

CPEAC Green Development Checklist



Description:

The Green Development Checklist was developed by the Carleton Place Environmental Advisory Committee (CPEAC) to assist staff in assessing development applications with regards to their environmental impact.

s.6.14.3 of the Official Plan indicates that all applicants are required to consult with municipal planning staff prior to submitting a Development Permit application. Pre-consultation will provide important information pertaining to the application including the development permit class as well as what professionally prepared plans, studies, and reports may be required to assist in the review process of the application. Based on the scope of the proposed development discussed during the pre-consultation meeting, staff may forward this Checklist to the applicant to consider.

Providing a standardized method of evaluation, this Checklist includes items that address a wide variety of topics including water and energy conservation, air quality, waste management, and protecting the natural environment. Based on the presence of these items, applications will be given an assessment score that assigns the development to one of three Environmental Standard categories: Gold, Silver, and Bronze. These categories are reflective of a development's efforts to incorporate proven environmental practices. The classification criteria for these categories are provided below:

Platinum Standard	25 – 31 items incorporated
Gold Standard	18 – 24 items incorporated
Silver Standard	11 – 17 items incorporated

This Checklist does not put additional requirements on local developers above and beyond the minimum standards of the Ontario Building Code and the Development Permit By-law. Inclusion of items on this Checklist within proposed developments is to be done strictly on a volunteer basis. **Applicants are not required** to undertake such works in conformity to this Checklist. Should applicants incorporate items included on this Checklist, both the CPEAC and the Town of Carleton Place approve the applicant to advertise the development's endorsed Environmental Standard in marketing materials for said development.

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Energy Conservation

<i>Item</i>	<i>Rationale</i>
<input type="checkbox"/> Energy Star® Appliances Installed	Building to the Energy Star® standard enables new homes to be approximately 20% more energy efficient than those built to the minimum requirements of the Ontario Building Code
<input checked="" type="checkbox"/> Heat Pump	Moves thermal energy from one place to another rather than turning one type of energy into another.
<input type="checkbox"/> Zonal Heating Controls	Allows homeowners to control the temperature in different areas of their home, reducing energy consumption given that occupants will not require all spaces to be heated.
<input type="checkbox"/> Tankless Water Heater	Heats water only when needed rather than being stored in a tank for future usage.
<input type="checkbox"/> Clothesline	Where possible, Energy Star® recommends air drying to reduce energy consumption given that electric clothes dryers use more energy than any other household appliance.
<input checked="" type="checkbox"/> Structural Orientation for Solar Gain	Orientation of units towards the East and West maximizes the passive solar gain of buildings.
<input type="checkbox"/> Solar Ready Design	Eliminates the cost of retrofitting developments at a later time, thereby encouraging future installations of solar panels and solar panel generation.
<input checked="" type="checkbox"/> LED Lighting	LED bulbs can use 75% less energy than traditional incandescent bulbs.
<input type="checkbox"/> Exterior Motion Lights	Motion lighting uses significantly less energy than traditional lighting given that it is only in use when needed.

Subtotal: 3

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Water Conservation & Quality

<i>Item</i>	<i>Rationale</i>
<input checked="" type="checkbox"/> Low Flow Water Fixtures Installed	Reduces water consumption, environmental impacts, and costs for occupants.
<input type="checkbox"/> Grey Water Recycling Installed or Roughed-In for Future Installation	Lowers demand for potable water. Roughing-in plumbing at the time of construction will minimize future costs of retrofitting and promote future installation of grey water recycling systems.
<input type="checkbox"/> Rain Barrel Collection	Reduces the use of potable water for non-potable purposes such as landscape irrigation.
<input checked="" type="checkbox"/> Low Impact Stormwater Design (LID)	Addresses stormwater at the source rather than collecting stormwater in traditional management ponds, assisting with pollution control and reducing runoff.
<input checked="" type="checkbox"/> 6" High Quality Topsoil Depth Uncompacted	Poor quality, compacted topsoil may promote over irrigation. High quality, uncompacted soil that is comprised of 5 to 15% organic material with a pH level of 6.0 to 8.0 is well drained.
<input type="checkbox"/> Runoff Volume Less Than 50% of Annual Rainfall Expectations	Helps to recharge groundwater, encourages landscaping options, and reduces the need for large off-site stormwater retention facilities which consume additional land, thereby decreasing densities
<input checked="" type="checkbox"/> Native Drought Tolerant Plants	Reduces the demand for potable water which can increase by as much as 50% during the summer months, placing strain on potable water services

