# WESTERN FEDERAL LANDS HIGHWAY DIVISION

# PROJECT DEVELOPMENT PROCESS FLOW CHART

REVISED SEPTEMBER 2007



Federal Highway Administration

#### WFLHD SUPPLEMENT 9.6.3-1

#### 9.6.3 PS&E DEVELOPMENT AT VARIOUS STAGES OF DESIGN

This supplement describes the design process in WFLHD.

WFLHD's design process is described in the <u>Project Development Process Flow Charts</u>. The Project Development Process Flow Chart is a simplified, web-based framework that outlines the project development process at Western Federal Lands Highway Division. The chart provides comprehensive links to detailed activity definitions and other related forms, guidelines, and policies. The chart is intended to be used as a guideline that can be modified to fit individual project requirements.

Each task box shown in the flow chart may be selected to access a detailed activity definition. Each activity definition contains links to forms, guidelines, and policies where appropriate. The entire flow chart with activity definitions is also located in a <u>single</u> document.

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### **Acronym List**

ADT Average Daily Traffic

A/E Architectural & Engineering
BA Biological Assessment
BO Biological Opinion
CE Categorical Exclusion

CEQ Council on Environmental Quality

CFT Cross-Functional Team
CFR Code of Federal Regulations

CO Contracting Officer

COE Construction Operations Engineer

COTR Contracting Officer's Technical Representative

CPM Critical Path Method

CQAS Construction Quality Assurance Specialist

DAB Development Advisory Board (NPS)
DEIS Draft Environmental Impact Statement
DERT Division Environmental Review Team

DSC Denver Service Center
EA Environmental Assessment
EIS Environmental Impact Statement

EO Executive Order

EPA Environmental Protection Agency

ESA Endangered Species Act

FAR Federal Acquisition Regulation

FEIS Final Environmental Impact Statement

FHP Forest Highway Program

FONSI Finding of No Significant Impact FHWA Federal Highway Administration

HDM Highway Design Manager

NEPA National Environmental Policy Act

NOA Notice of Availability

NOAA National Oceanic and Atmospheric Administration

NOH Notice of Hearing
NOI Notice of Intent
NPS National Park Service

PA Project Agreement

PDDM Project Development and Design Manual

PE Project Engineer
PIH Plan-in-Hand

PIP Public Involvement Plan
PIR Project Identification Report

PM Project Manager

PRMS Program Resource Management System

PRP Parks Road Program

PS&E Plan, Specification, and Estimate

PST Pavement Selection Team

QA Quality Assurance
QC Quality Control
RE Resident Engineer
ROD Record of Decision

ROW Right-of-Way

SCRs Special Contract Requirements

SEE Social, Economic, and Environmental SHPO State Historic Preservation Officer

SOW Statement of Work

SWPPP Storm Water Pollution Prevention Plan THPO Tribal Historic Preservation Officer

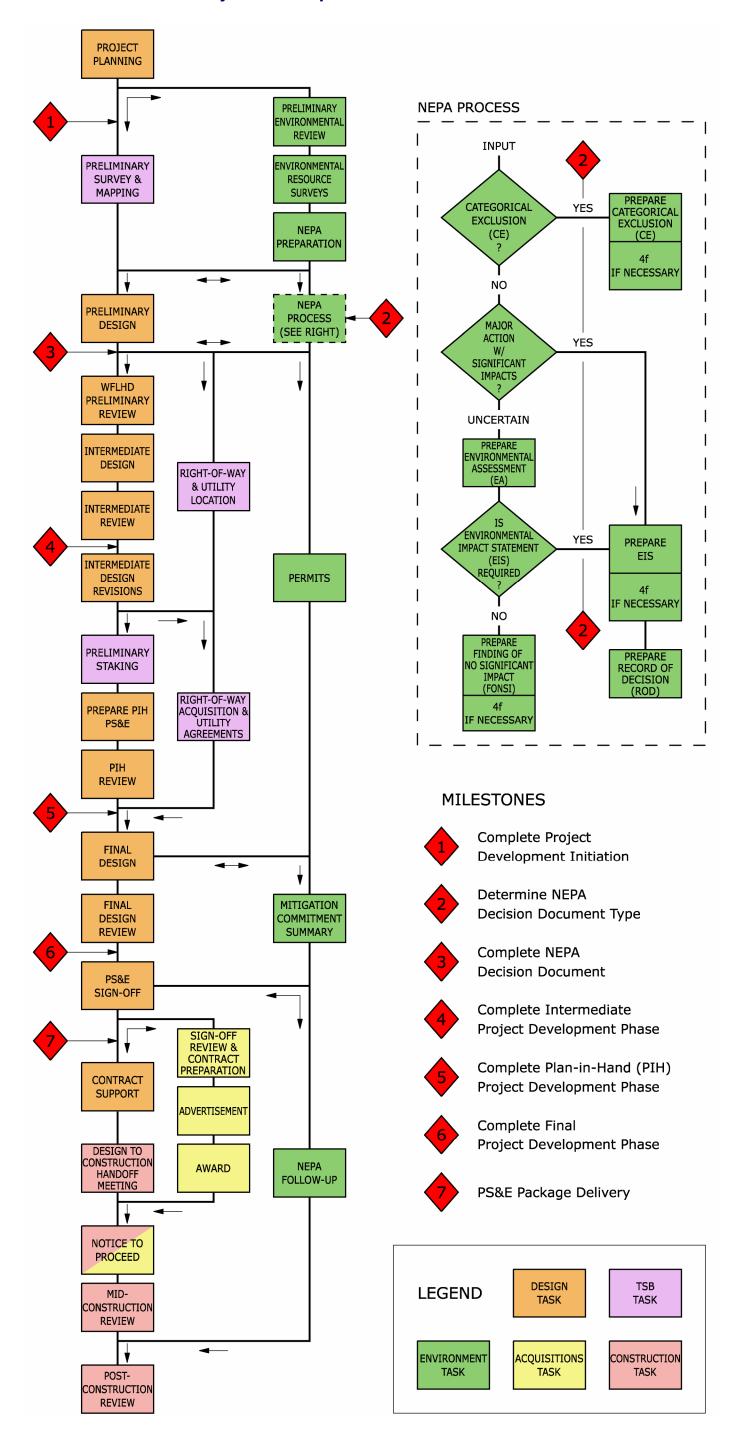
TSB Technical Service Branch
TSL Type, Size, and Location

USACE United States Army Corps of Engineers USFWS United States Fish and Wildlife Service

VA Value Analysis
VE Value Engineering

WFLPII Western Federal Lands Project Improvement Initiative

# **Project Development Process Flow Chart**



#### **Milestones**

Industry Definition: A *Milestone* is a terminal element that marks the completion of a work package or phase, typically marked by a high level event such as completion, endorsement or signing of a deliverable, document or a high level review meeting. Typically a milestone is associated with some sort of decision that outlines the future of a project.

#### **WFL Milestone #1: Complete Project Development Initiation**

The purpose of this milestone is to identify the signatory acceptance of the Project / Functional Manager developed *Project Plan*.

The *Project Plan* guides project execution and project control by defining planning assumptions and decisions, facilitate communication among stakeholders, and document approved scope, cost, and schedule baselines. The *Project Plan* is an evolving plan in that the plan would be revised to reflect approved changes to the scope, cost, schedule, and performance objectives.

PRMS Activity Code: WM0100

#### WFL Milestone #2: Determine NEPA Decision Document Type

The purpose of this milestone is to identify the determination point of when the Categorical Exclusion (CE), Environmental Assessment (EA), or Environmental Impact Statement (EIS) is determined.

Categorical Exclusions (CE) may be used for actions or activities which meet the definition in 23 CFR 771.11(a) and do not have significant environmental impacts. Environmental Assessments (EA) may be used for actions where a CE is inadequate, due to the anticipated environmental impacts of the project. If it is uncertain whether the project is a major action with significant impacts, then the next step in the process is to proceed to an EA. The primary purpose of an EA is to help decide whether or not an Environmental Impact Statement (EIS) is necessary. Environmental Impact Statements (EIS) are to be used for actions where an EA and FONSI are inadequate, due to the anticipated environmental impacts of the project. An EIS is required for actions that individually or cumulatively have significant environmental impacts.

PRMS Activity Code: WM0200

#### **WFL Milestone #3: Complete NEPA Decision Document**

The purpose of this milestone is to identify the signatory acceptance point of a Categorical Exclusion (CE), Finding of No Significant Impact (FONSI) or Record of Decision (ROD).

A Categorical Exclusion (CE) document is the NEPA decision document for actions or activities meet the definition in 23 CFR 771.11(a) and do not have significant environmental impacts. A Finding of No Significant Impact (FONSI) document follows the preparation of the EA in the NEPA process. The EA and any attachments should adequately document the basis for the FONSI. A Record

Revised: 9/9/2007

of Decision (ROD) document follows the preparation of the EIS in the NEPA process. The ROD explains the basis for the project decision as completely as possible, based on information contained in the FEIS; however, it is appropriate to cross-reference and incorporate other documents by reference.

