

CODE OF PRACTICE FOR EROSION AND SEDIMENT CONTROL

*Made under the Stormwater Bylaw 37M2005
Section 15(3)(d)*

In Force as of May 8, 2023

Definitions

1(1) All definitions in the Stormwater Bylaw (37M2005) apply to the Code of Practice for Erosion and Sediment Control (ESC).

(2) In this Code of Practice,

- a. "Applicant" means an Owner or a Person responsible listed in Section 3.2 of the Erosion and Sediment Control Application;
- b. "Approval" means an Authorization issued, by the Director, for an ESC Plan in accordance with Section 3 of this Code of Practice;
- c. "Audit" means to conduct a complete review an ESC Plan that was submitted with a Written Notice and approved under a Notice to Proceed;
- d. "Authorization" means a written approval issued under the authority of Section 16 of the Stormwater Bylaw (37M2005);
- e. "Code of Practice" means this Code of Practice for Erosion and Sediment Control and any amendment there to;
- f. "Construction Activity" means removal of vegetation, disturbance of soil and installation of erosion and sediment controls and practices;
- g. "Contravention" means when the deficiencies noted at the previous inspection are not resolved at the following inspection;
- h. "Director" means the City Manager for The City of Calgary or The City Manager's designates delegated powers under Section 15(2) of the Stormwater Bylaw (37M2005) for the purpose of reviewing, approving, and inspecting ESC Plans;
- i. "ESC Plan" means the application, drawings, and supporting documents that comply with the requirements outlined in the most recent Instruction Manual for Erosion and Sediment Control Plan Applications;
- j. "Good Housekeeping Letter" means an Authorization issued, by the Director, for a Good Housekeeping request in accordance with Section 5 of this Code of Practice;
- k. "Good Housekeeping Request" means a request, containing all the information specified in Schedule C;
- l. "Inspection Completion Request" means a notice containing all information outlined in Schedule F which is required to obtain written permission to cease ESC Inspections;

- m. "Major Breach" means when the Applicant or a Person authorized to act on their behalf commits an offence under the Stormwater Bylaw, fails to correct issues identified by the Director within the time period specified by the Director, or when the applicant does not meet the requirements of this Code of Practice;
- n. "Major Changes" means changes that represent a major departure from what was approved in the ESC Plan that require amendments to existing drawings, and/or the application and will require revisions to the Revised Universal Soil Loss Calculations;
- o. "Minor Changes" means changes that represent a minor departure from what was approved in the ESC Plan that require amendments to the existing drawing and/or the application that will not require revisions to the Revised Universal Soil Loss Calculations;
- p. "Notice to Proceed" means an Authorization issued, by the Director, for a Written Notice in accordance with Section 4 of this Code of Practice;
- q. "Pre-construction Meeting Request" means a request containing all information outlined in Schedule E;
- r. "Qualified Designer" means a person who meets the qualifications outlined in Section 100.5 of the most recent edition of The City of Calgary Standard Specifications – ESC;
- s. "Qualified Inspector" means a person who meets the qualifications outlined in Section 100.14 of the most recent edition of The City of Calgary Standard Specifications – ESC;
- t. "Revised Universal Soil Loss Equation" means the calculation used to predict soil loss from sheet, rill and inter-rill erosion using the factors of rainfall and runoff erosivity, soil erodibility, length and slope angle, cover controls, and support practices;
- u. "Site" means a Parcel where there is a designated activity which requires an ESC Authorization;
- v. "The City of Calgary Standard Specifications - ESC" means the most recent edition of The City of Calgary Standard Specifications - Erosion and Sediment Control;
- w. "Written Notice" means a notice, containing all the information specified in Schedule B;

