

A/E Oversight Guidelines

Central Federal Lands Highway Division

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Project Management Engineer

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Acronyms

A/E	Architectural and Engineering Firm
ADT	Average Daily Traffic
Cat-X	Categorical Exclusion
CFLHD	Central Federal Lands Highway Division
COE	Construction Operations Engineer
COTR	Contracting Officer's Technical Representative
CFT	Cross Functional Team
EA	Environmental Assessment
EIS	Environmental Impact Statement
DSC	Denver Service Center, National Park Service
FH	Forest Highway
FHWA	Federal Highway Administration
FLH	Federal Lands Highway
FLHP	Federal Lands Highway Program
FONSI	Finding of No Significant Impacts
FM	Functional Manager
FS	Forest Service
FWS	Fish & Wildlife Service
GIS	Geographic Information System
GPS	Global Positioning System
HDM	Highway Design Manager
HDS	Highway Design Standards
IGE	Independent Government Estimate
IMR	Intermountain Region
LOE	Level of Effort
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
NPS	National Park Service
P&A	Planning and Administration
PDDM	Project Development & Design Manual
PDT	Project Delivery Team
PM	Project Manager
PMIS	Project Management Information System
PMT	Project Management Team
PNM	Price Negotiation Memorandum
PR	Procurement Request
PS&E	Plans, Specifications, & Estimate
PSR	Pre-programming Scoping Report
PST	Project Support Team
P3	Project Scheduler
QA/QC	Quality Assurance/Quality Control
RIP	Road Inventory Program
ROD	Record of Decision
ROW	Right-of-Way

SEE	Social, Economic, and Environment Study Team
SOW	Scope of Work
TO	Task Order
3R	Rehabilitation, restoration, and resurfacing
4R	Reconstruction, rehabilitation, restoration, and resurfacing

The following acronyms have been created to identify groups of project personnel that would likely meet or correspond for specific purposes and on multiple occasions. These teams are described below and in Figures 2 through 4.

PST - Project Support Team – Figure 2: Internal resources necessary to support the PM.
PDT - Project Delivery Team - Figure 3: PM, PST, and the A/E.
PMT - Project Management Team – Figure 4: PM, A/E, and external agencies.

CFLHD Management Expectations

The following guidelines were developed to provide guidance to Central Federal Lands Highway Division (CFLHD) employees on how to effectively and efficiently utilize Architect/Engineer (A/E) firms under full-service contracts to produce plans, specifications, and estimates (PS&E) for highway projects. These contracts are led by a CFLHD Project Manager assisted by efficient technical support from members of CFLHD's technical functions. Management expects that these guidelines will be implemented immediately after distribution.

Management desires that these guidelines serve as a foundation for the relationship and performance expectations for our full-service A/E teammates and that any problems between CFLHD employees and our A/E staff be resolved at the working level or escalated to supervisors and/or managers quickly when necessary.

Management welcomes feedback from users (CFLHD, A/Es, and others) to make continuous improvements to these guidelines. **Please e-mail your comments on these guidelines to: PMGroup.CFL@fhwa.dot.gov**

Acknowledgements

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- Project Delivery (Director, Project Management Engineer, Project Management, Quality Assurance)
- Division Engineer
- Legal Council

I. EXECUTIVE SUMMARY

Introduction

An A/E Oversight Team was formed in June 2003 to develop guidelines for roles and responsibilities for A/E oversight. The objective of the team was stated as: “Achieve the greatest advantage from A/E resources for future CFLHD program amounts through better definition of administrative and oversight responsibilities.”

The team received guidance from the Project Delivery Director and Branch Chiefs and input from CFLHD staff to develop the A/E Oversight Guidelines. The guidelines are endorsed by the CFLHD Leadership Team and are intended to serve as a guide for the delivery of projects utilizing full-service A/E contractors.

Background

CFLHD is looking to achieve greater advantage from A/E contractors in order to deliver an increased program of quality work without increasing staff size. CFLHD plans to achieve this goal, in part, through more efficient use of full-service A/E contractors whereby the Project Manager (a) is the Contracting Officer’s Technical Representative (COTR), (b) provides direct A/E oversight, and (c) relies on a team of CFLHD technical specialists for support. The guidelines presented herein were developed to better convey A/E oversight roles, responsibilities, and expectations among CFLHD management, project management, technical functions, and A/E contractors. The structured approach these guidelines provide is expected to result in use of fewer CFLHD resources to deliver quality projects through A/E contracting. Implementation is expected to allow CFLHD to meet its program goals and to allow staff more time for understanding customer needs, delivering projects internally, and participating in training and in other efforts to enhance personal and agency capabilities.

Approach

The team considered that CFLHD’s resources committed to A/E oversight could best be reduced by addressing two limitations of our current practice. The first is a lack of a standard process wherein all the tasks necessary to deliver a project are grouped into standard Task Orders (TO) as needed to advance a project from scoping through award. A standard process and standard TO would allow team members to develop efficiency in completing their roles in the process and would provide CFLHD information that can be evaluated and optimized in the future. The second limitation is uncertainty in the roles, responsibilities, and expectations of the various team members in the delivery process. Definitions of roles, responsibilities, and expectations would enable team members to know what is expected of them, in terms of both work products and level of effort, and what they can expect of others. The guidelines use two example projects to define a standard process and to identify roles and responsibilities for team members.

These guidelines also emphasize the importance of placing more responsibility and accountability on the A/E and less reliance and “ownership” by CFLHD staff. CFLHD staff responsibilities will be more compliance checking of the TO requirements as opposed to providing

detailed/comprehensive support. Defining strategic points of engagement and level of effort for the Project Support Team (PST) while commanding additional responsibility and accountability on the A/E will result in a reduction of oversight resource hours. Our current programmatic outsource management is estimated at between 20% to 30%. The November 2000 Federal Lands Highway Phase II Benchmarking Study describes a programmatic outsource management goal of 9% (based on budget—not full time equivalent employees (FTE)) at a \$350 million program level (per Division) based on industry experience.

The approach is based on proven methods and introduces new terminology to facilitate understanding and to distinguish this mode of project delivery from internal project delivery. The PST is comprised of the Project Manager (PM) and CFLHD members from the various functions involved in the work; it has a similar composition as the Cross Functional Team (CFT) defined for internally delivered projects, but it differs in that the PST supports the project through oversight and review of the A/E's project work while supporting CFLHD's PM, not conducting the work. A CFT for internally produced projects consists of one "lead" representative, appointed by their Functional Manager (FM), from each discipline with project work elements. This team would be PM led. For A/E produced projects, the CFT would be a function of the A/E, with the A/E providing the functional staff and management necessary to produce the project documents. The structure of the PST is established by CFLHD's PM and FM's as determined by project specific needs. Not all of the project disciplines engaged by the A/E require parallel PST representation. The Project Delivery Team (PDT) is the PST plus the A/E contractor and is the team primarily responsible for delivering the project. The Project Management Team (PMT) includes the external agencies (our customers) but not the technical functional members of the PST.

Key assumptions are that the Pre-programming Scoping Report and the Standard Scope of Work template are completed and available for the A/E to use. It also assumes that CFLHD staff will continually develop functional discipline QA/QC procedures and checklists that are available to both the A/E and CFLHD staff and that A/E contracts will emphasize QA by the A/E with language to enforce it.

Implementation

Standard Process

Oversight of full-service A/E contractor delivery of CFLHD projects is to be conducted in accordance with the standard process outlined in the guidelines. The guidelines use example projects to define a standard process and to identify roles and general responsibilities for team members; specific responsibilities are based on guidance within functional disciplines and are beyond the scope of this report. The example projects are a 3R project for the National Park Service (NPS) (where the NPS would lead the environmental compliance process) and a 4R Forest Highway project, where CFLHD and the A/E contractor complete the environmental compliance process. The standard processes identified for these 'typical' projects consist of two TO's for the 3R project and three TO's for the 4R project; they start with a scoping TO and end with a final design TO that includes construction contract procurement assistance and ends at the point of construction contract award.

For purposes of oversight and identifying roles for team members, the TO's are broken into subtasks grouped according to TO development, administration, communication, conduct, submittals, deliverables, procurement assistance, and closeout. Narrative discussion of each subtask is presented in a paragraph or two to describe anticipated activities associated with the subtask and specifics associated with the roles and responsibilities of team members.

Roles and Responsibilities

It is expected that the following five defined roles represent the levels of involvement with the delivery of a project. Each member of the PDT will have different roles for different subtasks of a TO. The roles are briefly defined as follows.

1. *Perform*: Lead the work and assure delivery of the work products
2. *Review*: Evaluate the work against the TO and project requirements, provide input and recommendations, and participate in site reviews and meetings as needed
3. *Coordinate*: Assure communication of actions and recommendations to the A/E, PM, PST, and others as needed
4. *Assist*: Contribute to receipt and review of the work products and/or development and communication of actions and recommendations
5. *Support*: As needed support to others for accomplishing the task (expected to be only in rare instances)

With these defined roles there should be no ambiguity that the individual identified with the *Perform* role is responsible for getting the work done, the *Review* role for reviewing and commenting, the *Coordinate* role for assuring communication, the *Assist* role for minor assistance, and the *Support* role – only if needed. Additional definition of the roles is provided in the guidelines.

For the 3R and 4R example projects, a table was formed with each subtask as a row and different team members as columns. The team members identified in the columns for the 3R project are the A/E, the PM, the PST, and the NPS; and the team members identified for the 4R project are the A/E, the PM, the PST (exclusive of the environment function), and the environment function. By assigning each of the cells in the table one of the five defined roles, Roles and Responsibilities matrices were created for the recommended standard 3R and 4R processes. The matrices provide a concise means of understanding responsibilities and conveying expectations. Narrative discussion in the report is organized according to the same sequence of subtasks and provides additional information and the basis for estimated hours of effort, which are also shown in the matrices.

Estimated hours should be interpreted as a programmatic average; some projects may require more or less effort. Similarly, the processes and the roles and responsibilities presented herein are expected to be used as guidelines. It is anticipated that some adaptation of the standard processes to actual projects will be required to handle differences in scope, schedule, and budget.

II. INTRODUCTION and BACKGROUND

As a result of the anticipated increase in program amounts expected in the new Safe, Accountable, Flexible, and Efficient Transportation Equity Act (SAFETEA) highway bill, CFLHD has been pursuing ways to deliver an increased program with fixed staff while focusing on customer satisfaction, maintaining expertise to deliver projects internally, and furthering career development. The CFLHD Leadership Team envisions delivering entire projects through the use of full-service A/E contractors in a process wherein expectations, roles, and responsibilities are well defined for the A/E contractor as well as CFLHD staff. This delivery approach is not entirely new; in fact, there are several variations to this delivery method currently being used. Given the fact that there are so many variations, roles and responsibilities become inconsistent. This, coupled with being unique to single projects, also contributes to inefficient oversight and inconsistent expectations of A/E contractors. To improve efficiency of oversight and fulfillment of CFLHD expectations for A/E contractors, an A/E Oversight Team was formed to develop a standard process that includes standard roles and responsibilities for PM's, project team members, and A/E contractors.

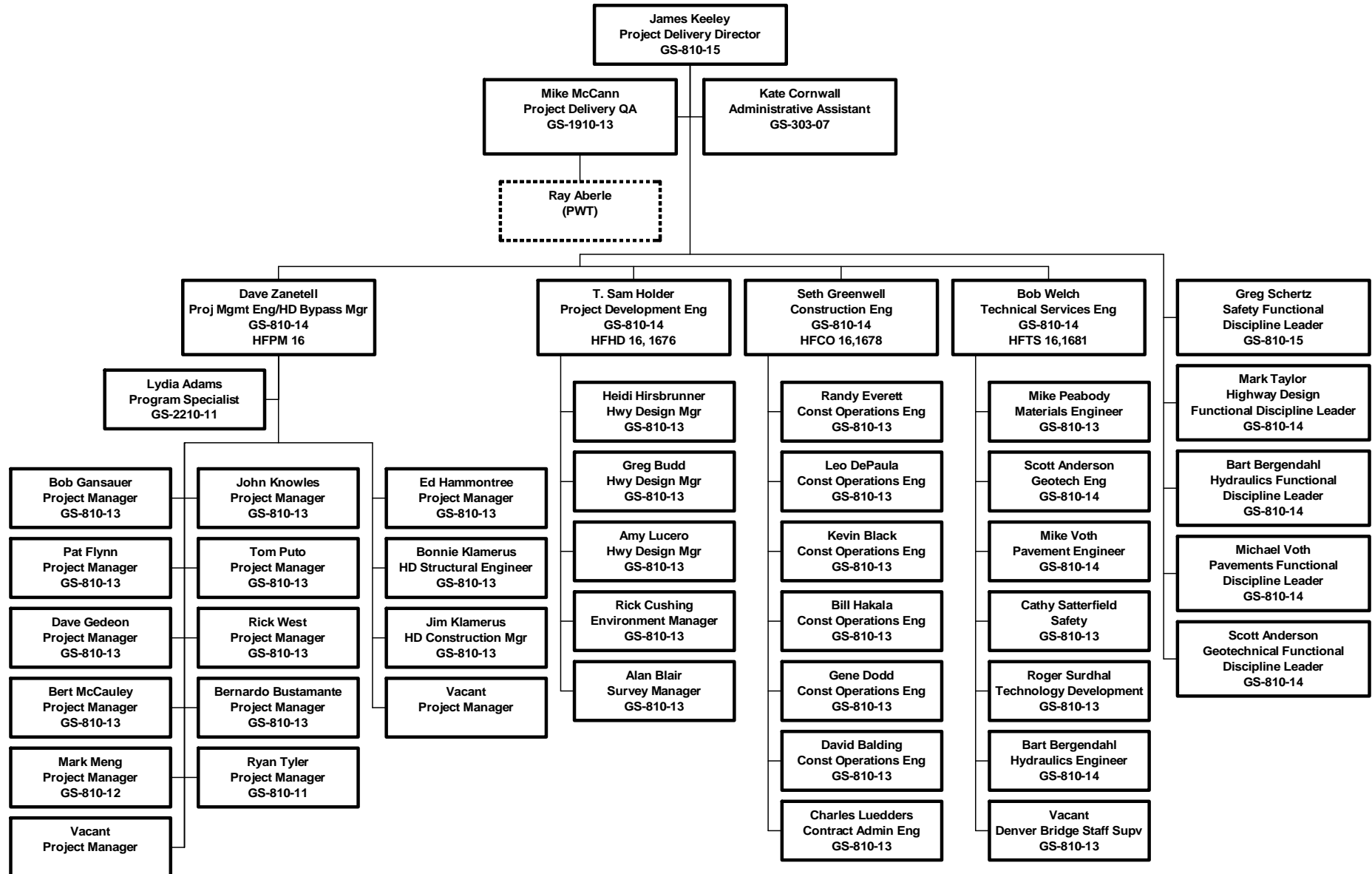
The A/E Oversight Team was formulated on June 16, 2003, when the Director of Project Delivery and Branch Chiefs provided their initial guidance and expectations. Periodic planning and progress meetings were held with these individuals to ensure alignment of work progress with organizational direction and vision. Status updates and briefings were given periodically at the regularly scheduled PM/FM meetings. This report summarizes standard processes -- including roles, responsibilities, and definitions that were developed by the A/E Oversight Team with the guidance of the Branch Chiefs and input from CFLHD staff.

Current conditions

In 2003, CFLHD reorganized and created a Project Management Branch in parallel to Project Development, Construction Engineering, and Technical Services Branches (shown in Figure 1). The organization is a project-centered matrix wherein CFT members from Project Development, Construction and Technical Services support the PM and the project. Each project has a unique CFT, which means that a PM who manages 10 projects has 10 different CFT's (with different members) supporting their projects; functional team members belong to multiple CFT's and support multiple PM's. The level of engagement of the CFT members varies by project from being completely responsible for doing the work, to being a COTR and being responsible for administration and oversight of the technical work products, to providing sporadic oversight and consultation to the PM's and other CFT members on an as-requested basis.

Figure 1

Office of Project Delivery



III. THE NEED

CFLHD desires to achieve the greatest possible project delivery advantage from our A/E contracted resources. Guidelines are needed to standardize a process so that we can consistently use fewer CFLHD resources to oversee the A/E delivery of quality projects to meet our expectations and our customers' needs. The success of this process will allow time for CFLHD staff to better understand customer needs, deliver projects internally, and participate in training and in other efforts to enhance personal and agency capabilities.

Specific needs were discussed by the Branch Chiefs at the kickoff meeting for this effort and include the need for defined roles and responsibilities and better communication of expectations, both internally and to the A/E contractor. Notes from this meeting are included in Appendix A.

1. Assumptions

The terminology, processes, and guidelines presented herein are based on certain assumptions, which may need to be adjusted if at any time the assumptions are deemed unreasonable. Primary assumptions include the following:

- a. The project-centered organizational matrix is as shown in Figure 1.
- b. The PM is the COTR for Task Orders.
- c. The TO has adequate scope, fee, and QA/QC enforcement clauses for A/E comprehension and CFLHD administration.
- d. The recently developed Pre-programming Scoping Report, Standardized Scope of Work, Contractor Evaluation Reports, Functional Discipline QA/QC Procedures, and A/E QC checklists are ready and available.
- e. The CFLHD PM and technical staff responsible for oversight are individuals with experience in delivering similar work themselves and in conducting A/E oversight.

2. Definitions

Task Order Development: Those activities necessary to develop and negotiate the A/E contract documents.

Task Order Administration: The management of the scope, schedule, and budget -- including establishment of the PST and providing oversight, administrative, and technical assistance to the A/E as necessary to facilitate understanding of the scope of work.

Task Order Communication: Addresses the types of overall communication needed to complete the Task Orders between the A/E and CFLHD personnel. Communication on the part of the A/E are discussions internal to the A/E necessary to finalize activities; this communication is separate from the communication that is inherently governmental, i.e., meetings where the PM or PST is representing the project before our customer or where we, if required by law, are representing the project before other Federal agencies or the public. CFLHD is the primary contact with our customers. Also included is communication between the A/E and the PM or PST.

Task Order Conduct: Accomplishing the work along with the relationships with CFLHD.

Task Order Submittal: Draft documents generated for a specific TO, which typically are reviewed by CFLHD, program agencies, and regulatory agency personnel. Documents which are submitted for review and comment.

Task Order Deliverables: Final documents generated for a specific TO. These documents are developed to the level indicated in the TO that meet the terms and conditions of the TO requirements.

Figure 2

“PST”

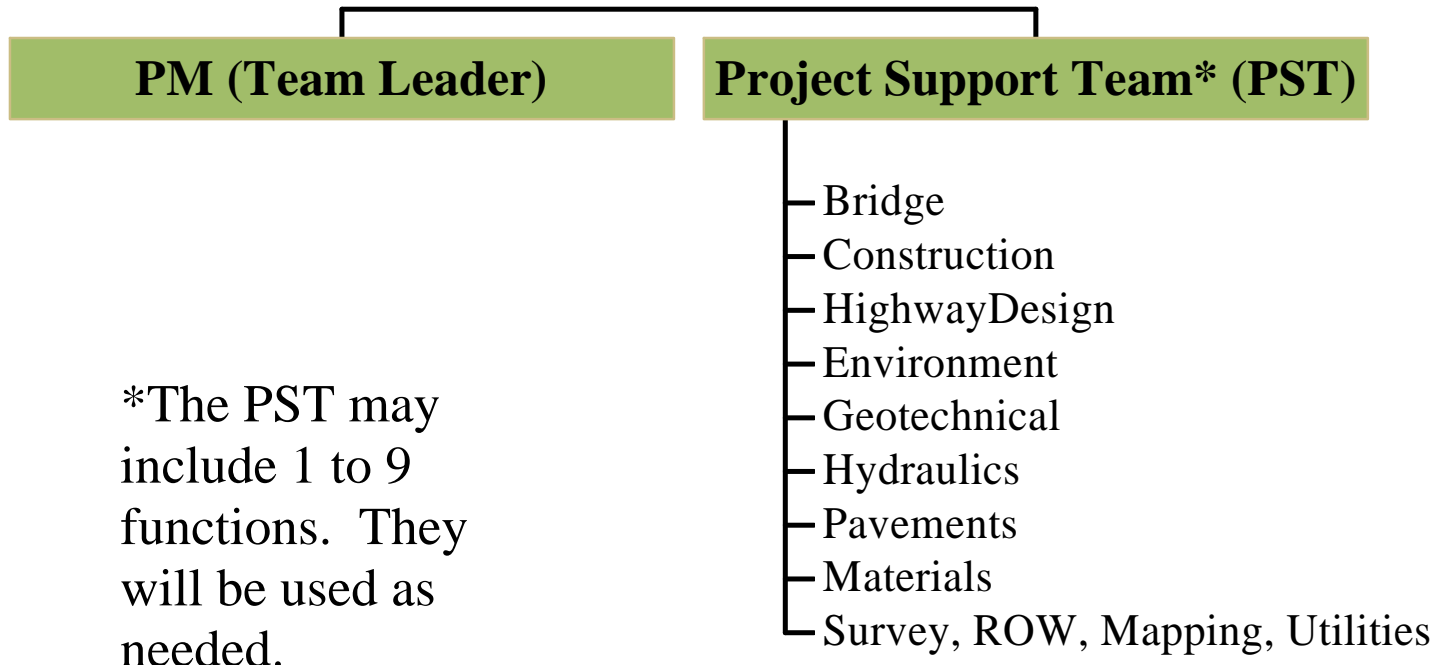


Figure 3

“PDT”