PRMS Activity Code: WM0300

#### WFL Milestone #4: Complete Intermediate Project Development Phase

The purpose of this milestone is to identify the meeting date for partner review of the Intermediate Plans, Specification, and Estimate (PS&E) package.

The Project Development process should be approximately 50% complete at this point. The PS&E package includes cross sections, major pay items with their associated quantities, and major design details such as intersections, turnouts, large culverts, guardrail, walls, and any items affecting environmental permits and ROW acquisition (e.g., the erosion control plan).

PRMS Activity Code: WM0400

#### WFL Milestone #5: Complete Plan-in-Hand (PIH) Project Development Phase

The purpose of this milestone is to identify the meeting date for partner review of the Plan-In-Hand (PIH) Plans, Specification, and Estimate (PS&E) package.

The Project Development process should be approximately 70% complete at this point. The PIH PS&E includes a plan set with all major design elements addressed (grading, parking areas, drainage, structures, erosion control, traffic control), cross-sections, a draft set of SCRs, and a complete estimate of all pay items with their associated quantities.

PRMS Activity Code: WM0500

#### WFL Milestone #6: Complete Final Project Development Phase

The purpose of this milestone is to identify the date for partner concurrence of the Plans, Specification, and Estimate (PS&E) package.

The Project Development process should be approximately 95% complete at this point. All details are incorporated in the plan sheets at this point, as well as a complete set of SCRs and a comprehensive Critical Path Method (CPM) schedule.

PRMS Activity Code: WM0600

#### WFL Milestone #7: PS&E Package Delivery

The purpose of this milestone is to identify the delivery date of the Plans, Specification, and Estimate (PS&E) package to Acquisitions.

The Project Development process is 100% complete at this point. The PS&E package and CPM schedule is ready for advertisement.

PRMS Activity Code: WM0700

Revised: 9/9/2007

# Design Task Activity Definition Project Planning

#### Receivables/Inputs:

Not Applicable

#### **Activity Description:**

The purpose of this task is to adequately scope the project to provide all necessary information to begin the National Environmental Policy Act (NEPA) process and Preliminary Design. This primarily involves conducting a field review and drafting the appropriate scoping document.

Conduct an initial field review to determine the project scope. Typical attendees include the Project Manager (PM), Partnering Agency, Program Coordinator, Environmental Specialist, and Design representatives as needed. Other Technical Service Branch (TSB) representatives may attend as requested. As a minimum, the following should be addressed at this meeting:

- Project purpose and need
- Roles and responsibilities of partnering agencies
- List of reasonable project alternatives established using general design guidelines (road width, surfacing, corridor location, etc.)
- Primary contacts for project
- Preliminary project delivery schedule with milestones
- Any special issues or concerns that may impact project alternatives (winter closures, events, etc.)
- Collection and analysis of traffic data (accident history, average daily traffic (ADT) volumes, etc.)
- Preliminary construction estimate
- Environmental concerns for the project (cultural and natural resource) and estimation of the affected environment
- Proposed level of NEPA analysis

The above information will be documented in a Project Agreement (PA) for National Park Service (NPS) projects or Project Identification Report (PIR) for Forest Highway projects.

The PM will meet with other WFLHD functional leaders to determine the members of the Cross-Functional Team (CFT) for the remainder of the project. The CFT will then meet to determine the method(s) of project delivery (A/E firm or in-house) and establish a project budget and schedule for delivery.

Project accounts are set up for Project Delivery functions.

#### **Deliverables/Outputs:**

- 1. Completed scoping document (PA or PIR) including the following:
  - a. Project Purpose and Need identified
  - b. Project roles and responsibilities defined for partnering agencies
  - c. General list of reasonable alternatives established
  - d. Preliminary Project delivery schedule established
  - e. Anticipated environmental impacts for the proposed project identified
- 2. Project Delivery schedule (PRMS)
- 3. Project account and budget established in PRMS
- 4. Preliminary construction estimate
- 5. CFT selection

#### **Completion of Activity:**

The CFT is selected, the Project Delivery schedule is entered into PRMS, and the project account and budget are established in PRMS.

#### **Additional Supporting Documentation:**

Example Project Agreement

Example Project Identification Report

PDDM Chapter 3 - Environmental Stewardship

PDDM Chapter 4 - Conceptual Studies and Preliminary Design

Acronym List

#### **Applicable PRMS Codes:**

D00001 Field Review and Scope of Work

# **Design Task Activity Definition**

# **Preliminary Design**

#### Receivables/Inputs:

- 1. Completed scoping document (PA or PIR)
- 2. Complete Environmental and Project Delivery schedule (PRMS)
- 3. Project accounts in PRMS
- 4. Preliminary Engineering Budget
- 5. Preliminary construction estimate
- 6. List of CFT members
- 7. WFL preliminary survey and mapping
- 8. Resource surveys (wetlands, archeological sites, and biological assessments)

#### **Activity Description:**

The purpose of this task is to provide adequate design support to effectively analyze the alternatives presented in the Environmental Document. This may include developing multiple line and grades, pavement structures and templates for evaluation. Development of these alternatives should not exceed 30%.

#### Designer Guidance:

Develop design criteria according to the scoping document. Utilize preliminary mapping to strike initial alignments and develop proposed typical sections for each alternative. Hold a Pavement Selection Team (PST) meeting to determine proposed pavement structure options. Obtain preliminary TSB recommendations, as necessary (slopes, bridge foundations, etc.). Incorporate mapping and delineations from resource surveys to determine approximate impacts for each alternative.

Provide further design information to the drafters of the Environmental Document(s) as required. This may include, but is not limited to; total areas of impact, preliminary earthwork quantities, waste & staging areas, material source plans, preliminary drainage designs, bridge TSL, ROW plans, construction phasing and closure schedules, and revised cost estimates.

For Park Roads projects, a Value Analysis (VA) may be performed by the NPS. Provide the appropriate preliminary design information as described above to the Park Service and attend the VA meeting as requested. Following the VA, a Development Advisory Board (DAB) Review will be performed by the NPS. Provide further technical support (preliminary design details, cost estimates, etc.) for this review as requested.

#### **Deliverables/Outputs:**

- 1. 30% preliminary plans of the design alternatives (plan/profile sheets, typical sections, major work items identified and located)
- 2. Preliminary construction cost estimates for alternatives presented in the Environmental Document.

### **Completion of Activity:**

NEPA selection of preferred alternative (The FONSI or ROD is completed by environment.)

### **Additional Supporting Documentation:**

NPS VA procedures PDDM Chapter 4 - Conceptual Studies and Preliminary Design Acronym List

#### **Applicable PRMS Codes:**

D00002 Preliminary Design

Subtasks:

L00004 L00005 **Analyze Alternatives** 

Finalize Preferred Alternative

# Design Task Activity Definition WFLHD Preliminary Review

#### Receivables/Inputs:

- 1. NEPA-selected preferred alternative (FONSI or ROD completed)
- 2. Preliminary plans (plan/profile sheets, typical sections, major work items identified and located) for the preferred alternative
- 3. Preliminary construction cost estimate for the preferred alternative

#### **Activity Description:**

The purpose of this task is to perform internal and external reviews at 30% design of the NEPA-selected preferred alternative.

#### Designer Guidance:

Some revisions to the preliminary plan set may be necessary to bring the preferred alternative plan set to a full 30% level of completion. Allow 1-2 weeks for each review, depending on project complexity. The scheduled reviews are as follows:

 Design QC Review. Provide the preliminary plans to the HDM or their delegated Senior Designer for a QA/QC Review. The reviewer will perform a line and grade review using the <u>Quality Assurance/Quality Control</u> <u>Checklist</u> as a guide.

#### 2. Field Review.

<u>Note:</u> The field review may take place earlier in the design process to aid in the selection and analysis of alternatives presented in the Environmental Document.

Document resolutions to Design QC Review comments. Perform revisions and provide copies of the revised plans to the external agencies prior to the scheduled field review. For Forest Highway projects, the field review will typically include all SEE (Social, Economic, and Environmental) Team members. For Park Roads projects, the attendees will typically consist of CFT members, Park representatives and Denver Service Center (DSC) representatives, as requested. If ROW/Utility issues are present, a ROW specialist should be invited to attend. Prepare any presentation materials/visualizations as necessary to appropriately convey design information to the meeting attendees. Accompany the PM to the external field review and provide technical input as needed.

#### **Deliverables/Outputs:**

- 1. Summary of comments provided at the field review.
- 2. <u>Trip Report</u> discussing accomplishments/decisions made at the preliminary field review

#### **Completion of Activity:**

The preliminary field review trip is completed.

Additional Supporting Documentation: PDDM WFL Supplement 9.6.4-1, Reviews Acronym List

# **Applicable PRMS Codes:**

D0PREV Preliminary Review

# Design Task Activity Definition Intermediate Design

#### Receivables/Inputs:

Summary of comments provided at the preliminary field review.

#### **Activity Description:**

The purpose of this task is to complete the Plan, Specification, and Estimate (PS&E) package to 50%. The intermediate set of plans should include cross-sections, major pay items with their associated quantities, and major design details such as intersections, turnouts, large culverts, guardrail, walls, and any items affecting environmental permits and ROW acquisition (e.g., the erosion control plan).

