

Document 11 – Implementation of On-Site Stormwater Management and Adequate Water and Wastewater Service Provisions in Section 201

Ottawa is experiencing significant growth, with over 400,000 new residents expected by 2046. Development in the form of intensification in existing neighbourhoods is planned to account for 60 per cent of all new development by 2046. This will bring new residents into existing neighborhoods, many of which were not originally designed to handle the increased stormwater runoff caused by new buildings and paved surfaces.

To address this challenge, the Council-approved 2024 Infrastructure Master Plan recommended the creation of an On-Site Stormwater Management (SWM) Program. This program is designed to reduce flood risks and improve drainage in intensifying areas, specifically targeting developments that proceed solely through building permit approvals. Stormwater management requirements have historically been achieved as part of Site Plan Control approvals under the *Planning Act*. With recent changes to promote housing development by exempting more development proposals from Site Plan Control, a gap has been created. The new Zoning By-law will add a new requirement for on-site stormwater management.

Existing stormwater management controls shall continue to apply consistently to all developments proceeding through *Planning Act* processes. No changes to these requirements are proposed.

Program Overview

The On-Site Stormwater Management Program applies to all building permit approvals for low-rise residential developments (four storeys or fewer) that increase hard surface areas. This includes substantial additions and new infill dwellings. The City is requiring all development sites to implement on-site stormwater management to ensure that service levels for the existing community are not diminished as a result of development. This program supports increased infill development while maintaining current flood protection standards for existing residents. The program introduces new requirements for managing stormwater directly on the site of a development using methods such as:

- Rooftop control systems
- Surface or underground storage
- Low Impact Development (LID) techniques

These measures help ensure that stormwater is captured, stored, and released at rates similar to pre-development conditions.

Implementation Plan and Stakeholder Engagement

The City collaborated with Municipal Government Wayfinders Ltd. to develop a comprehensive implementation strategy and provide technical support to the development industry. The resulting plan identifies 13 solutions and 22

recommendations to guide effective program delivery. Key components of the program include the following:

- A plain-language process guide for applicants and reviewers
- Integration of the stormwater management (SWM) program into the existing building permit grading review process
- Recommendations for documentation, training, and communications including pre-consultation
- Provision of technical support to the development industry through the development of the “Quick Stormwater Management Tool” (QuickSWM Tool)
- Engagement with stakeholders such as the Greater Ottawa Home Builders’ Association (GOHBA), internal City teams, and the Committee of Adjustment

The implementation plan was developed through workshops, technical memos, and ongoing feedback loops to ensure it meets the needs of both the City and the development community.

Water and Wastewater Services

For water and sewer, the City is applying a risk-based approach to determine when system capacity checks are necessary. Low-density residential developments (one to three dwelling units) typically pose minimal risk to sanitary capacity and fire protection. These developments will be tracked, and system models will be updated as growth occurs. This information will help guide the planning and prioritization of local infrastructure upgrades, based on available funding.

In contrast, developments including four to ten dwelling units present a higher risk, particularly with respect to fire flow availability. As a result, the City will be actively reviewing all development files above a defined size threshold to assess fire flow capacity and ensure adequate service levels.

QuickSWM Tool

A key innovation in the program is the QuickSWM Tool, accompanied by a technical checklist and guide that allows applicants to complete stormwater reviews without hiring a specialized stormwater management engineer. This tool is expected to save proponents 8–12 weeks in the review process, when compared to typical Site Plan Control application timelines. In many cases, approvals can be completed within the standard 10-day building permit review timeline. Please note that the QuickSWM Tool was originally developed for low-rise residential applications not subject to Site Plan Control approval. While projects requiring Site Plan Control approval can vary widely in form and scale, the tool may still be applicable where appropriate. It is the responsibility of applicants to ensure their designs comply with all relevant regulations and standards when using the tool.

The QuickSWM Tool has been peer-reviewed and aligned with the broader implementation plan. It establishes thresholds for when a full stormwater management report rather than the QuickSWM Tool are needed. The tool will be updated regularly based on user feedback. The published version of the tool has been finalized and can be provided upon request.

Applicants will include the results from use of this tool as part of their grading and servicing submission. The results will be verified by the Grading and Servicing reviewers (Development Review staff). Support for this process will be provided by Asset Management (IWSD Department).

Full program reporting will be provided as part of IWSD reporting to Committee in Q1 2026.

Zoning By-law and Regulatory Framework

The Zoning By-law is foundational to the success of this program. It provides the legal authority to control building permit issuance and enforce stormwater requirements. A new section in the final draft Zoning By-law (Section 201) establishes requirements for management of stormwater that must be satisfied to issue the building permit. Those requirements are confirmed by City engineering staff during their review of the QuickSWM materials submitted by building permit applicants. Without approval of these new provisions under Section 201 of the final draft of the Zoning By-law, the City cannot effectively manage the impacts of intensification on local drainage systems for development that is exempted from Site Plan Control approval.

The implementation plan also recommends harmonizing related by-laws, such as Site Alteration and Sewer Connection by-laws, to support consistent enforcement and compliance.

Fees and Staffing

Importantly, no new fees will be collected for this program. Stormwater reviews will be integrated into the existing grading review process, which is already funded through building permit fees. Staffing needs will be monitored as the program evolves, with initial estimates suggesting the eventual need for two permanent and one temporary staff member.

Conclusion

The On-Site SWM Program is a proactive, cost-effective solution to managing the impacts of intensification on Ottawa's stormwater systems. It supports the City's growth goals while protecting existing neighborhoods from increased flood risk. With the QuickSWM Tool, streamlined processes, and no new fees, the program is designed to be efficient, equitable, and responsive to the needs of both residents and developers.