



### NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES) DISCHARGES OF STORMWATER ASSOCIATED WITH CONSTRUCTION ACTIVITIES ANTIDEGRADATION ANALYSIS MODULE 3

Applicant: Core5 Industrial Partners

Project Site Name: Core5 at Route 100

Surface Water Name: Cherith Brook via existing swale

Surface Water Use: HQ-CWF, MF

#### ANTIDEGRADATION – EROSION AND SEDIMENT CONTROL (E&S) PLAN

A **Non-Discharge Alternative will be utilized** for the project that will either individually or collectively eliminate the net change in stormwater volume, rate, and quality for storm events up to and including the 2-year/24-hour storm during earth disturbance activities.

Identify the E&S BMP(s) that will be utilized to achieve the non-discharge alternative:

- |  |  |
|--|--|
| <input type="checkbox"/> Alternative Siting: Location              | <input type="checkbox"/> Limiting Extent & Duration of Disturbance |
| <input type="checkbox"/> Alternative Siting: Configuration         | <input type="checkbox"/> Riparian Buffer (150 ft min.)             |
| <input type="checkbox"/> Alternative Siting: Location of Discharge | <input type="checkbox"/> Riparian Forest Buffer (150 ft min.)      |
| <input type="checkbox"/> Other: _____                              | <input type="checkbox"/> Limited Disturbed Area                    |

Explain how the E&S BMP(s) will individually or collectively eliminate the net change in stormwater volume, rate, and quality for storm events up to and including the 2-year/24-hour storm during earth disturbance activities.

If a **Non-Discharge Alternative will not be utilized**, explain the rationale for non-selection, including why none of the alternatives are considered environmentally sound and cost-effective.

**The Alternative Siting, Limiting Extent & Duration of Disturbance, and Limited Disturbed Area alternatives listed above were not feasible for the project due to the existing layout and topography of the site. Additionally, the site cannot infiltrate the stormwater runoff generated on-site. The Riparian Buffer and Riparian Forest Buffer alternatives listed above were not feasible because there is not a true riparian buffer present on site in the existing condition.**

**Antidegradation Best Available Combination of Technologies (ABACT) BMP(s) will be utilized** for the project that will either individually or collectively manage the net change in stormwater volume, rate, and quality for storm events up to and including the 2-year/24-hour storm during earth disturbance activities.

Identify the ABACT E&S BMP(s) that will be utilized:

- |  |  |
|--|--|
| <input checked="" type="checkbox"/> Rock Construction Entrance with Wash Rack    | <input type="checkbox"/> Rock Construction Entrance with Street Sweeping           |
| <input type="checkbox"/> Wheel Wash  | <input checked="" type="checkbox"/> Pumped Water Filter Bag with Compost Sock Ring |
| <input checked="" type="checkbox"/> Pumped Water Filter Bag with Sump Pit        | <input checked="" type="checkbox"/> Compost Filter Sock                            |
| <input type="checkbox"/> Compost Filter Berm (HQ Only)                           | <input type="checkbox"/> Weighted Sediment Filter Tube (HQ Only)                   |
| <input type="checkbox"/> Silt Fence with Vegetative Filter Strip                 | <input type="checkbox"/> Super Silt Fence with Vegetative Filter Strip             |
| <input checked="" type="checkbox"/> Wood Chip Filter Berm (HQ Only)              | <input type="checkbox"/> Vegetative Filter Strip (HQ Only)                         |
| <input type="checkbox"/> Sediment Basin with Perforated Riser (HQ Only)          | <input checked="" type="checkbox"/> Sediment Basin with Skimmer                    |
| <input type="checkbox"/> Stone Inlet Protection with Compost Layer (HQ Only)     | <input type="checkbox"/> Compost Filter Sock Sediment Trap                         |
| <input type="checkbox"/> Embankment Sediment Trap with Compost Layer (HQ Only)   | <input type="checkbox"/> Embankment Sediment Trap with Compost Sock                |
| <input type="checkbox"/> Sediment Trap with Perforated Riser (HQ Only)           | <input type="checkbox"/> Sediment Trap with Skimmer                                |
| <input type="checkbox"/> Erosion Control Blankets within 50 ft of Surface Waters | <input checked="" type="checkbox"/> Immediate Stabilization                        |
| <input type="checkbox"/> Flocculant with PAMs                                    | <input checked="" type="checkbox"/> Vegetative Conveyance                          |

Riparian Buffer (< 150 ft)

Riparian Forest Buffer (< 150 ft)

Approved Alternative: \_\_\_\_\_

Explain how the E&S BMP(s) will individually or collectively manage the net change in stormwater volume, rate, and quality for storm events up to and including the 2-year/24-hour storm during the earth disturbance activities.

