Cut and Fill Analysis

PURPOSE:

This document provides guidance for the completion of a Cut and Fill Analysis, which may be required for the submission of an application under the *Planning Act*. All Cut and Fill Analyses shall follow the requirements referenced in this document.

A Cut and Fill Analysis provides information required for a Planning Application where cut and fill operations are proposed within a floodplain.

A Cut and Fill is a technique used to balance flood storage loss resulting from the placement of fill within a floodplain by removing a volume of earth at the appropriate elevation and location to offset areas within the floodplain being filled. A Cut and Fill Analysis provides a summary of the volume of earth being added and removed, together with plans showing the location and dimensions of the proposed cut and fill operations.

PREPARED BY:

A Cut and Fill Analysis must be prepared by a consultant registered as a Professional Engineer (P.Eng.) in the province of Ontario. The consultant must affix their stamp and seal and specifically identify the engineer who prepared the work.

CONTENTS:

A Cut and Fill Analysis shall contain the following:

- A detailed summary of total fill volumes and total cut volumes;
- Cross sectional plots to scale showing existing and proposed flood lines and ground areas;

- A detailed contour/topographic plan to scale showing existing conditions and proposed works;
- Hydraulic model for existing and proposed conditions verifying that there is no impact to floodplain limits (floor elevations) and that floodplain storage volumes are maintained; and,
- Electronic files of the input and output for the existing and proposed conditions.

Floodplain/hydraulic modelling may also be required if the proposed cut and fill is not balanced. The modelling must be prepared in the HEC-EAS format by a qualified Professional Engineer.

OTHER INFORMATION:

Hamilton Conservation Authority Planning & Regulation Policies and Guidelines:
PlanRegPolicyGuidewAppendices.pdf (conservationhamilton.ca)

Conservation Halton Polices and Guidelines:

Policies and Guidelines - Conservation Halton

NPCA Policy Document:
NPCA_Policy_Document__Nov_18_2022_Office_Consolidation.pdf

Grand River Conservation Authority Policies for the Administration of the Development, Interference with Wetlands and Alterations to Shorelines and Watercourses Regulation:
https://www.grandriver.ca/planning-development/policies-and-guidelines/

REVIEWED AND APPROVED BY:

The Conservation Authority with regulatory authority over the subject lands, namely:

- Hamilton Conservation Authority
- Conservation Halton
- Niagara Peninsula Conservation Authority
- Grand River Conservation Authority

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