Soil Erosion and Sediment Control Plan For:

Milton CAT

2110 Plainfield Pike

Cranston, Rhode Island 02921

Assessor's Plat 35, Lot 9

Simas, William A.

Owner: 2788 Plainfield Pike

Cranston, RI 02921-2070

Company Name

Name

Operator: Address

TO BE DETERMINED UPON City Sta

TO BE DETERMINED UPON CONTRACT AWARD

City, State, Zip Code
Telephone Number

Email Address

Estimated Project Dates: September 2023

Completion Date: September 2024

VHB

Name

1 Cedar Street

SESC Plan Prepared By: Providence, RI 02903

401-272-8100

jrosen@vhb.com

SESC Plan

Preparation Date:

May 2023

SESC Plan Revision

Date:

Revision Date: 1/20/2017

OPERATOR CERTIFICATION

Upon contract award, the OPERATOR must sign this certification statement before construction may begin.

I certify under penalty of law that this document and all attachments were prepared under the direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate 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 it is the responsibility of the owner/operator to implement and amend the Soil Erosion and Sediment Control Plan as appropriate in accordance with the requirements of the RIPDES Construction General Permit.

Operator Signature: Date

Contractor Representative: Name

Contractor Title: Title

Contractor Company Name: Company Name (if applicable)

Address: Mailing Address

Phone Number: Phone Number

Email Address: Email

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INTRODUCTION

The purpose of erosion, runoff, and sedimentation control measures is to prevent pollutants from leaving the construction site and entering waterways or environmentally sensitive areas during and after construction. This SESC Plan has been prepared prior to the initiation of construction activities to address anticipated worksite conditions. The control measures depicted on the site plan and described in this narrative should be considered the minimum measures required to control erosion, sedimentation, and stormwater runoff at the site. Since construction is a dynamic process with changing site conditions, it is the operator's responsibility to manage the site during each construction phase so as to prevent pollutants from leaving the site. This may require the operator to revise and amend the SESC Plan during construction to address varying site and/or weather conditions, such as by adding or realigning erosion or sediment controls to ensure the SESC Plan remains compliant with the RIPDES Construction General Permit. Records of these changes must be added to the amendment log attached to the SESC Plan, and to the site plans as "red-lined" drawings. Please Note: Even if practices are correctly installed on a site according to the approved plan, the site is only in compliance when erosion, runoff, and sedimentation are effectively controlled throughout the entire site.

It is the responsibility of the site owner and the site operator to maintain the SESC Plan at the site, including all attachments, amendments and inspection records, and to make all records available for inspection by RIDEM during and after construction. (RIPDES CGP - Part III.G)

The site owner, the site operator, and the designated site inspector are required to review the SESC Plan and sign the Party Certification pages (Section 8). The primary contractor (if different) and all subcontractors (if applicable) involved in earthwork or exterior construction activities are also required to review the SESC Plan and sign the certification pages before construction begins.

Any questions regarding the SESC Plan, control measures, inspection requirements, or any other facet of this document may be addressed to the RIDEM Office of Water Resources, at 401-222-4700 or via email: water@dem.ri.gov.

SOIL EROSION AND SEDIMENT CONTROL PLAN GUIDENCE

SECTION 1: SITE DESCRIPTION

1.1 Project/Site Information

Project/Site Name:

- Milton CAT Facility
- The project proposes to construct a 42,125+ SF sales and service facility, a 5,400 SF wash bay building, customer parking, equipment storage, utility infrastructure, and stormwater management areas.

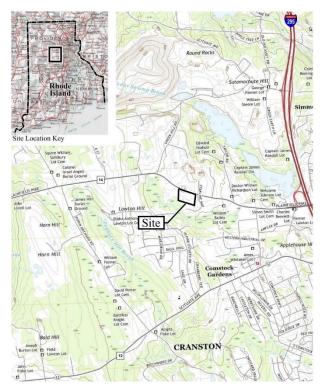
Project Street/Location:

• 2110 Plainfield Pike, Cranston, RI

The following are estimates of the construction site area:

Total Project Area10.8 acres

Total Project Area to be Disturbed



8.3 acres

Yes x No The Limits of Disturbance have been marked in the field

1.2 Receiving Waters

RIPDES CGP - Parts IV.A.7 & IV.A.8

List/description of separate storm sewer systems or drainage systems that may be impacted during construction and the water bodies that receive discharges from each storm sewer or drainage system:

N/A

List/description of receiving waters that may be impacted during construction:

Tributary to Simmons Lower Reservoir

Are any of the receiving waters in the vicinity of the proposed construction project listed as being impaired or subject to a TMDL?

☐ Yes ☐ No

If yes, List/provide description of 303(d)/TMDL waters and applicable TMDL requirements that must be addressed during construction:

1.3 Natural Heritage Area Information

RIPDES CGP - Part III.H RIDEM Rhode Island Natural Heritage Program mailto:plan@dem.ri.gov

,	Natural Heritage Areas being disturbed by the construction activity or will discharges be Natural Heritage Area as a result of the construction activity?
☐ Yes	⊠ No
•	or refer to documentation which determines the likelihood of an impact on this area and the e taken to address any impacts.
1.4	Historic Preservation/Cultural Resources
Are there any h	istoric properties, historic cemeteries or cultural resources on or near the construction site?
Yes	⊠ No
Describe how the	nis determination was made and summarize state or tribal review comments:

If yes, describe or refer to documentation which determines the likelihood of an impact on this historic property, historic cemetery or cultural resource and the steps taken to address that impact including any conditions or mitigation measures that were approved by other parties.

1.5 Site Features and Constraints

List All Site Constraints and Sensitive Areas that require avoidance and protection through the implementation of control measures:

- Wetland 1
- SESC 1

SECTION 2: EROSION, RUNOFF, AND SEDIMENT CONTROL

RIPDES Construction General Permit – Part III.J.1 – Erosion, Runoff, and Sediment Controls

2.1 Avoid and Protect Sensitive Areas and Natural Features

Per RI Stormwater Design and Installation Standards Manual 3.3.7.1:

Areas of existing and remaining vegetation and areas that are to be protected as identified in the Section 1.6 of the SESC Plan must be clearly identified on the SESC Site Plans for each Phase of Construction. Prior to any land disturbance activities commencing on the site, the Contractor shall physically mark limits of disturbance (LOD) on the site and any areas to be protected within the site, so that workers can clearly identify the areas to be protected.

Feature Requiring Protection	Construction Phase #	Method of Protection	Sheet #
Wet meadow Wetland 1	1 & 2	Sit sock / Silt fence barrier	SESC 1 & 2
Sand Filter 1	1 & 21	Silt Sock	SESC 1 & 2
Sand Filter 2		Silt Sock	SESC 1 & 2

BGSF 1	1 & 2	Silt Sock	SESC 1 & 2
BGSF 2	1 & 2	Silt Sock	SESC 1& 2

2.2 Minimize Area of Disturbance

Per RI Stormwater Design and Installation Standards Manual 3.3.7.2: Will >5 acres be disturbed in order to complete this project? □ No Will <5 acres be disturbed or will disturbance activities be completed within a six (6) month window? ☐ No Provide discussion regarding the need to phase or not to phase construction activity in this instance. Based on the answers to the above questions will phasing be required for this project? ☐ No PHASING PLAN The following are estimates of <u>each phase</u> of the construction project: Phase No. or Identifier Total Area of Phase 3.8 acres Area to be Disturbed 3.8 acres Description of Construction Sequencing for Phase 1 Construction includes stormwater basin grading, slope stabilization, install millings. Phase No. or Identifier 2 Total Area of Phase 4.5 acres Area to be Disturbed 4.5 acres Description of Construction Sequencing for Phase buildings, concrete and bituminous pavement, utility, site stabilization 2.3 Minimize the Disturbance of Steep Slopes Per RI Stormwater Design and Installation Standards Manual 3.3.7.3: Are steep slopes (>15%) present within the proposed project area? Yes ⊠ No

2.4 Preserve Topsoil

Site owners and operators must preserve existing topsoil on the construction site to the maximum extent feasible and as necessary to support healthy vegetation, promote soil stabilization, and increase stormwater infiltration rates in the post-construction phase of the project.

Will existing top	soil be preserved at	the site?			
⊠ Yes	☐ No				
Existing topsoil potential stockp	will be stockpiled a ile areas.	nd used in seed	and sod areas.	See sheet L1.01	See SESC 1 fo

Soil compaction must be minimized by maintaining limits of disturbance throughout construction. In instances where site soils are compacted the site owner and operator must restore infiltration capacity of the compacted soils by tilling or scarifying compacted soils and amending soils as necessary to ensure a minimum depth of topsoil is available in these areas. In areas where infiltrating stormwater treatment practices are located compacted soils must be amended such that they will comply the design infiltration rates.

2.5 Stabilize Soils

Upon completion and acceptance of site preparation and initial installation of erosion, runoff, and sediment controls and temporary pollution prevention measures, the operator shall initiate appropriate temporary or permanent stabilization practices during all phases of construction on all disturbed areas as soon as possible, but not more than fourteen (14) days after the construction activity in that area has temporarily or permanently ceased.

Any disturbed areas that will not have active construction activity occurring within 14 days must be stabilized using the control measures depicted in the SESC Site Plans, in accordance with the *RI SESC Handbook*, and per manufacturer product specifications.