#### Designer Guidance:

Document resolutions to preliminary field review comments and revise the plan set accordingly.

Complete the design exception portion of the *Highway Design Standards Form*.

Incorporate CFT recommendations into the plans (Hydraulic, Geotech, etc.). Develop design drawings and quantities required for environmental permits. As needed, provide design information to the ROW Specialist for the development of the draft ROW plans and easement plats.

For projects exceeding \$1 Million in construction costs, a Value Engineering (VE) study is required. This study may be performed in-house or contracted to a consultant. Incorporate any approved VE recommendations into the plan set. If a Value Analysis (VA) has been performed (NPS projects), this may satisfy the requirements of a VE study. Consult with the PM and HDM for the appropriate action.

Refine the preliminary cost estimate to reflect all intermediate design changes.

#### **Deliverables/Outputs:**

50% plan set with estimate. Draft Special Contract Requirements (SCRs) are recommended, but not required at this point.

#### **Completion of Activity:**

Submit the 50% plan set with estimate to HDM for QA/QC review.

#### **Additional Supporting Documentation:**

PDDM Section 9.6 — Plans Specifications and Estimate (PS&E) Development PDDM WFL Supplement 9.6.4-1, Reviews Acronym List

# Applicable PRMS Codes: D00005 Interme

Intermediate Design
Design Value Engineering Study DES\_VE

# Design Task Activity Definition Intermediate Review

#### Receivables/Inputs:

50% plan set with estimate

#### **Activity Description:**

The purpose of this task is to perform internal and external reviews of the 50% design package.

#### Designer Guidance:

Depending on the complexity of the project, this task may be abbreviated or eliminated, as approved by the HDM/PM. Allow 1-2 weeks for each review, depending on project complexity. The scheduled reviews are as follows:

- 1. Design QC Review. Provide the intermediate plans and estimate to the HDM or their delegated Senior Designer for a QA/QC Review. The reviewer will perform a QC review using the <u>Quality Assurance/Quality</u> <u>Control Checklist</u> as a guide. The reviewer's focus at this phase will be ensuring that the design adheres to the following:
  - a. It is context sensitive:
  - b. It minimizes or avoids resource impacts;
  - c. It is cost-effective and constructible;
  - d. It integrates environmental mitigation and stipulations;
  - e. All appropriate design and drafting standards are being utilized in the development of the PS&E package.
- Internal Review. Document resolutions to Design QA/QC Review comments. Perform revisions to the PS&E package. Submit the revised PS&E to the PM, CFT, and Partners agency(s) according to PDDM WFL Supplement 9.6.4-1, Reviews. Optional reviewers may include the Highway Safety Engineer.
- 3. External Review. The External Review may consist of an office review and/or a field review at the project site. Coordinate and document resolutions to comments from the Internal Review. Revise the PS&E package and provide copies to the external agencies prior to the field review. For Forest Highway projects, the external review will typically include all SEE (Social, Economic, and Environmental) Team members. For Park Roads projects, the attendees will typically consist of CFT members, Park representatives and DSC representatives, as requested. Prepare any presentation materials/visualizations as necessary to appropriately convey design information to the meeting attendees. Accompany the PM to the external field review and provide technical input as needed.

#### **Deliverables/Outputs:**

- 1. Summary of comments resulting from the external review.
- 2. <u>Trip Report</u> discussing accomplishments/decisions made at the intermediate field review, as applicable.

#### **Completion of Activity:**

The intermediate external review is completed.

### **Additional Supporting Documentation:**

PDDM <u>WFL Supplement 9.6.4-1</u>, Reviews Acronym List

#### **Applicable PRMS Codes:**

D00006 Intermediate Review

Subtasks:

D00006A PD Team Final Design QC/QA Review

D00006B Revise Intermediate PS&E

D00016C Intermediate PS&E CFT Review

D00006D Intermediate Field Review

# Design Task Activity Definition

### **Intermediate Design Revisions**

#### Receivables/Inputs:

Summarized comments resulting from the intermediate review

#### **Activity Description:**

The purpose of this task is to provide a PS&E package of sufficient detail to apply for applicable permits, to allow for preliminary roadway staking, and to prepare final ROW/utility plans, as applicable.

#### Designer Guidance:

Document resolutions to the intermediate external review comments and revise the plan set accordingly. Finalize construction limits. Assist the Environmental Specialist in drafting the permit applications as needed, including the Storm Water Pollution Prevention Plan (SWPPP) and erosion control plans. Provide revised cross-sections and staking data to the Survey Branch if staking for the Plan-in-Hand (PIH) review will be required.

#### **Deliverables/Outputs:**

- 1. Intermediate design package with revisions
- 2. Staking notes (cross-sections, slope stakes, centerline) as required
- 3. Sufficiently detailed plans to apply for permits

#### **Completion of Activity:**

- 1. Permit application(s) completed by environment
- 2. Preliminary staking data submitted to survey
- Intermediate design package submitted to ROW for drafting of final ROW/utility plan

#### **Additional Supporting Documentation:**

<u>PDDM Chapter 12</u> – Right of Way and Utilities Acronym List

#### **Applicable PRMS Codes:**

D00008 Intermediate Design Revisions

E00006 Mitigation Efforts E00007 Permit Process

Subtasks:

E00007A Permit Applications E00007B Permit Coordination

# Design Task Activity Definition

### Prepare Plan-in-Hand (PIH) PS&E

#### Receivables/Inputs:

Intermediate design package

#### **Activity Description:**

The purpose of this task is to complete the PS&E package to 70%. The PIH PS&E should include a plan set with all major design elements addressed (grading, parking areas, drainage, structures, erosion control, traffic control), cross-sections, a draft set of SCRs, and a complete estimate of all pay items with their associated quantities.

#### Designer Guidance:

Assemble a complete set of SCR's. Obtain feedback from environment and ROW on appropriate sections of the SCRs. Determine all pay items to be used in the contract and calculate the associated quantities. Provide quantity tables and a summary of quantities in the plan set. Further develop the plan sheets to adequately support work items called out in the plans. Compile a complete estimate using the WFL Engineer's Estimate program.

Complete the remaining portions of the <u>Highway Design Standards Form</u> and route for signature.

Review the scheduled advertisement date to determine if pre-advertisement is appropriate for the contract. If so, supply Acquisitions with requested plan sheets and SCRs as well as a completed <u>FedBizOpps</u> form.

#### **Deliverables/Outputs:**

70% PS&E package
Completed WFLHD-3 Highway Design Standards Form

#### **Completion of Activity:**

The PIH PS&E is submitted to HDM for internal QA/QC review.

#### **Additional Supporting Documentation:**

PDDM Section 9.6.9 — Specifications
PDDM Section 9.6.8 — Engineer's Estimate
PDDM WFL Supplement 9.6.6.1-1, Computation of Quantities
PDDM WFL Supplement 9.6.8.5-1, Development of Prices
Acronym List

#### **Applicable PRMS Codes:**

D00010 Assemble PIH PS&E

# Design Task Activity Definition PIH Review

#### Receivables/Inputs:

70% PS&E package Completed WFLHD-3 Highway Design Standards Form

#### **Activity Description:**

The purpose of this task is to perform internal and external reviews of the 70% PIH PS&E package.

#### Designer Guidance:

Allow 1-2 weeks for each review, depending on project complexity. The scheduled reviews are as follows:

- Design QC Review. Provide the PIH PS&E, Design Book, and Completed WFLHD-3 Highway Design Standards Form to the HDM or their delegated Senior Designer for a QA/QC review. The reviewer will perform a full review of the plans and specifications using the <u>Quality Assurance/Quality</u> <u>Control Checklist</u> as a guide. The reviewer will use the Design Book to verify quantity support calculations and unit price analysis.
- Internal Review. Document resolutions to Design QA/QC Review comments. Perform revisions to the PS&E package. Submit the revised PS&E to the PM, CFT, and Partners agency(s) according to PDDM WFL Supplement 9.6.4-1, Reviews. Optional reviewers may include the Highway Safety Engineer.
- 3. **PIH Field Review.** Coordinate and document resolutions to Internal Review comments. Revise the PS&E package to reflect resolutions of the review comments and provide copies of the revised plans and specifications to the external agencies. Accompany the PM to the external field review and provide technical input as needed. Other attendees will typically consist of CFT members, the SEE Team, and agency representatives. Complete a *Trip Report* to document proposed changes, action items, and discussion points at the field review.

#### **Deliverables/Outputs:**

- 1. Summary of comments resulting from the field review.
- 2. Trip report discussing accomplishments/decisions made at the PIH field review.

#### **Completion of Activity:**

The PIH Field review is completed.

#### **Additional Supporting Documentation:**

PDDM <u>WFL Supplement 9.6.4-1</u>, Reviews <u>Acronym List</u>

# **Applicable PRMS Codes:**

D00011 Plan-in-Hand Review

Subtasks:

D00011A PD Team PIH Design QC/QA Review

D00011B Revisions from PIH QC Review

D00011C CFT PIH Review

D00011D Revisions from CFT PIH Review

D00012E PIH Field Review

# Design Task Activity Definition Final Design

#### Receivables/Inputs:

Receive comments from the PIH field review.

