TOWN OF CALEDON

Town of Caledon

Green Development Standard

Guidebook

Prepared for:

The Town of Caledon

Prepared by:

Sustainability Solutions Group (SSG)

Designed by SSG

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SSG

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Land Acknowledgement

The Town of Caledon acknowledges that it is situated on lands that are home to many Indigenous Peoples from across Turtle Island (North America). The Town realizes the need and value of understanding more about the rich history of this land and its Indigenous Peoples, which will help the Town be better neighbours and partners.

This land is part of the Treaty Lands and Territory of the Mississaugas of the Credit First Nation, and part of the traditional Territory of the Huron-Wendat, Haudenosaunee Peoples, and the Anishnabek of the Williams Treaties.

We acknowledge the enduring presence and deep traditional knowledge and perspectives of the Indigenous Peoples with whom we share this land today.

Context:
Why Caledon Adopted a Green Development Standard

The Intergovernmental Panel on Climate Change (IPCC), the world's leading scientific body on climate change, estimates that human activities have already caused the world to warm by 1.1°C since the Industrial Revolution. The IPCC indicates that we must limit warming to no more than 1.5°C above pre-industrial temperatures to reduce the risk of catastrophic climate impacts. Limiting warming to 1.5°C requires reaching net-zero greenhouse gas (GHG) emissions globally by around 2050, or sooner.[1]

International organizations, federal governments, regions, and municipalities worldwide are taking action to reverse the course of climate change and reduce global emissions. Acknowledging climate change as an immediate threat to residents, the economy, and the environment, and seeking to mobilize action on climate change, on January 28, 2020, Caledon Town Council unanimously passed a motion declaring a climate emergency, and it set a target to reach net-zero emissions community-wide by 2050. Following this, in 2021 the Resilient Caledon Community Climate Change Action Plan (Resilient Caledon Plan) was released, which outlined how Caledon would reach its net-zero target. One of the five priority actions in the Plan was to develop and apply a Green Development Standard (GDS) to ensure all new buildings are net-zero and climate-resilient by 2030 and to promote an efficient, green, and liveable community design.

About Green Development Standards

Caledon is entering a period of significant growth. The town's population is projected to triple from 81,000 to 300,000 in the next 30 years. To accommodate this growth, the Town will be planning for buildings and infrastructure patterns that will last decades (and even centuries) and that will directly impact the town's energy and GHG footprint. The GDS is a pivotal opportunity for the Town to "get it right" from the start by embedding sustainability and GHG emissions reductions at the core of planning, design, construction, and management of new development. This will have a significant impact on public health, social equity, local economic development, climate change resilience, resource use, and the overall liveability of Caledon's communities. In this way, the GDS presents an opportunity to improve performance on sustainability and provide many additional benefits on matters of importance to the community.

[1] IPCC, 2022: Summary for Policymakers [H.-O. Pörtner, et al. (eds.)]. Dans: Climate Change 2022: Impacts, Adaptation and Vulnerability. Contribution of Working Group II to the Sixth Assessment Report of the Intergovernmental Panel on Climate Change. Cambridge University Press, Cambridge, UK and New York, NY, USA, pp. 3–33, doi:10.1017/9781009325844.001.

Caledon's Green Development Standard is not just about greenhouse gas emissions

Climate change is the long-term shift in temperature and weather patterns caused by the release of heat-trapping greenhouse gases in the atmosphere. In large part, efforts to prevent, or "mitigate," climate change seek to eliminate the combustion of fossil fuels by making products and processes more efficient (for example, improving building insulation) and by switching to renewable energy sources such as solar PV and wind.

However, it is important to recognize that true sustainability is not achievable through GHG emissions reduction or technology improvements alone. Many of earth's life support systems are currently under threat from human activity, including biodiversity loss, pollution, land use change, as well as climate change. Care needs to be taken to ensure that action in one area does not exacerbate problems in other areas, and that both people and nature can thrive in a low carbon future.

A zero-carbon community that fails to provide residents' needs locally will result in people still having to drive to meet their day-to-day needs. Zero-carbon communities that are unaffordable to much of the population may sit empty and/or fail to address the emissions of those who cannot access them. Zero-carbon communities that fail to preserve nature and integrate abundant green space will result in further biodiversity loss and will be more at risk from climate impacts.

It is for reasons like these that green standards, including Caledon's, incorporate elements such as liveability, housing diversity, active transportation, and biodiversity alongside measures to reduce GHG emissions. Green development cannot be limited to low-carbon development. It must also be resilient and support social, economic, and environmental well-being for people and nature should it truly wish to achieve its goal of addressing the climate crisis.

The Process:
Developing Caledon's Green Development Standard

The Town kicked off its GDS project in January 2022, undertaking extensive background research to understand Caledon's existing policy context, as well as best practices from Ontario and other jurisdictions.

As the GDS affect all members of the community, engagement was considered a critical component of the project. Key groups were identified at the onset of the project, and pre-engagement interviews were conducted to give them the chance to provide input on how they would prefer to be engaged. An Engagement Plan, which included the following, was developed and then carried out:

- Focus groups with representatives from equity-deserving groups;
- Workshops with developer groups, utilities, conservation groups, etc.; and
- A community survey and the release of the GDS draft open to all interested parties for comment.

Additionally, the project was guided by two groups that met regularly: 1) a Project Advisory Committee (PAC) consisting of Town staff and 2) a Technical Working Group composed of agency stakeholders, development industry representatives, and context and content experts.

The Vision and Guiding Principles

The Vision Statement and Guiding Principles for Caledon's GDS were developed with input from the GDS Project Advisory Committee and additional Town staff and were based on the visions from the Town's Official Plan, Caledon's Community Climate Change Action Plan, and the GDSs from surrounding jurisdictions.

Vision Statement

Caledon aims to be a zero-emissions, resilient, and complete community. As we grow, we celebrate our rural roots and our connection to the land and find innovative ways for people to connect with nature in all our communities.

Guiding Principles

1. Support net-zero, energy- and resource-efficient buildings and renewable energy systems.
2. Create communities and infrastructure that are resilient to climate change impacts.
3. Create complete, compact, connected, and transit-oriented communities.
4. Provide for a range and mix of housing opportunities, choices, and accessibility, with a focus on affordable options.
5. Enhance and strengthen the local economy and create jobs concurrent with residential growth to reduce the need for long distance commuting. Support new technologies and innovation.
6. Protect, restore, and enhance the natural heritage system, ecosystem services, and agricultural lands.
7. Create inclusive, liveable communities that advance social equity and improve public health.
8. Preserve the town's rural character through place-making and restoration.

Additional Considerations for Developing the GDS

Along with the Vision Statement and the Guiding Principles, some important considerations for developing the GDS were identified throughout consultations with staff and other groups. These considerations ensured the included metrics would:

- Be direct, simple, and verifiable to ease the process for Town staff and applicants;
- Advance both climate change resiliency and a pathway to net zero;
- Align with and enhance other existing standards when needed;
- Avoid overlap or conflict with existing standards or programs; and
- Be implementable via the Town's authority (i.e., through the Planning Act, Official Plan, by-laws and Site Plan approval).

Caledon's Green Development Standard: Submission Criteria

The following section details the application process, the metric and submission requirements, instructions for preparing submissions, and the resources, tools and templates to guide applicants in preparing their GDS submission. Applicants are required to complete the relevant developer checklist during the Pre-Consultation (DART) Review and Formal Application phase. The developer checklist and supporting documentation (e.g., plans, drawings, and component studies) must be completed using the GDS Guidebook as a reference. In addition, all applicants should refer to the Town's Terms of Reference webpage for a complete list of the supporting studies and materials that are submitted as part of a complete planning application.

Applicability: Development Application and Building Types

Development Application Types

Application types that are required to comply with the GDS include those listed below, as submitted to the Town under the Planning Act:

- Official Plan or Zoning By-Law amendments to facilitate either a Draft Plan of Subdivision or Site Plan application (a high-level GDS Brief)
- Draft Plan of Subdivision
- Site Plan[2]

Building Types

The GDS applies to the following new construction types and major expansions in both greenfield and infill contexts:

- Residential[3]
- Commercial and Institutional
- Industrial

[2] Including Oak Ridges Moraine Site Plan Applications for properties in the Oak Ridges Moraine that are subject to Site Plan control according to Caledon's Site Plan Control by-law.

[3] Note that because Site Plan Control only applies to developments of 10 units or more, the GDS applies to developments of 10 units or more.

Exceptions

The following application types are exempt from GDS requirements and submissions:

- Subdivisions of ten residential units or less (however, these developments will be encouraged to adhere to relevant GDS metrics).
- Limited Site Plans (per the Region of Peel definition). These include site alterations, ground-based units, and the Oak Ridge Moraine.
- Municipal facility projects.
- Lands that already have an approved Plan of Subdivision or Site Plan as of the approval of the GDS.
- Major expansions of buildings or parking areas may be required to complete the GDS either in full or in part - Town staff will work with applicants to assess the applicability of each metric for particular sites.
- Renovations of existing buildings.

Development Application Process

The GDS is designed to be integrated into the Town's existing development application process. Table 1 shows the Town's general development application process steps, with details on GDS submission requirements and how they will be reviewed.

Table 1. GDS steps as part of the development application process.

Development Application Step	GDS Review or Submission
Preliminary (PARC) Meeting	Applicants are advised of GDS requirements. Project plans are discussed and questions about applicability and compliance are fielded by the Town.
Pre-Consultation (DART) Review/Formal Application	Applicants submit a completed GDS checklist as part of their complete application submission.
Circulation/Technical Review	Town staff review submitted plans/drawings and component studies (e.g., Landscape Plans, Urban Design Briefs, etc.) to verify compliance with the GDS. Comments on application compliance and any outstanding documents or unmet metric thresholds is provided to the applicant by the Town.
Re-Submissions	Application updated by applicant as needed.

Development Application Step	GDS Review or Submission
Decision Made on Application	If approved, the Town will include any requirements for conditions and agreements.
Detailed Design/Site Construction	Applicants demonstrate that GDS requirements are met in detailed design submission and through site construction, where applicable.

Applicants are required to complete one of three GDS checklists:

Draft Plan of Subdivision: Complete for low-rise residential subdivision applications, primarily for building types that will proceed straight to building permit without the need for a Site Plan application. Any lots within the subdivision that will need to submit a separate Site Plan application (e.g., commercial buildings, multi-unit residential buildings, etc.) should complete the GDS checklist for Site Plan applications (below).

Site Plan: Complete for any development that must go through Site Plan, except industrial developments. Note that if the Site Plan application is part of a pre-existing plan of subdivision that completed the GDS, it may be exempt from some broader site design metrics.

Industrial Site Plan: Complete for Site Plan applications for industrial developments.

Checklists include a fillable column for applicants to demonstrate how each GDS metric is being achieved. This content should include specific details about where reviewers can verify the metrics, including the reference to plans, page numbers, drawing numbers, etc., and any considerations specific to the site. If a reviewer cannot find the relevant information, it will be sent back as incomplete.

Themes and Metrics

Caledon's GDS takes a single-tier approach, meaning that there are no points or "levels" to be achieved, just one set of metrics for which all requirements must be met. Metrics are designed to provide an overarching target, with flexibility in how that target is achieved and recognizing that the context may differ across development sites. Caledon's GDS has been organized into three theme areas:

1

Community Design and Mobility

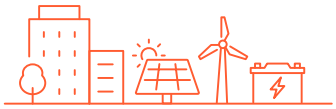
Create complete, connected communities that enable active and sustainable modes of transportation and enhance well-being for town residents.

2

Green Infrastructure

Improve stormwater management, reduce urban heat island effect, and enhance habitat through urban green space.

3



Buildings and Energy

Support low-carbon, energy-efficient, and resilient buildings and renewable energy systems.

The following section outlines the theme objectives, metric requirements and submission requirements, as well as guidance for preparing submission documents and the resources for each metric. Detailed specifications for some metrics are included in Terms of References, information sheets, templates, and reporting tools; these are highlighted within the Guidebook and are available for download from the Resource section on the Town's Green Development Standard webpage.

1

The community design and mobility theme area includes metrics to ensure new communities are designed to be complete and connected to enable active and sustainable modes of transportation and enhance well-being for town residents. It seeks to increase the diversity of building use types (residential and non-residential) and more compact forms of development so that people can use means other than private vehicles (such as active modes and public transit) to get to go.

Metric 1.1: Housing Diversity

- **Rationale:** Encourage a diverse housing stock that offers more accessible and affordable options to a range of residents and improves efficiency of land and energy resources.
- **Official Plan 9.0:** The Town will establish housing targets and will adapt to innovative designs and trends. This will take the form of intensification, additional residential units, inclusionary zoning, and purpose-built affordable housing.
- **Application Reviewers:** Development Planning.
- **Development Type:** Low-rise residential subdivision.
- **Application Type:** Draft Plan of Subdivision.

