VIRGINIA DEPARTMENT OF TRANSPORTATION

LOCATION AND DESIGN DIVISION

INSTRUCTIONAL AND INFORMATIONAL MEMORANDUM

GENERAL SUBJECT: Virginia Stormwater Management Program	NUMBER: IIM-LD-195.13
SPECIFIC SUBJECT: Requirements for Erosion & Sediment Control and Stormwater Management Plans for VDOT Projects	DATE: November 30, 2022
	SUPERSEDES: IIM-LD-195.12
APPROVAL:	Emmett R. Heltzel, P.E. State Location and Design Engineer Approved November 30, 2022

Changes are shaded.

CURRENT REVISION

- Updated information in Scenarios 3 and 4 including for routine maintenance
- Multiple revisions have been made throughout this memorandum to update and clarify certain sections, with these elements shown in gray highlights

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EFFECTIVE DATE

- Unless identified otherwise within this IIM, the information contained in this IIM is effective upon the approved date as noted herein.

1.0 PROGRAM PURPOSE AND NEED

1.1 VDOT's Stormwater Management Program

The Virginia Stormwater Management Act, the VSMP Regulations, the Virginia Pollutant Discharge Elimination System (VPDES) General Permit for Discharges of Stormwater from Construction Activities (the Construction General Permit – or CGP) and the VPDES Individual Permit for Discharge of Stormwater from Municipal Separate Storm Sewer System (Permit No. VA0092975) require that VDOT implement a stormwater management (SWM) Program that protects the quality and quantity of state waters from the potential harm of unmanaged stormwater runoff resulting from land-disturbing activities. This IIM addresses the application of these regulatory requirements as they relate to development of Post-Construction Stormwater Management Plans for VDOT land- disturbing activities.

Other elements of VDOT's SWM Program are addressed by the VDOT Drainage Manual and current editions of other IIMs, including:

- IIM-LD-242 which addresses the application and administration of the VPDES General Permit for Discharges of Stormwater from Construction Activities to VDOT Regulated Land Disturbing Activities (RLDAs);

- IIM-LD-243 which addresses signing and sealing of plans and documents including Erosion and Sediment Control (ESC)/SWM Plans and construction record drawings;

- IIM-LD-251 which addresses the purchase of nutrient credits to address post-construction water quality reduction requirements for VDOT land-disturbing activities associated with construction projects.

- IIM-LD-256 which addresses VDOT Oversight Responsibilities for VDOT projects with coverage under the VPDES General Permit for Discharges of Stormwater from Construction Activities and other Regulated Land Disturbing Activities.

- IIM-LD-258 which addresses policy, general information and regulatory requirements to identify VDOT's Roles and Responsibilities for Erosion & Sediment Control (ESC) and Stormwater Management (SWM) on Non-VDOT projects, such as for Locally Administered Projects (LAP), for which VDOT is not the Construction General Permit (CGP) permittee.

2.0 PROGRAM ADMINISTRATION

2.1 Administration of VDOT's ESC and SWM Standards and Specifications

VDOT's Annual ESC and SWM Standards and Specifications shall apply to all plan design, construction and maintenance activities administered by VDOT and performed either by its internal workforce or contracted to external entities, where such activities are regulated by the VESC and VSMP Law and Regulations.

VDOT's Annual ESC and SWM Standards and Specifications are a compilation of all VDOT documents related to the design, construction, inspection and maintenance of ESC measures, Pollution Prevention (P2) practices and post-development Best Management Practices (BMP) including, but not limited to, all or a portion of the following:

- Road & Bridge Standards
- Road & Bridge Specifications, Supplemental Specifications and Special Provisions
- IIMs
- Drainage Manual
- Pollution Prevention Field Guide for Construction Activities
- Road Design Manual
- Maintenance Division's BMP Inspection and Maintenance Manual

VDOT's Annual ESC and SWM Standards and Specifications are housed in an on-line electronic system which includes both the current and previous versions of the standards and specifications. The system is dynamic and items within may be added to, deleted or revised at any time to reflect changes or updates to VDOT's ESC and SWM Program.

Approval to use any portions of VDOT's Annual ESC and SWM Standards and Specifications, including this IIM, on non-VDOT projects/land-disturbing activities (e.g. Locality Administered Projects and Land Use Permit projects - see section 3.2 of this IIM for definition of non-VDOT projects/land-disturbing activities) shall be secured from the respective VESCP/VSMP Authority. For non-VDOT projects, the Authority means an authority approved by the State Water Control Board to operate a VESCP or VSMP, and can include the Virginia Department of Environmental Quality (DEQ), and a locality. Any approval to use portions of VDOT's Annual ESC and SWM Standards and Specifications, will presumably be part of the VSMP/VESCP Authorities overall plan approval process.

2.2 Approval of VDOT's ESC and SWM Standards and Specifications

VDOT annually submits its ESC and SWM Standards and Specifications to secure approval from DEQ. Through this process, DEQ authorizes VDOT to administer its ESC and SWM Program in accordance with the Annual ESC and SWM Standards and Specifications on all regulated land disturbance activities performed by VDOT's internal workforce or contracted by VDOT to external entities.

