Sustainable King: Green Development Standards Program

The Sustainable King: Green Development Standards program has been developed to expand upon the sustainability policies outlined in the Township's Official Plan and Integrated Community Sustainability Plan (Sustainable King). The Green Development Standards program establishes a set of metrics with the purpose of evaluating the sustainable performance of new development in the Township of King. The development metrics established through this program represent the vision for the Township and the Township's overarching goal of creating a sustainable, resilient and healthy community for all. These metrics will apply to all Site Plan applications throughout the Township to ensure that all proposed development aligns with the vision for the community.

What is Sustainability?

As provided by King Township's Integrated Community Sustainability Plan, the most commonly adopted definition of sustainability is "meeting the needs of the present generation without compromising the ability of future generations to meet their needs". This means the actions we take must protect, restore and enhance our natural environment and promote a high quality of life today, tomorrow and for generations to come. New developments must occur sustainably to ensure that community well-being is resilient and equitable over the long term.

The Green Development Standards program breaks down this definition of sustainability into four key principles. These principles are all interconnected and must be addressed collectively to ensure the Township's sustainable future. The four principles are:

1) Green Infrastructure

Sustainable, green infrastructure is a key component in creating sustainable communities. By conserving energy and water, sustainable developments contribute to creating a more resilient community. Green infrastructure measures can be implemented both internal to buildings, and external on the subject property. Development metrics in this section will include promoting green technologies such as on-site renewable energy, LEED certified buildings, low impact development control techniques, permeable surfaces, and green roofs.

2) Natural Environment

The identification, protection, enhancement and restoration of the natural environment are core components of the program. King Township contains portions of the Oak Ridges Moraine, Greenbelt and Holland Marsh, all of which contain diverse ecosystems.

Within King Township's Villages, community green spaces and parkland contribute to creating more walkable, healthy communities while providing for natural areas within urbanized areas. The development metrics in this section look to minimize the impacts of development on the natural environment through limiting the fragmentation of rural and agricultural land and by retaining and enhancing existing natural vegetation. Proposed developments should be harmonious with the natural landscape, and developments within the Villages should promote open space, trails and parkland.

3) Efficiency & Conservation

Proposed developments should aim to protect and enhance the natural environment while utilizing efficient and innovative measures. Development metrics in this section propose to reduce the Township's environmental and carbon footprint by incorporating alternative energy sources, innovative landscaping and construction practices.

4) Healthy Communities

Developing on the basis of health provides increased opportunities for active and passive recreation and promotes active transportation and walkability through a compact community design. Development metrics in this section will focus on creating complete, equitable and inter-connected communities with universal, accessible and age friendly designs that incorporate a mix of uses, building types and densities.

How do the Metrics Work?

The Green Development Standards program supports diversifying land uses to ensure an appropriate balance between residential, commercial, industrial and institutional uses while also preserving the natural heritage system, agricultural system and open spaces through directing development to the Villages.

All new Site Plan applications submitted to the Township under the Planning Act, with the exception of Site Plan applications required for conformity purposes with the Oak Ridges Moraine Conservation Plan (ORMCP) area are required to address the metrics of the Sustainable King: Green Development Standards Program as part of a complete application.

Within each principle area are a variety of sustainability metrics. Metrics are separated into three sections based on the location of the proposed development. All applications must address the **General** development metrics. For developments located within Nobleton, Schomberg and King City, the **Villages** development metrics must also be addressed. For developments in the rest of the Township, including the Hamlets, the **Countryside** development metrics must be addressed.

The Township recognizes that specific metrics may not be applicable to all development applications. If a metric is not applicable to the proposed development an explanation should be provided as to why the metric is not applicable.

There is also an opportunity to suggest a sustainability metric that is not currently included within the program. The final page of the Sustainability Review Table provides a table where a development metric can be proposed. This metric must be allocated in to one of the four principles, and justification must be provided to support the proposed metric. The Township will review the proposed metric and evaluate the number of points to be awarded.

How are the Metrics Evaluated?

The sustainability metrics are evaluated overall and based on each of the four key principles. Each principle area is allocated a maximum of 30 points, for a total of 120 points. Each metric is comprised of three targets: “Minimum Target”, “Level 1”, and “Level 2”. For metrics were only the “Minimum Target” is satisfied, no points will be awarded. Where the “Level 1” or “Level 2” target is satisfied, points will be awarded up to the maximum allocated for the specific metric.

All proposed developments must obtain the “Minimum Target” for all applicable sustainability metrics. For each of the four principle areas, the proposed development must obtain at least one “Level 1” target and one “Level 2” target. In addition to achieving at least one “Level 1” target and one “Level 2” target in each principle area, proposed development must score a minimum of 25 points across all four principles. The minimum point total of 25 must be achieved in addition to satisfying all other application requirements to obtain support from the Township’s Planning Division.