Metric Requirements

Applicability	Metric Requirement
Low-Rise Residential Subdivisions	No more than 50% of units are single-/semi-detached.[4] Additional units are provided in a range of housing types and sizes, including at least two of the following types: • Townhouses/row houses • Additional residential units within homes • Multiplexes • Mid-/high-rise buildings • Dedicated rental housing units • Live-work units • Affordable units

[4] A rationale must be provided if the 50% target is not going to be achieved.

Submission Requirements

Draft Plan of Subdivision

Planning Justification Report provides:

- Housing analysis detailing the percentage (%) of units of each housing or tenure type included in the proposed development and a detailed rationale if the target is not met.
- The total percentages (%) by category should each add up to 100%.
- Housing Assessment Report required for applications proposing more than 50 units.

Draft Plan: Identify the housing and tenure types.

Site Statistics Template: Complete the Housing Diversity tab.

Definitions

1. The Town uses the Provincial Planning Statement (2020) and Peel Region Official Plans definitions of affordable housing:
    a. A purchase price that is not greater than 30% of the gross annual household income for low- and moderate-income households and
    b. Rent at or below the average market rent of a unit in the regional market area.
2. Refer to the Town of Caledon: Housing Study for housing continuum characteristics for emergency shelters, transitional housing, supportive housing, social housing, affordable housing, market rental housing, and market ownership housing.

Preparing Submission Materials

1. A rationale must be provided if the 50% target is not going to be achieved.
2. To prepare a Housing Assessment Report, refer to the Town's Terms of Reference: Housing Assessment.

Resources

- Town of Caledon Terms of Reference: Housing Assessment—Submission requirements for preparing the Housing Assessment Report.
- Town of Caledon: Housing Study—Current state of the housing market and future housing demand.
- Peel Region Housing Assessment Guidelines—Guidelines for preparing the Housing Assessment Report.
- Peel Region Affordable Housing Incentives Program—Funding for developers to build affordable rental housing in Peel.
- LEED ND (v4) NPD: Housing Types and Affordability—Housing diversity, housing categories, and affordable housing guidelines.

Metric 1.2: Connection to Parks and Open Space

- **Rationale:** Provide access and visibility to parks and open spaces that promote accessibility, safety, and physical activity and that support urban biodiversity.
- **Official Plan 14.4.2(b)(c):** Parkland will be planned in a manner that prioritizes street frontage for visibility from the public realm to promote accessibility and safety; and avoids locations to the rear of adjacent properties and uses; and to be accessible by pedestrians, cyclists, transit, and motor vehicles, as appropriate.
- **Application Reviewers:** Parks and Natural Heritage; Transportation Engineering (for trail and other active transportation connections).
- **Development Type:** Low-rise residential and multi-unit residential.
- **Application Type:** Draft Plan of Subdivision and Site Plan.

Metric Requirements

Applicability	Metric Requirement
Low-Rise Residential Multi-Unit Residential	Provide new or enhanced visual and physical connections to open-space areas, parkland, and natural features (where appropriate) for the proposed development (e.g., vistas, public access blocks, single-loaded roads, trails, sidewalks).

Submission Requirements

Draft Plan of Subdivision and Site Plan

Landscape Plan: Highlight any open-space/natural areas/parks on map that abut the development site, as well as the connections to them that are provided in the site/landscape design.

Community Design Guideline or Urban Design Brief: Include a brief description of the spaces and connections provided, referring to the highlighted plan(s).

Preparing Submission Materials

1. Refer to the Caledon Town-Wide Design Guidelines Natural Heritage Systems section for design standard guidelines outlined in Section 6.1 Open Space and Parks.
2. Visual and physical connections should be designed to meet the site's applicable Town-Wide Design Guidelines and the guidelines defined by the Recreation and Parks Master Plan, Caledon Trails Master Plan, Active Transportation Master Plan, site-specific design criteria, and the Accessibility Advisory Committee.
3. Private yards (e.g., backlotting) and parking lots are not counted as part of public physical connections to open-space areas, parkland, and natural features.

Resources

- Caledon Town-Wide Design Guidelines—Public realm definitions and guidelines. Developers should refer to the most recently updated Caledon Town-Wide Design Guidelines.

Metric 1.3: Light Pollution Reduction

- **Rationale:** Minimize light pollution and its impacts on nocturnal wildlife and preserve the natural night sky.
- **Official Plan 7.7.4:** Lighting will be internally oriented within a property to minimize glare and light pollution on adjacent properties, environmentally protected areas, or public roads. DarkSky-compliant lighting fixtures and smart lighting solutions that reduce lighting requirements will be encouraged.
- **Application Reviewers:** Development Engineering; Parks and Natural Heritage (for horizontal light trespass).
- **Development Type:** Low-rise residential, multi-unit residential, and institutional, commercial, and industrial (ICI).
- **Application Type:** Draft Plan of Subdivision, and Site Plan.

Metric Requirements

Applicability	Metric Requirement
Low-Rise Residential	Low-rise residential developments are encouraged to adhere to the Five Principles for Responsible Outdoor Lighting outlined by the DarkSky International Association.
Multi-Unit Residential Institutional, Commercial, and Industrial	Follow the specifications in the Town's Outdoor Lighting Standard Manual, including those for street and walkway/bikeway lighting, commercial, institutional, and condominiums: • All lighting fixtures must be DarkSky approved. If a DarkSky Fixture Seal of Approval is not available, fixtures must be full-cutoff (0 BUG uplight) and with a colour temperature rating of 3000 K or less. • All street and walkway/bikeway lighting fixtures must have NEMA 7 -pin ANSI 136.41 receptacle and photocells. • All other fixtures must have photocells or astronomic time clock operations to limit lighting when daylight is adequate.
All Site	Sites adjacent to protected natural features shall have no lateral light trespass into the feature. See specifications for details and definitions of natural features.

Submission Requirements

Draft Plan of Subdivision

Lighting Design Plan: Provide a narrative in the Lighting Design Plan describing how the development is following the Five Principles for Responsible Outdoor Lighting.

For sites adjacent to protected natural features: On the Photometrics Plan indicate lighting levels (expressed in foot candles or lumens) at the border of the natural feature.

Site Plan

For street and walkway/bikeway lighting and outdoor lighting for ICI and condominiums: Meet the submission requirements, as outlined in the Town's Outdoor Lighting Standard Manual.

Lighting Design Plan: Indicate the locations and types of lighting fixtures in the Lighting Design Plan. Provide a list of the lighting fixture types and indicate whether each is DarkSky approved, how they meet DarkSky requirements (if not DarkSky approved), or if they are exempt (traffic control). Also indicate whether they have photosensors or astronomic time clock operations and integrated photovoltaic cells.

For low-rise residential: Provide a narrative in the Lighting Design Plan describing how the development is following the Five Principles for Responsible Outdoor Lighting.

For sites adjacent to protected natural features: On the Photometrics Plan indicate lighting levels (expressed in foot candles or lumens) at the border of the natural feature.

Definitions:

Protected natural features are defined as follows:

1. Current Official Plan (March 2024 Consolidation): Portions of the Ecosystem Framework as identified in Table 3.1 of Caledon's Official Plan that are protected from development and/or Environmental Policy Areas [EPAs] Zoning.
2. Future Caledon Official Plan: Portions of the Natural Environment System (NES) that are protected from development.

Preparing Submission Materials for Low-Rise Residential Sites

1. Applicants are encouraged to implement the DarkSky International Association's Five Principles for Outdoor Lighting, which include the following criteria:
    a. Useful: All light should have a clear purpose. Impacts on wildlife and habitats have been considered.
    b. Targeted: Lighting should direct only where it is needed, and shielding and aiming is used to target the direction of the light beam.
    c. Low level: The lowest light level required should be used.
    d. Controlled: Light is only used while needed, and controls such as timers, motion detectors, and dimmers are used.
    e. Warm-coloured: Limit use of shorter wavelength (blue-violet) light to the least amount possible.

Preparing Submission Materials for Multi-Unit Residential Sites and Institutional, Commercial, and Industrial Sites

2. Follow the Town's Outdoor Lighting Standard Manual, including guidelines for street and walkway/bikeway lighting and for commercial, institutional, and condominiums.
1. Ensure all exterior fixtures are DarkSky Compliant (a third-party certification for lighting to minimize glare, reduce light trespass, and reduce light pollution).
2. Ensure all rooftop and exterior facade architectural illumination is directed downward (no up-lighting).
3. When possible, avoid the use of continuous green, blue, and white light to reduce impacts on nocturnal migrating birds.

Preparing Submission Materials for All Sites

1. Traffic control lights are excluded from the light pollution reduction metrics. If additional exclusions are required, a rationale may be provided for why these are not feasible in certain instances.
2. For sites adjacent to a natural feature, lighting levels must be expressed in foot candles defined as one lumen per square foot.

Resources

- Town's Outdoor Lighting Standard Manual—Submission requirements for street and walkway/bikeway lighting and outdoor lighting for ICI and condominiums.
- Responsible outdoor lighting—DarkSky Association guidelines for responsible outdoor lighting.
- City of Toronto Best Practices for Effective Lighting (2017)—City of Toronto guidelines for CPTED.
- The Royal Astronomical Society of Canada: Canadian Guidelines for Outdoor Lighting (2020) —Canadian guidelines for outdoor lighting.
- International DarkSky Association Fixture Seal of Approval—Provides DarkSky Compliant resources, retailers, and database.

Metric 1.4: Active Transportation

- **Rationale:** Facilitate and encourage active transportation by enhancing the availability of pedestrian and cycling amenities and designing complete, well-connected communities.
- **Official Plan 11.4.1(a):** Develop an active transportation system that prioritizes comfortable and accessible pedestrian and cycling facilities that meet the needs of a diverse range of users, including children, youth, seniors, and people of all abilities.
- **Official Plan 7.3.3:** New streets will be designed to include pedestrian and cyclist amenities to promote active transportation.
- **Official Plan 22.7.3:** The development of pedestrian-oriented focal points that are walkable from nearby areas is required. These spaces should be easily accessible and visible to the public; contain seating amenities, hard landscaping, and natural elements; and provide passive recreation uses, possible public or private programmed activities, and public art. Adjacent commercial uses are encouraged to be integrated with and front upon these spaces.
- **Official Plan 7.2.4:** Align new streets in a grid pattern to create pedestrian-scaled development blocks to ensure connectivity and to better provide for active transportation.
- **Application Reviewers:** Transportation Engineering (ATMP requirements); Peel Public Health (HDA), where applicable.
- **Development Type:** Low-rise residential, multi-unit residential, and institutional, commercial, and industrial.
- **Application Type:** Draft Plan of Subdivision and Site Plan.

Metric Requirements

Applicability	Metric Requirement
Low-Rise Residential Multi-Unit Residential Institutional, Commercial, and Industrial	Follow all requirements outlined in the Active Transportation Master Plan, including guidelines for sidewalks, trails, cycling networks, and bicycle parking. For industrial or employment sites, provide outdoor amenity areas and appropriate walkways within the site for employees. AND Achieve a minimum score of Silver* (70%–79%) on the applicable Peel Healthy Development Assessment (HDA) for the categories of Streetscape Characteristics, Street Connectivity, and Efficient Parking.

Submission Requirements

Draft Plan of Subdivision and Site Plan

Traffic Impact Study (Active Transportation section): Demonstrate the active transportation strategies being incorporated in the development, as per the Town's Active Transportation Master Plan.

Peel Healthy Development Assessment (HDA): Demonstrate a minimum score of Silver (70%–79%) on the applicable Peel HDA for the categories of Streetscape Characteristics, Street Connectivity, and Efficient Parking.

Include relevant drawings/mark-ups on the Site Plan, Pedestrian Circulation Plan, etc.

Preparing a Peel Healthy Development Assessment

1. If the Peel Healthy Development Assessment's Silver Score is not met, a rationale including proposed alternatives, must be provided.
2. Submit a completed applicable Peel Healthy Development Assessment Form and Health Development Assessment Scorecard.
3. The required assessment categories are StreetScape Characteristics, Street Connectivity, and Efficient Parking. Follow the design guidelines and standards identified in the Peel Healthy Development Assessment for each assessment category.

Preparing a Traffic Impact Study Using the Active Transformation Master Plan Strategies

1. To complete the Traffic Impact Study, applicants must meet the requirements outlined in the Town's Active Transportation Master Plan (2024) and highlight a strategy to reduce single-occupancy vehicle trips generated by the proposed development through a variety of multimodal infrastructure strategies and transportation demand management.
2. Strategies to reduce single-occupancy vehicle trips include, but are not limited to, the minimum requirements outlined in Table 2 (next page).