During any inspections of VDOT land-disturbing activities by DEQ, EPA, or other such regulatory agency, compliance with VDOT's Annual ESC and SWM Standards and Specifications (and all parts thereof) will be expected.

3.0 DETERMINING A REGULATED LAND-DISTURBING ACTIVITY

3.1 VDOT Regulated Land-Disturbing Activities

The SWM and ESC requirements are applicable to all land-disturbing activities where one acre or greater (2,500 square feet or greater in a designated CBPA) of land is disturbed, unless otherwise exempted. ESC requirements apply to all projects which disturb greater than or equal to 10,000 square feet (2,500 square feet or greater in a designated CBPA), unless otherwise exempted. See Section 3.3 of this IIM for discussion on the exemption for routine maintenance operations.

The VSMP Regulations and application of this IIM shall apply to all VDOT regulated land-disturbing activities, both construction and maintenance, administered by VDOT and performed either by its internal workforce or contracted to external entities, including those developed/constructed under, the Design/Build (DB) process and the Capital Outlay Program. PPTA/P3 projects are a special case and, while requiring consistency with VDOT standards and specifications, are often considered by DEQ to be "non-VDOT" projects for the purposes of permit issuance and ESC and SWM Plan review and approval. PPTA/P3 entities should consider that projects may be required to meet the local technical and administrative requirements and to secure permits from the applicable Local VSMP and VESCP Authorities, while at the same time maintaining consistency with the VDOT standards, specifications and contract provisions related to SWM and ESC.

Provisions for VDOT SWM Program administration including plan design, review and approval are further discussed in IIM-LD-242 and Chapter 11 of the VDOT Drainage Manual.

3.2 Non-VDOT Regulated Land-Disturbing Activities

Requirements for non-VDOT projects are referenced in IIM-LD-258.

3.3 Routine Maintenance Activities

In accordance with the Stormwater Act Virginia Code 62.1-44.15:34.C.7, routine maintenance is defined as those activities 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 for stormwater management purposes if performed to maintain the original line and grade, hydraulic capacity or original construction of the project.

According to EPA's 2017 Construction General Permit (CGP) Frequent Questions, re-grading a dirt road or cleaning out a roadside drainage ditch to maintain the "original as built" state is road maintenance and not active construction; repaving, for the purposes of VPDES CGP applicability, is routine maintenance unless underlying bare soils or surrounding soil is cleared, graded, or excavated as part of the repaving operation. Where repaving involves clearing, grading, or excavating (i.e., down to bare soils), ESC and VPDES CGP permit coverage is required if at least one acre is disturbed.

Routine maintenance activities are exempt from the Virginia Stormwater Management Act, the attending VSMP Regulations, and the VPDES Construction General Permit requirements, unless repaving exposes bare soils as part of the construction project, regardless of the amount of land disturbance. The routine maintenance exemption DOES NOT apply to the ESC Program and therefore ESC is required. Repaving projects that expose bare soils as part of an active construction project per Scenerios 3 and 4 require VDPES CGP permitting. See IIM-LD-242 and Chapter 10 of the VDOT Drainage Manual for more information on ESC Plan requirements.

Operations and Maintenance Activities:

Such activities include, but are not limited to: ditch cleaning operations, re-establishment of existing ditches that maintain the original line and grade, hydraulic capacity or original construction, pipe replacement or rehabilitation operations, bridge deck replacement, rural rustic road projects where underlying bare soils are not excavated or graded, and the normal operational procedures for maintaining the travel surface of unpaved/gravel roadways (i.e., dragging, blading, grading, etc.). Facilities that support the routine maintenance activity (e.g., disposal areas for surplus dirt, borrow pits, or staging areas) are not considered a part of the routine maintenance operation and, therefore, are not covered under the routine maintenance activity exemption.

For any maintenance activity being classified as routine, proper documentation of original conditions must be kept on file at the District office, and available upon request. Documentation of original conditions can be in the form of old plans, photographs or other such documents depicting the original line and grade, hydraulic capacity, or original construction or purpose of the facility. Written and signed

statements from those that know the history of the facility can also serve as documentation of the original conditions.

Roadway Construction and Maintenance Activities:

Scenario 1: Mill and Overlay ONLY (with no changes to geometrics)

The removal and replacement of an existing pavement structure within the same footprint that DOES NOT EXPOSE the subgrade soil, such as mill and overlay or sawcutting of pavement, IS NOT a land disturbing activity under ESC or SWM. The area of such existing pavement would not be included with the other land disturbance areas of the project for the purposes of determining the applicability of the VSMP Regulations and the VPDES General Construction Permit.