Subtotal: 4

Air Quality

<i>Item</i>	<i>Rationale</i>
<input checked="" type="checkbox"/> Plant Trees Above Minimum Requirements	Trees improve air quality, reduce heat island effects, and enhance the streetscape for pedestrian usage. They are also an important tool in mitigating the effects of climate change.

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| <input checked="" type="checkbox"/> | Heat Recovery Ventilator System (HVR) Installed | Improves the air quality of internal spaces by filtering in fresh, outdoor air. The exchange of heat in the stale exhaust air to the incoming fresh air reduces the energy required to bring outside air up to ambient room temperatures. |
| <input type="checkbox"/> | High Albedo Roofing Materials | Saves energy towards cooling efforts by directly reducing the heat gain experienced through a building's envelope and by lowering the urban air temperature. |
| <input checked="" type="checkbox"/> | Provision of Green Space Exceeding Town Minimums | Reduces the ambient surface temperature of the roof, thereby reducing the heat island effect and reducing cooling requirements within the building. |
| <input checked="" type="checkbox"/> | Low VOC Finishes | Improves indoor air pollution as these products eliminate or reduce the amount of contaminants released by these products into the air. |

Subtotal: 4

Waste Management

- | <i>Item</i> | <i>Rationale</i> |
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| <input checked="" type="checkbox"/> FSC certified wood-based products | The Forest Stewardship's Council (FSC) ensures sustainable harvesting and replanting practices. A minimum of 25% of all wood-based products and materials are to be FSC certified. |
| <input checked="" type="checkbox"/> Construction Waste Plan | Presents an opportunity to redesign processes to renegotiate contracts with suppliers and subcontractors to reduce waste and increase efficiency. |
| <input checked="" type="checkbox"/> Recycling and Composting Facilities | Reduces the amount of waste going to landfills and the need for landfill expansions. |

Subtotal: 3

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Natural Environment

<i>Item</i>	<i>Rationale</i>
<input type="checkbox"/> Climate Change Statement	Recognizes the need to mitigate extreme weather damages and details methods to decrease the footprint of development.
<input type="checkbox"/> Increased Pit Size	Ensures that trees become established on-site and facilitates their long-term survival. Triple the typical pit size of high-quality soil per tree with a minimum depth of .8m.
<input checked="" type="checkbox"/> Tree Watering Program	Ensures that trees become established on-site and facilitates their long-term survival. Reduces the demand for potable water.
<input checked="" type="checkbox"/> Electric Vehicle Plug-Ins	Promotes the use of electric and/or hybrid vehicles. The manufacturing and use of these vehicles are responsible for comparatively less greenhouse gas emissions than traditional automotive vehicles that use internal combustion engines.
<input checked="" type="checkbox"/> Bicycle Parking	Encourages a shift from the use of motorized vehicles to active methods of transportation. Promotes a reduction in the emission of greenhouse gases that contribute to climate change.
<input checked="" type="checkbox"/> Recycle Soil	Eliminates the need to move soil in-or-out of the site via large, motorized vehicles that promote CO ₂ emissions.
<input checked="" type="checkbox"/> Eliminate Spot and Vanity Lighting	Vanity lighting wastes electricity and contributes to light pollution in the night skies.

Subtotal: 5

Total Number of Items: 19

Approved Environmental Standard: Gold