



Project Management Procedure

SUBJECT: PROJECT SCOPE PROCESS AND TEAM MEETING	NUMBER: PMO-1.3
RESPONSIBILITY: PROJECT MANAGER	EFFECTIVE DATE: September 22, 2010
	SUPERSEDES: PMO-1.2
STATE CONSTRUCTION ENGINEER APPROVAL: <div style="text-align: right; margin-top: 10px;"> <u>Original with signature on file in Project Management Office</u> <hr style="width: 20%; margin: 0 auto;"/> State Construction Engineer </div>	

TASK:	Refine and document the Scope of the project.
PURPOSE:	This procedure outlines the actions required to Scope a project and conduct the Scoping Meeting. The Project Manager is responsible for guiding the process from Preliminary Engineering Authorization through the Scoping Meeting. The process described below should be applied to individual projects based on their complexity.
STEPS:	Prepare for Field Review and Scoping Meeting <ol style="list-style-type: none"> 1. Review the initial project schedule and adjust planned dates as needed. 2. Identify Project Team members based on the requirements for project development, coordinate/negotiate with Functional Managers for resources, and document Project Team Members in iPM Communications and Divisions tab. 3. Initiate a Context Sensitive Analysis and Stakeholder Outreach to involve all stakeholders in the development process as described in IIM-LD-235 – Context Sensitive Solutions. 4. Collect data for Environmental Review Process (ERP) and Scoping Meeting; verify that Request for Traffic Data (LD-104) is submitted; request imagery for plan development via iPM Action Item. 5. Submit Project Early Notification (EQ-429) to the Environmental Division by completing the information in CEDAR.

6. **Coordinate with the Area Construction Engineer** on the Scoping Constructability Review in accordance with the guidelines provided in [Appendix E of the Road Design Manual](#).
7. **Consider and evaluate the delivery method for the project** – Design-Bid-Build, Design Build, Public-Private-Partnership.
8. **Determine Stakeholders and Team Members** that should attend the Scoping Meeting. The Scoping Meeting includes Stakeholders and Team Members from the appropriate disciplines (some disciplines such as Location and Design Division and Environmental Division may have several sub-disciplines representing specific expertise). The potential members of the Scope/ Field Review Team are listed in the [Field Review and Scoping Report](#) (PM-100).
9. **Confirm with the Lead Design Engineer** that project documents for the Field Review and Scoping Meeting are complete and available.
10. **Confirm with the Environmental Division** team member that the Environmental Review Process (ERP) task is completed and closed in the Project Schedule.
11. **Verify completion and close the Scoping Constructability Review** task (22C) in the Project Schedule.
12. **Schedule and communicate Scoping Meeting** and make all pertinent project information accessible to the Project Team in advance of the meeting. Allow sufficient time for the Team Members to review the project documents before the meeting.

Conduct Field Review and Scoping Meeting

1. **Conduct the Field Review** and discuss constructability issues including construction access and maintenance of traffic items (include Assistant Residency Administrator for Maintenance if appropriate).
2. **Determine the level of public involvement** and whether a Willingness and/or Public Hearing is required.
3. **Determine the delivery method** - Design-Bid-Build, Design Build, Public-Private-Partnership.
4. **Establish and enter a comprehensive project budget in PCES and**

	<p>develop the project schedule (identify critical tasks) with the input from the appropriate Team Members. (Refer to Project Development Budget and Estimates Procedure and Project Development Schedule Procedure for details).</p> <ol style="list-style-type: none"> 5. Complete and save the Scoping Team Meeting Report in iPM. 6. Close Scoping Team Meeting task (22X) in the Project Schedule. 7. Complete Field Review and Scoping Report (PM-100) and submit for approval - The Project Manager completes this form at the conclusion of the Project Scoping Meeting and submits to the required individual(s) for approval. 8. Complete the Baseline Schedule (with critical tasks identified) and document the appropriate milestone meetings in the Project Schedule. 9. Close Scope Project task (22) in the Project Schedule after the Field Review and Scoping Report (PM-100) is approved by the State Location & Design Engineer (or designee) and the complete schedule is entered in the Project Schedule. (Refer to Project Development Schedule Procedure). Change the project status to ‘Activity Dates Set’ in the Project Pool. 10. Upload the approved Field Review and Scoping Report (PM-100) to iPM Documents and send e-copies to stakeholders that do not have access to iPM.
<p>TOOLS AND RESOURCES:</p>	<ul style="list-style-type: none"> ▪ Concurrent Engineering Process ▪ iPM – (User’s Guide & Action Items) ▪ Project Pool & User’s Guide ▪ iSYP & User’s Guide ▪ HTRIS ▪ PONTIS ▪ PCES & User’s Guide ▪ Project Schedule & User’s Guide ▪ IIM-241 – Transportation Management Plan Requirements ▪ Maintenance Best Practices Manual - Section 4.10 ▪ IIM-LD-235 – Context Sensitive Solutions ▪ Policy Manual for Public Participation in Transportation Projects ▪ Project Early Notification (EQ-429) ▪ Request for Traffic Data (LD-104) ▪ Project Change Control (PM-102) ▪ Risk Management Form (PM-103) ▪ Communication Plan

