VIRGINIA WESTERN
The Community's College

APEX COMPANIES, LLC

VPDES General Permit for Small Municipal Separate Storm Sewer Systems Permit No. VAR040030

Year 1 (July 1, 2018 – June 30, 2019) Annual Report

Submitted By:
Virginia Western Community College
P.O. Box 14007
Roanoke, VA 24038

Support Provided By:
Apex Companies, LLC
9700 Capital Court, Suite 100
Manassas, VA 20110

Original Submission Date: October 1, 2019

APEX

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The Community's College

Certification Statement

I certify under penalty of law 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 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 there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations.

Name: Dr. Robert Sandel
Title: President, VWCC

Signature: Robert H. Sandel

Date: 9/19/19

VWCC MS4 Program Plan Effectiveness and Summary of Changes

The Best Management Practices (BMPs) VWCC employs to meet Minimum Control Measure (MCM) requirements have proven effective throughout the 2018-2019 permit year. More detailed information on these BMPs and their effectiveness can be found in the following pages of this document. VWCC updated the Program Plan on May 1, 2019 in accordance with the new MS4 General Permit effective November 1, 2018. This Program Plan contained several changes, both to achieve compliance under the new permit, and to reflect changes within VWCC. The following is a summary of those changes.

- Total campus area is now 69.25 acres due to deeding 0.7451 acres to the City of Roanoke for the Colonial Avenue Project. Outfall #1 drainage area changed from 40.76 acres to 40.12 acres, and Outfall #2 drainage area changed from 2.59 acres to 2.48 acres
- BMPs are now organized according to subsection of each MCM;
- The new Program Plan no longer includes tracking target audience for MCM #1 in accordance with the new MS4 General Permit;
- The Program Plan now specifically states procedures for public involvement. A link to the Stormwater Management webpage is included;
- The Program Plan now includes a schedule for updating the MS4 map and information tables to ensure VWCC compliance with MCM #3 of the new MS4 General Permit;
- The Program Plan now includes plans to submit stormwater management facilities that discharge into the MS4 to the DEQ construction stormwater database and the DEQ BMP warehouse in accordance with the new MS4 General Permit; and
- The new Program Plan included a current (at the time of publishing) Nutrient Management Plan.

Future Program Plan changes:

- In the 2018-2019 Program Plan, the BMP addressing the high-priority water quality issue Stormwater Control and Protection specifically names VWCC students as the target audience. In future program plans, this BMP will be expanded to include the VWCC community and local community.

Minimum Control Measure #1 : Public Education and Outreach on Stormwater Impacts

VWCC implements a public education program through various BMPs to present educational materials to students, faculty, and staff. Outreach activities will help to inform the educational community about the impacts of stormwater discharges and steps that VWCC is taking to reduce pollutants in stormwater runoff. VWCC will use the following BMPs to meet the stated objective of MCM #1. The Responsible Party for BMPs identified here will be the Director of Facilities, Planning and Development.

High-Priority Water Quality Issue	Elements of BMP	Strategy Used to Communicate	Plans for Upcoming Permit Year
Protecting Waterways	Educate the VWCC community on methods of reducing human impacts on local waters.	**Media Materials** VWCC ran slideshows on different topics throughout the year over 30 TVs around campus which scrolls through slides during the business hours of the day. This included educational slides as well as advertising for water quality community events such as the Clean Valley Council Earth Summit, The Clean Valley Council Clean Valley Day, and the Clean Valley Council River Festival.	Continue to provide CCTV information slides on campus.
Stormwater Control and Protection	Promote stormwater protection with the VWCC community on removing debris from clogging stormwater drains and entering the stormwater system. **Change to future Program Plan:** In the current (2018-2019) Program Plan, this BMP specifically names VWCC students as the target audience. In future program plans, this BMP will be expanded to include the VWCC community and local community.	**Speaking engagements** VWCC presented at Glenvar High School – Career Expo. This Powerpoint presentation highlighted sustainable practices at VWCC campus site and buildings. See Appendix A for VWCC's invitation to present. VWCC presented at Envision Roanoke. This presentation emphasized campus sustainability and showed MS4 rain gardens and best practices. Envision is a community group planned by City of Roanoke and hosted on VWCC campus. Approximately 30 people from the community attended. See Appendix A for a summary of the presentation.	Continue to provide CCTV information slides on campus.
Water Supply, Treatment, and Disposal System	Provide course-credit opportunities for students to learn about stormwater management and environmental impacts of construction.	**Curriculum Materials** VWCC provided an introduction into water and wastewater treatment in course ENV 110 during the 2018-2019 school year. See Appendix A for a description of the course from the Online Student Catalog.	VWCC is providing water supply, treatment, and disposal courses during the Spring 2020 semesters.
Water Quality	Affix storm drain labels to curb inlets located on campus and surrounding properties.	**Signage** 100% of curb inlets have been labeled.	Maintain existing storm drain labels and label new inlets as constructed.

Minimum Control Measure #2 : Public Participation and Involvement

VWCC implements a public involvement program through various BMPs to promote public involvement with stormwater control measures on campus. Public involvement maintains dialogue between VWCC and the surrounding community about the impacts of stormwater discharges. VWCC will use the following BMPs to meet the stated objective of MCM #2. The Responsible Party for BMPs identified here will be the Director of Facilities, Planning and Development.

Proposed BMP	Elements of BMP	Compliance Status	Documentation of Compliance	Plans for Upcoming Permit Year
Procedures for Public Input	a. Promote public involvement through the use of the VWCC webpage. b. Develop procedures for responding to and maintaining documentation of public input. c. Make the current and archived MS4 documents and reports available to the public.	a. The VWCC Storm Water Management webpage contains language promoting public involvement, including information on how to recognize an illicit discharge. Contact information for the environmental department is listed. b. Public input is maintained and documented within the SCPS Facilities Planning & Development Department. The department has not recieved any public comments/complaints within the permit year. c. The updated MS4 program plan for the 2018-2019 permit year and current permit cycle, as well as the archived MS4 documents are available on the website.	Webpage: https://www.virginiawestern.edu/fpd/swm.php	VWCC will continue to promote public involvement, document public input and maintain public access to MS4 documents through the VWCC webpage
Public Participation	Promote local Household Hazardous Waste Disposal Days on campus to provide for the collection and safe disposal of hazardous materials.	**Disposal or colleciton Events:** VWCC promotes local Household Hazardous Waste disposal days on campus and on the facilities management website.	The VWCC Stormwater Management webpage (see above) contains a link to the Roanoke Valley Resource Authority webpage on Household Hazardous Waste (https://www.rvra.net/35/Household-Hazardous-Waste).	Continue to promote local Household Hazardous Waste Disposal Days on campus. These collection events are held the third Saturday of each month.
	Encourage students and staff to participate in the Spring CVC-sponsored Waterways Cleanup Days.	**Restoration:** April 6, 2018 Spring Cleanup Day. VWCC promoted this event on campus-wide CCTV.	See Appendix B: Spring Clean Valley Council Cleanup Slide.	Spring 2019 Waterways Cleanup Day.

Proposed BMP	Elements of BMP	Compliance Status	Documentation of Compliance	Plans for Upcoming Permit Year
Public Participation (cont.)	Additional Public Participation Events These additional events were not included in the Program Plan for this permit year, but they are included here as documentation of VWCC's continuing effort to promote opportunities for the public to participate in activities reducing stormwater pollutant loads, improving water quality, and supporting local restoration and clean-up.	**Educational Events:** November 2, 2018. Earth Summit. Partner with Clean Valley Council to promote this event which gives local high school students the opportunity to meet with environmental professionals to explore and understand current environmental topics. VWCC promoted this event on campus-wide CCTV.	See Appendix B: Earth Summit Slide.	Continue to document public participation events for future Annual Reports. Include public participation events expected to be ongoing in future Program Plan revisions.
		Educational Events: February 26, 2019. Sustainable Technologies Tour for Salem Highschool. VWCC hosted tour showing rain gardens, storm water structures, roof gardens and other sustainable features of VWCC campus site and buildings.	See Appendix B: Email Exchange and LEED Elements Map.	
		Educational Events: March, 06, 2019. Trees Virginia by VA Urban Forest Council: VWCC presented with Hills Studio the benefit of trees and absorptive planting and surfaces. Approximately 50 arborists and community members attended.	See Appendix B: Trees, Construction, & Uninvited Guests.	
		Educational Events: April 12, 2019. VWCC Spring Fling: VWCC sponsored table with displays and take-aways regarding storm water, clean water, waste management, LEED buildings, and environmental clean-up. Approximately 2,000 students attend the event and approximately 150 students stopped by the table.	See Appendix B: Spring Fling Event Table	
		Restoration/Educational Events: June, 29, 2019. Clean Valley Council, River Festival: Advertised on VWCC closed circuit TV's	See Appendix B: Clean Valley's Riverfest 2019	
		Educational Events: March, 2019. Community Arboretum Event: Taking care of vegetation and native species. Event at VWCC. VWCC Facilities Planning and Development and Hills Studio presented the Campus Master Plan and Colonial Avenue Redevelopment plan that respectively showed greening of campus and storm water management along the refurbished roadway. Permeable and impermeable surfaces were discussed. Both the VWCC Masterplan and Colonial Avenue projects will significantly reduce impermeable area.	See Appendix B: Arboretum Event Display and Promotion	

Minimum Control Measure #3 : Illicit Discharge Detection and Elimination

VWCC implements an illicit discharge detection/elimination program through various BMPs to identify and stop illicit discharges to VWCC's MS4. VWCC will use the following BMPs to meet the stated objective of MCM #3. The Responsible Party for BMPs identified here will be the Director of Facilities, Planning and Development.

Proposed BMP	Elements of BMP	Compliance Status	Documentation of Compliance	Plans for Upcoming Permit Year
Storm Sewer Map and Information Table	Map locations of all MS4 outfalls. List of outfall identifier numbers; names, locations, and impairment status of receiving waters; estimated MS4 acreage served; stormwater management facilities owned or operated by PWCS; and applicable TMDL names. Information table including the following information for eachoutfall/point of discharge: unique identifier; latitude and longitude; estimated acreage draining to each; name of receiving water; 6th Order HUC; impairement; predominant land use; EPA approved TMDLs	The information table and maps have been updated to reflect any changes occuring on or before June 30, 2019. These items were submitted to the DEQ before the July 1, 2019 deadline and confirmation of submission was received.	See Appendix C: Outfall Information Table and Maps.	Continue to update maps of storm sewer system maps and information table that includes all outfall locations and acreage as needed. VWCC has contracted Spectrum to geolocate stormwater structures to improve accuracy of future maps.
Illicit Discharge Investigations	Summarize any investigations of suspected illicit discharges conducted during the Permit Year.	September 12, 2018. City of Roanoke, Colonial Avenue project flooded and silt fence failed resulting in silt discharge beyond construction site. This was reported to City of Roanoke per email and photographs 9/12/2018. It was reported to DEQ by VWCC as silt infiltrated and clogged a VWCC rain garden. DEQ investigated and asked City of Roanoke (George Nevergold) for response which they provided. October 30, 2018. Removal of Petroleum Discharge. Clean up by W.E.L, Inc.	See Appendix C: Silt Discharge email exchange and photos; W.E.L. Inc. Shipping manifest	Continue to investigate sources of suspected illicit discharge identified during the next Permit Year.
Identify and Notify New Physical Interconnections	Notify downstream MS4 operators in writing identifying any known physical interconnection.	No written notifications were given in this permit year.	No MS4 interconnection letters were documented during this Permit Year.	Notify downstream MS4 operators of any new physical interconnections.
Annual Outfall Visual Screening	Perform annual visual outfall screening of all VWCC outfall locations. Report inspection results and detail of any follow-up actions necessitated.	Outfalls 1-5 were visually screened during the 2017-2018 Permit Year on August 2, 2017 By Apex. Outfalls were also visually inspected quarterly by VWCC Staff on October 4 and December 11, 2017, March 7, 2018.	See Appendix C: Dry Weather Outfall Inspection Forms.	Continue to visually inspect outfalls 1-5 during the next Permit Year.

Minimum Control Measure #4 : Construction Site Stormwater Runoff Control

VWCC implements a program to reduce pollutants in MS4 stormwater due to land disturbances from construction activities on campus. VDEQ certified E&S Inspectors conduct inspections during constructions projects to identify and stop construction runoff discharges to VWCC's MS4. VWCC will use the following BMPs to meet the stated objective of MCM #4. The Responsible Party for BMPs identified here will be the Director of Facilities, Planning and Development.

Proposed BMP	Elements of BMP	Compliance Status	Documentation of Compliance	Plans for Upcoming Permit Year
Erosion and Sediment Control During Construction	Prevent sediment and construction debris from earth-disturbing operations from contaminating waterways associated with the MS4.	VWCC requires engineering firms to be qualified in erosion and sediment control. These firms develop erosion and sediment control plans for development projects on campus. Land disturbing projects have been conducted in accordance with the current department approved standards and specifications for erosion and sediment control	See Appendix D: Annual Standards and Specifications for Erosion & Sediment Control and Stormwater Management.	Continue to use preventative measures to control erosion and sediment in future construction projects.

Permit Year	Regulated Land Disturbing Activities	Disturbed Acreage	Inspections Conducted	Enforcement Action Summary
Year 1	Construction of a new 72,000 s.f. STEM Facility. Project will green approximately 9 acre which is currently paved parking.	2.0 acres	2018 - 71 2019 - 25	No Enforcement Actions Required
Upcoming VWCC Projects (Permit Year 2018-2023 Year 2)	Continued construction of a new 72,000 s.f. STEM Facility. Project will green approximately 9 acre which is currently paved parking.	2.0 acres	TBD	N/A

Minimum Control Measure #5 : Post-Construction Stormwater Management in New Development and Redevelopment

VWCC implements a program to reduce pollutants in MS4 stormwater following the construction of new facilities on campus. VWCC will use the following BMPs to meet the stated objective of MCM #5. The Responsible Party for BMPs identified here will be the Director of Facilities, Planning and Development.

Proposed BMP	Elements of BMP	Compliance Status	Plans for Upcoming Permit Year
Legal Authorities	As a public institution of higher education that has developed standards and specifications in accordance with the Virginia Stormwater Management Act and the VSMP Regulations, VWCC implements the most recent department approved standards and specifications.	See Appendix D: Virginia's Community Colleges Annual Standards and Specifications for Erosion & Sediment Control and Stormwater Management	VWCC will continue to implement the most recent department approved standards and specifications.
Stormwater Management Facility Inspections	Visually inspect all stormwater infrastructure quarterly to identify major maintenance requirements. Conduct quarterly inspections and subsequent maintenance of structural stormwater controls. Revise inspection checklists to include new buildings upon completion. Conduct annual stormwater management facility inspections	Completed quarterly inspections September 30, 2018, December 30, 2018, March 29, 2019, and June 27, 2019. Structural repairs were coordinated through the VWCC work order management program. See Appendix E: Stormwater Management Quarterly Reports. See Appendix C for annual outfall and BMP inspection report.	VWCC will continue to perform inspections in the next permit year. SWM inspections will be conducted in tandem with dry weather outfall screening.
Maintenance of Low Impact Developments (LID) and BMPs	Maintain LIDs and BMPs to reduce the runoff volume discharging from campus from previously installed LIDs and BMPs such as rain gardens, underground detention systems, basins, rain cisterns, bioswales, and green roofs when possible.	During the permit year, VWCC conducted general maintenance on multiple bioretentions and stormwater structures throughout campus. See Appendix E for documentation.	VWCC will continue to maintain LIDs and BMPs to reduce the volume of runoff from construction.
Stormwater Management Facility Tracking and Reporting	Maintain and update an electronic database of stormwater management facilities discharging into the MS4. Include facility type, location description, acres treated (total and pervious vs impervious), installation completion date, HUC, any impaired discharge waters, ownership status, maintenance agreements, and most recent inspection date. Annually, submit this data for any new facilities brought on-line during the reporting year.	Best Management Practices were reported into the DEQ BMP Warehouse per Part I.E.5.g of the MS4 Permit. See Appendix E: Stormwater Management Facilities Database for a copy of the submitted database.	VWCC will continue to update the database and add any new facilities brought online in the next permit year.

Minimum Control Measure #6 : Pollution Prevention/Good Housekeeping for Facility Operations

VWCC implements an Operations and Maintenance program to reduce pollutants in MS4 stormwater and maintain housekeeping standards. Various Best Management Practices (BMPs) are used, which ultimately aim to prevent or reduce pollutant runoff from campus operations. VWCC will use the following BMPs to meet the stated objective of MCM #6. The Responsible Party for BMPs identified here will be the Director of Facilities, Planning, and Development.

Proposed BMP	Elements of BMP	Compliance Status	Plans for Upcoming Permit Year
Standard Operating Procedures (SOPs)	Section II.B.6.a - Develop and implement written procedures to minimize or prevent discharge from (1) Daily Operations (road, street, parking lot maintenance) (2) Equipment Maintenance and (3) Chemical Application, Storage, Transport, and Disposal (herbicides, pesticides, fertilizers). Incorporate plans into employee training.	No new SOPs have been developed. To view current SOPs, see the MS4 Program Plan (Version 5.0) Appendix A: SOPs.	SOPs will be reviewed for permit compliance.
High Priority Facilities and Stormwater Pollution Prevention Plan (SWPPPs)	Identify high-priority facilities within the MS4 area with a high potential of discharging pollutants. Develop and implement a specific stormwater pollution prevention plan (SWPPP) for all high-priority facilities identified.	In the previous permit cycle, the VWCC SWPPP was developed. This SWPPP has been updated annually. The current SWPPP and SWPPP inspections schedule can be found in Appendix F.	Continue implementing the SWPPP for the campus.
Nutrient Management Plan	Identify properties where nutrients are applied to a contiguous area of more than one acre. Develop and implement Nutrient Management Plans for those properties.	A total of 100% of identified lands have been implemented with Nutrient Management Plans. MS4 Program Plan (Version 6.0) Appendix C: Nutrient Management Plan. Total acreage where plans are required: 22.8 acres. Total acreage where plans have been implemented: 22.8 acres.	Continue implementing the Nutrient Management Plan for the campus.
Staff Training	Provide biennial training in the recognition and reporting of illicit discharges. Provide biennial training in good housekeeping and pollution prevention practices.	Stormwater Training was provided on August 1, 2018 by Apex. Thirteen employees attended the training event. Topics included recognition and reporting of Illicit discharges; practices during road, street, and parking lot maintenance; housekeeping wastewater management; TMDLS; and spill response. See Appendix F: Training Slides	Apex will provide staff refresher training in the upcoming permit year.
Recycling	Develop and implement a recycling program to reduce the campus waste stream.	VWCC removed 7,850 lbs of material from the waste stream through the recycling program in Year 1. Additionally, 46 tons of recyclable material was diverted from the landfill through WM. See Appendix F: Recycling Totals.	VWCC will continue to operate, monitor, and revise the recycling program as needed through permit cycle. Expand existing programs to increase the amount of on campus recycling by 5% annually.
Street Sweeping Program	Maintain a biannual street sweeping program to remove sediment and trash from the parking lots feeding the storm drain system on campus. Keep records of the amount of sediment and debris removed during street sweeping activities. Reduce the need to clean campus structural BMPs.	VWCC conducted street sweeping of all parking areas located on campus in Spring 2018. Approximately 10 cubic yards of debris was removed on April 28, 2019. See Appendix F: Street Sweeping Totals Invoice.	VWCC will continue its contract with street sweeping services to remove debris in the next permit year.

Special Conditions: Total Maximum Daily Load Implementation

VWCC has been assigned Waste Load Allocations (WLAs) by the Virginia Department of Environmental Quality (VDEQ) under Section I Part B Special Condition.

New Permit Timeline	TMDL Special Condition	Summary of Actions	Plans for Upcoming Permit Year
Local TMDL Action Plans for TMDLs approved by the EPA prior to July 1, 2013 are in accordance with the 2013-2018 MS4 General Permit. PWCS is currently updating these TMDL Action Plans for submittal to the DEQ by May 1, 2020, in accordance with II.B.1.a of the current (2018-2023) MS4 General Permit	Bacteriological TMDL Action Plan: A TMDL Action Plan will be implemented in multiple phases over more than one permit cycle to reduce the pollutant discharge in a manner consistent with the assumptions and requirements of the specific TMDL wasteload.	MS4 Program Plan (Version 6.0) Appendix F: Bacteriological TMDL Action Plan. Stream data was not available during Permit Year 5 via the Virginia Save Our Streams website referenced in the TMDL Action Plan. Sampling was not conducted this permit year due to hold time and laboratory time restrictions. VWCC conducted outfall IDDE inspections at all 5 outfalls. No sewage odor or visible detection of fecal material was present at the time of inspection. Pamphlets titled "Here's the Scoop...Do Your Doody & Clean Up After Your Pet" were handed to students and the community during the Annual Spring Fling event to educate the community on reduction of fecal matter introduction to local waterways.	VWCC will continue to implement actions outlined in each local TMDL Action Plan. PWCS will update each specific local TMDL action plan for submittal to the DEQ by May 1, 2020 per the current (2018-2023) MS4 General Permit. VWCC may conduct outfall sampling during the following permit years if budget is available. VWCC will continue to conduct outfall IDDE inspections at all 5 outfalls during the following permit years. VWCC will continue to promote good housekeeping for the students, faculty, and the community to reduce the discharge of bacteria.
	Benthic (Sediment) TMDL Action Plan: A TMDL Action Plan will be implemented in multiple phases over more than one permit cycle to reduce the pollutant discharge in a manner consistent with the assumptions and requirements of the specific TMDL wasteload.	MS4 Program Plan (Version 6.0) Appendix E: Benthic TMDL Action Plan. Stream data was not available during Permit Year 1 via the Virginia Save Our Streams website referenced in the TMDL Action Plan.Sampling was not conducted this permit year due to hold time and laboratory time restrictions. VWCC conducted outfall IDDE inspections at all 5 outfalls. No visible detection of sediment or debris was present at the time of inspection. Street sweeping was conducted on paved areas in Fall 2017 and Spring 2018. A total of 16.2 cubic yards of debris was removed from campus.	VWCC will continue to implement actions outlined in each local TMDL Action Plan. PWCS will update each specific local TMDL action plan for submittal to the DEQ by May 1, 2020 per the current (2018-2023) MS4 General Permit. VWCC may conduct outfall sampling during the following permit years if budget is available. VWCC will continue to conduct outfall IDDE inspections at all 5 outfalls during the following permit years. VWCC will continue to conduct street sweeping of the campus during the following permit years.

Appendix A
MCM #1 Supporting Documents

Glenvar High School
4549 Malus Drive
Salem, Virginia 24153
(540) 387-6536 Fax (540) 387-6347

Dear Business Partner:

We would like to invite you to Glenvar High School on November 27th to take part in the annual Career Expo. This event will be an excellent opportunity for you and our students to engage in conversations pertaining to academic and workplace skills necessary to meet the specific requirements for your profession. Hands-on, interactive activities are welcome. All grade levels 9-12 will be circulating through the Career Expo.

This experience is twofold for our students and you, as our business partner. First, it will allow our students to make better choices when planning for future academic coursework and programs offered at GHS, the Burton Center for Arts & Technology, the Regional Academy at VWCC, and the Roanoke Valley Governor's School for Science and Technology. Second, it will allow you to meet Roanoke Valley's future workforce and establish relationships that could lead to student internships and possible work-based partnerships. It is the continued goal at GHS to bring real-world experiences and problem solving to our classrooms. Project Based Learning activities involving our business partners are one way to make learning meaningful, exciting, and interactive!

We also hope this experience will help with our students' communication skills and prepare them for future professional interactions. Listed below are some possible questions our students may ask while visiting the Career Expo.

- Name & Job Title
- What is your educational background?
- What coursework would be most helpful to prepare for this job?
- What are your responsibilities?
- What is the entry level salary & salary scale?
- Are there opportunities for advancement?
- Are there further education opportunities?
- Is there travel involved?
- Describe
    - How your education/coursework helped you with your career/job skills
    - Working environment and stress related to the job
    - Various responsibilities within the organization
    - Appropriate dress/protective gear

The Career Expo will be held in classrooms and students will cycle through in four 20 minute sessions. You will have a designated classroom with access to electricity, a projector, and

Internet. Each classroom will have a teacher to assist with behavior and technology. You may begin setting up at 9:30 AM and the students' first session will begin at approximately 10:00 AM.

Please confirm your attendance through Katie Benson at kbenson@rcps.us or (540) 387-6536. She will also answer any questions or special requests about the Glenvar High School Career Expo. We thank you for your consideration and hope you will join us for a great learning experience!

Sincerely,

Corie Franklin

Dr. Corie Franklin
Principal

Sustainability is wise stewardship of natural resources. Added value – Enhance environment by intentional design.

Slide 3 – Point out Traffic Calming, Safety, Pedestrian environment.

Slide 4 - Roof Gardens, Solar Panels at Bookstore, Arboretum, Transforming parking lot 9 to green, there are 5 rain gardens on campus (water cleansing).

Slide 5 – Remove Parking add back in Buildings and Green Space. Landscape, absorptive surfaces.

Slide 6 & 7 – Traffic Calming: One lane each side, bike paths, sidewalks, public transportation, lighting, safety.

Slide 8 - Student Life Center (LEED Silver) features.

Slide 9 STEM – IGCC (International Green Construction Code Compliant) - Solar preheat hot water, LED lighting, Highly energy efficient equipment, Chemistry labs have chilled water to save H20.

Slide 10 Parking Garage: Central location used as curtain or back drop to new development. Enter from campus perimeter. Electric car terminals, car counter, motion sensor lighting, design for addition of solar panels at top deck.

Claude Moore – off campus: Sustainable kitchens, energy efficient appliances.

Point out on campus map MS4 Permit Structures - VWCC's rain gardens, absorptive swales, Bio Filters, UG tanks and detention ponds. Note absorptive and impermeable surfaces. Discuss VWCC clean water initiatives and BMP's.

Recycling paper, plastics. Shred day and household chemicals.

Best Practices for spills

Stormwater Pollution Prevention Plan

Faucets and toilets are low flow water saving

Older buildings retrofitted with LED lamps in existing light fixtures

Converted most outdoor and parking lot lighting to LED
Maintain Rain Gardens

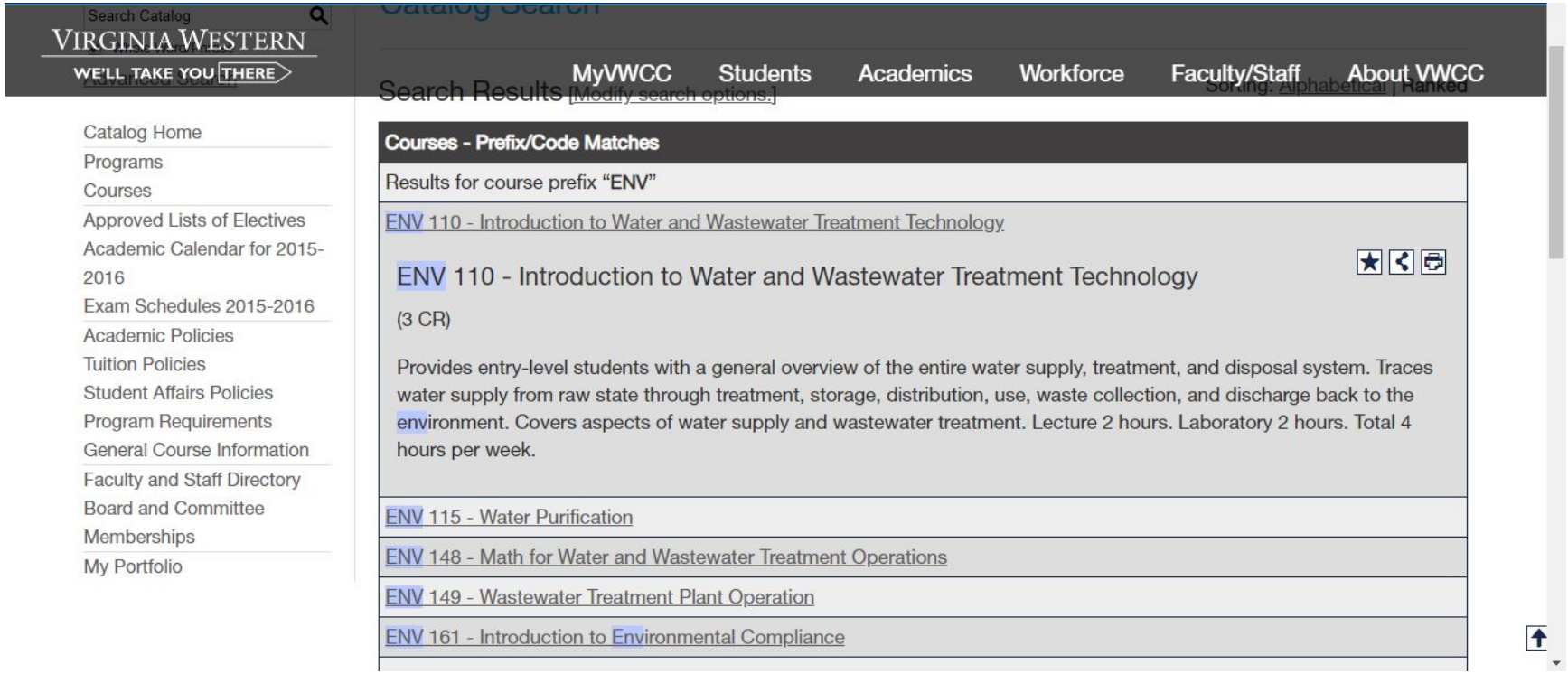
Motion Sensors in most classrooms and labs turn off lights when not in use

IT – Use "Thin Clients" at workstation and move to cloud, reduces energy of computing. Allows remote access.

IT – Electronic Documents to save paper

Public Transportation paid for M-F if VWCC student. Can be used to go places other than campus within metro system.

Partner with Roanoke City and surrounding counties.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Program Requirements
General Course Information
Faculty and Staff Directory
Board and Committee Memberships
My Portfolio
Courses - Prefix/Code Matches
Results for course prefix "ENV"
ENV 110 - Introduction to Water and Wastewater Treatment Technology
ENV 110 - Introduction to Water and Wastewater Treatment Technology
(3 CR)
Provides entry-level students with a general overview of the entire water supply, treatment, and disposal system. Traces water supply from raw state through treatment, storage, distribution, use, waste collection, and discharge back to the environment. Covers aspects of water supply and wastewater treatment. Lecture 2 hours. Laboratory 2 hours. Total 4 hours per week.
ENV 115 - Water Purification
ENV 148 - Math for Water and Wastewater Treatment Operations
ENV 149 - Wastewater Treatment Plant Operation
ENV 161 - Introduction to Environmental Compliance

Appendix B
MCM #2 Supporting Documents

Clean Valley Day

Clean Valley Day!

April 6th, 2019
9:00am -12:00pm
Clean up – your location of choice

Clean Valley Council welcomes individuals and groups to volunteer for our annual spring cleanup. Volunteers come from the Cities of Roanoke and Salem, the Town of Vinton and the Counties of Roanoke and Botetourt collect many tons of trash every year!

This valley-wide clean up promotes respect and care for the beautiful community we share. It is a great fun, team-building opportunity for corporations, civic organizations, youth and church groups. Pick your spot – a park, playground, roadside, stream bank or your very own neighborhood and help get rid of the litter and make it a cleaner, healthier place for all. Please help us to keep our valley beautiful and its waterways clean. All volunteers are provided with trash bags and gloves.

« All Events

Earth Summit

November 2

Earth Summit is a day-long event designed to give high school students from around the Roanoke Valley the chance to explore and understand current environmental topics. Students will meet with local environmental professionals, participate in break-out sessions, and connect with like-minded peers. Earth Summit began as the vision of Roanoke City student, Lexie Levin, to bring together students to discuss environmental concerns and work towards solutions. Registration is open to 10th-12th grade public & private school students in Botetourt County, City of Roanoke, City of Salem, County of Roanoke and the Town of Vinton.

+ GOOGLE CALENDAR + ICAL EXPORT

Details

Date:
November 2

Venue

Virginia Western
Community College

Margaret King

From: Terry Drumheller
Sent: Monday, February 25, 2019 1:40 PM
To: Kevin Witter
Subject: FW: Sustainable Technologies at VWCC
Attachments: Student Life Center - IDc1.1 - LEED Elements Map.pdf; 180926 Lots with STEM and Colonial - v1.pdf

This is awesome. Thanks!

From: Kevin Witter <KWitter@virginiawestern.edu>
Sent: Monday, February 25, 2019 1:35 PM
To: Terry Drumheller <TDrumheller@virginiawestern.edu>
Subject: RE: Sustainable Technologies at VWCC

Terry:

1. Fralin: Roof garden is located at 3rd floor, north end of corridor (side next to Fishburn). At end of corridor is view windows. Roof garden is not accessible due to mechanical equipment but is fully viewable. It is to right of equipment. This is a traditional 21 century tray system roof garden.
2. Roof garden on north side of Anderson Hall. The steps on left past the Brown elevator go up on top of a massive roof garden over top the mechanical room. Dirt here is 5 foot deep.
3. Rain gardens – collect water and filter it before release.
   3.1 Middle courtyard between Fralin and Business Science
   3.2 Front of Fralin along Colonial Ave.
   3.3 One in lower Lot 2 and one at FMS (College Services).
   3.4 Big one is located at back end of Lot 14 on top of hill north campus.
4. Bookstore has solar PV panels for electrical. Visible from Lot 1. Generates power that goes into bookstore supply.
5. STEM solar hydronic panels are for water preheating. This improves energy efficiency.
6. SLC – see LEED features attached.

Kevin

From: Terry Drumheller
Sent: Monday, February 25, 2019 1:23 PM
To: Kevin Witter <KWitter@virginiawestern.edu>; Reginald A. Walker <RWalker@virginiawestern.edu>
Subject: RE: Sustainable Technologies at VWCC

Hi gentlemen,

Sorry to be a pest, but would the group coming tomorrow be able to access any of the roof gardens? I could lead them, but I don't know where they are. Thanks.

Terry

From: Kevin Witter <KWitter@virginiawestern.edu>
Sent: Friday, January 25, 2019 3:06 PM
To: Terry Drumheller <TDrumheller@virginiawestern.edu>; Reginald A. Walker <RWalker@virginiawestern.edu>
Subject: RE: Sustainable Technologies at VWCC

Terry:
The Student Life Center is a LEED certified building. Innnovative geofoam technology was used to build the patio in the back on 3rd floor. Fralin is LEED compliant and has a small roof garden. There are also roof gardens from era of Anderson Hall. There is a small array of solar panels on the bookstore roof. STEM has solar hot water preheat on the low roof and is also first building with continuous envelope insulation. Glass in new buildings is super low E and energy efficient.

Outdoors we have several rain gardens, filtara units, underground and above ground water retention. The center landscaping at Fralin is a rain garden landscape feature. There are also absorptive swales at lot 14.

Kevin

*LEED (Leadership in Energy and Environmental Design) is a nationally accepted benchmark for the design, construction and operation of high performance green buildings

Trees, Construction & Uninvited Guests

Wednesday, March 6, 2019
Virginia Western Community College (VWCC)
Whitman Theatre, 3099 Colonial Ave. SW, Roanoke, VA 24015

7:15 – 8:00	**Check-in/Registration- Light refreshments**

Morning Session: VWCC, Roanoke VA — Indoor Lectures

8:00 – 8:05	Welcome / Announcements ➢ *Laura Reilly, City of Salem & President of Roanoke Urban Forest Council*
8:05 – 8:10	Trees Virginia's education mission ➢ *Ms. Barbara White, Virginia Department of Forestry*
8:10 – 9:00	**Managing Trees During Construction: Best Management Practices** ➢ *Dr. Chad Rigsby, Bartlett Tree Research Laboratories*
9:05 – 9:55	**Strength Loss and Safety While Working in EAB Compromised Trees** ➢ *Mr. Don Roppolo, Davey Tree Expert Company*
9:55 – 10:10	B R E A K
10:10 – 11:00	**The Ecology and Impact of Invasive Species in Our Forests** ➢ *Dr. Jacob Barney, Virginia Tech*
11:05 – 12:00	**Invasive Species Management: Untangling the Root of the Problem** ➢ *Dr. Jacob Barney, Virginia Tech* ➢ *Mr. Michael Burton, City of Richmond, Invasive Species Taskforce* ➢ *Mr. Jim Helvey, Virginia Dept. of Transportation,*
12:00 – 1:15	LUNCH PROVIDED

Afternoon Session: VWCC, Roanoke VA — Outdoor Demonstrations (30 minutes each)

STATION 1: **Backpack Sprayers…Identifying the Best for Your Needs**
Dr. Shawn Askew, Virginia Tech

STATION 2: **Designing Space for Trees Before & After Construction on Colonial Ave.**
Mr. Greg Webster & Laurice Ellsworth, Hill Studios & Kevin Witter, VWCC

STATION 3: **Chainsaw Safety for EAB Infested Trees**
Mr. Don Roppolo, Davey Tree Expert Company

Spring Fling Event Table – April 12, 2019

Clean Valley's RiverFest 2019

June 29,2019
Smith Park
11:00 AM – 4:00 PM

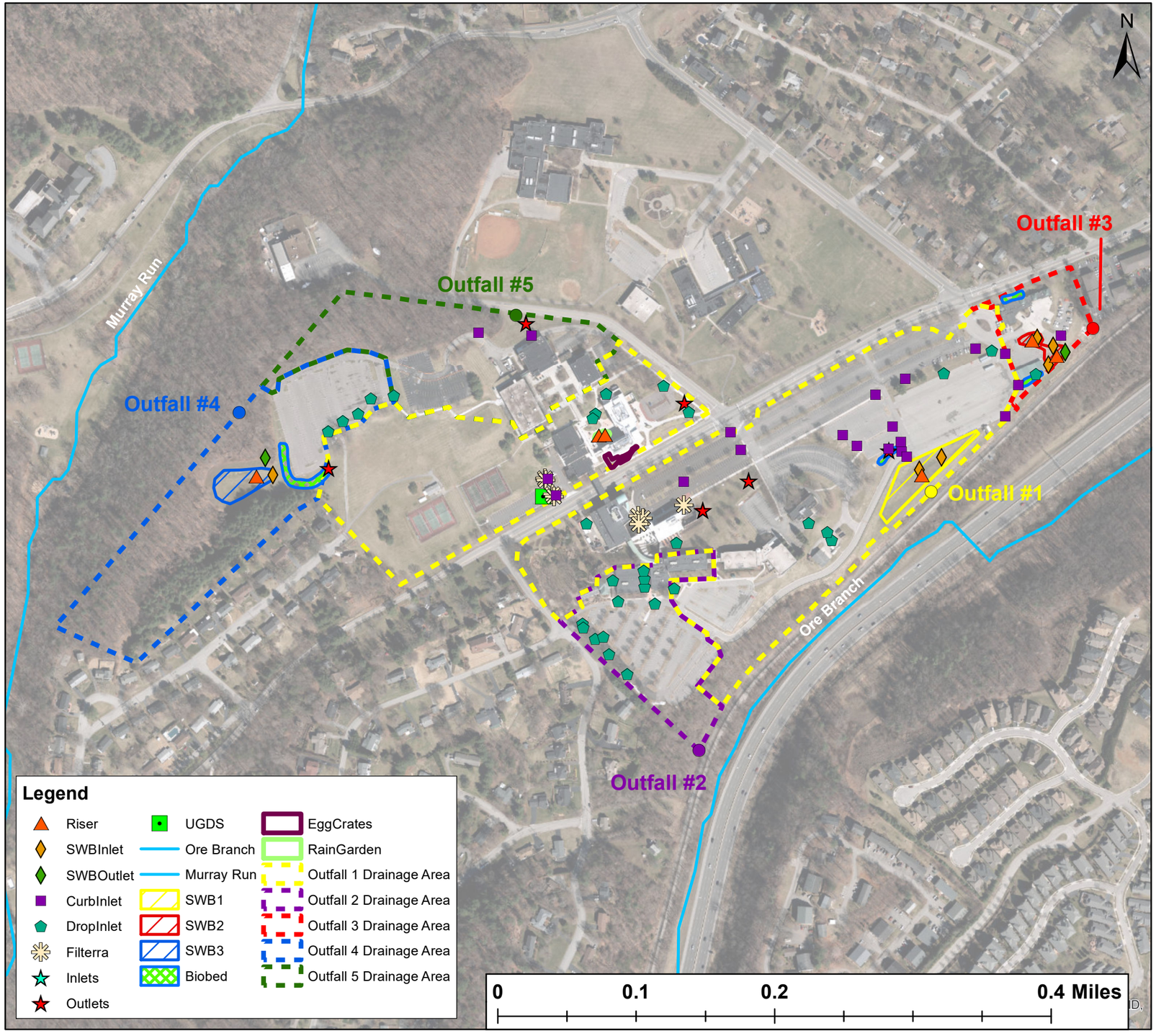
Clean Valley's RiverFest featuring the Recycled Regatta and Duck Race is a day filled with celebrating waterway health, recycling, litter prevention, recreation and the beautiful environment surrounding the Roanoke Valley! Teams build their own boats out of recycled materials and race down the Roanoke River.

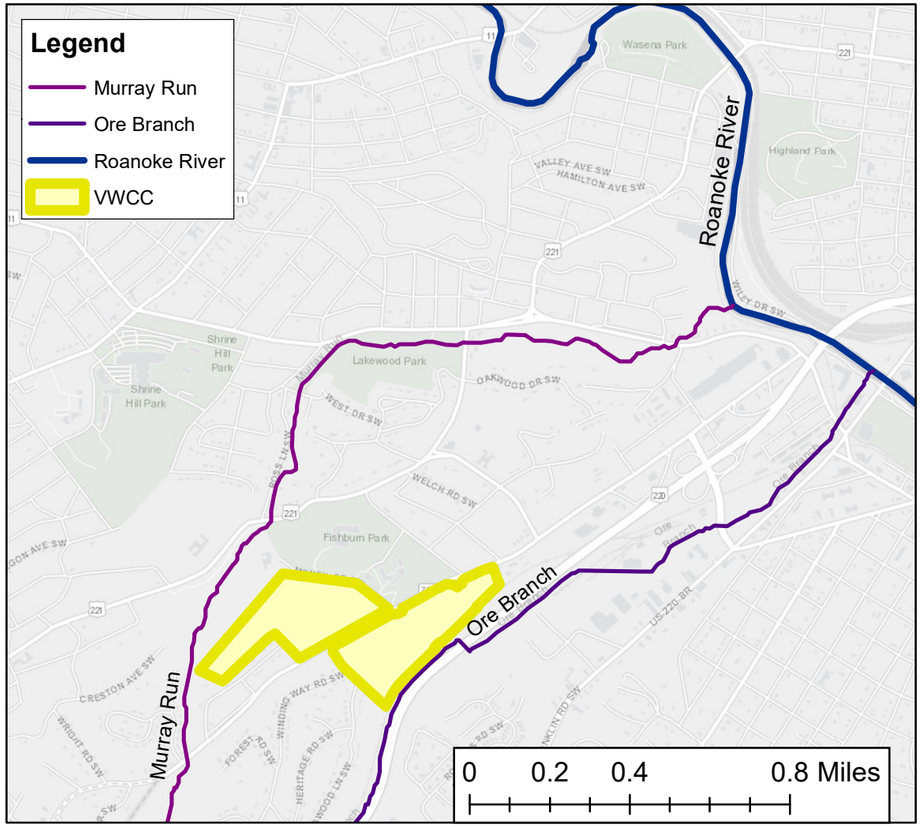
March 2019 Community Arboretum Event Display and Promotion

Appendix C
MCM #3 Supporting Documents

Virginia Western Community College - Information Table

Unique Identifier	Latitude and longitude	Est. Drained Acreage	Discharge Water Body	6th Order Hydrologic Unit Code	12 Digit HUC	Discharge Water Impairment	TMDL
1	37°14'45, 79°58'8	39.35	Ore Branch	RU14	30101010404	4A - Impaired	Bacteria 2006, Benthic 2006
2	37°14'35, 79°58'19	5.50	Ore Branch	RU14	30101010404	4A - Impaired	Bacteria 2006, Benthic 2006
3	37°14'51, 79°58'1	2.53	Ore Branch	RU14	30101010404	4A - Impaired	Bacteria 2006, Benthic 2006
4	37°14'48, 79°58'41	12.26	Murray Run	RU14	30101010404	4A - Impaired	Bacteria 2006, Benthic 2006
5	37°14'52, 79°58'28	9.1	Murray Run	RU14	30101010404	4A - Impaired	Bacteria 2006, Benthic 2006





Total Acres: 68.74
Watershed: Roanoke River
VaNWBDv5 (HU6): RU14
Hydrologic Unit Code (HUC): 30101010404
Impairment: 4A - Impaired
TMDLs: Bacteria (2006), and Benthic (2006)
Land Use: Commercial/Industrial - Educational

Outfall ID	Location	Est. Acreage	Discharge Water Body
#1	37.246012, -79.969082	39.35	Ore Branch
#2	37.243266, -79.972070	5.50	Ore Branch
#3	37.247752, -79.966996	2.53	Ore Branch
#4	37.246728, -79.978172	12.26	Murray Run
#5	37.247794, -79.974563	9.10	Murray Run

VIRGINIA WESTERN
The Community's College

Virginia Western Community College

3094 Colonial Ave SW
Roanoke, VA 24015

Outfalls and Stormwater Management Facilities Map

Permit Number VAR040030

Prepared By: Apex Companies, LLC
9700 Capital Court STE 100
Manassas, VA 20110
(703) 369-6730

Margaret King

From: Reginald A. Walker
Sent: Wednesday, September 12, 2018 2:59 PM
To: James Nuckles (James.Nuckles@roanokeva.gov)
Cc: Luke Pugh, P.E. (Luke.Pugh@RoanokeVa.gov); Blair Willard; Kevin Witter
Subject: FW: Construction Runoff
Attachments: KIMG0343_resized.JPG; KIMG0345_resized.JPG; KIMG0341_resized.JPG; FW: FW: Pictures of Water Overflow at the College Services Building

Importance: High

Follow Up Flag: Follow up
Flag Status: Flagged

James,

The attached photos show a compromised E&SC feature which resulted in damage to one of VWCC's rain gardens last night / early this morning. In light of the impending heavy precipitation over the next several days, please contact DLB and ask them to check &/or reestablish all of their E&SC controls as soon as possible to prevent further damage.

On a related note, VWCC has not received any copies of any documentation provided to DEQ related to the previous SWM incident (see attached email); please forward a copy of this response info to Kevin Witter as soon as possible (for our records & use in our reporting to DEQ). Thanks!

Reggie

Reginald A. Walker, RA, LEED AP
Project Manager, Facilities Planning and Development
Assistant Professor, BTT
Virginia Western Community College
Roanoke, VA
Office: 540-857-6456

From: Kevin Witter
Sent: Wednesday, September 12, 2018 2:24 PM
To: Reginald A. Walker <RWalker@virginiawestern.edu>
Subject: FW: Construction Runoff

Reggie:
Please notify City/DLB of the problem as it is sure to only get worse. They never did provide their response to the last illicit sediment discharge after DEQ asked them for explanation. If they responded to DEQ they never copied VWCC and we need that documentation from the last event.

Please pursue the corrections and documentation with them.
Kevin

From: Lisa Ridpath
Sent: Wednesday, September 12, 2018 2:11 PM
To: Peter Stocki <PStocki@virginiawestern.edu>; Kevin Witter <KWitter@virginiawestern.edu>; Reginald A. Walker

<RWalker@virginiawestern.edu>
Subject: RE: Construction Runoff

Also, the contractor moved the rain socks given the upcoming rains. This may be necessary since we are in a state of emergency with Hurricane Florence, but we need to make sure it is noted that we did not move them.
Thanks,
Lisa Ridpath

From: Peter Stocki
Sent: Wednesday, September 12, 2018 10:37 AM
To: Kevin Witter <KWitter@virginiawestern.edu>; Reginald A. Walker <RWalker@virginiawestern.edu>
Cc: Lisa Ridpath <LRidpath@virginiawestern.edu>
Subject: Construction Runoff

Kevin

Attached are photos of runoff from last night's rain FYI.

Peter

Sent from my T-Mobile 4G LTE device

Margaret King

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Cc: Lisa Ridpath <LRidpath@virginiawestern.edu>
Subject: Construction Runoff

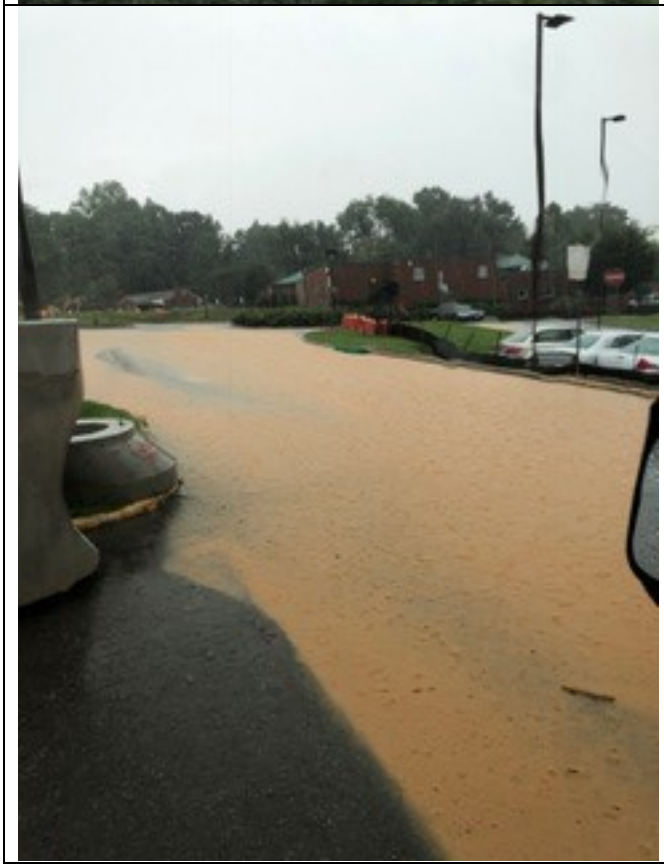
Kevin

Attached are photos of runoff from last night's rain FYI.

Peter

Sent from my T-Mobile 4G LTE device

City of Roanoke Colonial Avenue project silt discharge - September 12, 2018

	Rnk City Mud Pile Sept. 18.
	Rnk City Mud Flow to Retention Pond

	Sediment at curb inlet (1)
	Sediment at bioretention pond

	Sediment at curb inlet (2)

W.E.L., Inc.

BILL OF LADING / SHIPPING MANIFEST

P.O. BOX 109
CONCORD, VA 24538
434-993-2210 / FAX: 434-993-2287
EMERGENCY CONTACT: 800-847-2455

DOCUMENT NO._____

SHIPPER INFORMATION:

BUSINESS / CLIENT NAME: _____

MAILING ADDRESS: _____

SHIPMENT ORIGIN: _____

AUTHORIZED AGENT: _____ TELEPHONE NO. _____

HM	Hazard Class, Proper Shipping Name, ID Number, Packing Group	Containers No.	Containers Type	Total Quantity	Unit Wt/Vol
X	UN1203, Gasoline, 3, PG II				Gallons
X	NA1993, Fuel Oil, 3, PG III				Gallons
X	UN1993, Flammable Liquid, n.o.s., (Gasoline, Water), 3, PG II				Gallons
X	NA1993, Combustible Liquid, n.o.s., (Fuel Oil, Water), PG III				Gallons
	Used Oil				Gallons
	Petroleum Contact Water				Gallons
	Petroleum Impacted Absorbent Materials				
	Petroleum Impacted Soils				

Container Types - Tank Truck/Tank Trailer (TT), Dump Truck (DT), Drums (DM), Roll-Off Container (RO), Intermediate Bulk Container (IBC)

TYPE OF PROCESS GENERATING MATERIAL: _____

SPECIAL HANDLING INSTRUCTIONS / ADDITIONAL INFO: _____

The materials described above were consigned to the transporter designated below. I certify the foregoing is true to the best of my knowledge.

_____ _____
Signature of Authorized Agent ***Date***

TRANSPORTER INFORMATION:

NAME AND ADDRESS: **W.E.L., INC. – P.O. Box 109, CONCORD, VA 24538**

TELEPHONE NO: **800-847-2455** USDOT HAZMAT REGISTRATION: **061516 552 092YA** TRUCK /TRAILER NO.: _____

I certify that the materials in quantity described above were received by me for shipment.

_____ _____
Signature of Transporter ***Date***

DESIGNATED FACILITY:

NAME AND ADDRESS: _____

TELEPHONE NO. _____ PERMIT NO. _____

TOTAL QUANTITY MEASURED AT DELIVERY: _____

I certify that the materials described above were received by me. I further certify that this facility has all applicable permits, and approval for handling this material.