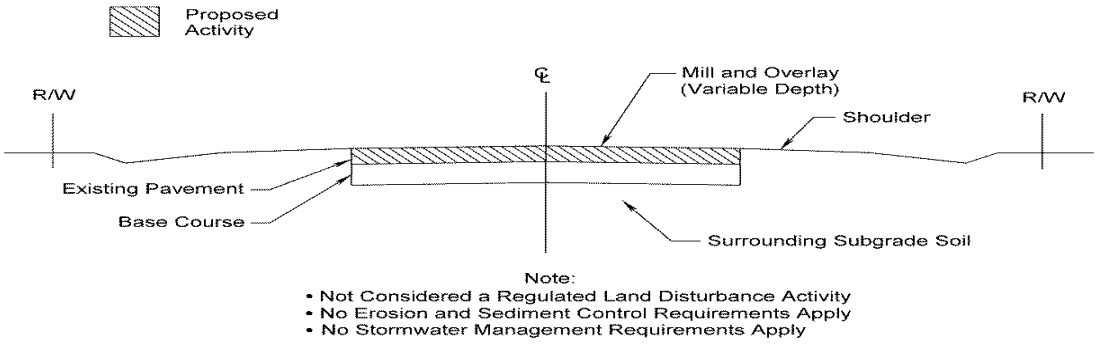


Figure 1. Scenario 1

Scenario 2: Mill and Overlay ONLY (with changes to geometrics)

The removal and replacement of an existing pavement structure within the same footprint that DOES NOT EXPOSE the subgrade soil, such as mill and overlay or sawcutting of pavement, IS NOT a land disturbing activity under ESC or SWM. The area of such existing pavement would not be included with the other land disturbance areas of the project for the purposes of determining the applicability of the VSMP Regulations and the VPDES Construction General Permit. However, the project must take into consideration the potential changes in site hydrology for the affected conveyances, and they must be evaluated and be in accordance with the VDOT Drainage Manual. Areas outside of the existing mill and overlay footprint that require removal of unsuitable material, grading, or other land disturbing activities shall be considered as land disturbing with associated requirements.

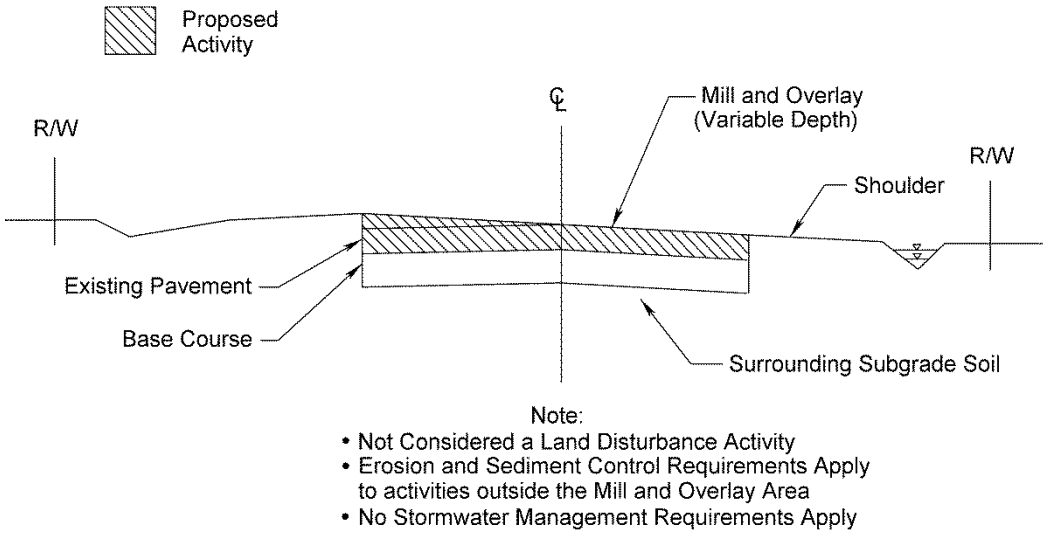
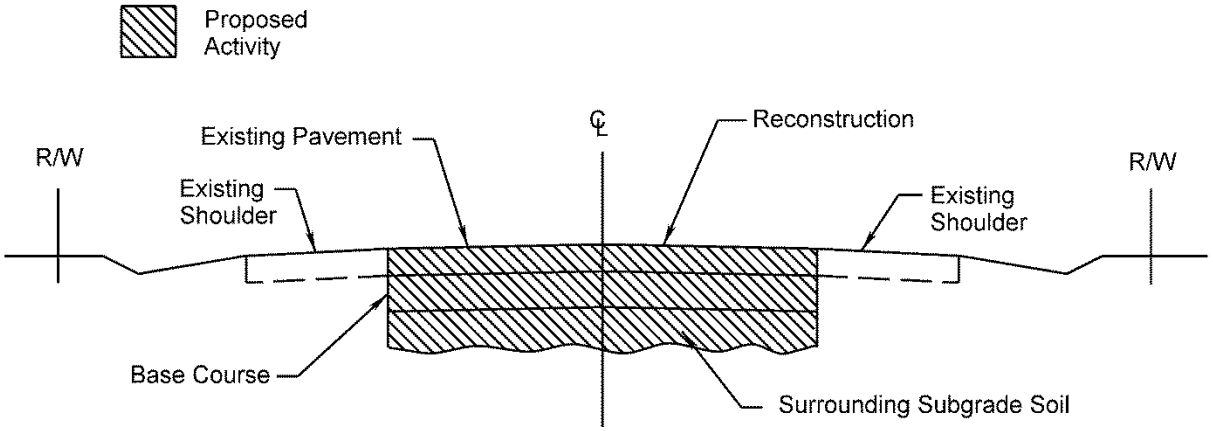