	<ul style="list-style-type: none"> ▪ Request for RW Data (PM-104) ▪ Field Review and Scoping Report (PM-100) ▪ Scoping Team Meeting Report ▪ Final Scoping Certification (PM-131) ▪ Project Management Body of Knowledge (PMBOK) – Chapters 4 - 11 ▪ VDOT Project Management Development Program Courses ▪ Project Scope Definition Form (PM-101) ▪ Project Tasks and Scheduling Guide ▪ Environmental Review Process
DELIVERABLES:	<ol style="list-style-type: none"> 1. Project Team established in iPM. 2. Project scoped and approved PM-100 form saved in iPM. 3. Scoping Team Meeting Report saved in iPM. 4. Scoping Estimate (i.e. project budget) uploaded in PCES. 5. Complete project schedule developed, critical tasks identified, scoping task completed and documented in Project Schedule.
DELIVERABLE SAMPLES:	<ul style="list-style-type: none"> ▪ Project Team in iPM ▪ Scope Team Meeting Report ▪ Field Review and Scoping Report ▪ Scoping Estimate in PCES ▪ Project Schedule
DESCRIPTION:	<p>The scoping process begins after the Project Sponsor holds a Pre-Scoping meeting, transitioning the project from Initiation to the Development Phase and once PE Authorization is secured. At this time the Project Schedule should be adjusted to accurately capture the initial task durations (ERP, Scoping and Determine Permits Needed). The Environmental Review Process (ERP) is the document that defines how VDOT’s Environmental Division determines what environmental analysis or if an environmental analysis is required for a given project. The Scoping meeting is the first inter-disciplinary team meeting and Development Phase Milestone. During this time the Project Purpose is refined. All available data related to the project such as old plans, aerial photos, and any miscellaneous documents, including organization of the Project Team members, is accessible in iPM to the Project Sponsor and Team Members prior to or during the scheduling of the scoping meeting. Each discipline represented on the project team proceeds to investigate the proposed project from the perspective of their discipline. The Scoping Meeting is held when all team members are ready to present their respective findings and the results of the ERP are available. The Project Team, under the leadership of the Project Manager, refines the scope of the project and establishes the project budget and the complete project schedule at this meeting.</p> <p>It is the responsibility of the Project Manager to perform any preliminary work necessary to determine appropriate representatives to be included in the Project</p>

Scoping. These representatives are from the disciplines that are involved in providing design or support services for the project's development. Representatives (including FHWA) are to be invited a minimum of two weeks prior to the project Scoping Meeting. Attendance at Scoping Meeting by appropriate representatives is mandatory unless the Project Manager determines that written comments prior to the meeting, in lieu of attendance, is acceptable. In some cases the invitee may designate an equally or more knowledgeable individual as a substitute.

Project Scoping Team Meeting also includes Project Sponsor, appropriate stakeholders or representative of the project sponsors. Local representatives in many cases are from a local Transportation Department or Public Works Department, in others the Residency Administrator represents the county or municipality. If the stakeholder or representative of the project sponsor cannot attend, the meeting is rescheduled. Members of the Review Team evaluate the project's purpose, need, scope, and design criteria before any significant engineering funds are expended.

The Project team uses field observations, reviews available crash data, and other relevant operational information to discuss preliminary work zone management strategies in conjunction with alternative project options and design schemes. Relevant operational information should include but is not limited to, project definition (scope, project's complexity level, roadway and traffic characteristics, and TMP type), construction phasing/staging of equipment and materials, as well as temporary traffic control, public communications and transportation operations strategies. The Regional Traffic Engineer begins acquiring traffic and crash data and explores possible alternate/detour routes. A preliminary cost estimate for the project's traffic management plan is developed by the Project Manager at this milestone. A preliminary Public Communications Plan is drafted with the assistance of District Public Affairs. Context Sensitive Solutions (CSS) is a project development approach that is initiated at this point to promote the involvement of all stakeholders in the development of the project to ensure the project fits its physical setting and also reflects concerns for scenic, aesthetic, historic and environmental resources while providing for transportation safety and mobility.