#### **Activity Description:**

The purpose of this task is to advance the PS&E package to the 95% level. All design details will be incorporated in the plan sheets at this point, as well as a complete set of SCRs and a comprehensive Critical Path Method (CPM) schedule.

#### Designer Guidance:

Revise the PS&E package to reflect resolutions to PIH field review comments. Send documented resolutions to the attendees of the PIH field review.

If the project is to have contract options or is to be a best-value negotiated contract, notify Acquisitions and assist the PM as necessary in drafting the appropriate request letters.

Complete the <u>FedBizOpps</u> form at least 6 weeks prior to sign-off and deliver to Acquisitions.

#### **Deliverables/Outputs:**

95% PS&E package

#### **Completion of Activity:**

Final PS&E package submitted to HDM for a QA/QC review.

#### **Additional Supporting Documentation:**

Best-value request letter

Options letter

CPM tips sheet

CPM made easy

PDDM WFL Supplement 9.6.4-1, Reviews

Acronym List

#### **Applicable PRMS Codes:**

D00015 Assemble PS&E for Final Review

# Design Task Activity Definition

### Final Design Review

#### Receivables/Inputs:

95% PS&E package

#### **Activity Description:**

The purpose of this task is to perform internal and external reviews of the 95% Final review package.

#### Designer Guidance:

Allow 1-2 weeks for each review, depending on project complexity. The scheduled reviews are as follows:

**Design QC Review**. Provide the 95% PS&E package to the HDM or their delegated Senior Designer for a QA/QC Review. The reviewer will ensure that all work items, design details, and SCRs have been included in the PS&E package and that appropriate design and drafting standards have been met according to the *Quality Assurance/Quality Control Checklist*.

**Internal and External Review**. Document resolutions to Design QC Review comments. Perform revisions to the PS&E package. Submit the revised PS&E to the PM, CFT, and Partners agency(s) according to PDDM WFL Supplement 9.6.4-1, Reviews.

Optional reviewers may include the Highway Safety Engineer and Specification Engineer. Send title sheet of plans to appropriate agency for signature.

#### **Deliverables/Outputs:**

Summarized comments resulting from the final review.

#### **Completion of Activity:**

The Internal and External final reviews are completed.

#### **Additional Supporting Documentation:**

PDDM <u>WFL Supplement 9.6.4-1</u>, Reviews <u>Acronym List</u>

#### **Applicable PRMS Codes:**

D00016 Final Design Review

Subtasks:

D00016A PD Team Final Design QC/QA Review

D00016B Design QC/QA Revisions

D00016C PS&E/CPM WFLHD Int/Ext Review

# Design Task Activity Definition PS&E Sign-Off

#### Receivables/Inputs:

Receive review comments from final review package.

#### **Activity Description:**

The purpose of this activity is to advance the PS&E package and CPM schedule to the 100% level so that the package is ready for advertisement.

#### Designer Guidance:

Document resolutions to final review comments and revise the PS&E package accordingly. Finalize any details necessary to complete the package to 100%. Assist the Environmental Specialist in completion of the Mitigation Commitment Summary (Environmental Checklist).

Compile supporting documentation for the PS&E package sign-off book. Refer to the <u>Signoff Package to PS&E Checklist</u> for a list of required documentation. Provide a copy contract plans in to PDF format.

Submit the sign-off package to the HDM for a QA review. This review typically evaluates the completeness of the sign-off book and package before submittal to Acquisitions. Make revisions to the sign-off package as necessary.

Submit sign-off package to the Project Manager for signatures. The PM will call a CFT sign-off meeting. Submit final review revisions to the CFT prior to this meeting. The PM will deliver the completed sign-off package and supporting documentation to Acquisitions.

#### **Deliverables/Outputs:**

Completed sign-off package and supporting documentation.

#### **Completion of Activity:**

The completed sign-off package and supporting documentation are delivered to Acquisitions, and the PM sends the delivery notice to the appropriate parties.

#### **Additional Supporting Documentation:**

PDDM <u>WFL Supplement 9.6.4-1</u>, Reviews <u>Acronym List</u>

#### **Applicable PRMS Codes:**

D00017 Signoff Plans and Specs

Subtasks:

D00017A Final Design Revisions D00017B Assemble Signoff Book

D00017C Signoff Meeting

# Design Task Activity Definition

### **Contract Support**

#### Receivables/Inputs:

Completed sign-off package and supporting documentation delivered to Acquisitions.

#### **Activity Description:**

The purpose of this task is to provide design support to Acquisitions during contract Advertisement and Award process.

#### Designer Guidance:

Respond to inquiries about the contract from Acquisitions and provide design information as requested. When requested, prepare responses to questions from potential bidders or assist with the preparation of amendments.

For Negotiated Best-Value contracts, the Designer, PM, and/or HDM may be required to assist in the negotiation process and provide support data for price discrepancies.

If the low bid exceeds the obligated amount, a unit price analysis may be required by the CFT to determine if the bid prices are fair and reasonable.

Prepare the Project Engineer (PE) Hold file and construction staking data. Provide this information to the HDM for a QA check.

Send *customer surveys* to external customers.

#### **Deliverables/Outputs:**

- 1. Completed PE Hold File
- 2. Construction taking data
- 3. Customer survey

#### **Completion of Activity:**

The Contract is awarded by Acquisitions.

#### **Additional Supporting Documentation:**

PE Hold File Checklist
PDDM Section 9.6.10 — Contract Assembly
PDDM WFL Supplement 9.6.6.6-1, Design Narrative
Acronym List

#### **Applicable PRMS Codes:**

D00018 Design Data for Construction

# TSB Task Activity Definition

### **Preliminary Survey & Mapping**

#### Receivables/Inputs:

- 1. Completed scoping document (PA or PIR), including a list of alternatives to be evaluated.
- 2. Project delivery schedule (PRMS)
- 3. Project account and budget established in PRMS
- 4. Completed Survey Request submitted by Project Development

#### **Activity Description:**

The purpose of this task is to conduct preliminary survey and mapping for all alternatives that are presented in the Environmental Document. This work may be completed in-house or by a contractor.

#### **Deliverables/Outputs:**

1. Completed mapping for use by Project Development

#### **Completion of Activity:**

The survey is completed in the field, and mapping is completed for Project Development.

#### **Additional Supporting Documentation:**

Acronym List

#### **Applicable PRMS Codes:**

S00002 Preliminary Survey

S00003 Staking

# TSB Task Activity Definition Right-of-way (ROW) & Utility Location

#### Receivables/Inputs:

Preliminary plans submitted from Project Development to ROW indicating proposed construction limits and existing utilities.

#### **Activity Description:**

The purpose of this task is to identify potential ROW and utility conflicts along the project corridor and notify the affected parties. Utility conflicts may consist of overhead or underground power, communications, fuel and water lines as well as irrigation ditches and canals. Land access conflicts may occur with private landowners, other government entities, or Native American tribes. *Note: The processing of railroad agreements and the preparation of plans for railroad encroachment projects are typically time consuming operations. If the project has the potential to impact a railroad, the railroad agreement process should begin as soon as possible to prevent delays in the project schedule. Refer to the PDDM for more information on railroad agreements.* 

The ROW Specialist obtains title reports, copies of deeds and any other documents about existing right-of-way. The ROW Specialist will examine these documents along with the preliminary plans for easements or other encumbrances to reveal the existence and location of waterlines, conduits, drainage or irrigation lines, or other features affecting construction.

The ROW Specialist will send a letter to affected parties notifying them of the potential conflict. ROW may request further project information from the designer as necessary and as it becomes available.

#### **Deliverables/Outputs:**

Letter to affected parties.

#### **Completion of Activity:**

Letters are sent to affected parties and the preparation of final ROW/utility plan begins.

#### **Additional Supporting Documentation:**

<u>PDDM Chapter 12</u> – Right of Way and Utilities Acronym List

#### **Applicable PRMS Codes:**

R01PLAT R04PLAN

# TSB Task Activity Definition Preliminary Staking

#### Receivables/Inputs:

Preliminary staking data submitted from Project Development

#### **Activity Description:**

The purpose of this task is to conduct preliminary staking of centerline, stations stakes, slope stakes, clearing limits, and reference points as requested for the PIH Review.

#### **Deliverables/Outputs:**

Not Applicable

#### **Completion of Activity:**

Staking is completed in the field.

#### **Additional Supporting Documentation:**

Acronym List

#### **Applicable PRMS Codes:**

SOSLOPE Slope Staking SOCLSTK Staking Centerline

### TSB Task Activity Definition

# Right-of-way (ROW) Acquisition & Utility Agreements

#### Receivables/Inputs:

Intermediate plans submitted from Project Development to ROW for drafting of final ROW/utility plan

#### **Activity Description:**

The purpose of this task is to draft the final ROW/utility plans and negotiate and acquire right-of-way and utility relocation agreements.