Figure 2. Scenario 2

Scenario 3: Full Depth Reconstruction of Travel Lane (within the existing footprint)

According to EPA's 2017 Construction General Permit (CGP) Frequent Questions, repaving is routine maintenance unless underlying and/or surrounding soil is cleared, graded, or excavated as part of the repaving operation. Where clearing, grading, or excavating (i.e., down to bare soils) takes place as part of a repaving project, ESC and VPDES CGP permit coverage is required if at least one acre (separately or as part of a larger plan of development) is disturbed.

The removal and replacement of an existing pavement structure within the same footprint that DOES EXPOSE the subgrade soil IS considered a land disturbing activity under ESC law however it meets the definition of routine maintenance under the Stormwater Act. Therefore, the area of such existing pavement would be included with the other land disturbance areas of the project for the purposes of determining the applicability of ESC regulations and VPDES Construction General Permit requirements, but DEQ has granted a programmatic exception from VSMP post-development stormwater management water quality and quantity technical criteria requirements for this regulated land disturbing activity scenario per the Virginia Stormwater Act exemption as defined under §62.1-44.15:34.C.7.



Note:

- Erosion and Sediment Control Requirements Apply to the disturbed area
- VPDES CGP Requirements Apply
- No Stormwater Management Requirements Apply

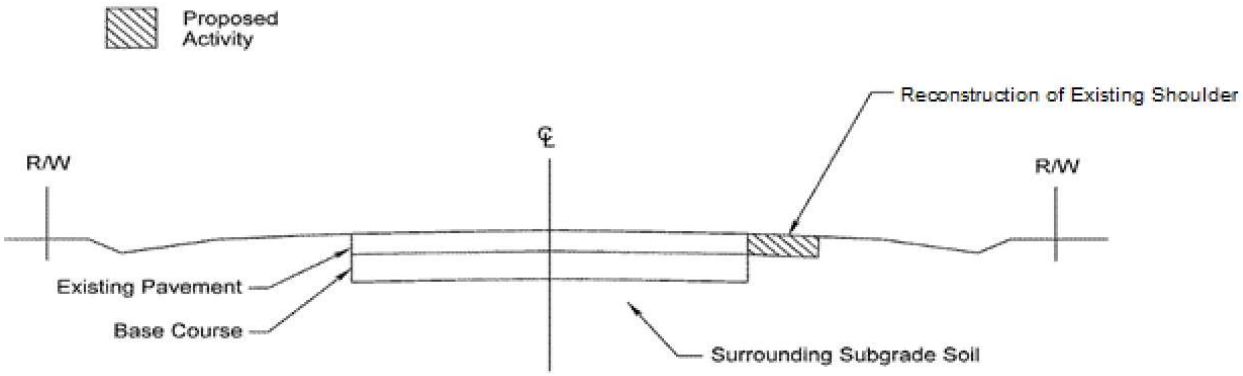
Figure 3. Scenario 3

Scenario 4: Shoulder Reconstruction (within the existing footprint)

According to EPA's 2017 Construction General Permit (CGP) Frequent Questions, repaving is routine maintenance unless underlying and/or surrounding soil is cleared, graded, or excavated as part of the repaving operation. Where clearing, grading, or excavating (i.e., down to bare soils) takes place as part of a repaving project, ESC and VPDES CGP permit coverage is required if at least one acre (separately or as part of a larger plan of development) is disturbed.

Shoulder Reconstruction Within the Existing Footprint, such as Safety Improvement Projects, that include paving of an existing shoulder with a compacted or impervious surface and reestablishment of existing associated ditches shall be deemed routine maintenance in accordance with the Stormwater Act. Therefore, the area of such existing pavement would be included with the other land disturbance areas of the project if it DOES EXPOSE the subgrade soil for the purposes of determining the applicability of ESC regulations and VPDES CGP requirements, but DEQ has granted a programmatic exception from VSMP post-development stormwater management water quality and quantity technical criteria requirements for this regulated land disturbing activity scenario per the Virginia Stormwater Act exemption as defined under §62.1-44.15:34.C.7.

Note: This would not include changing use by paving an existing compacted shoulder to create an additional travel lane. If the paving effort is to change an existing compacted shoulder to an additional travel lane, the area should be identified as "redevelopment" under the VSMP regulations and for VRRM computation purposes.

