JAMES MADISON UNIVERSITY®

Standards & Specifications for Erosion and Stormwater Management

DEQ VA SWM Handbook V1.0 (or later)
Appendix J Template

2025 Edition

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JMU® Stormwater Management

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Virginia Department of Environmental Quality

Standards and Specifications # SS021 (Note: to be entered by the Department)

Standards and Specifications Agreement

For

JAMES MADISON UNIVERSITY

1.1 Standards and Specifications Entity

Entity Name:	James Madison University
Entity Address:	181 Patterson Street, MSC 7004
City, State, and Zip Code:	Harrisonburg, VA 22807
Contact Name:	Alison Sloop
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Contact Email:	witmanad@jmu.edu
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1.2 Standards and Specifications Entity Type

- [x] State
- [ ] Federal
- [ ] Linear Utility
- [ ] Public Service Authority
- [ ] Wetland/Stream

1.3 Standards and Specifications Agreement Information

Agreement Date: 04/01/2025 - 04/01/2030

Date of previously approved agreement: 3/15/2021

Have there been any updates to your previously approved agreement? ☐ ■ Yes ☐ No

1.4 Certification

"I certify under penalty of law that this agreement 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."

Printed Name:	Alison Sloop
Title:	Stormwater Coordinator, Facilities Management Engineering & Construction
Signature:	Alison Sloop Digitally signed by Alison Sloop Date: 2025.04.03 12:31:35 -04'00'
Date:	4/3/25

1.5 Administration

Per § 62.1-44.15:31 of the Code of Virginia, the Virginia Department of Transportation shall; any other state agency or federal entity may; and electric, natural gas, and telephone utility companies; interstate and intrastate natural gas pipeline companies; railroad companies; and authorities created pursuant to § 15.2-5102 of the Code of Virginia may submit standards and specifications, for approval by the Virginia Department of Environmental Quality (Department), who serves as the Virginia Erosion and Stormwater Management Program (VESMP) authority for all land-disturbing activities subject to approved standards and specifications. The Standards and Specifications Program is designed to provide a single set of standards and specifications, the Virginia Stormwater Management Handbook, Version 1.0, that describes how entities with approved standards and specifications conduct land-disturbing activities in a manner that will be consistent with the requirements of the Virginia Erosion and Stormwater Management Act (VESMA), Virginia Erosion and Stormwater Management Regulation, and the General Virginia Pollutant Discharge Elimination System (VPDES) Permit for Discharges of Stormwater from Construction Activities (Construction General Permit).

JAMES MADISON UNIVERSITY, hereinafter the "S&S Entity," is responsible for administering, implementing, and complying with the standards and specifications for Erosion and Sediment Control (ESC) and Stormwater Management (SWM) set out in this agreement by following the design criteria in the Virginia Stormwater Management Handbook, Version 1.0, for regulated land disturbing activities.

Please refer to JMU's Site Plan Review webpage to ensure compliance with internal processes in the planning and implementation of regulated and unregulated land disturbing projects, as well as ensuring compliance with the University's policies related to stormwater management and erosion and sediment control.

1.6 Regulated Land-Disturbing Activities

A. Land-disturbing activities that meet one of the criteria below are regulated as follows:
   1. Land-disturbing activity that disturbs 10,000 square feet or more, is less than one acre, not in an area of a locality designated as a Chesapeake Bay Preservation Area, and not part of a common plan of development or sale, is subject to criteria defined in Article 2 (9VAC25-875-540 et seq.) of Part V of the Virginia Erosion and Stormwater Management Regulation (Regulation).
   2. Land-disturbing activity that disturbs 2,500 square feet or more, is less than one acre, and in an area of a locality designated as a Chesapeake Bay Preservation Area is subject to criteria defined in Article 2 (9VAC25-875-540 et seq.) and Article 3 (9VAC25-875-570 et seq.) of Part V of the Regulation unless Article 4 (9VAC25-875-670 et seq) of Part V is applicable, as determined in accordance with 9VAC25-875-480 and 9VAC25-875-490.
   3. Land-disturbing activity that disturbs less than one acre, but is part of a larger common plan of development or sale that disturbs one acre or more, is subject to criteria defined in Article 2 (9VAC25-875-540 et seq.) and Article 3 (9VAC25-875-570 et seq.) of Part V of the Regulation unless Article 4 (9VAC25-875-670 et seq) of Part V is applicable, as determined in accordance with 9VAC25-875-480 and 9VAC25-875-490.
   4. Land-disturbing activity that disturbs one acre or more is subject to criteria defined in Article 2 (9VAC25-875-540 et seq.) and Article 3 (9VAC25-875-570 et seq.) of Part V of the Regulation unless Article 4 (9VAC25-875-670 et seq.) of Part V is applicable, as determined in accordance with 9VAC25- 875-480 and 9VAC25-875-490.

