Toronto Green Standard: Council requested information on Solid Waste, Energy and Urban Heat Island standards

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<th>Date</th>
<th>January 22, 2010</th>
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<td>To:</td>
<td>Planning and Growth Committee</td>
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<td>From:</td>
<td>Chief Planner and Executive Director, City Planning</td>
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<td>Wards:</td>
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<td>Reference Number:</td>
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**SUMMARY**

This report responds to requests for additional information from the City Council meeting on October 26, 2009. Council requested that the Chief Planner and Executive Director, City Planning consider a number of amendments to the Toronto Green Standard including: requirements for in-building systems that will better facilitate the City’s three-stream recycling program; moving the requirement for provision of Energy Star compliant refrigerators and dishwashers into Tier 1 of the Toronto Green Standard and requiring City and ABCCD owned buildings that are not heated or cooled to meet the same green roof standards applied to private sector buildings.

This report does not recommend any amendments to the Toronto Green Standard resulting from this report.

**RECOMMENDATIONS**

The Chief Planner and Executive Director, City Planning Division recommends that:

1. The Toronto Green Standard performance measures, as adopted by City Council at its meeting held on October 26 and 27, 2009, remain unchanged at this time.
2. The City Policy on Green Roofs buildings owned by the City of Toronto or any of its agencies, boards, commissions or corporations not be amended for the reasons identified in this report

Financial Impact
The report will have no financial impact beyond what has already been approved in the City Planning base budget.

DECISION HISTORY
At its meeting on October 26 and 27, 2009, City Council, in considering the report on the Update and Revisions to the Toronto Green Standard, adopted the following:

1. City Council adopt the revised two-tiered set of performance measures associated with the Toronto Green Standard as presented in Appendix A of the report (September 22, 2009) from the Chief Planner and Executive Director, City Planning Division, to be applied to all applications under the Planning Act.

2. City Council direct that the Toronto Green Standard report be circulated to the following organizations, and that they be requested and encouraged to adopt similar environmental standards, especially with regard to the Bird Friendly Guidelines and Light Pollution:
   - LEED: Leadership in Energy and Environmental Design (Green Buildings Certification Institute)
   - BOMA: Building Owners and Managers Association
   - BILD: Building Industry Land Development Association
   - Great Lakes and St. Lawrence Cities Initiative
   - Canada Green Building Council
   - AMO: Association of Municipalities of Ontario
   - FCM: Federation of Canadian Municipalities

3. City Council refer the following motions to the Chief Planner and Executive Director, City Planning, for a report to the Planning and Growth Management Committee at its meeting on February 11, 2010:

   1. That City Council adopt the revised two-tiered set of performance measures associated with the Toronto Green Standard as presented in Appendix A of the report (September 22, 2009) from the Chief Planning and Executive Director, City Planning Division, to be applied to all applications under the Planning Act, with the following amendments:

      a. The section headed “Storage and Collection of Recycling and Organic Waste” be referred to the Chief Planner and Executive Director, City Planning Division, in consultation with the General Manager, Solid Waste Management Services, to establish requirements for in-building systems
that will better facilitate the City’s three-stream recycling program. Those requirements to include structural changes to townhouse developments that will eliminate the requirement to wheel city recycling containers around the block to facilitate collection.

b. The section headed “Minimum Energy Performance” be referred back to the Chief Planner and Executive Director, City Planning Division, to report on the impact of moving the requirement to provide Energy Star compliant refrigerators and dishwashers into Tier 1 standards.

2. Buildings that are owned by the City of Toronto or any of its agencies, boards, commissions, corporations or divisions that are not heated or cooled be required to meet the same green roof standards applied to private sector buildings.

This report responds to City Council’s action to refer the motions contained in Item 3 above for a report to the Planning and Growth Management Committee.

At its meeting on March 3, 4 and 5 City Council adopted recommendations to amend its policy respecting the installation of green roofs on City and ABC owned facilities: http://www.toronto.ca/legdocs/mmis/2008/ex/bgrd/backgroundfile-10414.pdf

ISSUE BACKGROUND
The Toronto Green Standard (TGS) is a two-tiered set of performance measures for new construction that promotes sustainable development. Tier 1 is mainly secured through Planning Act applications and will be validated in-house; Tier 2 is proposed to be achieved through a Development Charge Refund and will be validated by a third party review.

COMMENTS

Storage and Collection of Recycling and Organic Waste
The Tier 1 targets under the Development Feature for Storage and Collection of Recycling and Organic Waste are consistent with the City of Toronto Requirements for Garbage and Recycling Collection from New Developments and Redevelopments. The requirements are currently under review by Solid Waste Management Services. As a result, updated targets for the Storage and Collection of Recycling and Organic Waste will be reviewed for the TGS following the completion of the City of Toronto Requirements for Garbage and Recycling Collection from New Developments and Redevelopments.

Minimum Energy Performance (requiring Energy Star appliances)
The Toronto Green Standard was adopted by Council in December 2008 and revised in October 2009 following extensive stakeholder consultation and a comprehensive legal review of the City’s abilities to require green standards for new development. The new standard was structured to align with the authorities available to the City to require
elements of sustainable development that can be secured through the Planning Act processes. Tier 1 measures include exterior sustainable design, landscaping and site level infrastructure features (such as automobile, cycling and pedestrian infrastructure).

Securing Energy Star compliant appliances, including refrigerators and dishwashers in new development, is encompassed in Tier 2 of the TGS. Tier 2 establishes higher performance targets for green buildings and includes matters outside of what can be secured under the Planning Act or City of Toronto Act. This is achieved by offering a 20% refund on the Development Charges associated with the development. Tier 2 is voluntary, but can be secured through verification of the requirements prior to the release of the Development Charge Refund incentive.

The City has no legal authority to require interior features of new development such as fixtures and appliances as part of the development approval process. As a result, no change to the Tier 1 requirements of the Toronto Green Standard is recommended.

**Urban Heat Island: Roof (green roof requirements)**

The City’s green roof initiatives including the Policy and the By-law are premised on the multiple environmental benefits that the widespread implementation of green roofs would have in the City of Toronto. These benefits were identified in the *Report on the Environmental Benefits and Costs of Green Roof Technology for the City of Toronto*, prepared by Ryerson University and include: reduction in stormwater runoff, urban heat island mitigation, and improved energy performance of buildings and beautification of the City. As a result, the By-law and the Policy were structured to require green roofs on all building types including unconditioned buildings.

The City of Toronto Green Roof By-law adopted by Council in May 2009 sets out the minimum requirements for the construction of green roofs on private development in Toronto. The By-law requires that all new buildings greater than 2,000 sq.m in total Gross Floor Area provide a green roof ranging in size from 20 percent to 60 percent of the available roof space dependent on the size of the building.

In addition to the requirements for private development, in March 2008, City Council adopted a green roof policy for buildings owned by the City of Toronto or any of its agencies, boards, commissions, corporations or divisions. Council policy directs that a green roof be installed on all new buildings and on existing buildings when roofs are due to be replaced, where technically practical.

The Policy requires a flat rate coverage of 50 percent of the footprint of the building for any building size. Compared to the graduated scale requirement size of the Green Roof By-law, the policy for City-owned buildings is more stringent, but is less stringent than the By-law for only the largest building class requiring 60 percent coverage. However, the Green Roof By-law would also apply to City-owned buildings and the 60 percent requirement would need to be met.
The higher standard of green roof requirements for City-owned buildings was initiated to demonstrate leadership in green roof design. Requiring green roofs over top of unconditioned buildings is useful as green roofs offer multiple benefits to the City. As a result, no change to the policy is recommended.

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SIGNATURE

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