged to utilize attractive display lighting to animate the streetscape.

Personal Safety

- The impact the design of the building has on individual safety e.g. avoid recesses, dark alcoves, the creation of hiding spots, and isolated areas, should be considered. The Checklist for Safety Planning and Design (Appendix 9) should be referred to.
- The basic principals of Crime Prevention through Environmental Design (CPTED) should be incorporated.

5 – Natural Environment DP Area

12.6 DPA 5 – NATURAL ENVIRONMENT

Protection of the Natural Environment - Its Ecosystems and Biological Diversity

Category

Application

This Development Permit Area applies to Protection Areas (including Indigenous Species, Raptor Habitat, Aquifer Protection, and Riparian Areas). These areas are shown on Map 4.

A development application may propose to vary the boundaries if it can satisfy the City that the natural features, functions and conditions of the area will be preserved, protected and/or enhanced by the proposed development design. Other land use regulations may be relaxed such as variances to setbacks, building height, parking requirements etc. (with the exception of the zoned use or the maximum allowable density) in consideration of better protection of the environment.

PROTECTION AREAS

Justification

Duncan is situated within one of the rarest ecological zones in Canada, occupying what was once grassland, savanna, vernal meadows and rock outcrops. The majority of the area is in a historic floodplain connected to the Cowichan River, forming one of its boundaries and providing a rich fisheries habitat. While dyking of the River has provided flood relief for the City, it has cut off many of the historic side channels. While Duncan, as an urban area, does not have a large number of significant natural, ecological or environmentally sensitive areas remaining, there are a number of areas of natural habitat and native vegetation that require protection from development. Development pressures continue to threaten these remaining areas.

Invasive species are causing problems in the many parts of the region. They need to be a priority because they have the ability to establish quickly and easily, and spread rapidly when introduced to a new site. Their effects can be devastating, permanently altering the landscape.

Many species of raptors (birds of prey) have been adversely affected by urban and rural land development in British Columbia. However, raptors can often coexist with people in human-modified landscapes if certain practices are adopted. Preserving and managing raptor habitats within urban and rural landscapes benefits more than just the birds. Many of the habitat features required by raptors add aesthetic and market value to real estate developments, and the presence of wildlife, including raptors, enhances the quality of life for residents.

The City of Duncan obtains its drinking water from the Lower Cowichan River aquifer, a natural underground water reservoir that provides excellent water quality. Contamination of the aquifer is of concern. For several reasons, the Cowichan River aquifer is particularly vulnerable: the groundwater lies only a few metres below the ground surface, which means that contaminants need to travel only a short distance through the soil to reach it; the layer protecting the groundwater from the upper surface consists primarily of highly permeable gravel and sand which allows rainfall to seep quickly through the pores of the coarse soil carrying contaminants from the

surface to the aquifer below.

Objectives

- To minimize the impact of development on all protected areas.
- To monitor closely, all phases of development in areas that could impact protected areas.

Guidelines

General (applicable to all Protection Areas)

Protection areas represent areas within this DPA that are of ecological value and that are susceptible to disturbance.

- Protection Areas should be maintained free of *development* and conserved in a natural vegetated state, except as allowed under a development permit issued in accordance with these Guidelines.
- Development permit applications must make every effort through site design to avoid or minimize encroaching into *protection areas* and to avoid impacts on their *natural features, functions and conditions*.
- Consideration will be given to requiring applicants to provide, at the applicant's expense, a report, certified by a professional with experience relevant to the applicable matter. Such information or studies should consider the effect of the proposed development on one or all of the following, according to their relevance for the specific proposal:
 - soil cover
 - slope stability
 - natural vegetation
 - fish, avian and wildlife habitat
 - natural drainage systems
 - quality and quantity of surface water and groundwater systems
 - adjacent land uses
 - archaeological sites
 - other environmental concerns
- Boundaries of protection areas should be physically located on the ground by an appropriately qualified professional prior to any site development or other disturbance.
- Temporary barrier fencing should be installed along these boundaries prior to any development activities, to demarcate the area of no disturbance.
- Where possible, protection areas should be protected through dedication, conservation covenant or other provisions acceptable to the Approving Officer.
- The City may require that the implementation of required environmental mitigation, restoration or enhancement measures approved under a development permit be monitored by an appropriately qualified professional.

