

**B. SITE (115 points)**

**B.1 Site development area (45 points)**

**Objectives:**

- Protect important existing land uses and reduce demands on municipal infrastructure and services.
- Protect existing natural areas, reduce the impact on the site’s bio-diversity and minimize the soil compaction during construction

<b>B.1.1 Is the building constructed on: (Select the most appropriate)</b>	
• an existing serviced site	10 points
• a designated mixed-use, “urban village” site with transit	20 points
• a remediated brownfield site	30 points
• a new greenfield site	0 points
<b>Provides references to land-use plans and maps._____</b> <b>Describe the remediation. _____</b>	

**Verification:** Review the Location Plan, Site Plan showing the planning designation, photos, or other material that indicate previous use of the site to verify that the project is constructed on an existing serviced site.

**Final verification:** Conduct a visual verification.

<b>B.1.2 Does the project avoid construction on land that is: (Select all that are appropriate)</b> <i>Code of Federal Regulations Title 7, Volume 6, Part 400-699, Section 657.5 (citation 7CFR657.5); 40CFR, Part 230-233 and part 22Code of Federal Regulations 40CFR, Part 230-233 and part 22; FEMA</i>	Must answer “yes” to every bullet for a total of 15 points
• agricultural prime farmland	
• a wildlife corridor	
• within 100 feet of lake, river, stream, or isolated wetlands	
• within 100 feet of an area of spatial concern identified by state or local rule	
• land whose elevation is lower than 5 feet above the elevation of the 100 year flood plain	

<b>Provide drawings and specifications:</b>	
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**Verification:** Check the Site Plan to verify that the building is not built within 100 feet of any water or isolated wetlands or areas of spatial concern identified by state or local rule, nor land whose elevation is lower than 5 feet above the elevation of the 100 year flood plain. Check that any portion of the site identified as being a wetland, or wildlife corridor, agricultural prime farmland, parkland, or an area notable for its scenic beauty will be fully preserved.

**Final verification:** Conduct a visual verification.

## B.2 Reduce ecological impacts (40 points)

### Objectives:

- Avoid erosion on air and water quality and to maintain the ecological integrity of the site
- Reduce impact on the microclimate and habitat
- Reduce impact on the nocturnal environment of fauna and flora

<b>B.2.1 Are undeveloped slopes greater than 15% left undisturbed? Mark "not applicable" where there are no slopes on the site.</b>	2 points
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**Verification:** Review the Site or Landscape Plan that shows topography before and after construction. Verify that previously undeveloped slopes greater than 15% are left undisturbed.

**Final verification:** Conduct a visual verification.

<b>B.2.2 Are construction activities limited to within 40 feet of the building perimeter, 5 feet from primary roadway curbs, walkways, and main utility branch trenches; and 25 feet beyond storm water detention facilities and playing fields?</b>	2 points
<b>B.2.3 Before construction begins, are fences installed around the drip lines of trees that remain so that vehicles do not compact or harm the tree root system? Mark "not applicable" where the site has no existing vegetation.</b>	1 point
<b>Provide references to the Construction Staging Plan or photos taken during excavation and construction. _____</b>	

**Final verification:** Review the Construction Staging Plan or photos taken during excavation and construction to check that construction activities do not fall within 40 feet of the building perimeter, 5 feet from primary roadway curbs, walkways, and main utility branch trenches nor 25 feet beyond storm water detention facilities and playing fields. Check photos to ascertain that fences are constructed around the drip lines prior to construction.

<b>B.2.4 Are the following erosion-control best management practices followed? Select applicable.</b> <i>EPA National Pollution Discharge Elimination System (NPDES) Permitting Program</i>
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<p><b>There are erosion prevention measures during clearing and grading (such as structural erosion prevention, top-soiling, temporary seeding and planting, permanent seeding and planting, compost blankets, erosion control blankets and mats, soil binders, soil tackifiers, sodding vegetative buffer strips, live staking, live fascines, brush wattles, pole planting, etc.)</b></p>	<p>4 points</p>
<p><b>Erosion and sediment controls not in the direct path of work are installed before any land disturbance.</b></p>	<p>2 points</p>
<p><b>Temporary sediment control measures are not removed until permanent vegetation or other cover of exposed areas is established.</b></p>	<p>2 points</p>
<p><b>Describe the main site characteristics, and the main erosion control measures in the project stages. _____</b></p> <p><b>Provide references to the map, site plan showing grading, features and soil types prior to the project, the grading plan showing location of erosion and sediment control measures and the erosion control timetable chart. ____</b></p>	

**Final verification:** Review a map showing the proximity of the site to water, roads etc and the existing conditions site plan that shows the grading, features and soil types as they existed prior to the project. Review the Grading Plan and Construction Timetable that shows the proposed finished contours, the location of all erosion and sediment control measures, and timetable charts showing sequencing of control measures. This plan should demonstrate that steps will be taken to stabilize exposed soil at any time.