_____ _____
Signature of Authorized Agent ***Date***

General Information

Site: Virginia Western Community College **Inspector:** Kim Mervine
Precipitation in the past 72 hours? No
Is there storm water basin? Yes
How many? 3
How many outfalls? 5
How many Biobeds? 2

Parking Lot Conditions/Drop Inlets

Sediment/Debris/Trash build up in drop inlets No
Where?
Trash/Pet waste? No
Markers in place? Yes
Where?
Signs of illicit discharge at drop inlets? No
Overall Condition Satisfactory
Explain

Stormwater Basin

Basin ID SWB 1
Safety/Warning sign posted? Yes
If fence installed, is it in good condition? Yes
Erosion? Yes
Where? At pipes from sinkholes
Are there animal burrows? No
Where?
Sediment/Debris/Trash build up in basin? No
Where?
Condition of riser? Satisfactory
Explain
Condition of trash rack? Satisfactory
Explain
Sediment/Debris/Trash build up at trash rack? No
If a dry basin, is there standing water? No
Vegetation adequate in basin? Yes
Explain
Inlets/Outlet conditions? Satisfactory
Explain
Any pipe leaks, corrosion, or joint separations? No
Where?
Is spillway pipe clean and free of debris? N/A
Where?
Is there an odor? None
Other-Describe
Where?
If there is standing water or flow, what is the clarity? N/A

Where?
Water color? N/A
Describe
Are floatables present? N/A None
Describe
Where?
Are there deposits or stains? None
Where?
Signs of illicit discharge? No
Explain
Overall condition Satisfactory
Explain
Grade B
Comments

Basin ID SWB 2
Safety/Warning sign posted? No
If fence installed, is it in good condition? N/A
Erosion? No
Where?
Are there animal burrows? No
Where?
Sediment/Debris/Trash build up in basin? No
Where?
Condition of riser? Satisfactory
Explain
Condition of trash rack? N/A
Explain
Sediment/Debris/Trash build up at trash rack? N/A
If a dry basin, is there standing water? No
Vegetation adequate in basin? Yes
Explain
Inlets/Outlet conditions? Satisfactory
Explain
Any pipe leaks, corrosion, or joint separations? No
Where?
Is spillway pipe clean and free of debris? N/A
Where?
Is there an odor? None
Other-Describe
Where?
If there is standing water or flow, what is the clarity? N/A
Where?
Water color? N/A
Describe
Are floatables present? N/A None
Describe
Where?
Are there deposits or stains? None
Where?
Signs of illicit discharge? No
Explain

Overall condition Satisfactory
Explain
Grade A
Comments

Basin ID SWB 3
Safety/Warning sign posted? No
If fence installed, is it in good condition? N/A
Erosion? No
Where?
Are there animal burrows? No
Where?
Sediment/Debris/Trash build up in basin? No
Where?
Condition of riser? Satisfactory
Explain
Condition of trash rack? N/A
Explain
Sediment/Debris/Trash build up at trash rack? N/A
If a dry basin, is there standing water? No
Vegetation adequate in basin? Yes
Explain
Inlets/Outlet conditions? Satisfactory
Explain
Any pipe leaks, corrosion, or joint separations? No
Where?
Is spillway pipe clean and free of debris? N/A
Where?
Is there an odor? None
Other-Describe
Where?
If there is standing water or flow, what is the clarity? N/A
Where?
Water color? N/A
Describe
Are floatables present? N/A None
Describe
Where?
Are there deposits or stains? None
Where?
Signs of illicit discharge? No
Explain
Overall condition Satisfactory
Explain
Grade A
Comments

Outfalls

Outfall ID Outfall #1
Erosion? No
Explain
Sediment/Debris/Trash build up at outfalls? No

Where?
Damage to outfall structure? No
Explain
Any pipe leaks, corrosion, or joint separations? No
Where?
Is there an odor? None
Other-Describe
Explain
If there is water flow, what is the clarity? Clear
Where?
Water color? Clear
Describe
Are floatables present? None
Where?
Are there deposits or stains? None
Where?
Signs of illicit discharge? No
Explain
Overall condition Satisfactory
Explain
Grade A
Comments

Outfall ID Outfall #2
Erosion? No
Explain
Sediment/Debris/Trash build up at outfalls? No
Where?
Damage to outfall structure? No
Explain
Any pipe leaks, corrosion, or joint separations? No
Where?
Is there an odor? None
Other-Describe
Explain
If there is water flow, what is the clarity? N/A
Where?
Water color? N/A
Describe
Are floatables present? N/A
Where?
Are there deposits or stains? None
Where?
Signs of illicit discharge? No
Explain
Overall condition Satisfactory
Explain
Grade A
Comments

Outfall ID Outfall #3
Erosion? No
Explain

Sediment/Debris/Trash build up at outfalls? No
Where?
Damage to outfall structure? No
Explain
Any pipe leaks, corrosion, or joint separations? No
Where?
Is there an odor? None
Other-Describe
Explain
If there is water flow, what is the clarity? N/A
Where?
Water color? N/A
Describe
Are floatables present? N/A
Where?
Are there deposits or stains? None
Where?
Signs of illicit discharge? No
Explain
Overall condition Satisfactory
Explain
Grade A
Comments

Outfall ID Outfall #4
Erosion? Yes
Explain At outfall
Sediment/Debris/Trash build up at outfalls? No
Where?
Damage to outfall structure? No
Explain
Any pipe leaks, corrosion, or joint separations? No
Where?
Is there an odor? None
Other-Describe
Explain
If there is water flow, what is the clarity? N/A
Where?
Water color? N/A
Describe
Are floatables present? N/A
Where?
Are there deposits or stains? None
Where?
Signs of illicit discharge? No
Explain
Overall condition Satisfactory
Explain
Grade B
Comments

Outfall ID Outfall #5
Erosion? No

Explain
Sediment/Debris/Trash build up at outfalls? No
Where?
Damage to outfall structure? No
Explain
Any pipe leaks, corrosion, or joint separations? No
Where?
Is there an odor? None
Other-Describe
Explain
If there is water flow, what is the clarity? N/A
Where?
Water color? N/A
Describe
Are floatables present? N/A
Where?
Are there deposits or stains? None
Where?
Signs of illicit discharge? No
Explain
Overall condition Satisfactory
Explain
Grade A
Comments

Biobed

Biobed ID Biobed #1
Vegetation adequate? Yes
Explain
PVC in good condition? Yes
Explain
Flooding present? No
Overall condition Satisfactory
Explain
Comments

Biobed ID Biobed #1
Vegetation adequate? Yes
Explain
PVC in good condition? Yes
Explain
Flooding present? No
Overall condition Satisfactory
Explain
Comments

UGDS

Is there a UGDS? Yes
Could the UGDS be opened? Yes
Sediment/Debris/Trash build up? No
Explain
Need cleaning? No
Overall condition Satisfactory

Explain

1

SWB 3 Overview

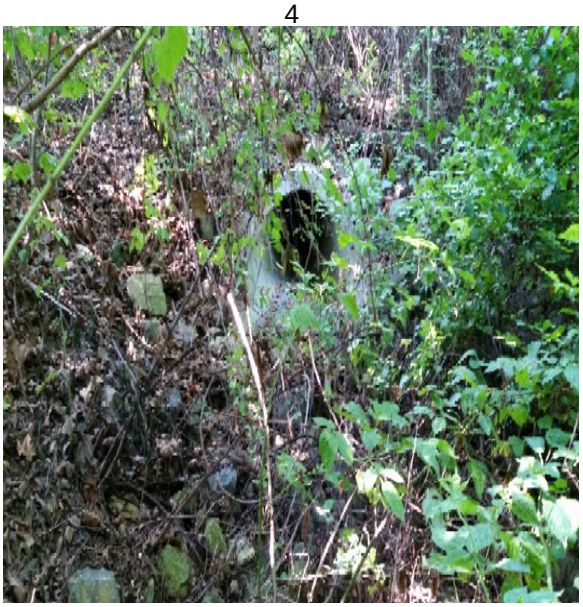
2

SWB 3 inlet

3

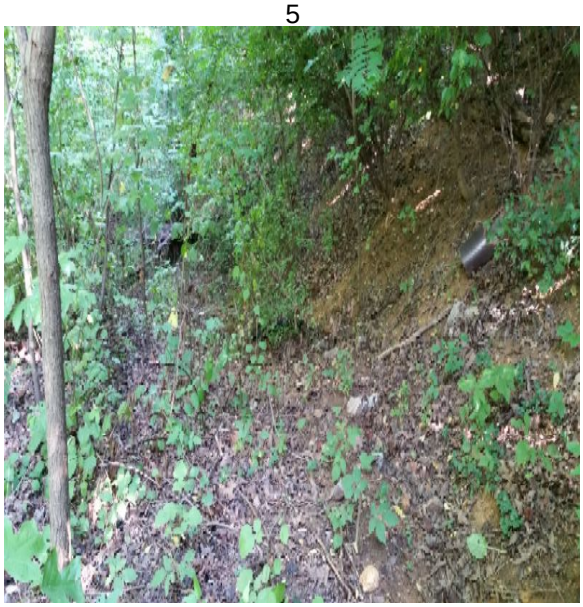
SWB 3 riser

4



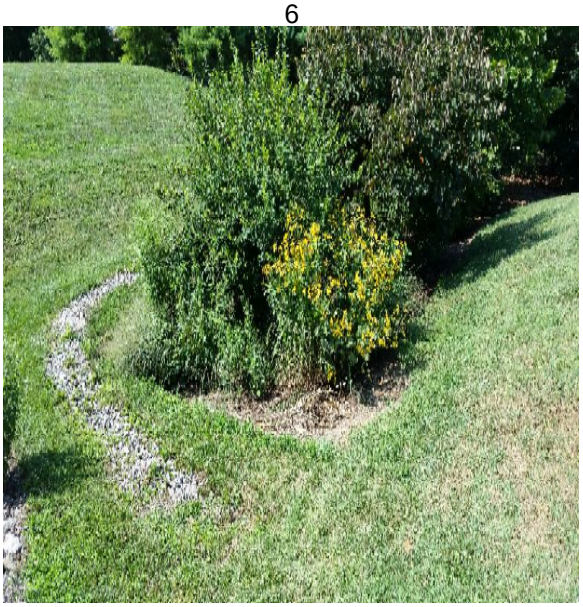
SWB 3 outlet

5



Outfall #4

6



Biobed 1 overview

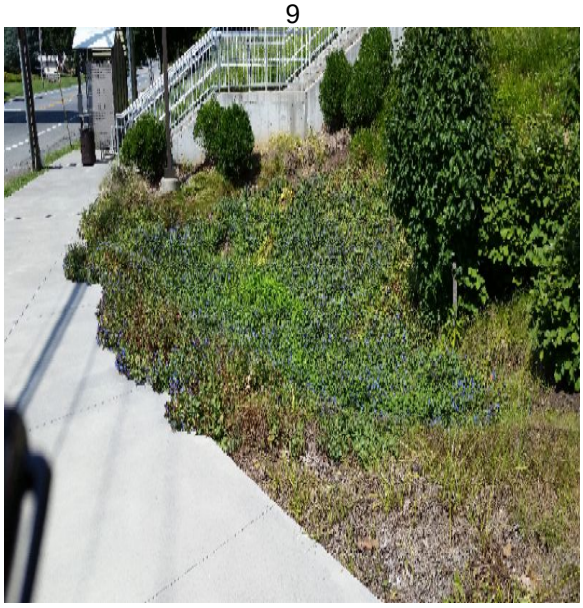
7

Biobed 1 overview 2

8

Raingarden

9



Egg crate system 1

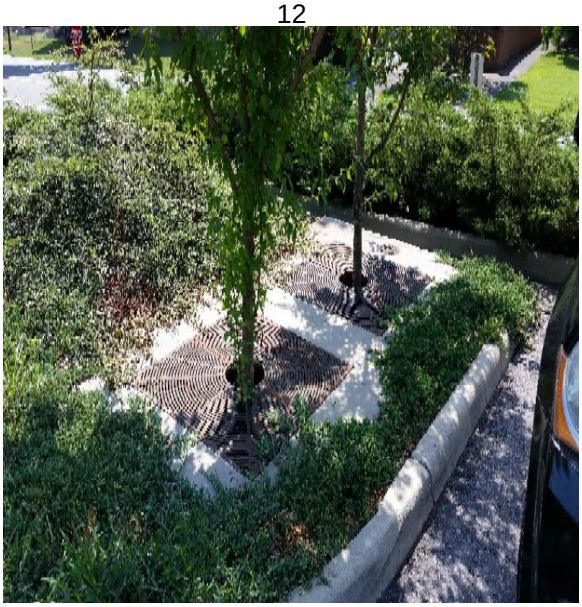
10

Egg crate system 2

11

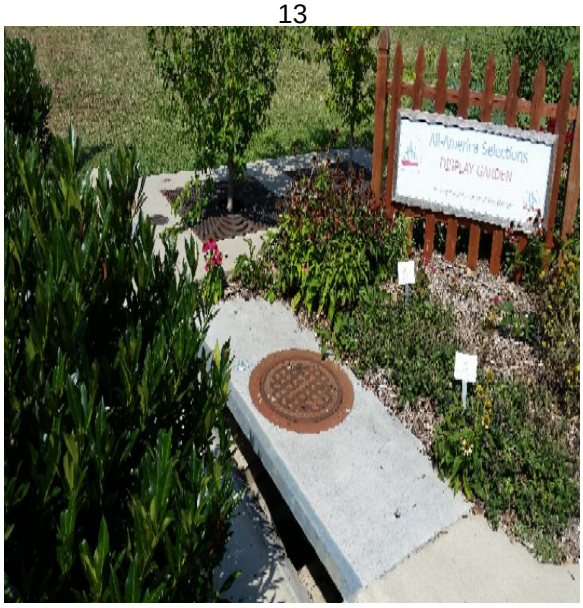
Drop inlet in parking lot

12



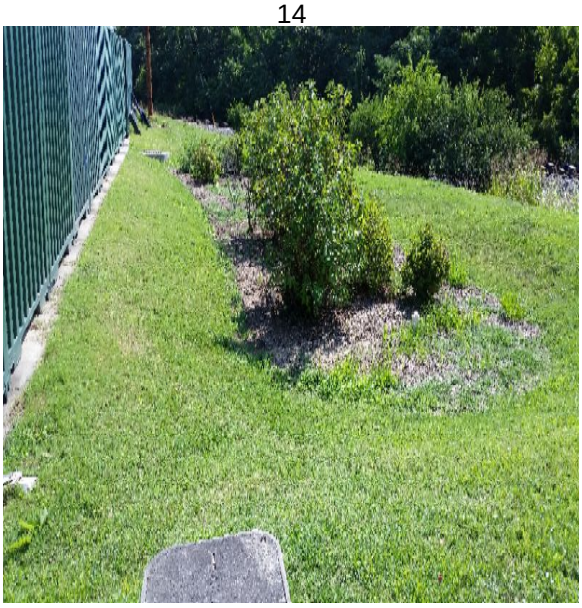
Filterras in parking lot

13



Filterras and curb inlet in parking lot

14



Biobed 2 overview

15

Curb inlet near SWB 1 with heavy erosion

16

SWB 1 overview

17

SWB 1 erosion around pipes

18

SWB 1 inlet

19

SWB 1 riser

20

Outfall #5

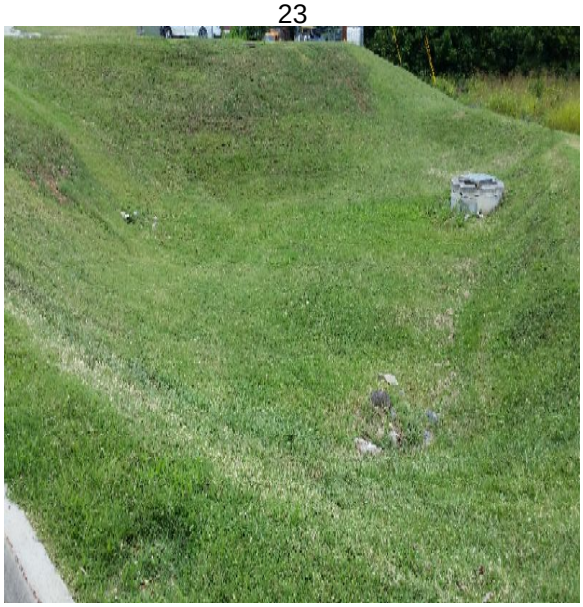
21

Outfall #2

22

Outfall #1

23



SWB 2 Overview

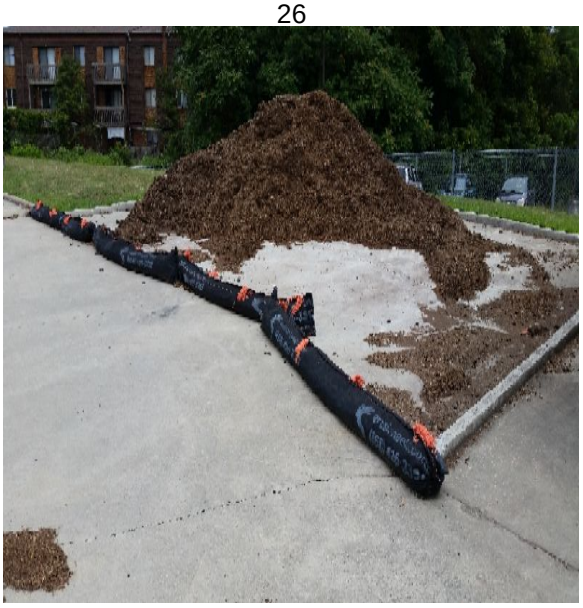
24

Outfall #3

25

First drainage area to SWB 2

26



Temporary mulch pile with socks

27

Biobed before SWB 1

Dry Weather Outfall Inspection Form

Location Information: Outlet at Motorcycle Container and railroad track

Date: 9/30/18 **Inspector:** [signature] **Time:** 9:21 AM

Outfall ID: (OR-1) OR-2 OR-3 MR-1 MR-2 **Outfall Location:** _____

Receiving Waterbody: _____

Photo Taken: Yes (No) **Photo ID:** We'll take Photo in Dec.

Weather: (Clear) Cloudy **Approximate Temp:** 87° **Wind Present:** Yes (No)

Precipitation in the past 3 days: No Yes _____ inches

Pipe Flow: None Trickle Steady 1/4 pipe flow or more

Color (if flow is present): _____

Inspection Information *Select all that are applicable*

Odor:	**Clarity**	**Floatables**	**Deposits/Stains**
(None)	(Clear)	(None)	(None)
Sewage	Slight Cloudiness	Sewage/toilet Paper	Oily
Rancid/Sour	Cloudy	Suds	Flowline
Petroleum/Gasoline	Opaque	Petroleum (sheen)	Paint
Sulfur		Other	
Chemical		Describe:	
Other			
Describe:			

Additional Information:

Sediment Condition: (Open) 1/4 Full 1/2 Full 3/4 Full Plugged

Structure Condition: (Excellent) Good Fair Poor

Vegetation Condition: Excellent (Good) Fair Poor

Trash/litter present: Yes (No) **Yard waste observed:** Yes (No)

General Comments: _____

_____

_____

Potential Sources / Actions Taken: _____

_____

_____

Follow up required: Yes No

Dry Weather Outfall Inspection Form

Location Information: Outlet down in the Weeds from lot 1, down at tracks

Date: 9/30/18 **Inspector:** [signature] **Time:** 9:45 Am

Outfall ID: OR-1 (OR-2) OR-3 MR-1 MR-2 **Outfall Location:** _____

Receiving Waterbody: _____

Photo Taken: Yes (No) **Photo ID:** Well take Photo in Dec

Weather: (Clear) Cloudy **Approximate Temp:** 87° **Wind Present:** Yes (No)

Precipitation in the past 3 days: (No) Yes _____ inches

Pipe Flow: (None) Trickle Steady 1/4 pipe flow or more

Color (if flow is present): _____

Inspection Information *Select all that are applicable*

Odor:	**Clarity**	**Floatables**	**Deposits/Stains**
(None)	(Clear)	(None)	(None)
Sewage	Slight Cloudiness	Sewage/toilet Paper	Oily
Rancid/Sour	Cloudy	Suds	Flowline
Petroleum/Gasoline	Opaque	Petroleum (sheen)	Paint
Sulfur		Other	
Chemical		Describe:	
Other			
Describe:			

Additional Information:

Sediment Condition: (Open) 1/4 Full 1/2 Full 3/4 Full Plugged

Structure Condition: (Excellent) Good Fair Poor

Vegetation Condition: Excellent (Good) Fair Poor

Trash/litter present: Yes (No) **Yard waste observed:** Yes (No)

General Comments: _____

_____

_____

Potential Sources / Actions Taken: _____

_____

_____

Follow up required: Yes No

Dry Weather Outfall Inspection Form

Location Information: Outlet at CS bldg.

Date: 9/30/18 **Inspector:** _____ **Time:** 10 AM

Outfall ID: OR-1 OR-2 (OR-3) MR-1 MR-2 **Outfall Location:** _____

Receiving Waterbody: _____

Photo Taken: Yes (No) **Photo ID:** Well take Photo in Dec

Weather: (Clear) Cloudy **Approximate Temp:** 87° **Wind Present:** Yes (No)

Precipitation in the past 3 days: (No) Yes _____ inches

Pipe Flow: (None) Trickle Steady 1/4 pipe flow or more

Color (if flow is present): _____

Inspection Information *Select all that are applicable*

Odor:	**Clarity**	**Floatables**	**Deposits/Stains**
(None)	(Clear)	(None)	(None)
Sewage	Slight Cloudiness	Sewage/toilet Paper	Oily
Rancid/Sour	Cloudy	Suds	Flowline
Petroleum/Gasoline	Opaque	Petroleum (sheen)	Paint
Sulfur		Other	
Chemical		Describe:	
Other			
Describe:			

Additional Information:

Sediment Condition: (Open) 1/4 Full 1/2 Full 3/4 Full Plugged

Structure Condition: Excellent Good Fair Poor

Vegetation Condition: Excellent Good Fair Poor

Trash/litter present: Yes (No) **Yard waste observed:** Yes (No)

General Comments: _____

_____

_____

Potential Sources / Actions Taken: _____

_____

_____

Follow up required: Yes No

Dry Weather Outfall Inspection Form

Location Information: Outlet lot 14 in Woods

Date: 9/30/18 **Inspector:** [signature] **Time:** 10:20 AM

Outfall ID: OR-1 OR-2 OR-3 (MR-1) MR-2 **Outfall Location:** _____

Receiving Waterbody: _____

Photo Taken: Yes (No) **Photo ID:** Well take Photos in Dec

Weather: Clear Cloudy **Approximate Temp:** 87° **Wind Present:** Yes (No)

Precipitation in the past 3 days: No Yes _____ inches

Pipe Flow: (None) Trickle Steady 1/4 pipe flow or more

Color (if flow is present): _____

Inspection Information *Select all that are applicable*

Odor:	**Clarity**	**Floatables**	**Deposits/Stains**
(None)	(Clear)	(None)	(None)
Sewage	Slight Cloudiness	Sewage/toilet Paper	Oily
Rancid/Sour	Cloudy	Suds	Flowline
Petroleum/Gasoline	Opaque	Petroleum (sheen)	Paint
Sulfur		Other	
Chemical		Describe:	
Other			
Describe:			

Additional Information:

Sediment Condition: (Open) 1/4 Full 1/2 Full 3/4 Full Plugged

Structure Condition: (Excellent) Good Fair Poor

Vegetation Condition: Excellent (Good) Fair Poor

Trash/litter present: Yes (No) **Yard waste observed:** Yes (No)

General Comments: _____

_____

_____

Potential Sources / Actions Taken: _____

_____

_____

Follow up required: Yes No

Dry Weather Outfall Inspection Form

Location Information: Back of Parking lot 14

Date: 9/30/18 **Inspector:** _____ **Time:** 11:00 AM

Outfall ID: OR-1 OR-2 OR-3 MR-1 (MR-2) **Outfall Location:** _____

Receiving Waterbody: _____

Photo Taken: Yes (No) **Photo ID:** Will take Photo in Dec

Weather: (Clear) Cloudy **Approximate Temp:** 87° **Wind Present:** Yes (No)

Precipitation in the past 3 days: (No) Yes _____ inches

Pipe Flow (None) Trickle Steady 1/4 pipe flow or more

Color (if flow is present): _____

Inspection Information *Select all that are applicable*

Odor:	**Clarity**	**Floatables**	**Deposits/Stains**
(None)	(Clear)	(None)	(None)
Sewage	Slight Cloudiness	Sewage/toilet Paper	Oily
Rancid/Sour	Cloudy	Suds	Flowline
Petroleum/Gasoline	Opaque	Petroleum (sheen)	Paint
Sulfur		Other	
Chemical		Describe:	
Other			
Describe:			

Additional Information:

Sediment Condition: (Open) 1/4 Full 1/2 Full 3/4 Full Plugged

Structure Condition: (Excellent) Good Fair Poor

Vegetation Condition: Excellent (Good) Fair Poor

Trash/litter present: Yes (No) **Yard waste observed:** Yes (No)

General Comments: _____

_____

_____

Potential Sources / Actions Taken: _____

_____

_____

Follow up required: Yes No

Dry Weather Outfall Inspection Form

Location Information: OR-2

Date: 12/30/18 **Inspector:** JL Rock **Time:** Day

Outfall ID: OR-1 ~~OR-2~~ OR-3 MR-1 MR-2 **Outfall Location:** _____

Receiving Waterbody: _____

Photo Taken: ~~Yes~~ No **Photo ID:** _____

Weather: ~~Clear~~ Cloudy **Approximate Temp:** Mid 40's **Wind Present:** Yes ~~No~~

Precipitation in the past 3 days: ~~No~~ Yes _____ inches

Pipe Flow: ~~None~~ Trickle Steady 1/4 pipe flow or more

Color (if flow is present): _____

Inspection Information *Select all that are applicable*

Odor:	**Clarity**	**Floatables**	**Deposits/Stains**
~~None~~	~~Clear~~	~~None~~	~~None~~
Sewage	Slight Cloudiness	Sewage/toilet Paper	Oily
Rancid/Sour	Cloudy	Suds	Flowline
Petroleum/Gasoline	Opaque	Petroleum (sheen)	Paint
Sulfur		Other	
Chemical		Describe:	
Other			
Describe:			

Additional Information:

Sediment Condition: ~~Open~~ 1/4 Full 1/2 Full 3/4 Full Plugged

Structure Condition: ~~Excellent~~ Good Fair Poor

Vegetation Condition: ~~Excellent~~ Good Fair Poor

Trash/litter present: Yes ~~No~~ **Yard waste observed:** Yes No

General Comments: _____

_____

_____

Potential Sources / Actions Taken: _____

_____

_____

Follow up required: Yes ~~No~~

Dry Weather Outfall Inspection Form

Location Information: OR-1

Date: 12/30/18 **Inspector:** J Rock **Time:** Day

Outfall ID: ~~OR-1~~ OR-2 OR-3 MR-1 MR-2 **Outfall Location:** _____

Receiving Waterbody: _____

Photo Taken: ~~Yes~~ No **Photo ID:** _____

Weather: ~~Clear~~ Cloudy **Approximate Temp:** Mid 40s **Wind Present:** Yes ~~No~~

Precipitation in the past 3 days: ~~No~~ Yes _____ inches

Pipe Flow: None Trickle ~~Steady~~ 1/4 pipe flow or more

Color (if flow is present): Clear

Inspection Information *Select all that are applicable*

Odor:	**Clarity**	**Floatables**	**Deposits/Stains**
~~None~~	~~Clear~~	~~None~~	~~None~~
Sewage	Slight Cloudiness	Sewage/toilet Paper	Oily
Rancid/Sour	Cloudy	Suds	Flowline
Petroleum/Gasoline	Opaque	Petroleum (sheen)	Paint
Sulfur		Other	
Chemical		Describe:	
Other			
Describe:			

Additional Information:

Sediment Condition: ~~Open~~ 1/4 Full 1/2 Full 3/4 Full Plugged

Structure Condition: ~~Excellent~~ Good Fair Poor

Vegetation Condition: Excellent ~~Good~~ Fair Poor

Trash/litter present: Yes ~~No~~ **Yard waste observed:** Yes No

General Comments: _____

_____

_____

Potential Sources / Actions Taken: _____

_____

_____

Follow up required: Yes ~~No~~

Dry Weather Outfall Inspection Form

Location Information: OR-3

Date: 12/30/18 **Inspector:** J Rock **Time:** Day

Outfall ID: OR-1 OR-2 ~~OR-3~~ MR-1 MR-2 **Outfall Location:** _____

Receiving Waterbody: _____

Photo Taken: ~~Yes~~ No **Photo ID:** _____

Weather: ~~Clear~~ Cloudy **Approximate Temp:** Mid 40's **Wind Present:** Yes ~~No~~

Precipitation in the past 3 days: ~~No~~ Yes _____ inches

Pipe Flow: ~~None~~ Trickle Steady 1/4 pipe flow or more

Color (if flow is present): _____

Inspection Information *Select all that are applicable*

Odor:	**Clarity**	**Floatables**	**Deposits/Stains**
~~None~~	~~Clear~~	~~None~~	~~None~~
Sewage	Slight Cloudiness	Sewage/toilet Paper	Oily
Rancid/Sour	Cloudy	Suds	Flowline
Petroleum/Gasoline	Opaque	Petroleum (sheen)	Paint
Sulfur		Other	
Chemical		Describe:	
Other			
Describe:			

Additional Information:

Sediment Condition: ~~Open~~ 1/4 Full 1/2 Full 3/4 Full Plugged

Structure Condition: ~~Excellent~~ Good Fair Poor

Vegetation Condition: Excellent ~~Good~~ Fair Poor

Trash/litter present: Yes ~~No~~ **Yard waste observed:** Yes No

General Comments: _____

Awesome

Potential Sources / Actions Taken: _____

Follow up required: Yes ~~No~~

Dry Weather Outfall Inspection Form

Location Information: MR-1

Date: 12/30/18 **Inspector:** John Rock **Time:** Day

Outfall ID: OR-1 OR-2 OR-3 (MR-1) MR-2 **Outfall Location:** Near lot 14

Receiving Waterbody: _____

Photo Taken: ~~Yes~~ No **Photo ID:** _____

Weather: ~~Clear~~ Cloudy **Approximate Temp:** Mid 40's **Wind Present:** Yes ~~No~~

Precipitation in the past 3 days: ~~No~~ Yes _____ inches

Pipe Flow: ~~None~~ Trickle Steady 1/4 pipe flow or more

Color (if flow is present): _____

Inspection Information *Select all that are applicable*

Odor:	**Clarity**	**Floatables**	**Deposits/Stains**
~~None~~	~~Clear~~	~~None~~	~~None~~
Sewage	Slight Cloudiness	Sewage/toilet Paper	Oily
Rancid/Sour	Cloudy	Suds	Flowline
Petroleum/Gasoline	Opaque	Petroleum (sheen)	Paint
Sulfur		Other	
Chemical		Describe:	
Other			
Describe:			

Additional Information:

Sediment Condition: ~~Open~~ 1/4 Full 1/2 Full 3/4 Full Plugged

Structure Condition: ~~Excellent~~ Good Fair Poor

Vegetation Condition: ~~Excellent~~ Good Fair Poor

Trash/litter present: Yes ~~No~~ **Yard waste observed:** Yes No

General Comments: Great !!!

Potential Sources / Actions Taken: _____

Follow up required: Yes ~~No~~

Dry Weather Outfall Inspection Form

Location Information: MR-2

Date: 12/30/18 **Inspector:** GL Rock **Time:** Day

Outfall ID: OR-1 OR-2 OR-3 MR-1 (MR-2) **Outfall Location:** Over in Woods Lot 14

Receiving Waterbody: _____

Photo Taken: (Yes) No **Photo ID:** _____

Weather: (Clear) Cloudy **Approximate Temp:** Mid 40's **Wind Present:** Yes (No)

Precipitation in the past 3 days: (No) Yes _____ inches

Pipe Flow: None Trickle Steady 1/4 pipe flow or more

Color (if flow is present): None

Inspection Information *Select all that are applicable*

Odor:	**Clarity**	**Floatables**	**Deposits/Stains**
~~None~~	~~Clear~~	~~None~~	~~None~~
Sewage	Slight Cloudiness	Sewage/toilet Paper	Oily
Rancid/Sour	Cloudy	Suds	Flowline
Petroleum/Gasoline	Opaque	Petroleum (sheen)	Paint
Sulfur		Other	
Chemical		Describe:	
Other			
Describe:			

Additional Information:

Sediment Condition: ~~Open~~ 1/4 Full 1/2 Full 3/4 Full Plugged

Structure Condition: ~~Excellent~~ Good Fair Poor

Vegetation Condition: Excellent ~~Good~~ Fair Poor

Trash/litter present: Yes ~~No~~ **Yard waste observed:** Yes No

General Comments: Made me wish I was a storm drain

Potential Sources / Actions Taken: _____

Follow up required: Yes ~~No~~

Dry Weather Outfall Inspection Form

Location Information: Near Rail Road

Date: 3/29/2019 **Inspector:** [signature] **Time:** Day

Outfall ID: (OR-1) OR-2 OR-3 MR-1 MR-2 **Outfall Location:** _____

Receiving Waterbody: _____

Photo Taken: (Yes) No **Photo ID:** _____

Weather: (Clear) Cloudy **Approximate Temp:** 10 AM **Wind Present:** Yes (No)

Precipitation in the past 3 days: (No) Yes _____ inches

Pipe Flow: None Trickle (Steady) 1/4 pipe flow or more

Color (if flow is present): Clear

Inspection Information *Select all that are applicable*

Odor:	**Clarity**	**Floatables**	**Deposits/Stains**
(None)	(Clear)	(None)	(None)
Sewage	Slight Cloudiness	Sewage/toilet Paper	Oily
Rancid/Sour	Cloudy	Suds	Flowline
Petroleum/Gasoline	Opaque	Petroleum (sheen)	Paint
Sulfur		Other	
Chemical		Describe:	
Other			
Describe:			

Additional Information:

Sediment Condition: (Open) 1/4 Full 1/2 Full 3/4 Full Plugged

Structure Condition: (Excellent) Good Fair Poor

Vegetation Condition: Excellent (Good) Fair Poor

Trash/litter present: Yes (No) **Yard waste observed:** Yes (No)

General Comments: Looks like a Drain, You really should see this !!!

_____

_____

Potential Sources / Actions Taken: _____

_____

_____

Follow up required: Yes (No)

Dry Weather Outfall Inspection Form

Location Information: Over the bank from Brown

Date: 3/29/2019 **Inspector:** QL **Time:** _____

Outfall ID: OR-1 OR-2 OR-3 (MR-1) MR-2 **Outfall Location:** _____

Receiving Waterbody: ?

Photo Taken: (Yes) No **Photo ID:** _____

Weather: (Clear) Cloudy **Approximate Temp:** 11:42 AM **Wind Present:** Yes (No)

Precipitation in the past 3 days: (No) Yes _____ inches

Pipe Flow: (None) Trickle Steady 1/4 pipe flow or more

Color (if flow is present): _____

Inspection Information *Select all that are applicable*

Odor:	**Clarity**	**Floatables**	**Deposits/Stains**
(None)	(Clear)	(None)	(None)
Sewage	Slight Cloudiness	Sewage/toilet Paper	Oily
Rancid/Sour	Cloudy	Suds	Flowline
Petroleum/Gasoline	Opaque	Petroleum (sheen)	Paint
Sulfur		Other	
Chemical		Describe:	
Other			
Describe:			

Additional Information:

Sediment Condition: (Open) 1/4 Full 1/2 Full 3/4 Full Plugged

Structure Condition: (Excellent) Good Fair Poor

Vegetation Condition: Excellent (Good) Fair Poor

Trash/litter present: Yes (No) **Yard waste observed:** Yes (No)

General Comments: I get misty eyed

Potential Sources / Actions Taken: _____

Follow up required: Yes (No)

Dry Weather Outfall Inspection Form

Location Information: Lot 14

Date: 3/29/2019 **Inspector:** JL **Time:** _____

Outfall ID: OR-1 OR-2 OR-3 MR-1 (MR-2) **Outfall Location:** Lot 14

Receiving Waterbody: ? Lot 14 I guess

Photo Taken: (Yes) No **Photo ID:** _____

Weather: (Clear) Cloudy **Approximate Temp:** 11:21 AM **Wind Present:** Yes (No)

Precipitation in the past 3 days: (No) Yes _____ inches

Pipe Flow: (None) Trickle Steady 1/4 pipe flow or more

Color (if flow is present): _____

Inspection Information *Select all that are applicable*

Odor:	**Clarity**	**Floatables**	**Deposits/Stains**
(None)	(Clear)	(None)	(None)
Sewage	Slight Cloudiness	Sewage/toilet Paper	Oily
Rancid/Sour	Cloudy	Suds	Flowline
Petroleum/Gasoline	Opaque	Petroleum (sheen)	Paint
Sulfur		Other	
Chemical		Describe:	
Other			
Describe:			

Additional Information:

Sediment Condition: (Open) 1/4 Full 1/2 Full 3/4 Full Plugged

Structure Condition: (Excellent) (Good) Fair Poor

Vegetation Condition: Excellent (Good) Fair Poor

Trash/litter present: Yes (No) **Yard waste observed:** Yes (No)

General Comments: Work of Art

Potential Sources / Actions Taken: _____

Follow up required: Yes (No)

Dry Weather Outfall Inspection Form

Location Information: Rail Road track

Date: 3/29/2019 **Inspector:** JL **Time:** _____

Outfall ID: OR-1 OR-2 OR-3 MR-1 MR-2 **Outfall Location:** See top of page

Receiving Waterbody: ?

Photo Taken: ~~Yes~~ No **Photo ID:** _____

Weather: ~~Clear~~ Cloudy **Approximate Temp:** 10:45 Am **Wind Present:** Yes ~~No~~

Precipitation in the past 3 days: No ~~Yes~~ _____ inches

Pipe Flow: ~~None~~ Trickle Steady 1/4 pipe flow or more

Color (if flow is present): _____

Inspection Information *Select all that are applicable*

Odor:	**Clarity**	**Floatables**	**Deposits/Stains**
~~None~~	~~Clear~~	~~None~~	~~None~~
Sewage	Slight Cloudiness	Sewage/toilet Paper	Oily
Rancid/Sour	Cloudy	Suds	Flowline
Petroleum/Gasoline	Opaque	Petroleum (sheen)	Paint
Sulfur		Other	
Chemical		Describe:	
Other			
Describe:			

Additional Information:

Sediment Condition: ~~Open~~ 1/4 Full 1/2 Full 3/4 Full Plugged

Structure Condition: ~~Excellent~~ Good Fair Poor

Vegetation Condition: Excellent ~~Good~~ Fair Poor

Trash/litter present: Yes ~~No~~ **Yard waste observed:** Yes ~~No~~

General Comments: Awesome Sauce

Potential Sources / Actions Taken: _____

Follow up required: Yes ~~No~~

Dry Weather Outfall Inspection Form

Location Information: Near Rail Road track

Date: 3/29/2019 **Inspector:** [signature] **Time:** Day

Outfall ID: OR-1 (OR-2) OR-3 MR-1 MR-2 **Outfall Location:** Rail Road

Receiving Waterbody: ?

Photo Taken: (Yes) No **Photo ID:** _____

Weather: (Clear) Cloudy **Approximate Temp:** 10:15 am **Wind Present:** Yes (No)

Precipitation in the past 3 days: (No) Yes _____ inches

Pipe Flow: (None) Trickle Steady 1/4 pipe flow or more

Color (if flow is present): _____

Inspection Information *Select all that are applicable*

Odor:	**Clarity**	**Floatables**	**Deposits/Stains**
(None)	(Clear)	(None)	(None)
Sewage	Slight Cloudiness	Sewage/toilet Paper	Oily
Rancid/Sour	Cloudy	Suds	Flowline
Petroleum/Gasoline	Opaque	Petroleum (sheen)	Paint
Sulfur		Other	
Chemical		Describe:	
Other			
Describe:			

Additional Information:

Sediment Condition: (Open) 1/4 Full 1/2 Full 3/4 Full Plugged

Structure Condition: (Excellent) Good Fair Poor

Vegetation Condition: (Excellent) Good Fair Poor

Trash/litter present: Yes (No) **Yard waste observed:** Yes (No)

General Comments: It was a beautiful sight !!!

Potential Sources / Actions Taken: _____

Follow up required: Yes (No)

Dry Weather Outfall Inspection Form

Location Information: OR-1 Near Rail Road Tracks

Date: 6/27/19 **Inspector:** Johnny Johnson **Time:** Day

Outfall ID: (OR-1) OR-2 OR-3 MR-1 MR-2 **Outfall Location:** Look

Receiving Waterbody: _____

Photo Taken: Yes ~~No~~ **Photo ID:** _____

Weather: (Clear) Cloudy **Approximate Temp:** 89 **Wind Present:** Yes ~~No~~

Precipitation in the past 3 days: ~~No~~ Yes _____ inches

Pipe Flow: None Trickle Steady 1/4 pipe flow or more

Color (if flow is present): Clear

Inspection Information *Select all that are applicable*

Odor:	**Clarity**	**Floatables**	**Deposits/Stains**
~~None~~	~~Clear~~	~~None~~	None
Sewage	Slight Cloudiness	Sewage/toilet Paper	Oily
Rancid/Sour	Cloudy	Suds	Flowline
Petroleum/Gasoline	Opaque	Petroleum (sheen)	Paint
Sulfur		Other	
Chemical		Describe:	
Other			
Describe:			

Additional Information:

Sediment Condition: ~~Open~~ 1/4 Full 1/2 Full 3/4 Full Plugged

Structure Condition: ~~Excellent~~ Good Fair Poor

Vegetation Condition: Excellent ~~Good~~ Fair Poor

Trash/litter present: Yes ~~No~~ **Yard waste observed:** Yes No

General Comments: _____

_____

_____

Potential Sources / Actions Taken: _____

_____

_____

Follow up required: Yes ~~No~~

Dry Weather Outfall Inspection Form

Location Information: Down In Woods Near Rail Road Tracks

Date: 6/27/19 **Inspector:** Johnny Johnson **Time:** Day

Outfall ID: OR-1 (OR-2) OR-3 MR-1 MR-2 **Outfall Location:** _____

Receiving Waterbody: _____

Photo Taken: Yes ~~No~~ **Photo ID:** _____

Weather: ~~Clear~~ Cloudy **Approximate Temp:** 89 **Wind Present:** Yes ~~No~~

Precipitation in the past 3 days: ~~No~~ Yes _____ inches

Pipe Flow: ~~None~~ Trickle Steady 1/4 pipe flow or more

Color (if flow is present): _____

Inspection Information *Select all that are applicable*

Odor:	**Clarity**	**Floatables**	**Deposits/Stains**
~~None~~	~~Clear~~	~~None~~	~~None~~
Sewage	Slight Cloudiness	Sewage/toilet Paper	Oily
Rancid/Sour	Cloudy	Suds	Flowline
Petroleum/Gasoline	Opaque	Petroleum (sheen)	Paint
Sulfur		Other	
Chemical		Describe:	
Other			
Describe:			

Additional Information:

Sediment Condition: ~~Open~~ 1/4 Full 1/2 Full 3/4 Full Plugged

Structure Condition: ~~Excellent~~ Good Fair Poor

Vegetation Condition: ~~Excellent~~ Good Fair Poor

Trash/litter present: Yes ~~No~~ **Yard waste observed:** Yes No

General Comments: _____

_____

_____

Potential Sources / Actions Taken: _____

_____

_____

Follow up required: Yes ~~No~~

Dry Weather Outfall Inspection Form

Location Information: Near FMS BLDG. Near Rail Road Tracks

Date: 6/27/19 **Inspector:** _____ **Time:** Day

Outfall ID: ~~OR-1~~ OR-2 OR-3 MR-1 MR-2 **Outfall Location:** Refer to Top

Receiving Waterbody: _____

Photo Taken: Yes ~~No~~ **Photo ID:** _____

Weather: ~~Clear~~ Cloudy **Approximate Temp:** 89 **Wind Present:** Yes ~~No~~

Precipitation in the past 3 days: ~~No~~ Yes _____ inches

Pipe Flow: ~~None~~ Trickle Steady 1/4 pipe flow or more

Color (if flow is present): _____

Inspection Information *Select all that are applicable*

Odor:	~~**Clarity**~~	**Floatables**	**Deposits/Stains**
~~None~~	~~Clear~~	~~None~~	None
Sewage	Slight Cloudiness	Sewage/toilet Paper	Oily
Rancid/Sour	Cloudy	Suds	Flowline
Petroleum/Gasoline	Opaque	Petroleum (sheen)	Paint
Sulfur		Other	
Chemical		Describe:	
Other			
Describe:			

Additional Information:

Sediment Condition: ~~Open~~ 1/4 Full 1/2 Full 3/4 Full Plugged

Structure Condition: ~~Excellent~~ Good Fair Poor

Vegetation Condition: ~~Excellent~~ Good Fair Poor

Trash/litter present: Yes ~~No~~ **Yard waste observed:** Yes No

General Comments: _____

_____

_____

Potential Sources / Actions Taken: _____

_____

_____

Follow up required: Yes ~~No~~

Dry Weather Outfall Inspection Form

Location Information: Near Fishburn Elem. Across the Road

Date: 6/27/19 **Inspector:** Johnny Johnson **Time:** Day

Outfall ID: OR-1 OR-2 OR-3 (MR-1) MR-2 **Outfall Location:** _____

Receiving Waterbody: _____

Photo Taken: Yes ~~No~~ **Photo ID:** _____

Weather: ~~Clear~~ Cloudy **Approximate Temp:** 89 **Wind Present:** Yes No

Precipitation in the past 3 days: ~~No~~ Yes _____ inches

Pipe Flow: ~~None~~ Trickle Steady 1/4 pipe flow or more

Color (if flow is present): _____

Inspection Information *Select all that are applicable*

Odor:	**Clarity**	**Floatables**	**Deposits/Stains**
~~None~~	~~Clear~~	~~None~~	~~None~~
Sewage	Slight Cloudiness	Sewage/toilet Paper	Oily
Rancid/Sour	Cloudy	Suds	Flowline
Petroleum/Gasoline	Opaque	Petroleum (sheen)	Paint
Sulfur		Other	
Chemical		Describe:	
Other			
Describe:			

Additional Information:

Sediment Condition: ~~Open~~ 1/4 Full 1/2 Full 3/4 Full Plugged

Structure Condition: Excellent Good Fair Poor

Vegetation Condition: ~~Excellent~~ Good Fair Poor

Trash/litter present: Yes No **Yard waste observed:** Yes No

General Comments: _____

_____

_____

Potential Sources / Actions Taken: _____

_____

_____

Follow up required: Yes No

Dry Weather Outfall Inspection Form

Location Information: Over the bank at Lot 14

Date: 6/27/19 **Inspector:** Johnny Johnson **Time:** Day

Outfall ID: OR-1 OR-2 OR-3 MR-1 ~~MR-2~~ **Outfall Location:** Lock

Receiving Waterbody: _____

Photo Taken: Yes ~~No~~ **Photo ID:** _____

Weather: ~~Clear~~ Cloudy **Approximate Temp:** 89 **Wind Present:** Yes ~~No~~

Precipitation in the past 3 days: ~~No~~ Yes _____ inches

Pipe Flow: ~~None~~ Trickle Steady 1/4 pipe flow or more

Color (if flow is present): _____

Inspection Information *Select all that are applicable*

Odor:	**Clarity**	**Floatables**	**Deposits/Stains**
~~None~~	~~Clear~~	~~None~~	~~None~~
Sewage	Slight Cloudiness	Sewage/toilet Paper	Oily
Rancid/Sour	Cloudy	Suds	Flowline
Petroleum/Gasoline	Opaque	Petroleum (sheen)	Paint
Sulfur		Other	
Chemical		Describe:	
Other			
Describe:			

Additional Information:

Sediment Condition: ~~Open~~ 1/4 Full 1/2 Full 3/4 Full Plugged

Structure Condition: ~~Excellent~~ Good Fair Poor

Vegetation Condition: ~~Excellent~~ Good Fair Poor

Trash/litter present: Yes ~~No~~ **Yard waste observed:** Yes No

General Comments: _____

_____

_____

Potential Sources / Actions Taken: _____

_____

_____

Follow up required: Yes ~~No~~

Appendix D
MCM #4 Supporting Documents

Annual Standards and Specifications

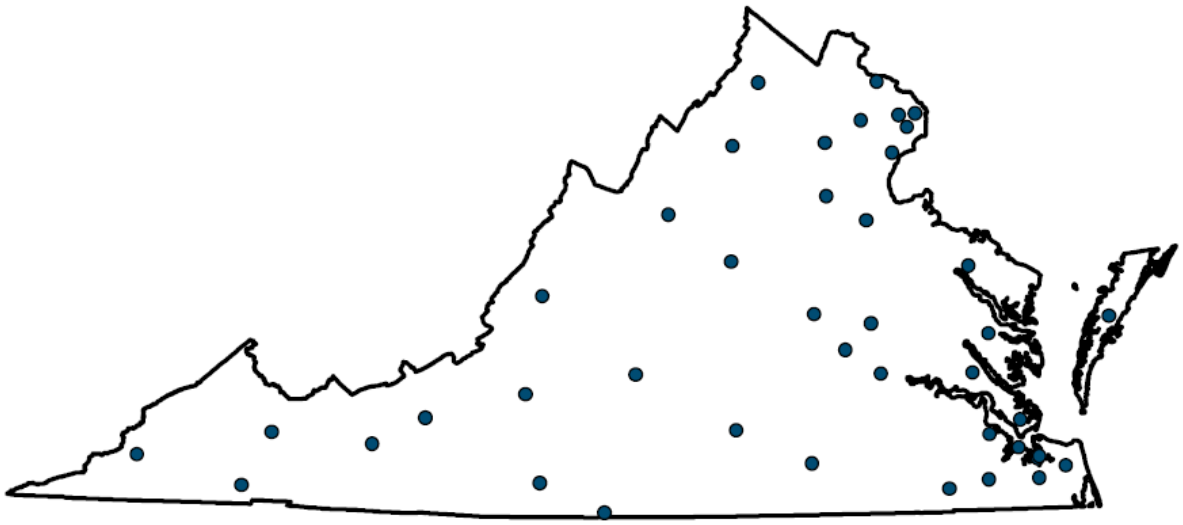
for

Erosion & Sediment Control

and

Stormwater Management

[The VCCS Stormwater Pollution Prevention Plan (SWPPP) Template is incorporated by reference and available as a separate Word document for projects equal to or greater than an acre of disturbance.]



Virginia Community College System

Effective for: FY2018 (July 1, 2017 – June 30, 2018)

Latest Revision: June 1, 2017 (See page iii for tracked revisions)

Virginia Department of Environmental Quality (DEQ) Approval Date: _____

This document is submitted in accordance with 9VAC25-870-170 that requires submission to DEQ, on an annual basis, standards and specifications consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq., as amended), the General Permit for Discharges of Stormwater for Construction Activity, and the Erosion and Sediment Control Regulations. This document describes how land-disturbance activity shall be conducted on lands owned by the State Board for Community Colleges, Virginia Community College System.

TABLE OF CONTENTS

APPENDICES

ACRONYMS

BMP	Best Management Practice
CWA	Clean Water Act
DEQ	Virginia Department of Environmental Quality
EPA	Environmental Protection Agency
ESC	Erosion and Sediment Control
HUC	Hydraulic Unit Code
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
SWM	Stormwater Management
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
VAR10	General Permit for Discharges of Stormwater from Construction Activity
VESCH	Virginia Erosion and Sediment Control Handbook
VPDES	Virginia Pollutant Discharge Elimination System
VSMP	Virginia Stormwater Management Program
VCCS	Virginia Community College System
VCCS AS&S	Virginia Community College System Annual Standards and Specifications

Revision Table

Revision #	Date	Description
1	2014	Revisions based on DEQ comments prior to the January 1, 2015 - December 31, 2015 approval.
2	10/31/16	Update the Loudoun County ESC threshold and added a disclosure statement in Appendix A. See revision clouds in Appendix A. Also corrected Appendix E2 to read greater than or equal to "≥".
3	6/1/17	Effective dates changed to reflect the Commonwealth's fiscal year. Dates modified on cover sheet and page footers.
4	6/1/17	Section 5.1 was modified to ensure post-construction SWM facility inspections and maintenance are based on BMP Clearinghouse specifications.
5	6/1/17	Section 5.2 added to ensure record retention consistent with 9VAC25-870-126.B.
6	6/1/17	Section 3.4 was modified to ensure notification to DEQ of commencement of land disturbance activity with descriptive project information.
7	6/1/17	Section 3.3 modified to require submission of the DEQ "AS&S Entity Info Sheet" with Registration Statement submission to DEQ. Plan preparer/reviewer checklists in Appendix C also modified to include information necessary to complete the "AS&S Entity Info Sheet." Appendix D changed to D-2 and the "AS&S Entity Info Sheet" now included as Appendix D-1.
8	6/1/17	Section 1 modified to include sub-sections, including a subsection to include the listed DEQ responsibilities and discretionary items.
9	6/1/17	Section 4.1 modified to require DEQ be notified of changes that affect information of the VAR10 Registration Statement, Permit Fee Form, and/or permit coverage.
10	6/1/17	Updates included in ESC Technical Bulletin #4 now referenced with Virginia ESC Handbook Standards and Specifications reference in Section 3.1.1.
11	6/1/17	Sections 3.1 and 3.2 expanded to clarify the VCCS AS&S Project Manager coordinates plan review by a DEQ-certified plan reviewer.
12	6/1/17	Section 3.1 (ESC Plan Review and Approval) and Section 3.2 (SWM Plan Review and Approval) modified to require VCCS plan approval by a DEQ-certified ESC and SWM Program Administrator after recommendation of approval by a DEQ-certified ESC and SWM Plan Reviewer.

DEFINITIONS

The words and terms used in these Standards & Specifications shall have the meanings defined in the regulations listed in Section 1.0 unless the context clearly indicates otherwise. The following definitions apply to these Standards & Specifications:

"Applicant" means person or persons providing submissions to VCCS to engage in a regulated land-disturbing activity (e.g. VCCS AS&S Project Manager or designee).

"Contractor" means operator as defined in these Standards & Specifications.

"Land disturbance" or "land-disturbing activity" means a manmade change to the land surface that potentially changes its runoff characteristics including clearing, grading, or excavation, except that the term shall not include those exemptions specified in Sections 3.1.3 for Erosion and Sediment Control Regulations and 3.2.5 for Stormwater Management Regulations.

"Licensed professional" means a professional registered in the Commonwealth of Virginia pursuant to Article 1 (§ 54.1-400 et seq.) of Chapter 4 of Title 54.1 of the Code of Virginia. For purposes of these Standards and Specifications a licensed professional is one that is certified by DPOR as an Architect, Professional Engineer, Land Surveyor, or Landscape Architects.