Designation of Activities

- 2(1) Sites that are greater than 2.0 hectares are designated as activities that require an ESC Plan **Approval** as outlined in Section 3;
- (2) Sites between 0.4 – 2.0 hectares are designated as activities that require an ESC Plan **Notice to Proceed** as outlined in Section 4;
- (3) The following are designated activities that require ESC **Good Housekeeping** as outlined in Section 5;
 - (a) All Sites that are less than 0.4 hectare;
 - (b) Where a **Good Housekeeping Letter** is required because a Site is one that is:
 - (1) 0.4 hectares or greater, where less than 0.4 hectares will be disturbed;
 - (2) less than 0.4 hectares with characteristics that indicate greater than normal ESC concerns; or
 - (3) a series of two or more discrete locations where no individual location exceeds 0.4 hectares.
- (4) The Director may, when there is Major Breach, revoke an Applicant's right to submit a Written Notice under Section 2(2) for a period of 6 months and require the Applicant to submit an ESC Plan for Approval for all Sites 0.4 hectares or greater.

Approval from the Director

- 3(1) For the purpose of Section 15(3)(d) of the Stormwater Bylaw (37M2005), a Qualified Designer must create an ESC Plan, that outlines how a Release from the Site will not cause an Adverse Effect during a Construction Activity.
- (2) No Person may commence or continue a Construction Activity on a Site where an ESC Plan Approval is required, except pursuant to an Approval issued by the Director.
- (3) The Construction Activity must be conducted in accordance with the information contained in the ESC Plan provided to the Director under subsection (1).
- (4) An ESC Plan Application, that contains all the information noted in Schedule A, must be provided to the Director for an application to be deemed complete.
- (5) ESC Plan Applications must be submitted and authenticated by a Qualified Designer.
- (6) The Director may reject an ESC Plan Application if any of the information required under Schedule A is missing or incorrect at the time the ESC Plan Application is submitted.

- (7) When there has been a Minor Change to the Construction Activity that deviates from the ESC Plan, an amendment must be provided prior to or within 72 hours of the Minor Change. The amendment must contain the information noted in Schedule D.
- (8) When a Major Change to the Construction Activity is proposed, that deviates from the ESC Plan, an amendment must be submitted to the Director to obtain Approval prior to commencement of the change. The amendment must contain the information noted in Schedule D.

Notice to Proceed from the Director

- 4(1) For the purpose of Section 15(3)(d) of the Stormwater Bylaw (37M2005), a Qualified Designer must create an ESC Plan, that outlines how a Release from the Site will not cause an Adverse Effect during a Construction Activity.
- (2) No Person may commence or continue a Construction Activity on a Site where a Notice to Proceed is required, except pursuant to a Notice to Proceed issued by the Director.
- (3) The Construction Activity must be conducted in accordance with the information contained in the ESC Plan and the Written Notice provided to the Director under subsection (1).
- (4) A Written Notice, that contains all the information noted in Schedule B, must be provided to the Director for a Written Notice to be deemed complete.
- (5) The Written Notice must be submitted, with a copy of the ESC Plan, at least 30 calendar days before any works are commenced, continued, or carried out, unless otherwise specified in writing by the Director.
- (6) Written Notice must be submitted and authenticated by the Qualified Designer who created the ESC Plan.
- (7) The Director may reject a Written Notice if any of the information required under Schedule B is missing or incorrect at the time the Written Notice is submitted.
- (8) The Director may reject a Written Notice if the Applicant has lost the right to use the Code of Practice under Section 2(4).
- (9) When there has been a change to the Construction Activity that deviates from the information provided under either the ESC Plan or the Written Notice, or both the ESC Plan and the Written Notice, an amendment must be provided prior to or within 72 hours of the deviation. The amendment must contain the information noted in Schedule D.

