



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

Applicant: CRG Services Management, LLC

Project Site Name: 2951 Betz Court Site

Surface Water Name: 001 - UNT to Jordan Creek (via onsite Wetland J)
002 - UNT to Jordan Creek (via onsite Wetland L)
003 - UNT to Jordan Creek (via onsite sheet flow)

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.

N/A

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.

See E&S Report pages 3-4 - Antidegradation - Non-discharge Alternatives Evaluation

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 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 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 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 type="checkbox"/> Vegetative Conveyance |
| <input type="checkbox"/> Riparian Buffer (< 150 ft) | <input type="checkbox"/> Riparian Forest Buffer (< 150 ft) |

Approved Alternative: Extended Rock Construction Entrance

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.

Nearly all of the disturbed area of the site will be controlled by sediment basins with skimmers, which manage stormwater volume, rate and quality by slowly releasing clean water from the top of the basin. Very small portions of the site will be controlled by compost filter sock. Due to the small size of these areas, no increase is proposed with respect to volume or rate, and the compost filter sock will remove any pollutants and maintain 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:

- | | |
|--|---|
| <input type="checkbox"/> Alternative Siting: Location | <input type="checkbox"/> Low Impact Development |
| <input type="checkbox"/> Alternative Siting: Configuration | <input type="checkbox"/> Riparian Buffer (150-ft. min.) |
| <input type="checkbox"/> Alternative Siting: Location of Discharge | <input checked="" type="checkbox"/> Riparian Forest Buffer (150-ft. min.) |
| <input checked="" type="checkbox"/> Infiltration | <input type="checkbox"/> Water Reuse |
| <input type="checkbox"/> 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.

The proposed SWM/BMP Facilities will eliminate the net change in stormwater volume, rate, and water quality by first infiltrating a significant portion of the stormwater runoff, thus removing volume, then impounding stormwater and slowly releasing, thus decreasing rate, and then filtering pollutants through the provided engineered soil mixture and vegetation which improves water quality for all stormwater which does leave the site. Any stormwater which is released from SWM/BMP Facility #2 will have its volume and water quality reduced to required levels by the downstream proposed Forested Riparian Buffer.

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.

N/A

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 PCSM BMPs that will be utilized:

- | | |
|--|---|
| <input type="checkbox"/> Rain Garden (with Infiltration) | <input type="checkbox"/> Disconnection of Impervious / Roof Area |
| <input type="checkbox"/> Rain Garden (without Infiltration) | <input type="checkbox"/> Pervious Pavement with Infiltration Bed |
| <input type="checkbox"/> Constructed Filter | <input type="checkbox"/> Infiltration Basin |
| <input type="checkbox"/> Vegetated Swale | <input type="checkbox"/> Infiltration Bed |
| <input type="checkbox"/> Vegetated Filter Strip | <input type="checkbox"/> Infiltration Trench |
| <input type="checkbox"/> Constructed Wetland | <input type="checkbox"/> Soil Amendment |
| <input type="checkbox"/> Wet Pond | <input type="checkbox"/> Dry Well / Seepage Pit |
| <input 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.

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.

Fred Ferraro

Applicant Name (type or print legibly)

Fred Ferraro

Applicant Signature

VP of Development

Official Title

10/13/2022

Date Signed