B. Land-disturbing activities exempt per 9VAC25-875-90 are not required to comply with the requirements of the VESMA unless otherwise required by federal law.

1.7 Certified Personnel

A. The S&S Entity's administrator shall be responsible for the management and coordination of this standards and specifications agreement and shall be certified as a Dual Combined Administrator as outlined in 9VAC25- 875-400.

B. Plan Reviewers shall review all ESC and SWM plans for compliance with this standards and specifications agreement and all applicable laws and regulations. Plan reviewers shall be certified as a Plan Reviewer for ESC and a Plan Reviewer for SWM or as a Dual Plan Reviewer, as outlined in 9VAC25-875-400.

C. Compliance inspectors shall be responsible for the inspection and compliance of ESC, SWM, and stormwater pollution prevention plan practices. They shall be certified as an Inspector for ESC and an Inspector for SWM or as a Dual Inspector, as outlined in 9VAC25-875-400.

1.8 Review and Approval of Plans

A. The S&S Entity has the authority to approve soil erosion control and stormwater management (ESM) plans, except for activities not required to comply with the requirements of the Virginia Erosion and Stormwater Management Act (VESMA), under § 62.1-44.15:34 of the Code of Virginia. The ESM plan is a document describing methods for controlling soil erosion and managing stormwater in accordance with the requirements adopted pursuant to the VESMA. The ESM plan may consist of aspects of the erosion and sediment control plan and the stormwater management plan as each is described in the Virginia Erosion and Stormwater Management Regulation. (9VAC25-875-20)

B. ESM plans must be approved in writing. If a third party is used to fulfill the certification of the plan reviewer, the third-party reviewer may recommend approval to the S&S Entity; however, the S&S Entity formally approves the plan in writing. The date of the approvable plan should be noted in the approval letter signed by the S&S Entity's certified plan reviewer.

C. Plans must be reviewed and approved by Department-certified personnel, as outlined in 9VAC25-875-400, to ensure compliance with these Standards and Specifications for ESC and SWM and reviewed by the S&S Entity for consistency with the Virginia Stormwater Management Handbook, Version 1.0, and applicable permit and regulatory requirements.

D. The Department may require changes to an approved ESM plan in the following cases:

   1. Where inspection has revealed that the plan is inadequate to satisfy applicable regulations or ordinances; or
   2. Where the S&S Entity finds that because of changed circumstances, or for other reasons, the plan cannot be effectively carried out and proposed amendments to the plan, consistent with the requirements of the VESMA, are agreed to by the department, as the VESMP authority, and the S&S Entity.

1.9 Erosion and Sediment Control Plan - Contents of Plan

A. The S&S Entity shall prepare an erosion and sediment control plan for its land-disturbing activities. The erosion and sediment control plan shall contain all major conservation decisions to ensure that the entire unit or units of land will be treated to achieve the conservation objectives in 9VAC25-875-560. The erosion and sediment control plan shall be prepared in accordance with 9 VAC25-875-550 and be consistent with design criteria in the Virginia Stormwater Management Handbook, Version 1.0.

B. The person responsible for carrying out the plan shall provide the name of an individual holding a certificate who will be in charge of and responsible for carrying out the land-disturbing activity to the Department.