The ROW Specialist will prepare final ROW/utility plans and descriptions using the intermediate design package provided by the designer. The plans and descriptions will be submitted to the external agency for ROW acquisition. ROW agreements are then negotiated with landowners.

A separate utility agreement is negotiated with the utility company, which includes a relocation plan and responsible party.

#### **Deliverables/Outputs:**

ROW and Utility agreements.

#### **Completion of Activity:**

ROW is acquired and Utility agreements are finalized and provided to PM.

#### **Additional Supporting Documentation:**

PDDM Chapter 12 - Right of Way and Utilities Acronym List

#### **Applicable PRMS Codes:**

R04PLAN

R05PKG

U02PKG

**R08AGRE** 

U05AGRE

# **Environment Task Activity Definition Preliminary Environmental Review**

#### Receivables/Inputs:

- Completed scoping document (PA or PIR) establishing the Purpose and Need for the project
- 2. Environmental and Project Delivery schedule (PRMS)

#### **Activity Description:**

Several pre-NEPA tasks are accomplished during this activity. Depending upon which program is employed; WFL must be established as either the Lead or Cooperating Agency. For the Forest Highway Program (FHP), WFL is the lead agency for NEPA. For the Parks Road Program (PRP), the Park Service is the lead agency for NEPA and WFL participates as a cooperating agency. The lead agency is responsible for all aspects of NEPA.

Purpose and Need should already be established for the project, but may need to be supplemented or revised to further address NEPA requirements. On projects where a law, Executive Order (EO), or regulation (Section 4(f), EO 11990 or EO 11988) mandates an evaluation of avoidance alternatives, the explanation of the project need should be more specific so that avoidance alternatives that do not meet the stated project need can be readily dismissed. A range of alternatives should be established, with the goal of eventually developing the preferred alternative for the project.

The Environmental Specialist will prepare the Public Involvement Plan (PIP) for the project. This will include activities related to public involvement for the project, such as the establishment of a mailing list, project milestones and circulation of the public notice. The Environmental Specialist should also plan and conduct the first public meeting or open house for the project during this phase.

For Forest Highway Projects, work on the Project Checklist should begin at this point. The environmental responsibility in the project checklist includes the "affected environment" section and the environmental checklist portion at the end of the document. The design staff is responsible for the remainder of the document, which is a location document with engineering details. For the PRP, the Environmental Work Plan is completed by the Park.

#### **Deliverables/Outputs:**

- 1. Establish Lead vs. Cooperating Agency status
- PIP
- 3. Project Checklist or Environmental Work Plan
- 4. First public involvement meeting conducted

#### **Completion of Activity:**

The first public involvement meeting is conducted.

# **Additional Supporting Documentation:**

PDDM Chapter 3 — Environmental Stewardship
PDDM Chapter 4 — Conceptual Studies and Preliminary Design
PIP example
Project Checklist example
Acronym List

### **Applicable PRMS Codes:**

E00001 Preliminary Environmental Review

# **Environment Task Activity Definition Environmental Resource Surveys**

#### Receivables/Inputs:

Project Checklist or Environmental Work Plan

#### **Activity Description:**

The purpose of this task is to collect resource reconnaissance for the proposed project limits. This usually entails resource survey data collected within the road corridor, so as to encompass any possible alternatives, as well as outlying material sources, waste and staging areas, and possible detours necessary for road construction.

For Park Roads projects, the NPS will arrange for resource surveys to be performed and produce associated reports and recommendations to other consultation agencies.

For Forest Highway projects, WFLHD typically hires a contractor to perform the resource surveys. The Environmental Specialist acts as the COTR (Contracting Officer's Technical Representative), composing the Statement of Work (SOW) and monitoring the progress of work. The COTR is also responsible for billing on the contract. The SOW should request separate survey and manage reports for each resource survey. The survey report is the data collected in the field. The manage report gives impacts and assessment suggestions that may be used in later documentation for consultation, permitting and NEPA documents.

#### **Deliverables/Outputs:**

- 1. Resource mapping information (wetlands, archaeological sites, etc.) that will be used in the drafting of the NEPA documents, resource agency consultation, and permitting processes.
- 2. Survey and Manage Reports for biology, wetlands and cultural resources

#### **Completion of Activity:**

The resource reports are prepared.

#### **Additional Supporting Documentation:**

<u>PDDM Chapter 3</u> – Environmental Stewardship Example of SOW for resource surveys Acronym List

#### **Applicable PRMS Codes:**

E00002 Resource Survey

# Environment Task Activity Definition NEPA Preparation

#### Receivables/Inputs:

Resource mapping information (wetlands, archaeological sites, etc.) to be used in the drafting of the NEPA documents, resource agency consultation, and permitting processes.

#### **Activity Description:**

The primary purpose of this activity is to provide NEPA support and scoping in preparation for the NEPA document. During this activity, the necessary pre-NEPA documents are clarified, prepared, and outlined to allow the NEPA process to move forward. These documents include Biological Assessments (BA), Cultural Resource Surveys, and consultations with appropriate resource agencies.

For Park Roads projects, the NPS will typically draft the BA and consult with necessary resource agencies. For Forest Highway projects, the WFLHD Environmental Specialist drafts or serves as a COTR for the drafting of the BA, and consults with necessary resource agencies.

Endangered Species Act (ESA), Section 7 consultation should begin in this phase. ESA consultation takes one of two forms: informal consultation (30 days) or formal consultation (135 days). Consultation results in either a concurrence letter or a Biological Opinion (BO) on the effects to threatened and endangered species resulting from the project. A BA is required for both informal and formal consultation. The BA is the mechanism that will start consultation with the United States Fish and Wildlife Service (USFWS) or National Oceanic and Atmospheric Administration (NOAA) Fisheries. USFWS consults on threatened and endangered species (wildlife/plants/fish) as well as candidate species and critical habitat. NOAA Fisheries consults on anadromous fish and critical habitat that may be affected by the project. These consultations may be conducted separately or together, but a BA is required by both agencies.

Cultural resource consultation is undertaken with the State Historic Preservation Officer (SHPO) or with the Tribal Historic Preservation Officer (THPO) on Reservation lands where the tribe has assumed the responsibilities of the SHPO. This requires the preparation of a cultural resources report by a professional acceptable to the SHPO/THPO. The time necessary to obtain the professional services, inventory and generate the report will vary depending upon the size, scope and complexity of the proposed project, as well as the presence and type of cultural resources within the project area.

Wetland resource mapping is used to illustrate and discuss any impacts that the project may have to wetlands within the project vicinity. A watershed analysis may be performed to illustrate the effects to a particular watershed in the project area. The USACE (United States Army Corps of Engineers) is responsible for regulating impacts to wetlands and waters of the United States. This is an

important step in the preparation of both state and federal permits that may be required for the project, as well as the determination of any wetland mitigation requirements.

Any preliminary investigatory studies should begin in this phase. In the case of preliminary geotechnical investigations (drilling), consultation and permits may be necessary. The Environmental Specialist coordinates with the Geotechnical representative in gaining compliance for the activities required for the project.

#### **Deliverables/Outputs:**

- 1. BA for Section 7 consultation (formal consultation is 135 days; informal consultation is approximately 30 days)
- 2. Wetland delineations and hydrological assessments

#### **Completion of Activity:**

A BA is developed and consultations with the USFWS and NOAA are initiated if needed. Cultural resource consultation is initiated.

#### **Additional Supporting Documentation:**

PDDM Chapter 3 — Environmental Stewardship Example BA
ESA Section 7 Handbook
Acronym List

#### **Applicable PRMS Codes:**

E00001 Preliminary Environmental Review

# **Environment Task Activity Definition**

### **Prepare Categorical Exclusion**

#### Receivables/Inputs:

- 1. Completed BA
- 2. USFWS and/or NOAA Fisheries consultation
- 3. SHPO or THPO cultural resource consultation
- 4. Wetland delineations and hydrological assessments
- 5. Concurrence letters (or BO) for consultations

#### **Activity Description:**

The purpose of this task is to complete a Categorical Exclusion (CE) document for actions or activities which meet the definition in 23 CFR 771.11(a) and do not have significant environmental impacts. CEs are divided into two groups based on the action's potential for impacts.

The first group is a list of 20 categories of actions in 23 CFR 771.117(c) which never or almost never cause significant environmental impacts, such as non-construction actions (planning, grants or research programs) or limited construction activities (pedestrian facilities, landscaping or fencing). These actions are automatically classified as CEs and do not require approval or documentation. However, other environmental laws may still apply, such as Section 4(f) clearances or Section 7 of the ESA.

The second group consists of actions with a higher potential for impacts than the first group, but which still meet the criteria for CEs. The actions in this group can be covered by 23 CFR 771.117(d), and because of the potential for impacts, these actions require some information to be provided to determine the proper CE classification. The level of information that is necessary should be commensurate with the action's potential for adverse environmental impacts. The level of analysis should be sufficient to define the extent of impacts, identify appropriate mitigation measures, and address known and foreseeable public and agency concerns. Unusual circumstances where further environmental studies will be necessary to determine the appropriateness of a CE classification are listed in 23 CFR 771.117(b).