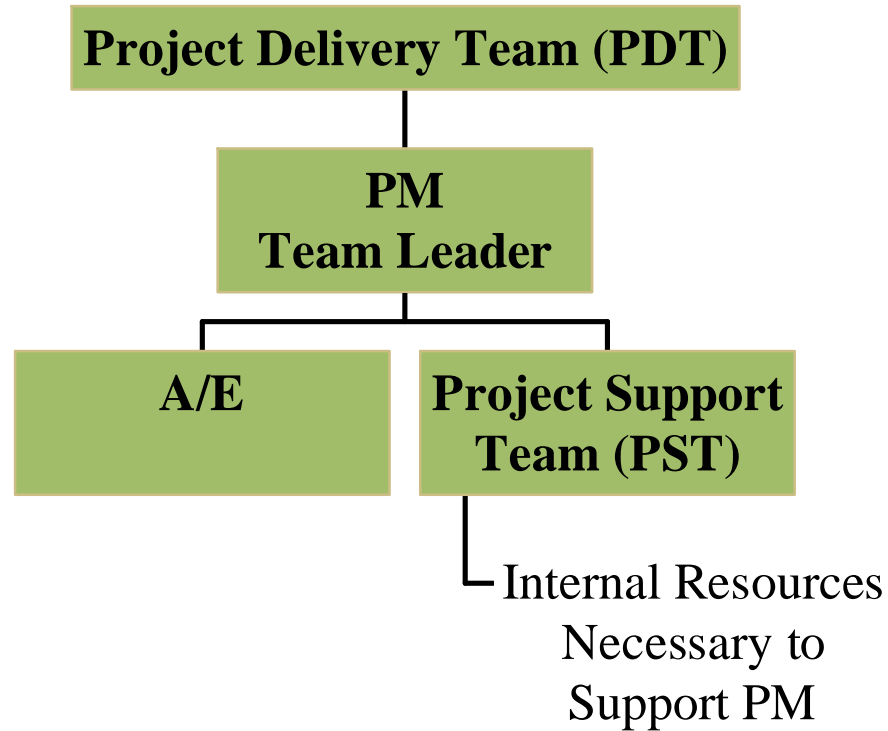
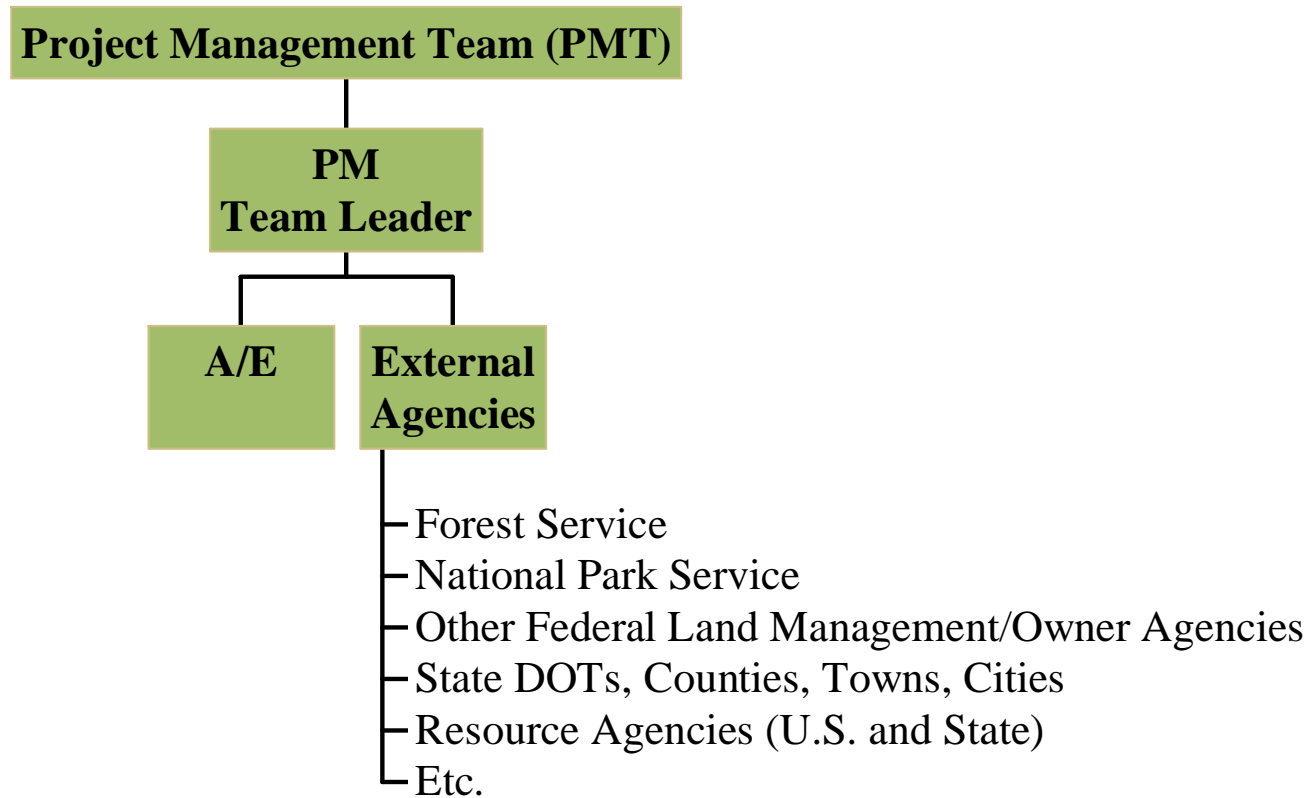


Figure 4

“PMT”



CFLHD resources in addition to the PM may participate on the PMT to provide input or guidance on project specific issues (i.e. funding issues, Program Manager). The PM will determine participation.

3. Reasoning

Current delivery models utilized in CFLHD range from complete internal delivery by CFLHD staff to full-service A/E delivery with limited CFLHD oversight. This results in project team members who simultaneously advance many projects with varying delivery processes. Roles and responsibilities are seldom well documented and usually unique to each specific project. This has resulted in great organizational flexibility but causes project delivery team members to be less efficient due to inconsistent understanding of their roles and responsibilities, resulting in more involvement than necessary and/or unmet expectations from other team members who are less involved.

To improve oversight efficiency and gain the greatest advantage utilizing our A/E resources, standard guidelines need to be developed and defined, both in terms of the established processes as well as the roles and responsibilities of CFLHD staff and the A/E contractor. Recognizing that optimal efficiency likely results from a balance of structure and flexibility -- to account for individual work styles -- guidelines were developed, not procedural "specifications."

The standard process is comprised of a sequence of TO's for 3R and 4R projects, with the individual TO's broken down into specific tasks. The primary objective is to group the various TO activities according to task type and not chronological order. The standard process is presented in *Section IV. The Solution*, along with a narrative discussion of responsibilities. The standard process refers to five broadly defined roles, which are described below. The list of tasks, definition of team members, and assignment of roles creates a matrix, which is shown for 4R projects in *Section IV. The Solution, 4R – Forest Highway Matrix* and for 3R projects in *Section IV. The Solution, 3R – National Park Service Matrix*.

4. Project Delivery Roles

The primary roles of team members are described here for A/E delivery of NPS 3R Park Road projects and Forest Service (FS) 4R Forest Highway (FH) projects. The roles are identified for typical tasks in the delivery process and presented in matrices that identify tasks, team members, and their roles. Different matrices are presented for the 3R-NPS and 4R-FS projects because they differ in the breadth of the scope of work and the typical involvement of our customer (the NPS or FS). Typically, the NPS's role on a 3R project includes leadership of some tasks, so its role is explicitly identified in the 3R-Park matrix. The FS provides crucial project support throughout project delivery but does not typically lead any of the tasks identified in the matrices, so its role is implicit to all tasks and is not identified explicitly in the 4R FS matrix.

The PDT consists of an A/E contractor, a CFLHD PM, and the PST which is composed of CFLHD functional specialists. The PDT is responsible for delivering the project -- generally completed through a series of two or three Task Orders taking the project from scoping through environmental clearance, final design, and procurement assistance. Each TO requires multiple tasks related to development, contract administration, work conduct, submittals (drafts), deliverables (final products), and closeout. These can be arranged in a somewhat chronological order where each PDT member has a unique role for each task.

The roles and responsibilities of each PDT member in a full-service delivery have been divided into five broad categories of involvement (i.e., level of effort (LOE) expected from each member in this delivery model). The five broad role categories (in descending level of expected involvement) are: *Perform* (the greatest level of involvement), *Review* (2nd greatest level of involvement), *Coordinate* (3rd greatest level), *Assist* (4th greatest level), and *Support* (the least level of involvement). These keywords only partly describe the responsibilities associated with the PDT member's involvement and LOE in the project.

On any given task, each PDT member (A/E, PM, and PST) has an assigned role. For the 3R-Park project, the NPS is also assigned one of these roles for several tasks. Additionally, for 4R FH projects the PST roles and level of effort (hours) for the Environmental PST member were separated from the core PST. This was done to emphasize the roles and LOE necessary to steer the environmental process to ensure that the purpose and need, alternatives, and impacts are considered. In addition, it allows for a clearer understanding of the distribution of the remaining PST hours.

Although, the *Perform* role is accomplished by several members of the PDT, it is CFLHD's PM who is the Team Leader. As Team Leader, the PM will determine the PST membership and level of involvement for the various tasks. Not all of the tasks identified in the matrices require PST engagement.

The PDT members identified as having *Perform* or *Review* roles have the greatest level of involvement in project delivery so these roles are considered Primary Project Delivery Roles. The PDT members identified as having the remaining roles are considered to have Contributing Project Delivery Roles, and they have a decreasing level of involvement in the delivery depending on their identified role from *Coordinate* – being the highest contributing level of involvement, *Assist* – the next highest contributing level of involvement, to *Support* – the least contributing level of involvement. A premise of this division of roles and responsibilities is that the tasks identified are primarily accomplished, communicated, and accepted in a relationship between two of the PDT members; the other member(s) have varying levels of contribution. Each of these roles and the team members they are assigned to are described below:

PRIMARY ROLES

Perform

Lead the work and assure delivery of the work products. The PDT member(s) assigned this role is ultimately responsible for the task and for doing what it takes to get it completed. Other team members are expected to contribute to the extent indicated by their assigned role.

The *Perform* role is assigned to the A/E or the PM, with one task assigned to the environmental PST member for their role as co-chair of the Social, Economic, and Environmental Study Team (SEE Team) and another for the Construction Operations Engineer (COE) during the contract procurement phase. Except for the noted exception, PST members are responsible for contributing to project oversight and delivery; they are not ultimately responsible for delivering the tasks identified in the matrix. The PM generally has the *Perform* role only during initiation and closeout of each TO, and these are unique tasks because they are performed almost unilaterally by the PM.

The A/E has the *Perform* role for most other tasks, including management of their scope, schedule, and budget as well as work conduct, communication, submittals, and final deliverables. Where the A/E has the *Perform* role, the PM and PST roles comprise the A/E oversight.

The *Perform* role is assigned to the NPS for limited tasks on 3R-Park projects, which means these are tasks for which the NPS is responsible and CFLHD contributes in a supporting role. At the time this document was issued, there was a proposal that may require the adoption by the FHWA of the NPS's National Environmental Policy Act (NEPA) prepared documents. The impacts to the roles and responsibilities caused by adoption of this proposal will have to be developed and adhered to by the responsible parties.

Review

Evaluate the work against the TO and project requirements, provide input and recommendations, and travel as needed. The PDT member assigned this role receives the work delivered by the PDT member with the *Perform* role and is responsible for its evaluation. The *Review* role is broad and varies by task from review of written documents and drawings to participation in office and field meetings that are led by others; consequently, the form of 'input and recommendations' provided by the *Review* role is varied. Additionally, the *Review* role assumes the responsibilities of the *Coordinate* and/or *Assist* roles (described below) when they are not assigned.

All PDT members are assigned the *Review* role for some tasks, though most often the role belongs to the PM or specific PST members. A case where the A/E has the *Review* role is for meetings where the PM is representing the project before our customer or where the FHWA, if required by law, is representing the project before other Federal agencies or the public, yet the A/E is extensively involved.

The PM has the *Review* role for TO administration (i.e., the PM receives and reviews invoices and progress reports from the A/E), activities required to conduct the TO work (i.e., routine communication during performance of the work), and non-technical deliverables. Where the PM has the *Review* role, the A/E has the *Perform* role and the PST has *Support* or *Assist* roles, depending on the level of involvement anticipated.

The PST has the *Review* role primarily for technical submittals and deliverables as defined by the PM. On these tasks, the A/E typically has the *Perform* role and the PM has the *Coordinate* role (described below). PST members are responsible for evaluating the work with respect to the TO and in accordance with the specific requirements and procedures established within each technical discipline. These tasks, where the PST has the *Review* role, are principal tasks where quality of deliverables is evaluated and assured through the A/E oversight process. The definition of what constitutes the *Review* role depends on the task, the technical function, and the project, though the expected total LOE from all PST members is indicated in the matrices by estimated hours. Technical guidance on what constitutes the *Review* role for each function is available through the FM's. In addition, the PM should discuss the expected level of review based on need, risk, etc., with the PST during the kick off meeting and PST meetings. A narrowly focused review or a review with a minimal LOE would be covered by the *Assist* role.

CONTRIBUTING ROLES

Coordinate

Assure communication of actions and recommendations to the A/E, PM, PST, and others as needed. The PM is the PDT member assigned this role and is responsible for assuring that ‘input and recommendations’ from individual PST members are communicated both to PST members in associated functions and to the A/E. The *Coordinate* role is also responsible for achieving consensus among the PST members so that CFLHD speaks with a single voice that the PST members and PM can all accept. Outreach by the PM with the PST may be necessary to obtain technical advice to resolve inquiries from the A/E. The PST member providing the information may be requested by the PM to assist in communicating the specifics of the technical data. The *Coordinate* role is only assigned for technical tasks where the A/E is in the *Perform* role and the PST is in the *Review* role; the *Coordinate* role is only assigned to the PM.

Assist

Contribute to receipt and review of the work products and/or development and communication of actions and recommendations. The PDT member assigned this role should expect some limited involvement with the task and is responsible for assisting the PDT member assigned the *Review* role. The *Assist* role is assigned to the PST, A/E, or NPS (for the 3R-Park project) for tasks associated with communication and meetings.

Support

As needed support to others for accomplishing the task (expected involvement to be only in rare instances). The PDT member assigned this role should expect no involvement with the task but should be receptive to requests made when circumstances warrant. The PM will need to notify and coordinate requests with the PST member so the PST member can ensure that their schedule can accommodate the request in the required timeframe. The *Support* role is responsible for assisting the PDT member assigned the *Review* role. The *Support* role is assigned only to the A/E or PST (or the NPS for 3R-Park projects). It is assigned to the A/E for CFLHD internal tasks such as internal meetings and tasks related to TO development. The *Support* role is assigned to the PDT for administrative tasks and for the tasks where the work is actually conducted by the A/E, indicating that the A/E will be working alone.

5. Expected Outcomes from This Process Implementation

By implementing the roles identified above and the TO process identified in the next section, the following results are expected:

- a. Increase quality of deliverables/submittals.
- b. Reduce CFLHD oversight time needed.
- c. Reduce CFLHD oversight dollars expended.
- d. Better defined expectations of A/E’s by involved CFLHD staff.
- e. Better defined and communicated CFLHD expectations to A/E’s.
- f. Better defined relationships of CFLHD, A/E’s, and project customers on A/E full-service task orders.
- g. Better defined roles and responsibilities of PST members at various project phases.

6. Extrapolation to Other Project Types

Development of a 4R NPS project would approximately follow the 4R FS guidelines. The primary exceptions are that the project agreement and environmental documents would be completed by the NPS. Right-of-way (ROW) tasks would also not be involved. The LOE for the PM and PST would reasonably be equal to the LOE shown for a 4R FS project with the exception of the tasks noted above.

A similar scenario applies to 3R FS projects. The 3R NPS guidance and matrix should be used to provide the frame-work for determining the initial LOE and points of engagement for the development of a 3R FS project, with the exception that the environmental documents and project agreement should be completed by the A/E. During the project kick off meeting, the anticipated responsibilities and LOE will be determined. The PM will be responsible for determining the need to verify rights-of-way and ownership on 3R FS projects. The appropriate tasks will be included in the SOW.

For these and other projects, it is anticipated that these guidelines and associated matrices would be used by the PDT to develop project specific guidelines. The key difference in projects of similar type is the project complexity. This will create the greatest variance in the points of engagement and LOE of the PDT. For example, projects that require either an Environmental Impact Statement (EIS) or complex Environmental Assessment (EA) would require a greater emphasis being placed on the interactions of the CFLHD environmental staff.

IV. THE SOLUTION

A - 4R Forest Highway Project

The following information describes the A/E oversight processes for full-service A/E project delivery. The example project that was used consisted of the following:

- A single project (not a project in a series of projects along a route)
- Approximate project development duration of 4 years
- Approximate cost of \$10,000,000
- A/E costs of \$1,500,000 (15%)
- EA/Finding of No Significant Impacts (FONSI)
- Moderate technical complexities
- No bridge, some minor structural design required
- A few major hydraulic crossings and typical hydrologic conditions
- Average earthwork with a few standard retaining walls

The team developed a Roles and Responsibilities Matrix (matrix 1) to show the relationship between the A/E, the PM, and the PST during project development activities. In addition, the team recommends delivery in a three task order phasing approach using the following TO narrative discussion.

Lastly, included in the matrix are the estimated hours of effort necessary for the PM and PST to complete each identified task consistent with this delivery approach. The estimated hours were cross-checked with the current LOE provided from PM's and functional areas and were found to be an achievable reduction in oversight hours based on the recommended A/E oversight changes.

1.0 Task Order One Narrative – Scoping

The scoping phase of project development affords the PMT (Environment PST should attend site visit) their "first look" at the project. Scoping will give the PMT an introduction to the project issues, an estimation of design and investigation needs, and, most importantly, the information necessary to complete a scoping report and project agreement. The PM will lead this process; but the documenting, report writing, and drafting of the project agreement will be the responsibility of the A/E. As a result, the workload on the PM is minimized. Additionally, it will be expected that, in cases where specific functional support is needed, the A/E will provide the functional expert who will attend the scoping site visit and address the particular needs. As a result, the workload of the PST and/or FM's is minimized. It is assumed that the Pre-programming Scoping Report (PSR) from Planning and Administration (P&A) is completed prior to this scoping. The PSR will be used as a resource to help develop the activities of the SOW and assign PST members. A narrative and outline of the activities for this phase is presented below.

1.1 Task Order Development

1.1.1 Scope of Work

It is envisioned that a standardized or boilerplate TO SOW will be developed by CFLHD that will apply to nearly every project. The PM may have to customize the SOW; but generally the tasks, work effort, and issues will be the same for every project (i.e. review site with owner-agency and other stakeholders, review project limits, estimate project and design needs, write scoping report, draft a project agreement, etc.). Minimal input from functional areas may be necessary to customize the TO and SOW. The only anticipated existing documented project information is the PSR, which contains some technical data, specific site conditions, and design recommendations. The SOW should require the A/E to furnish other project data prior to the site visit (i.e., initial maps, accident reports, Geographic Information System (GIS)/Global Positioning System (GPS) support, and tax maps) to be used for the scoping effort.

PDT Primary Responsibilities & Hours

A/E	Support
PM	Perform - 16
PST w/o Environment	Support - 4
Environment	Support - 1

1.1.2 IGE and Pre-negotiation

As above, a standardized Independent Government Estimate (IGE) formatted form, will be developed that will only require minor customizing by the A/E and PM to fit the particular projects need. Since it will be necessary for the A/E to develop a spreadsheet with the SOW activities listed (no hours), the PM should ask the A/E to forward a copy so the PM can modify the standardized IGE to reflect the actual TO activities. After the PM completes the IGE, the PM will forward the final TO SOW, IGE, Procurement Request (PR), and Letter of Approval and/or Authorization (PR-1240) to the CFLHD Acquisitions Section, which will send the final TO SOW to the A/E as a

request for proposal. The A/E will prepare their cost proposal and return this information back to the CFLHD Acquisitions Section, which will then route the price proposal package back to the PM. The PM will independently evaluate the price proposal. The PM will develop pre-negotiation information that documents the objectives of the negotiator's (PM) position. An understanding of each side's position is important to adequately prepare for negotiations.

PDT Primary Responsibilities & Hours

A/E	Support
PM	Perform - 20
PST w/o Environment	Support - 4
Environment	Support - 1

1.1.3 Negotiation and Post-negotiation

The PM will determine the need for PST members to attend the negotiation meeting(s) with the A/E and their subconsultants. Typically, negotiation meeting(s) have no involvement from the PST.

The PM will evaluate the cost and task proposal submitted by the A/E. Both the pre-negotiation objectives and the results of the contract action will be documented by the PM; and the PM will revise the SOW, as appropriate, to reflect any changes to the SOW resulting from negotiations.

PDT Primary Responsibilities & Hours

A/E	Review
PM	Perform - 14
PST w/o Environment	Support - 0
Environment	Support - 0

1.2 Task Order Administration

1.2.1 Establish PST

A key part of the administration activity will be the establishment of a PST. The PM will establish a PST by requesting FM's to assign a representative. The FM's will use the PSR as a basis for assigning a representative. At the discretion of the PM, the PDT may meet prior to the scoping trip to provide guidance or technical assistance. If a pre-scoping meeting does not occur, then it is expected that, shortly after the scoping trip and before the start of preliminary design, the PM would hold a meeting with the PDT to "kick off" the project. Project account numbers would also be established at this stage to allow PST members to begin charging time to the project. Establishment of the PST occurs prior to the development of the SOW.

The PM, with assistance of the FM's, should develop a responsibility and hours matrix with the SOW to provide PST LOE tailored for each project. The responsibility and hours matrix would be used by the PST to identify points of engagement and LOE. This will help the FM's plan resource loads and should provide the frame-work for developing uniform resource requirements across multiple PM's. In addition, it will be necessary for the PM's to review the matrix and amend it as appropriate, including providing advance notice of variances to the PST.

