



**CITY OF RICHMOND**  
**Stormwater Management Division**

**Appendix C:** Department of Community Development  
Stormwater Management Division  
900 East Broad Street-Room 500  
Richmond, Virginia 23219  
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CHECKLIST FOR CHESAPEAKE BAY

*Chesapeake Bay Site Plan - Requirements and Submission Checklist*

**Address of Project:** \_\_\_\_\_

**Application/Permit Number:** \_\_\_\_\_

**IMPORTANT: This checklist is to be completed by the plan preparer and submitted with the permit application package; in time, submittals will be rejected without it. All items must be fully addressed and indicated so by checking the box for that item or entering a comment as to why it has not been addressed (upon review, the plan reviewer may still require the item to be addressed). The comments “N/A” or “not applicable” are not acceptable responses.**

**Note that plan sheets may be combined as long as all required information is legible.**

**A. Submission**

- Provide 4 copies of all plan sheets
- All plan sheets must be certified by the appropriate professional

**B. Basic information required to appear on each sheet:**

- Name of project, developer, preparer of plan (Name, address, phone, fax, and email.)
- Engineer's/Architect's stamp (seal).
- North arrow
- Scale (suitable scale for base/plan information)
- Plan date/revision dates
- Property lines with dimensions and bearings taken from deed or survey
- Limits of Chesapeake Bay Preservation Areas
- Area of site
- Vicinity map (to show location of site in relation to nearby landmarks)



## ***CITY OF RICHMOND***

### ***Stormwater Management Division***

#### **C. Existing physical site characteristics (*sheet #1*)**

- Existing topography, depending on the scale of the base sheet, contour intervals should be no greater than 5-feet; intervals of 2-feet or 1-foot are desirable.
- Location of Mean High Water Line (MHWL) of the shores on which the site is located as determined by the best available information acceptable to the Program Administrator. If such line is not within the confines of the property, a locator map at a scale of 1"=200' shall be required to show its proximity to the site.
- Location of tributary streams, as shown on the most recent USGS 7 1/2 minute quadrangle sheets (note revision date).
- Limits of 100-year floodplain, taken from the latest edition of the Flood Insurance Rate Maps of the City (available from the Division of Permits and Engineering Services) or other available sources and site specific studies.
- Location and boundaries of tidal and non-tidal wetlands, as delineated on the National Wetland Inventory (NWI) Maps prepared by the U.S. Department of the Interior (available from the Program Administrator). In cases of either direct or indirect impact on NWI identified wetlands, the Program Administrator may require a delineation of wetlands to be performed by a technical professional acceptable to the Administrator in the field by type, following the classification system found in the *Classification of Wetlands and Deep Water Habitats of the United States*, U.S. Department of the Interior, Fish and Wildlife Service.
- Limits of the boundary line for the established buffers for the RPA and/or RMA.
- Location of all significant plant material, including all trees on site six inches or greater in diameter at breast height; groupings of trees or significant vegetation may be outlined.
- Physical features, including streets, alleys (including all improved and unimproved rights-of-way), parking areas and existing site improvements to remain, such as structures and their use, parking areas, driveways and all areas of impervious cover.
- Existing utilities, including storm sewer, curb and gutter, sewer (including existing septic drainfields), water, electrical, gas, and easements or other improved or unimproved rights-of-way for utilities.
- Land uses immediately adjacent to the site.

#### **D. Proposed improvements (*sheet #2*)**

- Areas of proposed impervious surface, including:
  - Streets, alleys, easements or other rights-of-way, including proposed improvements to existing rights-of-way
  - New sidewalks, curbs and gutters, driveways and access, loading and other paved areas, including location and materials to be used.
  - Proposed structures, including building footprint, dimensions, and use.
- The location of any sewage disposal system or reserve drainfields.



**CITY OF RICHMOND**  
**Stormwater Management Division**

**E. Preliminary grading plan and/or cross-section drawings (if necessary to evaluate site drainage and conservation of natural features).**

**F. Limits of the proposed area of disturbance based on all anticipated improvements, including buildings, driveways, parking spaces, utilities, etc.**

**G. Proposed location and basic layout of planned structural Best Management Practice (BMP) facilities.**

**H. Additional supporting information including calculations shown in a table format on plan sheet #2**

- Total gross square footage area
- Total land area covered by buildings
- Amount of open space on site
- Amount of paved or graveled area (impervious surface) on the site (acreage and percent of site coverage)
- Number of parking spaces
- Number of residential units of each type
- Pre- and Post-development runoff rate from 2 and 10 design year storms
- Pollutant load calculations (See App. 5D of VA. Stormwater Management Handbook, Vol. 2)
- BMP design calculations (See VA Stormwater Management Handbook