"Local technical criteria (for SWM)" means technical criteria in a DEQ approved local ordinance that is more stringent than the technical criteria described in Part II B of 9VAC25-870.

"Operator" means contractor of a regulated activity. In the context the Standards & Specifications, operator means any person associated with a construction project that meets either of the following two criteria: (i) the person has direct operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications or (ii) the person has day-to-day operational control of those activities at a project that are necessary to ensure compliance with a stormwater pollution prevention plan for the site.

"*Permittee"* means the operator to whom the General Permit for Discharges of Stormwater from Construction Activity (VAR10) is issued.

"*Primary Contractor for land disturbance"* is the company and individual responsible for implementation of the approved ESC Plan, SWM Plan, and conditions of the General Permit for Discharges of Stormwater from Construction Activity, when applicable.

"Standards & Specifications" means the Virginia Community College System's Annual Standards and Specifications for Erosion & Sediment Control and Stormwater Management.

"Stormwater Management Facility" means a control measure that controls stormwater runoff and changes the characteristics of that runoff including, but not limited to, the quantity and quality, the period of release or the velocity of flow. For purposes of water quality, a stormwater management facility means approved practices as described on the Virginia Stormwater BMP Clearinghouse Website.

"VCCS AS&S Inspector" the individual performing inspections in accordance with Section 4.2.1 of these standards and specifications.

"VCCS AS&S for ESC" includes the information described in the standards and specifications regarding ESC.

"VCCS AS&S for SWM" includes the information described in the standards and specifications regarding SWM.

"VCCS AS&S Project Manager" means the individual managing the land disturbance activity for the VCCS or college.

1.0 OVERVIEW

The Virginia Community College System (VCCS), is required per §62.1-44. 15:31 of the Virginia Stormwater Management Act to submit standards and specifications for approval by the Virginia Department of Environmental Quality (DEQ) to describe how land disturbance activities shall be conducted on VCCS properties. In response, VCCS has adopted the VCCS Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management (VCCS AS&S) that guide regulated land disturbance activity on VCCS properties. The VCCS AS&S incorporate, by reference, the following laws and attendant regulations:

- Virginia Stormwater Management (SWM) Act (§62.1-44.15:24 et. seq.) and Virginia Stormwater Management Program (VSMP) Regulations (9VAC25-870);
- VPDES General Permit for Discharges of Stormwater from Construction Activities (9VAC25-880);
- Virginia Erosion and Sediment Control (ESC) Law (§62.1-44.15:51 et. seq.) and Virginia Erosion and Sediment Control Regulations (9VAC25-840);
- Erosion and Sediment Control and Stormwater Management Certification Regulations (9VAC25-850), and where applicable,
- Chesapeake Bay Preservation Act (§62.1-44.15:67 et. seq.) and Chesapeake Bay Preservation Area Designation and Management Regulations (9VAC25-830).

1.1 Structure and Implementation

The VCCS AS&S have been framed to guide a land disturbance project through planning, plan approval and construction to ensure consistency with the regulatory requirements referenced in Section 1.0. The VCCS AS&S include four distinct sections:

- **Applicability** – Procedures to determine if a land disturbance project is subject to the VCCS AS&S as described in Section 2;
- **Application Process** – Procedures for applicable land disturbance activities prior to commencement of land disturbance as discussed in Section 3;
- **Implementation through Construction** – Procedures necessary during construction through the completion of a project as discussed in Section 4; and
- **Post-Construction and Reporting** – VCCS responsibilities and procedures to ensure long-term care and maintenance of stormwater management facilities.

The VCCS AS&S shall apply to all applicable land disturbance activities, as described in Section 2. Administration and enforcement of the VCCS AS&S will be performed by VCCS as described herein. Implementation of the VCCS AS&S ensure responsible staff and its representatives obtain the necessary certifications through DEQ in accordance with the Erosion and Sediment Control and Stormwater Management Certification Regulations (9VAC25-850). Certifications will be dependent on the individual's role in implementing the VCCS AS&S and may include Program Administrator, Plan Reviewer and/or Inspector.

1.2 Virginia DEQ Oversight Responsibilities

The VCCS AS&S are submitted annually to DEQ for their review and approval based on consistency with the law and regulations listed in Section 1.0. The Department shall have 60 days in which to approve the standards and specifications. If no action is taken by the Department within 60 days, the standards and specifications shall be deemed approved. Approval requires VCCS to operate a VSMP and Virginia Erosion and Sediment Control (VESCP) consistent with the VCCS AS&S.

Where applicable, and to ensure compliance in accordance with the laws and regulations listed in Section 1.0, DEQ shall:

- Provide project oversight and enforcement, as necessary, per §62.1-44.15:56.G;
- Shall provide comprehensive program compliance review and evaluation per §62.1-44.15:56.G;
- Administer enforcement of the approved VCCS AS&S per §62.1-44.15:27.F and §62.1-44.15:54.E and may take enforcement action, where applicable;
- Perform random site inspections or inspections in response to a complaint per §62.1-44.15:31.C;
- Assess administrative charge to cover costs of services rendered associated with responsibilities pursuant to the Stormwater Management Act (§62.1-44.15:31.D). The State Water Control Board has the authority to enforce approved specifications and charge fees equal to the lower of (i) $1,000 or (ii) an amount sufficient to cover the costs associated with standard and specification review and approval, project inspections, and compliance.

At DEQ's discretion, the following documentation and/or actions may be requested:

- Inspection reports resulting from inspections conducted by VCCS;
- Complaint logs and complaint responses;
- Weekly e-reporting to the department's applicable regional office that may include:
  - Inspection reports;
  - Pictures;
  - Complaint logs and complaint responses; and
  - Other compliance documents.

2.0 APPLICABILITY

A land disturbance activity may be subject to ESC Law and Regulations or SWM Law and Regulations, or both. Applicability may vary depending on the location and type of activity. Section 2 includes the following:

- Section 2.1 provides information for determining if a proposed project is subject to the *VCCS AS&S for ESC*.
- Section 2.2 provides information for determining if a proposed project is subject to the *VCCS AS&S for SWM*.
- Section 2.3 describes the requirements for *all* SWM practices on VCCS properties to be approved by the VCCS.

2.1 Erosion & Sediment Control

The *VCCS AS&S for ESC* are applicable on VCCS properties where a land disturbance activity is equal to or greater than:

- 10,000 square feet;
- The threshold established in a locality's DEQ-approved ESC Program ordinance; or
- 2,500 square feet if the project is within a Chesapeake Bay Preservation Area (CBPA).

Appendix A provides information for each VCCS community college campus throughout the Commonwealth to assist in determining if a land disturbance activity is subject to the more stringent local threshold or the CPBA threshold. For the purposes of applicability to the *VCCS AS&S for ESC*, a land disturbance activity is defined as:

> ***ESC Land Disturbance Activity*** *– means any man-made change to the land surface that may result in soil erosion from water or wind and the movement of sediments into state waters or onto lands in the Commonwealth, including, but not limited to, clearing, grading, excavating, transporting and filling of land.*

Exceptions to the applicability of the *VCCS AS&S for ESC* that are potentially relevant to VCCS include:

- Installation, maintenance, or repair of underground public utility lines when such activity occurs on, and is confined within, an existing hard surfaced road, street or sidewalk;
- Septic tank lines or drainage fields unless included in an overall plan for land-disturbing activity relating to construction of the building to be served by the septic tank system;
- Tilling, planting, or harvesting of agricultural, horticultural, or forest crops, livestock feedlot operations, including engineering operations as follows: construction of terraces, terrace outlets, check dams, desilting basins, dikes, ponds, ditches, strip cropping, lister furrowing, contour cultivating, contour furrowing, land drainage and land irrigation;
- Installation of fence, sign posts, telephone and electric poles, and other posts or poles; and

- Emergency work to protect life, limb or property, and emergency repairs; however, the land area disturbed shall be shaped and stabilized in accordance with the requirements of the VCCS AS&S.

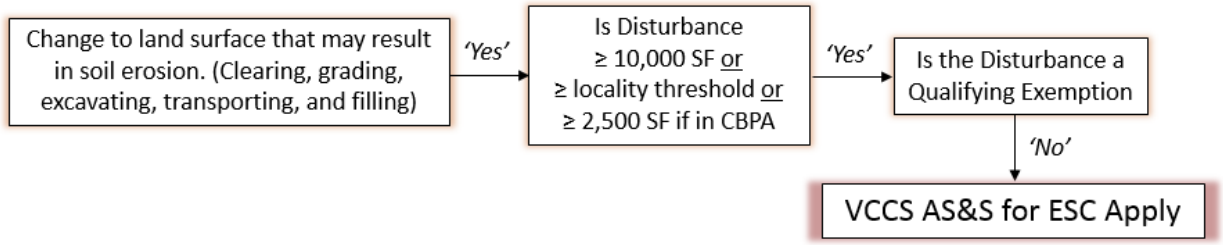


Figure 2.1 *Summary for determining applicability to the VCCS AS&S for ESC. Refer to Appendix A for local thresholds.*

2.2 Stormwater Management

The *VCCS AS&S for SWM* are applicable where a land disturbance activity is equal to or greater than:

- 1-acre; or
- 2,500 square feet if the project is within a CBPA.

Appendix A provides information for each VCCS college campus throughout the Commonwealth to assist in determining if a land disturbance project is subject to the CBPA threshold. For the purposes of applicability to the *VCCS AS&S for SWM*, a land disturbance activity is defined as:

> ***SWM Land Disturbance Activity*** *– means a man-made change to the land surface that potentially changes its runoff characteristics including clearing, grading, or excavation.*

Exceptions to the applicability of the *VCCS AS&S for SWM* that are potentially relevant to VCCS include:

- Projects that discharges to a sanitary sewer or a combined sewer system;
- Routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original construction of the project. The paving of an existing road with a compacted or impervious surface and reestablishment of existing associated ditches and shoulders shall be deemed routine maintenance; and
- Land-disturbing activities in response to a public emergency where the related work requires immediate authorization to avoid imminent endangerment to human health or the environment. In such situations, VCCS and the DEQ shall be advised of the disturbance within seven days of commencing the land-disturbing activity, and compliance with the administrative requirements described in Section 3.2 are required to be submitted to VCCS within 30 days of commencing the land-disturbing activity.

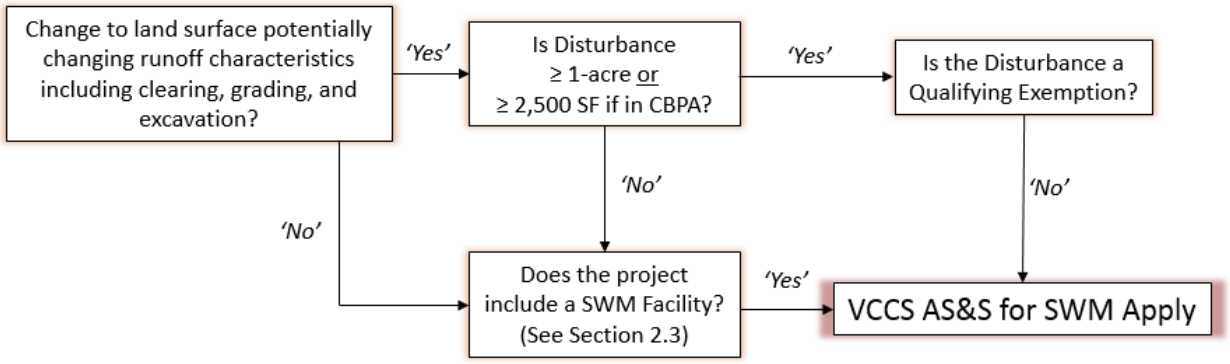


Figure 2.2 *Summary for determining applicability to the VCCS AS&S for SWM. Refer to Appendix A for assistance in determine if a project is within a CPBA.*

2.3 Stormwater Management for Non-Applicable Projects

From time to time, development projects on VCCS properties may incorporate the construction of a SWM practice although the practice is not required by the SWM laws and regulations. The incorporation of these practices may instead occur as part of a building project to assist in achieving credit towards environmental rating system certifications. Any stormwater management practice that does not otherwise qualify as subject to the *VCCS AS&S for SWM* shall not be constructed prior to approval of a SWM Plan from VCCS as described in Section 3.2. The practice shall be designed per the Virginia Stormwater Management Handbook and the standards and specifications in the Virginia BMP Clearinghouse.

3.0 APPLICATION PROCESS

Section 3 describes the development process once a land disturbance activity has been identified to be subject to the VCCS AS&S. The Section discusses the responsibilities of the VCCS, the VCCS AS&S Project Manager, and the primary contractor of the land disturbance prior to commencement of land disturbance.

Depending on the applicability determination made using the guidance in Section 2, a land disturbance activity may be subject to:

- Only the ESC submission requirements and technical criteria described in Section 3.1; or
- The ESC *and* SWM submission requirements and technical criteria described in Sections 3.1 and 3.2; or
- A SWM submission and ESC submission (if land disturbance threshold is met or exceeded) if a project includes a SWM facility as described in Section 2.3.

All submissions are to be provided by the applicant to VCCS and require VCCS approval on the plans. For land disturbance activity equal to or greater than an acre, a General Permit for Discharges of Stormwater from Construction Activities, issued by DEQ, is also required prior to the commencement of land disturbance.

3.1 Erosion & Sediment Control Plan Review & Approval

Land disturbance activity subject to the *VCCS AS&S for ESC* requires a VCCS approved ESC Plan. Upon the completion of an ESC Submittal, as described in Section 3.1.2, the VCCS AS&S Project Manager will coordinate the review of the Plans by an individual certified in accordance with the ESC and SWM Certification Regulations (9VAC25-850). Plans will be reviewed for consistency with the technical criteria described in Section 3.1.1.

The review will result in a recommendation to VCCS for approval, or a letter providing the reasons the ESC Plan could not be approved, within 45 days of the acceptance of the submittal. The date of acceptance of a submittal is the date that VCCS acknowledges in writing that all of the submission materials described in Section 3.1.2 have been provided for review. Acknowledgement from VCCS of a complete submittal will be provided with form LD-01, provided in Appendix B.

Upon approval, the DEQ-certified Plan Reviewer will sign the plans, providing their certification number and date. Subsequently, plans are approved by VCCS in the form of a signed approval stamp signed by a DEQ-certified ESC and SWM Program Administrator designee of the VCCS Associate Vice Chancellor for Facilities Management Services.

3.1.1 ESC Technical Criteria

The ESC Plan shall be consistent with the requirements of the Virginia ESC Regulations (9VAC25-840), the latest edition of the Virginia Erosion and Sediment Control Handbook (VESCH), including updates provided in DEQ's ESC Technical Bulletin No. 4, and specifically address each applicable minimum standard described in 9VAC25-840-40.

When applicable, the ESC Plan shall also address more stringent local requirements for erosion and sediment controls. For planning purposes, localities known to have more stringent local criteria for ESC are identified in Appendix A. However, it is the responsibility of the ESC Plan preparer to review the locality's ESC ordinance for more stringent requirements and incorporate them into the ESC Plan.

3.1.2 ESC Submittal

The following shall be submitted by the Applicant for review to VCCS when land disturbance activity is subject to the *VCCS AS&S for ESC*. Each item shall be provided to VCCS as hardcopy (# of copies as shown) and also electronically in pdf format.

- **VCCS Land Disturbance Application Form** (2 copies) – This form shall be completed and provided with all submittals. A copy of the form is provided in Appendix B.
- **Completed VCCS ESC Plan Checklist** (2 copies) – The VCCS ESC Plan Checklist in Appendix C1 is provided to assist the ESC Plan preparer and reviewer with ensuring compliance to the technical criteria and the VCCS AS&S for ESC. Each applicable item on the checklist shall be addressed in the ESC Plan or ESC Narrative. Written reference on the checklist to the location (plans or narrative) as to where an item has been addressed is recommended to assist with plan development and review.
- **ESC Plan** (6 copies) – The ESC plan shall be signed and sealed by a licensed professional and demonstrate compliance to the technical criteria described in Section 3.1.1.
- **ESC Plan Narrative** (6 copies) – The ESC Plan Narrative shall be signed and sealed by a licensed professional and is considered part of the ESC Plan. The narrative shall incorporate supporting information necessary to demonstrate compliance to the technical criteria described in Section 3.1.1.

Re-submissions to address comments provided by a VCCS as the result of a review shall include a cover letter from the licensed professional that explicitly responds to each comment from the review. Each response shall describe how the comment was addressed with reference to the locations of the changes in the Plan and/or Narrative. Any other changes not specifically addressed in the response to comments from the previous review shall also be described in the cover letter.

3.1.3 ESC Plan Variances

An Applicant may request a variance from the ESC technical criteria through VCCS. A variance request shall be provided in writing and may be considered prior to plan approval or during construction under the following conditions:

- The applicant requests, in writing, a variance with explanation of the reasons for requesting the variance. Reasons must be specific to restrictive site conditions and the variance shall be the minimum necessary to mitigate for the site restriction.
- The request shall include alternative measures to address potential downstream transport of sediment that could result from the granting of the variance.

- The request shall describe how the alternative measure(s) meets the intent of the minimum standard (9VAC25-840-40) for which the variance is sought.
- A variance will not be granted in any case where the granting of the variance could cause damage to downstream property. It is the responsibility of the applicant to demonstrate in the request that downstream properties will be protected from erosion, sedimentation and flooding.
- Request for a variance to the VESCH standards and specifications of an ESC measure (e.g. proprietary inlet protection device) will consider consistency with the intent of the standard and specification for the specific type of measure described in Chapter 3 of the VESCH.
- Specific variances which are allowed by VCCS shall be documented on the ESC Plan.

Requests for variances will be considered by VCCS, and if deemed appropriate, VCCS will submit the request to DEQ for consideration of approval. All variances must be approved by DEQ Central Office.

VCCS reserves the right to disallow the use of proprietary ESC measures based on findings that demonstrate poor performance related to sedimentation control or maintenance. Sufficient detail shall be provided on the ESC Plan for allowed proprietary measures, including any necessary computations, installation instruction, and inspection and maintenance instruction. Installation and maintenance shall be per the manufacturer's recommendations.

3.2 Stormwater Management Plan Review & Approval

Land disturbance activity subject to the *VCCS AS&S for SWM* requires a VCCS approved SWM Plan. Upon the completion of an SWM Submittal, as described in Section 3.2.4, the VCCS AS&S Project Manager will coordinate the review of the Plans by an individual certified in accordance with the ESC and SWM Certification Regulations (9VAC25-850). Plans will be reviewed for consistency with the technical criteria described in Section 3.2.1.

The review will result in a recommendation to VCCS for approval, or a letter providing the reasons the SWM Plan could not be approved, within 45 days of the acceptance of the submittal. The date of acceptance of a submittal is the date that VCCS acknowledges in writing that all of the submission materials described in Section 3.2.4 have been provided for review. Acknowledgement from VCCS of a complete submittal will be provided with form LD-01 provided in Appendix B.

Upon approval, the DEQ-certified Plan Reviewer will sign the plans, providing their certification number and date. Subsequently, plans are approved by VCCS in the form of a signed approval stamp signed by a DEQ-certified ESC and SWM Program Administrator designee of the VCCS Associate Vice Chancellor for Facilities Management Services

3.2.1 SWM Technical Criteria

The SWM Plan shall be consistent with Part II A and Part II B of the VSMP Regulations, unless grandfathered per conditions described in 9VAC25-870-48 and therefore subject to Part II C of the

VSMP Regulations. A project is not considered grandfathered unless explicitly approved in writing from DEQ in response to a request for "grandfathered status" consistent with 9VAC25-870-48.

Design standards and specifications shall be consistent with the Virginia Stormwater BMP Clearinghouse Website, the latest edition of the Virginia Stormwater Management Handbook, and the supplemental criteria in Sections 3.2.2 and 3.2.3.

When applicable and to the maximum extent practicable, the SWM plan shall comply with any local VSMP authority's additional *technical* requirements for stormwater management adopted within a DEQ-approved local ordinance. Localities with the potential to have additional technical requirements for SWM are identified in Appendix A. However, it is the responsibility of the SWM Plan preparer to:

- Review the locality's SWM ordinance for specific requirements and incorporate them into the SWM Plan to the maximum extent practicable.
- Where applicable, demonstrate to VCCS that the locality's additional *technical requirements* are not practicable and the SWM Plan Narrative shall include information demonstrating the impracticality.

3.2.2 VCCS Supplemental Technical Criteria

For the purposes of the technical criteria for water quality described in Part II B of the VSMP Regulations, the planning area shall be defined as the limits of disturbance.

3.2.3 VCCS Supplemental BMP Selection Criteria

The successful performance of SWM practices is dependent on a successful long-term maintenance program. Designers are encouraged to consider maintenance concerns such as accessibility, frequency of maintenance, and costs of maintenance when selecting BMPs to achieve technical criteria. The maintenance requirements for SWM practices shall be clearly specified on the SWM Plan and under no circumstance shall a SWM practice be proposed that requires a maintenance contract with the manufacturer outside of the term of an initial establishment of the practice. VCCS reserves the right to grant exemptions to this requirement in accordance with 3.2.5.

3.2.4 SWM Submittals

The following shall be submitted by the Applicant for review to VCCS when land disturbance activity is subject to the *VCCS AS&S for SWM*. Each item shall be provided to VCCS as hardcopy (# of copies as shown) and electronically in pdf format.

- **VCCS Land Disturbance Application Form** (2 copies) – This form shall be provided with all submittals and include the Applicant's contact information and general information about the land disturbance activity. A copy of the form is provided in Appendix B.
- **Completed VCCS SWM Plan Checklist** (2 copies) – The VCCS SWM Plan Checklist in Appendix C2 is provided to assist the SWM Plan preparer and reviewer with ensuring compliance to the technical criteria and the VCCS AS&S. Each applicable item on the checklist shall be

addressed in the SWM Plan or SWM Narrative and the checklist certified by the licensed professional.

- **SWM Plan** (6 copies) – The SWM plan shall be signed and sealed by a licensed professional and provide all of the information described in 9VAC25-870-55 (Stormwater Management Plans) of VSMP regulations. When applicable, the SWM Plan shall also address local *technical* requirements as described in Section 3.2.1.
- **SWM Plan Narrative** (6 copies) – The SWM Plan Narrative shall be signed and sealed by a licensed professional and is considered part of the SWM Plan, incorporating supporting information necessary to demonstrate compliance to the technical criteria described in Section 3.2.1 and 3.2.2.
- **Completed SWM Management Handbook BMP Checklist** (6 copies) – As applicable, provide the applicable BMP Design Checklist from Appendix 8-A of the Virginia Stormwater Management Handbook, latest edition. A BMP-type specific checklist shall be provided for each BMP proposed in the SWM Plan.
- **Exception Request** (2 copies) – Where applicable, the applicant shall provide written request that address the conditions described in Section 3.2.5.

Re-submissions to address comments provided by VCCS as the result of a review shall include a cover letter from the licensed professional that explicitly responds to each comment from the previous review. Each response shall describe how the comment was addressed with reference to the locations of changes in the Plan and/or Narrative. Any other changes not specifically addressed in the response to comments from the previous review shall also be described in the cover letter.

3.2.5 SWM Plan Exceptions

An Applicant may request in writing for an exception to the SWM technical criteria and design standards and specifications through VCCS. An exception may be granted provided that:

- The exception is the minimum necessary to afford relief;
- reasonable and appropriate conditions are imposed as necessary upon any exception granted so that the intent of the Virginia Stormwater Management Act and the technical criteria are preserved;
- granting the exception will not confer any special privileges that are denied in other similar circumstances; and the
- request is not based upon conditions or circumstances that are self-imposed or self-created.

Economic hardship alone is not a sufficient reason to request an exception from the requirements of the technical criteria or design standards and specifications. The following exceptions will not be granted:

- The requirement that a land-disturbing activity obtain a state permit, when applicable.
- The use of a BMP not found on the BMP Clearinghouse.
- Requirements for phosphorus reductions.

Requests for exceptions will be considered by VCCS, and if deemed appropriate, VCCS will submit the request to DEQ for consideration of approval. All exceptions must be approved by DEQ Central Office.

3.3 Construction General Permit (VAR10)

Land disturbance activity that disturbs an acre or greater requires a General Permit for Discharges of Stormwater from Construction Activity (9VAC25-880), also known as General Permit No. VAR10 (VAR10). The VAR10 General Permit is issued by the Virginia DEQ and coverage is required throughout the duration of the land disturbance activity. The contractor is responsible for applying for permit coverage as the operator and must provide a VAR10 General Permit coverage letter from DEQ at the preconstruction meeting described in Section 3.4. The coverage letter is required prior to the commencement of the land disturbance activity and shall be maintained in the project Stormwater Pollution Prevention Plan described in Section 3.3.1. The operator of the permit is responsible for compliance to the permit conditions throughout the course of the land disturbance activity. VCCS will provide oversight of permit compliance through site inspections as described in Section 4.2.

VAR10 coverage requires submission of a completed DEQ VAR10 Registration Statement. The Registration Statement can only be completed once the ESC and SWM Plans have been approved by VCCS and a project-specific SWPPP has been completed. The submission of the Registration Statement must be accompanied by DEQ's "Annual Standards & Specification Entity Information" form, provided in Appendix D-1. Information required to complete the "Annual Standards & Specification Entity Information" form will be available on the approved plans (as required by Appendix C) or otherwise available from the VCCS AS&S Project Manager.

3.3.1 Stormwater Pollution Prevention Plans (SWPPP)

Prior to submission of a Registration Statement to DEQ for VAR10 General Permit coverage, the project is required to have a VCCS approved ESC and/or SWM Plan, as applicable, included as part of a site-specific stormwater pollution prevention plan (SWPPP). The SWPPP shall be prepared and certified, in accordance with the permit by the permittee or duly authorized representative and prepared using the VCCS SWPPP template. The template is available from VCCS as a separate fillable form Word document and is incorporated by reference into the VCCS AS&S. The permittee is responsible for implementation of the SWPPP and may delegate authority for certifications (e.g. SWPPP and inspection form certifications) using the *Delegation of Authority Form* in provided in the SWPPP template.

3.3.2 Special Conditions for Total Maximum Daily Loads

Dependent on the location of a project, special conditions may be applicable if a waste load allocation has been assigned to construction activity in a DEQ approved Total Maximum Daily Load (TMDL). DEQ will indicate in the VAR10 General Permit coverage letter if the TMDL Special Conditions apply to the project. In the case that special conditions do apply, the permittee is

responsible for incorporating the increased inspection frequency described in Section 5.1 of the SWPPP template and adhering to the additional criteria in Section 5.4 of the SWPPP.

3.3.3 Off-site Land-Disturbance Activity

Offsite support facilities are defined as those facilities such as staging areas, equipment and material storage areas, unsuitable and surplus material disposal areas, borrow areas, etc., which are located outside of the project limits shown on an approved ESC and/or SWM Plan. Offsite support facilities may be located within or outside of VCCS property. In either case, it is the responsibility of the contractor to ensure applicable plans are approved and permits are obtained for support facilities prior to the commencement of land disturbance activity.

3.4 Pre-construction Meeting

A preconstruction meeting is required for all applicable land disturbance activity subject to the VCCS AS&S prior to the commencement of the activity. The VCCS AS&S Project Manager is responsible for coordination of the meeting. The certified Responsible Land Disturber (RLD), as defined in 9VAC25-850-10, shall be identified on the plans at, or prior to, the preconstruction meeting. The RLD will typically be identified and provided by the Contractor. The meeting coordinator shall ensure the individuals identified in Section 1 of the *VCCS AS&S Preconstruction Meeting Form* (see Appendix D-2) attend the meeting and the checklist items in Section 2 of the form will be available at the meeting.

The VCCS AS&S Project Manager is responsible for electronic notification to DEQ's Central Office and the appropriate regional office at least two weeks prior to the proposed preconstruction meeting time. The notification shall include the following information:

- ✓ Project name or project number (including any associated VAR10 General Permit for Discharges of Stormwater from Construction Activity number provided on the DEQ coverage letter);
- ✓ Project location (including nearest intersection, latitude and longitude, access point);
- ✓ On-site project manager name and contact info (contractor responsible for the land disturbance);
- ✓ Responsible Land Disturber (RLD) name and contact info (provided by Contractor)
- ✓ Project description;
- ✓ Acreage of disturbance for project;
- ✓ Project start and finish date; and
- ✓ Any variances/exceptions associated with this project.

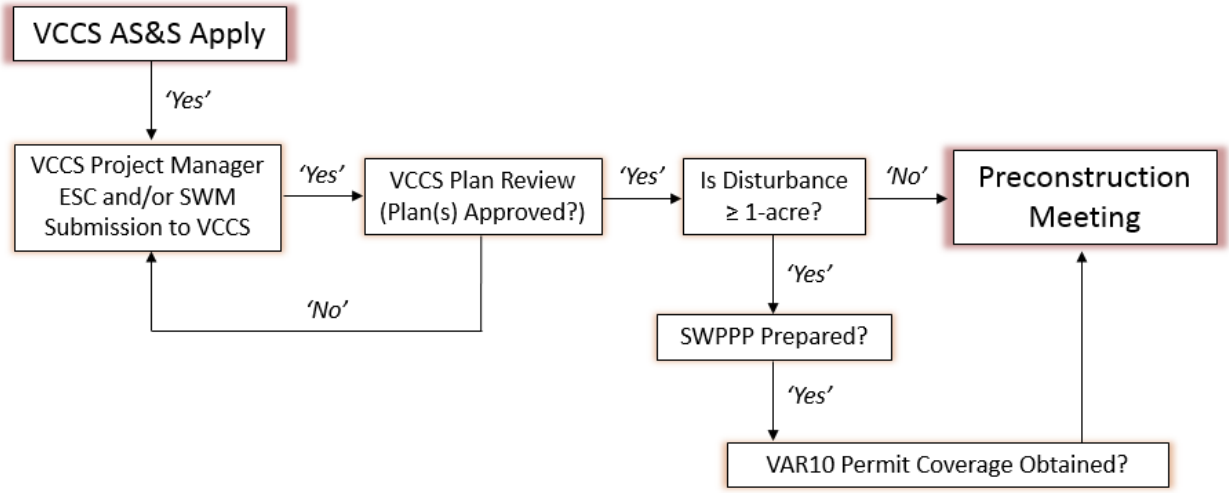


Figure 3.1 *Summary of the development process prior to commencement of land disturbance.*

4.0 IMPLEMENTATION THROUGH CONSTRUCTION

Section 4 describes the required actions of the Contractor and the VCCS during the implementation of a land disturbance activity subject to the VCCS AS&S.

4.1 Contractor/Operator Responsibilities

For land disturbance activity subject to the VCCS AS&S, the contractor's responsibilities prior to and during construction include, but may not be limited to:

- When applicable, obtaining the VAR10 General Permit for Discharges of Stormwater from Construction Activity (9VAC25-880) from DEQ (reference Section 3.3). Upon obtaining VAR10 coverage, the Contractor shall:
  - Comply with the conditions of the VAR10 General Permit, when applicable;
  - Update and maintain the SWPPP per the VAR10 General Permit;
  - Perform self-inspections per the VAR10 (It is strongly recommended that the contractor use the inspection form in Appendix E). The permittee shall have inspections performed by a DEQ certified ESC/SWM Inspector per 9VAC25-850.
  - Notify DEQ (constructionGP@deq.virginia.gov) of changes that affect information on the Registration Statement, permit fee forms, and/or permit coverage.
- Adhering to the approved plans unless otherwise approved in writing by VCCS;
- Maintaining the approved plans, and an up-to-date SWPPP (e.g. plan modifications and inspection forms) on the project site at all times.
- Obtaining necessary permit coverage and plan approvals for applicable off-site activities
- Providing SWM BMP certified record drawing per Section 4.1.1.
- Responding to any corrective action(s) and specified timeframes identified as the result of a VCCS or DEQ inspection.

4.1.1 SWM Facility Record Drawings

Certification of the construction of all stormwater management facilities shall be submitted to VCCS for review and approval. The certification shall be signed and sealed by a licensed professional with the design firm that developed the SWM Plan and include:

- A completed and certified copy of the *VCCS Stormwater Management Facility Record Drawing and Certification Form* in Appendix F;
- A signed and sealed copy of the certifying professional's inspection log, including incremental surveys (drawings), photographs, construction logs, inspection reports, geotechnical testing reports, soil reports, certification of materials, and all other applicable information necessary to support and ensure the SWM facility has been built in accordance with the approved Plan; and
- A record drawing (as-built) signed and sealed by the licensed professional that includes:
  - The long-term inspection and maintenance schedule for the SWM facility (extracted from the SWM Plan or SWM Narrative); and the
  - Total drainage area being served by the stormwater practice with the total impervious and pervious area within the drainage area.

In the case that a SWM facility has not been constructed and installed in accordance with the approved SWM Plan, the licensed professional(s) responsible for certifying the as-built shall immediately notify the VCCS AS&S Program Manager. Generally, there are two potential options when a facility is not constructed in accordance with the approved Plan:

- Option 1: Re-construct the facility in accordance with the approved Plan. It will be necessary to repeat the inspections, surveys, and documentation process such that the licensed professional shall certify the facility is constructed in accordance with the approved Plan.
- Option 2: Perform calculations and analysis, based on the licensed professional's surveys, data, inspections, and other applicable documentation necessary to verify the as-built conditions meet the approved VCCS AS&S. The licensed professional shall certify the as-built condition of the facility meets the quantitative and qualitative controls, as prescribed by the approved VCCS AS&S, and submit the final report as required in this section. The plans shall be revised and the revised plans reviewed and approved by the certified plan reviewer.

4.2 VCCS Responsibilities

VCCS is responsible for ensuring implementation of the VCCS AS&S throughout the development process. In addition to plan review and approvals, VCCS meets these responsibilities with oversight throughout the land disturbance activity that include inspections, enforcement actions, and acceptance of record drawings.

4.2.1 Inspections

VCCS will perform inspections on all projects subject to the VCCS AS&S. The individual performing inspections on behalf of the VCCS shall be certified as an ESC and SWM Inspector, as applicable, in accordance with the ESC and SWM Certification Regulations (9VAC25-850). Where a VAR10 is required, VCCS inspections are in addition to the VAR10 permittee's inspection requirements described in the SWPPP. The applicable inspection report provided in Appendix E shall be completed by the inspector on each inspection and a copy provided to the appropriate individual identified on the Preconstruction Form, provided in Appendix D-2, within 2 business days.

VCCS will conduct the following inspections, at a minimum, with the exception of the alternative inspection schedule described in Section 4.2.2:

- After the installation of initial ESC measures per the ESC phasing in the approved ESC Plan,
- At least once in every two-week period,
- Within 48 hours following any runoff producing storm event,
- At the completion of the project, and
- Periodically as deemed necessary by VCCS.

Inspection reports shall specify a required corrective action for each violation noted and a date by which the corrective action must be completed.

4.2.2 Alternative Inspection Schedule

VCCS inspections may be conducted at a reduced frequency where areas have been temporarily stabilized or land-disturbing activities will be suspended due to continuous frozen ground conditions. With these conditions and when stormwater discharges are unlikely, the inspection frequency may be reduced to once per month. If weather conditions (such as above freezing temperatures or rain or snow events) make discharges likely, VCCS shall immediately resume the regular inspection frequency.

4.2.3 Enforcement

VCCS reserves the right to enforce the VCCS AS&S upon discovery of noncompliance through inspection or through public reporting. Compliance status will be conveyed in writing using the *VCCS Construction Site Inspection Form Compliance Summary* included with the *VCCS Construction Site Inspection Form* (LD-04) in Appendix E. The compliance summary will be completed with each inspection and may also be used if an issue of noncompliance is identified outside of an inspection. The compliance summary will:

- Summarize the item(s) of noncompliance identified on the inspection form,
- Provide an indication of severity of compliance status, and
- Provide a description of the necessary corrective action and a timeframe for completing the action.

Enforcement will be consistent with the color-coding system on the LD-04N form which generally follows the following guidelines:

- Green flag – Site was in compliance with the VCCS AS&S at the time of inspection.
- Yellow flag – Items of noncompliance that have not resulted in observation of sediment or other pollutants being discharged from the project area. A notification with this flag serves as a warning. If corrective action is not performed in the specified timeframe, the issue could be elevated to a red flag by the VCCS AS&S Inspector.
- Red flag - Items of noncompliance that have resulted in observed or perceived offsite transport of sediment or other pollution. A notification with this flag serves as a Notice of Violation and if the item(s) are not addressed in the specified timeframe, can be elevated to a black flag by the VCCS AS&S Inspector.
- Black flag - Items of noncompliance that are either elevated from a red flag or are in significant conflict with the VCCS AS&S. A notification with this flag requires a submission to the VCCS Associate Vice Chancellor for Facilities Management Services for determination if work on site must stop until the corrective action is completed to the satisfaction of the VCCS Associate Vice Chancellor for Facilities Management Services. All losses associated with a notification that stops work are the responsibility of the contractor.

4.2.4 Modifications to Approved Plans

An approved Plan may be changed by direction or approval by VCCS in the following cases:

- Where inspection has revealed the plan is inadequate to satisfy applicable regulations; or

- Where the person responsible for carrying out the approved Plan finds that because of changing circumstances, or for other reasons, the approved Plan cannot be effectively carried out. Proposed amendments to the Plan, consistent with the requirements of the VCCS AS&S, are agreed upon by VCCS and the person responsible for carrying out the Plan.

Amendments to an approved ESC and SWM Plan are submitted in writing to VCCS and shall not be considered approved until written notice is provided and must comply with the VCCS AS&S for ESC and SWM. Modifications to approved plans and on-site changes shall be documented on the approved plans.

4.2.5 Approval of SWM Facility Record Drawings

VCCS will review and approve record drawing submissions described in Section 4.1.1. VCCS will return an approved copy of the VCCS SWM Facility Certification Form (LD-SS06) to the VCCS AS&S Project Manager or provide written comments in the case that a record drawing submission is not approved.

4.2.6 VCCS Termination of Land Disturbance

VCCS will provide to the permittee a completed and approved *Termination of VCCS Land Disturbance Form* (Appendix G) upon:

- The approval of the record drawing submittal described in Section 4.1.1 and 4.2.5 and
- Verification that the area of disturbance has been stabilized to the satisfaction of the VCCS AS&S Project Manager.

Acceptance of the record drawing submission does not release the contractor from any post-construction warranty and the Operator shall not terminate the VAR10 General Permit until receipt of a VCCS-approved *Termination of VCCS Land Disturbance Form*.

4.2.7 Project Tracking and Notification

Consistent with 9VAC25840-65, VCCS will maintain a list of active construction projects and submit the list electronically to DEQ at a frequency of once per 6-month period. The list will include:

- Project name (or number);
- Project location (including nearest major intersection);
- On-site project manager name and contact information;
- Project description;
- Acreage of disturbed area for project;
- Project start and finish dates; and
- Responsible Land Disturber name, contact information and RLD certification number.

5.0 POST-CONSTRUCTION

Section 5 describes post-construction requirements regarding long-term inspection and maintenance of stormwater facilities and associated record retention.

5.1 Maintenance of SWM Facilities

The Director of Facilities at each college, or equivalent individual, is responsible for long-term maintenance of SWM facilities at the campuses in which they oversee. Inspections will be conducted per the prescribed inspection frequency on the approved SWM Plan, or at a minimum frequency of once per a year. Maintenance will be performed per the long-term inspection and maintenance requirements on the approved SWM Plan or as otherwise necessary to ensure the intended function of the facility. Facility inspections shall be performed by a DEQ certified SWM Inspector based on BMP-type specific maintenance inspection guidance provided in the Virginia Stormwater BMP Clearinghouse.

5.2 Record Retention

VCCS is responsible for ensuring records are maintained in accordance with the following:

- Project records, including approved SWM plans, shall be kept for three years after state permit termination or project completion.
- SWM facility inspection records shall be documented and retained by the Director of Facilities at each college, or equivalent individual, for at least five years from the date of inspection.
- Construction record drawings shall be maintained in perpetuity or until a SWM facility is removed.
- All registration statements submitted for a VAR10 General Permit for Discharges of Stormwater from Construction Activity (9VAC25-880) shall be documented and retained for at least three years from the date of project completion or state permit termination.

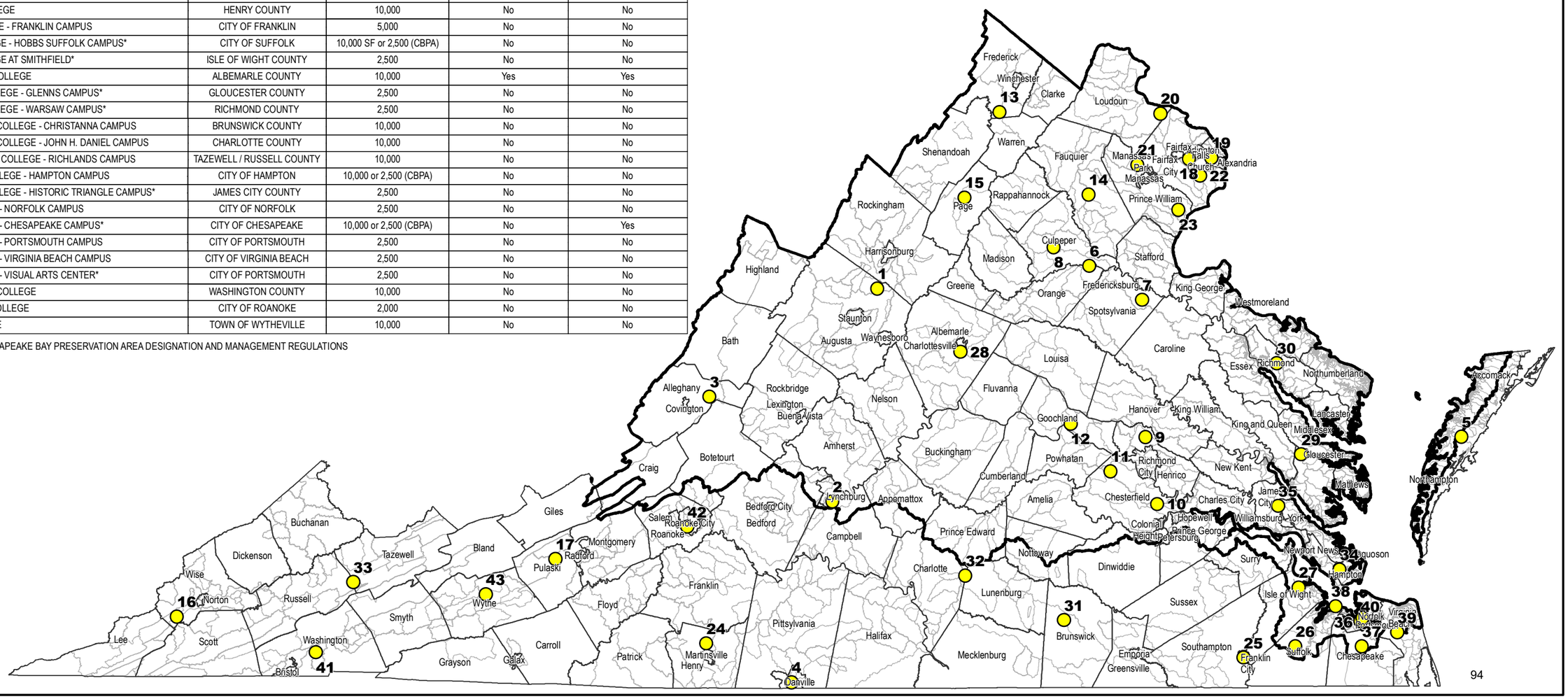
Appendix A

Statewide Coverage Map of VCCS Properties

ID	CAMPUS	LOCALITY	ESC PLAN THRESHOLD (SF)	MORE STRINGENT LOCAL ESC REQUIREMENTS	ADDITIONAL LOCAL SWM TECHNICAL CRITERIA
1	BLUE RIDGE COMMUNITY COLLEGE	AUGUSTA COUNTY	10,000	No	No
2	CENTRAL VIRGINIA COMMUNITY COLLEGE	CITY OF LYNCHBURG	1,000	No	No
3	DABNEY S LANCASTER COMMUNITY COLLEGE	ALLEGHANY COUNTY	10,000	No	No
4	DANVILLE COMMUNITY COLLEGE	CITY OF DANVILLE	5,000	No	No
5	EASTERN SHORE COMMUNITY COLLEGE	ACCOMACK COUNTY	2,500	No	No
6	GERMANNA COMMUNITY COLLEGE - LOCUST GROVE CAMPUS	ORANGE COUNTY	10,000	No	No
7	GERMANNA COMMUNITY COLLEGE - FREDERICKSBURG AREA CAMPUS*	SPOTSYLVANIA COUNTY	2,500	Yes	Yes
8	GERMANNA COMMUNITY COLLEGE - DANIEL TECHNOLOGY CENTER	CULPEPER COUNTY	10,000	No	No
9	J SARGEANT REYNOLDS COMMUNITY COLLEGE - PARHAM ROAD CAMPUS	HENRICO COUNTY	2,500	No	No
10	JOHN TYLER COMMUNITY COLLEGE - CHESTER CAMPUS*	CHESTERFIELD COUNTY	2,500	No	No
11	JOHN TYLER COMMUNITY COLLEGE - MIDLOTHIAN CAMPUS*	CHESTERFIELD COUNTY	2,500	No	No
12	J SARGEANT REYNOLDS COMMUNITY COLLEGE - GOOCHLAND CAMPUS	GOOCHLAND COUNTY	10,000	No	No
13	LORD FAIRFAX COMMUNITY COLLEGE - MIDDLETOWN CAMPUS	FREDERICK COUNTY	10,000	No	No
14	LORD FAIRFAX COMMUNITY COLLEGE - FAUQUIER CAMPUS	FAUQUIER COUNTY	10,000	No	No
15	LORD FAIRFAX COMMUNITY COLLEGE - LURAY-PAGE COUNTY CENTER	PAGE COUNTY	10,000	No	No
16	MOUNTAIN EMPIRE COMMUNITY COLLEGE	WISE COUNTY	10,000	No	No
17	NEW RIVER COMMUNITY COLLEGE	PULASKI COUNTY	10,000	No	No
18	NORTHERN VIRGINIA COMMUNITY COLLEGE - ANNANDALE CAMPUS*	FAIRFAX COUNTY	2,500	No	Potential
19	NORTHERN VIRGINIA COMMUNITY COLLEGE - ALEXANDRIA CAMPUS*	CITY OF ALEXANDRIA	2,500	No	Yes
20	NORTHERN VIRGINIA COMMUNITY COLLEGE - LOUDON CAMPUS	LOUDOUN COUNTY	5,000	Yes	Yes
21	NORTHERN VIRGINIA COMMUNITY COLLEGE - MANASSAS CAMPUS*	PRINCE WILLIAM COUNTY	2,500	Yes	Potential
22	NORTHERN VIRGINIA COMMUNITY COLLEGE - MEDICAL EDUCATION CAMPUS*	FAIRFAX COUNTY	2,500	No	Potential
23	NORTHERN VIRGINIA COMMUNITY COLLEGE - WOODBRIDGE CAMPUS*	PRINCE WILLIAM COUNTY	2,500	Yes	Potential
24	PATRICK HENRY COMMUNITY COLLEGE	HENRY COUNTY	10,000	No	No
25	PAUL D CAMP COMMUNITY COLLEGE - FRANKLIN CAMPUS	CITY OF FRANKLIN	5,000	No	No
26	PAUL D. CAMP COMMUNITY COLLEGE - HOBBS SUFFOLK CAMPUS*	CITY OF SUFFOLK	10,000 SF or 2,500 (CBPA)	No	No
27	PAUL D. CAMP COMMUNITY COLLEGE AT SMITHFIELD*	ISLE OF WIGHT COUNTY	2,500	No	No
28	PIEDMONT VIRGINIA COMMUNITY COLLEGE	ALBEMARLE COUNTY	10,000	Yes	Yes
29	RAPPAHANNOCK COMMUNITY COLLEGE - GLENNS CAMPUS*	GLOUCESTER COUNTY	2,500	No	No
30	RAPPAHANNOCK COMMUNITY COLLEGE - WARSAW CAMPUS*	RICHMOND COUNTY	2,500	No	No
31	SOUTHSIDE VIRGINIA COMMUNITY COLLEGE - CHRISTANNA CAMPUS	BRUNSWICK COUNTY	10,000	No	No
32	SOUTHSIDE VIRGINIA COMMUNITY COLLEGE - JOHN H. DANIEL CAMPUS	CHARLOTTE COUNTY	10,000	No	No
33	SOUTHWEST VIRGINIA COMMUNITY COLLEGE - RICHLANDS CAMPUS	TAZEWELL / RUSSELL COUNTY	10,000	No	No
34	THOMAS NELSON COMMUNITY COLLEGE - HAMPTON CAMPUS	CITY OF HAMPTON	10,000 or 2,500 (CBPA)	No	No
35	THOMAS NELSON COMMUNITY COLLEGE - HISTORIC TRIANGLE CAMPUS*	JAMES CITY COUNTY	2,500	No	No
36	TIDEWATER COMMUNITY COLLEGE - NORFOLK CAMPUS	CITY OF NORFOLK	2,500	No	No
37	TIDEWATER COMMUNITY COLLEGE - CHESAPEAKE CAMPUS*	CITY OF CHESAPEAKE	10,000 or 2,500 (CBPA)	No	Yes
38	TIDEWATER COMMUNITY COLLEGE - PORTSMOUTH CAMPUS	CITY OF PORTSMOUTH	2,500	No	No
39	TIDEWATER COMMUNITY COLLEGE - VIRGINIA BEACH CAMPUS	CITY OF VIRGINIA BEACH	2,500	No	No
40	TIDEWATER COMMUNITY COLLEGE - VISUAL ARTS CENTER*	CITY OF PORTSMOUTH	2,500	No	No
41	VIRGINIA HIGHLANDS COMMUNITY COLLEGE	WASHINGTON COUNTY	10,000	No	No
42	VIRGINIA WESTERN COMMUNITY COLLEGE	CITY OF ROANOKE	2,000	No	No
43	WYTHEVILLE COMMUNITY COLLEGE	TOWN OF WYTHEVILLE	10,000	No	No

* INDICATES COLLEGES SUBJECT TO CHESAPEAKE BAY PRESERVATION AREA DESIGNATION AND MANAGEMENT REGULATIONS

INFORMATION PROVIDE ON THIS MAP IS FOR PRELIMINARY PLANNING PURPOSES ONLY. THE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THRESHOLDS APPLICABLE FOR ESC AND SWM AND IF MORE STRINGENT CRITERIA ARE APPLICABLE. IT IS RECOMMENDED THAT THE DESIGN ENGINEER CONTACT THE LOCALITY FOR THE LATEST INFORMATION.



Appendix B

Land Disturbance Application Form (LD-01)

VCCS LAND DISTURBANCE APPLICATION FORM

Instruction: This form shall be completed, typically by the design engineer preparing the plans, and included with all plan submissions for projects involving land disturbance activities on VCCS owned properties and campuses. Refer to Section 2 the VCCS Annual Standards and Specifications for ESC and SWM for assistance in completing the form.

Project Name: _____

Date of submittal: _____ **Date on plans:** _____

Project Abbreviation (if applicable): _____

Project Location: _____

_____

Applicant

Name: _____

Phone: _____

Email: _____

Estimated Area of Disturbance (sq. ft.): _____

Estimated Impervious Area (sq. ft.): Pre-Development: _____, **Post-Development:** _____

Estimated Dates of Disturbance: _____ **to** _____, **or Duration (months):** _____

Do the VCCS Annual Standards & Specifications require an approved ESC plan? ☐ **Yes** ☐ **No** ☐ **Unknown**

Do the VCCS Annual Standards & Specifications require an approved SWM plan? ☐ **Yes** ☐ **No** ☐ **Unknown**

Describe the land-disturbance(s) involved with the project, including any offsite activities: _____

_____

_____

_____

Submission Item	Applicable? (yes/no)	Included in Submission? (yes/no)
Completed Land Disturbance Application Form		
Completed ESC Plan Checklist		
ESC Plan		
ESC Narrative		
Completed SWM Plan Checklist (when applicable)		
SWM Plan (when applicable)		
SWM Plan		
SWM Narrative		

Applicant (Print): _____

Applicant Signature: _____

Information below to be completed by VCCS

VCCS has verified receipt of all of the applicable submittal items identified above on _____, initiating the 45 day VCCS review period. Comments or an approval letter resulting from the review will be provided to the applicant listed above.

Received by: _____

Appendix C1

VCCS ESC Plan Preparer/Plan Reviewer Checklist (LD-02A)

Instruction: The checklist shall be completed if an ESC Plan and Narrative is required per the VCCS Annual Standards and Specifications for ESC and SWM. The completed checklist shall be provided with the ESC Plan submittal. The Plan and narrative submitted for review shall be signed and sealed by a licensed professional. This checklist is intended to only be used as a guide. The licensed professional is responsible for ensuring plans address the ESC laws and regulations.

