



Standard Erosion Prevention & Sediment Control (EPSC) Plan

This questionnaire and associated EPSC plan sheets are required for projects

- on properties other than single family (R1) or duplexes (R2) that require a level II or III Certificate of Appropriateness or Major Impact zoning applications and involve 5000 sq. ft. or more of earth disturbance; or
- any activity where a zoning permit is not required but where the project involves 10,000 sq. ft. or more of earth disturbance; or
- if requested by the Stormwater Program due to project characteristics such as slope, soils or proximity to drainage structures or waterbodies.

Please note that you must submit EPSC plan and detail sheets as outlined in section A below.

All projects involving redevelopment or addition of impervious surface must submit the stormwater management screening project (attached) for evaluation or meet with the Stormwater Program to determine the stormwater management requirements for your project.

1. Project Location Phase 1B of Burlington Bike Path Rehabilitation Project (Waterfront Access North to North Beach)

2. Zoning Permit Address (if different from above): 645 Pine Street, Suite B, Burlington VT 05401

3. Brief Project Description (i.e. building construction, subdivision, site work)

The project is Phase 1B of the Burlington Bike Path Rehabilitation Project, which will reconstruct and re-align portions of the Bike Path, including maintenance of shoreline protection infrastructure, establish user amenities such as pause places, and remove areas of existing bituminous pavement to restore to a vegetated condition.

4. Owner Name: City of Burlington, c/o Jesse Bridges

5. Owner Mailing Address: 645 Pine Street, Suite B, Burlington VT 05401

6. Owner Phone: (802) 865-7557 6. Owner email: jbridges@burlingtonvt.gov

7. Contractor Name: _____ Contractor not known at this time

8. Contractor Phone: _____ 9. Contractor Email: _____

10. Estimated Project Start Date June, 2016 Estimated End Date December, 2016

11. Area of Land Disturbance 392,040 sq. ft. (approx. 9 ac)

12. Total proposed (existing + new) amount of impervious: decrease of 0.67 ac

14. Does your project require a State Construction Stormwater Permit (9020 or INDC) ? Yes No
 (You will be required to submit proof of your authorization to discharge prior to initiation of earth disturbance).

A. REQUIRED PLAN SHEETS:

15. Plan sheet(s) MUST BE ATTACHED showing the following:

- Limits of disturbance
- Direction of stormwater flow on site
- Location of stockpiles (if any)
- Location of sediment control BMP's (silt fence etc.)
- Location of stabilized construction entrances
- Stabilization measures
- Phasing plan (if appropriate)

*impervious = any surface off of which water runs off rather than infiltrates, including, but not limited to rooftops and paved/unpaved (gravel/packed dirt) driveways, walkways and patios

16. Detail sheet MUST BE ATTACHED and include details for all EPSC measures listed on the EPSC Plan Sheet.

Additionally, notes must be included related to:

- Daily inspection of roadways and sweeping as necessary
- Dewatering measures (if applicable)
- Temporary site stabilization requirements
- Final site stabilization requirements
- Winter site stabilization (for disturbance after November 1)
- Inspection requirements

B. EPSC QUESTIONNAIRE (See last page for typical solutions to these questions)

A) Do you anticipate the need for any dewatering of excavations during the construction? Yes No

- If yes, please indicate which plan sheet has details for how dewatering operations will be managed to prevent the discharge of sediment laden water. Sheet(s): _____

B) Will excavated soil be stockpiled on the site? Yes No If yes, show locations and EPSC measures for the stockpile on plan sheet(s)

- If no, where is the ultimate disposal of excess soil? Some excess cut soil used to construct bike path pause place

C) Do you plan to park construction vehicles on or disturb City owned property like the greenbelt area? Yes No

- If yes, tell us how you agree to repair all disturbances or damage to City owned property and provide a written approval from the City allowing construction vehicles to park on City owned property.

The rehabilitation of the Burlington Bike Path is a City project, managed by the Department of Parks and Recreation. All necessary inter-department approvals will be secured in advance of construction.

- If no, then please monitor all construction and visitor vehicles and advise all not to park on City owned property.

D) Will stockpiles or disturbed soils be present and/or exposed after Nov. 1st of any construction year? Yes No

- If yes, tell us how you plan to stabilize any stockpile and/or disturbed soils.

All areas of disturbed or stockpiled soils will be stabilized in accordance with EPSC measures identified in an approved EPSC plan (Moderate Risk site) as well as a VT DEC construction phase stormwater permit.