For Forest Highway projects, the Environmental Specialist prepares the CE and 4(f) document if applicable. For NPS Projects, the Park generally prepares a CE. Once the Park CE has been signed, the Environmental Specialist then prepares a FHWA CE.

The Environmental Manager signs CEs, which do not need to be submitted for review to the Division Environmental Review Team (DERT).

#### **Deliverables/Outputs:**

- 1. The CE is completed.
- 2. The 4(f) document, if applicable, is completed.

# **Completion of Activity:**

The CE and the final 4(f) document, if applicable, are signed.

# **Additional Supporting Documentation:**

<u>PDDM Chapter 3</u> – Environmental Stewardship

40 CFR 1508.4, Categorical exclusion

CE example

4(f) example

Acronym List

# **Applicable PRMS Codes:**

E00003 Prepare Environmental Document

# **Environment Task Activity Definition**

# **Prepare Environmental Assessment**

#### Receivables/Inputs:

- 1. Completed BA
- 2. USFWS and/or NOAA Fisheries consultation
- 3. SHPO or THPO Cultural resource consultation
- 4. Wetland delineations and hydrological assessments
- 5. Determination that a CE is inadequate to cover the proposed project
- 6. Concurrence letters (or BO) for consultations

#### **Activity Description:**

The purpose of this task is to complete an Environmental Assessment (EA) for actions where a CE is inadequate, due to the anticipated environmental impacts of the project. If it is uncertain whether the project is a major action with significant impacts, then the next step in the process is to proceed to an EA. The primary purpose of an EA is to help decide whether or not an Environmental Impact Statement (EIS) is necessary.

The EA should address only those resources or features that will likely be significantly impacted. The EA should be a concise document and should not contain long descriptions, detailed information that may have been gathered, or analyses that may have been conducted for the proposed action. Although there are no page limits in any regulations, the Council on Environmental Quality (CEQ) recommends that an EA should generally be less than 15 pages. To minimize volume, the EA should use good quality maps and exhibits. The EA should also incorporate, reference, and summarize background data and technical analyses to support concise discussions of alternatives and their impacts. CEQ suggests that the following format and content is appropriate for an EA:

- Cover sheet
- Purpose and need for action
- Alternatives
- Impacts
- Comments and coordination
- Appendices (if any)
- Section 4(f) analysis (if any)
- Revisions

For Forest Highway projects, the Environmental Specialist prepares the draft EA document, and, if applicable, the draft 4(f) document, which are then reviewed by the DERT. Once internal review is complete, the draft documents are sent out for external review by the SEE team, to obtain approval for public circulation. When this approval is obtained, the Environmental Specialist prepares a Public

Notice, and the document is distributed to the public. A 30-45 day comment period is extended for public review, and comments are received. During this time, the Environmental Specialist prepares the final 4(f) document, if applicable. At the end of the comment period, the Environmental Specialist prepares an amended EA to address the comments received, and submits the EA for a final DERT review. When DERT approval is received, the approved amended EA is ready for approval and signature by the Director of Project Delivery.

For NPS Projects, the Park generally prepares the EA and appropriate documents. As a cooperating agency, FHWA works closely with the Park during their NEPA process and preparation of the NEPA documents. The DERT team reviews the EA prepared by the Park.

At this time, a decision is made as to whether an EIS is required.

#### **Deliverables/Outputs:**

- 1. The final EA is completed.
- 2. The final 4(f) document is completed, if applicable

#### **Completion of Activity:**

The EA and the final 4(f) document, if applicable, are signed and approved.

#### **Additional Supporting Documentation:**

PDDM Chapter 3 — Environmental Stewardship 40 CFR 1508.9, Environmental assessment EA example 4(f) example Acronym List

#### **Applicable PRMS Codes:**

E00003 Prepare Environmental Document

# **Environment Task Activity Definition**

# **Prepare Finding of No Significant Impact**

#### Receivables/Inputs:

- 1. Completed EA
- 2. Final 4(f) document if applicable
- 3. Preferred alternative is chosen

#### **Activity Description:**

The purpose of this task is to prepare the Finding of No Significant Impact (FONSI). The preparation of this document follows the preparation of the EA in the NEPA process. The EA and any attachments should adequately document the basis for the FONSI.

For Forest Highway projects, the Environmental Specialist prepares the FONSI after a review of the EA, during which the proposed action is determined to have no significant impacts. This determination is documented by attaching a separate statement to the EA that clearly sets forth conclusions.

The FONSI describes compliance with NEPA and other applicable environmental laws, EOs, and related requirements. If the FONSI must be prepared before full compliance with these other requirements is achieved, the FONSI must describe consultation with the appropriate agencies, and how and when the requirements will be met.

FONSIs do not need to be formally distributed, but a Notice of Availability (NOA) must be sent to Federal, State, and local government agencies that are likely to have an interest in the project. Agencies that provided commented on the EA should be advised of the project decision, as well as on the disposition of their comments. The Environmental Specialist should provide a copy of the FONSI to commenting agencies, which helps foster open communication between agencies.

For Forest Highway Projects, the FONSI is prepared by the Environmental Specialist. A DERT review is conducted on the final 4(f) document and FONSI. Once the DERT review is concluded, the FONSI is ready for approval and signature by the Director of Project Delivery.

For NPS Projects, the Park generally prepares the FONSI. As a cooperating agency, FHWA works closely with the Park during their NEPA process and preparation of the appropriate documents. FHWA adopts the approved Park FONSI.

#### **Deliverables/Outputs:**

- 1. The final FONSI is completed.
- 2. The final signed 4(f) document is completed.
- 3. For NPS projects, the FHWA adoption of the NPS FONSI is completed.

#### **Completion of Activity:**

The FONSI and the final 4(f) document are approved, signed, and distributed to commenting agencies. For park projects, an adoption document is completed.

# **Additional Supporting Documentation:**

PDDM Chapter 3 — Environmental Stewardship 40 CFR 1508.13, Finding of no significant impact FHWA Technical Advisory T 6640.8A FONSI example 4(f) example Acronym List

### **Applicable PRMS Codes:**

E00003 Prepare Environmental Document

E00005 Prepare Final Documents

### **Environment Task Activity Definition**

### **Prepare Environmental Impact Statement**

#### Receivables/Inputs:

- 1. Completed BA
- 2. USFWS and/or NOAA Fisheries consultation
- 3. SHPO or THPO cultural resource consultation
- 4. Wetland delineations and hydrological assessments
- 5. Determination that:
  - a. A CE is inadequate to cover the proposed project
  - b. An EA and FONSI are inadequate to cover the proposed project
- 6. Concurrence letters (or BO) for consultations

#### **Activity Description:**

The purpose of this task is to complete an Environmental Impact Statement (EIS) for actions where an EA and FONSI are inadequate, due to the anticipated environmental impacts of the project. An EIS is required for actions that individually or cumulatively have significant environmental impacts. Specific regulations govern an EIS.

The first step in this process is to file a Notice of Intent (NOI) in the Federal Register. There is a 15-day minimum waiting period after filing the NOI.

Scoping for the EIS begins with the establishment of milestones and planning for a series of public meetings appropriate for the project. At this time, the preferred alternative may not yet be established, and therefore all alternatives must be scoped. Public and agency participation is required for an EIS. For administrative and record keeping purposes, the EIS should be printed on 8½ x 11-inch paper with 11 x 17-inch foldout sheets for graphics. For consistency with CEQ regulations, the following standard format should be used:

- Cover sheet
- Summary
- Table of contents
- Purpose of and need for action
- Alternatives
- Environmental consequences
- List of preparers
- List of agencies, organizations, and persons to whom copies of the statement are sent
- Comments and coordination
- Index
- Appendices (if any)

A complete description of these actions is covered in 23 CFR 771.115.

For Forest Highway Projects, the Environmental Specialist prepares the Draft Environmental Impact Statement (DEIS), and, if applicable, a draft 4(f) document, and submits these documents for DERT review. The Environmental Specialist also prepares a public notice, and submits the documents for internal and SEE team reviews.

For Forest Highway Projects, the next steps include publishing the Notice of Hearing (NOH) in the Federal Register, with a minimum 30 day waiting period prior to conducting the public hearing; filing the DEIS with the Environmental Protection Agency (EPA); and publishing a NOA with the Federal Register. There is a minimum 60 day public and peer review period and a 90 day review period for the DEIS. During this time, consideration and response is given to the comments provided internally, as well as by the public, cooperating agencies, and other agencies. This comment period is 30 calendar days.

For Forest Highway Projects, the Environmental Specialist prepares the Final Environmental Impact Statement (FEIS) for internal review and clearance (30 – 45 days), and final DERT review. Additionally, the public notice and final 4(f) document should be prepared and permit application preparation can begin. The FEIS is reviewed and prepared for approval and signature by the Division Engineer.

For NPS Projects, the Park generally prepares the DEIS and FEIS. As a cooperating agency, FHWA works closely with the Park during their NEPA process and preparation of the appropriate documents. FHWA adopts the approved Park FEIS.