Project Information:

Project Name: _____ Project Location: _____

Submittal Date: _____ Date on Plans: _____

Design Engineer (Printed): _____ Email: _____

Yes	No	N/A	ESC *Narrative* Requirement
			Completed ESC Checklist provided in ESC Narrative.
			Project description including the nature and purpose of the land-disturbing activity.
			Description of the **existing site conditions**, including topography, ground cover, and drainage (include information for on-site and receiving channels).
			Description of **adjacent areas** such as residential developments, agricultural areas, streams, lakes, roads, etc., that might be affected by the land disturbance.
			Description of **off-site land disturbing activities** that may occur (borrow sites, disposal areas, easements, etc.). Identify the Owner of the off-site area and the locality responsible for plan review. Include a statement that any off-site land-disturbing activity associated with the project must have an approved ESC Plan. Submit documentation of the approved ESC Plan for each of these sites.
			Description of the site **soils conditions**, including hydrologic soils group, mapping unit, erodibility, permeability, surface runoff, and a brief description of depth, texture and soil structure. Mapping of soil variations should be provided in the narrative or on the plans.
			Description of **critical areas** that have potentially serious erosion problems or that are sensitive to sediment impacts (e.g., steep slopes, channels, etc.).
			Description of the structural and vegetative **ESC measures** that will be used to control erosion and sedimentation on the site. Controls should be consistent with the standards and specifications in Chapter 3 of the Virginia Erosion and Sediment Control Handbook (VESCH), latest edition. Variations and proprietary measures require a variance (see Section 3.5 of the latest edition of the VCCS Annual Standards and Specification for ESC and SWM). Approval from DEQ of variances shall be maintained in the narrative.
			Detailed **sequence of construction**, that includes the **phasing** of installation of ESC measures.
			Description of **permanent stabilization** for the entirety of the site, including specifications, of how the site will be stabilized after construction is completed (permanent stabilization).
			Schedule of **maintenance requirements for ESC measures** including inspections frequency, maintenance concerns, and methods for repair or prevention of need for repair (i.e. removal of sediment build-up).
			Description of **stormwater runoff considerations** that includes describing any increase in peak runoff rates and the effects on downstream erosion and flooding. The description shall include the strategy to control stormwater runoff.
			Calculations for temporary sediment basins, diversions, channels, stormwater facilities to address MS-19, etc. Where applicable. including pre- and post-development runoff calculations, drainage area maps, time of concentration paths and computations, rainfall source and documentation, weighted runoff coefficients and computations, runoff and routed hydrographs or peak computations (as applicable), adequate onsite channel (MS-19) & culvert computations, etc.

Yes	No	N/A	ESC *Plan* Requirement
			Vicinity map locating the site in relation to the surrounding area. Include any landmarks and road information that might assist in locating the site.
			Certification by DEQ qualified plan reviewer signature block including location for printed name, signature, and location for certified plan reviewer number, for ESC and SWM, as applicable.
			Location on the ESC Plan cover sheet for identification of the **Responsible Land Disturber** (RLD).
			Existing conditions including existing contours, surface waters and other surface features, existing tree lines, grassed areas, or unique vegetation.
			Where applicable, a **demolition plan** with identification of features to be demolished and measures to address ESC for the demolition.
			Proposed conditions, including proposed contours and features.
			Delineation of the **limits of disturbance**.
			A description of any **variance** approved by DEQ described on the cover sheet of the ESC Plans.
			North arrow provided on all plan sheets.
			Legend with a complete listing of all ESC measures used, including the VESCH uniform code symbol and the standard and specification number. Include any other items necessary to identify pertinent features in the plan.
			Identification of any **off-site land disturbing activities** (e.g., borrow sites, disposal areas, etc.) and appropriate ESC controls.
			Identification of **critical areas** and appropriate protections.
			Inclusion of **erosion and sediment control notes** (ES-1 through ES-9) found in Table 6-1 on page VI-15 of the 1992 Virginia Erosion and Sediment Control Handbook.
			Identification of **property and easement lines**. For each adjacent property, list the deed book and page number and the property owner's name and address.
			Finished floor elevation of all buildings on site, including basements.
			The **locations of erosion and sediment control and stormwater management practices** used on the site. Use the standard symbols and abbreviations in Chapter 3 of the VESCH.
			Existing drainage patterns including dividing lines and directions of flows with the total area for each drainage area.
			A **schedule of regular inspections, maintenance, and repair** of temporary erosion and sediment control structures and permanent stormwater management facilities.
			Storm sewer profiles of all storm drains except roof drains.
			Site-specific **details for all ESC measures**. Where applicable, details shall include site-specific dimensions. Proprietary measures with an approved variance shall include site-specific details with dimensions and other information for construction per manufacturer's specifications.
			Specifications for stormwater and stormwater management structures (i.e. pipe materials, pipe bedding, stormwater structures etc.).
			Minimum Standard (MS) 1 through 19 provided on the plan with a description for each that describes how the minimum standard is addressed with the plan.
			Permanent or temporary soil stabilization shown where required on plans using standard symbols and abbreviations in Chapter 3 of the VESCH. **(MS-1, MS-3, and MS-5)**
			Stabilization and/or protection measures for soil stock piles and borrow areas. **(MS-2)**
			Detailed **sequence of construction**, that includes the phasing of installation of ESC measures with sediment trapping measures as a first step prior to upslope land disturbance. **(MS-4)**
			Drainage areas to sediment traps and sediment basins shown on plans. **(MS-6)**

Yes	No	N/A	ESC Plan Requirement (cont.)
			Stabilization measures provided for slopes steeper than 3:1. **(MS-7)**
			Measures to prevent concentrated flow from flowing down cut or fill slopes (i.e. slope drains). **(MS-8)**
			Measures to address water seeping from a slope face been addressed. **(MS-9)**
			Inlet protection provided for all operational storm drain and culvert inlets. **(MS-10)**
			Outlet protection and/or channel linings provided for all stormwater conveyance channels and receiving channels prior to being made operational (see sequence of construction). **(MS-11)**
			Measures to minimize encroachment and minimize sediment transport for work in a live watercourse. **(MS-12)**
			Temporary stream crossings of non-erodible material where a live watercourse must be crossed by construction vehicles more than twice in any six-month period. **(MS-13)**
			Applicable federal, state and local regulations pertaining to working in or crossing live watercourses are addressed and summarized on the plan. **(MS-14)**
			Stabilization measures for bed and banks of live watercourse subject to disturbance. **(MS-15)**
			Measures shown on plan (i.e. Construction entrance) to minimize sediment transport onto public and otherwise paved roads. **(MS-17)**
			MS-19 satisfied for each receiving channel per 9VAC25-840-40(19)
			Increased volumes of sheet flows that may cause erosion or sedimentation on adjacent property are diverted to a stable outlet, adequate channel, pipe or pipe system, or to a detention facility.
			If the project impacts any wetlands or surface waters, is all correspondence and permits concerning any proposed impacts to jurisdictional wetlands, stream and channels included (i.e. COE 404 permit). Note that the plan cannot be approved without proper documentation or necessary permits for jurisdictional impacts.

Appendix C2

VCCS SWM Plan Preparer/Plan Reviewer Checklist (LD-02A)

Instruction: This checklist shall be completed if a SWM Plan and Narrative is required per the VCCS Annual Standards and Specifications for ESC and SWM. The completed checklist shall be provided with the SWM Plan submittal. The Plan and Narrative submitted for review shall be signed and sealed by a licensed professional. This checklist is intended to only be used as a guide. The licensed professional is responsible for ensuring plans address the SWM laws and regulations.

Project Information:

Project Name: _____ Project Location: _____

Submittal Date: _____ Date on Plans: _____

Design Engineer (Printed): _____ Email: _____

Yes	No	N/A	SWM Plan/Narrative Requirement
General Plan Information (Plan)			
			North arrow.
			Legend.
			Location and vicinity map.
			Certification by DEQ qualified plan reviewer signature block including location for printed name, signature, and location for certified plan reviewer number, for ESC and SWM, as applicable.
			Delineation of the site area and property lines in the vicinity of the project.
			Existing and proposed contours (2' interval minimum).
			Locations of test borings.
			Earthwork specifications.
			Compaction requirements specified.
			Sequence of construction.
			Limits of clearing and grading.
			Existing and proposed features including buildings, roads, parking areas, utilities, stormwater management facilities and any other physical attributes.
			SWM Facility Certification - Plans shall list all SWM facilities and critical construction inspection timeframes (i.e., liner, underdrain and outlet pipe installation) for which SWM BMP certification is required per Section 4.1.2 of the VCCS Annual Standards and Specifications for ESC and SWM.
			The following note is on the plan: "A certified construction record drawing for permanent SWM facilities shall be submitted to VCCS for approval per section 4.1.2 of the VCCS Annual Standards and Specifications for ESC and SWM. Construction inspections and surveys, performed by a licensed professional, shall be required at each stage of installation (construction) as necessary to certify that the SWM facility has been built in accordance with the approved plan and design specifications. The Contractor shall provide a minimum of 2 business days' notice to the certifying professional to allow for critical inspections."
			BMP Inspection and maintenance plan for each permanent SWM facilities. For manufactured permanent BMPs, the construction drawings shall include manufacturer's recommendation on maintenance and inspection.
			Specifications for construction/installation of proprietary BMPs per the manufacturer's specifications
			Cross sections for stormwater conveyance channels with maximum water surface elevations for design storms (1-, 10-, and 100-year)
			Where applicable, outlet protection with dimensions at points of concentrated discharge

Yes	No	N/A	SWM Plan/Narrative Requirement
Site Information (Narrative)			
			Description of existing and proposed site conditions.
			Summary table with pre- and post-development land cover conditions (i.e. forest, managed turf, and impervious areas).
			Discussion of the stormwater management strategy to address water quantity and quality criteria.
			Information on the type and location of stormwater discharges, including information on the features to which stormwater is being discharged including surface waters or karst features if present.
			If the project impacts any wetlands or surface waters, is all correspondence and permits concerning any proposed impacts to jurisdictional wetlands, stream and channels included (i.e. COE 404 permit). Note that the plan cannot be approved without proper documentation or necessary permits for jurisdictional impacts.
			A general description of the proposed stormwater management facilities and the mechanism through which the facilities will be operated and maintained after construction is complete
			Information on the proposed stormwater management facilities, including (i) the type of facilities; (ii) location, (iii) impervious and pervious acres treated; and (iv) the surface waters or karst features into which the facility will discharge
			Discussion of possible stormwater impacts on downstream properties including mapping with sufficient information on adjoining parcels to assess the impacts.
			Geotechnical report when applicable (include infiltration rates when required for a BMP).
			Boring locations: borrow area, basin pool area and embankment area (centerline principal spillway, emergency spillway, abutments).
			Boring logs with Unified Soils Classifications, soil descriptions, depth to seasonal high groundwater table, etc.
			Additional geophysical investigation and recommendations in Karst environment.
			Description of inclusion of the locality's additional technical requirements into the plan, if any, and how they were addressed to the maximum extent practicable.
Hydrologic Computations (Narrative)			
			Mapping that supports computations and includes, at a minimum the following: • Pre- and post-development development contours; • Existing streams, ponds, culverts, ditches, wetlands, other water bodies, and floodplains; • Current land use including existing structures, roads, and locations of known utilities and easements; • Limits of clearing and grading; • Proposed drainage patterns on the site; • Proposed buildings, roads, parking areas, utilities, and stormwater management facilities.
			Pre-development drainage area mapping that includes all contributing drainage areas, CN labels, depiction of time of concentration flow paths, slopes and lengths used for runoff hydrographs.
			Post-development drainage area mapping that includes all contributing drainage areas, CN labels, depiction of time of concentration flow paths, slopes and lengths used for runoff hydrographs.

Yes	No	N/A	SWM Plan/Narrative Requirement
Hydrologic Computations cont. (Narrative)			
			Rainfall precipitation frequency data recommended by the U.S. National Oceanic and Atmospheric Administration (NOAA) Atlas 14. Partial duration time series shall be used for the precipitation data.
			Summary table for determination of runoff curve numbers.
			Time of concentration calculations.
			Predevelopment runoff hydrographs.
			Post-development runoff hydrographs.
Hydraulic Computations (Narrative & Plans, as indicated)			
			Routing computations for each proposed stormwater management facility for each applicable design storm provided in narrative.
			Stage-storage data used in routing computations in the narrative.
			Control structure information used in routing computations in the narrative.
			Summary table of pre- and post-development peak runoff rates for each point of discharge from the site provided in narrative.
			Maximum water surface elevations for design storms shown in sections or profiles on the plans for each stormwater management facility.
			Impoundments designed to convey the 100-year storm as demonstrated in computations in the narrative.
			Adequate freeboard is provided for impoundments as shown on the plans based on computations in the narrative.
			Hydraulic grade line computations in the narrative with indication of locations of surcharge or inadequacy.
			Storm sewer design computations in the narrative.
			Culvert calculations in the narrative.
			Gutter spread calculations in the narrative.
			Provide profiles of all storm conveyances (except roof drains) on plans. Profiles should include existing and proposed grade, structure types, pipe materials and sizes, slopes, inverts, etc.
Water Quality Computations (Narrative & Plans, as indicated)			
			Provide Runoff Reduction Method spreadsheet output including: • Site loadings • Required reductions • Input for each BMP employed and reductions achieved by each BMP • Compliance worksheet • Adjusted CN worksheet, when applicable.
			Treatment volume calculations for sizing BMPs.
			Stage-storage information indicating the treatment volume required and volume provided.
			All proposed SWM design follows the Virginia BMP Clearinghouse design specifications.
			A BMP-type specific checklist from Appendix 8-A of the Virginia Stormwater Management Handbook, latest edition, is completed and provided in the narrative for each proposed BMP.

Appendix D-1

DEQ Annual Standards and Specifications Entity Information Form

(To be submitted with the VAR 10 Registration Statement)

Annual Standards & Specification (AS&S) Entity Information
General VPDES Permit for Discharges of Stormwater from Construction Activities (VAR10)

(To be completed by the AS&S Entity and submitted with the VAR10 Registration Statement)

1. Annual Standards & Specifications Entity/Holder:		Virginia Community College System
2. AS&S Coverage Verification		
	a. Operator:	
	b. Project name:	
	c. Technical Criteria Used:	
	d. Estimated Area to be Disturbed (acres):	
3. Plan Approval Verification		
	a. Erosion & Sediment Control (ESC) Plan Reviewer Name:	
	i. ESC Plan Reviewer Certification Number:	
	b. Stormwater Management (SWM) Plan Reviewer Name:	
	i. SWM Plan Review Certification Number	

Printed Name:	**Title:**
Signature:	**Date:**

(Please sign in ink. This must be signed by an employee of the AS&S entity who has oversight of this project and is aware of its coverage under their AS&S.)

Instructions for completion:

2.a. Operator = Owner, operator, developer, person or general contractor that the AS&S holder is allowing to operate under their DEQ approved AS&S.
2.b. Project Name = Name of the construction activity as it appears on the Registration Statement.
2.c. Stormwater Management Technical Criteria = The technical criteria used for this project will be either IIB or IIC per the SWM Regulations; 9VAC25-870.
2.d. Estimated Area to Be Disturbed = Provide the estimated area (to the nearest one-hundredth acre) to be disturbed by the construction activity. Include the estimated area of land disturbance that will occur at any off-site support activity to be covered under this general permit.

(Further questions can be directed to the Stormwater Construction General Permitting personnel; constructiongp@deq.virginia.gov)

Appendix D-2

VCCS AS&S Preconstruction Meeting Form (LD-03)

VCCS LAND DISTURBANCE PRECONSTRUCTION MEETING FORM

Instruction: This form shall be completed prior to the commencement of a land disturbance as defined in the VCCS Annual Standards and Specifications for ESC and SWM. The purpose of this form is to acknowledge responsibilities in accordance with the VCCS Annual Standards and Specifications for ESC and SWM. A copy of this completed form shall be maintained by the VCCS Project Manager and the contractor and be readily available upon request. The following individuals are required to participate in the preconstruction meeting:

- VCCS Project Manager;
- VAR10 General Permit Operator (or Duly Authorized Representative) or primary contractor for projects where the land disturbance activity is less than 1-acre;
- For land disturbance of an acre or greater, the Certified Inspector performing self-inspections for the Operator as required by the VAR10 General Permit ;
- The Responsible Land Disturber (RLD) identified on the ESC Plan;
- Representative of SWM facility design firm providing SWM facility certification, when applicable; and
- A list of additional attendees may be attached to this form, if desired.

Section 1 – Project Information

Project Name: _____ Date: _____

Project Location/Description: _____

VCCS Representative: _____

Primary Contractor/ VAR10 General Permit Operator: _____

Responsible Land Disturber: _____

Representative for firm certifying stormwater facility (when applicable):_____

VCCS Inspector: _____

Section 2 – Checklist

Check those available:

- ❒ Coverage Letter for the General Permit for Discharges of Stormwater from Construction Activity Available, when applicable for land disturbance ≥ 1-acre
- ❒ Prepared site-specific and completed SWPPP for land disturbance of an acre or greater, when applicable for land disturbance ≥ 1-acre
- ❒ Approved ESC Plan
- ❒ Approved SWM Plan, when applicable
- ❒ Identification of Responsible Land Disturber (Recorded in SWPPP, when applicable)
- ❒ Any off-site areas associated with this project have been identified.
- ❒ Conditions of termination of land disturbance form discussed.
- ❒ Discussion of responsibilities for SWM facility certifications (e.g. coordination with the design professional certifying the facility and the critical components of the installation of the facility)

Section 3 – Contractor Acknowledgement of Responsibilities

(To be completed by the Contractor/Operator)

I acknowledge my responsibilities to conduct the land disturbance activity in accordance with the VCCS Annual Standards and Specifications for ESC and SWM, the approved Plans, to seek approval from VCCS for any significant changes to the plan, to adhere to the conditions of the VAR10 General Permit (when applicable), oversight of the maintenance of the Stormwater Pollution Prevention Plan (when applicable), coordination with the individual providing the as-built for any stormwater management facilities, and notifying the VCCS Project Inspector upon:

- Installation of the initial ESC measures where applicable and as identified on the ESC Plan; and
- The occurrence of significant discharge of sediment or other pollutants from the site.

Name: _____

Signature: _____

Date: _____

Section 4 – VCCS Approval of Completeness of the Land Disturbance Preconstruction Meeting

(To be completed by the VCCS Project Manager)

I acknowledge the Land Disturbance Preconstruction Meeting has occurred and been conducted consistent with the VCCS Annual Standards and Specifications for ESC and SWM. The required documentation, as listed on this form, is complete and land disturbance can commence.

Name: _____

Signature: _____

Date: _____

Appendix E1

VCCS Construction Site Inspection Form for Land Disturbance < 1-acre (LD-04A)

VCCS LAND DISTURBANCE INSPECTION SUMMARY

Date: _____

VCCS AS&S ESC/SWM Inspector Name: _____

Project Name: _____

Project Location: _____

_____




GREEN FLAG **YELLOW FLAG** **RED FLAG** **BLACK FLAG**

As result of the inspection reflected on the attached inspection form, the following assessment of the Project has been made in regards to compliance with VCCS Annual Standards & Specifications for Erosion and Sediment Control and Stormwater Management:

GREEN FLAG – No issue identified.

YELLOW FLAG – No sediment/pollution has left the site. A VERBAL WARNING is being issued. Corrective action shall be performed as described below.

- ☐ Inadequate Erosion & Sediment Controls
- ☐ Un-maintained ESC Controls
- ☐ SWPPP not maintained, or not on site
- ☐ Other: _____
  _____
- ☐ Illegal connection to stormwater system
- ☐ Inlets are unprotected
- ☐ Stabilization timeframe exceeded
- ☐ See inspection checklist

Description of violation: _____

_____

_____

RED FLAG – Off-site sediment transport or pollution is occurring/has occurred, or significant potential issues exist on the site. A NOTICE OF VIOLATION is being issued. Corrective action shall be performed as described below. Failure to address outstanding issues will result in a Black Flag status, at which point all work must stop.

- ☐ Yellow Flag violation not addressed within specified timeframe
- ☐ Mud or debris on public street or adjacent property
- ☐ Illegal connection to the sanitary sewer
- ☐ Stormwater facilities are inadequate with potential threat to downstream areas
- ☐ Other: _____
  _____
- ☐ Improper location/maintenance of material stockpiles
- ☐ Evidence of Stormwater pollution
- ☐ Chemicals and waste products are not properly stored
- ☐ Improper fill materials
- ☐ See inspection Checklist

Description of violation: _____

_____

_____

LD-04 – VCCS Land Disturbance Inspection Summary

■ **BLACK FLAG– There is significant conflict with VCCS Annual Standards & Specifications or the General Permit for Discharges from Construction Activity (VAR10). ALL WORK MUST STOP**

- ☐ **Red Flag violation not addressed within specified timeframe**
- ☐ **Working without or in non-compliance with the required permits or approved plans**
- ☐ **Significant off-site pollution or erosion**
- ☐ **Other: _____**
  _____
- ☐ **Significant pollution into stormwater system or open water**
- ☐ **Filling, grading, or grubbing in environmentally sensitive areas.**
- ☐ **Failing stormwater facilities**
- ☐ **See inspection checklist**

Description of violation: _____

_____

_____

REQUIRED CORRECTIVE ACTIONS:

_____

_____

_____

_____

Timeline for required activities: _____

Enforcement Follow-up Procedures

YELLOW FLAG – Corrective action will be performed as soon as is practicable within the timeframe specified. Follow-up may be required with the VCCS AS&S ESC/SWM Inspector to verbally confirm that remediation activities have occurred, are appropriate or if any changes or delays are anticipated.

RED FLAG – Violations shall be addressed as soon as is practicable within the timeframe specified. The contractor shall provide written confirmation (with photos, as needed) that remediation activities have occurred within the specified timeframe. Documentation of the corrective action shall be maintained within the SWPPP.

BLACK FLAG – Black flag violations represent potentially significant damage to property and natural resources, as well as increased legal liability for VCCS. All work must stop until such point that corrective action has been completed and any remediation activities have occurred. Project work associated with the ESC and/or SWM Plans, outside of those to perform corrective actions or remediation cannot commence until a violation release form is provided. Documentation of the corrective action and the release form shall be maintained in the SWPPP.

VCCS AS&S ESC/SWM Inspector's Signature:

_____

Notification Received By: _____, Title: _____

LD-04R – Stop Work (Black Flag) Release Form
Project Code: 260 _____

VCCS LAND DISTURBANCE INSPECTION SUMMARY – BLACK FLAG VIOLATION RELEASE FORM

Date: _____

VCCS AS&S ESC/SWM Inspector Name: _____

Project Name: _____

Project Location: _____

_____

Corrective actions and/or remediation identified on the VCCS Land Disturbance Inspection Summary dated _____ have been completed to the satisfaction of the VCCS AS&S Inspector. Corrections and/or remediation are to a point where significant conflicts with the VCCS Annual Standards & Specifications, Construction General Permit VAR10, as well as any threats to property or natural resources, are minimized and work on the project may continue.

VCCS AS&S ESC/SWM Inspector Signature:

_____

Notification Received By: _____, Title: _____

LD-04A: VCCS Construction Site Inspection Form
(For regulated Land Disturbance < 1-acre)

General Information			
Project Name:		VCCS Project Code:	
Location:		Start Time:	
Date of Inspection:		End Time:	
Contact Information/Responsible Parties			
* Site Representative (see below)		Representative's Email:	
		Representative's Phone #:	
Inspector's Name(s):		Inspector Email:	
		Inspector Phone #:	
Inspectors DEQ Certification #(s):		Date of last inspection:	

* PM, Contractor, RLD or other individual with responsibility for implementation of the ESC Plan.

Inspection Type (check all that apply)

☐ After installation of initial ESC measures ☐ 2-week inspection ☐ Final Stabilization
☐ Within 48-hours after a runoff event (≥ 0.25 inches of rain over 24-hours)* ☐ Other _____

* If Inspection Type due to runoff event; provide the date of event: _____ and estimated rainfall amount (inches): _____

Weather Conditions (check all that apply)

☐ Clear ☐ Sunny ☐ Partly Cloudy ☐ Cloudy ☐ Cold ☐ Cool ☐ Mild ☐ Hot ☐ Raining ☐ Post-rain event

Are discharges occurring from the site at the time of inspection or evidence of off-site sediment transport? ☐ Yes ☐ No
If yes, describe:

	Construction Inspection Checklist Items numbered are ESC Minimum Standards, 9VAC25-840-40 (See VCCS approved ESC Plan and Narrative, where applicable)	***Yes***	***No***	***N/A***	***Location of Concern & Recommended Corrective Action/Notes*** (additional notes at end of form)
-	Are deficiencies identified during previous inspections corrected? Notify VCCS PM if a specific deficiency has been identified and not corrected on each of the past 3 consecutive inspection reports?				
-	Are all land-disturbing activities within the area of disturbance identified on the approved ESC Plan?				
-	Are all erosion and sediment controls maintained, properly repaired & functional? [9VAC25-840-60]				
-	Are site ESC operations consistent with the ESC phasing plan or have modifications to the plan been appropriately approved and documented?				
1	Are temporary or permanent stabilization measures applied within allowable time frames (7 days after final grade or where dormant for more than 14 days)? [9VAC25-840-40]				
2	Are disposal/borrow areas & stockpiles (on-site and off-site) stabilized or protected with sediment trapping measures? Are off-site areas on plan or have separate VCCS or locality approved ESC Plan?				
3	Are all temporary ESC measures that are no longer needed removed & applicable site areas permanently stabilized?				
4	Are initial ESC measures, including perimeter controls, (i.e. silt fence, sediment basins and traps, perimeter dikes) intended to trap sediment installed and functional prior to upslope land disturbance?				

	Construction Inspection Checklist	***Yes***	***No***	***N/A***	***Location of Concern & Recommended Corrective Action/Notes*** (additional notes at end of form)
5,7	Are earthen structures, such as dams, dikes, diversions, & cut/fill slopes, stabilized or protected with functioning sediment trapping measures?				
6	Are sediment basins/traps constructed according to the plans/specifications, functional and maintained?				
8	Are cut/fill slopes protected from concentrated runoff with channel flumes or slope drains?				
9	Are slopes with water seeps protected with adequate drainage and stabilization?				
10	Do operational storm sewer & culvert inlets have inlet protection according to the plans/specifications?				
11	Are constructed stormwater conveyance channels & ditches stabilized with the appropriate channel lining and/or outlet protection according to the plans/specifications?				
12	Is non-erodible material or cover provided for all causeways and cofferdams where work is performed in a live watercourse?				
13	Is a live watercourse crossed by construction vehicles more than twice in a 6-month period, and if so, is the temporary stream crossing used for crossing constructed of non-erodible materials?				
14	Where work is performed in a live watercourse, are applicable federal and state permits available?				
15	Where work is performed in a live watercourse, have the bed and banks been stabilized immediately and per the plan/specifications?				
16	Are underground utilities installed with less than 500’ of trench open, sediment trapping controls for excavated material, filtering of effluent from dewatering, and compaction and restabilization of backfill?				
17a	Are construction entrances properly located, installed & maintained?				
17b	Does sediment tracked onto adjacent roadways appear to be removed each day?				
18	If the site is stabilized, have ESC measures been removed and trapped sediment been stabilized or appropriately removed?				
19a	Is there evidence of downstream or other off-site sediment transport? (Provide locations & description of impacts if applicable.)				

	Construction Inspection Checklist	***Yes***	***No***	***N/A***	***Location of Concern & Recommended Corrective Action/Notes*** (additional notes at end of form)
19b	Are adjacent properties and waterways adequately protected from accidental land disturbance, potential pollutant discharge, erosion, flooding, & sedimentation from the project site?				
19c	Do all locations concentrated of concentrated runoff leaving the site discharge to a channel (i.e. stream, storm sewer, or ditch)?				
-	Are any ESC measures to protect SWM practices (i.e. infiltration basin, bioretention) that are shown on the plans to prevent compaction or clogging installed?				
-	Is runoff and other discharges (dewatering) that contain sediment or other pollutants being properly treated prior to discharging from the site?				
-	Are permanent stormwater measures (basins, etc.) properly installed/converted, stabilized and functional?				

NOTES (reference checklist item # and any additionally attached information such as photos):

CERTIFICATION INSTRUCTION
This Inspection Form is not complete without the completion of the certification below by the certified inspector identified on the first sheet of the inspection form.

Reports conducted by VCCS or VCCS representative will be provided to the Site Representative by (check all that apply):
☐ Hardcopy ☐ Email ☐ Other _____ within 48 hours.

CERT-1: INSPECTION CERTIFICATION STATEMENT
"I certify under penalty of law that I performed the inspection described in this form as a Certified Project Inspector for ESC and SWM per the Virginia Erosion and Sediment Control and Stormwater Management Certification Regulations (9VAC25-850). I certify that the inspection described in the form reflects site conditions to the best of my knowledge and belief and is 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 and falsifying inspections (reports)."

Inspector's Name: _____

Signature: _____ Date: _____

Appendix E2

VCCS Construction Site Inspection Form for Land Disturbance ≥1-acre (LD-04B)

VCCS LAND DISTURBANCE INSPECTION SUMMARY

Date: _____

VCCS AS&S ESC/SWM Inspector Name: _____

Project Name: _____

Project Location: _____

_____




GREEN FLAG **YELLOW FLAG** **RED FLAG** **BLACK FLAG**

As result of the inspection reflected on the attached inspection form, the following assessment of the Project has been made in regards to compliance with VCCS Annual Standards & Specifications for Erosion and Sediment Control and Stormwater Management:

GREEN FLAG – No issue identified.

YELLOW FLAG – No sediment/pollution has left the site. A VERBAL WARNING is being issued. Corrective action shall be performed as described below.

- ☐ Inadequate Erosion & Sediment Controls
- ☐ Un-maintained ESC Controls
- ☐ SWPPP not maintained, or not on site
- ☐ Other: _____
  _____
- ☐ Illegal connection to stormwater system
- ☐ Inlets are unprotected
- ☐ Stabilization timeframe exceeded
- ☐ See inspection checklist

Description of violation: _____

_____

_____

RED FLAG – Off-site sediment transport or pollution is occurring/has occurred, or significant potential issues exist on the site. A NOTICE OF VIOLATION is being issued. Corrective action shall be performed as described below. Failure to address outstanding issues will result in a Black Flag status, at which point all work must stop.

- ☐ Yellow Flag violation not addressed within specified timeframe
- ☐ Mud or debris on public street or adjacent property
- ☐ Illegal connection to the sanitary sewer
- ☐ Stormwater facilities are inadequate with potential threat to downstream areas
- ☐ Other: _____
  _____
- ☐ Improper location/maintenance of material stockpiles
- ☐ Evidence of Stormwater pollution
- ☐ Chemicals and waste products are not properly stored
- ☐ Improper fill materials
- ☐ See inspection Checklist

Description of violation: _____

_____

_____

LD-04 – VCCS Land Disturbance Inspection Summary

■ **BLACK FLAG– There is significant conflict with VCCS Annual Standards & Specifications or the General Permit for Discharges from Construction Activity (VAR10). ALL WORK MUST STOP**

- ☐ **Red Flag violation not addressed within specified timeframe**
- ☐ **Working without or in non-compliance with the required permits or approved plans**
- ☐ **Significant off-site pollution or erosion**
- ☐ **Other: _____**
  _____
- ☐ **Significant pollution into stormwater system or open water**
- ☐ **Filling, grading, or grubbing in environmentally sensitive areas.**
- ☐ **Failing stormwater facilities**
- ☐ **See inspection checklist**

Description of violation: _____

_____

_____

REQUIRED CORRECTIVE ACTIONS:

_____

_____

_____

_____

Timeline for required activities: _____

Enforcement Follow-up Procedures

YELLOW FLAG – Corrective action will be performed as soon as is practicable within the timeframe specified. Follow-up may be required with the VCCS AS&S ESC/SWM Inspector to verbally confirm that remediation activities have occurred, are appropriate or if any changes or delays are anticipated.

RED FLAG – Violations shall be addressed as soon as is practicable within the timeframe specified. The contractor shall provide written confirmation (with photos, as needed) that remediation activities have occurred within the specified timeframe. Documentation of the corrective action shall be maintained within the SWPPP.

BLACK FLAG – Black flag violations represent potentially significant damage to property and natural resources, as well as increased legal liability for VCCS. All work must stop until such point that corrective action has been completed and any remediation activities have occurred. Project work associated with the ESC and/or SWM Plans, outside of those to perform corrective actions or remediation cannot commence until a violation release form is provided. Documentation of the corrective action and the release form shall be maintained in the SWPPP.

VCCS AS&S ESC/SWM Inspector's Signature:

_____

Notification Received By: _____, Title: _____

LD-04R – Stop Work (Black Flag) Release Form
Project Code: 260 _____

VCCS LAND DISTURBANCE INSPECTION SUMMARY – BLACK FLAG VIOLATION RELEASE FORM

Date: _____

VCCS AS&S ESC/SWM Inspector Name: _____

Project Name: _____

Project Location: _____

_____

Corrective actions and/or remediation identified on the VCCS Land Disturbance Inspection Summary dated _____ have been completed to the satisfaction of the VCCS AS&S Inspector. Corrections and/or remediation are to a point where significant conflicts with the VCCS Annual Standards & Specifications, Construction General Permit VAR10, as well as any threats to property or natural resources, are minimized and work on the project may continue.

VCCS AS&S ESC/SWM Inspector Signature:

_____

Notification Received By: _____, Title: _____

LD-04B: VCCS Construction Site Inspection Certification Form
(For regulated Land Disturbance ≥ 1-acre)

General Information			
Project Name:		VCCS Project Code:	
VAR10 Permit # (where applicable)		Location:	
Date of Inspection:		Start/End Time:	
Contact Information/Responsible Parties			
* Site Representative (see below)		Representative's email and phone number:	
Inspector's Name(s):		Inspector's email and phone number:	
Inspectors DEQ Certification #(s):		Other contact information (as applicable):	
* PM, Contractor, RLD or other individual with responsibility for implementation of the ESC Plan and the SWPPP, where applicable.			

Inspection Type (check all that apply)

☐ After installation of initial ESC measures
☐ Within 48-hours after a runoff event (≥ 0.25 inches of rain over 24-hours)*
☐ Contractor's self-inspection as required in SWPPP (where applicable)
☐ Periodic SWM inspection _____
☐ Final Stabilization
☐ 2-week inspection
☐ Other _____

* If within 48-hours of runoff event, provide: date of event: _____ and rainfall amount (inches): _____

Weather Conditions (check all that apply)

☐ Clear ☐ Sunny ☐ Partly Cloudy ☐ Cloudy ☐ Cold ☐ Cool ☐ Mild ☐ Hot ☐ Raining ☐ Post-rain event

Are discharges occurring from the site at the time of inspection or evidence of off-site sediment transport? ☐ Yes ☐ No
If yes, describe:

	Construction Inspection Checklist (For projects under 1 acre of disturbance that do not require a Construction General Permit ONLY Section 1 of this form applies. Where disturbance is equal to or greater than an acre, all Sections apply)	***Yes***	***No***	***N/A***	***Location of Concern and Recommended Corrective Action/Notes*** (additional notes at end of form)
1	***Section 1 - ESC Plan Inspection: Part II(A)2***				See VCCS approved ESC and SWM Plans, where applicable
1a	Are deficiencies identified during previous inspections corrected? Notify VCCS PM if a specific deficiency has been identified and not corrected on each of the past 3 consecutive inspection reports?				
1b	Are all land-disturbing activities within the area of disturbance identified on the approved ESC Plan?				
1c	Are all erosion and sediment controls maintained, properly repaired and functional? [9VAC25-840-60]				
1d	Are site ESC operations consistent with the ESC phasing plan or have modifications to the plan been appropriately approved and documented?				
1e	Are temporary or permanent stabilization measures applied within allowable time frames (7 days after final grade or where dormant for more than 14 days)? [9VAC25-840-40]				
1f	Are disposal/borrow areas and stockpiles (on-site and off-site) stabilized or protected with sediment trapping measures? Are off-site areas on plan or have separate VCCS or locality approved ESC Plan?				

	Construction Inspection Checklist	*Yes*	*No*	*N/A*	***Location of Concern and Recommended Corrective Action/Notes*** (additional notes at end of form)
1g	Are all temporary ESC measures that are no longer needed removed and applicable site areas permanently stabilized?				
1h	Are initial ESC measures, including perimeter controls, (i.e. silt fence, sediment basins and traps, perimeter dikes) intended to trap sediment installed and functional prior to upslope land disturbance?				
1i	Are earthen structures, such as dams, dikes, diversions, and cut/fill slopes, stabilized or protected with functioning sediment trapping measures?				
1j	Are sediment basins/traps constructed according to the plans/specifications, functional and maintained?				
1k	Are cut/fill slopes protected from concentrated runoff with channel flumes or slope drains?				
1l	Are slopes with water seeps protected with adequate drainage and stabilization?				
1m	Do operational storm sewer and culvert inlets have inlet protection according to the plans/specifications?				
1n	Are constructed stormwater conveyance channels and ditches stabilized with the appropriate channel lining and/or outlet protection according to the plans/specifications?				
1o	Is non-erodible material or cover provided for all causeways and cofferdams where work is performed in a live watercourse?				
1p	Is a live watercourse crossed by construction vehicles more than twice in a 6-month period, and if so, is the temporary stream crossing used for crossing constructed of non-erodible materials?				
1q	Where work is performed in a live watercourse, are applicable federal and state permits available?				
1r	Where work is performed in a live watercourse, have the bed and banks been stabilized immediately and per the plan/specifications?				
1s	Are underground utilities installed with less than 500’ of trench open, sediment trapping controls for excavated material, filtering of effluent from dewatering, and compaction and restabilization of backfill?				
1t	Are construction entrances properly located, installed and maintained?				
1u	Does sediment tracked onto adjacent roadways appear to be removed each day?				

	Construction Inspection Checklist	***Yes***	***No***	***N/A***	***Location of Concern and Recommended Corrective Action/Notes*** (additional notes at end of form)
1v	If the site is stabilized, have ESC measures been removed and trapped sediment been stabilized or appropriately removed?				
1w	Is there evidence of downstream or other off-site sediment transport? (Provide locations and description of impacts if applicable.)				
1x	Are adjacent properties and waterways adequately protected from accidental land disturbance, potential pollutant discharge, erosion, flooding, and sedimentation from the project site?				
1y	Do all locations concentrated of concentrated runoff leaving the site discharge to a channel (i.e. stream, storm sewer, or ditch)?				
1z	Are any ESC measures to protect SWM practices (i.e. infiltration basin, bioretention) that are shown on the plans to prevent compaction or clogging installed?				
1aa	Is runoff and other discharges (dewatering) that contain sediment or other pollutants being properly treated prior to discharging from the site?				
1bb	Are permanent stormwater measures (basins, etc.) properly installed/converted, stabilized and functional?				
2.	***Section 2 - Pollution Prevention Plan Inspection: Part II(A)4*** (Applicable to land disturbance 1 acre or greater)	***Yes***	***No***	***N/A***	See project-specific Stormwater Pollution Prevention Plan (SWPPP)
2a	Are functional measures in place to prevent and respond to leaks, spills and other pollutant releases including procedures for expeditiously stopping, containing, cleaning up spills and reporting?				
2b	Are functional measures in place to prevent the release of soaps, solvents, detergents, wash water from construction materials, paint clean-up and other pollutants and/or also from contact with stormwater?				
2c	Are wash waters from vehicles, equipment, construction materials and the like prevented from release and/or properly treated before leaving the site?				
2d	Is the concrete wash-out waste directed into a properly installed leak-proof container? Is the treatment mechanism properly maintained and utilized?				
2e	Are construction products, materials, and wastes being properly stored, handled, labeled? Are loose trash and debris properly contained?				
2f	Are other potential pollutant-generating activities not listed above being properly managed to prevent exposure to precipitation/runoff?				
2g	Have all pollutant generating activities present on the site been identified in the Pollution Prevention Plan?				

3	***Section 3 - SWPPP Documentation Inspection: Part II(A)1*** (Applicable to land disturbance 1 acre or greater)	***Yes***	***No***	***N/A***	See Section 1.0 and Various Appendices in the Stormwater Pollution Prevention Plan
3a	Copy of notice of coverage letter and information for public access to the SWPPP posted near main entrance of the site?				
3b	Copy of complete SWPPP available onsite for operators and inspectors?				
3c	SWPPP is being amended, modified, updated and appropriately signed?				
3d	Are dates when major grading activities occurred properly recorded?				
3e	Are SWPPP inspections conducted by contractor at required frequency, summarized including corrective actions, appropriately signed and retained with the SWPPP?				

CERTIFICATION INSTRUCTION
This Inspection Form is not complete without the completion of the appropriate certification(s) by the individual(s) listed below.

Reports conducted by VCCS or VCCS representative will be provided to the Operator or Duly Authorized Representative by (check all that apply): ☐ Hardcopy ☐ Email ☐ Other _____ within 48 hours.

- **CERT-1 and CERT-2** certification is required with VCCS inspections.
- **CERT-2** certification is required by the VAR10 operator for all inspections, including self-inspections required by the VAR10.

CERT-1: INSPECTION CERTIFICATION STATEMENT
"I certify under penalty of law that I performed the inspection described in this form as a Certified Project Inspector for ESC and SWM per the Virginia Erosion and Sediment Control and Stormwater Management Certification Regulations (9VAC25-850). I certify that the inspection described in the form reflects site conditions to the best of my knowledge and belief and is true, accurate and complete. On inspection forms where no corrective action is identified, the construction activity is in compliance with the project SWPPP. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations and falsifying inspections (reports)."

Inspector's Name: _____

Signature: _____ Date: _____

CERT-2: OPERATOR (OR DULY AUTHORIZED REPRESENTATIVE) CERTIFICATION STATEMENT
"I certify under penalty of law that I have read and understand this document and that this document and all attachments were prepared 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."

The inspection form shall be maintained in the project SWPPP. Corrections to incidents of noncompliance identified on this form will be corrected within 7 days or as otherwise identified per incident.

Operator (or Duly Authorized Representative) Name: _____

Signature: _____ Date: _____

Appendix F

VCCS SWM Facility Certification Form (LD-05)

VCCS Stormwater Management Facility Certification Form

The purpose of this form is to provide a minimum standard for stormwater management facility construction record drawings, verifying that all SWM facilities and associated conveyance systems have been built in accordance with the approved plan and design specifications.

Record Drawing and Construction Certification Requirements

(1) A completed copy of this form

- ✓ A copy of this form shall be submitted for each permanent stormwater management facility that is recommended for acceptance. The applicant shall ensure that this form is completed in its entirety and all required documentation listed below is submitted.

(2) Certifying Professional Inspection Log

- ✓ A copy of the applicant's inspection log shall be submitted with this form. This log should document all aspects of SWM facility construction to demonstrate compliance with the approved plans. For example, a bioretention facility may require a liner. Without an inspection log, there would be no assurance that it was installed post construction since it is underground and not visible from the surface.

(3) Record Drawing of Plans

- ✓ A record drawing of the plans is required to be submitted with this form. The plans should indicate any changes that differ from the approved plans, along with any applicable computations.
- ✓ A clear means, such as a checkmark, shall be used to demonstrate that the applicant agrees with the constructed values.
- ✓ For any changes to the plans, including numeric changes, a red line shall be used to cross out the original item and the actual revision shall be entered beside the crossed out value.
- ✓ Elevations shall be to the nearest 0.1 foot.
- ✓ The storage volume of the facility, including all dimensioned structures, shall be verified with the certification.
- ✓ All submitted plan sheets shall be labeled as "Record Drawing".

(4) Record Drawing Stormwater Facility Checklist

- ✓ A record drawing stormwater facility checklist shall be completed for each facility being certified. A checklist can be found included in this form.

LD-05 – Record Drawing and SWM Facility Certification Form

Section 1 – SWM Facility General Information

Project Name: _____ Project Location: _____
BMP Type: _____ BMP Location: _____
College Plan No.: _____ Total Drainage To BMP (Acres): _____
Impervious Acres: _____ Pervious Acres: _____
6th Order HUC:_____ Date Facility Brought Online:_____
Name of Impaired Waters BMP Is Draining To (2010 305(b)/303(d)):_____

Brief Description of Stormwater Management Facility:

_____

_____

Section 2 - Contractor Information:

Company:_____ Contact Person: _____
Title: _____ Phone Number: _____
Plan Name: _____ Plan Date: _____

Section 3 - Record Drawing and Construction Certifications for Stormwater Management/BMP Facilities

Certifying Professionals: *A Registered Professional Engineer is responsible for preparation and or certification of the SWM Record Drawing. The Engineer is responsible for the inspection, monitoring and certification of Stormwater Management / BMP facilities during construction.*

I certify that I am a licensed professional in the Commonwealth of Virginia, and that to best of my knowledge, having completed a site specific inspection(s), the stormwater facility referenced on this form is constructed in accordance with the approved plans.

Record Drawing Certification

Design Firm Name: _____

Mailing Address: _____

Business Phone: _____

Contact Name: _____ **PLACE SEAL HERE**

Title: _____

Signature: _____

Date: _____

Section 4 - Record Drawing Approval

(This section to be completed by VCCS Staff only)

VCCS AS&S Project Manager: _____ Title: _____
Date: _____ Signature: _____

GENERAL CERTIFICATION CHECKLIST
(Required For All SWM Facilities)

The following certification checklist is to be used as part of the VCCS Stormwater Management Facility certification process. Any changes from the original design plans should be noted. While the following checklist shall be utilized, it is not meant to be an all-encompassing document. It is the responsibility of the certifying professional to ensure that any components not listed as a part of the design plans are built correctly to ensure long term functionality of the stormwater management facility. The certifying professional shall ensure the following have been installed per the approved design plan:

Erosion and Sediment Control

- ❒ All applicable erosion and sediment control practices have been removed.

Contributing Drainage Area:

- ❒ The contributing drainage area is free of debris and sediment.
- ❒ All pervious areas of the contributing drainage area have been permanently stabilized.
- ❒ Construction has not impacted the final facility configuration.

Inflow Structures

- ❒ Inflow conveyance properly stabilized.
- ❒ No siltation or trash in inflow structure.
- ❒ No erosion at inflow outlet into the facility.
- ❒ All temporary erosion and sediment control measures have been removed (e.g. silt fence or check dams).

Pretreatment (If Applicable)

- ❒ All pretreatment practices (forebays, grass filter strips, gravel diaphragms, etc.) have been properly installed.
- ❒ All pretreatment practices are in good working condition with no indication of construction impacts.
- ❒ Any proposed weirs/spillways conform to the designed size, elevation, materials, and locations shown on the plans.
- ❒ Forebays conform to the designed volumes.
- ❒ Forebay areas are stabilized with the correct material (liner, stabilization matting, seed, etc.) with no erosion.

Reservoir Area (Water Quantity and Quality)

- ❒ Area is stabilized.
- ❒ No signs of erosion.
- ❒ No trash or debris present.
- ❒ Volumes meet design plan requirements.
- ❒ Underdrains (if applicable) have been installed and are the proper elevation, material and size.
- ❒ All liners have been installed per the plans.
- ❒ No clogging evident.
- ❒ All structural materials (i.e. media for bioretention) meet plan specifications.

Control Structure

- ❒ Control structure is the appropriate type and size per the plans.
- ❒ All control structures are free of cracks, deterioration and other structural deficiencies.
- ❒ Top of control structure is at the appropriate elevation per the plans.
- ❒ Water quality orifice(s) are at the appropriate elevation and size per the plans.
- ❒ Any applicable wetlands have been installed.
- ❒ Trash racks have been installed per the plans.
- ❒ Any applicable plants have been installed per the designed planting plan (correct type, spacing, location etc.).
- ❒ Control structure is free from blockages and obstructions.

Emergency Spillway (If Applicable)

- ❒ Emergency spillway is constructed to the dimensions and configuration shown in the approved plans. (e.g. proper turn downs, toe drains and anchors).
- ❒ Emergency Spillway is at the elevation shown in the approved plans
- ❒ Emergency spillway is permanently stabilized.
- ❒ Emergency spillway is constructed of the material shown in the approved plans
- ❒ No evidence of erosion.

Embankments (If Applicable)

- ❒ All embankments are permanently stabilized in accordance with the approved plans.
- ❒ Top of embankment is at the design elevation.
- ❒ No holes around or above the barrel/outlet pipe indicating piping or joint failure.
- ❒ No water seeping out of the embankment.
- ❒ No erosion or tree growth on embankment.
- ❒ No animal burrows evident on the embankment.

Outlet Pipe (If Applicable)

- ❒ All anti-seep collars have been installed.
- ❒ Outlet pipe is the appropriate material, size, and location.
- ❒ Outlet pipe is structurally sound with no evidence of cracking, corrosion or deterioration.
- ❒ Velocity dissipation devices are installed per the detail on the approved plans at the outlet (riprap size, dimensions and location)

Outfall Channels

- ❒ Outlet channel properly stabilized.
- ❒ No siltation or trash in outlet channel.
- ❒ No erosion in channel.
- ❒ All temporary erosion and sediment control measure have been removed (e.g. silt fence or check dams).

Appendix G

VCCS Contractor Notification of Completion of Land Disturbance Activity Form (LD-06)

Termination of Land Disturbance

This form is to be used as a termination of land disturbance notification between the Primary Contractor and the VCCS AS&S Project Manager. This form is **NOT** a notice of termination for Construction General Permit (VAR10) coverage between the Contractor and DEQ.

Project Name: _____ Project Code: _____

Section 1– Conditions for Termination of Land Disturbance

The conditions of this section shall be met and this form shall be signed by both the Primary Contractor and the AS&S Project Manager before final payment is made.

- ☐ No further land disturbance activities are planned.
- ☐ The project area has been stabilized in accordance with the approved plans, which includes seeding, mulching, sodding, paving, or other means.
- ☐ All temporary erosion and sediment control measures have been removed.
- ☐ All pollution prevention measures have been removed from the site and disposed of in a legal manner.
- ☐ All permanent post-construction stormwater management facilities have been certified.
- ☐ All trash and debris has been removed from the site.

Section 2 – Operator Certification:

"I certify under penalty of law that I have read and understand this document and that this document and all attachments were prepared 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."