Only areas that can be reasonably expected to have active construction work being performed within 14 days of disturbance will be cleared/grubbed at any one time. It is NOT acceptable to clear and grub the entire construction site if portions will not be active within the 14-day time frame. Proper phasing of clearing and grubbing activities shall include temporary stabilization techniques for areas cleared and grubbed that will not be active within the 14-day time frame.

All disturbed soils exposed prior to October 15 of any calendar year shall be seeded by that date if vegetative measures are the intended soil stabilization method. Any such areas that do not have adequate vegetative stabilization, as determined by the site operator or designated inspector, by November 15, must be stabilized through the use of non-vegetative erosion control measures. If work continues within any of these areas during the period from October 15 through April 15, care must be taken to ensure that only the area required for that day's work is exposed, and all erodible soil must be restabilized within 5 working days. In limited circumstances, stabilization may not be required if the intended function of a specific area of the site necessitates that it remain disturbed (i.e. construction of a motocross track).

Temporary Vegetative Control Measures

Temporary erosion control seed for quick growing grasses such as wheat, rye or oats shall be
planted when exposed areas are not active for 14 days. All permanent grass areas planted with
temporary erosion control seed shall be over seeded with permanent seed mix. Apply seed
mixture at a rate of 100 pounds per acre.

		% Germination
Seed	% Weight	Minimum
Winter Rye	80 Minimum	85
Red Fescue (Creeping)	4 Minimum	80
Perennial Rye Grass	3 Minimum	90
Red Clover	3 Minimum	90
Other Crop Grass	0.5 Maximum	
Noxious Weed Seed	0.5 Maximum	
Inert Matter	1.0 Maximum	

Permanent Vegetative Control Measures

Erosion controls mat will be used at the weirs. See Overflow weir detail sheet C5.01.

2.6 Protect Storm Drain Outlets

Temporary or permanent outlet protection must be used to prevent scour and erosion at discharge points through the protection of the soil surface, reduction in discharge velocities, and through the promotion of infiltration. Outlets often have high velocity, high volume flows, and require strong materials that will withstand the forces of stormwater. Storm drain outlet control measures also offer a last line of protection against sediment entering environmentally sensitive areas.

All stormwater outlets that may discharge sediment-laden stormwater flow from the construction site must be protected using the control practices depicted on the approved plan set and in accordance with the *RI SESC Handbook*.

Will temporary or permanent point source discharges be generated at the site as the result of construction of sediment traps or basins, diversions, and conveyance channels?

⊠ Yes	No

Rip-Rap stone protection at flared end section outlets. See plan sheet C3.01 and detail sheet C5.01.

2.7 Establish Temporary Controls for the Protection of Post-Construction Stormwater Treatment Practices

Per RI Stormwater Design and Installation Standards Manual 3.3.7.8:

Temporary measures shall be installed to protect permanent or long-term stormwater control and treatment measures as they are installed and throughout the construction phase of the project so that they will function properly when they are brought online.

Will long-term stormwater treatment practices be installed at the site?

See SESC 1 for locations of sand filters to be protected.

2.8 Divert or Manage Run-on from Up-gradient Areas

Per RI Stormwa	ter Design and Installation Standards Manual 3.3.7.10:
ls stormwater fro disturbed?	om off-site areas anticipated to flow onto the project area or onto areas where soils will be
☐ Yes	⊠ No
2.9	Retain Sediment Onsite through Structural and Non-Structural Practices
from disturbed a slopes to maint maintenance of	RRIERS must be installed along the perimeter areas of the site that will receive stormwater areas. This also may include the use of sediment barriers along the contour of disturbed ain sheet flow and minimize rill and gully erosion during construction. Installation and sediment barriers must be completed in accordance with the maintenance requirements product manufacturer or the RI SESC Handbook.
	arriers be utilized at the toe of slopes and other downgradient areas subject to stormwater sion during construction?
⊠ Yes	□ No
	nt barriers such as silt socks will be utilized at the down gradient limits of work with potential to on-site and off-site surface waters and wetlands resource areas as shown on SESC1. SC 2.
	arriers be utilized along the contour of slopes to maintain sheet flow and minimize rill and ring construction?
☐ Yes	No No

SEDIMENT BARRIERS					
Construction Phase #	Sediment Barrier Type	Sediment Barrier is Labeled on Sheet #	Detail is on Sheet #		
1 & 2	12 inch dia. Silt Sock	SESC 1	SESC 2		

Per RI Stormwater Design and Installation Standards Manual 3.3.7.6:

INLET PROTECTION will be utilized to prevent soil and debris from entering storm drain inlets. These measures are usually temporary and are implemented before a site is disturbed. ALL stormwater inlets &/or catch basins that are operational during construction and have the potential to receive sediment-laden stormwater flow from the construction site must be protected using control measures outlined in the *RI SESC Handbook*.

For more information on inlet protection refer to the RI SESC Handbook, Inlet Protection control measure.

Maintenance

The operator must clean, or remove and replace the inlet protection measures as sediment accumulates, the filter becomes clogged, and/or as performance is compromised. Accumulated sediment adjacent to the

		nould be removed by the end of the ay if removal by the same work da		n it is found or by the
Do inlets e	xist adjacent to o	r within the project area that requi	re temporary protection?	
⊠ Yes	☐ No			
		sed storm drain inlet types selected phase and inlet protection type.	d from Section Six of the	RI SESC Handbook.
		INLET PROTECTI	ON	
Constru	uction Phase #	Inlet Protection Type	Inlet Protection is labeled on Sheet #	Detail(s) is/are on Sheet #
	2	Siltsack Sediment Trap	SESC 1	SESC 2
reduce the entrances of detail include. Any construction and in according to the stabilization construction.	amount of sediction poorly drained des subsurface duction site accessordance with the ation of construction access roads se	es point must employ the control of RI SESC Handbook. Construction tion roads to reduce the amount of shall be constructed prior to any roads.	nis project has avoided porly drained soils could not measures on the approven entrances shall be used from mud picked up by cons	olacing construction of be eliminated, the red SESC site plans d in conjunction with truction vehicles. All
The site ov	vner and operato	r must:		
1.	Restrict vehicle	use to properly designated exit po	oints.	
2.	Use properly designed and constructed construction entrances at all points that exit onto paved roads so that sediment removal occurs prior to vehicle exit.			
3.	3. When and where necessary, use additional controls to remove sediment from vehicle tires prior to exit (i.e. wheel washing racks, rumble strips, and rattle plates).			
4.	4. Where sediment has been tracked out from the construction site onto the surface of off-site streets, other paved areas, and sidewalks, the deposited sediment must be removed by the end of the same work day in which the track out occurs. Track-out must be removed by sweeping, shoveling, or vacuuming these surfaces, or by using other similarly effective means of sediment removal.			
Will constru	uction entrances	be utilized at the proposed constr	uction site?	
⊠ Yes	☐ No			

CONSTRUCTION ENTRANCE			
Construction Phase #	Soil Type at the Entrance	Entrance is located on Sheet #	Detail is on Sheet #
1 & 2	Fine sandy loam	SESC 1	SESC 2

STOCKPILE CONTAINMENT will be used onsite to minimize or eliminate the discharge of soil, topsoil, base material or rubble, from entering drainage systems or surface waters. All stockpiles must be located within the limit of disturbance, protected from run-on with the use of temporary sediment barriers and provided with cover or stabilization to avoid contact with precipitation and wind where and when practical.

Stock pile management consists of procedures and practices designed to minimize or eliminate the discharge of stockpiled material (soil, topsoil, base material, rubble) from entering drainage systems or surface waters.

For any stockpiles or land clearing debris composed, in whole or in part, of sediment or soil, you must comply with the following requirements:

- 1. Locate piles within the designated limits of disturbance.
- 2. Protect from contact with stormwater (including run-on) using a temporary perimeter sediment barrier.
- 3. Where practicable, provide cover or appropriate temporary vegetative or structural stabilization to avoid direct contact with precipitation or to minimize sediment discharge.
- 4. <u>NEVER</u> hose down or sweep soil or sediment accumulated on pavement or other impervious surfaces into any stormwater conveyance, storm drain inlet, or surface water.
- 5. To the maximum extent practicable, contain and securely protect from wind.

STOCKPILE CONTAINMENT				
Construction Phase #	Run-on measures necessary? (yes/no)	Stabilization or Cover Type	Stockpile Containment Measure	Sheet #
1 & 2	NO	Plastic	Silt sock	SESC 1 & 2

CONSTRUCTED SEDIMENT STRUCTURES

TEMPORARY SEDIMENT TRAPS will be utilized onsite. There will be no disturbed drainage areas greater than one acre that will be exposed for longer than six months. Design and sizing calculations in accordance with the *RI SESC Handbook*, Section Six are found in __Appendix F___ of this SESC Plan. A summary of the calculations are provided below:

Are temporary sediment traps required at the site?