#### **Deliverables/Outputs:**

- 1. NOI filed in the Federal Register
- 2. Completed DEIS
- 3. Completed FEIS
- 4. NOH and NOA filed in the Federal Register

#### **Completion of Activity:**

The FEIS and final 4(f) document, if applicable, are approved and signed. For park projects, FHWA adopts the park FEIS.

#### Additional Supporting Documentation:

<u>PDDM Chapter 3</u> – Environmental Stewardship

40 CFR 1502, Environmental Impact Statement

FHWA Technical Advisory T 6640.8A

NOI example

**DEIS** example

FEIS example

4(f) example

Acronym List

### **Applicable PRMS Codes:**

E00003 Prepare Environmental Document

# **Environment Task Activity Definition Prepare Record of Decision**

#### Receivables/Inputs:

Completed FEIS

#### **Activity Description:**

The purpose of this task is to prepare the Record Of Decision (ROD). This is the final step in the NEPA process. There is a limit on any action with the project until the ROD is issued. The ROD will explain the reasons for the project decision, summarize any mitigation measures that will be incorporated in the project, and document any required Section 4(f) approval. The ROD must explain the basis for the project decision as completely as possible, based on information contained in the FEIS; however, it is appropriate to cross-reference and incorporate other documents by reference. The following key items need to be addressed in the ROD:

- Decision
- Alternatives considered
- Section 4(f) if applicable
- Measures to minimize harm
- Monitoring or enforcement program
- Comments on FEIS

The environmentally preferred alternative is selected and rationale is given for that selection. The environmentally preferred alternative is the alternative that best promotes the NEPA policies and the alternative that causes the least amount of damage to the environment. Concurrently, the agency preferred alternative is also selected, with rationale given to support that selection. The agency preferred alternative is one that will fulfill the agency's statutory mission and responsibilities, giving consideration to economics, environment, technical and other factors.

Mitigation measures are designed and issued. This includes mitigation and monitoring plans dictated in the NEPA document, as well as any mitigation that may be issued from the permitting or regulatory agencies and mitigation designed to compensate for any effects to endangered, threatened, or special concerns.

For Forest Highway projects, the Environmental Specialist completes the ROD, which is then reviewed by the DERT. After the final DERT review, the ROD is delivered to the Division Engineer for final approval and signature. A public notice is prepared, and the ROD is distributed for public and agency review.

For NPS Projects, the Park generally prepares the ROD. As a cooperating agency, FHWA works closely with the Park during their NEPA process and

preparation of the appropriate documents. FHWA adopts the approved Park ROD.

#### **Deliverables/Outputs:**

The preferred environmental alternative and the preferred agency alternative are chosen, and the ROD is created.

#### **Completion of Activity:**

The ROD is signed and approved. For NPS projects, FHWA adopts the Park ROD.

### **Additional Supporting Documentation:**

<u>PDDM Chapter 3</u> – Environmental Stewardship

40 CFR 1505.2

FHWA Technical Advisory T 6640.8A

ROD example

Acronym List

#### **Applicable PRMS Codes:**

E00003 Prepare Environmental Document

E00005 Prepare Final Documents

# Environment Task Activity Definition Permits

#### Receivables/Inputs:

- 1. Completed NEPA document
- 2. Supporting resource surveys

#### **Activity Description:**

The purpose of this task is to obtain required permits for the project.

Regardless of the program implemented (Park Roads or Forest Highways), the Environmental Specialist will prepare the permit package, obtaining all applicable data and drawings necessary to complete the application package, and is responsible for transmitting permit packages to the appropriate permitting agencies associated with the project. These permits include all applicable Federal, State or local permits necessary to complete the project.

Applicable permits include: Section 404 Clean Water Act Permit, Storm Water Permit (MPDES for Montana, WYPDES for Wyoming, or NPDES for other states); state permits for stream protection and stream alteration, and also state permits tied into the federal nexus to include the 401 Clean Water Act permit. There may also be other state and local permits that apply to the project. The permit coordinator will advise as to what permits are necessary and the time frames necessary to allow for those permits. Usually, if the Corps of Engineers issues an individual 404 permit, the process can take as long as 120 days, including the time required for the Corps to go out for public notice for 30 days. For Nationwide Permits from the Corps, the time period is usually reduced to 30 – 45 days, but may require pre-construction notices before those permits can be issued. Additionally, the Forest Service may issue Special Use Permits to allow entry and action on permitted areas in the National Forest.

The Environmental Permits Coordinator will assist the Environmental Specialist in preparing the permit packages, obtaining the necessary information for permit applications and renewal of any permits during the life of the project. After the project is completed, some permits may require filing termination notices in order to stay in compliance with the various state and federal agencies. Some permits are contingent upon reestablishment of vegetation at the site or establishment of mitigation required for the project. Permit requirements can vary from state to state, as can the time periods necessary to obtain those permits. All permits must go through the environmental permit coordinator so that they are logged into the system. This will allow for reminders and notices of impending permit renewals when necessary.

#### **Deliverables/Outputs:**

Applicable permits issued for project

#### **Completion of Activity:**

Permits are obtained from the appropriate agencies and distributed as needed.

Additional Supporting Documentation:

PDDM Chapter 3 - Environmental Stewardship
Example Permit Application Acronym List

# **Applicable PRMS Codes:**

E0007A Permit Applications E0007B Permit Coordination

# **Environment Task Activity Definition Mitigation Commitment Summary**

#### Receivables/Inputs:

- 1. Completed NEPA document (CE, EA/FONSI, or FEIS)
- 2. Completed 4f documentation, if applicable
- 3. Appropriate permits have been received for the project

#### **Activity Description:**

The purpose of this task is to document how environmental commitments for a project will be accomplished. The Environmental Specialist will complete a Mitigation Commitment Summary, also known as an environmental checklist. The Mitigation Commitment Summary will list all mitigation commitments included in NEPA documents and permits. In addition, the summary will also document how each mitigation commitment will be accomplished for the project. The designer may be asked to assist with preparation of the summary by directing the Environmental Specialist to locations where mitigation commitments are addressed in the plans and specifications. The final Mitigation Commitment Summary is included in the sign-off package.

The final Mitigation Commitment Summary will be completed before PS&E signoff. However, the mitigation commitments should be addressed in the plans and specifications as early as possible.

### **Deliverables/Outputs:**

Mitigation Commitment Summary

#### **Completion of Activity:**

The Mitigation Commitment Summary is prepared by the Environmental Specialist and included in the sign-off package.

#### **Additional Supporting Documentation:**

PDDM Chapter 3 — Environmental Stewardship
PPDM WFLHD Supplement 3.4-1, Environmental Analysis and Public
Involvement
Mitigation Commitment Summary example
Acronym List

#### **Applicable PRMS Codes:**

**E00006 Mitigation Efforts** 

# Environment Task Activity Definition NEPA Follow-Up

#### Receivables/Inputs:

Completed NEPA document

#### **Activity Description:**

The purpose of this task is to make sure that all WFLHD follows through on all commitments made during the NEPA process. This includes environmental support of the Construction Branch, such as permit maintenance and renewals.

Mitigation monitoring plans should be reviewed and monitored throughout the period of the plan, including revegetation plans and wetland monitoring plans. Yearly progress reports should be filed and distributed to appropriate agencies as required. In some cases, reimbursable agreements with other agencies can cover mitigation and monitoring requirements. These tasks may be completed by WFLHD environmental staff or by a contractor or another agency under agreement.

#### **Deliverables/Outputs:**

- 1. Mitigation monitoring
- 2. Revegetation monitoring
- 3. Wetland monitoring
- 4. Permit maintenance and renewals

#### **Completion of Activity:**

At or after project completion, all environmental commitments have been fulfilled, and permits are closed out.

#### **Additional Supporting Documentation:**

<u>PDDM Chapter 3</u> – Environmental Stewardship <u>Acronym List</u>

#### **Applicable PRMS Codes:**

E00006 Mitigation Efforts

# **Acquisitions Task Activity Definition**

#### **Sign-Off Review & Contract Preparation**

#### Receivables/Inputs:

Completed sign-off package and supporting documentation delivered to Acquisitions

#### **Activity Description:**

The purpose of this activity is to prepare a Contract for advertisement. The following tasks take place under this activity from the time the completed sign-off package is delivered to Acquisitions until the advertisement date:

#### Contract Liaison Engineer and Specifications Engineer

- Completes review of SCRs to ensure they are current
- Checks the <u>Signoff Package to PS&E checklist</u> to ensure sign-off package is complete
- Completes biddability review
- Revises the Engineer's Estimate (as needed) and prepares the bid schedule
- Prepares Federal Acquisition Regulation (FAR) clause notations

#### Contracts

- Prepares solicitation documents (FAR clauses, wage rates)
- Compiles review package
- Complies distribution list with addresses

#### Pre-solicitation review

- Legal Review (for solicitations over \$500,000)
- Contracting Officer (CO) review
- 2<sup>nd</sup> level CO review (for solicitations over \$500,000)
- Director of Project Delivery review (only for Project Development solicitations)

#### **Acquisitions**

- Makes revisions after pre-solicitation review
- Orders printed plans as necessary
- Requests printing of the solicitation package
- Requests printing of all physical data
- For all Montana projects, coordinates bid opening date with FHWA Division office in Helena

Revised: 6/10/2007

Allow 20 working days for this activity when preparing project schedules and determining the notice to proceed date (<u>PS&E to NTP Calculator</u>) for most projects. Additional time may be required for this activity depending on the number and timing of additional projects that have been delivered to Acquisitions.

