



COMMONWEALTH of VIRGINIA

DEPARTMENT OF TRANSPORTATION

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STATE HYDRAULIC ENGINEERING DIRECTIVE

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To: Virginia Design, Construction, and Maintenance Communities; VDOT Location & Design, Capital Outlay, Right of Way and Utilities, Construction, Materials, and Local Assistance Divisions, District Environmental Managers

From: Victoria Bains, P.E. – State Hydraulics and Utilities Engineer, VDOT Location & Design Division

Subject: Environmental Commitment (EC) Plan for VDOT Design-Bid-Build Projects

This State Hydraulic Engineering Directive (SHED) shall apply to all VDOT plans (No Plans, Minimal Plans, and Standard Plans) for construction projects where environmental resources are present and environmental permits or commitments are applicable to the construction activity. It describes the Environmental Commitment (EC) Plan to be included in plan assemblies for VDOT projects that identify the location of environmental resources and environmental commitments associated with the construction activities and associated Environmental permits and special conditions. The SHED applies to construction projects implemented under the Design/Bid/Build (D/B/B)/RAAP (Regular Advertisement and Award Process).

BACKGROUND

The development of the Environmental Commitment (EC) Plan is a collaborative effort between the Environmental and Location and Design Divisions to enhance awareness of the requirements and conditions of the various environmental permits and commitments that must be implemented during the construction of a VDOT project. The EC Plan is an integral part of the Environmental Performance Program (EPP), a tool to convey the requirements and conditions of the environmental commitments implemented during the appropriate project construction phase. See Environmental Memorandum EM-COMP-03-05-2019 Environmental Commitment Plan Sheets (ECPS) for Design-Bid-Build Projects for more information:

The EC Plan includes a tabulated summary and (where appropriate) a graphical display of project environmental commitments as provided in CEDAR and controlling environmental documents. The purposes of the EC Plan are to increase visibility and provide clarity to construction contractors regarding EC. The EC Plan is ancillary to, but does not override, other controlling environmental documents in the contract such as water quality permits, special provisions, etc., and will be subservient to any conflicts with the controlling environmental documents.

ENVIRONMENTAL COMMITMENTS

A number of different environmental commitments may apply to a given VDOT project. For the EC Plan, the commitments have been organized into six categories:

- Cultural Resources (CR)
- General Environmental (ENV)
- General Natural Resources (NR)
- Hazardous Materials (HM)
- Threatened and Endangered Species (TE)
- Water Quality Permits (WQ)

ROLES

The VDOT District Environmental Staff work to secure permits and identify environmental commitments during the location and design phase of VDOT projects. The environmental commitments shown on the EC Plan will be developed by the District Environmental Staff and provided to the Location & Design (L&D) Division staff for incorporation into construction plans as the EC Plan.

The L&D Division provides support to the District Environmental Staff during the planning and design phases, where the Hydraulics Program currently assists with the development of permit sketches and documents supporting the Environmental permit process. The process of developing the final EC Plan for insertion into a construction plan set will be the responsibility of the L&D Division Hydraulics Program staff. The State and District Hydraulics Engineers and designated Central Office and District Hydraulics staff will work closely with the District Environmental Staff to develop the EC Plan for insertion into construction plans for Design-Bid-Build projects.

IMPLEMENTATION

The EC Plan consists of two parts: the EC Summary Sheet and the EC Plan Sheet(s). The EC Summary Sheet will include tables on a common sheet or series of sheets. In addition, on projects where Environmental Avoidance Areas Outside of the Project Limits exist, the ECPS will include a graphical depiction of the Avoidance Areas. The graphical depiction of Avoidance Areas may be placed on the EC Summary sheet if adequate room is available, or on a separate sheet following the EC Summary Sheet when necessary. Each of the six EC categories listed above will be included in separate tables on the EC Summary Sheet, when applicable to a project. The District Environmental Staff will provide the summary tables to the Hydraulics section to place on the EC Summary Sheet using the standard format shown in the example EC Summary Sheet in Attachment A. Note that the EC Summary Sheet tables may include commitments that are not depicted graphically on the EC Plan Sheets.

To provide for cross-reference between the EC Summary Sheet and EC Plan Sheet(s), the Environmental Commitments requiring graphical depiction will be numbered in the summary tables and the same numbering used in the call-outs on the EC Plan Sheet(s). For instance, the first General Environmental commitment in the summary table will be identified as “ENV-1”, with the call-out on each sheet where the commitment applies also being “ENV-1”. The third Hazardous Materials commitment will be identified as “HM-3”. Note that a commitment listed in the summary tables may apply to multiple plan sheets, and some commitments in the summary tables may have no graphical call out associated with them. The EC Summary Sheet tables also provide the construction plan sheet number(s) where the EC applies.

The EC Plan includes insert plan sheets, similar to the current Erosion and Sediment Control (ESC) plan sheets. An EC Plan Sheet will be included for each overall plan sheet in a series when that plan sheet

includes EC. When no EC are located within the area represented by an overall plan sheet, an EC Plan Sheet is not required. The EC Plan Sheet will follow the ESC plan sheet(s) in series, and be numbered consecutively; e.g., if the ESC plan sheets are numbered 3B (phase 1) and 3C (phase 2), the related EC Plan Sheets would follow consecutively as sheet number 3D. The ECs are not included in the overall plan sheet or the ESC plan sheet to avoid confusion with other information and make it easier for the EC to stand out in the construction plan set.

CADD STANDARDS AND LIBRARY

CADD standards and a CADD library have been developed to assist with the EC Plan and the use of standard lines, hatched areas, call-outs, and appropriate legends to show the location, extent, and nature of EC shown.

The notes to be used on the EC Summary Sheet are in the CADD Library and shown in Figure 1 below.