Yes	∐ No
-----	------

SEDIMENT TRAPS				
Construction Phase #	Exposed Area (acres)	Trap #	Sheet #	Detail found on Sheet#
2	1.85	2A	SESC 1	SESC 2
2	2.6	2B	SESC 1	SESC 2

Trap #	Wet Storage Volume (cu.ft)	Dry Storage Volume (cu.ft.)	Cleanout Depth (ft)	Provide Reference to Location of Supporting Design and Sizing Calculations
2A	3,348	3.348	1.84'	Appendix F
2B	4,698	4,698	1.86'	Appendix F

All traps will be functional and installed prior to disturbance in the contributing drainage area. Access for sediment removal is provided on the plans with cleanout depth requirements. The removed sediment will be utilized onsite or disposed of properly off-site.

TEMPORARY SEDIMENT BASIN(S) will be utilized onsite. Every effort must be made to prevent erosion and control it near the source.

Are temporary s	sediment basins required at the site?
Yes	⊠ No
Temporary Sed	iment Traps are used.

2.10 Properly Design Constructed Stormwater Conveyance Channels

Are temporary stormwater conveyance practices required in order to properly manage runoff within the proposed construction project?

☐ Yes	\boxtimes	No
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Conveyance to temporary sediment traps is sheet flow. Traps are linear consistent with grading.

2.11 Erosion, Runoff, and Sediment Control Measure List

It is expected that this table and corresponding Inspection Reports will be amended as needed throughout the construction project as control measures are added or modified.

Phase No. # 1			
Location/Station	Control Measure Description/Reference	Maintenance Requirement	
Downgradient at Site Perimeter – Compost Sediment Tubes	Compost Sediment Tube. Section Six, Sediment Control Measures, Compost Tubes and Fiber Rolls - RI SESC Handbook.	Inspection should be made after each storm event or 1/week and repair or replacement should be made promptly as needed. Cleanout of accumulated sediment behind the wattle if sediment accumulates to at least ½ the distance between the top of wattle and ground surface.	
Construction Entrance	Stone Stabilized Pad. Section Six: Sediment Control Measures – Construction Entrances –RI SESC Handbook.	The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto pave surfaces. Provide periodic top dressing with additional stone or additional length as conditions demand. Roads adjacent to entrance shall be clean at the end of each day. If maintenance alone is not enough to prevent excessive track out, increase length of entrance, modify construction access road surface, or install washrack or mudrack.	
Project Site Interior – Compost Sediment Tubes around sand filters and sediment forebays	Compost Sediment Tube. Section Six, Sediment Control Measures, Compost Tubes and Fiber Rolls - RI SESC Handbook.	Inspection should be made after each storm event or 1/week and repair or replacement should be made promptly as needed. Cleanout of accumulated sediment behind the wattle if sediment accumulates to at least ½ the distance between the top of wattle and ground surface.	

Phase No. # 2			
Location/Station	Control Measure Description/Reference	Maintenance Requirement	
Downgradient at Site Perimeter – Compost Sediment Tubes	Compost Sediment Tube. Section Six, Sediment Control Measures, Compost Tubes and Fiber Rolls - RI SESC Handbook.	Inspection should be made after each storm event or 1/week and repair or replacement should be made promptly as needed. Cleanout of accumulated sediment behind the wattle if sediment accumulates to at least ½ the distance between the top of wattle and ground surface.	
Construction Entrance	Stone Stabilized Pad. Section Six: Sediment Control Measures –	The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto pave surfaces. Provide periodic top	

	Construction Entrances —RI SESC Handbook.	dressing with additional stone or additional length as conditions demand. Roads adjacent to entrance shall be clean at the end of each day.
		If maintenance alone is not enough to prevent excessive track out, increase length of entrance, modify construction access road surface, or install washrack or mudrack.
Project Site Interior – Compost Sediment Tubes around sand filters and sediment forebays	Compost Sediment Tube. Section Six, Sediment Control Measures, Compost Tubes and Fiber Rolls - RI SESC Handbook.	Inspection should be made after each storm event or 1/week and repair or replacement should be made promptly as needed. Cleanout of accumulated sediment behind the wattle if sediment accumulates to at least ½ the distance between the top of wattle and ground surface.
Catch Basin Locations	Inlet Protection. Section Six, Inlet Protection - RI SESC Handbook	Inspect and maintain inlet protection devices are every rain event and/or weekly as required. Dispose of sediment properly. Remove all inlet protection devices within 30 days of permanent site stabilization.

SECTION 3: CONSTRUCTION ACTIVITY POLLUTION PREVENTION

The purpose of construction activity pollution prevention is to prevent day to day construction activities from causing pollution.

This section describes the key pollution prevention measures that must be implemented to avoid and reduce the discharge of pollutants in stormwater. Example control measures include the proper management of waste, material handling and storage, and equipment/vehicle fueling/washing/maintenance operations.

Where applicable, include *RI SESC Handbook* or the *RI Department of Transportation Standard Specifications for Road and Bridge Construction* (as amended) specifications.

3.1 Existing Data of Known Discharges from Site

Are there known discharges from the project area?
☐ Yes
Describe how this determination was made:
 Existing site survey.
If yes, list discharges and locations:
Is there existing data on the quality of the known discharges?
☐ Yes

If yes, provide data:

3.2 Prohibited Discharges

Per RI SESC Handbook - Part D

The following discharges are prohibited at the construction site:

- Contaminated groundwater, unless specifically authorized by the DEM. These types of discharges may only be authorized under a separate DEM RIPDES permit.
- Wastewater from washout of concrete, unless the discharge is contained and managed by appropriate control measures.
- Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials.
- Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance. Proper storage and spill prevention practices must be utilized at all construction sites.
- Soaps or solvents used in vehicle and equipment washing.
- Toxic or hazardous substances from a spill or other release.

All types of waste generated at the site shall be disposed of in a manner consistent with State Law and/or regulations.

regulations.	
Will any of the above list	ted prohibited discharges be generated at the site?
☐ Yes ⊠ No	
3.3 Proper	Waste Disposal
	other construction site wastes must be properly managed and disposed of in a State Law and/or regulations.
	lection area shall be designated on the site that does not receive a substantial unoff from upland areas and does not drain directly to a waterbody or storm drain.
All waste co	ntainers shall be covered to avoid contact with wind and precipitation.
Waste collection	ction shall be scheduled frequently enough to prevent containers from overfilling.
	tion site wastes shall be collected, removed, and disposed of in accordance with egulatory requirements and only at authorized disposal sites.
	and containers shall be checked for leaks, corrosion, support or foundation failure, and of deterioration. Those that are found to be defective shall be immediately replaced.
Is waste disposal a signi	ificant element of the proposed project?
☐ Yes	⊠ No

3.4 Spill Prevention and Control

Per RI SESC Handbook - Part D

All chemicals and/or hazardous waste material must be stored properly and legally in covered areas, with containment systems constructed in or around the storage areas. Areas must be designated for materials delivery and storage. All areas where potential spills can occur and their accompanying drainage points must be described. The owner and operator must establish spill prevention and control measures to reduce the chance of spills, stop the source of spills, contain and clean-up spills, and dispose of materials contaminated by spills. The operator must establish and make highly visible location(s) for the storage of spill prevention and control equipment and provide training for personnel responsible for spill prevention and control on the construction site.

spill prev	ventio		rator must establish and make highly visible location(s) for the storage ipment and provide training for personnel responsible for spill prevent site.
Are spill	preve	ention and control r	measures required for this particular project?
	\boxtimes	Yes	□ No
•	re int ec pr pr	quirements under formation on fuels quipment, location, ocedures, includin revention and resp	spill plan shall be evaluated specific to the project for regulatory SPCC regulations or local ordinances. A field spill plan would include and oils being used, approximate amounts in each container or type of fueling location, secondary containment, response and notification ag contact phone numbers, etc. All personnel shall be briefed on spill onse prior to the commencement of construction. The state-specific EC all be followed in the event of a spill.
,	ha (C Be lin sp op in ca	azardous materials DHM) may be request practices shall nited to: storage a bill response equipperating equipment cidental releases capable of managing	activities do not require the use or storage of large quantities of oil or (i.e., greater than 55 gallons). However, oil and/or hazardous material ired in limited quantities to support construction or vehicle operations, be followed in the use and storage of OHM which include but are not not refueling greater than 100 feet from resource areas; maintenance of ment at work locations sufficient to handle incidental releases from t; general training for on-site personnel for spill clean-up response for OHM; and contracting with an on-call spill response contractor that is g incidental and significant releases of OHM. Storage of OHM shall be with any applicable regulatory requirements.
•	re to pr cle ap	eleases of oils or ha make all required operly responded eanup of these releanup	all be immediately stopped and contained, if it is safe to do so. For azardous materials owned by a contractor, the contractor is responsible notifications to regulatory agencies and to ensure that the release is to. The contractor is also responsible for hiring contractors for the eases and properly disposal of any related waste off-site at an All releases of OHM to the environment in Rhode Island are considered
;	3.5	Control of Allo	wable Non-Stormwater Discharges
	e allov	_	ater discharges present on or near the project area?
⊠ Yes	احتنما	∐ No	adia charge (a) and the approximated as inter-language (-).
List of al	iowab	ne non-stormwater	discharge(s) and the associated control measure(s):

 Allowable non-storm water discharges, which are described in the General Permit, that may reasonably be expected to be present and to be mixed with storm water discharges include the following: the use of water to control dust, firefighting activities, water applied to promote grass and landscape vegetation establishment and hydrant flushing.

