MONTANA DEPARTMENT OF TRANSPORTATION



CONSULTANT SERVICES MANUAL







VISION ZERO
Montana Department of Transportation

August 2019

PREFACE

The *MDT Consultant Services Manual* has been developed to provide guidance to MDT and Consultant personnel on the MDT Consultant Program. The *Manual* complies with all State and Federal laws, statutes and regulations at the time of the *Manual* publication, and it presents MDT policies and procedures on the Consultant Program's operations. The *Manual* is organized into three major parts:

- Part I "Administration and Procedures"
- Part II "Consultant Selection and Monitoring"
- Part III "Consultant Contract Requirements"

The *Manual* presents much of the information normally required for a typical Consultant project; however, it is impossible to address every situation that may arise during Consultant project development. Therefore, MDT and Consultant personnel must exercise good judgment on individual projects and, frequently, they must be innovative in their approach to project management. Where questions arise regarding the appropriate approach, the *Manual* user should seek guidance from Consultant Design Bureau management and other knowledgeable individuals.

The *MDT Consultant Services Manual* was developed by the MDT Consultant Design Bureau in cooperation with the Federal Highways Administration (FHWA) and the Montana Chapter of the American Council of Engineering Companies (ACEC). The *Manual* Review Committee included:

Ryan Dahlke	Consultant Design Engineer, Montana Department of Transportation
Bryan Miller	Consultant Plans Engineer, Montana Department of Transportation
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MDT CONSULTANT SERVICES MANUAL
(Revision Process)

The *MDT Consultant Services Manual* is expected to be updated periodically based on changes to laws, regulations, policies, procedures, etc. Revisions to this Manual may be implemented without formal approval from FHWA. When revisions are proposed that affect core policies and procedures, MDT will coordinate with FHWA. All suggested changes should be sent to the Consultant Design Engineer.

* *Page Revised* number references page numbers in previous edition, prior to revision

MDT CONSULTANT SERVICES MANUAL REVISION HISTORY		
Manual Revision Number (Date)	**Page Revised ***	**Revision Explanation/Summary**
1 (09/08/2016)	4-16	Updated Figure number to 4.2-C
1 (09/08/2016)	8-14	Added language to define when CE amendments do/do not need to go through the Funding Approval Memo process
1 (09/08/2016)	Appendix A, ii	Updated web link to Certification of Indirect Costs
2 (05/15/2018)	All pages	Updated date of manual in footer on all pages
2 (05/15/2018)	Preface	Added Table on Manual Revision History
2 (05/15/2018)	2-1	Updated web link to MDT organizational chart
2 (05/15/2018)	6-9	Updated web link to new Request for Consultant Services form
2 (05/15/2018)	6-13	Removed the term “subconsultants” in the second bulleted item of the non-qualifications-based evaluation criteria section
2 (05/15/2018)	6-17	Under section 6.3.2.7, added language regarding the Consultant Selection Board’s flexibility and limitations in selecting the most-qualified consultant
2 (05/15/2018)	6-18	Minor revisions to second paragraph, detailing how notice of consultant selection is sent
2 (05/15/2018)	6-26	Revised Small Purchase Process dollar limit to $50,000 to align with updated MCA
2 (05/15/2018)	8-19	Revised language regarding performance evaluation requirements at contract closure
2 (05/15/2018)	8-21	Updated figure 8.4-C to align with revisions made to page 8-19
2 (05/15/2018)	11-9	Under section 11.2.4, removed extra bullet containing no content; Revised the last bullet to clarify that the existing rate must be lower than new rate
2 (05/15/2018)	Appendix A, ii	Updated web link to AASHTO website; Revised name of “Indirect Cost Rate Certification” to “Certification of Indirect Costs”; Revised name of “Executive Compensation Matrix” to “National Compensation Matrix”
3 (8/27/2019)	All pages	Updated date of manual in footer on all pages
3 (8/27/2019)	Preface	Added Table on Manual Revision History
3 (8/27/2019)	various	Changed “Deputy Director” to “Chief Operating Officer” throughout Manual
3 (8/27/2019)	7-15, 7-19, 7-20	Revised description of Contract Execution Process to align with current e-signature processes
3 (8/27/2019)	8-12	Revised language detailing the amendment execution process to align with current e-signature processes

3 (8/27/2019)	8-12	Revised language describing need for amendments greater than $200,000 needing to go to the Consultant Selection Board. Revisions were made to reflect changes in the Board's role, as well as the Preconstruction Engineer's authority, in the amendment process.
3 (8/27/2019)	8-13	Revised Figure 8.4-A to reflect changes in the Consultant Selection Board's role, as well as the Preconstruction Engineer's authority, in the amendment process
3 (8/27/2019)	8-15, 8-16	Revised language detailing the term contract amendment execution process to align with current e-signature processes

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Chapter 1
MDT CONSULTANT PROGRAM

1.1 GENERAL

1.1.1 Mission Statement

MDT's mission is to serve the public by providing a transportation system and services that emphasize quality, safety, cost effectiveness, economic vitality and sensitivity to the environment.

To accomplish its mission effectively, MDT uses outside Consultants when it lacks the in-house resources or technical expertise to perform the work. Consultants are an extension of MDT staff, capable of providing additional skills, experience, expertise and quality work without increasing in-house staff. Consultants can also provide independent opinions to MDT staff and, in some cases, opinions that may be more readily accepted by the public on sensitive projects and issues.

1.1.2 Authority

The *MDT Consultant Services Manual* has been prepared by the Consultant Design Bureau, reviewed by MDT management and approved by the Director of the Department of Transportation. This *Manual* has been approved by the Federal Highway Administration in compliance with applicable Federal regulations at the time of *Manual* publication. Additionally, the Montana Chapter of the American Council of Engineering Companies (ACEC) actively participated in the development of this *Manual*.

1.1.3 *Manual* Overview

1.1.3.1 Basic Objective

The basic objective of the *MDT Consultant Services Manual* is to improve the efficiency of the MDT Consultant program in the management of professional service contracts for the Montana Department of Transportation. The Consultant Design Bureau has prepared the *Manual* to facilitate Consultant participation with MDT and to guide MDT staff who works with Consultants in the MDT program. The *Manual* describes MDT procedures, guidelines and formats for the fair and impartial process for the procurement, management, and administration of engineering and design related consultant services, in accordance with applicable Federal and State regulations.

1.1.3.2 Summary

The *MDT Consultant Services Manual* is organized into three major Parts:

1. Part I "Administration and Procedures." The discussion of this *Part* summarizes the functional responsibilities of selected MDT units, the coordination between the Consultant Design Bureau and other MDT units, and the various internal "housekeeping" responsibilities of the Bureau (e.g., correspondence, records, files).

2. Part II "Consultant Selection and Monitoring." Part II provides guidance on the authorization, selection and monitoring of Consultants. The *Manual* documents MDT procedures for engaging consultant contracts for the entire process including:

    - establishing the need for Consultant services,
    - receiving authorization to secure Consultant services,
    - selecting a Consultant through a qualification-based process,
    - negotiating with a Consultant,
    - monitoring Consultant work,
    - administering the contract, and
    - evaluating Consultant performance.

3. Part III "Consultant Contract Requirements." Part III discusses MDT policies and procedures on MDT auditing and accounting policies and procedures and on Consultant contract provisions (e.g., insurance, certificates, subcontracting.)

1.1.3.3 Coordination with Other MDT Policies

MDT policies and procedures have been documented in a variety of sources (e.g., Montana Code Annotated, Administrative Rules of Montana, memoranda, other MDT Manuals). The procedures contained in this *Manual* are intended to supplement and assist in the implementation of various MDT policies, not to supersede them. Any conflicts that may exist between this *Manual* and MDT policies documented elsewhere are unintentional. If any conflicts are discovered, notify the Consultant Design Engineer.

1.1.4 Impetus for Using Consultants

1.1.4.1 General

MDT maintains a staff with the resources and technical expertise needed to perform the workload for the majority of the MDT program of projects. When work cannot be performed consistent with the schedule for the MDT program, or when the work requires specialized professional or technical skills not readily available within MDT, Consultants may be employed.

Fluctuations in funding for transportation improvements can have a major impact on the need for Consultant services. In general, if the available funding is significantly increased from State and/or Federal sources, then the preferred strategy may be to augment MDT in-house resources with Consultant services.

1.1.4.2 Specific

MDT may elect to seek Consultant services for a variety of specific reasons, including:

- controversial projects,
- legislative mandates,
- an accelerated project development schedule,
- MDT resources are not readily available to meet the desired schedule,
- specialized professional or technical skills not readily available within MDT, or
- emergencies.

1.1.4.3 Estimating Consultant Utilization

MDT continually analyzes projected work for the Department and routinely estimates the need for the level of effort, cost, and schedule of consultant services. A combination of historical data of consultant utilization, projected funding levels, and current MDT staff workload (both in and outside of the Consultant Design Bureau) is considered during this analysis. MDT then utilizes this analysis to forecast consultant services and corresponding MDT staff resources to administer these Consultant contracts and manage the program. Project scheduling software aids the Department in analyzing resources for current project and program delivery.

1.2 TYPES OF CONSULTANT SERVICES

1.2.1 Overview

MDT uses Consultants for a wide variety of services, which include the following broad categories:

- planning,
- preconstruction,
- construction,
- inspections, and
- other.

1.3 LEGAL AUTHORITY

1.3.1 State Requirements

In general, the MDT Consultant program is authorized by and must comply with all Montana State laws, regulations, etc. The Montana Code Annotated (MCA) and Administrative Rules of Montana (ARM) present actionable language to implement the laws of the State of Montana. In particular, the MDT Consultant program is governed by the Statutes for Public Projects, A/E Selection, MCA Section 18-8-201, et seq. Other significant State legal requirements that impact the solicitation and management of professional service contracts include those related to insurance (§39-71-401 et seq., §33-9-101 et seq., etc.), professional licenses (§37-65-101 et seq., §37-67-101 et seq.), conflict of interest (§2-2-105, §2-2-201, §2-2-131), and many others.

1.3.2 Federal Requirements

When Federal-aid funds are used, the MDT Consultant program must comply with all applicable Federal laws, regulations, etc., that are administered by the Federal Highway Administration. In general, this includes Federal requirements related to equal opportunity, subcontracting, disadvantaged business enterprises, etc. Specifically for the solicitation and management of consultant contracts, the following briefly discusses the most significant Federal requirements.

1.3.2.1 *Federal Acquisition Regulations* (FAR)

The *Federal Acquisition Regulations* is the primary, authoritative source for the acquisition of supplies and services by government agencies. The fundamental objective of FAR is to:

> *… deliver on a timely basis the best value product or service to the customer, while maintaining the public's trust and fulfilling public policy objectives.*

FAR presents uniform policies and procedures for acquisition by all executive agencies. Very few of the FAR provisions apply to MDT Consultant projects and agreements, with the exception of Part 31 "Contract Cost Principles and Procedures." Part 31 presents cost principles and procedures for:

- the pricing of contracts, subcontracts and amendments to contracts when a cost analysis is performed;
- the determination, negotiation or allowance of costs when required by a contract clause; and
- detailed explanations of specific rules for allowable and unallowable costs.

As an example, all Consultants retained by MDT, when Federal Funds are utilized, must meet the FAR requirements for the determination of allowable costs. Chapter 11 of the *MDT Consultant Services Manual* discusses MDT policies and procedures for compliance with FAR for the MDT

Consultant program, particularly in regards to Consultant indirect cost rates (commonly referred to as overhead rates).

1.3.2.2 Federal Highway Administration

The 1972 passage of the *Brooks Act* represents the origin of current FHWA regulations for contracting procedures for State DOTs. This *Act* required that Consultant selection be based on qualifications only and that negotiations should then follow on the cost of services. The *Act* mandated that the following steps be used in the procurement of architectural and engineering services:

- review of qualification statements and performance data submitted by Consultants;
- discussion with no less than three firms on concepts and project approaches;
- selection of no less than three firms based on qualifications; and
- negotiation with the best qualified firm on compensation.

Over time, the term “qualifications-based selection” (QBS) has become common.

In general, the FHWA requirements are presented in 23 CFR Part 172 “Administration of Engineering and Design Related Service Contracts,” which is the governing legal requirement for the solicitation, negotiation and management of professional service contracts. Specifically, this *Regulation* applies when utilizing any funds from the Federal-aid Highway Program (FAHP) for contracts involving engineering and design related services for projects related to a construction project administered by a State Transportation Department. The Part 172 policies and procedures apply to such contracts and have been issued:

> *… to ensure that a qualified consultant is obtained through an equitable selection process, that prescribed work is properly accomplished in a timely manner, and at fair and reasonable cost.*

23 CFR Part 172 discusses methods of procurement, audits and approvals. See Chapter 11 for more discussion.

1.4 TENTATIVE CONSTRUCTION PLAN (TCP)

The MDT Tentative Construction Plan (TCP), commonly known as the "Red Book," is the MDT financial plan for delivering projects. The following summarizes the important features of the TCP:

1. Purpose. The basic purpose of the TCP is to document the amount of highway funding available in each of the upcoming five Federal Fiscal Years (FFY). The funding is segregated by month, by geographic District and by source of funding (i.e., Federal and State). MDT updates the TCP every year, typically in October.

2. Fiscal Year. The State FY is from July 1 to June 30. The Federal FY is from October 1 to September 30. The TCP is based on the Federal FY.

3. Letting Date. The TCP includes a "letting date," which is the anticipated date that construction bids are opened.

4. Ready Date. The Ready Date is typically established as a target date for completion of all elements of the plans, specifications, and estimate (PS&E) package, including permits, right-of-way, etc. The TCP includes a "ready date," which is typically three months before the letting date and documents the date that the project is ready for the Contract Plans Bureau to initiate preparation for letting the project.

5. Consultant Completion Date. For all Consultant-designed MDT projects, the Consultant is expected to complete the project in accordance with the contract.

6. Updating Construction Cost Estimates. The TCP process involves accurate construction cost estimates used to establish a fiscal plan. All Consultants with active projects are required to update construction cost estimates annually in preparation for the TCP process (in addition to cost estimate updates at milestones and major changes in the construction cost estimate).

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Chapter 2
ORGANIZATION AND AUTHORITY

2.1 GENERAL

Chapter 2 discusses:

- the overall organization of the Montana Department of Transportation,
- the organization, authority, and responsibilities of the Consultant Design Bureau,

Chapter 2 presents the responsibilities of the MDT Consultant Design Bureau. Chapter 3 discusses the coordination between the Consultant Design Bureau and selected units external and internal to MDT.

MDT's organizational chart can be found on MDT's web page at:
http://www.mdt.mt.gov/other/webdata/external/dir/orgchart.pdf

The functional responsibilities of MDT Divisions, Districts, Bureaus, and other entities outside of Consultant Design can be found on MDT's web page (http://www.mdt.mt.gov/mdt/contact_list.shtml) or in the applicable manual (http://www.mdt.mt.gov/publications/manuals.shtml).

2.2 CONSULTANT DESIGN BUREAU

2.2.1 General

The Consultant Design Bureau is within the Preconstruction Program of the Engineering Division. The Bureau has the overall responsibility for the administration and management of the MDT Consultant program, Transportation Alternatives (TA) program, and Community Transportation Enhancement Program (CTEP). The organization of Consultant Design can be found on MDT's Consultant Design web page at:
http://www.mdt.mt.gov/mdt/organization/cdb.shtml

In general, the Consultant Design Bureau's responsibilities include (but are not limited to):

- management of projects through sound engineering judgement, in partnership with a consultant
- solicitation and procurement of consultant services
- conducting contract negotiations,
- processing and executing Consultant contracts,
- processing Consultant progress payments,
- processing contract amendments,
- facilitation of discussions between consultant and MDT staff
- coordination with external agencies, stakeholders, and the public regarding project development
- monitoring work received versus payments made,
- resolving disputes, and
- closing out contracts.

Throughout the *MDT Consultant Services Manual*, the discussion identifies the responsibilities and authorities of the various units and positions within the Consultant Design Bureau. This applies to, for example, Consultant selection and monitoring (Part II) and contract issues on Consultant projects (Part III). Section 2.2 documents the major responsibilities of the Bureau; it is not intended to be all inclusive.

2.2.2 Consultant Design Engineer

The Consultant Design Engineer (CDE) has the overall responsibility for the MDT Consultant program and for the management of the Consultant Design Bureau. The following presents a summary of these responsibilities. The CDE:

- Manages internal business operations for the Consultant Design Bureau.
- Estimates current and projected workload and resources needed to manage MDT's consultant program.
- Establishes the policies, procedures and practices used by the Consultant Design Bureau in the administration of the MDT Consultant program.
- Coordinates with the MDT Consultant industry through the Montana Chapter of the American Council of Engineering Companies (ACEC).
- Represents MDT on all issues related to the MDT Consultant program.
- Serves as the Bureau's official point of contact with the MDT Director's Office, FHWA, local governments and other entities outside of the Department.
- Initiates and manages the procurement of Consultant services.
- Issues Requests for Qualifications (RFQs) and Requests for Proposals (RFPs) to the Consultant community.
- Selects the membership of the Rating Panel to evaluate Consultant Statements of Qualifications and Proposals.
- Serves as non-voting Chair of the Consultant Selection Board.
- Serves as the only authorized point of contact for interested Consultants during the solicitation and selection process.
- Determines which of the Consultant selection processes will be used.
- Notifies Consultants on the outcome of the Consultant selection process.
- Provides debriefings to Consultants, upon request, after completion of the Consultant selection process.
- Approves all contract agreements (or amendments) with Consultants.
- Can authorize a Consultant to perform out-of-scope work while a contract amendment is being formally processed.
- Approves all Term Assignments.

- Approves milestone project reports and design exceptions for consultant-led projects.
- Upon request, answers significant project-related or contract-related questions.
- Ensures consultant performance evaluations are completed for all consultant contracts upon completion of the contract and incorporated into future evaluation and ranking of consultant to provide similar services.
- Serves as non-voting Chair for the Audit Dispute Resolutions process.
- Serves as non-voting Chair for the Errors & Omissions process.
- Serves as non-voting Chair for the Consultant Dispute Resolution process for procurement, management, or administration of consultant services.
- In consultation with the Civil Rights Bureau, establishes any needed DBE requirements on each project using Consultant services.
- Provides administration and oversight of the MDT TA & CTEP program.

2.2.3 Consultant Plans Section

2.2.3.1 Consultant Plans Engineer

The Consultant Plans Engineer is primarily responsible for the day-to-day administration of the Consultant Plans Section, which includes the Consultant Project Engineers and the Consultant Plans Checkers. The Consultant Plans Engineer is responsible for the delivery of Consultant-designed projects; reports directly to the Consultant Design Engineer; and is authorized to act on behalf of the CDE when necessary.

The following summarizes the responsibilities of the Consultant Plans Engineer:

- Assigns the Consultant Project Engineers to individual Consultant projects.
- Through interaction with the CPEs, monitors the status of active Consultant projects.
- Attends any significant meetings with Consultants.
- Manages the day-to-day activities of the staff in the Consultant Plans Section.
- In coordination with the CPEs, works to resolve any issues and disputes with MDT functional units, external units, etc., that do not involve an interpretation of or a change in the policies of MDT or the Consultant Design Bureau.
- Signs project-related MDT memoranda and correspondence to Consultants.
- Approves consultant invoices.
- Upon request, answers any project-related or contract-related questions.
- Approves consultant performance evaluations for projects or term contracts that are managed by the Consultant Plans Section
- Identifies and develops methods to improve efficiency and to streamline processes related to the delivery of Consultant projects.

2.2.3.2 Consultant Project Engineers

The Consultant Project Engineers (CPEs) are the focal point for the day-to-day administration and management of MDT Consultant projects. In general, the CPEs are responsible for their respective projects from initial scoping with the Consultant to construction completion. The CPEs develop contracts and amendments, provide engineering review of the project design, manage the project schedule, scope and budget, verify that the Consultant complies with all agreements, and ensures that sound engineering and design concepts are used per Federal, State and local requirements. The CPEs also perform a variety of other engineering and project management

duties as assigned by the Consultant Design Engineer and Consultant Plans Engineer. More specifically, the CPE:

- Works with the MDT functional unit or other project Sponsor to write a project-specific Request for Proposals.
- Signs all routine project-related MDT transmittal memoranda and requests for information.
- Assists the Consultant Design Engineer as needed in the administration of the solicitation and procurement process, including the development of RFPs and RFQs.
- Once a Consultant is selected, serves as the MDT Team Leader and schedules and leads the Scoping Meeting between MDT and the Consultant.
- Prepares an independent Cost Estimate and negotiates the scope, schedule and cost with the Consultant.
- Coordinates with EISS and other MDT units as needed for the MDT project scheduling system (EPS) and budget system (PPMS).
- Coordinates with the various MDT units (e.g., Internal Audit, Legal Services) and the Consultant to execute the contract.
- On “Projects” and “Special Projects”, serves as the central point of contact for all administrative and technical activities during project implementation, including:
    - + establishing the communication protocol among the involved parties;
    - + processing monthly progress reports and invoices, including ensuring costs billed are allowable under FARs and consistent with the contract;
    - + addressing contract issues (e.g., insurance, agreements with other entities, budget, scope);
    - + preparing and negotiating contract amendments, and ensuring that a project completion date does not lapse while work remains to be done;
    - + coordinating meetings between MDT and the Consultant as needed during project development;
    - + provides broad engineering oversight in addition to technical guidance;
    - + coordinating efforts to address any project-related problems, including errors and omissions on Consultant plans;
    - + preparing Consultant performance evaluations

implementing project closure; and

+ ensuring that all necessary documents, files, etc., are incorporated into the various MDT records and files (e.g., MDT Document Management System, MDT Consultant Information Systems Database, master project file).

- For a "Term Contract," supports the MDT functional unit as needed to negotiate the scope and cost with the Consultant. The CPE writes the contract for the functional unit, processes amendments, reviews assignments for compliance with the contract, and reviews invoices. The CPE serves as the central point of contact for all administrative activities during project implementation and provides guidance and administrative support as needed.

- Approves consultant performance evaluations for projects or term contracts that are managed by the CPE

- If applicable, manages the Consultant contract when the Consultant is providing construction-related engineering services.

2.2.3.3 Consultant Plans Checking Unit

The Consultant Plans Checking Unit is responsible for reviewing Consultant plans prepared for MDT projects. The Unit's Checkers serves as a technical liaison between MDT and the Consultant. They review (at various levels of detail) all elements of the Consultant's plans, but focus their attention on the roadway design portion of the plans. The MDT Road Design Section does not typically review Consultant plans. As appropriate, for other design elements of the project, the Consultant Plans Checking Unit will coordinate with the MDT unit responsible for these elements to conduct a technical review of the Consultant plans. This could include the Hydraulics Section, Geotechnical Section, Bridge Bureau, etc.

In general, the nature of the evaluation by the Consultant Plans Checking Unit is a "technical review," not an "approval" that would then transfer the burden of responsibility for technical and engineering accuracy from the Consultant to MDT. The depth of this technical review will vary from project to project. However, the Consultant is required to respond to any written comments provided by the Consultants Plans Checkers on the Consultant plans.

For more discussion on the responsibilities of the Consultant Plans Checking Unit, see Section 3.1.3.1 and Section 8.1.2.2.

2.2.4 Transportation Alternatives (TA) Section

2.2.4.1 TA Engineer

The TA Engineer is primarily responsible for the day-to-day administration of the TA and CTEP Section, which includes the TA Project Engineers (CPEs) and the TA Coordinator. The TA Engineer is responsible for the delivery of TA projects and for overall management of the TA and CTEP programs; reports directly to the Consultant Design Engineer; and is authorized to act on behalf of the CDE when necessary.

The following summarizes the responsibilities of the TA Engineer:

- Manages internal business operations for the TA Section of the Consultant Design Bureau.
- Analyzes budgets, funding, and resources to manage the TA and CTEP programs.
- Assigns the TA Project Engineers to individual Consultant projects.
- Through interaction with the CPEs, monitors the status of active Consultant projects.
- Attends any significant meetings with Consultants.
- Manages the day-to-day activities of the staff in the TA Section.
- In coordination with the CPEs, works to resolve any issues and disputes with MDT functional units, external units, etc., that do not involve an interpretation of or a change in the policies of MDT or the Consultant Design Bureau.
- Signs project-related MDT memoranda and correspondence to Consultants.
- Approves consultant invoices.
- Upon request, answers any project-related or contract-related questions.
- Approves consultant performance evaluations for projects or term contracts that are managed by the TA Section
- Identifies and develops methods to improve efficiency and to streamline processes related to the delivery of TA projects.

2.2.4.2 TA Project Engineers

The TA Project Engineers (CPEs) are the focal point for the day-to-day administration and management of MDT Consultant TA projects. In general, the TA Project Engineers are responsible for their respective projects from initial scoping with the Consultant to construction completion. The CPEs develop contracts and amendments, provide engineering review of the

project design, manage the project schedule, scope and budget, verify that the Consultant complies with all agreements, and ensure that sound engineering and design concepts are used per Federal, State and local requirements. Regarding CTEP projects, the CPEs coordinate with local agencies on project development, process reimbursements, and ensure compliance with applicable state and federal regulations for these projects. The CPEs also perform a variety of other engineering and project management duties as assigned by the Consultant Design Engineer and TA Engineer. More specifically, for TA projects, the CPE:

- Works with the MDT functional unit or other project Sponsor to write a project-specific Request for Proposals.
- Signs all routine project-related MDT transmittal memoranda and requests for information.
- Assists the Consultant Design Engineer as needed in the administration of the solicitation and procurement process, including the development of RFPs and RFQs.
- Once a Consultant is selected, serves as the MDT Team Leader and schedules and leads the Scoping Meeting between MDT and the Consultant.
- Prepares an independent Cost Estimate and negotiates the scope, schedule and cost with the Consultant.
- Coordinates with EISS and other MDT units as needed for the MDT project scheduling system (EPS) and budget system (PPMS).
- Coordinates with the various MDT units (e.g., Internal Audit, Legal Services) and the Consultant to execute the contract.
- On “Projects” and “Special Projects”, serves as the central point of contact for all administrative and technical activities during project implementation, including:
    - + establishing the communication protocol among the involved parties;
    - + processing monthly progress reports and invoices, including ensuring costs billed are allowable under FARs and consistent with the contract;
    - + addressing contract issues (e.g., insurance, agreements with other entities, budget, scope);
    - + preparing and negotiating contract amendments, and ensuring that a project completion date does not lapse while work remains to be done;
    - + coordinating meetings between MDT and the Consultant as needed during project development;
    - + provides broad engineering oversight in addition to technical guidance;

  + coordinating efforts to address any project-related problems, including errors and omissions on Consultant plans;

  + preparing Consultant performance evaluations implementing project closure; and

  + ensuring that all necessary documents, files, etc., are incorporated into the various MDT records and files (e.g., MDT Document Management System, MDT Consultant Information Systems Database, master project file).

- For MDT "Term Contracts", supports the MDT functional unit as needed to negotiate the scope and cost with the Consultant. The CPE writes the contract for the functional unit, processes amendments, reviews assignments for compliance with the contract, and reviews invoices. The CPE serves as the central point of contact for all administrative activities during project implementation and provides guidance and administrative support as needed.

- Approves consultant performance evaluations for projects or term contracts that are managed by the CPE

- If applicable, manages the Consultant contract when the Consultant is providing construction-related engineering services.

  + implementing project closure; and

  + ensuring that all necessary documents, files, etc., are incorporated into the various MDT records and files (e.g., MDT Document Management System, MDT Consultant Information Systems Database, master project file).

2.2.5 Community Transportation Enhancement Program (CTEP)

Since 1991, each Federal transportation law enacted by Congress has required that 10% of the Federal transportation funds be set aside for transportation enhancement projects. These include projects for bicycle and pedestrian improvements, historical and archeological site enhancements, etc. The transportation enhancement funds are available to local and Tribal governments in Montana under the Community Transportation Enhancement Program (CTEP), which is administered by the CTEP Section. The *MDT CTEP Manual* discusses this Program in detail.

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Chapter 3
COORDINATION

The administration and management of the MDT Consultant program requires coordination with many other internal MDT units and entities external to MDT. The necessary coordination can be segregated into three basic categories:

- The Consultant Design Bureau (Bureau) will coordinate with MDT units that are users of Consultant services.
- The Bureau will coordinate with MDT units that provide technical support services required to administer and manage the MDT Consultant program.
- The Bureau will coordinate with entities external to MDT for a variety of reasons.

Chapter 3 discusses the coordination between the Consultant Design Bureau and others. See Chapters 4 and 8 for a discussion on the communication protocol for Consultant projects.

3.1 MDT UNITS

3.1.1 Executive Level Involvement

3.1.1.1 Director/Chief Operating Officer

The involvement of the Director or Chief Operating Officer in the MDT Consultant program includes:

- serving as a permanent Voting Member of the Consultant Selection Board; and
- providing overall policy and program direction.

3.1.1.2 Highways and Engineering Division Administrator

The involvement of the Division Administrator in the MDT Consultant program includes

- serving as a permanent Voting Member of the Consultant Selection Board; and
- providing overall managerial support for the Consultant program.

3.1.1.3 Preconstruction Engineer

The involvement of the Preconstruction Engineer in the MDT Consultant program includes:

- providing approval of scope, schedule and budget of professional services at the conclusion of negotiations for the original contract and amendments via the Contract Funding Approval Memo,
- serving as a permanent Voting Member of the Consultant Selection Board, and
- providing overall managerial support for the Consultant program.

3.1.2 Users of Consultant Services

3.1.2.1 General

The following MDT units may use Consultant services:

- Highways Bureau;
- Bridge Bureau;
- Right-of-Way Bureau;
- Environmental Services Bureau;
- Traffic and Safety Bureau;
- Geotechnical Section;
- Bureaus within the Construction Program;
- Rail, Transit and Planning Division;
- Aeronautics Division;
- Districts; and
- others as necessary.

3.1.2.2 Coordination Activities

The coordination between the Consultant Design Bureau and the MDT units that use Consultant services varies somewhat. Two factors that affect the coordination are:

- the nature of the consultant service, and
- the type of Consultant contract (e.g., Project, Term, Special Project).

The following generic discussion summarizes the basic coordination with the MDT units on Consultant projects. This discussion is only intended to discuss the overall roles of the Consultant Design Bureau and the functional unit; the referenced Chapters provide detailed information on the respective responsibilities, participation and activities performed by the Bureau and the functional unit. Also note that the following discussion distinguishes between a “Project” and a “Term Contract.” For a “Special Project,” the respective roles are similar to a “Project.”