**The Rock Construction Entrance with Wash Rack will help limit sediment from leaving the site via construction traffic. Compost Filter Socks (CFS) will help to trap sediment on-site during rainfall events throughout construction. The CFS's will also act as small-scale impoundments for stormwater runoff promoting infiltration and helping to manage stormwater rate and volume. The pumped water filter bag detail is provided in order to limit sediment laden water from discharging the site during the pumping of the basins or any potential surface ponding during construction. Compost filter sock diversions are proposed to effectively convey flow from a large portion of the site (±2 acres). They are tributary to the sediment trap and sediment basin and are proposed during construction to allow for sediment laden water to be detained and treated prior to discharge. Immediate stabilization of disturbed areas will help limit the potential for erosion and sediment loss, thereby managing stormwater volume, rate, and quality.**

**ANTIDegradation – POST-CONSTRUCTION STORMWATER MANAGEMENT (PCSM) PLAN**

A **Non-Discharge Alternative will be utilized** for the project that either individually or collectively eliminate the net change in stormwater volume, rate, and quality for storm events up to and including the 2-year/24-hour storm after earth disturbance activities.

Identify the PCSM BMPs that will be used to achieve the non-discharge alternative:

Alternative Siting: Location

Low Impact Development

Alternative Siting: Configuration

Riparian Buffer (150-ft. min.)

Alternative Siting: Location of Discharge

Riparian Forest Buffer (150-ft. min.)

Infiltration

Water Reuse

Other: \_\_\_\_\_

Explain how the PCSM BMP(s) will individually or collectively eliminate the net change in stormwater volume, rate, and quality for storm events up to and including the 2-year/24-hour storm after earth disturbance activities.

If a **Non-Discharge Alternative will not be utilized**, explain the rationale for non-selection, including why none of the alternatives are considered environmentally sound and cost-effective.

**Antidegradation Best Available Combination of Technologies (ABACT) has been selected** for the project that will either individually or collectively manage the net change in stormwater volume, rate, and quality for storm events up to and including the 2-year/24-hour storm after earth disturbance activities.

Identify the ABACT PSCM BMPs that will be utilized:

Rain Garden (with Infiltration)

Disconnection of Impervious / Roof Area

Rain Garden (without Infiltration)

Pervious Pavement with Infiltration Bed

Constructed Filter

Infiltration Basin

Vegetated Swale

Infiltration Bed

Vegetated Filter Strip

Infiltration Trench

Constructed Wetland

Soil Amendment

Wet Pond

Dry Well / Seepage Pit

- |  |   |
|--|---|
| <input checked="" type="checkbox"/> Dry Extended Detention Basin           | <input type="checkbox"/> Infiltration Berm / Retentive Grading      |
| <input type="checkbox"/> Water Quality Device                              | <input type="checkbox"/> Protect Sensitive / Special Value Features |
| <input type="checkbox"/> Spray / Drip Irrigation                           | <input type="checkbox"/> Street Sweeping                            |
| <input type="checkbox"/> Rain Barrel                                       | <input type="checkbox"/> Green Roof                                 |
| <input type="checkbox"/> Protect / Utilize Natural Flow Pathways (on-site) |   |

Approved Alternative: \_\_\_\_\_

Explain how the PCSM BMP(s) will individually or collectively manage the net change in stormwater volume, rate, and quality for storm events up to and including the 2-year/24-hour storm after earth disturbance activities.

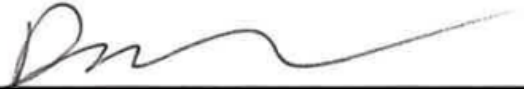
**The site has been designed such that the calculated increase in stormwater runoff will be managed by constructing/restoring a full 150 foot riparian buffer uphill of the existing pond. Rates will be managed through a vegetated swale and vegetated detention basin that discharges to a level spreader and then the riparian buffer. Post-development water quality and runoff volume will be attenuated by the 150 foot riparian buffer for all storm events.**

### CERTIFICATION

I certify under penalty of law and subject to the penalties of 18 Pa.C.S. § 4904 (relating to unsworn falsification to authorities) that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Brian Reisinger

\_\_\_\_\_  
**Applicant Name** (type or print legibly)



\_\_\_\_\_  
**Applicant Signature**

Vice President, Development

\_\_\_\_\_  
**Official Title**

01/18/2023

\_\_\_\_\_  
**Date Signed**