			roposed contamin r near the project	ated discharges, including anticipated contaminated dewatering area?
☐ Yes		⊠ No		
	3.6	Control	Dewatering Prac	tices
Per RI	SES	C Handbook	- Part D	
remove	d fro	om excavation	ns, trenches, four	rom discharging groundwater or accumulated stormwater that is idations, vaults, or other similar points of accumulation, unless by appropriate control measures.
sedime that are	nt tra	aps, sediment	socks, dewaterir ove sediment. Ur	s include, but are not limited to, temporary sediment basins or ig tanks and bags, or filtration systems (e.g. bag or sand filters) acontaminated, non-turbid dewatering water can be discharged
At a mi	nimu	ım the followir	ng discharge requ	irements must be met for dewatering activities:
	1.	Do not discha	arge visible floatir	g solids or foam.
	2.			regetated, upland areas of the site to infiltrate dewatering water vill surface waters be considered part of the treatment area.
	3.	At all points v	where dewatering	water is discharged, utilize velocity dissipation devices.
	4.	With filter ba treatment pro		her haul it away for disposal or return it to the beginning of the
	5.			edia used in dewatering devices when the pressure differential cturer's specifications.
	6.	applicable (i.	e. containment ar	volve the implementation of appropriate control measures as eas for dewatering earth materials, portable sediment tanks and and pump intake protection.)
		cely that the sed project?	ite operator will n	eed to implement construction dewatering in order to complete
		⊠ Yes	☐ No	
	•	Groundwater	or perched groun	dwater may be encountered during excavations for footings and

3.7 Establish Proper Building Material Staging Areas

adequate to control groundwater

Per RI SESC Handbook - Part D

All construction materials that have the potential to contaminate stormwater must be stored properly and legally in covered areas, with containment systems constructed in or around the storage areas. Areas must be designated for materials delivery and storage. Designated areas shall be approved by the site owner/engineer. Minimization of exposure is not required in cases where the exposure to precipitation and to stormwater will not result in the discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use).

utility trenches. Filtered sumps that discharge to dewatering straw bale basin should be

 All phases can expect to see typical building materials and utility infrastructure to be staged on the site. The contractor shall manage these activities and revise SESC Plan accordingly.

3.8 Minimize Dust

Per RI SESC Handbook - Part D

Dust control procedures and practices shall be used to suppress dust on a construction site during the construction process, as applicable. Precipitation, temperature, humidity, wind velocity and direction will determine amount and frequency of applications. However, the best method of controlling dust is to prevent dust production. This can best be accomplished by limiting the amount of bare soil exposed at one time. Dust Control measures outlined in the *RI SESC Handbook* shall be followed. Other dust control methods include watering, chemical application, surface roughening, wind barriers, walls, and covers.

 Fugitive dust will be controlled by applying water using a water truck with a rear sprayer or other similar device in a manner which does not result in the creation of runoff.

3.9 Designate Washout Areas

Per RI SESC Handbook - Part D

At no time shall any material (concrete, paint, chemicals) be washed into storm drains, open ditches, streets, streams, wetlands, or any environmentally sensitive area. The site operator must ensure that construction waste is properly disposed of, to avoid exposure to precipitation, at the end of each working day.

Will washout areas be required for the proposed project?

⊠ Yes	No
IXIYAS	INIO

Concrete wash outs shall be used for management of concrete waste. Concrete and concrete washout water shall not be deposited or discharged directly on the ground, or in catch basins or other drainage structures. Concrete washouts shall be located in areas as depicted on the SESC Site Plans. Following the completion of concrete pouring operations, the wash outs shall be disposed of off-site with other construction debris

3.10 Establish Proper Equipment/Vehicle Fueling and Maintenance Practices

Per RI SESC Handbook - Part D

Vehicle fueling shall not take place within regulated wetlands or buffer zone areas, or within 50-feet of the storm drain system. Designated areas shall be depicted on the SESC Site Plans, or shall be approved by the site owner.

Vehicle maintenance and washing shall occur off-site, or in designated areas depicted on the SESC Site Plans or approved of by the site owner. Maintenance or washing areas shall not be within regulated wetlands or buffer zone areas, or within 50-feet of the storm drain system. Maintenance areas shall be clearly designated, and barriers shall be used around the perimeter of the maintenance area to prevent stormwater contamination.

Construction vehicles shall be inspected frequently for leaks. Repairs shall take place immediately. Disposal of all used oil, antifreeze, solvents and other automotive-related chemicals shall be according to applicable regulations; at no time shall any material be washed down the storm drain or in to any environmentally sensitive area.

 When refueling vehicles, Company personnel or contractors at field locations shall bring vehicles or equipment (except for fixed equipment such as drill rigs) to an access area outside of

environmentally sensitive areas (such as waterways, wetlands, buffer zones or drinking water sources), or as specified in permit conditions. A paved area such as a parking lot or roadway is preferred, to minimize the possibility of spill or release to the environment. The driver shall take all usual and reasonable environmental and safety precautions during refueling, such as connecting a safety grounding strap between the fuel tank and vehicle or equipment being refueled. The driver shall frequently check for fuel spills, drips, or seeps during the refueling operation. Small equipment such as pumps and generators shall be placed in small swimming pools or on absorbent blankets/pads, to contain any accidental fuel spills. Small swimming pools with absorbent blankets/pads, and/or other secondary containment, shall be used for refueling of fixed equipment in wetlands and should be maintained to prevent accumulation of precipitation.

- Routine vehicle maintenance shall not be conducted on project sites.
- When other vehicle or equipment maintenance operations (such as emergency repairs) occur, company personnel or contractors at field locations shall bring vehicles or equipment to an access location a minimum of 100 feet away from catch basins. A paved area, such as a parking lot or roadway, is a preferred field maintenance location to minimize the possibility of spills or releases to the environment. Crews shall take all usual and reasonable environmental precautions during repair or maintenance operations. Precautions shall be taken to prevent oil or hazardous material release to the environment. These precautions include (but are not limited to) deployment of portable basins or similar secondary containment devices, use of ground covers, such as plastic tarpaulins.
- Cleaning of tools and equipment shall be conducted away from drainage catchments to the
 maximum extent possible. A paved area such as a parking lot or roadway is preferred, to minimize
 the possibility of spill or release to the environment. Crews shall wipe up all minor drips or spills of
 grease and oil at field locations.

The Contractor shall designate areas on the SESC Site Plans at least 100 feet away from drainage catchments.

3.11 Chemical Treatment for Erosion and Sediment Control

Per RI SESC Handbook - Appendix J

Chemical stabilizers, polymers, and flocculants are readily available on the market and can be easily applied to construction sites for the purposes of enhancing the control of erosion, runoff, and sedimentation. The following guidelines should be adhered to for construction sites that plan to use treatment chemicals as part of their overall erosion, runoff, and sedimentation control strategy.

The U.S. Environmental Protection Agency has conducted research into the relative toxicity of chemicals commonly used for the treatment of construction stormwater discharges. The research conducted by the EPA focused on different formulations of chitosan, a cationic compound, and both cationic and anionic polyacrylamide (PAM). In summary, the studies found significant toxicity resulting from the use of chitosan and cationic PAM in laboratory conditions, and significantly less toxicity associated with using anionic PAM. EPA's research has led to the conclusion that the use of treatment chemicals for erosion, runoff, and sedimentation control requires proper operator training and appropriate usage to avoid risk to aquatic species. In the case of cationic treatment chemicals additional safeguards may be necessary.

Application/Installation Minimum Requirements

If a site operator plans to use polymers, flocculants, or other treatment chemicals during construction the SESC plan must address the following:

- 1. <u>Treatment chemicals shall not be applied directly to or within 100 feet of any surface water body, wetland, or storm drain inlet.</u>
- 2. <u>Use conventional erosion, runoff, and sedimentation controls prior to and after the application of treatment chemicals.</u> Use conventional erosion, runoff, and sedimentation controls prior to

chemical addition to ensure effective treatment. Chemicals may only be applied where treated stormwater is directed to a sediment control (e.g. temporary sediment basin, temporary sediment trap or sediment barrier) prior to discharge.

- 3. <u>Sites shall be stabilized as soon as possible using conventional measures to minimize the need to use chemical treatment.</u>
- 4. <u>Select appropriate treatment chemicals.</u> Chemicals must be selected that are appropriately suited to the types of soils likely to be exposed during construction and to the expected turbidity, pH, and flow rate of stormwater flowing into the chemical treatment system or treatment area. **Soil testing is essential.** Using the wrong form of chemical treatment will result in some form of performance failure and unnecessary environmental risk.
- 5. Minimize discharge risk from stored chemicals. Store all treatment chemicals in leak-proof containers that are kept under storm-resistant cover and surrounded by secondary containment structures (e.g., spill berms, decks, spill containment pallets), or provide equivalent measures, designed and maintained to minimize the potential discharge of treatment chemicals in stormwater or by any other means (e.g., storing chemicals in covered areas or having a spill kit available on site).
- 6. Use chemicals in accordance with good engineering practices and specifications of the chemical provider/supplier. You must also use treatment chemicals and chemical treatment systems in accordance with good engineering practices, and with dosing specifications and sediment removal design specifications provided by the supplier of the applicable chemicals, or document specific departures from these practices or specifications and how they reflect good engineering practice.