PDT Primary Responsibilities & Hours

A/E	Support
PM	Perform - 8
PST w/o Environment	Review - 16
Environment	Review - 4

1.2.2 Invoicing (Budget Control)

The A/E will submit a monthly invoice to the CFLHD Acquisitions Section which will then forward the invoice to the PM for verification/approval. The PM is the COTR and is responsible for reviewing A/E invoices. The A/E is responsible for completing the TO within budget and for invoicing in accordance with the contract requirements. The CFLHD will have 30 calendar days for payment on the invoice before interest will be granted to the A/E.

PDT Primary Responsibilities & Hours

A/E	Perform
PM	Review - 4
PST w/o Environment	Support - 0
Environment	Support - 0

1.2.3 Progress Reports (Schedule Control)

The A/E will submit a monthly progress report (typically submitted together with the invoice) detailing work performed in the period, describing anticipated work in the next billing period, documenting problems and delays, etc. The PM is the COTR and is responsible for reviewing A/E progress reports and, if needed, discussion of technical issues with the PST. The A/E is responsible for completing and submitting progress reports in accordance with the terms of the contract. Notification of the PST of changes to the schedule should occur when the revised schedule affects workload planning. The preferred method would be updating of the project scheduler (P3) to reflect the revised schedule. Notification by email is an option when the timing of the revisions does not coincide with the P3 update cycle.

PDT Primary Responsibilities & Hours

A/E	Perform
PM	Review - 4
PST w/o Environment	Support - 0
Environment	Support - 0

1.2.4 Adherence to SOW (Scope Control)

The PM is the COTR and is responsible for monitoring the need for scope modification through correspondence from the A/E. The PM may engage support from the PST as issues arise during the TO performance period. The A/E is responsible for adhering to the contract SOW.

Should changes to the SOW be required after the TO has been signed, the PM and A/E shall agree on the level of work expected to be performed and the A/E shall prepare the SOW for the contract modification. All other work responsibilities will be as described in Section 2.1

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 4
PST w/o Environment	Support	- 0
Environment	Support	- 0

1.2.5 Technical Issues

The PST will provide technical assistance to the PM and A/E to convey CFLHD's expectations, institutional experience, and/or previous experience with projects in the area. PST members are expected to provide comments on processes and suggestions on “ best practice.” The PST member(s) will also provide support to the PM as necessary to resolve technical issues or provide guidance for determining the reasonableness of A/E proposed solutions. Direct communication between the PST and A/E technical staff may be necessary. It may not be possible to identify the level of communication/involvement PST members will have during execution of the TO. Therefore, communication/involvement will typically be requested by the PM on an as-needed basis. To expedite the communication process, the PM may request the A/E to contact the PST member(s) directly. The PM will notify the PST and A/E of this request for assistance as early as possible to ensure that PST members can plan their schedule accordingly and minimize disruption to other project work. Due to the simplistic nature of this TO, minimal communication/ involvement of the PST is envisioned.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 8
PST w/o Environment	Review	- 32
Environment	Review	- 8

1.3 Task Order Conduct

1.3.1 Site Visit

The site visit is the major information gathering activity for this TO. The site visit also serves as a venue for meeting and discussing the project with representatives of the agencies who will sign the project agreement. The PM will attend in a lead role for the agency. Attendance by the appropriate officials is imperative. The PM and the A/E PM will mutually decide attendance. Attendance by PST members, with the exception of the environment PST, will typically not be necessary. Projects that have a heavy reliance on specific functional discipline area(s) may require engagement of those technical experts. In this case, the PM may request that those PST members attend. However, the A/E will customarily provide the technical experts for on-site support in the particular functional areas. The SOW should state if A/E functional support is needed.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 24
PST w/o Environment	Support	- 0
Environment	Assist	- 24

1.4 Task Order Submittals

Typically, there are three submittals (see below) required with this task. The A/E is tasked with completing these submittals and forwarding them, as appropriate, to the PMT and PST.

1.4.1 Draft Scoping Report

The A/E will develop a draft scoping report using the Standardized Scoping Report format. The PM, PST, and stakeholders will receive copies of the draft scoping report. The purpose of this document is to allow the A/E to fully identify all key issues associated with a project. Having the issues identified earlier in the process should help all functional areas become engaged in the project at the correct time to avoid scheduling problems. It will also allow the PST to have a better understanding of the work required for each project. The PM will be responsible for reviewing, consolidating stakeholder and PST comments, and forwarding comments on the draft report to the A/E. The PST is responsible for reviewing the appropriate section(s) and providing comments on the observations and recommendations contained within the report.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review -	4
PST w/o Environment	Assist -	12
Environment	Assist -	8

1.4.2 Draft Project Agreement

The PM and the PST will receive copies of the draft project agreement. However, little support is expected from the PST in the review of this document. The PM will be responsible for reviewing the document.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review -	4
PST w/o Environment	Support -	0
Environment	Support -	2

1.4.3 Draft SOW for Subsequent Task Order

The A/E will use the standardized TO as an outline to expedite the development of the SOW for TO 2 (0 to 30% project development). The PDT will receive copies of the draft SOW. Input from functional areas typically will be necessary to ensure that tasks, work effort, and issues are clearly and completely stated. PST members are not expected to provide specific, project level comments but rather general oversight on completeness, work effort, and suggestions on “best practice”. Section 2.1.1 discusses modifications to the SOW to prepare the appropriate environmental decision document.

The PM will be responsible for coordinating and communicating the comments back to the A/E. This is the PST's opportunity to provide technical comments and/or receive clarification of project scope and design issues.

PDT Primary Responsibilities & Hours			
A/E	Perform		
PM	Coordinate	-	8
PST w/o Environment	Review	-	24
Environment	Review	-	20

1.5 Task Order Deliverables

The A/E will incorporate the comments from the PMT and PST received in Section 1.4 above and finalize the previously transmitted submittals.

1.5.1 Final Scoping Report

The A/E will incorporate the comments from the PMT and PST received in Section 1.4.1 above and finalize the scoping report. The A/E will produce and distribute the final scoping report to the PDT and PMT, as appropriate.

PDT Primary Responsibilities & Hours			
A/E	Perform		
PM	Review	-	2
PST w/o Environment	Support	-	0
Environment	Support	-	2

1.5.2 Final Project Agreement

The PM will assist the A/E in producing the final project agreement, but the PM will be directly responsible for the completion and distribution of the project agreement.

PDT Primary Responsibilities & Hours			
A/E	Perform		
PM	Review	-	8
PST w/o Environment	Support	-	0
Environment	Support	-	1

1.5.3 Final SOW for Subsequent Task Order

The A/E will incorporate comments from the PDT received in Section 1.4.3 above and finalize the draft SOW. The A/E will distribute the final-draft TO 2 SOW to the PDT, as appropriate. Therefore, much of the work involved in developing TO 2 (Section 2.1) will be complete.

PDT Primary Responsibilities & Hours			
A/E	Perform		
PM	Review	-	4
PST w/o Environment	Assist	-	8
Environment	Assist	-	7

1.6 Task Order Closeout

The PM will have primary responsibility for completing this activity. It will include assuring that deliverables have been received and are complete, signing off for payment of the final voucher, and

coordinating completion of A/E evaluations. Only informal input, if any, is expected from the PST and external agencies in completing evaluations.

1.6.1 Confirmation of Completed SOW and Deliverables

The PM will cross-check the deliverables received with the list of deliverables stipulated in the TO to verify fulfillment of the requirements. The PM will be responsible for completion of this activity. It will include assuring that all deliverables have been received and are complete, signing off for payment of the final voucher, and the completion of A/E evaluations.

PDT Primary Responsibilities & Hours

A/E	Support
PM	Perform - 2
PST w/o Environment	Support - 0
Environment	Support - 0

1.6.2 Payment of Final Invoice

The A/E will submit the final invoice to the CFLHD Acquisitions Section which will forward the invoice to the PM for verification/approval. The CFLHD will have 30 calendar days for payment on the invoice before interest will be granted to the A/E.

PDT Primary Responsibilities & Hours

A/E	Support
PM	Perform - 2
PST w/o Environment	Support - 0
Environment	Support - 0

1.6.3 Complete Evaluations

The PM will complete the General Information and PST Input, Consultant Satisfaction Evaluation, and Cost Proposal and Negotiation Information forms. The PM will determine the overall satisfaction with the consultant's work by providing a rating from 1 (unacceptable) to 5 (excellent) and an explanation for any rating of 2 or lower. In addition to the CFLHD consultant evaluation forms, the PM will complete Standard Form 1421 and submit it and the other forms to the CFLHD Acquisitions Section.

PDT Primary Responsibilities & Hours

A/E	Support
PM	Perform - 4
PST w/o Environment	Support - 0
Environment	Support - 0

2.0 Task Order Two Narrative - Preliminary Design & NEPA

2.1 Task Order Development

2.1.1 Scope of Work

The final-draft SOW for this TO was developed by the A/E as a deliverable of TO 1. The PM and PST assisted the A/E in the development of the SOW during TO 1. It should never be implied that the A/E tasked to complete TO work will also be contracted to complete the subsequent task order (TO 3). This is to avoid the appearance that the A/E's interest in the outcome of the project might be a TO for future work. The PM will compile, review, and finalize the final-draft SOW into a TO for this phase of work (second TO). It is anticipated that only minor input from the PST will be necessary to finalize the SOW. It is envisioned that the only time the PST would need to review the SOW again would be if significant changes are made. The A/E will submit the final SOW and price proposal to the PM and to the CFLHD Acquisitions Section.

Task Order 2 will also contain the work requirements for preparing the subsequent SOW (TO 3) for final design. Discussions on the development of TO 3 SOW [for final (100%) PS&E) package] is covered under Sections 2.5.6 and 2.6.7.

The SOW for TO 2 will identify the environmental studies and evaluations needed for the type of environmental document anticipated (Categorical Exclusion (Cat-X), EA, EIS). For projects where an EA is being developed, it cannot be assumed that the EA will result in a FONSI decision document. Therefore, once the EA has been completed and the CFLHD concludes that the proposed project will have either no significant impacts or significant impacts, TO 2 will be modified to prepare the appropriate decision document (FONSI or preparation of a Draft EIS, Final EIS, and Record of Decision (ROD)).

PDT Primary Responsibilities & Hours

A/E	Assist
PM	Perform - 8
PST w/o Environment	Support - 0
Environment	Support - 0

2.1.1A Modification to Task Order for NEPA Decision Document

The SOW in TO 2 identifies the environmental studies and investigations necessary to determine the NEPA document to be completed. These assumptions are based on the information available from the PSR and Scoping report efforts. If these assumptions prove to be inappropriate, the TO will have to be modified. Once sufficient studies have been conducted and the NEPA document type determined, modification of TO 2 may be necessary to allow for completion of the NEPA Decision document (FONSI, ROD). Task Order 3 cannot be issued until the Decision document has been signed. Rare cases where reasonable assumptions cannot be made may require an additional TO to complete the NEPA Decision document.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 4
PST w/o Environment	Support	- 2
Environment	Assist	- 7

2.1.2 IGE and Pre-negotiation

The A/E will prepare a "blank" IGE, which includes the SOW activities but no hours, and send it to the PM. The PM will use the "blank IGE" to price the TO work. The PM will distribute the completed IGE to PST members, as appropriate. The PST member(s) will review the IGE portion of the TO work that falls within their area. The PM will incorporate the IGE review comments, as appropriate, into a final IGE, review the final IGE for deviations within the budget, and prepare the PR and Letter of Approval and/or Authorization (PR-1240). After the PM completes the IGE, the PM will forward the final Task Order SOW, IGE, PR, and Letter of Approval and/or Authorization (PR-1240) to the CFLHD Acquisitions Section, which will send the final TO SOW to the A/E as a request for proposal. The A/E will prepare their cost proposal and return this information back to the CFLHD Acquisitions Section, which will then route the price proposal package back to the PM. The PM will independently evaluate the price proposal, prior to requesting PST involvement in the evaluation process. The PM will provide copies of the price proposal and final IGE to individual members of the PST for future reference. The PM will develop a pre-negotiation position documenting the objectives of the negotiator's (PM) position.

PDT Primary Responsibilities & Hours

A/E	Support	
PM	Perform	- 16
PST w/o Environment	Review	- 16
Environment	Review	- 4

2.1.3 Negotiation and Post-negotiation

The PM will determine the need for PST members to attend the negotiation meeting(s) with the A/E and their subconsultants. Typically, negotiation meeting(s) have little involvement from the PST. However, the PM is urged to involve the PST on projects where their historical knowledge would be useful during negotiations to help ensure a complete understanding of the LOE required. This involvement should not get into the finite details but be limited to evaluating the reasonableness of the A/E's approach and hours.

Both the pre-negotiation objectives and the results of the negotiation will be documented by the PM in sufficient detail to clearly set forth all significant aspects of the contract action. To assist the PM in preparing the post-negotiation memorandum, PST members who attend the negotiation meeting will furnish meeting notes to the PM, as needed. The PST member(s) are only responsible for documenting the discussions relating to their area of responsibility.

The A/E will revise and resubmit to the PM and to the CFLHD Acquisitions Section, the SOW and price proposal that reflects the changes agreed to during the negotiations. The PM may request assistance from PST member(s) to review specific portions of the revised SOW to ensure that the work is clearly, completely, and accurately defined.

PDT Primary Responsibilities & Hours

A/E	Review	
PM	Perform -	16
PST w/o Environment	Assist -	8
Environment	Assist -	8

2.2 Task Order Administration

The PM will serve as the COTR for TO's and will be directly responsible for all TO administration as it relates to the management of the contract.

2.2.1 Invoicing (Budget Control)

The A/E will submit a monthly invoice to the CFLHD Acquisitions Section which will then forward the invoice to the PM for verification/approval. The CFLHD will have 30 calendar days for payment on the invoice before interest will be granted to the A/E.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review -	24
PST w/o Environment	Support -	0
Environment	Support -	0

2.2.2 Progress Reports (Schedule Control)

The A/E will submit a monthly progress report (typically submitted together with the invoice) detailing work performed in the period, describing anticipated work in the next billing period, documenting problems and delays, etc. The PM will review the report and, if needed, discuss technical issues with the PST. On projects with time critical schedules, it may be necessary to require the A/E to submit weekly updates showing tasks completed during the week and tasks planned for the next week. This update could be a one-page bullet summary that could be submitted by email. Notification of the PST of changes to the schedule should occur when the revised schedule affects workload planning. The preferred method would be updating of the project scheduler (P3) to reflect the revised schedule. Notification by email is an option when the timing of the revisions does not coincide with the P3 update cycle.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review -	24
PST w/o Environment	Support -	0
Environment	Support -	0

2.2.3 Adherence to SOW (Scope Control)

The PM will be responsible for verifying that the A/E is in conformance with the SOW and may request PST support as issues arise during the TO performance period.

Should changes to the SOW be required after the TO has been signed, the PM and A/E shall agree on the level of work expected to be performed and the A/E shall prepare the draft SOW for the contract modification. All other work responsibilities will be as described in Section 2.1

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 48
PST w/o Environment	Support	- 0
Environment	Support	- 0

2.3 Task Order Communication

2.3.1 Technical Issues

The PST member(s) will provide technical assistance to the PM to convey CFLHD's expectations, institutional experience with the site or similar site, customer attitudes and expectations, project features, guidelines, policy, and technical data (i.e., drawings, specifications, etc.). The PST member(s) will also provide support to the PM as necessary to resolve technical issues or assess risk or provide guidance for determining the reasonableness of A/E proposed solutions. Direct communication between the PST and A/E technical staff will be necessary. It may not be possible to identify the level of communication/involvement PST members will have during execution of the TO. Therefore, communication/involvement will typically be requested by the PM on an as-needed basis. To expedite the communication process, the PM may request the A/E to contact the PST member(s) directly. The PM will notify the PST and A/E of this request for assistance as early as possible to ensure that PST members can plan their schedule accordingly and minimize disruption to other project work. The A/E should be required to promptly document all direct communications (not simple requests for information) with PST members through an email to the PM and PST for communications that have project ramifications to cost, schedule, or scope.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 48
PST w/o Environment	Review	- 32
Environment	Review	- 8

2.3.2 Project Support Team (PST) Meetings

PST meetings are internal meeting(s) held to discuss administrative or technical issues and/or for the exchange of information. The involvement and scheduling of PST meetings will typically be determined on an as-needed basis and arranged by the PM. There should be standard PST meetings that are held for all TO phases, including: kickoff, major milestones, and deliverable review meetings.

PDT Primary Responsibilities & Hours

A/E	Support	
PM	Perform	- 24
PST w/o Environment	Review	- 96
Environment	Review	- 24

2.3.3 Project Delivery Team (PDT) Meetings

PDT meetings will be scheduled and organized by the A/E. These meetings are progress status (over the shoulder) meetings. Discussion topics typically will include: progress, schedule, budget, A/E requested guidance, and check-in on A/E concepts and direction of effort. PST participation will be determined by the agenda topics. The agenda will be developed by the A/E with input from the PM. Once the agenda is developed, the PM will notify the PST members of their participation. Meeting location will be determined by the PM but should be held at CFLHD's office to minimize the amount of travel time required of the PST.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 24
PST w/o Environment	Assist	- 96
Environment	Assist	- 24

2.3.4 Project Management Team (PMT) Meetings

PMT meetings will be organized by the PM and scheduled by the A/E. These meetings will be attended by the PM, A/E, and external agencies. Meeting location will be determined by the PM but typically will be held in the local area of the participating external agencies (i.e., FS). These meetings are typically held to discuss progress, gain insight into the clients' expectations, programming and funding, data to be furnished by the agency(s), permits, scheduling, etc. If PST input/attendance is necessary, the PM will contact the PST member and request assistance. Unlike the SEE Team meeting, Section 2.3.6, the PM does not share the *Perform* role.

PDT Primary Responsibilities & Hours

A/E	Assist	
PM	Perform	- 64
PST w/o Environment	Support	- 0
Environment	Support	- 0

2.3.5 Public Meetings and Hearings

The Environmental PST member will be the NEPA specialist acting in a support role for the PM at public meetings and hearings. The A/E's environmental technical expert will also typically be a presenter or staffer of technical exhibits. The PM should always be the media contact person on environmental issues should the media be in attendance at the meeting or if the media calls prior to or following the meeting. The Environmental PST member should always attend these meetings to gain an understanding of the public's perceptions of the project and to support the PM. The A/E will continue to be the responsible entity for ensuring that all pre-, during-, and post-meeting scheduling, documentation, etc., are taken care of. The PM and the Environment PST member will attend all public meetings and hearings. Other PST members will typically not be involved in public meetings or hearings.

PDT Primary Responsibilities & Hours

A/E	Review	
PM	Perform	- 32
PST w/o Environment	Support	- 0
Environment	Assist	- 32

2.3.6 Social, Economic, and Environmental Study Team (SEE) Team

The PM and the Environmental PST representative are co-chairs of the SEE Team which drives the early project development decisions. Since the PM and the Environmental PST representative are co-chairs, both are in the *Perform* role. However, the PM as COTR is the responsible individual for ensuring the team provides appropriate project development direction to the A/E. The A/E will be a guest member. The A/E's role on the team will be to gain first-hand knowledge of the decisions made and the history behind those decisions. The A/E should be tasked with providing documents to facilitate the steering process, development of meeting minutes, and general support of the team.

PDT Primary Responsibilities & Hours

A/E	Assist	
PM	Perform	- 64
PST w/o Environment	Support	- 0
Environment	Perform	- 64

2.4 Task Order Conduct

2.4.1 Field Studies and Investigations

During development of the TO, the PST and/or the PM would have been responsible for evaluating the SOW to ensure that it adequately describes the level of investigation/study necessary for the size and complexity of the project. PM and/or PST involvement at this stage is not necessary because this phase of the work effort is exploratory in nature, involves limited interaction with client agencies, and should be well defined in the TO. The A/E will conduct field investigations and studies independently. The A/E will be responsible for requesting and obtaining permits and access permission necessary to gain approval from the land management agency and/or private landowners to access the site. The PM will first contact the owner agency to inform them of the actions of the A/E. The A/E must let the owner agency know that it is making a contact on behalf of the FHWA, making it clear that they are not FHWA employees. The resource hours to address these issues are included under Section 2.3.1.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 4
PST w/o Environment	Support	- 4
Environment	Support	- 1

2.4.2 Line and Grade Field Review

The line and grade field review typically occurs at the 15 percent project development phase. This review gives the A/E the opportunity to present the conceptual design alternatives to the cooperating agencies. The intent of the review is to identify environmental impacts and methods to avoid and/or minimize impacts.

This review is attended by the PM, A/E, PST (as requested by PM), and cooperating agencies. The PM will attend in a lead role for the agency. It is anticipated that the PM will attend line and grade reviews unless circumstances dictate otherwise. When the PM is unable to attend, a project-knowledgeable substitute will be designated. The PM's lead role is separate from the role that the A/E performs. CFLHD's role will be to control the direction of the review to ensure that significant topics (i.e., goal, objectives, standards, guidelines, compliance, land use, stewardship, etc.) are acknowledged. This may involve consensus building or delegation of responsibility for future actions necessary to further the project. The PM and/or functional PST member(s) will also impart CFLHD institutional experience with the site or similar sites, partner agency expectations, project features, and oversee the A/E's work efforts. On projects with heavy involvement with one or more of the functional areas, the PM may request participation from their PST members. A CFLHD Environment representative will be one of those functional areas. On projects with an EIS or EA (not Cat-X), environmental PST representation will be essential to ensure that NEPA regulations and commitments are reflected in the design.