The basic coordination between the Consultant Design Bureau and a user of Consultant services follows:

1. Consultant Need (Project). Any MDT Unit or District Administrator identifies the need to hire a Consultant using the "Project" procedures as discussed in Section 6.2.1. The Consultant Design Bureau will initiate the Consultant selection process.

2. Consultant Need (Term Contract). For an in-house project, the MDT technical support units (e.g., Geotechnical Section, Hydraulics Section, Right-of-Way Bureau, Bridge Bureau, Environmental Services Bureau) may identify the need to secure Consultant services using the “Term Contract” procedures as discussed in Section 6.2.2. The Consultant Design Bureau will initiate the Consultant selection process.

3. Consultant Selection. Chapter 6 discusses the process for Consultant selection in detail. For both a Project and a Term Contract, the Consultant Design Bureau and the MDT unit participate in the selection process. The contribution by the functional unit includes membership on the Rating Panel and preparing the scope of services for the solicitation.

4. Contract Negotiations. Chapter 7 discusses this in detail. For Projects, the Consultant Project Engineer (CPE) leads the negotiation process supported as needed by the functional unit. For Term Contracts, the CPE executes the contract with support as needed from the functional unit. For Term Assignments under the Term Contract, the functional unit leads the negotiation process supported as needed by the CPE.

5. Contract Amendments. Chapter 8 discusses Contract Amendments. For Projects, the Consultant Project Engineer (CPE) leads the negotiation process supported as needed by the functional unit. For amendments to Term Contracts, the CPE leads the process to execute the amendments. For amendments to Term Assignments, the functional unit leads the process to execute the amendments to Term Assignments.

6. Consultant Project Administration. Chapter 8 discusses this in detail. For Projects, the CPE has the primary responsibility for project administration. The role of the functional unit is to answer technical questions and to perform a technical review of the Consultant deliverables; however, all communication is through the CPE.

   For Term Contracts, the functional unit takes the lead on all technical issues and is the primary point of contact. The CPE assists the Functional Manager with all contract issues (e.g., invoices, time extensions).

3.1.3 Support Services

This Section discusses the coordination between the Consultant Design Bureau and those MDT units that provide support services for the administration of the MDT Consultant Program.

3.1.3.1 Technical Support

The goal of all communication among the MDT functional units, CPE, and Consultant is to work as a team to arrive at the best solution for the users of Montana's transportation system. Effective communication among all team members is encouraged to reach this goal. To ensure continuity of the entire project team, the CPE should be involved in all communication between the consultant and MDT staff.

As stated in Chapter 6, the Preliminary Field Review Report may identify the need to secure Consultant services using the "Project" procedures. Typically, the Consultant's scope of services will include all aspects of the project similar to a MDT-designed project (e.g., structures, hydraulics, geotechnical, pavement). Applicable MDT functional units provide in-house technical expertise to the Consultant Design Bureau. Therefore, when a Consultant submits a project deliverable (reports, plans, etc.) to the Bureau, the CPE or Consultant Plans Checker will forward the Consultant deliverable to the applicable MDT functional unit for review and comment.

The Consultant Plans Checker and functional units are responsible for providing technical reviews of Consultant submittals prepared for MDT projects. The CPE has the responsibility of ensuring that these tasks are completed. Chapter 8 discusses the focus of technical reviews.

The Consultant Plans Checker submits the final plans to the Contract Plans Bureau and the CPE, and the Consultant Plans Checker facilitates all changes directly with the Consultant and other MDT units as necessary.

In most cases, for a Consultant-designed project, MDT will be responsible for certain project activities. The scope of services will clearly delineate any MDT responsibilities. Typical examples include:

- MDT will typically secure any necessary agreements (e.g., utilities, railroad, Tribal, city/county).
- MDT will typically secure any necessary right-of-way and any right-of-way agreements and easements.
- Based on the information provided by the Consultant, MDT will typically secure any necessary environmental permits/certifications/approvals (e.g., Section 404, SPA).

3.1.3.2 Internal Audit Unit

The Internal Audit Unit has a significant involvement in the MDT Consultant program. The *MDT Consultant Services Manual* documents the Unit's role in detail in:

- Chapter 7 "Contract Negotiations," and
- Chapter 11 "Accounting and Auditing."

The following briefly summarizes the key activities of the Internal Audit Unit:

- providing a resource and guidance for acceptable accounting standards and Federal and State laws and regulations that Consultants must meet;
- conduct risk assessment and provide recommendations on consultant overhead rate submitted to MDT for approval;
- reviewing the Consultant's accounting system;
- providing guidance on the *Federal Acquisitions Regulations* (FAR);
- reviewing cost proposals for compliance with MDT policies and practices (as requested);
- reviewing proposals for amendments for compliance with the terms of the original agreement (as requested);
- performing various types of audits (e.g., post-award audit, interim audit, final audit, desk review); and
- participating in the Consultant Audit Resolution Process.

3.1.3.3 Legal Services Unit

For the MDT Consultant program, the primary responsibility of the Legal Services Unit is to review proposed contracts and amendments with Consultants, develop standardized language for MDT Consultant contracts and provide general legal guidance.

The Legal Services Unit works jointly with the Consultant Design Engineer and the Montana Chapter of ACEC to develop the standard MDT contract language, which must meet all applicable State and Federal laws and regulations. See Chapter 12. The Unit also provides legal interpretations of contract clauses and takes the lead for any legal action involving a Consultant project.

3.1.3.4 District Offices

The goal of all communication among the District, CPE, and Consultant is to work as a team to arrive at the best solution for the users of Montana's transportation system. Effective communication among all team members is encouraged to reach this goal. To ensure continuity of the entire project team, the CPE should be involved in all communication between the consultant and District staff.

In general, the District Office will be invited to all project reviews, will receive project-related correspondence, and are a critical part of the project development team.

The District Administrator is often the primary project sponsor for MDT projects. In these cases, the District Administrator is involved throughout project development and is consulted on all

significant project-level decisions. Additionally, they are involved in the process to identify the need to secure Consultant services for a proposed project. The applicable District Administrator is also a pro tem Voting Member of the Consultant Selection Board.

The District Construction Engineer will notify the Consultant Design Bureau if the contract between a design Consultant and MDT needs to be modified for the Consultant to provide construction support services. The District Construction Engineer is also involved in construction issues arising during all MDT projects, including Consultant projects.

3.1.3.5 Construction Program

The Bureaus within the Construction Program will coordinate with the Consultant Design Bureau for the following:

- providing feedback to the Consultant Design Bureau on the evaluation of the design Consultant after construction is completed;
- working with the Consultant Design Bureau to resolve construction issues, including problems related to errors or omissions in Consultant plans;
- working with the Bureau and Consultant if Value Analysis is applicable to a Consultant-designed project; and
- reviewing plans and specifications (similar to other Functional Managers).

3.1.3.6 Public Information Office

Occasionally, the Consultant Design Bureau may be required to interact with the media or the public. The Bureau will work with the Public Information Office when necessary for this interaction.

3.1.3.7 Administration Division

The Consultant Design Bureau requires support services to administer its operations (e.g., purchasing, office equipment, mail). The Administration Division provides these services.

3.1.3.8 Engineering Information Services Section

The Engineering Information Services Section (EISS) is responsible for the MDT project management system (EPS). See Chapter 4 for the Consultant Design Bureau's interaction with EISS on EPS.

3.1.3.9 Management Information and Support

The CPE coordinates with the Fiscal Officer within Management Information and Support for:

- invoicing,
- payments to Consultants, and
- other issues.

3.1.3.10 Information Services Division

The Information Services Division maintains and supports the MDT Document Management System (DMS) and Consultant Information System (CIS) Database. As needed, the Consultant Design Bureau coordinates with the Division when using the DMS and CIS.

3.2 EXTERNAL UNITS

This Section discusses the specific coordination activities between the Consultant Design Bureau and units external to MDT with which the Bureau has significant interaction. In general, the Bureau has the authority to communicate directly with any of these external units or to delegate this authority to the applicable MDT unit. An exception is with Tribal governments; see Chapter 3. Unless directed otherwise, the Consultant must coordinate through the Consultant Project Engineer when communicating with these external units.

3.2.1 Federal Highway Administration

3.2.1.1 General

The Federal Highway Administration (FHWA) administers the Federal-aid program that funds eligible highway improvements nationwide. Their basic responsibility is to ensure that the State DOTs and all other recipients of Federal-aid comply with all applicable Federal laws and regulations in their expenditure of Federal funds and to ensure that the State DOTs meet the applicable engineering requirements for their proposed highway projects. FHWA maintains a Division Office within each State, and this is the primary point of contact for a State DOT.

In general, FHWA will implement the following actions (and perform additional actions as needed):

- programming Federal-aid funds for all Federal-aid projects (PE, ROW, Construction);
- reviewing all right-of-way programs;
- approving the MDT Indirect Cost Allocation Plan;
- approving all environmental documents for all Federal-aid projects;
- approving civil rights and DBE programs;
- processing Federal-aid project final vouchers; and
- approving the Statewide Transportation Improvement Program (STIP).

3.2.1.2 Partnership Agreement

FHWA and MDT have entered into a Partnership Agreement which, among many other objectives, establishes the policies and procedures that MDT must follow to secure Federal-aid funding in its administration of the MDT Consultant program. The Partnership Agreement establishes a general framework for cooperation between MDT and FHWA. The Agreement:

- outlines the respective roles, responsibilities and authorities of MDT and FHWA for the Federal-aid Highway Program (FAHP);

- identifies the controlling documents via its reference to the “Montana Delegated Program and Project Responsibilities and Control Documents Reference Guide”;

- documents FHWA project-level oversight on Federal-aid projects;

- documents FHWA program-level oversight for the FAHP in Montana; and
- identifies the MDT and FHWA performance goals and results for the FAHP in Montana.

3.2.1.3 Other

The FHWA involvement in the MDT Consultant program also includes the following:

1. CDB Documents. As part of its administration and management operations, the Consultant Design Bureau produces standardized documents including the *MDT Consultant Services Manual*. FHWA reviews and approves the *Consultant Services Manual*.

2. Consultant Selection. FHWA, although it is not a member and does not have a vote, is invited to the meetings of the Consultant Selection Board. FHWA provides guidance on issues related to the Federal-aid program.

3. Special Activities. On a case-by-case basis, FHWA may encourage or mandate that MDT pursue special activities related to the MDT Consultant program. For example, the use of a Project Quality Plan on specific projects (see Chapter 9) was based in part on FHWA involvement.

3.2.2 Local Coordination

3.2.2.1 General

MDT has a responsibility to ensure that the cities, counties, media, Tribal governments and general public remain up-to-date on all MDT projects in their locality. For a Consultant project, the CPE may delegate the authority to the Consultant to coordinate directly with local governments. Although the Consultant Design Bureau may communicate directly with the local government agencies, the MDT communication is better accomplished through the District Administrator or Public Relations Officer.

3.2.2.2 Local Consultant Projects

Occasionally, a local agency will serve as the lead for the administration of a Consultant project that is funded with State and/or Federal funds. In this case, a Consultant Project Engineer (CPE) will be assigned to the project. The city, county or Tribe must follow all MDT/FHWA policies and procedures related to the administration of a Consultant project. This refers to:

- Consultant selection (Chapter 6),
- Consultant negotiations (Chapter 7),
- project administration (Chapter 8), and
- indirect cost rate audits (Chapter 11).

The local agency must consistently coordinate with the CPE throughout project implementation. In particular, the Consultant Design Engineer must review and process for approval:

- the Consultant selection process;
- the Consultant contract before execution; and
- all contract amendments.

MDT's Local Agency Guidelines (LAG) Manual provides guidance for local agencies serving as the lead for the administration of projects utilizing State or Federal funds.

3.2.2.3 Local Working Groups

For large, complicated or controversial projects that are using Consultant services, the Consultant Design Bureau may coordinate with local working groups or committees during project implementation. MDT and the Consultant will meet with these groups or committees periodically (e.g., monthly, quarterly). MDT and the Consultant will update the local government agencies on the project status and seek information, advice, etc., from these groups/committees.

3.2.2.4 Agreements

Chapter 4 lists several agreements that may be required with Tribal governments, cities and/or counties on a MDT project. For Consultant projects, the Consultant Project Engineer determines who is responsible for processing these agreements and must ensure that they are executed.

3.2.3 Tribal Governments/Bureau of Indian Affairs

MDT coordination with the Tribal governments and/or the Bureau of Indian Affairs (BIA) will be necessary for Consultant projects that are on or in the vicinity of Tribal lands. MDT maintains Memorandums of Understanding (MOU) with the Tribal governments throughout the State that outline the government-to-government relationship, including the planning, design and construction processes for each reservation. Each construction project also requires a Project Specific Agreement (PSA) that may outline training positions, mineral and water sources or other items not included in the MOU.

The Consultant Design Bureau is not authorized to contact the head of a Tribal Council directly; the MDT Director is the only authorized point of contact, unless that Office delegates the authority elsewhere. Through the Director's Office, or the delegated authority, MDT will keep the Tribal governments informed on the project progress and will work with the Tribal governments on negotiating MOUs, PSAs and/or TEROs (Tribal Employment Rights Office) Agreements.

Many MDT projects that are within Reservation boundaries involve active communication with the Tribal government regarding project-level design elements and decisions. Interaction with the Tribal governments is led by the CPE, and may consist of regularly-scheduled meetings,

milestone meetings, or impromptu discussions to facilitate decisions needed to successfully progress the project. Prior authorization from the MDT Director is typically not required for these communications.

3.2.3.1 TERO/IOS fees

Each of the Tribal government MOUs contains language that describes the agreement between MDT and the applicable Tribe regarding application of Tribal Employment Rights Office (TERO) and Improvements or Services (IOS) fees. TERO and IOS fees will be applied to any consultant work and expenditures physically taking place within Indian Reservation boundaries. Some examples of this type of work are: geotech drilling, land survey, cultural and historical surveys, wetland delineation, on-site field reviews, R/W negotiations, construction inspection, etc. Administration of TERO/IOS fees is covered in Chapter 8.

3.2.4 Resource Agencies

Project development often requires coordination with one or more State and Federal resource agencies. These may include:

- Montana Department of Natural Resources and Conservation (DNRC)
- Montana Department of Fish, Wildlife and Parks (FWP)
- Montana Department of Environmental Quality (DEQ)
- Montana State Historic Preservation Office (SHPO)
- Montana Natural Heritage Program (MNHP)
- United States Forest Service (USFS)
- US Environmental Protection Agency (EPA)
- National Park Service (NPS)
- Bureau of Land Management (BLM)
- Bureau of Reclamation (BOR)
- United States Fish and Wildlife Service (USFWS)
- United States Army Corps of Engineers (USACE)
- US Geological Survey (USGS)
- Natural Resource Conservation Service (NRCS)

For Consultant projects where coordination with resource agencies is necessary, the chain of command is as follows: From the Consultant to the MDT Consultant Project Engineer to the MDT Environmental Services Bureau to the resource agency. When the resource agency provides comments on environmental documents, plans, permit applications, etc., the chain of command is reversed. The chain of command can be modified at the discretion of the CPE.

3.2.5 Utility Companies

The MDT Utilities Section is the primary point of contact with the Utility Companies that operate in Montana. However, the Utilities Section has delegated the authority to the CPE to perform

many day-to-day routine tasks (e.g., setting up meetings between the Utility and MDT/Consultant). However, only the Utilities Section can address major policy and legal issues (e.g., negotiating cost reimbursements, executing agreements between MDT and the Utility Company).

3.2.6 American Council of Engineering Companies

MDT recognizes the importance of communication and collaboration with the Consultant community that provides professional services to MDT. This community is represented by the Montana Chapter of the American Council of Engineering Companies (ACEC).

MDT meets with the Montana Chapter of ACEC periodically (typically quarterly) to exchange information on industry news and events, work collaboratively on issues of concern and promote positive relationships between MDT and the Consultant community. The meetings provide a good forum for the expression of ideas that can result in improvements to the MDT Consultant program. Members of the Montana ACEC also meet with the Consultant Design Engineer periodically for informal working meetings regarding business or procedural issues.

MDT is committed to working with the Montana ACEC to develop standard contract language that considers the needs and business realities of the Consultant community in addition to the legitimate interests of MDT. Therefore, the standard contract is not revised without ACEC input and opportunity for comment. See Chapter 12.

3.2.7 Metropolitan Planning Organizations (MPOs)

Occasionally, MPOs use Consultant services for projects that are administered by the Consultant Design Bureau. The Consultant Project Engineer will coordinate with the MPOs through the Statewide Urban Planning Section in the Multimodal Planning Bureau. The discussion in Section 3.2.2 on local governments would apply to coordination activities on these projects.

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Chapter 4
ADMINISTRATIVE POLICIES AND PROCEDURES

Chapter 4 discusses administrative policies and procedures that are internal to the operations of the Consultant Design Bureau.

4.1 PROJECT MANAGEMENT

4.1.1 Program & Project Management System (PPMS)

MDT uses PPMS to schedule, forecast, monitor and coordinate project development. One of the functions of PPMS is to track project phase estimates. These estimates are updated at milestone reports, in preparation for the Tentative Construction Plan (TCP) or when significant changes in the estimate occur. The CPE is responsible for maintaining project estimates in PPMS.

4.1.2 Engineering Project Scheduler (EPS)

The Department uses EPS software for scheduling and resourcing. For further information on EPS, review the *MDT EPS Guides* and consult the Engineering Information Services Section (EISS). The EPS applies to both projects designed in-house and projects designed by a Consultant.

Projects are segregated into defined activities with estimated duration and man-hours required for completion. Duration is the number of working days required to complete each activity. Activity durations are used to estimate the total length of time to develop a project. Man-hours are the anticipated number of hours that will be expended toward the completion of the activity. Man-hours are used to estimate the cost and budget required to develop a project.

Each activity has predecessor and successor activities. Arranging the activities in order from predecessor to successor creates the overall project schedule or flow chart. EISS has developed a list of defined activities with standard flow charts for typical MDT projects. The standard flowcharts for Consultant-designed projects include:

1. Consultant Design Flowchart. This flowchart is the primary flowchart used to develop projects designed by Consultants. It is used for all highway projects and rest areas and sometimes modified for use on rare projects such as corridor studies and weigh stations.

2. Environmental Consultant Wetland Mitigation Design Flowchart. This flowchart is specifically tailored to wetland projects designed by Consultants, and it includes feasibility-only projects and full wetland design projects. It was created to address the unique project development needs of a wetland project (e.g., early right-of-way involvement) and to create activity names, numbers and descriptions that better fit wetland projects.

3. In-House Design with Environmental Activities Assigned to Consultant Flowchart. This flowchart is intended for projects that are designed in-house but require the services of a Consultant to complete the environmental document. This flowchart is used for EA and EIS documents.

4. Transportation Alternatives Flowchart. This flowchart is for simple low risk projects with little to no involvement in R/W, Utilities, Bridge, etc. compared to the Consultant Design Flowchart. This flowchart is typically used for TA projects, unless the TA project is complex or involves significant involvement with multiple functional areas. Non-TA projects that fit this low-risk description may also use this flowchart.

5. For projects that don't fit one of the standard flowcharts, a custom schedule will be developed.

These flowcharts are available at the MDT website.

The discussion in the remainder of Section 4.1.2 describes the coordination between the Consultant Project Engineer (CPE) and others on scheduling for a "Project." This is one of many processes that may occur in developing a Consultant Project schedule. For a Term Assignment pursuant to a "Term Contract," the Functional Manager performs this coordination.

4.1.2.1 Project Initiation

After a project is nominated by the stakeholder and approved by the Transportation Commission, Federal funding is secured and a Design Project Manager (DPM) is designated. DPMs are almost always representatives from the Highways Bureau, Bridge Bureau or Traffic and Safety Bureau, depending on the predominant nature of the project. The DPM is responsible for reviewing the system information to ensure that it is correctly assigned based on the initial project nomination. The DPM will then conduct a Preliminary Field Review to better define the project scope and discuss the need for Consultant services, which will be documented in the Preliminary Field Review Report (see Chapter 6).

Occasionally, a project is assigned to a Consultant prior to the Preliminary Field Review. In this scenario, the Consultant scoping meeting (see Chapter 7) also serves as the Preliminary Field Review.

4.1.2.2 Establishing the Project Schedule

After the Preliminary Field Review Report is approved and placed in the Document Management System (DMS), the project will be transferred to the Consultant Design Bureau if a Consultant will be used. The Consultant Plans Engineer will assign a Consultant Project Engineer (CPE) to the project. The man-hours and activity durations are a part of the contract negotiations between MDT and the Consultant. The basic process is as follows:

1. The Consultant and CPE agree to the scope of services. See Chapter 7
2. The Consultant provides its man-hours and time durations for all Consultant activities. Consultant activities are identified as the 100's series. See Chapter 7
3. Once these values are identified, the CPE works with EISS to input this data into EPS.

4. The CPE submits the draft project schedule to the Consultant and appropriate FM's for review/input.
5. The CPE and Consultant negotiate and modify the schedule as necessary.
6. The CPE discusses the project schedule with the Project sponsor for concurrence.
7. The CPE requests a ready date from the Program Manager

4.1.2.3 CPE Coordination with Functional Units

Section 3.1.3.1 discusses the nature of the technical support that MDT functional units provide to the CPE for a Consultant-designed project. The support is one of the following basic types:

1. MDT units may be responsible for specific project activities, including:

    - agreements with Railroad and Utility Companies (MDT Utility Section),
    - right-of-way appraisals and acquisition (MDT Right-of-Way Bureau),
    - coordination with resource agencies (MDT Environmental Services Bureau) and/or
    - other

2. Many MDT Units may be responsible for reviewing Consultant deliverables and should be consulted in developing the project.

In general, the coordination among the CPE and other MDT units occurs via both structured (through EPS) and non-structured channels (outside of EPS). The CPE uses structured communication with Functional Managers (FMs) through EPS. EPS, in conjunction with the applicable flowchart, establishes and monitors the required interaction between the CPE and FMs as defined by the flowchart and its related activity descriptions. Non-structured channels include issue-driven meetings, emails, phone conversations, etc. Although the flowchart specifies certain required interactions (e.g., PIH meeting), the non-structured interaction is largely determined at the discretion of the CPE.

4.1.2.4 Project Implementation

The CPE serves as the MDT Project Manager for project implementation and is responsible for all interaction with EPS. The CPE also performs similar Project Manager duties that the DPM would perform for an in-house designed project. As the project develops, the CPE is responsible for:

1. Changes in Scope. A major change in the project scope will likely result in the need to adjust project resources. The CPE will be responsible for initiating these changes in EPS.

2. Cost Estimates. Although not related to EPS, the CPE will update construction cost estimate updates to the PPMS, at project milestones and when necessary.

3. CPE Status/Monitoring. For the project schedule, the CPE monitors the following and updates the status preferably once a week, but at least once every two weeks:

   - the EPS 100 series activities, which are the Activities that the Consultant is responsible for; and
   - the EPS 200 series activities, which are the MDT Activities that the CPE is responsible for.

4. Functional Managers. For the project schedule, the Functional Managers are responsible for:

   - updating the status of their activities in EPS once every two weeks at a minimum and preferably once a week; and
   - notifying the CPE of any proposed change to project scope schedule or budget,

4.1.3 Financial Management System

The Project Analysis Bureau operates the MDT Financial Management System (FMS), which is coordinated with the Statewide Transportation Improvement Program (STIP). The purpose of FMS is to manage and monitor all transportation-related capital and operating project budgets to support the Construction Program. As discussed in Section 4.5.3, the Project Analysis Bureau assigns a unified project number (UPN) to all projects for project accounting. The Consultant Project Engineer uses the UPN to track budgets for Consultant-designed projects.

4.2 INTERNAL COMMUNICATIONS

This Section provides internal "housekeeping" guidance on MDT correspondence for Consultant Design Bureau staff. Chapters 7 and 8 discuss correspondence and communication with Consultants.

4.2.1 Project-Related Correspondence

4.2.1.1 Outgoing Mail

Memoranda are used by MDT to provide written, interdepartmental information between the various Bureaus, Sections, Districts, etc. The memoranda are used to distribute project reports, process approval requests, request project information, submit project information, etc. Project-related letters to Consultants are used to disseminate contract information, request information, submit approvals, etc.

Prepare all memoranda in the standard format including the MDT logo. Complete the heading including the project number, project name and unified project number. For non-project correspondence, the subject line should provide a brief but informative title of the memorandum's purpose.

For letters, use the standard State letter template, which is available on the MDT Intranet.

4.2.1.2 Incoming Mail

For incoming mail, the recipient and/or the Bureau's Administrative Assistant will review incoming correspondence to determine the appropriate distribution. Use the following procedure:

1. All incoming mail will be stamped and dated by the Administrative Assistant.

2. The Administrative Assistant will forward the mail to the appropriate individual. This will usually be the Consultant Project Engineer or TA Engineer, but may include others (e.g., Consultant Design Engineer) depending on the document.

3. In general, the Administrative Assistant and/or the recipient will determine the appropriate distribution of the document. Any document that is identified as a master file copy is always "green stamped." The recipient will determine if the correspondence is a master file copy or not and will "green stamp" the document themselves before sending the item back to the Administrative Assistant.

4. The document will be returned to the Administrative Assistant for master filing and/or distribution, if necessary.

4.2.1.3 Project-Related Correspondence

Project-related correspondence must be distributed to all potentially impacted functional areas, including the project Sponsor, as appropriate. The following provides more specific guidance for processing project-related correspondence:

1. Correspondence generated within Bureau. If the correspondence is for internal distribution, the Administrative Assistant or CPE will "green stamp" the original, make the appropriate number of copies, distribute the copies and file the original. If the correspondence is for external distribution, the Administrative Assistant will make a copy of the original, "green stamp" the copy, make the appropriate number of copies for internal Bureau distribution, mail the original and file the "green-stamped" copy.

2. Correspondence generated by MDT Unit external to Bureau. The generating MDT Unit retains the green-stamped original in its filing system. For the original received by the Bureau, the Administrative Assistant will apply the Bureau's distribution stamp and determine the recipients. The CPE will check which file the correspondence is destined for and, after internal Bureau distribution, the Administrative Assistant will file the correspondence.

3. Correspondence generated by sources external to MDT. The Administrative Assistant will apply the Bureau's distribution stamp and determine the recipients. The CPE will check which file the correspondence is destined for and, after internal Bureau distribution, the Administrative Assistant will apply the "green stamp" and file the correspondence.

4.2.2 Signature/Distribution for Project-Related Correspondence

For standardized project-related memoranda and letters, the Consultant Design Bureau has established its protocol with respect to signature authority and distribution. Distributions should reference the Department's standard templates when applicable.

4.2.2.1 Signature by Consultant Design Engineer

Use the following procedures:

1. Contract Funding Approval Memo. The memorandum is written from the Consultant Plans Engineer through the Consultant Design Engineer to the Preconstruction Engineer. The memorandum is submitted to the Consultant Plans Engineer from the CPE. A carbon copy is not required.

2. Consultant Contract Award Letter. This letter is written from the Consultant Design Engineer to the selected Consultant. A carbon copy is provided to the project file and other personnel as required.

3. Consultant Contracts and Amendments. Per MDT Signature Authority Policy, the Consultant Design Engineer may sign Consultant contracts and amendments for the Department.

4. Consultant Contract Closeout Letter. This letter is written from the Consultant Design Engineer to the Consultant. A carbon copy is provided to the project file and other personnel as required.

5. Scope of Work. The following applies:

   - Distribution Memo for Comment. The memorandum is written from the Consultant Design Engineer to Distribution. The memorandum is submitted to the Consultant Plans Engineer from the CPE.

   - Approval Memo. The memorandum is written from the Consultant Plans Engineer to the Preconstruction Engineer. The memorandum is submitted to the Consultant Plans Engineer from the CPE. The Consultant Design Engineer may approve this memo for the Preconstruction Engineer.

6. Design Exceptions. The following applies:

   - FHWA Projects of Division Interest (PoDI) Approval Letter. The letter is written by the consultant to the CPE and Consultant Plans Engineer for signature by the FHWA Operations Engineer and Consultant Design Engineer.

   - Non-PoDI Projects Approval Memo. The memorandum is written by the consultant to the CPE and Consultant Plans Engineer for signature by the Consultant Design Engineer

7. Audit Reports. See Chapter 11 for a discussion on the complete audit process.

8. Motor Pool. The Consultant Design Engineer, Consultant Plans Engineer or TA Engineer will sign Motor Pool Vehicle Requisition and Trip Ticket requests. If they are not available, move up the chain of command.

4.2.2.2 Signature by Consultant Plans Engineer

Use the following procedures:

1. Alignment and Grade Report Approval Memo/Plan-in-Hand Report Approval Memo/Final Plans Review Report Approval Memo. The memorandum is written from the Consultant Plans Engineer to the Consultant Design Engineer.

2. Contract Documents. The following applies:

   - Contract Cover Letter. This letter transmits the contracts to the Consultant for its signature. The letter is written from the Consultant Plans Engineer to the Consultant. A carbon copy is provided to the contract file and other personnel as required.

   - Contract Notice-to-Proceed Letter. This letter provides the Consultant with a written Notice-to-Proceed and transmits the executed contract to the Consultant. The letter is

written from the Consultant Plans Engineer to the Consultant. A carbon copy is provided to the contract file and other personnel as required.

- Contract Amendments. This letter is written from the Consultant Plans Engineer to the Consultant. A carbon copy is provided to the contract file and other personnel as required.

3. Invoices. The Consultant Project Engineers will approve the invoices for services received. The Consultant Plans Engineer will approve the invoices for payment.

4.2.2.3 Signature by Consultant Projects Engineer (CPE)

Use the following procedures:

1. Consultant Activity Transmittal Memo. This memorandum accompanies the transmittal of Consultant 100 level activity submittals to units within MDT. The memorandum is written from the Consultant Project Engineer to the appropriate Departmental personnel (Bureau Chief, District Administrator, District Geotechnical Manager, etc.). A carbon copy is provided to the project file. An e-copy is provided to the Consultant Plans Engineer, the Consultant Plans Checker Supervisor, and other personnel as required.

2. Invoices. The Consultant Project Engineers will initial received for project invoices, and initial approved for term contract invoices.

4.2.2.4 Signature Designee on Documents

The Consultant Design Bureau staff may sign documents on behalf of their supervisors. Use the following procedures:

1. Supervisory personnel should designate one or more responsible staff (as required by circumstances) to sign on their behalf during absences.

2. The designated staff should sign their own names to the documents rather than signing the supervisor's name and adding their own initials.