### **Completion of Activity:**

Acquisitions places the contract on Advertisement.

# **Additional Supporting Documentation:**

<u>PDDM Section 9.6.10</u> – Contract Assembly Acronym List

#### **Applicable PRMS Codes:**

C00004B Signoff Review

C00005 Prepare Solicitation Documents

C0006 Advertise Contract

Revised: 6/10/2007

# Acquisitions Task Activity Definition Advertisement

#### Receivables/Inputs:

Contract under advertisement.

#### **Activity Description:**

The purpose of this activity is to provide an opportunity for potential contractors to obtain information and prepare bids for advertised contracts. During this activity, Acquisitions responds to questions from potential Contractors and prepares amendments as necessary. They also distribute solicitation documents to WFL employees and agency representatives

Allow 30 calendar days for this activity when preparing project schedules and determining the notice to proceed date (<u>PS&E to NTP Calculator</u>). Additional time may be required for this activity if:

- The 30<sup>th</sup> day lands on a Saturday, Sunday, Monday, or the first workday of the week when there is a holiday.
- It is a Montana project, which are opened in the Montana Division Office. Allow 35 days minimum for these bid openings.
- It is a complex project, which may lead to a delay in the bid opening. Amendments issued near the initial bid opening date may cause delays.
- Several projects are in Acquisitions at the same time.

#### **Deliverables/Outputs:**

Not Applicable

#### **Completion of Activity:**

Bids are opened.

#### **Additional Supporting Documentation:**

<u>PDDM Section 9.6.10</u> – Contract Assembly <u>Acronym List</u>

#### **Applicable PRMS Codes:**

C00006 Advertise Contract

# Acquisitions Task Activity Definition Award

#### Receivables/Inputs:

The bids are opened.

#### **Activity Description:**

The purpose of this task is to determine which bidder will be awarded the Contract. The following tasks take place under this activity from the time of the bid opening to award:

- 1. Acquisitions tasks:
  - a. Determines if HUBZone evalutation factor is applicable
  - b. Runs bid tabulation & obligation tabulation
  - c. Determines Responsiveness
  - d. Determines Contractor responsibility
  - e. For applicable Montana Projects, coordinates contractor completion of the MT-DEQ permit
  - f. If a subcontracting plan is required, coordinates Headquarters approval
  - g. Coordinates all bid protest submittals. In the case of a bid protest, award will be delayed by 60 days or more
- 2. If the low bid exceeds the obligated amount, Programming requests additional money. This may require Programming to coordinate funding w/client agency, which can take 6 weeks or more. This step may require the designer and CFT to complete a unit price analysis to determine if the bid prices are fair and reasonable.
- For Negotiated Best Value contracts, the Designer, PM, and/or HDM may be required to assist in the negotiation process and provide support data for price discrepancies.

Allow 30 calendar days for this activity when preparing project schedules and determining the notice to proceed date for most projects (<u>PS&E to NTP</u> <u>Calculator</u>). Negotiated Best Value projects require substantially more than 30 calendar days for this activity for proposal reviews, discussions, and negotiations.

#### **Deliverables/Outputs:**

Acquisitions provides documents for the PE Hold File.

#### **Completion of Activity:**

The Contract is awarded.

#### **Additional Supporting Documentation:**

<u>PDDM Section 9.6.10</u> - Contract Assembly Acronym List

Applicable PRMS Codes:

C00008 Open and Analyze Bids
C00009 Award Contract

# Construction Task Activity Definition

# **Design to Construction Handoff**

#### Receivables/Inputs:

- 1. Awarded project
- 2. Completed PE Hold file and staking data

#### **Activity Description:**

The purpose of this task is for Project Development to formally hand off CFT leadership to the Construction Branch. Construction will schedule the meeting prior to NTP for the purpose of transferring project information and leadership of the CFT from Project Development to Construction. This meeting may require anywhere from one hour of time to an entire day, depending on the complexity of the project. The meeting may be held in the office or in the field.

#### **Deliverables/Outputs:**

Established forum for CFT sharing of information with Construction. The PE and CFT review the project and the PE hold file. Detailed design data, Project Development details, and situations of note or potential concern are transferred to Construction at this forum.

#### **Completion of Activity:**

Completed review of the project and PE hold file information by the CFT and the PE/Construction Operations Engineer (COE). Leadership of the CFT is transferred from the Project Manager to Construction.

#### **Additional Supporting Documentation:**

<u>Construction Quality Assurance Process</u> document Acronym List

#### **Applicable PRMS Codes:**

None

#### Acquisitions/Construction Task Activity Definition

#### **Notice to Proceed**

#### Receivables/Inputs:

- 1. Awarded contract
- 2. Acquisitions provides documents for the PE Hold File

#### **Activity Description:**

The purpose of this activity is to complete all required preconstruction activities prior the Notice to Proceed. *Note:* When preparing project schedules and determining the notice to proceed date for most projects, allow a minimum of 21 calendar days from award of contract to Notice to Proceed (*PS&E to NTP Calculator*). The following tasks take place under this activity from the time of award to the Notice to Proceed date:

- 1. Acquisitions verifies bonds and insurance of selected Contractor and notifies Construction once bonds & insurance have been approved.
- 2. Upon receiving Plans/Specs from Acquisitions, Construction branch prepares NTP package that includes:
  - a. Preparing Delegation of Authority letter (Signed by Contract Development Engineer)
  - b. Letter from COE regarding preconstruction conference along with all paperwork that needs to be completed and submitted by the Contractor at the preconstruction conference or prior to beginning work.
- 3. COE/PE schedules precon and invites CFT members to attend.
- 4. COE/PE conducts the Preconstruction Conference.
- 5. The Contractor prepares documents that will enable them to start construction work (Construction schedule, safety plan, etc.)
- 6. The COE issues NTP

#### **Deliverables/Outputs:**

- 1. Bonds/Insurance verified
- 2. Preconstruction Conference, Agenda, Minutes

#### **Completion of Activity:**

The Notice to Proceed is issued.

#### **Additional Supporting Documentation:**

<u>PDDM Section 9.6.10</u> – Contract Assembly <u>Acronym List</u>

#### **Applicable PRMS Codes:**

C00010 Receive and Verify Bonds

# Construction Task Activity Definition

#### **Mid-Construction Review**

#### Receivables/Inputs:

Approximate mid-point of construction project.

#### **Activity Description:**

The Mid-Construction review is an optional activity requested by the Construction Branch.

The purposes of this activity are 1) to perform an in-depth review of design, administration and contractor construction methods, and how they relate to the plans, specifications and intent of the project; and 2) to identify items that require improvement (Lessons Learned) and items that may be highlighted (Best Practices). The CFT has responsibility for this review. Required reviewers are the Lead Designer, PE/COE, Environmental Specialist, and the CQAS, although all members of the CFT may be included. The CQAS will coordinate the review, which may occur over a one or two-day period as needed. Construction contractor personnel may be invited to attend and contribute.

#### **Deliverables/Outputs:**

CFT Mid-Construction Report, listing "Lessons Learned", "Best Practices" and other ideas for improvement.

#### **Completion of Activity:**

The CQAS completes the CFT Mid-Construction Report, and the CFT transfers administration of follow-up activities to the WFLPII team.

#### **Additional Supporting Documentation:**

Construction Quality Assurance Process document Acronym List

### **Applicable PRMS Codes:**

Not Applicable

### Construction Task Activity Definition

#### **Post-Construction Review**

#### Receivables/Inputs:

Approximate completion point of construction project.

#### **Activity Description:**

The Post-Construction review is an optional activity requested by the Construction Branch.

The purposes of this activity are 1) to perform an in-depth review of design, administration and contractor construction methods, and how they relate to the plans, specifications and intent of the project; and 2) to identify items that require improvement (Lessons Learned) and items that may be highlighted (Best Practices). The CFT has responsibility for this review. Required reviewers are the Lead Designer, PE/COE, Environmental Specialist, and the CQAS, although all members of the CFT may be included. The CQAS will coordinate the review, which may occur over a one or two-day period as needed. Construction contractor personnel may be invited to attend and contribute.

#### **Deliverables/Outputs:**

CFT Post-Construction Report, listing "Lessons Learned", "Best Practices" and other ideas for improvement.

### **Completion of Activity:**

The CQAS completes the CFT Post-Construction Report, and the CFT transfers administration of follow-up activities to WFLPII team.

#### **Additional Supporting Documentation:**

<u>Construction Quality Assurance Process</u> document Acronym List

### **Applicable PRMS Codes:**

Not Applicable