Protection Areas – Indigenous Species

Guidelines

- A development permit must be applied for, and issued by the City of Duncan where the following conditions apply:
 - the retention of existing species (apart from invasive species) to minimize disruption to habitat; and,
 - the replacement of indigenous species where an area has been cleared.
- Replacement with indigenous species is preferred, particularly (but not limited

to) along the river corridor and near the aquifer. Plant species should be selected for drought resistance, and/or be native to the area, and have value to wildlife habitat.

- *The following list of examples of invasive species is provided as a guideline only – other species not listed may also be included on completion of an invasive species strategy by the City.*
 - Purple loosestrife
 - English ivy
 - Dalmatian toadflax
 - Scotch, English and Spanish broom
 - Invasive clematis
 - Traveller's joy
 - English hawthorn
 - Sweet vernal grass
 - Daphne
 - Oxeye daisy
 - Giant hogweed
 - Japanese and Himalayan knotweeds
 - Himalayan blackberry
 - Night flowering catchfly
 - Hedgehog dogtail
 - Orchard grass
 - Common velvet grass

Protection Areas - Raptor Habitat

Guidelines

- A development permit must be applied for, and issued by the City of Duncan for raptor habitat areas.
- Development should not adversely impact raptor habitat features, including nest sites, foraging areas, roosting sites and surrounding protective buffers.
- Development Permits will be required in these areas for activity including construction, subdivision, land clearing, land grubbing, soil removal, soil deposit and tree removal.
- Developers are required to conduct a thorough site assessment during the course of site assessment or development to identify nest trees and other habitat features. The location of known nest trees are shown in the *Cowichan Valley Environmental Planning Atlas*, but as this inventory is ongoing, there may be important trees which have not yet been identified and developers are required to notify the City of these nest trees.
- Nest tree protection areas may be required to: remain free of development and in a naturally vegetated state; be free of disturbance; and subject to noise control (e.g. blasting) during the breeding season.
- Reference should be made to the BC Ministry of Environment *Best Management Practices for Raptor Conservation during Urban and Rural Land Development in British Columbia*.

Protection Areas - Aquifer Protection

Guidelines

- A development permit must be applied for, and issued by the City of Duncan, prior to any of the following activities being established:
 - auto repair shops, car washes, dry cleaning establishments, laboratories, landfills, gas stations, manufacturing facilities, recycling facilities or waste treatment and storage facilities, and, transfer stations;
 - any business that involves the use and storage of chlorinated solvents, petroleum hydrocarbons, organic liquids and pesticides and

preservatives, or any other hazardous or regulated chemicals.

- Prior to obtaining approval to operate, the submission of an Aquifer Protection Plan, prepared by a recognized geotechnical expert in groundwater protection, must be submitted. The Plan should contain the following information:
 - (a) An assessment of the relationship of the proposed property development to the aquifer, using known geological, hydro geological and geotechnical information;
 - (b) An assessment of the potential for contamination and the expected results should an accident or leak occur;
 - (c) Identification of appropriate groundwater protection measures;
 - (d) Design and implementation of a groundwater monitoring program;
 - (e) Spill response, fire and contingency plans, including a contingency fund.
- During construction, the creation of any building piles and testholes drilled for geotechnical purposes must be reported to City authorities, and must be properly sealed upon completion, to mitigate the migration of contaminants to the aquifer.
- Landstripping, excavations, ditching and trenching should be minimized. Extensive excavation activity should be carefully conducted in consultation with a geotechnical engineer.

RIPARIAN AREAS

Definitions For the purposes of this Development Permit Area, the terms used herein have the same meaning that they do under the *Riparian Areas Regulation* (BC Reg. 376/2004).