The Federal Highway Administration (FHWA) is invited to Project Scoping on all federally funded projects. The FHWA determines if participation is necessary. Federal Oversight remains as designated in the Six Year Improvement Program unless there is a significant change in the scope that alters the construction estimate. Determining the need to change the federal designation is coordinated between Location and Design Division, Programming Division, and FHWA.

The Team Members review the project in the field prior to the Scoping Team Meeting. The Project Scoping for some projects cannot be completed until the Preliminary Field Inspection (PFI) phase, in these cases the scope is reviewed and finalized at the PFI using form PM-100 Part C. The Project Manager schedules, conducts, and documents the field review and project scoping immediately following the review. For projects designed by consultants ensure that appropriate detail is included in the Request for Proposals (RFP). The RFP is developed after completion of the Scoping Report. The Project Manager updates the Project Schedule and enters the Scoping Estimate in PCES after receiving input from all disciplines.

The Project Manager ensures that Project Scoping accomplishes the following, and is documented in the Scoping Report:

- Determine the delivery method (Design Build, Design-Bid-Build, Public-Private-Partnership).
- Refine project limits
- Preliminarily identify project issues that may affect scheduling and the construction budget, such as environmental issues, right of way, design, utilities, etc.
- Finalize the purpose and need of the project.
- Refine the Pre-Scoping (Programming) Estimate provided at the Pre-Scoping meeting to develop the initial construction cost estimate. Note: The Construction Engineering and Inspection (CEI) estimate is developed automatically in PCES based on a percentage of the construction cost.
- Consider opportunities (cost, quality, safety, etc.), identify project risk and develop risk mitigation strategies.
- Refine the schedule (each team milestone should be clarified with all team members and reviewed to ensure commitment).
- Determine if a Citizen Information Meeting should be held.
- Define participation of each discipline and identify a project Team Member.

The Field Review and Scoping Report (PM-100) consists of three parts:

- Part A establishes the project scope, identifies the general limits of survey information required and authorizes survey on all projects after the Field Review is held. Part A also documents Final Scoping Approval on projects determined by the Project Manager to require no further studies to establish project scope.
- Part B documents information discussed at the Field Review for all projects. This information should be included with information submitted with requests for project survey.
- Part C will be used to document Final Scoping Approval for projects requiring a Preliminary Field Inspection to finalize the project scope and

survey requirements.

Once the Field Review and Scoping Report is complete, the Project Manager submits the PM-100 to the District Administrator (or their designee) for approval and forwarding to the State Location and Design Engineer. This approval sequence applies to all projects that either require the approval and/or recommendation from the State Location and Design Engineer to the Chief Engineer. Examples of such projects include all Complete, Minimum, and No Plan construction projects (advertised by VDOT or Locality); Right of Way and/or Construction approvals; and Public Hearing (Design and/or Location) approvals. For projects not requiring the State Location and Design Engineer's approval and/or recommendation, the PM-100 is submitted to the Residency Administrator then forwarded to the District Administrator.

Upon approval of the Field Review and Scoping Report, the Project Manager uploads the approved PM-100 to iPM Documents and sends copies to individuals listed on the form that do not have access to iPM.

Subsequent to project scoping, whenever a change cannot be avoided in project scope, schedule or features that could result in environmental impacts, the District Preliminary Engineering Manager (in conjunction with the Scoping Team) is to be consulted to determine if the project should be re-scoped. The decision to re-scope a project is based upon the following:

- Change in purpose and need of the project
- Project right of way authorization date or advertisement date is delayed or advanced significantly
- Change in footprint (typical section, location, terminus) of project

When a project is re-scoped, the scoping process is started again as described in this document. The Project Manager does not commit to a project change until all impacts of the change are identified. Impacts to budget, schedule, quality and environmental issues are considered and the Project Sponsor is consulted. An additional Scoping Report (PM-100) is completed and approved if the project is re-scoped. When re-scoping results from public interests, Public Affairs Division is included in the team meeting. Any impacts to schedule/budget/quality are documented.

When the Project Manager, Project Sponsor and PE Manager agree that a change in the Scope does not warrant a re-scoping, the Project Change Control form PM-102 should be used to document the recommended scope changes, signed by the Sponsor and PE manager and uploaded to iPM Documents.

Note: A re-scoping does not automatically justify a re-baseline in the Dashboard, the Dashboard rules for re-baselining must be adhered to in all

instances.

Prior to the signing of plans for right of way (or construction when no right of way is required), the Project Manager will complete a Scoping Certification Form (PM-131) stating that the project is within the original scope or provide documentation concerning deviations.

Note: For Maintenance projects refer to the Maintenance Best Practices Manual - Section 4.10.