Complete Submission Requirements

Application Information

1. Site Plan Application Information Form
   - Fill out the application form, property information and proposal.

2. Review Sustainability Metrics
   - Review the intent of the measure and how to comply with the measure.

3. Choose Target Levels
   - Select the target level that the development has achieved.
   - Applicants are encouraged to propose site-specific and custom development metrics. These additional metrics will be evaluated and points will be assigned to them accordingly.
   - The ability to propose customized development metrics allows for innovation and flexibility while still ensuring the Township's sustainability principles are fulfilled.

4. Explain
   - For each metric, please provide a written explanation as to how the selected development target has been met, or identify the plan and/or report that confirms the achievement of the target.
   - For metrics where no target is met, please provide a detailed written explanation as to why the metric was not met, including if the metric is "not applicable" to the development.
   - Exemptions from specific development metric may be granted on a case by case basis at the discretion of the Township. These exemptions will be determined through the Site Plan review process.

5. Reference
   - Please reference the plan or report that outlines how the metric has been met under the "Plan or Report Name" column. For reports, please provide specific section and page numbers.

6. Submit/Resubmit the Completed Application Form and Checklist
   - The Township will evaluate all submissions and complete an assessment of the application.

Definitions

Accessibility for Ontarians with Disabilities Act, 2005 (AODA)	An Act to benefit all Ontarians by aiming to identify, remove and prevent barriers for people with disabilities with respect to goods, services, facilities, accommodation, employment, buildings, structures and premises. AODA applies to all levels of government, non-profit organizations and private sector businesses in Ontario.
Active Transportation	Any form of human-powered transportation such as: walking, jogging, running, cycling, in-line skating, skateboarding, snowshoeing and skiing.
Bird Friendly Design	A compilation of best practices designed to prevent and mitigate bird deaths caused by collisions with mid and high-rise buildings.
Biodiversity	The variation of life forms within a given ecosystem, biome or the entire earth. Biodiversity is often used as a measure of the health of biological systems.
Carbon Footprint	The total amount of greenhouse gases emitted directly and indirectly to support human activities, usually expressed in equivalent tons of either carbon or carbon dioxide.
Climate Change	Changes in global climate patterns (such as temperature, precipitation or wind) that last for extended periods of time as a result of either natural processes or human influences. In some cases, 'climate change' has been used synonymously with the term 'global warming'.
Complete Community	Complete communities meet people's needs for daily living through an entire lifetime by providing convenient access to an appropriate mix of jobs, local services, a full range of housing, and community infrastructure including affordable housing, schools, recreation and open space for their residents. Convenient access to public transportation and options for safe, non-motorized travel is also a component of a complete community.
Core Area	A property designated as "Village Core" within the Township's Official Plan, "Our King", adopted September 23, 2019.
Cool Roof	A roofing system that delivers a high solar reflectance and higher thermal emittance than standard designed roofing products. Cool roofs have historically been either white or a

	light colour.
Cultural Heritage	The legacy of physical artifacts and intangible attributes of a group or society that are inherited from past generations, maintained in the present and bestowed for the benefit of future generations. Cultural heritage includes tangible culture, intangible culture and natural heritage.
Cultural Heritage Resource	Resources that contribute to our understanding of the past and include archaeological resources, built heritage resources and cultural heritage landscapes.
Dark Sky Lighting	The use of fixtures that cast little or no light upward, intended to help reduce light pollution and cut down on energy usage.
Energy Star®	A rating system generally most applicable to single family dwellings and town *home projects by enhancing specific aspects of residential buildings during construction in an* effort to ensure the home is more energy efficient and reduces operating costs. Homes built to Energy Star® standard are approximately 30% to 40% more energy efficient than those built to minimum Ontario Building Code Standards and produce two to three fewer tonnes of greenhouse gas emissions per year.
Green Roof	A roofing surface that supports the growth of a vegetated landscape built up from several layers that are installed on a roof surface including a waterproofing membrane, drainage layer, growth material (soils), and a vegetative layer. Green roofs absorb heat and act as insulators to buildings, reducing the energy needed to provide cooling and heating. Green roofs can be both extensive (shallow) and intensive (deep), depending on the depth of the growth material (soils).
Greenhouse Gas (GHG) Emissions	Greenhouse gases include naturally occurring gases as well as new emissions created by industrial and individual activities. Naturally occurring GHG include water vapour, carbon dioxide, methane and ozone. Others result exclusively from human industrial processes. Human activities also add significantly to the level of naturally occurring GHGs.
Integrated Community Sustainability Plan (ICSP)	Adopted in 2012 and referred to as Sustainable King, the Plan was created through an extensive collaborative process with the community and defines the future for the municipality, community groups, local organizations and the broader public.