Justification The Province of British Columbia's *Riparian Areas Regulation (RAR)*, under the *Fish Protection Act*, aims to protect riparian (waterside) habitat. Riparian Areas, associated with creeks and rivers are an important component of aquatic ecosystems and perform several key functions. Riparian areas filter contaminants from surface runoff and prevent erosion, shade surface waters and maintain cool water temperatures, provide wildlife habitat and corridors, and are an important food source for fish, aquatic invertebrates, birds and wildlife.

Their existence in a relatively undisturbed state helps to maintain a healthy, sustainable waterway. Disturbance of a riparian area may jeopardize delicate ecosystems and may lead to potential land erosion, slope instability, and flood risk. This Development Permit Area aims to restrict activities within the riparian area for the purposes of habitat protection, minimizing erosion and sedimentation and associated nutrient enrichment downstream to maintain long-term waterway health.

Applicability

The Province of British Columbia's *Riparian Areas Regulation (RAR)* requires that residential or commercial development as defined in the *RAR*, near freshwater features, be subject to an environmental review for:

- (a) a 3:1 (vertical/ horizontal) ravine less than 60 m wide, a strip on both sides of the stream measured from the high water mark to a point that is 30 m beyond the top of the ravine bank, and
- (b) a 3:1 (vertical/ horizontal) ravine 60 m wide or greater, a strip on both sides of the stream measured from the high water mark to a point that is 10 m beyond the top of the ravine bank.

Guidelines

- A development permit must be applied for, and issued by the City of Duncan, prior to any of the following activities occurring in a Riparian Assessment Area, where such activities are directly or indirectly related to existing or proposed residential or commercial land uses in any Zone or Land Use Designation:
 - (a) removal, alteration, disruption or destruction of vegetation;
 - (b) disturbance of soils;
 - (c) construction or erection of buildings and structures;
 - (d) creation of nonstructural impervious or semi-impervious surfaces;
 - (e) flood protection works;
 - (f) construction of roads, trails, docks, wharves and bridges;
 - (g) provision and maintenance of sewer and water services;
 - (h) development of drainage systems;
 - (i) development of utility corridors;
 - (j) subdivision as defined in Section 872 of the *Local Government Act*.
- Prior to undertaking any of the development activities listed above an owner of property within the designated area should apply to the City of Duncan for a development permit, and the application should meet the following guidelines:
 - (a) A qualified environmental professional (QEP) will be retained at the expense of the applicant, for the purpose of preparing a report on the riparian area pursuant to the *RAR Assessment Methodology* guidebook. The report will be submitted to the Ministry of Environment, Fisheries and Oceans Canada and the CVRD;
 - (b) Where the QEP report proposes a Harmful Alteration, Disruption or Destruction (HADD) to fish habitat pursuant to Section 35(2) of the *Canada Fisheries Act*, the development permit shall not be issued unless the HADD is subsequently approved by Fisheries and Oceans Canada. In order to apply for a HADD, the City of Duncan would have to express its support in principle for the HADD, and identify the context (from the QEP report);
 - (c) Where the QEP report describes an area designated as Streamside Protection and Enhancement Area (SPEA), the development permit will not allow any development activities to take place therein, and the owner will be required to provide a plan for protecting the SPEA over the long term through measures to be implemented as a condition of the development permit, such as:
 - a dedication back to the Crown Provincial,
 - gifting to a nature protection organization (tax receipts may be

- issued),
 - the registration of a restrictive covenant or conservation covenant over the SPEA confirming its long-term availability as a riparian buffer to remain free of development;
- (d) Where the QEP report describes an area as suitable for development with special mitigating measures, the development permit will only allow the development to occur in strict compliance with the measures described in the report. Monitoring and regular reporting by professionals paid for by the applicant may be required, as specified in a development permit;
- (e) If the nature of a proposed project in a riparian assessment area evolves due to new information or some other change, the QEP will be required to re-assess the proposal with respect to the SPEA;
- Wherever possible, QEPs are encouraged to exceed the minimum standards set out in the *RAR* in their reports.