Table 3. Required strategies to reduce single-occupancy vehicle trips.

Category	Strategies
Pedestrian Amenities	Applicants must include a minimum of three of the following for the Draft Plan of Division and one for the Site Plan: 1. Wayfinding plan (destinations, distances, and accessibility information) 2. Interpretive signage 3. Gathering nodes at route junction with enhanced amenities such as shelters, rest areas, consistent design features) 4. Regular rest areas and/or weather shelters that include accessible seating, minimized separation on slopes, and shade structures (e.g., gazebo, covered bench, etc.) 5. Public art, as per Town selection criteria and integrated as part of an overall landscape or streetscape plan 6. Covered outdoor waiting area at primary building entrance or lobby entrance with opaque canopies or awnings for shade and weather protection 7. Pedestrian-only street/promenades 8. Other amenity, as proposed by applicant
Cycling Amenities	1. Provide bike parking in accordance with rates identified in the Active Transportation Master Plan and Zoning By-Law. Include dedicated spaces for electric bikes and scooters and secure storage for long-term bike parking in multi-unit residential buildings. 2. Include showers and changeroom facilities in institutional and office buildings. 3. Include bike repair stations in appropriate locations, as determined by Town staff.
Infrastructure	1. Ensure a minimum 1.8-m-wide sidewalk on one side of local roads, or in accordance with the Active Transportation Master Plan for other roads. 2. Provide separated bike lanes, where appropriate.
Design	1. Locate mid-block pedestrian connections/mews centrally in blocks that are longer than 200 m in length and connect to sidewalks, trails, or pathways on either end. 2. Connect residents to pedestrian networks and priority destinations, including town urban and rural settlement areas, Intensification Areas, employment clusters, schools and institutions, parks and open spaces, transit stops, adjacent municipalities, and other key places.

3. Pedestrian-scale lighting must be DarkSky Compliant in accordance with Metric 1.3: Light Pollution.

Resources

- Active Transportation Master Plan (2024)—Submission requirements for design strategies.
- Peel Healthy Development Assessment—Submission requirements for Streetscape Characteristics, Street Connectivity, and Efficient Parking. Option to submit Small Scale or Large Scale assessment for residential or ICI sector.

Metric 1.5: Public Spaces

- **Rationale:** Create vibrant public spaces to encourage the use of active travel modes with destinations within walking distances of homes and to reduce emissions from travel.
- **Official Plan 7.7.1(d):** Where appropriate, particularly in densely populated areas, provide at-grade or grade-related public spaces, such as plazas, forecourts, and public courtyards.
- **Application Reviewers:** Planning and Development (Urban Design).
- **Development Type:** Low-rise residential, multi-unit residential.
- **Application Type:** Draft Plan of Subdivision and Site Plan.

Metric Requirements

Applicability	Metric Requirement
Low-Rise Residential Multi-Unit Residential Institutional and Commercial	In dense developments where private yard space is limited, provide a common outdoor amenity space at a recommended rate of 4 square metres per dwelling unit (minimum 40 square metres provided in a common location). Amenity type and design to be approved by Town staff.

Submission Requirements

Draft Plan of Subdivision

Draft Plan of Subdivision and Urban Design Brief/Community Design Guidelines: Indicate the size and location of amenity area on the Draft Plan and describe its function, etc. in the Urban Design Brief or Community Design Guidelines.

Site Plan

Site Plan and Urban Design Brief: Indicate the size and location of amenity area on the Site Plan and provide a description of its function, etc. in the Urban Design Brief or other documentation.

Preparing Submission Materials

1. Common outdoor amenity spaces are shared open spaces that are primarily intended for the enjoyment and recreational use of all residents and could be sited on public or private land.
2. The spaces should be programmed for either passive or active use and should not include any parking areas, driveways, or other spaces intended for alternative function purposes (e.g., storage, utility access, solar PVs or future renewable energy installations, stormwater management, etc.).
3. Amenity spaces, including public roof terraces, must be accessible for all building occupants.

Resources

- Caledon Town-Wide Design Guidelines—Developers should refer to the most recently updated Caledon Town-Wide Design Guidelines.
- City of Vancouver: Housing Design and Technical Recommendations—Reference guidelines for designing outdoor amenity spaces.
- City of Vancouver: High-Density Housing For Families With Children Guidelines—Reference guidelines for designing outdoor amenity spaces in high-density housing.

Metric 1.6: Mixed-Use Neighbourhoods

- **Rationale:** Design communities that enable active transportation opportunities by locating travel destinations close to homes.
- **Official Plan 2.3.8:** Plan for healthy and complete communities that offer a mix of housing and employment opportunities for all; a range of parks, open spaces, and amenities; and the choice to conveniently access shopping and services without a car.
- **Application Reviewers:** Planning and Development (Urban Design); or Peel Public Health.
- **Development Type:** Low-rise residential, multi-unit residential, and institutional and commercial.
- **Application Type:** Draft Plan of Subdivision and Site Plan.

Metric Requirements

Applicability	Metric Requirement
Low-Rise Residential Multi-Unit Residential Institutional and Commercial	Provide for a mix of uses within the same lot or block and site residential dwellings in close proximity to a range of community amenities. Planned or future amenities may be included. **Strategic growth areas:** Three or more community amenities are within 500 m (equivalent to a five-minute walk) of 75% of dwelling units along connected routes. **Other residential areas:** Three or more community amenities are within 800 m of 75% of Dwelling Units (DUs) (equivalent to a 10-minute walk) along connected routes. Community amenities could include: • Essential businesses like grocery stores, pharmacies, etc.; • Services such as childcare, medical centres, etc.; • Schools; • Community and recreation centres; • Cultural and social amenities;

Applicability	Metric Requirement
	Community amenities could include *(continued):* • Parks, outdoor spaces; and • Transit stations/stops. Note: Wherever possible, large-scale developments (more than 50 ha) should include a distinct neighbourhood centre that includes a compatible mix of uses such as residential, parks, retail, and community services.

Submission Requirements

Draft Plan of Subdivision and Site Plan

Draft Plan/Site Plan and site map: Include a map of the subject site with the proposed development overlaid. On this map:

- Highlight the area that accounts for 75% of the DUs and identify the approximate geographic centre;
- Identify the amenities (minimum of three) within 800 m/500 m walking distance from the project's geographic centre (for low-/high-density developments); and
- Show the mix of uses within the proposed development.

Community Design Guidelines/Urban Design Brief: Provide a brief description of the community amenities that will be sited in close proximity to residents and any neighbourhood "hubs" and describe how the community design will facilitate active modes of transportation.

Compliance may also be demonstrated through the Peel Healthy Development Assessment under the Service Proximity theme area.

Note: If part of a Plan of Subdivision has already conducted this analysis, this metric will not be required.

Preparing Submission Materials

1. Community amenities that are not specifically listed in the metric requirements (above) may also be considered, where permitted by the Town, provided that they meet the intent of the metric.
2. One building can be considered to host multiple amenities (e.g., a pharmacy located within a grocery store).
3. If amenities are included in the proposed development but have yet to be defined, use the zoning by-law coupled with best judgment (based on size, location, and planning allocations) to assume the expected end use of the planned amenity.

Resources

- LEED LT Credit: Surrounding Density and Diverse—Reference materials for strategies to promote walkability and transportation efficiency and reduce vehicle distance travelled.
- Peel Healthy Development Assessment—Reference materials for mixed-use development.

Metric 1.7: Electric Vehicle (EV) Charging

- **Rationale:** Support low-carbon personal vehicles to reduce transportation emissions.
- **Official Plan 11.2.3(b):** To support the climate change objectives and policies of this Plan, the Town will implement a transportation system that supports targets for zero-emissions vehicles by 2035 and net-zero greenhouse gas emissions by 2050, including expansion of public electric vehicle charging infrastructure.
- **Application Reviewers:** Energy and Environment.
- **Development Type:** Low-rise residential, multi-unit residential, and institutional, commercial, and industrial.
- **Application Type:** Draft Plan of Subdivision and Site Plan.

Metric Requirements

Applicability	Metric Requirement
Low-Rise Residential	A minimum of one EV-Ready parking space per residential dwelling unit.
Multi-Unit Residential	A minimum of 50% of parking spaces are EV-ready. Visitor parking spaces in multi-unit buildings are exempt.
Institutional, Commercial, and Industrial	A minimum of 20% of non-fleet parking spaces are EV-Ready. Encourage a minimum 5% of spaces to be equipped with EV Supply Equipment (EVSE).
All Building Sites	For mixed-use sites: Apply the requirements above for residential and non-residential parking provided in the same lot. For all building sites: Encourage dedicated parking spaces for car-share services or carpooling, as well as charging spaces for E-bikes and scooters.

Submission Requirements

Draft Plan of Subdivision

Letter of Commitment: Signed by a qualified professional (e.g., electrical engineer) and the owner/developer/builder confirming the number of EV-Ready spaces and EVSE installed (if applicable).

Building Drawings (prior to permit): Indicate location(s) of energized outlet(s).

Site Plan

Site Plan, Traffic Plan, or Parking Study

Identify:

- The number and location of total parking spaces included per building on the site;
- The number of total parking spaces that will be EV-Ready; and
- The percentage of parking spaces that will be EV-Ready.

Site Statistics Template (for multi-unit residential and non-residential): Complete the Electric Vehicle Charging tab.

Definitions

1. Level 2 charging means a Level 2 electric vehicle charging level as defined by SAE International's J1772 standard, as amended (208 V to 240 V single-phase power, with a maximum current of 80 A).
2. EVSE is defined (in accordance with the Ontario Electrical Safety Code) as the complete assembly consisting of cables, connectors, devices, apparatus, and fittings installed for the purpose of power transfer and information exchange between the branch circuit and the electric vehicle, commonly referred to as an EV charging station or EV charger.
3. Electric Vehicle Rough-in ("EV-Capable") is defined as having infrastructure to permit the future installation of an EV charging station, including electrical panel capacity capable of level 2 charging (200 amps), and continuous raceway from the panel to the future EV parking spot. Raceways will be empty to accommodate future wiring. An EV-Capable residential parking space:

   a. Has a minimum 21mm trade-size conduit with pull-string, installed at the time of construction to allow for the later installation of EV charging station(s), terminating at:

      i. The resident's electrical panel with space for one full-module double-pole breaker and sufficient load capacity for a 5.7kW charger, or

      ii. A dedicated common electrical panelboard, with space for one full-module double-pole breaker per charging station. For buildings up to 20 resident parking spaces, the panelboard and supply conductors shall be rated minimum 200 amp 240 V/1-phase or 208 V/3-phase. For buildings with more than 20 resident parking spaces, the panelboard, switchboard, and transformer shall be sized at minimum to accommodate the greater of a 38.4 kW load, or 5% of parking spaces multiplied by 3.8 kW/space; OR

   b. Has a single conduit with pull-string, from the common point of adjoining parking spaces (2 or 4 spaces with a common corner) to an electrical panelboard complying with a.ii., for future installation of a multi-coupler charging station, with conduit trade size sufficient to accommodate conductors delivering a minimum 3.8 kW per parking space.

4. EV-Ready is defined as having an installed panel capacity and raceway with conduit terminating in a junction box or 240-volt charging outlet, to which an EV charging station could simply be plugged in.

5. EV-Installed is defined as having a minimum Level 2 charging station installed at the outlet.

Preparing Submission Requirements for EV-Ready and EVSE Spaces

1. Complete the Site Statistics template for EV Charging stations.

2. If installing an EV-Ready space: Provide the parking space with an energized electrical outlet (junction box with a cover plate or a receptacle) at which a Level 2 EVSE can be installed in the future. Note that EV rough-ins will be acceptable if rationale is provided.

3. If installing and EVSE: The requirements may be implemented using any of the following equipment:

   a. Install a dedicated electrical outlet; and

   b. Provide a receptacle or EVSE supplied by a separate branch circuit or using EVEMS load-sharing technologies, which allow multiple vehicles to charge on the same circuit, reducing power requirements and installation costs.

4. All EV-Ready and EVSE parking spaces must be installed according to the Ontario Electrical Safety Code (OESC) provisions for electric vehicle charging systems, EVEMS, and electric vehicle supply equipment demand factors without EVEMS. Rule 8-500 of the OESC permits EVEMSs to monitor loads and automatically control EVSE loads.
5. If installing E-bike and scooter charging: Spaces should be equipped with an energized outlet (120 V) adjacent to the bicycle rack or parking spaces.