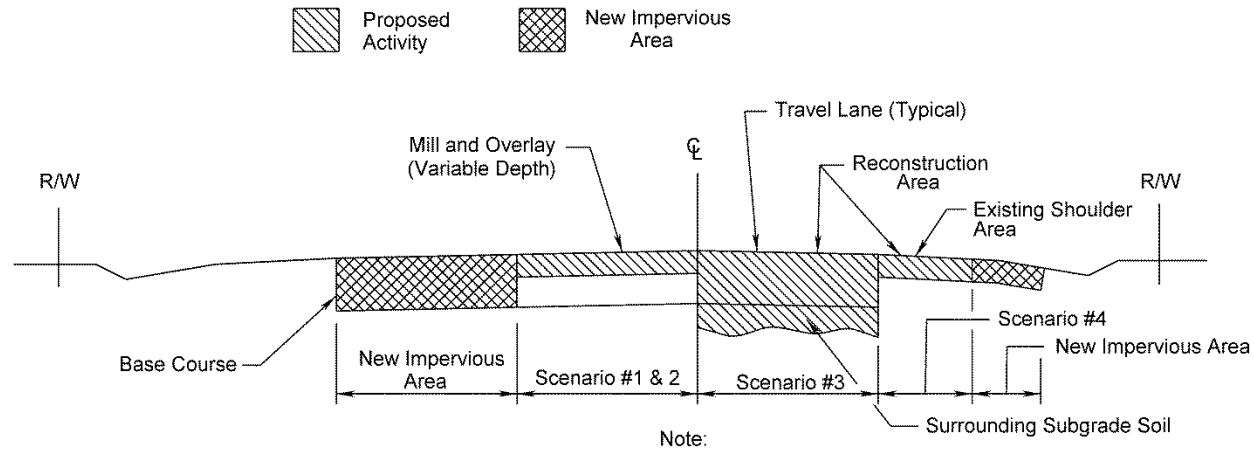


- Erosion and Sediment Control Requirements Apply to the Reconstruction areas over the Compacted Shoulders
- VPDES CGP Requirements Apply
- No Stormwater Management Requirements Apply for the Reconstruction of an existing Shoulder

Figure 4 Scenario 4

Scenario 5: Combination of Scenarios (i.e., combination of scenarios 1 through 4)

For projects that will have a combination of scenarios, the DHE shall review and coordinate the application of such combination with the State Water Resources/MS4 Engineer Shoulder Reconstruction Within the Existing Footprint. The coordination shall include the necessary documentation to illustrate how the different scenarios will be addressed in each case.



Note:

Scenario #1 Mill and Overlay Only (With No Changes to Geometrics):	Not Considered a Regulated Land Disturbance Activity No Erosion and Sediment Control Requirements Apply No Stormwater Management Requirements Apply
Scenario #2 Mill and Overlay (With Changes to Geometrics):	Not Considered a Regulated Land Disturbance Activity No Erosion and Sediment Control Requirements Apply No Stormwater Management Requirements Apply
Scenario #3 Reconstruction of Travel Area:	Erosion and Sediment Control Requirements Apply No Stormwater Management Requirements Apply
Scenario #4 Reconstuction of Existing Shoulder Area:	Erosion and Sediment Control Requirements Apply No Stormwater Management Requirements Apply
New Impervious Area:	Erosion and Sediment Control Requirements Apply Stormwater Management Requirements Apply

	• VPDES CGP requirements apply
New Impervious Area:	• Erosion and Sediment Control requirements apply • Stormwater Management requirements apply • VPDES CGP requirements apply

Figure 5. Scenario 5

Where there is any question as to the application of the routine maintenance definition to a land disturbing activity, the appropriate District Hydraulics Engineer should be consulted, along with the State Water Resources/MS4 Engineer.

3.4 Scenario 5 Planning Timeframe

The DHE shall review the documentation and application associated with Scenario 5 for completeness. Adequate time shall be allotted for this review for planning purposes. In cases, where further DEQ consultation or determination may be needed for verification, appropriate time should be allotted for planning purposes.

4.0 APPLICATION OF TECHNICAL CRITERIA

4.1 Applicable Technical Criteria

Part II of the VSMP Regulations (9VAC25-870 et. seq.) provides administrative and technical criteria for regulated land-disturbing activities.

Part IIB (9VAC25-870 et. seq.) contains the “new” technical criteria that include the Runoff Reduction methodology (for determining compliance with water quality requirements) and the Energy Balance Equation (for determining compliance with stream channel erosion requirements). Part IIB technical criteria are applicable to all projects unless the project qualifies for application of Part IIC.

Part IIC (9VAC25-870 et. seq.) contains the “old” technical criteria that include the Performance/Technology-Based methodology (for determining compliance with water quality requirements) and MS19 criteria (for determining compliance with stream channel flooding and erosion requirements). Part IIC technical criteria are only applicable if the project qualifies as discussed in the grandfathering section below. Effective July 1, 2023 all new projects that are in a scoping or an earlier stage of the project development process, and which have not yet received a grandfathering concurrence letter, shall apply the Part IIB technical criteria.

Design criteria and engineering methodologies to comply with either Part IIB or IIC of the technical criteria in the VSMP Regulation can be found Chapter 11 of the VDOT Drainage Manual.