6 - Hazard Lands DP Area

12.7 DPA 6 – HAZARD LANDS

Category	Protection of development from hazardous conditions
Justification	Natural hazards, such as floods and steep slopes can pose a risk to life and property.

Steep Slope Areas

Steep slopes are identified as land with 30 degrees incline or more, lands within 30 m of undeveloped slopes with gradients exceeding 50% and all land within 30 m of developed slopes with gradients exceeding 30%. These areas are identified generally in Map 3. This mapping is developed from map contours and site specific measurements prior to development may be required. Developing on steep slopes can create erosion problems, excessive storm water drainage, groundwater management concerns, and other environmental and visual impacts, particularly if tree cover is substantially altered. Protecting these slopes in the course of development is important to the environment. Conventional detached residential developments located on steep slopes are typically very disruptive on steep slopes given the densities that need to be achieved. It is also very difficult to retain vegetation on the slopes. For this reason, the City supports the use of housing forms that concentrate development in less sensitive parts of steeply sloped areas, leaving a significant portion of the land in a relatively undisturbed state.

Flood Areas

Flooding is a potential hazard, in particular along the Cowichan River. Flood areas may be unsuitable for development without putting life and property at risk. The measure of risk is calculated by the Provincial Government and is based on a 200-year flood event. These flood zone areas are indicated on Map 3. Lands not shown on this schedule but adjacent to watercourses, may also be subject to flooding. Reference to the BC Ministry of Environment flood plain mapping and/or site-specific elevations may be required to determine if there is a risk of flooding prior to development approval.

The hazard area designations should not be interpreted as prohibitions on all development activity, but as an identification of areas where professional geotechnical assessment and specific development standards are required.

Guidelines

General

Development Permits will be required in these areas for activity including construction, subdivision, land clearing, land grubbing, soil removal, soil deposit and tree removal. The hazard area designations should not be interpreted as prohibitions on all development activity, but as an identification of areas where professional geotechnical assessment and specific development standards are required.

- Prior to any development or alteration of land, a geotechnical engineering report must be prepared by a qualified professional engineer with experience

in geotechnical engineering and, preferably also with experience in hydraulic engineering. The geotechnical engineering report should include:

- A topographic and geomorphic description of the site and a statement as to which type of natural hazards may affect it.
 - A review of previous geotechnical studies affecting the site and/or engineering work in the vicinity.
 - An assessment of the nature, extent, frequency (probability) and potential effect of the hazard including a description of the scientific methodology used to define these parameters. The methodology should be described in sufficient detail to facilitate a professional review of the study of necessary.
 - Proposed mitigative works (if any, including construction and maintenance programs for such works) and/or actions designed to prevent hazardous occurrences. Certificates of approval are required on all constructed works for which the engineer is responsible.
 - An assessment of the effect of the mitigative work in terms of its ability to reduce the potential impact of the hazard.
 - Any other recommendations which the qualified professional engineer believes appropriate.
- No development or alteration of land will occur where the report by the qualified professional indicates that a hazardous condition would result.
 - Planning for the retention of significant stands of trees is strongly encouraged.
 - In the absence of a geotechnical engineering report, no development or alteration of land will be permitted on the escarpment or within 30 m of the top of the ridge or the base of the slope.

Steep Slope Areas

- No unnecessary disturbance to the steep slope shall be permitted.
- Existing vegetation should be maintained to control erosion and protect banks. Any access improvements on the steep slope such as footpaths and stairways should be constructed so as not to disturb the slope or other natural slope drainage.
- No significant excavation or filling should be undertaken, nor any building or permanent structure of any kind whatsoever should be erected, constructed or placed in those areas subject to bank instability or damage from bank instability.
- Lot configurations and building designs should incorporate the topography rather than relying on creating large, flat lots.
- Buildings and structures should be sited in accordance with building setbacks and other requirements, as determined by a professional engineer, to avoid those areas subject to unstable slopes.
- Building heights and roof forms should conform to topography and minimize visual impact.
- Special natural features such as rock outcroppings, significant trees, watercourses and ridgelines should be protected.
- Provision should be made and works undertaken to provide for the disposal of

surface run-off and storm water currently flowing over the crest of the slope and which may stem from further development. Such works shall be required to divert drainage away from those areas subject to sloughing.

