

# Charter Bylaw 19738

## Text Amendment to Zoning Bylaw 12800 for Wind Impact Assessments

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### Purpose

To align Zoning Bylaw 12800 Wind Impact Assessment requirements with the finalized Wind Impact Assessments Terms of Reference.

### Readings

Charter Bylaw 19738 is ready for three readings after the public hearing has been held. If Council wishes to give three readings during a single meeting, Council must unanimously agree “That Charter Bylaw 19738 be considered for third reading.”

### Advertising and Signing

This Charter Bylaw was advertised in the Edmonton Journal on June 4 and 12, 2021. The Charter Bylaw can be passed following third reading.

### Position of Administration

Administration supports this proposed Charter Bylaw.

### Previous Committee Action

At the December 1, 2020, Urban Planning Committee meeting, Council Report 7702 - Wind Studies Terms of Reference was received for information.

### Report

At the December 1, 2020 Urban Planning Committee, Administration committed to producing a finalized Wind Impact Assessments Terms of Reference and preparing a corresponding text amendment to Zoning Bylaw 12800.

Wind Impact Assessments are an important tool for evaluating and mitigating adverse wind conditions in the City’s development review process. Creating a comprehensive framework for managing wind impacts caused by new development will improve consistency of submission and review of Land Development and Development Permit applications and will help to align the Zoning Bylaw with The City Plan by supporting Edmonton’s identity as a winter city.

Currently, the Zoning Bylaw states that the Development Officer may require a Wind Impact Study or Statement (or both) for developments greater than 20 metres in height (greater than five storeys). However, the bylaw currently does not clearly distinguish

between different types of Wind Impact Assessments, when the different types of assessments may be required and what the Development Officer should do with the information provided. This makes it difficult to be consistent with submission and review requirements for both Land Development and Development Permit applications.

The proposed text amendment aligns the Zoning Bylaw with the finalized Wind Impact Assessments Terms of Reference by:

- Distinguishing between three different Wind Impact Assessments:
  - Wind Impact Statement (Desktop Assessment)
  - Qualitative Wind Impact Study (Computational Fluid Dynamics Study)
  - Quantitative Wind Impact Study (Wind Tunnel Study)
- Establishing building height thresholds for different Wind Impact Assessments:
  - Buildings 20 metres or greater in height may require a Wind Impact Statement;
  - Buildings 40 metres or greater in height may require a Qualitative Wind Impact Study; and
  - Further detailed wind assessment - including a Quantitative Wind Impact Study (Wind Tunnel Study) - may be required depending on the recommendation of the previous assessment;
- Removing the requirement that Wind Impact Assessments be completed by a registered professional engineer. (Note: not all professionals who can accurately prepare Wind Impact Assessments are engineers);
- Outlining that a Development Officer must consider the recommendations of the Wind Impact Assessment when making a decision on a discretionary Development Permit; and
- Outlining when a revised Wind Impact Assessment may be required.

### **Public Engagement**

The final draft of the Wind Impact Assessments Terms of Reference was circulated to industry stakeholders for review in March 2021. The proposed Zoning Bylaw text amendment was circulated to industry stakeholders and surrounding municipalities in April 2021. Respondents generally supported the draft terms of reference. The most common concerns were around increased costs to developers, building height thresholds, and impacts on review timelines.

In response to the feedback, the proposed Zoning Bylaw text amendment establishes clear expectations that developers will consider potential wind impacts and appropriate mitigation strategies early in the planning and design process of a proposed development. Establishing the height thresholds provides clarity on the type of Wind Impact Assessment that may be required. Review timelines and costs to developers are not expected to increase as the proposed amendments do not significantly deviate

from the current regulations, which allow Administration to require Wind Impact Assessments for developments over 20 metres in height.

### **Attachments**

1. Charter Bylaw 19738
2. Mark-up of Proposed Text Amendment to Zoning Bylaw 12800
3. Wind Impact Assessments Terms of Reference