Resources

- Government of Canada: Zero-Emission Vehicle Infrastructure Program (ZEVIP) (2021)—Overview of the Canadian ZEVIP, which provides funding for electric vehicle charging infrastructure.
- Clean Air Partnership EV Costing Study (2021)—EV costing study completed by the Clean Air Partnership.
- US Department of Energy Alternative Fuels Data Center—Overview of charging infrastructure terminology and requirements of EVSE installation.
- Ontario Electrical Safety Code—Required standards for EV charging systems, EVEMS, and EV supply equipment demand factors without EVEMS.

2

The green infrastructure theme area promotes the health of residents, natural areas and overall biodiversity. Metrics aim to maximize the amount and quality of green space and tree canopy across the town so that residents can benefit from cleaner air, shading, and temperature regulation during extreme heat; better physical and mental health through recreation opportunities, and reduced risk of urban heat island effect. This theme also focuses on protecting biodiversity and creating habitat for wildlife and pollinator species in urban areas. Maximizing green infrastructure can also enhance community resilience to extreme precipitation and improve water quality.

This theme area was designed to recognize the many co-benefits of tree cover, in particular the strong link with stormwater, and it provides the opportunity for green features to contribute to multiple objectives, including shading and stormwater retention and filtration.

The Town is piloting an approach to enhancing urban green cover through its On-Site Green Infrastructure metric, adapted from the City of Seattle's Green Factor. This approach sets an overall target for green cover across different development types, which can be achieved through a weighted menu of features. Preserved features are weighted highest, in recognition of the significant value provided by mature trees and small wetlands, followed by a scale of newly planted trees, landscaped areas, and stormwater features, such as green roofs, rain gardens, and permeable paving. The intent is to improve the quantity and quality of green features across all development types while allowing applicants flexibility in how they can meet the target depending on their site context. The Town will be looking to gather data on this tool through the pilot phase in order to assess its effectiveness and make adjustments as needed.

Metric 2.1: On-Site Green Infrastructure

- **Rationale:** Meet the following green infrastructure objectives:
    - Build in adaptation and resilience across the stormwater system in response to climate change;
    - Reduce urban heat island effect;
    - Protect natural water balance and water quality;
    - Improve biodiversity by enhancing habitat for pollinators and other wildlife; and
    - Enhance green space in urban areas for aesthetics, recreation, and human well-being.
- **Official Plan 5.3.1(f):** Integrate green infrastructure and low-impact development, such as green roofs and permeable surfaces, into the design of infrastructure, wherever possible.
- **Application Reviewers:** Parks and Natural Heritage; Development Engineering.
- **Development Type:** Low-rise residential, multi-unit residential, and institutional, commercial, and industrial.
- **Application Type:** Draft Plan of Subdivision and Site Plan.

Metric Requirements

Applicability	Metric Requirement
Low-Rise Residential Multi-Unit Residential Institutional, Commercial, and Industrial	Meet minimum green cover targets across the site by completing the Green Factor Tool. Eligible green infrastructure features must comply with specifications in the GDS and other Town standards and guidelines. • Low-Rise Residential: 0.60; • Multi-Unit and Residential in Strategic Growth Areas: 0.50; • Institutional, and Commercial: 0.30; and • Industrial: 0.2. Note: Mixed-use sites can pro-rate their required factor based on the gross floor area of each development type on the site.

Submission Requirements

Draft Plan of Subdivision and Site Plan

Green Factor Scoresheet: Complete the Green Factor Tool worksheet and scoresheet to demonstrate the score achieved.

Landscape and Planting Plans: Include notations indicating green infrastructure features, locations (including any rooftop features), and size/area, as well as plant lists providing numbers, species, sizes, and locations of plants.

Arborist's Report: Indicate the type and size of trees to be preserved.

Preparing Submission Materials

1. The Green Factor Tool categories include preserved features, new plantings, stormwater solutions, and bonus elements.
2. Applicants can use a combination of strategies listed within the Green Factor Tool to achieve the applicable green cover targets. Refer to the Green Factor Tool for eligible green infrastructure features and weighting.
3. Green Factor Tool strategies can be used to meet the other GDS requirements (e.g, Stormwater Quantity and Quality, Urban Heat Island, etc.) and must comply with the specifications listed in the other Green Infrastructure metrics (e.g., Plant Species, Healthy Soils, Stormwater Quantity and Quality etc.).
4. Refer to the Town's Terms of Reference: Tree Preservation for tree preservation requirements.
5. If installing green roof infrastructure, refer to the Toronto Green Roof Construction Guidelines.

Resources

- Town of Caledon Terms of Reference: Tree Preservation—Tree preservation requirements.
- Town of Caledon: Preferred Street Trees Species List—Required submission materials for street tree species.
- Trees Ontario—Resource for tree planting and conservation techniques and native tree species and drought-tolerant species lists.
- Credit Valley Conservation: Native Plants for Pollinators Guide (2017)—Planting guidelines to support pollinators.

- Landscape Ontario: Drought-Tolerant Plants—Planting guidelines for drought-tolerant species.
- Ontario Invasive Plant Council—Resource and guidelines for planting native species and managing invasive species.
- Pollinator Partnership Canada—Resources for pollinator-friendly habitats.
- City of Toronto: Pollinators Resources—Resources for pollinator-friendly gardens, native flowers, trees, and shrubs.
- Green Roofs for Healthy Cities—Resources and guidelines for green roof design, installation, and maintenance
- Sustainable Technologies Evaluation Program—Low impact development stormwater management planning and design guide.
- City of Toronto: Biodiverse Green Roofs—Design guidelines for biodiverse green roofs.

Metric 2.2: Healthy Soils

- **Rationale:** Ensure newly planted trees have adequate volume and soil quality to reach maturity.
- **Official Plan 25.8.4:** To ensure the long-term viability of trees planted as part of approved development, the Town will require appropriate tree species, soil volume, drainage, and technology through by-laws, Site Plan control, landscape standards, and Green Development Standards.
- **Official Plan 12.5.12(c):** The Town will incorporate measures into subdivision and site plan agreements to ensure that the development and site alteration minimizes the removal of vegetation, grading, and soil compaction.
- **Application Reviewers:** Parks and Natural Heritage; Development Engineering.
- **Development Type:** Low-rise residential, multi-unit residential, and institutional, commercial, and industrial.
- **Application Type:** Draft Plan of Subdivision and Site Plan.

Metric Requirements

Applicability	Metric Requirement
Low-Rise Residential Multi-Unit Residential Institutional, Commercial, and Industrial	Soil volume: Provide access to a minimum of 30 m3 soil volume for newly planted trees or tree-specific soil volume indicated in municipal tree species guide. Where two or more trees share the same soil volume, 20 m3 per tree is sufficient. Indicate soil depth used to calculate soil volume. Root ball may be factored into soil volume calculation. Provide a minimally compacted topsoil layer/upper horizon. Refer to the Planting Medium Terms of Reference for soil specifications. Stockpiled soils used for planting areas must be tested and amended to achieve the soil properties outlined in the Town's Planting Medium Terms of Reference. Structured soil cells or other appropriate technologies may be used to achieve this metric, particularly in denser urban areas.

Applicability	Metric Requirement
	Grading and compaction: Where feasible and appropriate, use selective grading techniques that reduce soil compaction and preserve the natural landform as much as possible. Techniques may include lot selection, road alignment, building placement, or use of "cluster development." Preserving the natural landform can help preserve soil health and enhance opportunities for low-impact development (LID) features by maintaining natural drainage.

Submission Requirements

Draft Plan of Subdivision and Site Plan

Soils Report: Indicate the results of soil tests in accordance with the Town's *Planting Medium Terms of Reference Soils Report*, which is to be signed by a qualified professional (e.g., pedologist).

Landscape Plan: Indicate the locations of trees and planting areas and provide mark-ups for the areas/depths/volumes/soil quality.

Grading Plan: Indicate techniques used to minimize grading and soil compaction, where applicable.

Draft Plan of Subdivision: If it is too early in the application review process to provide the required details, applicants may provide a Letter of Commitment signed by a landscape architect and the owner/developer/builder confirming the metric requirements will be achieved and that compliance will be demonstrated in subsequent submissions of the Landscape Plan and through detailed design.

Preparing Submission Materials for Soil Volume

1. Follow the Town's Terms of Reference: Planting Medium to complete the Soil Report and demonstrate compliance with soil volume.

Preparing Submission Materials for Grading Plan

1. Refer to the Town's Minimum Requirements for Grading Plans to demonstrate compliance with grading and soil compaction.

Resources

- Town of Caledon: Terms of Reference: Planting Medium—Required submission materials for Soil Report.
- Town of Caledon: Minimum Requirements for Grading Plans—Required submission materials for Grading Plan.
- Town of Caledon: Preferred Street Trees Species List—Required submission materials for street tree species.
- City of Toronto: Continuous Soil Trench With Soil Cells Drawings and Green Infrastructure Drawings—Guidelines for silva cells.

Metric 2.3: Plant Species

- **Rationale:** Enhance biodiversity and habitat for pollinators.
- **Official Plan 13.12.9:** The Town, as a condition of development approval, will require the planting of appropriate native species as conditions of development and site alteration applications.
- **Application Reviewers:** Parks and Natural Heritage.
- **Development Type:** Low-rise residential, multi-unit residential, and institutional, commercial, and industrial.
- **Application Type:** Draft Plan of Subdivision and Site Plan.

Metric Requirements

Applicability	Metric Requirement
Low-Rise Residential Multi-Unit Residential Institutional, Commercial, and Industrial	Landscape plan to include no invasive species and a minimum of 50% native plant species. Select drought-tolerant species from local climate zones wherever possible. Refer to the Town's species list for public trees and Credit Valley Conservation (CVC) planting guidelines for landscaped areas. Where buffer plantings are required by Town policy, they must be 100% native plant species. Provide a two-year watering and maintenance program (only for Draft Plan of Subdivision). Note: Providing a higher ratio of native plant species will receive credit on the Green Factor Score.

Submission Requirements

Draft Plan of Subdivision and Site Plan

Landscape Plan: Show total landscaped area and highlight native and drought-tolerant species.

For sites adjacent to natural features where buffer areas are required, the Landscape Plan must show the site and surrounding area, highlighting natural features and their buffer areas and labelling the native plant species to be planted in the buffers.

Watering Plan: Submit plans for a two-year watering and maintenance program, indicating frequency of watering, pruning, fertilizer application, etc., signed by a landscape architect.

Preparing Submission Materials

1. Choose native plant species—plants that are indigenous to Southern Ontario, are adapted to the local conditions, and occur naturally within the region. Native planting requirements apply to trees, shrubs, and herbaceous plants. Refer to Ontario Native Plants guidelines for planting native species.
2. Choose drought-tolerant and, where close to roadways or sidewalks, salt-tolerant native species. If potable water is used for irrigation, all native and non-native plants must be drought tolerant.
3. Comply with the Ontario Invasive Plant Council guidelines by avoiding the use of all invasive species in the landscape design. Invasive species are species that reproduce aggressively and become established in a natural area by displacing native species.
4. Plant pollinator plants to provide continuous bloom throughout the growing season to support pollinators. These can be maintained by an irrigation system to provide supplemental watering and should include a maintenance plan for year-round support of native pollinators.
5. Use non-potable irrigation, which is preferred to support plantings and may include potable water supplies to make up irrigation sources for non-potable systems during drought conditions. The irrigation plan must be completed by a Water Smart Irrigation Professional or a Landscape Architect.
6. For sites next to a Natural Heritage area, refer to the Caledon Town-Wide Design Guidelines Natural Heritage Systems section for design standard guidelines outlined in Section 6.1 Open Space and Parks.

Resources

- Town of Caledon: Preferred Street Trees Species List—Required submission materials for street tree species.
- Caledon Town-Wide Design Guidelines—Design standard guidelines for Natural Heritage areas.
- Landscape Ontario: Drought-Tolerant Plants—Planting guidelines for drought-tolerant species.
- Ontario Invasive Plant Council—Resource and guidelines for planting native species and managing invasive species.
- Pollinator Partnership Canada—Resources for pollinator-friendly habitats.

Metric 2.4: Urban Heat Island

- **Rationale:** Reduce the urban heat island effect of large buildings and pavement areas by increasing shade, incorporating reflective paving and rooftop materials, and increasing the landscape area.
- **Official Plan 5.3.3:** To reduce the urban heat island effect, the Town will implement measures to protect, maintain, or enhance the urban forest tree canopy cover and promote green roofs and white roofs on residential, commercial, industrial, office, and institutional rooftops.
- **Application Reviewers:** Parks and Natural Heritage (Paving); Energy and Environment (Rooftops).
- **Development Type:** Low-rise residential, multi-unit residential, and institutional, commercial, and industrial.
- **Application Type:** Draft Plan of Subdivision and Site Plan.