Functional support during the field review initially comes from the A/E. PST functional staff will rarely be involved, with the exception of the environmental PST who will attend in an oversight role to aid in the understanding, conveyance, and steering of the environmental issues. The involvement of environment will be determined by the PM, in coordination with the Environmental FM. When it is necessary for PST functional staff to attend, they will function in an oversight role to evaluate that processes, procedures, and level of risk taken are consistent with other CFLHD projects. As in most cases, the A/E is responsible for providing the appropriate individuals (as agreed to with the PM) to adequately address the issues that will be encountered during the field review.

The A/E will lead the design portion of the field review, including presentation of their design, solicitation of comments from participants, future design efforts, rationale for decisions, etc. This review gives the A/E the opportunity to present the proposed design to the cooperating agencies and to solicit comments to ensure that the design is being developed in compliance with the intended scope and social and environmental commitments. The A/E will organize the review (prepare distribution letter for signature by the PM and prepare the agenda); and the PM will contact participants to schedule review dates and provide oversight of the A/E to ensure that the review and participation is coordinated fully. Documentation of the field review will be a responsibility of the A/E. All PST members attending the review will be responsible for reviewing the field inspection report and endorsing it or providing comments prior to distribution. Refer to Section 2.5.5 for submittal of 15% Plans & Estimate.

PDT Primary Responsibilities & Hours

A/E	Perform
PM	Review - 24
PST w/o Environment	Support - 10
Environment	Assist - 20

2.4.3 30% Field Review

The PM will set up the field review and coordinate internal and external agency attendance. The PM may request individual members of the PST to attend this field review.

The roles and responsibilities for the 30% field review are the same as stated in Section 2.4.2

PDT Primary Responsibilities & Hours

A/E	Perform
PM	Review - 28
PST w/o Environment	Support - 10
Environment	Assist - 20

2.4.4 Office Analysis and Design

The A/E is solely responsible for design analysis, development, and advancement of the project. The PM will have weekly or biweekly communication with the A/E to discuss progress (see Section 2.2.2, Progress Reports). The A/E should initiate the communication. It is anticipated that there will be little involvement by the PST; involvement will only be considered when an issue is raised that requires the assistance of the PST.

PDT Primary Responsibilities & Hours

A/E	Perform
PM	Review - 24
PST w/o Environment	Support - 32
Environment	Support - 8

2.4.5 Environmental Issues

The ability to approve a document necessitates an understanding of the environmental issues and depth of the preparation of the document. Traditionally this involved the participation of CFLHD's environmental staff at each level of development. With the use of consultants and anticipated higher funding levels, new methods of achieving that same understanding has to be explored. The premise of these oversight guidelines is to reduce the roles and responsibilities on the PST and to place additional responsibilities on the A/E to not only develop the documents but also to convey the intricacies of the environmental issues. As a result, the workload of the environmental PST and/or FM is diminished. The guidelines contained herein describe the PM's and Environment's roles and responsibilities under a full-service contract where the PM is the COTR.

The PM will oversee the overall development of the environmental decision making document and incorporation of the environmental mitigation measures and commitments. The A/E will provide the functional experts to analyze the impacts, develop the document, and identify any mitigation measures necessary. CFLHD's Environmental PST will be engaged to provide document direction and oversee the efforts of the A/E at various stages of development. The A/E is required to furnish competent individuals responsible for development of the various elements of the design, including comprehensive knowledge of NEPA regulations and procedures.

The A/E will lead the preparation of the environmental decision making document. To aid in the understanding, conveyance, and steering of the environmental issues, the PM will make a determination as to whether the A/E will conduct informational meeting(s) for the benefits of the Environmental PST and/or signature authority. Information can be exchanged during PST meetings, as formal presentations, etc. **CFLHD** is the **lead agency** for NEPA and for any

coordination, contact, or signature authority required by regulations. These regulatory requirements will require the involvement of the Environmental PST at various stages of document development. PST members will typically act in a capacity of reviewer and to steer the process to ensure that the purpose and need, alternatives, and impacts are considered. Prior to forwarding decision making documents to the Division Engineer (or delegate) for signature, the Environmental staff will conduct an independent review of the Draft and Final NEPA documents (not Cat-X). This is performed through an Environmental Review Team. The PM will present the final document for signature with clearly delineated concurrence from the PST and legal council, when required, that the document and process meets CFLHD requirements.

The involvement of environment will be determined by the PM, in coordination with the Environmental FM, during development of the TO. A responsibility and hours matrix developed during establishment of the PST (see Section 1.2.1, Establish PST) will identify Environment's PST points of engagement and LOE for each project. Points of engagement for Environment would be expected at the SEE Team meetings, public meetings and hearings, scoping site visit, and possibly at the line and grade and 30% field reviews. In addition to scheduled milestones, Environment would be responsible for providing assistance to the PM during the review of documents, understanding NEPA processes, and oversight of A/E activities (as determined by the PM).

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 48
PST w/o Environment	Support	- 0
Environment	Assist	- 112

2.5 Task Order Submittals

The LOE for reviewing submittals will be defined by the use of standardized checklists. The checklists identify those critical elements of development that are key to the advancement of the document(s). Checklists are tailored for the level of completeness that is stated in the TO. Along with each submittal the A/E will submit, a completed QA/QC checklist and certificate of compliance certifying that the QA/QC has been accomplished.

If a submittal is not complete enough to provide an adequate review or does not meet the contract requirements for submittals, the PST members are to immediately advise the PM. The submittal will be returned to the A/E and the PM will advise the A/E by letter of the reasons for refusal. The PM is responsible for writing the transmittal letter and returning the submittal.

To reduce the PM's workload, the A/E is tasked with completing submittals and forwarding the required submittals to the PM. When the submittals are developed in an office in the Denver metro area, the PM may request that the A/E distribute the documents individually to the PM and PST. A cover letter developed by the A/E and signed by the PM is to accompany all internal submittals. The A/E will also forward external copies to individuals within the FS and other agencies as appropriate. External copies will be distributed with an FHWA distribution letter signed by the PM. The A/E will develop the distribution letter with assistance from the PM. Distribution to

external agencies should only occur after the A/E has incorporated CFLHD review comments. The PM will ensure that the consultant is aware of the point of contact for receipt of submittals.

It will be necessary for the PM to communicate the urgency of providing review comments by the predetermined dates to external agencies. Ultimately, the PM is responsible for ensuring that PS&E and other documents are reviewed and comments collected and transmitted to the A/E. Each PST member designated to review a submittal has the responsibility of completing a thorough review of the documents. If a reviewer is unable to fulfill their obligation, arrangements shall be made through their supervisor for another individual to complete the review. The PM also needs to require all external agencies to provide CFLHD with only one set of combined comments from individual agency staff in which all conflicting comments have been resolved prior to submittal. All comments are to be forwarded to the PM, who will transmit the review comments to the A/E.

The A/E will be required to respond to all review comments from CFLHD and external agencies. Comments for PS&E documents that are provided as plan markups (red ink) and/or furnished via an electronic format (i.e., email, Microsoft Word) shall be captured to a Comment and Response form by the A/E. Reviewers of PS&E documents **may** also provide typed comments using a Review Comment Sheet. Comments for other documents can be provided as markups (red ink), typing the comments on the Comment and Response Form, or by using the "Track Changes" feature in Microsoft Word documents. Because of time constraints, it may be necessary to transmit uncompiled/unresolved comments to the A/E. It will be the responsibility of the A/E to initiate resolution of conflicting comments and to compile them. If there is a question regarding a review comment, clarification from CFLHD will be obtained prior to finalizing the written response to the review comment. A copy of the finalized Comment and Response form shall be forwarded to CFLHD for distribution with the subsequent document submittal. When there is not a subsequent document submittal, the Comment and Response form is to be forwarded with the final documents.

The PM will be responsible for coordinating and communicating the review comments back to the A/E.

2.5.1 Mapping

Mapping will be reviewed by the CFLHD Survey and Mapping Section for compliance with established QA processes related to standards. The A/E is responsible to assure compliance with standards and accuracy of data through their QC processes. The accuracy of mapping has to be presumed by the Surveys Team and will have to be confirmed during field reviews. Review of topographical and utility mapping will have to be conducted during field reviews. Mapping will have to be compared with ground and planimetric features.

The PM will forward review comments from the CFLHD Survey and Mapping Section to the A/E.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 2
PST w/o Environment	Review	- 8
Environment	Support	- 0

2.5.2 Draft Technical Memoranda

The PST member with the appropriate expertise will review draft reports. Review comments from the functional area(s) will be forwarded to the A/E by the PM.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 10
PST w/o Environment	Review	- 40
Environment	Support	- 0

2.5.3 Draft NEPA and Section 4(f) Documentation

See Section 2.5.2. The FS will review technical reports for cultural resources and Biological Evaluations, since they (as the land management agency) need to concur with the report findings on effect and recommended mitigations for resources on their property.

The A/E will develop the necessary level of documentation required by the Section 4(f) process. The CFLHD Environmental Section will review the draft for conformance with current FHWA policies and procedures.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 8
PST w/o Environment	Support	- 0
Environment	Review	- 32

2.5.4 Draft Structural Details

The draft structural details will be reviewed by the PM, a Bridge PST member, and external agencies to determine the adequacy in addressing the type, size, and location of the proposed structure. Comments will be forwarded to A/E by the PM.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 2
PST w/o Environment	Review	- 8
Environment	Support	- 0

2.5.5 15% Plans and Estimate

The A/E shall submit the 15% plans and estimate to the PM for CFLHD review. The A/E shall set up the field review and the PM shall coordinate internal and external agency attendance. The PM may request individual members of the PST to attend this field review.

PST members will review the drawings in accordance with their respective standards, QA/QC manuals, etc., and will provide review comments according to Section 2.5 in a timely manner to the PM for transmittal to the A/E.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 4
PST w/o Environment	Review	- 32
Environment	Review	- 8

2.5.6 Draft SOW for Subsequent Task Order

The A/E will develop a SOW to advance the project through final design (30%-100%). The A/E will use the standardized TO as an outline to expedite the document development. Input from PST members typically will be necessary to ensure that tasks, work effort, and issues are clearly and completely stated. PST members are expected to provide comments on general oversight processes and suggestions on “best practice.” The A/E will modify the SOW to reflect the review comments and resubmit the document as a deliverable. The PM usually has to make slight revisions to the SOW during development of the subsequent TO.

The PM will be responsible for coordinating and communicating the comments back to the A/E.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 8
PST w/o Environment	Review	- 32
Environment	Review	- 8

2.6 Task Order Deliverables

The A/E will incorporate comments from the review of submittals completed in Section 2.5 and then finalize the deliverables. The PST, PM, and external agencies will review deliverables for incorporation of the submittal review comments, review those areas where the design was advanced, and review areas where significant design changes were made. Distribution of review documents, forwarding of comments, and compliance with the SOW will be the same as stated in Section 2.5.

2.6.1 Final Technical Memoranda

PST members with the appropriate expertise will review final memoranda for incorporation of draft comments. The sections of the report that have been modified by the A/E due to additional investigations or studies will also be reviewed.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 5
PST w/o Environment	Review	- 20
Environment	Review	- 0

2.6.2 Final NEPA and Section 4(f) Documentation

The Environmental Section will review the document for inclusion of the draft review comments. The FS will review the technical reports for cultural resources and Biological Evaluations, since

they (as the land management agency) need to concur with the report findings on effect and recommended mitigations for resources on their property. The PM will present the final document for signature with clearly delineated concurrence from the PST and legal council, when required, that the document and process meets CFLHD requirements. Once the Section 4(f) document is acceptable, the CFLHD Environmental Section will process the final Section 4(f) according to current FHWA policies and procedures.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 16
PST w/o Environment	Support	- 0
Environment	Review	- 40

2.6.3 Final Structural Details

The final structural details will be reviewed by the PM, a Bridge PST member, and external agencies to determine the adequacy in addressing the type, size, and location of the proposed structure. Comments will be forwarded to A/E by the PM.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 4
PST w/o Environment	Review	- 8
Environment	Review	- 0

2.6.4 Boundary Plats and Title Search

The boundary plats and title search will be reviewed by the CFLHD ROW Section for compliance with established QA processes related to standards. The A/E is responsible for assurance compliance with standards through their QC processes. A responsibility and hours matrix developed during establishment of the PST (see Section 1.2.1, Establish PST) will identify Survey’s PST LOE for projects with critical ROW issues. The PM will forward comments from the CFLHD ROW Section to the A/E.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 2
PST w/o Environment	Review	- 8
Environment	Review	- 0

2.6.5 30% Plans and Estimate

At least two weeks prior to the official distribution of plans and estimate, a brief pre-submittal review will be held to ensure that the plans are at the appropriate level of design and have been revised to reflect the comments and observations made during development. The actual length of time between the pre-submittal distribution and the official distribution should be covered in the SOW. The pre-submittal review may be held at the office of the A/E or at CFLHD or reviewed independently and comments discussed with the A/E via phone or email. However, the review of

the documents can occur at any location. If a meeting is held, it will normally be attended by the PM. The PST should only attend when significant issues are discovered. Review of the pre-submittal documents will typically be conducted by the PM and Design PST member.

The A/E shall submit the 30% plans and estimate to the PM for CFLHD review.

PST members will review the drawings in accordance with their respective standards, QA/QC manuals, etc. and will provide review comments according to Section 2.5 in a timely manner to the PM for transmittal to the A/E.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 4
PST w/o Environment	Review	- 32
Environment	Review	- 8

2.6.6 Draft Highway Design Standards (HAD) Form

The draft HDS should be completed by the 30% design development stage and the HDS finalized at the 70% design development stage. At that point, the geometry will have been defined and mitigation measures developed to address any exception(s). Until the HDS is finalized, it will be referred to as a draft document. The Design PST member will review the HDS for documentation of exceptions to the standards used. Recommending and approving the HDS will normally occur at the 95% design development stage.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 2
PST w/o Environment	Review	- 4
Environment	Review	- 0

2.6.7 Final SOW for Subsequent Task Order

The A/E will modify the SOW to reflect the review comments and resubmit the document as a deliverable. The PM usually has to make slight revisions to the SOW during development of the subsequent TO.

The PM will modify the SOW during finalization of TO 3 to reflect the decision making document.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 4
PST w/o Environment	Assist	- 16
Environment	Assist	- 4

2.7 Task Order Closeout

2.7.1 Confirmation of Completed SOW and Deliverables

The PM will cross-check the deliverables received with the list of deliverables stipulated in the TO to verify fulfillment of the requirements. The PM will be responsible for completion of this activity. It will include assuring that all deliverables have been received and are complete, signing off for payment of the final voucher, and coordinating the completion of A/E evaluations.

PDT Primary Responsibilities & Hours

A/E	Support	
PM	Perform	- 2
PST w/o Environment	Support	- 0
Environment	Support	- 0

2.7.2 Payment of Final Invoice

The A/E will submit the final invoice to the CFLHD Acquisitions Section which will forward the invoice to the PM for verification/approval. The CFLHD will have 30 calendar days for payment on the invoice before interest will be granted to the A/E.

PDT Primary Responsibilities & Hours

A/E	Support	
PM	Perform	- 2
PST w/o Environment	Support	- 0
Environment	Support	- 0

2.7.3 Complete Evaluations

The PM will complete the General Information and PST Input, Consultant Satisfaction Evaluation, and Cost Proposal and Negotiation Information forms. PST input will be requested by the PM on the overall satisfaction with the consultant's work for their functional area. The PST will provide a rating from 1 (unacceptable) to 5 (excellent) and an explanation for any rating of 2 or lower. The PST will evaluate the A/E's conformance with the TO based on their knowledge of the scope and level of involvement with the tasks. The PM will compile the ratings provided by the PST onto the evaluation form. In addition to the CFLHD consultant evaluation forms, the PM will complete Standard Form 1421 and submit it and the other forms to the CFLHD Acquisitions Section.

PDT Primary Responsibilities & Hours

A/E	Support	
PM	Perform	- 4
PST w/o Environment	Assist	- 4
Environment	Assist	- 1

3.0 Task Order Three Narrative - Final Design

3.1 Task Order Development

3.1.1 Scope of Work (SOW)

The final-draft SOW for final design efforts was developed by the A/E as a deliverable under the second TO. The TO addresses all elements of the final (100%) PS&E package. The PM will be responsible for assembling the TO and limited assistance from the PST will be necessary to finalize the TO, as the A/E will use the standard SOW developed by CFLHD. The PM will modify the SOW during finalization of TO 3 to reflect the decision making document. It should never be implied that the A/E doing the NEPA (TO 2) contract work will also do this or any other project TO work. This is to avoid the appearance of a vested interest on the part of the A/E where their sole interest in the outcome of the project might be a contract for final design of the project.

PDT Primary Responsibilities & Hours

A/E	Assist	
PM	Perform	- 8
PST w/o Environment	Support	- 0
Environment	Support	- 0

3.1.2 IGE and Pre-negotiation

The A/E will prepare a "blank" IGE, which includes the SOW activities but no hours, and send it to the PM. The PM will use the "blank IGE" to price the TO work. The PM will distribute the completed IGE to PST members, as appropriate. The PST member(s) will review the IGE portion of the TO work that falls within their area. The PM will incorporate the IGE review comments, as appropriate, into a final IGE, review the final IGE for deviations within the budget, and prepare the PR and Letter of Approval and/or Authorization (PR-1240). After the PM completes the IGE, the PM will forward the final TO SOW, IGE, PR, and Letter of Approval and/or Authorization (PR-1240) to the CFLHD Acquisitions Section, which will send the final TO SOW to the A/E as a request for proposal. The A/E will prepare their cost proposal and return this information back to the CFLHD Acquisitions Section, which will then route the price proposal package back to the PM. The PM will independently evaluate the price proposal, prior to requesting PST involvement in the evaluation process. The PM will provide copies of the price proposal and final IGE to individual members of the PST for future reference. The PM will develop a pre-negotiation position documenting the objectives of the negotiator's (PM) position.

PDT Primary Responsibilities & Hours

A/E	Support	
PM	Perform	- 16
PST w/o Environment	Review	- 8
Environment	Review	- 2

3.1.3 Negotiation and Post-negotiation

The PM will determine the need for PST members to attend the negotiation session with the A/E and their subconsultants. Typically, negotiation meeting(s) have little involvement from the PST. However, the PM is urged to involve the PST on projects where their historical knowledge would be useful during negotiations to help ensure a complete understanding of the LOE required. This involvement should not get into the finite details, but should be limited to evaluating the reasonableness of the A/E's approach and hours. The PST will only be expected to provide input on prices/effort for activities or practices with which they are familiar. There could be situations where individual PST members negotiate directly with the A/E or the A/E's subcontractors.

The PM will schedule the negotiation meeting with the A/E, lead the negotiations, and be responsible for documenting all final agreements in the Price Negotiation Memorandum (PNM). To assist the PM in preparing the PNM, PST representatives who attend the negotiation meeting will furnish their meeting notes to the PM, as needed. The PST member(s) are only responsible for documenting the discussions relating to their area of responsibility.

The A/E will revise and resubmit to the PM and to the CFLHD Acquisitions Section, the SOW and price proposal that reflects the changes agreed to during the negotiations. The PM may request assistance from PST member(s) to review specific portions of the revised SOW to ensure that the work is clearly, completely, and accurately defined.

PDT Primary Responsibilities & Hours

A/E	Review	
PM	Perform	- 16
PST w/o Environment	Assist	- 12
Environment	Assist	- 4

3.2 Task Order Administration

3.2.1 Invoicing (Budget Control)

The A/E will submit a monthly invoice to the CFLHD Acquisitions Section which will forward the invoice to the PM for verification/approval. The CFLHD will have 30 calendar days for payment on the invoice before interest will be granted to the A/E.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 12
PST w/o Environment	Support	- 0
Environment	Support	- 0

3.2.2 Progress Reports (Schedule Control)

The A/E will submit a monthly progress report (typically submitted together with the invoice) detailing work performed in the period, describing anticipated work in the next billing period, documenting problems and delays, etc. The PM will review the report and, if needed, discuss technical issues with the PST. On projects with time critical schedules, it may be necessary to

require the A/E to submit weekly updates showing tasks completed during the week and tasks planned for the next week. This update could be a one-page bullet summary that could be submitted by email. Notification of the PST of changes to the schedule should occur when the revised schedule affects workload planning. The preferred method would be updating of the project scheduler (P3) to reflect the revised schedule. Notification by email is an option when the timing of the revisions does not coincide with the P3 update cycle.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 12
PST w/o Environment	Support	- 0
Environment	Support	- 0

3.2.3 Adherence to the SOW (Scope Control)

The PM will be responsible for conformance to the SOW and may involve PST members for discussion points as issues arise during the TO performance period. The PM will periodically review the A/E’s QC plan and verify adherence with it. The PM’s have the responsibility of assuring CFLHD management that the A/E has fulfilled their responsibilities and is in compliance with their QC plan.

Should changes to the SOW be required after the TO has been signed, the PM and A/E shall agree on the level of work expected to be performed and the A/E shall prepare the SOW for the contract modification. All other work responsibilities will be as described in Section 3.1

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 24
PST w/o Environment	Support	- 0
Environment	Support	- 0

3.3 Task Order Communication

3.3.1 Technical Issues

The PST member(s) will provide technical assistance to the PM to convey CFLHD's expectations, institutional experience with the site or similar site, customer attitudes and expectations, project features, guidelines, policy, and technical data (i.e., drawings, specifications, etc.). The PST member(s) will also provide support to the PM as necessary to resolve technical issues or assess risks or provide guidance for determining the reasonableness of A/E proposed solutions. Direct communication between the PST and A/E technical staff will be necessary. It may not be possible to identify the level of communication/involvement PST members will have during execution of the TO. Therefore, communication/involvement will typically be requested by the PM on an as-needed basis. To expedite the communication process, the PM may request the A/E to contact the PST member(s) directly. The PM will notify the PST and A/E of this request for assistance as early as possible to ensure that PST members can plan their schedule accordingly and minimize disruption to other project work. The A/E should be required to promptly document all direct

communications (not simple requests for information) with PST members through an email to the PM and PST for communications that have project ramifications to cost, schedule, and scope.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 24
PST w/o Environment	Review	- 24
Environment	Review	- 6

3.3.2 Project Support Team (PST) Meetings

PST meetings are internal meeting(s) held to discuss administrative or technical issues and/or for the exchange of information. The involvement and scheduling of PST meetings will typically be determined on an as-needed basis and arranged by the PM. There should be standard PST meetings that are held for all TO phases, including: kick off, major milestones, and deliverable review meetings.

