



STAFF REPORT ACTION REQUIRED

Minor Amendments to the Green Roof By-law

Date:	October 12, 2012
To:	Planning and Growth Management Committee
From:	Chief Planner and Executive Director, City Planning and Chief Building Official and Executive Director, Toronto Building
Wards:	All
Reference Number:	P:\2012\Cluster B\PLN\ Pg12078

SUMMARY

The Toronto Green Roof By-law is the first of its kind in North America and has been in force since January 31, 2010. To provide greater efficiency in the design and construction of Green Roofs in Toronto, this report recommends minor amendments to the Green Roof By-law. The proposed amendments provide additional clarity for staff and applicants on the interpretation of the By-law, allowing for greater efficiencies in the design and approval of green roofs while maintaining the performance standards currently in effect under the By-law.

The report also provides a status update on the revisions to the Toronto Green Roof Construction Standard. The report recommends that the Chief Building Official report on proposed amendments to the construction standard to the Planning and Growth Management Committee in 2013.

RECOMMENDATIONS

The Chief Planner and Executive Director, City Planning Division and the Chief Building Official, Executive Director, Toronto Building recommend that:

1. City Council direct the City Solicitor to submit a bill to Council amending Chapter 492 of the Municipal Code – Green Roofs (known as the Toronto Green Roof By-law) to make the technical amendments outlined in the report (October 12, 2012) from the Chief Planner and Executive Director, City Planning Division and the Chief Building Official, Executive Director, Toronto Building.
2. City Council request the Chief Building Official and Executive Director, Toronto Building, to report on revisions to the Green Roof By-law to reflect updates to the Toronto Green Roof Construction Standard.

Financial Impact

There is no financial impact

Implementation Points

Amendments to the By-law, as recommended in this report will apply to all Building Permit applications where a Green Roof is required as of the date of enactment of the amending by-law by City Council. Notification of changes to the By-law will be provided online to applicants through the City of Toronto website.

DECISION HISTORY

The Green Roof By-law was adopted by Council at its meeting on May 25, 26 and 27, 2009, under the authority of Section 108 of the City of Toronto Act, 2006. Council also directed the Chief Planner and the Chief Building Official report back on a review of the Toronto Green Roof By-law by January 31, 2012

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2009.PG25.3>

At its meeting on November 29, 30 and December 1, 2011, City Council amended the Green Roof By-law to permit an alternative option to a required green roof for industrial buildings. Council further directed City Planning and Toronto Building to report on the provision of an alternate option for public and separate school board buildings

<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2011.PG9.1>

At its meeting on June 6, 7, 8, 2012, Council decided against providing an alternate option to a required green roof for public and separate school board buildings.

<http://app.toronto.ca/tmmis/viewPublishedReport.do?function=getCouncilDecisionDocumentReport&meetingId=5664>

ISSUE BACKGROUND

In 2009, City Council adopted the Green Roof By-law, the first comprehensive by-law to require and govern the construction of green roofs in North America. The Green Roof By-law came into effect for new site plan control and building permit applications on February 1, 2010 and requires Green Roofs on most new buildings or additions over 2,000 m² in Gross Floor Area.

Between February 1, 2010 and September 30, 2012, the City Planning Division has received over 250 Site Plan applications where the Green Roof By-law will be required at the time of Building Permit application. During the same period, only 16 applications requested to pay cash-in-lieu for providing less green roof than is required under the By-law.

When constructed, these buildings will include an estimated 170,000 m² of green roof, covering an area equivalent to 20 CFL football fields in size. City Planning has also received over 40 Site Plan applications not covered under the By-law that are providing more than 20,000 m² of green roof. By comparison, in the years prior to 2010, an estimated total of 133 green roofs were built in Toronto covering an area of approximately 36,000 m².

As of September 2012, 19 green roofs required under the By-law have been issued building permits and a further 40 green roofs are under review.

In 2010, the City of Toronto received the Canadian Association of Municipal Administrators Environment Award for large municipalities for the implementation of both the Green Roof By-law and the Toronto Green Standard. The Green Roof By-law has also been referenced as a leading edge example in green roof strategy documents for international cities such as Sydney Australia and Singapore.

COMMENTS

Proposed Amendments

Following the implementation of the By-law, City Planning and Toronto Building have been collecting feedback from City staff, architects, landscape architects and green roof suppliers in order to identify any areas of improvement within the By-law.

The proposed amendments are technical and administrative in nature and do not significantly impact the area of green roof that is required for new development applications or the type of development where a green roof will be required. The table below outlines the proposed amendments to the Green Roof By-law.

Amendment	Rationale	Section
1. To permit green roof areas required on multiple buildings under the same Site Plan Control Application, to be amalgamated on the development site. Where a phased development is proposed, the first phase of the development must comply with the Green Roof By-law for the building for which a building permit is being issued. Green Roof area provided in excess of the minimum requirement may be applied to subsequent phases of the development.	Amalgamation of multiple green roof areas will allow for construction cost savings and greater design flexibility for the applicant while continuing to meet the intended performance of the By-law. Currently the By-law requires an amendment to permit the amalgamation of green roof areas.	TBD by the City Solicitor
2. Replace “Outdoor Amenity Space” to “Required Outdoor Amenity Space” under definition of Available Roof Space.	By-law currently permits Outdoor Amenity space to be excluded from the calculation of Available Roof Space. Amendment clarifies that only amenity space that is required under the Zoning By-law can be deducted.	492-1
3. Replace “ten percent of the Gross Floor Area” with “ten percent of the Available Roof Space”	Amendment corrects a technical error in the green roof requirement for Industrial buildings.	492-2(C)
4. Addition of exemptions for at-grade commercial greenhouses, temporary structures and air supported structures.	The amendment exempts specific structures where a green roof is not technically feasible	492-5
5. Delegate the cash-in-lieu of a green roof approval to the Chief Planner.	By-law requires that cash-in-lieu must be paid for all applications that do not provide the mandated green roof area. The approval of cash in lieu is currently delegated to the Chief Planner where a smaller than required green roof is proposed. Where no green roof area is proposed, approval is required by City Council. The amendment would apply one delegated approval process for all applications requiring cash-in-lieu to improve the efficiency of application processing and reduce reporting requirements to City Council.	492-11 (B) (D) (E)
6. Delete "Existing Buildings".	Amendment will permit funds collected under the Green Roof By-law to be used to fund all eligible green roof projects under the Eco-Roof Incentive Program.	492-12(C)