3. Where the supervisor's name or title is printed on the document, Bureau staff should sign their own names with the word "for" preceding the printed name or title of the supervisor. For example:

   James Smith *(signature)*
   for Thomas Jones
   Consultant Design Engineer

4.2.3 Outside Correspondence

4.2.3.1 General

Prepare all written materials for sources outside of the Department on MDT letterhead. However, letters for the Governor's signature will be on the Governor's letterhead. MDT letters will often be written to individuals without a transportation background; use terminology that is understandable to the audience. Correspondence to AASHTO, FHWA, TRB, etc., should use standard highway engineering terminology.

4.2.3.2 Signatures

In general, all letters will be forwarded though the chain of command to the individual signing the correspondence. The following presents MDT policy for signing outgoing letters:

1. Letters to US Congressmen, Governor, legislators, County Commissioners, Mayor and elected officials will be signed by the Director or designee.

2. Letters responding to citizen inquiries will be signed by the Consultant Design Engineer, District Administrator or a higher level, depending on who initially received the letter.

3. Letters that provide non-sensitive information, including routine project-related information, to towns, counties or other local officials should be signed by the Consultant Plans Engineer or designee.

4. Information to Federal and State agencies, AASHTO, TRB, other State DOTs, etc., should be signed by the Engineering Division Administrator or designee.

5. For letters to a Consultant, the Consultant Design Engineer will sign the Award Letter and Contract Closeout Letter. The Consultant Plans Engineer will sign project-related letters to Consultants when the subject matter is routine; the Consultant Design Engineer will sign project-related letters to Consultants when the subject matter is not routine. For all other letters to Consultants, the signature authority is at the discretion of the Consultant Design Engineer.

4.2.3.3 Distribution

The distribution of an outside letter will vary according to the content of the letter. In general, the individual that generates the correspondence will determine who is on the distribution list.

4.2.4 Legislature and Media Contacts

When contacted by news media, legislators, legislative audit staff, other government officials, etc., use the current MDT policy for signature authority, processing and distribution.

4.2.5 Electronic Communications

4.2.5.1 General

MDT staff are encouraged to use email, the internet and the intranet to accomplish their duties. However, access to electronic communication imposes certain responsibilities on the user.

4.2.5.2 Status

In general, the policies and procedures that apply to hard-copy communication also apply to electronic communication. Assume that every email will become public knowledge. If there is litigation, the law makes no distinction between hardcopy or electronic communication.

4.2.5.3 Electronic File Protocol

Current MDT Policies and procedures should be followed for managing the use of the electronic filing system for MDT design projects. The Consultant Project Engineer is responsible for setting up and maintaining an electronic file folder for all electronic project-related documents. Any project-related email correspondence should be copied to the appropriate e-folder. All emails should contain the project number, project name and unified project number.

Any project-related electronic email that is considered a matter of record must be printed, “green stamped” and filed accordingly. The CPE must do this during the course of the project, not at project conclusion.

4.2.6 Telephone Calls

Documenting telephone calls requires judgment. If the conversation involves the project schedule, budget, scope, etc., then written documentation may be appropriate. This would also apply if, for example, the Consultant Project Engineer provides direction to the Consultant or if a significant decision is made in a telephone conversation.

4.2.7 Meetings

4.2.7.1 General

Meetings must be well planned, attended by the proper individuals, and the information disseminated to the affected people in a timely manner. The individual arranging the meeting should prepare an agenda and prepare minutes of the meeting. This may be accomplished by either the CPE or Consultant.

4.2.7.2 Project Meetings

Project meetings include scoping meetings, negotiations meetings, project review meetings, etc. Chapters 7 and 8 discuss these meetings in detail. The CPE will arrange all project meetings, or the CPE, at his/her discretion, can request that the Consultant arrange the meetings (e.g., date, time, place, attendees).

4.2.8 Monthly Invoices/Progress Reports

Chapter 8 discusses MDT requirements for Consultant submission of monthly invoices and progress reports.

4.2.8.1 Projects and Special Projects

For Projects and Special Projects, the Consultant is typically required to submit one original and one copy of the monthly invoice, and one original and two copies of the progress report. The CPE will use the following internal procedure to process these:

1. Received. The Administrative Assistant will stamp and date the original invoice, the copy of the invoice and one copy of the progress report on the day it is received by the Bureau. The Administrative Assistant will also apply the payment/approval stamp to the original invoice. The Administrative Assistant will send the progress report that was stamped and dated to the district for their information.

2. Approval. The CPE will review the invoice/progress report, enter the invoice into CIS and, if acceptable, initial and date the payment approval stamp for services received. Both the original and the copy of the invoice, along with two copies of the progress report (one progress report attached to each invoice) is then submitted to the Consultant Plans Engineer. The Consultant Plans Engineer will approve the invoice/progress report for payment by signing and dating the payment/approval stamp.

3. Payment. The Consultant Plans Engineer will transmit both invoices and both progress report to the Engineering Division Fiscal Officer for payment.

   Note: Per MCA and per the standard contract, MDT will pay invoices with 30 days of receipt of a properly completed invoice.

4. Distribution. After the payment is processed, the Fiscal Officer will send the copy of the invoice and progress report to the Consultant Design Engineer; these documents are placed in the contract file by the Administrative Assistant. The Fiscal Officer will keep the original invoice and one progress report.

4.2.8.2 Term Contracts

For Term Assignments pursuant to a Term Contract, the Consultant is typically required to submit one original and two copies of the invoice, and one original and two copies of the progress report to the MDT Functional Manager (FM) for the contract (Term Contract Manager). The FM will use the following procedure to process these:

1. Received. An employee within the functional unit will stamp and date the original invoice and the copies of the invoice on the day it is received by the unit. The functional unit will also apply the payment/approval stamp to the original invoice.

2. Approval. The FM will review the invoice/progress report, enter the invoice into CIS and, if acceptable, initial and date the payment approval stamp for services received. The FM will keep one copy of the invoice/progress report for their files. The original and one copy of the invoice, along with the two progress reports (one progress report attached to each invoice) is then submitted to the CPE. The CPE will approve the invoice/progress report for payment by signing and dating the payment/approval stamp.

3. Payment.

    a. For services within the Engineering Division: The CPE will transmit both invoices and both progress reports to the Consultant Plans Engineer to be forwarded to the Engineering Division Fiscal Officer for payment.

    b. For services within the Rail, Transit, and Planning Division: The CPE will retain the copy of the invoice/progress report for the term contract file. The original invoice/progress report is transmitted to the Rail, Transit, & Planning Division Fiscal Officer for payment.

    Note: Per MCA and per the standard contract, MDT will pay invoices with 30 days of receipt of a properly completed invoice.

4. Distribution.

    a. For services within the Engineering Division: After the payment is processed the Fiscal Officer will send the copy of the invoice and progress report to the Consultant Design Engineer; these documents are placed in the contract file by the Administrative Assistant. The Fiscal Officer will keep the original invoice/progress report.

    b. For services within the Rail, Transit, and Planning Division: After the payment is processed the Fiscal Officer will keep the original invoice/progress report.

4.2.8.3 Business Process

The following documents the MDT business processes for processing Consultant payments:

- Figure 4.2-A “Invoice Process for Projects”

- Figure 4.2-B “Invoice Process for Term Contracts managed within the Engineering Division”
- Figure 4.2-C “Invoice Process for Term Contracts managed within the Rail, Transit, and Planning Division”

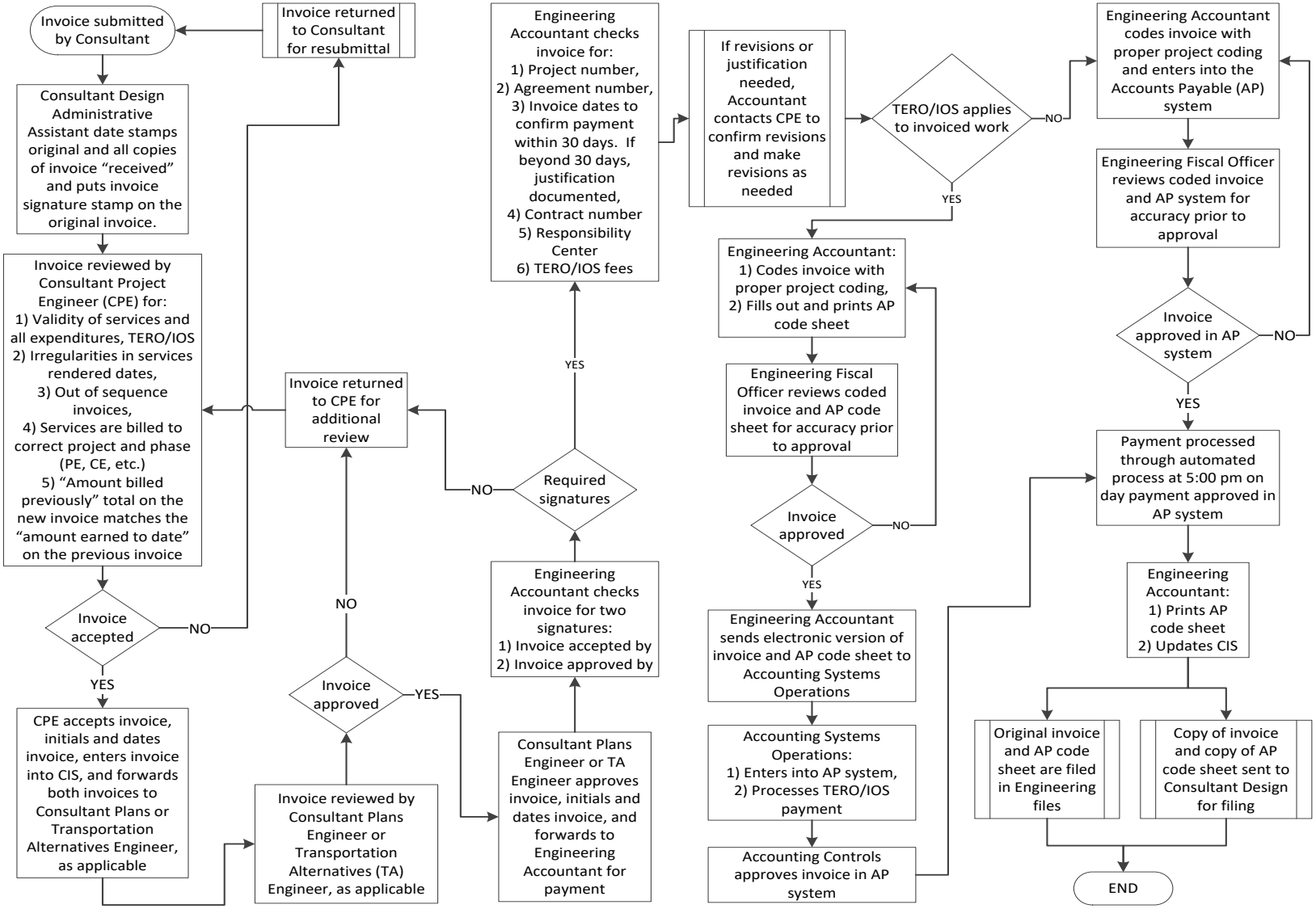


Figure 4.2-A — INVOICE PROCESS FOR PROJECTS

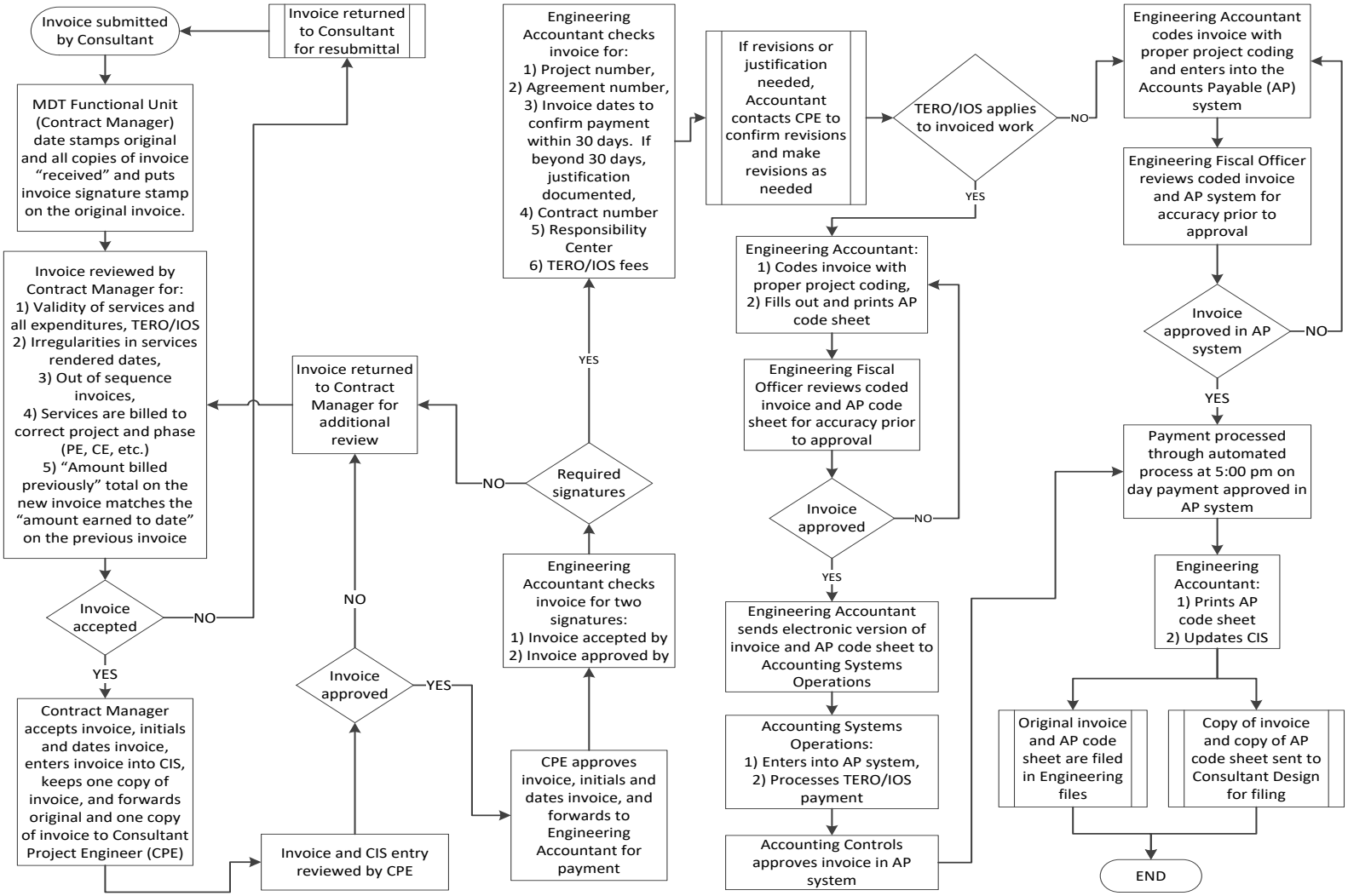


Figure 4.2-B — INVOICE PROCESS FOR TERM CONTRACTS (managed within Engineering Division)

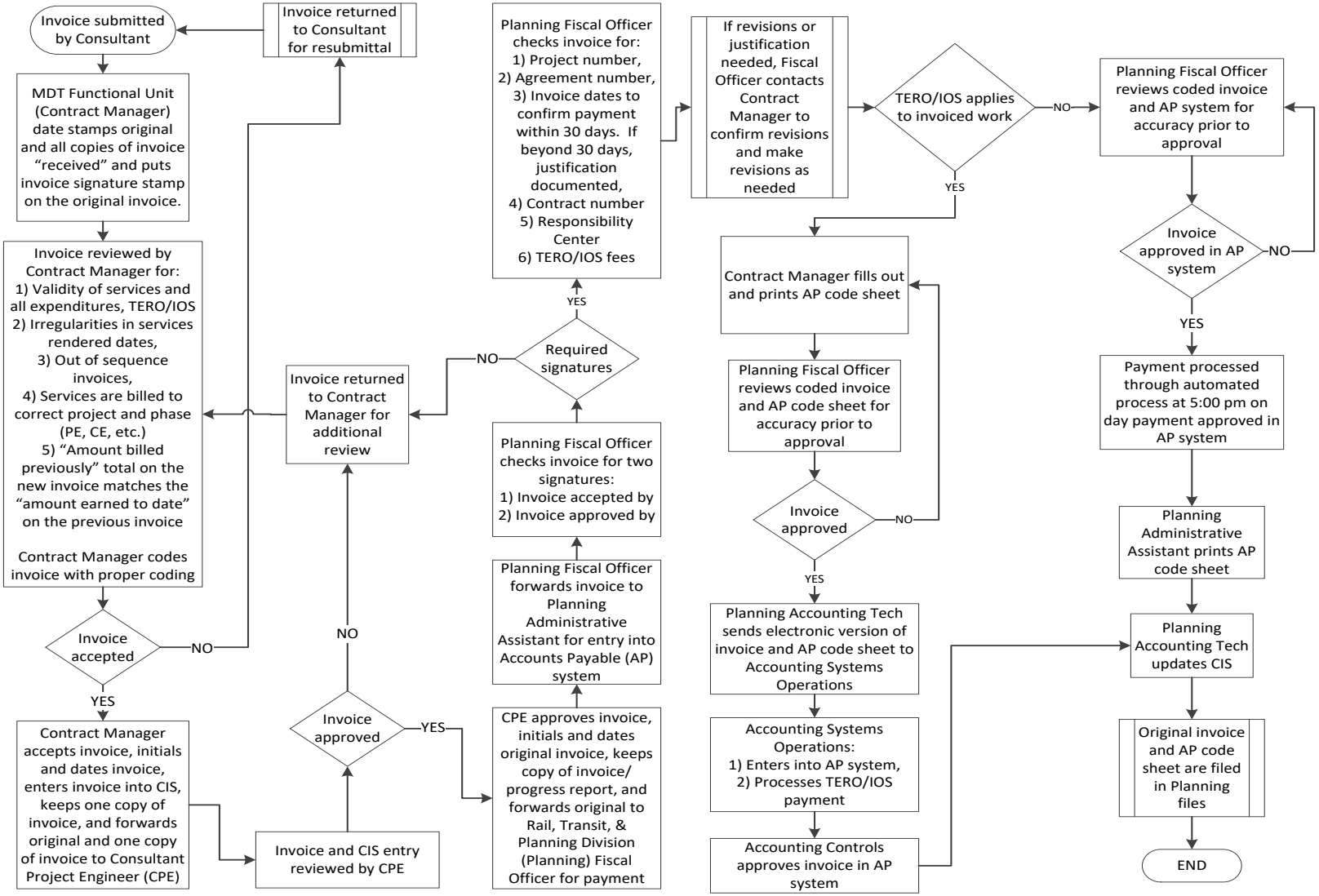


Figure 4.2-C — INVOICE PROCESS FOR TERM CONTRACTS (managed within Rail, Transit, & Planning Division)

4.3 RECORDS AND FILES

4.3.1 Retention of Information

All information must comply with MDT records management policies and State Law (in particular, Title 2, Chapter 6 of Montana Code Annotated). The most recent MDT Management Memo on Records Management can be found on MDT's webpage (http://www.mdt.mt.gov/business/consulting/design_memos.shtml).

4.3.2 Contract-related Information.

Contract-related information refers to both hard-copy and electronic information.

Records include:

- Original contract
- Amendments
- Invoices and Progress Reports
- Approval memos
- Other contract-related records (i.e. proof of insurance, cost disclosure statement, etc.)

Reference materials include:

- Emails related to contracting and managing the contract scope, schedule and budget

Specifically for the solicitation of consultant services, supporting documentation of the solicitation, proposal, evaluation, and selection of the consultant shall be retained in accordance with the provisions of 2 CFR 200.333. In part, 2 CFR 200.333 states that these records must be retained for three (3) years after the date of submission of the final expenditure report (invoice), unless any litigation, claim, or audit is started before the expiration of the 3-year period. In these circumstances, the records must be retained until all litigation, claims, or audit findings have been resolved and final action taken.

4.3.2.1 Consultant Information System (CIS) Database

The CIS database provides a central, automated source for the Consultant Design Bureau to facilitate its responsibilities to monitor and manage the work performed by Consultant firms under contract to MDT. CIS provides a centrally managed application for contracts, which is intended to:

- improve the management of contracts and term contracts,
- enhance the efficiency of contract information search and retrieval, and
- segregate data into meaningful formats.

The CIS database is only for use by MDT staff. The database information can be segregated into multiple formats (e.g., by Consultant, by project type) to provide meaningful comparisons for Bureau staff evaluation.

4.3.2.2 CDB Share Drive

The CDB share drive is an electronic storage area that stores information, correspondence, emails, contracts, term contracts and project-related documents. Only the Consultant Design Bureau staff is authorized to access the share drive. Once the contract is closed, the CPE should go through the share drive regarding contract-related information. All information deemed as "record" should be retained. Information deemed as "reference material" should be purged from the share drive.

4.3.3 Project-related Information.

Project-related information refers to both hard-copy and electronic information.

Records include:

- Reports
- Plans, specifications, and estimates
- Studies
- Memos
- Deliverables
- Emails involving project decisions
- etc.

Reference materials include:

- Draft reports
- Intermediate plans, specifications, and estimates
- Emails related to managing the project

4.3.3.1 MDT Document Management System (DMS)

The DMS is the Department's standard location for electronically storing its project-related documents (i.e., "cradle to grave") for both preconstruction and construction. The DMS is used for both in-house designed and Consultant-designed projects; however, DMS does not store Consultant contracts. The system serves as a single source of project records to provide all authorized MDT personnel with access to needed project information. DMS is the location for permanent records. All final plans, reports, and design documentation are required to be placed in DMS. The Information Services Division maintains, updates and supports DMS; see the *MDT Document Management System User's Manual* for more information.

4.3.3.2 Consultant Design Bureau Vault (CDB Vault)

The CDB vault is an electronic storage area that stores "draft" Consultant correspondence and project-related documents. All MDT staff is authorized to access the vault. For files that are "Drafts" MDT's retention policy is to retain only if deemed useful for historical purpose. After the project is closed the need for historical reference is typically no longer required. DMS is the location for permanent records. All final plans, reports, and design documentation is required to be placed in DMS.

4.3.3.3 CDB Share Drive

The CDB share drive is an electronic storage area that stores information, correspondence, emails, contracts, term contracts and project-related documents. Only the Consultant Design Bureau staff is authorized to access the share drive. Once the contract is closed, the CPE should go through the share drive regarding project-related information. All information deemed as "record" should be retained. Information deemed as "reference material" should be purged from the share drive.

4.3.3.4 Project-Specific Documentation

The Consultant Design Bureau maintains several hardcopy files to store its project-specific documentation. At the conclusion of project construction, files are purged to eliminate non-master file copies, and then all of these files are transferred to the MDT Records Management Section for permanent storage. Record retainage follow MDT's Records Management Policy.

4.3.3.5 Master Project File

The master project file is a hardcopy file maintained by the Consultant Design Bureau for Projects and Special Projects. This file includes the project-related information (e.g., reports, correspondence, surveys). For Term Assignments, project-related documents are stored by the applicable functional unit.

4.3.3.6 Master Contract File

The master contract file is a hardcopy file maintained by the Consultant Design Bureau. This file includes contract-related documents (e.g., contracts, amendments, invoices). The Consultant Design Bureau maintains the master contract file for Projects, Special Projects and Term Contracts.

4.3.3.7 Other Project-Related Files

The Consultant Design Bureau maintains other files as needed on a project-by-project basis.

4.3.4 Audit File

The Consultant Design Bureau maintains the audit file for MDT Consultants, which is a hardcopy file. The data is segregated by Consultant firm (subconsultant data remains separate) and calendar year. The audit file may include for each Consultant/subconsultant:

- financial compliance audits,
- performance audits, and
- accounting system audits.

4.3.5 Indirect Cost Rate Audit File

The Consultant Design Bureau maintains the indirect cost rate (i.e., overhead rate) file for MDT Consultants, which is a hardcopy file. The data is segregated by Consultant firm.

4.4 PROJECT NUMBER EXPLANATION

4.4.1 Federal-Aid Projects

Example Project: F 1-9(23)565	
Element	**Comment**
F = Funding Designation	It generally designates the roadway system or type of work being performed.
1 = Route Number	Refer to the Montana Federal-Aid Log for route numbers and descriptions. The route number may be an Interstate, Primary, Secondary or Urban Route.
9 = County Designation	Sequential County number in which the route has traveled through. In this project, the number 9 is the 9th County on this route, normally increasing from the West to East and South to North.
23 = Agreement Number	Sequential number relating to the number of projects performed in this route/county section.
565 = Milepost on Route	Refer to the Montana Federal-Aid Log. Specific for that segment of the route, normally increasing from West to East and South to North.

4.4.2 State-Funded Only Projects

The prefix for all 100% State-funded projects is “SF.”

4.4.3 Uniform Project No./Control No.

The Project Analysis Bureau assigns project numbers to all MDT projects. The control number (CN) is a 4-digit code. The unified project number (UPN) is the CN plus 3 digits to identify the MDT unit to which the project is assigned. The UPN is the project accounting number that ties together all phases of a project.

4.5 PROJECT WORK TYPE CODES

A list of the standardized project work type codes used by MDT is available on MDT's webpage (http://www.mdt.mt.gov/other/webdata/external/EISS/Work_Type_Codes/Workcodes.PDF). The applicable project work type number will be determined during the Preliminary Field Review. It may be revised for the Scope of Work Report.

EISS will use the Preliminary Field Review and Scope of Work Reports to input the project work type number into the Document Management System. Changes to the project work type after the Scope of Work Report has been approved must be agreed upon by EISS and the Fiscal Officer. If there are any questions concerning assigning or changing the project work type number, contact EISS.

4.6 AGREEMENTS

MDT projects often require legal agreements between MDT and other entities to ensure that the expectations of all parties are met. For example, legal agreements may be required for defining the maintenance responsibilities between MDT and a local agency. Examples of agreements may include:

- City Construction Agreement (State-maintained routes),
- City-County Construction Agreement (city-maintained routes),
- City Construction Agreement (city-maintained routes),
- County Resolution (secondary routes),
- Railroad Agreement,
- Utilities Agreement,
- Right-of-Way Agreement(s), and
- Tribal Agreement.

MDT units other than the Consultant Design Bureau are typically responsible for negotiating and executing agreements. However, the Consultant Project Engineer is responsible for ensuring that all applicable agreements are executed for each Consultant-designed project.

4.7 EMPLOYEE POLICIES AND PROCEDURES

The Montana Department of Administration establishes personnel policies and procedures for employees of the Montana State government. The Department has published several manuals, guides, memoranda, policies, etc., to document the rights, protection and responsibilities of State employees. The MDT Human Resources Division has supplemented the Department of Administration's documents with its internal publications that address a variety of personnel issues specifically for MDT.

4.7.1 Conflicts of Interest

The Montana Department of Transportation has an Ethics Model Policy which includes conflicts of Interest. The Policy requires employees to disclose any conflicts of interest and comply with the policy by signing the Conflict of Interest Annual Disclosure Form submitted to the MDT Internal Audit Unit. The Consultant Design Engineer is notified of the conflict of interest. An evaluation of the conflict of interest is completed by Consultant Design Engineer and other appropriate staff necessary to determine if proper controls are in place or to mitigate the identified conflict. Documentation is maintained and is available upon request.

MDT's process to ensure conflicts of interest are addressed:

1. Employee fills out conflict of interest form annually, or at any time a conflict of interest is perceived.
2. Consultant Design Engineer is notified of potential conflicts of interest.
3. Consultant Design Engineer evaluates conflict of interest and ensures proper controls are in place.
4. If there is a conflict of interest with the Consultant Design Engineer, the Preconstruction Engineer ensures proper controls are in place.

Chapter 5
RESERVED

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Chapter 6
CONSULTANT SELECTION

6.1 GENERAL

6.1.1 MDT Objective

Chapter 6 documents the MDT selection process to ensure that all interested Consultants have access to the information required to pursue opportunities for professional engagements with MDT. The Consultant selection process is intended to provide MDT with access to the local and national Consultant community. For each project, this maximizes the probability that the Department will select the Consultant that will best deliver the services needed to meet the project objectives.

6.1.2 Types of Professional Services

6.1.2.1 Engineering, surveying and architectural (ESA) services

Engineering, surveying and architectural (ESA) services, also referred to as “engineering and design related services”, refers to professional services such as program management, construction management, feasibility studies, preliminary engineering, design engineering, surveying, mapping, or architectural related services. Montana law defines these services as activities within the scope of the general definition of professional practice and licensed for the respective practice as an architect or an engineer or land surveyor. For engineering, surveying and architectural (ESA) services, MDT uses a qualifications-based process to select consultants to perform ESA services for the Department.

6.1.2.2 Non-ESA services

Non-ESA services include all services not categorized as an ESA service. Some examples of these types of services include right-of-way acquisition, geotechnical drilling, cultural resource surveys, biological resource assessments and wetland monitoring. For non-ESA services, MDT considers cost in its selection process, in addition to qualifications.

6.1.3 Types of Consultant Contracts

All MDT Consultant contracts are one of three basic types, as discussed below.

6.1.3.1 Project

Project contracts are typically contracts for professional services for a specific project. These projects typically require engineering design and analyses and result in the preparation of plans, specifications and cost estimates for the construction or reconstruction of a highway facility.

Examples include road design and bridge design projects, which, in addition to the road design/bridge design expertise, may require expertise in hydraulics, traffic engineering, geotechnical engineering, pavement design, environmental studies, etc.

Project contracts may be solicited, negotiated, and administered as a single phase or multiphase contract.

Single Phase: For single phase contracts, the consultant is scoped during initial contract negotiations to design the project from an early stage through delivery of a final PS&E package (typically). There is a single contract negotiations stage which includes all of the services required to complete the project design. The original solicitation through which the consultant is selected must contain the overall scope of services required. This process is most-often used when the scope of the project is well-defined from the outset, there is very low risk of selecting a no-build alternative, and there is low risk of major changes in the scope of the project during the design process.

Multiphase: For multiphase contracts, the consultant is scoped during initial contract negotiations to design the project from an early stage through an intermediate project milestone (typically the Alignment & Grade or Scope of Work stage). At completion of this project milestone, contract negotiations are then completed to advance the project to the next stage (typically delivery of a final PS&E package). Despite there being multiple contract negotiation phases in this method, the original solicitation through which the consultant is selected must contain the overall scope of services required to complete all phases. This process is most-often used when the scope of the project is not clearly defined from the outset, there is moderate to high probability of selecting a no-build alternative, or there is moderate to high risk of major changes in the scope of the project during the design process.

