



STORMWATER MANAGEMENT FACILITY **POST CONSTRUCTION VERIFICATION DOCUMENT** **SUBMITTAL CHECKLIST**

1.0 Infiltration Pond Submittal Requirements

- Post Construction Verification Document survey plan in accordance with the items of this Checklist
- Supporting calculations in accordance with the items of this Checklist
- A copy of the completed Post Construction Verification Document Submittal Checklist
- Stormwater Management Facility Construction Checklist completed during construction of the facility, if applicable
- Narrative stating whether the pond was constructed in accordance with an approved plan or if not constructed to plan, provide justification, approvals and supplement calculations as required. Please include the plan or applicable revision approval being used for the PCVD.
- Geotechnical engineer's report, if applicable
- Resubmittal documents to include point by point response letter as applicable.

Post Construction Verification Document Plan Requirements

All Plans:

- Plans must be submitted on minimum 24" x 36" sheets
- Provide an accurate location map of the project on the plan
- Provide a north arrow on the plan
- Provide all applicable BMP O&M notes
- Provide location of BMP by labeling Latitude/Longitude
- Specify total acres treated by BMP
- Specify impervious acres treated by BMP
- Responsible party for maintenance including phone number and email address

The title block must include:

- Project name indicating "POST CONSTRUCTION VERIFICATION DOCUMENT" in the plan title
- Name, address, telephone and fax numbers of the individual preparing the plan
- Scale of plan (maximum plan scale accepted will be 1"=50')
- Date of the survey
- Hundred, County, and State
- Street address of the project site
- Signature and seal of Delaware Registered Professional Engineer or Professional Land Surveyor



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Delineate and properly label the following (as applicable):

- Roads adjoining the stormwater management facility
- Property lines adjacent to the stormwater management facility
- Easements (i.e. drainage, utility, access, etc.) adjacent to the stormwater management facility

Provide the following as it relates to the stormwater management pond's storage volume:

- Surveyed contours of the constructed stormwater management pond shown in red including forebays at 1- or 2-foot intervals based on the datum of the approved plan. This should be overlayed on the previously approved plan (One-foot contours will generally be expected for projects located in Kent and Sussex Counties. For sites with greater elevation differences (+20' across the site) such as is often found in New Castle County, 2-foot contours will be accepted.)
- A minimum of two cross sections showing elevations, inside slopes, top width and backslope, as applicable (to scale). Cross sections should be taken through inlet and outlet structures/spillway as applicable.
- Lowest top of bank elevation at fill for embankment/combination pond or lowest top of bank elevation for excavated pond. ****The constructed top of bank elevation may be no lower than the design elevation for top of bank.*
- Calculations of the infiltration surface area. ****The constructed area of the infiltration surface shall be no less than 90% of the design surface area.*
- Provide design storm elevations.
- Provide design and constructed forebay volume.
- Provide a calculations table with the volume of the constructed pond incremental storage and cumulative storage volumes (volumes measured in cubic feet for each one-foot elevation contour) along with the design incremental storage and cumulative storage volumes and variances in percentage. ****The constructed volume of the wet pond surface storage shall be no less than 90% of the design volume.*

	Constructed Pond		Designed Pond		
Station 0+00 (LF)	Incremental Storage (CF)	Cumulative Storage (CF)	Incremental Storage (CF)	Cumulative Storage (CF)	Variance (Percent %)



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Provide the following information related to the inlet and outlet structures within the stormwater facility. ****The constructed elevation of any structure shall be within 0.15 foot of the design:*

- Diameter and material of all inlet and outlet pipes
- Invert elevations of all inlet and outlet pipes
- Dimensions (length, width, depth, d50) for all areas of rock outlet protection
- Dimensions and material of outfall structures
- Profile through principal spillway showing inverts and dimensions of all pipes, weirs, orifices, risers and other appurtenances, as applicable (to scale)
- Cross-section of emergency spillway (to scale)
- Profile through emergency spillway (to scale)

Provide the following information related to the infiltration rate available in facility.

- Provide Confirmatory Infiltration Testing per BMP Standards and Specifications, Appendix A-Soil Investigation Procedures***Rate shall be no less than 150% of design rate
- Provide hand Auger Testing to verify separation of facility's bottom from groundwater per BMP Standards and Specifications, Appendix A – Soil Investigations procedures ***Depth to limiting layer shall be no less than 2' from facility bottom

****When the allowable tolerances are exceeded for pond surface area or volume or structure elevations, supplemental calculations must be submitted to the approval agency to determine if the facility, as constructed, meets the design requirements. Submit the following:*

- Calculations of outflow from the infiltration facility for all design storms. Routing computations must be based on the construction volumes and elevations for the facility.
- Calculations demonstrating that the design requirements have been met in the construction condition.