

# TORONTO GREEN STANDARD VERSION 2.0 – CHECKLIST



## For New Mid to High Rise Residential and all New Non-Residential Development

Complete in conjunction with the full Toronto Green Standard and Specifications.

The Toronto Green Standard (TGS) is a two-tier set of performance measures, with supporting guidelines for new development. Its purpose is to promote sustainable site and building designs that address Toronto's urban environmental pressures: air quality, climate change and energy efficiency, water quality and efficiency, ecology and solid waste.

This Checklist is part of a Complete Application. It must contain adequate detail on how the design meets the Toronto Green Standard. The Checklist must also reference the appropriate plans, drawings and reports that demonstrate compliance with the performance measures. Complete the Checklist in conjunction with the appropriate Standard that applies to the development type, including the Specifications, Definitions and Resources column that provides more information on how to comply. The Checklist is completed by the project architect or planning consultant and is submitted to City Planning staff as part of your development application.

### Application Submitted

- Site Plan Control       Zoning Bylaw Amendment       Draft Plan of Subdivision

#### Office Use Only

District Offices:  North York District       Toronto East York District       Scarborough District       Etobicoke York District

Date Received: \_\_\_\_\_ Planner: \_\_\_\_\_ Application No.: \_\_\_\_\_

Is this checklist revised from an earlier submission?     Yes     No

### Property and Applicant

Address of Subject Land (Street Number/Name): \_\_\_\_\_

#### Applicant/Agent

Name: \_\_\_\_\_ Telephone: \_\_\_\_\_ E-mail: \_\_\_\_\_ Registered Owner: \_\_\_\_\_

#### Proposal Description

Gross Floor Area: \_\_\_\_\_ Number of Storeys: \_\_\_\_\_ Number of Units: \_\_\_\_\_

Project Information (include a narrative of your project highlighting green attributes or performance measures)

- Tier 1 performance measures are required by the City and must be addressed as part of your approved development application.
- Tier 2 performance measures are voluntary with higher performance levels. Achieving Tier 2 means that you are eligible to apply for a refund of development charges equivalent to 20% of the 2014 rate.

**Check here if you intend to achieve Tier 2 of the Toronto Green Standard (complete pages 9-12).**

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## TIER 1: AIR QUALITY

Section	Development Feature	Tier 1 Required Performance Measure Summary	Description (How is this performance measure being met?)	Reference the Plans, Drawings or Reports
AQ 1.1	Low-Emitting Vehicle Spaces  <b>EXAMPLE</b>	Physical provision for future electric vehicle charging (residential) or dedicated priority parking spaces (non-residential) for parking above minimum requirement	A minimum of 100 automobile parking spaces are required under the Zoning Bylaw.  115 automobile parking spaces are provided for this development. Dedicated carpool parking is provided for 15 spaces.	Site Plan # A1-01 Underground Garage Plan# Other #
AQ 1.1	Low-Emitting Vehicle Spaces	Physical provision for future electric vehicle charging (residential) or dedicated priority parking spaces (non-residential) for parking above minimum requirement		Site Plan # Underground Garage Plan # Other #
AQ 2.1	Bicycle Parking Rates	Minimum bicycle parking rates		Site Plan # Underground Garage Plan # Other #
AQ 2.2	Long-term bicycle parking location	Long-term parking in secure bicycle parking facility or purpose-built bicycle locker		Site Plan # Underground Garage Plan # Other #
AQ 2.3	Short-term bicycle parking location	Short-term bicycle parking in a highly visible and publicly accessible location		Site Plan # Underground Garage Plan # Other #
AQ 2.4	Shower & change facilities	Shower and change facilities (non-residential only)		Site Plan # Other #

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Section	Development Feature	Tier 1 Required Performance Measure Summary	Description (How is this performance measure being met?)	Reference the Plans, Drawings or Reports
AQ 3.1	Connectivity	Safe, accessible pedestrian routes that connect with off-site pedestrian networks and priority destinations		Floor Plan # Other #
AQ 3.2	Sidewalk space	Pedestrian clearway at least 2.1 m wide to accommodate pedestrian flow		Site Plan # Landscape Plan # Other #
AQ 3.3	Weather protection	Covered outdoor waiting areas		Site Plan # Other #
AQ 3.4	Pedestrian specific lighting	Pedestrian scale lighting		Site Plan # Building Cross-section# Other #
AQ 4.1	Urban Heat Island Reduction: At Grade	<p>One of the following is provided:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> High-albedo surface materials <b>OR</b></li> <li><input type="checkbox"/> Open grid pavement <b>OR</b></li> <li><input type="checkbox"/> Shade within 5 years of construction <b>OR</b></li> <li><input type="checkbox"/> Shade from structures covered by solar panels <b>OR</b></li> <li><input type="checkbox"/> Combination of above options</li> </ul> <p>Place 50% required parking spaces under cover (non-residential option only)</p>		Landscape Plan # Other #