PDT Primary Responsibilities & Hours

A/E	Support	
PM	Perform	- 24
PST w/o Environment	Review	- 96
Environment	Review	- 24

3.3.3 Project Delivery Team (PDT) Meetings

PDT meetings will be scheduled and organized by the A/E. These meetings are progress status (over the shoulder) meetings. Discussion topics typically will include: progress, schedule, budget, A/E requested guidance, and check-in on A/E concepts and direction of effort. PST participation will be determined by the agenda topics. The agenda will be developed by the A/E with input from the PM. Once the agenda is developed, the PM will notify the PST members of their participation. Meeting location will be determined by the PM but should be held at CFLHD's office to minimize the amount of travel time required of the PST.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 16
PST w/o Environment	Assist	- 60
Environment	Assist	- 20

3.3.4 Project Management Team (PMT) Meetings

PMT meetings will be organized by the PM and scheduled by the A/E. These meetings will be attended by the PM, A/E, and external agencies. Meeting location will be determined by the PM but typically will be held in the local area of the participating external agencies (i.e., FS). These meetings are typically held to discuss progress, gain insight into the clients' expectations, data to be furnished by the agency(s), permits, scheduling, etc. If PST input/attendance is necessary, the PM will contact the PST member and request assistance.

PDT Primary Responsibilities

A/E	Review	
PM	Perform	- 48
PST w/o Environment	Support	- 8
Environment	Support	- 8

3.4 Task Order Conduct

3.4.1 Field Studies and Investigations

During development of the TO, the PST and/or the PM would have been responsible for evaluating the SOW to ensure that it adequately describes the level of investigation/study necessary for the size and complexity of the project. PM and/or PST involvement at this stage is not necessary because this phase of the work effort is exploratory in nature, involves limited interaction with client agencies, and should be well defined in the TO. The A/E will conduct field investigations and studies independently. The A/E will be responsible for requesting and obtaining permits and access permission necessary to gain approval from the land management agency and/or private landowners to access the site. The PM will first contact the owner agency to inform them of the actions of the A/E. The A/E must let the owner agency know that it is making a contact on behalf of FHWA, making it clear that they are not FHWA employees.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 4
PST w/o Environment	Support	- 4
Environment	Support	- 1

3.4.2 50% and 70% Field Reviews

At least two weeks prior to the official distribution of plans, a brief pre-submittal review will be held to ensure that the plans are at the appropriate level of design and have been revised to reflect the comments and observations made during development. The actual length of time between the pre-submittal distribution and the official distribution should be covered in the SOW. The pre-submittal review may be held at the office of the A/E or at CFLHD or reviewed independently and comments discussed with the A/E via phone or email. However, the review of the documents can occur at any location. If a meeting is held, it will normally be attended by the PM; the PST should only attend when significant issues are discovered. Review of the pre-submittal documents will typically be conducted by the PM, Design, and Construction PST member.

The roles and responsibilities for the 50% and 70% field reviews are the same as stated in Section 2.4.2. Attendance by the Construction PST member should occur at a minimum for the 70% field review. The complexity and needs of the project will determine the attendance by the other PST members.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 32
PST w/o Environment	Assist	- 32
Environment	Support	- 16

3.4.3 Office Analysis and Design

The A/E is solely responsible for design analysis, development (adjusting of the design to further minimize environmental impacts if possible and finalizing and/or follow-up on environmental mitigation and commitment measures), and advancement of the project. The PM will have weekly or biweekly communication with the A/E to discuss progress (see Section 3.2.2, Progress Reports). The A/E should initiate the communication. It is anticipated that there will be little involvement by the PST; involvement will only be considered when an issue is raised that requires the assistance of the PST.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 12
PST w/o Environment	Support	- 30
Environment	Support	- 0

3.4.4 Environmental Issues

If changes to the project occur since the signing of the NEPA decision document (30% development stage) that require a Reevaluation of the NEPA document or a Supplemental EIS, then the A/E will be responsible for evaluating any additional environmental issues and preparing the appropriate additional NEPA documentation. The PM will monitor the environmental mitigation efforts (i.e., wetland reports, cultural resources work, threatened and endangered species work, hazardous waste work, etc.) and external agency commitments.

The A/E will provide the functional experts to conduct the mitigation studies and write the mitigation reports. Environment PST members may be engaged to provide direction and monitor the efforts of the A/E at various stages throughout completion of project development. **CFLHD** is the **lead agency** for NEPA and any coordination, contact, or signature authority required by regulations. These regulatory requirements will require the involvement of Environmental PST representation at various stages. The involvement of environment will be determined by the PM during development of the TO. Points of engagement for Environment should also be expected during coordination with external clients and regulatory agencies and possibly at the 50 and 70 percent reviews. In addition, Environment could be asked by the PM to provide assistance during the review of documents and monitoring of A/E activities.

Environment's major involvement from 30%-100% is in the following areas:

- Involved in plan reviews to evaluate conditions that may have implications on mitigation or environmental issues committed to in the final NEPA document.

- Evaluate environmental implications of design changes which could be either positive or negative (i.e., lessening or increasing impacts from those described in the final NEPA document).
- Coordinate and consult with resource agencies on implementation of any mitigation that can be started, including developing final mitigation plans if not done previously during the NEPA document phase.
- Implementing any mitigation that can be started prior to advertisement of the project (typically would be archeological data recovery on the land management's property). Any archeological data recovery on private property would have to be done after ROW is obtained.
- Reviewing various stages of Design (50, 70, 95%) to ensure that design changes do not go outside of the previously surveyed corridor evaluated under NEPA and to ensure that environmental commitments are included appropriately in the PS&E packages.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 48
PST w/o Environment	Support	- 0
Environment	Assist	- 96

3.4.5 Other

The A/E will be responsible for producing all other miscellaneous contractual documents (specifications, bid items, standard drawings, etc.) The PM may ask for the assistance of other functional specialties on an as-needed basis.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 12
PST w/o Environment	Support	- 32
Environment	Support	- 8

3.5 Task Order Submittals

The LOE for reviewing submittals will be defined by the use of standardized checklists. The checklists identify those critical elements of development that are key to the advancement of the document(s). The checklists are tailored for the level of completeness that is stated in the TO. Along with each submittal, the A/E will submit a completed QA/QC checklist and certificate of compliance certifying that the QA/QC has been accomplished.

If a submittal is not complete enough to provide an adequate review or does not meet the contract requirements for submittals, the PST members are to immediately advise the PM. The submittal will be returned to the A/E, and the PM will advise the A/E by letter of the reasons for refusal. The PM is responsible for writing the transmittal letter and returning the submittal.

Distribution of review documents, forwarding of comments, and compliance with the SOW will be the same as stated in Section 2.5.

3.5.1 Draft Technical Reports

PST members with the appropriate expertise will review draft reports. Review comments will be forward to the A/E by the PM. Environmental Draft Technical Reports were completed in TO 2.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 10
PST w/o Environment	Review	- 44
Environment	Support	- 0

3.5.2 Updated Environmental Reports (Wetland and Others)

The Environmental PST member will review addendums to the various environmental reports and studies as necessary. Review comments will be forward to the A/E by the PM.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 6
PST w/o Environment	Support	- 0
Environment	Review	- 24

3.5.3 Draft Permit Applications

Standard permits include the National Pollutant Discharge Elimination System (NPDES), Army Corp of Engineers' 404, and Water Quality 401 permits. The PM and A/E will determine the need for permits during development of the TO. When it is necessary to develop permits, the Draft Permit Applications will be prepared by the A/E. The CFLHD Permits Section will be responsible for reviewing the applications to ensure that they conform to [current regulatory, agency policies, and procedures.]

If there has been no 404 merger process performed during NEPA under TO 2, then Individual and nationwide 404 permits will be developed during TO 3. If there has been a 404 merger process, much of the coordination during the development of permits will occur during the NEPA phase (0% - 30%). Individual and nationwide 404 permit submittals will be reviewed by the CFLHD Permits Section for conformance with [current regulatory, agency policies, and procedures.] The PM will transmit review comments to the A/E for incorporation into the final permits package.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 2
PST w/o Environment	Review	- 4
Environment	Review	- 4

3.5.4 Boundary Compilation

Final boundary compilation reconciles the information from the title search with any field data. The boundary compilation is considered final at the 50% project development stage, and the ROW

preparation and description writing will start after the 50% alignment changes are incorporated. No legal descriptions should be written until after the ROW plans are complete.

It is anticipated that the ROW PST member will participate in an initial meeting with the A/E to provide guidance on how to prepare ROW documents and the acquisition process. The ROW staff will also review A/E ROW documents. The A/E would continue ROW efforts based on guidance given. Coordination between the A/E and the acquiring agency will occur based on guidance given the A/E during the initial meeting. CFLHD ROW PST will coordinate with the acquiring ROW agency to ensure that guidance and review comments have been adhered to by the A/E.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 4
PST w/o Environment	Review	- 16
Environment	Support	- 0

3.5.5 Draft Utility Plans

Draft utility plans will be submitted by the A/E with the 50% plans package. Plan requirements will be covered in the standardized SOW. It will be necessary for the A/E to gather information on the location of existing utilities and utility agreements (i.e., franchise agreements) along with identifying any additional utility easement needs and incorporating them into the ROW documents. The ROW/Utility PST member will review the draft documents based on available information. In some instances, communication between the Utility PST member and the utility owner(s) may be necessary to adequately review the documents and to determine who pays for relocation of utilities. The A/E is responsible for coordinating with the utility owners to obtain relocation plans. For projects with a significant concentration of utilities, the PM may require additional assistance from the ROW/Utility PST member. A responsibility and hours matrix developed during establishment of the PST (see Section 1.2.1, Establish PST) will identify ROW/Utility PST LOE for projects with critical utility issues. The PM will forward comments from the CFLHD ROW/Utility Section to the A/E.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 2
PST w/o Environment	Review	- 8
Environment	Support	- 0

3.5.6 50% Plans, Specification, and Estimate

The A/E shall submit a completed 50% PS&E package to the PM for review. The A/E shall submit an environmental commitments form identifying the environmental commitments agreed to in the NEPA document and identifying how/where those commitments are addressed in the PS&E package. The A/E shall set up the field review, and the PM shall coordinate internal and external agency attendance. The PM may request individual members of the PST to attend this field review.

PST members will review the PS&E in accordance with their respective standards, QA/QC manuals, etc., and will provide review comments according to Section 2.5 in a timely manner to the

PM for transmittal to the A/E. Comment review meetings may be scheduled by the PM, and PST members may be asked to participate along with the A/E. The PM may ask the PST members to clarify their review comments.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 8
PST w/o Environment	Review	- 32
Environment	Review	- 8

3.5.7 70% Plans, Specifications, and Estimate

Same as 3.5.6 with the exception that separate internal (CFLHD) and external (external agencies) reviews will occur. The internal review comments are to be incorporated into the PS&E prior to distributing the external review PS&E.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 8
PST w/o Environment	Review	- 32
Environment	Review	- 8

3.5.8 95% Plans, Specifications, and Estimate

Same as 3.5.7 with the exception that separate internal (CFLHD) and external (external agencies) reviews will occur. The internal review comments are to be incorporated into the PS&E prior to distributing the external review PS&E.

A field review will normally not occur. The PM, PST, and A/E will attend a CFLHD PS&E review meeting, usually in Denver, and reconcile any review comments. The FS will normally not attend but will furnish comments electronically.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 8
PST w/o Environment	Review	- 32
Environment	Review	- 8

3.6 Task Order Deliverables

The A/E will incorporate the comments from the review of the submittals completed in Section 3.5 and then finalize the deliverables. The PST, PM, and external agencies will review the deliverables for incorporation of the submittal review comments, review those areas where the design was advanced, and review areas where significant design changes were made. Distribution of review documents, forwarding of comments, and compliance with the SOW will be the same as stated in Section 2.5.

3.6.1 100% Plans, Specifications, and Estimate

The A/E will incorporate comments from the review of the 95% PS&E submittal completed in Section 3.5 and then finalize the deliverables. The PS&E package will be accepted without further PST review. The PM and CFLHD Quality Assurance Section will review the final PS&E to ensure that comments from the previous review were adequately incorporated. This final review is required before the PS&E will be signed by the Director of Project Delivery. It is assumed that, once the A/E has stamped the documents, they have accepted all responsibility in assuring that a final QA/QC review of documents has been completed. It is the PM's responsibility to assure management that the A/E has fulfilled their responsibilities and is in compliance with their QC plan. The PS&E package will be forwarded to the CFLHD Acquisitions Section by the PM after all signatures and contracting forms are completed.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 4
PST w/o Environment	Support	- 0
Environment	Support	- 0

3.6.2 Final Technical Reports

The PST member with the appropriate expertise will review the final reports for incorporation of submittal comments. The sections of the report that have been modified by the A/E due to additional investigations or studies will also be reviewed by the PST. Environmental Final Technical Reports were completed in TO 2.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 4
PST w/o Environment	Review	- 8
Environment	Support	- 0

3.6.3 Final Updated Environmental Reports

The A/E will review any final reports or additional studies or changes to previously finalized reports for incorporation of changed conditions. Any modifications to previously completed final reports will be done by the A/E by preparing a Technical Memorandum to that report. The Environmental PST will review the Technical Memoranda to the final reports for adequacy in addressing the changed conditions.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 3
PST w/o Environment	Support	- 0
Environment	Review	- 6

3.6.4 Final Permit Applications

Final permits will be reviewed by the Permits PST for inclusion of draft review comments and for conformance with current regulatory, agency policies, and procedures. The final permits should be substantially completed at the 70% project development stage. The PM will sign permit applications they are delegated to sign and forward them to the Permits Section for transmitting the final permit(s) to the regulatory agency having jurisdiction.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 2
PST w/o Environment	Review	- 1
Environment	Review	- 1

3.6.5 Stamped ROW Plans

The ROW plans and QC documents submitted by the A/E will be reviewed by the CFLHD ROW Section for inclusion of the draft submittal review comments. The ROW plans will be submitted at the 70% milestone or immediately following incorporation of the 70% review comments. The plans will be reviewed to ensure that the corrections and revisions from the red-line first draft were incorporated. Along with the ROW plans and legal descriptions, the A/E will submit an initialed set of checklists, as provided by CFLHD, indicating that certain minimum requirements have been included. The final plans and descriptions will be forwarded by the PM to the acquiring agency. The final ROW plans and descriptions shall not be stamped until all revisions have been made. This is to prevent multiple sealed drawings being distributed and ultimately having the wrong documents filed at the county courthouse. The SOW will need a provision to have the ROW plans revised after ROW negotiations. Often the acquiring agency will request that ROW lines be changed.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 4
PST w/o Environment	Review	- 36
Environment	Support	- 0

3.6.6 Final Utility Plans

Final utility plans will be submitted by the A/E with the 70% PS&E package. The level of utility investigation will be covered in the standardized SOW. The utility resolution plan will be incorporated into the PS&E by the A/E prior to printing of bidding documents. The A/E will begin coordination with the individual utility companies on the relocation efforts. The intent is to have relocation of utilities completed before construction begins. It may be difficult to convince a utility to expend the money and effort to relocate their facilities prior to the final PS&E. The PM and /or Utility PST member will provide direction to the A/E as appropriate.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 2
PST w/o Environment	Review	- 8
Environment	Support	- 0

3.6.7 Construction Stakeout Data

The A/E will produce the construction stakeout reports that are listed in the SOW. The A/E is responsible for the quality of the outputs and for compliance with CFLHD format standards. Quality checking of staking data requires that the A/E review the generated cross-sections for accuracy and correctness and that all of the widenings and template changes have been included. The output(s) will be reviewed by the PST design member for reasonableness, based on a adequate number of spot checks. The reports will be transmitted to the Construction Branch as part of the Project Engineer's package.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 2
PST w/o Environment	Review	- 8
Environment	Support	- 0

3.7 Construction Contract Procurement Assistance

3.7.1 Respond to Technical Questions

The COE will be the initial point of contact for bidders' questions. The PM, PST, and Contract Acquisitions Section will be engaged when the COE requires assistance in answering the questions. The following delegation will be followed when the COE is not available: Acquisitions is 1st backup and the PM is the 2nd backup. The Highway Design Manager (HDM) is not listed as a backup due to the limited involvement during project development. All questions from bidders will be documented and transmitted to the COE, PM, PST, and the Acquisitions Section.

PDT Primary Responsibilities & Hours

A/E	Assist	
PM	Coordinate	- 4
PST w/o Environment	Perform	- 8
Environment	Support	- 0

3.7.2 Identification of Need for Modifications

Identification of the need for modifications to the PS&E during advertisement usually originates with questions from prospective contractors, wage rate changes, or errors and/or omissions identified by the PST (typically the COE) or the Acquisitions Section. The PM will determine whether the modification is caused by an error or omission or to provide compensation for additional effort on the part of the A/E. Acquisitions will initiate discussions with the COE and PM to determine the necessity of generating a modification. Acquisitions will generally prepare

the modification contract documents with technical assistance from the A/E, COE, and PM. The modification may be discussed with other PST members to determine the best approach.

PDT Primary Responsibilities & Hours

A/E	Assist	
PM	Coordinate	- 2
PST w/o Environment	Perform	- 4
Environment	Support	- 0

3.7.3 Execution of Modifications

The A/E will be responsible for furnishing the revised sheets, postscript files, and any other information affected because of the modification. The PM will communicate the effort required of the A/E. In extremely rare cases, either the PM or COE can request PST members to provide technical assistance. The Acquisition Section will prepare the paperwork for each modification. The A/E, PST, PM, and COE will receive copies of each contract modification.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 2
PST w/o Environment	Review	- 2
Environment	Support	- 0

3.8 Task Order Closeout

3.8.1 Confirmation of Completed SOW and Deliverables

The PM will cross-check the deliverables received with the list of deliverables stipulated in the TO to verify fulfillment of the requirements. The PM will be responsible for completion of this activity. It will include assuring that all deliverables have been received and are complete, signing off for payment of the final voucher, and coordinating the completion of A/E evaluations.

PDT Primary Responsibilities & Hours

A/E	Support	
PM	Perform	- 2
PST w/o Environment	Support	- 0
Environment	Support	- 0

3.8.2 Payment of Final Invoice

The A/E will submit the final invoice to the CFLHD Acquisitions Section which will forward the invoice to the PM for verification/approval. The CFLHD will have 30 calendar days for payment on the invoice before interest will be granted to the A/E.

PDT Primary Responsibilities & Hours

A/E	Support	
PM	Perform	- 2
PST w/o Environment	Support	- 0
Environment	Support	- 0

3.8.3 Complete Evaluations

The PM will complete the General Information and PST Input, Consultant Satisfaction Evaluation, and Cost Proposal and Negotiation Information forms. PST input will be requested by the PM on the overall satisfaction with the consultant's work for their functional area. PST will provide a rating from 1 (unacceptable) to 5 (excellent) and an explanation for any rating of 2 or lower. The PM will compile the ratings provided by the PST onto the evaluation form. In addition to the CFLHD consultant evaluation forms, the PM will complete Standard Form 1421 and submit it and the other forms to the Acquisitions Section.

PDT Primary Responsibilities & Hours

A/E	Support	
PM	Perform	- 2
PST w/o Environment	Assist	- 5
Environment	Support	- 0

4R FOREST HIGHWAY PROJECT ROLES AND RESPONSIBILITIES MATRIX	
Definitions (listed in descending order of anticipated work effort):	
Perform	: Lead the work and assure delivery of the work products.
Review	: Evaluate work against T.O. and project requirements, provide input and recommendations , travel as needed.
Coordinate	: Assure communication of actions and recommendations to A/E, PM, PST and others as needed.
Assist	: Contribute to receipt and review of work products and/or development and communication of recommendations.
Support	: As needed support to others for accomplishing the task (expected involvement to be only in rare instances).

