

## EROSION AND SEDIMENT CONTROL REQUIREMENTS

*for Construction on Renovations, Coach Houses, Single & Two-Family Properties*

Stormwater is collected from the City's impermeable surfaces, and then flows through ditches and underground storm sewers, eventually discharging into streams and the Burrard Inlet. Pollutants can be transported through the stormwater system, harming fish and other aquatic organisms. The purpose of this guide is to inform applicants of their responsibility to keep their work-sites tidy and prevent the discharge of any prohibited substances (soil, sand, concrete, dirty water, oil, paint, etc.) into the City drainage system.

**Allowing a prohibited substance to enter the City drainage system is a significant environmental concern, and a violation of the Stream and Drainage System Protection Bylaw, No. 7541, 2003.**



For a City Permit (Demolition Permit, Building Permit, etc.) on a single family or two-family lot that involves the disturbance of soil, applicants must:

- Demonstrate how they will comply with the “Erosion and Sediment Control Guidelines for Single and Two-Family Properties” listed below.
- Provide a sketch and/or written description of the proposed sediment and erosion control measures to be employed.
- Mitigate the erosion and sediment control issues on the site to the City's satisfaction.

*Single or two-family developments situated close to watercourses, **or** on slopes greater than 20%, **or** on sites considered to be at a high geotechnical risk, **or** where multiple adjacent lots are being developed at the same time, may be required to submit a “Sediment Control Plan” (SCP) prepared by a Professional Engineer. Applicants should confirm the requirements for their site prior to submitting their application.*

# Erosion and Sediment Control Guidelines for single and two-family properties

**Please Note: This bulletin is provided as a reference guide only. It is the responsibility of the applicant to ensure compliance with all applicable by-laws and legislation.**

The objective during construction on single and two-family lots is to minimize erosion and release of sediment off-site by controlling the development and construction activities. You are required to utilize the following guidelines in order to meet the City's requirements for Erosion and Sediment Control.



## 1. Mark Limits of Disturbance

- Design and layout the building site to minimize impervious areas.
- Phase construction to limit the total area disturbed at any one time.
- Retain existing vegetation and ground cover where possible. Use fencing or flagging to restrict access to this area.
- Clearly mark building area and clearing boundaries on-site.

## 2. Establish a Clear Access Point

- Restrict vehicle access to one location and install a gravel access pad (Min. depth of 30 cm, length of 15 m and rock size of 75 mm clear gravel, with a geotextile liner underlain) or use an existing paved driveway. If a gravel access pad will not adequately prevent sediment from being tracked off site, a wheel wash will be required.
- Limit machine access and operation to prepared access areas only.
- Take care to ensure that no silt or soil is tracked, spilled, or deposited onto the street. Sweep roads when dirty.



## 3. Stabilize Exposed Soils

- Cover temporary fills or stockpiles with polyethylene or tarps when not under construction and overnight. Use silt fencing around the base to prevent sediment laden water and erosion.
- Cover exposed slopes of excavation with polyethylene tarps. Ensure poly coverings are secure at the end of each day.
- Consider seeding or mulching if soils will sit idle for one month or longer
- Re-vegetate or final landscape disturbed areas as soon as practically possible.

## 4. Install Site Specific Sediment Controls

- Note the type of soils, topography, slope and drainage of the site when determining appropriate placement and type of sediment controls.
- Divert run-off away from cleared areas by use of swales or low berms.
- Utilize silt fences around stockpiled materials and sloped areas.



## 5. Manage Water Leaving Site

- No water leaving the site shall meet or exceed the criteria for “Excessive Suspended Solids Discharge” as described in the Stream and Drainage System Protection Bylaw, No. 7541, 2003.
- Install a sediment trap or tank to treat sediment-laden water prior to discharging offsite. Check sediment trap or tank regularly and remove built-up sediment as needed.
- Collect and dispose of concrete or cement wash-water appropriately or take off-site for disposal. Concrete wash-water must not be discharged into the storm drainage system. It is toxic and can alter the pH of the surrounding environment and result in the death of aquatic life.

*Please note: Filtering concrete wash-water will not remove the poisonous components that kill fish even if the wash-water appears crystal clear.*

## 6. Protect Catch Basins

- Install sediment socks in catch basins on and downslope of the site. To prevent socks from falling into catch basins, socks should have a wire frame.
- Inspect catch basin socks after every rainfall event. Clean or replace as needed.
- Sweep roads to keep dirt and debris out of catch basins. Ensure roads are clean and swept at the end of each day.



## Enforcement and Penalties

Allowing any material from your site to enter City streams or the storm drainage system is a serious environmental concern and is prohibited under the Stream and Drainage System Protection Bylaw, No. 7541, (2003). Penalties include fines of up to \$10,000 per offence.

As the City drainage system is connected to fish-bearing streams and Burrard Inlet, any discharges to the storm drain are also prohibited under the Federal Fisheries Act, with fines of up to \$300,000 for first time offences.

## Erosion and Sediment Control Plan for single and two-family properties

The site plan below may be used to submit the Sediment and Erosion Control Plan. See the attached example of a **Typical Sediment and Erosion Site Plan** for reference.

Indicate, at minimum, the following on your sketch:

- Limits for clearing and excavation
- Phasing of construction if applicable
- Surface runoff direction and control, including, but not limited to, sediment fences and swales
- Soil stockpile location and protection
- Excavation slope protection
- Sediment detention / water discharge method(s)
- Off-site catch basin protection
- Site access location including materials and construction of the access pad
- Site location context (lot dimensions, street names, etc.)

Date: \_\_\_\_\_

Signature: \_\_\_\_\_

