

Passive House Standards Under Chapter 813, Trees

Date: September 8, 2020

To: Planning and Housing Committee

From: General Manager, Parks, Forestry and Recreation

Wards: All

SUMMARY

This report responds to a request by City Council on recommended policy changes that could support and expedite development applications seeking to meet high performance building standards associated with Passive House's, which are also tied to tree removal, injury and replacement requirements through a review of *Chapter 813, Trees*, of the Toronto Municipal Code.

City of Toronto *Municipal Code Chapter 813, Trees* gives the General Manager the authority to issue permits for injury, destruction and removal of trees in accordance with certain criteria. The General Manager may issue permits for removal of City owned trees following review and approval of a landscape plan satisfactory to the General Manager and the ward Councillor. As a result, a by-law amendment is not required to support development applications requiring tree injury or removal permits to pursue Passive House standards.

A specific procedure can be developed to allow the recommendation for removal of trees under certain circumstances based on criteria to be developed in consultation with City Planning and Environment and Energy Divisions. This change does not require approval by City Council.

RECOMMENDATIONS

The General Manager, Parks, Forestry and Recreation recommends that:

1. The Planning and Housing Committee receive this report for information.

FINANCIAL IMPACT

There are no financial implications resulting from the adoption of this report.

DECISION HISTORY

On July 15, 2020, North York Community Council considered a report titled *Application to Remove Two City-Owned Trees - 18 Raeburn Avenue*. The applicant requested to remove two City-owned spruce trees and replace them with one large deciduous tree in order to meet an energy efficiency target for Passive House certification of a new infill house to be constructed on site. The permit was denied and appealed. The item was deferred. <http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2020.NY16.14>

On July 28, 2020, City Council directed the General Manager, Parks, Forestry and Recreation to review Chapter 813, Trees, of the Toronto Municipal Code and report back by the end of the third quarter of 2020 on recommended policy changes that could support and expedite development applications seeking to meet the Passive House high performance building standards, which are also tied to tree removal, injury and replacement requirements.
<http://app.toronto.ca/tmmis/viewAgendaItemHistory.do?item=2020.MM23.17>

COMMENTS

Passive House Canada is a national non-profit professional association advocating for internationally recognized Passive House high-performance building standards that can consume up to 90 per cent less heating and cooling energy than conventional structures. The Passive House standard is a voluntary standard encouraged in the Toronto Green Standard (TGS). The TGS also references the Canadian Home Builders Association (CHBA) Net Zero Home Labelling Program or an alternative zero emissions standard certification as a high level of energy performance.

Many strategies are used by architects and engineers to achieve the high level of energy efficient performance of a Passive House, including insulation, windows, form, orientation, efficient ventilation, and air tightness. In order to meet Passive House standards certain energy efficiency targets must be met. Coniferous trees may shade a building in winter thereby reducing the solar gain and increasing the heating demand required to meet the standard. As such, requests to remove healthy and maintainable trees may arise from time to time. As well, deciduous trees may be considered for compensation planting on site, as they will allow for solar gain in winter and should not impact the energy efficiency of the building.

The TGS only applies to new development applications subject to Site Plan review including low-rise housing (less than four storeys with greater than five dwelling units). Tree removal and compensation planting is typically addressed through the Site Plan review process and the *Toronto Municipal Code Chapter 813 (Trees)*.

Outside of the administration of the Ontario Building Code, the City of Toronto does not have any mandatory standards for energy performance for new development applications not subject to Site Plan Control such as single family dwellings.

Municipal Code 813-5.K gives the General Manager the authority to issue permits for injury, destruction and removal of trees in accordance with the criteria and subject to the Passive House Standards Under Chapter 813, Trees

conditions set out in this article. *Municipal Code 813-7.A.4* requires that the landscape plan is satisfactory to the General Manager and ward Councillor. As such no changes to the by-law are required to follow the direction proposed in the Member Motion.

It is proposed that for low-rise infill developments such as single family dwellings that are voluntarily targeting high levels of energy performance for Passive House standards, and where a healthy City tree is in conflict with meeting the standard, a consultation with the ward Councillor will occur:

- The applicant must demonstrate the need to remove a tree by providing an energy efficiency report from an accredited consultant indicating that removal is necessary in order to meet a high energy efficiency target.
- Applications will be reviewed by Urban Forestry in consultation, if required, with City Planning and/or Environment and Energy Divisions to determine if the project achieves net zero emissions status or meets a minimum Passive House standards in order to ensure the greatest environmental net benefit, including tree retention or removal, as well as to offer advice and alternatives for the applicant to consider.
- Permits for the removal of City-owned trees may be approved in consultation with the ward Councillor. All tree removals would be conditional upon the provision of satisfactory replacement planting or cash-in-lieu of planting.

In summary, Urban Forestry, in consultation with the City Planning and Environment and Energy Divisions will develop a procedure and criteria for the review of similar requests on a case-by-case basis in order to weigh all the priorities, including the ecosystem and amenity value of the tree. The procedure will support applications seeking to meet the Passive House or other high performance building standards while preserving and maintaining trees and the many environmental benefits they provide. Ultimately the goal is to retain trees and enable Passive House certification.

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SIGNATURE

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ATTACHMENTS
