GID Blocks 1&2 Sustainability Metrics Checklist

Section 1: Subdivision and Site Design Considerations				
#	Recommendation	Rationale	Implementation	Status
1.1	Amend Topsoil: Maintain a minimum 30 cm/12" quality topsoil, protect areas from disturbance and/or de-compact subsoil in landscaped areas/non hardscape areas.	Enhanced topsoil levels absorb runoff and helps to ensure plants survive and thrive. Protecting areas from disturbance and de-compacting soil in disturbed areas further ensures the health of planted material. Resource: Preserving and Restoring Healthy Soil: Best Practices for Urban Construction. TRCA June 2012	Subdivision	☐ N/A ☒ Implementation: Addressed through conditions of approval
1.2	Snow Management, Enhanced: Achieve the Smart About Salt Site Certification. Prepare and implement a salt management plan for all multiple residential, commercial and mixed-use developments with the objective of reducing the application of salts/chlorides.	The Smart About Salt Site Certification ensures that design and management best practices are in place to mitigate the impacts of road salt. Resource: www.smartaboutsalt.com	Site Plan	☒ N/A ☐ Implementation:
1.3	Reuse Topsoil: Retain and reuse uncontaminated on-site topsoil in areas not covered by the building and parking/hard surface areas. Proper storage of topsoil to retain soil health and quality.	Reusing soil promotes responsible use of a natural resource and minimizes the need to truck soil to and from the site. Resource: Preserving and Restoring Healthy Soil: Best Practices for Urban Construction. TRCA June 2012	Site Plan	☒ N/A ☐ Implementation:
1.4	Site Disturbance: To the extent practical, limit site disturbance including earthwork and clearing of vegetation to reduce erosion and dust. Require revegetation of disturbed portions of the site if construction, site servicing does not commence within six months of area grading.	Maintains the local landscape and helps to ensure soils and vegetation remain undisturbed. Resource: LEED ND	Subdivision and Site Plan	☐N/A ☒ Implementation: Addressed through conditions of approval

Section 2: Transportation				
#	Recommendation	Rationale	Implementation	Status
2.1	Community 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. Provide internal connections to the proposed parks. Connect the proposed neighbourhoods with the existing active transportation network, and the Guelph Transit system.	Encourages active transportation and transit to reduce the dependence on the automobile.	Subdivision and Site Plan	☐ N/A ☒ Implementation: New active transportation links are provided throughout the subdivision through new municipal sidewalks on local roads, bike lanes and sidewalks on collector roads, walkway blocks between local roads and extensive trails through proposed parks, open space blocks and natural heritage lands.
2.2	Accessibility: Design on-site sidewalks, crosswalks and walkways to be continuous, universally accessible, barrier-free and clearly delineated in accordance with the Community Design Guidelines and the Accessibility for Ontarians with Disabilities Act	Promotes walking by all age groups and abilities and provides access for those with limited mobility. Resources: The Illustrated Technical Guide to the Accessibility Standard for the Design of Public Spaces: www.gaates.org/documents/DOPS_Illustrated_Guide_140527_FINAL.pdf	Subdivision and Site Plan	☐ N/A ☒ Implementation: Addressed through conditions of approval
2.3	Bicycle Storage: Provide bicycle parking spaces within multiple blocks, commercial blocks, employment blocks and parks.	Cycling reduces greenhouse gas emissions, reduces traffic congestion and improves health. Convenient bicycle parking encourages the use of active transportation. Resource: Zoning By-law	Site Plan	☒ N/A ☐ Implementation:
2.4	Bicycle Storage (Visitor): Provision of bicycle parking spaces at grade near the main entrances or easy to identify areas.	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.	OPA/ZBA and Site Plan	☐ N/A ☒ Implementation: Minimum bicycle parking rates are implemented through the City's zoning by-law.
2.5	Transportation Demand Management: Provision and implementation of a Transportation Demand	Transportation Demand Management Plans are plans that encourage sustainable modes of transportation. TDM	ZBA, Minor Variance Applications and Site Plan	☐ N/A

	Management Plan. Required for parking reductions associated with multiple residential, commercial and mixed-use development.	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.		☒ Implementation: A TIS had been prepared, which includes an assessment of required parking.
2.6	Electric Vehicles: Implement Building Code requirements for EV charging stations and provide "rough-ins" in new residential buildings where parking is provided within the building.	The demand for electric vehicles and related infrastructure is growing in Canada, and encouraging electric vehicles reduces greenhouse gas emissions and air pollution.	Site Plan	☒ N/A ☐ Implementation:
2.7	Transit Pass: For multiple residential, commercial and mixed-use development, encourage tenants and employees to use transit with possible incentives being provision of transit passes.	Transit is intended to provide support for the Minor Corridor and higher densities is associated with and in proximity to the Minor Node. Growth is directed towards intensification areas, all serviced by local transit. Transit-supportive development and measures to encourage transit ridership is encouraged.	Site Plan.	☒ N/A ☐ Implementation:

Section 3: Natural Environment				
#	Recommendation	Rationale	Implementation	Status
3.1	Native Species (NHS): Use native, non-invasive species within the Natural Heritage System and related buffers and use non-invasive species in all other areas.	Planting native and non-invasive species protects and enhances the Natural Heritage System and biodiversity and are resilient to the local climate.	Subdivision and Site Plan	☐ N/A ☒ Implementation: The submitted Environmental Impact Study has incorporated recommendations for native plantings in the Natural Heritage System. The recommendations of the Environmental Impact Study will be implemented through conditions of approval.
3.2	Native Species (Enhanced, outside NHS and buffers): Use native, non-invasive species	Additional native plantings outside of natural areas are	Site Plan	☒ N/A ☐ Implementation:

	that are suitable to site conditions for a minimum of 75% of all landscaped areas.	encouraged to promote biodiversity and resiliency.		
3.3	Bird Friendly Design: Incorporate bird friendly design measures. Required for development adjacent to the Natural Heritage System.	Bird Collisions with windows is a leading cause of bird death across North America. Resources: For assistance identifying bird friendly design measures please consult with FLAP Canada (www.flap.org)	Site Plan	☒ N/A ☐ Implementation:
3.4	Low Maintenance Landscaping: All landscaping is low maintenance and drought resistant (i.e. Xeriscaping) that does not require a permanent potable water-based irrigation system (except for initial watering to establish plants).	The use of low maintenance and drought-resistant planting reduces the amount of watering needed and produces a resilient landscape.	Site Plan	☒ N/A ☐ Implementation:
3.5	Topsoil for Sodded Areas: When landscaping development sites, maintain a minimum of 15 cm/6" of quality topsoil for areas to be sodded.	Appropriate topsoil levels absorb runoff and help to ensure sodded areas survive and thrive.	Site Plan	☒ N/A ☐ Implementation:
3.6	Tree Planting (soil): Provide a soil volume of 30 m^3 per tree and a minimum depth of 1 metre of high-quality soil OR in hard surface situations install a soil cell product with high quality soil and provide the required soil volume.	The use of high-quality soil at an appropriate quantity helps ensure trees survive and thrive. A soil cell type product helps ensure trees survive in urban hardscape environments. High quality soil is well drained, un-compacted soil comprised of 5 to 15% organic material with a pH level of 6.0 to 8.0.	Subdivision and Site Plan	☐ N/A ☒ Implementation: Addressed through conditions of approval
3.7	Tree Canopy: Meet the City of Guelph Sustainable Development Guidelines for Trees, including soil volumes, spacing and density.	Enhanced tree canopy cover can increase biodiversity and minimize the urban heat island effect. Resource Guelph Sustainable Development Guidelines (EB1 to 5).	Subdivision and Site Plan	☐ N/A ☒ Implementation: Addressed through conditions of approval
3.8	Restoration and Enhancement: Complete and implement a restoration and/or enhancement plan for adjacent Natural Heritage System areas, including a management and monitoring plan as may be required as a result of Environmental	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.	Subdivision and Site Plan	☐ N/A ☒ Implementation: Addressed through conditions of approval

	Impact Study recommendations.			
3.9	Community Gardens: Consider incorporating a community garden(s) for multiple and townhouse development and/or within adjacent open space lands. Include a rain barrel collection system.	Community gardens encourage sustainable local food production, increase access to healthy food, provide opportunities for community building and create local green space.	Subdivision and Site Plan	☐ N/A ☒ Implementation: To be implemented through multiple and townhouse development at the site plan stage.
3.10	Light Pollution: Meet the City of Guelph Lighting Guidelines.	Appropriate lighting levels and fixtures which are dark sky compliant minimize light pollution and protect natural heritage systems.	Subdivision and Site Plan	☐ N/A ☒ Implementation: Addressed through conditions of approval and site plan applications.