Metric Requirements

Applicability	Metric Requirement
Low-Rise Residential Multi-Unit Residential Institutional, Commercial, and Industrial	**Rooftops:** For all sloped-roof buildings: Install cool roof over 100% of the available roof area—high-albedo/light-coloured materials with a Solar Reflective Index (SRI) of 78 or over for low-sloped roofs (<2:12), or 29 for steep-sloped roofs (>2:12). Exempt if installing solar PVs over 50% of the available roof area. For all flat-roof buildings (slope <2:12): Install cool roof over 90% of available roof area. Exempt if installing solar PVs and/or green roof over a minimum of 50% of the available roof area.

Applicability	Metric Requirement
Multi-Unit Residential ICI	**Paving:** Paved areas are to be treated with at least two of the following strategies, covering at least 50% of the total paved area*: • High-albedo paving materials with an initial solar reflectance of at least 0.33 or an SRI of 29; • Canopy of large-growing shade trees planted in landscape islands at regular intervals or in hedgerows to maximize both shading and ecological value. Canopy coverage to be calculated at 75% maturity (also contributes to, and can be demonstrated through, the On-Site Green Infrastructure metric); • Shade from architectural structures that are vegetated or have an initial solar reflectance of at least 0.33 at installation or an SRI of 29; • Shade from structures with energy generation; and • Open-grid pavement with at least 50% perviousness (can be demonstrated through the On-Site Green Infrastructure metric). *For industrial sites: Total paved area excludes loading bays, freight parking, and fire lanes.

Submission Requirements

Draft Plan of Subdivision

Letter of Commitment (at Draft Plan): From landowner and/or builder to install a cool roof.

Roof Plan (prior to permit): Show the extent of cooling features over roof area and specifications for any SRI-compliant materials.

Site Plan

Roof Plan: Show the extent of cooling features over roof area and specifications for any SRI-compliant materials.

Site Plan

Indicate:

- The total paved area;
- 50% of paved areas highlighted with compliant cover/materials and their types;
- Specifications for any SRI-compliant materials being used; and
- Total parking area/spaces and total trees being added within the site. Note that soil volume requirements must be met per the Healthy Soils metric.

Site Statistics Template: Complete the Urban Heat Island tab.

Preparing Submission Materials for Low-Rise Residential, Multi-Unit Residential, and Institutional, Commercial, and Industrial Rooftops

1. For cool roofs, the available roof space consists of the total roof area of the building, excluding HVAC and other equipment.
2. Cool roofing material and coating systems must meet the following requirements:
    a. Low-slope roofs (<2:12) should have an SRI rating of 78 or higher and an emissivity equal to or greater than 0.9.
    b. Steep-slope (pitched) roofs (>2:12) should have an SRI rating of 29 or higher and an emissivity equal to or greater than 0.9.

Preparing Submission Materials for Multi-Unit Residential and Institutional, Commercial, and Industrial Paving Materials

1. Treated paving is calculated as the area in metres squared that is treated by each strategy. Calculate the percentage of urban-heat-island-treated areas to total non-roof hardscape area.
2. Other design considerations include the following:
    a. Shade cast by buildings is not considered an eligible heat island strategy.
    b. Open-grid pavement consists of concrete or hard plastic grid systems with large pore spaces filled with a planted growing medium or light-coloured aggregate. Open-grid and high-albedo pavement should not be used for driveways and loading areas for commercial and industrial sites. Any

permeable paving materials proposed for public areas (e.g. roads, sidewalks, etc.) must be approved by the Town and meet Town LID specifications.

c. Wherever possible, use high-albedo, low-carbon concrete mixtures with a minimum of 25% supplementary cementitious material (SCM) and biobased materials for decorative stonework, retaining walls, walkways, or other landscape or architectural elements.

Resources

- Cool Roof Rating Council: LEED Resources—Primer for cool roof construction requirements.
- City of Toronto: Design Guidelines for Greening Surface Parking Lots—Strategies and measures for developers, designers, and reviewers of surface parking lots.
- LEED ND and BD+C: New Construction, Heat Island Reduction (V4)—Requirements for non-roof and roof surfaces.
- Green Infrastructure Ontario—Resources for infrastructure planning and policy development to enhance green infrastructure.
- Toronto and Region Conservation Authority: Sustainable Technologies Evaluation Program (STEP)—Resources for implementing technologies that protect water resources and reduce our carbon footprint.

Metric 2.5: Stormwater Quantity and Quality

- **Rationale:** Mitigate stormwater impacts from urbanization and improve water quality by maintaining the natural water cycle to the greatest extent possible.
- **Official Plan 12.5.3:** The Town will employ a treatment train approach to stormwater management to meet overall site water balance, water quality, water quantity, and erosion. The treatment train approach uses source, conveyance, and end-of-pipe controls to manage stormwater where it falls, along its path, and prior to it entering the natural environment. A hierarchical method is applied where each step is exhausted before proceeding to the next, as follows: retention, filtration, and conventional stormwater management.
- **Application Reviewers:** Development Engineering.
- **Development Type:** Low-rise residential, multi-unit residential, and institutional, commercial, and industrial.
- **Application Type:** Draft Plan of Subdivision and Site Plan.

Metric Requirements

Applicability	Metric Requirement
Low-Rise Residential Multi-Unit Residential Institutional, Commercial, and Industrial	Water balance: • Control the infiltration deficit per the criteria identified in the water balance assessment* through stormwater retention low-impact development practices.** OR • Control, to the greatest extent possible,*** the 27 mm event using a hierarchical application of LID measures to achieve the target beginning with (1) retention and followed by (2) filtration, in accordance with site constraints outlined in the GDS Guidebook's Stormwater Quantity and Quality Specifications, where each step is exhausted before proceeding to the next.

Applicability	Metric Requirement
Low-Rise Residential Multi-Unit Residential Institutional, Commercial, and Industrial	Stormwater quality: • Ensure 80% Total Suspended Solids (TSS) removal, to the greatest extent possible, through a hierarchical approach using (1) retention, (2) filtration, and (3) conventional stormwater management, where each step is exhausted before proceeding to the next. If an approved Stormwater Management Plan already exists for the site, follow those criteria. Notes: * Water balance assessment to be completed in line with the Town's approved Terms of Reference. ** LID feature specifications following the Sustainable Technology Evaluation Program's Low Impact Development Stormwater Management Planning and Design Wiki Guide or most recent Town specifications. Note: Green infrastructure features implemented through the On-Site Green Infrastructure metric may help to achieve the LID requirements of this metric. ***In accordance with the site constraints identified below under "Preparing Submission Materials"

Submission Requirements

Draft Plan of Subdivision and Site Plan

Stormwater Management Plan: Identify the infiltration deficit being controlled as per the water balance assessment and describe the LID strategies proposed to manage it and the strategies to address water quality. Reference appropriate engineering drawings and specifications for LID features.

Definitions

1. Retention: Low-impact development retention practices that use the mechanisms of infiltration, evapotranspiration, and/or reuse to recharge shallow and/or deep groundwater, return collected rainwater to the atmosphere, and/or use harvested rainwater.

2. Filtration: Low-impact development technologies that use appropriate filter media. The controlled volume is filtered and released into the municipal sewer networks or surface waters at a reduced rate and volume (a portion of LID filtration may be infiltrated or may experience evapotranspiration).

Preparing Submission Materials

1. Water balance assessment to be completed in line with the Town's approved Terms of Reference.
2. LID feature specifications following the Sustainable Technology Evaluation Program's Low Impact Development Stormwater Management Planning and Design Wiki Guide or most recent Town specifications. Note: Green infrastructure features implemented through the On-Site Green Infrastructure metric may help achieve the LID requirements of this metric.
3. The following site constraints may include the following:
    a. Shallow bedrock,[5] areas of blasted bedrock,[6] and Karst.
    b. High groundwater[7]or areas where increased infiltration will result in elevated groundwater levels, which can be shown through an appropriate area-specific study to impact critical utilities or property (e.g., susceptible to flooding).
    c. Swelling clays[8] or unstable sub-soils.
    d. Contaminated soils (e.g., brownfields).
    e. High-risk site activities, including spill-prone areas.
    f. Prohibitions and or restrictions per the approved Source Protection Plans and where impacts to private drinking water wells and/or vulnerable domestic well supply areas cannot be appropriately mitigated.
    g. Flood-risk-prone areas or structures and/or areas of high inflow and infiltration (I/I) where wastewater systems (storm and sanitary) have been shown through technical studies to be sensitive to groundwater conditions that contribute to extraneous flow rates that cause property flooding/sewer backups.

[5] May limit infiltration capabilities if bedrock and groundwater is within 1 m of the proposed facility invert per Table 3.4.1 of the LID Stormwater Planning and Design Guide (2010, V1.0 or most recent by TRCA/CVC). Detailed assessment or studies are required to demonstrate infiltration effects, and results may permit relaxation of the minimum 1 m offset.

[6] Where blasting is more localized, this constraint may not be an issue elsewhere on the property. While infiltration-based practices may be limited in blasted rock areas, other forms of LID, such as filtration, evapotranspiration, etc., are still viable options that should be pursued.

[7] May limit infiltration capabilities if bedrock and groundwater is within 1 m of the proposed facility invert per Table 3.4.1 of the LID Stormwater Planning and Design Guide (2010, V1.0 or most recent by TRCA/CVC). Detailed assessment or studies are required to demonstrate infiltration effects, and results may permit relaxation of the minimum 1 m offset.

[8] Swelling clays are clay soils that are prone to large volume changes (swelling and shrinking) that are directly related to changes in water content.

h. Existing municipal rights-of-way infrastructure (e.g., roads, sidewalks, utility corridors, sewers, LID, and trails) where reconstruction is proposed and where surface and subsurface areas are not available, based on a site-specific assessment completed by a qualified professional (QP).

i. Developments within partially separated wastewater systems where reconstruction is proposed and where, based on a site-specific assessment completed by a QP, can be shown to increase private property flood risk liabilities that cannot be mitigated through design,impact pumping and treatment cost that cannot be mitigated through design, or increase risks of structural collapse of sewer and ground systems due to infiltration and the loss of pipe and/or pavement support that cannot be mitigated through design.

j. Surface-water-dominated or surface-water-dependent features, including, but not limited to, marshes and/or riparian forest wetlands that derive all or a majority of their water from surface water, including streams, runoff, and overbank flooding. Surface-water-dominated or surface-water-dependent features that are identified through approved site-specific hydrologic or hydrogeologic studies, and/or Environmental Impact Statements (EIS) may be considered for a reduced volume control target. Pre-consultation with the MECP and local agencies is encouraged.

k. Existing urban areas where risk to water distribution systems has been identified through assessments to meet applicable drinking water requirements, including Procedures F-6 and F-6-1, and substantiated by a QP through an appropriate area-specific study and where the risk cannot be reasonably mitigated per the relevant design guidelines.

l. Existing urban areas where risk to life, human health, property, or infrastructure has been identified and substantiated by a QP through an appropriate area-specific study and where the risk cannot be reasonably mitigated per the relevant design guidelines.

m. Water reuse feasibility study completed to determine non-potable reuse of stormwater for on-site or shared use.

n. Economic considerations set by infrastructure feasibility and prioritization studies undertaken at either the local/site or municipal/system level.[9]

[9] Infrastructure feasibility and prioritization studies should comprehensively assess stormwater site opportunities and constraints to improve cost effectiveness, environmental performance, and overall benefit to the receivers and the community. The studies include assessing and prioritizing municipal infrastructure for upgrades in a prudent and economically feasible manner.

Resources

- Town of Caledon Stormwater Management Terms of Reference—Required document for completing water balance assessment.
- Ontario Ministry of the Environment, Conservation, and Parks: Ontario's Low Impact Development Stormwater Management Planning and Design Guide (2018)—Stormwater management practices for infill development.
- Ontario Draft LID Guidelines— Low Impact Development Stormwater Management Guidance Manual.
- Toronto and Region Conservation Authority: Stormwater Management and Design Guidance Manual—Stormwater management guidelines from the Toronto and Region Conservation Authority.
- Lake Simcoe Region Conservation Authority: Lake Simcoe Region Conservation Authority: Stormwater Management Technical Guidelines (2019)—Stormwater management guidelines from Lake Simcoe Region Conservation Authority.
- STEP LID Planning and Design Wiki Guide—Guidance on how to design low-impact development features to meet the design criteria.
- Sustainable Technologies Resource Library—Guidance and publications for LID, water quality, bioretention, inspection, maintenance, etc.

Metric 2.6: Bird-Friendly Design

- **Rationale:** Provide bird-friendly environments and reduce bird collisions caused by buildings.
- **Official Plan 7.8.8:** The Town will promote bird-friendly building and site design.
- **Application Reviewers:** Planning and Development (Urban Design).
- **Development Type:** Low-rise residential, multi-unit residential, and institutional, commercial, and industrial.
- **Application Type:** Draft Plan of Subdivision, and Site Plan.