Primary Tasks		PDT Primary Responsibilities			
Task No.	Task Description	A/E	PM	PST w/o Env.	Environment
1	SCOPING (TASK ORDER 1)				
1.1	Task Order Development				
1.1.1	Scope of Work	Support	Perform - 16	Support - 4	Support - 1
1.1.2	IGE and Pre-negotiation	Support	Perform - 20	Support - 4	Support - 1
1.1.3	Negotiation and Post-negotiation	Review	Perform - 14	Support - 0	Support - 0
1.2	Task Order Administration				
1.2.1	Establish PST	Support	Perform - 8	Review - 16	Review - 4
1.2.2	Invoicing (Budget Control)	Perform	Review - 4	Support - 0	Support - 0
1.2.3	Progress Reports (Schedule Control)	Perform	Review - 4	Support - 0	Support - 0
1.2.4	Adherence to SOW (Scope Control)	Perform	Review - 4	Support - 0	Support - 0
1.2.5	Technical Issues	Perform	Coordinate - 8	Review - 32	Review - 8
1.3	Task Order Conduct				
1.3.1	Site Visit	Perform	Review - 24	Support - 0	Assist - 24
1.4	Task Order Submittals				
1.4.1	Draft Scoping Report	Perform	Review - 4	Assist - 12	Assist - 8
1.4.2	Draft Project Agreement	Perform	Review - 4	Support - 0	Support - 2
1.4.3	Draft SOW for Subsequent Task Order	Perform	Coordinate - 8	Review - 24	Review - 20
1.5	Task Order Deliverables				
1.5.1	Final Scoping Report	Perform	Review - 2	Support - 0	Support - 2
1.5.2	Final Project Agreement	Perform	Review - 8	Support - 0	Support - 1
1.5.3	Final SOW for Subsequent Task Order	Perform	Review - 4	Assist - 8	Assist - 7
1.6	Task Order Close-out				
1.6.1	Confirmation of Completed SOW and Deliverables	Support	Perform - 2	Support - 0	Support - 0
1.6.2	Payment of Final Invoice	Support	Perform - 2	Support - 0	Support - 0
1.6.3	Complete Evaluations	Support	Perform - 4	Support - 0	Support - 0
Subtotal:			140	100	78

4R FOREST HIGHWAY PROJECT ROLES AND RESPONSIBILITIES MATRIX	
Definitions (listed in descending order of anticipated work effort):	
Perform	: Lead the work and assure delivery of the work products.
Review	: Evaluate work against T.O. and project requirements, provide input and recommendations , travel as needed.
Coordinate	: Assure communication of actions and recommendations to A/E, PM, PST and others as needed.
Assist	: Contribute to receipt and review of work products and/or development and communication of recommendations.
Support	: As needed support to others for accomplishing the task (expected involvement to be only in rare instances).

Primary Tasks		PDT Primary Responsibilities			
Task No.	Task Description	A/E	PM	PST w/o Env.	Environment
2	PRELIMINARY DESIGN & NEPA (TASK ORDER 2)				
2.1	Task Order Development				
2.1.1	Scope of Work	Assist	Perform - 8	Support - 0	Support - 0
2.1.1A	Modification of Task Order for NEPA Decision Document	Perform	Review - 4	Support - 2	Assist - 7
2.1.2	IGE and Pre-negotiation	Support	Perform - 16	Review - 16	Review - 4
2.1.3	Negotiation and Post-negotiation	Review	Perform - 16	Assist - 8	Assist - 8
2.2	Task Order Administration				
2.2.1	Invoicing (Budget Control)	Perform	Review - 24	Support - 0	Support - 0
2.2.2	Progress Reports (Schedule Control)	Perform	Review - 24	Support - 0	Support - 0
2.2.3	Adherence to SOW (Scope Control)	Perform	Review - 48	Support - 0	Support - 0
2.3	Task Order Communication				
2.3.1	Technical Issues	Perform	Coordinate - 48	Review - 32	Review - 8
2.3.2	Project Support Team (PST) Meetings	Support	Perform - 24	Review - 96	Review - 24
2.3.3	Project Delivery Team (PDT) Meetings	Perform	Review - 24	Assist - 96	Assist - 24
2.3.4	Project Management Team (PMT) Meetings	Assist	Perform - 64	Support - 0	Support - 0
2.3.5	Public Meetings	Review	Perform - 32	Support - 0	Assist - 32
2.3.6	SEE Team	Assist	Perform - 64	Support - 0	Perform - 64
2.4	Task Order Conduct				
2.4.1	Field Studies and Investigations	Perform	Review - 4	Support - 4	Support - 1
2.4.2	Line and Grade Field Review	Perform	Review - 24	Support - 10	Assist - 20
2.4.3	30% Field Review	Perform	Review - 28	Support - 10	Assist - 20
2.4.4	Office Analysis and Design	Perform	Review - 24	Support - 32	Support - 8
2.4.5	Environmental Issues	Perform	Review - 48	Support - 0	Assist - 112
2.5	Task Order Submittals				
2.5.1	Mapping	Perform	Coordinate - 2	Review - 8	Support - 0
2.5.2	Draft Technical Memoranda	Perform	Coordinate - 10	Review - 40	Support - 0
2.5.3	Draft NEPA and Section 4(f) Documentation	Perform	Coordinate - 8	Support - 0	Review - 32
2.5.4	Draft Structural Details	Perform	Coordinate - 2	Review - 8	Support - 0
2.5.5	15% Plans and Estimate	Perform	Coordinate - 4	Review - 32	Review - 8
2.5.6	Draft SOW for Subsequent Task Order	Perform	Coordinate - 8	Review - 32	Review - 8

4R FOREST HIGHWAY PROJECT ROLES AND RESPONSIBILITIES MATRIX	
Definitions (listed in descending order of anticipated work effort):	
Perform	: Lead the work and assure delivery of the work products.
Review	: Evaluate work against T.O. and project requirements, provide input and recommendations , travel as needed.
Coordinate	: Assure communication of actions and recommendations to A/E, PM, PST and others as needed.
Assist	: Contribute to receipt and review of work products and/or development and communication of recommendations.
Support	: As needed support to others for accomplishing the task (expected involvement to be only in rare instances).

Primary Tasks		PDT Primary Responsibilities			
Task No.	Task Description	A/E	PM	PST w/o Env.	Environment
2.6 Task Order Deliverables					
2.6.1	Final Technical Memoranda	Perform	Coordinate - 5	Review - 20	Support - 0
2.6.2	Final NEPA and Section 4(f) Documentation	Perform	Coordinate - 16	Support - 0	Review - 40
2.6.3	Final Structural Details	Perform	Coordinate - 4	Review - 8	Support - 0
2.6.4	Boundary Plats and Title Search	Perform	Coordinate - 2	Review - 8	Support - 0
2.6.5	30% Plans and Estimate	Perform	Coordinate - 4	Review - 32	Review - 8
2.6.6	Draft Highway Design Standards Form (HDS)	Perform	Coordinate - 2	Review - 4	Support - 0
2.6.7	Final SOW for Subsequent Task Order	Perform	Review - 4	Assist - 16	Assist - 4
2.7 Task Order Close-out					
2.7.1	Confirmation of Completed SOW and Deliverables	Support	Perform - 2	Support - 0	Support - 0
2.7.2	Payment of Final Invoice	Support	Perform - 2	Support - 0	Support - 0
2.7.3	Complete Evaluations	Support	Perform - 4	Assist - 4	Assist - 1
Subtotal:			603	518	433

4R FOREST HIGHWAY PROJECT ROLES AND RESPONSIBILITIES MATRIX	
Definitions (listed in descending order of anticipated work effort):	
Perform	: Lead the work and assure delivery of the work products.
Review	: Evaluate work against T.O. and project requirements, provide input and recommendations , travel as needed.
Coordinate	: Assure communication of actions and recommendations to A/E, PM, PST and others as needed.
Assist	: Contribute to receipt and review of work products and/or development and communication of recommendations.
Support	: As needed support to others for accomplishing the task (expected involvement to be only in rare instances).

Primary Tasks		PDT Primary Responsibilities			
Task No.	Task Description	A/E	PM	PST w/o Env.	Environment
3	FINAL DESIGN (TASK ORDER 3)				
3.1	Task Order Development				
3.1.1	Scope of Work	Assist	Perform - 8	Support - 0	Support - 0
3.1.2	IGE and Pre-negotiation	Support	Perform - 16	Review - 8	Review - 2
3.1.3	Negotiation and Post-negotiation	Review	Perform - 16	Assist - 12	Assist - 4
3.2	Task Order Administration				
3.2.1	Invoicing (Budget Control)	Perform	Review - 12	Support - 0	Support - 0
3.2.2	Progress Reports (Schedule Control)	Perform	Review - 12	Support - 0	Support - 0
3.2.3	Adherence to SOW (Scope Control)	Perform	Review - 24	Support - 0	Support - 0
3.3	Task Order Communication				
3.3.1	Technical Issues	Perform	Coordinate - 24	Review - 24	Review - 6
3.3.2	Project Support Team (PST) Meetings	Support	Perform - 24	Review - 96	Review - 24
3.3.3	Project Delivery Team (PDT) Meetings	Perform	Review - 16	Assist - 60	Assist - 20
3.3.4	Project Management Team (PMT) Meetings	Review	Perform - 48	Support - 8	Support - 8
3.4	Task Order Conduct				
3.4.1	Field Studies and Investigations	Perform	Review - 4	Support - 4	Support - 1
3.4.2	50% and 70% Field Reviews	Perform	Review - 32	Assist - 32	Support - 16
3.4.3	Office Analysis and Design	Perform	Review - 12	Support - 30	Support - 0
3.4.4	Environmental Issues	Perform	Review - 48	Support - 0	Assist - 96
3.4.5	Other	Perform	Review - 12	Support - 32	Support - 8
3.5	Task Order Submittals				
3.5.1	Draft Technical Reports	Perform	Coordinate - 10	Review - 44	Support - 0
3.5.2	Updated Environmental Reports (Wetlands & others)	Perform	Coordinate - 6	Support - 0	Review - 24
3.5.3	Draft Permit Applications	Perform	Coordinate - 2	Review - 4	Review - 4
3.5.4	Boundary Compilation	Perform	Coordinate - 4	Review - 16	Support - 0
3.5.5	Draft Utility Plans	Perform	Coordinate - 2	Review - 8	Support - 0
3.5.6	50% Plans, Specifications and Estimate	Perform	Coordinate - 8	Review - 32	Review - 8
3.5.7	70% Plans, Specifications and Estimate	Perform	Coordinate - 8	Review - 32	Review - 8
3.5.8	95% Plans, Specifications and Estimate	Perform	Coordinate - 8	Review - 32	Review - 8

4R FOREST HIGHWAY PROJECT ROLES AND RESPONSIBILITIES MATRIX	
Definitions (listed in descending order of anticipated work effort):	
Perform	: Lead the work and assure delivery of the work products.
Review	: Evaluate work against T.O. and project requirements, provide input and recommendations , travel as needed.
Coordinate	: Assure communication of actions and recommendations to A/E, PM, PST and others as needed.
Assist	: Contribute to receipt and review of work products and/or development and communication of recommendations.
Support	: As needed support to others for accomplishing the task (expected involvement to be only in rare instances).

Primary Tasks		PDT Primary Responsibilities			
Task No.	Task Description	A/E	PM	PST w/o Env.	Environment
3.6	Task Order Deliverables				
3.6.1	100% Plans, Specifications and Estimate	Perform	Coordinate 4	Support - 0	Support - 0
3.6.2	Final Technical Reports	Perform	Coordinate - 4	Review - 8	Support - 0
3.6.3	Final Updated of Environmental Reports, as needed	Perform	Coordinate - 3	Support - 0	Review - 6
3.6.4	Final Permit Applications	Perform	Coordinate - 2	Review - 1	Review - 1
3.6.5	Stamped ROW Plans	Perform	Coordinate - 4	Review - 36	Support - 0
3.6.6	Final Utility Plans	Perform	Coordinate - 2	Review - 8	Support - 0
3.6.7	Construction Stake-out Data	Perform	Coordinate - 2	Review - 8	Support - 0
3.7	Construction Contract Procurement Assistance				
3.7.1	Respond to Technical Questions	Assist	Coordinate - 4	Perform - 8	Support - 0
3.7.2	Identification of Need for Modifications	Assist	Coordinate - 2	Perform - 4	Support - 0
3.7.3	Execution of Modifications	Perform	Coordinate - 2	Review - 2	Support - 0
3.8	Task Order Close-out				
3.8.1	Confirmation of Completed SOW and Deliverables	Support	Perform - 2	Support - 0	Support - 0
3.8.2	Payment of Final Invoice	Support	Perform - 2	Support - 0	Support - 0
3.8.3	Complete Evaluations	Support	Perform - 2	Assist - 5	Support - 0
Subtotal (Hrs):			391	554	244
Total (Hrs):			1134	1172	755
Grand Total (\$):		3061	hrs x \$80/hr =		\$244,880.00

EXAMPLE PROJECT		
Construction Cost:	\$	10,000,000
PE Cost (at 15%):	\$	1,500,000
AE Oversight Cost (Grand Total plus \$20,000 travel):	\$	264,880
Percent Oversight Cost (with respect to PE):		17.7%
Project Percent PE, including Oversight Cost:		17.6%

Note: The FS provides crucial project support throughout project delivery, but does not typically lead any of the tasks identified in the matrix, so its role is implicit to all tasks and is not identified explicitly in the 4R FS matrix.

B - 3R National Park Service Project

The following information describes the proposed A/E oversight process for full-service A/E project delivery for 3R NPS projects. The project that was used consisted of the following:

- A single project
- Approximate project development duration of 18 months
- Approximate cost of \$4,000,000
- Approximate A/E cost of 8% of construction costs
- NPS-completed Categorical Exclusion (Cat-X)
- Pavement rehabilitation project with minimal drainage, safety, and other functional area involvement

The team developed a Roles and Responsibilities Matrix (matrix 2) to relate the A/E, the NPS, the PM, and the PST during project delivery in a two TO phasing approach with TO narrative discussion included below.

Lastly, included in the matrix are the estimated hours of effort to complete each identified task, consistent with this delivery approach, for the PM and PST. The estimated hours were cross-checked with current LOE provided from PM's and functional areas and were found to be an achievable reduction in oversight hours based on the recommended A/E oversight changes.

1.0 Task Order One Narrative – Scoping

The scoping phase of project development affords the PMT their “first look” at the project. Scoping will give the PMT an introduction to the project issues, an estimation of design and investigation needs, and, most importantly, the information necessary to complete a scoping report and project agreement. The PM will lead this process; but the documenting and report writing will be the responsibility of the A/E. As a result, the workload on the PM is minimized. Additionally, it will be expected that, in cases where specific functional support is needed, the A/E will provide the functional expert who will attend the scoping site visit and address the particular needs. As a result, the workload of the PST and/or FM’s is minimized. On 3R NPS projects, the Federal Lands Highway Program (FLHP) Coordinator has the “perform” role for the project agreement. The rest of the PMT and PST provide support and review of the project agreement as necessary. It is assumed that Road Inventory Program (RIP)/Project Management Information System (PMIS) data exists for the project. This data will be used as a resource to help develop the activities of the SOW and assign PST members. A narrative and outline of the activities for this phase is presented below.

1.1 Task Order Development

1.1.1 Scope of Work

It is envisioned that a standardized or boilerplate TO for scoping will be developed that will apply to nearly every 3R project. The A/E and the PM may have to customize the SOW; but generally the tasks, work effort, and issues will be the same for every project (i.e., review the site with the NPS and other stakeholders, review project limits, estimate project and design needs, write scoping report, etc.). Minimal or no input from functional areas will be necessary to develop the TO and SOW. The only existing documented project information is the RIP/PMS data and NPS’s PMIS information. The RIP/PMIS data contains pavement condition indices, roadway widths, Average Daily Traffic (ADT), culvert locations, photos/video, and other information.

PDT Primary Responsibilities & Hours

A/E	Support	
PM	Perform	- 8
PST	Support	- 0

1.1.2 IGE and Pre-negotiation

As above, a standardized IGE will be developed that will only require minor customizing by the A/E and PM to fit the particular projects need. Since it will be necessary for the A/E to develop a spreadsheet with the SOW activities listed (no hours), the PM should ask the A/E to forward a copy so the PM can modify the standardized IGE to reflect the actual TO activities. After the PM completes the IGE, the PM will forward the final TO, SOW, IGE, PR, and Letter of Approval and/or Authorization (PR-1240) to the CFLHD Acquisitions Section, which will send the final TO SOW to the A/E as a request for proposal. The A/E will prepare their cost proposal and return this information back to the CFLHD Acquisitions Section, which will then route the price proposal package back to the PM. The PM will independently evaluate the price proposal. The PM will

develop pre-negotiation information that documents the objectives of the negotiator's (PM) position. An understanding of each side's position is important to adequately prepare for negotiations.

PDT Primary Responsibilities & Hours

A/E	Support	
PM	Perform	- 4
PST	Support	- 0

1.1.3 Negotiation and Post-negotiation

The PM will determine the need for PST members to attend the negotiation meeting(s) with the A/E and their subconsultants. Typically, negotiation meeting(s) have no involvement from the PST.

The PM will evaluate the cost and task proposal submitted by the A/E. Both the pre-negotiation objectives and the results of the contract action will be documented by the PM; and the PM will revise the SOW, as appropriate, to reflect any changes to the SOW resulting from negotiations.

PDT Primary Responsibilities & Hours

A/E	Review	
PM	Perform	- 4
PST	Support	- 0

1.2 Task Order Administration

1.2.1 Establish PST

A key part of the administration activity will be the establishment of a PST. The PM will establish a PST by requesting selected FM's to assign a representative. Unlike 4R projects, only a few functional areas will typically be represented on the PST. The PM will use existing project data and the preliminary scope to determine which functional areas need to be represented. The FM's will assign a representative based upon this same existing project data. For many projects, Design, Materials, and Pavements will be the only functions with involvement; but Safety, Survey, Geotech, Construction, etc., may have minimal involvement at different times. The involvement of the PST will vary with project complexities. At the discretion of the PM, the PDT may meet prior to the scoping trip to provide guidance or technical assistance. If a pre-scoping meeting does not occur, then it is expected that, shortly after the scoping trip and before the start of preliminary design, the PM would hold a meeting with the PDT to "kick off" the project. Project account numbers would also be established at this stage to allow PST members to begin charging time to the project. Establishment of the PST occurs prior to the development of the SOW.

The PM, with assistance of the FM's, should develop a responsibility and hours matrix with the SOW to provide PST levels of effort tailored for each project. The responsibility and hours matrix would be used by the PST to identify points of engagement and LOE. This will help the FM's plan resource loads and should provide the frame-work for developing uniform resource requirements across multiple PM's. In addition, it will be necessary for the PM's to review the matrix and

amend it as appropriate, including providing advance notice of variances to the PST. Establishment of the PST occurs prior to the development of the SOW.

PDT Primary Responsibilities & Hours

A/E	Support	
PM	Perform	- 6
PST	Review	- 12

1.2.2 Invoicing (Budget Control)

The A/E will submit a monthly invoice to the CFLHD Acquisitions Section which will then forward the invoice to the PM for verification/approval. The PM is the COTR and is responsible for reviewing A/E invoices. The A/E is responsible for completing the TO within budget and for invoicing in accordance with the contract requirements. The CFLHD will have 30 calendar days for payment on the invoice before interest will be granted to the A/E.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 2
PST	Support	- 0

1.2.3 Progress Reports (Schedule Control)

The A/E will submit a monthly progress report detailing work performed in the period, describing anticipated work in the next billing period, documenting problems and delays, etc. The PM is the COTR and is responsible for reviewing A/E progress reports. Unlike TO 2, this first TO has a relatively short duration. In many cases, there may only be one invoice. Progress reports may simply consist of phone conversations or email messages. Notification of the PST of changes to the schedule should occur when the revised schedule affects workload planning. The preferred method would be updating of the project scheduler (P3) to reflect the revised schedule. Notification by email is an option when the timing of the revisions do not coincide with the P3 update cycle.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 2
PST	Support	- 0

1.2.4 Adherence to SOW (Scope control)

The PM is the COTR and is responsible for monitoring the need for scope modification through correspondence from the A/E. The A/E is responsible for adhering to the contract SOW.

Should changes to the SOW be required after the TO has been signed, the PM and A/E shall agree on the level of work expected to be performed and the A/E shall prepare the SOW for the contract modification. All other work responsibilities will be as described in Section 2.1

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 2
PST	Support	- 0

1.2.5 Technical Issues

The PST will provide technical assistance to the PM and A/E to convey CFLHD's expectations, institutional experience, and/or previous experience with projects in the area. PST members are expected to provide comments on processes and suggestions on “best practice.” The PST member(s) will also provide support to the PM as necessary to resolve technical issues or provide guidance for determining the reasonableness of A/E proposed solutions. Direct communication between the PST and A/E technical staff may be necessary. To expedite the communication process, the PM may request the A/E to contact the PST member(s) directly. The PM will notify the PST and A/E of this request for assistance as early as possible to ensure that PST members can plan their schedule accordingly and minimize disruption to other project work. Due to the simplistic nature of this TO, minimal communication/involvement of the PST is envisioned. The NPS will also provide assistance with items such as project history, maintenance history, accident data, and other such locally available information.

PDT Primary Responsibilities & Hours

NPS	Support	
A/E	Perform	
PM	Coordinate	- 2
PST	Review	- 2

1.3 Task Order Conduct

It is important to note that some NPS Regions/FLHP Coordinators have different processes for initiating projects and completing project agreements. The guidelines were developed to accommodate those differences.

1.3.1 Site Visit

The site visit is the major information gathering activity for this TO. The site visit also serves as a venue for meeting and discussing the project with representatives of the NPS. Attendance by the appropriate officials is imperative. The PM and the A/E PM will mutually decide attendance. Attendance by PST members will typically not be necessary, with the exception of projects that have a heavy reliance on a specific functional discipline area(s), which may require engagement of those technical experts. In this case, the PM may request that a particular PST member attend. However, the A/E will customarily provide the technical experts for on-site support in the particular functional areas. The SOW should state if A/E functional support is needed. The FLHP Coordinator and the PM will be responsible for inviting appropriate NPS representatives.

Depending upon the NPS Region, the PM will set up the site visit according to one of the two examples that follow:

Site Visit Example A – CFLHD & NPS the scope project prior to A/E participation.

On day 1 of the site visit, the PM and the NPS meet and complete a cursory project visit. General project issues, special Park concerns, budget, and schedule are discussed and documented. On day 2, the A/E arrives to complete a thorough scoping review and project site visit. The PM debriefs the A/E on issues discussed in day 1 and assists the A/E with the scoping site visit. All information necessary to complete a scoping report must be gathered during the site visit. Depending upon the size and scope of the project, the A/E may need an additional day (e.g., day 3) to complete the site visit.

Site Visit Example B – CFLHD, NPS, and A/E scope project together.