When requested by a locality’s VSMP Authority, VDOT projects located in jurisdictions that have adopted more stringent SWM technical criteria than that required by the VSMP Regulation shall be designed, to the largest extent practicable, to meet the locality’s more stringent criteria. For any requests to be considered, the VSMP Authority’s more stringent criteria must: 1.) have been adopted pursuant to the Virginia Stormwater Management Act; 2.) the request is made in writing; and 3.) such requests are received prior to the completion of the project’s plans for use in the public involvement phase of the project (or other such phase where no public involvement process is required). If it is found that the more stringent local SWM requirements are not practicable for the VDOT project, it will be the responsibility of VDOT, in coordination with the SWM Plan Designer to implement the requirements to the maximum extent practicable and to demonstrate to the VSMP Authority’s technical

requirements are not practicable. Documentation shall be kept with the SWM Plan and SWPPP. Early coordination should occur between VDOT in coordination with the SWM Plan Designer and the locality's VSMP Authority, in order to identify any such potential requirements or requests.

If the locality's more stringent criteria are deemed not practicable, in full or in part, documentation shall be provided by VDOT or its designated SWM Plan Designer to be reviewed to the satisfaction of the DHE. The documentation at a minimum contain the following information: 1.) identification of the more stringent criteria; 2.) discussion on the required design changes due to the more stringent criteria and identification/quantification of the design changes that can't be met. 3.) discussion on why the more stringent criteria can't be met; 4.) information on the additional cost associated with implementing the design changes to accommodate the more stringent criteria. The documentation and VDOT District concurrence shall be maintained by the District and retained with the project files.

4.2 Grandfathering

Part II of the VSMP Regulations (9VAC 25-870-47 and 9VAC 25-870-48) provides provisions for locality, state and federal projects to be grandfathered under Part IIC provided certain conditions are met. For the purposes of grandfathering VDOT projects, the project shall be considered grandfathered by the VSMP authority and shall be subjected to the Part IIC technical criteria provided the project that can demonstrate an obligation of local, state or federal funding, in whole or in part, prior to July 1, 2012, or the department has approved a SWM Plan prior to this date; a state VPDES permit has not been issued prior to July 1, 2014 and a land disturbance did not commence prior to July 1, 2014.

Any project that is considering utilization of the grandfathering provision shall be evaluated and documented by the District Hydraulics Engineer. The documentation shall clearly demonstrate an obligation of funds prior to July 1, 2012.

When evaluating a project for application of the Grandfathering provision, consideration should be given as to when the project will be advertised and when construction activities will begin. If the project will not begin construction activities prior to July 1, 2019, the project should be designed in accordance with the Part IIB (or the "new") technical criteria. Land disturbing activities grandfathered under subsections A and B of the regulations shall remain subject to the Part II C technical criteria for one additional state permit cycle. After such time, portions of the project not under construction shall become subject to any new technical criteria adopted by the board.

This written evaluation and determination shall be coordinated with the State Water Resources/MS4 Engineer. All projects shall apply Part IIB technical criteria unless a Part IIC technical criteria concurrence letter is coordinated with Central Office and obtained. Consultation with, and concurrence by, DEQ may be coordinated by VDOT Central Office, however is not required. If approved, the status of a project/activity with regards to the grandfathering provision shall be documented using the

appropriate note(s) in Section IV of the SWPPP General Information Sheets. If multiple UPCs exist for the project, each UPC should be evaluated separately to determine the extents or segments of the project that qualify for grandfathering. Portions of a project not under construction by July 1, 2019 will become subject to the new technical criteria adopted by the board.

Projects eligible for grandfathering may still use Part IIB of the technical criteria. However, in doing so, the design details and pollutant removal efficiency of the BMPs shall be in accordance with the information on DEQ's BMP Clearinghouse website or identified on VDOT's approved BMP Standards and Special Provisions.

4.3 Phasing of Construction Project and Associated SWPPP

This section applies to all VDOT projects which will run design and construction in tandem efforts, including Design/Build projects which are on an expedited delivery schedule.

Where a project will be constructed in phases, the SWPPP shall include an ESC Plan, a SWM Plan, and P2 Plan for each phase that includes the scope and extent of land-disturbing proposed for that phase. The term phase, as used here, typically refers to a smaller land-disturbing area portion within the total land development area. The subsequent land-disturbing areas expand upon the initial previously permitted land-disturbing acreage within the total land development area in subsequent phase(s), until the total land development acreage is reached. See IIM-LD-242 for more information on phases as it relates to plan review and approval on the LD-445C form and as it relates to VPDES CGP permit modifications. The SWPPP for the individual phases will be self-sustaining and not incur a deficit in post construction SWM design requirements requiring mitigation on successive phases. These minimum requirements must be satisfied prior to VPDES CGP registration.

The initial SWPPP shall cover, at a minimum, the following items:

- Preliminary construction plans documenting the limits of disturbance, construction and work to be performed;
- Complete ESC Plan for initial land-disturbing area being permitted that has been reviewed and approved per Section 6.0 of this IIM and documented on the LD-445C form. The ESC Plan shall be complete and meet all ESC Regulatory Minimum Standards for the initial phase.
- Pollution Prevention (P2) Plan for phase; and
- Post-Construction SWM including required documentation and calculations, location of all outfalls, identification and description with the water quantity and quality requirements, a topographical site map, and a narrative describing the existing and proposed site conditions.