**I. Erosion and Sediment Control Plan (*sheet #3*)**

Requirements in accordance with Chapters 3, through 6 of the *Virginia Erosion and Sediment Control Handbook*:

- Erosion and Sediment Control Checklist with required E & S plans as per the Virginia Erosion & Sediment Control Handbook, 1992 Third Ed.
- Detailed narrative and notes on all E & S measures used including but not limited to any stream crossings or wetland disturbance.
- Assessment of existing shoreline conditions and a determination of required erosion control measures.
- Directional arrows of drainage flow to the planned sediment control measures (if applicable).
- Existing and proposed grades.
- Existing natural and/or developed features on site or directly adjacent to the site.
- Pre- and post-development drainage (including off-site) for all permanent and temporary sediment control measures for the 10-year storm.
- 100-year floodplain under proposed channel conditions.
- Means proposed to preserve any existing vegetation during construction and retention as part of completed project in accordance with guidelines established in the following section (see Performance Criteria, page 19).



## ***CITY OF RICHMOND***

### ***Stormwater Management Division***

- Phasing and sequencing of development, and provisions for handling surface water throughout the stages of development.

#### **J. Landscape Plan (*sheet #4*)**

- Major landscaping features, including existing vegetation, to be retained.
- Clear delineation of all trees proposed for removal.
- Description of plant species to be disturbed or removed.
- Treatment of the RPA buffer, indicating proposed landscaping and vegetation to be retained by type and quantity.
- Replanting schedule for trees and other significant vegetation removed for construction, including list of trees and plants to be used.
- Demonstration that the design will preserve to the greatest extent possible any significant trees and vegetation on site and provide maximum erosion control and overland flow benefits.
- Demonstration that indigenous plants (See Plant List, Appendix C of the Public Information Manual) are to be used to the greatest extent possible.

#### **K. Narrative**

- Accompanying sheets 1 through 4 shall be a narrative that describes the following:
  - A description of the impact the development will have on existing vegetation
  - A description, including location and design, of all measures to be taken to meet the performance criteria outlined in the ordinance

#### **L. Water Quality Impact Assessment (WQIA) (*sheet #5*)**

- Required for all development proposed in an RPA or any other area warranted as determined by the Program Administrator. The WQIA consists of the following elements in addition to information contained on previous sheets:
  - Hydrological element**
    - Describe existing topography, soils, hydrology and geology of the site and immediately adjacent lands.
    - Describe impacts of the proposed development on topography, soils, hydrology and geology on site and adjacent lands.

**In addition to the information shown on the CBSP, the WQIA plan sheet must show:**

1. Disturbance/destruction of wetlands and justification for such action;
2. Disruption/reduction in supply of water to wetlands, streams, lakes, rivers or other water bodies;
3. Disruption to existing hydrology, including wetland and stream circulation patterns;
4. Source, location and description of proposed fill material;
5. Location of dredge material and location of dumping area for such material;



**CITY OF RICHMOND**  
**Stormwater Management Division**

6. Location of, and impacts on, shellfish beds, submerged aquatic vegetation, and fish spawning areas;
  - Provide evidence of required permits in addition to wetlands permits from all applicable agencies necessary to develop the project.
  - Describe proposed mitigation measures for the potential hydrological impacts.

Potential mitigation measures include:

1. Proposed erosion and sediment control concepts which may include minimizing the extent of the cleared area, perimeter controls, reduction of runoff velocities, measures to stabilize disturbed areas, schedule and personnel for site inspection;
2. Proposed stormwater management system;
3. Creation of wetlands to replace those lost;
4. Minimizing cut and fill.

**Landscape Element**

- The standard requirements of the Landscape Plan (sheet #4), satisfy this section. At the discretion of the Program Administrator, the applicant may be required to provide additional information, particularly in support of significant mitigation requirements for a project that disturbs more than 50,000 square feet of area.

**Wastewater Element**

- Include calculations and locations of anticipated changes which affect existing septic drainfield or wastewater irrigation areas;
- Provide justification for sewer line locations in environmentally sensitive areas and describe construction techniques and standards;
- Discuss any proposed on-site collection and treatment systems, their treatment levels and impacts on receiving water courses.
- Describe the potential impacts of any proposed wastewater systems, including the proposed mitigative measures for these impacts.

**M. Additional documentation that must be provided**

- A copy of any stream perennial flow determination
- A copy of any US Army Corps of Engineer wetland delineation approval
- A copy of all required Federal permits
- A copy of all State permits

**Signature of preparer:** \_\_\_\_\_

**Date of signature:** \_\_\_\_\_

**Preparer's professional seal:**