The only temporary necessary soil stockpiling will occur for approximately 1,000 cu yd, generally along the existing path to the west in the vicinity of the dog park in the Urban Reserve, before stockpiled soils are transported to a certified solid waste facility.

Do you agree to abide by the following conditions?

Y N Applicant will call 863-4501 or email gjohnson@burlingtonvt.gov at least 24 hours prior to initiating earth disturbance and submit the name and contact (cell phone and email) of the erosion control coordinator for the project

Y N Applicant will post the attached notice in a visible location

Y N I acknowledge that it is the responsibility of the owner and his/her representatives to ensure that:

- sediment does not enter surface water bodies (streams, ditches, ponds, lakes, wetlands etc.)
- sediment does not enter City conveyance infrastructure (catch basins, sewers etc.) and
- All sediment must be removed from the city ROW (sidewalks and roadways) by the end of each work day.

Y N Sediment control measures will be installed prior to the initiation of earth disturbance.

- Y N During the non-winter construction season (April 15 – November 1): After an initial 14 day period of initial disturbance, temporary or permanent stabilization (mulching, erosion control matting or tarps for stockpiles, or other approved method) of exposed areas and stockpiles will occur at the end of each work day unless:
 - o Earthwork is to continue in the area within the next 24 hours and there is NO liquid precipitation forecast for the next 24 hours; or
 - o If work is occurring in a self contained excavation (no outlet) with a depth of 2 feet or greater (e.g. house foundation excavation or utility trenches).
- Y N During the winter construction period from November 1 to April 15, any new disturbance must be temporarily or permanently stabilized (mulching, erosion control matting or tarps for stockpiles, or other approved method) will occur at the end of each work day unless:
 - o Earthwork is to continue in the area within the next 24 hours and there is NO liquid precipitation forecast for the next 24 hours; or
 - o If work is occurring in a self-contained excavation (no outlet) with a depth of 2 feet or greater (e.g. house foundation excavation or utility trenches)
- Y N The perimeter of the site and all BMPs will be inspected at the end of each workday to ensure that sediment will not leave the site. If sediment has travelled beyond the site boundary, it shall be swept up or otherwise removed and deposited on-site in an upgradient area at the end of each work day.
- Y N The owner and his/her representatives shall abide by the best management practices (BMPs) indicated in this plan and conditions and in the Vermont DEC Low Risk Site Handbook for Erosion Prevention and Sediment Control (2006). Contact 802-863-4501 for a hard copy or go to the web:
http://vtwaterquality.org/stormwater/docs/construction/sw_low_risk_site_handbook.pdf
- Y N If soils will be exposed after November 1st and winter construction has not been permitted the project will notify DPW prior to October 15th and ensure that sediment control is installed PRIOR to soil freezing. If the project is completed during the winter months, an additional inspection will be required to ensure that the site is buttoned up for the winter.
- Y N Within 48 hours of reaching final grading, the exposed soil will be seeded and mulched or covered with erosion control matting (for slopes steeper than 3:1 or high wind prone areas). Erosion control matting is preferred.
- Y N The owner will contact DPW to schedule a stabilization inspection when site work is finished and stabilization measures (seeding and mulching or matting) have been installed.

AGREEMENT

By filling out and signing this plan, I agree to abide by the terms and conditions outlined above. Failure to follow this plan can result in a stop work order by the City of Burlington, fines, or both.

By: Owner Contractor

Name

Signature

Date

Additional Conditions of Approval:

AN EROSION PREVENTION AND SEDIMENT CONTROL PLAN

FOR THE PROJECT AT:

HAS BEEN FILED WITH THE CITY OF BURLINGTON
STORMWATER MANAGEMENT PROGRAM IN ACCORDANCE
WITH CHAPTER 26 OF THE BURLINGTON CODE OF ORDINANCES

THIS REQUIRES THAT MEASURES BE INSTALLED OR TAKEN TO
PREVENT SEDIMENT FROM LEAVING THE SITE AND ENTERING
WATERWAYS AND IMPACTING CITY INFRASTRUCTURE
(RIGHT OF WAY AND STORMDRAINS)

FOR QUESTIONS OR TO REPORT SEDIMENT LEAVING THE SITE
CALL 802-863-4501

This notice to be posted in full view at all times during earth
disturbance. Additional conditions on attached.