<p><b>B.2.5 What percentage of hardscape has measures to mitigate the heat island effect (i.e. shading and/or high albedo paving)? Where there is no hardscape around the building, mark "not applicable."</b></p>	<p>Points are awarded where 1-100% of hardscape has measures to avoid the heat island effect. The Green Globes system will calculate this based on the stated percentage of hardscape that is shaded with vegetation or surfaced with high albedo materials.</p> <p>Maximum points = 10 points or N/A</p>
<p><b>Select applicable measures:</b></p> <ul style="list-style-type: none"> <li>• shading hardscape areas around the building with vegetation and/or</li> <li>• surfacing hardscape areas with high albedo paving materials</li> </ul> <p><b>Indicate the total area of hardscape (including roadways, sidewalks and parking) around the building. _____</b></p> <p><b>Indicate the area of hardscape shaded with vegetation (i.e. trees within 15 years or hedges and vines within 5 years) and/or surfaced with paving that has minimum solar reflectance index (SRI) 29. ____</b></p>	
<p><b>Provide references to Landscape Drawings showing shading and specifications for high albedo paving materials. _____</b></p>	

**Verification:** Review the Site plan and Landscape Plan to check that the stated percentage of hardscape surfaces including roads, sidewalks, courtyards and parking lots are provided with any combination of the following measures: shade from trees (within 15 years) or shrubs or vines (within 5 years), and/or paving materials with a minimum SRI of 29.

<p><b>B.2.6 What percentage of the roof has measures to mitigate the heat island effect (i.e. green roof or high albedo surfacing)?</b>  <i>BENCHMARK, Criteria 6.3. Cool Roofs and Ecoroofs</i></p>	<p>Points are awarded where 1-100% of the roof has measures to avoid the heat island effect. The Green Globes system will calculate this based on the stated percentage of roof that is green or surfaced with high albedo materials.                   Maximum points = 10 points</p>
<p><b>Select applicable:</b></p> <ul style="list-style-type: none"> <li>• a green roof and/or</li> <li>• high albedo surfacing</li> </ul> <p>Indicate the total roof area _____</p> <p>Indicate the roof area that is green _____</p> <p>Indicate the roof area that is high albedo _____                  SRI 78 for a low sloping (<math>\leq 2:12</math>) roof                  SRI 29 for steep-sloping (<math>&gt; 2:12</math>) roof</p>	
<p><b>Provide references to the roof plan and specifications.</b> _____</p>	

**Verification:** Check the roof plan and specifications to verify that the stated percentage of the roof area is a green roof and/or is covered with roof materials that are the appropriate solar reflectance index i.e. high albedo roofing material –for a low-sloping ( $\leq 2:12$ ) roof, use a minimum SRI of 78, for a steep-sloping ( $> 2:12$ ) roof use a minimum SRI of 29 reflectance) – OR a green roof, OR a combination of both high-albedo materials and green roof.

<p><b>B 2.7 Are obtrusive aspects from exterior lighting, such as glare; light trespass and sky glow minimized? (Select appropriate)</b>  <i>Illuminating Engineering Society of North America (IESNA) Recommended Practice Manual: Lighting for Exterior Environments (RP-33) and BENCHMARK, Criteria 5.10.-Outdoor Lighting</i></p>	
<p><b><u>For a dark park or rural setting</u></b></p> <ul style="list-style-type: none"> <li>• The maximum initial illuminance value is no greater than 0.01 horizontal and vertical footcandles at the site boundary and beyond.</li> <li>• 0% of the total initial designed fixture lumens are emitted at an angle of 90% or higher from nadir.</li> </ul>	<p>7 points</p>
<p><b><u>For a residential area</u></b></p> <ul style="list-style-type: none"> <li>• The maximum initial illuminance value is no greater than 0.10 horizontal and vertical footcandles at the site boundary and no greater than 0.01 horizontal footcandles 10 feet beyond the site boundary.</li> </ul>	<p>7 points</p>