Will	chemical	stabilizers,	polymers,	flocculants	or othe	r treatment	t chemicals	be	utilized	on	the	propose
con	struction p	roject?										

☐ Yes ☐ No

Provide test results for representative soils from the site, and any recommendations

3.12 Construction Activity Pollution Prevention Control Measure List

It is expected that this table will be amended as needed throughout the construction project.

Phase No. #1					
Location/Station	Control Measure Description/Reference	Maintenance Requirement			
Downgradient Project Site Perimeter	Section 6 Compost Sediment Tubes –RI SESC Handbook.	Inspection should be made within 24 hours after each storm event producing 0.25 inches of rainfall in a 24 hour period or weekly. Repair or replacement should be made promptly as needed.			
		Cleanout of accumulated sediment behind the tube if sediment accumulates to at least ½ the distance between the top of compost tube and ground surface.			
Stabilized Construction	Stone Stabilized Pad.	The entrance shall be maintained in a condition			
Entrance	Section Six: Sediment	which will prevent tracking or flowing of sediment			
	Control Measures –	onto paved surfaces. Provide periodic top			

Around BMP Perimeter (sand filters, sediment forebays)	Section 6 Compost Sediment Tubes –RI SESC Handbook.	dressing with additional stone or additional length as conditions demand. Roads adjacent to entrance shall be clean at the end of each day. If maintenance alone is not enough to prevent excessive track out, increase length of entrance, modify construction access road surface, or install washrack or mudrack. Inspection should be made after each storm event (as above) or weekly and repair or replacement should be made promptly as needed. Cleanout of accumulated sediment behind the tube if sediment accumulates to at least ½ the distance between the top of compost tube and ground surface.
	Phase I	No. #2
	Control Measure	
Location/Station	Description/Reference	Maintenance Requirement
Downgradient Project Site Perimeter	Section 6 Compost Sediment Tubes – <i>RI</i> SESC Handbook.	Inspection should be made within 24 hours after each storm event producing 0.25 inches of rainfall in a 24 hour period or weekly. Repair or replacement should be made promptly as needed. Cleanout of accumulated sediment behind the tube if sediment accumulates to at least ½ the distance between the top of compost tube and ground surface.
Stabilized Construction Entrance	Stone Stabilized Pad. Section Six: Sediment Control Measures – Construction Entrances –RI SESC Handbook.	The entrance shall be maintained in a condition which will prevent tracking or flowing of sediment onto paved surfaces. Provide periodic top dressing with additional stone or additional length as conditions demand. Roads adjacent to entrance shall be clean at the end of each day. If maintenance alone is not enough to prevent excessive track out, increase length of entrance, modify construction access road surface, or install washrack or mudrack.
Around BMP Perimeter (sand filters, sediment forebays)	Section 6 Compost Sediment Tubes – <i>RI</i> SESC Handbook.	Inspection should be made after each storm event (as above) or weekly and repair or replacement should be made promptly as needed. Cleanout of accumulated sediment behind the tube if sediment accumulates to at least ½ the

	distance between the top of compost tube and ground surface.

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SECTION 4: CONTROL MEASURE INSTALLATION, INSPECTION, and MAINTENANCE

4.1 Installation

Per RI SESC Handbook - Part D:

Complete the installation of temporary erosion, runoff, sediment, and pollution prevention control measures by the time each phase of earth-disturbance has begun. All stormwater control measures must be installed in accordance with good judgment, including applicable design and manufacturer specifications. Installation techniques and maintenance requirements may be found in manufacturer specifications and/or the *RI SESC Handbook*.

SESC 1 and SESC 2

4.2 Monitoring Weather Conditions

Per RI SESC Handbook - Part D:

<u>Anticipating Weather Events</u> - Care will be taken to the best of the operator's ability to avoid disturbing large areas prior to anticipated precipitation events. Weather forecasts must be routinely checked, and in the case of an expected precipitation event of over 0.25-inches over a 24-hour period, it is highly recommended that all control measures should be evaluated and maintained as necessary, prior to the weather event. In the case of an extreme weather forecast (greater than one-inch of rain over a 24-hour period), additional erosion/sediment controls may need to be installed.

<u>Storm Event Monitoring For Inspections</u> - At a minimum, storm events must be monitored and tracked in order to determine when post-storm event inspections must be conducted. Inspections must be conducted and documented at least once every seven (7) calendar days and within twenty-four (24) hours after any storm event, which generates at least 0.25 inches of rainfall per twenty-four (24) hour period and/or after a significant amount of runoff or snowmelt.

The weather gauge station and website that will be utilized to monitor weather conditions on the construction site is as follows:

Station: KRICRANS41 Location: Cranston, RI Lat 41.78 N 71.52 W

4.3 Inspections

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<u>Minimum Frequency</u> - Each of the following areas must be inspected by or under the supervision of the owner and operator at least once every seven (7) calendar days and within twenty-four (24) hours after any storm event, which generates at least 0.25 inches of rainfall per twenty-four (24) hour period and/or after a significant amount of runoff or snowmelt:

- All areas that have been cleared, graded, or excavated and where permanent stabilization has not been achieved;
- b. All stormwater erosion, runoff, and sediment control measures (including pollution prevention control measures) installed at the site;
- c. Construction material, unstabilized soil stockpiles, waste, borrow, or equipment storage, and maintenance areas that are covered by this permit and are exposed to precipitation;
- d. All areas where stormwater typically flows within the site, including temporary drainage ways designed to divert, convey, and/or treat stormwater;
- e. All points of discharge from the site;
- f. All locations where temporary soil stabilization measures have been implemented;
- g. All locations where vehicles enter or exit the site.

<u>Reductions in Inspection Frequency</u> - If earth disturbing activities are suspended due to frozen conditions, inspections may be reduced to a frequency of once per month. The owner and operator must document the beginning and ending dates of these periods in an inspection report.

<u>Qualified Personnel</u> – The site owner and operator are responsible for designating personnel to conduct inspections and for ensuring that the personnel who are responsible for conducting the inspections are "qualified" to do so. A "qualified person" is a person knowledgeable in the principles and practices of erosion, runoff, sediment, and pollution prevention controls, who possesses the skills to assess conditions at the construction site that could impact stormwater quality, and the skills to assess the effectiveness of any stormwater controls selected and installed to meet the requirements of the permit.

<u>Recordkeeping Requirements</u> - All records of inspections, including records of maintenance and corrective actions must be maintained with the SESC Plan. Inspection records must include the date and time of the inspection, and the inspector's name, signature, and contact information.

General Notes

- A separate inspection report will be prepared for each inspection.
- The Inspection Reference Number shall be а combination of the RIPDES Construction General Permit No consecutively numbered inspections. ex/ Inspection reference number for the 4th inspection of a project would be: RIR10###-4
- Each report will be signed and dated by the Inspector and must be kept onsite.
- Each report will be signed and dated by the Site Operator.
- The corrective action log contained in each inspection report must be completed, signed, and dated by the site operator once all necessary repairs have been completed.
- It is the responsibility of the site operator to maintain a copy of the SESC Plan, copies of <u>all</u> completed inspection reports, and amendments as part of the SESC Plan documentation <u>at the</u> site during construction.

Failure to make and provide documentation of inspections and corrective actions under this part constitutes a violation of your permit and enforcement actions under 46-12 of R.I. General Laws may result.

4.4 Maintenance

:

Maintenance procedures for erosion and sedimentation controls and stormwater management structures/facilities are described on the SESC Site Plans and in the RI SESC Handbook.

Site owners and operators must ensure that all erosion, runoff, sediment, and pollution prevention controls remain in effective operating condition and are protected from activities that would reduce their effectiveness. Erosion, runoff, sedimentation, and pollution prevention control measures must be maintained throughout the course of the project.

Note: It is recommended that the site operator designates a full-time, on-site contact person responsible for working with the site owner to resolve SESC Plan-related issues.

4.5 Corrective Actions

If, in the opinion of the designated site inspector, corrective action is required, the inspector shall note it on the inspection report and shall inform the site operator that corrective action is necessary. The site operator must make all necessary repairs whenever maintenance of any of the control measures instituted at the site is required.

In accordance with the *RI SESC Handbook*, the site operator shall initiate work to fix the problem immediately after its discovery, and complete such work by the close of the next work day, if the problem does not require significant repair or replacement, or if the problem can be corrected through routine maintenance.

When installation of a new control or a significant repair is needed, site owners and operators must ensure that the new or modified control measure is installed and made operational by no later than seven (7) calendar days from the time of discovery where feasible. If it is infeasible to complete the installation or repair within seven (7) calendar days, the reasons why it is infeasible must be documented in the SESC Plan along with the schedule for installing the control measures and making it operational as soon as practicable after the 7-day timeframe. Such documentation of these maintenance procedures and timeframes should be described in the inspection report in which the issue was first documented. If these actions result in changes to any of the control measures outlined in the SESC Plan, site owners and operators must also modify the SESC Plan accordingly within seven (7) calendar days of completing this work.

SECTION 5: AMENDMENTS

This SESC Plan is intended to be a working document. It is expected that amendments will be required throughout the active construction phase of the project. Even if practices are installed on a site according to the approved plan, the site is only in compliance when erosion, runoff, and sedimentation are effectively controlled throughout the entire site for the entire duration of the project.