Metric Requirements

Applicability	Metric Requirement
Low-Rise Residential	Builders are encouraged to adhere to the CSA A460:19 Bird-Friendly Building Design Standard, in particular, specifications for window glazing.

Multi-Unit Residential
 	
Institutional, Commercial, and Industrial
	Design buildings in accordance with CSA A460:19 Bird-Friendly Building Design Standard, including, at minimum, treating glazing up to 16 m above grade or to the top of the mature tree canopy, whichever is greater.
	
	• Treat a minimum of:
	  ◦ 90% of glazing with collision deterrent markers;
	  ◦ All glazing that creates fly-through conditions, including glass railing systems;
	  ◦ All glazing adjacent to natural areas; and
	  ◦ All non-vision glazing, including spandrels.
	• Collision Deterrent Markers (visual markers) details:
	  ◦ Size: Minimum 4 mm in diameter.
	  ◦ Density: Maximum 50 mm between markers.
	  ◦ Contrast: High contrast under varying daylight conditions.
	  ◦ Surface: Must be applied to the first (exterior) surface of glass.

Applicability	Metric Requirement
Multi-Unit Residential Institutional, Commercial, and Industrial	Rooftop vegetation: Where there is glazing adjacent to green roofs and/or other rooftop vegetation, the bird collision mitigation strategy shall be applied to a height of 4 m from the surface of the green roof or the height of the adjacent mature vegetation, whichever is greater. Grate porosity: Grade-level building ventilation grates shall have a porosity of no greater than 20 mm x 20 mm or 40 mm x 10 mm.

Submission Requirements

Draft Plan of Subdivision

Community Design Guidelines/Urban Design Brief: Describe any measures being taken to implement bird-friendly design strategies in accordance with the CSA Standard.

Site Plan

Building Elevation Plans: Indicate the bird-friendly glazing measures implemented, including treated area, type of treatment, density of visual markers, etc.

Site Statistics Template: Complete the Bird-Friendly Design tab.

Preparing Submission Materials

1. Use the Canadian Standards Association CSA A460:19 Bird-Friendly Design Standards (2019 or later) to design treatment of glazing materials, building integrated permanent structures, and overall building and site design.

Resources

- Canadian Standards Association CSA A460:19 Bird-Friendly Design Standards (2019)—Required standards for treatment of glazing materials, building integrated permanent structures, and overall building and site design.
- LEED BD + C: New Construction, Bird Collision Deterrence Credit—Design guidelines from LEED.
- Bird-Safe Canada and Fatal Light Awareness Program: Bird-Safe Design and Standards (2021)—Design guidelines from Fatal Light Awareness Program.

- City of Ottawa: Bird-Safe Design Guidelines (2021)—Design guidelines from the City of Ottawa.
- American Bird Conservancy: Guidelines to Reduce Bird Collisions with Buildings—Downloadable resources for architects and designers to minimize bird collisions in building design.

3

Building operations are responsible for approximately one-fifth of GHG emissions in Caledon. The buildings and energy theme area ensures that Caledon's buildings have the least possible impact on the environment, from the beginning to the end of their life. It ensures that buildings are built to better withstand the impacts of climate change by including features that can handle flooding, extreme heat, and power outages. The buildings and energy metrics ensure that new buildings either incorporate renewable energy and/or are designed so that it can be added as these technologies continue to become more accessible and mandated in the future through zero-emissions building requirements. Some of the metrics in this theme area also include a pathway for increasing targets to achieving net-zero emissions new construction by 2030. The Town recognizes the need to provide time for the industry to adapt to provide clarity as to how requirements will change over time, and to provide flexibility in how metrics can be achieved.

Metric 3.1: Operational Energy and GHG Emissions

- **Rationale:** Reduce contributions to climate change from new buildings by improving energy efficiency and switching to low-carbon energy sources. These actions will have co-benefits for residents and businesses, including lower energy bills, improved comfort, and better air quality.
- **Official Plan 5.2.2:** To support energy conservation and conversion, the Town will maximize opportunities for implementing renewable and alternative energy systems on a site-specific or district-wide basis; encourage opportunities for conservation, energy efficiency, and demand management, such as high-performance building envelopes and ventilation systems; and encourage the shift away from natural gas in favour of renewable and alternative energy generation, including, but not limited to, low-carbon district energy heating and cooling systems, microgrids, geo-exchange systems, air-source heating and cooling pumps, anaerobic digestion, and waste heat recovery.
- **Application Reviewers:** Energy and Environment.
- **Development Type:** Low-rise residential, multi-unit residential, and institutional, commercial, and industrial.
- **Application Type:** Draft Plan of Subdivision and Site Plan.

Metric Requirements

Applicability	Metric Requirement
Low-Rise Residential	Design and construct to a minimum of Tier 3 energy performance under the National Building Code (NBC) 2020 section 9.36 or follow a recognized labelling program equivalent to ENERGY STAR for New Homes version 17.1 revision 2. AND Reduce operational greenhouse gas emissions by an additional 20% (demonstrated through an energy modelling report or by installing low-carbon equipment listed in the Energy Modelling Guideline). Alternative pathway: Design and construct to the current version of the Ontario Building Code and install a hybrid heating system (minimum three-season air-source heat pump with gas furnace or combination hybrid heating system).

Applicability	Metric Requirement
Multi-Unit Residential Institutional and Commercial	Meet the following Greenhouse Gas Intensity (GHGI), Thermal Energy Demand Intensity (TEDI), and Total Energy Use Intensity (TEUI) targets: Multi-Unit Residential: • GHGI: 15 kg CO2e/m2/yr • TEUI: (> 6 storeys) 135 kWh/m2/yr and (< 6 storeys) 130 kWh/m2/yr • TEDI: (> 6 storeys) 50 kWh/m2/yr and (< 6 storeys) 40 kWh/m2/yr Commercial Office: • GHGI: 15 kg CO2e/m2/yr • TEUI: 130 kWh/m2/yr • TEDI: 30 kWh/m2/yr Commercial Retail: • GHGI: 10 kg CO2e/m2/yr • TEUI: 120 kWh/m2/yr • TEDI: 40 kWh/m2/yr Industrial: • GHGI: 15 kg CO2e/m2/yr • TEUI: 130 kWh/m2/yr • TEDI: 60 kWh/m2/yr

Submission Requirements

Draft Plan of Subdivision

A Letter of Commitment signed by the landowner/builder and a qualified energy advisor, if applicable, indicating the option being pursued and to submit the following documents:

Performance Path: Energy Modelling Report and templates prior to building permit using the Town's Energy Modelling Report Guidelines and Energy Model Reporting Tool.

- Labelling Program: Submit Energy Efficiency Design Summary (EEDS) and the Builder Option Package (BOP) forms (if applicable) prior to building permit, and submit a post-construction verification report. Regardless of the labelling program, documents must demonstrate equivalency with the metric targets.
- Alternate Pathway: Follow standard requirements for Ontario Building Code (OBC) compliance and provide specifications for hybrid heating equipment and terms of installation (i.e., rental, add-on, etc.).

Site Plan

Low-rise residential: Follow submission requirements outlined above for Draft Plan of Subdivision applications.

Multi-unit residential and non-residential: Submit the Energy Modelling Report and accompanying templates as described in the Energy Modelling Report Guidelines prior to building permit. Provide a high level net-zero transition plan.

Preparing Submission Requirements for Low-Rise Residential Sites

1. Refer to the Compliance Pathways Flowchart for the different pathways available and for how to demonstrate compliance with each pathway.
2. If pursuing performance pathway (NBC Tier 3 or ENERGY STAR): Submit energy modelling reports for all low-rise dwellings in the application, carried out by a qualified energy advisor. Modelling outputs are to be entered into the Caledon Energy Report Tool.
    a. Follow the Low-Rise Residential: Energy Reporting Guideline's instructions for the Energy Modelling Report and how to complete the reporting tool.
    b. Complete the fillable Energy Model Report Tool to report the results of the Energy Modelling Report and submit prior to building permit.

3. If pursuing a labelling program:
    c. ENERGY STAR labelling program: Complete the Energy Efficiency Design Summary PDF for Part 9 residential housing, including a copy of the Builder Option Package form for ENERGY STAR® v. 17.1 or R-2000 prior to building permit.
    d. Other labelling program: submit documentation demonstrating equivalency with the metric targets, along with EEDS form, prior to building permit.
        i. Submit a third party verification report and details of the energy and emissions performance level and label achieved (e.g. ENERGY STAR certified, HERS Rating, etc.) after construction.
    e. Install one of the following low carbon equipment to meet the 20% GHG reduction:
        ii. Electric Domestic Water Heater
        iii. Heat Pump Hot Water Heater
        iv. Air Source Heat Pump (hybrid or cold climate)
        v. Ground Source Heat Pump
        vi. Note: electric baseboard heating will not be considered as an eligible measure.
4. If pursuing alternative pathway: Design and construct to the current version of the Ontario Building Code and install a hybrid air source heat pump at minimum.

Preparing Submission Requirements for Multi-Unit Residential Sites and Institutional, Commercial, and Industrial Sites

1. All new buildings greater than 2000 m2 gross floor area must complete and submit an Energy Modelling Report. Follow the Energy and Emissions Requirements for each building type outlined in the Energy Modelling Report Terms of Reference and Guidelines and submit the completed Designed Development Stage Energy Modelling Report prior to Site Plan approval.
2. Acceptable software for whole-building energy modelling includes EQuest v. 3.64 or higher, Energy Plus, and IES Virtual Environment. If designing to passive House Standards, use the Passive House Planning Package (PHPP).
3. Ontario Building Code, SB-10 (2017), Division 3. The emissions intensity of specific sources of energy is outlined in SB-10 2017 (C02 Emissions Factors, Table 1.1, 2.2). The specific emissions intensity of fuel sources included in a district energy system must be obtained directly from the providers or a reputable source.
4. Projects that come within 15% of the TEDI and TEUI thresholds are permitted where alternative improvements in performance are made (e.g., embodied carbon reductions, installation of on-site renewable energy).

5. Provide a zero-carbon transition plan that lays out a pathway toward achieving carbon neutrality in the future, including how the building is designed to support this transition, such as providing the necessary infrastructure for full building electrification and avoidance of on-site combustion of fossil fuels.

6. A net-zero emissions building is one that is highly energy efficient and produces on-site or procures carbon-free and/or renewable energy in an amount sufficient to offset the annual carbon emissions associated with its operations or simply eliminates carbon emissions altogether. Net-zero emissions status is determined following the CaGBC Zero Carbon Building Standard methodology.

Caledon's Pathway to Net Zero by 2030

Although Caledon's GDS does not follow a formal tiered system, it does outline a pathway to achieve the Council endorsed target of new construction being net zero by 2030. This pathway includes estimated targets for 2027 and 2030 updates to the GDS, however these updates will be subject to stakeholder and industry consultation.

Table 3. Performance pathway for low-rise residential sites.

Caledon GDS Requirements	2024 Target	2027 Target	2030 Target
Energy	Energy Star or equivalent OR NBC Tier 3 performance	NBC Tier 4 performance	NBC Tier 4 performance
GHG Emissions	Additional 20% reduction in GHG emissions	Electric DWHR and minimum hybrid/dual-fuel HVAC system	All electric DWHR and HVAC systems

Table 4. Greenhouse gas intensity performance pathway for multi-unit residential, and institutional, commercial, and industrial sites.

Building Type: GHGI (kg CO_2e/m2/yr)	2024 Target	2027 Target	2030 Target	Net-Zero Emissions
All Residential	**15**	10	5	0
Commercial Office	**15**	8	4	0
Commercial Retail	**10**	5	3	0
Industrial	**15**	10	5	0
Mixed Use (calculated using a weighted average of the above)				

Table 5. Thermal Energy Demand Intensity and Total Energy Use Intensity performance pathways.