On day 1 of the site visit, the PMT jointly completes a project site visit. General project issues, special Park concerns, budget, and schedule are discussed and documented. On day 2, the A/E, PM, and other interested PMT members gather any additional field data necessary to complete the scoping report.

PDT Primary Responsibilities & Hours

NPS	Assist	
A/E	Perform	
PM	Review	- 32
PST	Support	- 0

1.3.2 Project Agreement

Depending upon the NPS Region, this task will involve either completing a signed and committed project agreement or just completing a rough draft.

Project Agreement Example A

In the Intermountain Region (IMR) and the Midwest NPS Region, the FLHP Coordinators prefer to have a completed and signed project agreement at the end of the scoping/site visit. The NPS FLHP Coordinator is responsible for writing the project agreement. The PM reviews the project agreement and helps facilitate agreement among the parties. Once a consensus is achieved on the project agreement, the PM, FLHP Coordinator, and the Park Superintendent sign the agreement; and it becomes official. However, amendments and updates to the project agreement are always possible throughout the various design stages. Upon return from the site visit, the PM will distribute the project agreement to the PST members

Project Agreement Example B

In the Pacific NPS Region, the FLHP Coordinator prefers to complete the final project agreement after the scoping/site visit. During the site visit, language to include in the project agreement for scope, schedule, and budget is discussed by all parties and documented by the FLHP Coordinator. After the scoping/site visit and generally prior to the first intermediate field review, the NPS FLHP Coordinator completes the project agreement in consultation with the local Park and the PM. The PM will review and provide input for the project agreement. The PM will consult with PST members as necessary prior to signing the project agreement. The PM will distribute the signed version of the project agreement to the PST.

PDT Primary Responsibilities & Hours

NPS	Perform	
A/E	Support	
PM	Review	- 2
PST	Support	- 0

1.4 Task Order Submittals

Typically, there are the three submittals (see below) required with this task. To lighten the workload on the PM, the A/E is tasked with completing these submittals and forwarding them, as appropriate, to the PMT and PST.

1.4.1 Draft Scoping Report

The A/E will develop a draft scoping report using the Standardized Scoping Report format. The PM, NPS, and PST will receive copies of the draft scoping report. The purpose of this document is to allow the A/E to fully identify all key issues associated with a project. Having the issues identified earlier in the process should help functional areas become engaged in the project at the correct time to avoid scheduling problems. It will also allow the PST to have a better understanding of the work required for each project. The PM will be responsible for reviewing and forwarding comments on the draft report. Minimal support is expected from the PST in the review of this document, but the NPS will be asked to provide input on the draft scoping report. The PM will have the overall responsibility for reviewing the document.

PDT Primary Responsibilities & Hours

NPS	Assist	
A/E	Perform	
PM	Review	- 2
PST	Support	- 2

1.4.2 Update Project Agreement (Intermountain and Midwest Region Only)

If a project agreement exists (i.e., project agreement example A), the A/E will evaluate whether or not the project agreement needs updating based upon a review of the data gathered during the site visit. This update may include a revision of desired roadway widths, the need for culvert replacement, or some other scope, schedule, or budget issue. The A/E will have the lead role in updating the project agreement, but the PM and NPS will be directly responsible for coordinating the completion and distribution of the project agreement. The PM will review the updated project agreement prior to issuing the revision to the NPS. The NPS and PM will jointly review and sign the revised project agreement. The PM will send copies of the updated project agreement to the PST.

PDT Primary Responsibilities & Hours

NPS	Assist	
A/E	Perform	
PM	Review	- 4
PST	Support	- 0

1.4.3 Draft SOW for Subsequent Task Order

The A/E will use the standardized TO as an outline to expedite the development of the SOW for TO 2 (0 to 100% project development). The PDT will receive copies of the draft SOW. Input from functional areas typically will be necessary to ensure that tasks, work effort, and issues are clearly and completely stated.

The PM will be responsible for coordinating and communicating the comments back to the A/E. This is the PST's opportunity to provide technical comments and/or receive clarification of project scope and design issues.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 4
PST	Review	- 4

1.5 Task Order Deliverables

The A/E will incorporate the comments from the NPS, PM, and PST received in Section 1.4 above and finalize the submittals. The A/E will produce and distribute the final scoping report and final SOW to the NPS, PDT, and others, as appropriate. Therefore, much of the work involved in the first activity of task order 2 (section 2.1) will be complete.

1.5.1 Final Scoping Report

The A/E will incorporate the comments from the PMT and PST received in Section 1.4.1 above and finalize the scoping report. The A/E will produce and distribute the final scoping report to the PDT and PMT, as appropriate.

PDT Primary Responsibilities & Hours

NPS	Support	
A/E	Perform	
PM	Review	- 2
PST	Support	- 0

1.5.2 Final SOW for Subsequent Task Order

The A/E will incorporate the comments from the PDT received in Section 1.4.3 above and finalize the SOW. The A/E will produce and distribute the final SOW to the PDT, as appropriate. Therefore, much of the work involved in the developing TO 2 (Section 2.1) will be complete.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 2
PST	Assist	- 2

1.6 Task Order Closeout

The PM will have primary responsibility for the completion of this activity. It will include assuring that deliverables have been received and are complete, signing off for payment of the final voucher, and coordinating the completion of A/E evaluations. Only informal input, if any, is expected from the PST and external agencies in completing evaluations.

1.6.1 Confirmation of Completed SOW and Deliverables

The PM will cross-check the deliverables received with the list of deliverables stipulated in the TO to verify fulfillment of the requirements. The PM will be responsible for completion of this activity. It will include assuring that all deliverables have been received and are complete, signing off for payment of the final voucher, and coordinating the completion of A/E evaluations. The PM will distribute internal evaluations forms to the PST, compile the comments and forward the completed evaluation form to acquisition for their files.

PDT Primary Responsibilities & Hours

A/E	Support	
PM	Perform	- 2
PST	Support	- 0

1.6.2 Payment of Final Invoice

The A/E will submit the final invoice to the CFLHD Acquisitions Section which will forward the invoice to the PM for verification/approval. The CFLHD will have 30 calendar days for payment on the invoice before interest will be granted to the A/E.

PDT Primary Responsibilities & Hours

A/E	Support	
PM	Perform	- 1
PST	Support	- 0

1.6.3 Complete Evaluations

The PM will complete the General Information and PST Input, Consultant Satisfaction Evaluation, and Cost Proposal and Negotiation Information forms. The PM will provide the overall satisfaction with the consultant's work by rating from 1 (unacceptable) to 5 (excellent) and providing an explanation for any rating of 2 or lower. In addition to the CFLHD consultant evaluation forms, the PM will complete Standard Form 1421 and submit it and the other forms to the Acquisitions Section. Only informal input, if any, is expected from the PST and external agencies in completing evaluations.

PDT Primary Responsibilities & Hours

A/E	Support	
PM	Perform	- 2
PST	Support	- 0

2.0 Task Order Two Narrative – Final Design

2.1 Task Order Development

2.1.1 Scope of Work

The SOW for this TO was developed by the A/E as a deliverable of TO 1. The PM assisted the A/E in the development of the SOW. The PM will compile the SOW into a TO for this phase of work (2nd and final TO). The PM will edit and finalize the TO. It is not anticipated that input from the PST will be necessary to finalize the TO.

PDT Primary Responsibilities & Hours

A/E	Assist	
PM	Perform	- 2
PST	Support	- 0

2.1.2 IGE and Pre-negotiation

The A/E will prepare a "blank" IGE, which includes the SOW activities but no hours, and send it to the PM. The PM will develop the IGE. The PM may ask for support from individual PST members during development of the IGE to discuss their understanding of the work effort. After the PM completes the IGE, the PM will forward the final TO SOW, IGE, PR, and Letter of Approval and/or Authorization (PR-1240) to the CFLHD Acquisitions Section, which will send the final TO SOW to the A/E as a request for proposal. The A/E will prepare their cost proposal and return this information back to the CFLHD Acquisitions Section, which will then route the price proposal package back to the PM. The PM will independently evaluate the price proposal. Requesting of PST involvement in the price proposal evaluation process will be on an as-needed basis. The PM will provide copies of the price proposal and final IGE to individual members of the PST for future reference. The PM will develop a pre-negotiation position documenting the objectives of the negotiator's (PM) position.

PDT Primary Responsibilities & Hours

A/E	Support	
PM	Perform	- 12
PST	Support	- 4

2.1.3 Negotiation and Post-negotiation

The PM will determine the need for PST members to attend the negotiation meeting(s) with the A/E and their subconsultants. Typically, negotiation meeting(s) have little involvement from the PST.

Both the pre-negotiation objectives and the results of the negotiation will be documented by the PM in sufficient detail to clearly set forth all significant aspects of the contract action. To assist the PM in preparing the post-negotiation memorandum, PST members who attend the negotiation meeting will furnish meeting notes to the PM, as needed. The PST member(s) are only responsible for documenting the discussions relating to their area of responsibility.

The A/E will revise and resubmit to the PM and to the CFLHD Acquisitions Section, the SOW and price proposal that reflects the changes agreed to during the negotiations. The PM may request assistance from PST member(s) to review specific portions of the revised SOW to ensure that the work is clearly, completely, and accurately defined.

PDT Primary Responsibilities & Hours

A/E	Review	
PM	Perform	- 16
PST	Support	- 2

2.2 Task Order Administration

The PM will serve as the COTR for this TO and will be directly responsible for all TO administration as it relates to the management of the contract.

2.2.1 Invoicing (Budget Control)

The A/E will submit a monthly invoice to the CFLHD Acquisitions Section which will then forward the invoice to the PM for verification/approval. The CFLHD will have 30 calendar days for payment on the invoice before interest will be granted to the A/E.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 18
PST	Support	- 0

2.2.2 Progress Reports (Schedule Control)

The A/E will submit a monthly progress report (typically submitted together with the invoice) detailing work performed in the period, describing anticipated work in the next billing period, documenting problems and delays, etc. The PM will review the report and, if needed, discuss issues with the PST. On projects with time critical schedules, it may be necessary to require the A/E to submit weekly updates showing tasks completed this week and tasks planned for next week. This update could be a one-page bullet summary that could be submitted by email. Notification of the PST of changes to the schedule should occur when the revised schedule affects workload planning. The preferred method would be updating of the project scheduler (P3) to reflect the revised schedule. Notification by email is an option when the timing of the revisions do not coincide with the P3 update cycle.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 18
PST	Support	- 0

2.2.3 Adherence to SOW (Scope Control)

The PM will be responsible for verifying that the A/E is in conformance with the SOW and may request PST support as issues arise during the TO performance period. Should changes to the

SOW be required after the TO has been signed, the PM and A/E shall agree on the level of work expected to be performed and the A/E shall prepare the SOW for the contract modification.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 36
PST	Support	- 0

2.3 Task Order Communication

2.3.1 Technical Issues

The PST member(s) will provide technical assistance to the PM to convey CFLHD's expectations, institutional experience with the site or similar site, customer attitudes and expectations, project features, guidelines, policy, and technical data (i.e., drawings, specifications, etc.). Communication with the NPS may be necessary to provide additional insight into their intent, needs, and/or expectations. The PM will coordinate contact with the NPS. The PST members who typically have the greatest amount of involvement in resolving technical issues are: design, materials, pavements, and safety. The PST member(s) will also provide support to the PM as necessary to resolve technical issues or assess risk or provide guidance for determining the reasonableness of A/E proposed solutions. Direct communication between the PST and A/E technical staff may be necessary. It may not be possible to identify the level of communication/involvement PST members will have during execution of the TO. Therefore, communication/involvement will typically be requested by the PM on an as-needed basis. To expedite the communication process, the PM may request that the A/E contact the PST member(s) directly. The PM will notify the PST and A/E of this request for assistance as early as possible to ensure that PST members can plan their schedule accordingly and minimize disruption to other project work. The A/E should be required to promptly document all direct communications (not simple requests for information) with PST members through an email to the PM and PST for communications that have project ramifications to cost, schedule, and scope.

PDT Primary Responsibilities & Hours

NPS	Support	
A/E	Perform	
PM	Coordinate	- 36
PST	Review	- 36

2.3.2 Project Support Team (PST) Meetings

PST meetings are internal meeting(s) held to discuss administrative or technical issues and/or for the exchange of information. The involvement and scheduling of PST meetings will typically be determined on an as-needed basis and arranged by the PM. There should be standard PST meetings that are held including: kickoff, major milestones, and delivery review meetings. It is assumed that an average of two PST meetings will be conducted during execution of the final development TO.

PDT Primary Responsibilities & Hours

A/E	Support	
PM	Perform	- 8
PST	Review	- 16

2.3.3 Project Delivery Team (PDT) Meetings

PDT meetings will be scheduled and organized by the A/E. These meetings are progress status (over the shoulder) meetings. Discussion topics typically will include: progress, schedule, budget, A/E requested guidance, and check-in on A/E concepts and direction of effort. PST participation will be determined by the agenda topics. The agenda will be developed by the A/E with input from the PM. Once the agenda is developed, the PM will notify the PST members of their participation. Meeting location will be determined by the PM but should be held at CFLHD's office to minimize the amount of travel time required of the PST. It is assumed that an average of four PDT meetings will be conducted during execution of the final development TO.

PDT Primary Responsibilities & Hours

NPS	Support	
A/E	Perform	
PM	Review	- 16
PST	Support	- 24

2.3.4 Project Management Team (PMT) Meetings

PMT meetings will be organized by the PM and scheduled by the A/E. These meetings will be attended by the PM, A/E, and external agencies. Meeting location will be determined by the PM but typically will be held in the local area of the participating external agencies (i.e., National Park). These meetings are typically held to discuss progress, gain insight into the clients' expectations, data to be furnished by the agency(s), environmental compliance, permits, scheduling, etc. If PST input/attendance is necessary, the PM will contact the PST member(s) and request assistance.

PDT Primary Responsibilities & Hours

NPS	Review	
A/E	Assist	
PM	Perform	- 24
PST	Support	- 0

2.4 Task Order Conduct

2.4.1 Field Studies and Investigations

During development of the TO, the PST and/or the PM would have been responsible for evaluating the SOW to ensure that it adequately describes the level of investigation/study necessary for the size and complexity of the project. PM involvement at this stage is primarily limited to interaction with the client agency to ensure that notification and agreement to access the site is given. The A/E will be responsible for requesting and obtaining permits and other permissions necessary to gain approval from the NPS to access the site. The A/E will conduct field investigations and studies

independently. The PM will first contact the owner agency to inform them of the actions of the A/E. The A/E must let the owner agency know that it is making a contact on behalf of FHWA, making it clear that they are not FHWA employees. Technical issues that arise may require the support of the PST. The resource hours to address these issues are included under Section 2.3.1.

PDT Primary Responsibilities & Hours

NPS	Support	
A/E	Perform	
PM	Review	- 4
PST	Support	- 0

2.4.2 Office Analysis and Design

The A/E is solely responsible for design analysis, development, and advancement of the project. The PM will have biweekly communication with the A/E to discuss progress (see Section 2.2.2, Progress Reports). The A/E should initiate the communication. There will be no involvement by the PST unless a technical issue is raised that requires their assistance.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 36
PST	Support	- 0

2.4.3 Intermediate Field Review

This site visit is the major information gathering activity for this TO. The site visit also serves as a venue for meeting and discussing the project scope with representatives of the NPS. Revisions to the project agreement should be formulated during this site visit.

The project development at this stage is typically at about 30 percent. This review is attended by the PM, A/E, PST, local Park Service, and NPS' Denver Service Center. When the complexities of the project dictate the attendance of PST members, it will typically be from Design, with the exception of projects that have a heavy reliance on a specific functional discipline area(s). In this case, the PM may request that those PST members attend. The PM will attend in a lead role for CFLHD. This lead role is separate from the role that the A/E performs. CFLHD's role will be to control the direction of the review to ensure that significant topics (i.e., goal, objectives, standards, guidelines, compliance, land use, stewardship, etc.) are covered. This may involve consensus building or delegation of responsibility for future actions necessary to further the project. The PM and PST will also impart CFLHD institutional experience with the site or similar sites, partner agency expectations, project features, and oversee the A/E's work efforts. However, the A/E will customarily provide the technical experts for on-site support in the particular functional areas. PST functional staff would attend in an oversight role to evaluate that processes, procedures, and level of risk taken are consistent with other CFLHD projects and are planned for. As in most cases, the A/E is responsible for providing the appropriate individuals (as agreed to with the PM) to adequately address the issues that will be encountered during the field review.

The A/E will lead the design portion of the field review, including presentation of the preliminary design, solicitation of comments from participants, future design efforts, rational for decisions,

budget constraints, gather additional information, etc. This review gives the A/E, PM, and the NPS the opportunity to ensure that the design is being developed in compliance with the intended scope and social and environmental commitments. The A/E will organize the review (contact participants and schedule review dates, prepare distribution letter for signature by the PM, and prepare the agenda); and the PM will provide oversight of the A/E to ensure that the review and participation is coordinated fully. Documentation of the field review will be a responsibility of the A/E. CFLHD staff that attend the review will be responsible for reviewing the field inspection report and providing comments prior to distribution.

PDT Primary Responsibilities & Hours

NPS	Assist	
A/E	Perform	
PM	Review	- 24
PST	Support	- 24

2.4.4 Update Project Agreement

The project agreement that was developed during the scoping/site visit, identified in Subsection 1.3.2 as example 1, or the project agreement developed prior to the intermediate field review, identified in Subsection 1.3.2 as example 2, will be reviewed at the Intermediate Design phase to ensure that the project scope, schedules, budget, roles, etc., are current. When they are not, the project agreement will be updated to reflect the current information available. Future updating may be necessary if the scope, schedule, or budget changes. The A/E will have the lead role in updating the project agreement, but the PM and NPS will be directly responsible for coordinating the completion and distribution of the project agreement. The PM will review the updated project agreement prior to issuing the revision to the NPS. The NPS and PM will jointly review and sign the revised project agreement. The PM will distribute the updated project agreement to the PST.

PDT Primary Responsibilities & Hours

NPS	Assist	
A/E	Perform	
PM	Review	- 8
PST	Support	- 0

2.4.5 Plan-in-Hand Field Review

At least two weeks prior to the official distribution of plans, a brief pre-submittal review will be held to ensure that the plans are at the appropriate level of design and have been revised to reflect the comments and observations made during development. The actual length of time between the pre-submittal distribution and the official distribution should be covered in the SOW. The pre-submittal review may be held at the office of the A/E or at CFLHD or reviewed independently and comments discussed with the A/E via phone or email. However, the review of the documents can occur at any location. If a meeting is held, it will normally be attended by the PM; the PST should **only** attend when significant issues are discovered. Review of the pre-submittal documents will be conducted by the PM.

The roles and responsibilities for the Plan-in-Hand field review is the same as stated in Section 2.4.3 with the exception that the COE or project engineer will typically attend this field review.

PDT Primary Responsibilities & Hours

NPS	Assist	
A/E	Perform	
PM	Review	- 24
PST	Assist	- 24

2.4.6 Environmental Issues

The sample 3R project used for these guidelines assumes that a Cat-X will be developed by the NPS and that the NEPA work should be minimal and be able to meet the goal of completion at 30% project development.

Specific delineation of roles and responsibilities for environmental clearance will be identified and documented in the project agreement. It is expected that the majority of NEPA compliance will be accomplished through a CAT-X for 3R type work. Archeological and biological clearances, where needed, will also be completed by the NPS. The PM will be responsible for reviewing the environmental compliance document(s) to ensure that the commitments detailed in the document(s) are achievable during design and construction. The A/E's role will be to implement the commitments of the NEPA documents. The PM will work directly with the NPS DSC project manager or local Park to resolve issues that arise. Minimal involvement of the PST is anticipated.

PDT Primary Responsibilities & Hours

NPS	Perform	
A/E	Assist	
PM	Review	- 12
PST	Support	- 0

2.5 Task Order Submittals

The LOE for reviewing of submittals will be defined by the use of standardized checklists. The checklists identify those critical elements of development that are key to the advancement of the document(s). The checklists are tailored for the level of completeness that is stated in the TO. Along with each submittal, the A/E will submit a completed QA/QC checklist and certificate of compliance certifying that the QA/QC has been accomplished.

If a submittal is not complete enough to provide an adequate review or does not meet the contract requirements for submittals, the PST members are to immediately advise the PM. The submittal will be returned to the A/E, and the PM will advise the A/E by letter of the reasons for refusal. The PM is responsible for writing the transmittal letter and returning the submittal.

To lighten PM's workload, the A/E is tasked with completing submittals and forwarding the required submittals to the PM. When the submittals are developed in an office in the Denver metro area, the PM may request that the A/E distribute the documents individually to the PM and PST. A cover letter developed by the A/E and signed by the PM is to accompany all internal submittals.

The A/E will also forward external copies to individuals within the NPS (i.e., DSC, local Park). External copies will be distributed with an FHWA distribution letter signed by the PM. The A/E will develop the distribution letter with assistance from the PM. Distribution to the NPS should only occur after the A/E has incorporated CFLHD review comments. The PM will ensure that the consultant is aware of the point of contact for receipt of submittals.

It will be necessary for the PM to communicate the urgency of providing review comments by the predetermined dates to the NPS. Ultimately, the PM is responsible for ensuring that PS&Es and other documents are reviewed and comments collected and transmitted to the A/E. Each PST member designated (when the complexities of the project justify) to review a submittal has the responsibility of completing a thorough review of the documents. If a reviewer is unable to fulfill their obligation, arrangements shall be made through their supervisor for another individual to complete the review. The PM also needs to require all external agencies to provide CFLHD with only one set of combined comments in which all conflicting comments have been resolved prior to submittal. All comments are to be forwarded to the PM, who will transmit the review comments to the A/E.