The SESC Plan shall be amended within seven (7) days whenever there is a change in design, construction, operation, maintenance or other procedure which has a significant effect on the potential for the discharge of pollutants, or if the SESC Plan proves to be ineffective in achieving its objectives (i.e. the selected control measures are not effective in controlling erosion or sedimentation).

In addition, the SESC Plan shall be amended to identify any new operator that will implement a component of the SESC Plan.

All revisions must be recorded in the Record of Amendments Log Sheet, which is contained in Attachment G of this SESC Plan, and dated red-lined drawings and/or a detailed written description must be appended to the SESC Plan. Inspection Forms must be revised to reflect all amendments. Update the Revision Date and the Version # in the footer of the Report to reflect amendments made.

All SESC Plan Amendments, except minor non-technical revisions, must be approved by the site owner and operator. Any amendments to control measures that involve the practice of engineering must be reviewed, signed, and stamped by a Professional Engineer registered in the State of RI.

The amended SESC plan must be kept on file <u>at the site</u> while construction is ongoing and any modifications must be documented.

Attach a copy of the Amendment Log.

SECTION 6: RECORDKEEPING

RIPDES Construction General Permit - Parts III.D, III.G, III.J.3.b.iii, & V.O

It is the site owner and site operator's responsibility to have the following documents available at the construction site and immediately available for RIDEM review upon request:

- A copy of the fully signed and dated SESC Plan, which includes:
 - A copy of the General Location Map INCLUDED AS ATTACHMENT A
 - A copy of all SESC Site Plans INCLUDED AS ATTACHMENT B
 - A copy of the RIPDES Construction General Permit (To save paper and file space, do not include in DEM/CRMC submittal, for operator copy only) INCLUDED AS ATTACHMENT C
 - A copy of any regulatory permits (RIDEM Freshwater Wetlands Permit, CRMC Assent, RIDEM Water Quality Certification, RIDEM Groundwater Discharge Permit, RIDEM RIPDES Construction General Permit authorization letter, etc.)
 INCLUDED AS ATTACHMENT D
 - The signed and certified NOI form or permit application form (if required as part of the application, see RIPDES Construction General Permit for applicability) INCLUDED AS ATTACHMENT E
 - Completed Inspection Reports w/Completed Corrective Action Logs INCLUDED AS ATTACHMENT F
 - SESC Plan Amendment Log INCLUDED AS ATTACHMENT G

SECTION 7: PARTY CERTIFICATIONS

RIPDES Construction General Permit - Part V.G

All parties working at the project site are required to comply with the Soil Erosion and Sediment Control Plan (SESC Plan including SESC Site Plans) for any work that is performed on-site. The site owner, site operator, contractors and sub-contractors are encouraged to advise all employees working on this project of the requirements of the SESC Plan. A copy of the SESC Plan is available for your review by contacting the site owner or site operator.

The site owner and site operator and each subcontractor engaged in activities at the construction site that could impact stormwater must be identified and sign the following certification statement.

I acknowledge that I have read and understand the terms and conditions of the Soil Erosion and Sediment Control (SESC) Plan for the above designated project and agree to follow the control measures described in the SESC Plan and SESC Site Plans.

Site Owner:		
Insert Company or Organization Name		
Insert Name & Title		
Insert Address		
Insert City, State, Zip Code	signature/date	
Insert Telephone Number, Insert Fax/Email		
Site Operator:		
Insert Company or Organization Name		
Insert Name & Title		
Insert Address		
Insert City, State, Zip Code	signature/date	
Insert Telephone Number, Insert Fax/Email		
Designated Site Inspector:		
Insert Company or Organization Name		
Insert Name & Title		
Insert Address		
Insert City, State, Zip Code	signature/date	
Insert Telephone Number, Insert Fax/Email		
SubContractor SESC Plan Contact:		
Insert Company or Organization Name		
Insert Name & Title		
Insert Address		
Insert City, State, Zip Code	signature/date	
Insert Telephone Number, Insert Fax/Email		

LIST OF ATTACHMENTS

Attachment A - General Location Map

Attachment B - SESC Site Plans

Attachment C - Copy of RIPDES Construction General Permit and
Authorization to Discharge (To save paper and file space, do not
include in DEM/CRMC submittal, for operator copy only)

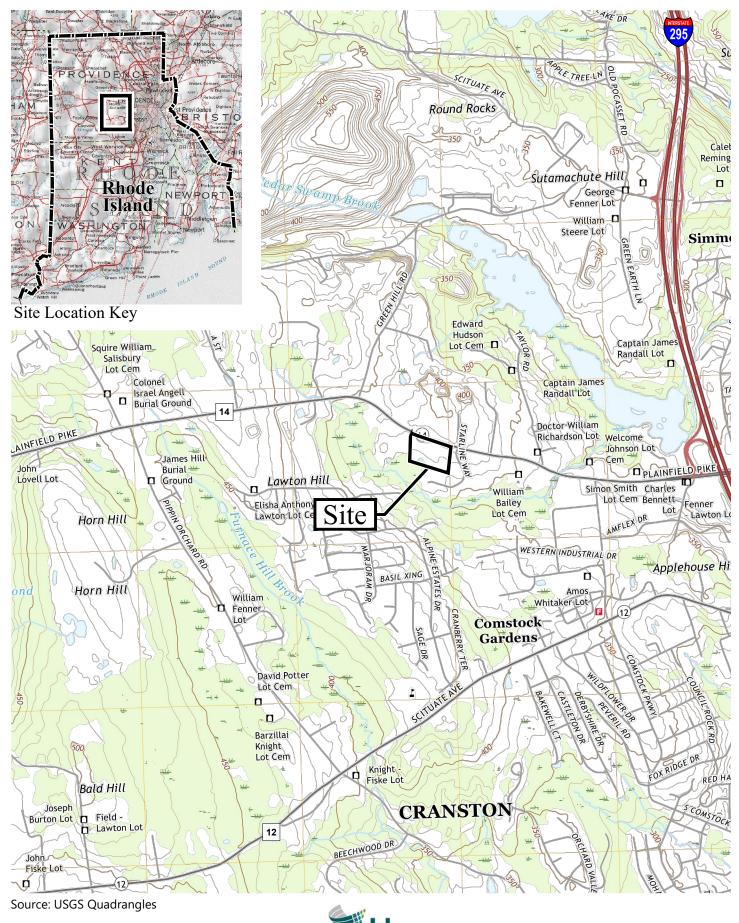
Attachment D - Copy of Other Regulatory Permits

Attachment E - Copy of RIPDES NOI (if required as part of application, see RIPDES Construction General Permit for applicability)

Attachment F - Inspection Reports w/ Corrective Action Log

Attachment G - SESC Plan Amendment Log

Attachment H – Temporary Sediment Trap Calculations



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1000

2000Feet

Site Location Map 2110 Plainfield Pike Cranston, Rhode Island Figure 1

April 2023

235 Promenade Street, Providence, RI 02908 Telephone: 401-222-6820; Rhode Island Relay: 711

Application for Stormwater Construction Permit and Water Quality Certification

Use this form to request a Stormwater Construction Permit (RIPDES CGP or GWD/UIC) or Water Quality Certification (WQC). If a Freshwater Wetlands (FWW) Application is required, this form must be submitted in addition to the FWW Application form.

If a WOC is requested as part of a Federal Permit which is not covered under a General Permit and therefore requires 401 certification as described in Section 401 of the Clean Water Act, this form and accompanying materials must be submitted directly to the WOC Program to receive such certification (even if a FWW permit is required).

Please fill out this form electronically. Print the completed form and submit with all required documentation and fee to:

(Check or money order must be made payable to the Rhode Island General Treasurer.) Stormwater Construction Permit Fee will be waived for applications submitted concurrently with Providence, RI 02908-5767 a Freshwater Wetlands Application.

Permit Application Center (PAC)

235 Promenade Street, Room 260

Provide all applicable information by completing the shaded areas.

