



**County of Powhatan,  
Virginia**

**Plan Submittal Checklist**

**For Erosion and Sediment Control Plans**

Powhatan County, Virginia

Environmental Management

3834 Old Buckingham Road: Suite F

Powhatan, VA 23139

**For Office Use Only**

Case Number

Plan Submittal Date

Last Revision: Oct. 1, 2025

Please fill in all blanks and reference the plan pages or sheets where relevant information may be found. For a submittal to be deemed complete, 1 full set of physical plans and calculations shall be submitted with the application along with a full digital set emailed to the environmental coordinator. Payment is due upon submission. Incomplete submittals will not be accepted.

Applicant Information	
Applicant	
Address	
Phone Number	
Email Address	

Plan Information	
Project Name	
VSMP Permit Number	
Site Plan Number	
Site Address	
Property Owner (Name/Phone)	
Principal Designer (Name/Phone)	
General Contractor (Name/Phone)	

Checklist Preparer Certification	
<p>I, _____, certify that I am a professional in adherence to all minimum standards and requirements pertaining to the practice of that profession in accordance with Chapter 4 (§ 54.1-400 et seq.) of Title 54.1 of the Code of Virginia and attendant regulations.</p> <p>By signing this checklist I am certifying that this document and all attachments are, to the best of my knowledge and belief, true, accurate, and complete.</p>	
Signature	
Printed Name	
Qualifications	
Date	

Fees & Plan Copies	
Application Fee <i>\$1000.00 plus \$250.00 per Disturbed Acre or Portion Thereof</i>	
Bond and Surety <i>\$3,000 per Disturbed Acre or Portion Thereof</i>	

### General Submission Requirements Checklist

*A complete set of plans shall be submitted, including all sheets pertaining to the site grading and stormwater and activities impacting erosion and sediment control and drainage.*

#### General Requirements

**Professional's Seal:** The designer's original seal, signature, and date are required on the cover sheet of each Narrative and each set of Plan Sheets. A facsimile is acceptable for subsequent Plan Sheets.

**Two Sets ESC Plans:** The DEQ office will retain all submitted plans.

**Variiances:** Variiances requested at the time of plan submission are governed by Section 9VAC25-840-50 of the *Virginia Erosion and Sediment Control Regulations*.

**Certified Responsible Land Disturber (RLD):** A certified RLD is required during all stages of construction, from the initial land disturbance through final site stabilization. The name of the project RLD must be provided before any land disturbance may begin. Notify DEQ in a timely manner if the RLD changes during the course of the project.

#### Plan Sheets

Existing Conditions

Demolition

Site Grading

Erosion and Sediment Control

Storm Sewer Systems

Stormwater Management Facilities

Utility Layout

Landscaping

On-site and Off-site Borrow and Disposal Areas that do not have separate approved ESC Plans

**Narrative Checklist**

Sheet No.

		<b>Project Description.</b> Briefly describe the nature and purpose of the land-disturbing activity. Provide the area (acres) to be disturbed.
		<b>Existing Site Conditions.</b> Describe the existing topography (% slopes), ground cover, and drainage (on-site and receiving channels).
		<b>Adjacent Areas.</b> Describe all neighboring areas such as residential developments, agricultural areas, streams, lakes, roads, etc., that might be affected by the land disturbance.
		<b>Off-site Areas.</b> Describe any off-site land-disturbing activities that may occur (borrow sites, disposal areas, easements, etc.). Identify the Owner of the off-site area and the entity 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.
		<b>Soils.</b> Provide a description of the soils on the site, giving such information as soil name, mapping unit, erodibility, permeability, surface runoff, and a <i>brief</i> description of depth, texture and soil structure. Show the site location on the Soil Survey, if it is available. Include a plan showing the boundaries of each soil type on the development site.
		<b>Critical Areas.</b> Provide a description of areas on the site that have potentially serious erosion problems or that are sensitive to sediment impacts (e.g., steep slopes, watercourses, wet weather / underground springs, etc.).
		<b>Erosion and Sediment Control Measures.</b> Describe the structural and vegetative methods that will be used to control erosion and sedimentation on the site. Controls should satisfy applicable minimum standards and specifications in Chapter 3 of the 1992 <i>Virginia Erosion and Sediment Control Handbook</i> (VESCH) or more stringent local requirements.
		<b>Management Strategies/Sequence of Construction.</b> Address management strategies, the sequence of construction, and any phasing of installation of ESC measures.
		<b>Permanent Stabilization.</b> Provide a brief description, including specifications, of how the site will be stabilized after construction is completed.
		<b>Maintenance of ESC Measures.</b> Provide a schedule of regular inspections, maintenance, and repair of erosion and sediment control structures