Figure 1. EC Summary Notes

Notes:

Information on this sheet is a reference document related to the Environmental Commitments, Conditions and Clearances applicable to this project. Refer to the controlling documents (Bid/Proposal/Contract, Special Provisions, final Construction Plans, etc.).

Environmental shall be contacted regarding any field adjustments, construction Plan revisions, etc. prior to work proceeding to allow review to verify environmental compliance.

There are also EC Summary Abbreviations in the CADD Library that are included on the EC Summary Sheet, as shown in Figure 2.

Figure 2. EC Summary Abbreviations

Abbreviations

ACM - Asbestos Containing Materials
BMP - Best Management Practice
DEM - District Environmental Manager
ECI - Environmental Commitment Inspector
VDGIF - Department of Game and Inland Fisheries
FHWA - Federal Highway Administration
MOA - Memorandum of Agreement
MOU - Memorandum of Understanding
NEPA - National Environmental Policy Act
NOI - Notice of Intent
NWP - Nationwide permit
TOYR - Time of Year Restriction
T&E - Threatened and Endangered Species
PCN - Pre-Construction Notification
VDEQ - Virginia Department of Environmental Quality
VMRC - Virginia Marine Resources Commission
USACE/COE - U.S. Army Corps of Engineers
USFWS - U.S. Fish and Wildlife Service
WOTUS - Waters of the United States
WQ - Water Quality
CR - Cultural Resources

Environmental Contacts for the EC Plan are also listed on the EC Summary Sheet, as in the example for Figure 3. Note that the information may vary from that shown below based upon the District where the

project is located. The District Environmental Manager (DEM) and project Environmental Commitment Inspector (ECI) will be the contacts usually provided, although alternative or additional contacts may be provided by the Environmental Division for inclusion on the EC Summary Sheet.

Figure 3. EC Summary Contacts (Example – Use District Project Contacts)















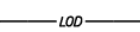
Environmental Contacts:

District Environmental Manager:
Kevin Bradley
(434) 856-8288
kevin.bradley@vdot.virginia.gov

Environmental Commitment Inspector:
Blake Barnes
(434) 841-0499
blake.barnes@vdot.virginia.gov

Figure 4 below shows the EC Legend with line types, hatches, and call-outs for the six categories, as used on the EC Plans Sheets.

Figure 4. EC Plan Sheet Legend

<i>ENVIRONMENTAL COMMITMENTS LEGEND</i>		
		<i>General Environmental</i>
		<i>General Natural Resources</i>
		<i>Water Quality Permits</i>
		<i>Threatened and Endangered Species</i>
		<i>Cultural Resources</i>
		<i>Hazardous Materials</i>
		<i>Water Feature</i>
		<i>Wetland</i>
		<i>Limits of Disturbance</i>

A standard note for the EC Plan Sheet(s) is also provided in the CADD Library, and should be used on each EC Plan Sheet as shown in Figure 5.

Figure 5. ECAP Plan Sheet Note

Note:
***The Environmental information on this sheet is a reference;
refer to the controlling documents for project-specific details.***

EC Plan Checklist for Hydraulics Staff/Designer

- () EC Summary Sheet
 - () Include the summary tables required for the project (up to 6) (*provided by Environmental*)
 - () Cultural Resources (CR)
 - () General Environmental (ENV)
 - () General Natural Resources (NR)
 - () Hazardous Materials (HM)
 - () Threatened and Endangered Species (TE)
 - () Water Quality Permits (WQ)
 - () Add EC Plan Sheet number(s) where each EC appears to the summary tables
 - () EC Abbreviations (*see CADD Library*)
 - () Environmental Division Contact(s) (*provided by Environmental*)
 - () Water Quality Permit Info Summary Table (*provided by Environmental*)
 - () EC Notes (*see CADD Library*)
- () Environmental Avoidance Area Outside of the Project Limits Sheet
 - () Base Map (*similar to a Project Location Map*)
 - () Scale as needed to show location and extent of Avoidance Areas Outside of the Project Limits
 - () North Arrow
 - () Project limits and call-out
 - () Routes and Route number/name labels for locating the Avoidance Areas
 - () Other landmarks deemed useful for identifying the Avoidance Areas as specified by Environmental (e.g., stream line with name, National Park, battlefield, etc.)
 - () Avoidance Areas Outside of the Project Limits (*provided by Environmental*)
 - () EC Abbreviations (*see CADD Library*)
 - () EC Notes (*see CADD Library*)
 - () EC Legend (*see CADD Library*)
- () EC Plan Sheet(s)
 - () Sheet for each overall plan sheet where an EC occurs (*numbered sequentially after Erosion and Sediment Control Plan Sheets*)
 - () Base Map
 - () Same scale (usually 1" = 25' or 1" = 50') as the overall plan sheet
 - () North Arrow
 - () Limits of Disturbance (LOD)
 - () Right-of-Way and Easements
 - () Waters of the US/Wetlands Lines (black lines and hatches)
 - () Existing and proposed features and infrastructure shown (grey lines and hatches)
 - () EC Legend (*see CADD Library*)
 - () EC Areas (*provided by Environmental - see CADD Library*)
 - () EC Call-Outs (*1 per commitment numbered as provided by the Environmental Division in the Summary Tables*)
 - () EC Notes (*see CADD Library*)

State Hydraulic Engineering Advisory
Environmental Commitments Plan Sheets (ECPS) for VDOT Design-Bid-Build Plans
June 30, 2020

ATTACHMENTS

[Attachment A Example EC Summary Sheet](#)

[Attachment B Example Environmental Avoidance Area Outside of the Project Limits Sheet](#)

[Attachment C Example EC Plan Sheets](#)