Energy Performance Measure kWh/m²/yr	2024		2027 Target		2030 Target	
	TEUI	**TEDI**	**TEUI**	**TEDI**	**TEUI**	**TEDI**
Multi-Unit Residential (> 6 storeys)	**135**	**50**	100	30	75	15
Multi-Unit Residential (≤ 6 storeys)	**130**	**40**	100	25	70	15
Commercial Office	**130**	**30**	100	22	65	15
Commercial Retail	**120**	**40**	90	25	70	15
Industrial	**130**	**60**	100	50	70	37
Mixed Use (calculated using a weighted average of the above)						

Resources

- Part 9 Housing: Archetype Case Studies—Reference guide demonstrating four scenarios to meet Tier 3 energy performance.
- Compliance Pathways Flowchart—Pathways available for low-rise residential development for the different pathways available and how to demonstrate compliance with each pathway.
- Low-Rise Residential: Energy Reporting Guideline—Low-rise residential development Energy Reporting Guidelines.
- Energy Reporting Tool—Low-rise residential development reporting tool.
- Energy Modelling Report Terms of Reference—Terms of Reference for multi-unit residential, and ICI buildings.
- City of Toronto: Energy Efficiency Report Submission and Modelling Guidelines (2022)—Energy Modelling Report guidelines for TGS V4.
- BC Energy Step Code: Design Guide (2019)—Design and performance strategies for achieving TEDI, TEUI, and GHGI targets.
- CAGBC Zero Carbon Building Performance Standards and Design Standards—Industrial building archetypes' TEDI, TEUI, and GHGI targets.
- CAGBC Zero Carbon Building Performance Standards and Design Standards: Appendix B1 (page 59)—Industrial building archetypes' TEDI, TEUI, and GHGI targets.

- CHBA Net Zero Home Labelling Program Administrative Requirements—Technical requirements for completing net-zero home labelling (low-rise multi-unit residential buildings (MURB).
- Canadian Association of Consulting Energy Advisors—A list of Energy Advisors familiar with GDS Energy Modelling Reports.
- LEED ID+C: Commercial Interiors, Minimum Energy Performance (V4)—Examples of compliance pathways and building and system requirements.
- National Energy Code of Canada for Buildings (NECB)—Overview of the National Energy Code of Canada for Buildings.
- Natural Resources Canada EnerGuide Rating System—List of licensed service providers to deliver the EnerGuide Rating System, ENERGY STAR ® for New Homes, and R-2000 initiatives.

Metric 3.2: Building Resilience

- **Rationale:** Enhance the ability of buildings to withstand future climate impacts, including flooding, high winds, and heat.
- **Official Plan 5.4.4(j):** The Green Development Standards will address matters including, but not limited to, measures for climate change adaptation.
- **Application Reviewers:** Energy and Environment.
- **Development Type:** Low-rise residential and multi-unit residential.
- **Application Type:** Draft Plan of Subdivision and Site Plan.

Metric Requirements

Applicability	Metric Requirement
Low-Rise Residential	Using the resources provided, implement at least two measures to increase resilience to climate-related impacts in the areas of basement flooding, high wind, and/or extreme heat.
Multi-Unit Residential	Provide a resilience strategy for the building that includes measures to address climate risks, including flooding, high wind, extreme heat, and power outages to improve outcomes for residents in the context of climate change. At a minimum, the strategy should include a refuge area for residents with heating, cooling, lighting, potable water, and power available.

Submission Requirements

Draft Plan of Subdivision and Site Plan

Building Resilience Strategy Template: Reference the resources provided below to complete the Building Resiliency Strategy template, listing building resilience features that will be incorporated into building design and have it signed by the landowner/builder to indicate commitment to implement features.

Preparing Submission Materials

1. Refer to the Institute for Catastrophic Loss Reduction (ICLR) information sheets on flooding and high wind protection strategies. Refer to the City of Toronto's Resilience Planning Checklist and the Durham Region: Climate Resilience Standard for New Houses for additional strategies not listed in the ICLR information sheets. Complete the Building Resiliency Strategy template indicating the features to be incorporated and how they will enhance resiliency of the building and its occupants.
2. Strategies for thermal heat protection can include:
    a. Passive building strategies: higher roof R values; operable windows; cool and green roofs; external window shading devices; tenant emergency preparedness guides; higher envelope R values; window films; high-albedo envelope materials; and triple-glazed windows.
    b. Active building strategies: ceiling fans; and centralized air conditioning.
    c. Site building strategies: external pools (e.g., splash pads); soft landscaping, reduced hardscapes, use of solar PV as shade; building and architectural shade structures; shade trees and shrubs; outdoor covered and shaded amenity spaces with seating; and high-albedo hardscapes.
3. Ensure the minimum size of the refuge area is 93 m2 (1000 ft2) and/or 0.5 m2 per building occupant. Refuge areas must be designed with heating, cooling, lighting, potable water, and power. They may be designed to function as a building amenity during normal operations.
4. Consider the following guidelines and recommendations for accessibility, location, and essential features in the design of refuge areas:
    a. Accessibility: Refuge areas should be accessible to all occupants and should comply with applicable accessibility codes and standards to ensure equal access for everyone.
    b. Location: Refuge areas should be located on safe floors away from hazards, providing a secure location until occupants can safely evacuate or receive assistance.
    c. Essential features: Refuge areas should be equipped with essential features such as ventilation, communication systems, emergency lighting, fire protection equipment, and emergency supplies.
5. Provide back-up power and thermal energy to a central refuge area and to essential building systems, including security systems, domestic water pumps, sump pumps, one elevator, boilers, and hot water pumps. Non-fossil-fuel sources are preferred; however, both combustion-based or battery-based systems are permitted.

Resources

- ICLR: Basement Flood Protection for New Construction—Information sheet for flood protection strategies.
- ICLR: High Wind Protection for New Construction in Southern Ontario—Information sheet for wind protection strategies.
- LEED BD+C: New Construction, Design for Enhanced Resilience (v4)—Design recommendations for resilient buildings to withstand natural disasters and weather events.
- Durham Region: Climate Resilience Standard for New Houses (2016)—Design standards to improve the disaster resilience of new low-rise residential buildings.
- City of Vancouver's Resilient Neighbourhoods Toolkit—Resilience planning checklist for neighbourhoods.
- City of Toronto: Minimum Back-Up Power Guidelines for MURBs (2016)—Guidelines to help improve resilience to area-wide power outages in multi-unit residential buildings.
- Enhancing the Liveability and Resilience of Multi-Unit Residential Buildings (MURBs)—MURB Design Guide.

Metric 3.3: Solar Readiness

- **Rationale:** Ensure all buildings can accommodate rooftop solar PV systems in the future and encourage greater adoption of local renewable energy generation.
- **Official Plan 5.2.2:** The Town will encourage the design and orientation of buildings and new communities to maximize passive solar energy gain and minimize energy loss from prevailing winds.
- **Official Plan 5.2.8:** The Town will encourage large-scale solar photovoltaic installations in appropriate locations, such as the rooftops of commercial and employment buildings or parking structures.
- **Application Reviewers:** Energy and Environment.
- **Development Type:** Low-rise residential, multi-unit residential, and institutional, commercial, and industrial.
- **Application Type:** Draft Plan of Subdivision, and Site Plan.

Metric Requirements

Applicability	Metric Requirement
All Buildings	All buildings with a pitched roof are designed to be solar-ready according to specifications outlined in NRCan's Photovoltaic Ready Guidelines, and buildings with a flat roof are designed to be solar-ready, verified by a certified installer by the North American Board of Certified Energy Practitioners (NABCEP).
Low-Rise Residential	Builders are encouraged to explore opportunities to work with renewable energy providers, the local distribution company, and/or building or homeowners on installation of solar PVs.
Multi-Unit Residential Institutional, Commercial, and Industrial	Applications for buildings with a rooftop area greater than 50,000 square feet must conduct a feasibility assessment for the installation of an appropriately-sized solar PV system, conducted by a qualified solar provider or other energy professional, and in consultation with the local distribution company. The assessment may consider options for rooftop, ground, cladding, and/or other systems, and arrangements such as net metering, virtual net metering, self-generation, third-party ownership, etc.

Submission Requirements

Draft Plan of Subdivision and Site Plan

Letter of Commitment:

- For pitched roofs, submit a Letter of Commitment signed by the developer and/or a builder that confirms all new buildings will be designed for solar readiness. Attach the NRCan Photovoltaic Ready Guidelines Checklist and Builders Declaration.
- For flat roofs, submit a Letter of Commitment signed by a qualified professional (e.g., NABCEP, professional engineer, and/or architect) and the developer/builder that confirms all new buildings will be designed for solar readiness. Where applicable, provide documentation of solar feasibility assessment from a solar provider and the local hydro utility.

Building and Roof Plans (prior to permit): On the roof plan, indicate locations of conduit(s), HVAC, and/or other rooftop equipment and highlight locations for potential future solar or thermal systems.

Building plans must demonstrate structural capacity for solar PVs, show the location designated for future electrical equipment, and be prepared by a qualified professional (e.g., NABCEP, professional engineer, and/or architect).

Preparing Submission Materials for Solar Ready Sloped and Pitched Roofs

1. Solar-ready design: The design criteria must meet the NRCan Solar-Ready Guidelines for Domestic Hot Water and Photovoltaic Systems (for sloped roofs) and NABCEP (for pitched roofs), including, at minimum:
    a. Locate solar-ready areas in a space with high solar potential;
    b. Design non-solar rooftop equipment to avoid shading of solar equipment and maximize continuous roof space;
    c. Ensure static load roof strength is provided by a professional engineer;
    d. Provide space for a solar energy system DC–AC inverter on an outside wall of a utility room;
    e. Designate an area of the roof for future solar PV and/or solar thermal. Size the area to accommodate solar thermal or PV that could meet a minimum of 30% of the building's energy requirements (or the maximum available roof area if 30% cannot be met);
    f. Design and build an adequate structural capacity of the roof structure;

g. Install one or two conduits from the roof to the main electrical or mechanical room (size of conduit to be determined based on maximum potential solar PV or solar thermal system size);

h. Designate a 2 m by 2 m wall area in the electrical and mechanical rooms for future solar electrical/thermal equipment controls and connections (e.g., metres, monitors); and

i. Where possible, place the HVAC or other rooftop equipment on the north side of the roof to prevent future shading.

2. Complete Solar Ready Checklist and Builder's Declaration (page 17 of NRCan Solar Ready Guidelines).

Preparing Submission Materials for Solar PV Feasibility Study

1. Solar feasibility study must be conducted by a qualified solar provider or other energy professional. The system under consideration should be appropriately sized based on the building's function, return on investment potential, and local generation capacity. However, at a minimum it should assess the system's ability to meet at least 30% of the building's energy requirements.
2. Installation of the solar system evaluated is strongly encouraged and the Town should be notified of any installation.

Resources

- NRCan Solar-Ready Guidelines for Domestic Hot Water and Photovoltaic Systems—Design and technical specifications for installing solar photovoltaic systems.
- Canadian Home Builders' Association: Net Zero Home Labelling Program (MURB)—Program for net-zero-energy-ready and net-zero-energy MURBs integrated mechanical system technologies, design, and practices.

Metric 3.4: Embodied Carbon

- **Rationale:** Foster a greater understanding of the GHG emissions associated with building materials through reporting and benchmarking.
- **Official Plan 5.4.4(d):** The Green Development Standards will address matters including, but not limited to, embodied carbon of building materials.
- **Application Reviewers:** Energy and Environment.
- **Development Type:** Low-rise residential, multi-unit residential, and institutional, commercial, and industrial.
- **Application Type:** Draft Plan of Subdivision and Site Plan.

Metric Requirements

Applicability	Metric Requirement
Low-Rise Residential	Conduct a Materials Emissions Assessment using MCE2 or an equivalent tool to measure A1–A3 stage emissions for all structural, enclosure, and major finishes (e.g., cladding, flooring, ceilings, interior wall sheathing).
Multi-Unit Residential Institutional, Commercial, and Industrial	Report embodied carbon in these bulk materials based on the relevant Environmental Product Declaration (EPD): concrete, steel, masonry, wallboard, glass, thermal insulation, and wood. AND Include concrete mixes that are at least 10% below the Concrete Ontario baselines per mix type.

Submission Requirements

Draft Plan of Subdivision and Site Plan

For Low Rise Residential

Letter of Commitment: Signed by the developer or builder to submit the Materials Emissions Assessment prior to building permit.

For Multi-Unit Residential and ICI

Letter of Commitment: Signed by the developer or builder to submit the Embodied Carbon Reporting Tool prior to building permit.

Definitions

1. Upfront carbon (life-cycle stages A1–A5): Includes embodied carbon emissions from the product stage (raw material supply, transport, manufacturing) and construction process stage (transport and construction–installation process). Note at this time the GDS only requires reporting on the product stage (A1-A3).
2. Use-stage embodied carbon (life-cycle stages B1–B5): Includes embodied carbon emissions during the use, maintenance, repair, refurbishment, and replacement stages.
3. End-of-life carbon (life-cycle stages C1–C4): Includes embodied carbon emissions from the deconstruction/demolition, transport, waste processing, and disposal stages.
4. Environmental Product Declaration: Provides quantifiable environmental data to compare products that fulfill the same function. In order to create comparable EPDs, they must follow the rules and guidelines called for in the associated Product Category Rules (PCR) rules defined in the ISO 14025.