6.1.3.2 Term Contract

Term Contracts, also known as Indefinite Delivery/Indefinite Quantity (IDIQ) contracts, are ongoing contracts for similar-type work on numerous MDT projects. Term Contracts use Consultants to perform services on an as-needed basis. These contracts typically extend for a period of two-three years, but cannot exceed a total of five years, including contract extensions. Term contracts enable the Department to quickly procure needed services to meet project development needs through a Term Assignment. Typically, Term Contracts are used by MDT functional units (e.g., geotechnical, hydraulics, surveying, right-of-way, environmental) for MDT-designed projects when the MDT unit lacks adequate resources or expertise to complete the work within the project schedule.

6.1.3.3 Special Project

Special Projects are used to perform special studies, analyses, etc., or to prepare products that have a general use for MDT. These projects are not typically tied directly to a highway construction project; however the services provided may result in the nomination of such a project. Examples include:

- the preparation of manuals;
- traffic engineering studies (e.g., speed studies, school zone studies); and
- safety engineering improvement studies.

6.1.4 MDT Website

The MDT website (http://www.mdt.mt.gov/business/consulting/) provides the following information of interest to Consultants:

- upcoming projects proposed for Consultant solicitation,
- current Requests for Qualifications and Requests for Proposals (RFQs & RFPs),
- recently selected Consultants,
- consultant performance evaluation criteria,
- the MDT Consultant Prequalification Roster,
- consultant mailing list instructions,
- MDT manuals, guides, specifications, special provisions, detailed drawings, and forms and templates,
- errors and omissions policies and procedures,
- links to other MDT programs,
- audit and indirect cost rate policies and procedures,
- agency contact information, and
- other miscellaneous information.

6.1.5 Consultant Mailing List

Consultants interested in providing services may elect to be included on MDT's consultant mailing list. MDT uses email as one method to communicate to the consultant community things such as current RFQ or RFP solicitations, changes in policies and/or procedures, etc. While participation in MDT's consultant mailing list is not a prerequisite for doing work with MDT, it is an effective method for consulting firms to stay informed of current MDT advertisements and practices.

6.1.6 Advertisement for Services

For contracts utilizing the open solicitation method (6.3.1.2) of procurement, MDT advertises for Consultant services via several methods:

- on the MDT's website (http://www.mdt.mt.gov/business/consulting/rfq.shtml),
- email solicitation to all consultants on the MDT consultant mailing list, and
- on the State of Montana's ePass website (https://app.mt.gov/epass/Authn/selectIDP.html).

In addition to the above, MDT may also use direct mail or email to a Consultant not on the mailing list for which MDT has knowledge that the Consultant may be interested in the project.

For contracts utilizing the short-list solicitation method (6.3.1.2) of procurement, MDT contacts the short-listed firms directly via email and direct mail to inform them of the solicitation.

6.1.7 Consultant Selection Board

The authority to select Consultants to provide professional services to MDT and approve MDT's consultant prequalification roster is vested in the Consultant Selection Board (Board), excluding Small Purchase procedures. Membership on the Board includes:

- Consultant Design Engineer, Chair (Non-Voting Member),
- Director (Permanent Voting Member),
- Chief Operating Officer (Permanent Voting Member),
- Highways and Engineering Division Administrator (Permanent Voting Member),
- Preconstruction Engineer (Permanent Voting Member),
- Highways Engineer (Permanent Voting Member),
- Bureau Chief or designee, as applicable to the contract (Pro tem Voting Member),
- District Administrator, as applicable to the contract (Pro tem Voting Member),
- local agency representative, as applicable to the contract (Pro tem Voting Member), and
- others as necessary, as determined by the Consultant Design Engineer.

A minimum of three Voting Members are required to represent a quorum (i.e., to transact business). The Chair prepares Board Summary Meeting Minutes to record all Board actions.

The purpose of the Consultant Selection Board is to provide oversight for Consultant Selection and major contract amendments. For contracts utilizing the short-list solicitation method of procurement, the Board selects the short-listed firms, with input from staff as appropriate, and after proposal scoring, to act on staff's recommendation regarding the most qualified firm(s) for the work. For contracts utilizing the open solicitation method of procurement, the role of the Board is to act on staff's recommendation regarding the most qualified firm(s) for the work, and in the case of Term Contracts, the duration and contract value. The role of the Board in regards to MDT's Prequalification Roster, is to act on staff's recommendation regarding the composition and ranked order of consultant firms. In any of these cases, the Board may choose to participate in consultant interviews and/or presentations

An additional responsibility of the Board is to approve all significant project contract amendments as described in Chapter 8.

6.1.8 Rating Panels for Statements of Qualifications (SOQ) and Proposals

For every solicitation, whether a general RFQ or Project-specific RFP, a rating panel is formed to review and score the subsequent Statements of Qualifications or Proposals. The Consultant Design Engineer is responsible for establishing a Rating Panel at the time of solicitation, with input from staff as appropriate. The rating panel will usually include MDT staff that is technically proficient in the predominant field(s) of services identified in the solicitation. Additionally, project sponsors may be part of the rating panel. Typically, the Rating Panel consists of three members; however additional members may be included in cases where additional evaluation from subject matter experts is needed.

Once the rating panel is established, the solicitation has closed, and the SOQs/Proposals are received by MDT and reviewed for responsiveness, the rating panel is gathered for an instructional meeting. During this meeting, the SOQs/Proposals are distributed to the rating panel. Consultant Design staff verifies that no conflicts of interest exist with the members of the rating panel, and provides the members instructions for reviewing and scoring the SOQs/Proposals:

- to evaluate the SOQs/Proposals strictly on the basis of how the SOQ/Proposal meets the qualification requirements stipulated in the solicitation,
- to provide comments/feedback/justification for all scores,
- to follow the scoring methodology identified in the solicitation, and
- to independently evaluate the SOQs/Proposals, with no interaction with anyone except the Consultant Design Engineer during the rating process,

After the rating panel completes their individual evaluations of the SOQs/Proposals, the rating panel is assembled for a consensus meeting. The purpose of this consensus meeting is to discuss comments and justification of scores, identify and resolve any discrepancies or inconsistencies in scoring, and reach a consensus score for each SOQ/Proposal. The Consultant Design Engineer (or designee) chairs this meeting to facilitate discussion, ensure consistency, resolve conflict, and ensure impartial scoring.

Once consensus is reached, record of past performance is added to the SOQ/Proposal scores in accordance with the solicitation. The final ranked list is then evaluated to develop a recommendation. The recommendation may be to select the highest-ranked firm(s), or to exercise one of the options specified in the RFP to conduct further discussions with at least three of the most qualified consultants.

6.1.9 MDT Consultant Prequalification Roster

6.1.9.1 Description/Application

MDT currently maintains a Consultant Prequalification Roster (Roster) for use in short-listing firms for proposed work. The Roster includes various categories of service such as comprehensive road design, bridge design, etc. MDT's webpage should be referenced for a current list of work categories contained within the Roster. When appropriate, MDT uses the Roster to short list Consultants to provide professional services to the Department. This process may be applicable to "Projects" and "Term Contracts"; however, it is rarely applicable to "Special Projects." For a specific Project or Term Contract, MDT may short list at least three Consultants to submit a project-specific proposal. It should be noted that consulting firms do not need to be "pre-qualified" to perform work for MDT. The Roster is only used in specific situations to short-list firms. In the open solicitation procurement method (described in this Chapter), the solicitation is open to all interested consulting firms, regardless if they are on the Roster or not.

6.1.9.2 Solicitation for the Roster

Once every two years, typically in March or April, MDT issues a Request for Statements of Qualification (SOQs) from Consultants interested in participating in the new Roster. In the "off" years, Consultants have the opportunity to update their SOQs if a firm's makeup or personnel has changed significantly from the original submission. Additionally, Consultants not on the original Roster have the opportunity to submit their SOQs to be added to the current Roster. Subsequently, the Roster is updated annually.

6.1.9.3 Request for Statements of Qualification (SOQs)

The Consultant Design Bureau is responsible for preparing all Requests for Qualifications (RFQs) for the Roster, with assistance as needed from one or more MDT units. The RFQ for the Roster will include:

- A clear description of the scope of services for the category of service. The scope of services is not intended to be project-specific, rather it is intended to communicate to the consulting firms the types of experience, expertise, and qualifications that are required to do work typical of the category of service,
- Professional licensure requirements,
- Evaluation criteria,
- Discussion on how the Roster will be used for short-listing consulting firms,
- Anticipated contract types that will typically be used, and
- Any special provisions or contract requirements.

6.1.9.4 Evaluation and Scoring of SOQs

The Consultant Design Engineer is responsible for establishing a Rating Panel for each category of service at the time of solicitation, with input from staff as appropriate. The rating panel will include MDT staff that is technically proficient in the category of service. The process that the rating panel uses to evaluate and score the SOQs follows that described in Section 6.1.8.

6.1.9.5 Roster Finalized, Approved, and Released

The Consultant Design Engineer presents the Rating Panels' ratings and recommendations for each category of service to the Consultant Selection Board, typically in July. The Board then acts on staff's recommendation and establishes a ranked roster, updated annually, in each of the prequalification categories of service.

6.1.9.6 Updates to Roster

In the "off" years, Consultants that either update their SOQs because of significant changes to the firm, as well as Consultants submitting SOQs to be added to the roster will be evaluated and scored following the same process. These firms are then incorporated into the Roster from the previous year, by Board action. Consultants already on the roster that did not submit updated SOQs will not be re-evaluated. The SOQ scores for those firms remain unchanged in the "off" year.

6.1.10 Dispute of Consultant Selection

MDT policy is to take all necessary proactive measures to avoid and minimize any disputes and, especially, to avoid litigation. Should anyone dispute or appeal MDT's selection of a Consultant, contact the Consultant Design Engineer (CDE), and the CDE will attempt to resolve the issue informally and in a timely manner. If an impasse is reached, the individual/organization disputing/appealing the selection must submit a letter to the CDE within 14 calendar days of the Consultant selection (Consultant Selection Board meeting).

At this point, the process will be moved to the Dispute Resolution Committee (Committee). The Committee members are the Chief Engineer, Chief Legal Counsel and a representative from the Montana Chapter of American Council of Engineering Companies. Within 14 calendar days of receiving the dispute letter, the CDE will schedule a meeting to convene the Committee.

The CDE will inform the Committee of all previous actions and discussions. The Committee will consider this information and direct one of the options listed below. The individual/organization disputing the selection will be invited to present their dispute to the Committee. The CDE will draft a response letter to the individual/organization disputing the selection. Prior to the letter being sent, the Chief Engineer will receive approval from the Director's office of the proposed decision. This letter is signed by the Consultant Design Engineer and is sent within 14 calendar days of the Committee's decision. The options include:

- The Committee affirms the solicitation process and Consultant selection; or
- The Committee rejects the selection process. If this option is selected, MDT will determine whether to revise the selection process and re-solicit for the services or to perform the work with internal staff.

6.2 IDENTIFICATION OF CONSULTANT NEED

MDT maintains a staff with the resources and technical expertise needed to perform the workload for the majority of the MDT program of projects. When work cannot be performed consistent with the schedule for the MDT program, or when the work requires specialized professional or technical skills not readily available within MDT, Consultants may be employed. The project/contract sponsor, in consultation with key MDT staff (particularly those units that would be tasked with leading the project/contract), will determine if consultant services are needed.

MDT may elect to seek Consultant services for a variety of specific reasons, including:

- controversial projects,
- legislative mandates,
- an accelerated project development schedule,
- MDT resources are not readily available to meet the desired schedule,
- specialized professional or technical skills not readily available within MDT, or
- emergencies.

6.2.1 Request for Consultant Services

Once a determination is made to utilize consultant services for a project, term contract, or special project, the project/contract sponsor must submit the Request for Consultant Services Form, located at the following link:

http://mdtinfo.mdt.mt.gov/other/webdata/internal/CDB/csd/forms/MDT-CDB-004_Request_for_Consultant_Services.pdf

6.2.2 Project

For MDT projects, one MDT unit serves as the lead for project development. The lead unit is almost always the:

- District Design Section,
- Road Design Section,
- Bridge Bureau,
- Traffic Engineering Section, or
- Consultant Design Bureau.

The following information is needed to initiate the process of securing Consultant services for a Project:

- project description,
- scope of work statement,
- PFR Report if completed,
- services to be provided by MDT,
- source of funding, and

- an estimated cost of construction (i.e., a preliminary cost estimate).

A PFR Report, although preferable, is not the only mechanism that can be used to identify the need for a Consultant Project. The project sponsor (typically the District Administrator or Bureau Chief) must submit a written request to the Consultant Design Engineer. The request must include the information listed above to initiate the selection process. The Bureau will then assign a CPE to manage the project, and will initiate the process to select a Consultant for the Project.

6.2.3 Term Contract

If a MDT functional unit recognizes the need for a Consultant Term Contract, the Bureau Chief (or designee) or District Administrator must submit a written request to the Consultant Design Engineer via the Request for Consultant Services form, which must include:

- a brief scope of services,
- the desired number of contracts/Consultants,
- the desired contract dollar ceiling, and
- the term (duration) of the contract

The Consultant Design Engineer will assign a CPE to manage the Term Contract and coordinate with the sponsoring functional unit. For a MDT-designed project, the lead unit may require support services during project development for any discipline-specific fields.

For the contract dollar value, MDT guidelines recommend a maximum contract value of $300,000 for an individual Term Contract, which applies to the entire duration of the Contract. If the sponsoring unit desires a Term Contract dollar value in excess of $300,000, the sponsoring unit must provide justification and receive approval from the Consultant Design Engineer. These contracts typically extend for a period of two-three years, but cannot exceed a total of five years, including contract extensions.

6.2.4 Special Project

MDT sometimes secures Consultant services for specialty work that may not be directly related to the development of an individual construction project and, typically, is not managed with EPS and is not included in the MDT Tentative Construction Plan (TCP). To initiate this type of Consultant project, the Bureau Chief (or designee) or District Administrator must submit a written request to the Consultant Design Engineer. The request must include the following:

- project description,
- scope of work statement,
- required time of completion, if applicable,
- source of funding, and
- estimated cost of Consultant work.

6.3 CONSULTANT SELECTION FOR ESA CONTRACTS

6.3.1 General

Section 6.3.1 presents MDT policies and procedures that apply to more than one of the Consultant solicitation processes used by the Department.

6.3.1.1 Legal Authority (ESA Professional Services)

For ESA professional services, the MDT Consultant selection process is authorized by, and must meet the requirements of, the following.

6.3.1.1.1 Federal Regulations

The procurement, management, and administration of engineering and design-related services funded with FAHP funds and related to a highway construction project fall under the FHWA regulations of 23 CFR Part 172. These provisions require that a contracting agency obtain consultant services through an equitable qualifications-based selection procurement process, ensure that the prescribed work is properly accomplished in a timely manner, and at a fair and reasonable cost. Further, 23 U.S.C. 112 provides regulations for the letting of federal-aid highways contracts. The policies and procedures within this Manual, and by reference, comply with these regulations.

6.3.1.1.2 State of Montana Regulations

Montana Code Annotated (MCA) Section 18-8-201 establishes a State policy that governmental agencies publicly announce requirements for architectural, engineering and land surveying services, and negotiate contracts for such professional services on the basis of demonstrated competence and qualifications for the type of professional services required and at a fair and reasonable price. MCA Section 18-8-204 stipulates in part that Agencies may encourage firms to submit annually or biennially a statement of qualifications and performance data, shall evaluate current statements of qualifications and performance data on file with the agency, together with those that may be submitted by other firms regarding the proposed project, shall conduct discussions with one or more firms regarding anticipated concepts and the relative utility of alternative methods of approach for furnishing the required services, and shall then select, based on criteria established under agency procedures and guidelines, the firm considered most qualified to provide the services required for the proposed project. MCA Section 18-4 contains overall procurement regulations.

6.3.1.2 Process Types

MDT may use one of several processes to select a Consultant through the Consultant Design Bureau, including:

- Open Solicitation Process, by which a RFP is openly advertised to all consultants, regardless if they are on the MDT Consultant Prequalification Roster or not (See Section 6.3.2),

- Short List Process, by which MDT short-lists at least three consultants from the MDT Consultant Prequalification Roster, with those short-listed firms then invited to submit project/contract-specific proposals (see Section 6.3.3),
- Noncompetitive Process (see Section 6.3.4), or
- Small Purchase Process (see Section 6.3.5).

The Consultant Design Engineer will determine which Consultant selection process to use on a case-by-case basis. The selection process to be used is driven by the nature of the services required, the complexity of the project, the size of the project, the relative scale of the cost of consultant services, and the required qualifications needed to meet the scope of services of the individual project/contract.

6.3.1.3 Request for Proposals (RFPs)

The Consultant Design Bureau is responsible for preparing all RFPs related to ESA contracts, with assistance as needed from one or more MDT units.

All RFPs shall provide all information and requirements necessary for interested consultants to provide a response to the RFP and compete for the solicited services. The RFP shall:

- Provide a clear, accurate, and detailed description of the scope of work, technical requirements, and qualifications of consultants necessary for the services to be rendered. To the extent practicable, the scope of work should detail the purpose and description of the project, services to be performed, deliverables to be provided, estimated schedule for performance of the work, and applicable standards, specifications, and policies;
- Identify the requirements for any discussions that may be conducted with three or more of the most highly qualified consultants following submission and evaluation of proposals;
- Identify proposal evaluation factors including their relative weight of importance;
- Specify the contract type and method(s) of payment anticipated for the solicited services;
- Identify any special provisions or contract requirements associated with the solicited services;
- Require that submission of any requested cost proposals or elements of cost be in a concealed format and separate from technical/qualifications proposals, since these shall not be considered in the evaluation, ranking, and selection phase;
- Provide an estimated schedule for the procurement process and establish a submittal deadline for responses to the RFP that provides sufficient time for interested consultants to receive notice, prepare, and submit a proposal, which except in unusual circumstances shall be not less than 14 calendar days from the date of issuance of the RFP;
- Identify requirements of the proposal submittal (e.g., organization of proposal, number of copies, page limits, consultant contact information, etc.);
- Identify Disadvantaged Business Enterprises (DBE) requirements and/or goals; and
- Contain non-discrimination requirements.

6.3.1.4 Proposal evaluation factors

The evaluation criteria for which consultants will be evaluated shall be contained in the RFP, and must assess the demonstrated competence and qualifications for the type of professional services solicited, including those of identified subconsultants. Evaluation factors may include:

- Technical approach (e.g., project understanding, innovative concepts or alternatives, quality control procedures);
- Work experience (firm and staff);
- Specialized expertise;
- Professional licensure;
- Staff capabilities;
- Workload capacity; and
- Past performance.

Additionally, the following non-qualifications-based evaluation criteria are permitted under specified conditions, provided the combined total of these criteria do not exceed a nominal value of ten (10) percent of the total evaluation criteria to maintain the integrity of a qualifications-based selection:

- A local presence may be used as a nominal evaluation factor where appropriate. This criteria shall not be based on political or jurisdictional boundaries and may be applied on a project-by-project basis for contracts where a need has been established for a consultant to provide a local presence, a local presence will add value to the quality and efficiency of the project, and application of this criteria leaves an appropriate number of qualified consultants, given the nature and size of the project. If a consultant from outside of the locality area indicates as part of a proposal that it will satisfy the criteria in some manner, such as establishing a local project office, that commitment shall be considered to have satisfied the local presence criteria.
- The participation of qualified and certified Disadvantaged Business Enterprises (DBE) may be used as a nominal evaluation criterion where appropriate in accordance with 49 CFR part 26 and MDT's DBE program.

The following may not be used as evaluation factors:

- Price shall not be used as a factor in the evaluation, ranking, and selection phase.

- In-State or local preference shall not be used as a factor in the evaluation, ranking, and selection phase. State licensing laws are not preempted by this provision and professional licensure within a jurisdiction may be established as a requirement for the minimum qualifications and competence of a consultant to perform the solicited services.

For any selection criteria for the Consultant selection processes, the evaluation criteria may vary from the list above as determined on a project-by-project basis. The project-specific criteria are at the discretion of the Consultant Design Engineer.

6.3.1.5 Consultant Contact with MDT

From the time of advertisement until the official Consultant selection, the Consultant shall have no contact with MDT with respect to the solicitation except through the Consultant Design Engineer. As appropriate, the Consultant Design Engineer may authorize another MDT staff member to discuss aspects of the solicitation with the Consultant. If unauthorized contact is made and the Consultant Design Engineer determines the context of the contact gives the firm an unfair advantage, the firm may be disqualified from the solicitation.

6.3.1.6 Announcement of Selection

The Consultant Design Engineer will notify all responding consultants of the final ranking of all consultants, upon final selection. Typically, this notification is in the form of an email containing the results, followed by an award letter to the selected consultant and letters of appreciation to the unsuccessful consultants. Other means of notification may be used when appropriate.

6.3.1.7 Debriefing

A Consultant desiring a debriefing can schedule an appointment with the Consultant Design Engineer for either a telephone or in-person debriefing. The purpose of the debriefing will be for the Consultant Design Engineer to inform the Consultant of the strengths and weaknesses of the proposal.

6.3.2 Open Solicitation Process

Description/Application

The selection process to be used is driven by the nature and complexity of the project/contract, as well as the qualifications needed to complete the necessary tasks. For consultant services requiring qualifications that don't clearly fall within the confines of a specific prequalification roster, require diverse qualifications or are highly specialized, the open solicitation process is used. Other examples of projects for which it may be advantageous to use the open solicitation process include projects that are extremely large, controversial or sensitive in nature.

In the open solicitation procurement method, the solicitation is open to all interested consulting firms, regardless if they are on MDT's Prequalification Roster or not. Consulting firms do not need to be "pre-qualified" to submit a proposal in response to an open RFP solicitation.

Figure 6.3-A presents the basic steps in the open solicitation process. The following sections elaborate on each step within the process.

6.3.2.1 MDT develops and advertises the Request for Proposals (RFP)

The Consultant Design Bureau, with assistance from the sponsoring functional unit, will prepare the Request for Proposal (RFP). Section 6.3.1.3 discusses the content of the proposal. Refer to 6.1.6 for the advertisement process.

6.3.2.2 Consultants submit proposals

Consultants submit their proposals to the Consultant Design Engineer by the established deadline, which is typically three to four weeks after the issuance of the RFP. By federal law, a minimum of 14 calendar days is required between the date of issuance of the RFP to the submittal deadline, except in unusual circumstances. The Consultant Design Bureau then reviews the proposals for responsiveness and prepares the proposals for distribution to the Rating Panel.

At least three qualified consultants must respond to the RFP in order for the solicitation process to continue without further investigation. If only two qualified consultants respond to the solicitation, MDT may proceed with evaluation and selection if the Consultant Design Engineer determines that the RFP did not contain certain conditions or requirements that arbitrarily limited competition. When making this determination, the Consultant Design Engineer will evaluate any special conditions or requirements in the RFP (i.e. specialized licensing requirements, special equipment requirements, etc.). Additionally, the Consultant Design Engineer may discuss the RFP with consultant firms that are known to qualify that did not submit in order to determine the reasons the firm did not respond to the RFP. If only one firm responds to the solicitation, MDT will evaluate whether to revise the RFP (if necessary) and re-advertise for services or to pursue procurement following the Noncompetitive Process described in Section 6.3.4.

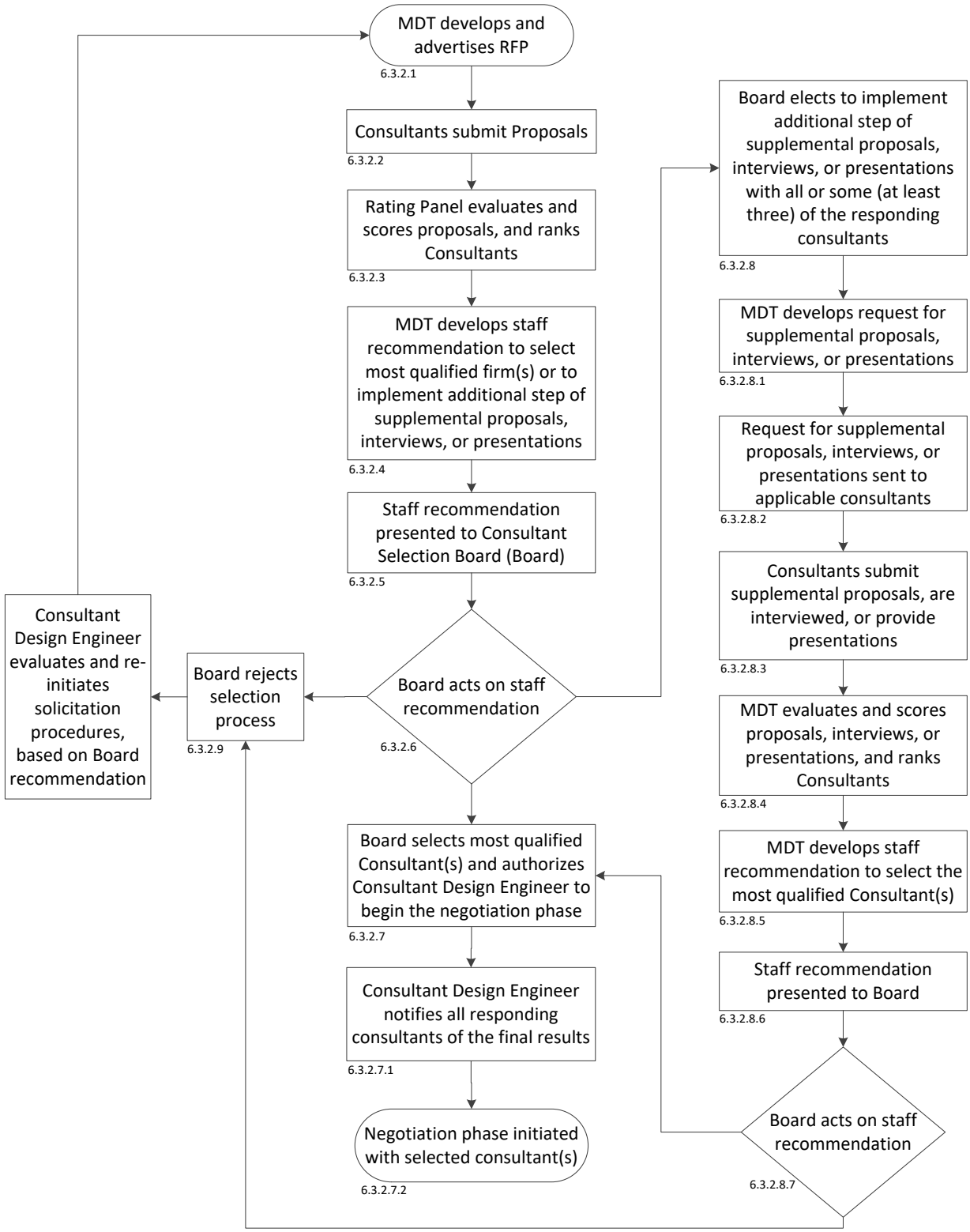


Figure 6.3-A — OPEN SOLICITATION PROCESS

6.3.2.3 Rating Panel evaluates and scores proposals and ranks consultants

Refer to Section 6.1.8 for a detailed description of rating panel activities.

6.3.2.4 Rating Panel develops recommendation for Board

Once all scores, including past performance, are finalized, the final ranked list is then evaluated to develop a recommendation. The recommendation may be to select the highest-ranked firm(s), or to exercise one of the options specified in the RFP to conduct further discussions with at least three of the most qualified consultants. If the recommendation is to select the highest-ranked firm(s), there must be at least three firms deemed to be most-highly qualified. In the case of a project, this is typically the highest-qualified firm and two alternates. In the case of a term contract, there may be three or more consultants selected for term contracts. In these instances, alternates are not required.

6.3.2.5 Consultant Design Engineer presents recommendation to the Board

If the Consultant Design Engineer approves staff's recommendation, he/she presents the recommendation to the Board.

6.3.2.6 Consultant Selection Board acts on staff's recommendation

The Board considers staff's recommendation and takes action in one of the following ways:

1) Selects the most qualified consultant(s), and alternates as appropriate (procedure Section 6.3.2.7), or

2) Elects to implement the option to conduct further discussions with at least three of the most qualified consultants (in accordance with the terms of the RFP) (procedure Section 6.3.2.8), or

3) Rejects the selection process (procedure Section 6.3.2.9).

See Section 6.1.7 for more information on the Board.

6.3.2.7 Board action option 1) Most qualified consultant(s) selected

If the Board selects the most qualified consultant(s), and alternates as appropriate, the Consultant Design Engineer is authorized to initiate the negotiation phase. In considering which consultant is most qualified, the Board shall consider the ranked list provided by staff. All consultants scoring within two percent (2%) of the highest-scoring consultant are considered equally qualified. From the list of consultants that are considered equally qualified, the Board may use judgement to select

the consultant they feel is most-qualified. Selections other than the highest-scoring consultant must include justification that is documented in the Consultant Selection Board meeting minutes.

6.3.2.7.1 Consultant Design Engineer contacts all responding consultants

The Consultant Design Engineer contacts the selected consultant(s) to discuss the selection, verify that they have not encountered any significant changes from what was identified in the Proposal, and verify that they are willing, able, and interested in performing the work.

Upon confirmation by the selected consultant(s), the Consultant Design Engineer will notify all responding consultants of the final ranking of all consultants, upon final selection. Typically, this notification is in the form of an email to all responding consultants containing the results, followed by an award letter to the selected consultant. Other means of notification may be used when appropriate.

If the Consultant Design Engineer identifies significant changes since the proposal was submitted or the firm is unwilling, unable, or uninterested, the Consultant Design Engineer will notify the Board and proceed with discussions with the next most qualified consultant (first alternate).

6.3.2.7.2 Negotiation phase initiated

Once the selected consultant(s) confirm interest, the Consultant Design Engineer authorizes the CPE assigned to the project/contract to initiate the negotiation phase. Refer to Chapter 7 regarding the contract negotiations phase.

6.3.2.8 Board action option 2) Additional discussions required

The Board may elect to implement the option to conduct further discussions with at least three of the most qualified consultants (in accordance with the terms of the RFP). The options for these additional discussions must be identified in the original RFP, and are typically:

- Solicit supplemental proposals from the short-listed consultants
- Invite the short-listed consultants to make an oral presentation to MDT
- Invite the short-listed consultants to participate in an interview by MDT

6.3.2.8.1 MDT develops request for additional information/discussions

The Consultant Design Bureau, with assistance from the sponsoring functional unit, will prepare the format of the additional discussions to take place. The format and content of the additional discussions must be approved by the Consultant Design Engineer, must be clear and concise, must relate directly to the project/contract, and must be the same for all short-listed consultants. The Consultant Design Engineer will determine the evaluation criteria based on the above items on a project-by-project basis.