1.10 Erosion and Sediment Control Variances and Exceptions

A. The Department may waive or modify any of the standards that are deemed to be inappropriate or too restrictive for site conditions, by granting a variance. A variance may be granted under these conditions:

   1. Prior to construction, the S&S Entity may request a variance to become part of the approved erosion and sediment control plan. The S&S Entity shall explain the reasons for requesting variances in writing. Specific variances which are allowed by the department shall be documented in the plan.
   2. During construction, the person responsible for implementing the approved plan may request a variance in writing from the Department. The Department shall respond in writing either approving or disapproving such a request. If the department does not approve a variance within 10 days of receipt of the request, the request shall be considered disapproved. Following disapproval, the applicant may resubmit a variance request with additional documentation.

1.11 Stormwater Pollution Prevention Plan Contents

A. A stormwater pollution prevention plan shall include, but not be limited to, an approved erosion and sediment control plan, an approved stormwater management plan, a pollution prevention plan for regulated land- disturbing activities, and a description of any additional control measures necessary to address a total maximum daily load (TMDL) pursuant to 9VAC25-875-500 E.

B. An erosion and sediment control plan consistent with the requirements of 9VAC25-875-550 must be designed and implemented during construction activities. Prior to land disturbance, this plan must be approved by a Plan Reviewer for ESC or a Dual Plan Reviewer.

C. A stormwater management plan consistent with the requirements of 9VAC25-875-510 and the design criteria in the Virginia Stormwater Management Handbook, Version 1.0, must be designed and

implemented during construction activities. Prior to land disturbance, this plan must be approved by a Plan Reviewer for SWM or a Dual Plan Reviewer.

D. A pollution prevention plan that complies with 9VAC25-875-520 and identifies potential sources of pollutants that may reasonably be expected to affect the quality of stormwater discharges from the construction site and describes control measures that will be used to minimize pollutants in stormwater discharges from the construction site must be developed before land disturbance commences.

E. In addition to the requirements of subsections A through D of this section, if a specific wasteload allocation for a pollutant has been established in an approved TMDL and is assigned to stormwater discharges from a construction activity, additional control measures that are consistent with the Virginia Stormwater Management Handbook, Version 1.0, must be identified and implemented by the operator so that discharges are consistent with the assumptions and requirements of the wasteload allocation.

F. The stormwater pollution prevention plan must address the requirements specified in 40 CFR 450.21, to the extent otherwise required by state law or regulations and any applicable provisions of a state permit:

1. Control stormwater volume and velocity within the site to minimize soil erosion;
2. Control stormwater discharges, including both peak flow rates and total stormwater volume, to minimize erosion at outlets and to minimize downstream channel and stream bank erosion;
3. Minimize the amount of soil exposed during construction activity;
4. Minimize the disturbance of steep slopes;
5. Minimize sediment discharges from the site. The design, installation, and maintenance of erosion and sediment controls must address factors such as the amount, frequency, intensity, and duration of precipitation, the nature of resulting stormwater runoff, and soil characteristics, including the range of soil particle sizes expected to be present on the site;
6. Provide and maintain natural buffers around surface waters, direct stormwater to vegetated areas to increase sediment removal and maximize stormwater infiltration, unless infeasible;
7. Minimize soil compaction and, unless infeasible, preserve topsoil;
8. Stabilization of disturbed areas must, at a minimum, be initiated immediately whenever any clearing, grading, excavating, or other earth-disturbing activities have permanently ceased on any portion of the site, or temporarily ceased on any portion of the site and will not resume for a period exceeding 14 calendar days. Stabilization must be completed within a reasonable period of time or as otherwise determined by the department. In arid, semiarid, and drought-stricken areas where initiating vegetative stabilization measures immediately is infeasible, alternative stabilization measures must be employed as specified by the Department; and
9. Utilize outlet structures that withdraw water from the surface, unless infeasible, when discharging from basins and impoundments.

G. The stormwater pollution prevention plan shall be amended whenever there is a change in design, construction, operation, or maintenance that has a significant effect on the discharge of pollutants to state waters and that has not been previously addressed in the plan. The stormwater pollution prevention plan must be maintained at a central onsite location. If an onsite location is unavailable, notice of the stormwater pollution prevention plan's location must be posted near the main entrance at the construction site.

