Town of Vienna Submittal and Review of Stormwater Management and Erosion and Sediment Control Plans

STANDARD OPERATING PROCEDURES

The following are to be submitted to the Town of Vienna Department of Planning and Zoning by an applicant for any proposed land disturbing activity regulated under Town Code Chapter 23 "Environment:"

- 1. A Land Disturbing Permit Application.
- 2. A stormwater management plan that meets the requirements of Chapter 23, Article 3, Section 23-14.
- 3. An erosion and sediment control plan that meets the requirements of Chapter 23, Article 2 "Erosion and Sediment Control."
- 4. Plans for meeting the requirements of Chapter 18, Article 21.1 "Chesapeake Bay Preservation Areas."

The Department of Planning and Zoning distributes items 1 through 4 to the Department of Public Works for review.

The Department of Public Works reviews the stormwater management plan in accordance with Chapter 23, Section 23-15 and the erosion and sediment control plan in accordance with Chapter 23, Section 23-6.

| Stormwater Management Plan | Erosion and Sediment Control Plan | | |
|--|---|--|--|
| 15 days for the Town to determine plan | 45 days for the Town to review and approve | | |
| completeness and notify the applicant in | the plan if it adequate. | | |
| writing. | | | |
| 60 days from the time of notification of | 45 days for the Town to review and provide | | |
| completeness for the Town to review the plan | written notice with an explanation for the plan | | |
| and notify the applicant in writing. | if it is inadequate. | | |
| 45 days from the date of any resubmission for | 45 days for the Town to review and respond in | | |
| the Town to review and respond in writing to a | writing to a plan that was previously | | |
| previously disapproved plan. | disapproved. | | |
| 60 days for the Town to review and respond in | If no action is taken within the time frames | | |
| writing to modifications to the approved plan. | specified above, the plan is deemed approved. | | |

The Department of Public Works utilizes the Town of Vienna Stormwater Management Plan Review Checklist and any supplemental review materials in Appendix 3 of the Virginia Stormwater Management Handbook to review the stormwater management plan to verify that minimum standards are met and required elements of the plan have been provided in accordance with Article 3 "Stormwater Management" of Chapter 23.

The Department of Public Works utilizes the Virginia Stormwater BMP Clearinghouse or the Fairfax County Public Facilities Manual, whichever is more stringent unless waived by the Director of Public Works in accordance with Town Code Section 23-17.A.1., to review stormwater management facility design.

The Department of Public Works utilizes Chapter 6 and Chapter 7 of the Virginia Erosion and Sediment Control Handbook to verify that minimum standards are met and required elements of the plan have been provided in accordance with Article 2 "Erosion and Sediment Control" of Chapter 23.

The Department of Public Works provides comments to the Department of Planning and Zoning for communication to the applicant. Revisions and re-submittals are made in accordance with the Town Code until satisfactorily addressed.

The Department of Public Works approves the stormwater management plan and erosion and sediment control plan contingent on the following:

- 1. The applicant demonstrates that all land clearing, grading, excavating, transporting, and filling of land will be done in conformance with Town Code Chapter 23.
- 2. The applicant submits fees pursuant to Chapter 1, Section 1-13.
- 3. The applicant submits performance bonds required in Town Code Section 23-7 and Section 23-23.
- 4. The Town approves the stormwater management facility maintenance agreement as required in Town Code Section 23-18.

On approval of the stormwater management plan and erosion and sediment control plan by the Department of Public Works, the applicant submits a Registration Statement for a General Permit for Discharges from Construction Activities in accordance with 9VAC25-880.

On obtaining and presenting evidence of General Permit coverage to the Town, the Town finalizes and approves the Land Disturbing Permit.

TOWN OF VIENNA STORMWATER MANAGEMENT PLAN REVIEW CHECKLIST

1. Applicant Information

| Submission Date | |
|---------------------------------|--------------|
| Project Name | |
| Site Address | |
| | |
| Applicant | Phone Number |
| Applicant Legal Address | |
| Applicant Phone Number | |
| Principal Designer Phone Number | |
| General Contractor Phone Number | |

2. _____ Signature and stamp of licensed professional consultant and owner certification (for final plan submittal)

3. Plan Status

| | Legend: | Complete |
|--------------|---------|------------------------------|
| Approved | | Inc Incomplete/Incorrect |
| Not Approved | | 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 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