The A/E will be required to respond to all review comments from CFLHD and external agencies. Comments for PS&E documents that are provided as plan markups (red ink) and/or furnished via an electronic format (i.e., email, Microsoft Word) shall be captured to a Comment and Response form by the A/E. Reviewers of PS&E documents **may** also provide typed comments using a Review Comment Sheet. Comments for other documents can be provided as markups (red ink), typing the comments on the Comment and Response form, or by using the "Track Changes" feature in Microsoft Word documents. Because of time constraints, it may be necessary to transmit uncompiled/unresolved comments to the A/E. It will be the responsibility of the A/E to initiate resolution of conflicting comments and to compile them. Comments documented during site visits shall also be recorded on the form. If there is a question regarding a review comment, clarification from CFLHD will be obtained prior to finalizing the written response to the review comment. A copy of the finalized Comment and Response form shall be forwarded to CFLHD for distribution with the subsequent document submittal. When there is not a subsequent document submittal, the Comment and Response form is to be forwarded with the final documents.

If a submittal is not complete enough to provide an adequate review or does not meet the contract requirements for submittals, the PST members are to immediately advise the PM. The submittal will be returned to the A/E and the PM will advise the A/E by letter of reasons for refusal. The PM is responsible for writing the transmittal letter and returning the submittal.

The PM will be responsible for coordinating and communicating the review comments back to the A/E.

2.5.1 Draft Technical Memoranda

The PST members with the appropriate expertise will review the draft memoranda. Review comments from the PST will be forwarded to the A/E by the PM.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 4
PST	Review	- 8

2.5.2 Draft NEPA Documentation

The Draft NEPA documents will be prepared by the NPS. The NPS will develop the necessary level of documentation required by the NEPA process. The PM will be responsible for reviewing the environmental compliance document(s) to ensure that the commitments detailed in the document(s) are achievable during design and construction. The PM will work directly with the NPS's DSC project manager to resolve issues that arise. Formal review of the documents by the PST is not anticipated. However, the Design PST will familiarize themselves with the commitments in the document to facilitate review of the PS&E. The A/E will be responsible for incorporating the commitments identified in the draft document.

PDT Primary Responsibilities & Hours

NPS	Perform	
A/E	Assist	
PM	Review	- 8
PST	Support	- 2

2.5.3 Intermediate Plans & Estimate

The A/E shall submit the $\pm 30\%$ plans and estimate to the PM for CFLHD review. The A/E will develop the distribution cover letter with the assistance of the PM. PST members will review the documents in accordance with their respective standards, QA/QC manuals, etc., and will provide review comments according to Section 2.5 in a timely manner to the PM for transmittal to the A/E.

PDT Primary Responsibilities & Hours

NPS	Assist	
A/E	Perform	
PM	Review	- 4
PST	Support	- 16

2.5.4 Plan-in-Hand Plans, Specifications, & Estimate

The A/E shall submit the $\pm 70\%$ PS&E to the PM for CFLHD review. The A/E will develop the distribution cover letter with the assistance of the PM. PST members will review the documents in accordance with their respective standards, QA/QC manuals, etc., and will provide review comments in a timely manner to the PM for transmittal to the A/E. Reviewers will be requested to attend a 70% PS&E review meeting.

PDT Primary Responsibilities & Hours

NPS	Assist	
A/E	Perform	
PM	Review	- 12
PST	Assist	- 48

2.5.5 Draft Permit Applications

Typically, permits will be limited to National Pollutant Discharge Elimination System (NPDES), Army Corp of Engineers' 404, and Water Quality 401 permits. The PM and A/E will determine the need for permits during development of the TO. When it is necessary to develop permits, the Draft Permit Applications will be prepared by the A/E. The CFLHD Permits Section will be responsible for reviewing the applications to ensure that they conform to current regulatory, agency policies, and procedures. The PM will coordinate with the A/E to resolve issues that arise. The PM will transmit review comments to the A/E for incorporation into the final permits package.

PDT Primary Responsibilities & Hours

NPS	Support	
A/E	Perform	
PM	Review	- 2
PST	Support	- 3

2.5.6 95% PS&E

The A/E shall submit the PS&E to the PM for CFLHD review. The A/E will develop the distribution cover letter with the assistance of the PM. PST members will review the documents in accordance with their respective standards, QA/QC manuals, etc., and will provide review comments according to Section 2.5 in a timely manner to the PM for transmittal to the A/E.

A field review will normally not occur. The PM, PST (in rare cases), and A/E will attend a CFLHD PS&E review meeting, usually in Denver, to reconcile any review comments. The NPS (i.e., DSC project manager) will be invited to attend the review meeting.

PDT Primary Responsibilities & Hours

NPS	Assist	
A/E	Perform	
PM	Review	- 8
PST	Support	- 16

2.6 Task Order Deliverables

The A/E will incorporate the comments from the review of the submittals completed in Section 2.5 and then finalize the deliverables. The PM, NPS, and PST (when the complexities of the project justify) will review the deliverables for incorporation of the submittal review comments, review those areas where the design was advanced, and review areas where significant design changes were made. Distribution of review documents, forwarding of comments, and compliance with the SOW will be the same as stated in Section 2.5.

2.6.1 Final Technical Reports

The PST member with the appropriate expertise will review the final reports for incorporation of draft comments. The sections of the report that have been modified by the A/E due to additional investigations or studies will also be reviewed by the PST.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Coordinate	- 2
PST	Review	- 4

2.6.2 Final NEPA Documentation

The Final NEPA documents will be prepared by the NPS. The PM will be responsible for reviewing the environmental compliance document(s) to ensure that review comments were addressed. The sections of the report that have been modified due to additional studies will also be reviewed by the PM. The PM will work directly with the NPS's DSC project manager to resolve issues that arise. Minimal involvement of the PST is anticipated. The A/E will be responsible for reviewing and incorporating the final commitments.

PDT Primary Responsibilities & Hours

NPS	Perform	
A/E	Assist	
PM	Review	- 2
PST	Support	- 2

2.6.3 Final Permit Applications

Final permits will be reviewed by the Permits PST for inclusion of draft review comments and for conformance with current regulatory, agency policies, and procedures. The final permits should be substantially completed at the 70% project development stage. The PM will sign permit applications they are delegated to sign and forward them to the Permits Section for transmitting the final permit(s) to the regulatory agency having jurisdiction.

PDT Primary Responsibilities & Hours

NPS	Support	
A/E	Perform	
PM	Review	- 2
PST	Support	- 1

2.6.4 100% Plans, Specifications & Estimate

The A/E will incorporate the comments from the review of the 95% PS&E submittal completed in Section 2.5.6 and then finalize the deliverables. The PS&E package will be accepted without future PST review. The PM and CFLHD Quality Assurance Section will review the final PS&E to ensure that comments from the previous review were adequately incorporated. This final review is required before the PS&E will be signed by the Director of Project Delivery. It is assumed that, once the A/E has stamped the documents, they have accepted all responsibility in assuring that a final QA/QC review of documents has been completed. It is the PM's responsibility to assure management that the A/E has fulfilled their responsibilities and is in compliance with their QC plan. The PS&E package will be forwarded to the CFLHD Acquisitions Section by the PM after all signatures and contracting forms are completed. The delivery of the final documents will include: postscript files, project engineer's notebook, design files on CD, project documentation, etc.

PDT Primary Responsibilities & Hours

A/E	Perform	
PM	Review	- 4
PST	Support	- 0

2.7 Construction Contract Procurement Assistance

2.7.1 Respond to Technical Questions

The COE will be the initial point of contact for bidders' questions. The PM, PST, and Contract Acquisitions Section will be engaged when the COE requires assistance in answering the questions. The following delegation will be followed when the COE is not available: Acquisitions is 1st backup and the PM is the 2nd backup. The HDM is not listed as a backup due to the limited involvement during project development. All questions from bidders will be documented and transmitted to the COE, PM, PST, and the Acquisitions Section.

PDT Primary Responsibilities & Hours

NPS	Support	
A/E	Assist	
PM	Coordinate	- 4
PST	Perform	- 8

2.7.2 Identification of Need for Modifications

Identification of the need for modifications to the PS&E during advertisement usually originates with questions from prospective contractors, wage rate changes, or errors and/or omissions identified by the PST (typically the COE) or the Acquisitions Section. The PM will determine whether the modification is caused by an error or omission or to provide compensation for additional effort on the part of the A/E. Acquisitions will initiate discussions with the COE and PM to determine the necessity of generating a modification. Acquisitions will generally prepare the modification contract documents with technical assistance from the A/E, COE, and PM. The modification may be discussed with other PST members to determine the best approach.

PDT Primary Responsibilities & Hours

A/E	Assist	
PM	Coordinate	- 2
PST	Perform	- 2

2.7.3 Execution of Modifications

The A/E will be responsible for furnishing the revision sheets, postscript files, and any other information affected because of the modification. The PM will communicate the effort required of the A/E. In extremely rare cases, either the PM or COE can request PST members to provide technical assistance. The Acquisition Section will prepare the paperwork for each modification. The A/E, PST, PM, and COE will receive copies of each contract modification.

PDT Primary Responsibilities & Hours

NPS	Support	
A/E	Perform	
PM	Coordinate	- 2
PST	Review	- 2

2.8 Task Order Closeout

2.8.1 Confirmation of Completed SOW and Deliverables

The PM will cross-check the deliverables received with the list of deliverables stipulated in the TO to verify fulfillment of the requirements. The PM will be responsible for completion of this activity. It will include assuring that all deliverables have been received and are complete, signing off for payment of the final voucher, and coordinating the completion of A/E evaluations.

PDT Primary Responsibilities & Hours

A/E	Support	
PM	Perform	- 2
PST	Support	- 0

2.8.2 Payment of Final Invoice

The A/E will submit the final invoice to the CFLHD Acquisitions Section which will forward the invoice to the PM for verification/approval. The CFLHD will have 30 calendar days for payment on the invoice before interest will be granted to the A/E.

PDT Primary Responsibilities & Hours

A/E	Support	
PM	Perform	- 2
PST	Support	- 0

2.8.3 Complete Evaluations

The PM will complete the General Information and PST Input, Consultant Satisfaction Evaluation, and Cost Proposal and Negotiation Information forms. The PM will provide an overall satisfaction with the consultant’s work by rating from 1 (unacceptable) to 5 (excellent) and providing an explanation for any rating of 2 or lower. In addition to the CFLHD consultant evaluation forms, the PM will complete Standard Form 1421 and submit it and the other forms to the Acquisitions Section. Only informal input, if any, is expected from the PST and the NPS in completing evaluations.

PDT Primary Responsibilities & Hours

A/E	Support	
PM	Perform	- 4
PST	Support	- 0

3R PARK ROAD PROJECT ROLES AND RESPONSIBILITIES MATRIX		
Definitions (listed in descending order of anticipated work effort):		
Perform	: Lead the work and assure delivery of the work products.	N/A = Not Applicable
Review	: Evaluate work against T.O. and project requirements, provide input and recommendations , travel as needed.	
Coordinate	: Assure communication of actions and recommendations to A/E, PM, PST and others as needed.	
Assist	: Contribute to receipt and review of work products and/or development and communication of recommendations.	
Support	: As needed support to others for accomplishing the task (expected involvement to be only in rare instances).	

Primary Tasks		PDT Primary Responsibilities			
Task No.	Task Description	NPS	A/E	PM	PST
1	SCOPING (TASK ORDER 1)				
1.1	Task Order Development				
1.1.1	Scope of Work	N/A	Support	Perform - 8	Support - 0
1.1.2	IGE and Pre-negotiation	N/A	Support	Perform - 4	Support - 0
1.1.3	Negotiation and Post-negotiation	N/A	Review	Perform - 4	Support - 0
1.2	Task Order Administration				
1.2.1	Establish PST	N/A	Support	Perform - 6	Review - 12
1.2.2	Invoicing (Budget Control)	N/A	Perform	Review - 2	Support - 0
1.2.3	Progress Reports (Schedule Control)	N/A	Perform	Review - 2	Support - 0
1.2.4	Adherence to SOW (Scope Control)	N/A	Perform	Review - 2	Support - 0
1.2.5	Technical Issues	Support	Perform	Coordinate - 2	Review - 2
1.3	Task Order Conduct				
1.3.1	Site Visit	Assist	Perform	Review - 32	Support - 0
1.3.2	Project Agreement	Perform	Support	Review - 2	Support - 0
1.4	Task Order Submittals				
1.4.1	Draft Scoping Report	Assist	Perform	Review - 2	Support - 2
1.4.2	Update Project Agreement, IMR/Midwest Region	Assist	Perform	Review - 4	Support - 0
1.4.3	Draft SOW for Subsequent Task Order	N/A	Perform	Coordinate - 4	Review - 4
1.5	Task Order Deliverables				
1.5.1	Final Scoping Report	Support	Perform	Review - 2	Support - 0
1.5.2	Final SOW for Subsequent Task Order	N/A	Perform	Review - 2	Assist - 2
1.6	Task Order Close-out				
1.6.1	Confirmation of Completed SOW and Deliverables	N/A	Support	Perform - 2	Support - 0
1.6.2	Payment of Final Invoice	N/A	Support	Perform - 1	Support - 0
1.6.3	Complete Evaluations	N/A	Support	Perform - 2	Support - 0
Subtotals:				83	22

3R PARK ROAD PROJECT ROLES AND RESPONSIBILITIES MATRIX		
Definitions (listed in descending order of anticipated work effort):		
Perform	: Lead the work and assure delivery of the work products.	N/A = Not Applicable
Review	: Evaluate work against T.O. and project requirements, provide input and recommendations , travel as needed.	
Coordinate	: Assure communication of actions and recommendations to A/E, PM, PST and others as needed.	
Assist	: Contribute to receipt and review of work products and/or development and communication of recommendations.	
Support	: As needed support to others for accomplishing the task (expected involvement to be only in rare instances).	

Primary Tasks		PDT Primary Responsibilities			
Task No.	Task Description	NPS	A/E	PM	PST
2	DESIGN to 100% and NEPA (TASK ORDER 2)				
2.1	Task Order Development				
2.1.1	Scope of Work	N/A	Assist	Perform - 2	Support - 0
2.1.2	IGE and Pre-Negotiation	N/A	Support	Perform - 12	Support - 4
2.1.3	Negotiation and Post-Negotiation	N/A	Review	Perform - 16	Support - 2
2.2	Task Order Administration				
2.2.1	Invoicing (Budget Control)	N/A	Perform	Review - 18	Support - 0
2.2.2	Progress Reports (Schedule Control)	N/A	Perform	Review - 18	Support - 0
2.2.3	Adherence to SOW (Scope Control)	N/A	Perform	Review - 36	Support - 0
2.3	Task Order Communication				
2.3.1	Technical Issues	Support	Perform	Coordinate - 36	Review - 36
2.3.2	Project Support Team (PST) Meetings	N/A	Support	Perform - 8	Review - 16
2.3.3	Project Delivery Team (PDT) Meetings	Support	Perform	Review - 16	Support - 24
2.3.4	Project Management Team (PMT) Meetings	Review	Assist	Perform - 24	Support - 0
2.4	Task Order Conduct				
2.4.1	Field Studies and Investigations	Support	Perform	Review - 4	Support - 0
2.4.2	Office Analysis and Design	N/A	Perform	Review - 36	Support - 0
2.4.3	Intermediate Field Review	Assist	Perform	Review - 24	Support - 24
2.4.4	Update Project Agreement	Assist	Perform	Review - 8	Support - 0
2.4.5	Plan-in-Hand Field Review	Assist	Perform	Review - 24	Assist - 24
2.4.6	Environmental Issues	Perform	Assist	Review - 12	Support - 0
2.5	Task Order Submittals				
2.5.1	Draft Technical Memoranda	N/A	Perform	Coordinate - 4	Review - 8
2.5.2	Draft NEPA Documentation	Perform	Assist	Review - 8	Support - 2
2.5.3	Intermediate Plans & Estimate	Assist	Perform	Review - 4	Support - 16
2.5.4	Plan-in-Hand PS&E	Assist	Perform	Review - 12	Assist - 48
2.5.5	Draft Permit Applications	Support	Perform	Review - 2	Support - 3
2.5.6	95% PS&E	Assist	Perform	Review - 8	Support - 16
2.6	Task Order Deliverables				
2.6.1	Final Technical Memoranda	N/A	Perform	Coordinate - 2	Review - 4
2.6.2	Final NEPA Documentation	Perform	Assist	Review - 2	Support - 2
2.6.3	Final Permit Applications	Support	Perform	Review - 2	Support - 1
2.6.4	100% PS&E	N/A	Perform	Review - 4	Support - 0

3R PARK ROAD PROJECT ROLES AND RESPONSIBILITIES MATRIX	
Definitions (listed in descending order of anticipated work effort):	
Perform	: Lead the work and assure delivery of the work products.
Review	: Evaluate work against T.O. and project requirements, provide input and recommendations , travel as needed.
Coordinate	: Assure communication of actions and recommendations to A/E, PM, PST and others as needed.
Assist	: Contribute to receipt and review of work products and/or development and communication of recommendations.
Support	: As needed support to others for accomplishing the task (expected involvement to be only in rare instances).
N/A = Not Applicable	

Primary Tasks		PDT Primary Responsibilities			
Task No.	Task Description	NPS	A/E	PM	PST
2.7	Construction Contract Procurement Assistance				
2.7.1	Respond to Technical Questions	Support	Assist	Coordinate - 4	Perform - 8
2.7.2	Identification of Need for Modifications	N/A	Assist	Coordinate - 2	Perform - 2
2.7.3	Execution of Modifications	Support	Perform	Coordinate - 2	Review - 2
2.8	Task Order Close-out				
2.8.1	Confirmation of Completed SOW and Deliverables	N/A	Support	Perform - 2	Support - 0
2.8.2	Payment of Final Invoice	N/A	Support	Perform - 2	Support - 0
2.8.3	Complete Evaluations	N/A	Support	Perform - 4	Support - 0
Subtotal (Hrs):				358	242
Total (Hrs):				441	264
Grand Total (\$):		705	hrs x \$80/hr =		\$56,400.00

EXAMPLE PROJECT	
Construction Cost:	\$ 4,000,000
PE Cost (at 8%):	\$ 320,000
AE Oversight Cost (Grand Total plus \$10,000 travel):	\$ 66,400
Percent Oversight Cost (with respect to PE):	20.8%
Project Percent PE, including Oversight Cost:	9.7%

Appendices

- A. Activities ongoing within CFLHD, referenced here for information.**
- B. Oversight Team Kick-off Meeting Summary**

Appendix A

Activities ongoing within CFLHD

The references are for information only and are not included in the guidelines.

- 1. Pre-Programming Scoping Report**
- 2. FS, NPS, and Fish & Wildlife Service (FWS) Scoping Reports**
- 3. Standardized Scope of Work**
- 4. Contractor Evaluation Reports**
- 5. Functional Discipline QA/QC Procedures**
- 6. QA/QC Development Checklists**

Appendix B

Oversight Team Kickoff Meeting Summary

June 16, 2003, A/E Oversight Team Kickoff meeting summary

Attendees: Jim Keeley, Bob Welch, Dave Zanetell, Mark Taylor, Mike Voth, Scott Anderson, Ed Hammontree, Mike McCann. Tom Puto was absent.

The following topics and overview was discussed:

Jim Keeley overview: *Work has been completed on the strategy to get work out to A/E's in the most effective manner; now we need to develop the details for CFLHD to deliver with the Use of A/E's. Two goals: use A/E's to assist in program delivery and Train CFLHD staff for the future.*

Guidelines for Oversight work need to address full (multi) service work for PM roles, Technical Services Branch functional areas, and Project Development.

Mark Taylor overview: *Greg Dolson, EFLHD Project Development Engineer is working on Federal Lands Highway wide guidelines for A/E services. Expects to be done by end of 2003. American Association of State Highway and Transportation Officials (AASHTO) has A/E guidelines for processes. Need to address A/E evaluations, process, and format. Need to define what is FLH accountability of A/E work.*

Bob Welch overview: *Need consistency with PM's and functional areas for process, administration and closeout and communication. Need Roles and Responsibilities defined for PM's and functional areas. Need QA/QC procedures for implementation of full-service task orders. Need reference and work on Project Development and Design Manual and technical manuals. Need to prepare guidelines for procurement steps also for multi-service task orders.*

Dave Zanetell overview: *Define criteria for administration of task orders, roles and responsibilities, and interaction between all parties on multi-service task orders. Need the following:*

- 1. Task Order development including procurement, scope of work development, IGE, and negotiations.*
- 2. Administration of the Task Order including PM roles, technical area role and reviews, QA/QC, and performance evaluations.*
- 3. Task order submittals (PS&E's and technical submittals, i.e., Geotech reports).*
- 4. Project review signoffs (external and internal), QC checklists, Internal roles.*

Summary of discussions regarding issues this team is trying to address:

- √ Quality of Deliverables*
- √ Oversight time and dollars (Fiscal efficiency of Oversight, Schedule efficiency)*

- √ *Roles and Responsibilities in a CFLHD quality work product and consistency with*
- √ *CFLHD organization goals*
- √ *Better define our expectations of A/E's for CFLHD staff*
- √ *Better define our expectations to A/E's*
- √ *Better define relationships of CFLHD, A/E's, and project customers for A/E full-service task orders*

Bob Welch summarized the general guidelines as follows:

7. *Roles and Responsibilities:*
 - a. *Project Manager*
 - b. *Functional Leader*
 - c. *Cross Functional Team members*
8. *Procurement Process*
9. *Oversite Process*
10. *Milestone definition, submittals, and expected deliverables; Scoping, Line and Grade, 30%, 70%, 95%, and Final.*
11. *Oversite Expectations, review, and "accountability"*
12. *A/E Performance Assessments, Documentation, and Evaluations*
13. *Define and communicate the expectations of the A/E firm*