Double-click to select:		☑ New F	ermit		☐ Permit Modification					
		Fee = 8	6400.							
	City/Town	n:	Street Address: Water Body Class					er Body Class:		
	Cranston			2110 Plainfield Pike					В	
ಶ	Plat(s):		Lot(s):				Proj	ect Nam	e:	
je	35		9				Milton	CAT Fa	cility	
2		Location:					Water B	ody Nar	ne(s):	_
4		of intersection wi		e Way.	Tri	butary we	tlands to U	named ?	Cributary	to Simmons
&	Sout	h of utility pole r	10. 412				Re	eservoir		
Site & Project	<u>Latitude:</u>	<u>Longitude:</u>	Utility	Pole #:		otal Site A	rea:	Site	Area to b	e Disturbed:
Si	41.789648	-71.529531		12		0.8	acres			acres
	RIDOT PSII	D#: F	I Contrac	t #:	•		pplication M	leeting?	Provid	e Meeting Date:
					✓	Yes				03/09/23
	0	rganization/Con	ipany Nan	ne:						tive for Questions:
		N/A				Etha	n Flinkstro	m- ethar	f@newte	echcoine.com
H	First Nam	e:		Name:			Owner's	Email:		Phone:
ह	Lori			dillo			63@yahoo.	com		401-413-1624
		Addres					City/Town:		State:	Zip:
d		60 Old Danie	elson Pike				Foster		RI	02825
Owner / Applicant	implement or hire a qua discharges leaving the s this application and ass	ite during the constructed the construction of the compliance with the compliance with the construction of	tion period. I any permit o	authorize RI	IDEM persoi	nnel access to g from this ap	the property for pplication.	rol Plan, so or purposes	as to effectiv	g conditions pertinent to
	/ · /A	pplicant's Signat	ure:			Title:				Date:
	All a	water			0	owner			6-16-2023	
	Organ	ization/Compan	y Name:			Professio	nal's Licens		s) and N	umber(s):
		VHB				PE 8974				
	P	rofessional's Na	me:			Professional's Email:				Phone:
_		Josh Rosen				<u>jrosen@vhb.com</u>			401.457.7829	
I certify under penalty of law that the project described in this application and associated materials is in compliance with the RI SI Installation Standards Manual (as amended) and the Rhode Island Soil Erosion and Sediment Control Handbook (as amended) [information presented in this application and the accompanying materials are true, accurate and complete. All engineering design required] included in this application were done by me or by someone working directly for me. The Natural Heritage Area Inform specific Soil Erosion and Sediment Control Plan [if required] were prepared under my direction or supervision in accordance with that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons those persons directly responsible for gathering or developing the information, the information submitted is, to the best of my known accurate, and complete at the time this application is made. I am aware that there are significant penalties for submitting false information in the information is made. I am aware that there are significant penalties for submitting false information. Professional's Signature: Title:							led) [if requi designs, plar nformation e with a syst sons who ma ny knowledg	ired] and I believe all as and specifications [if [if required] and the site em designed to assure nage the system, or e and belief, true.		
	FIC	Accelonal e orgin	iture.			11	ue,			
										06/06/23
&WOC N	New or Modification 11.	/15/21	dem	ri.gov/stor	minatercon	struction				Page

PERMIT HISTORY AND APPLICABILITY - Double-click to check all boxes that apply to the proposed project.

	Provide all other	RIDEM USE ONLY						
Permit History	RI CRMC Assen	t: US Army Corps of Engineers:	RIDEM Program Name & File Number:					
λ	Management, Design an There are Freshwate ☑ New or inc □ Disturbanc □ To fill in ar	Disturbance of more than 10,000 sq. ft. of existing impervious cover; or						
on Activit	The project propose trench, infiltration b		nter Wetland Rules 8.21 of the Stormwater Rules (i.e. infiltration nat receives stormwater from:	STW/WQC Application # Required:				
Stormwater Construction Activity	A residential impervious area that is more than 10,000 sq. ft.; or A non-residential roof area greater than 10,000 sq. ft.; or A non-residential (commercial, industrial, institutional) road or parking area of any size. Indicate if the treatment system discharges: Below the ground (UIC); or Above the ground and infiltrates (not UIC), but must be reviewed for compliance with the RISDISM to be protective of groundwater. Refer to Groundwater Discharge Rules The project proposes discharge of stormwater to waters of the State [including a Separate Storm Sewer System (MS4)], AND: Disturbs less than 1 acre, but the activity is part of a larger common plan resulting in more than 1 acre of disturbance.							
	<u>Refer to I</u>	ore than 1 acre of property. RI Pollutant Discharge Eliminati	on System General Permit					
Water Quality Certification (WQC)	□ <u>Fo</u> M □ Fi □ Ao	type(s): that requires a Federal Permit chat requires a Federal Permit chat requires a Federal Permit arinas-New Construction or Exp ll Waters of the U.S. COE Individual Permit COE Fill in Coastal Waters cher						
Water (☐ Flow Alter		Vater Quality Rules, and Application Guidance					
<u>Submission.</u> <u>Requirements</u>	submitting concurred Si Aj St D St W	Refer to Water Quality Rules and Application Guidan ease submit separately bound documents, as required. Additional copies are required when bmitting concurrently with a Freshwater Wetlands Application. Site Plan(s) Appendix A Checklist/LID Planning Assessment Stormwater Management Plan (Includes SESC Plan, O&M Plan, and SW Drainage/Analysis Report) Stormwater Construction Permit Fee Waived when submitting concurrently with a Freshwater Wetland Application						

INSPECTION	DFFFDFN CF	NIIMRED	DTD10
INSPECTION	<i>KEFEKENLE</i>	NUMBER	NINIU

SESC Plan Inspection Report

	Project Information						
Name							
Location							
DEM Permit	No.						
Site Owner		Name		Phone	Email		
Site Operato	or	Name		Phone	Email		
			Inspection	on Information			
Inspector Na	ame	Name		Phone	Email		
Inspection D	ate			Start/End Time			
Inspection T		torm event 🔲 🛭	During stor	m event	☐ Other		
	My Lines			er Information			
Last Rain Ev	vent	Duration (hrs):		Approximate Rainfall (in):			
	Location & So			Approximate Ruman (m).			
Weather at ti	ime of this ins	pection:					
Trodinor at t							
Check state	ment that appl	ies then sign and	d date below	<u>N:</u>			
				nas been inspected as required	by regulation and I have		
determined t	that maintenar	nce and corrective	e actions a	re not required at this time.			
				nas been inspected as required ve actions. The required correct			
this inspecti		at the site require	cs correctiv	ve actions. The required correct	ive actions are noted within		
	Print Name		Signature		Date		
Inspector:							
The Site Ope	erator acknow	edges by his/her	r signature.	the receipt of this SESC Plan in	nspection report and its		
findings. He/she acknowledges that all recommended corrective actions must be completed and documentation of all such corrective actions must be made in this inspection report per applicable regulations.							
or all such c	Print Name	ns must be made	Signature	spection report per applicable re	Date		
Operator:							
					·		

SESC Plan Inspection Report

Site-specific Control Measures

Number the structural and non-structural stormwater control measures identified in the SESC Plan and on the SESC Site Plans and list them below (add as necessary). Bring a copy of this inspection form and any applicable SESC Site Plans with you during your inspections. This list will assist you to inspect all control measures at your site.

FILL THIS TABLE USING THE SESC PLAN TABLES 2.11 & 3.12.

I ILL	Location/Station	Control Measure Description	Installe Operati	ed & ting	Assoc. Photo/ Figure #	Corrective Action Needed (Yes or No; if 'Yes', please detail action required)
1	Example 1: Eastern Parcel – Slope No. 4 Adjacent to I-95. Straw Wattles	Straw Wattle. Section Six, Sediment Control Measures, Straw Wattles, Compost Tubes and Fiber Rolls - RI SESC Handbook.	□Yes	□No		
2	Example 2: Western Parcel – Green Street Construction Entrance	Stone Stabilized Pad. Section Six: Sediment Control Measures – Construction Entrances –RI SESC Handbook.	□Yes			
3	Example 3: Hospital Main Footings – Excavation Area – SESC Site Plan Sheet No. 3.	Pump Intake Protection Using Stone Filled Sump with Standpipe. Section Six: Sediment Control Measures, Pump Intake Protection, RI SESC Handbook.	□Yes	□No		
4	Example 4: Bridge Abutment Construction Southbound Bridge Abutment, Bridge No. 244 – SESC Site Plan Sheet No. 18.	Prefabricated Concrete Washout Container with Ramp. Used to contain concrete washout during concrete pouring operations. Section Three: Pollution Prevention and Good Housekeeping, Concrete Washouts, RI SESC Handbook.	□Yes	□No		
5	INSERT TEXT	INSERT TEXT	□Yes	□No		
6	Attention Operator:	You must modify this inspection form as the project progresses, control measure locations change, and amendments to the SESC Plan are instituted in the field.	□Yes			
7			□Yes			
8			□Yes	□No		

SESC Plan Inspection Report

	Location/Station	Control Measure Description	Installed & Operating Properly?	Assoc. Photo/ Figure #	Corrective Action Needed (Yes or No; if 'Yes', please detail action required)
9			□Yes □No		
10			□Yes □No		
11			□Yes □No		
12			□Yes □No		
13			□Yes □No		
14			□Yes □No		
15			□Yes □No		
16			□Yes □No		
17			□Yes □No		
18			□Yes □No		
19			□Yes □No		
20			□Yes □No		
21			□Yes □No		
22			□Yes □No		
23			□Yes □No		
24			□Yes □No		

SESC Plan Inspection Report

	Location/Station	Control Measure Description	Installed & Operating Properly?	Assoc. Photo/ Figure #	Corrective Action Needed (Yes or No; if 'Yes', please detail action required)
25			□Yes □No		
26			□Yes □No		
27			□Yes □No		
28			□Yes □No		
29			□Yes □No		
30			□Yes □No		

(add more as necessary)

General Site Issues

Below are some general site issues that should be assessed during inspections. Please **customize** this list as needed for conditions at the site.