The initial SWPPP shall contain all required plan content addressed in the VPDES Construction General Permit, Stormwater Management Regulations and Erosion and Sediment Control Regulations. The ESC plan and SWM plan shall be reviewed by a

DEQ certified professional and approved by a VDOT person to complete and document plan review and approval with the LD-445C form prior to submittal of the project for coverage under the VPDES CGP registration. Any subsequent phases beyond the initial phase of ESC or SWM plans within the same land disturbing area shall also be reviewed, approved and documented in the LD-445C. Approval of permit modification for subsequent phases shall be obtained prior to initiation of subsequent land disturbance. Expanding land disturbing areas requires a modification to the active VPDES CGP; see IIM-LD-242 for more information.

4.4 Selection of Manufactured Treatment Devices (MTDs) and Underground BMPs

In selecting proprietary stormwater systems (MTDs or Underground BMPs), designers and VDOT should strive to design and specify the system that provides the best value to VDOT, considering a variety of factors. Designers should evaluate and compare traditional/conventional Stormwater Management Facilities ("SWM Facilities" - detention, extended detention, filtration systems and infiltration systems) and the proposed underground or manufactured systems to ascertain if the overall value to VDOT is better. This evaluation should include a comparison of capital costs (land, materials and labor), as well as anticipated long-term operation and maintenance costs over the life cycle of the MTD or underground SWM Facilities in comparison to conventional, non-proprietary SWM Facilities alternatives open to the ground surface. When the total life cycle cost for a conventional SWM Facilities alternative is less than for a MTD or underground SWM Facilities, consideration must be given to use of the conventional system, even if the capital costs are higher, unless acquisition of additional R/W or easements are expected to delay the overall project schedule.

If an MTD or underground SWM Facilities determined to be the most appropriate solution, the plans and specifications should identify the minimum performance criterion that the system is expected to meet. Performance criteria may include geometric, hydraulic, materials, operation and maintenance, and water quality characteristics. These performance criteria become the basis for specification and procurement. Specific proprietary systems should not be specified. All products should be selected from the Approved Products List (when feasible) and any water quality performance characteristics (e.g. efficiency, allowable flow rates, etc.) shall be as approved by DEQ.

5.0 EXCEPTIONS FROM TECHNICAL CRITERIA

For those land-disturbing activities where it is determined that water quality requirements cannot be totally achieved utilizing onsite BMPs and/or offsite options (see Chapter 11 of the VDOT Drainage Manual), an exception from the portions of the technical criteria unachievable (e.g., relief from the improvement factor of Energy Balance Equation) may be considered and granted by DEQ, pursuant to 9VAC25-870-122, provided that VDOT coordinates with DEQ and submits a written exception

request. The designer or project manager should coordinate consideration of any exceptions directly the DHE. If deemed warranted or necessary, the DHE will assist in documenting the request for exception. This effort shall be documented in accordance with VDOT's Annual Standards and Specifications, including the preparation of a submitall package to be coordinated by the DHE to the State Water Resources/MS4 Engineer and DEQ.

The request shall include documentation of the need for the exception. The documentation shall describe all means and methods evaluated for meeting the water quality/quantity requirements and the reasons why specific means or methods were determined not feasible. The documentation shall also state that the exception being requested is the minimum necessary to afford relief. Economic hardship alone is not sufficient reason to request an exception.

Any approved exception is to be documented and included in the SWPPP for the project/activity. The appropriate SWPPP General Information Sheet notes are to include the date the exception was approved, by whom it was approved and the nature of the exception (e.g., increased reliance on nutrient credits to ___ lbs. in exceedance of the 25% allowable off site). This same information should be noted and included with other registration information when applying for coverage under the VPDES Construction Permit.

6.0 REVIEW AND APPROVAL OF ESC & SWM PLANS

The ESC plan and SWM plan shall be reviewed and approved by a DEQ certified professional and ultimately approved by a VDOT person on the LD-445C form to document VDOT's plan review and approval for the project has been completed prior to submittal of the project for coverage under the VPDES CGP permit registration. This is in accordance with VDOT's Annual Standards and Specifications, including the Road & Bridge Specifications Section 107.

For phased projects that include expansion of land disturbing area beyond the initial permitted area, more than one LD-445C form is required at different times covering the land disturbing areas that will be permitted within the overall project or total land development. For projects with major plan revisions within an area that was previously reviewed, certified, and permitted, a separate and additional LD-445C form(s) is required to document VDOT's plan review and approval.

See Form LD-445C Instructions and Section 10.2.2.1 of the VDOT Drainage Manual for certification requirements and review and approval of Plans.

7.0 MAINTENANCE CONSIDERATIONS

Requirements for maintenance of SWM Facilities, the schedule for inspection, maintenance operations, and the identification of persons responsible for the maintenance is addressed in the VDOT Maintenance Division's BMP Inspection and Maintenance Manuals. The long-term operations and maintenance requirements for any SWM Facility shall be considered during SWM Plan development. The applicable inspection and maintenance section of each manual shall be noted using the appropriate note(s) in Section IV of the SWPPP General Information Sheets.