**Narrative Checklist (Cont.)** *Sheet No.*

		<b>Calculations for Temporary ESC Measures.</b> For each temporary ESC measure, provide the calculations required by the standards and specifications.
		<b>Stormwater Management Considerations.</b> Will the development of the site cause an increase in peak runoff rates? Will the increase in runoff cause flooding or channel degradation downstream? Describe the strategy to control stormwater runoff, including during construction
		<b>Specifications/Detail Drawings for ESC Measures.</b> For each erosion and sediment control measure employed in the plan, include, at a minimum, the detail from the standard and specification in the VESCH or more stringent local requirements. Include any approved variances or revisions to the standards and specifications.
		<b>Specifications for Stormwater and Stormwater Management Structures.</b> Provide specifications for stormwater and stormwater management structures, i.e., pipe materials, pipe bedding, stormwater structures.

**Site Plan Checklist** *Sheet No.*

		<b>Vicinity Map.</b> Include a small map locating the site in relation to the surrounding area. Include any landmarks that might assist in locating the site.
		<b>Indicate North.</b> Show the direction of north in relation to the site.
		<b>Off-site Areas.</b> Include any off-site land-disturbing activities (e.g., borrow sites, disposal areas, etc.) not covered by a separate approved ESC Plan.
		<b>Legend.</b> Provide 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.
		<b>Property Lines and Easements.</b> Show all property and easement lines. For each adjacent property, list the deed book and page number and the property owner's name and address.
		<b>Existing Vegetation.</b> Show the existing tree lines, grassed areas, or unique vegetation.

**Site Plan Checklist (Cont.)** *Sheet No.*

		<b>Limits of Clearing and Grading.</b> Delineate all areas that are to be cleared and graded.
		<b>Protection of Areas Not Being Cleared.</b> Fencing or other measures to protect areas that are not to be disturbed on the site.
		<b>Critical Areas.</b> Note all critical areas on the plan.
		<b>Existing Contours.</b> Show the existing contours of the site.
		<b>Final Contours and Elevations.</b> Show changes to the existing contours, including final drainage patterns.
		<b>Site Development.</b> Show all improvements, such as buildings, parking lots, access roads, utility construction, etc. Show all physical items that could affect or be affected by erosion, sediment, and drainage.
		<b>Location of practices.</b> Detail the locations of erosion and sediment control and stormwater management practices used on the site. Use the standards symbols and abbreviations found in Chapter 3 of the VESCH.

**Conveyances Checklist** *Sheet No.***Adequate Conveyances.**

Ensure that stormwater conveyances with adequate capacity and adequate erosion resistance have been provided for all on-site concentrated stormwater runoff. Off-site channels that receive runoff from the site, including those receiving runoff from stormwater management facilities, must be adequate. Increased volumes of sheet flows must be diverted to a stable outlet, adequate channel, pipe or pipe system, or a stormwater management facility.

		<b>Drainage Area Exhibits.</b> Provide exhibits showing the drainage divides, the direction of flow, and the size (acreage) of each of the site drainage areas that discharge runoff off-site, both existing and proposed.
		<b>Runoff Calculations.</b> Provide calculations for pre- and post-development runoff from these drainage areas.
		<b>Minimum Standard 19 Met.</b> Ensure that Minimum Standard 19 is satisfied for each off-site receiving channel, including those that receive runoff from stormwater management facilities.

**Conveyances Checklist (Cont.)**

Sheet No.

		<b>Stormwater Management Facility Calculations.</b> Provide calculations for the design of each permanent stormwater management facility.
		<b>Sheet Flows.</b> Ensure that increased volumes of sheet flows are diverted to a stable outlet, to an adequate channel, pipe or pipe system, or to a stormwater management facility.
		<b>Direction of Flow for Conveyances.</b> Indicate the direction of flow for all stormwater conveyances (storm drains, stormwater conveyance channels).
		<b>Storm Drain Profiles.</b> Provide profiles of all storm drains except roof drains. If the type of pipe (RCP, CMP, HDPE, etc.) is not called out on the profiles, then the most conservative pipe material that may be specified for the project must be used in the adequacy calculations.

