# **Drainage Regulation Project – Proposed New Drainage Bylaw**

#### **ISSUE**

The City of Saskatoon's (City) current drainage regulatory framework has a number of limitations, which restrict the ability to effectively address issues such as improper lot grading, drainage complaints, flooding and potential property damage. The drainage regulation project will establish a more comprehensive regulatory framework, including development of a new drainage bylaw, for the purpose of better achieving lot grading compliance.

# RECOMMENDATION

That the Standing Policy Committee on Planning, Development and Community Services recommend to City Council:

- 1. That the proposed changes to drainage regulation, as outlined in this report, be approved; and
- 2. That the City Solicitor be requested to draft a new drainage bylaw to replace Bylaw No. 8379, The Drainage Bylaw, 2005.

# **BACKGROUND**

# <u>Current Regulatory Framework</u>

The current City Bylaw No. 8379, Drainage Bylaw, 2005 (Drainage Bylaw) is narrow in scope and primarily focuses on regulating rear property line design elevations on one and two-unit lots in new suburban growth areas, where engineered lot grading plans exist. Lot grading plans are completed by land developers and their engineering consultants prior to development of new subdivisions. They contain lot grade elevations at property corners and adhering to these elevations is necessary to ensure storm water flows appropriately.

There are also some existing gaps associated with drainage and lot grading requirements in the City's building permit process. Currently, Commercial Building Permits, for commercial, industrial and multi-unit developments, require submission of a site grading plan at the building permit application stage. These plans identify important characteristics such as lot grade elevations at property corners, drainage swales and other on-site storm water infrastructure such as catch basins. However, there is no inspection process to confirm the approved site grades are put in place.

Additionally, Residential Building Permits do not currently require submission of a site grading plan as part of the building permit process. In newer suburban areas, this can result in sites being developed at elevations which do not conform to engineered lot grading plans for those areas. In older neighbourhoods where lot grading plans do not exist, this can result in site grading being completed which does not properly account for the grades of existing adjacent properties.

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# <u>Drainage-Related Complaints and Site Grading Audits</u>

Administration receives and reviews approximately 200 complaints related to lot grading and drainage each year. These instances often involve improperly graded development sites. In 2019, Bylaw Compliance staff conducted grading audits on recently constructed commercial, multi-family and on suburban one-unit dwelling sites in the city. These sites were reviewed for consistency with the approved site grading plans or engineered lot grading plans. The audit identified site grading compliance rates of 51% for commercial sites, 68% for multiple-unit dwelling sites and 22% for one-unit dwelling sites in new suburban development areas. The audit results demonstrate the importance of developing site grading approval and inspection procedures, as part of an updated Drainage Bylaw to help ensure compliance with lot grading and drainage requirements when sites are being developed.

# **DISCUSSION/ANALYSIS**

For the purpose of improving the City's drainage regulatory framework, Administration initiated work on the Drainage Regulation Project in 2018. A summary of completed initiatives is provided in Appendix 1. The following components are proposed to be addressed through an updated Drainage Bylaw:

<u>Low-Density Residential Infill Development Drainage Regulation Changes</u>

Administration is proposing changes to regulate new infill development site grading, in order to reduce grading and drainage related impacts on existing adjacent properties.

The proposed changes would establish requirements for submission of an infill lot grading plan at the building permit stage and a site inspection process to ensure grading is completed in accordance with the approved plans and additionally, provide for enforcement measures to ensure compliance. Administrative reviews and inspections required for these components will be undertaken by the Community Standards Department and no additional permit fees are anticipated.

# Commercial Building Permits Drainage Regulation Changes

Administration is proposing enhanced drainage regulation related to new commercial permit applications, including commercial, multi-unit residential and industrial forms of development.

Proposed changes would establish a mandatory site inspection process and provide for enforcement measures which can be implemented to ensure these sites are developed in compliance with the regulations. Administration of these components will be undertaken by the Community Standards Department and no additional permit fees are anticipated at this time. The requirement for a drainage permit fee may be revisited at a future date should increased building permit activity result in need for additional staffing resources to ensure service level standards are met.

<u>Low-Density Residential Suburban Development Drainage Bylaw Amendments</u>
Administration is proposing changes to drainage regulation to ensure compliance with engineered lot grade elevations. Required lot grade elevations are indicated on lot

grading plans for new suburban development areas and these bylaw provisions will help ensure new lots are graded appropriately. Lot grading plans are completed by land developers and their engineering consultants prior to development of new subdivisions. It is noted that additional grading and drainage measures related to new suburban development areas will also be pursued as part of the final phases of the Drainage Regulation Project and are detailed in Appendix 1 of this report.

Administration notes the focus of the proposed changes will be directed to new development that occurs after approval of the proposed bylaw. However, the proposed changes do include some regulatory measures that may help to resolve some of the drainage issues found on existing properties. A summary, identifying the focus and objectives of the proposed changes, is included in Appendix 2.

# Municipal Scan

A review of practices utilized by other western Canadian cities was undertaken by Administration as part of this project. Proposed drainage procedures enabled through changes to drainage regulation are consistent with those utilized by the cities studied under this review and are summarized in Appendix 3.

# FINANCIAL IMPLICATIONS

The new lot grading plan review and inspection procedures enabled through the proposed changes to drainage regulation will be undertaken by existing staff in the Community Standards Department. Increases in building permit activity may require the need for additional staffing resources at a later date.

Implementation of the lot grading plan review and inspection procedures will require development of workflows which are aligned with the City's building permit process. Financial implications for this software requirement will be reported to Committee and Council in an upcoming report by mid 2021.

Financial implications associated with remaining project initiatives which largely focus on suburban development initiatives will be identified in a report in fall 2021.

# **COMMUNICATIONS AND ENGAGEMENT**

The engagement and communications strategy focused on targeting external stakeholders related to the building, development and engineering consulting industries. Information on the project and opportunities for providing feedback was also provided to the broader public through social media and on the City's Engage Page. Due to the technical nature of the project, it was anticipated interest in this project from the broader public would likely be limited to individuals who experienced grading or drainage related issues with their property. Engagement details are summarized in Appendix 4.

A public communication plan focusing on lot grading and drainage education will be rolled out in April 2021. Subsequent communication plan initiatives will be developed in 2021 to ensure industry stakeholders are informed of proposed changes related to the site grading plan approval process and final grade inspection requirements.

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#### **NEXT STEPS**

Upon approval by City Council of the proposed changes, the City Solicitor's Office will draft the necessary bylaw, which will integrate relevant aspects of the existing Drainage Bylaw. City Council consideration of this bylaw is anticipated in summer 2021.

Administration is targeting fall 2021 for implementation of the site grading plan review and inspection procedures for new low-density residential infill development and commercial permit development. Implementation dates will depend on timing associated with completion of database updates to accommodate necessary administrative workflows.

The remaining initiatives to be addressed under the Drainage Regulation Project are summarized in Appendix 1 and are anticipated to be complete in Q4 2021. A report on the remaining project initiatives will be tabled at a Standing Policy Committee on Planning, Development and Community Services meeting in Q4 2021.

# **APPENDICES**

- 1. Drainage Regulation Project Initiatives
- 2. Summary of Proposed Drainage Bylaw
- 3. Municipal Scan Drainage Regulation Practices
- 4. Engagement Summary

#### REPORT APPROVAL

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