



CITY OF DUNCAN

Community Sustainability Checklist (Revised October 2015)

Introduction

A main objective of the Sustainability Checklist is to raise awareness on how sustainability principles can be implemented into proposed plans and development. This checklist emphasizes environmental sustainability. The social and economic pillars of sustainability, while equally important, are further addressed in the City's Official Community Plan (OCP), the Development Permit Area (DPA) Guidelines, the Integrated Community Sustainability Plan (ICSP) and the Community Energy and Emissions Plan (CEEP).

The Sustainability Checklist is a tool that will help staff evaluate development applications and determine eligibility for various incentives that promote sustainable development in the City of Duncan. This Checklist will allow applicants and the City to work together to develop high quality projects that are a beneficial and lasting legacy to the community.

The Sustainability Checklist has been organized by the four priority areas presented in the ICSP. A proposal's score will reflect its alignment with ICSP objectives and other City sustainability policies, and will help identify any areas where improvement is possible.

Instructions

All applications for Zoning Bylaw Amendments, Development Permits (major, structure over 200 m²) and Development Variance Permits (associated with Major Development Permits) are required to complete this Checklist. Please follow the steps provided below:

- 1) Review and complete** the checklist. Fill out appropriate columns relating to your project. Items not applicable to particular developments have been indicated and factored into the total score.
- 2) Submit** the Checklist and supporting documentation.
- 3) Staff will review** the final score and contact the applicant for more information, if necessary.

Point System

The total permitted points per feature are indicated. Items that partially comply may receive up to a maximum of *half* the total possible points. In order to receive partial points for a feature, the applicant must provide additional details in the comment box next to the corresponding item.

Staff may choose to award bonus points for innovation in sustainability, where indicated.

SCHEDULE "A" to Bylaw 3148, 2015

Incentives

DEVELOPMENT COST CHARGE REDUCTION

In order to receive a 25% reduction in new Multi-Family Development Cost Charges, the development must receive a **minimum score of 70 points or higher** on this checklist. This score must be confirmed and signed off by a Registered Professional indicating that the project has been designed to achieve and is capable of achieving this score. This form can be found at the end of this checklist. New Multi-Family development that meets the maximum allowable density or is higher than 100 units per hectare further qualifies for a 50% Development Cost Charge waiver.

APPLICATION FEE REBATE

Development that achieves green building certification (LEED, Built Green, Cascadia Living Building Challenge) will receive a full rebate on the application fee for a Development Permit, Development Variance Permit and/or Rezoning.

HOME ENERGY PROGRAMS

Development that meets the requirements of utility or Provincial incentive programs may qualify for additional rebates. Contact the Planner for more information.

Development Information

NAME OF APPLICANT:	
SUBJECT PROPERTY ADDRESS:	
DATE OF APPLICATION:	

PROPOSED USE:

- Multi-Family Residential
- Commercial
- Mixed Use

APPLICATION TYPE:

- Development Permit
- Development Variance Permit
- Zoning Bylaw Amendment

If you have any questions, please contact the Planner at: **Duncan City Hall, 200 Craig Street, Duncan, B.C., (250)746-6126**

SCHEDULE "A" to Bylaw 3148, 2015

Features	Points Achieved	Possible Points	Additional Notes/Comments
<p>PRIORITY #1: A CARBON NEUTRAL COMMUNITY, APPROACHING ZERO-WASTE THAT HAS AFFORDABLE AND SAFE PUBLIC AND ACTIVE TRANSPORTATION OPTIONS. Key Areas: Energy & GHG Emissions, Waste Reduction, Transportation and Mobility</p>			
<p>Energy Conservation, GHG Emissions and Waste Reduction</p>			
1.1	Provides onsite renewable energy generation such as solar energy or geothermal heating.	3	
1.2	Power Smart and CFC-reducing HVAC systems are used throughout the building.	2	
1.3	Achieves a new home energy labeling program standard that exceeds the BC Building Code (i.e. ASHRAE, EnerGuide, EnergyStar). Please provide detail in comment box.	4	
1.4	Includes a passive Heat Recovery Ventilator (HRV, for 2 points) or an active Heat Recovery Ventilator/Energy Recovery Ventilator (HRV or ERV, 4 points) either centrally or in each unit.	4	
1.5	Includes the installation of an active solar hot water system sized for a minimum of 30% Domestic Hot Water .	2	
1.6	The development maintains an existing building.	2	
1.7	The development uses at least: i) 15% recycled or reused content in building materials; OR ii) 25% recycled or reused content in building materials.	2	
		3	
1.8	A comprehensive recycling program is utilized during construction: i) 25% of construction and demolition debris; OR ii) 50% of construction and demolition debris.	2	
		4	
1.9	The parking area in the development has: i) At least one Level 2 Electric Vehicle Charging Station ; OR ii) A Level 1 Electric Vehicle Charging Station in each residential stall.	3	

