

CIVIC ADDRESS OF PROPERTY

COMMUNITY ENERGY and EMISSIONS DEVELOPMENT PERMIT AREA DESIGNATION

All lands within the boundaries of City of Campbell River shown on “Map 1 – Overview Map” as part of [Schedule D to Bylaw No. 3475, 2012](#), are designated as a Community Energy and Emissions Reduction Development Permit Area. All development applications that propose any commercial development, residential development of three or more dwelling units on one lot (including strata development proposals and bare land strata development applications), intensive residential development, including mobile home parks, or subdivision of three or more residential lots are subject to the development permit approval.

JUSTIFICATION

Building, site and landscape design can assist in reducing energy use and water consumption. Additionally, requirements for on-site recycling and waste stream separation and diversion will result in a decrease in methane released from landfill and assist in reducing greenhouse gas emissions. The objective of this Development Permit Area designation is to ensure development is aligned with the Official Community Plan (OCP) by reducing energy use in and greenhouse gas emissions from buildings.

EXEMPTIONS

The following are exempt from the development permit application approval process:

- Interior renovations.
- The City will assess minor façade changes that propose colour, material or other façade
- changes that are consistent with the colour, and applicable additional architectural guidelines addressing materials, colour and façade articulation through an expedited review process.
- Minor renovations, meaning that less than 55 square metres (592 square feet) gross floor area are added to the building or constructed as a new detached building, and the changes are either
 - consistent with the existing building, having no substantial changes in materials, colours, or façade articulation; or
 - consistent with the development permit guidelines for “Form and Character Considerations”, “Colour,” and applicable “Additional Architectural Guidelines” addressing materials, colour, and façade articulation.
- Temporary buildings or structures that are erected for offices, construction, or marketing purposes for a period that does not exceed the duration of construction.
- Murals, provided that the mural design be reviewed and approved by Council.

Please review each guideline and provide comments on how you have considered this during your design process. If for some reason you cannot achieve a guideline, state why.

GUIDELINE	COMMENTS/NOTES
<p>Passive solar building design utilizes the building's architectural features and orientation to capture, store and distribute solar heat gain without the aid of additional mechanical or electrical systems, with the goal of reducing the amount of energy required to heat the building, while maintaining a comfortable indoor environment. The following guidelines pertain to passive solar design:</p> <ul style="list-style-type: none"> • <i>Consider penetration of sunlight in winter and shading of sun in summer (passive cooling/solar heating) in the design of landscape and buildings.</i> 	
<ul style="list-style-type: none"> • <i>Ensure that new development to the degree possible, does not entirely block views and solar access of existing or anticipated development, and that shadowing impacts on adjacent buildings and open spaces are minimized by ensuring that adjacent buildings are not shading each other at noon on the winter solstice.</i> 	
<ul style="list-style-type: none"> • <i>Subdivision design should demonstrate consideration of a southern orientation for the lotting pattern or within plus or minus 30 degrees of south to facilitate passive solar, along with the appropriate glazing and architectural design.</i> 	
<ul style="list-style-type: none"> • <i>Building design for multifamily, commercial and industrial buildings should demonstrate consideration of southern orientation or within plus or minus 30 degrees of south to facilitate passive solar, along with the appropriate glazing and architectural design</i> 	

GUIDELINE	COMMENTS/NOTES
<p>Buildings should be designed to be compact in form, and should have a south facing wall length of approximately 1.3 to 1.5 times as long as the buildings average depth (on an east-west axis).</p> <p>South facing window area should be maximized up to 8% of total living space floor area, or up to 15% if additional heat storage materials are added such as masonry walls, solid wood wall, or concrete floors. Heat storage materials should be located to be in direct contact with the incoming sunlight.</p>	
<p>Design measures should be included to limit summer solar gain through south facing windows.</p>	
<p>Overhangs or solar shading devices (such as awnings) should be placed so that windows are completely unshaded at the winter solstice and between fully and half-shaded at noon on the summer solstice.</p> <ul style="list-style-type: none"> • <i>On east and west aspects, consider using glazing systems that admit daylight while reducing heat gain, and consider limiting glazing area to only what is needed for adequate daylight and views.</i> • <i>On south aspects, glazing with high solar heat gain coefficients should be selected. On south aspects avoid heavily tinted or reflective glasses that reduce solar heat gain but also reduce daylight and exterior views and cause excessive glare.</i> • <i>On north aspects, glazing area should be minimized and highly insulated (low "U value") glazing should be selected.</i> • <i>Within subdivisions, north-south spacing between buildings and building geometry should be designed such that buildings are not shading each other at noon on the winter solstice.</i> • <i>Where possible, use exterior shading devices such as fixed awnings or retractable canopies that are adjustable according to season.</i> 	

GUIDELINE	COMMENTS/NOTES
<ul style="list-style-type: none"> Where solar thermal and photovoltaic modules are used on buildings with a south orientation, solar energy collection can be optimized by ensuring roofs and the main axis of buildings are within 15 degrees of due south. 	
<p>Building design that allows for natural ventilation is encouraged. This could include operable windows on at least two sides of the building to enable passive cooling through cross ventilation.</p>	
<p>Building design that promotes daylight exposure for natural lighting is encouraged.</p>	
<p>Energy efficient lighting for building interiors and exteriors is encouraged.</p>	
<p>Energy efficient building techniques including, but not limited to, increased insulation, heat recovery ventilators, use of materials that encourage thermal storage, and airtight building envelope construction that reduces unintentional air leakage, are encouraged.</p>	
<p>Green roofs are encouraged to absorb storm water, reduce heat gain and provide outdoor amenity space for residents.</p>	