- Controls on erosion during the construction phase, and measures to mitigate erosion on the finished development should be encouraged.
- The desire for views should be balanced with the need to maintain vegetation.

Flood Areas

- New residential development will be discouraged within designated flood plains. Where no alternative exists and/or where residential development is currently allowed within the flood plain, structures should be flood proofed to standards specified by the BC Ministry of Environment.
- Lands subject to flooding should, where possible, be left in a natural state, or used for parks and open space recreation.
- The City will discourage filling within designated flood plains due to the cumulative impact that such works may have. Where filling cannot be avoided, it will only be permitted when it is shown that the drainage of other lands is not affected.
- On-site storm water management systems will be encouraged throughout the City to reduce potential flood impacts.
- Where a flood plain setback from a designated watercourse renders a property totally undevelopable, the setback may be reduced provided that: a geotechnical report from a professional engineer certifies that the land may be used safely for the intended use; environmental factors such as building siting, placement of fill, soil disturbance, planting and maintenance of vegetation have been considered; a Safe Harmless Covenant is registered in favour of the City.
- A flood control program was initiated in the 1980's for the lower reaches of the Cowichan River. Various reports and studies have been undertaken to assess and design the appropriate measures (i.e. dicing). Flood hazard mitigation measures, including land uses restrictions, within the Cowichan Estuary shall be undertaken in accordance with the Cowichan Estuary Environmental Management Plan, 1992.

7 – Development Approvals Information Areas

12.8 DEVELOPMENT APPROVAL INFORMATION AREAS

Designation	The entire area within the City of Duncan is established as a Development Approval Information Area (DAIA).
Justification	The <i>Local Government Act</i> provides local governments with the authority to establish DAIA's. The City of Duncan wishes to use this authority for proposed major developments that may have an appreciable impact on natural conditions, surrounding properties and the character of the neighbourhood.
Objectives	The intent of establishing this DAIA is to ensure that appreciable impacts of proposed major developments are identified and documented as part of the development review process and to provide the City with complete information to properly assess and mitigate conditions caused by that development. In the event that appreciable negative impacts are identified, the City may request certain mitigations from the applicant to improve the proposal and minimize potential negative impacts on neighbouring lands.
Guidelines	<p>The City may require applicants to provide the information on the following to minimize the effect of development on lands undergoing development and adjoining lands, especially with respect to siting of roads and driveways, traffic, potential erosion and water drainage problems:</p> <ul style="list-style-type: none">• transportation patterns including traffic flow;• local infrastructure;• public facilities including schools and parks;• community services; and• the natural environment of the area affected (e.g. the quality of groundwater and aquifers within the lands against possible pollution from land development; the Proper Functioning Condition of all Riparian-Wetland; and sensitive ecosystems, rare and endangered species, habitat and bio-diversity).

Map 2 DEVELOPMENT PERMIT AREAS



City of Duncan
Official Community Plan
2007



1:8,000

GIS Services by: Pamela Williams 250-746-9877

	DOWNTOWN AREA
	HIGHWAY CORRIDOR
	OTHER COMMERCIAL AREA
	HAZARD LANDS - FLOODPLAIN
	HAZARD LANDS - STEEP SLOPES
	NATURAL ENVIRONMENTS - RIPARIAN - Cowichan River
	NATURAL ENVIRONMENTS - RIPARIAN with 30 m buffer
	NATURAL ENVIRONMENTS - RIPARIAN with 30 m buffer

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