1.12 Stormwater Management Plan Contents

A. A stormwater management plan shall be developed and implemented as approved or modified by the Department-certified plan reviewer and shall be developed in accordance with the following:

1. A stormwater management plan for a land-disturbing activity shall apply the stormwater management technical criteria outlined in Article 3 (9VAC25-875-570 et seq.) of Part V of the Regulation to the entire land-disturbing activity.
2. A stormwater management plan shall consider all sources of surface runoff and all sources of subsurface and groundwater flows converted to surface runoff; and
3. Best management practices in the stormwater management plan are consistent with design criteria in the Virginia Stormwater Management Handbook, Version 1.0.

B. A complete stormwater management plan shall address all requirements of 9VAC25-875-510.

C. All final plan elements, specifications, or calculations of the stormwater management plans whose preparation requires a license under Chapter 4 (§ 54.1-400 et seq.) or 22 (§ 54.1- 2200 et seq.) of Title 54.1 of the Code of Virginia shall be appropriately signed and sealed by a professional who is licensed to engage in practice in the Commonwealth of Virginia. Nothing in this subsection shall authorize any person to engage in practice outside his area of professional competence.

1.13 Pollution Prevention Plan Contents

A. A plan for implementing pollution prevention measures during construction activities shall be developed, implemented, and updated as necessary. The pollution prevention plan shall detail the design, installation, implementation, and maintenance of effective pollution prevention measures as specified in 40 CFR 450.21(d) to minimize the discharge of pollutants. At a minimum, such measures must be designed, installed, implemented, and maintained to:
1. Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
2. Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials present on the site to precipitation and to stormwater; and
3. Minimize the discharge of pollutants from spills and leaks and implement chemical spill and leak prevention and response procedures.

B. The pollution prevention plan shall include effective best management practices to prohibit the following discharges in accordance with 40 CFR 450.21(e):
1. Wastewater from washout of concrete, unless managed by an appropriate control;
2. Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials;
3. Fuels, oils, or other pollutants used in vehicle and equipment operation and maintenance; and
4. Soaps or solvents used in vehicle and equipment washing.

C. Discharges from dewatering activities, including discharges from dewatering of trenches and excavations, are prohibited unless managed by appropriate controls in accordance with 40 CFR 450.21(c).

1.14 Technical Criteria for Regulated Land-Disturbing Activities

A. To protect the quality and quantity of state water from the potential harm of unmanaged stormwater runoff resulting from land-disturbing activities, the S&S Entity shall adhere to the technical criteria for regulated land-disturbing activities set forth in Part V of the Regulation expressly to include 9VAC25-875-580 [water quality design criteria requirements]; 9VAC25-875-590 [water quality compliance]; 9VAC25-875-600 [water quantity]; 9VAC25-875-610 [offsite compliance options]; 9VAC25-875-620 [design storms and hydrologic methods]; 9VAC25-875-630 [stormwater harvesting]; 9VAC25-875-640

[linear development project]; and, 9VAC25-875-650 [stormwater management impoundment structures or facilities], which shall apply to all land-disturbing activities, except as expressly set forth in 9VAC25-875-490.

B. The S&S Entity shall submit documentation that offsite options, approved by the Department or applicable state board, that are required to achieve the necessary phosphorous water quality reductions have been obtained prior to the commencement of the land-disturbing activity (i.e., prior to issuance of the permit). In the case of a phased project, the land disturber may acquire or achieve the offsite nutrient reductions prior to the commencement of each phase of the land-disturbing activity in an amount sufficient for each such phase.

1.15 Long-Term Maintenance of Permanent Stormwater Facilities

A. The S&S Entity shall submit a construction record drawing for permanent stormwater management facilities to the VESMP authority based on the locality where the land-disturbing activity will occur. The record drawing shall contain a statement signed by a professional registered in the Commonwealth of Virginia pursuant to Chapter 4 (§ 54.1-400 et seq.) of Title 54.1 of the Code of Virginia, stating that to the best of the professional's knowledge, the construction record drawing shows all adjustments and revisions to the stormwater management plan made during construction and serve as a permanent record of the actual location of all constructed elements.