Preparing Submission Materials for Low-Rise Residential Sites

1. Acceptable methodologies and tools include MCE2 (or BEAM).
2. Calculate the total embodied carbon in kilograms of carbon dioxide equivalent (kg CO2e) and express the building average in kg CO2/m2 of heated floor area for life-cycle stages A1–A3 and complete a contribution analysis by building assembly or material type for each building typology in the development site. Provide the results from the "review tab" to identify all the material selections for the project and their associated emissions and demonstrate a total material emissions intensity of the heated floor area.
3. The following materials and features must be included: envelope and structural elements, including footings and foundations, complete structural wall assemblies (from cladding to interior finishes, including basement), structural floors and ceilings (not including surface finishes like paint and stain), party walls, roof assemblies, and parking structures.
4. The following materials and features can be excluded: fixtures and appliances; mechanical, electrical, and plumbing (MEP) materials; paints and surface finishes; millwork and trim; stairs; cabinetry; decks; driveways; site development; and works (i.e., excavation).
5. Existing structures reused as part of a renovation/rehabilitation and/or salvaged material incorporated into the project can count as embodied emissions of zero.
6. Calculate embodied carbon by each housing typology and provide the total amount for all combined housing typologies in the development site using a weighted average calculated by the gross floor area of the entire site.

Preparing Submission Materials for Multi-Unit Residential and Institutional, Commercial, and Industrial Sites for Embodied Carbon Reporting

1. Use the American Society for Testing Materials Published Environmental Product Declarations for concrete, steel, masonry, wallboard, glass, thermal insulation, and wood.
2. Referencing the appropriate EPD, report the carbon intensity of each material, the total quantity to be used in the building, and the total embodied carbon of each material (i.e., carbon intensity x quantity). Reporting should be completed in the Embodied Carbon Reporting Tool.
3. Report Type III facility-specific EPDs (industry average is acceptable if facility-specific EPD is not available). Indicate the total embodied carbon of the building from all materials.
4. For concrete, demonstrate that the mix types used in construction are at least 10% below Concrete Ontario baselines.
5. Acceptable software for calculating the embodied carbon based on the ASTM's Published Environmental Production Declarations is One Click LCA.

Resources

- Builders for Climate Action and Passive Buildings Canada: House Emissions Materials Benchmark Assessment for Residential Construction (2022)—Primer for embodied emissions in low-rise housing construction in Ontario.
- MCE2—Required methodology to calculate embodied carbon in low-rise residential developments.
- BEAM—Methodology to calculate embodied carbon in low-rise residential developments.
- One Click LCA—Required software for preparing Environmental Product Declaration.
- ASTM's Published Environmental Product Declarations—Required published EPDs used to calculate the total embodied carbon.
- ISO 14044: Environmental Management, Life Cycle Assessment Requirements, and Guidelines—Compliance standards for datasets for baseline and proposed buildings.
- CAGBC Embodied Carbon: A Primer for Buildings in Canada (2021)—Policy primer for understanding embodied carbon in Canada.
- City of Toronto: Policy Primer for Regulating Embodied Emissions in Buildings (2022)—Policy primer for setting embodied carbon caps in buildings.
- National Research Council's National Guidelines for Whole-Building Life Cycle Assessment's Appendix A—Methodology to calculate gross floor area.

Metric 3.5: Water Conservation

- **Rationale:** Conserve and efficiently use potable water to achieve Caledon's goal of reducing water consumption by 50% in one-third of homes.
- **Official Plan 5.4.4(k):** Mandatory Green Development Standards to address matters related to water conservation and efficiency.
- **Application Reviewers:** Energy and Environment.
- **Development Type:** Low-rise residential, multi-unit residential, and institutional, commercial, and industrial.
- **Application Type:** Draft Plan of Subdivision and Site Plan.

Metric Requirements

Applicability	Metric Requirement
Low-Rise Residential	Install high-efficiency Water Sense-labelled toilet and lavatory faucets or equivalent. For single-detached homes: Each house includes a separate, non-potable watering system with minimum capacity of 180 L to harvest rainwater for irrigation purposes in a location approved by the Town.
Multi-Unit Residential Institutional, Commercial, and Industrial	Install water fixtures or use non-potable water sources that achieve a minimum 25% reduction in potable water consumption in the building over baseline water fixtures. Where soft landscaping exists on-site, reduce potable water use for irrigation by 40% using strategies that could include: Drought-tolerant, native, or adaptive vegetation that requires little to no water in the local climate; Use of high-efficiency irrigation, such as drip irrigation; Use of captured rainwater for irrigation; and If captured rainwater is used, provide a letter from a qualified professional (e.g., professional engineer) confirming the proposed cistern size and the calculations to demonstrate the volume of captured water expected.

Submission Requirements

Draft Plan of Subdivision and Site Plan

Letter of Commitment: Signed by a qualified professional (e.g., architect, professional engineer, landscape architect) and the owner/developer/builder, it confirms:

Low-rise: Installation of Water Sense or equivalent fixtures and rainwater harvesting system.

Other buildings: The percent (%) reduction in potable water used to irrigate relative to a midsummer baseline case. For information on how to achieve this credit, refer to LEED v4 BD+C WE Credit: Outdoor Water Use Reduction Option 2 and use the calculation tool to demonstrate.

Preparing Submission Materials for Low-Rise Residential Sites

1. WaterSense faucets and toilets:
    a. Refer to the US EPA WaterSense Products website for a list of products and performance standards.
    b. Equivalent lavatory and toilets must meet the EPA's WaterSense standards for High-Efficiency Lavatory Faucet Specifications and Toilet and Urinal Specifications.
2. Rainwater harvesting system must have a minimum capacity of 180 L to harvest rainwater for irrigation purposes. Rationale may be provided if rainwater harvesting is not feasible on certain types, subject to Town approval.

Preparing Submission Materials for Multi-Unit Residential Sites and Institutional, Commercial, and Industrial Sites

1. Follow LEED BD+C: WE Outdoor Water Use Reduction Option 2 and use the calculation tool to demonstrate reduction in irrigation consumption compared to a midsummer baseline.
2. Reduce the project's irrigation requirements from the calculated baseline of the site's peak water month (midsummer baseline). Reductions can be achieved using plant species, a combination of treatment measures for reuse of greywater and blackwater (e.g., rain barrels, cisterns, green roofs, and filtration ponds), alternative water sources, and smart-scheduling technologies.

Resources

- US EPA WaterSense Products—Required standard and specifications for low-rise residential buildings.
- Toronto and Region Conservation Authority: Sustainable Technologies Evaluation Program (STEP)—Resources for implementing technologies that protect water resources and reduce our carbon footprint.
- LEED BD+C: WE Outdoor Water Use Reduction—Calculation requirements to demonstrate irrigation water consumption.
- Sustainable Technologies Resource Library—Guidance and publications for LID, water quality, bioretention, inspection, maintenance, etc.

Metric 3.6: Construction Waste

- **Rationale:** Promote reuse and repurposing of building materials to reduce waste and encourage diversion to reduce building materials going to landfill.
- **Official Plan 12.8.1:** The Town of Caledon will promote reduction, reuse, and recycling programs (3Rs) and strive for a cost-effective waste management system to minimize environmental impacts.
- **Application Reviewers:** Energy and Environment.
- **Development Type:** Low-rise residential, multi-unit residential, and ICI.
- **Application Type:** Draft Plan of Subdivision and Site Plan.

Metric Requirements

Applicability	Metric Requirement
Low-Rise Residential Multi-Unit Residential	All projects must develop and implement a Construction and Demolition Waste Management Plan and divert at least 50% of the total construction and demolition material from the landfill; diverted materials must include at least four material streams. Plan must be certified by a verified third party or developed in accordance with the requirements in LEED Construction and demolition waste management planning credit.
Institutional Commercial Industrial	All projects must develop and implement a Construction and Demolition Waste Management Plan in accordance with O. Reg. 103-94 and must divert at least 50% of the total construction and demolition material from the landfill; diverted materials must include at least four material streams.

Submission Requirements

Draft Plan of Subdivision and Site Plan

Construction and Waste Management Plan: Provide a Construction and Waste Management Plan identifying reuse, source reduction, and diversion strategies signed by landowner/builder and verified third party (if not pursuing LEED).

Preparing Submission Materials for Low-Rise Residential and Multi-Unit Residential Sites

1. Follow the LEED BD+C: New Construction, Construction, and Demolition Waste Management (V4) to develop a Construction and Waste Management Plan to:
    a. Identify strategies to reduce waste generation during project design and construction;
    b. Establish waste diversion goals by identifying structural and non-structural materials targeted for diversion;
    c. Establish the project's diversion strategies; and
    d. Identify where materials will be taken, including the expected diversion rates for each material.
2. Calculate the total waste generation by tracking all materials generated from construction to completion, including all waste and diverted materials.
    a. Any commingled materials must be sent to a recycling facility for processing that posts and tracks an average recycling rate (minus Alternate Daily Cover [ADC]). Include materials destined for alternative daily cover in the calculations as waste (not diversion). Any materials sent to a commingled recycling facility for processing must take the facility average recycling rate and must include any ADC as waste (not diversion).
    b. The following waste types are excluded from the total waste generation calculation: hazardous materials and land-clearing debris.

Preparing Submission Materials for Institutional, Commercial, and Industrial Sites

1. Follow the Ontario Environmental Protection Act, O. Reg. 103/94: Industrial, Commercial, and Institutional Source Separation Programs to develop a Construction and Demolition Waste Management Plan to:
    a. Identify strategies to reduce waste generation during project design and construction;
    b. Establish waste diversion goals by identifying structural and non-structural materials targeted for diversion;
    c. Establish the project's diversion strategies; and
    d. Identify where materials will be taken and the expected diversion rates for each material.

2. Calculate the total waste generation by tracking all materials generated from construction to completion, including all waste and diverted materials.

    a. Any commingled materials must be sent to a recycling facility for processing that posts and tracks an average recycling rate (minus ADC). Include materials destined for ADC in the calculations as waste (not diversion). Any materials sent to a commingled recycling facility for processing must take the facility average recycling rate and must include any ADC as waste (not diversion).

    b. The following waste types are excluded from the total waste generation calculation: hazardous materials and land-clearing debris.

Resources

- LEED BD+C: New Construction, Construction, and Demolition Waste Management (V4)—Total waste generation calculation template.
- Ontario Environmental Protection Act, O. Reg. 103/94: Industrial, Commercial, and Institutional Source Separation Programs—Regulations for ICI waste reduction.

Metric 3.7: Owner Education

- **Rationale:** Educate owners, maintenance staff, and occupants about sustainable building and site features to bring attention to their purpose and ensure that they are properly operated and maintained.
- **Application Reviewers:** Energy and Environment.
- **Development Type:** Low-rise residential, multi-unit residential, and institutional, commercial, and industrial.
- **Application Type:** Draft Plan of Subdivision and Site Plan.

Metric Requirements

Applicability	Metric Requirement
Low-Rise Residential Multi-Unit Residential Institutional, Commercial, and Industrial	Distribute a Town-approved sustainability handout to all new building owners/tenants, outlining sustainability features (e.g., green building materials, energy efficiency, resilience, transit stop locations) and encouraging other activities (e.g., low-water gardening, green cleaning materials, alternate pest control measures, purchasing green power). The sustainability handout shall also include an itemized list of all "green" technologies and programs that the applicant has committed to undertake within this GDS, including references and attachments for any ongoing maintenance requirements or standards, and it should include information to assist building owners/tenants in installing solar PVs. Provide permanent signage for green/LID/site features to ensure owners/tenants are aware of the features and the services they provide.

Submission Requirements

Draft Plan of Subdivision and Site Plan

Letter of Commitment: From the developer/owner indicating that manuals will be prepared and submitted to the Town staff for review prior to distribution and provided to new owners/tenants to detail GDS-related features and maintenance requirements in adherence with the Town's Terms of Reference.

Resources

- Town of Caledon: Owner Education Terms of Reference—Guidance for developing owner education materials.

Higher Performance Buildings

The Higher Performance Buildings metric is a voluntary additional metric that allows applicants to demonstrate ways in which they are going above and beyond the Town's GDS or using innovative practices. This metric is optional to complete and will not be used to approve applications but may be recognized as part of a future awards/recognition program.

High performance measures could include:

- Design and construct to higher energy and emissions performance standards, e.g. net zero emissions, Passive House, etc.).
- Enroll the buildings in a recognized labelling and verification program.
- Install solar PV or other renewable energy sources.
- Use of energy sharing between buildings (i.e. district energy).
- Demonstrate reduction in embodied carbon of materials in the building
- Integrate local food production into the development.

TOWN OF CALEDON