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Features		Points Achieved	Possible Points	Additional Notes/Comments
1.10	Includes the following GHG reduction and air quality strategies: i) The use of low VOC emission materials (ex. paint, carpets). ii) Design maximizes exposure to natural light (passive solar light and heat through building orientation). iii) Allows passive ventilation of the building.		2	
			2	
			2	
1.11	Green Building Certification i) Achieves LEED/Built Green/Cascadia Living Building Challenge Silver (or equivalent rating); OR ii) Achieves LEED/Built Green/Cascadia Living Building Challenge Gold (or equivalent rating); OR iii) Achieves LEED/Built Green/Cascadia Living Building Challenge Platinum (or equivalent rating).		2	
			3	
			4	
TOTAL POINTS: ENERGY CONSERVATION			37	
Transportation and Mobility				
1.12	Provides covered and secure bicycle racks on site.		2	
1.13	Provides secure bicycle lockers on site.		2	
1.14	Provides change rooms and showers as end of trip cycling facilities.		3	
1.15	Contributes to the creation or enhancement of a nearby bus shelter.		3	
TOTAL POINTS: TRANSPORTATION AND MOBILITY			10	
TOTAL POINTS: PRIORITY #1			47	

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Features		Points Achieved	Points Possible	Additional Notes/Comments
<p>PRIORITY #2: A HEALTHY, ACTIVE COMMUNITY WITH A STRONG SENSE OF CONNECTEDNESS. A COMMUNITY THAT SUPPORTS THE EDUCATIONAL SERVICE AND LEISURE NEEDS OF ITS CITIZENS AT ALL LIFE STAGES.</p> <p>Key Areas: Community & Individual Health, Recreation & Leisure</p>				
<p>Community Connections & Public Realm</p>				
2.1	The development allocates opportunities/space for community gardens , urban agriculture, and/or fruit trees on or adjacent to the site.		4	
2.2	Provides off-site planting and landscaping on adjacent boulevards.		4	
2.3	The development adds to or enhances publicly owned parkland, recreation areas, and/or trail systems.		4	
2.4	Improves the condition of or widens sidewalks or other pedestrian facilities.		2	
TOTAL POINTS: PRIORITY #2			14	

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Features		Points Achieved	Points Possible	Additional Notes/Comments
PRIORITY #3: PROTECTED NATURAL RESOURCES AND ADEQUATE LOCAL FOOD SOURCES AND CLEAN WATER FOR FUTURE GENERATIONS				
Key Areas: Aquatic & Terrestrial Natural Systems, Food & Agriculture				
Aquatic and Terrestrial Natural Systems				
3.1	Retains mature trees and indigenous plant species onsite outside of the building envelope.		2	
3.2	Rain gardens, detention ponds and other on-site stormwater management features are incorporated into the development.		4	
3.3	Impervious surfaces onsite are minimized and replaced with permeable surfaces.		3	
3.4	Green roof installed to a minimum of 50% of the total roof area.		5	
	Innovative wastewater technologies are used (low consumption fixtures, grey water systems , irrigation using harvested water). Provide details in Comment box.		4	
3.5	Includes high-quality landscaping and contributes to a greener, more aesthetically pleasing public realm, beyond the requirements set in the Screening and Landscaping bylaw: i) A minimum of 30% of site is landscaped; AND ii) Utilizes drought tolerant or native plants		3	
			2	
Food and Agriculture				
3.6	The development allocates land toward local food production and private gardens: i) At least 5% of land is provided; OR ii) At least 10% of land is provided		2	
			3	
TOTAL POINTS: PRIORITY #3			26	

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Features		Points Achieved	Points Possible	Additional Notes/Comments
<p>PRIORITY #4: AN AFFORDABLE COMMUNITY WITH A STRONG AND DIVERSE ECONOMY, WELL KNOWN FOR ITS VIBRANT AND HISTORIC DOWNTOWN AND INNOVATIVE ARTS AND CULTURE COMMUNITY. Key Areas: Building and Sites, Economy and Employment</p>				
Building and Sites				
4.1	Includes a mix of commercial and residential uses.		2	
4.2	Surface parking areas, utility and service areas are screened with landscaping from adjacent streets and properties (must meet or exceed landscaping regulations in the DPA Guidelines and Zoning Bylaw).		2	
4.3	A minimum of 80% of residential parking is located underground or within the principal structure.		4	
Economy				
4.4	Supports or enhances existing businesses and producers by using at least 10% local materials from Vancouver Island.		2	
4.5	Creates live/work studios within the development.		3	
TOTAL POINTS: BUILDING AND SITES & ECONOMY			13	

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BONUS: OTHER SUSTAINABILITY FEATURES			
5.1	Development adds other unique or innovative features not addressed in the checklist criteria above. Provide detailed explanation. *Points to be determined by Staff.	*	5

TOTAL CHECKLIST POINTS ACHIEVED (To be completed by staff)

PRIORITY #1 TOTAL CHECKLIST POINTS ACHIEVED	/
PRIORITY #2 TOTAL CHECKLIST POINTS ACHIEVED	/
PRIORITY #3 TOTAL CHECKLIST POINTS ACHIEVED	/
PRIORITY #4 TOTAL CHECKLIST POINTS ACHIEVED	/
OTHER POINTS ACHIEVED	/
TOTAL CHECKLIST POINTS ACHIEVED	/
MINIMUM TARGET OF 70 POINTS ACHIEVED?	Y / N

NOTE:

Eligibility to receive a 25% reduction in Development Cost Charges requires a minimum of **70 points** on this checklist.