<p>(For site boundaries that abut public right-of-way, light trespass requirements may be met relative to the curb line instead of the site boundary.)</p> <ul style="list-style-type: none"> <li>• No more than 2% of the total initial designed fixture lumens are emitted an angle of 90 degrees or higher from nadir (straight down.)</li> </ul>	
<p><b><u>For a commercial/industrial, high-density residential area</u></b></p> <ul style="list-style-type: none"> <li>• The maximum initial illuminance value is no greater than 0.20 horizontal and vertical footcandles at the site boundary and no greater than 0.01 horizontal footcandles 15 feet beyond the site (For site boundaries that abut public right-of-way, light trespass requirements may be met relative to the curb line instead of the site boundary.)</li> <li>• No more than 5% of the total initial designed fixture lumens are emitted at an angle of 90 degree or higher from nadir.</li> </ul>	7 points
<p><b><u>For a major city centre or entertainment district</u></b></p> <ul style="list-style-type: none"> <li>• The maximum initial illuminance value is no greater than 0.60 horizontal and vertical footcandles at the site boundary and no greater than 0.01 horizontal footcandles 15 feet beyond the site. (For site boundaries that abut public right-of-way, light trespass requirements may be met relative to the curb line instead of the site boundary.)</li> <li>• No more than 10% of the total initial design site lumens are emitted at an angle of 90 degrees or higher from nadir.</li> </ul>	7 points
<p><b>Provide references to specifications and calculations showing that the project's exterior lighting complies with IESNA recommendations. ____</b></p>	

**Verification:** Verify by checking the specifications and calculations that the project's exterior lighting complies with the Illuminating Engineering Society of North America (IESNA) Recommended Practice Manual: Lighting for Exterior Environments (RP-33).

### B.3 Enhancement of watershed features (15 points)

**Objective:** Reduce the amount of storm water run-off entering storm sewers and increase ground infiltration of storm water without negatively impacting the building or on-site vegetation.

<p><b>B 3.1 Is storm water runoff from the site controlled to prevent damage to project elements and vegetation, and to reduce the pollution of waterways? Select applicable.</b></p>	
<ul style="list-style-type: none"> <li>• There is no storm water management.</li> </ul>	0 point
<ul style="list-style-type: none"> <li>• Storm water is directed to pervious areas or to a storage reservoir.</li> </ul>	5 points
<ul style="list-style-type: none"> <li>• In the case of a site which was previously 100% pervious (green site), there is no increase in run-off.</li> </ul> <p>OR</p> <ul style="list-style-type: none"> <li>• In the case of a site whose pre-development impervious area is greater than 50% (site previously built on), a storm water control plan achieves a 25% decrease in storm water run-off.</li> </ul>	5 points

**Describe briefly how storm run-off on the site is controlled \_\_\_\_\_**  
**Provide references to drawings. \_\_\_\_\_**

<b>B 3.2 Is storm water run-off from the roof controlled and directed to a pervious area or is there a green roof? Select applicable.</b>	
<ul style="list-style-type: none"> <li>• There are no specific measures to reduce, control or direct run-off from the roof.</li> </ul>	0 points
<ul style="list-style-type: none"> <li>• Run-off from the roof is controlled and directed to a pervious area or to a storage reservoir</li> <li>OR</li> <li>• There is a green roof.</li> </ul>	5 points
<b>Describe briefly how storm run-off from the roof is controlled. _____</b> <b>Provide references to drawings. _____</b>	

**Verification:** Review the Storm water Management Plan, volume calculations and the site plan indicating location and type of swales or retention areas, vegetation, paved surfaces or storm water collection tanks or cisterns or roof plan indicating green roof. Review specifications to verify that storm management measures are included.

**B.4 Site ecology improvement (15 points)**

**Objective:**

- Increase natural biodiversity

<b>B.4.1 Are trees, shrubs and ground cover native to the area, (as listed in local Plant Society documentation?)</b>	6 points
<b>B.4.2 Is lawn avoided or restricted to within 20 feet of buildings and 5 feet of parking, driveways, and walkways?</b>	5 points
<b>Provide Local Plant Society documentation references. _____</b> <b>Provide references to the Landscape Plan and specifications. _____</b>	

**Verification:** Review the Landscape Plan and specifications to verify that local species are used. Refer to documentation from the local Plant Society. Verify that lawn areas are designated for functional purposes only, such as playing field or picnic area.

<b>B.4.3 Are there design measures to avoid bird collisions?</b>	4 points
<b>Briefly describe the design strategies to avoid bird collisions. _____</b> <b>Provide references to drawings. _____</b>	

**Verification:** Review construction documents to check that large areas of glass are broken up with architectural details such as mullions, etched and ceramic-fritted glass is used to make glass visible to birds, lightshelves, shutters, sunscreens, and other shading devices mute reflections and provide visual noise so that birds avoid confusing glass for sky or vegetation. **Final verification:** A visual verification is conducted.