Status of Revisions to the Toronto Green Roof Construction Standard

A key component of the Green Roof By-law is the Toronto Green Roof Construction Standard (TGRCS) which sets out the City's requirements for the construction of green roofs in Toronto. As prescribed in the By-law, the Chief Building Official may periodically review the TGRCS and, after consultation with the Green Roof Technical Advisory Group (TAG), recommend amendments to City Council to reflect the City's experience with green roofs and new construction techniques and materials.

Work is currently underway to develop wind uplift and fire standards for future inclusion in the TGRCS. The Chief Building Official will meet with the TAG to review amendments to the construction standard. The Chief Building Official will report to the Planning and Growth Management Committee on these matters and on any advisable technical amendments to the TGRCS.

CONTACT

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SIGNATURE

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ATTACHMENTS

Attachment 1: Draft By-law

[P:\2012\Cluster B\PLN\PG12078]

Attachment 1:

Authority: Planning and Growth Management Committee Item _____ as adopted
by City of Toronto Council on _____

CITY OF TORONTO

Bill No.

BY-LAW No.

To amend City of Toronto Municipal Code Ch. 492, by making technical amendments to the Green Roof Requirements.

WHEREAS under section 108 of the *City of Toronto Act, 2006* (the “Act”), the City added Chapter 492, Green Roofs, to the City of Toronto Municipal Code, through the passage of By-law No. 583-2009, thereby requiring and governing the construction of green roofs; and

WHEREAS the City wishes to make technical amendments to the requirements for green roofs;

The Council of the City of Toronto **HEREBY ENACTS** as follows:

1. §492-1, Definitions, of the City of Toronto Municipal Code is amended by deleting Subsection C in the definition of "AVAILABLE ROOF SPACE" and replacing it with the following:

"C. In the case of a residential building or a building addition to a residential building, the Required Outdoor Amenity Space."

2. §492-1, Definitions, of the City of Toronto Municipal Code is amended by deleting the definition of "OUTDOOR AMENITY SPACE" and inserting the following definition of "REQUIRED OUTDOOR AMENITY SPACE" after the definition of "RENEWABLE ENERGY":

"REQUIRED OUTDOOR AMENITY SPACE – means an area located on the roof of a building, intended for recreational use by the residents of the building, but does not exceed the minimum area required under the applicable zoning by-law for the building for outdoor amenity space."

3. Subsection A of §492-2 of the City of Toronto Municipal Code is amended by adding the following sentence to the end of Subsection A:

"Notwithstanding the foregoing, where a development consists of two or more buildings under a Complete Site Plan Application and the buildings are to be constructed on a phased basis, the first phase of the development shall comply with the Green Roof requirements of this chapter for the building permit being

- issued and any Green Roof area provided in excess of the minimum Green Roof area required may be applied to subsequent phases of the development."
4. Subsection C of §492-2 of the City of Toronto Municipal Code is amended by replacing the number and words "10 percent of the gross floor area" with the number and words "10 percent of the available roof space".
 5. §492-5 of the City of Toronto Municipal Code is amended by adding the following Subsection D:

"D. §492-2 does not apply to commercial greenhouses located at grade, temporary structures and air supported structures."
 6. §492-11 of the City of Toronto Municipal Code is amended by deleting §492-11 and replacing it with the following:

"§492-11. Exemption or Variation of coverage requirement for a green roof by the Chief Planner.

 - A. If an applicant is unable to provide the green roof coverage as required in this chapter, application may be made to the Chief Planner for either a complete exemption to the requirement to provide a green roof or to provide a smaller green roof area than would otherwise be required, provided that a cash-in-lieu payment is made in accordance with this chapter, and the Chief Planner shall approve such application and shall notify the local Councillor(s) of the decision.
 - B. Where an application for a reduced green roof requirement is made to the Chief Planner pursuant to Subsection A, no alteration or variance to the technical standards for construction of green roofs as provided in the Toronto Green Roofs Construction Standard shall be permitted.
 - C. Where the Chief Planner has approved an exemption or variance and the cash-in-lieu payment is made, the Chief Building Official may issue a permit for the related building or building addition as though the applicant was in compliance with this chapter."
 7. Subsection A of §492-12 of the City of Toronto Municipal Code is deleted and replaced with the following"

"A. Where less than the required green roof coverage than otherwise would be required by this chapter is provided, either because of a variance or exemption approved by the Chief Planner, the applicant shall make a payment of cash-in-lieu of construction of a green roof for the reduced or exempted area based on the average actual cost of construction of a green

roof which at the time of the passing of this chapter shall be deemed to be \$200.00/m²."

8. Subsection C of §492-12 of the City of Toronto Municipal Code is amended by deleting the words "on existing buildings".

ENACTED AND PASSED this day of , A.D. 2012.

ROB FORD,
Mayor

ULLI S. WATKISS
City Clerk

(Corporate Seal)