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Section	Development Feature	Tier 1 Required Performance Measure Summary	Description (How is this performance measure being met?)	Reference the Plans, Drawings or Reports
AQ 5.1	Green & cool roofs	Choose the applicable category: <input type="checkbox"/> Green roof By-law applies <b>OR</b> <input type="checkbox"/> Green roof by-law does not apply <b>OR</b> <input type="checkbox"/> City-owned buildings and all Agencies, Boards, Commissions and Corporations (ABCCs)		Site Plan # Roof Plan # Other #

## TIER 1: GREENHOUSE GAS EMISSIONS/ENERGY EFFICIENCY

Section	Development Feature	Tier 1 Required Performance Measure Summary	Description (How is this performance measure being met?)	Reference the Plans, Drawings or Reports
GHG 1.1	Energy efficiency	Design building(s) to achieve at least 15% energy efficiency improvement over the current Ontario Building Code		<input type="checkbox"/> Design Development Stage Energy Report <b>OR</b> <input type="checkbox"/> Small Buildings Checklist
GHG 1.2	On-site renewable energy	City-owned buildings and all ABCCs: Install renewable energy devices		<input type="checkbox"/> Feasibility study

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## TIER 1: WATER QUALITY, QUANTITY AND EFFICIENCY

Section	Development Feature	Tier 1 Required Performance Measure Summary	Description (How is this performance measure being met?)	Reference the Plans, Drawings or Reports
WQ 1.1	Erosion & sediment control	Adherence to <i>Erosion and Sediment Control Guidelines for Urban Construction</i>		Site Grading Plan # Other #
WQ 2.1	Stormwater balance	Stormwater retained on-site to the same level of annual volume allowable under pre-development conditions		<input type="checkbox"/> Stormwater Management Report Site Grading Plan # Other #
WQ 2.2	Stormwater retention & reuse	One of the following is provided: <input type="checkbox"/> The first 5mm from each rainfall retained on-site <b>OR</b> <input type="checkbox"/> Maximum allowable annual runoff volume is no more than 50% of the total average annual rainfall depth		<input type="checkbox"/> Stormwater Management Report Site Grading Plan # Other #
WQ 3.1	Total suspended solids (TSS)	Remove 80% of total suspended solids based on the post-development level of imperviousness		<input type="checkbox"/> Stormwater Management Report Site Grading Plan # Other #
WQ 3.2	E. Coli reduction	Control the amount of E. Coli directly entering Lake Ontario and waterfront areas		<input type="checkbox"/> Stormwater Management Report Site Grading Plan # Other #
WQ 4.1	Drought-tolerant landscapes	Water efficient plant material provided for at least 50% of landscaped site area		Landscape Plan # Other #

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## TIER 1: ECOLOGY

Section	Development Feature	Tier 1 Required Performance Measure Summary	Description (How is this performance measure being met?)	Reference the Plans, Drawings or Reports
EC 1.1	Tree protection	Adherence to the Tree Protection Policy and Specifications for Construction Near Trees		<input type="checkbox"/> Arborist Report Site Plan # Landscape Plan # Tree Preservation Plan # Other #
EC 1.2	Preservation of mature trees	Protect and retain all trees that are 30 cm or more DBH from injury or removal		<input type="checkbox"/> Arborist Report Site Plan # Landscape Plan # Tree Preservation Plan # Other #
EC 1.3	Ravine protection	Within the Ravine Protected Area, protect and retain trees of all diameters		<input type="checkbox"/> Arborist Report Site Plan # Landscape Plan # Tree Preservation Plan # Other #
EC 1.4	Street tree retention	Protect and retain all trees adjacent to City of Toronto streets and roadways and City-owned Parkland		<input type="checkbox"/> Arborist Report Site Plan # Landscape Plan # Tree Preservation Plan # Other #
EC 2.1	Tree planting	Tree canopy cover distributed across site area and public boulevard		Landscape Plan # Other #
EC 2.2	Soil volumes	Provide all trees planted with a minimum volume of 30 m <sup>3</sup> of high quality soil per tree		Landscape Plan # Other #

