3.0. SAMPLE 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:  \( \square \) - Complete

\( \text{Inc.} \) - Incomplete/Incorrect

\( \text{N/A} \) - 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

Boundary of existing predominant vegetation and proposed limits of clearing and grading

Plan Review Course
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