Good Housekeeping

- 5(1) For the purpose of Section 15(3)(d) of the Stormwater Bylaw (37M2005), the Owner or Person responsible for a Site where there is Construction Activity, that did not require an Approval or a Notice to Proceed under Section 2 of this Code of Practice, will:
- (a) ensure a Release from the Site will not cause an Adverse Effect during a Construction Activity; and
 - (b) comply with Section 100.26 Good Housekeeping Practices and Section 200 Specifications, of The City of Calgary Standard Specifications - ESC.
- (2) No Person may commence or continue a Construction Activity on a Site where a Good Housekeeping letter is required, except pursuant to a Good Housekeeping letter issued by the Director.
- (3) The Construction Activity must be conducted in accordance with the information contained in the Good Housekeeping Letter when the Construction Activity is operating under a Good Housekeeping Letter provided by the Director under Section 2(3)(b).
- (4) When a site qualifies to operate under Section 2(3)(b) of this Code of Practice, A Good Housekeeping Letter Request, that contains all the information listed in Schedule C, must be provided to the Director, or an Environmental Compliance Specialist for an application to be deemed complete.
- (5) The Director may reject a Good Housekeeping Letter request if any of the information required under Schedule C is missing or incorrect at the time the ESC Plan Application is submitted.
- (6) The Director may require an Owner or occupier of a Site submit an ESC Plan under either Section 3(2) of Section 4(2) of this Code of Practice if there are characteristics that indicate greater than normal ESC concerns which The City believes could result in an Adverse Effect to property, infrastructure, health, safety, or the environment.
- (7) The Director may impose conditions or requirements upon an Owner or occupier of a Site to prevent Releases from the Site from causing an Adverse Effect.

Submission, Applications, and Written Notice

- 6(1) Any submission, application, Written Notice, or other communications to the Director under this Code of Practice must be in writing, complete and in the approved format to be effective, and be provided electronically through:
- (a) the ESC inbox at ESC@calgary.ca;
 - (b) other approved electronic means posted at www.calgary.ca/stmpp.
- (2) Any submissions, applications, Written Notice, or other communications submitted electronically:

- (a) by 4:00 p.m. shall be deemed to be received on the date it is received; or
- (b) after 4:00 p.m. shall be deemed to be received on the next business day.

Bound by the Code of Practice

- 7(1) Any Person who carries out a Construction Activity, must comply with all relevant documents:
- (a) The ESC Authorization;
 - (b) Written Notice;
 - (c) Erosion and Sediment Control Application form;
 - (d) The City of Calgary Standard Specifications – ESC;
 - (e) All applicable drawings;
 - (f) Attachments;
 - (g) The Stormwater Bylaw; and
 - (h) The requirements set out in this Code of Practice; and any conditions or requirements authorized under Section 15(3)(e) of the Stormwater Bylaw.

Pre-construction Meeting

- 8(1) A Pre-construction Meeting Request must be submitted to the Director, and approved in writing by the Director, prior to commencing construction on any Site 0.4 hectare or greater in size.
- (2) A Pre-construction Meeting Request, that contains all the information noted in Schedule E, must be submitted to the Director, at least five business days prior to the commencement of construction.
- (3) A Pre-construction Meeting Request will not be considered valid if any of the information required under Schedule E is missing.

Contraventions

- 9(1) A Person involved in carrying out a Construction Activity must, within 72 hours of discovery of a Contravention, report, in writing, to the Director by emailing ESC@calgary.ca, and the Owner, any Contraventions of an Authorization and this Code of Practice. The written communication must contain:

- (a) The name and contact information of the Person reporting the Contravention;
 - (b) A description of what is being contravened;
 - (c) Clarification on when the Contravention commenced or occurred; and
 - (d) Any corrective action taken, or proposed to be taken, to respond to the Contravention.
- (2) Any prohibited or restricted Releases to the Stormwater System under the Stormwater Bylaw or otherwise to the environment from a Site must be immediately reported to:
- (a) 311 (City of Calgary staff and City contractors follow the Corporate Substance Release Reporting Procedure);
 - (b) The Director by emailing ESC@calgary.ca; and
 - (c) 1-800-222-6514 (Environment and Protected Areas 24-hour spill line) if the spill, release, or emergency may cause, is causing, or has caused an adverse effect on the environment.
- (3) Failure to follow the requirements set out in this Code of Practice is deemed an offence under the Stormwater Bylaw.

Inspection Completion Request

- 10** (1) Written permission is required from the Director prior to erosion and sediment control inspections ceasing on any Site 0.4 hectare or greater in size
- (2) An Inspection Completion Request, that contains all the information requested in Schedule F, must be submitted to the Director to commence an inspection completion review.
- (3) An Inspection Completion Request will not be considered valid if any of the information required under Schedule F is missing at the time of the request.