	It guides and directs how we make decisions, develop partnerships and take action.
Light Coloured Materials	Light coloured materials for cool roof coatings are defined as white, beige, tan or as containing special reflecting pigments that reflect sunlight.
Light-Emitting Diode (LED)	Semi-conductor devices that produce visible light when an electrical current passes through them. LED lighting products produce light approximately 90% more efficiently than incandescent light bulbs.
LEED™	Leadership in Energy and Environmental Design is a voluntary, consensual-based system for developing high-performance, sustainable buildings.
LEED™ Certification	Different levels of green building certification are attainable in the LEED™ Green Building Rating System: certified, silver, gold, and platinum. They are awarded based on the total number of credits earned in the categories of: sustainable sites, water efficiency, energy and atmosphere, materials and resources, and indoor environmental quality. This certification is granted after a thorough review of the project characteristics by the Canadian Green Building Council (CaGBC).
Low Impact Development (LID)	Stormwater Management systems that use or mimic natural processes that result in the infiltration, evapotranspiration, harvesting, filtration and detention of stormwater in order to protect water quality and the associated aquatic habitat. LID measures can include: bio-swales, green roofs, stormwater management ponds, swales, soakaway pits, trenches and rainwater harvesting.
Major Development	1. The creation of four or more lots; 2. The construction of a building or buildings with a ground floor area of 500 square metres or more; or, 3. The establishment of a *major recreational use*.
Natural Heritage Evaluation (NHE)	An evaluation to determine the potential impacts on the Natural Heritage System (NHS) from development and site alteration proposals.
Natural Heritage System (NHS)	A system made up of key natural heritage features and areas, and linkages between them that are intended to provide connectivity and support natural processes.

	The boundaries of the Township's Natural Heritage System (NHS) are identified in Schedule X of the Township's Official Plan.
Non-potable Water	Non-potable water sources include rainwater, reclaimed/recycled water and gray water. Non-potable water is not of drinking water quality, but can be used for other purposes such as laundry and toilet/urinal flushing.
Natural Resources Canada EnerGuide	The EnerGuide label is supported by the Government of Canada, and all participating builders must be registered with Natural Resources Canada. The label works to promote energy efficiency in the Canadian marketplace, and provides the energy performance rating for key consumer items including houses, light-duty vehicles and certain energy-use products.
Official Plan	A Plan that delineates the goals for the future of the municipality, and Council's policies on how land in the community is to be used. It directs future planning and development to meet the needs of the Township.
Ontario Building Code (OBC)	A regulation under the Building Code Act that provides detailed requirements as well as minimum standards for all building construction.
Ontario Heritage Act	An Act passed by the province of Ontario to give municipalities and the provincial government powers to protect heritage properties and archaeological sites across Ontario.
Permeable Materials	Porous materials that allow stormwater to drain through the pavement and into an underlying stone reservoir. Permeable surfaces catch precipitation and surface runoff and store it in the reservoir while slowly allowing it to infiltrate into the soil below. Permeable materials and pavements can be used for parking lots, driveways, walkways and pedestrian plazas.
Renewable Energy	Natural Resources that provide energy such as sunlight, wind, tides and geothermal heat which are naturally replenished.
Resilient	The capacity to anticipate risk, limit impact, and bounce back rapidly through survival, adaptability, evolution and growth in the face of turbulent change.
Smart Growth	A development approach to improve environmental, economic

	and social sustainability by managing urban sprawl.
Stormwater	The discharge of water by runoff from land and impervious areas, such as paved streets, parking lots and buildings, during rainfalls and snow events.
Stormwater Management	Stormwater management is anything associated with the planning, maintenance, and regulation of facilities which collect, store or convey stormwater.
Sustainable Development	A vision of development that encompasses populations, animal and plant species, ecosystems, natural resources – water, air, energy – and that integrates concerns such as the fight against poverty, gender equality, human rights, education for all, health, human security, intercultural dialogue, etc.
Township Design Guidelines	Documents that instruct infill and new development within the Village Cores and the Township's Employment Areas. The Guidelines take into consideration compatibility to scale, massing and architectural character of existing buildings.
Volatile Organic Chemicals (VOCs)	Compounds that evaporate easily at room temperature and often have a sharp smell. They can come from many products, such as office equipment, adhesives, carpeting, upholstery, paints, solvents, and cleaning products