Operator: _____
Signature: _____
Date: _____

Section 3 – Termination of Land Disturbance Approval

(This section to be completed by AS&S Project Manager only)

VCCS AS&S Project Manager: _____
Signature: _____
Date: _____

Appendix E
MCM #5 Supporting Documents

DATE 9/30/18

VWCC STORM WATER
DROP INLET INSPECTION

INSPECTOR SIGNATURE

INLET ID	ID MARKER		GRATE IN PLACE		INLET CLEAR		INLET CLEANED		IS THERE DANAGE (DAMGE)		NOTE
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
07											
08											
84											
85											
12											
13											
14											
76											
77											
09	✓		✓		✓			✓			
02	✓		✓		✓			✓	✓		
03	✓		✓		✓			✓			
01	✓		✓		✓			✓			
82	✓		✓		✓			✓			
102	✓		✓		✓			✓			
103	✓		✓		✓			✓			
06	✓		✓		✓			✓			
11	✓		✓		✓			✓			
10	✓		✓		✓			✓			
99	✓		✓		✓			✓			
101	✓		✓			✓	✓				
100	✓		✓			✓	✓				
98	✓		✓		✓			✓			
97	✓		✓		✓			✓			
80	✓		✓		✓			✓		✓	
04	✓		✓			✓	✓			✓	Cleaned
05	✓		✓			✓	✓			✓	Cleaned
81	✓		✓		✓			✓		✓	
86	✓		✓		✓			✓		✓	
20	✓		✓		✓			✓		✓	

Construction Areas

Johnny said:
Still need inlet inspection
Raining constantly
Flourence now Michael
Hurricanes

10/10/2018

DATE 12/30/18 Northside

VWCC STORM WATER
DROP INLET INSPECTION

INSPECTOR SIGNATURE Jeff Rock

INLET ID	ID MARKER		GRATE IN PLACE		INLET CLEAR		INLET CLEANED		IS THERE ~~DANAGE~~ Damage		NOTE
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
108	✓		✓		✓			✓		✓	
107	✓		✓		✓			✓		✓	
106	✓		✓		✓			✓		✓	
105	✓		✓		✓			✓		✓	
43	✓		✓		✓			✓		✓	
42	✓		✓		✓			✓		✓	
41	✓		✓		✓			✓		✓	
52	✓		✓		✓			✓		✓	
54	✓		✓		✓			✓		✓	
83	✓		✓		✓			✓		✓	
55	✓		✓			✓	✓			✓	Cleaned
56	✓		✓			✓	✓			✓	Cleaned
70	✓		✓		✓			✓		✓	
53	✓		✓		✓			✓		✓	
58	✓		✓		✓			✓		✓	
59	✓		✓		✓			✓		✓	
60	✓		✓			✓	✓			✓	Cleaned
61	✓		✓			✓	✓			✓	Cleaned
63	✓		✓			✓	✓			✓	Cleaned
62	✓		✓		✓			✓		✓	
46	✓		✓		✓			✓		✓	
47	✓		✓		✓			✓		✓	
45	✓		✓		✓			✓		✓	
44	✓		✓		✓			✓		✓	
49	✓		✓		✓			✓		✓	
51	✓		✓		✓			✓		✓	
50	✓		✓		✓			✓		✓	
72	✓		✓		✓			✓		✓	
48	✓		✓		✓			✓		✓	
104	✓		✓		✓			✓		✓	
68	✓		✓		✓			✓		✓	
69	✓		✓		✓			✓		✓	

DATE 12/30/18 North Side

VWCC STORM WATER
DROP INLET INSPECTION

INSPECTOR SIGNATURE John Rock

INLET ID	ID MARKER		GRATE IN PLACE		INLET CLEAR		INLET CLEANED		IS THERE ~~DAMAGE~~ DAMAGE		NOTE
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
96	✓		✓		✓			✓		✓	
109	✓		✓		✓			✓		✓	
110	✓		✓		✓			✓		✓	
111	✓		✓		✓			✓		✓	
112	✓		✓		✓			✓		✓	
94	✓		✓		✓			✓		✓	
95					✓			✓		✓	
66	✓		✓		✓			✓		✓	
65	✓		✓			✓	✓			✓	Cleaned
67	✓		✓		✓			✓		✓	
				South Side							
33	✓		✓		✓			✓		✓	
35	✓		✓		✓			✓		✓	
36	✓		✓			✓	✓			✓	Cleaned
34	✓		✓		✓			✓		✓	
37	✓		✓			✓	✓			✓	Cleaned
38	✓		✓			✓	✓			✓	Cleaned
31	✓		✓		✓			✓		✓	
30	✓		✓		✓			✓		✓	
75	✓		✓		✓			✓		✓	
64	✓		✓		✓			✓		✓	
32	✓		✓		✓			✓		✓	
26	✓		✓		✓			✓		✓	
27	✓		✓		✓			✓		✓	
28	✓		✓		✓			✓		✓	
29	✓		✓		✓			✓		✓	
24	✓		✓		✓			✓		✓	
25	✓		✓		✓			✓		✓	
88	✓		✓		✓			✓		✓	
89	✓		✓			✓	✓			✓	Cleaned

DATE 12/30/18

VWCC STORM WATER
DROP INLET INSPECTION

INSPECTOR SIGNATURE John Rock

INLET ID	ID MARKER		GRATE IN PLACE		INLET CLEAR		INLET CLEANED		IS THERE ~~DANAGE~~ DAMAGE		NOTE
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
90	✓		✓			✓	✓			✓	Cleaned
23	✓		✓		✓			✓			
22	✓		✓		✓			✓			
73	✓		✓		✓			✓			
92	✓		✓		✓			✓			
91	✓		✓		✓			✓			
21	✓		✓		✓			✓			
20	✓		✓		✓			✓			
86	✓		✓			✓	✓			✓	Cleaned
81											
04	✓		✓		✓			✓		✓	
05	✓	~~✓~~	✓			✓	✓			✓	Cleaned
101	✓		✓		✓			✓		✓	
100	✓		✓		✓			✓		✓	
99	✓		✓		✓			✓		✓	
98	✓		✓		✓			✓		✓	
97	✓		✓		✓			✓		✓	
80	✓		✓		✓			✓		✓	
10	✓		✓		✓			✓		✓	
06	✓		✓		✓			✓		✓	
11	✓		✓		✓			✓		✓	
18	✓		✓		✓			✓		✓	
19	✓		✓		✓			✓		✓	
79	✓		✓			✓	✓			✓	Cleaned
78	✓		✓		✓			✓		✓	
16	✓		✓		✓			✓		✓	
17	✓		✓		✓			✓		✓	
87	✓		✓			✓	✓			✓	Cleaned
15											
03	✓		✓		✓			✓			Covered Due to Construction
02	✓		✓		✓			✓			" " " "
~~01~~	✓		✓		✓			✓			" " " "

DATE 12/30/18

VWCC STORM WATER
DROP INLET INSPECTION

INSPECTOR SIGNATURE J Rock

INLET ID	ID MARKER		GRATE IN PLACE		INLET CLEAR		INLET CLEANED		IS THERE DANAGE		NOTE
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
102	✓		✓		✓			✓		✓	
82	✓		✓		✓			✓		✓	
103	✓		✓		✓			✓		✓	
01	✓		✓		✓			✓		✓	

DATE 3/29/2019

VWCC STORM WATER
DROP INLET INSPECTION

INSPECTOR SIGNATURE

INLET ID	ID MARKER		GRATE IN PLACE		INLET CLEAR		INLET CLEANED		IS THERE ~~DANAGE~~ DAMAGE		NOTE
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
108		✓	✓		✓			✓		✓	New ID Marker
107		✓	✓		✓			✓		✓	" " "
106		✓	✓		✓			✓		✓	" " "
105		✓	✓		✓			✓		✓	" " "
67	✓		✓		✓			✓		✓	
65	✓		✓		✓			✓		✓	
64	✓		✓		✓			✓		✓	
43	✓		✓		✓			✓		✓	
42		✓	✓		✓			✓		✓	New ID Marker
41		✓	✓		✓			✓		✓	" " "
54		✓	✓		✓			✓		✓	" " "
52	✓		✓		✓			✓		✓	
70	✓		✓		✓			✓		✓	
53	✓		✓		✓			✓		✓	
83	✓		✓		✓			✓		✓	
55	✓		✓		✓			✓		✓	
56	✓		✓		✓			✓		✓	
62	✓		✓		✓			✓		✓	
63	✓		✓		✓			✓		✓	
58		✓	✓		✓			✓		✓	New ID Marker
59	✓		✓		✓			✓		✓	
60	✓		✓			✓	✓			✓	Cleaned
61	✓		✓			✓	✓			✓	"
44		✓	✓		✓			✓		✓	New ID Marker
45	✓		✓		✓			✓		✓	
46	✓		✓		✓			✓		✓	
47	✓		✓		✓			✓		✓	
72	✓		✓		✓			✓		✓	
48	✓		✓		✓			✓		✓	
49	✓		✓		✓			✓		✓	
51	✓		✓		✓			✓		✓	
50	✓		✓		✓			✓		✓	

DATE 3/29/2019

VWCC STORM WATER
DROP INLET INSPECTION

INSPECTOR SIGNATURE

INLET ID	ID MARKER		GRATE IN PLACE		INLET CLEAR		INLET CLEANED		IS THERE ~~DANAGE~~ DAMAGE		NOTE
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
68	✓		✓		✓			✓		✓	
69	✓		✓		✓			✓		✓	
96	✓		✓		✓			✓		✓	
112	✓		✓		✓			✓		✓	
111	✓		✓		✓			✓		✓	
110	✓		✓		✓			✓		✓	
109	?										Road Work
94	✓		✓			✓	✓			✓	Cleaned
95	✓		✓			✓	✓			✓	"
99		✓	✓		✓			✓		✓	New ID Maker
101	✓		✓		✓			✓		✓	
100	✓		✓					✓		✓	
98	✓		✓		✓			✓		✓	
97	✓		✓		✓			✓		✓	
80	✓		✓		✓			✓		✓	
10	✓		✓		✓			✓		✓	
04	✓		✓		✓			✓		✓	
11	✓		✓		✓			✓		✓	
05	✓		✓			✓	✓			✓	Cleaned
04	✓		✓			✓	✓			✓	"
81	✓		✓			✓	✓			✓	"
84	✓		✓	[redacted]	✓			✓		✓	
20	✓		✓	[redacted]	✓			✓		✓	
18	✓		✓	[redacted]	✓			✓		✓	
19	✓		✓	[redacted]	✓			✓		✓	
79	✓		✓		✓			✓		✓	
87	✓		✓			✓	✓			✓	Cleaned
17	✓		✓		✓			✓		✓	
16	✓		✓		✓			✓		✓	
78	✓		✓		✓			✓		✓	
15	✓		✓		✓			✓		✓	

DATE 3/29/2019

VWCC STORM WATER
DROP INLET INSPECTION

INSPECTOR SIGNATURE

DAMAGE

INLET ID	ID MARKER		GRATE IN PLACE		INLET CLEAR		INLET CLEANED		IS THERE ~~DAMAGE~~		NOTE
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
21	✓		✓		✓			✓		✓	
22	✓		✓		✓			✓		✓	
73	✓		✓		✓			✓		✓	
23	✓		✓		✓			✓		✓	
90	✓		✓			✓	✓			✓	Cleaned
89	✓		✓			✓	✓			✓	"
88	✓		✓			✓	✓			✓	"
25	✓		✓		✓			✓		✓	
24	✓		✓		✓			✓		✓	
92	✓		✓		✓			✓		✓	
91	✓		✓		✓			✓		✓	
24		✓	✓		✓			✓		✓	New ID Marker
31		✓	✓		✓			✓		✓	" " "
33		✓	✓		✓			✓		✓	" " "
35	✓		✓		✓			✓		✓	
34	✓		✓		✓			✓		✓	
34	✓		✓		✓			✓		✓	
37	✓		✓		✓			✓		✓	
38	✓		✓		✓			✓		✓	
27	✓		✓			✓	✓			✓	Cleaned
28	✓		✓			✓	✓			✓	"
29	✓		✓			✓	✓			✓	"
64	✓		✓		✓			✓		✓	
75	✓		✓		✓			✓		✓	
30	✓		✓		✓			✓		✓	
32	✓		✓		✓			✓		✓	
02											Being Repaired
03	✓		✓		✓			✓		✓	Consturtion Ell in front of it
102	✓		✓		✓			✓		✓	
103	✓		✓		✓			✓		✓	
01	✓		✓		✓			✓		✓	
82	✓		✓		✓			✓		✓	

DATE 3/29/2019

VWCC STORM WATER
DROP INLET INSPECTION

INSPECTOR SIGNATURE

Damage

INLET ID	ID MARKER		GRATE IN PLACE		INLET CLEAR		INLET CLEANED		IS THERE ~~DANAGE~~		NOTE
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
14											
13											
12											
77											
76											
93											
07											
85											
08											
84											
09											

Construction Area

DATE 6/27/19

VWCC STORM WATER
DROP INLET INSPECTION

INSPECTOR SIGNATURE [signature]

INLET ID	ID MARKER		GRATE IN PLACE		INLET CLEAR		INLET CLEANED		IS THERE Damage DANAGE		NOTE
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
02	✓		✓		✓			✓	✓		Still needs Repaired Backside
03	✓		✓		✓			✓	✓		Still has constuction Ell in front of it
102	✓		✓		✓			✓	[redacted]	✓	
82	✓		✓		✓			✓		✓	
01	✓		✓		✓			✓		✓	
103	✓		✓		✓			✓		✓	
11	✓		✓		✓			✓		✓	
06	✓		✓		✓			✓		✓	
10	✓		✓		✓			✓		✓	
80	✓		✓		✓			✓		✓	
97	✓		✓		✓			✓		✓	
98	✓		✓		✓			✓		✓	
99	✓		✓		✓			✓		✓	
101	✓		✓		✓			✓		✓	
100	✓		✓		✓			✓		✓	
05	✓		✓			✓	✓			✓	Cleaned
04	✓		✓		✓			✓		✓	
81	✓		✓		✓			✓		✓	
84	✓		✓		✓			✓		✓	
19		✓	✓		✓			✓		✓	New I.D. Maker
18	✓		✓		✓			✓		✓	
20	✓		✓		✓			✓		✓	
79	✓		✓			✓	✓			✓	Cleaned
14		✓	✓		✓			✓		✓	New I.D. Maker
17		✓	✓		✓			✓		✓	New I.D. MAKER
78	✓		✓		✓			✓		✓	
87	✓		✓		✓			✓		✓	
15	✓		✓		✓			✓		✓	
21	✓		✓		✓			✓		✓	
22	✓		✓		✓			✓		✓	
73	✓		✓		✓			✓		✓	
23	✓		✓		✓			✓		✓	

DATE 6/27/19

VWCC STORM WATER
DROP INLET INSPECTION

INSPECTOR SIGNATURE

INLET ID	ID MARKER		GRATE IN PLACE		INLET CLEAR		INLET CLEANED		IS THERE DANAGE (Damage)		NOTE
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
90	✓		✓		✓			✓		✓	
89	✓		✓			✓	✓			✓	Cleaned
88	✓		✓		✓			✓		✓	
25		✓	✓		✓			✓		✓	New I.D. MAKER
24		✓	✓		✓			✓		✓	New I.D. MAKER
39	✓		✓		✓			✓		✓	New Discovery
27	✓		✓		✓			✓		✓	
28	✓		✓		✓			✓		✓	
29	✓		✓		✓			✓		✓	
32	✓		✓		✓			✓		✓	
30	✓		✓		✓			✓		✓	
75	✓		✓		✓			✓		✓	
44	✓		✓		✓			✓		✓	
31	✓		✓		✓			✓		✓	
26		✓	✓		✓			✓		✓	New I.D. MAKER
33	✓	▬	✓		✓			✓		✓	
35	✓	▬	✓		✓			✓		✓	
36	✓		✓			✓	✓			✓	Cleaned
34	✓		✓		✓			✓		✓	
37	✓		✓			✓	✓			✓	Cleaned
38	✓		✓			✓	✓			✓	Cleaned
91	✓		✓		✓			✓		✓	
92	✓		✓		✓			✓		✓	
94	✓		✓		✓			✓		✓	
95	✓		✓		✓			✓		✓	
109	✓		✓		✓			✓		✓	
96	✓		✓		✓			✓		✓	
68	✓		✓		✓			✓		✓	
69	✓		✓		✓			✓		✓	
110	✓		✓		✓			✓		✓	
111	✓		✓		✓			✓		✓	
112	✓		✓		✓			✓		✓	

DATE 6/27/19

VWCC STORM WATER
DROP INLET INSPECTION

INSPECTOR SIGNATURE

INLET ID	ID MARKER		GRATE IN PLACE		INLET CLEAR		INLET CLEANED		IS THERE DANAGE (Damage)		NOTE
	YES	NO	YES	NO	YES	NO	YES	NO	YES	NO	
104	✓		✓		✓			✓		✓	
72	✓		✓		✓			✓		✓	
48	✓		✓		✓			✓		✓	
44	✓		✓		✓			✓		✓	
45	✓		✓		✓			✓		✓	
46	✓		✓		✓			✓		✓	
47	✓		✓		✓			✓		✓	
50	✓		✓		✓			✓		✓	
51	✓		✓		✓			✓		✓	
49	✓		✓		✓			✓		✓	
42	✓		✓		✓			✓		✓	
41	✓		✓		✓			✓		✓	
43	✓		✓		✓			✓		✓	
54	✓		✓		✓			✓		✓	
52	✓		✓		✓			✓		✓	
70	✓		✓		✓			✓		✓	
83	✓		✓		✓			✓		✓	
53	✓		✓		✓			✓		✓	
55	✓		✓			✓	✓			✓	Cleaned
56	✓		✓			✓	✓			✓	Cleaned
58	✓		✓		✓			✓		✓	
59	✓		✓		✓			✓		✓	
60	✓		✓			✓	✓			✓	Cleaned
61	✓		✓			✓	✓			✓	Cleaned
63	✓		✓		✓			✓		✓	
62	✓		✓		✓			✓		✓	
105	✓		✓		✓			✓		✓	
106	✓		✓		✓			✓		✓	
107	✓		✓		✓			✓		✓	
108	✓		✓		✓			✓		✓	
67	✓		✓		✓			✓		✓	
65	✓		✓			✓	✓			✓	
66	✓		✓		✓			✓		✓	

WELLS CONSTRUCTION COMPANY

4/23/2019

P.O. Box 1067
Vinton, Virginia 24179

TO: Virginia Western Community College **fax** **857-6161**
Attn: Peter Stocki, Facilities Management Services

JOB: Storm Water Management - Retention pond repair

DETAILS:

Mobilize equipment for excavation to include mini excavator, skid steer and dump truck.
Explore by excavation of the existing sink hole. Fill and compact excavated area.
Perform confined space internal inspection of existing manhole to determine if joints are intact and functioning.
This inspection will include simple joint repair with sealant if faults are detected.

Anticipate one 8 hour day for repair

Total **$4,300.00**

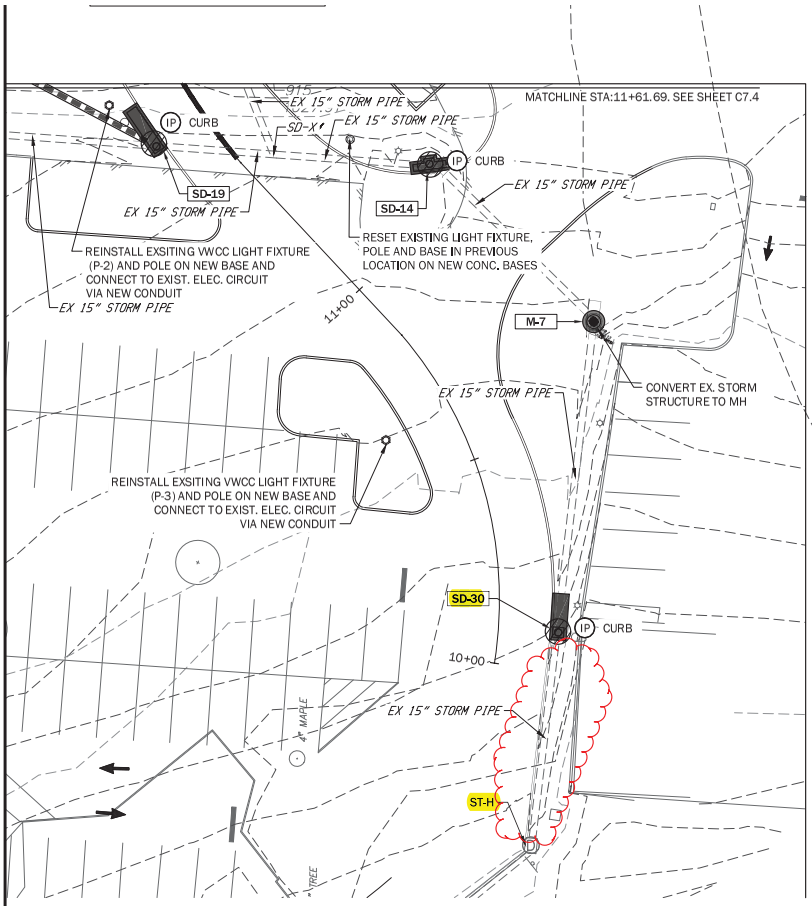
Offered by:

Charles S. Wells
President - Wells Construction Company

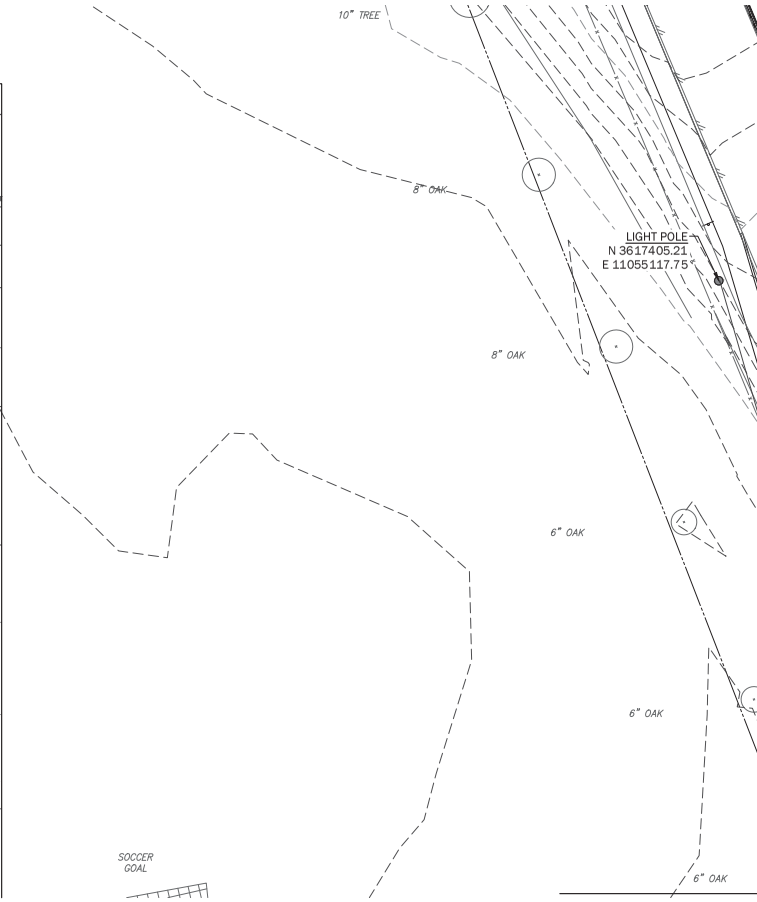
Work Description	Cost
Oil/Water Separator	$8,735.37
Structure ST-H	$11,750.00
Clearing/Grubbing (Option 2)	$29,293.30
* Replace Pipe from ST-H to SD-30, CG-2 and 1.5-inch Asphalt (milling/resurfacing) over length of curb replacement (10 ft width)	$7,670.00
	$57,448.67

Option 2 = SC-C to ROW (Railroad)

* Approximate Cost based on Bid Prices ($95/LF for 15-inch rcp (0-4' depth), CG-2 = $32.50/LF, Asphalt = $18/SY)



1 UTILITY PLAN
SCALE: 1" = 20'



2 UTILITY PLAN
SCALE: 1" = 20'

VWCC Stormwater Management Facilities Database - Submitted to DEQ BMP Warehouse October 1, 2019															
BMP ID	Date Installed (assumed date)	BMP Name	Measurement Name	Measurement Unit	BMP Extent	Impervious Acres Treated	Practice Description	Locality	HUC12	VAHU6	Latitude	Longitude	MS4 Service Area	Ownership Type	Action Plan
SWB 1	6/30/2005	Dry Detention Ponds	Area Treated	ACRE	39.35	18.9	SWB 1	ROANOKE	030101010404	RU14	37.24619	-79.96923	Inside MS4 service area	Public	Local TMDL Action Plan
SWB 2	6/30/2005	Dry Detention Ponds	Area Treated	ACRE	12.26	2.72	SWB 2	ROANOKE	030101010404	RU14	37.24754	-79.96764	Inside MS4 service area	Public	Local TMDL Action Plan
SWB 3	6/30/2005	Dry Detention Ponds	Area Treated	ACRE	2.53	1.18	SWB 3	ROANOKE	030101010404	RU14	37.24599	-79.97814	Inside MS4 service area	Public	Local TMDL Action Plan
	6/30/2005	Bioretention	Area Treated	ACRE	3.34	2.72	Biobed 1	ROANOKE	030101010404	RU14	37.24611	-79.97738	Inside MS4 service area	Public	Local TMDL Action Plan
	6/30/2005	Bioretention	Area Treated	ACRE	11.22	10.7	Biobed 2	ROANOKE	030101010404	RU14	37.24639	-79.96965	Inside MS4 service area	Public	Local TMDL Action Plan
	6/30/2005	Bioretention	Area Treated	ACRE	0.27	0.1	Biobed 3	ROANOKE	030101010404	RU14	37.24721	-79.96779	Inside MS4 service area	Public	Local TMDL Action Plan
	6/30/2005	Bioretention	Area Treated	ACRE	0.5	0.1	Biobed 4	ROANOKE	030101010404	RU14	37.24807	-79.96805	Inside MS4 service area	Public	Local TMDL Action Plan
	6/30/2005	Filtration	Area Treated	ACRE	0.03	0	Egg Crate 1	ROANOKE	030101010404	RU14	37.24629	-79.97327	Inside MS4 service area	Public	Local TMDL Action Plan
	6/30/2005	Filtration	Area Treated	ACRE	0.02	0	Egg Crate 2	ROANOKE	030101010404	RU14	37.24634	-79.97307	Inside MS4 service area	Public	Local TMDL Action Plan
	6/30/2005	Biofiltration	No. Systems	COUNT	1	0.1	Rain Garden	ROANOKE	030101010404	RU14	37.24654	-79.97346	Inside MS4 service area	Public	Local TMDL Action Plan
	6/30/2005	Biofiltration	No. Systems	COUNT	1	0.16	Rain Garden	ROANOKE	030101010404	RU14	37.24656	-79.97336	Inside MS4 service area	Public	Local TMDL Action Plan
	6/30/2005	Filtration	Area Treated	ACRE	0.63	0.63	UGDS	ROANOKE	030101010404	RU14	37.2459	-79.97417	Inside MS4 service area	Public	Local TMDL Action Plan
	6/30/2005	Biofiltration	No. Systems	COUNT	1	0.21	Filterra	ROANOKE	030101010404	RU14	37.24609	-79.97415	Inside MS4 service area	Public	Local TMDL Action Plan
	6/30/2005	Biofiltration	No. Systems	COUNT	1	0.21	Filterra	ROANOKE	030101010404	RU14	37.24608	-79.97414	Inside MS4 service area	Public	Local TMDL Action Plan
	6/30/2005	Biofiltration	No. Systems	COUNT	1	0.11	Filterra	ROANOKE	030101010404	RU14	37.24593	-79.97404	Inside MS4 service area	Public	Local TMDL Action Plan
	6/30/2005	Biofiltration	No. Systems	COUNT	1	0.11	Filterra	ROANOKE	030101010404	RU14	37.24591	-79.97403	Inside MS4 service area	Public	Local TMDL Action Plan
	6/30/2005	Biofiltration	No. Systems	COUNT	1	0.4	Filterra	ROANOKE	030101010404	RU14	37.24572	-79.97292	Inside MS4 service area	Public	Local TMDL Action Plan
	6/30/2005	Biofiltration	No. Systems	COUNT	1	0.4	Filterra	ROANOKE	030101010404	RU14	37.2457	-79.97286	Inside MS4 service area	Public	Local TMDL Action Plan
	6/30/2005	Biofiltration	No. Systems	COUNT	1	0.4	Filterra	ROANOKE	030101010404	RU14	37.24563	-79.9729	Inside MS4 service area	Public	Local TMDL Action Plan
	6/30/2005	Biofiltration	No. Systems	COUNT	1	0.4	Filterra	ROANOKE	030101010404	RU14	37.24583	-79.97232	Inside MS4 service area	Public	Local TMDL Action Plan

Appendix F
MCM #6 Supporting Documents

VIRGINIA WESTERN
The Community's College

STORMWATER POLLUTION PREVENTION PLAN

Virginia Western Community College
3094 Colonial Avenue Southwest
Roanoke, Virginia 24015

Permit Number: VAR040030

May 2019

Prepared By:

Apex Companies, LLC
9700 Capital Court STE 100
Manassas, Virginia 20110

APEX

CERTIFICATION

I certify under penalty of law that this 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.

Furthermore, I have read and understand this Stormwater Pollution Prevention Plan and the information in this document and its attachments is to the best of my knowledge true, accurate, and complete. In addition, I certify that I will fully implement this Plan and will maintain its accuracy and maintain onsite at all times.

Robert H. Sandel
President, Virginia Western Community College

Date

TABLE OF CONTENTS

LIST OF TABLES & APPENDICES

ABBREVIATIONS

Best Management Practices ..... BMP
Hydraulic Unit Code..... HUC
Illicit Discharge Detection and Elimination..... IDDE
Municipal Separate Storm Sewer System MS4
Total Maximum Daily Load..... TMDL
Standard Operating Procedures..... SOP
Stormwater Pollution Prevention Plan ..... SWPPP
Virginia Community College System ..... VCCS
Virginia Department of Environmental Quality..... VDEQ
Virginia Pollutant Discharge Elimination System ..... VPDES
Virginia Stormwater Management Program..... VSMP
Virginia Western Community College..... VWCC

1.0 INTRODUCTION

The purpose of this Stormwater Pollution Prevention Plan (SWPPP) is to address Section I.E.6.c of the General Virginia Pollutant Discharge Elimination System (VPDES) Permit for Discharges of Stormwater from Small Municipal Separate Storm Sewer Systems (MS4) General Permit Number 9VAC25-89-40, referred to herein as the General Permit. SWPPPs will be submitted to the Virginia Department of Environmental Quality (VDEQ) with the Annual Report for the reporting period of July 1, 2018 through June 30, 2019 by October 1, 2019.

As a non-governing body, Virginia Western Community College (VWCC) does not have regulatory authority and must rely on the Commonwealth of Virginia to develop and enforce legal authorities such as ordinances, permits, or orders. Therefore, the primary tool for preventing the discharge of pollutants to the storm sewer system within VWCC is the General Permit 9VAC25-890-40. It is subject to all applicable requirements of the Virginia Stormwater Act (Article 2.3 (§ 62.1-44.15:24 et seq.) of Chapter 3.1 of Title 62.1 of the Code of Virginia), the Virginia Stormwater Management Program (VSMP) Regulations (9VAC25-870), and the Clean Water Act (33 U.S.C. §1251 et seq. (1972)).

VWCC has prepared this SWPPP in accordance with the General Permit for high-priority facilities that have a high potential to discharge pollutants. VWCC is located in the City of Roanoke at 3094 Colonial Avenue SW, Roanoke, VA 24015 and is Permit Number VAR040030. VWCC is a part of the Virginia Community College System (VCCS) that develops Annual Standards and Specifications for Erosion & Sediment Control and Stormwater Management (Standards) and capital project SWPPP, included as **Appendix A**, that are approved by VDEQ. This SWPPP is specific to VWCC and describes how VWCC intends to reduce the potential for pollutants to enter bodies of water as runoff from their campus.

Table 1. Facility Information

Name of Facility: Virginia Western Community College

Address: 3094 Colonial Avenue SW, Roanoke, VA 24015

Permit Number: VAR040030

Latitude/Longitude: 37.245533 N -79.972863 W

Total Acreage: 69.25 acres

HUC and Receiving Waterbody: RU14 – Roanoke River (Ore Branch & Murray Run)

Waterbody Impairments: Sediment (benthic) and Bacteria (E. coli)

2.0 GENERAL INFORMATION

VWCC is located in the City of Roanoke at 3094 Colonial Avenue SW, Roanoke, VA 24015. Stormwater discharges from VWCC are regulated under the MS4 General Permit Number VAR040030. The campus is located in the Upper Roanoke River Basin and falls into Hydraulic Unit Code (HUC) RU14, discharging to the Roanoke River. The campus directly discharges into Ore Branch and Murray Run, tributaries of the Roanoke River. The VWCC campus includes a total of 69.25 acres and has five outfalls, each with distinct drainage areas. **Table 3** in **Section 3.0** identifies VWCC's outfalls. Per the requirements of the General Permit, VWCC has identified five "high-priority facilities" within the campus grounds that will be included in this SWPPP.

2.1 General Permit Requirements

During Permit Cycle 2013-2018 Year 1 (July 1, 2013 to June 30, 2014) of the General Permit, VWCC identified municipal high-priority facilities and facilities with a high potential of discharging pollutants. Within 12 months of permit coverage (Permit Year 1 July 1, 2018 to June 30, 2019), a SWPPP must be developed and implemented for all high-priority facilities previously identified. This SWPPP will fill the requirements set forth in the General Permit as a campus-wide plan.

The General Permit defines the following as municipal high-priority facilities:

(i) Composting facilities;
(ii) Equipment storage and maintenance facilities;
(iii) Materials storage yards;
(iv) Pesticide storage facilities;
(v) Public works yards;
(vi) Recycling facilities;
(vii) Salt storage facilities;
(viii) Solid waste handling and transfer facilities; and
(ix) Vehicle storage and maintenance yards.

Table 4 in **Section 3.0** identifies these high-priority facilities on VWCC campus.

Municipal high-priority facilities that have a high potential for discharging pollutants are those facilities not covered under a separate VPDES permit which are expected to have exposure to stormwater resulting from rain, snow, snowmelt, or runoff, at which any of the following materials or activities occur:

- Areas where residuals from using, storing, or cleaning machinery or equipment remain and are exposed to stormwater;
- Materials or residuals on the ground or in stormwater inlets from spills or leaks;
- Material handling equipment (except adequately maintained vehicles);
- Materials or products that would be expected to be mobilized in stormwater runoff during loading/unloading or transporting activities (e.g. rock, salt, fill dirt);

- Materials or products stored outdoors (except final products intended for outside use where exposure to stormwater does not result in the discharge of pollutants);
- Materials or products that would be expected to be mobilized in stormwater runoff contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers;
- Waste material except waste in covered, non-leaking containers (dumpsters);
- Application or disposal of process wastewater (unless otherwise permitted); and
- Particulate matter or visible deposits of residuals from roof stacks, vents or both not otherwise regulated (under an air quality control permit) and evident in the stormwater runoff.

Table 5 in **Section 3.0** identifies these high-priority facilities not covered under a separate VDPES permit on VWCC campus.

2.2 Pollution Prevention Team

In order to maintain a working SWPPP, personnel must be identified to provide structure and management to the stormwater management program. VWCC maintains overall responsibility of the property. **Table 2** provides the Pollution Prevention Team members and their respective plan responsibilities.

The Director of Facilities, Planning, & Development will supervise the implementation of the SWPPP at VWCC. In the event of personnel changes, the facility will appoint alternative employees as team members to the SWPPP.

Table 2. Pollution Prevention Team

Member Name	Contact Information	Description of Responsibilities
Kevin Witter (Director of Facilities, Planning, & Development)	Phone: (540) 857-6481 Email: kwitter@virginiawestern.edu	Maintain SWPPP and associated records. Maintain annual site evaluation for updates and correctness. Implement and maintain SWPPP and employee training
Patrick Rhodes (Facilities Management Services Manager)	Phone: (540) 857-6482 Email: prhodes@virginiawestern.edu	Complete stormwater and facility inspections. Maintain structural control measures onsite. Conduct clean-up activities and waste disposal as necessary. Delegate authority to commit resources, direct equipment repair, and direct clean-up activities and waste disposal. Provides documentation of SWPPP related maintenance activities.

3.0 DESCRIPTION OF POTENTIAL POLLUTION SOURCES

A pollutant source assessment has been completed to identify materials or practices that may be a source of contaminants in stormwater runoff. Maps are included in **Appendix B** and **C** which depict potential pollutant sources, outfalls, drainage patterns, Best Management Practices (BMPs), exposed significant materials, and the location of areas where materials or activities occur that may affect stormwater quality.

3.1 Outfalls & Drainage Area

VWCC has five outfalls and five distinct drainage areas on campus. A map depicting outfalls, drainage areas, and discharge water bodies is provided in **Appendix B**. This information is also included in VWCC's MS4 Program Plan, available digitally through the VWCC stormwater management webpage (https://www.virginiawestern.edu/fpd/swm.php). Any future modifications or improvements to the campus will be appropriately identified on the maps in the following permit years.

Stormwater at the facility is overland flow and generally flows to five outfalls, which discharge into Ore Branch and Murray Run. Both tributaries eventually discharge into the Roanoke River. **Table 3** identifies all five outfalls and their respective locations and discharge points.

Table 3. VWCC Outfalls

Outfall ID	Location		Est. Drained Acres	Discharge Water Body	Discharge Water Impairment
#1	37.245833	-79.968889	40.12	Ore Branch	Bacteria, Sediment
#2	37.243056	-79.971944	5.40	Ore Branch	Bacteria, Sediment
#3	37.247500	-79.966944	2.48	Ore Branch	Bacteria, Sediment
#4	37.246667	-79.978056	12.13	Murray Run	Bacteria, Sediment
#5	37.247778	-79.976389	9.12	Murray Run	Bacteria, Sediment

- Outfall #1 is located on the southeastern side of the campus with a total drainage area of 40.76 acres. Runoff from this area drains primarily to the southeast towards the railroad tracks along the southeastern border of the campus and discharges into Ore Branch. This outfall consists of a concrete pipe.
- Outfall #2 is located on the southern side of the campus with a total drainage area of 5.40 acres. Runoff from this area primarily drains to the south and the outfall consists of a concrete pipe.

- Outfall #3 is located on the eastern side of the campus with a total drainage area of 2.59 acres. Runoff from this area primarily drains to the east and the outfall consists of a metal pipe.
- Outfall #4 is located on the western side of the campus with a total drainage area of 12.13 acres. Runoff from this area primarily drains to the northwest and the outfall consists of a small concrete pipe.
- Outfall #5 is located on the north side of the campus with a total drainage area of 9.12 acres. Runoff from this area primarily drains to the north and the outfall consists of a concrete pipe with a concrete wall behind it.

See **Appendix B** for the Campus Drainage Area & Outfall Map.

3.2 High-Priority Facilities

VWCC has identified a total of five facilities to be addressed under this SWPPP. **Table 4** below identifies these facilities. Each drainage area has specific high-priority facilities that are located within it. The High-Priority Facility Locations Map depicts these locations and is attached as **Appendix C**.

Table 4. High-Priority Facilities

High-Priority Facilities	# of Facilities	Location	Outfall ID	Nearest Storm Drains
Composting Facilities	1	Arboretum	#2	#32
Equipment Storage & Maintenance Facilities	2	College Services Building/ Old Trades Building	#1 & #3	#18, #19, #32, #102, #9, #84
(Consists of a fork lift, a back hoe, seven service vans/trucks, six car pool vehicles, a four-wheeler, and a snow plow truck)				
Materials Storage Yards	1	Near Parking Lot 12	#3	#1, #103
(Consists of plastic traffic barriers, snow blades, and a plastic H_20 tank)				
Pesticide Storage Facilities	None	-	-	-
Public Works Yards	None	-		
Recycling Facilities	None	-		
Salt Storage Facilities	None	-	-	-
Solid Waste Handling & Transfer Facilities	None	-		
Vehicle Storage Maintenance Yards	None	-		

* Stored seasonally

High-priority facilities that have a high potential of discharging pollutants (those which are expected to be exposed to stormwater and that are not covered by a separate VPDES Permit) have been additionally identified. **Table 5** below identifies these facilities.

Table 5. High-Priority Facilities – Not covered under a separate VPDES Permit

High-Priority Facilities	Type	Location	Outfall ID	Nearest Storm Drains
Areas where residuals from machine/equipment use, storage, or cleaning remain	None	-		
Areas where spills or leaks leave residuals on the ground or in stormwater inlets	None	-		
Areas where equipment is handled (not well-maintained vehicles)	None	-		
Areas where materials could be mobilized during loading/unloading/transporting	None	-		
Areas where materials or products are stored outdoors	Hardwood mulch pile	Various/Parking Lot 12*	#3	#1, #103
Areas where materials or products which could mobilize in runoff are contained in open/deteriorated/leaking storage containers	None	-		
Areas where waste materials are stored outside of a dumpster	None	-		
Areas where process wastewater is applied or disposed of	None	-		
Areas where particulate matter/residual deposits from roof stacks or vents is evident in runoff	None	-		

* Stored seasonally

- Composting Facility: The composting facility is located in the arboretum behind Weber Hall and is maintained by the arboretum. The composting facility is used year round and is covered approximately 15% of the time. Approximately 300 lbs of compost is onsite throughout the year.
- Equipment Storage and Maintenance Facilities: Equipment storage and maintenance facilities are located at the College Services Building and at the old Trades Building. These facilities consist of a fork lift, a back hoe, seven service vans/trucks, six car pool vehicles, a four-wheeler, and a snow plow truck.
- Materials Storage Yard: A materials storage yard is located near Parking Lot 12. This facility consists of plastic traffic barriers, snow blades, and a plastic H_2O tank.
- Hardwood Mulch Pile: The hardwood mulch pile is categorized under High-Priority Facilities not covered under a separate VPDES Permit. The hardwood mulch pile varies in size and location depending on where it is being used on campus, and is usually located in Parking Lot 12. The hardwood mulch pile is stored seasonally as needed, typically in the spring. Plastic traffic barriers and matting are placed around the mulch pile

Any new high-priority facilities brought online during the following permit years will be added to this SWPPP during the annual evaluation and be included in **Appendix D** Amendments, Modifications, & Updates.

3.3 Past Spills and Leaks

VWCC, to their knowledge, has had no significant spill events at the campus related to the high-priority facilities listed in **Tables 4** and **5**. Any discharges from these high-priority facilities will be included in the **Appendix E** Spills & Leaks Log of this document.

3.4 Non-Stormwater Discharges

Non-stormwater discharges include process water, air conditioner condensate, non-contact cooling water, vehicle wash water, or sanitary wastes. Non-stormwater discharges can contain a significant load of pollutants that may go unnoticed into the storm sewer system.

VWCC does not allow non-stormwater discharges to occur unless otherwise permitted prior to discharge. Any illicit non-stormwater discharges from the high-priority facilities listed above will be recorded and added to **Appendix E** of this SWPPP. All structures onsite are serviced by public water and public sewer.

4.0 POLLUTION PREVENTION PRACTICES & CONTROL MEASURES

Best management practices (BMPs) are methods by which the adverse impacts of site activities are controlled through their application. BMPs may include schedules of activities, prohibition of practices, monitoring procedures, and structural and managerial practices that when used, reduce the discharge of pollutants to the stormwater system. All control measures will be implemented and maintained. VWCC's high-priority facilities are listed in **Tables 4** and **5** of **Section 3.0**.

4.1 Best Management Practices

Minimizing exposure of materials, equipment, and chemical storage areas to stormwater can reduce stormwater contamination potential into surface waters. To properly minimize exposure, the following practices are utilized:

1. All materials stored in varying amounts for varying durations are covered when not in use, either inside buildings or outside under cover. When it is not practical to store materials indoors, the products should be roofed or placed in areas that stormwater can be controlled if a leak or spill were to occur.
2. Areas have been designated for storage of materials and equipment.
3. Materials are used only when and where needed to complete the activity. Manufacturer recommendations are followed regarding use, protective equipment, and any chemical mixing.
4. Chemical and petroleum products are stored in tightly sealed containers which are clearly labeled. Chemicals and petroleum products used onsite are kept in small quantities and stored in closed containers inside or undercover.
5. Drip pans and absorbents under and/or around liquid are used as necessary. Any drip pans that contain any liquid product accumulation will be promptly cleaned and disposed at the property disposal facility.
6. All spills and leaks are cleaned-up immediately to prevent the discharge of pollutants.
7. All vehicles and equipment are inspected prior and after use to reduce onsite spills.

Preventive maintenance is important in keeping equipment and facility operations in good working condition. Equipment that is not well taken care of are more likely to fail and cause a spill or leak. Early detection of faulty equipment is the best preventive maintenance. Specifically, this incorporates routine maintenance and inspection of equipment and systems such as tanks, containers, drums, vehicles, and other equipment that may have the potential to impact stormwater.

An inspection program allows the facility to recognize and repair defective equipment on vehicles and equipment before a spill can occur. This reduces the incidence of unwanted material such as oils, greases, and fuels to discharge off site. Fork lifts and other equipment should be inspected for leaks and areas of material and fluid storage should be inspected no less than quarterly for potential stormwater contamination. All leaks must be fixed prior to operating equipment. Off side preventive maintenance is performed regularly on all vehicles and

mechanized equipment by manufactures authorized garages or repair shops.

Repairs of equipment are conducted on a regular basis in order to detect leaks or other defects that could result in potential discharges to stormwater. Equipment, such as fork lifts, back hoes, and other vehicles (cars, vans, trucks) will be inspected on a regular basis for defects or signs of deterioration.

Good housekeeping practices are designed to maintain a clean and orderly work environment and reduce the possibility of accidental spills caused by the misplacement of materials and equipment. Safety Data Sheets (SDS) are kept by department and are available as needed. The following procedures are utilized to reduce the potential of discharge pollutants:

1. Work areas are well-organized and maintained to reduce the possibility of accidental spills or injury caused by material misplacement.
2. Garbage and waste material are disposed of in the proper location and work areas are kept orderly and free of clutter, debris, spills, loose buckets, containers of oil and fluids, and waste material.
3. An inventory of all materials present is maintained and helps identify which materials and activities pose the highest potential risk to the environment. The inventory includes: identification of all chemicals and a copy of the SDS for each; labeling of all containers to clearly show the name and type of each substance; and clearly marking on the inventory which materials require special handling, storage, use, or disposal.
4. All employees are trained annually in good housekeeping practices. Employees will be informed about the purpose and scope of this SWPPP, spill identification, and response.

Standard operating procedures (SOP) have been developed and implemented at VWCC. A copy of the current SOPs is included as an appendix to the MS4 Program Plan (dated May 1, 2019) including Parts Cleaning; Spill Response & Clean-up; Salt, Sand, and Deicing Material Application; Petroleum and Chemical Disposal; Fertilizer, Herbicide, and Pesticide Storage and Disposal; and Vehicle and Equipment Storage.

VWCC institutes good housekeeping procedures and preventative maintenance to reduce the possibility of spills and leaks from high-priority facilities. Structural BMPs are also in place to reduce damage to surface waters before it leaves the property. Rain gardens and stormwater basins have been constructed to control the amount of stormwater leaving the property all at once and to help direct pollutants to a specific area. Rain gardens naturally filter pollution from stormwater runoff and contain pollutants from leaving the property. Stormwater basins collect and detain stormwater to prevent it from leaving the property all at once. Knowing the locations of stormwater basins can help to identify where to set up absorbents and clean-up materials to catch pollutants before they leave the property.

4.2 High-Priority Facilities Control Measures

A summary table of VWCC's High-Priority Facilities is located in **Section 3.0 Tables 4** and **5**. For reference locations of each high-priority facility and the closest spill kits, a High-Priority Facility Locations Map is attached as **Appendix C**. Each high-priority facility is stored and placed in different locations across the campus depending on use and available space. All the high-priority facilities are located on the southern portion of the campus. The following is specific site controls for each high-priority facility.

Composting Facility:

The composting facility is under cover and contained within one area. The nearest storm drain is #32 to the south of this facility. In case of a spill or leak, the spill or leak will be contained so that it does not travel to the storm sewer conveyance system.

Equipment Storage and Maintenance Facilities:

All vehicles are maintained and inspected for leaks and defects before and after use and when the equipment has not been used for long periods of time. When defects are recognized, the equipment is repaired before use. When there is a leak from a defect in equipment, the equipment will be repaired and fixed promptly to ensure no more is leaked and absorbent protection will be placed near the closest stormwater drop inlets. The nearest storms drains are #18, #19, #82, #102, #84, and #9. Absorbent material will be placed and disposed of properly. An SOP for Vehicle and Equipment Storage has been developed and implemented at VWCC. The SOP procedures are included below:

Always:

- Inspect parking areas for staining/leaks on a schedule established by the appropriate personnel.
- Clean up ponding resulting from leaks using dry methods (absorbents).
- Use drip pans for vehicles that historically leak petroleum (provide a labeled location to empty and store drip pans).
- Address a known leak or drip as soon as possible.

Whenever Possible:

- Store vehicles on paved areas.
- Maintain vehicles to prevent leaks from occurring.
- Perform a pre-trip inspection of vehicle.

Never:

- Never store leaking vehicles over a storm drain.

Materials Storage Yard:

All vehicles are maintained and inspected for leaks and defects before and after use and when the equipment has not been used for long periods of time. Materials such as plastic traffic barriers are organized and neatly placed, and do not pose a threat to surface waters at this time. When defects are recognized, the equipment is repaired before use. When there is a leak from a defect in equipment, the equipment will be repaired and fixed promptly to ensure no more is leaked and absorbent protection will be placed near the closest stormwater drop inlets. The nearest storm

drains are #1 and #103. Absorbent material will be placed and disposed of properly.

Hardwood Mulch Pile:
The hardwood mulch pile is stored seasonally as needed, typically in the spring. Traffic barriers and matting is placed around the perimeter of the pile to reduce the hardwood mulch from discharging into the storm sewer system. The nearest storm drains are #1 and #103. If the hardwood mulch pile is not contained and hardwood mulch is entering a storm drain, clean-up of hardwood mulch will be conducted and additional materials will be placed to prevent hardwood mulch from entering the storm drain.

Good housekeeping will be evaluated annually and will be updated as necessary. Good housekeeping is included in the annual training conducted each fall.

4.3 Visual Inspections

Regular visual inspections of all high-priority facilities ensure that all elements of the SWPPP have been implemented and are working properly. Employees should be able to identify problems through their daily work routine and respond to various material and chemical spills or leaks.

VWCC currently conducts Illicit Discharge Detection and Elimination (IDDE) inspections annually at all five outfalls. Records of all IDDE outfall inspections are included as an appendix to the Annual Report in the corresponding Permit Year.

VWCC also currently conducts stormwater drop inlet/storm sewer system inspections across campus. A map of the storm sewer system is included as **Appendix F**. As needed, debris is removed from drains. Copies of inspection reports are included as an appendix to the Annual Report in the corresponding Permit Year.
High-priority facility inspections will be kept with this SWPPP and will be updated as necessary. Documentation of the inspections includes:

- Date of inspection
- Who conducted the inspection
- What areas were inspected
- What problems were identified
- What corrective actions were taken

A copy of all Visual High-Priority Facility Inspections will be completed and included in **Appendix G**.

4.4 Spill Prevention and Response Procedures

Establishing spill prevention and response procedures along with proper employee training can reduce the probability of an accidental release. Employees should be aware and properly trained to prevent a possible spill and to respond to a spill, should the need arise.

The following aspects of the SWPPP provide baseline considerations for spill prevention:

- Good housekeeping;
- Reporting any release immediately;
- Contain leaks if encountered;
- Regular visual inspections;
- Onsite waste minimization through recycling, reduction, and reuse of process materials;
- Identification of safety measures;
- Procedures for notification of the appropriate authorities in case of a spill; and
- Description of spill containment, diversion, isolation, and cleanup practices.

All spill kits and supplies are located at the College Services Building lower warehouse on the campus. These kits contain various quantities and sized spill pads, booms, and granular absorbents that are easily accessible for quick spill response. The spill kits are in drum kits or stored on shelving that can be utilized by any personnel in the area who discovers or causes a spill. As with any spill, quick attempts will be made to intercept any spilled product prior to spreading or entering into the stormwater conveyance system. The contents of the spill kits are routinely inspected and maintained as necessary. Documentation of all spills or leaks will be maintained within this SWPPP for future reference. The location of all spill kits are located on the High-Priority Facilities Locations Map in **Appendix C**.

Spills and leaks from equipment and chemical storage that are used and/or stored should be addressed immediately. Personnel are to contact the Pollution Prevention Team in the event of a leak or spill.

In the event of a spill or other associated emergency, the following list of contacts may be necessary. The initial contact should be made to the Pollution Prevention Team. Contact information is included in **Table 2**. Evaluation of the situation will determine the remainder of the contacts that need to be made.

Table 6 Emergency Contacts

Person or Agency	Telephone Number
Kevin Witter – Pollution Prevention Team	(540) 857-6481
Patrick Rhodes – Pollution Prevention Team	(540) 857-6482
Emergency Response (Fire/Rescue)	911
WEL Inc – Petroleum or Hazmat spill	(540) 580-4762
VDEQ Blue Ridge Regional Office (Roanoke)	(540) 562-6700

An SOP for Spill Response and Clean-up has been developed and implemented at VWCC and is

included as **Appendix A** to the MS4 Program Plan (dated May 1, 2019). The SOP procedures are included below:

Always:

- Respond to injuries.
- Stop the source of the spill (if possible).
- Contain and/or prevent any liquids from entering the storm drainage system (if possible).
- Contact WEL Inc. in any Petroleum or Hazmat spill/event at 540-580-4762 for clean-up efforts.
- Cover the spill with absorbent material such as kitty litter, sawdust, or oil absorbent pads. Do not use straw. Dispose of used absorbent material properly. Use sealable containers with proper labels.
- Use water only when necessary and minimize its use.
- Report to Facilities Management Services Manager Patrick Rhodes at 540-857-6482.
- Keep a spill kit in areas where petroleum or hazardous materials are stored.
- Train employees in spill response procedures and equipment.
- Deploy containment barrier if spill could potentially reach a storm drainage system.
- Position mats to contain drips from equipment or vehicles until they can be repaired.

Whenever Possible:

- Seal the floor with paint to prevent absorption of fluids into concrete.

Never:

- Never wash a spill into the storm drain or a water body.
- Never leave a spill without cleaning it up.

Fill out a Spills & Leaks form and include the completed form with this SWPPP. This SWPPP will retain all logs of all spills and leaks in **Appendix E**. The log shall include a description of the measures taken to clean-up the spill and proper disposal of those materials.

If any unusual or extraordinary discharge should occur from a high-priority facility and the discharge enters or could be expected to enter surface waters, VWCC shall promptly notify, in no case later than within 24 hours, VDEQ by telephone after the discovery of the discharge. This notification shall provide all available details of the incident, including type of material and approximate amount of material spilled/leaked. Unusual and extraordinary discharges include but are not limited to any discharge resulting from:

- Unusual spillage of materials resulting directly or indirectly from processing operations;
- Breakdown of processing or accessory equipment;
- Failure or taking out of service some or all of the facilities; and
- Flooding or other acts of nature.

4.6 Employee Training

Through a variety of safety meetings, staff meetings, and annual training, site employees receive information to maintain their spill awareness roles and responsibilities. Employees are trained to be aware of potential environmental and human health issues associated with a release of oil or other hazardous materials such as pesticides, salt and sand, etc. In addition, employees are instructed to identify leaks, how to properly clean-up various fluids and materials, and to immediately notify their supervisor when a spill or leak is identified.

Facility employees are trained annually regarding this SWPPP and all procedures and responsibilities included in this SWPPP. At a minimum, employees involved with the inspection, maintenance, clean-up, or response of spills or leaks will receive in-house training for proper equipment operation, maintenance, material and waste storage practices, and good housekeeping in order to reduce stormwater pollution. These individuals include facility staff and supervisors. This training will correspond with existing annual training, and/or will take place as soon as possible after new hires are brought on. The Pollution Prevention Awareness Form is included as **Appendix H** for each individual to sign that has had training under this SWPPP.

5.0 RECORDS, UPDATES, AND PLAN MODIFICATIONS

Pursuant to this SWPPP, proper controls are instituted to ensure that this SWPPP is adequate. Regular site evaluations by properly trained personnel, thorough documentation, and revisions as needed, will aid in updating this SWPPP.

5.1 Annual Site Evaluation

VWCC will conduct site evaluations annually. The annual site evaluation includes a review of this SWPPP to meet the requirements of the General Permit. The site evaluation will include determining if any new high-priority facilities brought online during the following permit years and any changes to outfalls or drainage patterns due to construction activities or implementation of new control measures. This will be conducted in conjunction with facility inspections.

The annual site evaluations for the campus will be conducted at least annually and a form is included in **Appendix I**.

5.2 Record Keeping and Reporting

Records of employee training, inspection documentation, material inventories, spills, operational permits, and other important information are integral to the implementation of the SWPPP. Spills, leaks, and other incidents that could potentially impact stormwater will be reported as quickly as possible and included in **Appendix E**. Visual inspections of all high-priority facilities will be conducted quarterly in conjunction with stormwater drop inlet inspections. Visual inspection forms are included in **Appendix G**.

5.3 Plan Revisions

Any major changes in the design of the campus, operation, construction, or maintenance will be properly documented in this SWPPP. Any new high-priority facilities brought online during the following permit years will be updated and included in **Appendix D.**

5.4 Plan Location

The Pollution Prevention Team will maintain the SWPPP and all related records will be kept with this SWPPP during the following permit years. VWCC will maintain a copy of the SWPPP and all related documentation for the various high-priority facilities in the Pollution Prevention Team's office or where otherwise designated.