Information Availability and Audits

- 11** (1) The Director may Audit an ESC Plan that was submitted with a Written Notice under Section 4.
- (2) Upon review of the Audited ESC Plan, an owner must resolve any issues identified with the ESC Plan by the Director, within the time period specified in writing by the Director.

Instructions

- 12** The City may publish Instructions to assist with the interpretation and implementation of this Code of Practice. Such Instructions do not form part of this Code of Practice.

SCHEDULE A

Erosion and Sediment Control Plan Application

The following information must be contained in an Erosion and Sediment Control Plan Application for the purpose of Section 3 of this Code of Practice.

Application Requirements:

- 1.1 Project Name
- 1.2 Estimated Start-up Date
- 1.3 Legal Land Location
- 1.4 Address
- 1.5 Community
- 1.6 Overall Site Size
- 1.7 Stormwater Movement (storm pond, receiving water body, outfall)
- 1.8 Consultant File # (optional)
- 2.0 Application Type (included parent information, development agreement, and subdivision number where applicable)
- 3.0 Contact information (including owner's representative, parcel owner, ESC consultant, site ESC Inspector, and site contact)
- 4.0 Unit Product Supply List (including product and quantity/units)
- 5.0 Construction Drawings Required (ESC1-ESC10)
- 6.0 Erosion and Sediment Controls (including C or P values, types, application rates, drawings when used, description where used, and additional information if required) If a non-standard control is required, provide the name and type of control, description of control or practice, C or P-value, number present, drawing(s) when used, description where used, additional information, design limitations and requirements, installation method, inspection requirements, maintenance requirements, winter operations, removal requirements.
- 7.0 Stockpile Stabilization Requirements that indicate if the stockpile is short or long-term, material stockpiled, volume, and estimated length of time material will be in place.
- 8.0 Idle Site Management Information (including site size disclosure, short-term cover if required, and long-term cover for all sites)
- 9.1 Site Photos and Maps
- 9.2 RUSLE Calculations
- 9.3 Populated Inspection Sheet
- 9.4 Sediment Containment System Information
- 9.5 Manufacturers Information
- 9.6 Geotechnical Data
- 9.8 Large Site Safety Plan (for sites greater than 65ha)
- 10.1 Project Description
 - 10.2.1 Site Visit Date
 - 10.2.2 Visit Limitations
 - 10.2.3 Present Cover and Practices
 - 10.3.1 Adjacent Properties
 - 10.3.2 Critical Areas

- 10.3.3 List of Low Impact Development and easily damaged surface drainage facilities, including how and when the facility will be installed so that it is protected from the impacts of sediment
- 10.4 Reference Documents used to create the ESC Plan
- 10.5 Project Specific Information, if required
- 11.0 Drawing Requirements:
 - (a) Project Name
 - (b) Owner
 - (c) City Project Number(s) (e.g. DA, DP, CD, DL, SB)
 - (d) Location Key Plan
 - (e) Drawing Titles
 - (f) Scale
 - (g) Drawing Dates
 - (h) Professional Stamp
 - (i) City of Calgary Office Use Space
 - (j) Drawing Code
 - (k) Revisions Table
 - (l) North Arrow
 - (m) Match Lines
 - (n) Buildings
 - (o) Stockpiles
 - (p) Retaining Walls
 - (q) ESC 6 Utility Key Plan
 - (r) Construction Boundary
 - (s) Lot Boundaries
 - (t) Adjacent Properties
 - (u) Critical Areas
 - (v) Low Impact Developments
 - (w) Storm Infrastructure
 - (x) Contours
 - (y) LS Values
 - (z) Drainage Patterns including run-on, run-off, and emergency overland flow locations.
 - (aa) Approving Neighbors
 - (bb) Drainage Divides
 - (cc) Water Retention Plans
 - (dd) Cover
 - (ee) Vegetated Areas
 - (ff) Perimeter Controls
 - (gg) Infrastructure Controls
 - (hh) Erosion and Sediment Controls
 - (ii) Cut and Fill
 - (jj) Water Management Plans
 - (kk) Landscaping Plan
 - (ll) Phasing Plan
 - (mm) Authentication by a Qualified Designer.
- 12.0 Construction Drawing Requirements that indicates which drawings the project requires
- 13.0 Authentication by a Qualified Designer

SCHEDULE B

Written Notice

The following information must be contained in a Written Notice for the purpose of Section 4 of this Code of Practice.

