

Study Description

A **Stormwater Management Report** is an evaluation of the effects of the proposed development on the natural environment and municipal storm and sewer infrastructure. The study provides mitigative measures to reduce the impacts of increased sediment erosion, higher and faster peak flows and pollutant containment loads on the receiving storm water network.

Purpose

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

Who should prepare this?

A qualified, registered professional engineer. All reports and drawings must be stamped, signed and dated by a qualified professional, licensed in the Province of Ontario. The study may be a stand-alone document or combined with a **Functional Servicing Report**.

When is this required?

A **Stormwater Management Report** may be required as part of the following applications:

- Zoning By-law Amendment
- Draft Plan of Subdivision/Condominium
- Site Plan Control

Required Contents

The **Stormwater Management Report** shall be consistent with the requirements of the Storm Drainage and Stormwater Management Policies and Design Guidelines and include:

- A map of existing contours and pre-development catchments including external contributing areas
- Identification of floodplain limits of all watercourses, including the erosion hazard
- A plan with pre-development and post-development catchments including area and runoff coefficients
- A plan of the sewer system, stormwater management facilities and overland flow routes
- A description of methodology and existing conservation authority watershed criteria
- A summary of the City's applicable criteria to be met
- Detail input parameters to the hydrologic model
- Complete computer output/input printouts (computer files)
- Electronic data files of input and output for pre and post development conditions
- Summary of computer output results in a simplified tabular format
- Identification of revised pipes and proposed catchbasin inlet controls
- Verification that major overland flow routes do not impact properties and that road gutter flows are within City parameters
- Summary of how all City and Watershed stormwater management criteria has been satisfied

- Outline of the operations, maintenance, and monitoring program for the stormwater management facilities, including Oil Grit Separators (OGS) and Low Impact Developments (LIDs)
- Phosphorus budget and water balance in accordance with the relevant conservation authority guidelines
- The inclusion of any low impact developments (LIDs) and their function (and included in the modelling) including relevant hydrogeological information

What else should we know?

An ***Erosion and Sediment Control Plan*** may be required to supplement this report. See Appendix A – Erosion and Sediment Control Plan for details regarding the requirements.

Regardless of any Environmental Compliance Approvals (ECA) issued by the Ministry of Environment, Conservation and Parks, the developer must demonstrate compliance with the City Wide ECA for assumption of infrastructure.

Pre-consultation with the Lake Simcoe Region Conservation Authority and/or the Nottawasaga Valley Conservation Authority is strongly recommended to ensure that all requirements are incorporated into the first draft of the study.

The Lake Simcoe Region Conservation Authority (LSRCA) has a Phosphorus Offsetting Policy that may be applicable to your site.

What other resources are available?

Professional Engineers Ontario - To hire a professional engineering consultant, consult the directory:

<http://forum.peo.on.ca/cgi-bin/CED/CEDSearch.cgi>

Section 5.3 Stormwater Management of the Official Plan:

<https://www.barrie.ca/City%20Hall/Planning-and-Development/Pages/Official-Plan.aspx>

Engineering Storm Drainage and Stormwater Management Policies and Design Guidelines:

<https://www.barrie.ca/City%20Hall/Planning-and-Development/Engineering-Resources/Documents/City-Standards/Storm-Drainage-and-Stormwater-Management-Policies-and-Design-Guidelines.pdf>

Engineering Standards, Policies & Guidelines:

<https://www.barrie.ca/City%20Hall/Planning-and-Development/Engineering-Resources/Pages/Engineering-Standards-Policies-Guidelines.aspx>

Engineering Department Development Manual:

<https://www.barrie.ca/City%20Hall/Planning-and-Development/Engineering-Resources/Documents/City-Standards/Development-Manual.pdf>

Lake Simcoe Region Conservation Authority Technical Guidelines for SWM Submissions:

https://www.lsrca.on.ca/Shared%20Documents/permits/swm_guidelines.pdf

Lake Simcoe Region Conservation Authority Phosphorus Offsetting:

<https://www.lsrca.on.ca/watershed-health/phosphorus>

Nottawasaga Valley Conservation Authority Stormwater Technical Guide:

[https://www.nvca.on.ca/Shared%20Documents/NVCA%20Stormwater%20Technical%20Guide%20\(Dec.%202013\).pdf](https://www.nvca.on.ca/Shared%20Documents/NVCA%20Stormwater%20Technical%20Guide%20(Dec.%202013).pdf)

Stormwater Management Planning and Design Manual (March 2003):

<https://www.ontario.ca/document/stormwater-management-planning-and-design-manual-0>

Notes

If the proposed development is revised, the study/report shall reflect the revisions by an updated report or letter from the author indicating the recommendations and conclusions are the same.

Please note that a peer review may be required. The cost of the peer review will be borne by the applicant.

Please note that the requirements of this study may vary depending on the nature of the proposal. This will be determined through the pre-consultation process and in consultation with any applicable external agencies.

If the submitted study is incomplete, is authored by an unqualified individual, or does not contain adequate analysis, the application will be considered incomplete and returned to the applicant.

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| Study Description | An <i>Erosion And Sediment Control Plan</i> ensures that activities due to the placing or dumping of fill, removal of top soil and alteration of grade do not have a negative impact on the receiving storm drainage system and can be used to supplement a <i>Stormwater Management Report</i> . |
| Purpose | To set out the mitigative measures for preventing negative impacts on the drainage system due to site alteration. |
| Who should prepare this? | The <i>Erosion And Sediment Control Plan</i> should be prepared by a qualified professional engineer with experience in municipal engineering. All final documents must be signed and stamped by a professional engineer. |
| When is this required? | To support the following applications: <ul style="list-style-type: none"> • Draft Plan of Subdivision/Condominium • Site Plan Control • Consent to Sever |
| Required Contents | The <i>Erosion And Sediment Control Plan</i> is to be prepared according to Site Alteration By-law (2014-100) and the City's Storm Drainage and Stormwater Management Policies and Design and in consultation with the Lake Simcoe Region Conservation Authority and/or the Nottawasaga Valley Conservation Authority. |
| What other resources are available? | Professional Engineers Ontario - To hire a professional engineering consultant, consult the directory: http://forum.peo.on.ca/cgi-bin/CED/CEDSearch.cgi Section 5.3 Stormwater Management of the Official Plan: https://www.barrie.ca/City%20Hall/Planning-and-Development/Pages/Official-Plan.aspx Engineering Storm Drainage and Stormwater Management Policies and Design Guidelines: https://www.barrie.ca/City%20Hall/Planning-and-Development/Engineering-Resources/Documents/City-Standards/Storm-Drainage-and-Stormwater-Management-Policies-and-Design-Guidelines.pdf Engineering Standards, Policies & Guidelines: https://www.barrie.ca/City%20Hall/Planning-and-Development/Engineering-Resources/Pages/Engineering-Standards-Policies-Guidelines.aspx Engineering Department Development Manual: https://www.barrie.ca/City%20Hall/Planning-and-Development/Engineering-Resources/Documents/City-Standards/Development-Manual.pdf Lake Simcoe Region Conservation Authority Technical Guidelines for SWM Submissions: |

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Lake Simcoe Region Conservation Authority Phosphorus Offsetting:

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