City of Burlington - Sustainable Building and Development Guidelines

Section 1: Site Design

#	Required or Voluntary	Guideline	Rationale, Incentives, and Resources	Implementation
1.6	Voluntary	**Site Disturbance:** On greenfield sites, limit site disturbance including earthwork and clearing of vegetation to 12 metres beyond the building perimeter, 1.5 m beyond primary roadway curbs, walkways, and main utility branch trenches, and 7.5 m beyond constructed areas with permeable surfaces (such as pervious paving areas) that require additional staging areas in order to limit compaction in the constructed area. Or on previously developed sites, restore a minimum of 50% of the site area (excluding the building footprint) by replacing impervious surfaces with native or adapted vegetation.	**Rationale:** Maintains the local landscape and helps to ensure soils and vegetation remain undisturbed. **Resource:** LEED ND: https://www.usgbc.org/leed/rating-systems/neighborhood-development **Incentive:** Sustainable Building Award	Native vegetation and the adjacent natural heritage feature on the property is being preserved and enhanced with the implementation of an open space zone and tree Restoration Plan. Implementation completed through OPA/ZBA and construction of the project
1.7	Voluntary	**Adaptive Reuse:** Development includes adaptive reuse or rehabilitation of any non-designated heritage buildings with cultural heritage value or potential.	**Rationale:** The City's Official Plan contains policy to encourage adaptive re-use of built heritage resources where appropriate. Adaptive reuse integrates cultural heritage resources or their key attributes into a new development and makes use of existing building stock. **Resource:** N/A **Incentive:** Sustainable Building Award	The property does not contain any heritage buildings. The existing building is being removed to uspport intensification of the property

Section 2: Transportation

#	Required or Voluntary	Guideline	Rationale, Incentives, and Resources	Implementation
2.1	Required	**Site Connections:** Provide pedestrian and cycling connections from on-site buildings to off-site public sidewalks, pedestrian paths, trails, open space, active transportation pathways, transit stops and adjacent buildings and sites in accordance with Official Plan policies.	**Rationale:** Encourages active transportation and transit use to reduce the dependence on the automobile. **Resource:** N/A	A private sidewalk is proposed on the subject lands as per the Conceptual Development Plan, which connectes to the public sidewalk. Implementation completed through OPA/ZBA and site construction
2.3	Required	**Bicycle Storage:** Provide bicycle parking spaces in accordance with the Zoning By-law and Official Plan Policies.	**Rationale:** Cycling reduces greenhouse gas emissions, reduces traffic congestion and improves health. Convenient bicycle parking encourages the use of active transportation. **Resource:** The City's Zoning Bylaw contains minimum bicycle parking space requirements for various zones.	Bicycle storage is available in the individual int garages and provides for an approutunity for active transportation for future residents of this dvelopment.Implementation completed through OPA/ZBA.
2.4	Voluntary (see exception)	**Transportation Demand Management:** Provision and implementation of a Transportation Demand Management Plan. Required for parking reductions and required in Primary, Secondary and Employment Growth areas as per Official Plan policy.	**Rationale:** Transportation Demand Management Plans are plans that encourage sustainable modes of transportation. TDM plans evaluate building transportation needs comprehensively and may consider measures such as the provision of transit passes, flexible work hours, unbundled parking, on site transit facilities, priority parking for carpooling and autoshare programs, etc. **Resource:** Smart Commute Halton: https://www.smartcommute.ca/Public/Home.aspx **Incentive:** Sustainable Building Award	OPA/ZBLA and Site Plan
2.5	Voluntary	**Bicycle Storage (Occupants):** Locate occupant/employee bicycle parking near the main entrance or easy to identify area, in a weather protected area with controlled access or secure enclosures, at no extra charge to the occupant/employee.	**Rationale:** Applicants are encouraged to improve upon the required bicycle parking requirements in the Zoning By-law to further encourage cycling as a viable transportation option. **Resource:** Toronto's Guidelines for the Design and Management of Bicycle Parking Facilities: https://www.toronto.ca/wp-content/uploads/2017/12/8c1a-Cycling-Guidelines-for-the-Design-and-Management-of-Bicycle-Parking-Facilities.pdf **Incentive:** Sustainable Building Award	Individual unit garages provide secure enclosures for bicycle storage. Implementation completed through OPA/ZBA
2.6	Voluntary	**Bicycle Storage (Visitor):** Provision of bicycle parking spaces in a weather protected area at grade near the main entrance or easy to identify area.	**Rationale:** Applicants are encouraged to improve upon the required bicycle parking requirements in the Zoning By-law to further encourage cycling as a viable transportation option. **Resource:** Toronto's Guidelines for the Design and Management of Bicycle Parking Facilities: https://www.toronto.ca/wp-content/uploads/2017/12/8c1a-Cycling-Guidelines-for-the-Design-and-Management-of-Bicycle-Parking-Facilities.pdf **Incentive:** Sustainable Building Award	The subject lands are restricted in the amount of land that is available for distrubance. Visitor bicyle storage is not supplied through this proposal, but could be available in the individual unit garages if desired by the occupants.