6.3.2.8.2 Request sent to short-listed consultants

The Consultant Design Engineer will contact all short-listed consultants to provide them the requirements of the additional discussion. Regardless of which option is used, sufficient time must be given to the consultants to prepare the response (a minimum of 14 calendar days). Evaluation criteria is shared with the consultants at this time.

6.3.2.8.3 Additional discussions take place

Additional discussions typically take the form of supplemental proposals, oral presentations, or interviews, but must be in accordance with the RFP. A brief description of each of these options is summarized as follows:

1. Supplemental Proposals. MDT will request that each Consultant present a detailed supplemental proposal. For example, MDT may frame the request to elicit a response to the following issues (examples not intended to be all-inclusive or restrictive):

    - What is the Consultant's understanding of the project?
    - How will the Consultant fulfill the scope of services? What are the most significant challenges related to the project?
    - What innovative ideas will the Consultant use in project implementation?
    - What approach (i.e., the project work plan) will the Consultant use?
    - How does the Consultant plan on delivering the project in a timely fashion?

2. Oral Presentations. The Consultant Design Engineer notifies each short-listed Consultant of the time, date and location for the oral presentation. The notification will inform each Consultant of the time limit for the presentation, subdivided into a time for the Consultant presentation and a time for MDT questions. Content of the oral presentations may contain the same types of information described in the supplemental proposals section above, but may be customized to specific project needs/requirements.

3. Interviews. The Consultant Design Engineer notifies each short-listed Consultant of the time, date and location for the interview. The notification will inform each Consultant of the time limit for the interview. Interview questions may seek the same types of information described in the supplemental proposals section above, but may be customized to specific project needs/requirements.

6.3.2.8.4 MDT staff evaluates and scores additional discussions and ranks consultants

The Consultant Design Engineer typically designates the same Rating Panel membership as used for the evaluation of the Consultants' proposals. The Consultant Selection Board may, at their discretion, participate in the evaluation of the additional discussions. This may include all or part

of the membership of the Board; however the same staff must be used to evaluate all Consultants. The Rating Panel members, along with members of the Board, if applicable, evaluate and assign a score to each Consultant for each evaluation criteria. A consensus scoring meeting, chaired by the Consultant Design Engineer, will be held to discuss comments and justification of scores, identify and resolve any discrepancies or inconsistencies in scoring, and reach a consensus score for each evaluation criteria for each Consultant. The consensus scores from the additional discussions are then added to the original proposal and past performance score to arrive at a total score.

At least three qualified consultants must respond to the request for additional information in order for the solicitation process to continue without further investigation. If only two qualified consultants respond to the solicitation, MDT may proceed with evaluation and selection if the Consultant Design Engineer determines that the request for additional information did not contain certain conditions or requirements that arbitrarily limited competition. When making this determination, the Consultant Design Engineer will evaluate any special conditions or requirements in the RFP (i.e. unreasonable response time, unavoidable scheduling conflicts, etc.). Additionally, the Consultant Design Engineer may discuss the request for additional discussions with consultant firms that were asked to participate that did not participate in order to determine the reasons the firm did not respond. If only one firm responds to the solicitation, MDT will evaluate whether to revise the format and requirements of the additional discussions (if necessary) and re-solicit the request for additional discussions or to pursue procurement following the Noncompetitive solicitation method described in Section 6.3.4.

6.3.2.8.5 MDT staff develops recommendation for Board

Once the total scores are finalized, the final ranked list is then evaluated to develop a recommendation to select the highest-ranked firm(s). In the case of a project, this is typically the highest-qualified firm and two alternates. In the case of a term contract, there may be three or more consultants selected for term contracts. In these instances, alternates are not required.

6.3.2.8.6 Consultant Design Engineer presents recommendation to the Board

If the Consultant Design Engineer approves staff's recommendation, he/she presents the recommendation to the Board.

6.3.2.8.7 Consultant Selection Board acts on staff's recommendation

The Board considers staff's recommendation and takes action in one of the following ways:

1) Selects the most qualified consultant(s), and alternates as appropriate (procedure Section 6.3.2.7), or

2) Rejects the selection process (procedure Section 6.3.2.9).

6.3.2.9 Board action option 3) Selection process rejected

If the Board rejects the selection process, the reason(s) for rejecting the process are provided to the Consultant Design Engineer. Appropriate revisions are then made to the solicitation, and the solicitation process begins again. MDT may also decide to not pursue consultant services.

6.3.3 Short List Process

Description/Application

The selection process to be used is driven by the nature and complexity of the project/contract, as well as the qualifications needed to complete the necessary tasks. For consultant services requiring qualifications that clearly fall within the confines of a specific prequalification roster category of service, the short-list solicitation process may be used.

In the short-list solicitation procurement method, the Consultant Selection Board selects the most-qualified Consultants for the specific project/contract off of the MDT Consultant Prequalification Roster. Short-listed firms are then invited to submit project-specific proposals. This process is applicable to many “Projects” and “Term Contracts”; however, it is rarely applicable to “Special Projects.”

Figure 6.3-B presents the basic steps in the short-list solicitation process.

The only difference between the short-list solicitation process and the open solicitation process is step 1, short-listing of Consultants by the Board. In this step, the current MDT Prequalification Roster is brought before the Board for consideration. Discussion takes place amongst the Board members, with input from Consultant Design staff as requested, to determine the Consultants that are most-qualified to perform the work necessary for the specific project/contract. Information from the Consultants’ prequalification SOQs, as well as current knowledge of each of the Consultants is considered to make this determination. The top scoring firms according to the prequalification roster scores may or may not be the most-qualified consultants for the project/contract. In example, there may be Consultants that have a higher level of expertise for items critical to the specific project than other Consultants that are ranked higher on the roster. The Board takes all of this information into consideration and short-lists at least three consultants as the most-qualified. These firms are then invited to submit abbreviated project-specific proposals in response to a RFP that Consultant Design develops.

At the option of the Consultant Design Engineer, an additional step may be implemented prior to presenting the Prequalification Roster to the Board for the selection of short-listed consultants. In this step, the Consultant Design Engineer contacts each of the Consultants on the applicable work category of the Prequalification Roster, soliciting statements of interest in the project/contract. The intent of this process is to identify consultants that are, and are not, interested in responding to a project-specific RFP. This ensures the Board does not short-list any consultants that would otherwise not submit a proposal for the project.

After the step of the Board short-listing consultants, every step is identical to the open-solicitation, beginning with “MDT develops and advertises the Request for Proposals (RFP)”. The one exception is that MDT does not advertise the short-listed RFP openly; rather the RFP is sent only to the short-listed consultants. Refer to Section 6.3.2 for a description of the solicitation procedures.

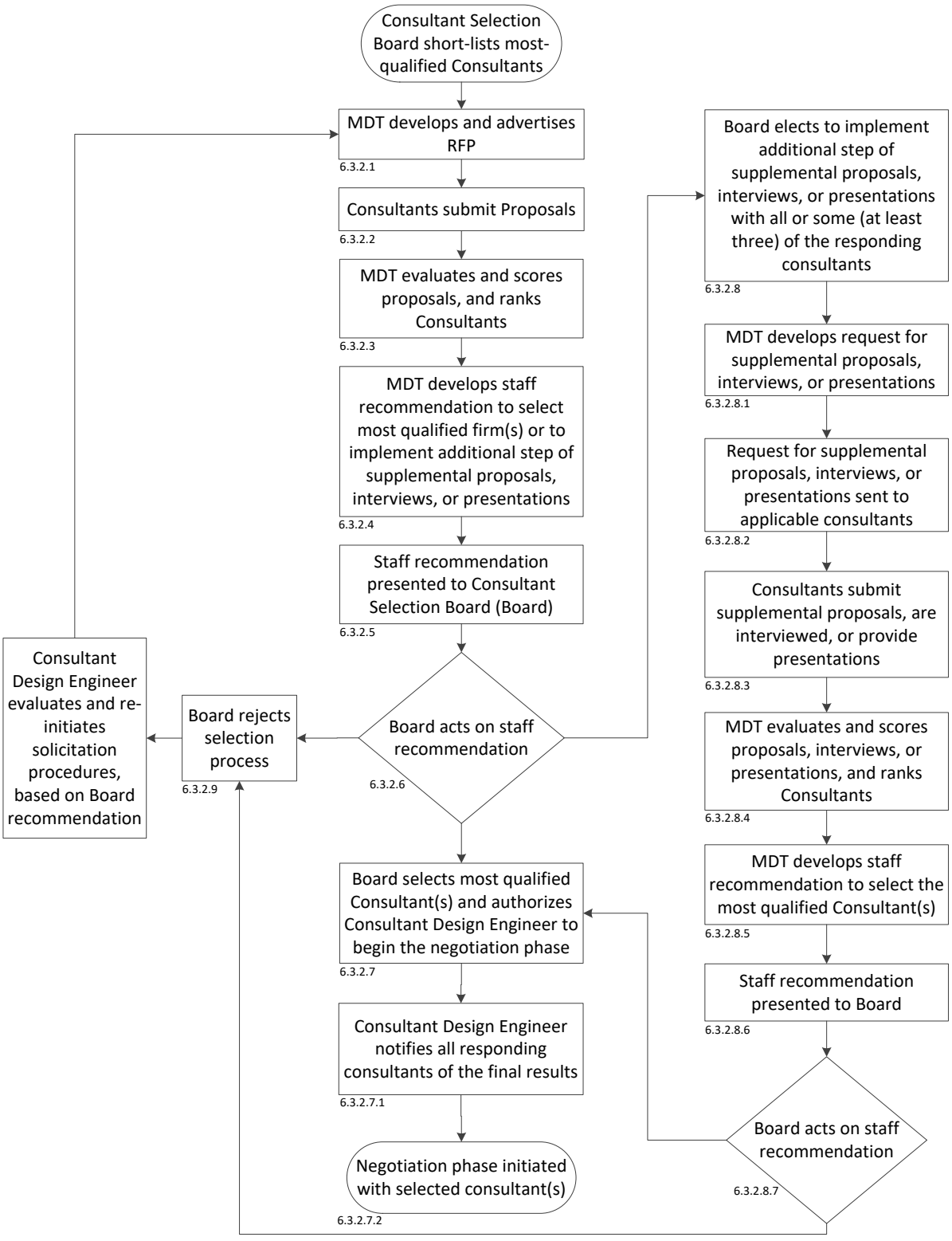


Figure 6.3-B — SHORT-LIST SOLICITATION PROCESS

6.3.4 Noncompetitive Process

The Noncompetitive Process (also referred to as sole source procedures) may be used to obtain Consultant services when the selection is not feasible using the small purchase or competitive negotiation (open solicitation or short-list solicitation) process. Refer to 23 CFR 172.7(a)(3), MCA 18-4-133, MCA 18-4-306, and MCA 18-8-211. As 23 CFR 172 stipulates, FHWA must approve Consultant selection via noncompetitive procedures. By approval of the policies and procedures contained herein, FHWA has approved the use of noncompetitive process, so long as the following procedures are followed. Noncompetitive procedures may be used if:

1. the service is available only from a single source;
2. there is an emergency which will not permit the time necessary to conduct competitive negotiations; or
3. after solicitation of a number of sources, competition is determined to be inadequate.

If one of the above conditions is met, the Board may authorize the Consultant Design Engineer to negotiate with a single source to provide the Consultant services. All contract negotiations will follow the normal contract procedures as outlined in Chapter 7. The justification for using a single source is documented in the Consultant Selection Board's Minutes, as well as the Consultant Design Bureau contract file.

The following points expand on the reasons and justification for a noncompetitive selection:

1. The service is available only from a single source

   Determination that a service is only available from a single source is a judgment call, and must be carefully considered before making this determination. These situations are rare, and the service must be an exceptionally specialized professional service or the combination of a very specialized service in a very remote location. One option that may be considered to ensure no other competition is available is to advertise on MDT's website a notice of intention to select a consultant under the noncompetitive procedures. This is typically a two-week posting that describes the services required and a contact point should anyone wish to express interest. The Consultant Design Engineer will make the determination on the use of Noncompetitive procedures and will present to the Board for consideration.

2. There is an emergency which will not permit the time necessary to conduct competitive negotiations

   In rare cases, MDT may be faced with an emergency situation where consultant services are required within a timeframe that does not allow for a competitive solicitation. Per MCA 10-3-103, "Emergency" means the imminent threat of a disaster causing immediate peril to life or property that timely action can avert or minimize. "Disaster" means the occurrence or imminent threat of widespread or severe damage, injury, or loss of life or property resulting from any natural or artificial cause requiring emergency action to avert danger or damage, disruption of state services, etc.

3. After solicitation of a number of sources, competition is determined to be inadequate.

   There may be cases where only one firm responds to a solicitation. In these cases, the first step is for MDT to determine if there were any conditions in the RFP that arbitrarily limited competition. When making this determination, the Consultant Design Engineer will evaluate any special conditions or requirements in the RFP (i.e. specialized licensing requirements, special equipment requirements, etc.). Additionally, the Consultant Design Engineer may discuss the RFP with consultant firms that are known to qualify that did not submit in order to determine the reasons the firm did not respond to the RFP.

   If the short-list solicitation process was used, MDT will re-solicit using the open solicitation process (with a revised RFP if applicable). If exceptional circumstances exist, MDT may seek approval from FHWA to select the responding consultant without having to re-solicit.

   If the open solicitation process was used and it was determined that there were no conditions in the RFP that arbitrarily limited competition, this is sufficient to conclude that competition is inadequate and negotiations can commence with the responding firm.

6.3.5 Small Purchase Process

The Small Purchase Process (also referred to as small contract procedures) may be used to obtain Consultant services if the estimated cost of services including any anticipated amendments or modifications, does not exceed $50,000 (MCA 18-8-212, MCA 18-4-305). Any contract amendments that cause the total contract amount to exceed this threshold are ineligible for Federal-aid funding (23 CFR 172.7(a)(2)(iv)). The scope cannot be broken into smaller components to permit the use of the small contract process.

At least three sources must be reviewed to satisfy federal regulations. This may be in any of the following forms:

- review of the MDT Consultant Prequalification Roster;
- formal discussions;
- email exchange;
- phone calls; or
- in-person discussions

If the Consultant Design Engineer concludes that the preferred Consultant has the necessary qualifications, experience and resources to provide the services, he/she may authorize negotiations with the consultant and develop a contract. A record of the sources reviewed must be maintained in the contract file, including:

- the names of the sources reviewed;
- a summary of the evaluation; and
- a summary of the content of the discussions (if applicable)

All contract negotiations will follow the normal contract procedures as outlined in Chapter 7.

6.3.6 Term Assignment Process

If multiple consultants are awarded term contracts through a single solicitation, MDT must specify the procedures that will be used in awarding individual term assignments (aka task orders). Refer to 23 CFR 172.9(a)(3). This may be in the form of an additional qualifications-based selection or on a regional basis. Typically, MDT uses an additional qualifications-based selection process where the Term Contract Manager evaluates and scores each consultant's qualifications. The process and criteria for selecting a consultant for an individual term assignment must be described in the original solicitation.

Chapter 7 further describes the process for award of term assignments.

6.4 CONSULTANT SELECTION FOR NON-ESA CONTRACTS

Occasionally, the Consultant Design Bureau may be contacted for procuring a consultant for non-ESA services. Some examples of this include cultural resources investigation and analysis, environmental natural resources evaluations and studies, and planning studies.

While many of the same federal regulations apply to the administration of these types of contracts, the regulation that governs ESA consultant procurement (23 CFR 172) does not apply. The Administrative Rules of Montana (ARM), specifically §2.5.202, states that the authority to procure these services lies within the responsibility of the Department of Administration, unless delegated otherwise. The Department of Administration has granted MDT's Purchasing Services Section limited purchasing authority for these types of non-ESA services when needed by MDT. Therefore, all non-ESA services will be procured through MDT's Purchasing Services Section, unless otherwise agreed to by all parties. Once the consultant(s) has been selected, however, the Purchasing Services Section's responsibilities end and the Consultant Design Bureau will assume responsibility to proceed with contract initiation and administration for the life of the contract.

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Chapter 7
CONTRACT DEVELOPMENT

7.1 GENERAL

7.1.1 Objective

The general objective of contract development is to establish a scope, schedule and budget, that will enable a successful project. Scope, schedule, and budget are the three fundamental elements for managing project success, and changes in one of these elements may in turn affect at least one of the other two elements.

7.1.2 Legal Authority

State of Montana

Montana Code Annotated, (MCA), Section 18-8-205 stipulates in part that for contracts for architectural, engineering and land surveying services:

- Agencies shall negotiate a contract with the most qualified firm at a cost that is fair and reasonable.
- Agencies shall consider the value of the services to be provided in addition to the scope and complexity of the services.

The provisions of MCA Section 18-8-205 do not apply to the negotiation of contracts for projects that MDT has determined are part of the design-build contracting program authorized in MCA Section 60-2-137.

Federal Highway Administration

23 CFR Part 172 “Procurement, Management, and Administration of Engineering and Design Related Services” requires (1) competitive negotiation to comply with the Brooks Act, 40 U.S.C. 1101-1104, (2) small purchase negotiations to follow the state’s small procedures process, and (3) noncompetitive negotiations follow the agency’s [MDT’s] noncompetitive procedures; however, all negotiation methods shall determine the allowability of costs in accordance with the Federal cost principles.

7.1.3 Contract Payment Methods

23 CFR Part 172, State DOTs, and the Consultant industry have identified the basic types of contract payment methods. The following describes the contract payment types used by MDT:

1. Cost Plus Fixed Fee. An agreement in which all cost factors except fixed fee are actual costs. The fixed fee is a set dollar amount in the agreement. Through the negotiations process, MDT establishes a ceiling or upper limit on a cost-plus-fixed-fee contract. Federal regulations (23 CFR 172) require a contract ceiling/upper limit in cost plus fixed fee contracts. Almost all MDT contracts with Consultants are based on this payment method.

2. Cost Per Unit of Work or Specific Rates of Compensation. An agreement based on a unit rate of work developed for billing purposes, including a firm's direct labor cost, indirect cost rate (accepted or negotiated), and negotiated fee. The "unit" may be an hour, drilling a hole for subsurface investigations, testing of materials, etc. This type of reimbursement may be appropriate for a specialized or support services, or construction or inspection services (e.g., geotechnical drilling). This method should only be considered when the duration of work cannot be determined with a reasonable degree of accuracy. Federal regulations (23 CFR 172) require a contract ceiling/upper limit when the payment method is cost per unit of work or specific rates of compensation.

3. Lump Sum. An agreement where the method of payment for delivery of goods and services is one set amount that includes direct costs, indirect costs and fixed fee that does not allow adjustments. Once the lump-sum amount is agreed upon, the services or goods must be provided regardless of the actual cost to the Consultant. The extent, scope, complexity, character, and duration of the work must be clearly defined at the time of negotiation for this contracting payment method to be used. MDT rarely uses this payment method for professional services.

7.2 PROJECTS AND SPECIAL PROJECTS

This section discusses the contract development process for “Projects” and “Special Projects.”

7.2.1 Time Line

Development of a Consultant Contract is a small project. Like all projects, executing a consultant contract is a temporary endeavor undertaken to create a unique product, service or result with a definite beginning and end point. For every consultant project, time is of the essence. Consultants are selected for projects because they have the capacity to do the proposed work in a timely manner. The CPE will coordinate with the Consultant to establish a contract execution schedule appropriate for the complexity of the project. Meeting this schedule requires active management, buy-in, and prioritization by all parties to meet these deadlines. Constant communication throughout contract execution is key to help define the project clearly with stakeholders and team input, implement immediate changes and incorporate effective project monitoring in order to execute the contract in a timely fashion. MDT expects project contracts to be executed within 11 weeks after the Consultant Selection Board meeting unless otherwise agreed by both parties.

Chapter 6 discusses the selection of Consultants for a “Project” or “Special Project” using the various types of solicitation procedures. Each of these processes ends with the Consultant Selection Board authorizing the Consultant Design Engineer to begin negotiations. Figure 7.2-A outlines the steps for completing the contract development process. The remaining portion of this section elaborates on certain steps within the process.

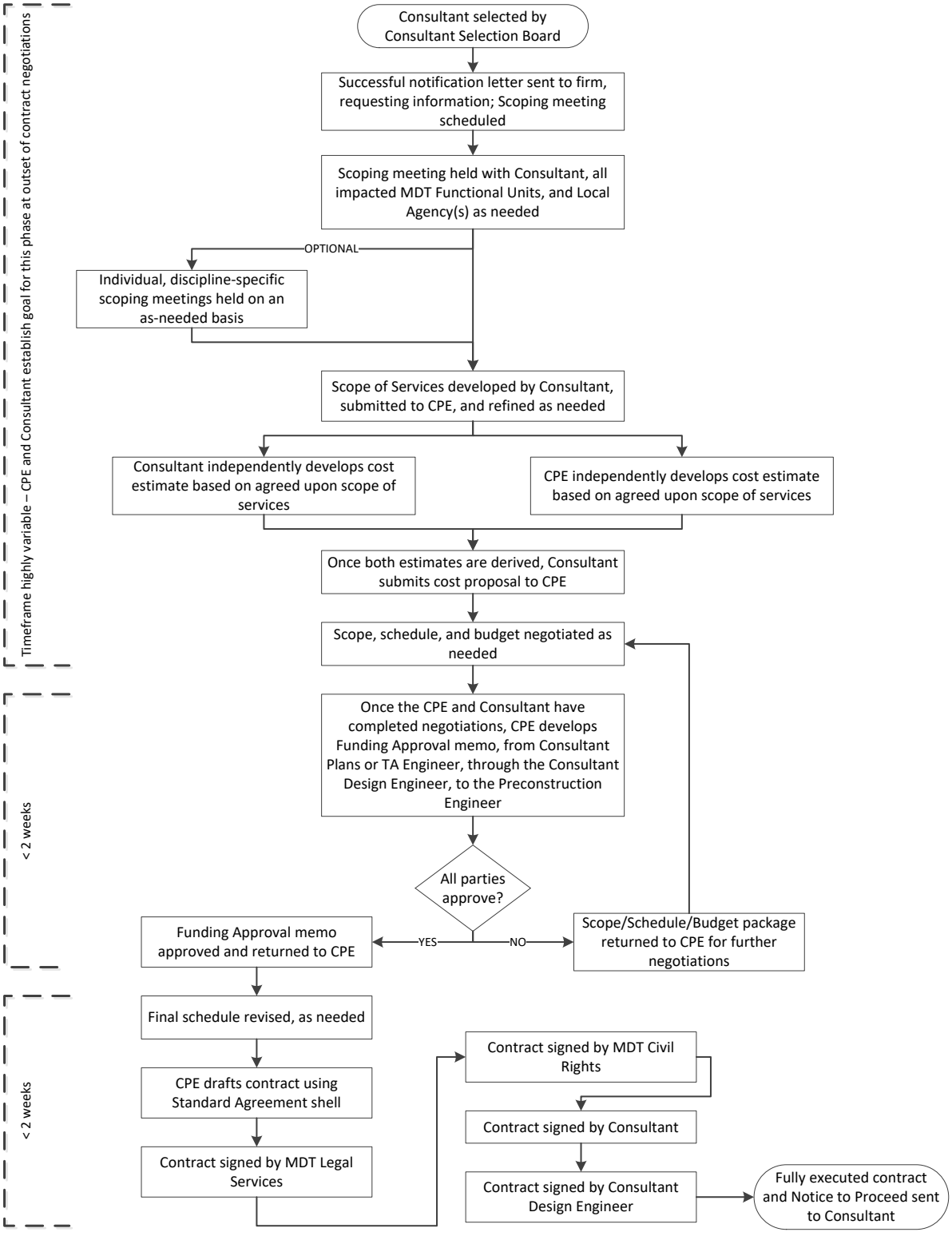


Figure 7.2-A — CONTRACT DEVELOPMENT PROCESS

7.2.2 Scoping Meeting(s)

Scoping Meeting Purpose

The overall purpose of scoping meetings are for MDT and other stakeholders (FHWA, County, City, Tribe, etc.) to communicate the project objectives to the selected Consultant to enable them to prepare a scope of services and cost proposal. Scoping meetings provide a forum for all parties to engage in discussion, ask questions, etc., to better define the nature of the project, risk factors, duration, division of responsibilities between MDT and Consultant, lines of communication, etc. The CPE leads all scoping meetings and serves as the moderator.

A multi-discipline team is required to provide suitable details for the tasks in their field of expertise. Costly modifications to projects (in time and money) can be avoided with a well-developed scope of services. It is critical that all parties (the CPE, Stakeholders, and Functional Managers) clearly communicate expectations by participating and engaging in the scoping process. This sets the Consultant up for success to meet that individual's expectations.

> *Discipline-Specific scoping meetings*: For more complex or specialized projects, additional discipline-specific scoping meetings may be necessary and can be very advantageous. The overall purpose of these meetings is for a specific, small, and focused group to communicate specific project objectives (applicable to that discipline) to the Consultant to enable refinement of the scope of services and cost proposal. For example, if there is a complex environmental natural resources element to the project, it may prove advantageous to hold a discipline-specific scoping meeting with the Environmental Services Bureau to provide the opportunity for the MDT functional unit to clearly convey its expectations to the Consultant. The CPE and the Consultant should collectively determine if any discipline-specific scoping meetings are needed.

Scoping Meeting Schedule

The Consultant Project Engineer (CPE) schedules the appropriate scoping meeting(s) to initiate the negotiation process. As appropriate, the CPE will invite other MDT representatives and stakeholders to the meeting (e.g., functional unit, District, local governments). The scoping meeting should be held as soon as possible after the Consultant has been selected. All reasonable attempts should be made to hold the scoping meeting within 2-3 weeks of the date on which the Consultant was selected.

The CPE will prepare an agenda for the meeting(s) and submit the agenda to all attendees. The CPE may coordinate with the Consultant to add other items to the agenda.

> *Discipline-Specific scoping meetings*: Additional discipline-specific scoping meetings should be held as close as possible to the general scoping meeting. These can be held before or after the general scoping meeting, and there are pros and cons to both options.

The CPE, the Functional Area, and the Consultant should collaborate to determine when to meet.

Scoping Meeting Content

If available, the Preliminary Field Review (PFR) Report, Environmental Document or other project documentation will be used as an outline for discussion. If no PFR report is available, the current PFR report template should be used to guide discussion.

Include in discussion: Project purpose and need, project limits, funding, public involvement, stakeholders, design elements, constraints, proposed scope, R/W, utilities, TMP, risk, etc.

Discipline-Specific scoping meetings: For additional discipline-specific scoping meetings, use project specific reports or project information to discuss the specialty work or discipline.

Identify Roles:

- MDT project team (including FMs)– charged with:
  - Communicating scope and expectations.
  - Reviewing & commenting on work submitted by the Consultant.
  - Completing tasks assigned to MDT.
- Consultant Project Engineer – charged with:
  - Administering the contract
  - Managing scope, schedule and budget
  - Facilitating communication
  - Acting as liaison between the Consultant and the Department
- Consultant – charged with:
  - Confirming scope expectations.
  - Completing tasks as scoped.

Establish Communication Protocol:

Refer to chapter 8 for a discussion on communication protocol.

Communicate additional information to the Consultant:

- Check list of required information to execute a contract;
- Anticipated/desired project schedule;
- Use of Activity Descriptions and project Flowchart;
- Use of the Consultant Proposal Estimate Spreadsheet for the cost proposal;
- Sample MDT invoice, progress report and Standard Agreement Shell

Initial discussions regarding a schedule specific to the development of the contract needs to take place at the scoping meeting to ensure all parties (especially the project sponsor) have achievable expectations for contract execution. Following the scoping meeting, the CPE and the Consultant

will collectively determine a contract development schedule, for inclusion in the scoping meeting minutes.

Scoping Meeting Minutes

The Consultant is responsible for submitting the minutes of scoping meetings to the CPE within seven days after the meeting, unless determined otherwise by the CPE. The consultant prepares the scoping meeting minutes to be distributed by the CPE. When a Preliminary Field Review (PFR) report is conducted concurrently with the Consultant Scoping Meeting, the scoping meeting minutes may be attached to the PFR report. In all cases, the scoping meeting minutes must be distributed to the project Sponsor and all potentially impacted functional areas. The scoping meeting minutes include action items for Consultant and MDT and an attendance list. Additionally, the contract development schedule will be included as part of the scoping meeting minutes, including dates for completion of milestone steps within the contract development process.

The meeting minutes will be reviewed and comments sent to the Consultant to clarify scope and to allow the Consultant to develop the final scope of services.

7.2.3 Consultant's Proposal

This Section discusses the responsibilities of the Consultant for each element of its proposal, as well as MDT review responsibility.

1) Scope of Services

The detailed scope of services describes what work will be required, the expected conditions under which the work will be conducted and the obligations of both the consultant and the MDT. The scope is a major factor that determines the cost of Consultant services, and it forms the basis for the Consultant's labor-hour estimate. The scope provides a written documentation of the understanding between MDT and the Consultant on the work needed to complete the project. A well-written scope establishes the:

- Tasks and subtasks (i.e. work activities) to be performed;
- Tasks and subtasks to be performed by sub-consultants;
- Assumptions used to determine scope and level of effort;
- Number and type of meetings to be attended;
- Equipment that will be used;
- Format of deliverables;
- Standards, policies and guidelines that will be followed;
- Responsibilities of both the Consultant and MDT, if different than standard activity descriptions dictate; and
- Products to be delivered

MDT Review: *MDT will review the Consultant's project scope of services for completeness, accuracy, logic, etc. The final negotiated scope should be tailored to*

ensure a mutual understanding of the project. Each task and subtask should be discussed to determine how it will be accomplished, the nature of the deliverable and its format. If the Consultant's understanding does not agree with that of MDT, the Consultant and MDT should discuss the issues to identify a mutual understanding of the services to be accomplished, the method by which it will be accomplished, and the nature of the final product. Either party to the negotiations should feel free to request written confirmation on any modification to the scope to reflect the agreed-to terms. The CPE should consult Functional Areas as needed to ensure an accurate scope of services is developed. Once agreed upon, the CPE will notify the Consultant that the Scope of Services is acceptable and ready to be used to develop the labor-hour estimate.

