Township of ESQUIMALT

DEVELOPMENT SERVICES

Official Community Plan

DPA No. 7: Energy Conservation & Greenhouse Gas Reduction

Area
Land within the municipal boundaries of the Corporation of the Township of Esquimalt

Designation
Development Permit Area No. 7 is designated for:

- Section 488 (1)(h)- Energy Conservation; and
- Section 488 (1)(j)- Reduction of Greenhouse Gas Emissions. *Note: For DPA justification and exemptions please refer to the Official Community Plan, pages 103-104.*

If you are proposing a development within this DPA, please provide your application details in Section A. In Section B, please comment on how you propose to meet the DPA guidelines.

Section A

Application No.	Project Address	Applicant Name
DP		

Section B

No	Guideline	Comments (Please complete with NA where not applicable)
24.5.1	**Siting of buildings and structures**	
1	Orient buildings to take advantage of site specific climate conditions, in terms of solar access and wind flow; design massing and solar orientation for optimum passive performance.	
2	Build new developments compactly, considering the solar penetration and passive performance provided for neighbouring sites, and avoid shading adjacent to usable outdoor open spaces.	
3	In areas with taller developments, vary building heights to strategically reduce the shading on to adjacent buildings.	
4	Provide green space and pedestrian pathways between buildings.	
5	Strategically site buildings to sustain and increase the community's urban forest tree canopy cover.	
6	Provide space for significant landscaping including varying heights of trees, shrubs, and ground covers.	

	Design retaining wall spacing and landscape planting areas of sufficient width and depth to support plantings.	
7	Provide intuitive pedestrian access to storefronts and businesses with site connectivity to nearby amenities and services to help promote walking and the use of other active transportation modes.	
8	Provide usable outdoor amenities such as seating, food gardens, mini-libraries, and play spaces in semi-public areas to enhance the experience of walking and recreating in the neighbourhood.	
24.5.2	**Form and exterior design of buildings and structures**	
1	Orient larger roof surfaces to the south for potential use of solar panels or photo-voltaic roofing.	
2	Skylights are discouraged as they decrease insulating values and can interfere with solar panel installation.	
3	Use roof designs that reduce heat transfer into neighbouring buildings.	
4	Place more windows on the south side of buildings to increase solar gain, and use well-insulated windows on the north side to minimize heat loss, balancing daylighting, views, and ventilation needs.	
5	Use roof over-hangs, fixed-fins, or other solar shading devices on south and west facing windows to reduce peak summer heat gain while enabling sunlight penetration in winter months.	
6	Install adjustable overhangs above windows that can help control the amount of sun exposure in warmer months thereby reducing need for cooling.	
7	Provide building occupants with control of ventilation; i.e. windows that open.	
8	Consider including rooftop patios, greenhouses, green roofs, and gardens.	
9	Avoid heavily tinted windows or reflective glass which will diminish the natural daylighting of interior spaces, thereby requiring increased energy requirements for interior lighting.	
10	In exposed marine locations select durable materials that will withstand weather and sea spray, to ensure low maintenance costs and infrequent replacement	

	needs.	
24.5.3	**Landscaping**	
1	In residential locations plan for 'nature out front'; for new landscaping in front and exterior side yards use a variety of site-appropriate, native species thereby contributing positively to pedestrian friendly urban streets, future greenways, and habitat enhanced corridors.	
2	Choose open space and landscaping over dedicating space to the parking and maneuvring of motor vehicles.	
3	Strategically place taller deciduous trees and vegetation on the south and west sides of buildings where there is more direct sun exposure.	
4	As context and space allow, plant trees that will attain a greater mature size.	
5	In residential neighbourhoods and along roadways, parking areas, and sidewalks, provide space for larger trees with a larger canopy cover as this will enhance the pedestrian experience.	
24.5.4	**Machinery, equipment, and systems external to buildings**	
1	For external lighting: • Choose efficient low-energy and long life technologies; • Design lighting to reinforce and compliment existing street lighting; • Use motion-sensitive or solar-powered lights whenever possible; • Layer lighting for varying outdoor needs; • Provide lighting systems that are easily controlled by building occupants.	
2	Limit outdoor lighting and direct light toward pedestrian areas. Consider use of shielding, timers, motion sensors, and down-lighting. Use International Dark-Sky Association approved lighting fixtures in outdoor locations. Outdoor lighting should be no brighter than necessary, be fully shielded (directed downward and designed to serve pedestrian needs), have minimal blue light emissions and only be on when needed. Avoid vanity lighting, and lighting	

	directed into the night sky and trees tops.	
3	Use heat pumps, solar panels, green (living) roofing, or an innovative system to improve a building's energy performance.	
4	Use durable, vandalism, and graffiti resistant materials where neighbourhood surveillance may be limited.	
5	Design for on-site heat recovery and re-use of water.	
6	Design bicycle parking facilities to be inviting for cyclists. Locate bike racks near the main building entrance, with adequate lighting and weather protection.	
7	Provide car sharing facilities that are well lit, available for residents and the public, and easily accessed from the public street and not behind a gate.	
24.5.5	**Special Features**	
1	Use wood for construction as a means to sequester carbon dioxide - North American grown and sustainably harvested wood is preferable for building construction.	
2	Select local and regionally manufactured building products whenever possible.	
3	Reuse of existing buildings and building materials is encouraged.	
4	Choose materials that have a high likelihood of reuse or recycling at end of life.	