Section 4: Water Conservation and Quality				
#	Recommendation	Rationale	Implementation	Status
4.1	Stormwater Quality: Implement the SWM Strategy recommended by MTE in the stormwater management report.	Stormwater quality treatment reduces the total suspended solids and chlorides in receiving's streams.	Subdivision and Site Plan	☐ N/A ☒ Implementation: Addressed through conditions of approval
4.2	Water Conservation Systems: Encourage systems to reuse water, such as grey water recycling, rainwater harvesting systems, cisterns and rain barrels where appropriate.	Cisterns, rain barrels and rainwater harvesting systems allow rainwater to be captured and reused on site. Grey water systems allow the reuse of water internal to the building, for example allowing the reuse of water from bathing and/or laundry to be used for flushing toilets or irrigation.	Subdivision and Site Plan	☐ N/A ☒ Implementation: Addressed through conditions of approval and multiple and townhouse development at the site plan stage.
4.3	Pervious Surfaces: Minimize stormwater runoff through the use of Low Impact Development (LID) measures as appropriate and implementation of groundwater infiltration on a distributed area basis.	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 infiltration, evapotranspiration (where feasible) and rainwater harvesting.	Subdivision and Site Plan	☐ N/A ☒ Implementation: Addressed through conditions of approval

4.4	Water Efficient Fixtures: All newly installed toilets, urinals, private lavatory faucets, and showerheads that are eligible for labeling must be WaterSense labeled.	Efficient water fixtures reduce the use of potable water. Resources: EPA Watersense - www.epa.gov/watersense/watersense-label	Site Plan / Building Permit	☒ N/A ☐ Implementation:

Section 5: Energy and Emissions				
#	Recommendation	Rationale	Implementation	Status
5.1	Urban Heat Island: Provide vegetated landscape areas in hard surface areas associated with multiple residential, commercial and employment blocks that are subject to site plan approval.	Vegetation can reduce the urban heat island effect to improve human comfort and energy efficiency in the surrounding areas.	Site Plan	☒ N/A ☐ Implementation:
5.2	Use energy efficient lighting and promote the use of energy efficient appliances	The use of energy efficient lighting and appliances will reduce the use of energy.	Subdivision and Site Plan	☐ N/A ☒ Implementation: Addressed through conditions of approval and site plan applications.
5.3	Design, Construct and label buildings to achieve ENERGY STAR for New Homes and meet OBC energy performance standards.	The provision of more energy efficient buildings will reduce the overall energy demand of new development over the building's lifespan and improves the developments long term sustainability.	Subdivision and Site Plan	☐ N/A ☒ Implementation: Addressed through conditions of approval and site plan applications.
5.4	Air Tightness: Conduct air leakage tests for all buildings and meet future mandatory air tightness standards.	Construction of air tight buildings lowers energy consumption associated with heating and cooling on an ongoing basis.	Subdivision and Site Plan	☐ N/A ☒ Implementation: Addressed through conditions of approval and site plan applications.
5.5	Renewable Energy: Explore the installation of electric air-source heat pumps for space heating and consider the installation of solar PV where and when viable.	Provision of electric air-source heat pumps for space heating and solar PV will reduce the developments overall reliance on natural gas and reduce the long-term carbon footprint of the development.	Subdivision and Site Plan	☐ N/A ☒ Implementation: Addressed through conditions of approval and site plan applications.

Section 6: Waste and Building Materials				
#	Recommendation	Rationale	Implementation	Status

6.1	Waste Management Plan: Prepare and implement a waste management plan.	Recycling and composting treats waste as a resource and reduces the need for landfill expansion.	Site Plan	☒ N/A ☐ Implementation:
6.2	Waste Management Facilities: Provision of recycling, garbage and composting facilities which are easily accessible for all occupants (in an attached building).	Recycling and composting treats waste as a resource and reduces the need for landfill expansion.	Site Plan	☒ N/A ☐ Implementation:
6.3	On-Site Aggregate: To the extent possible, utilize suitable on-site aggregate material for construction purposes.	Reduces the demand for new aggregate, reduces off-site transportation and related emissions and utilizes a non-renewable resource.	Subdivision and Site Plan	☐ N/A ☒ Implementation: Addressed through conditions of approval
6.4	Construction Waste Management: Develop and implement a waste management plan to reduce, recycle and/or salvage construction, and land clearing waste.	Reduces construction and waste disposed of in landfills, and to treat recycled and salvaged materials as a resource.	Subdivision and Site Plan	☐ N/A ☒ Implementation: Addressed through conditions of approval

Section 7: Maintenance, Monitoring and Communication				
#	Recommendation	Rationale	Implementation	Status
7.1	Maintenance Plan: provision of a maintenance plan for multiple residential development subject to site plan approval. The maintenance plan is to provide instructions, training requirements and schedules for maintaining sustainability features of the site/ building/landscaping.	A maintenance plan will ensure sustainability features remain implemented on the site and continue to function at optimal levels.	Site Plan	☒ N/A ☐ Implementation:
7.2	Education: Prepare a homeowners/tenant brochure that explains the intent, benefits, use, and maintenance of sustainable development design and building features as part of the lease/sale agreement and/or condo declaration.	Communicating sustainable design features and educating occupants and visitors regarding the rationale for these features will help to ensure their proper use and maintenance.	Subdivision and Site Plan	☐ N/A ☒ Implementation: Addressed through conditions of approval