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Section	Development Feature	Tier 1 Required Performance Measure Summary	Description (How is this performance measure being met?)	Reference the Plans, Drawings or Reports
EC 2.3	Trees along street frontages	Plant large shade trees along all street frontages		Landscape Plan # Other #
EC 2.4	Trees in parking lots	Plant shade trees throughout the parking lot interior		<input type="checkbox"/> Arborist Report Landscape Plan # Other #
EC 2.5	Watering program	Provide a watering program for trees for at least the first 2 years after planting		<input type="checkbox"/> Arborist Report Landscape Plan # Other #
EC 3.1	Biodiversity in landscapes	Plant landscaped site area using a minimum of 50% native species		<input type="checkbox"/> Arborist Report Landscape Plan # Other #
EC 3.2	Ravines and natural areas buffers	Where a setback from top-of-bank is required, plant landscaped area of the setback with native species		Landscape Plan # Other #
EC 3.3	Invasive species	No invasive species on properties along streets abutting ravines and natural areas		Landscape Plan # Other #

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Section	Development Feature	Tier 1 Required Performance Measure Summary	Description (How is this performance measure being met?)	Reference the Plans, Drawings or Reports
EC 4.1	Bird friendly glazing	Treat a minimum of 85% of all exterior glazing within the first 12m of the building above grade, using a combination of the following strategies: <ul style="list-style-type: none"> <li><input type="checkbox"/> Low reflectance, opaque materials</li> <li><input type="checkbox"/> Visual markers</li> <li><input type="checkbox"/> Muted reflections</li> </ul> <u>For City-owned and all Agencies, Boards, Commissions and Corporations:</u> Treat all exterior glazing within 16 m of the building above grade as per EC 4.1. Visual markers must have maximum spacing of 50 mm x 50 mm.		Landscape Plan # Other # Elevation Plans #
EC 4.2	Rooftop vegetation	Treat the first 4 m of glazing above the feature		Landscape Plan # Other #
EC 4.3	Grate porosity	Ensure ground level grates have a porosity of less than 20 mm x 20 mm (or 40 mm x 10 mm)		Landscape Plan # Other #
EC 5.1	Exterior lighting	Shield all exterior light fixtures		Site Plan# Landscape Plan # Building Elevation # Other#



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## TIER 1: SOLID WASTE

Section	Development Feature	Tier 1 Required Performance Measure Summary	Description (How is this performance measure being met?)	Reference the Plans, Drawings or Reports
SW 1.1	Waste collection & sorting	Residential: Provide a waste sorting system		Floor Plan # Other #
SW 1.2	Waste storage spaces	Residential: Provide easily accessible waste storage room		Site Plan # Underground Garage Plan # Floor Plan # Other #
SW 1.3	Bulky waste	Residential: Provide a minimum of 10 m <sup>2</sup> for bulky items and additional diversion programs		Site Plan # Underground Garage Plan # Floor Plan # Other #

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**Tier 2** is the voluntary, enhanced performance level. Site plan applications received on or after May 1, 2009 that meet both Tier 1 and 2 of the Toronto Green Standard are eligible to apply for a potential refund of development charges equivalent to 20% of the 2014 rate. Completion of Tier 2 involves meeting all of the performance measures identified below as **CORE** and selecting three performance measures identified as **OPTIONAL**. Indicate where Tier 2 performance measures will be documented in the right hand columns of the checklist.

Tier 2 is verified during the construction stage by third party evaluators registered with the City. The detailed eligibility criteria, application and verification procedures are found at: [toronto.ca/greendevlopment](http://toronto.ca/greendevlopment)

## TIER 2: CORE

Section	Development Feature	Tier 2 Voluntary Performance Measure Summary	Description (How is this performance measure being met?)	Reference the Plans, Drawings or Reports
AQ 4.2	Enhanced UHI, Non-roof hardscape	Treat 75% of the site's non-roof hardscape		Landscape Plan # Other # <input type="checkbox"/> Declaration template
GHG 1.3	Enhanced energy efficiency	Design and construct the building(s) to achieve at least 25% energy efficiency improvement over the current Ontario Building Code		<input type="checkbox"/> As Constructed Energy Model Report <b>OR</b> <input type="checkbox"/> Small Buildings Checklist
GHG 2.1	Building Commissioning	Commission the project using best practice commissioning		<input type="checkbox"/> Declaration template
WQ 4.2	Water Efficient Fixtures	Reduce potable water consumption by at least 30% using efficient water fixtures and appliances		<input type="checkbox"/> Declaration template