Representatives from the City of Duncan may conduct a random audit to ensure conformance.

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If applying for the DCC Waiver, please fill out the form below.

CERTIFICATION BY REGISTERED PROFESSIONAL

BUILDING PERMIT STAGE

I _____ acknowledge that the development identified on page 2 of this form has been designed to and is capable of incorporating each of the proposed Sustainability Checklist criteria identified in the preceding pages of this form. This confirmation is provided only for the purpose of determining eligibility of the development for a waiver or reduction of Development Cost Charges.

Date

Signature of Registered Professional

Seal of Registered Professional

OCCUPANCY STAGE

I _____ acknowledge that the development identified on page 2 of this form, as constructed, incorporates each of the proposed Sustainability Checklist criteria identified in the preceding pages of this form. This confirmation is provided only for the purpose of determining eligibility of the development for a waiver or reduction of Development Cost Charges.

Date

Signature of Registered Professional

Seal of Registered Professional

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APPENDIX

CHECKLIST DEFINITIONS

“ASHRAE” or the *“American Society of Heating, Refrigerating, and Air-Conditioning Engineers”* means a series of standards and guidelines relating to HVAC systems and issues.

“Built Green” means a third-party certification program for homes that are built to be environmentally responsible. Visit www.builtgreencanada.ca for more information.

“Cascadia Living Building Challenge” means a building certification program developed by the Cascadia Green Building Council, and is based on seven sustainability performance categories. Visit www.living-future.org/lbc for more information.

“CFC” means Chlorofluorocarbons which are chemicals that are considered harmful to the ozone layer and are often present in refrigerants and aerosol propellants.

“Community Garden” means a piece of land, used by a group of people, for the cultivation of fruits, flowers, vegetables, or ornamental plants.

“Detention Pond” means a low lying area that is designed to temporarily hold a set amount of water while slowly draining to another location.

“Domestic Hot Water” means water that is heated for uses other than space heating.

“Electric Vehicle Charging Station” means a public or private parking space that is served by battery charging station equipment that has as its primary purpose the transfer of electric energy (by conductive or inductive means) to a battery or other energy storage device in an electric vehicle. **Level 1** uses a standard 120V outlet; whereas **Level 2** uses a 240V charger and provides a faster charging time.

“EnerGuide” means an energy standard created and standardized by the Office of Energy Efficiency of natural Resources Canada that is applied to British Columbia Buildings under Residential use that are not more than four stories. Visit <http://www.nrcan.gc.ca/energy/efficiency/housing/new-homes/5035> for more information.

“Energy Recovery Ventilator” means the energy recovery process of exchanging the energy contained in normally exhausted building or space air and using it to treat the incoming outdoor ventilation air in residential and commercial HVAC systems.

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“EnergyStar” means the international standard for energy efficient consumer products. Visit www.nrcan.gc.ca/energy/products/energystar/12519 for more information.

“Green Roof” means a roofing system that utilizes vegetation over a roof membrane to minimize storm water runoff and reduce heat absorption and may be a modular system.

“Grey Water System” means a system that allows users to re-use wastewater sourced from baths, bathroom basins, laundry machines, and showers.

“Heat Recovery Ventilator” means a mechanical ventilation device that continuously replaces stale indoor air with fresh outdoor air while exchanging heat between the supply and exhaust air.

“HVAC Systems” or “Heating Ventilation and Air-Conditioning” Systems means the internal system that delivers heat and air-conditioning as well as ventilation throughout a building.

“LEED” or “Leadership in Energy & Environmental Design” means a green building certification program that recognizes best-in-class building strategy and practices. Visit www.cagbc.org for more information.

“Live/Work Studio” means a dwelling unit which includes space for a professional office, artist studio, repair shop, custom workshop, and the like.

“Power Smart” means a high-efficiency device. Power Smart is also an energy reduction program for residential and commercial buildings and development, administered by BC Hydro. Visit www.bchydro.com/powersmart.html for more information.

“Rain Garden” means a shallow, vegetated basin that collects and absorbs runoff from rooftops, sidewalks, and streets.

“Site Coverage” means the percentage of the area of a lot which is occupied by any structure.

“Solar Ready” – means the guidelines set out by Natural Resources Canada (NRCan) or the Canadian Solar Industries Association (CanSIA):

- a) Minimum 10% of the total roof area is designed to support future solar collectors, is not shaded by other structures, and is structurally capable of supporting solar panels;
- b) A suitably sized conduit/chaseway is provided for routing solar energy conductors (wires and/or fluid lines) from the roof to the mechanical room (6 inches for a central shared solar system, or 4 inches conduit per dwelling unit); and
- c) The purchaser of the unit is given information upon sale showing them where future solar panels would be installed (ex. Building drawings with a clearly indicated location for future solar panels)

“VOC Emissions” or “Volatile Organic Compounds emissions” means emissions that are produced by the evaporation of petroleum based products, such as cleaning products or paints, and form particulate matter and other air quality issues.