Plan Approved by: _____ Date: _____
Burlington Stormwater Program

TYPICAL SOLUTIONS TO PREVENT OR CONTROL SEDIMENT AND EROSION

STOCKPILES

- Cover small stockpiles with a tarp when not being used.
- Install silt fencing or other appropriate devices around the stockpiles to filter sediment.
- Cover stockpiles with straw or other approved mulching material.
- Plan to remove any unusable material as soon as possible from the site to an approved location.
- Plant grass and mulch stockpiles that will be on site for more than 14 days.
- Cover, vegetate or install erosion matting on stockpiles that will remain disturbed over the winter.

DISTURBED AREAS

- Maintain vegetated buffers around disturbed areas.
- Install silt fencing or other appropriate device to filter sediment washing off from disturbed areas. Remember that the bottom of the silt fence must be “keyed in” (dug into ground) to work correctly.
- To prevent sediment from running off your site via your driveway (or other paved areas where you can’t install silt fence) use a row of hay bales or tube sand.
- Cover disturbed areas as soon as possible with straw or other approved mulching material. Use erosion control matting in high wind, traffic or slopes steeper than 3:1 (horizontal to vertical), and follow the manufacturer’s guidelines staple the matting down.
- Plant grass and mulch or use erosion control matting all disturbed areas that will remain exposed for more than 14 days.
- Cover, vegetate or install erosion matting on areas that will remain disturbed over the winter.
- Protect ditches, catch basins or water bodies off-site by using silt fencing, gravel check dams or other approved sediment control methods.

CONSTRUCTION VEHICLES

- Do not park construction vehicles on City owned green space. Vehicles disturb vegetation and compact the soil, thereby reducing its ability to infiltrate stormwater. Any green belt disturbance will need to be permanently stabilized with grass seed and erosion control matting.
- Prevent sediment from leaving the project by cleaning the tires of vehicles, or use clean gravel at project access points to clean tires.
- Sweep city streets, sidewalks and bikepaths daily or as needed to remove sediment transported from the project.

RESOURCES

The Vermont Handbook for Erosion Prevention and Sediment Control at:

http://vtwaterquality.org/stormwater/docs/construction/sw_low_risk_site_handbook.pdf

The City of Burlington Stormwater Program Page at

<http://www.burlingtonvt.gov/DPW/Stormwater-Management>



Stormwater Management Plan Pre-Screening

Please provide the following information to the Stormwater Program (stormwater@burlingtonvt.gov, ph: 863-4501) in order to determine what the requirements will be for your project.

- General Information Multiple Locations - Generally along bike path and waterfront between
 - Project Address: Waterfront Access North and North Beach access
 - Owner: City of Burlington
 - Engineer: VHB Phase 1B of the Burlington Bike Path Rehabilitation Project, which
 - Brief project description: proposes to reconstruct and realign portions of the bike path, perform maintenance and repair of shoreline protection infrastructure, establish user amenities such as pause places along the path, and remove areas of existing bituminous pavement within the Urban Reserve and restore to a vegetated condition.

- Stormwater Management Plan
 - Impervious¹ change summary

Condition	Type	Total Impervious (s.f.)
Existing Conditions	Existing Impervious	2.54
Proposed	Total Proposed (1+2+3)	
	1) New ²	
	2) Existing to Remain	
	3) Redeveloped	1.87 ac
Net New	Total Proposed – Existing	REDUCTION OF 0.67 ac

If available at this time:

- Existing conditions: *description of existing conditions, description of existing stormwater system, existing drainage issues, current connectivity to City system*

Currently the Project area has approximately 2.54 ac of impervious surfaces that do not have any stormwater management infrastructure. Existing impervious surfaces include the existing bike path and numerous areas of remnant bituminous pavement and concrete building pads. The Project area has generally flat topography, with slopes increasing to the east and north. Sheet flow from the Project area and from impervious surfaces to the north and east sheet flow west across the Project area towards Lake Champlain.

- Proposed Conditions: *description of proposed conditions, brief description of proposed stormwater system, proposed method of discharge to receiving water or City system (overland flow, direct connection via pipe, existing or new manhole or CB)*

The proposed bike path rehabilitation will include the implementation of a construction phase and operational phase stormwater management system, each pursuant to forthcoming Vermont DEC permit authorizations. In general, impervious surfaces within the project area will be reduced and restored with vegetated pervious surfaces, thereby avoiding the need for construction of stormwater treatment structures. Cross drainage under the rehabilitated bike path via a new culvert will convey sheet flow only from surrounding pervious surfaces.

¹ Impervious = any surface off of which water runs off rather than infiltrates, including, but not limited to rooftops and paved/unpaved (gravel/packed dirt) driveways, walkways and patios

² Impervious where there is not currently impervious