

VIRGINIA DEPARTMENT OF TRANSPORTATION

**INSTRUCTIONAL AND INFORMATIONAL MEMORANDUM**

GENERAL SUBJECT: PRELIMINARY ENGINEERING PROJECT DEVELOPMENT PROCESS	NUMBER: IIM-LD-226.5
SPECIFIC SUBJECT: PROJECT MANAGEMENT, MILESTONES IN THE PROJECT DEVELOPMENT PROCESS; AND TEAM MEETING GUIDELINES	DATE: JUNE 28, 2011
	SUPERSEDES: IIM-LD-226.4
CHIEF ENGINEER APPROVAL: Malcolm T. Kerley, PE Chief Engineer Approved June 28, 2011	

Changes are shaded.

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CURRENT REVISION

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- This memorandum was revised to change “Concurrent Engineering” to “Project Development” and “Milestones” to “Phases”.

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EFFECTIVE DATE

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- These changes are effective upon receipt. Please include this memorandum with other policy memorandums from Location and Design, Structure and Bridge, Traffic Engineering, Environmental, Scheduling and Contract, Maintenance, Scheduling and Contract, Right of Way and Materials. The instructions herein have been discussed with the noted Divisions and are to be considered as their instructional memorandum. The instructions outlined will be evaluated every 12 months and revised as may be appropriate.

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INTRODUCTION

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- Project management and the project development process are inseparable in the development of highway projects at VDOT. Milestone deliverables, quality control/quality assurance, a lessons learned (feedback) mechanism, and software tools are integral parts of this process. This memorandum addresses pertinent aspects of this Preliminary Engineering Project Development process.

- Information related to project management has been removed and is now available at the Project Management Office Team site at:  
[http://www.virginia-dot.org/business/project\\_management.asp](http://www.virginia-dot.org/business/project_management.asp) .
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## PRINCIPLES OF THE VDOT PROJECT DEVELOPMENT PROCESS

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The VDOT Project Development Process is based on three principles:

- Teamwork – Each discipline that is involved in the project development, including operations, construction, maintenance, Residencies, Local Governments, etc., must function as part of the project team and must commit to the dedication of the necessary resources at the designated times to meet the objectives of the project. The Project Manager is the Project Team Leader and is accountable for the organization of the project team. The Project Manager will coordinate the selection of team members with appropriate discipline managers.
- Flexibility - The project team must develop a project schedule that fits the needs of the particular project rather than making the project development conform to a rigid outline.
- Phases with resulting milestones - The project development process is built around a sequence of five major phases with resulting events (milestones):
  1. Scoping Phase, resulting in Final Scope Approval
    - a. A thorough scoping process that includes the overall concept of how the project will be constructed.
    - b. A Preliminary Field Inspection that considers maintenance of traffic and sequence of construction.
  2. Preliminary Design Phase, resulting in Design Approval
    - a. Includes a Preliminary Utility Field Inspection
    - b. Includes public outreach/public hearing
    - c. A Public Hearing based on the major design features of the project including the pertinent aspects of the proposed sequence of construction with its associated right of way impacts.
  3. Detailed Design Phase, resulting in Field Inspection
    - a. Beginning the right of way processes early in the project development and continuing it concurrently during the subsequent project development.
  4. Final Design and ROW Acquisition Phase, resulting in PAC (Pre-Advertisement Conference) and any plan refinements prior to advertisement
    - a. A thorough review of the plans including the proposed sequence of construction and maintenance of traffic, as well as the contract documents, by the entire project team prior to advertisement of the project.
  5. Advertise Plans Phase, resulting in project advertisement and award

## OBJECTIVE

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- The objective in implementing this process is to increase the efficiency with which projects are developed at VDOT. Specific goals are to:
    - improve the on-time and on-budget delivery of projects,
    - promote concurrent design activities,
    - establish regularly scheduled communication and coordination points throughout the project development process,
    - enable a “team” approach to project development,
    - improve the quality of final project development products and the subsequent design-construction transition.
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## IMPLEMENTATION POLICY

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- All preliminary engineering projects (all project activities prior to physical construction) should conform to the principles of the Project Development Process (including projects administered by Localities).
  - All preliminary engineering projects will have a designated Project Manager.
  - All preliminary engineering projects will have designated team members representing the individual disciplines involved in the project (this may range from a part-time project manager and several team members for a signal installation to a full-time project manager and a large number of team members for an Interstate construction project).
  - The name of the Project Manager and the team members will be shown on the integrated Project Manager (iPM) site.
- The Project Manager and Project Team will develop and coordinate the project schedule to meet the requirements of these guidelines.
- These phases and their resulting team meetings and milestones will document the development of the project in accordance with this memorandum. The Project Manager has oversight for the number of team meetings scheduled and the applicable steps in the project development process to be used for each project.
- All new projects will follow these guidelines from the project inception.