

What is it?

A Stormwater Management (SWM) Report is an evaluation of the quality and quantity impacts of the change in stormwater runoff on existing infrastructure and watercourses due to a proposed development. The report determines improvements to municipal servicing infrastructure, mitigation measures to minimize any negative impacts on the drainage system and identifies opportunities for enhancement of stormwater management facilities and features in redevelopment sites.

The report may be a stand-alone document or combined with a Functional Servicing Report (FSR).

Who prepares it?

A SWM report should be prepared by a qualified civil/water resources engineering consultant. The report must be stamped, dated and signed by a Professional Engineer (P.Eng.).

Why is it required?

The objective of a SWM report is to evaluate the effects of a proposed development on the stormwater and drainage system, and to recommend how to manage rainwater/snowmelt for the proposed development, consistent with the Transportation & Works Development Requirements Manual and also meeting CVC, TRCA, CH and provincial regulations.

When is it required?

A SWM Report may be required in support of the following development application types:

- Official Plan Amendment
- Zoning By-law Amendment
- Draft Plan of Subdivision / Condominium
- Site Plan Control
- Consent to Sever
- Minor Variance

How to prepare it

The report must provide sufficient engineering information to allow for the necessary review and acceptance of the proposed stormwater management schemes in principle and should address, but not be limited to, the following:

- Identify and describe the site location, area, pre-development and post-development conditions, etc.;
- Identify the inlets (from upstream) and outlets (to downstream) for the minor and major systems, including overland flow routes;
- Identify all internal and external drainage areas under existing and future development conditions for minor and major flows;

- Identify constraints and potential opportunities – quantitative, qualitative, erosion sensitivity and environmental concerns related to stormwater for both interim and ultimate development conditions;
- Identify existing stormwater management requirements and/or criteria that apply specifically to the site (applicable watershed);
- Indicate the design assumptions and conceptual engineering schemes to manage both quantity and quality of run-off;
- Identify how the water balance requirement is to be achieved through the use of green infrastructure and/or Low Impact Development (LID) techniques;
- Assess mitigation measures to minimize any negative impacts on the drainage system by applying appropriate on-site controls;
- Provide Hydraulic Grade Line and Overland Flow analyses where applicable
- Demonstrate that the proposal has maximized source control measures to reduce runoff from the site and maximized conveyance control measures to infiltrate and/or treat run-off as appropriate consistent with water quantity and quality objectives;
- Indicate if off-site land or works are required to implement the stormwater management proposal and comment to what extent (e.g. easements, dedication, land acquisition, etc.);
- Indicate the interim measures required for erosion, pond siltation and sedimentation, downstream works and riparian flow considerations during the construction phase;
- Indicate if other agencies have jurisdiction and if their approvals or permits are required (e.g. MTO, MECP, CVC, TRCA, CH, etc.) and provide record of approvals;
- Submit all plans, modeling results and calculations to support the proposals.

Please refer to Stormwater Drainage Design Requirements (below) for further information.

If a *Drainage Proposal* is requested, the outlet(s) is to be identified and storm sewer capacity verified.

Additional Information

- The applicant is encouraged to discuss the need, scope and the proposed stormwater management concepts and design assumptions with City staff prior to preparing the report.
- Detailed calculations and the design of the stormwater management facilities and drainage systems based on the accepted principles in the draft report or Drainage Proposal, must be accepted prior to, or in conjunction with the final acceptance of the engineering drawings.
- Stormwater Drainage Design Requirements; [Section 8.0 of the Transportation and Works Development Requirements Manual](#)
- Ministry of the Environment, Conservation and Parks; [Stormwater Management Planning and Design Manual](#)
- For inquiries please contact Environmental Services Section (Storm) at env.approvals@mississauga.ca