3-F.3.0. EXAMPLE CHECKLIST FOR A FINAL STORMWATER MANAGEMENT SITE PLAN PREPARATION AND REVIEW

1. Applicant Information

Final Plan Submission Date_____
Project Name_____
Site Plan/Permit Number_____
Site Address_____
Applicant_____ Phone Number_____
Applicant Legal Address_____
Owner_____ Phone Number_____
Principal Designer_____ Phone Number_____
General Contractor_____ Phone Number_____

2. _____ Signature and stamp of licensed professional consultant and owner certification

3. Plan Status

_____ Approved
_____ Not Approved

Legend:

▯	- Complete
Inc.	- Incomplete/Incorrect
N/A	- Not Applicable

4. _____ Common address and legal description of the site, including the tax reference number(s) and parcel number(s) of the property or properties affected.

_____
_____
_____

5. _____ A narrative that includes a description of current site conditions and proposed development and final site conditions, including proposed use of environmental site design techniques and practices, stormwater control measures, relevant information pertaining to long-term maintenance of these measures (see item #12 below), and a construction schedule.

6. Existing and proposed mapping and plans (recommended scale of 1" = 50', or greater detail), which illustrates the following at a minimum:

_____ North arrow
_____ Legend
_____ Vicinity map
_____ Existing and proposed topography (minimum of 2-foot contours recommended)
_____ Property lines
_____ Perennial and intermittent streams
_____ Mapping of predominant soils from USDA soils surveys as well as the location of any site-specific test bore hole investigations that may have been conducted and information identifying the hydrologic characteristics and structural properties of soils used in the installation of stormwater management facilities
_____ Boundaries of existing predominant vegetation and proposed limits of clearing and grading

_____ Location and boundaries of natural feature protection and conservation areas (e.g., wetlands, lakes, ponds, aquifers, public drinking water supplies, etc.) and applicable setbacks (e.g., stream buffers, drinking water well setbacks, septic drainfield setbacks, building setbacks, etc.)
_____ Identification of any on-site or adjacent water bodies included on the Virginia 303(d) list of impaired waters
_____ Current land use and location of existing and proposed roads, buildings, parking lots and other impervious areas
_____ Location and description of any planned demolition of existing structures, roads, etc.
_____ Proposed land use(s) with a tabulation of the percentage of surface area to be adapted to various uses, including but not limited to planned locations of utilities, roads, parking lots, stormwater management facilities, and easements
_____ Location of existing and proposed utilities [e.g., water (including wells), sewer (including septic systems), gas, electric, telecommunications, cable TV, etc.] and easements
_____ Earthwork specifications
_____ Selection, location and design of both structural and non-structural stormwater control measures, including maintenance access and limits of disturbance
_____ Storm drainage plans for site areas *not* draining to any BMP(s)
_____ Location of existing and proposed conveyance systems, such as storm drains, inlets, catch basins, channels, swales, and areas of overland flow, including grades, dimensions, and direction of flow
_____ Final drainage patterns and flow paths
_____ Location of floodplain/floodway limits and relationship of site to upstream and downstream properties and drainage systems
_____ Location of all contributing drainage areas and points of stormwater discharge, receiving surface waters or karst features into which stormwater discharges, the pre-development and post-development conditions for drainage areas, and the potential impacts of site stormwater on adjoining parcels
_____ Location and dimensions of proposed channel modifications, such as bridge or culvert crossings
_____ Final stabilization and landscaping plans

7. Hydrologic and hydraulic analysis, including the following:

_____ Site map with locations of design points and drainage areas (size in acres) for runoff calculations
_____ Identification and calculation of stormwater site design credits, if any apply
_____ Estimates of unified stormwater sizing criteria requirements
_____ Time of concentration (and associated flow paths)
_____ Imperviousness of the entire site and each drainage area
_____ NRCS runoff curve numbers or volumetric runoff coefficients
_____ A hydrologic analysis for the existing (pre-development) conditions, including runoff rates, volumes, and velocities, showing the methodologies used and supporting calculations
_____ A hydrologic analysis for the proposed (post-development) conditions, including runoff rates, volumes, and velocities, showing the methodologies used and supporting calculations
_____ Hydrologic and hydraulic analysis of the stormwater management system for all applicable design storms
_____ Pollution load and load reduction requirements and calculations

_____ Final good engineering and sizing calculations for stormwater control measures, including contributing drainage areas, storage, and outlet configurations, verifying compliance with the water quality and water quantity requirements of the regulations
_____ Stage-discharge or outlet rating curves and inflow and outflow hydrographs for storage facilities
_____ Final analysis of the potential downstream impacts/effects of the project, where necessary
_____ Downstream analysis, where detention is proposed
_____ Dam safety and breach analysis, where necessary

8. Representative cross-section and profile drawings and details of stormwater control measures and conveyances which include the following:

_____ Existing and proposed structural elevations (e.g., inverts of pipes, manholes, etc.)
_____ Design water surface elevations
_____ Structural details of BMP designs, outlet structures, embankments, spillways, grade control structures, conveyance channels, etc.

9. _____ Applicable construction and material specifications, including references to applicable material and construction standards (ASTM, etc.)

10. _____ Erosion and sediment control plan that, at a minimum, meets the requirements outlined in the Virginia Erosion and Sediment Control Regulations and Handbook

11. _____ Landscaping plans for stormwater control measures and any site reforestation or revegetation

12. Operations and maintenance plan/agreement that includes the following:
_____ Name, legal address and phone number of the party or parties responsible for long-term maintenance activities
_____ Description and schedule of maintenance tasks
_____ Identification/description of the source of funding to support maintenance activities
_____ Description of access and safety issues
_____ Procedures for testing and disposal of sediments, if required
_____ Right-of-entry authorization for local government inspections/repairs, as needed

13. _____ Evidence of acquisition of all applicable local and non-local permits

14. _____ Waiver/exception requests

15. _____ Evidence of acquisition of all necessary legal agreements (e.g., easements, covenants, land trusts, etc.)

16. _____ Applicable supporting documents and studies (e.g., infiltration tests, geotechnical investigations, TMDLs, flood studies, etc.)

17. _____ Other required permits
18. _____ Swale Minimum Slopes (.3% Concrete, 1% Grass)

19. _____ Pavement section (Subgrade Min. CBR 20)
20. _____ Newport News General Notes
21. _____ Use latest Newport News Details or HRPDC (*Trench Type III needs to be used for Stormwater Installations.*)