2) Labor-Hour Estimate

The basis for an accurate, meaningful labor-hour estimate is a well-developed, comprehensive scope of services. Each project must be evaluated individually to determine a fair estimate of required staff hours. The basis for the estimate should be the specific requirements for the project under consideration, together with a history of actual staff requirements for past projects with similar characteristics. A multi-discipline team is required to provide suitable details for the tasks in their field of expertise to complete the labor-hour estimate. In addition, the labor-hour estimate should :

- Correspond with MDT Activity Descriptions when appropriate to effectively communicate scope and for ease of reconciliation and development of a schedule;
- Include a reasonable distribution of work among the various levels of proposed staffing positions (i.e., the less complicated the task, the lower the level of staffing proposed); and
- The use of subconsultants/independent contractors.

MDT's Consultant Proposal Estimate Spreadsheet should be used (modified as necessary to fit the specific project) to present the labor-hour estimate for the project. The labor-hour estimate is used to help develop the project schedule and project cost estimate (budget).

MDT Review: *MDT ensures that the Consultant's proposed staff is reasonable for the specific project. It is also critical to determine if a reasonable distribution of work among various levels of staff is proposed to ensure the most economical staffing commensurate with the complexity of the project. The Consultant and MDT's labor-hour estimates should be compared and the differences evaluated. As necessary, the CPE will conduct discussions with the Consultant to resolve differences between MDT and Consultant labor-hour estimates.* ***Note:*** *The Consultant should not submit their labor-hour estimate to MDT prior to the CPE developing their independent estimate. This is critical for segregation of estimate development and ensures an impartial evaluation for reasonableness.*

3) Project Cost Estimate

The method of payment to the consultant is set forth in the original solicitation, contract and in any contract modification. The methods include Cost Plus Fixed Fee, Lump sum, Cost Per Unit of Work or Specific Rates of Compensation. A single contract may contain different payment methods as appropriate for compensation of different elements of work.

a) Cost Plus Fixed Fee Estimate

The cost estimate (including supporting data) must be segregated into the following cost elements:

1. Direct Labor Cost. These must be itemized by staff position and actual hourly rate. The proposed rates must be the actual hourly rate for the specific staff personnel. If multiple personnel with different compensation rates fall into one classification, an average of these rates may be used for the purpose of the estimate. Invoicing, however, must use actual rates for each employee. For Consultant projects that will be active for two or more years, MDT may accept built-in pay escalators, if reasonable. Based on the project circumstances, especially the project schedule, MDT will consider paying a premium on overtime work by Consultant employees. Clearly state and justify any proposed overtime. Actual overtime pay must be included in the project budget.

   For loaded rates, the hourly rate includes the direct labor rate plus indirect costs. Fixed fee is not included in the loaded rate and must be segregated.

2. Indirect Cost Rate. Chapter 11 and Appendix A discuss MDT policies, procedures, and guidance for indirect cost rates. All new contracts must follow MDT's current indirect cost rate requirements. If the Consultant (or subconsultant) is not in compliance with these requirements, the contract cannot be executed until compliance with these requirements is met. The Consultant should provide the information needed to meet the requirements to MDT as soon as possible, but no later than when submitting the cost proposal.

3. Direct Expenses. These include expenses directly related to project implementation (e.g., travel, communications, lodging, meals). These must be itemized by type, quantity and rate and must be the actual firm rates. Direct expenses must not exceed the Federal limits for travel expenses, and must not have been included in the IDC rate.

4. Fixed Fee. The Consultant will propose a fixed fee for the project. For estimating purposes, the Consultant (and subconsultants) can base its fixed fee on a percentage applied to direct labor costs plus the application of its indirect cost rate to direct labor.

   The CPE will make the fixed-fee determination on a project-by-project basis considering:

   - the degree of risk to the Consultant,
   - relative difficulty of work,
   - size of project,
   - duration of contract,
   - level of MDT involvement in project, and
   - use of subconsultants.

If a fixed fee is proposed, justify the reasoning. The Consultant Design Engineer must approve any fixed fee that is based on an estimate that exceeds 12% of the estimated direct labor costs plus estimated indirect costs. Federal limits on fixed fee must be adhered to (refer to 23 CFR 172.11(b)(3)).

5. Subconsultants/Independent Contractors. The cost estimate must present the same information, detail and segregation for any subconsultants and/or independent contractors proposed for the project as used for the prime Consultant. Subconsultants may not be responsible for more than 50% of the estimated total labor hours for the project without written approval from the CPE.

b) Lump Sum Estimate

For the lump sum payment method, the Consultant agrees to perform all of the necessary work for one set amount. However, the lump sum cost estimate must include information to determine reasonability of the unit of work or specific rate. A definition of the unit of work ($/foot, $/hour, $/procedure) and what is included in that work must be provided, along with the number of each unit of work that will be necessary for the scope of services.

c) Cost Per Unit of Work or Specific Rates of Compensation Estimate

This payment method shall only be used when it is not possible at the time of procurement to estimate the extent or duration of the work or to estimate costs with any reasonable degree of accuracy. These rates must include information to determine reasonability of the unit of work or specific rate. The proposal consists of direct labor hours at specified fixed hourly rates, including direct labor costs, indirect costs and fixed fee, plus any other direct expenses or costs, subject to an agreement maximum amount.

MDT Review of Project Cost Estimate: *MDT ensures that the Consultant's proposed cost is reasonable for the specific project. The CPE will use MDT's independent cost estimate to aid in making this determination. The CPE will also review the Consultant's proposed direct expenses, ensuring they comply with Federal travel/per diem rates and policies. Additionally, the CPE will check to be sure the Consultant is using a valid, MDT-approved indirect cost rate, and that all subconsultants' cost proposals comply with all of these guidelines. The CPE will also check all proposed staff salary rates for reasonableness. When a rate seems unreasonable, the CPE will discuss the rate with the CDE with reference to the National Compensation Matrix (NCM) as needed. The NCM is a tool to evaluate reasonable levels of executive compensation for engineering consultants. Since its inception, the NCM has been developed through a collaborative effort between AASHTO and ACEC transportation committee representatives.* ***Note:*** *The Consultant should not submit their cost estimate to MDT prior to the CPE developing their independent estimate. This is critical for segregation of estimate development and ensures an impartial evaluation for reasonableness.*

4) Project Schedule

The project schedule is a negotiated item between MDT and the Consultant. However, MDT may identify the desired project completion date at the scoping meeting. Developing the schedule is an iterative process between MDT and the Consultant. The proposal must include a project schedule illustrating:

- the tasks and subtasks identified in the project scope of services,
- the duration of each task/subtask, and
- predecessors and successors for task/subtask, if different from standard flowchart.

The activities listed in the MDT Consultant Activity Descriptions will be used, if applicable, to identify the project tasks and subtasks to present in the project schedule. For typical projects, a schedule is developed using MDT's EPS. Chapter 4 discusses in detail the EPS process to develop a project schedule that is agreeable to all parties. If the project does not fit the standard MDT flowcharts or activities, the Consultant will work with the CPE to determine the tasks and schedule.

5) Other Required Consultant Information

The Consultant must submit documentation of:

- errors and omissions insurance;
- workers' compensation insurance(or exemption);
- registration with the Secretary of State to do business in Montana; and
- authorization from the Montana Board of Professional Engineers and Land Surveyors to engage in the practice of engineering and surveying (as applicable)

7.2.4 CPE Independent Cost Estimate

The purpose of an independent in-house cost estimate is to provide MDT with a tool to help determine if the Consultant's proposed cost is fair and reasonable for the proposed services. This estimate can then be used as a guide to establish a comprehensive understanding of the scope of work and the effort required to complete the professional services for a given project. The independent cost estimate is an important baseline for negotiations with the Consultant.

This independent estimate will be developed based on the agreed-upon scope of services. It is critical, however, that CPE develop their independent estimate prior to receiving the Consultant's labor-hour or cost estimate. The CPE, with input from the MDT project multi-disciplinary team, will prepare this detailed labor-hour and cost estimate, and will then notify the Consultant to submit its estimate. The CPE will use the MDT Cost Estimate Spreadsheet and will:

- estimate the labor-hours for each work activity, for each employee classification;
- estimate the direct expenses;
- apply the MDT standard direct labor rates;
- apply the Consultant's appropriate indirect cost rate, and

- apply a fixed fee within the accepted MDT range as judged appropriate for the project.

Several methodologies are available for developing a project cost estimate. A "bottom-up" estimate, beginning with labor hours for each specific task is the most detailed, and should be the primary method, using comparable historical projects as a guide. Three-point estimates are very useful as well, using best-case, worst-case, and most likely to occur. Estimates based on percentage of construction cost, or cost per mile should not be used, except as a way to generally compare estimates as a litmus test. The CPE's cost estimate, by necessity, will be based on the project scope of services. This will become an area of negotiation and reconciliation between MDT and the Consultant once the Consultant's cost proposal has been reviewed.

7.2.5 Contract Negotiations

Negotiations should be conducted in good faith, recognizing that successful negotiations should not be an adversarial process. The MDT negotiators must recognize the legitimate interests of the Consultant industry in recovering their costs and making a reasonable profit when providing services to the Department. Consultants must recognize the legitimate interests of the Department in receiving quality work at a fair, competitive and reasonable cost to accomplish the work program while maximizing the benefit from taxpayer dollars. A contract that is beneficial to both parties is the desired outcome of successful negotiations.

Evaluating the Consultant's proposed labor-hours is the most subjective element of the negotiation process. MDT expects an efficient allocation of manpower resources. However, this does not eliminate honest differences of opinion between the CPE and Consultant on the labor-hours needed to fulfill the scope of services. It may require considerable negotiations between the two parties on scope and level of effort to identify a mutually agreeable balance. A gap between the Consultant and MDT estimated labor hours may indicate a different interpretation of the scope of services or the perceived risk with the project. Addressing gaps in the independent labor-hour and cost estimate will help resolve differences between the Consultant's and MDT's proposed cost. If necessary, meetings with functional areas, the Consultant Plans (or TA) Engineer, or Consultant Design Engineer may prove helpful for identifying gaps, especially in understanding of the scope of services.

Assuming both parties have come to agreement on the scope of services, the project schedule, and the Consultant's labor rates, the primary negotiated item remaining is the labor-hour and cost estimate. There are no hard and fast rules or thresholds for how close a Consultant's proposal must be to the CPE's independent estimate. Typically, the estimates should be negotiated to within 10%, but exceptions may be considered.

7.2.6 Unsuccessful Negotiations

There are certain fundamental items that if not met, will result in unsuccessful negotiations. Some of these items are:

- An agreement on scope of services cannot be met;
- MDT determines the Consultant's labor rates are not fair and reasonable;
- MDT determines the Consultant's proposed cost is not fair and reasonable;
- The Consultant is proposing to use a significantly different team than identified in their proposal by which they were selected;
- The Consultant is suspended or debarred from receiving government contracts;
- The Consultant is unable or unwilling to comply with other core requirements, such as errors and omissions insurance, workers' compensation insurance, registration with the Montana Secretary of State, or registration to practice engineering or surveying (as applicable).

If MDT and the Consultant fail to successfully complete contract negotiations, the Consultant Design Engineer will terminate negotiations. MDT will then initiate contract negotiations with the next selected Consultant (i.e., the next ranked firm).

The decision to terminate negotiations is a business decision made by MDT. It should not result in a negative view of the Consultant, nor will this impact the Consultant's opportunity for selection on future projects.

7.2.7 Approval of Proposal

The CPE will prepare the Contract Funding Approval Memo stating the outcome of the contract negotiations and requesting approval, which will satisfy 48 CFR. The memorandum will be signed by the Consultant Plans (or TA) Engineer and will be addressed to the Preconstruction Engineer through the Consultant Design Engineer. If in agreement, the Preconstruction Engineer will approve the scope and cost of the project. This concludes the negotiation process and initiates the contract execution process. If not in agreement, the Consultant Plans (or TA) Engineer, Consultant Design Engineer, or Preconstruction Engineer may return the proposal to the CPE for further negotiations with the Consultant.

In accordance with 48 CFR 31.205-32; in the event that an amicable agreement is reached, the Consultant is allowed to bill the Department for reasonable costs associated with the scoping of the contract. These costs are permissible even if they occur prior to executing a contract; however invoices will not be paid until the contract is executed.

7.2.8 Contract Execution Process

This section discusses the process that leads to contract execution once the Preconstruction Engineer signs the Contract Funding Approval Memo. Chapter 12 discusses MDT requirements for contract provisions (e.g., insurance, subcontracting). The CPE will use the following internal procedure for processing the contract:

1. Contract Preparation. MDT, in coordination with the Montana Chapter of ACEC, has developed a standard contract for Consultant services. The CPE prepares and processes the contract using the standard agreement, incorporating the project-specific information on:

    - Project name/number
    - Scope of services;
    - Schedule;
    - Cost estimate; and
    - Indirect Cost Rate terms for the contract (fixed or annual).

2. Signatures. The CPE will develop the contract and cover letter, and distribute for approval. The first signature required is from the Consultant Plans (or TA) Engineer, who signs the cover letter. Once the Consultant Plans (or TA) Engineer signs the cover letter, contract execution moves to the next stage, which is review and signature by the following:

    - MDT Legal Services
    - MDT Civil Rights
    - Consultant Design Engineer
    - Consultant

    Upon the signature by all parties, the contract is considered executed. The CPE will then finalize the contract information into CIS.

    Signatures may be obtained via hard-copy ink signature, or by digital signature with proper security protocols.

3. Distribution. Upon contract execution, the CPE will distribute the fully executed contract as the notice to proceed. This distribution may be handled through the digital signature workflow. Distribution lists on the contract cover letter template are maintained as necessary.

7.3 TERM CONTRACTS

This section discusses the contract development process for Term Contracts. The objective of a Term Contract is to establish contractually the basic parameters of agreement (contract value, duration, etc.) between MDT and the Consultant that will uniformly apply to any future Term Assignments. This enables the Department to quickly procure needed services to meet future project development needs. The CPE's role is to develop the contract and to provide assistance to the Contract Manager in contract administration. Chapter 6 discusses the selection of Consultants for a Term Contract using the various types of solicitation procedures. Each of these processes ends with the Consultant Selection Board authorizing the Consultant Design Engineer to begin contract development.

7.3.1 Timeline

Relative to projects or special projects, the development of a Term Contract proceeds rapidly, as there are minimal, if any, negotiations included in the process. Typically, a Term Contract is executed within 4 weeks of the Consultant Selection Board meeting at which the Consultant was selected. The majority of this time is absorbed mailing the contract back and forth with the Consultant during the signature process. Occasionally, a Consultant does not have an approved indirect cost rate with MDT at the time of selection. The process to get an approved rate may add delay to the contract execution process.

Figure 7.3-A outlines the steps of the Term Contract Execution process. The remaining portion of this section elaborates on certain steps within the process.

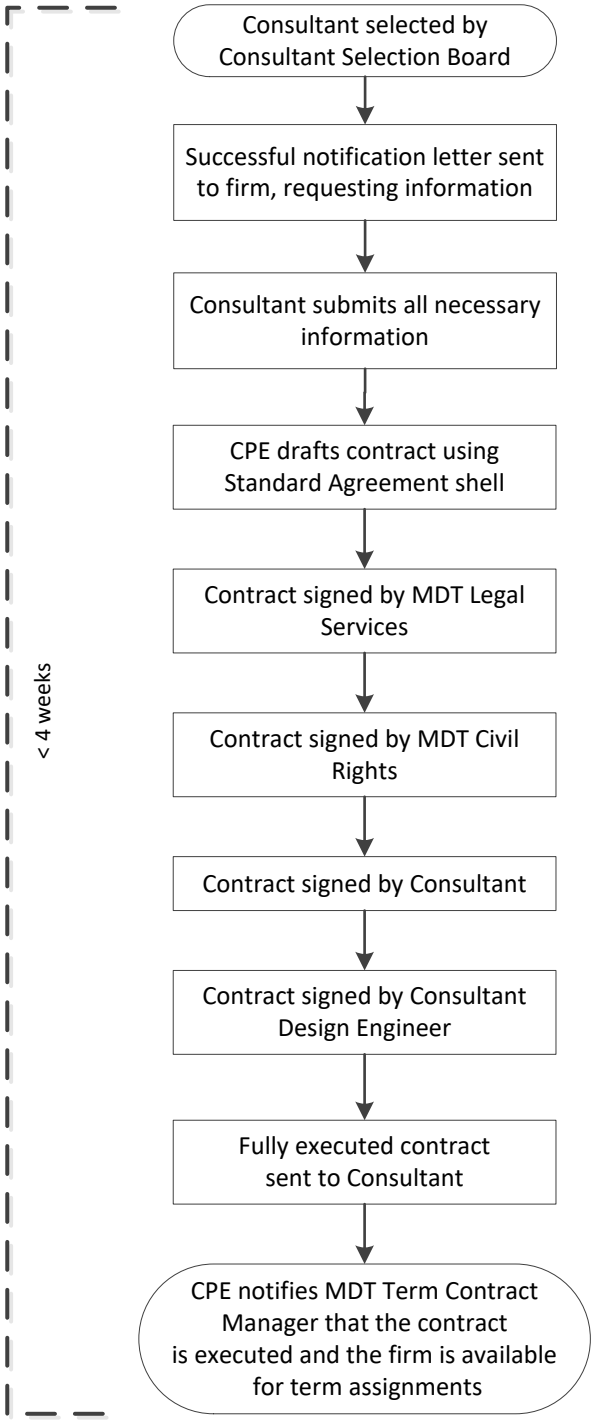


Figure 7.2-A — TERM CONTRACT EXECUTION PROCESS

7.3.2 Consultant Information

The Consultant will provide the CPE and Contract Manager with the following:

1. Direct Labor Rates. These must be itemized by staff position and actual hourly rate. The proposed rates must be the actual hourly rate for the specific staff personnel. If multiple staff with different compensation rates fall into one classification, an average of these rates may be used for the purpose of the estimate. Invoicing, however, must use actual rates for each employee. For Term Contracts that will be active for two or more years, MDT may accept built-in pay escalators, if reasonable. MDT reserves the right to terminate contract negotiations when unreasonable rate charges are proposed. When a rate seems unreasonable, the CPE will discuss the rate with the CDE, with reference to the National Compensation Matrix as needed.

   ***MDT Review**: The CPE and Contract Manager should compare the Consultant's proposed hourly rates with comparable prevailing rates in the Consulting industry for each employee classification. If loaded rates are proposed, the CPE must verify that no fixed fee or unallowable charges are included in the rate, and must verify that the Consultant does not have an active, accepted indirect cost rate with MDT.*

2. Indirect Cost Rate. Chapter 11 discusses MDT requirements, policies and procedures for indirect cost rates. If the Consultant has a current, MDT-accepted indirect cost rate, the CPE will send this information to the master contract file. If the Consultant is not in compliance with these requirements, the contract cannot be executed until compliance with these requirements is met. The Consultant should provide the information needed to meet the requirements to MDT as soon as possible.

   ***MDT Review**: The CPE should verify that the Consultant is using their most recent approved indirect cost rate.*

3. Direct Expenses. These are known expenses anticipated for the Term Assignments directly related to project implementation (e.g., travel, communications, lodging, meals). These must be itemized by type and rate and must be the actual firm rates. All direct expenses must not exceed the Federal limits.

   ***MDT Review**:* The CPE should evaluate each proposed direct expense considering:

   - *Is the item required to fulfill the project scope of services?*
   - *Where applicable, does the cost per unit for the item comply with federal limits?*
   - *For items where MDT has not established rate limits, does the cost per unit for the item appear to be reasonable?*
   - *The Consultant must bill the actual costs for meals and lodging not to exceed the maximum per diem rate as allowed by the Federal limits.*

4. Fixed Fee. The Consultant will propose a fixed fee for the Term Contract. For estimating purposes, the Consultant can base its fixed fee on a percentage applied to direct labor costs plus the application of its indirect cost rate to direct labor.

   ***MDT Review**: The CPE and Contract Manager will make the fixed-fee determination on a contract-by-contract basis considering:*

   - *the degree of risk to the Consultant,*
   - *relative difficulty of work,*
   - *size of project,*
   - *duration of contract,*
   - *level of MDT involvement in project, and*
   - *use of subconsultants.*

   Justification must be provided for all fixed fees. The Consultant Design Engineer must approve any fixed fee that is based on an estimate that exceeds 12% of the estimated direct labor costs plus estimated indirect costs. Federal limits on fixed fee must be adhered to.

5. Subconsultants/Independent Contractors. The Consultant's submittal must present the same information, detail and segregation for any subconsultants and/or independent contractors proposed for the project as used for the prime Consultant. For indirect cost rate requirements, see Chapter 11.

   ***MDT Review**: The CPE will evaluate the various elements of the sub-consultant's cost estimate in the same manner as for the prime Consultant.*

6. Insurance/Registration. The Consultant must submit documentation of:
   - errors and omissions insurance;
   - workers' compensation insurance(or exemption);
   - registration with the Secretary of State to do business in Montana; and
   - authorization from the Montana Board of Professional Engineers and Land Surveyors to engage in the practice of engineering and surveying (as applicable)

7.3.3 Contract Execution Process

Once the Consultant has submitted the necessary information, the contract is ready to be prepared. The following discusses the process that leads to the execution of the Term Contract:

1. Contract Preparation. The CPE prepares and processes the Term Contract. MDT, in coordination with the Montana Chapter of ACEC, has developed a standard contract for Consultant services. For Term Contracts, special conditions are added to the Contract Cover Page.

2. Signatures. The CPE will develop the contract and cover letter, and distribute for approval. The first signature required is from the Consultant Plans (or TA) Engineer, who signs the cover letter. Once the Consultant Plans (or TA) Engineer signs the cover letter, contract execution moves to the next stage, which is review and signature by the following:

   - MDT Legal Services
   - MDT Civil Rights
   - Consultant Design Engineer
   - Consultant

   Upon the signature by all parties, the contract is considered executed. The CPE will then finalize the contract information into CIS.

   Signatures may be obtained via hard-copy ink signature, or by digital signature with proper security protocols.

3. Distribution. Upon contract execution, the CPE will distribute the fully executed contract. This distribution may be handled through the digital signature workflow. Distribution lists on the contract cover letter template are maintained as necessary.

Once these steps are complete, the Term Contract is ready to be utilized for individual term assignments (task orders).

7.4 TERM ASSIGNMENTS

This section discusses the process for executing a Term Assignment. Since the basic parameters of agreement between MDT and the Consultant have already been established through development and execution of a term contract, the process for executing a term assignment commences at the development and negotiation of a specific scope, schedule, and budget for the necessary work.

For Term Assignments, the Contract Manager (Functional Manager) is responsible for the development and negotiation of the scope, schedule, and budget. Assistance from the CPE is available as necessary and all final approvals of Term Assignments lies with the Consultant Design Engineer.

7.4.1 Timeline

Like projects and special projects, the development and execution of a term assignment is like a small project, albeit on a much smaller scale than for a large project. In most cases, rapid development and execution of a term assignment is needed, as the services are often needed immediately. This requires active management, constant communication, buy-in, and prioritization by all parties to meet these deadlines.

7.4.2 Types of Term Assignments

There are two types of term contract work with MDT. The first is for Engineering, Surveying, and Architecture (ESA) services, and the second is for non-ESA services.

- ESA. These types of services require the services of a professional engineer, land surveyor, or architect, and comprise the vast majority of the term contract work MDT utilizes. A few examples of these services are geotechnical investigation, hydraulic design, bridge design, and traffic analysis. Cost is not used as an evaluation factor when selecting Consultants for these services.
- Non-ESA. These types of services do not require the services of a professional engineer, land surveyor, or architect. While these services/types of term contracts are rare, they are used by MDT. Two examples of these services are environmental natural resources evaluations and studies, and cultural resources evaluations. Cost must be included as an evaluation factor when selecting Consultants for these services.

The Consultant Design Engineer will determine if the proposed Term Contract services are ESA or non-ESA.

Figures 7.4-A and 7.4-B outline the steps of the Term Assignment process, depending on whether the services are ESA or not. The portions of this section that follow elaborate on certain steps within these processes.

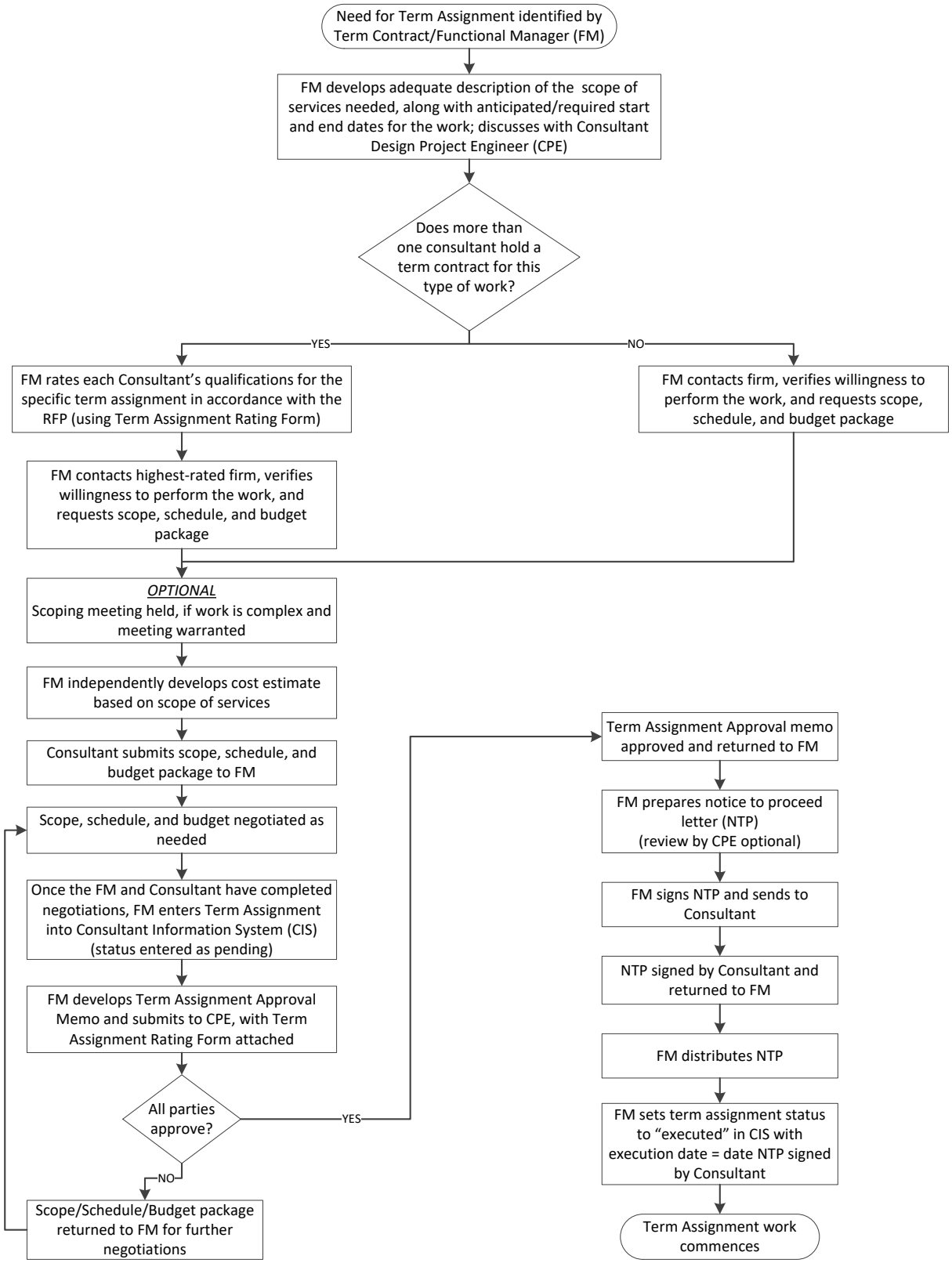


Figure 7.4-A — TERM ASSIGNMENT PROCESS (ESA)

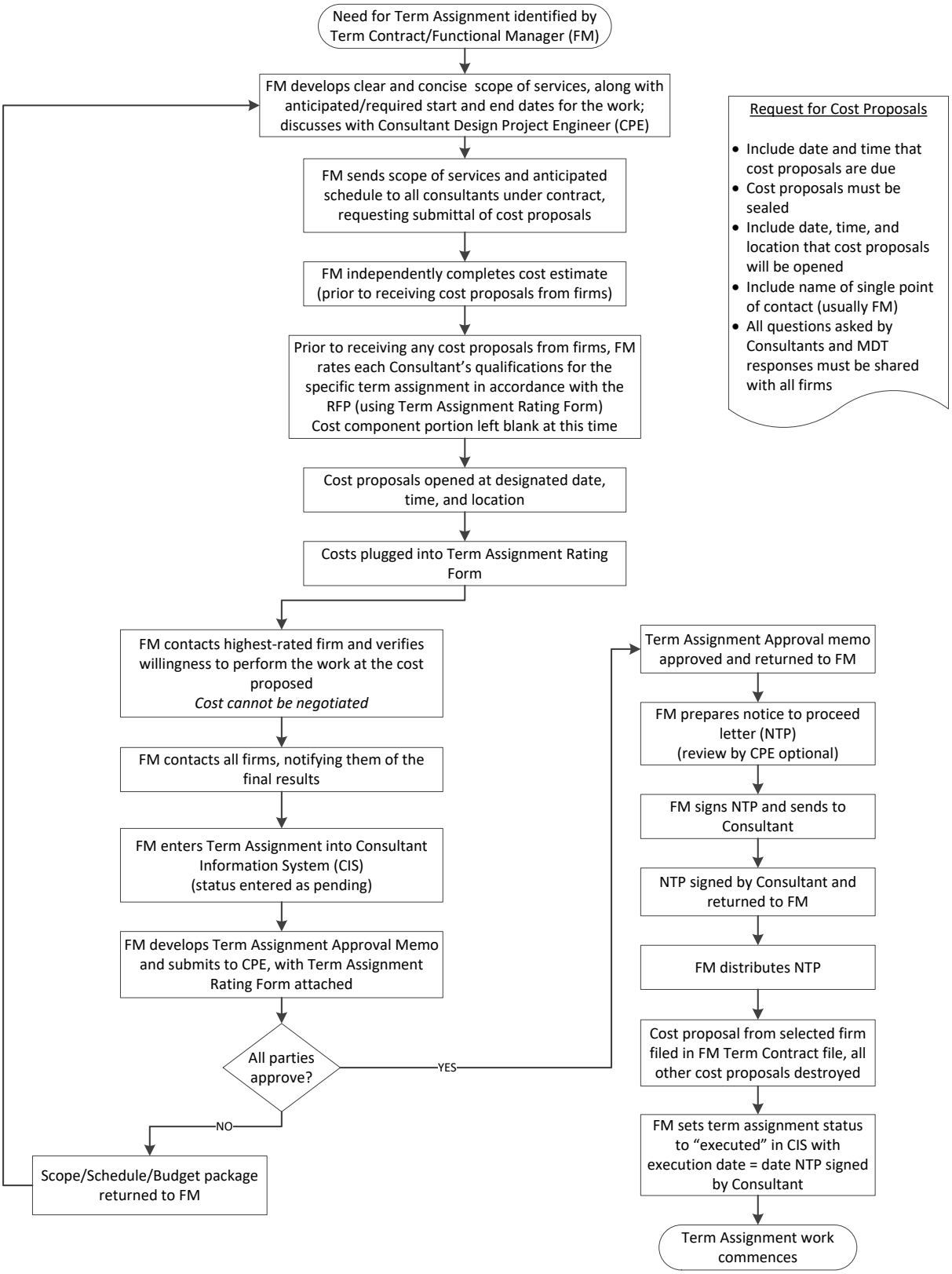


Figure 7.4-B — TERM ASSIGNMENT PROCESS (NON-ESA)

7.4.3 Term Assignment Process (ESA)

- In the early stages, when the FM has identified a need for Consultant Services, the scope of services is in draft form in order to establish goals, objectives, and expectations up front. In concept, a detailed scope of services describes what work will be required, the expected conditions under which the work will be conducted and the obligations of both the consultant and the MDT. The scope is a major factor that determines the cost of Consultant services, and it forms the basis for the Consultant's labor-hour estimate. The scope provides a written documentation of the understanding between MDT and the Consultant on the work needed to complete the project. A well-written scope establishes the:
    - Tasks and subtasks (i.e. work activities) to be performed;
    - Tasks and subtasks to be performed by sub-consultants;
    - Assumptions used to determine scope and level of effort;
    - Number and type of meetings to be attended;
    - Equipment that will be used;
    - Format of deliverables;
    - Standards, policies and guidelines that will be followed;
    - Responsibilities of both the Consultant and MDT, if different than standard activity descriptions dictate; and
    - Products to be delivered
- If only one Consultant holds the term contract, the FM contacts the Consultant, verifies their willingness and availability to perform the work, sends them the scope of services developed in step 2, and requests a refined and detailed scope of services, schedule, and cost proposal (see step 2 for description of what constitutes an effective scope of services). If more than one Consultant holds a term contract, the FM must rate each Consultant's qualifications for the specific term assignment. This is required in order to select the most-qualified Consultant and to comply with Federal regulations. A Term Assignment Rating Form has been developed to aid in this process, and is available on MDT's internal website. Rating of the Consultants must be in accordance with the RFP by which the Consultants were selected. The highest-scoring (most-qualified) Consultant is contacted by the FM to verify their willingness and availability to perform the work, then sends them the scope of services developed in step 2, and requests a refined and detailed scope of services, schedule, and cost proposal (see step 2 for description of what constitutes an effective scope of services).
- While the Consultant is developing their proposal, the FM develops an independent cost estimate. Refer to Section 7.2.4 for an expanded discussion on development of an independent estimate. ***NOTE:*** *The Consultant should not submit their cost estimate to MDT prior to the FM developing their independent estimate. This is critical for segregation of estimate development and ensures an impartial evaluation for reasonableness.*
- Refer to Section 7.2.3 for a detailed discussion on what elements need to be in a Consultant proposal, as well as the process by which MDT reviews the Consultant proposal.
- Negotiations should be conducted in good faith, recognizing that successful negotiations should not be an adversarial process. The MDT negotiators must recognize the legitimate interests of the Consultant industry in recovering their costs and making a reasonable profit

when providing services to the Department. Consultants must recognize the legitimate interests of the Department in receiving quality work at a fair, competitive and reasonable cost to accomplish the work program while maximizing the benefit from taxpayer dollars. Evaluating the Consultant's proposed labor-hours is the most subjective element of the negotiation process. A gap between the Consultant and MDT estimated labor hours may indicate a different interpretation of the scope of services or the perceived risk with the project. Addressing gaps in the independent labor-hour and cost estimate will help resolve differences between the Consultant's and MDT's proposed cost. If necessary, help from the CPE is available for identifying gaps, especially in understanding of the scope of services. There are no hard and fast rules or thresholds for how close a Consultant's proposal must be to the CPE's independent estimate. Typically, the estimates should be negotiated to within 10%, but exceptions may be considered.