APPENDIX A

Annual Standards & Specifications for Erosion & Sediment Control & Stormwater Management

Annual Standards and Specifications

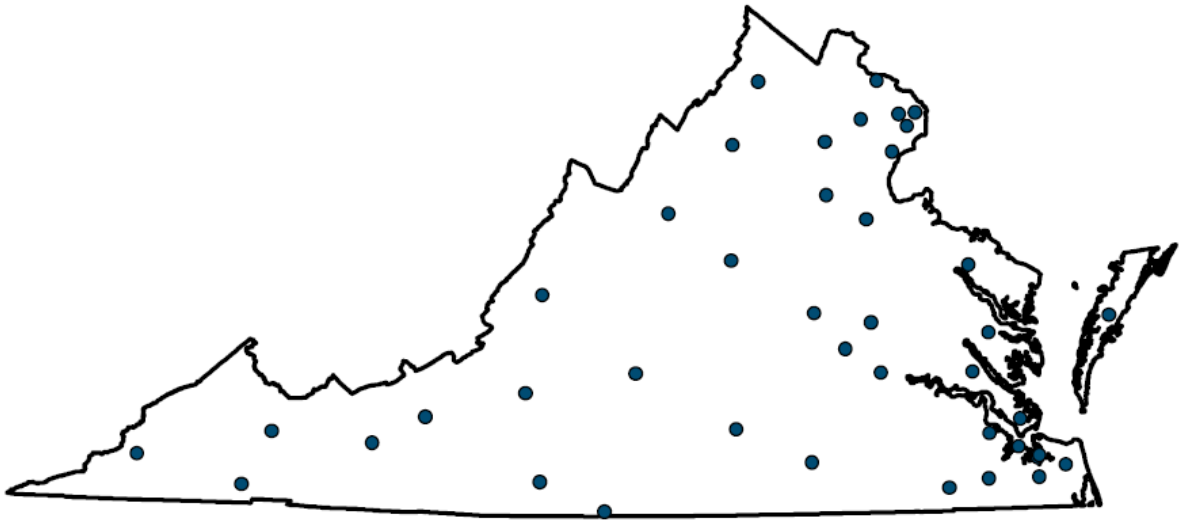
for

Erosion & Sediment Control

and

Stormwater Management

[The VCCS Stormwater Pollution Prevention Plan (SWPPP) Template is incorporated by reference and available as a separate Word document for projects equal to or greater than an acre of disturbance.]



Virginia Community College System

Effective:

January 1, 2017 – December 31, 2017

Revison 2 Date: October 31, 2016 (See revision table page ii)

This document is submitted in accordance with 9VAC25-870-170 that requires submission to DEQ, on an annual basis, standards and specifications consistent with the Virginia Stormwater Management Act (§ 62.1-44.15:24 et seq., as amended), the General Permit for Discharges of Stormwater for Construction Activity, and the Erosion and Sediment Control Regulations. This document describes how land-disturbance activity shall be conducted on lands owned by the State Board for Community Colleges, Virginia Community College System.

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Appendix A	Statewide Coverage Map of VCCS Properties
Appendix B	Land Disturbance Application Form (LD-01)
Appendix C1	VCCS ESC Plan Preparer/Plan Reviewer Checklist (LD-02A)
Appendix C2	VCCS SWM Plan Preparer/Plan Reviewer Checklist (LD-02A)
Appendix D	VCCS AS&S Preconstruction Meeting Form (LD-03)
Appendix E1	VCCS Construction Site Inspection Form for Land Disturbance < 1-acre (LD-04A)
Appendix E2	VCCS Construction Site Inspection Form for Land Disturbance ≥ 1-acre (LD-04B)
Appendix F	VCCS SWM Facility Certification Form (LD-05)
Appendix G	VCCS Contractor Notification of Completion of Land Disturbance Activities (LD-06)

ACRONYMS

BMP	Best Management Practice
CWA	Clean Water Act
DEQ	Virginia Department of Environmental Quality
EPA	Environmental Protection Agency
ESC	Erosion and Sediment Control
HUC	Hydraulic Unit Code
MS4	Municipal Separate Storm Sewer System
NPDES	National Pollutant Discharge Elimination System
SWM	Stormwater Management
SWPPP	Stormwater Pollution Prevention Plan
TMDL	Total Maximum Daily Load
VAR10	General Permit for Discharges of Stormwater from Construction Activity
VESCH	Virginia Erosion and Sediment Control Handbook
VPDES	Virginia Pollutant Discharge Elimination System
VSMP	Virginia Stormwater Management Program
VCCS	Virginia Community College System
VCCS AS&S	Virginia Community College System Annual Standards and Specifications

Revision Table

Revisions Number	Date	Description
1		Revisions based on DEQ comments prior to the January 1, 2015 - December 31, 2015 approval.
2	October 31, 2016	Update the Loudoun County ESC threshold and added a disclosure statement in Appendix A. See revision clouds in Appendix A. Also corrected Appendix E2 to read greater than or equal to "≥".

DEFINITIONS

The words and terms used in these Standards & Specifications shall have the meanings defined in the regulations listed in Section 1.0 unless the context clearly indicates otherwise. The following definitions apply to these Standards & Specifications:

"Applicant" means person or persons providing submissions to VCCS to engage in a regulated land-disturbing activity (e.g. VCCS AS&S Project Manager or designee).

"Contractor" means operator as defined in these Standards & Specifications.

"Land disturbance" or "land-disturbing activity" means a manmade change to the land surface that potentially changes its runoff characteristics including clearing, grading, or excavation, except that the term shall not include those exemptions specified in Sections 3.1.3 for Erosion and Sediment Control Regulations and 3.2.5 for Stormwater Management Regulations.

"Licensed professional" means a professional registered in the Commonwealth of Virginia pursuant to Article 1 (§ 54.1-400 et seq.) of Chapter 4 of Title 54.1 of the Code of Virginia. For purposes of these Standards and Specifications a licensed professional is one that is certified by DPOR as an Architect, Professional Engineer, Land Surveyor, or Landscape Architects.

"Local technical criteria (for SWM)" means technical criteria in a DEQ approved local ordinance that is more stringent than the technical criteria described in Part II B of 9VAC25-870.

"Operator" means contractor of a regulated activity. In the context the Standards & Specifications, operator means any person associated with a construction project that meets either of the following two criteria: (i) the person has direct operational control over construction plans and specifications, including the ability to make modifications to those plans and specifications or (ii) the person has day-to-day operational control of those activities at a project that are necessary to ensure compliance with a stormwater pollution prevention plan for the site.

"*Permittee"* means the operator to whom the General Permit for Discharges of Stormwater from Construction Activity (VAR10) is issued.

"*Primary Contractor for land disturbance"* is the company and individual responsible for implementation of the approved ESC Plan, SWM Plan, and conditions of the General Permit for Discharges of Stormwater from Construction Activity, when applicable.

"Standards & Specifications" means the Virginia Community College System's Annual Standards and Specifications for Erosion & Sediment Control and Stormwater Management.

"Stormwater Management Facility" means a control measure that controls stormwater runoff and changes the characteristics of that runoff including, but not limited to, the quantity and quality, the period of release or the velocity of flow. For purposes of water quality, a stormwater management facility means approved practices as described on the Virginia Stormwater BMP Clearinghouse Website.

"VCCS AS&S Inspector" the individual performing inspections in accordance with Section 4.2.1 of these standards and specifications.

"VCCS AS&S for ESC" includes the information described in the standards and specifications regarding ESC.

"VCCS AS&S for SWM" includes the information described in the standards and specifications regarding SWM.

"VCCS AS&S Project Manager" means the individual managing the land disturbance activity for the VCCS or college.

1.0 OVERVIEW

The Virginia Community College System (VCCS), is required per §62.1-44. 15:31 of the Virginia Stormwater Management Act to submit standards and specifications for approval by the Virginia Department of Environmental Quality (DEQ) to describe how land disturbance activities shall be conducted on VCCS properties. In response, VCCS has adopted the VCCS Annual Standards and Specifications for Erosion and Sediment Control and Stormwater Management (VCCS AS&S) that guide regulated land disturbance activity on VCCS properties. The VCCS AS&S incorporate, by reference, the following laws and attendant regulations:

- Virginia Stormwater Management (SWM) Act (§62.1-44. 15:24 et. seq.) and Virginia Stormwater Management Program (VSMP) Regulations (9VAC25-870);
- VPDES General Permit for Discharges of Stormwater from Construction Activities (9VAC25-880);
- Virginia Erosion and Sediment Control (ESC) Law (§62.1-44.15:51 et. seq.) and Virginia Erosion and Sediment Control Regulations (9VAC25-840);
- Erosion and Sediment Control and Stormwater Management Certification Regulations (9VAC25-850), and where applicable,
- Chesapeake Bay Preservation Act (§62.1-44.15:67 et. seq.) and Chesapeake Bay Preservation Area Designation and Management Regulations (9VAC25-830).

The VCCS AS&S are submitted annually to DEQ for their review and approval based on consistency with the law and regulations listed above. The VCCS AS&S shall apply to all applicable land disturbance activities, as described in Section 2.

Administration and enforcement of the VCCS AS&S will be performed by VCCS as described herein. The VCCS shall ensure responsible staff and its representatives obtain the necessary certifications through DEQ in accordance with the Erosion and Sediment Control and Stormwater Management Certification Regulations (9VAC25-850). Certifications will be dependent on the individual's role in implementing the VCCS AS&S and may include Program Administrator, Plan Reviewer and/or Inspector.

The VCCS AS&S have been framed to guide a land disturbance project through planning, plan approval and construction to ensure consistency with the regulatory requirements referenced in Section 1.0. The VCCS AS&S include four distinct sections:

- **Applicability** – Procedures to determine if a land disturbance project is subject to the VCCS AS&S as described in Section 2;
- **Application Process** – Procedures for applicable land disturbance activities prior to commencement of land disturbance as discussed in Section 3;
- **Implementation through Construction** – Procedures necessary during construction through the completion of a project as discussed in Section 4; and
- **Post-Construction and Reporting** – VCCS responsibilities and procedures to ensure long-term care and maintenance of stormwater management facilities.

2.0 APPLICABILITY

A land disturbance activity may be subject to ESC Law and Regulations or SWM Law and Regulations, or both. Applicability may vary depending on the location and type of activity. Section 2 includes the following:

- Section 2.1 provides information for determining if a proposed project is subject to the *VCCS AS&S for ESC*.
- Section 2.2 provides information for determining if a proposed project is subject to the *VCCS AS&S for SWM*.
- Section 2.3 describes the requirements for *all* SWM practices on VCCS properties to be approved by the VCCS.

2.1 Erosion & Sediment Control

The *VCCS AS&S for ESC* are applicable on VCCS properties where a land disturbance activity is equal to or greater than:

- 10,000 square feet;
- The threshold established in a locality's DEQ-approved ESC Program ordinance; or
- 2,500 square feet if the project is within a Chesapeake Bay Preservation Area (CBPA).

Appendix A provides information for each VCCS community college campus throughout the Commonwealth to assist in determining if a land disturbance activity is subject to the more stringent local threshold or the CPBA threshold. For the purposes of applicability to the *VCCS AS&S for ESC*, a land disturbance activity is defined as:

> ***ESC Land Disturbance Activity*** *– means any man-made change to the land surface that may result in soil erosion from water or wind and the movement of sediments into state waters or onto lands in the Commonwealth, including, but not limited to, clearing, grading, excavating, transporting and filling of land.*

Exceptions to the applicability of the *VCCS AS&S for ESC* that are potentially relevant to VCCS include:

- Installation, maintenance, or repair of underground public utility lines when such activity occurs on, and is confined within, an existing hard surfaced road, street or sidewalk;
- Septic tank lines or drainage fields unless included in an overall plan for land-disturbing activity relating to construction of the building to be served by the septic tank system;
- Tilling, planting, or harvesting of agricultural, horticultural, or forest crops, livestock feedlot operations, including engineering operations as follows: construction of terraces, terrace outlets, check dams, desilting basins, dikes, ponds, ditches, strip cropping, lister furrowing, contour cultivating, contour furrowing, land drainage and land irrigation;
- Installation of fence, sign posts, telephone and electric poles, and other posts or poles; and

- Emergency work to protect life, limb or property, and emergency repairs; however, the land area disturbed shall be shaped and stabilized in accordance with the requirements of the VCCS AS&S.

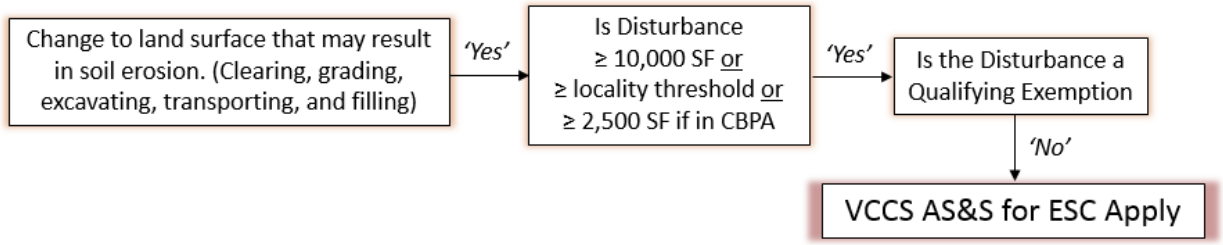


Figure 2.1 *Summary for determining applicability to the VCCS AS&S for ESC. Refer to Appendix A for local thresholds.*

2.2 Stormwater Management

The *VCCS AS&S for SWM* are applicable where a land disturbance activity is equal to or greater than:

- 1-acre; or
- 2,500 square feet if the project is within a CBPA.

Appendix A provides information for each VCCS college campus throughout the Commonwealth to assist in determining if a land disturbance project is subject to the CBPA threshold. For the purposes of applicability to the *VCCS AS&S for SWM*, a land disturbance activity is defined as:

> ***SWM Land Disturbance Activity*** *– means a man-made change to the land surface that potentially changes its runoff characteristics including clearing, grading, or excavation.*

Exceptions to the applicability of the *VCCS AS&S for SWM* that are potentially relevant to VCCS include:

- Projects that discharges to a sanitary sewer or a combined sewer system;
- Routine maintenance that is performed to maintain the original line and grade, hydraulic capacity, or original construction of the project. The paving of an existing road with a compacted or impervious surface and reestablishment of existing associated ditches and shoulders shall be deemed routine maintenance; and
- Land-disturbing activities in response to a public emergency where the related work requires immediate authorization to avoid imminent endangerment to human health or the environment. In such situations, VCCS and the DEQ shall be advised of the disturbance within seven days of commencing the land-disturbing activity, and compliance with the administrative requirements described in Section 3.2 are required to be submitted to VCCS within 30 days of commencing the land-disturbing activity.

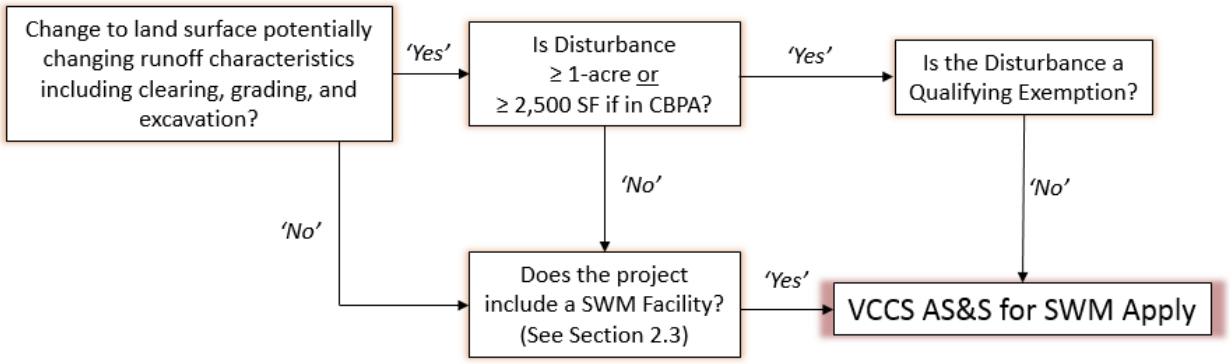


Figure 2.2 *Summary for determining applicability to the VCCS AS&S for SWM. Refer to Appendix A for assistance in determine if a project is within a CPBA.*

2.3 Stormwater Management for Non-Applicable Projects

From time to time, development projects on VCCS properties may incorporate the construction of a SWM practice although the practice is not required by the SWM laws and regulations. The incorporation of these practices may instead occur as part of a building project to assist in achieving credit towards environmental rating system certifications. Any stormwater management practice that does not otherwise qualify as subject to the *VCCS AS&S for SWM* shall not be constructed prior to approval of a SWM Plan from VCCS as described in Section 3.2. The practice shall be designed per the Virginia Stormwater Management Handbook and the standards and specifications in the Virginia BMP Clearinghouse.

3.0 APPLICATION PROCESS

Section 3 describes the development process once a land disturbance activity has been identified to be subject to the VCCS AS&S. The Section discusses the responsibilities of the VCCS, the VCCS AS&S Project Manager, and the primary contractor of the land disturbance prior to commencement of land disturbance.

Depending on the applicability determination made using the guidance in Section 2, a land disturbance activity may be subject to:

- Only the ESC submission requirements and technical criteria described in Section 3.1; or
- The ESC *and* SWM submission requirements and technical criteria described in Sections 3.1 and 3.2; or
- A SWM submission and ESC submission (if land disturbance threshold is met or exceeded) if a project includes a SWM facility as described in Section 2.3.

All submissions are to be provided by the applicant to VCCS and require VCCS approval on the plans (in the form of a signed approval stamp signed by the VCCS Associate Vice Chancellor for Facilities Management Services). For land disturbance activity equal to or greater than an acre, a General Permit for Discharges of Stormwater from Construction Activities, issued by DEQ, is also required prior to the commencement of land disturbance.

3.1 Erosion & Sediment Control Plan Review & Approval

Land disturbance activity subject to the *VCCS AS&S for ESC* requires a VCCS approved ESC Plan. The required submittals, as listed in Section 3.1.2, will be reviewed for consistency with the technical criteria described in Section 3.1.1 by an individual certified in accordance with the ESC and SWM Certification Regulations (9VAC25-850).

The review will result in an approval or a letter providing the reasons the ESC Plan could not be approved within 45 days of the acceptance of the submittal. The date of acceptance of a submittal is the date that VCCS acknowledges in writing that all of the submission materials described in Section 3.1.2 have been provided for review. Acknowledgement from VCCS of a complete submittal will be provided with form LD-01, provided in Appendix B.

3.1.1 ESC Technical Criteria

The ESC Plan shall be consistent with the requirements of the Virginia ESC Regulations (9VAC25-840), the latest edition of the Virginia Erosion and Sediment Control Handbook (VESCH) and specifically address each applicable minimum standard described in 9VAC25-840-40.

When applicable, the ESC Plan shall also address more stringent local requirements for erosion and sediment controls. For planning purposes, localities known to have more stringent local criteria for ESC are identified in Appendix A. However, it is the responsibility of the ESC Plan preparer to review the locality's ESC ordinance for more stringent requirements and incorporate them into the ESC Plan.

3.1.2 ESC Submittal

The following shall be submitted by the Applicant for review to VCCS when land disturbance activity is subject to the *VCCS AS&S for ESC*. Each item shall be provided to VCCS as hardcopy (# of copies as shown) and also electronically in pdf format.

- **VCCS Land Disturbance Application Form** (2 copies) – This form shall be completed and provided with all submittals. A copy of the form is provided in Appendix B.
- **Completed VCCS ESC Plan Checklist** (2 copies) – The VCCS ESC Plan Checklist in Appendix C1 is provided to assist the ESC Plan preparer and reviewer with ensuring compliance to the technical criteria and the VCCS AS&S for ESC. Each applicable item on the checklist shall be addressed in the ESC Plan or ESC Narrative. Written reference on the checklist to the location (plans or narrative) as to where an item has been addressed is recommended to assist with plan development and review.
- **ESC Plan** (6 copies) – The ESC plan shall be signed and sealed by a licensed professional and demonstrate compliance to the technical criteria described in Section 3.1.1.
- **ESC Plan Narrative** (6 copies) – The ESC Plan Narrative shall be signed and sealed by a licensed professional and is considered part of the ESC Plan. The narrative shall incorporate supporting information necessary to demonstrate compliance to the technical criteria described in Section 3.1.1.

Re-submissions to address comments provided by a VCCS as the result of a review shall include a cover letter from the licensed professional that explicitly responds to each comment from the review. Each response shall describe how the comment was addressed with reference to the locations of the changes in the Plan and/or Narrative. Any other changes not specifically addressed in the response to comments from the previous review shall also be described in the cover letter.

3.1.3 ESC Plan Variances

An Applicant may request a variance from the ESC technical criteria through VCCS. A variance request shall be provided in writing and may be considered prior to plan approval or during construction under the following conditions:

- The applicant requests, in writing, a variance with explanation of the reasons for requesting the variance. Reasons must be specific to restrictive site conditions and the variance shall be the minimum necessary to mitigate for the site restriction.
- The request shall include alternative measures to address potential downstream transport of sediment that could result from the granting of the variance.
- The request shall describe how the alternative measure(s) meets the intent of the minimum standard (9VAC25-840-40) for which the variance is sought.
- A variance will not be granted in any case where the granting of the variance could cause damage to downstream property. It is the responsibility of the applicant to demonstrate in the request that downstream properties will be protected from erosion, sedimentation and flooding.

- Request for a variance to the VESCH standards and specifications of an ESC measure (e.g. proprietary inlet protection device) will consider consistency with the intent of the standard and specification for the specific type of measure described in Chapter 3 of the VESCH.
- Specific variances which are allowed by VCCS shall be documented on the ESC Plan.

Requests for variances will be considered by VCCS, and if deemed appropriate, VCCS will submit the request to DEQ for consideration of approval. All variances must be approved by DEQ Central Office.

VCCS reserves the right to disallow the use of proprietary ESC measures based on findings that demonstrate poor performance related to sedimentation control or maintenance. Sufficient detail shall be provided on the ESC Plan for allowed proprietary measures, including any necessary computations, installation instruction, and inspection and maintenance instruction. Installation and maintenance shall be per the manufacturer's recommendations.

3.2 Stormwater Management Plan Review & Approval

Land disturbance activity subject to the *VCCS AS&S for SWM* requires an approved SWM Plan. The required submittals, as listed in Section 3.2.4, will be reviewed for consistency with the technical criteria described in Section 3.2.1 by an individual certified in accordance with the ESC and SWM Certification Regulations (9VAC25-850).

The review will result in an approval or a letter providing the reasons the SWM Plan could not be approved within 45 days of the acceptance of the submittal. The date of acceptance of a submittal is the date that VCCS acknowledges in writing that all of the submission materials described in Section 3.2.4 have been provided for review. Acknowledgement from VCCS of a complete submittal will be provided with form LD-01 provided in Appendix B.

3.2.1 SWM Technical Criteria

The SWM Plan shall be consistent with Part II A and Part II B of the VSMP Regulations, unless grandfathered per conditions described in 9VAC25-870-48 and therefore subject to Part II C of the VSMP Regulations. A project is not considered grandfathered unless explicitly approved in writing from DEQ in response to a request for "grandfathered status" consistent with 9VAC25-870-48.

Design standards and specifications shall be consistent with the Virginia Stormwater BMP Clearinghouse Website, the latest edition of the Virginia Stormwater Management Handbook, and the supplemental criteria in Sections 3.2.2 and 3.2.3.

When applicable and to the maximum extent practicable, the SWM plan shall comply with any local VSMP authority's additional *technical* requirements for stormwater management adopted within a DEQ-approved local ordinance. Localities with the potential to have additional technical requirements for SWM are identified in Appendix A. However, it is the responsibility of the SWM Plan preparer to:

- Review the locality's SWM ordinance for specific requirements and incorporate them into the SWM Plan to the maximum extent practicable.
- Where applicable, demonstrate to VCCS that the locality's additional *technical requirements* are not practicable and the SWM Plan Narrative shall include information demonstrating the impracticality.

3.2.2 VCCS Supplemental Technical Criteria

For the purposes of the technical criteria for water quality described in Part II B of the VSMP Regulations, the planning area shall be defined as the limits of disturbance.

3.2.3 VCCS Supplemental BMP Selection Criteria

The successful performance of SWM practices is dependent on a successful long-term maintenance program. Designers are encouraged to consider maintenance concerns such as accessibility, frequency of maintenance, and costs of maintenance when selecting BMPs to achieve technical criteria. The maintenance requirements for SWM practices shall be clearly specified on the SWM Plan and under no circumstance shall a SWM practice be proposed that requires a maintenance contract with the manufacturer outside of the term of an initial establishment of the practice. VCCS reserves the right to grant exemptions to this requirement in accordance with 3.2.5.

3.2.4 SWM Submittals

The following shall be submitted by the Applicant for review to VCCS when land disturbance activity is subject to the *VCCS AS&S for SWM*. Each item shall be provided to VCCS as hardcopy (# of copies as shown) and electronically in pdf format.

- **VCCS Land Disturbance Application Form** (2 copies) – This form shall be provided with all submittals and include the Applicant's contact information and general information about the land disturbance activity. A copy of the form is provided in Appendix B.
- **Completed VCCS SWM Plan Checklist** (2 copies) – The VCCS SWM Plan Checklist in Appendix C2 is provided to assist the SWM Plan preparer and reviewer with ensuring compliance to the technical criteria and the VCCS AS&S. Each applicable item on the checklist shall be addressed in the SWM Plan or SWM Narrative and the checklist certified by the licensed professional.
- **SWM Plan** (6 copies) – The SWM plan shall be signed and sealed by a licensed professional and provide all of the information described in 9VAC25-870-55 (Stormwater Management Plans) of VSMP regulations. When applicable, the SWM Plan shall also address local *technical* requirements as described in Section 3.2.1.
- **SWM Plan Narrative** (6 copies) – The SWM Plan Narrative shall be signed and sealed by a licensed professional and is considered part of the SWM Plan, incorporating supporting information necessary to demonstrate compliance to the technical criteria described in Section 3.2.1 and 3.2.2.
- **Completed SWM Management Handbook BMP Checklist** (6 copies) – As applicable, provide the applicable BMP Design Checklist from Appendix 8-A of the Virginia Stormwater

Management Handbook, latest edition. A BMP-type specific checklist shall be provided for each BMP proposed in the SWM Plan.

- **Exception Request** (2 copies) – Where applicable, the applicant shall provide written request that address the conditions described in Section 3.2.5.

Re-submissions to address comments provided by VCCS as the result of a review shall include a cover letter from the licensed professional that explicitly responds to each comment from the previous review. Each response shall describe how the comment was addressed with reference to the locations of changes in the Plan and/or Narrative. Any other changes not specifically addressed in the response to comments from the previous review shall also be described in the cover letter.

3.2.5 SWM Plan Exceptions

An Applicant may request in writing for an exception to the SWM technical criteria and design standards and specifications through VCCS. An exception may be granted provided that:

- The exception is the minimum necessary to afford relief;
- reasonable and appropriate conditions are imposed as necessary upon any exception granted so that the intent of the Virginia Stormwater Management Act and the technical criteria are preserved;
- granting the exception will not confer any special privileges that are denied in other similar circumstances; and the
- request is not based upon conditions or circumstances that are self-imposed or self-created.

Economic hardship alone is not a sufficient reason to request an exception from the requirements of the technical criteria or design standards and specifications. The following exceptions will not be granted:

- The requirement that a land-disturbing activity obtain a state permit, when applicable.
- The use of a BMP not found on the BMP Clearinghouse.
- Requirements for phosphorus reductions.

Requests for exceptions will be considered by VCCS, and if deemed appropriate, VCCS will submit the request to DEQ for consideration of approval. All exceptions must be approved by DEQ Central Office.

3.3 Construction General Permit (VAR10)

Land disturbance activity that disturbs an acre or greater requires a General Permit for Discharges of Stormwater from Construction Activity (9VAC25-880), also known as General Permit No. VAR 10 (VAR 10). The VAR 10 General Permit is issued by the Virginia DEQ and coverage is required throughout the duration of the land disturbance activity. The contractor shall obtain permit coverage as the permit operator and provide a VAR10 General Permit coverage letter from DEQ at the preconstruction meeting described in Section 3.4. An "Application of Submission Worksheet" to assist with applying for coverage under the VAR10 General Permit is available from DEQ at the following web link:

http://www.deq.virginia.gov/Portals/0/DEQ/Water/StormwaterManagement/CGPWorksheetStateFederalSns.pdf.

The coverage letter is required prior to the commencement of the land disturbance activity and shall be maintained in the project Stormwater Pollution Prevention Plan described in Section 3.3.1. The operator of the permit is responsible for compliance to the permit conditions. VCCS will provide oversight of permit compliance through site inspections as described in Section 4.2.

3.3.1 Stormwater Pollution Prevention Plans (SWPPP)

Prior to submission of a Registration Statement to DEQ for VAR10 General Permit coverage, the project is required to have a VCCS approved ESC and/or SWM Plan, as applicable, included as part of a site-specific stormwater pollution prevention plan (SWPPP). The SWPPP shall be prepared and certified, in accordance with the permit by the permittee or duly authorized representative and prepared using the VCCS SWPPP template. The template is available from VCCS as a separate fillable form Word document and is incorporated by reference into the VCCS AS&S. The permittee is responsible for implementation of the SWPPP and may delegate authority for certifications (e.g. SWPPP and inspection form certifications) using the *Delegation of Authority Form* in provided in the SWPPP template.

3.3.2 Special Conditions for Total Maximum Daily Loads

Dependent on the location of a project, special conditions may be applicable if a waste load allocation has been assigned to construction activity in a DEQ approved Total Maximum Daily Load (TMDL). DEQ will indicate in the VAR10 General Permit coverage letter if the TMDL Special Conditions apply to the project. In the case that special conditions do apply, the permittee is responsible for incorporating the increased inspection frequency described in Section 5.1 of the SWPPP template and adhering to the additional criteria in Section 5.4 of the SWPPP.

3.3.3 Off-site Land-Disturbance Activity

Offsite support facilities are defined as those facilities such as staging areas, equipment and material storage areas, unsuitable and surplus material disposal areas, borrow areas, etc., which are located outside of the project limits shown on an approved ESC and/or SWM Plan. Offsite support facilities may be located within or outside of VCCS property. In either case, it is the responsibility of the contractor to ensure applicable plans are approved and permits are obtained for support facilities prior to the commencement of land disturbance activity.

3.4 Pre-construction Meeting

A preconstruction meeting is required for all applicable land disturbance activity subject to the VCCS AS&S prior to the commencement of the activity. The VCCS AS&S Project Manager is responsible for coordination of the meeting and shall notify the DEQ at least 14 business days prior to the proposed meeting time. The certified Responsible Land Disturber (RLD), as defined in 9VAC25-850-10, shall be identified on the plans at, or prior to, the preconstruction meeting. The meeting coordinator shall ensure the individuals identified in Section 1 of the *VCCS AS&S Preconstruction*

Meeting Form (see Appendix D) attend the meeting and the checklist items in Section 2 of the form will be available at the meeting.

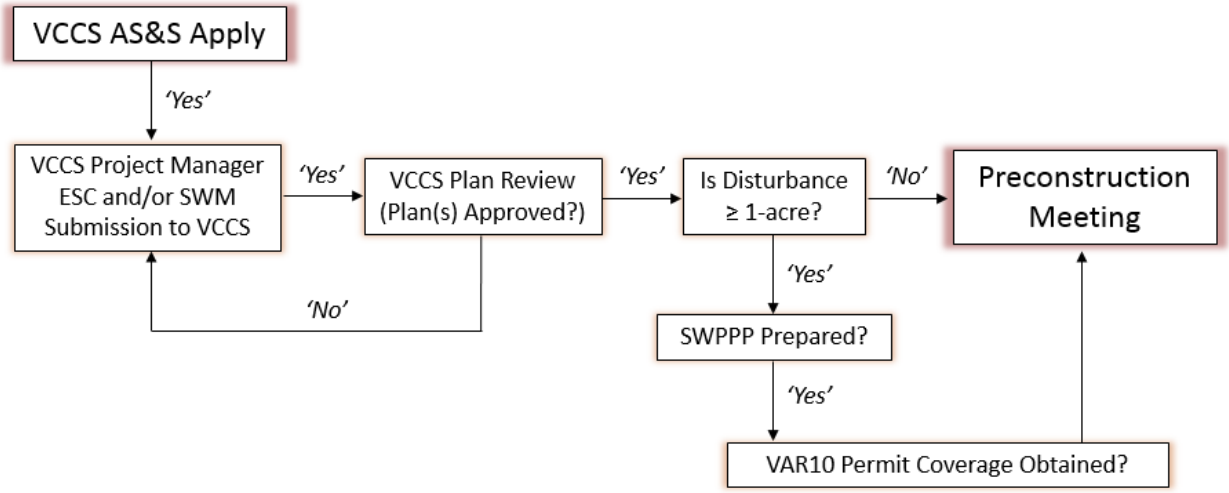


Figure 3.1 *Summary of the development process prior to commencement of land disturbance.*

4.0 IMPLEMENTATION THROUGH CONSTRUCTION

Section 4 describes the required actions of the Contractor and the VCCS during the implementation of a land disturbance activity subject to the VCCS AS&S.

4.1 Contractor/Operator Responsibilities

For land disturbance activity subject to the VCCS AS&S, the contractor's responsibilities prior to and during construction include, but may not be limited to:

- When applicable, obtaining the VAR10 General Permit for Discharges of Stormwater from Construction Activity (9VAC25-880) from DEQ;
  - Complying with the conditions of the VAR10 General Permit, when applicable;
  - Updating and maintaining the SWPPP per the VAR10 General Permit;
  - Performing self-inspections per the VAR10 (It is strongly recommended that the contractor use the inspection form in Appendix E). The permittee shall have inspections performed by a DEQ certified ESC/SWM Inspector per 9VAC25-850.
- Adhering to the approved plans unless otherwise approved in writing by VCCS;
- Maintaining the approved plans, and an up-to-date SWPPP (e.g. plan modifications and inspection forms) on the project site at all times.
- Obtaining necessary permit coverage and plan approvals for applicable off-site activities
- Providing SWM BMP certified record drawing per Section 4.1.1.
- Responding to any corrective action(s) and specified timeframes identified as the result of a VCCS or DEQ inspection.

4.1.1 SWM Facility Record Drawings

Certification of the construction of all stormwater management facilities shall be submitted to VCCS for review and approval. The certification shall be signed and sealed by a licensed professional with the design firm that developed the SWM Plan and include:

- A completed and certified copy of the *VCCS Stormwater Management Facility Record Drawing and Certification Form* in Appendix F;
- A signed and sealed copy of the certifying professional's inspection log, including incremental surveys (drawings), photographs, construction logs, inspection reports, geotechnical testing reports, soil reports, certification of materials, and all other applicable information necessary to support and ensure the SWM facility has been built in accordance with the approved Plan; and
- A record drawing (as-built) signed and sealed by the licensed professional that includes:
  - The long-term inspection and maintenance schedule for the SWM facility (extracted from the SWM Plan or SWM Narrative); and the
  - Total drainage area being served by the stormwater practice with the total impervious and pervious area within the drainage area.

In the case that a SWM facility has not been constructed and installed in accordance with the approved SWM Plan, the licensed professional(s) responsible for certifying the as-built shall

immediately notify the VCCS AS&S Program Manager. Generally, there are two potential options when a facility is not constructed in accordance with the approved Plan:

- Option 1: Re-construct the facility in accordance with the approved Plan. It will be necessary to repeat the inspections, surveys, and documentation process such that the licensed professional shall certify the facility is constructed in accordance with the approved Plan.
- Option 2: Perform calculations and analysis, based on the licensed professional's surveys, data, inspections, and other applicable documentation necessary to verify the as-built conditions meet the approved VCCS AS&S. The licensed professional shall certify the as-built condition of the facility meets the quantitative and qualitative controls, as prescribed by the approved VCCS AS&S, and submit the final report as required in this section. The plans shall be revised and the revised plans reviewed and approved by the certified plan reviewer.

4.2 VCCS Responsibilities

VCCS is responsible for ensuring implementation of the VCCS AS&S throughout the development process. In addition to plan review and approvals, VCCS meets these responsibilities with oversight throughout the land disturbance activity that include inspections, enforcement actions, and acceptance of record drawings.

4.2.1 Inspections

VCCS will perform inspections on all projects subject to the VCCS AS&S. The individual performing inspections on behalf of the VCCS shall be certified as an ESC and SWM Inspector, as applicable, in accordance with the ESC and SWM Certification Regulations (9VAC25-850). Where a VAR10 is required, VCCS inspections are in addition to the VAR10 permittee's inspection requirements described in the SWPPP. The applicable inspection report provided in Appendix E shall be completed by the inspector on each inspection and a copy provided to the appropriate individual identified on the Preconstruction Form, provided in Appendix D, within 2 business days.

VCCS will conduct the following inspections, at a minimum, with the exception of the alternative inspection schedule described in Section 4.2.2:

- After the installation of initial ESC measures per the ESC phasing in the approved ESC Plan,
- At least once in every two-week period,
- Within 48 hours following any runoff producing storm event,
- At the completion of the project, and
- Periodically as deemed necessary by VCCS.

Inspection reports shall specify a required corrective action for each violation noted and a date by which the corrective action must be completed.

4.2.2 Alternative Inspection Schedule

VCCS inspections may be conducted at a reduced frequency where areas have been temporarily stabilized or land-disturbing activities will be suspended due to continuous frozen ground conditions. With these conditions and when stormwater discharges are unlikely, the inspection frequency may be reduced to once per month. If weather conditions (such as above freezing temperatures or rain or snow events) make discharges likely, VCCS shall immediately resume the regular inspection frequency.

4.2.3 Enforcement

VCCS reserves the right to enforce the VCCS AS&S upon discovery of noncompliance through inspection or through public reporting. Compliance status will be conveyed in writing using the *VCCS Construction Site Inspection Form Compliance Summary* included with the *VCCS Construction Site Inspection Form* (LD-04) in Appendix E. The compliance summary will be completed with each inspection and may also be used if an issue of noncompliance is identified outside of an inspection. The compliance summary will:

- Summarize the item(s) of noncompliance identified on the inspection form,
- Provide an indication of severity of compliance status, and
- Provide a description of the necessary corrective action and a timeframe for completing the action.

Enforcement will be consistent with the color-coding system on the LD-04N form which generally follows the following guidelines:

- Green flag – Site was in compliance with the VCCS AS&S at the time of inspection.
- Yellow flag – Items of noncompliance that have not resulted in observation of sediment or other pollutants being discharged from the project area. A notification with this flag serves as a warning. If corrective action is not performed in the specified timeframe, the issue could be elevated to a red flag by the VCCS AS&S Inspector.
- Red flag - Items of noncompliance that have resulted in observed or perceived offsite transport of sediment or other pollution. A notification with this flag serves as a Notice of Violation and if the item(s) are not addressed in the specified timeframe, can be elevated to a black flag by the VCCS AS&S Inspector.
- Black flag - Items of noncompliance that are either elevated from a red flag or are in significant conflict with the VCCS AS&S. A notification with this flag requires a submission to the VCCS Associate Vice Chancellor for Facilities Management Services for determination if work on site must stop until the corrective action is completed to the satisfaction of the VCCS Associate Vice Chancellor for Facilities Management Services. All losses associated with a notification that stops work are the responsibility of the contractor.

4.2.4 Modifications to Approved Plans

An approved Plan may be changed by direction or approval by VCCS in the following cases:

- Where inspection has revealed the plan is inadequate to satisfy applicable regulations; or

- Where the person responsible for carrying out the approved Plan finds that because of changing circumstances, or for other reasons, the approved Plan cannot be effectively carried out. Proposed amendments to the Plan, consistent with the requirements of the VCCS AS&S, are agreed upon by VCCS and the person responsible for carrying out the Plan.

Amendments to an approved ESC and SWM Plan are submitted in writing to VCCS and shall not be considered approved until written notice is provided and must comply with the VCCS AS&S for ESC and SWM. Modifications to approved plans and on-site changes shall be documented on the approved plans.

4.2.5 Approval of SWM Facility Record Drawings

VCCS will review and approve record drawing submissions described in Section 4.1.1. VCCS will return an approved copy of the VCCS SWM Facility Certification Form (LD-SS06) to the VCCS AS&S Project Manager or provide written comments in the case that a record drawing submission is not approved.

4.2.6 VCCS Termination of Land Disturbance

VCCS will provide to the permittee a completed and approved *Termination of VCCS Land Disturbance Form* (Appendix G) upon:

- The approval of the record drawing submittal described in Section 4.1.1 and 4.2.5 and
- Verification that the area of disturbance has been stabilized to the satisfaction of the VCCS AS&S Project Manager.

Acceptance of the record drawing submission does not release the contractor from any post-construction warranty and the Operator shall not terminate the VAR10 General Permit until receipt of a VCCS-approved *Termination of VCCS Land Disturbance Form*.

4.2.7 Project Tracking and Notification

Consistent with 9VAC25840-65, VCCS will maintain a list of active construction projects and submit the list electronically to DEQ at a frequency of once per 6-month period. The list will include:

- Project name (or number);
- Project location (including nearest major intersection);
- On-site project manager name and contact information;
- Project description;
- Acreage of disturbed area for project;
- Project start and finish dates; and
- Responsible Land Disturber name, contact information and RLD certification number.

5.0 POST-CONSTRUCTION

Section 5 describes provisions for the long-term responsibility for and maintenance of SWM facilities. A long-term inspection and maintenance plan is required to be identified on the SWM Plans which are utilized by the college the SWM facility serves. The college's Director of Facilities, or equivalent individual, is responsible for long-term maintenance of SWM facilities at their respective college. Inspections will be conducted per the prescribed inspection frequency on the approved SWM Plan, or at a minimum frequency of once per a year. Maintenance will be performed per the Plan or as otherwise necessary to ensure the intended function of the facility. Facility inspections shall:

- Be performed by a certified SWM Inspector and
- Inspection and maintenance documentation shall be retained with the VCCS College with the approved inspection and maintenance schedule.

Appendix A

Statewide Coverage Map of VCCS Properties

ID	CAMPUS	LOCALITY	ESC PLAN THRESHOLD (SF)	MORE STRINGENT LOCAL ESC REQUIREMENTS	ADDITIONAL LOCAL SWM TECHNICAL CRITERIA
1	BLUE RIDGE COMMUNITY COLLEGE	AUGUSTA COUNTY	10,000	No	No
2	CENTRAL VIRGINIA COMMUNITY COLLEGE	CITY OF LYNCHBURG	1,000	No	No
3	DABNEY S LANCASTER COMMUNITY COLLEGE	ALLEGHANY COUNTY	10,000	No	No
4	DANVILLE COMMUNITY COLLEGE	CITY OF DANVILLE	5,000	No	No
5	EASTERN SHORE COMMUNITY COLLEGE	ACCOMACK COUNTY	2,500	No	No
6	GERMANNA COMMUNITY COLLEGE - LOCUST GROVE CAMPUS	ORANGE COUNTY	10,000	No	No
7	GERMANNA COMMUNITY COLLEGE - FREDERICKSBURG AREA CAMPUS*	SPOTSYLVANIA COUNTY	2,500	Yes	Yes
8	GERMANNA COMMUNITY COLLEGE - DANIEL TECHNOLOGY CENTER	CULPEPER COUNTY	10,000	No	No
9	J SARGEANT REYNOLDS COMMUNITY COLLEGE - PARHAM ROAD CAMPUS	HENRICO COUNTY	2,500	No	No
10	JOHN TYLER COMMUNITY COLLEGE - CHESTER CAMPUS*	CHESTERFIELD COUNTY	2,500	No	No
11	JOHN TYLER COMMUNITY COLLEGE - MIDLOTHIAN CAMPUS*	CHESTERFIELD COUNTY	2,500	No	No
12	J SARGEANT REYNOLDS COMMUNITY COLLEGE - GOOCHLAND CAMPUS	GOOCHLAND COUNTY	10,000	No	No
13	LORD FAIRFAX COMMUNITY COLLEGE - MIDDLETOWN CAMPUS	FREDERICK COUNTY	10,000	No	No
14	LORD FAIRFAX COMMUNITY COLLEGE - FAUQUIER CAMPUS	FAUQUIER COUNTY	10,000	No	No
15	LORD FAIRFAX COMMUNITY COLLEGE - LURAY-PAGE COUNTY CENTER	PAGE COUNTY	10,000	No	No
16	MOUNTAIN EMPIRE COMMUNITY COLLEGE	WISE COUNTY	10,000	No	No
17	NEW RIVER COMMUNITY COLLEGE	PULASKI COUNTY	10,000	No	No
18	NORTHERN VIRGINIA COMMUNITY COLLEGE - ANNANDALE CAMPUS*	FAIRFAX COUNTY	2,500	No	Potential
19	NORTHERN VIRGINIA COMMUNITY COLLEGE - ALEXANDRIA CAMPUS*	CITY OF ALEXANDRIA	2,500	No	Yes
20	NORTHERN VIRGINIA COMMUNITY COLLEGE - LOUDON CAMPUS	LOUDOUN COUNTY	5,000	Yes	Yes
21	NORTHERN VIRGINIA COMMUNITY COLLEGE - MANASSAS CAMPUS*	PRINCE WILLIAM COUNTY	2,500	Yes	Potential
22	NORTHERN VIRGINIA COMMUNITY COLLEGE - MEDICAL EDUCATION CAMPUS*	FAIRFAX COUNTY	2,500	No	Potential
23	NORTHERN VIRGINIA COMMUNITY COLLEGE - WOODBRIDGE CAMPUS*	PRINCE WILLIAM COUNTY	2,500	Yes	Potential
24	PATRICK HENRY COMMUNITY COLLEGE	HENRY COUNTY	10,000	No	No
25	PAUL D CAMP COMMUNITY COLLEGE - FRANKLIN CAMPUS	CITY OF FRANKLIN	5,000	No	No
26	PAUL D. CAMP COMMUNITY COLLEGE - HOBBS SUFFOLK CAMPUS*	CITY OF SUFFOLK	10,000 SF or 2,500 (CBPA)	No	No
27	PAUL D. CAMP COMMUNITY COLLEGE AT SMITHFIELD*	ISLE OF WIGHT COUNTY	2,500	No	No
28	PIEDMONT VIRGINIA COMMUNITY COLLEGE	ALBEMARLE COUNTY	10,000	Yes	Yes
29	RAPPAHANNOCK COMMUNITY COLLEGE - GLENNS CAMPUS*	GLOUCESTER COUNTY	2,500	No	No
30	RAPPAHANNOCK COMMUNITY COLLEGE - WARSAW CAMPUS*	RICHMOND COUNTY	2,500	No	No
31	SOUTHSIDE VIRGINIA COMMUNITY COLLEGE - CHRISTANNA CAMPUS	BRUNSWICK COUNTY	10,000	No	No
32	SOUTHSIDE VIRGINIA COMMUNITY COLLEGE - JOHN H. DANIEL CAMPUS	CHARLOTTE COUNTY	10,000	No	No
33	SOUTHWEST VIRGINIA COMMUNITY COLLEGE - RICHLANDS CAMPUS	TAZEWELL / RUSSELL COUNTY	10,000	No	No
34	THOMAS NELSON COMMUNITY COLLEGE - HAMPTON CAMPUS	CITY OF HAMPTON	10,000 or 2,500 (CBPA)	No	No
35	THOMAS NELSON COMMUNITY COLLEGE - HISTORIC TRIANGLE CAMPUS*	JAMES CITY COUNTY	2,500	No	No
36	TIDEWATER COMMUNITY COLLEGE - NORFOLK CAMPUS	CITY OF NORFOLK	2,500	No	No
37	TIDEWATER COMMUNITY COLLEGE - CHESAPEAKE CAMPUS*	CITY OF CHESAPEAKE	10,000 or 2,500 (CBPA)	No	Yes
38	TIDEWATER COMMUNITY COLLEGE - PORTSMOUTH CAMPUS	CITY OF PORTSMOUTH	2,500	No	No
39	TIDEWATER COMMUNITY COLLEGE - VIRGINIA BEACH CAMPUS	CITY OF VIRGINIA BEACH	2,500	No	No
40	TIDEWATER COMMUNITY COLLEGE - VISUAL ARTS CENTER*	CITY OF PORTSMOUTH	2,500	No	No
41	VIRGINIA HIGHLANDS COMMUNITY COLLEGE	WASHINGTON COUNTY	10,000	No	No
42	VIRGINIA WESTERN COMMUNITY COLLEGE	CITY OF ROANOKE	2,000	No	No
43	WYTHEVILLE COMMUNITY COLLEGE	TOWN OF WYTHEVILLE	10,000	No	No

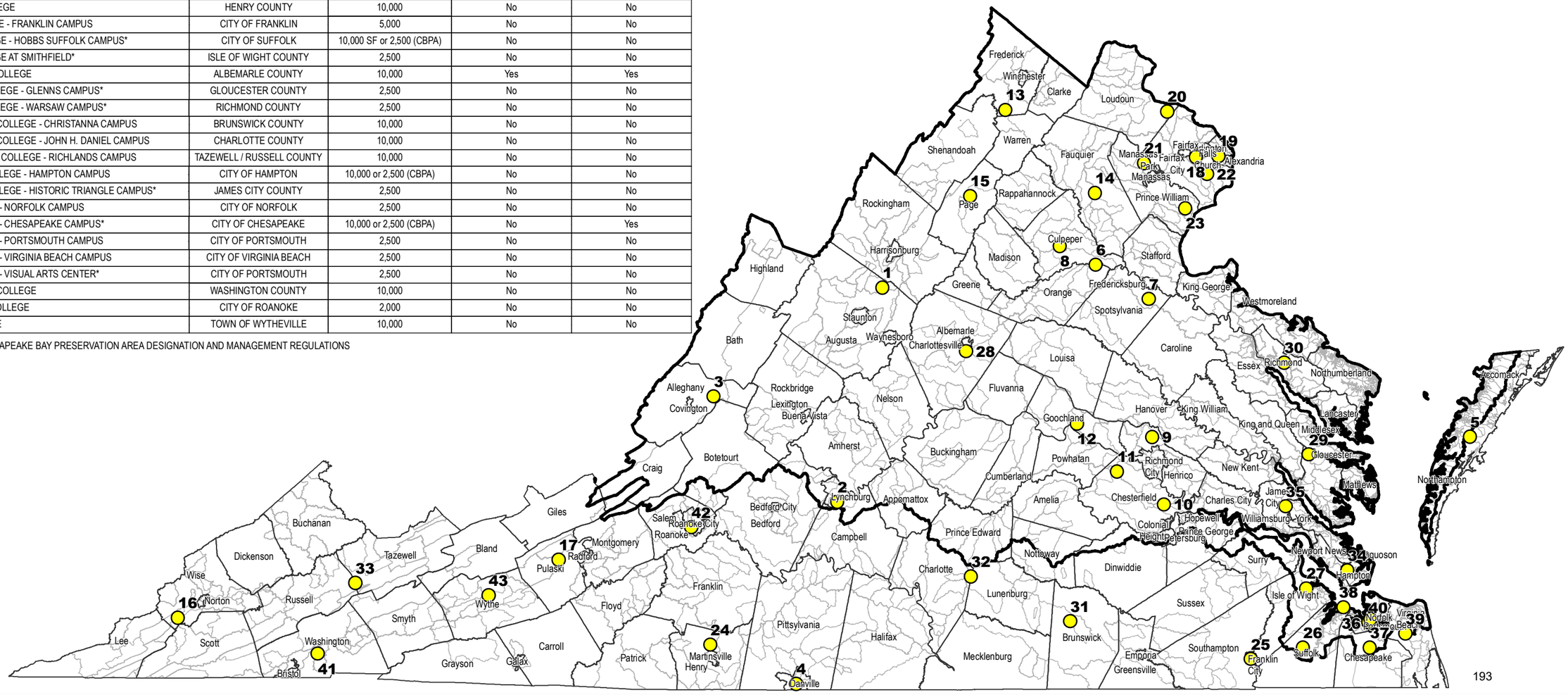
* INDICATES COLLEGES SUBJECT TO CHESAPEAKE BAY PRESERVATION AREA DESIGNATION AND MANAGEMENT REGULATIONS

INFORMATION PROVIDE ON THIS MAP IS FOR PRELIMINARY PLANNING PURPOSES ONLY. THE DESIGN ENGINEER IS RESPONSIBLE FOR DETERMINING THRESHOLDS APPLICABLE FOR ESC AND SWM AND IF MORE STRINGENT CRITERIA ARE APPLICABLE. IT IS RECOMMENDED THAT THE DESIGN ENGINEER CONTACT THE LOCALITY FOR THE LATEST INFORMATION.

Legend

- Virginia Community College System Campus
- TMDL Watersheds
- Virginia Counties
- Chesapeake Bay Watershed

0 40 80
Miles



Appendix B

Land Disturbance Application Form (LD-01)

VCCS LAND DISTURBANCE APPLICATION FORM

Instruction: This form shall be completed, typically by the design engineer preparing the plans, and included with all plan submissions for projects involving land disturbance activities on VCCS owned properties and campuses. Refer to Section 2 the VCCS Annual Standards and Specifications for ESC and SWM for assistance in completing the form.

Project Name: _____

Date of submittal: _____ **Date on plans:** _____

Project Abbreviation (if applicable): _____

Project Location: _____

_____

Applicant

Name: _____

Phone: _____

Email: _____

Estimated Area of Disturbance (sq. ft.): _____

Estimated Impervious Area (sq. ft.): Pre-Development: _____, **Post-Development:** _____

Estimated Dates of Disturbance: _____ **to** _____, **or Duration (months):** _____

Do the VCCS Annual Standards & Specifications require an approved ESC plan? ☐ **Yes** ☐ **No** ☐ **Unknown**

Do the VCCS Annual Standards & Specifications require an approved SWM plan? ☐ **Yes** ☐ **No** ☐ **Unknown**

Describe the land-disturbance(s) involved with the project, including any offsite activities: _____

_____

_____

_____

Submission Item	Applicable? (yes/no)	Included in Submission? (yes/no)
Completed Land Disturbance Application Form		
Completed ESC Plan Checklist		
ESC Plan		
ESC Narrative		
Completed SWM Plan Checklist (when applicable)		
SWM Plan (when applicable)		
SWM Plan		
SWM Narrative		

Applicant (Print): _____

Applicant Signature: _____

Information below to be completed by VCCS

VCCS has verified receipt of all of the applicable submittal items identified above on _____, initiating the 45 day VCCS review period. Comments or an approval letter resulting from the review will be provided to the applicant listed above.