B. The provision of long-term responsibility for and maintenance of stormwater management facilities and other techniques specified to manage the quality or quantity of runoff is required. Such requirements shall be set forth in a maintenance agreement which is recorded in the local land records prior to permit termination or earlier and shall at a minimum:

1. Be submitted to the VESMP authority for review and approval prior to the approval of the stormwater management plan;

2. Be stated to run with the land;

3. Provide for all necessary access to the property for purposes of maintenance and regulatory inspections;

4. Provide for inspections and maintenance and the submission of inspection and maintenance reports to the VESCP, or VESMP authority; and

5. Be enforceable by all appropriate governmental parties.

(Note: the Department has approved a model stormwater management facility maintenance agreement for use on projects where it is the permitting authority. The model agreement is in Section 10.2.1.1 of the Handbook.)

1.16 Project Tracking and Reporting

A. The S&S Entity is responsible for providing project tracking and electronic notifications to the Department of all regulated land-disturbing activities subject to this standards and specifications agreement to comply with the applicable ESC and SWM requirements pursuant to 9VAC25-875-830 D 6.

B. The S&S Entity must electronically notify the Department of any land- disturbing activities subject to approved standards and specifications that the S&S Entity intends to construct in Virginia prior to initiating land disturbance. The following information is required to be included in the electronic notification two weeks prior to initiating the regulated land-disturbing activity:

1. Project name and any associated Construction General Permit number;

2. Project location (including nearest intersection, latitude and longitude, or access point);
3. On-site project manager name and contact information;
4. Responsible Land Disturber (RLD) name and contact information;
5. Project description;
6. Acreage of disturbance for the project;
7. Anticipated project start and finish date; and
8. Any deviations/variances/exemptions/waivers associated with the project.

C. In addition to the prior land disturbance notification described above, the S&S Entity shall submit to the Department bi-annual linear project tracking of all active projects covered under this standards and specifications agreement from the last six months (including those previously reported). This bi-annual linear project tracking must include the acreage for all listed projects and shall be submitted by January 15th and July 15th of each year to the Department.

1.17 Monitoring, Inspections, and Enforcement

A. The S&S Entity or its designated inspector shall perform periodic inspections of the land-disturbing activity during construction for:
   1. Compliance with the approved erosion and sediment control plan;
   2. Compliance with the approved stormwater management plan;
   3. Development, updating, and implementation of a pollution prevention plan;
   4. Compliance with these Standards and Specifications.;
   5. Compliance with the permit, if applicable; and
   6. Development and implementation of additional control measures necessary to address a TMDL.

B. Periodic inspections are the responsibility of the S&S Entity and shall be conducted by an Inspector for ESC and Inspector for SWM or a Dual Inspector, as outlined in 9VAC25-875-400.

C. The Department will conduct periodic inspections on all projects during construction, including random inspections and inspections in response to complaints. Where inspections by Department personnel reveal deficiencies in carrying out an approved plan, the Department may take enforcement actions in accordance with the VESMA and related regulations.

Non-Virginia Stormwater Management Handbook (VSMH) Erosion and Sediment Control Measures

Non-VSMH and proprietary control measures shall be installed per the manufacturer's instructions, within the intent of the VSMH and follow the current version of the VSMH Chapter 7 specifications. Please note that all Non-VSMH measures will require that a detail, narrative, and manufacturer's installation and maintenance requirements be shown on the approved plan and/or included in the SWPPP. The below list are examples of proprietary measures that may be used on sites, as long as the above noted items are addressed and in compliance with Chapter 7 of the latest version of the VSMH.

1. Construction Entrance/Construction Road Stabilization Measures
    - Alturnamats
    - Versamats
2. Inlet Protection Measures
    - Dandy Bag/Dandy Curb/Dandy Sack
    - Erosion Eel
    - Gutter Buddy/Gutter Gator
    - SiltSack
    - Trench Drain Slot Guard
3. Perimeter Control Measures
    - Erosion Eel

This appendix does not replace the need for variance requests according to 9VAC25-875-170 and associated regulations or the need to record amendments, modifications, or updates to the SWPPP from commencement of land disturbance to NOT issuance – which includes changes to control measures on site not already specified in the approved ESC and SWM Plan.