7.4.4 Term Assignment Process (Non-ESA)

Term Assignments that are not ESA-related require that a cost component be included as part of the selection process. This is the fundamental difference between ESA related term assignments and Non-ESA related term assignments. It is imperative that all Consultants holding the applicable term contract be given a fair and impartial opportunity to present their cost proposal during the selection process. Some critical points to note regarding Non-ESA term assignments:

- A clear, concise, and final scope of services, including an anticipated schedule, must be developed by the FM at outset of the selection process. Because costs will be proposed based on the scope of services described, it needs to be complete from the beginning. It is important that all Consultants develop their cost proposals using the same scope of services description.
- The detailed scope of services will be sent to all Consultants holding the applicable term contract, requesting they submit a sealed cost proposal if interested. A specific date, time, and location must be identified regarding when the cost proposals will be opened. ***NOTE:*** *It is critical that any questions asked (and subsequent answers provided) be shared with all Consultants from the time the scope of services is distributed to the time the cost proposals are due.*
- While the Consultants are preparing their cost proposals, the FM should rate each Consultant's qualifications specific to the Term Assignment using the Term Assignment Rating Form. A Term Assignment Rating Form has been developed to aid in this process, and is available on MDT's internal website. Rating of the Consultants must be in accordance with the RFP by which the Consultants were selected.
- Once cost proposals are opened and entered into the Term Assignment Rating Form, the highest-scoring Consultant is awarded the Term Assignment. ***NOTE:*** *Cost cannot be negotiated at this point. Since costs were an element of selection, the Consultant must complete the work for the costs they proposed.*

7.4.5 Unsuccessful Negotiations

If the FM is having difficulty negotiating the Term Assignment, the CPE will provide assistance. If MDT and the Consultant fail to successfully complete Term Assignment negotiations, the FM will notify the Consultant Design Engineer in writing. The Consultant Design Engineer will then notify the Consultant that contract negotiations have been terminated. The FM may then request a proposal from another Consultant under a current Term Contract and begin negotiations with that Consultant.

The decision to terminate negotiations is a business decision made by MDT. It should not result in a negative view of the Consultant, nor will this impact the Consultant's opportunity for selection on future Term Assignments.

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Chapter 8
CONTRACT ADMINISTRATION

Chapter 8 presents MDT's policies and procedures on the administration of a Consultant contract after the Notice to Proceed is issued.

8.1 GENERAL CONTRACT ADMINISTRATION PROTOCOL

8.1.1 Overall Communication Protocol

Communication is the key for successful projects, and it is critical for all team members to be as effective as possible in maintaining and managing communication using all forms available. All team members have a responsibility to be proactive in responding, following up to inquiries and requests. Documentation of commitments or decisions made at meetings or in key conversations is essential. For example, email is a good method to document decisions or commitments made in informal conversations. Meeting minutes are a good method for documentation of meetings. Project Managers add value to projects by facilitating good communication.

Milestone reports and meeting minutes must be Completed and distributed as soon as possible. This helps keep projects moving forward, gives people a chance to comment while the milestone meeting is still fresh in their minds, and provides direction for future project development. It also helps set the tone for urgency of time to meet the project schedule.

It is imperative that the CPE be informed on any issues, risks or decisions that affect project schedule, scope, budget or quality.

The primary tool used to communicate the status of a project schedule is MDT's Engineering Project Scheduler (EPS). The CPE is responsible for the care and feeding of this system for their project, and it is vital it be maintained with regularity. The CPE should be prepared to discuss the schedule and status at any point, particularly at every project meeting. The CPE should use the following core requirements relating to maintenance of EPS:

- Keep schedules current;
- Status at a minimum of every two weeks, and when activities are completed;
- Address broken links;
- Analyze and revise the schedule as needed when changes in scope occur; and
- Immediately address all projects that are late (negative project float).

8.1.2 Communication Protocol with the Consultant

The CPE has the discretion to establish the communication protocol between the Consultant and all other parties involved with the project. This will be determined on a case-by-case and a project-by-project basis. It is essential that the CPE establish the communication protocol and ensure that the Consultant and other entities are informed. The protocol should, as practical, address all forms of communication, including telephone conversations. Specifically, for correspondence, the following will apply:

Written Correspondence. The Consultant should address all written correspondence to the Consultant Design Engineer and to the "Attention" of the CPE.

Email. The Consultant must include the CPE in all emails, subject to the CPE's established communication protocol. The CPE will determine when it is appropriate to forward the email to a higher level or other project parties.

Telephone Conversations. The Consultant should inform the CPE of any substantive telephone conversations with other entities if related to the project.

In general, the Consultant must adhere to the communication protocol as established by the CPE. The Consultant must inform the CPE of all substantive discussions directly with entities other than the CPE.

8.1.3 Role of MDT Units

In order for consultant projects to be successful, it is important for all affected MDT units to actively participate in the development of the work product. This includes clearly communicating expectations for scope of services and deliverables, as well as review of work products. Refer to Chapter 9 for discussion and guidance on review of consultant work.
For most Consultant-designed projects, MDT retains the responsibility of performing several project activities. For example, these include:

Agreements. A project may require one or more agreements (e.g., utilities, railroads, local agencies, Tribal). The Consultant Project Engineer will work with the applicable MDT unit to process these agreements.

Right-of-Way. The CPE and Consultant will work together with the Right-of-Way Bureau to secure the required right-of-way and easements. In most cases, acquisition of R/W is completed by MDT. In some cases, however, the Consultant will be contracted to perform R/W negotiations for MDT.

Environmental Permits/Certifications. A project may require one or more environmental permits or certifications. The CPE and Consultant will work together to draft the necessary permits. The Environmental Services Bureau completes and obtains the necessary permit, certification or approval from the applicable resource agency, and communicates any required changes to Consultant. The Consultant is not authorized to communicate

directly with Resource Agencies regarding permits/certifications unless such authority is explicitly granted by MDT Environmental Services.

8.2 "PROJECT" AND "SPECIAL PROJECT" PROTOCOL

8.2.1 Consultant Project Engineer (CPE) Role

For a Project or a Special Project, the CPE serves as the central point of contact for all project activities. The CPE provides administrative and engineering oversight during project development.

For contract-related and administrative-related tasks, the responsibilities of the CPE include (but are not limited to):

- developing contract scope, schedule and budget;
- ensuring consultant invoices are allowable, in accordance within the approved contract terms, and commensurate with the progress of the consultant's work;
- supervising the consultant's work;
- managing the project schedule, including maintenance of the schedule within MDT's EPS system;
- managing the project scope and budget;
- providing written authorization for the Consultant to use overtime in accordance with the contract;
- evaluating the qualifications, assignments, on-the-job performance, etc., of the Consultant's project staff;
- scheduling and attending project meetings;
- coordinating design work between the Consultant and MDT;
- coordinating with other MDT units to elicit their involvement in the project
- signing all routine project-related MDT memoranda that is generated in Consultant Design;
- addressing contract issues such as insurance, Disadvantaged Business Enterprise (DBE) requirements, agreements between MDT and other entities, compliance with the indirect cost rate, subcontracting, etc., and coordinating with other MDT units as needed;
- preparing and negotiating Contract Amendments;
- closing out a contract;
- preparing Consultant performance evaluations for active projects and when the contract is complete; and

- ensuring proper retention of all necessary project documents, files, correspondence, etc.

As appropriate, the CPE will inform and consult with the Consultant Plans Engineer and Consultant Design Engineer on issues related to the administration of individual Consultant projects.

8.2.2 Project Coordination

Effective project implementation requires proper coordination among the several parties involved in a Consultant project. In addition to the CPE and Consultant, these parties could include:

- one or more MDT Headquarters units (e.g., Utilities Section, Right-of-Way Bureau, Bridge Bureau, Environmental Services Bureau, Geotechnical Section);
- MDT District Offices;
- other Montana State agencies (e.g., Fish, Wildlife and Parks, Department of Natural Resources and Conservation, Department of Environmental Quality);
- Federal agencies (FHWA, Fish and Wildlife Service, US Army Corps of Engineers, etc.);
- Tribal governments;
- local agencies (County, City or Town); and
- the general public.

Chapter 3 discusses the specific items of coordination between the Consultant Design Bureau and various parties for the implementation of a Consultant project.

8.3 "TERM CONTRACT" PROTOCOL

8.3.1 General

As discussed in Chapter 6, a MDT unit that provides a support service to a MDT-designed project may elect to secure Consultant services by implementing the procedures of a Term Contract to provide the support service. For all individual Term Assignments, the Functional Manager in the MDT unit is the central point of contact for all parties involved.

Chapter 7 discusses in detail MDT procedures for initiating, negotiating and processing a Term Assignment.

8.3.2 Consultant Project Engineer (CPE) Role

The primary role of the CPE on a Term Assignment is to provide the necessary contract administrative support to the Contract Manager (Functional Manager). The CPE serves as the central point of contact for all administrative activities during contract implementation. The CPE responsibilities include:

- ensuring consultant invoices are allowable with the approved contract terms and progress of the consultant's work;
- evaluating the consultant's work and compliance with the terms, conditions, and specifications of the contract;
- providing a full range of support to the Functional Manager, including ensuring that all contract requirements are met, assisting with contract implementation, assisting with communication, etc.;
- reviewing and processing Contract Amendments;
- resolving disputes in procurement, management and administration of engineering and design related services (as described in Chapter 12);
- closing out a contract;
- maintaining the master contract file in the Consultant Design Bureau for contract-related documents; and
- reviewing term assignments proposals.

8.3.3 Contract Manager (Functional Manager) Role

During the implementation of an individual Term Assignment, the Contract Manager role is analogous to that of the CPE for a "Project." On a Term Assignment, the Consultant answers directly to the Contract Manager and adheres to the communication protocol. The responsibilities of the Contract Manager include (but are not limited to):

- preparing and negotiating term assignments;

- for term contracts that have multiple consultant contracts, evaluating all the consultants to determine the best for each assignment;
- for term contracts where cost is a factor, requesting each Consultant to submit a proposal for each assignment evaluation;
- establishing the communication protocol among the involved parties;
- ensuring that the Consultant meets the applicable engineering and technical criteria;
- reviewing all Consultant monthly progress reports;
- reviewing monthly invoices for goods and services received per the contract;
- informing the CPE of any significant activities and issues related to the Term Assignment;
- coordinating with other MDT units as needed to elicit their involvement in the Term Assignment (e.g., obtaining environmental permits for subsurface exploration);
- coordinating efforts to address project-related problems;
- scheduling and attending project meetings;
- managing the task schedule, including maintenance of the schedule within MDT's EPS system;
- managing the scope and task budget;
- ensuring that all technical documents (e.g., reports, design calculations, correspondence) are retained in the master project file;
- performing select contract-related functions;
- providing written authorization for the Consultant to use overtime in accordance with the contract;
- notifying the CPE when the Term Assignment has been completed; and
- preparing Consultant performance evaluations for active assignments on a yearly basis and when each term assignment is complete.

8.4 CONTRACT IMPLEMENTATION ITEMS

8.4.1 Scope, Schedule, Budget, Quality, Risk Management

8.4.1.1 Consultant Responsibilities

MDT expects that all Consultants will have in place the proper internal controls to monitor the contract scope, schedule, and budget, as well as quality and risk management. The Consultant is responsible for notifying the CPE (or Contract Manager for term contracts) for any change to these items and determining a course of action to address the change.

8.4.1.2 CPE and Contract Manager Responsibilities

The CPE is responsible for coordinating with the consultant to resolve any changes to the schedule, scope, budget, quality or risk management to determine a course of action to resolve the change. Coordination may include MDT units and project parties, if necessary. For term contracts/assignments, the Contract Manager assumes this role.

8.4.2 Invoices/Progress Reports

The following apply to monthly invoices and progress reports for all Consultant projects:

Sample Invoice Shell. Consultants must follow the format and invoice style of the sample MDT shell for invoices and progress reports. Examples can be found on the MDT website (http://www.mdt.mt.gov/publications/forms.shtml#con).

Frequency. Invoices must be submitted no more often than monthly and submitted at least once every three months. Progress reports should be submitted monthly, even if no substantive work has been performed during the applicable month.

Backup Information. Consultants need not submit the backup information to support their invoice (e.g., travel receipts, time sheets). However, the Consultant must retain all backup information for a period of not less than three years after project closure and must provide such information upon request.

Subconsultants. Subconsultants must follow the format and invoice style of the sample MDT shell for invoices and progress reports, unless approved otherwise by the CPE. Subconsultant invoices are submitted with the prime Consultant's invoice.

Project Phases. Projects may have multiple project phases (OT, PE, CE, RW) included under the same contract. Each phase will need a separate invoice or subtotal broken out on the invoice.

Chapter 4 presents the internal procedure used by the Consultant Design Bureau to process the Consultant's monthly invoice and progress report. The consultant is responsible for accounting for costs on the invoice and complying with Federal cost principles. If a firm violates or breaches the terms stated in the contract for allowable costs, they are subject to suspension or debarment actions.

8.4.2.1 TERO/IOS Fees

Tribal Employment Rights Office (TERO) and Improvements or Services (IOS) fees will be applied to any consultant work and expenditures physically taking place within Indian Reservation boundaries. Some examples of this type of work are: geotech drilling, survey, wetland delineation, on-site field reviews, R/W negotiations, construction inspection, etc. For projects where work physically takes place within an Indian Reservation boundary, a Project Specific Agreement for the project is used to determine the TERO and IOS fees that apply. When an invoice is submitted that contains work/expenses on a Reservation, the amount for which TERO and IOS would apply should be identified, and a calculation should be made to determine what the actual TERO and IOS fees are. For example:

- A consultant has incurred $1000 in work/expenses for the invoice period.
- $200 of that was work/expense that physically took place on the Reservation.
- The consultant should submit an invoice for $1000, and indicate on the invoice (as a separate item) that $200 is work/expense applicable to TERO and IOS and the resultant TERO and IOS fees are $6 (or whatever the appropriate rate is for that Reservation).

8.4.3 Deliverables

It is the responsibility of the Consultant to provide deliverables in accordance with the executed contract. Not only does the scope of services define these deliverables, but MDT manuals, memos, and guides are also included, by reference, in the contract. The role of the CPE is to ensure the Consultant's deliverables are in accordance with the contract, as well as all other MDT manuals, guides, policies, and procedures. For term contracts/assignments, the Contract Manager assumes this role. Refer to Chapter 9 for further detail on the quality of these deliverables.

8.4.4 Progress and Schedule

Chapter 7 discusses the negotiations between MDT and the Consultant to establish the project/task schedule. Once the schedule is established, it is the responsibility of the Consultant and MDT to work together to meet this goal. Adequate work effort, effective communication, progress reporting, and risk management are all critical elements in meeting the established schedule. All parties must be fully committed to meet this goal.

MDT expects that all Consultants will have in place the proper internal controls to monitor the schedule. The Consultant is responsible for notifying the CPE if the project is behind schedule. Consultants are required to monitor the project based on interim tasks, deliverables or milestones, not just on the overall project schedule and budget.

As discussed in Chapter 4, the CPE is responsible for implementing and maintaining schedules in EPS for a Consultant-designed project. For Term Assignments, the Functional Area for which the Consultant is performing work is responsible for maintaining activity status in EPS.

8.4.4.1 Stop Work Order

The CPE has the authority to issue a Stop Work Order on a Consultant-designed project when deemed to be in the best interest of the Department. The CPE is not required to seek approval from the Consultant Selection Board to stop work, but this decision must be fully vetted with the project design team as well as the Consultant Plans (or TA) Engineer and the Consultant Design Engineer.

8.4.5 Consultant Project Files

The Consultant is required to maintain its project files as stated in the Standard Agreement. This includes all back-up data for plans, reports, mapping, estimates, etc., that are submitted to MDT. It also includes all books, papers, records, etc., relating to the costs and expenditures incurred. These must be made available to MDT for audit and review.

8.4.6 Contract Amendments

8.4.6.1 General

The following section outlines the circumstances and process for out-of-scope work. The term "out-of-scope work", as used in this section, is defined as work that changes the character, scope, complexity, or duration of the work contained in the existing contract, yet was included in the original solicitation by which the Consultant was selected. Per Federal regulations, any proposed/identified out-of-scope work that was not included in the original solicitation cannot be added to the contract. Services of this nature must be procured through an additional solicitation, performed under a different existing contract (i.e. a term contract), or performed by internal MDT staff.

Contract Amendments may be necessary for a variety of reasons, including a change in:

- Scope (i.e., character of work, complexity of work);
- Duration; and/or
- Conditions (i.e., weather, drastically different land use, etc.).

The Consultant must submit thorough documentation on the justification and cost for the Contract Amendment (description of out-of-scope work, detailed cost estimate). Unless authorized otherwise by the Consultant Design Engineer, the Consultant cannot initiate any additional work until the Contract Amendment has been executed. However, expedited services are an exception.

As with most aspects of a consultant contract, time is of the essence when it comes to amendments. A priority should be given to negotiating and executing amendments, particularly when the out-of-scope work impacts a project schedule. Depending on the complexity and amount of work, an amendment may be fully processed from start to finish in as little as a few days, to as much as a couple of months. The primary controlling factor in this time is the time it takes for the CPE and the Consultant to come to an agreement on the scope, schedule, and budget. Both parties must prioritize this activity to ensure expediency in executing the amendment.

Contract Amendments do not apply to errors and omissions in the contract documents that are the responsibility of the Consultant. See Chapter 12 for a discussion on errors and omissions.

8.4.6.2 Projects and Special Projects

Figure 8.4-A outlines the steps of the **standard** contract amendment process. The following elaborates on certain steps within the process.

- When work is deemed out-of-scope by the Consultant and the Department, the CPE will verify that the work was included in the original solicitation by which the Consultant was selected. If this is deemed not to be the case, or is unclear, the Consultant Design Engineer should be consulted for a decision and determination on a course of action.
- The CPE will coordinate to receive preliminary approval on changes to schedule, scope, and budget from the Project Sponsor prior to initiating the amendment process.
- Development of the scope of services may be an iterative process. As with any scoping process, it is critical to clearly establish expectations and understanding on the services to be provided. While this step may be iterative in nature, it is important not to divulge cost estimates for the work until both parties have completed their estimates.
- In the cases where a contract expiration date is extended, and the indirect cost rate terms are “fixed” for the contract, the rate must be addressed in the amendment. The terms specified in the contract must be followed when determining how to address this issue.
- The decision to process an amendment immediately or to process at a later date (i.e. roll-up amendment) is one that must be made collectively by both MDT and the Consultant. It may be advantageous to roll-up the work in a later amendment when the work is of a small dollar value. This avoids excessive contract amendments. However, roll-ups may cause the Consultant difficulties in their financial system and business planning.
    - If the decision is made to request the amendment be processed immediately, regular practices will ensue.
        - The CPE develops a Funding Approval Memo, identifying the scope, schedule, and budget.

- Depending on the amendment, the Funding Approval Memo is either sent to the Preconstruction Engineer for approval, or the Consultant Design Engineer presents the Funding Approval Memo to the Consultant Selection Board.

    A. The *Preconstruction Engineer* has the authority to approve the Funding Approval Memo if the work resulting from the amendment does not violate Transportation Commission Policy #12.

    B. The authority to approve the Funding Approval Memo is held by the *Consultant Selection Board* if the amendment violates Transportation Commission Policy #12.

    Transportation Commission Policy #12 applicability to contract amendments:

    If the amendment includes work that changes the fundamental *construction* scope of work of the project, and the result is an increase in total project cost that violates the sliding scale defined in the Policy, it must be brought before the Consultant Selection Board for approval. It should also be noted that in these cases, the project as a whole (not specifically the Consultant amendment) will need to be brought forward to the Transportation Commission for their approval.

- Upon approval of the Funding Approval Memo, the CPE will draft the Amendment, obtaining signatures from:

    A. MDT Legal
    B. Consultant Design Engineer
    C. Consultant

- If the decision is made to request the amendment be processed at a later date, the scope, schedule, and budget will be presented to the Preconstruction Engineer for approval via the Funding Approval Memo. This option is intended to minimize the execution of small amendments, especially ones that may have the potential to be absorbed within an existing contract ceiling.

    - Upon approval of the Funding Approval Memo by the Preconstruction Engineer, the Consultant Project Engineer will notify the Consultant, in writing (email is sufficient) that the Department has approved the proposed scope for the negotiated budget and identify the circumstances by which the amendment will be processed.

    - An amendment will be processed upon either of the following scenarios:

        - Approved amendments not yet executed that reach a cumulative value of more than $100,000.
        - The Consultant identifies an imminent budget deficit requiring the contract ceiling be amended.

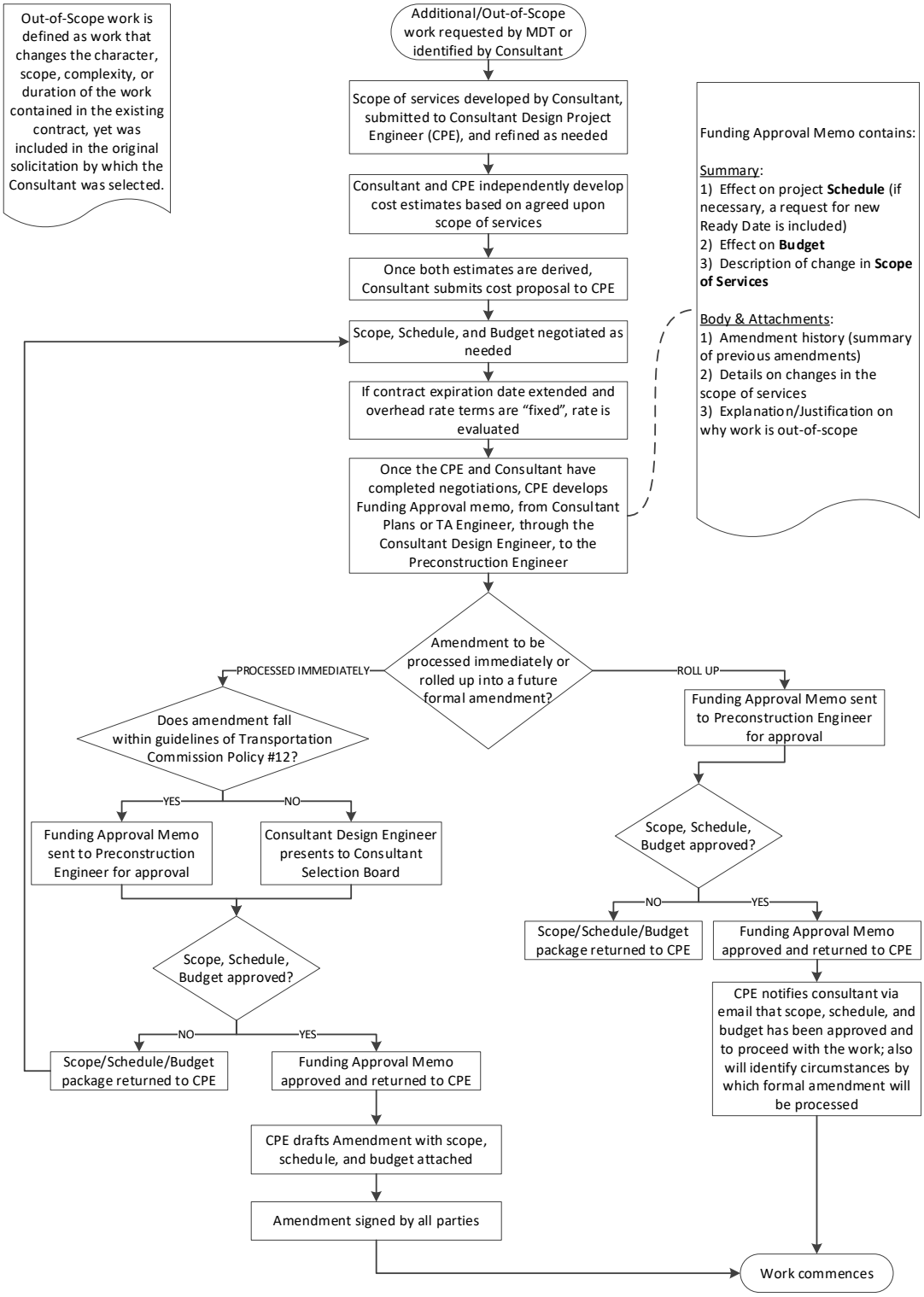


Figure 8.4-A — STANDARD PROJECT AMENDMENT PROCESS

8.4.6.2.1 Expedited Procedure for PE Services

In some instances, MDT may need to expedite out-of-scope design services during the preliminary engineering (PE) phase of a project (e.g., urgent R/W issues, management directives and unexpected changes to design prior to letting a project). The initial process requires approval in writing (email is sufficient) from the Consultant Design Engineer to authorize the expedited procedure and allow the CPE to initiate out-of-scope services with the Consultant while the Contract Amendment is being processed. In order for the Consultant Design Engineer to authorize such services, the cost for any out-of-scope work cannot exceed $20,000. Then, the Consultant Design Engineer or their designee will negotiate directly with the Consultant to perform the out-of-scope work and authorize the Consultant to initiate the work immediately. The Contract Amendment will then be processed and honored by MDT using the standard amendment procedure. All with the Consultant during this process must be in writing (email is sufficient) and documented in the master contract file.

8.4.6.2.2 Construction Support (CE) Services (Standard Procedure)

For Consultant-designed projects, MDT will often choose to amend the Consultant contract to provide support services during project construction. These services may include answering questions from MDT field construction personnel, interpreting and clarifying the construction plans, making minor corrections to the contract documents, etc. The request for construction support services may be made by the District Construction Engineer, District Administrator and/or the Headquarters Construction Engineer. Any request must be in writing and documented in the master contract file.

If the amendment is for general construction support under $20,000 then upon request for construction support services, the CPE can execute an amendment without going through the Funding Approval Memo process. For general construction support that is not clearly defined regarding the extent or duration of the work, the fixed fee paid is determined by the actual labor and overhead invoiced. For construction support that is defined within a proposal, the fixed fee is negotiated based on the labor and overhead of the proposal.

If the amendment includes specific construction support (bridge review, geotechnical observation, etc.) and exceeds $20,000, then the consultant needs to submit a scope and fee proposal, which will then go through the Funding Approval Memo process.

It is important that the Consultant maintain thorough documentation for construction support services. When the Consultant submits its invoice, the sample MDT shell for invoices and progress reports should be used to document the work that was performed. It is especially important that the Consultant maintain good records for this work.