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Section	Development Feature	Tier 2 Voluntary Performance Measure Summary	Description (How is this performance measure being met?)	Reference the Plans, Drawings or Reports
WQ 4.3	Irrigation	Reduce potable water use for irrigation by 50%		Landscape Plan # Roof Plan # Other # <input type="checkbox"/> Declaration template
EC 5.2	Enhanced Lighting	Direct rooftop architectural illumination downward and turn off between the hours of 11 p.m. and 6 a.m. during migratory bird seasons		Roof Plan # Lighting Plan # Other #
EC 5.3	Lighting Controls	Install an automatic device that reduces the outward spillage of internal light by one of the following: <input type="checkbox"/> Reducing the input power to lighting fixtures <input type="checkbox"/> Shielding all openings in the building envelope		<input type="checkbox"/> Declaration template

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## TIER 2: OPTIONAL (SELECT 3)

Section	Development Feature	Tier 2 Voluntary Performance Measure Summary	Description (How is this performance measure being met?)	Reference the Plans, Drawings or Reports
AQ 1.2	Enhanced LEV spaces	Electrical provision for future electric vehicle charging		<input type="checkbox"/> Declaration template
AQ 2.5	Enhanced Bicycle parking rates	Provide enhanced bicycle parking rates		Site Plan # Underground Garage Plan # Other #
AQ 2.6	Bike share	Provide public bike share location at-grade		Site Plan # Other #
GHG 1.4	On-site renewable energy	Design and install on-site renewable energy systems		<input type="checkbox"/> Declaration template <input type="checkbox"/> As-constructed Energy Model Report
GHG 2.2	Meters	Install thermal energy meters		<input type="checkbox"/> Declaration template
WQ 2.3	Enhanced stormwater retention & reuse	Provide enhanced stormwater retention and reuse		<input type="checkbox"/> Declaration template

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Section	Development Feature	Tier 2 Voluntary Performance Measure Summary	Description (How is this performance measure being met?)	Reference the Plans, Drawings or Reports
EC 2.6	Enhanced trees in parking lots	Plant internal shade trees in surface parking areas		Site Plan# Landscape Plan # Other #
EC 2.7	Enhanced tree planting	Provide additional tree planting beyond the development site and the associated public boulevard		Site Plan# Landscape Plan # Other #
EC 3.4	Enhanced Landscaping	Restore or protect a minimum 50% of the site area or 20% of the total site area with native or drought-tolerant vegetation.		Site Plan# Landscape Plan # Other #
EC 4.4	Enhanced bird friendly glazing	Use a combination of the following to treat a minimum of 95% of all exterior glazing within the first 12 m of the building: <input type="checkbox"/> Low reflectance, opaque materials <input type="checkbox"/> Visual markers <input type="checkbox"/> Mute reflections		Landscape Plan # Other # Elevation Plans #
EC 4.5	Opaque building materials	Provide at least 50% of the exterior surface of the building as non-reflective opaque materials		Building Elevation# Building Cross-Section #
SW 1.4	Enhanced waste collection & sorting	Provide three separate chutes for collection of each of the three waste streams on all floors (Residential)		Floor Plan # Other #

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Section	Development Feature	Tier 2 Voluntary Performance Measure Summary	Description (How is this performance measure being met?)	Reference the Plans, Drawings or Reports
SW 1.5	Enhanced waste storage space	One of the following is provided (Residential): <input type="checkbox"/> separated kitchen cabinet space for collection of three waste streams <input type="checkbox"/> dedicated area(s) within the building for collection and storage of recycling and organics		Floor Plan #  Other #
SW 1.6	Household hazardous waste	Provide a dedicated collection area or room		Floor Plan #  Other #
SW 2.1	Building reuse	Maintain at least 55% of the existing building structure and envelope		<input type="checkbox"/> Declaration template
SW 3.1	Construction waste	Recycle at least 75% of non-hazardous construction and demolition debris		<input type="checkbox"/> Declaration template
SW 4.1	Recycled content	Ensure that at least 20% construction materials comprise recycled content		<input type="checkbox"/> Declaration template
SW 5.1	Regional materials	Ensure at least 20% of the building materials or products have been extracted, harvested, recovered or processed within 800 km of the final manufacturing site		<input type="checkbox"/> Declaration template