



COMMONWEALTH of VIRGINIA
DEPARTMENT OF TRANSPORTATION

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STATE HYDRAULIC ENGINEERING DIRECTIVE #5

Date: July 1, 2023

To: Virginia Design, Construction, and Maintenance Communities; VDOT Location & Design, Capital Outlay, Right of Way and Utilities, Construction, Materials, Land Use, and Local Assistance Divisions

From: Victoria Bains, P.E., State Hydraulics and Utilities Engineer, VDOT Location & Design Division

Subject: VDOT Owned, Operated or Maintained Legacy/Grandfathered Stormwater Management/ Best Management Practice (SWM/BMP) Facilities

Definition: “Legacy/Grandfathered SWM Facility” means a SWM/BMP facility that was designed and constructed prior to 2013 and has no saved SWM calculations.

Effective Date: July 1, 2023

This State Hydraulic Engineering Directive (SHED) shall apply to all VDOT owned, operated or maintained Legacy/Grandfathered SWM/BMP facilities, as defined herein, no matter the type of plans (e.g., No Plans, Minimal Plans, or Standard Plans) or the process for construction (e.g., Design/Bid/Build [D/B/B], Design/Build [D/B], Local Assistance Plan [LAP], Land Use Plan [LUP], Capital Outlay [CO], or Private-Public Partnerships [P3]) that will be modified. This SHED describes what VDOT will accept for VDOT owned, operated, or maintained Legacy/Grandfathered SWM/BMP facilities, and is in effect until such time it is incorporated into another VDOT governance document.

It is the Department's policy to strongly discourage directing concentrated off-site drainage (i.e., drainage originating from outside the VDOT right-of-way or permanent easements) into an existing VDOT owned, operated, or maintained legacy/grandfathered SWM/BMP facility. VDOT prefers to leave the existing SWM/BMP facility as-is and design a new SWM/BMP facility serving the new VDOT project area to ensure full compliance with the applicable water quantity and water quality technical criteria of the Virginia Stormwater Management Program Regulation, 9VAC25-870 and any subsequent regulations that supersede.

It is also the Department's policy to strongly discourage the in-line retrofitting of an existing VDOT owned, operated, or maintained legacy/grandfathered SWM/BMP facility, for the purposes of SWM compliance on a construction project, to manage contributions of off-site drainage greater than or equal to 10% of the total contributing drainage area to the BMP. VDOT prefers to leave those SWM/BMP facilities as-is and design additional new SWM/BMP facilities serving the proposed VDOT project limits to ensure full compliance with the applicable water quantity and

water quality technical criteria of the Virginia Stormwater Management Program Regulation, 9VAC25-870 and any subsequent regulations that supersede.

For the purposes of this SHED, “off-site drainage” means drainage originating from land areas which are outside the operational control of VDOT (right-of-way or permanent easements).

Retrofits to Legacy/Grandfathered SWM Facilities

At VDOT's discretion, the Department may allow the in-line retrofitting of a VDOT owned, operated, or maintained legacy/grandfathered SWM facility with existing contributions of off-site drainage greater than or equal to 10% of the contributing drainage area to the BMP. In these instances:

- Approval to in-line retrofit a legacy/grandfathered SWM facility with existing contributions of off-site drainage associated with a construction project requires the approval of the District Hydraulic Engineer and the State Hydraulic and Utility Engineer. Requests will be reviewed on a case-by-case basis prior to completion of the Public Hearing plans. For legacy/grandfathered SWM/BMP facilities to be owned, operated, or maintained by VDOT, the SWM facility must be sized for the entire contributing drainage area utilizing Part IIB technical criteria, or as superseded, and in no case shall the designer take credit (water quantity or water quality) for the treatment of off-site drainage that is outside the operational control of VDOT; and
- For existing VDOT owned, operated, or maintained legacy/grandfathered SWM facilities which are to be retrofitted into “regional” SWM facilities serving multiple sites or entities, SWM facility ownership, operation, and maintenance shall be transitioned to others (e.g., a locality or developer). VDOT will no longer accept responsibility for the operation or maintenance of the retrofitted “regional” SWM facility and where it receives VDOT R/W runoff, a third-party BMP Maintenance Agreement is required, with VDOT and the third-party entity listed; and
- The SWM/BMP facility shall be retrofitted to ensure full compliance with the water quantity and water quality Part IIB technical criteria of the Virginia Stormwater Management Program Regulation, 9VAC25-870, or as superseded, for the VDOT “site” and project area. In addition, there shall be no increase of the pre-retrofit attenuated release rate(s) for the off-site drainage area and point(s) of discharge in the post-retrofit condition; or
- The SWM facility shall be retrofitted such that the off-site drainage area bypasses the SWM facility and the SWM facility only accepts drainage from the VDOT right-of-way or permanent easement. The SWM facility shall be retrofitted to ensure full compliance with the Part IIB water quantity and water quality technical criteria of the Virginia Stormwater Management Program Regulation, 9VAC25-870, or as superseded, for the VDOT “site” and project area. In addition, there shall be no increase of the pre-retrofit attenuated release rate(s) for the bypass discharge(s) (i.e., off-site drainage area) in the post-retrofit condition.

Reference IIM-LD-258 for additional information on maintenance aspects for stormwater BMP facilities delivered through Non-VDOT administered projects.