Received by: _____

Appendix C1

VCCS ESC Plan Preparer/Plan Reviewer Checklist (LD-02A)

Instruction: The checklist shall be completed if an ESC Plan and Narrative is required per the VCCS Annual Standards and Specifications for ESC and SWM. The completed checklist shall be provided with the ESC Plan submittal. The Plan and narrative submitted for review shall be signed and sealed by a licensed professional. This checklist is intended to only be used as a guide. The licensed professional is responsible for ensuring plans address the ESC laws and regulations.

Project Information:

Project Name: _____ Project Location: _____

Submittal Date: _____ Date on Plans: _____

Design Engineer (Printed): _____ Email: _____

Yes	No	N/A	ESC *Narrative* Requirement
			Completed ESC Checklist provided in ESC Narrative.
			Project description including the nature and purpose of the land-disturbing activity.
			Description of the **existing site conditions**, including topography, ground cover, and drainage (include information for on-site and receiving channels).
			Description of **adjacent areas** such as residential developments, agricultural areas, streams, lakes, roads, etc., that might be affected by the land disturbance.
			Description of **off-site land disturbing activities** that may occur (borrow sites, disposal areas, easements, etc.). Identify the Owner of the off-site area and the locality responsible for plan review. Include a statement that any off-site land-disturbing activity associated with the project must have an approved ESC Plan. Submit documentation of the approved ESC Plan for each of these sites.
			Description of the site **soils conditions**, including hydrologic soils group, mapping unit, erodibility, permeability, surface runoff, and a brief description of depth, texture and soil structure. Mapping of soil variations should be provided in the narrative or on the plans.
			Description of **critical areas** that have potentially serious erosion problems or that are sensitive to sediment impacts (e.g., steep slopes, channels, etc.).
			Description of the structural and vegetative **ESC measures** that will be used to control erosion and sedimentation on the site. Controls should be consistent with the standards and specifications in Chapter 3 of the Virginia Erosion and Sediment Control Handbook (VESCH), latest edition. Variations and proprietary measures require a variance (see Section 3.5 of the latest edition of the VCCS Annual Standards and Specification for ESC and SWM). Approval from DEQ of variances shall be maintained in the narrative.
			Detailed **sequence of construction**, that includes the **phasing** of installation of ESC measures.
			Description of **permanent stabilization** for the entirety of the site, including specifications, of how the site will be stabilized after construction is completed (permanent stabilization).
			Schedule of **maintenance requirements for ESC measures** including inspections frequency, maintenance concerns, and methods for repair or prevention of need for repair (i.e. removal of sediment build-up).
			Description of **stormwater runoff considerations** that includes describing any increase in peak runoff rates and the effects on downstream erosion and flooding. The description shall include the strategy to control stormwater runoff.
			Calculations for temporary sediment basins, diversions, channels, stormwater facilities to address MS-19, etc. Where applicable. including pre- and post-development runoff calculations, drainage area maps, time of concentration paths and computations, rainfall source and documentation, weighted runoff coefficients and computations, runoff and routed hydrographs or peak computations (as applicable), adequate onsite channel (MS-19) & culvert computations, etc.

Yes	No	N/A	ESC *Plan* Requirement
			Vicinity map locating the site in relation to the surrounding area. Include any landmarks and road information that might assist in locating the site.
			Location on the ESC Plan cover sheet for identification of the **Responsible Land Disturber** (RLD).
			Existing conditions including existing contours, surface waters and other surface features, existing tree lines, grassed areas, or unique vegetation.
			Where applicable, a **demolition plan** with identification of features to be demolished and measures to address ESC for the demolition.
			Proposed conditions, including proposed contours and features.
			Delineation of the **limits of disturbance**.
			A description of any **variance** approved by DEQ described on the cover sheet of the ESC Plans.
			North arrow provided on all plan sheets.
			Legend with a complete listing of all ESC measures used, including the VESCH uniform code symbol and the standard and specification number. Include any other items necessary to identify pertinent features in the plan.
			Identification of any **off-site land disturbing activities** (e.g., borrow sites, disposal areas, etc.) and appropriate ESC controls.
			Identification of **critical areas** and appropriate protections.
			Inclusion of **erosion and sediment control notes** (ES-1 through ES-9) found in Table 6-1 on page VI-15 of the 1992 Virginia Erosion and Sediment Control Handbook.
			Identification of **property and easement lines**. For each adjacent property, list the deed book and page number and the property owner's name and address.
			Finished floor elevation of all buildings on site, including basements.
			The **locations of erosion and sediment control and stormwater management practices** used on the site. Use the standard symbols and abbreviations in Chapter 3 of the VESCH.
			Existing drainage patterns including dividing lines and directions of flows with the total area for each drainage area.
			A **schedule of regular inspections, maintenance, and repair** of temporary erosion and sediment control structures and permanent stormwater management facilities.
			Storm sewer profiles of all storm drains except roof drains.
			Site-specific **details for all ESC measures**. Where applicable, details shall include site-specific dimensions. Proprietary measures with an approved variance shall include site-specific details with dimensions and other information for construction per manufacturer's specifications.
			Specifications for stormwater and stormwater management structures (i.e. pipe materials, pipe bedding, stormwater structures etc.).
			Minimum Standard (MS) 1 through 19 provided on the plan with a description for each that describes how the minimum standard is addressed with the plan.
			Permanent or temporary soil stabilization shown where required on plans using standard symbols and abbreviations in Chapter 3 of the VESCH. **(MS-1, MS-3, and MS-5)**
			Stabilization and/or protection measures for soil stock piles and borrow areas. **(MS-2)**
			Detailed **sequence of construction**, that includes the phasing of installation of ESC measures with sediment trapping measures as a first step prior to upslope land disturbance. **(MS-4)**
			Drainage areas to sediment traps and sediment basins shown on plans. **(MS-6)**
			Stabilization measures provided for slopes steeper than 3:1. **(MS-7)**

Yes	No	N/A	ESC Plan Requirement (cont.)
			Stabilization measures provided for slopes steeper than 3:1. **(MS-7)**
			Measures to prevent concentrated flow from flowing down cut or fill slopes (i.e. slope drains). **(MS-8)**
			Measures to address water seeping from a slope face been addressed. **(MS-9)**
			Inlet protection provided for all operational storm drain and culvert inlets. **(MS-10)**
			Outlet protection and/or channel linings provided for all stormwater conveyance channels and receiving channels prior to being made operational (see sequence of construction). **(MS-11)**
			Measures to minimize encroachment and minimize sediment transport for work in a live watercourse. **(MS-12)**
			Temporary stream crossings of non-erodible material where a live watercourse must be crossed by construction vehicles more than twice in any six-month period. **(MS-13)**
			Applicable federal, state and local regulations pertaining to working in or crossing live watercourses are addressed and summarized on the plan. **(MS-14)**
			Stabilization measures for bed and banks of live watercourse subject to disturbance. **(MS-15)**
			Measures shown on plan (i.e. Construction entrance) to minimize sediment transport onto public and otherwise paved roads. **(MS-17)**
			MS-19 satisfied for each receiving channel per 9VAC25-840-40(19)
			Increased volumes of sheet flows that may cause erosion or sedimentation on adjacent property are diverted to a stable outlet, adequate channel, pipe or pipe system, or to a detention facility.
			If the project impacts any wetlands or surface waters, is all correspondence and permits concerning any proposed impacts to jurisdictional wetlands, stream and channels included (i.e. COE 404 permit). Note that the plan cannot be approved without proper documentation or necessary permits for jurisdictional impacts.

Appendix C2

VCCS SWM Plan Preparer/Plan Reviewer Checklist (LD-02A)

Instruction: This checklist shall be completed if a SWM Plan and Narrative is required per the VCCS Annual Standards and Specifications for ESC and SWM. The completed checklist shall be provided with the SWM Plan submittal. The Plan and Narrative submitted for review shall be signed and sealed by a licensed professional. This checklist is intended to only be used as a guide. The licensed professional is responsible for ensuring plans address the SWM laws and regulations.

Project Information:

Project Name: _____ Project Location: _____

Submittal Date: _____ Date on Plans: _____

Design Engineer (Printed): _____ Email: _____

Yes	No	N/A	SWM Plan/Narrative Requirement
General Plan Information (Plan)			
			North arrow.
			Legend.
			Location and vicinity map.
			Delineation of the site area and property lines in the vicinity of the project.
			Existing and proposed contours (2' interval minimum).
			Locations of test borings.
			Earthwork specifications.
			Compaction requirements specified.
			Sequence of construction.
			Limits of clearing and grading.
			Existing and proposed features including buildings, roads, parking areas, utilities, stormwater management facilities and any other physical attributes.
			SWM Facility Certification - Plans shall list all SWM facilities and critical construction inspection timeframes (i.e., liner, underdrain and outlet pipe installation) for which SWM BMP certification is required per Section 4.1.2 of the VCCS Annual Standards and Specifications for ESC and SWM.
			The following note is on the plan: "A certified construction record drawing for permanent SWM facilities shall be submitted to VCCS for approval per section 4.1.2 of the VCCS Annual Standards and Specifications for ESC and SWM. Construction inspections and surveys, performed by a licensed professional, shall be required at each stage of installation (construction) as necessary to certify that the SWM facility has been built in accordance with the approved plan and design specifications. The Contractor shall provide a minimum of 2 business days' notice to the certifying professional to allow for critical inspections."
			BMP Inspection and maintenance plan for each permanent SWM facilities. For manufactured permanent BMPs, the construction drawings shall include manufacturer's recommendation on maintenance and inspection.
			Specifications for construction/installation of proprietary BMPs per the manufacturer's specifications
			Cross sections for stormwater conveyance channels with maximum water surface elevations for design storms (1-, 10-, and 100-year)
			Where applicable, outlet protection with dimensions at points of concentrated discharge

Yes	No	N/A	SWM Plan/Narrative Requirement
Site Information (Narrative)			
			Description of existing and proposed site conditions.
			Summary table with pre- and post-development land cover conditions (i.e. forest, managed turf, and impervious areas).
			Discussion of the stormwater management strategy to address water quantity and quality criteria.
			Information on the type and location of stormwater discharges, including information on the features to which stormwater is being discharged including surface waters or karst features if present.
			If the project impacts any wetlands or surface waters, is all correspondence and permits concerning any proposed impacts to jurisdictional wetlands, stream and channels included (i.e. COE 404 permit). Note that the plan cannot be approved without proper documentation or necessary permits for jurisdictional impacts.
			A general description of the proposed stormwater management facilities and the mechanism through which the facilities will be operated and maintained after construction is complete
			Information on the proposed stormwater management facilities, including (i) the type of facilities; (ii) location, (iii) impervious and pervious acres treated; and (iv) the surface waters or karst features into which the facility will discharge
			Discussion of possible stormwater impacts on downstream properties including mapping with sufficient information on adjoining parcels to assess the impacts.
			Geotechnical report when applicable (include infiltration rates when required for a BMP).
			Boring locations: borrow area, basin pool area and embankment area (centerline principal spillway, emergency spillway, abutments).
			Boring logs with Unified Soils Classifications, soil descriptions, depth to seasonal high groundwater table, etc.
			Additional geophysical investigation and recommendations in Karst environment.
			Description of inclusion of the locality's additional technical requirements into the plan, if any, and how they were addressed to the maximum extent practicable.
Hydrologic Computations (Narrative)			
			Mapping that supports computations and includes, at a minimum the following: • Pre- and post-development development contours; • Existing streams, ponds, culverts, ditches, wetlands, other water bodies, and floodplains; • Current land use including existing structures, roads, and locations of known utilities and easements; • Limits of clearing and grading; • Proposed drainage patterns on the site; • Proposed buildings, roads, parking areas, utilities, and stormwater management facilities.
			Pre-development drainage area mapping that includes all contributing drainage areas, CN labels, depiction of time of concentration flow paths, slopes and lengths used for runoff hydrographs.
			Post-development drainage area mapping that includes all contributing drainage areas, CN labels, depiction of time of concentration flow paths, slopes and lengths used for runoff hydrographs.

Yes	No	N/A	SWM Plan/Narrative Requirement
Hydrologic Computations cont. (Narrative)			
			Rainfall precipitation frequency data recommended by the U.S. National Oceanic and Atmospheric Administration (NOAA) Atlas 14. Partial duration time series shall be used for the precipitation data.
			Summary table for determination of runoff curve numbers.
			Time of concentration calculations.
			Predevelopment runoff hydrographs.
			Post-development runoff hydrographs.
Hydraulic Computations (Narrative & Plans, as indicated)			
			Routing computations for each proposed stormwater management facility for each applicable design storm provided in narrative.
			Stage-storage data used in routing computations in the narrative.
			Control structure information used in routing computations in the narrative.
			Summary table of pre- and post-development peak runoff rates for each point of discharge from the site provided in narrative.
			Maximum water surface elevations for design storms shown in sections or profiles on the plans for each stormwater management facility.
			Impoundments designed to convey the 100-year storm as demonstrated in computations in the narrative.
			Adequate freeboard is provided for impoundments as shown on the plans based on computations in the narrative.
			Hydraulic grade line computations in the narrative with indication of locations of surcharge or inadequacy.
			Storm sewer design computations in the narrative.
			Culvert calculations in the narrative.
			Gutter spread calculations in the narrative.
			Provide profiles of all storm conveyances (except roof drains) on plans. Profiles should include existing and proposed grade, structure types, pipe materials and sizes, slopes, inverts, etc.
Water Quality Computations (Narrative & Plans, as indicated)			
			Provide Runoff Reduction Method spreadsheet output including: • Site loadings • Required reductions • Input for each BMP employed and reductions achieved by each BMP • Compliance worksheet • Adjusted CN worksheet, when applicable.
			Treatment volume calculations for sizing BMPs.
			Stage-storage information indicating the treatment volume required and volume provided.
			All proposed SWM design follows the Virginia BMP Clearinghouse design specifications.
			A BMP-type specific checklist from Appendix 8-A of the Virginia Stormwater Management Handbook, latest edition, is completed and provided in the narrative for each proposed BMP.

Appendix D

VCCS AS&S Preconstruction Meeting Form (LD-03)

VCCS LAND DISTURBANCE PRECONSTRUCTION MEETING FORM

Instruction: This form shall be completed prior to the commencement of a land disturbance as defined in the VCCS Annual Standards and Specifications for ESC and SWM. The purpose of this form is to acknowledge responsibilities in accordance with the VCCS Annual Standards and Specifications for ESC and SWM. A copy of this completed form shall be maintained by the VCCS Project Manager and the contractor and be readily available upon request. The following individuals are required to participate in the preconstruction meeting:

- VCCS Project Manager;
- VAR10 General Permit Operator (or Duly Authorized Representative) or primary contractor for projects where the land disturbance activity is less than 1-acre;
- For land disturbance of an acre or greater, the Certified Inspector performing self-inspections for the Operator as required by the VAR10 General Permit ;
- The Responsible Land Disturber (RLD) identified on the ESC Plan;
- Representative of SWM facility design firm providing SWM facility certification, when applicable; and
- A list of additional attendees may be attached to this form, if desired.

Section 1 – Project Information

Project Name: _____ Date: _____

Project Location/Description: _____

VCCS Representative: _____

Primary Contractor/ VAR10 General Permit Operator: _____

Responsible Land Disturber: _____

Representative for firm certifying stormwater facility (when applicable):_____

VCCS Inspector: _____

Section 2 – Checklist

Check those available:

- ❒ Coverage Letter for the General Permit for Discharges of Stormwater from Construction Activity Available, when applicable for land disturbance ≥ 1-acre
- ❒ Prepared site-specific and completed SWPPP for land disturbance of an acre or greater, when applicable for land disturbance ≥ 1-acre
- ❒ Approved ESC Plan
- ❒ Approved SWM Plan, when applicable
- ❒ Identification of Responsible Land Disturber (Recorded in SWPPP, when applicable)
- ❒ Any off-site areas associated with this project have been identified.
- ❒ Conditions of termination of land disturbance form discussed.
- ❒ Discussion of responsibilities for SWM facility certifications (e.g. coordination with the design professional certifying the facility and the critical components of the installation of the facility)

Section 3 – Contractor Acknowledgement of Responsibilities

(To be completed by the Contractor/Operator)

I acknowledge my responsibilities to conduct the land disturbance activity in accordance with the VCCS Annual Standards and Specifications for ESC and SWM, the approved Plans, to seek approval from VCCS for any significant changes to the plan, to adhere to the conditions of the VAR10 General Permit (when applicable), oversight of the maintenance of the Stormwater Pollution Prevention Plan (when applicable), coordination with the individual providing the as-built for any stormwater management facilities, and notifying the VCCS Project Inspector upon:

- Installation of the initial ESC measures where applicable and as identified on the ESC Plan; and
- The occurrence of significant discharge of sediment or other pollutants from the site.

Name: _____

Signature: _____

Date: _____

Section 4 – VCCS Approval of Completeness of the Land Disturbance Preconstruction Meeting

(To be completed by the VCCS Project Manager)

I acknowledge the Land Disturbance Preconstruction Meeting has occurred and been conducted consistent with the VCCS Annual Standards and Specifications for ESC and SWM. The required documentation, as listed on this form, is complete and land disturbance can commence.

Name: _____

Signature: _____

Date: _____

Appendix E1

VCCS Construction Site Inspection Form for Land Disturbance < 1-acre (LD-04A)

VCCS LAND DISTURBANCE INSPECTION SUMMARY

Date: _____

VCCS AS&S ESC/SWM Inspector Name: _____

Project Name: _____

Project Location: _____

_____




GREEN FLAG **YELLOW FLAG** **RED FLAG** **BLACK FLAG**

As result of the inspection reflected on the attached inspection form, the following assessment of the Project has been made in regards to compliance with VCCS Annual Standards & Specifications for Erosion and Sediment Control and Stormwater Management:

GREEN FLAG – No issue identified.

YELLOW FLAG – No sediment/pollution has left the site. A VERBAL WARNING is being issued. Corrective action shall be performed as described below.

- ☐ Inadequate Erosion & Sediment Controls
- ☐ Un-maintained ESC Controls
- ☐ SWPPP not maintained, or not on site
- ☐ Other: _____
  _____
- ☐ Illegal connection to stormwater system
- ☐ Inlets are unprotected
- ☐ Stabilization timeframe exceeded
- ☐ See inspection checklist

Description of violation: _____

_____

_____

RED FLAG – Off-site sediment transport or pollution is occurring/has occurred, or significant potential issues exist on the site. A NOTICE OF VIOLATION is being issued. Corrective action shall be performed as described below. Failure to address outstanding issues will result in a Black Flag status, at which point all work must stop.

- ☐ Yellow Flag violation not addressed within specified timeframe
- ☐ Mud or debris on public street or adjacent property
- ☐ Illegal connection to the sanitary sewer
- ☐ Stormwater facilities are inadequate with potential threat to downstream areas
- ☐ Other: _____
  _____
- ☐ Improper location/maintenance of material stockpiles
- ☐ Evidence of Stormwater pollution
- ☐ Chemicals and waste products are not properly stored
- ☐ Improper fill materials
- ☐ See inspection Checklist

Description of violation: _____

_____

_____

LD-04 – VCCS Land Disturbance Inspection Summary

BLACK FLAG– There is significant conflict with VCCS Annual Standards & Specifications or the General Permit for Discharges from Construction Activity (VAR10). ALL WORK MUST STOP

- ☐ **Red Flag violation not addressed within specified timeframe**
- ☐ **Working without or in non-compliance with the required permits or approved plans**
- ☐ **Significant off-site pollution or erosion**
- ☐ **Other: _____**
  _____
- ☐ **Significant pollution into stormwater system or open water**
- ☐ **Filling, grading, or grubbing in environmentally sensitive areas.**
- ☐ **Failing stormwater facilities**
- ☐ **See inspection checklist**

Description of violation: _____

_____

_____

REQUIRED CORRECTIVE ACTIONS:

_____

_____

_____

_____

Timeline for required activities: _____

Enforcement Follow-up Procedures

YELLOW FLAG – Corrective action will be performed as soon as is practicable within the timeframe specified. Follow-up may be required with the VCCS AS&S ESC/SWM Inspector to verbally confirm that remediation activities have occurred, are appropriate or if any changes or delays are anticipated.

RED FLAG – Violations shall be addressed as soon as is practicable within the timeframe specified. The contractor shall provide written confirmation (with photos, as needed) that remediation activities have occurred within the specified timeframe. Documentation of the corrective action shall be maintained within the SWPPP.

BLACK FLAG – Black flag violations represent potentially significant damage to property and natural resources, as well as increased legal liability for VCCS. All work must stop until such point that corrective action has been completed and any remediation activities have occurred. Project work associated with the ESC and/or SWM Plans, outside of those to perform corrective actions or remediation cannot commence until a violation release form is provided. Documentation of the corrective action and the release form shall be maintained in the SWPPP.

VCCS AS&S ESC/SWM Inspector's Signature:

_____

Notification Received By: _____, Title: _____

LD-04R – Stop Work (Black Flag) Release Form
Project Code: 260 _____

VCCS LAND DISTURBANCE INSPECTION SUMMARY – BLACK FLAG VIOLATION RELEASE FORM

Date: _____

VCCS AS&S ESC/SWM Inspector Name: _____

Project Name: _____

Project Location: _____

_____

Corrective actions and/or remediation identified on the VCCS Land Disturbance Inspection Summary dated _____ have been completed to the satisfaction of the VCCS AS&S Inspector. Corrections and/or remediation are to a point where significant conflicts with the VCCS Annual Standards & Specifications, Construction General Permit VAR10, as well as any threats to property or natural resources, are minimized and work on the project may continue.

VCCS AS&S ESC/SWM Inspector Signature:

_____

Notification Received By: _____, Title: _____

LD-04A: VCCS Construction Site Inspection Form
(For regulated Land Disturbance < 1-acre)

General Information			
Project Name:		VCCS Project Code:	
Location:		Start Time:	
Date of Inspection:		End Time:	
Contact Information/Responsible Parties			
* Site Representative (see below)		Representative's Email:	
		Representative's Phone #:	
Inspector's Name(s):		Inspector Email:	
		Inspector Phone #:	
Inspectors DEQ Certification #(s):		Date of last inspection:	

* PM, Contractor, RLD or other individual with responsibility for implementation of the ESC Plan.

Inspection Type (check all that apply)

☐ After installation of initial ESC measures ☐ 2-week inspection ☐ Final Stabilization
☐ Within 48-hours after a runoff event (≥ 0.25 inches of rain over 24-hours)* ☐ Other _____

* If Inspection Type due to runoff event; provide the date of event: _____ and estimated rainfall amount (inches): _____

Weather Conditions (check all that apply)

☐ Clear ☐ Sunny ☐ Partly Cloudy ☐ Cloudy ☐ Cold ☐ Cool ☐ Mild ☐ Hot ☐ Raining ☐ Post-rain event

Are discharges occurring from the site at the time of inspection or evidence of off-site sediment transport? ☐ Yes ☐ No
If yes, describe:

	Construction Inspection Checklist Items numbered are ESC Minimum Standards, 9VAC25-840-40 (See VCCS approved ESC Plan and Narrative, where applicable)	***Yes***	***No***	***N/A***	***Location of Concern & Recommended Corrective Action/Notes*** (additional notes at end of form)
-	Are deficiencies identified during previous inspections corrected? Notify VCCS PM if a specific deficiency has been identified and not corrected on each of the past 3 consecutive inspection reports?				
-	Are all land-disturbing activities within the area of disturbance identified on the approved ESC Plan?				
-	Are all erosion and sediment controls maintained, properly repaired & functional? [9VAC25-840-60]				
-	Are site ESC operations consistent with the ESC phasing plan or have modifications to the plan been appropriately approved and documented?				
1	Are temporary or permanent stabilization measures applied within allowable time frames (7 days after final grade or where dormant for more than 14 days)? [9VAC25-840-40]				
2	Are disposal/borrow areas & stockpiles (on-site and off-site) stabilized or protected with sediment trapping measures? Are off-site areas on plan or have separate VCCS or locality approved ESC Plan?				
3	Are all temporary ESC measures that are no longer needed removed & applicable site areas permanently stabilized?				
4	Are initial ESC measures, including perimeter controls, (i.e. silt fence, sediment basins and traps, perimeter dikes) intended to trap sediment installed and functional prior to upslope land disturbance?				

	Construction Inspection Checklist	***Yes***	***No***	***N/A***	***Location of Concern & Recommended Corrective Action/Notes*** (additional notes at end of form)
5,7	Are earthen structures, such as dams, dikes, diversions, & cut/fill slopes, stabilized or protected with functioning sediment trapping measures?				
6	Are sediment basins/traps constructed according to the plans/specifications, functional and maintained?				
8	Are cut/fill slopes protected from concentrated runoff with channel flumes or slope drains?				
9	Are slopes with water seeps protected with adequate drainage and stabilization?				
10	Do operational storm sewer & culvert inlets have inlet protection according to the plans/specifications?				
11	Are constructed stormwater conveyance channels & ditches stabilized with the appropriate channel lining and/or outlet protection according to the plans/specifications?				
12	Is non-erodible material or cover provided for all causeways and cofferdams where work is performed in a live watercourse?				
13	Is a live watercourse crossed by construction vehicles more than twice in a 6-month period, and if so, is the temporary stream crossing used for crossing constructed of non-erodible materials?				
14	Where work is performed in a live watercourse, are applicable federal and state permits available?				
15	Where work is performed in a live watercourse, have the bed and banks been stabilized immediately and per the plan/specifications?				
16	Are underground utilities installed with less than 500’ of trench open, sediment trapping controls for excavated material, filtering of effluent from dewatering, and compaction and restabilization of backfill?				
17a	Are construction entrances properly located, installed & maintained?				
17b	Does sediment tracked onto adjacent roadways appear to be removed each day?				
18	If the site is stabilized, have ESC measures been removed and trapped sediment been stabilized or appropriately removed?				
19a	Is there evidence of downstream or other off-site sediment transport? (Provide locations & description of impacts if applicable.)				

	Construction Inspection Checklist	***Yes***	***No***	***N/A***	***Location of Concern & Recommended Corrective Action/Notes*** (additional notes at end of form)
19b	Are adjacent properties and waterways adequately protected from accidental land disturbance, potential pollutant discharge, erosion, flooding, & sedimentation from the project site?				
19c	Do all locations concentrated of concentrated runoff leaving the site discharge to a channel (i.e. stream, storm sewer, or ditch)?				
-	Are any ESC measures to protect SWM practices (i.e. infiltration basin, bioretention) that are shown on the plans to prevent compaction or clogging installed?				
-	Is runoff and other discharges (dewatering) that contain sediment or other pollutants being properly treated prior to discharging from the site?				
-	Are permanent stormwater measures (basins, etc.) properly installed/converted, stabilized and functional?				

NOTES (reference checklist item # and any additionally attached information such as photos):

CERTIFICATION INSTRUCTION
This Inspection Form is not complete without the completion of the certification below by the certified inspector identified on the first sheet of the inspection form.

Reports conducted by VCCS or VCCS representative will be provided to the Site Representative by (check all that apply):
☐ Hardcopy ☐ Email ☐ Other _____ within 48 hours.

CERT-1: INSPECTION CERTIFICATION STATEMENT
"I certify under penalty of law that I performed the inspection described in this form as a Certified Project Inspector for ESC and SWM per the Virginia Erosion and Sediment Control and Stormwater Management Certification Regulations (9VAC25-850). I certify that the inspection described in the form reflects site conditions to the best of my knowledge and belief and is 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 and falsifying inspections (reports)."

Inspector's Name: _____

Signature: _____ Date: _____

Appendix E2

VCCS Construction Site Inspection Form for Land Disturbance ≥1-acre (LD-04B)

VCCS LAND DISTURBANCE INSPECTION SUMMARY

Date: _____

VCCS AS&S ESC/SWM Inspector Name: _____

Project Name: _____

Project Location: _____

_____




GREEN FLAG **YELLOW FLAG** **RED FLAG** **BLACK FLAG**

As result of the inspection reflected on the attached inspection form, the following assessment of the Project has been made in regards to compliance with VCCS Annual Standards & Specifications for Erosion and Sediment Control and Stormwater Management:

GREEN FLAG – No issue identified.

YELLOW FLAG – No sediment/pollution has left the site. A VERBAL WARNING is being issued. Corrective action shall be performed as described below.

- ☐ Inadequate Erosion & Sediment Controls
- ☐ Un-maintained ESC Controls
- ☐ SWPPP not maintained, or not on site
- ☐ Other: _____
  _____
- ☐ Illegal connection to stormwater system
- ☐ Inlets are unprotected
- ☐ Stabilization timeframe exceeded
- ☐ See inspection checklist

Description of violation: _____

_____

_____

RED FLAG – Off-site sediment transport or pollution is occurring/has occurred, or significant potential issues exist on the site. A NOTICE OF VIOLATION is being issued. Corrective action shall be performed as described below. Failure to address outstanding issues will result in a Black Flag status, at which point all work must stop.

- ☐ Yellow Flag violation not addressed within specified timeframe
- ☐ Mud or debris on public street or adjacent property
- ☐ Illegal connection to the sanitary sewer
- ☐ Stormwater facilities are inadequate with potential threat to downstream areas
- ☐ Other: _____
  _____
- ☐ Improper location/maintenance of material stockpiles
- ☐ Evidence of Stormwater pollution
- ☐ Chemicals and waste products are not properly stored
- ☐ Improper fill materials
- ☐ See inspection Checklist

Description of violation: _____

_____

_____

LD-04 – VCCS Land Disturbance Inspection Summary

BLACK FLAG– There is significant conflict with VCCS Annual Standards & Specifications or the General Permit for Discharges from Construction Activity (VAR10). ALL WORK MUST STOP

- ☐ **Red Flag violation not addressed within specified timeframe**
- ☐ **Working without or in non-compliance with the required permits or approved plans**
- ☐ **Significant off-site pollution or erosion**
- ☐ **Other: _____**
  _____
- ☐ **Significant pollution into stormwater system or open water**
- ☐ **Filling, grading, or grubbing in environmentally sensitive areas.**
- ☐ **Failing stormwater facilities**
- ☐ **See inspection checklist**

Description of violation: _____

_____

_____

REQUIRED CORRECTIVE ACTIONS:

_____

_____

_____

_____

Timeline for required activities: _____

Enforcement Follow-up Procedures

YELLOW FLAG – Corrective action will be performed as soon as is practicable within the timeframe specified. Follow-up may be required with the VCCS AS&S ESC/SWM Inspector to verbally confirm that remediation activities have occurred, are appropriate or if any changes or delays are anticipated.

RED FLAG – Violations shall be addressed as soon as is practicable within the timeframe specified. The contractor shall provide written confirmation (with photos, as needed) that remediation activities have occurred within the specified timeframe. Documentation of the corrective action shall be maintained within the SWPPP.

BLACK FLAG – Black flag violations represent potentially significant damage to property and natural resources, as well as increased legal liability for VCCS. All work must stop until such point that corrective action has been completed and any remediation activities have occurred. Project work associated with the ESC and/or SWM Plans, outside of those to perform corrective actions or remediation cannot commence until a violation release form is provided. Documentation of the corrective action and the release form shall be maintained in the SWPPP.

VCCS AS&S ESC/SWM Inspector's Signature:

_____

Notification Received By: _____, Title: _____

LD-04R – Stop Work (Black Flag) Release Form
Project Code: 260 _____

VCCS LAND DISTURBANCE INSPECTION SUMMARY – BLACK FLAG VIOLATION RELEASE FORM

Date: _____

VCCS AS&S ESC/SWM Inspector Name: _____

Project Name: _____

Project Location: _____

_____

Corrective actions and/or remediation identified on the VCCS Land Disturbance Inspection Summary dated _____ have been completed to the satisfaction of the VCCS AS&S Inspector. Corrections and/or remediation are to a point where significant conflicts with the VCCS Annual Standards & Specifications, Construction General Permit VAR10, as well as any threats to property or natural resources, are minimized and work on the project may continue.

VCCS AS&S ESC/SWM Inspector Signature:

_____

Notification Received By: _____, Title: _____

LD-04B: VCCS Construction Site Inspection Certification Form
(For regulated Land Disturbance ≥ 1-acre)

General Information			
Project Name:		VCCS Project Code:	
VAR10 Permit # (where applicable)		Location:	
Date of Inspection:		Start/End Time:	
Contact Information/Responsible Parties			
* Site Representative (see below)		Representative's email and phone number:	
Inspector's Name(s):		Inspector's email and phone number:	
Inspectors DEQ Certification #(s):		Other contact information (as applicable):	
* PM, Contractor, RLD or other individual with responsibility for implementation of the ESC Plan and the SWPPP, where applicable.			

Inspection Type (check all that apply)

☐ After installation of initial ESC measures
☐ Within 48-hours after a runoff event (≥ 0.25 inches of rain over 24-hours)*
☐ Contractor's self-inspection as required in SWPPP (where applicable)
☐ Periodic SWM inspection _____
☐ Final Stabilization
☐ 2-week inspection
☐ Other _____

* If within 48-hours of runoff event, provide: date of event: _____ and rainfall amount (inches): _____

Weather Conditions (check all that apply)

☐ Clear ☐ Sunny ☐ Partly Cloudy ☐ Cloudy ☐ Cold ☐ Cool ☐ Mild ☐ Hot ☐ Raining ☐ Post-rain event

Are discharges occurring from the site at the time of inspection or evidence of off-site sediment transport? ☐ Yes ☐ No
If yes, describe:

	Construction Inspection Checklist (For projects under 1 acre of disturbance that do not require a Construction General Permit ONLY Section 1 of this form applies. Where disturbance is equal to or greater than an acre, all Sections apply)	***Yes***	***No***	***N/A***	***Location of Concern and Recommended Corrective Action/Notes*** (additional notes at end of form)
1	***Section 1 - ESC Plan Inspection: Part II(A)2***				See VCCS approved ESC and SWM Plans, where applicable
1a	Are deficiencies identified during previous inspections corrected? Notify VCCS PM if a specific deficiency has been identified and not corrected on each of the past 3 consecutive inspection reports?				
1b	Are all land-disturbing activities within the area of disturbance identified on the approved ESC Plan?				
1c	Are all erosion and sediment controls maintained, properly repaired and functional? [9VAC25-840-60]				
1d	Are site ESC operations consistent with the ESC phasing plan or have modifications to the plan been appropriately approved and documented?				
1e	Are temporary or permanent stabilization measures applied within allowable time frames (7 days after final grade or where dormant for more than 14 days)? [9VAC25-840-40]				
1f	Are disposal/borrow areas and stockpiles (on-site and off-site) stabilized or protected with sediment trapping measures? Are off-site areas on plan or have separate VCCS or locality approved ESC Plan?				

	Construction Inspection Checklist	*Yes*	*No*	*N/A*	***Location of Concern and Recommended Corrective Action/Notes*** (additional notes at end of form)
1g	Are all temporary ESC measures that are no longer needed removed and applicable site areas permanently stabilized?				
1h	Are initial ESC measures, including perimeter controls, (i.e. silt fence, sediment basins and traps, perimeter dikes) intended to trap sediment installed and functional prior to upslope land disturbance?				
1i	Are earthen structures, such as dams, dikes, diversions, and cut/fill slopes, stabilized or protected with functioning sediment trapping measures?				
1j	Are sediment basins/traps constructed according to the plans/specifications, functional and maintained?				
1k	Are cut/fill slopes protected from concentrated runoff with channel flumes or slope drains?				
1l	Are slopes with water seeps protected with adequate drainage and stabilization?				
1m	Do operational storm sewer and culvert inlets have inlet protection according to the plans/specifications?				
1n	Are constructed stormwater conveyance channels and ditches stabilized with the appropriate channel lining and/or outlet protection according to the plans/specifications?				
1o	Is non-erodible material or cover provided for all causeways and cofferdams where work is performed in a live watercourse?				
1p	Is a live watercourse crossed by construction vehicles more than twice in a 6-month period, and if so, is the temporary stream crossing used for crossing constructed of non-erodible materials?				
1q	Where work is performed in a live watercourse, are applicable federal and state permits available?				
1r	Where work is performed in a live watercourse, have the bed and banks been stabilized immediately and per the plan/specifications?				
1s	Are underground utilities installed with less than 500’ of trench open, sediment trapping controls for excavated material, filtering of effluent from dewatering, and compaction and restabilization of backfill?				
1t	Are construction entrances properly located, installed and maintained?				
1u	Does sediment tracked onto adjacent roadways appear to be removed each day?				

	Construction Inspection Checklist	***Yes***	***No***	***N/A***	***Location of Concern and Recommended Corrective Action/Notes*** (additional notes at end of form)
1v	If the site is stabilized, have ESC measures been removed and trapped sediment been stabilized or appropriately removed?				
1w	Is there evidence of downstream or other off-site sediment transport? (Provide locations and description of impacts if applicable.)				
1x	Are adjacent properties and waterways adequately protected from accidental land disturbance, potential pollutant discharge, erosion, flooding, and sedimentation from the project site?				
1y	Do all locations concentrated of concentrated runoff leaving the site discharge to a channel (i.e. stream, storm sewer, or ditch)?				
1z	Are any ESC measures to protect SWM practices (i.e. infiltration basin, bioretention) that are shown on the plans to prevent compaction or clogging installed?				
1aa	Is runoff and other discharges (dewatering) that contain sediment or other pollutants being properly treated prior to discharging from the site?				
1bb	Are permanent stormwater measures (basins, etc.) properly installed/converted, stabilized and functional?				
2.	***Section 2 - Pollution Prevention Plan Inspection: Part II(A)4*** (Applicable to land disturbance 1 acre or greater)	***Yes***	***No***	***N/A***	See project-specific Stormwater Pollution Prevention Plan (SWPPP)
2a	Are functional measures in place to prevent and respond to leaks, spills and other pollutant releases including procedures for expeditiously stopping, containing, cleaning up spills and reporting?				
2b	Are functional measures in place to prevent the release of soaps, solvents, detergents, wash water from construction materials, paint clean-up and other pollutants and/or also from contact with stormwater?				
2c	Are wash waters from vehicles, equipment, construction materials and the like prevented from release and/or properly treated before leaving the site?				
2d	Is the concrete wash-out waste directed into a properly installed leak-proof container? Is the treatment mechanism properly maintained and utilized?				
2e	Are construction products, materials, and wastes being properly stored, handled, labeled? Are loose trash and debris properly contained?				
2f	Are other potential pollutant-generating activities not listed above being properly managed to prevent exposure to precipitation/runoff?				
2g	Have all pollutant generating activities present on the site been identified in the Pollution Prevention Plan?				

3	***Section 3 - SWPPP Documentation Inspection: Part II(A)1*** (Applicable to land disturbance 1 acre or greater)	***Yes***	***No***	***N/A***	See Section 1.0 and Various Appendices in the Stormwater Pollution Prevention Plan
3a	Copy of notice of coverage letter and information for public access to the SWPPP posted near main entrance of the site?				
3b	Copy of complete SWPPP available onsite for operators and inspectors?				
3c	SWPPP is being amended, modified, updated and appropriately signed?				
3d	Are dates when major grading activities occurred properly recorded?				
3e	Are SWPPP inspections conducted by contractor at required frequency, summarized including corrective actions, appropriately signed and retained with the SWPPP?				

CERTIFICATION INSTRUCTION
This Inspection Form is not complete without the completion of the appropriate certification(s) by the individual(s) listed below.

Reports conducted by VCCS or VCCS representative will be provided to the Operator or Duly Authorized Representative by (check all that apply): ☐ Hardcopy ☐ Email ☐ Other _____ within 48 hours.

- **CERT-1 and CERT-2** certification is required with VCCS inspections.
- **CERT-2** certification is required by the VAR10 operator for all inspections, including self-inspections required by the VAR10.

CERT-1: INSPECTION CERTIFICATION STATEMENT
"I certify under penalty of law that I performed the inspection described in this form as a Certified Project Inspector for ESC and SWM per the Virginia Erosion and Sediment Control and Stormwater Management Certification Regulations (9VAC25-850). I certify that the inspection described in the form reflects site conditions to the best of my knowledge and belief and is true, accurate and complete. On inspection forms where no corrective action is identified, the construction activity is in compliance with the project SWPPP. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations and falsifying inspections (reports)."

Inspector's Name: _____

Signature: _____ Date: _____

CERT-2: OPERATOR (OR DULY AUTHORIZED REPRESENTATIVE) CERTIFICATION STATEMENT
"I certify under penalty of law that I have read and understand this document and that this document and all attachments were prepared 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."

The inspection form shall be maintained in the project SWPPP. Corrections to incidents of noncompliance identified on this form will be corrected within 7 days or as otherwise identified per incident.

Operator (or Duly Authorized Representative) Name: _____

Signature: _____ Date: _____

Appendix F

VCCS SWM Facility Certification Form (LD-05)

VCCS Stormwater Management Facility Certification Form

The purpose of this form is to provide a minimum standard for stormwater management facility construction record drawings, verifying that all SWM facilities and associated conveyance systems have been built in accordance with the approved plan and design specifications.

Record Drawing and Construction Certification Requirements

(1) A completed copy of this form

- ✓ A copy of this form shall be submitted for each permanent stormwater management facility that is recommended for acceptance. The applicant shall ensure that this form is completed in its entirety and all required documentation listed below is submitted.

(2) Certifying Professional Inspection Log

- ✓ A copy of the applicant's inspection log shall be submitted with this form. This log should document all aspects of SWM facility construction to demonstrate compliance with the approved plans. For example, a bioretention facility may require a liner. Without an inspection log, there would be no assurance that it was installed post construction since it is underground and not visible from the surface.

(3) Record Drawing of Plans

- ✓ A record drawing of the plans is required to be submitted with this form. The plans should indicate any changes that differ from the approved plans, along with any applicable computations.
- ✓ A clear means, such as a checkmark, shall be used to demonstrate that the applicant agrees with the constructed values.
- ✓ For any changes to the plans, including numeric changes, a red line shall be used to cross out the original item and the actual revision shall be entered beside the crossed out value.
- ✓ Elevations shall be to the nearest 0.1 foot.
- ✓ The storage volume of the facility, including all dimensioned structures, shall be verified with the certification.
- ✓ All submitted plan sheets shall be labeled as "Record Drawing".

(4) Record Drawing Stormwater Facility Checklist

- ✓ A record drawing stormwater facility checklist shall be completed for each facility being certified. A checklist can be found included in this form.

LD-05 – Record Drawing and SWM Facility Certification Form

Section 1 – SWM Facility General Information

Project Name: _____ Project Location: _____
BMP Type: _____ BMP Location: _____
College Plan No.: _____ Total Drainage To BMP (Acres): _____
Impervious Acres: _____ Pervious Acres: _____
6th Order HUC:_____ Date Facility Brought Online:_____
Name of Impaired Waters BMP Is Draining To (2010 305(b)/303(d)):_____

Brief Description of Stormwater Management Facility:

_____

_____

Section 2 - Contractor Information:

Company:_____ Contact Person: _____
Title: _____ Phone Number: _____
Plan Name: _____ Plan Date: _____

Section 3 - Record Drawing and Construction Certifications for Stormwater Management/BMP Facilities

Certifying Professionals: *A Registered Professional Engineer is responsible for preparation and or certification of the SWM Record Drawing. The Engineer is responsible for the inspection, monitoring and certification of Stormwater Management / BMP facilities during construction.*

I certify that I am a licensed professional in the Commonwealth of Virginia, and that to best of my knowledge, having completed a site specific inspection(s), the stormwater facility referenced on this form is constructed in accordance with the approved plans.

Record Drawing Certification

Design Firm Name: _____

Mailing Address: _____

Business Phone: _____

Contact Name: _____ **PLACE SEAL HERE**

Title: _____

Signature: _____

Date: _____

Section 4 - Record Drawing Approval

(This section to be completed by VCCS Staff only)

VCCS AS&S Project Manager: _____ Title: _____
Date: _____ Signature: _____

GENERAL CERTIFICATION CHECKLIST
(Required For All SWM Facilities)

The following certification checklist is to be used as part of the VCCS Stormwater Management Facility certification process. Any changes from the original design plans should be noted. While the following checklist shall be utilized, it is not meant to be an all-encompassing document. It is the responsibility of the certifying professional to ensure that any components not listed as a part of the design plans are built correctly to ensure long term functionality of the stormwater management facility. The certifying professional shall ensure the following have been installed per the approved design plan:

Erosion and Sediment Control

- ❒ All applicable erosion and sediment control practices have been removed.

Contributing Drainage Area:

- ❒ The contributing drainage area is free of debris and sediment.
- ❒ All pervious areas of the contributing drainage area have been permanently stabilized.
- ❒ Construction has not impacted the final facility configuration.

Inflow Structures

- ❒ Inflow conveyance properly stabilized.
- ❒ No siltation or trash in inflow structure.
- ❒ No erosion at inflow outlet into the facility.
- ❒ All temporary erosion and sediment control measures have been removed (e.g. silt fence or check dams).

Pretreatment (If Applicable)

- ❒ All pretreatment practices (forebays, grass filter strips, gravel diaphragms, etc.) have been properly installed.
- ❒ All pretreatment practices are in good working condition with no indication of construction impacts.
- ❒ Any proposed weirs/spillways conform to the designed size, elevation, materials, and locations shown on the plans.
- ❒ Forebays conform to the designed volumes.
- ❒ Forebay areas are stabilized with the correct material (liner, stabilization matting, seed, etc.) with no erosion.

Reservoir Area (Water Quantity and Quality)

- ❒ Area is stabilized.
- ❒ No signs of erosion.
- ❒ No trash or debris present.
- ❒ Volumes meet design plan requirements.
- ❒ Underdrains (if applicable) have been installed and are the proper elevation, material and size.
- ❒ All liners have been installed per the plans.
- ❒ No clogging evident.
- ❒ All structural materials (i.e. media for bioretention) meet plan specifications.

Control Structure

- ❒ Control structure is the appropriate type and size per the plans.
- ❒ All control structures are free of cracks, deterioration and other structural deficiencies.
- ❒ Top of control structure is at the appropriate elevation per the plans.
- ❒ Water quality orifice(s) are at the appropriate elevation and size per the plans.
- ❒ Any applicable wetlands have been installed.
- ❒ Trash racks have been installed per the plans.
- ❒ Any applicable plants have been installed per the designed planting plan (correct type, spacing, location etc.).
- ❒ Control structure is free from blockages and obstructions.

Emergency Spillway (If Applicable)

- ❒ Emergency spillway is constructed to the dimensions and configuration shown in the approved plans. (e.g. proper turn downs, toe drains and anchors).
- ❒ Emergency Spillway is at the elevation shown in the approved plans
- ❒ Emergency spillway is permanently stabilized.
- ❒ Emergency spillway is constructed of the material shown in the approved plans
- ❒ No evidence of erosion.

Embankments (If Applicable)

- ❒ All embankments are permanently stabilized in accordance with the approved plans.
- ❒ Top of embankment is at the design elevation.
- ❒ No holes around or above the barrel/outlet pipe indicating piping or joint failure.
- ❒ No water seeping out of the embankment.
- ❒ No erosion or tree growth on embankment.
- ❒ No animal burrows evident on the embankment.

Outlet Pipe (If Applicable)

- ❒ All anti-seep collars have been installed.
- ❒ Outlet pipe is the appropriate material, size, and location.
- ❒ Outlet pipe is structurally sound with no evidence of cracking, corrosion or deterioration.
- ❒ Velocity dissipation devices are installed per the detail on the approved plans at the outlet (riprap size, dimensions and location)

Outfall Channels

- ❒ Outlet channel properly stabilized.
- ❒ No siltation or trash in outlet channel.
- ❒ No erosion in channel.
- ❒ All temporary erosion and sediment control measure have been removed (e.g. silt fence or check dams).

Appendix G

VCCS Contractor Notification of Completion of Land Disturbance Activity Form (LD-06)

LD-06 – Termination of Land Disturbance Form
Project Code: 260-_____

Termination of Land Disturbance

This form is to be used as a termination of land disturbance notification between the Primary Contractor and the VCCS AS&S Project Manager. This form is **NOT** a notice of termination for Construction General Permit (VAR10) coverage between the Contractor and DEQ.

Project Name: _____ Project Code: _____

Section 1– Conditions for Termination of Land Disturbance

The conditions of this section shall be met and this form shall be signed by both the Primary Contractor and the AS&S Project Manager before final payment is made.

- ☐ No further land disturbance activities are planned.
- ☐ The project area has been stabilized in accordance with the approved plans, which includes seeding, mulching, sodding, paving, or other means.
- ☐ All temporary erosion and sediment control measures have been removed.
- ☐ All pollution prevention measures have been removed from the site and disposed of in a legal manner.
- ☐ All permanent post-construction stormwater management facilities have been certified.
- ☐ All trash and debris has been removed from the site.

Section 2 – Operator Certification:

"I certify under penalty of law that I have read and understand this document and that this document and all attachments were prepared 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."