	Compliance Question			Assoc. Photo/ Figure #	Corrective Action Needed (If 'Yes', please detail action required and include location/station)
1	Have all control measures been installed as specified in the RISESC Handbook and prior to any earth disturbing activities?	□Yes □ □ N/A			
2	Are appropriate limits of disturbance (LOD) established?	□Yes □ □ N/A	⊒No		
3	Are controls that limit runoff from exposed soils by diverting, retaining, or detaining flows (such as check dams, sediment basins, etc.) in place?	□Yes □ □ N/A			
4	Are all temporary conveyance practices installed correctly and functioning as designed?	□Yes □ □ N/A	⊒No		
5	Has maintenance been performed as required to ensure continued proper function of all temporary conveyances practices?	□Yes □ □ N/A	⊒No		
6	Were all exposed soils seeded by October 15 th ?	□Yes □ □ N/A	⊒No		
7	Have soils been stabilized where earth disturbance activities have permanently or temporarily ceased on any portion of the site and will not resume for more than 14 days?	□Yes □ □ N/A	⊒No		
8	In instances where adequate vegetative stabilization was not established by November 15 th , have non-vegetative erosion control measures must be employed?	□Yes □ □ N/A	⊒No		
9	If work is to continue from October 15 th through April 15 th , are steps taken to ensure that only the day's work area will be exposed and all erodible soil is stabilized within 5 working days?	□Yes □ □ N/A	⊒No		
10	Have inlet protection measures (such as fabric drop inlet protection, curb drop inlet protection, etc.) been properly installed?	□Yes □ □ N/A	⊒No		
11	Has the operator cleaned and maintained inlet protection measures when needed?	□Yes □ N/A	⊒No		
12	Has the operator removed accumulated sediment adjacent to inlet protection measures within 24 hours of detection?	□Yes □ N/A	□No		

SESC Plan Inspection Report

	Compliance Question		Assoc. Photo/ Figure #	Corrective Action Needed (If 'Yes', please detail action required and include location/station)
13	Has the operator properly installed outlet protection (such as riprap, turf mats, etc.) at all temporary and permanent discharge points?	□Yes □No □ N/A		
14	Are all outlet protection measures functioning properly in order to reduce discharge velocity, promote infiltration, and eliminate scour?	□Yes □No □ N/A		
15	Have all discharge points been inspected to ensure the prevention of scouring and channel erosion?	□Yes □No □ N/A		
16	Have sediment controls been installed along perimeter areas that will receive stormwater from earth disturbing activities?	□Yes □No □ N/A		
17	Is the operator maintaining sediment controls in accordance with the requirements in the RI SESC Handbook?	□Yes □No		
18	Have temporary sediment barriers been installed around permanent infiltration areas (such as bioretention areas, infiltration basins, etc.)?	□Yes □No □ N/A		
19	Have staging areas and equipment routing been implemented to avoid compaction where permanent infiltration areas will be located?	□Yes □No □ N/A		
20	Are surface outlet structures (such as skimmers, siphons, etc.) installed for each temporary sediment basin? [Exception: frozen conditions]	□Yes □No □ N/A		
21	Have all temporary sediment basins or traps been inspected and maintained as required to ensure proper function?	□Yes □No □ N/A		
22	Does the project include the use of polymers, flocculants, or other chemicals to control erosion, sedimentation, or runoff from the site?	□Yes □No □ N/A		
23	Are all chemicals being managed in accordance with Appendix J of the <i>RISESC Handbook</i> and current best management practices?	□Yes □No □ N/A		
24	Has the site operator taken steps to prohibit the following pollutant discharges on the site?			
а	Contaminated groundwater.	□Yes □No □ N/A		

SESC Plan Inspection Report

	Compliance Question			Assoc. Photo/ Figure #	Corrective Action Needed (If 'Yes', please detail action required and include location/station)
b	Wastewater from washout of concrete; unless properly contained, managed, and disposed of.	□Yes □ N/A	lNo		,
С	Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction products.	□Yes □	lNo		
d	Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance.	□Yes □ □ N/A	lNo		
е	Soaps or solvents used in vehicle and equipment washing.	□Yes □ □ N/A	lNo		
f	Toxic or hazardous substances from a spill or other release.	□Yes □ □ N/A	lNo		
25	Is the operator using properly constructed entrances/exits to the site so sediment removal occurs prior to vehicles exiting?	□Yes □	lNo		
26	If needed, are additional controls (such as rumble strips, rattle plates, etc.) in place to remove sediment from tires prior to exiting?	□Yes □ □ N/A	lNo		
27	Is sediment track-out being removed by the end of the same workday in which it occurs (via sweeping, shoveling, or vacuuming)?	□Yes □	lNo		
28	Are all wastes generated at the site being managed and properly disposed of by the end of each workday?	□Yes □	lNo		
29	Are all chemicals and hazardous waste materials stored properly in covered areas and surrounded by containment control systems?	□Yes □ N/A	lNo		
30	Has the operator established highly visible locations for the storage of spill prevention and control equipment on the construction site?	□Yes □ □ N/A	lNo		
31	Are allowable non-stormwater discharges being managed properly with adequate controls?	□Yes □ □ N/A	lNo		
32	Is the site operator properly managing groundwater or stormwater that is removed from excavations, trenches, or similar points of accumulation?	□Yes □	lNo		
33	Are proper procedures and controls in place for the storage of materials that may discharge pollutants if	□Yes □ N/A	lNo		

SESC Plan Inspection Report

Compliance Question		Assoc. Photo/ Figure #	Corrective Action Needed (If 'Yes', please detail action required and include location/station)
exposed to stormwater?			
Are stockpiles located within the limits of disturbance?	□Yes □No □ N/A		
Are stockpiles being protected from contact with stormwater using a temporary sediment barrier?	□Yes □No □ N/A		
Where needed, has cover or appropriate temporary vegetative or structural stabilization been utilized for stockpiles?	□Yes □No □ N/A		
Is the operator effectively managing the generation of dust through the use of water, chemicals, or minimization of exposed soil?	□Yes □No □ N/A		
Are designated washout areas (such as wheel washing stations, washout for concrete, paint, stucco, etc.) clearly marked on the site?	□Yes □No □ N/A		
Are vehicle fueling and maintenance areas properly located to prevent pollutants from impacting stormwater and sensitive receptors?	□Yes □No □ N/A		
(Other)			

(add more as necessary)

PROJECT:	INSPECTION DATE:
General Field Comments:	
SESC Plan Inspection Report	Page of

Photos:

(Associated photos – each photo should be dated and have a unique identification # and written description indicating where it is located within the project area. If a close up photo is required, it should be preceded with a photo including both the detail area and some type of visible fixed reference point. Photos should be annotated with Station numbers and other identifying information where needed.)

Photo #:	Station:
(insert Photo here)	Description:
(
	T
Photo #:	Station:
(insert Photo here)	Description:
Photo #:	Station:
(insert Photo here)	Description:
	Description:
DI	1 o:
Photo #:	Station:
(insert Photo here)	Description:
Photo #:	Station:
(insert Photo here)	Description:
(IIISELL I TIOLO TIELE)	Description.
	1
Photo #:	Station:
(insert Photo here)	Description:

(add more as necessary)

Corrective Action Log

TO BE FILLED OUT BY SITE OPERATOR

Describe repair, replacement, and maintenance of control measures, actions taken, date completed, and note the person that completed the work

trac	Location/Station	Corrective Action	Date Completed	Person Responsible
Оре	erator Signature:		Date:	

SESC Plan Inspection Report

Amendment Log

TO BE FILLED OUT BY SITE OPERATOR

Describe amendment(s) to be made to the SESC Plan, the date, and the person/title making the amendment. ALL amendments must be approved by the Site Owner.

#	Date	Description of Amendment	Amended by: Person/Title	Site Owner Must Initial
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

Add more lines/pages as necessary



Computations

 Project:
 Milton CAT
 Project # 73375

 Location:
 Cranston, RI
 Sheet: 1 of 2

 Calculated By:
 KC
 Date: May 17, 2023

 Checked By:
 Date:

Title: Temporary Sediment Trap Calculations

SE	SC Section 6 Temporary Sediment Trap
Ph	ase 2
Те	mporary Sediment Trap 2A
•	Volume = 134 cy per acre of drainage area
•	Runoff Area reaching sediment trap: 80700 sf
-	o 80,700 sf / 43,560 (sf/acre) = 1.85 acres
	O Required total storage = 1.85 acres x 134 cy/ac = 248 cy (6,696 cf)
	 Required wet storage = 0.5*total required storage = 248 cy*0.5 = 124 cy (3,348 cf)
	Required dry storage = 0.5*total required storage = 248 cy*0.5 = 124 cy (3,348 cf)
•	Dike length 325 LF
•	Wet Storage 325' x 10.3' x 1' = 3,348 CF
•	Dry Storage 325' x 12.3 x 0.84' = 3,348 CF
Те	mporary Sediment Trap 2B
•	Volume = 134 cy per acre of drainage area
•	Runoff Area reaching sediment trap: 113,215 sf
-	o 113,215 sf / 43,560 (sf/acre) = 2.6 acres
-	Required total storage = 2.6 acres x 134 cy/ac = 348 cy (9,396 cf)
	 Required wet storage = 0.5*total required storage = 348 cy*0.5 = 174 cy (4,698 cf)
	Required dry storage = 0.5*total required storage = 348 cy*0.5 = 174 cy (4,698 cf)
•	Dike length 380LF
•	Wet Storage 380' x 12.4' x 1' = 4,698 CF
•	Dry Storage 380' x 14.4 x 0.86' = 4,698 CF