**Calculations for Permanent Stormwater Conveyances.**

For each permanent stormwater conveyance or structure, provide the following design calculations, as applicable:

		Drainage area map with time of concentration ( $T_c$ ) path
		$T_c$ calculation/nomograph
		Locality IDF curve
		Composite runoff coefficient or RCN calculation
		Peak runoff calculations
		Stormwater conveyance channel design calculations
		Storm drain and storm sewer system design calculations
		Hydraulic Grade Line if any pipe in the system is more than 90% full for a 10-year storm
		Culvert design calculations
		Drop inlet backwater calculations
		Curb inlet length calculations

**Minimum Standards Checklist**

Yes    No    N/A

			<b>MS-1</b>	Have temporary and permanent stabilization been addressed in the narrative?
				Are practices shown on the plan?
				Temporary and permanent seed specifications?
				Lime and fertilizer?
				Mulching?
				Blankets/Matting?
				Pavement/Construction Road Stabilization?
			<b>MS-2</b>	Has stabilization of soil stockpiles, borrow areas, and disposal areas been addressed in the narrative and on the plan?
				Have sediment trapping measures been provided?
			<b>MS-3</b>	Has the establishment and maintenance of permanent vegetative stabilization been addressed?
			<b>MS-4</b>	Does the plan specifically state that sediment-trapping facilities shall be constructed as a first step in land-disturbing activities?
			<b>MS-5</b>	Does the plan specifically state that stabilization of earthen structures is required immediately after installation? Is this noted for each measure on the plan?
			<b>MS-6</b>	Are sediment traps and sediment basins specified where needed and designed to the standard and specification?
			<b>MS-7</b>	Have the design and temporary/permanent stabilization of cut and fill slopes been adequately addressed? Is Surface Roughening provided for slopes steeper than 3:1?
			<b>MS-8</b>	Have adequate temporary or permanent conveyances (paved flumes, channels, slope drains) been provided for concentrated stormwater runoff on cut and fill slopes?
			<b>MS-9</b>	Has water seeping from a slope face been addressed (e.g., subsurface drains)?

**Minimum Standards Checklist (Cont.)**

This checklist includes the current regulations of Minimum Standard 19 found at <https://law.lis.virginia.gov/admincode/title9/agency25/chapter870/section66/>

Yes    No    N/A

			<b>MS-10</b>	Is adequate inlet protection provided for all operational storm drain and culvert inlets?
			<b>MS-11</b>	Are adequate outlet protection and/or channel linings provided for all stormwater conveyance channels and receiving channels?
				Is there a schedule indicating: Dimensions of the outlet protection? Lining? Size of riprap?
				Is there a schedule indicating: Cross section and slope of the channels? Type of lining? Size of riprap, if used?
			<b>MS-13</b>	Are temporary stream crossings of non-erodible material required where applicable?
			<b>MS-14</b>	Are all applicable federal, state and local regulations pertaining to working in or crossing live watercourses being followed?
			<b>MS-15</b>	Has immediate re-stabilization of areas subject to in-stream construction (bed and banks) been adequately addressed?
			<b>MS-16</b>	Have disturbances from underground utility line installations been addressed?
				No more than 500 linear feet of trench open at one time?
				Effluent from dewatering filtered or passed through a sediment-trapping device?
				Proper backfill, compaction, and re-stabilization?
			<b>MS-17</b>	Is the transport of soil and mud onto public roadways properly controlled? (i.e., Construction Entrances, wash racks, transport of sediment to a trapping facility, cleaning of roadways at the end of each day, no washing before sweeping and shoveling)
			<b>MS-18</b>	Has the removal of temporary practices been addressed?
				Have the removal of accumulated sediment and the final stabilization of the resulting disturbed areas been addressed?
			<b>MS-19</b>	Are properties and waterways downstream from development adequately protected from sediment deposition, erosion, and damage due to increases in volume, velocity and peak flow rate of stormwater runoff? Have adequate channels been provided on-site?