Operator: _____
Signature: _____
Date: _____

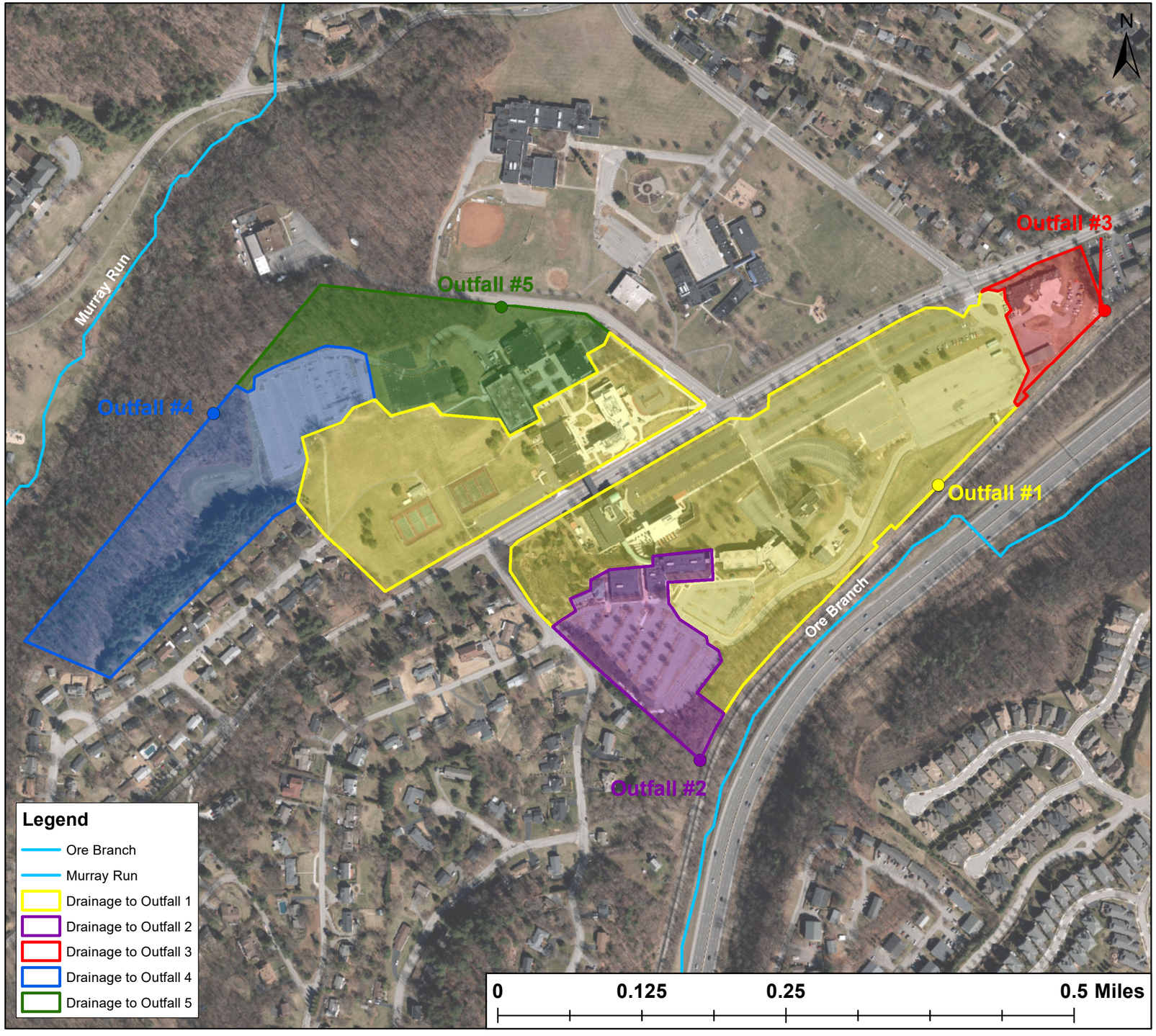
Section 3 – Termination of Land Disturbance Approval

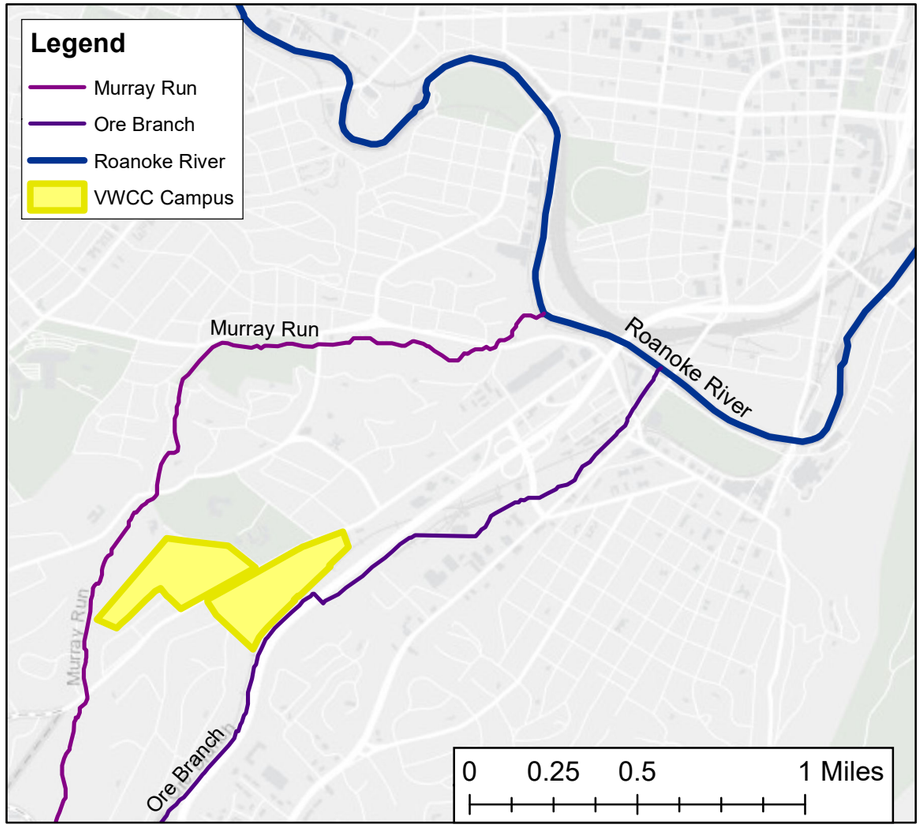
(This section to be completed by AS&S Project Manager only)

VCCS AS&S Project Manager: _____
Signature: _____
Date: _____

APPENDIX B

Drainage Area & Outfall Map





Total Acres: 69.25
Watershed: Roanoke River
Hydraulic Unit Code (HUC): RU14
TMDLs: Sediment and Bacteria (E. coli)

Outfall ID	Location	Est. Acreage	Discharge Water Body
#1	37.245833, -79.968889	40.12	Ore Branch
#2	37.243056, -79.971944	5.40	Ore Branch
#3	37.247500, -79.966944	2.48	Ore Branch
#4	37.246667, -79.978056	12.13	Murray Run
#5	37.247795, -79.974567	9.12	Murray Run

VIRGINIA WESTERN
The Community's College

Virginia Western Community College

3094 Colonial Ave SW
Roanoke, VA 24015

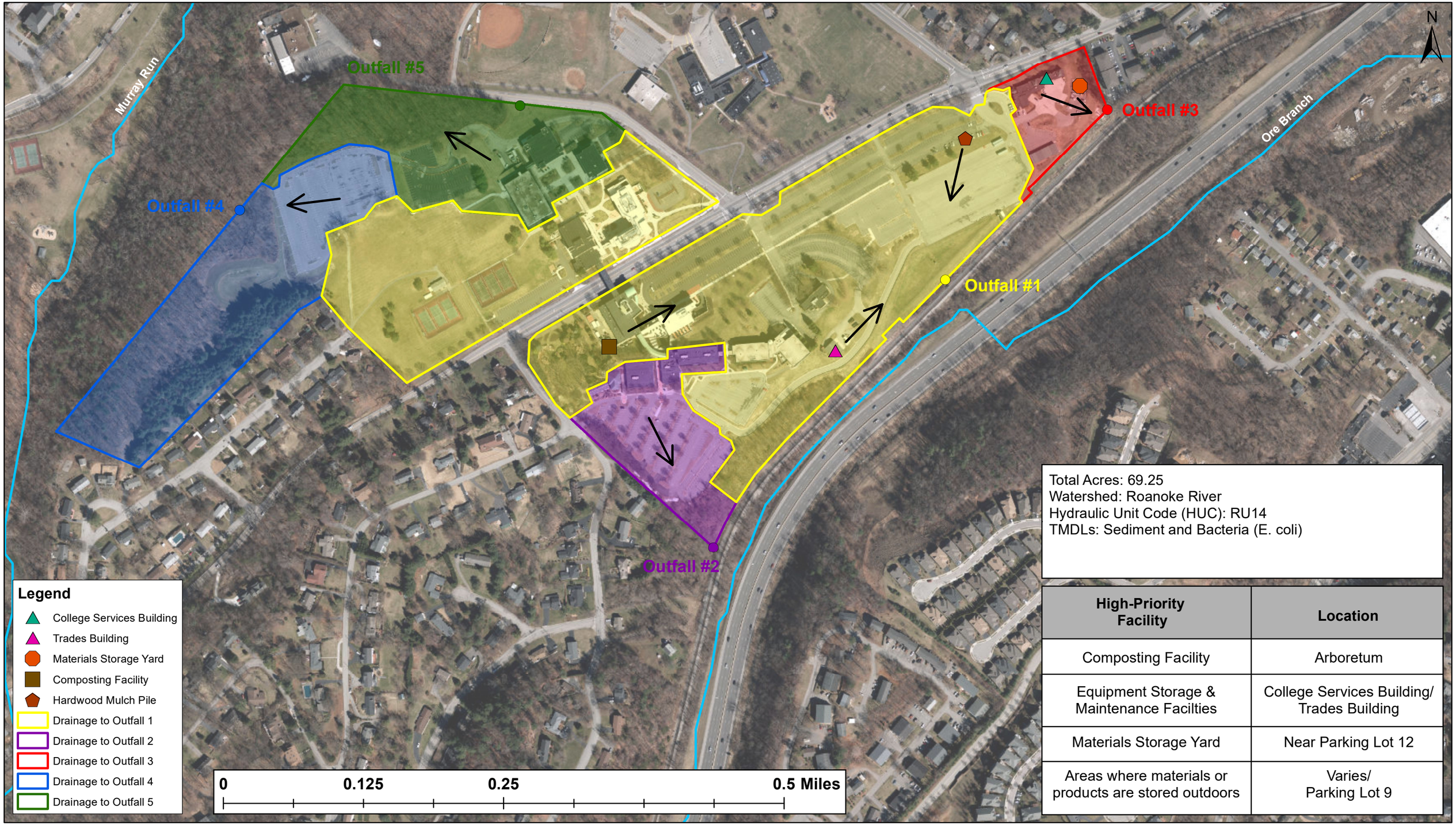
Drainage Area & Outfall Map

Permit Number VAR040030

Prepared By: Apex Companies, LLC
9700 Capital Court STE 100
Manassas, VA 20110
(703) 369-6730

APPENDIX C

High-Priority Facility Locations Map



Total Acres: 69.25
Watershed: Roanoke River
Hydraulic Unit Code (HUC): RU14
TMDLs: Sediment and Bacteria (E. coli)

High-Priority Facility	Location
Composting Facility	Arboretum
Equipment Storage & Maintenance Facilties	College Services Building/ Trades Building
Materials Storage Yard	Near Parking Lot 12
Areas where materials or products are stored outdoors	Varies/ Parking Lot 9

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The Community's College

Virginia Western Community College

3094 Colonial Ave SW
Roanoke, VA 24015

High-Priority Facility Locations Map

Permit Number VAR040030

Prepared By: Apex Companies, LLC
9700 Capital Court STE 100
Manassas, VA 20110
(703) 369-6730

APPENDIX D

Amendments, Modifications, & Updates

SWPPP AMENDMENT, MODIFICATION, AND UPDATE LOG

(Copy As Needed)

Date:	Description of Amendment, Modification, or Update

"I certify under penalty of law that this 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.

Furthermore, I have read and understand this Stormwater Pollution Prevention Plan and the information in this document and its attachments is to the best of my knowledge true, accurate, and complete. In addition, I certify that I will fully implement this Plan and will maintain its accuracy and maintain on site at all times."

Pollution Prevention Team Signature:

VIRGINIA WESTERN
The Community's College

APPENDIX E

Spills & Leaks Log

SPILLS AND LEAKS LOG

(Copy As Needed)

Use this log to keep a record of spills and leaks from equipment or chemicals that are on-site from High-Priority Facilities.

Date and Time: _____

Location: _____

_____

Type and Quantity (Volume) Released: _____

_____

Source/High-Priority Facility: _____

_____

Actions taken to minimized the impact of the release: _____

_____

Was the Spill or Leak Isolated? _____

Measures taken to prevent the reoccurrence of any prohibited discharge: _____

_____

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APPENDIX F

Storm Sewer System Map

Virginia Western Community College

Storm Water Drain Locations

20 — Approximate location of storm drains (Symbol)

Idenification Number of Storm Drain

Updated 03.20.14

APPENDIX G

Visual High-Priority Facility Inspections

Visual High-Priority Facility Inspection

High-Priority Facility ID: Composting Facility - Arboretum

Date: _____ Time: _____ Inspector: _____

Weather: Clear Cloudy **Approx. Temp: _____** **Precipitation past 3 days:** No Yes _____ inches

Have any discharges occurred since the last inspection? No Yes When? _____

Inspection Information *Select all that are applicable*

Question:		Maintenance Required?	Corrective Action Need and Notes
Is the HPF covered or inside?	Yes No	Yes No	
Is the HFP in the proper location on the map?	Yes No	Yes No	
Are all source controls implemented?	Yes No	Yes No	
Are there visible stains or deposits from the HPF?	Yes No	Yes No	
Is there an odor from the HPF?	Yes No	Yes No	
Is the nearest spill kit located on the correct place on the map?	Yes No	Yes No	
Is the spill kit stocked with absorbents and materials?	Yes No	Yes No	

General Comments: _____

_____

_____

_____

_____

_____

_____

Actions Taken: _____

_____

_____

Follow up required: Yes No

Visual High-Priority Facility Inspection

High-Priority Facility ID: Equipment Storage & Maintenance Facility – College Services Building

Date: _____ Time: _____ Inspector: _____

Weather: Clear Cloudy **Approx. Temp: _____** **Precipitation past 3 days:** No Yes _____ inches

Have any discharges occurred since the last inspection? No Yes When? _____

Inspection Information *Select all that are applicable*

Question:		Maintenance Required?	Corrective Action Need and Notes
Is the HPF covered or inside?	Yes No	Yes No	
Is the HFP in the proper location on the map?	Yes No	Yes No	
Are all source controls implemented?	Yes No	Yes No	
Are there visible stains or deposits from the HPF?	Yes No	Yes No	
Is there an odor from the HPF?	Yes No	Yes No	
Is the nearest spill kit located on the correct place on the map?	Yes No	Yes No	
Is the spill kit stocked with absorbents and materials?	Yes No	Yes No	

General Comments: _____

_____

_____

_____

_____

_____

_____

Actions Taken: _____

_____

_____

Follow up required: Yes No

Visual High-Priority Facility Inspection

High-Priority Facility ID: Equipment Storage & Maintenance Facility – Trades Building

Date: _____ Time: _____ Inspector: _____

Weather: Clear Cloudy **Approx. Temp: _____** **Precipitation past 3 days:** No Yes _____ inches

Have any discharges occurred since the last inspection? No Yes When? _____

Inspection Information *Select all that are applicable*

Question:		Maintenance Required?	Corrective Action Need and Notes
Is the HPF covered or inside?	Yes No	Yes No	
Is the HFP in the proper location on the map?	Yes No	Yes No	
Are all source controls implemented?	Yes No	Yes No	
Are there visible stains or deposits from the HPF?	Yes No	Yes No	
Is there an odor from the HPF?	Yes No	Yes No	
Is the nearest spill kit located on the correct place on the map?	Yes No	Yes No	
Is the spill kit stocked with absorbents and materials?	Yes No	Yes No	

General Comments: _____

_____

_____

_____

_____

_____

_____

Actions Taken: _____

_____

_____

Follow up required: Yes No

Visual High-Priority Facility Inspection

High-Priority Facility ID: Materials Storage Yard – Near Parking Lot 12

Date: _____ Time: _____ Inspector: _____

Weather: Clear Cloudy **Approx. Temp: _____** **Precipitation past 3 days:** No Yes _____ inches

Have any discharges occurred since the last inspection? No Yes When? _____

Inspection Information *Select all that are applicable*

Question:		Maintenance Required?	Corrective Action Need and Notes
Is the HPF covered or inside?	Yes No	Yes No	
Is the HFP in the proper location on the map?	Yes No	Yes No	
Are all source controls implemented?	Yes No	Yes No	
Are there visible stains or deposits from the HPF?	Yes No	Yes No	
Is there an odor from the HPF?	Yes No	Yes No	
Is the nearest spill kit located on the correct place on the map?	Yes No	Yes No	
Is the spill kit stocked with absorbents and materials?	Yes No	Yes No	

General Comments: _____

_____

_____

_____

_____

_____

_____

Actions Taken: _____

_____

_____

Follow up required: Yes No

Visual High-Priority Facility Inspection

High-Priority Facility ID: Hardwood Mulch Pile – Various/Parking Lot 9

Date: _____ Time: _____ Inspector: _____

Weather: Clear Cloudy **Approx. Temp: _____** **Precipitation past 3 days:** No Yes _____ inches

Have any discharges occurred since the last inspection? No Yes When? _____

Inspection Information *Select all that are applicable*

Question:		Maintenance Required?	Corrective Action Need and Notes
Is the HPF covered or inside?	Yes No	Yes No	
Is the HFP in the proper location on the map?	Yes No	Yes No	
Are all source controls implemented?	Yes No	Yes No	
Are there visible stains or deposits from the HPF?	Yes No	Yes No	
Is there an odor from the HPF?	Yes No	Yes No	
Is the nearest spill kit located on the correct place on the map?	Yes No	Yes No	
Is the spill kit stocked with absorbents and materials?	Yes No	Yes No	

General Comments: _____

_____

_____

_____

_____

_____

_____

Actions Taken: _____

_____

_____

Follow up required: Yes No

APPENDIX H

Pollution Prevention Awareness Form

POLLUTION PREVENTION AWARENESS FORM

This form shall be signed by all personnel performing potential generating activities which shall be identified by the SWPPP Pollution Prevention Team. By signing below the person acknowledges the following SWPPP Statement:

SWPPP Statement: *"I certify that I understand I may be involved inn a potential generating activity and that I am responsible for complying with the SWPPP. I have read, understand, and agree to follow all requirements outline in the SWPPP."*

Name	Signature	Company	Position	Date

VIRGINIA WESTERN
The Community's College

APPENDIX I

Annual Comprehensive Site Evaluations

Annual Comprehensive Site Evaluation

Annual Site Evaluations of this SWPPP are required by the General Permit 9VAC25-890-40. This comprehensive site compliance evaluation is to 1) confirm the accuracy of the potential pollutant sources described within this SWPPP, 2) to determine the effectiveness of control measures in place, and 3) to assess the overall compliance with the General Permit.

A. General Information

Permit Number: VAR040030 **SWPPP Effective Date:** February 2017

MS4 Name: Virginia Western Community College

Address: 3094 Colonial Avenue SW, Roanoke, VA 24015

Date of Evaluation: _____ **Inspector Name:** _____

B. Activity Area Specific Findings

High-Priority Facility:	**Composting Facility - Arboretum**

1. Brief Description:

2. Is there evidence of a spill or leak?	☐ Yes	☐ No
3. Are any control measures in need of maintenance or repair?	☐ Yes	☐ No
4. Have any control measures failed and require replacement?	☐ Yes	☐ No
5. Are any additional/revised control measures necessary in this area?	☐ Yes	☐ No

If Yes to any of the questions, provide a description of the problem:

High-Priority Facility:	**Equipment Storage & Maintenance Facility – College Services Building**

1. Brief Description:

2. Is there evidence of a spill or leak?	☐ Yes	☐ No
3. Are any control measures in need of maintenance or repair?	☐ Yes	☐ No
4. Have any control measures failed and require replacement?	☐ Yes	☐ No
5. Are any additional/revised control measures necessary in this area?	☐ Yes	☐ No

If Yes to any of the questions, provide a description of the problem:

Annual Comprehensive Site Evaluation

High-Priority Facility:	**Equipment Storage & Maintenance Facility – Trades Building**	
1. Brief Description:		
2. Is there evidence of a spill or leak?	☐ Yes	☐ No
3. Are any control measures in need of maintenance or repair?	☐ Yes	☐ No
4. Have any control measures failed and require replacement?	☐ Yes	☐ No
5. Are any additional/revised control measures necessary in this area?	☐ Yes	☐ No
If Yes to any of the questions, provide a description of the problem:		

High-Priority Facility:	**Pesticide Storage Facility – Trades Building**	
1. Brief Description:		
2. Is there evidence of a spill or leak?	☐ Yes	☐ No
3. Are any control measures in need of maintenance or repair?	☐ Yes	☐ No
4. Have any control measures failed and require replacement?	☐ Yes	☐ No
5. Are any additional/revised control measures necessary in this area?	☐ Yes	☐ No
If Yes to any of the questions, provide a description of the problem:		

High-Priority Facility:	**Salt Storage Facility – College Services Building**	
1. Brief Description:		
2. Is there evidence of a spill or leak?	☐ Yes	☐ No
3. Are any control measures in need of maintenance or repair?	☐ Yes	☐ No
4. Have any control measures failed and require replacement?	☐ Yes	☐ No
5. Are any additional/revised control measures necessary in this area?	☐ Yes	☐ No
If Yes to any of the questions, provide a description of the problem:		

High-Priority Facility:	**Hardwood Mulch Pile – Various/Parking Lot 9**

1. Brief Description:

2. Is there evidence of a spill or leak?	☐ Yes	☐ No
3. Are any control measures in need of maintenance or repair?	☐ Yes	☐ No
4. Have any control measures failed and require replacement?	☐ Yes	☐ No
5. Are any additional/revised control measures necessary in this area?	☐ Yes	☐ No

If Yes to any of the questions, provide a description of the problem:

C. General Inspection Findings

1. Are there any areas of the facility which are not included in the SWPPP but now contribute to stormwater discharges? (Refer to SWPPP for a list of facilities/activities required to be under this SWPPP.)

☐ Yes ☐ No

If Yes, describe:

If new high-priority facilities are identified, the SWPPP must be updated using the Amendments, Modifications, & Updates form located in Appendix G of the SWPPP.

2. Are any of the high-priority facilities no longer in use?

☐ Yes ☐ No

If Yes, describe which facilities:

3. Are there any high-priority facilities which current good housekeeping and preventative maintenance practices are not adequate in reducing the exposure of stormwater runoff from these facilities?

☐ Yes ☐ No

If Yes, describe which facilities and why those practices are not adequate:

4. Have stormwater runoff patterns or conveyance systems been altered or constructed?

☐ Yes ☐ No

If Yes, summarize the location of the alterations/constructed conveyance systems.

D. Corrective Actions

1. *Were any corrective actions identified during visual inspections or during this annual site evaluation?*

☐ Yes ☐ No

If Yes, describe. If No, skip to Section E. Annual Report Certification.

2. *Date problem identified:*

3. *Did/will this corrective action require modification of the SWPPP?*

☐ Yes ☐ No

4. *Date correction action completed:*

5. *If the corrective action has not yet been completed, provide the status of the corrective action:*

E. Annual Report Certification

Do you certify that your annual inspection has met the requirement of the General Permit and that, based upon the results of this inspection, to the best of your knowledge, you are in compliance with the permit?

☐ Yes ☐ No

If No, summarize why you are not in compliance with the General Permit:

I certify under penalty of law 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.

Authorized Representative (Printed): _____

Title: _____

Signature: _____ Date: _____

Storm Water Management Responsibilities Schedule

Updated 8/28/2018 with SWPPP

Facilities Planning and Development (FPD), MS4 Administrator: Kevin Witter, Director FPD
Facilities Management Services (FMS) – Peter Stocki (interim operations manager)
APEX - VWCC's current environmental storm water management consultant.
DEQ annual reporting period is July 1, 2018 to June 25, 2019.

The following is a schedule of items performed and reported by FMS to FPD for preparation of VWCC's MS4 DEQ Annual Report.

MS4 Compliance Requirements (Quarterly – March, June, September, December):

- Inspect storm inlet drains and remove debris. Provide report to FPD using DEQ form.
- Recycling: Keep monthly record of recycling of paper and plastic. Provide report to FPD.

MS4 Compliance Requirements (Every 6 months - Spring and Fall):

- Inspect drainage ditches and rain gardens. Weed, maintain or repair as needed. Report conditions and corrective actions of each to FPD.
- Inspect outfalls, identify if there is erosion or other problems. Report conditions and corrective actions of each to FPD (5 locations).
- Street sweep all parking lots both north and south campus. Date, billing invoice and pounds debris removed is needed for report. Report any other known clean up that is quantifiable.

MS4 Compliance Requirements (Annual): Note: Some of these items correlate to SWPPP.
Note: Items required for DEQ report need to be completed prior to June 25th each year. Reporting is required to include date problem was identified, photos (before and after), description of problem, description of repair, date of repair and invoices for repair if outsourced.

- Inspect storm water detention ponds, repair holes, drains, rip-wrap, etc. Report conditions and corrective actions to FPD. Inspect and report any overflow of rain garden, detention pond, rip-wrap blow out, sink hole or storm drain circumvention.
- Illicit Discharges and Spills: Report date, time, nature of discharge, action taken. Note if best practices are used. If WEL haz mat disposal is used provide copy of report and invoice. Examples include: Chemical spill, sewage overflow, HVAC refrigerant leak or spill, erosion from pipe malfunction outdoors, sediment accumulation after heavy rain, gas, diesel or radiator spills.
- Prevent activities that contribute to pollutants such as car washes, uncovered mulch or compost piles, uncovered soil piles, etc. Document precautions taken if it occurs.
- Maintain dumpsters and prevent from leaking. Document how leakage was handled. Report incident.
- Repaving, resurfacing, refurbishment of parking lots: FMS to collaborate with FPD to assure that planning includes sheet flow of water is able to get to storm drains unobstructed. FMS to schedule a pre-con meeting with contractor used and FPD/FMS prior to work to inform contractor of DEQ regulations and campus requirements under our MS4 permit. Contractor must avoid sweeping asphalt or debris into storm drains at curbs. Keep parking space count the same unless change is planned and authorized.
- Protect nearby drains from sediments entering system when conducting outdoor installations of underground conduit, digging for landscaping or distribution of top soil.
- Provide FPD with copy of Nutrient Management Plan to include in DEQ report. Send FPD application dates, report and/or receipts.
- Inspect manholes and grates to underground (UG) storm water structures or filters.

- Provide estimate of salt, other snow removal chemicals used per occurance. Report to FPD date, total pounds used and company applying.
- Document VWCC sponsored community hazardous waste disposal, clean-up or other similar events. Send FPD dates, description of activity, how was waste disposed of and estimated turn out or results of event. Ex: Approximately 20 people brought in 50 pounds of house hold chemicals and it was taken to City of Roanoke recycle plant for disposal. Items removed from waste stream = sustainability.
- Provide complete annual recycling report spreadsheet (this should be quarterly reports compiled).

NEW FOR 2017-2018 REPORTING: **The following is a schedule of items performed and reported by FMS to FPD for compliance with VWCC's Storm Water Pollution Prevention Plan (SWPPP) added to regulations in 2017 and provided to FMS 9/6/2017. DEQ requires spills and events be handled and reported. Per the VWCC SWPPP 3 ring binder (5.4, page 15) the SWPPP is required to be on hand in Peter and Kevin's offices as primary pollution prevention team members (Table 6, page 12).**

SWPPP Requirements (Annual and per event):

- FMS Operations - Appendix E: Log spills and leaks using Appendix E form. If clean-up is done by outside hazmat such as WEL the WEL report and invoice should be provided with the completed Appendix E form. Provide reporting to FPD for annual report.
- FPD - Appendix F: FPD keeps storm water drain location map current with new construction addition or removal of storm water drains and addition of structures.
- FMS Operations - Appendix G: High Priority Facility Inspection areas with standard form. FMS complete one form per area minimum annually (June) or if discharge occurs fill out form at occurrence of event. Provide reporting to FPD for annual report.
  1. Arboretum Composting Facility (Clark).
  2. Equipment Storage and Maintenance Facility – College Services
  3. Equipment Storage and Maintenance Facility – Trades Building.
  4. Materials Storage Yard – Parking Lot 12 at College Services
  5. Hardwood Mulch Pile – Various locations (currently behind College Services).
- FMS Operations - Appendix H: Pollution Prevention Awareness Form - Signed by FMS/FPD indicating storm water and college SWPPP plan annual training. Signed by outside contractors with potential pollution generating activities or clean-up responsibilities. Examples of pollution generating activities may include excavation/trenching, gas, diesel, HVAC refrigerant or chemical spills. Capital projects have independent SWPPP. Provide reporting to FPD for annual report.
- FMS Operations - Appendix I: Annual Site Evaluation Form (5.1, page 15 – Annually): 1. FMS complete form provided annually (June). 2. FMS identify any new high-priority facilities brought on line in past 12 months (June). Provide reporting to FPD for annual report.

The following is a schedule of items performed by FPD for preparation of VWCC's MS4 DEQ Annual Report.

- FPD/APEX will provide annual training to FMS staff on illicit discharge and storm water regulations.
- FPD/APEX will provide annual outfall testing by certified technician as required.
- FPD/APEX will provide outreach and public service announcements and postings on VWTV.
- FPD will participate in Spring Fling by setting up table with storm water and recycling information.
- FPD will collaborate with Clean Valley.Org, City of Roanoke and others for events related to pollution prevention and clean water. Maintains position in regional coalition.
- FPD will collaborate with VWCC Facilities and Environmental Sustainability Committee to identify sustainable practices or improvements to campus facilities.
- FPD responds to storm water needs in capital projects, parking lot projects and other construction.

- FPD processes DEQ annual permit fee and provides proof to City of Roanoke for storm water tax exemption based on maintenance of VWCC's MS4 Permit.
- FPD collects and organizes FMS documentation for inclusion in the development of the MS4 Annual Report.
- FPD will obtain AE services for work needed related to MS4 Permit such as periodic update to Storm Water Master Plan, AE services for structures, or as required DEQ certified technician to inspect.
- FPD/APEX will collaborate to assure Annual Report is compliant with DEQ storm water permit regulations.
- FPD/APEX revise and update MS4 Permit to reflect DEQ regulation additions or changes. Every 3 years the regulations undergo significant revisions. In 2017 SWPPP was added.
- FPD/APEX respond to DEQ annual report review comments and any DEQ audits.
- FPD provides record retention for all the above items.

MS4 Compliance Requirements - Other items as needed or noted:

- FPD: Every 2-3 years: Contract to inspect rain gardens, absorptive swales and underground storage tanks (Lot 15) via DEQ certified inspector. Inspector's report to document inspection, date, time, photographs, actions taken and recommendations. Schedule work to comply with recommendations.
- FPD: Every 10-12 years: Rain gardens, absorptive swales, and underground egg crate storage detention have limited life spans before requiring more than routine maintenance. This is due to clogging sediments over time. This lifecycle is approximately 10-12 years. DEQ certified inspector can determine if filter medium, plants, or underground egg crates need to be removed and replaced with new. Restoration will require an engineered design approved by DEQ and budget resources.

END

Virginia Western Community College Stormwater Management

August 1st, 2018

VIRGINIA WESTERN The Community's College

APEX

Introduction

- Stormwater Management
- Regulations
- Stormwater Guidelines & Permitting
- Pollutant Sources
- Materials Management
- Recognizing/Reporting Illicit Discharges
- Maintenance & Construction
- Spill/Emergency Response

Local Waterways & Stormwater

- Water from rain events drains along roadways, parking lots, and other surfaces, collecting sediment, debris, oils, chemicals and pollutants
- Storm drains collect rain water and transport it (and pollutants) off the property into rivers and streams.

Local Waterways & Stormwater

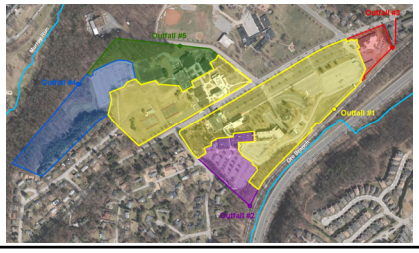
Protecting our local waterways is very important!

These waters are used for:

- Drinking
- Recreation
- Sports
- Fishing

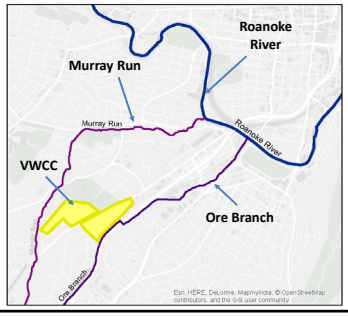
Stormwater at VWCC

Stormwater at VWCC flows through five drainage areas into two local waterways - Murray Run and Ore Branch. Those tributaries, and any pollutants, lead to the Roanoke River.



Stormwater at VWCC

Everyone at VWCC is responsible for protecting these tributaries of the Roanoke River!



Stormwater Management

- BMPs (Best Management Practices) are built to manage, filter, and control runoff during rain events
- Structural BMPs

Riprap

Biobed

Basin

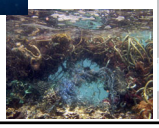
Inlet

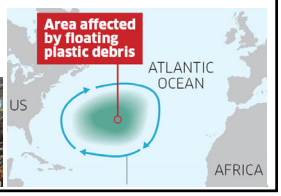
Stormwater Management

- Non-Structural BMPs
  - Trash & Recycling Programs
  - Household Hazardous Waste Collection Days

The Great Pacific Garbage Patch

- Large quantities of plastics/microplastics are accumulation in the oceans world-wide. The largest known is the Great Pacific Garbage Patch.
- Waters from Roanoke River eventually discharge into the Atlantic ocean. The North Atlantic Garbage Patch is a large accumulation of trash, mostly plastics, from surface waters.





Stormwater Management

During Year 4 of the last Permit Cycle (2013-2018), approximately **4,727.5 lbs** of material was removed from the waste stream through the recycling program on campus.

Reduce trash into the stormwater system by:

- Recycling/trash pick-up
- Performing stream clean-up
- Conducting stormwater maintenance
- Sweeping parking lots/roads

Stormwater Management

You are a part of the Virginia Western Community College MS4

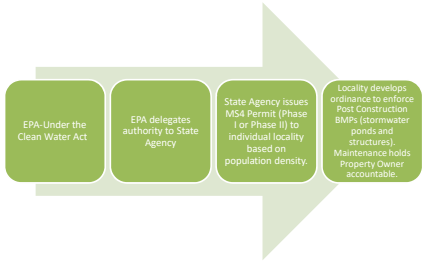
MS4 = Municipal Separate Storm Sewer System

- Systems designed to collect and convey stormwater from a given property/site
- Made up of storm drains, pipes, ditches, etc.
- Component of the National Pollutant Discharge Elimination System (NPDES)

Regulation

- Stormwater management is regulated by the EPA

EPA Regulation



Stormwater Guidelines

- Develop and adhere to a Stormwater Management Plan
- Develop a set of Best Management Practices for each of the components of the Stormwater Program
  - #1 Public Education and Outreach
  - #2 Public Involvement/Participation
  - #3 Illicit Discharge Detection and Elimination
  - #4 Construction Site Stormwater Runoff Control
  - #5 Post-Construction Site Stormwater Management
  - #6 Pollution Prevention/Good Housekeeping
- Identify measurable goals for each component

MS4 Permit 2018-2023

Year 1 – July 1, 2018 – June 30, 2019
Year 2 – July 1, 2019 – June 30, 2020
Year 3 – July 1, 2020 – June 30, 2021
Year 4 – July 1, 2021 – June 30, 2022
Year 5 – July 1, 2022 – June 30, 2023

Training Required by Permit

- TMDL-Specific
  - Sediment Pollution Control
  - Bacteria Pollution Control
- Illicit Discharges
  - Reporting
  - Spill Response
- Good Housekeeping and Pollution Prevention
  - Roads, Streets, Parking Lots
  - Maintenance and Public Works Facilities
- Pesticide and Herbicide Application & Storage

Total Maximum Daily Load (TMDL)

- A Total Maximum Daily Load (TMDL) is a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards. It is generally split into allocations for each main source of a pollutant in the watershed.
  - Base Load (Natural Sources)
  - Point Sources (Wastewater Treatment Plants etc.)
  - Nonpoint Sources (MS4 Areas)
- A Waste Load Allocation (WLA) is the maximum load of pollutants each discharger of waste is allowed to release into a particular waterway. Discharge limits are usually required for each specific water quality criterion being, or expected to be, violated.

Total Maximum Daily Load (TMDL)

- There are many types of TMDLs including:
  - Bacteria
  - Organics and Metals
  - Biochemical Oxygen Demand
  - Oil and Grease
  - Total Suspended Solids (Sediment)
  - PCBs
- BMPs function to help meet WLAs, control TMDLs, and ultimately limit water pollution.

Waste Load Allocations (WLAs)

Sediment

VWCC WLA: 2 tons/year

Produced from:
- Active construction sites
- Sinkholes
- Instream bank erosion
- Sand/salt application

E. coli

VWCC WLA: 1.73E+09 cfu/year

Produced from:
- Sewer backup/leaks
- Pet waste
- Portable toilets

Where Do Pollutants Come From?

- Schools conduct numerous activities that can pose a threat to water quality if practices and procedures are not in place.

Pollutant Sources

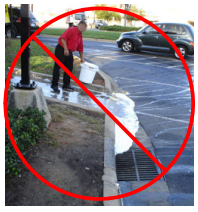
- These activities include but are not limited to:
  - Cleaning supplies
  - Winter road/path maintenance
  - Construction and infrastructure work
  - Building and landscaping maintenance
  - Waste disposal
  - Vehicle maintenance
  - Improper nutrient management

Materials Management

- Responsible management of common chemicals, such as fertilizers, solvents, paints, **cleaners**, and automotive products, can significantly reduce polluted runoff.
  - Identify all Hazardous and Non-hazardous materials.
  - Label all containers and make note of containers requiring special handling, storage or disposal.

Disposing of Chemicals

These are examples of **improper** disposal of chemicals and waste water:

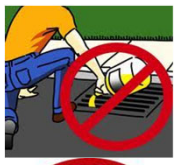


Disposing of Chemicals

These are examples of **improper** disposal of chemicals and waste water:

Disposing of Chemicals

Dispose of chemicals in the proper manner.




Road/Sidewalk Salt

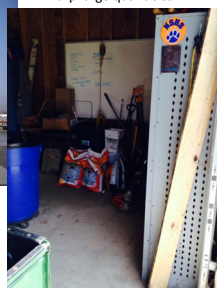
- Salt can produce high sodium and chloride concentrations in ponds and lakes.
  - Responsible for unnecessary fish kills.
  - One teaspoon of road salt can permanently pollute 5 gallons of water.
  - Chloride salts remain in solution in surface waters and are not subject to any significant natural removal mechanisms, accumulating and persisting in watersheds.
- Road salt can be lost to moisture, and should not be stored in areas exposed to water or within close proximity to salt-sensitive environments.
- A permanent underroof structure is the best option for road salt storage.

Road/Sidewalk Salt Use

- More salt does not mean more melting!
  - Use less than 4 pounds of salt per 1,000 square feet (an average parking space is about 150 square feet).
  - One pound of salt is approximately what would fit into a heaping 12-ounce coffee mug.
  - Consider using a hand-held spreader to help apply a consistent amount.

- Sweep up excess
  - If salt or sand is visible on dry pavement, it is no longer doing any work and will be washed away.
  - Use this salt or sand somewhere else or throw it away.

Road/Sidewalk Salt Storage

Tarp large quantities

Salt must be stored on a non-porous surface.

Storage of Fertilizers and Pesticides

- Fertilizers and pesticides should be labeled and stored separately.
- Avoid mixing fertilizers and pesticides.
- Fertilizer and pesticide materials should be stored in dry locations.
- Apply using manufacturer's recommendations.


Spill Response – Spill Kits

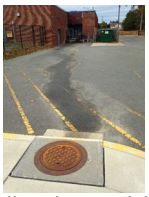
- Keep a spill kit in the vicinity of known hazard areas to immediately address spills or releases.
- If you have a hazard area which does not have a spill kit, please contact the Facilities Management Services Manager to have one added.
- Kits need to be replenished if they are running low on supplies.

Recognizing Illicit Discharges

- Sediment runoff from a construction site.
- Leaks from dumpsters, vehicles, emergency generators, etc.
- Unusual odors (petroleum, rotten eggs, etc.).
- Unusual textures (oily, muddy, etc.)
- Water or other liquid in a stormwater pond when there has been no rain

Missing silt fence allowing discharge of brown, muddy water!

Recognizing Illicit Discharges



- Unusual colored discharges (milky white, red, blue, green, purple, black)
- Washout of solids/liquids (oil, paint, concrete)
- Improper disposal of solids/liquids
- Fats, Oils, & Grease

Bacteria Reduction

- Provide signage, waste bags, and disposal containers to pick up dog waste
- Educate the public on how to prevent wildlife from accessing food sources (i.e. dumpsters, pet food, grease traps)
- Inspect commercial trash areas and washdown practices and enforcing corresponding policies

Sediment Reduction

- Enforce the use of proper erosion & sediment control techniques and measures to reduce the runoff of sediment from construction sites
- Remove excess sand/deicing material during the winter
- Conduct maintenance on curb and drop inlets to remove excess sediment BEFORE it leaves the campus
- Fix sinkholes as they appear (south campus basin)

Recognizing Illicit Discharges

Include the following information in your report so that an investigation can be conducted to verify if pollution is present and identify its sources:

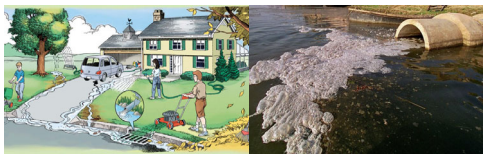
- Location
- Date and time
- Your contact information
- Description of pollution/observations
- Description of violator (if applicable)
- Pictures (if available)

Any observations of:
- Pollution entering the storm sewer system
- Illicit dumping
- Unusual odors, color, turbidity, or floating solids/liquids

Report Illicit Discharges to:
Kevin Witter
Office: (540) 857-7341

Public Education and Outreach

- Increase the public's knowledge of how to reduce stormwater pollution by implementing a diverse program targeting certain individuals or groups
- Teach the public about hazards associated with illegal discharges and the improper disposal of waste and how they negatively affect the local water sources



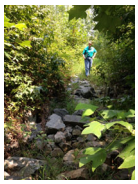
Public Education and Outreach

- Connecting with the public through these programs can also be a way to receive constructive input or feedback on the MS4 program
- The public can report potential stormwater pollution concerns or complaints

Maintenance and Construction

BMP Maintenance & Inspections

- Outfalls and basins (ponds, bio-beds) must be fully inspected at least annually.
- It is important to be aware of structural components of stormwater management.
- Structures will degrade and become less functional over time.



BMP Maintenance & Inspections

Annual Inspections & Maintenance

- Structures (inlets, outlets, and high-flow bypasses)
  - Inspect for damage
  - Repair promptly
- Vegetation Management
  - Cut and remove woody vegetation
  - Separate herbaceous roots if overcrowded
  - Replant if 50% vegetation coverage is not maintained.
- Inlet/Outlet Structures
  - Check for leaves and debris
  - Remove as needed
- Check for animal burrows – fill and lightly compact
- Check filter bed for sediment – remove as needed
- Inspect for signs of plant distress/vegetation loss

BMP Maintenance – Typical Bio Bed Issues

Ponding

Dead/Stressed Vegetation

Clogged Drains

BMP Maintenance & Inspections – Ponds

- Inspect pond outfalls, outlets, inlets, and basins.
- Structural components – structures will degrade and become less functional over time.
- Natural components – conditions such as drought, heavy rains, and wildlife can degrade systems.

BMP Maintenance – Typical Pond Issues

Damaged End Pipe

Blocked Outfall

Pipe Failure

Erosion

BMP Maintenance – Typical Pond Issues

Excessive Vegetation

Insufficient Vegetation

Sediment Accumulation

Animal Burrows

BMP Maintenance – Typical Pond Issues

Sinkhole

Erosion around inlet pipe

Leaf waste inside flow diverter

BMP Maintenance & Inspections – Drains

- Inspect curb inlets, drop inlets, and grates.
- Structural components – structures will degrade and become less functional over time.
- Natural components – conditions such as drought, heavy rains, and wildlife can degrade systems.

BMP Maintenance – Typical Drain Issues

Missing Grates

Clogged Drains

Clogged Inlets

BMP Maintenance – Typical Drain Issues

Trash Accumulation

BMP Maintenance – Typical Drain Issues

Damaged Structures

BMP Maintenance Schedule – Dry Ponds

Underground Systems

Routine Maintenance		Non-Routine Maintenance	
Task	Frequency	Task	Frequency
Remove accumulated debris & litter from contributing areas	Quarterly	Remove accumulated sediments from sediment chamber	1-2 yrs
Ensure contributing areas are not sources of vehicle fluids	Quarterly	Remove and replace top few inches of sand	1-2 yrs
Replace concrete shell	20-50 yrs	Replace filter media, replace underdrains	20 yrs
Stabilize/revegetate contributing areas	As Needed		

Bio Bed

Routine Maintenance		Non-Routine Maintenance	
Task	Frequency	Task	Frequency
Remove woody vegetation and leaves	Spring/Fall	Removed accumulated sediment	1-5 yrs
Remove accumulated gravel and sand from inlets	Spring	Repair curb inlets/structures	5-10 yrs
Remove accumulated litter	As Needed	Replace filter media	5-15 yrs
Fill animal burrows	ASAP		

Dry Pond

Routine Maintenance		Non-Routine Maintenance	
Task	Frequency	Task	Frequency
Remove accumulated debris & litter	Quarterly	Removed accumulated sediment/pollutants	2-10 yrs.
Mow, with heights less than 6-8 inches	2 /yr.	Dethatch grass to remove accumulated sediments	2 yrs
Remove woody vegetation from all dam & embankment areas	Spring/Fall	Aerate compacted area to promote infiltration	2-3 yrs
Stabilize/revegetate	As Needed	Replace components; reconstruct embankments	20-50 yrs
Fill animal burrows	ASAP		

Year 4 SW Facilities Inspection

Outfall #2

Riser of SWB on South Campus

Sinkhole in SWB on South Campus

Outfall #4

SWB to Outfall #3

Landscaping & Nutrient Management

VWCC Nutrient Management Plan 2015-2019

A nutrient management plan consists of:

- Proper nutrient application rates
- Application timing and methods to reduce runoff
- Safe nutrient storage and handling

The nutrient management plan is necessary to reduce eutrophication (creation of dead zones in streams, ponds, and lakes) from contaminated runoff.

Landscaping & Nutrient Management

- Timing of application, and application rates of fertilizer can maximize efficiency, save money, and reduce contamination of runoff.
- Use native or adapted plants to reduce water, fertilizer, and pesticide needs.
- The optimum fertilizer application time for most plants is in early spring before growth begins, or shortly after the plants have begun growing.
- Apply fertilizer just before light, steady rains
- Avoid applying pesticides before rains.

Landscaping & Nutrient Management

- Avoid over-watering to prevent excess run-off.
- Plant vegetation on bare areas and use mulching or matting for landscape areas.
- Leave grass trimmings on the lawn or compost.

Vehicle Maintenance

- Vehicle maintenance activities can release a huge variety of oils, greases, and other chemical products.
- Minimize oil and chemicals in stormwater runoff – address spills with dry absorbent methods such as absorbent pads, booms, or litter.

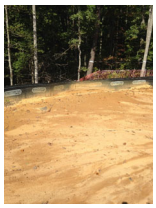
Construction Inspections

- Project Site Inspection
  - Before
  - During
  - After
- Inspections must be conducted by a VDEQ-Certified Erosion & Sediment Control Inspector.
- Inspect For
  - Pollutant Sources – Addressed? Who is responsible?
  - BMPs – Installed? Installed as designed? Operating? Repairs needed?
  - SWPPP
- Maintain *written* records of inspections, pollutant sources, spills or incidents, pollutant reduction practices in use, and alterations to original E&S plans.

Sediment & Erosion Control

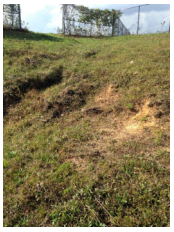
- Properly install and maintain BMPs to reduce soil erosion and sediment loss from construction sites

Hay Bales



Silt Fence

Erosion Examples



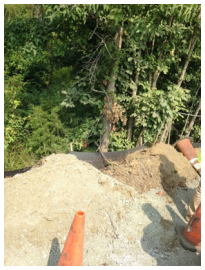
Stabilization techniques are necessary in highly erodible areas

Runoff should contain minimal sediment

Construction Issue Examples

Release Hazards

Material Storage Areas



Compromised Silt Fence

Emergency Response

In the event of a chemical or petroleum release (e.g. fuel tank leak):

1. Respond to injuries
2. Notify the Facilities Management Services Manager
   Kevin Witter
   Office: (540) 857-7341
3. The Facilities Management Services Manager will coordinate clean-up efforts with:
   WEL Inc. – Environmental Services:
   800 Liberty Rd NE, Roanoke, VA 24012
   Phone: (540) 561-0735

Prevention is Key

- DO NOT dump anywhere except the designated area for proper disposal.
- DO NOT store chemicals/materials in a manner that is likely to cause a spill or leak.
- Report any leaks or spills IMMEDIATELY.
- Report illicit discharges and activity that may cause illicit discharges.
- Report obvious erosion or excessive runoff.
- Report any damages to stormwater facilities.

Notify the Facilities Management Services Manager

Kevin Witter

Office: (540) 857-7341

Conclusions

- Pollutants are materials we interact with on a day to day basis. It is important to reduce the quantities that escape into our stormwater system.
  - Prevention is key in meeting WLAs and reducing or eliminating pollutants in stormwater runoff.
  - Prevention can be accomplished through handling, storing, and disposing of materials in the proper manner.
  - Maintaining strict policies and procedures will ensure that inspection standards are met.
- Take Action!
  - If you see a spill or materials that are not stored correctly, take the appropriate steps to mediate the situation!

Contact

Kevin Witter

Director of Facilities, Planning, and Development

E-mail: kwitter@virginiawestern.edu
Phone: (540) 857-7341

VIRGINIA WESTERN
WE'LL TAKE YOU THERE

Questions?

APEX

Recycling Management Report - 7/1/18 to 6/30/2019

Removal & Inspections Of Recycling Bins Located On Campus

Report Completed By: Peter Stocki					6/30/2019	
BUILDING NAME AND LOCATIONS	PAPER (NUMBER OF BAGS)		PLASTIC (NUMBER OF BAGS)		TOTAL WEIGHT OF RECYCLING MATERIALS	
	1/2	FULL	1/2	FULL	PAPER	PLASTIC
FISHBURN HALL						
Ground Floor	4	0	4	0	80	30
First Floor	8	0	8	0	160	60
Second Floor	13	0	13	0	260	97.5
BROWN LIBRARY						
Ground Floor	7	0	6	0	140	45
First Floor	6	0	7	0	120	52.5
Second Floor	14	0	12	0	280	90
ANDERSON HALL						
First Floor	11	0	11	0	220	82.5
Second Floor (NO RECYCLE BIN)	0	0	0	0	0	0
Third Floor	5	0	4	0	100	30
BUSINESS SCIENCE BLDG.						
First Floor	11	0	11	0	220	82.5
Second Floor	12	0	12	0	240	90
Third Floor	11	0	10	0	220	75
BRIDGE AREA						
Main Floor	8	0	8	0	160	60
WEBBER HALL						
First Floor	9	0	10	0	180	75
Second Floor	8	1	8	1	200	75
Third Floor	9	0	9	0	180	67.5
NATURAL SCIENCE BLDG.						
Main Floor	11	0	11	0	220	82.5
GREENHOUSE						
Main Floor (NO RECYCLE BIN)	0	0	0	0	0	0
CHAPMAN HALL						
Main Floor	12	0	12	1	240	105
BOOKSTORE-CRAIG HALL						
Main Floor	10	1	9	0	240	67.5
DUNCAN HALL						
First Floor (NO RECYCLE BIN)	1	0	2	0	20	15
Second Floor	0	0	1	0	0	7.5
INFILL AREA						
First Floor	9	0	9	0	180	67.5
Second Floor (NO RECYCLE BIN)	0	0	0	0	0	0
HUMANITIES BUILDING						
First Floor	14	0	14	0	280	105
Second Floor	11	0	11	0	220	82.5
THOMAS CENTER						
First Floor	7	0	7	0	140	52.5
Second Floor	7	0	7	0	140	52.5
STUDENT CENTER						
First Floor	11	0	11	0	220	82.5
Second Floor	10	0	9	0	200	67.5
COLLEGE SERVICES BLDG.						
Main Floor	12	0	12	0	240	90
P.E. BUILDING						
Main Floor (NO RECYCLE BIN)	0	0	0	0	0	0
Fralin Center						
First Floor	6	0	6	0	120	45
Second Floor	9	0	9	0	180	67.5
Third Floor	10	0	11	0	200	82.5
Fourth Floor	6	0	6	0	120	45
TOTALS FOR THIS REPORTING PERIOD	>>	>>	>>	>>	5720	2130

Report Period: July 2018 through September 2018

Recycling and Waste Stream Summary

We have saved:

Landfilled	256.0 tons	95.8%
Diverted	11.3 tons	4.2%
Total	267.4 tons	100.0%





Paper	Plastic	Aluminum	Glass	Cardboard
2.5 tons	0.2 tons	0.2 tons	0.9 tons	7.5 tons

These recycling efforts conserved the following resources:

150 mature trees
Enough to produce 1,854,099 sheets of newspaper

41 cubic yards of landfill space
Enough airspace to meet the disposal needs of 52 people

18,090 kW-hrs of electricity
Enough to power 1 homes for a full year

40 metric tons of CO2 equivalent
Preventing greenhouse gas emissions

69,834 gallons of water
Enough to meet the fresh water needs of 931 people for a year

Created on 10/10/2018

The recycling and waste data used in this report is based on actual customer data, historic WM studies, and EPA averages. For a more detailed analysis of your waste stream, talk to your WM rep about conducting a waste stream audit.

WASTE MANAGEMENT

THINK GREEN®

Report Period: October 2018 through December 2018

Recycling and Waste Stream Summary

We have saved:

Landfilled	247.0 tons	95.6%
Diverted	11.3 tons	4.4%
Total	258.3 tons	100.0%





Paper	Plastic	Aluminum	Glass	Cardboard
2.5 tons	0.2 tons	0.2 tons	0.9 tons	7.5 tons

These recycling efforts conserved the following resources:

150 mature trees
Enough to produce 1,854,099 sheets of newspaper

41 cubic yards of landfill space
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Enough to power 1 homes for a full year

40 metric tons of CO2 equivalent
Preventing greenhouse gas emissions

69,834 gallons of water
Enough to meet the fresh water needs of 931 people for a year

Created on 01/11/2019

The recycling and waste data used in this report is based on actual customer data, historic WM studies, and EPA averages. For a more detailed analysis of your waste stream, talk to your WM rep about conducting a waste stream audit.

WASTE MANAGEMENT

THINK GREEN®

Report Period: January 2019 through March 2019

Recycling and Waste Stream Summary

We have saved:

Landfilled	248.3 tons	95.6%
Diverted	11.5 tons	4.4%
Total	259.8 tons	100.0%





Paper	Plastic	Aluminum	Glass	Cardboard
2.5 tons	0.3 tons	0.3 tons	0.9 tons	7.6 tons

These recycling efforts conserved the following resources:

152 mature trees
Enough to produce 1,877,887 sheets of newspaper

42 cubic yards of landfill space
Enough airspace to meet the disposal needs of 53 people

18,322 kW-hrs of electricity
Enough to power 1 homes for a full year

41 metric tons of CO2 equivalent
Preventing greenhouse gas emissions

70,730 gallons of water
Enough to meet the fresh water needs of 943 people for a year

Created on 04/10/2019

The recycling and waste data used in this report is based on actual customer data, historic WM studies, and EPA averages. For a more detailed analysis of your waste stream, talk to your WM rep about conducting a waste stream audit.

WASTE MANAGEMENT

THINK GREEN®

Report Period: April 2019 through June 2019

Recycling and Waste Stream Summary

We have saved:

Landfilled	251.8 tons	95.5%
Diverted	11.8 tons	4.5%
Total	263.6 tons	100.0%





Paper	Plastic	Aluminum	Glass	Cardboard
2.6 tons	0.3 tons	0.3 tons	0.9 tons	7.8 tons

These recycling efforts conserved the following resources:

155 mature trees
Enough to produce 1,925,465 sheets of newspaper

43 cubic yards of landfill space
Enough airspace to meet the disposal needs of 54 people

18,786 kW-hrs of electricity
Enough to power 1 homes for a full year

42 metric tons of CO2 equivalent
Preventing greenhouse gas emissions

72,522 gallons of water
Enough to meet the fresh water needs of 966 people for a year

Created on 07/11/2019

The recycling and waste data used in this report is based on actual customer data, historic WM studies, and EPA averages. For a more detailed analysis of your waste stream, talk to your WM rep about conducting a waste stream audit.

WASTE MANAGEMENT

THINK GREEN®

Clean-Away Parking Lot Cleaning Service

a subsidiary of POGO, Inc.
P. O. Box 237
Cloverdale, VA 24077 - 0237
(540) 992-6163

Invoice

Date	Invoice #
4/29/2019	12181

Bill To
VA Western Community College Attn: Accounts Payable 3093 Colonial Ave. SW Roanoke, VA 24015

Description	Amount
Picked-up / removed 10 cubic yards of debris on 04/28/19 at Virginia Western Community College located on Colonial Avenue in Roanoke, VA PURCHASE ORDER #EP2819060-	2,400.00

Please remit to above address. Thank you for your business.

Total $2,400.00

CLEAN-AWAY PARKING LOT CLEANING SERVICE

(A subsidiary of POGO, Inc.)
P. O. BOX 237, CLOVERDALE, VA 24077-0237
OFFICE (540) 992-6163
FAX (540) 992-4586

DATE 6/12/19.

TO: Kimberly Rose

FAX NO. 540-857 6023

FROM:
Bob Poehner
Pogo Outdoor Adv, Inc.

MESSAGE: I think this is what your looking for. Have a good afternoon.

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