City of Hopewell ESC Plan Preparer/Plan Reviewer Checklist (LDA Form 04)

Instruction: The checklist shall be completed if an ESC Plan and Narrative is required per the City of Hopewell Stormwater and/or Erosion and Sediment Control Ordinance. The completed checklist shall be provided with the ESC Plan submittal. The plan and narrative submitted for review shall be signed and sealed by a licensed professional. This checklist is intended to only be used as a guide. The licensed professional is responsible for ensuring plans address the ESC laws and regulations.

Project Information:

Project Name: _____ Project Location: _____

Submittal Date: _____ Date on Plans: _____

Design Engineer (Printed): _____ Email: _____

Yes	No	N/A	ESC *Narrative* Requirement
			Completed ESC Checklist provided in ESC Narrative.
			Project description including the nature and purpose of the land-disturbing activity.
			Description of the **existing site conditions**, including topography, ground cover, and drainage (including information for on-site and receiving channels).
			Description of **adjacent areas** such as residential developments, agricultural areas, streams, lakes, roads, etc., that might be affected by the land disturbance.
			Description of **off-site land disturbing activities** that may occur (borrow sites, disposal areas, easements, etc.). Identify the Owner of the off-site area and the locality responsible for plan review. Include a statement that any off-site land-disturbing activity associated with the project must have an approved ESC Plan. Submit documentation of the approved ESC Plan for each of these sites.
			Description of the site **soils conditions**, including hydrologic soils group, mapping unit, erodibility, permeability, surface runoff, and a brief description of depth, texture and soil structure. Mapping of soil variations should be provided in the narrative or on the plans.
			Description of **critical areas** that have potentially serious erosion problems or that are sensitive to sediment impacts (e.g., steep slopes, channels, etc.).
			Description of the structural and vegetative **ESC measures** that will be used to control erosion and sedimentation on the site. Controls should be consistent with the standards and specifications in Chapter 3 of the Virginia Erosion and Sediment Control Handbook (VESCH), latest edition. Variations and proprietary measures require a variance. Approval from DEQ of variances shall be maintained in the narrative.
			Detailed **sequence of construction**, that includes the **phasing** of installation of ESC measures.
			Description of **permanent stabilization** for the entirety of the site, including specifications, of how the site will be stabilized after construction is completed (permanent stabilization).
			Schedule of **maintenance requirements for ESC measures** including inspections frequency, maintenance concerns, and methods for repair or prevention of need for repair (i.e. removal of sediment build-up).
			Description of **stormwater runoff considerations** that includes describing any increase in peak runoff rates and the effects on downstream erosion and flooding. The description shall include the strategy to control stormwater runoff.
			Calculations for temporary sediment basins, diversions, channels, stormwater facilities to address MS-19, etc. Where applicable. including pre- and post-development runoff calculations, drainage area maps, time of concentration paths and computations, rainfall source and documentation, weighted runoff coefficients and computations, runoff and routed hydrographs or peak computations (as applicable), adequate onsite channel (MS-19) & culvert computations, etc.

Yes	No	N/A	ESC *Plan* Requirement
			Vicinity map locating the site in relation to the surrounding area. Include any landmarks and road information that might assist in locating the site.
			Location on the ESC Plan cover sheet for identification of the **Responsible Land Disturber** (RLD).
			Existing conditions including existing contours, surface waters and other surface features, existing tree lines, grassed areas, or unique vegetation.
			Where applicable, a **demolition plan** with identification of features to be demolished and measures to address ESC for the demolition.
			Proposed conditions, including proposed contours and features.
			Delineation of the **limits of disturbance**.
			A description of any **variance** approved by DEQ described on the cover sheet of the ESC Plans.
			North arrow provided on all plan sheets.
			Legend with a complete listing of all ESC measures used, including the VESCH uniform code symbol and the standard and specification number. Include any other items necessary to identify pertinent features in the plan.
			Identification of any **off-site land disturbing activities** (e.g., borrow sites, disposal areas, etc.) and appropriate ESC controls.
			Identification of **critical areas** and appropriate protections.
			Inclusion of **erosion and sediment control notes** (ES-1 through ES-9) found in Table 6-1 on page VI-15 of the 1992 Virginia Erosion and Sediment Control Handbook.
			Identification of **property and easement lines**. For each adjacent property, list the deed book and page number and the property owner's name and address.
			Finished floor elevation of all buildings on site, including basements.
			The **locations of erosion and sediment control and stormwater management practices** used on the site. Use the standard symbols and abbreviations in Chapter 3 of the VESCH.
			Existing drainage patterns including dividing lines and directions of flows with the total area for each drainage area.
			A **schedule of regular inspections, maintenance, and repair** of temporary erosion and sediment control structures and permanent stormwater management facilities.
			Storm sewer profiles of all storm drains except roof drains.
			Site-specific **details for all ESC measures**. Where applicable, details shall include site-specific dimensions. Proprietary measures with an approved variance shall include site-specific details with dimensions and other information for construction per manufacturer's specifications.
			Specifications for stormwater and stormwater management structures (i.e. pipe materials, pipe bedding, stormwater structures etc.).
			Minimum Standard (MS) 1 through 19 provided on the plan with a description for each that describes how the minimum standard is addressed with the plan.
			Permanent or temporary soil stabilization shown where required on plans using standard symbols and abbreviations in Chapter 3 of the VESCH. **(MS-1, MS-3, and MS-5)**
			Stabilization and/or protection measures for soil stock piles and borrow areas. **(MS-2)**
			Detailed **sequence of construction**, that includes the phasing of installation of ESC measures with sediment trapping measures as a first step prior to upslope land disturbance. **(MS-4)**
			Drainage areas to sediment traps and sediment basins shown on plans. **(MS-6)**

			Stabilization measures provided for slopes steeper than 3:1. **(MS-7)**
Yes	**No**	**N/A**	**ESC Plan Requirement (cont.)**
			Stabilization measures provided for slopes steeper than 3:1. **(MS-7)**
			Measures to prevent concentrated flow from flowing down cut or fill slopes (i.e. slope drains). **(MS-8)**
			Measures to address water seeping from a slope face been addressed. **(MS-9)**
			Inlet protection provided for all operational storm drain and culvert inlets. **(MS-10)**
			Outlet protection and/or channel linings provided for all stormwater conveyance channels and receiving channels prior to being made operational (see sequence of construction). **(MS-11)**
			Measures to minimize encroachment and minimize sediment transport for work in a live watercourse. **(MS-12)**
			Temporary stream crossings of non-erodible material where a live watercourse must be crossed by construction vehicles more than twice in any six-month period. **(MS-13)**
			Applicable federal, state and local regulations pertaining to working in or crossing live watercourses are addressed and summarized on the plan. **(MS-14)**
			Stabilization measures for bed and banks of live watercourse subject to disturbance. **(MS-15)**
			Measures shown on plan (i.e. Construction entrance) to minimize sediment transport onto public and otherwise paved roads. **(MS-17)**
			MS-19 satisfied for each receiving channel per 9VAC25-840-40(19)
			Increased volumes of sheet flows that may cause erosion or sedimentation on adjacent property are diverted to a stable outlet, adequate channel, pipe or pipe system, or to a detention facility.
			If the project impacts any wetlands or surface waters, is all correspondence and permits concerning any proposed impacts to jurisdictional wetlands, stream and channels included (i.e. COE 404 permit). Note that the plan cannot be approved without proper documentation or necessary permits for jurisdictional impacts.