- (a) Project name
- (b) Estimated Construction Start Date
- (c) Legal Land Location
- (d) Project Address
- (e) Community Name
- (f) Site Size (in hectares)
- (g) Storm Pond/Receiving Water/Outfall – Section 1.7 Stormwater Movement
- (h) Project description
- (i) Other relevant information
- (j) List of ESC Drawings
- (k) File Number (e.g., DP, DA, DL, CC)
- (l) Parent Stripping and Grading Number (if applicable)
- (m) Secondary land use numbers (if applicable)
- (n) Contact information (Owner representative, Site Owner, ESC consultant, Site ESC Inspector, Site Contact)
- (o) Erosion controls, sediment controls, and supporting practices used on the Site
- (p) Authentication by a Qualified Designer.

SCHEDULE C

Good Housekeeping Letter Request

The following information must be contained in a Good Housekeeping Letter Request for the purpose of Section 5 of this Code of Practice.

- (a) Project name
- (b) File Number (e.g. DP, DA, DL, CC)
- (c) Project Address
- (d) Site Size (in hectares)
- (e) Disturbed soil area size (in hectares) including access roads and laydown areas
- (f) Contact information (owner)
- (g) Brief description of planned work, with specific focus on soil disturbance activity
- (h) Disclosure if the site indicates any greater than normal ESC concerns
- (i) A basic map showing the extent of the site boundaries, and soil disturbance (including access roads/laydown areas). Show the area size (in hectares) for both the total site area as well as the soil disturbance area
- (j) Authentication by applicant.

SCHEDULE D **Amendments**

The following information must be contained in an Amendment for the purpose of Sections 3(7), 3(8), and 4(10) of this Code of Practice.

- (a) Project name
- (b) File Number (e.g. DP, DA, DL, CC)
- (c) Project Address
- (d) A detailed description of what is being amended
- (e) Applicable amended drawing, calculations, and details portions of the ESC Plan.
- (f) Authentication by either a Qualified Designer (Major or Minor Change) or a Qualified Inspector (Minor Change).

SCHEDULE E

Pre-construction Meeting Request

The following information must be contained in a Pre-construction Meeting Request for the purpose of Section 8 of this Code of Practice.

- (a) Project name
- (b) File Number (e.g. DP, DA, DL, CC)
- (c) Project Address
- (d) Construction commencement date
- (e) Contact information (Owner representative, Site Owner, ESC consultant, Site ESC Inspector, Site Contact)
- (f) Authentication by either a Qualified Designer or a Qualified Inspector.

SCHEDULE F

Inspection Completion Request

The following information must be contained in an Inspection Completion Request for the purpose of Section 10 of this Code of Practice.

- (a) Project name
- (b) File Number (e.g. DP, DA, DL, CC)
- (c) Project Address
- (d) Date construction was completed
- (e) Contact information (Owner representative, Site Owner, ESC consultant, Site ESC Inspector, Site Contact)
- (f) Confirmation:
 - a. The Site matches the final approved ESC drawings;
 - b. All temporary erosion and sediment control practices are removed;
 - c. For subdivisions, 80% of the Site is stabilized with long-term cover, for all other Sites all seeding types are established with at least 80% growth; and
 - d. If sod was required as part of the plan, confirmation that it was inspected for at least two months after installation and it has fully rooted/established.
- (g) Provide photos that support f(b), f(c), and f(d).
- (h) Authentication by either a Qualified Designer or a Qualified Inspector.