Section 3: Natural Environment

#	Required or Voluntary	Guideline	Rationale, Incentives, and Resources	Implementation
3.8	Voluntary (see exception)	**Enhanced Tree Preservation:** Maintain existing on-site trees that are 30 cm or more DBH (diameter at breast height) OR Maintain 75% of healthy mature trees greater than 20 cm DBH. **Note:** Tree preservation requirements will be determined by Official Plan urban forestry policies.	**Rationale:** Preserving trees provides numerous benefits and services, including the reduction of air pollution, water attenuation, moderation of the urban heat island effect, carbon sequestration, shade, habitat for urban adapted wildlife, neighbourhood character and mental health benefits. **Resource:** City of Burlington webpages on tree planting and care: https://www.burlington.ca/en/services-for-you/tree-planting-and-care.asp **Incentive:** Sustainable Building Award	Trees on site are maintained where possible and outlined on the provided Tree Preservation Plan. Implementation completed through OPA/ZBA and the proposed open space zone which ensures tree protection.
3.9	Voluntary (see exception)	**Restoration and Enhancement:** Complete and implement a restoration and/or enhancement plan that demonstrates net gain for Natural Heritage System areas, including a management and monitoring plan. May be required as a result of Environmental Impact Assessment recommendations.	**Rationale:** The restoration and enhancement of Natural Heritage System areas can aid in the improvement of degraded areas, and can enhance ecosystem function. Long term management and monitoring ensures the success of the restoration project over the long term. **Resource:** N/A **Incentive:** Sustainable Building Award	A restoration plan, including a management and monitoring plan is provided and implemented through the OPA and ZBA. An EIS is also provided to address this matter further.

Section 4: Water Conservation and Quality

#	Required or Voluntary	Guideline	Rationale, Incentives, and Resources	Implementation
4.1	Required	**Stormwater Quality:** Achievement of a level one/enhanced stormwater treatment for all stormwater runoff.	**Rationale:** Stormwater quality treatment reduces the total suspended solids in runoff to ensure the protection of receiving watercourses and Lake Ontario. **Resources:** N/A	A stormwater management plan is provided with this submisison. Implementation completed through OPA/ZBA and Building Permit process
4.3	Voluntary	**Pervious Surfaces:** minimization of impervious surfaces and stormwater runoff through the use of Low Impact Development (LID) measures, such as: • permable pavements; • bioswales; • infiltration trenches/bioretention areas; • rain gardens; • draining roofs to pervious areas, and; • other innovative stormwater management strategies	**Rationale:** Low Impact Development strategies mitigate the impacts of increased urban runoff and stormwater pollution by managing it as close to its source as possible. It comprises a set of site design approaches and small scale stormwater management practices that promote the use of natural systems for infiltration and evapotranspiration, and rainwater harvesting. **Resources:** Guidance, case studies and other tools to help design and construct LID approaches can be found on Credit Valley Conservation's website: www.creditvalleyca.ca/low-impact-development/ **Incentives:** Sustainable Building Award	Enhanced 80.0% total suspended solids (TSS) removal achieved with a treatment train approach, to incorporate Low Impact Development strategies. To be implemented through the Building Permit process.
5.1	Required	**Urban Heat Island:** Provide vegetated landscape areas in hard surface areas as per the Zoning By-law.	**Rationale:** Vegetation can reduce the urban heat island effect to improve human comfort and energy efficiency in the surrounding areas. **Resource:** City's Zoning By-law	Existing vegetation has been maintained where possible and will be zoned as open space. Additional landscaping is also shown in the Restoration Plan. Implementation completed through OPA/ZBA

Section 6: Waste and Building Materials

#	Required or Voluntary	Guideline	Rationale, Incentives, and Resources	Implementation
6.1	Required	**Waste Management Plan:** Provide and implement a waste management plan in accordance with Regional requirements.	**Rationale:** Recycling and composting treats waste as a resource and reduces the need for landfill expansion. **Resource:** Halton Region's Development Design Guidelines for Source Separation of Solid Waste: https://www.halton.ca/Repository/Development-Design-Guidelines-for-Source-Separatio	