8.0 RECORDKEEPING AND REPORTING

8.1 SWPPP General Information Sheets

The VPDES MS4 and Construction Permits require VDOT to annually report information to DEQ such as the location, type, acres treated and the affected receiving waters of all SWM Facilities (BMPs) installed.

8.2 LD-445D and LD-458 Submittals

BMP information is to be recorded on the SWPPP General Information Sheets and reported through the VPDES Permit Termination Notice Form LD-445D. See the current IIM-LD-242 and Chapter 10 of the VDOT Drainage Manual for additional information.

The LD-458 Surplus Tracking Form will be used to collect any additional phosphorus credit generated by a specific project that could be applied to the Chesapeake TMDL Action Plan in a specific watershed. The form and JobAid are posted and available on VDOT's external Water Resources/MS4 Technical Resources website. This form is to be submitted to the State Water Resources/MS4 Engineer for coordination with the Environmental Division.

8.3 Stormwater BMP Construction Record Drawings, Final Inspection & Acceptance

Construction record drawings are required for all permanent SWM Facilities, including approved shop drawings for MTDs, and shall be appropriately signed and sealed by a person registered in the Commonwealth of Virginia as a professional architect, engineer, land surveyor or landscape architect and qualified in the responsible administration of the BMP construction. Construction record documentation shall be provided for all permanent SWM Facilities, including the long-term maintenance plan requirements as required by the VDOT BMP Maintenance Manual. The registered

professional shall certify that all SWM Facilities have been constructed and made functional in accordance with the SWM Plan. The form LD-445D shall be used to document this certification process. The official record drawings for the project include both the plan drawings and record drawing survey.

Any changes to the proposed SWM Plan or BMPs necessitated during the construction phase of the project, that affects the proposed construction details or the BMP design information shown in the construction plans or documentation, shall be coordinated by the VDOT construction manager with the appropriate VDOT District Hydraulics Engineer. If as-built documentation for permanent SWM Facilities deviates from the approved plans, the Area Construction Engineer should request a review by the District Hydraulics Engineer to determine if modifications to the facility are needed prior to acceptance. As-built documentation shall be submitted as early as possible but no less than 30 days prior to expected acceptance. Significant deviation from the approved drawings may delay project acceptance. The record set of construction plans and the BMP information tables in the construction plans or documentation are to be formally revised to reflect any authorized/approved changes to the proposed SWM Plan and/or the proposed BMP construction details. All plan revisions shall be completed in accordance with the VDOT Road Design Manual and the VDOT Construction Division's IIM-CD-2013-12.01, signed and sealed in accordance with Department's sealing and signing policy IIM-LD-243 and filed with the record set of construction plans maintained in the VDOT ProjectWise Plan File Room.

Inspection forms specific to the BMP type(s) should be used to document the construction/installation process. A final inspection for SWM Facilities/BMPs shall be conducted by the VDOT construction manager, the Area Construction Engineer (ACE), the VDOT DHE, the VDOT Maintenance Division Infrastructure Manager (or designee), and the District NPDES Coordinator (or their designees). The inspection shall be conducted prior to final project acceptance to identify any required corrective actions, allowing the contractor to perform these corrective actions. The final inspections should be conducted as early as practicable to allow time for corrective actions. Re-inspection may be required after receipt of the as-built documentation.

8.4 Transfer of VDOT Responsibility to Others

The footprint occupied by a BMP, that is installed as part of a VDOT project and is part of VDOT's post-construction SWM Plan, may be utilized for other land use and development, provided that all VSMP requirements are transferred to another entity (e.g. developer or locality). An example project would be where a private developer intends to utilize the area occupied by the BMP for parking spaces to service a shopping center. Prior to the transfer of land and elimination of the BMP, the entity shall demonstrate certain conditions have been met:

1. The entity (e.g. developer or locality) shall provide the applicable District Hydraulics Engineer a conceptual plan of how they are going to account for VDOT's SWM requirements;

2. Upon approval from the District Hydraulics Engineer, the entity shall provide an executed agreement stating the SWM requirements are to be transferred to the entity in perpetuity. This agreement shall not preclude any requirements of the locality's VSMP Authority, including an executed maintenance agreement for the replacement BMP(s);

3. Demonstrate to the District Hydraulics Engineer that all VSMP requirements will be transferred to another entity (e.g. developer or locality) to the satisfaction of the applicable VSMP Authority. The SWM Plan and maintenance agreement that is submitted to the VSMP Authority for review and approval must include the post-construction SWM requirements that are currently being satisfied by the existing BMP;

4. Replacement BMPs have been constructed and made operational prior to removal of VDOT's BMP and transfer of land; and

5. All maintenance agreements with the applicable VSMP Authority have been executed and recorded to carry with the land.

It is important to note that the release of an existing VDOT easement requires a separate VDOT Property Management disposal process. Compensation for the release of easement rights will be required and easements will be conveyed by quitclaim deed. Easement releases should be coordinated with the Right of Way Division's Property Management Program Manager, 1401 East Broad Street, Richmond, VA. 23219.