8.4.6.2.3 Construction Support (CE) Services (Expedited Procedure)

In some cases, MDT may need the services of the design Consultant expeditiously (e.g., changes to design, evaluation of Value Engineering Proposals from the Contractor). In these cases, the Consultant Design Engineer and MDT construction staff may agree that an expedited procedure

is justified to allow the Consultant to provide out-of-scope construction support services while the Contract Amendment is being processed. In the expedited procedure, the Consultant Design Engineer or his designee can negotiate directly with the Consultant to perform the out-of-scope work and authorize the Consultant to initiate the work immediately, if the agreed-upon cost is $50,000 or less. The formal Contract Amendment will then be processed and honored by MDT using the standard procedure for an Amendment. The request for construction support services may be made by the District Construction Engineer, District Administrator and/or the Headquarters Construction Engineer. Any request must be in writing (email is sufficient) and documented in the master contract file.

8.4.6.3 Term Contracts/Assignments

Figure 8.4-B outlines the steps of the standard term assignment addendum process. The following elaborates on certain steps within the process.

- When work is deemed out-of-scope by the Consultant and the Department, the Contract Manager will verify that the work was included in the original solicitation by which the Consultant was selected. If this is deemed not to be the case, or is unclear, the Consultant Design Engineer should be consulted for a decision and determination on a course of action.
- The Contract Manager may need to coordinate with the Project Sponsor or Funding Program Manager to receive preliminary approval on changes to schedule, scope, and budget prior to initiating the addendum process. This is particularly important when the Consultant work is funded through an annual program.
- Development of the scope of services may be an iterative process. As with any scoping process, it is critical to clearly establish expectations and understanding on the services to be provided. While this step may be iterative in nature, it is important not to divulge cost estimates for the work until both parties have completed their estimates.
- Once the Contract Manager and the Consultant come to an agreement on the scope, schedule, and budget for the addendum, the Contract Manager develops a Term Assignment Addendum Approval Memo, identifying the scope, schedule, and budget.
- Upon approval of the Term Assignment Addendum Approval Memo, the Contract Manager sends the Notice to Proceed to the Consultant.

If a Term Contract needs to be amended to add either time or dollar value to the contract, the Contract Manager will work with the CPE to develop a Term Contract Amendment. The basic steps in this process are as follows:

- The Contract Manager identifies need for amendment and notifies the CPE.
- The Contract Manager submits in writing (email is sufficient), a request for amendment to the Consultant Design Engineer (including the CPE in this correspondence).
- Upon approval, the CPE will draft an Amendment, obtaining signatures from:
    - MDT Legal
    - Consultant Design Engineer
    - Consultant

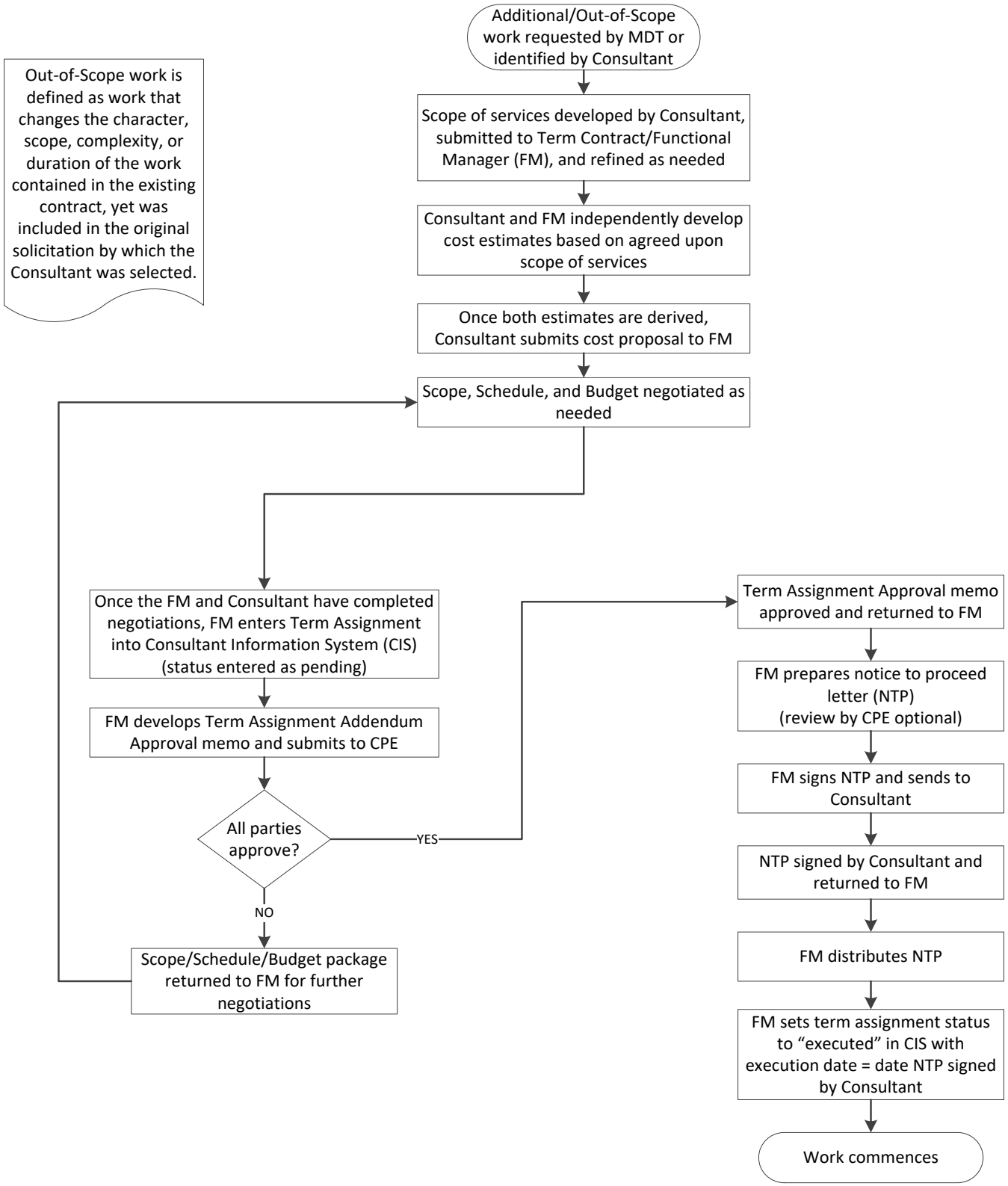


Figure 8.4-B — TERM ASSIGNMENT ADDENDUM PROCESS

8.4.7 Project Phase Closure

Many Consultant projects include multiple phases, such as PE, CE, and R/W. The following describes the MDT procedure to close individual phases within a contract, while leaving the contract open:

1) The CPE concludes that the Consultant has fulfilled all terms of the individual phase, and confirms this with the Consultant.
2) The CPE confirms with the Consultant Design Engineer that there are no open E&O cases or unresolved contract compliance audits.
3) Upon confirmation from the Consultant and the Consultant Design Engineer that the phase is ready to be closed, the CPE notifies the Consultant to submit its final invoice for that phase within 60 calendar days.
4) The Consultant must submit its final invoice for that phase stating that:
    - the project phase is complete;
    - this is the final invoice for this phase, including all fixed fee the Consultant is claiming for the phase;
5) Upon submittal of an acceptable final invoice, the CPE processes the final invoice, closes the phase within the Consultant Information System (CIS), and notifies the Consultant Design Engineer and the MDT Engineering Accountant that the project phase for the consultant contract is closed.
6) Either MDT or the Consultant may request a project phase debriefing.

Due to federal requirements regarding project phase inactivity, it is critical that MDT close project phases when complete. It is important to note that once MDT and the Consultant commit to closing a project phase (as described above), no further compensation is allowed under that phase. The contract, however, may remain open in order for the Consultant to perform work under subsequent phases (i.e. CE services).

8.4.8 Term Assignment Closure

As individual term assignments (task orders) are completed within an overall term contract, the assignments must be closed. The following describes the MDT procedure to close individual term assignments within a contract, while leaving the contract open:

1) The Contract Manager concludes that the Consultant has fulfilled all terms of the individual term assignment, and confirms this with the Consultant.
2) Upon confirmation from the Consultant that the assignment is ready to be closed, the CPE notifies the Consultant to submit its final invoice for that phase within 60 calendar days.
3) The Consultant must submit its final invoice for that phase stating that:

- the assignment is complete;
- this is the final invoice for the assignment, including all fixed fee the Consultant is claiming for the assignment;

4) Upon submittal of an acceptable final invoice, the Contract Manager processes the final invoice and closes the assignment within the Consultant Information System (CIS).

5) Either MDT or the Consultant may request a term assignment debriefing.

8.4.9 Final Contract Closure

Figure 8.4-C outlines the steps of the final contract closure process. The following elaborates on certain steps within the process.

- Once the CPE (or Contract Manager in the case of Term Contracts) and the Consultant agree that Consultant's work on the contract is complete, the contract closure process should move forward in an expeditious manner. Contracts should not remain open unnecessarily when no additional work is to be completed.
- It is critical that a contract not be closed if there is an open E&O case or an unresolved contract compliance audit. In these cases, it is important for the Consultant to remain under the terms of the contract. Additionally, if compensation or reimbursement results, a contract must be in place as a mechanism for such payment.
- Regarding fixed fee, the Consultant is entitled the entire fixed fee for the contract, assuming all agreed-upon work has been provided. The exception to this is general CE Services.
- When the Consultant submits the final invoice, they must indicate that:
  - the contract is complete;
  - this is the final invoice for the contract, including all fixed fee the Consultant is claiming;
  - all project-related documentation has either been submitted or is included with the final invoice.
- Federal regulations require a performance evaluation be completed for the Consultant's work on the contract. Interim/incremental performance evaluations may (and should) be completed throughout the life of the contract specific to the Consultant's work during that specific time period. As long as a performance evaluation was completed within the life of the contract, this requirement is met. The Consultant must be provided any evaluation(s), along with an opportunity to submit written comments to be attached to the evaluation(s).
- Upon submittal of an acceptable final invoice, the CPE (or Contract Manager) processes the final invoice, and closes the contract within the Consultant Information System (CIS). The Consultant Design Engineer will then issue a formal contract closure letter to the Consultant.
- Either MDT or the Consultant may request a contract debriefing. This may be very useful to capture both positive elements of work, as well as areas needing improvement to fully meet the other party's expectations. This contract debriefing may prove very useful for MDT in order to understand the true cost of the contract (if the Consultant

“wrote-off” certain expenditures during the life of the contract) aiding in better level of effort estimates for future, similar contracts.

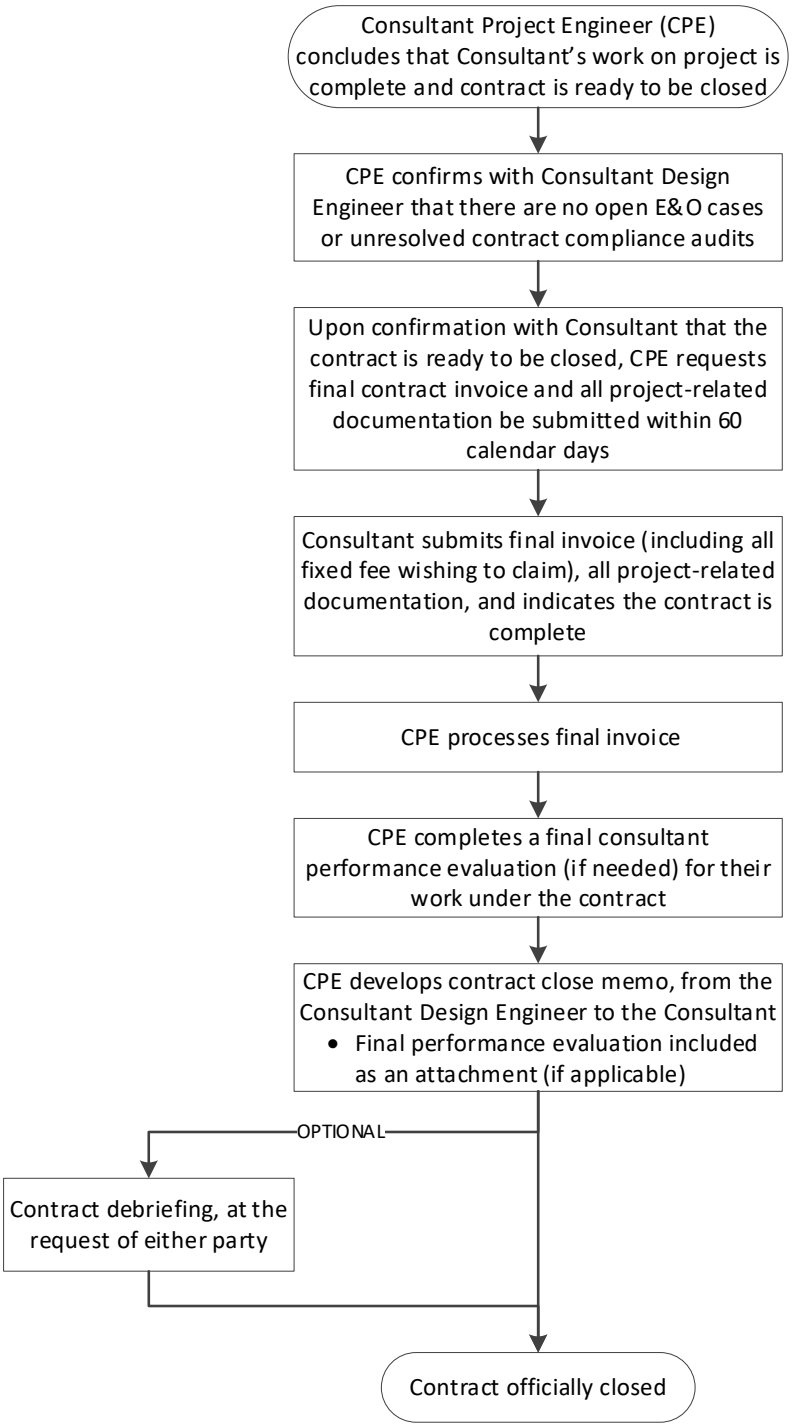


Figure 8.4-C — FINAL CONTRACT CLOSURE PROCESS

8.5 EVALUATION OF CONSULTANT PERFORMANCE

8.5.1 General

The evaluation of Consultant performance is important in many regards. Evaluations reinforce positive behavior and identify areas of needed improvement. They aid in communicating how expectations have or have not been met, and are invaluable in giving the Consultant the information they need to successfully meet MDT's needs. Consultant performance evaluations are also an important factor used by MDT in rating and selecting Consultants for future work. The Consultant Design Bureau maintains a database of Consultant evaluations for this purpose.

8.5.2 Consultant Evaluation Criteria

A detailed description of the evaluation criteria used in evaluating consultant performance is available on MDT's Consultant internet page. Generally speaking, Consultants are evaluated on Schedule and Deadlines, Quality of Work, Cooperation, Management, and Knowledge of Department Needs and Design Value. These same categories of evaluation are used when performing reference checks for consultants that do not have MDT-specific performance evaluations.

8.5.3 Evaluators

Any MDT employee who has been substantially involved in the project and/or who has had significant interaction with the Consultant is provided with the opportunity to complete an evaluation of the Consultant's performance. Annually, the following individuals are required to evaluate the performance for every Consultant the individual has worked sufficiently with:

- Consultant Project Engineer,
- Consultant Plans Checker, and
- Contract Manager for a Term Contract.

8.5.4 MDT Procedures

While evaluations may be done throughout the year (and are, in fact, encouraged), the Consultant Design Engineer issues a solicitation annually in the Spring for all appropriate MDT personnel to evaluate Consultant performance over the last 12 months. MDT utilizes a web-based application for evaluations for the purposes of consistency and ease of use. Supporting comments are strongly encouraged (and required in some cases), in order to provide justification for the rating and provide the Consultant with an understanding of the rating. All evaluations go through a series of review and approval, and must be approved by the Consultant Design Engineer.

8.5.5 Consultant Debrief

Consultants may be debriefed on their performance evaluation upon request to the Consultant Design Engineer. The consultant may, upon their request, attach comments to an evaluation.

8.6 UNSATISFACTORY CONSULTANT PERFORMANCE

8.6.1 Issue Resolution

Chapter 12 (section 12.5) discusses MDT's philosophy regarding resolution of issues arising during the life of a contract.

8.6.2 Corrective Action

If significant quality deficiencies are identified or quality is trending negatively, the CPE should initiate corrective action through informal contact with the Consultant. If the trend continues, then the CPE, with the approval of the Consultant Plans Engineer and/or TA Engineer and/or Consultant Design Engineer, will identify the adverse condition and prepare a letter to the Consultant requesting corrective action. The Consultant will respond in writing with a corrective action plan. The plan shall include the suspected cause of the adverse conditions, the corrective action proposed, the timeline for implementation and the resolution of the adverse conditions. The CPE will monitor corrective action through resolution. When the CPE and Consultant agree that the corrective action is complete, the Consultant Project Manager shall prepare a letter summarizing the action and results for submittal to the CPE. If acceptable performance and quality is not achieved, termination of the contract will be considered.

8.6.3 Termination

Termination of a consultant contract must not be taken lightly. Reasonable attempts should be made to allow the Consultant to meet MDT's expectations, typically through corrective action (described above). When corrective action has not resulted in satisfactory performance, terminating the contract may be in the best interest of MDT. The executed contract agreement must be followed regarding the conditions related to terminating the contract. Generally, a consultant contract may be terminated:

- If the services of the Consultant prove unsatisfactory,
- If the Consultant fails to perform its work with due diligence,
- If the required services or any part of them are not completed within the time limits specified, and/or
- Due to a conflict of interest

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Chapter 9
PROJECT QUALITY

9.1 PROJECT QUALITY OBJECTIVES

9.1.1 MDT Overall Policy Statement

MDT expects high quality planning and engineering services for all MDT projects. To achieve that goal, MDT requires a reasonable level of effort on every project specifically for quality control. High quality work enhances MDT's ability to efficiently deliver projects on or ahead of time and within or under budget.

Project quality is an inherent objective for every MDT Consultant project. MDT expects that all Consultants will have the proper internal controls to ensure that their products provide the quality as required by the contract. For every Consultant project, the MDT process is designed to review and evaluate these products for quality compliance.

Quality Assurance/Quality Control reviews are required for all Consultant deliverables. Each project shall conform to the Consultant's firm-wide quality assurance process and shall include quality control reviews at milestone submittals. The Consultant's proposal should include labor hours for quality control reviews.

9.1.2 MDT Design Review Process

MDT has established a formal process for project development with milestone reviews and reports to document the design at different stages of development. Milestone reviews and reports are defined in project activity descriptions and scheduled in the MDT's Engineering Project Scheduler (EPS). Project development is documented and approved through reports that include the Preliminary Field Review Report (PFR); Alignment and Grade Review Report; Scope of Work Report; Design Exception Report; etc. The review process is incremental as the project develops in order to catch errors and coordinate design changes early in the project development process. The first major review of the design is the Alignment and Grade Review (AGR). The purpose of the AGR is to review and finalize the design elements that control the horizontal alignment, grade and surfacing section of the proposed road. After this activity is completed, the adjustments to these elements should be minimal. The next major review is the Plan-In-hand (PIH). The purpose of this review is to review and finalize design elements that control the final construction limits of the proposed project. The last major review is the Final-Plan-Review (FPR). The purpose of this review is to review and finalize the plans, specifications and construction estimate. MDT's general Design Review process is utilized for both in-house and consultant designed projects.

9.1.3 MDT Review of Consultant Work

9.1.3.1 General

MDT's role in reviewing consultant work is from the owner's perspective. MDT reviews the quality of deliverables, expected results in respect to the purpose and need of the project, how the deliverable align with the contract scope, and how the work serves MDT's mission. MDT's review does not transfer the burden of responsibility for technical and engineering accuracy from the Consultant to MDT. In partnership with the Consultant, the review is intended to assist reaching the earlier-stated goal of providing high quality services for all MDT projects.

A framework for MDT Reviews is as follows:

1. Determine the appropriate review participants. The review participants are either defined by the review activities or determined by the CPE.

2. Define completeness and correctness criteria. The criteria for completeness and correctness are generally defined through activity descriptions, activity check lists, design memos and manuals. Refer to 8.4.3. Project specific criteria are defined during the scoping of the project with the consultant and contract scope.

3. Send out the review material prior to a review meeting or review deadline. Where possible, formal reviews will proceed more efficiently if the team has a chance to review the deliverable ahead of time. Review and provide appropriate comments prior to the review.

4. Conduct review. Focus the review on the completeness and correctness of the deliverable based on the criteria defined for the project. The review will determine whether or not the deliverable is acceptable and that the process used to build the deliverable was acceptable. Keep a list of action items and comments during the review.

5. Conclude the review. Does the deliverable meet all the completeness and correctness criteria set forth in the review and does not need further review? Is the review activity considered complete with expected changes to be made and reviewed in a later review activity? Or, is the review activity considered incomplete and an iteration of changes, submittal, review expected? If iterative changes occurred, determine the course of action and who is going to be involved.

6. Communicate the results. Communicate clearly with all interested parties the results of the review. When feedback is given, be clear whether the comment is required to be addressed or just a suggestion that might be followed. Use active voice when communicating to the Consultant. Passive language yields passive results! Using passive words like "should" does not communicate your expectations effectively. Clearly differentiate between revisions that must be made and revisions that are a preference of the reviewer for the Consultant to consider. Break down comments into the following categories, as applicable:

- Required changes. These changes must be made in order for MDT to accept the work product. Supplemental information may justify no change.
- Preferred changes. As implied, these changes are preferred by the reviewer but are not required for MDT acceptance of the work product.
- Items that should be considered by the Consultant on this project and future projects. These items are usually professional opinion that the reviewer is simply presenting to the Consultant as something to consider, and may require changes.
- Potential Risks. What are some of the potential risks identified with the consultant's work product? What questions does the reviewer have that the consultant should address, and what training or guidelines are available for the consultant to better meet the need of MDT.

9.1.3.2 Technical Reviews

Depending upon the nature of the Consultant project, one or more MDT units (including the Consultant Plans Checker) may provide technical support to the project. The technical support units are responsible for providing technical reviews of Consultant plans and other deliverables. The primary focus of the technical review is to assure:

- the design meets purpose and need;
- the design meets the scope of work approved by MDT;
- the Consultant is using an effective QC/QA process;
- the Consultant submittals are accurate and complete and are in compliance with applicable Federal, State and local standards;
- the design provides a safe and cost-effective design that is constructible and biddable;
- effective incorporation of all aspects of highway engineering (e.g., right-of-way, environmental, hydraulics); and
- CADD files are compiled according to MDT standards and have been properly incorporated into the MDT Document Management System.

The Consultant submits all project deliverables to the CPE. The CPE will prepare a transmittal memorandum to the appropriate MDT unit(s) requesting its review and comment on the Consultant submittal. The CPE will submit the comments (i.e., written, verbal, marked-up plans) to the Consultant and coordinate the resolution of the comments between the MDT unit and Consultant.

9.1.4 Consultant Submittals

9.1.4.1 Technical Standards

MDT has developed a comprehensive set of publications that document the Department's preconstruction and construction criteria, standards, policies and practices for developing the PS&E. The MDT publications identify the typical deliverables required from the Consultant. In addition, many MDT units have issued technical memoranda, Special Provisions, etc., that further document their policies and procedures. Any Consultant retained by MDT is responsible for ensuring that their project deliverables meet the requirements of the applicable MDT publications for technical accuracy, completeness, etc. Additionally, the Consultant is responsible for ensuring they are utilizing the most recent reference material. Many of these policies and procedures can be found on the MDT website.

9.1.4.2 Design Plan Submittals

Specifically for Consultant-designed plans, the following briefly describes the basic process:

- The Consultant is required to submit hard copies of the project plans (as directed by the CPE) and all electronic files.
- The applicable MDT unit(s) will conduct a review of the Consultant's plans and provide comments. The Consultant Design Bureau maintains the following checklists for design plans submitted by Consultants:
    - Activity 118 AGR Plan Review Checklist;
    - Activity 134 PIH Plans Review Checklist;
    - Activity 152 FPR Plan Review Checklist; and
    - Contract Plans Submittal Checklist.
- Once completed, these checklists are filed in the master project file. Written comments and, if necessary, a red-lined set of plans are submitted to the Consultant through the CPE.
- The Consultant must respond to all MDT comments in writing using the comment response tracking form (available on MDT's webpage) and with a revised set of plans, if necessary.
- This process is repeated for each major plan submittal.
- For all Consultant-designed plans, the CPE and Consultant Plans Checker submit the final plans to the Contract Plans Bureau and facilitate all changes directly with the Consultant and other MDT units as necessary.

9.1.4.3 Technical Report Submittals

The following addresses the review of the technical report submittals:

- The Consultant is required to submit hard copies and electronic copies of all technical reports as required by the contract. These include Hydraulics Reports, Environmental Reports, Traffic Reports, Geotechnical Reports, etc.
- The CPE will distribute these reports to the applicable MDT unit(s) for a technical review and provide comments as necessary.

9.1.4.4 Documentation

Good project documentation is an essential element of project implementation, as well as management and history of Consultant submittals. Depending upon the nature of the project, the required documentation may include:

- Scoping meeting minutes;
- Contract documents (draft and final); and
- Miscellaneous meeting minutes;
- Comment Response document;
- Preliminary Field Review Report;
- Alignment and Grade Review Report;
- Scope of Work Report;
- Plan-in-Hand Report;
- Final Plan Review Report;
- Traffic Engineering Report;
- Hydraulics Report;
- Geotechnical Report;
- Environmental document;
- Other documents, as required.

Comment Response Document. MDT has established a matrix template (available on the MDT Consultant Design web page) for documenting comments to Consultant deliverables, and subsequent Consultant responses to these comments. This matrix is referred to the Comment Response Document. The Consultant is responsible for maintaining this document. All comments (via email, written correspondence, mark-up of plans, verbal, etc.) from all sources (both internal and external to MDT) will be gathered by the Consultant and incorporated into the Comment Response Document. This is intended to be a tool to assist MDT and the Consultant in tracking comments and design decisions throughout the life of the project.

9.1.5 Consultant QA/QC

Consultants must have a QA/QC process for all MDT projects, scalable to the task and/or deliverable. This process must be followed as applicable for all work, especially before submitting any product to MDT.

9.2 PROJECT QUALITY PLANS

The nature of certain projects lends itself to the development and implementation of a documented, strategic Project Quality Plan (PQP). This Chapter documents MDT policies on:

- projects which may require a PQP,
- objectives of a PQP, and
- implementation of a PQP.

Therefore, on these selected Consultant projects, Consultant services and products will consistently meet or exceed MDT's needs and expectations through the implementation of a defined Project Quality Plan. MDT expects that the Consultant will prepare and implement project-specific Quality Control activities. QC activities should be based on the Consultant's established Quality Assurance program.

9.2.1 Definitions

The following defines various terms related to the development of a Project Quality Plan:

1. Quality. Quality is the degree to which a product or service meets or exceeds MDT requirements or expectations.

2. Quality Assurance (QA). An overall program that establishes project-related policies, standards, guidelines and systems intended to produce an acceptable level of quality. Quality Assurance promotes prevention over detection and being proactive rather than reactive.

3. Quality Control (QC). Project-specific activities that apply the policies, procedures, standards, guidelines and systems developed in the QA program to maintain an acceptable level of quality, through application of sound project management principles and practices.

4. Project Quality Plan (PQP). A systematic Plan that documents the QC activities and quality system elements necessary to meet MDT's needs and expectations. The PQP may identify risk elements and include activities to reduce or mitigate the risk.

9.2.2 Candidate Projects for a PQP

MDT may require the preparation of a Project Quality Plan on selected projects as recommended by the Consultant Project Engineer (CPE) and approved by the Consultant Design Engineer. The following identifies candidate projects for which a PQP will be considered:

- projects with a Consultant fee over $500,000;
- NEPA studies with a Consultant fee over $100,000;

- other medium to high risk projects as determined through a Risk Assessment; and
- other selected projects at the discretion of the Consultant Design Engineer.

9.2.3 PQP Objectives

The objectives of the Project Quality Plan are to systematically:

- improve the clarity, consistency and coordination between disciplines in Consultant-prepared plans, specifications, reports, studies, etc.;
- eliminate or minimize the occurrence of errors and omissions on Consultant-designed projects;
- provide a uniform process for MDT review of Consultant-prepared work products, for Consultant response and for incorporation of MDT review comments;
- improve schedule adherence on Consultant projects through timely reviews, documented decision-making and elimination of re-work;
- identify risk elements and mitigation, if applicable
- improve communication between Consultant and MDT in reaching agreement on scope, schedule and budget; and
- define when deliverables are complete and acceptable.

9.3 PROJECT QUALITY PLAN IMPLEMENTATION

9.3.1 Roles and Responsibilities

The following identifies the MDT roles and responsibilities:

1. Consultant Design Engineer. The Consultant Design Engineer is responsible for MDT QC/QA policies and oversight of the Consultant PQP.

2. Consultant Plans Engineer or Transportation Alternatives (TA) Engineer. The Consultant Plans or TA Engineer is responsible for supervising the CPE's oversight of PQPs to ensure that the MDT QC/QA policies are met.

3. Consultant Project Engineer (CPE). On individual Consultant projects, the CPE serves as MDT's Project Manager and is responsible for project risk assessment, recommending if a PQP is required, reviewing and commenting on the PQP and monitoring its implementation.

The following identifies the roles and responsibilities of the Consultant:

1. Consultant Principals. The Consultant Principal is responsible for internal Quality Assurance controls and the overall quality of a firm's work products.

2. Consultant Project Manager. The Consultant Project Manager is responsible for the preparation and implementation of the PQP.

3. Consultant Quality Manager. The Consultant Quality Manager is responsible for ensuring the implementation of the PQP through assignment of independent and qualified QC reviewers and implementation of the PQP.

4. Consultant Staff (Engineers, Planners, Technicians). The Consultant staff is responsible for understanding and adhering to the PQP. The Consultant must ensure that the individuals who will fulfill these tasks are identified in the Plan.

9.3.2 Project Quality Plan Requirements

MDT may require a full or partial PQP, specific to the project, be developed and submitted as part of the project development.

9.3.3 Risk Assessment

A project Risk Assessment is one mechanism used to identify candidate projects for a formal PQP. Risk assessment will need to be evaluated continuously during the project. Risk will be considered in the selection process for a Consultant, during the scoping of the Consultant's work, at project milestones and throughout the life of the project.

9.3.4 Contract Considerations

In developing Consultant contracts, consider the risk and mitigation of risk through implementation of a PQP.

On projects requiring a PQP, include in the scope of work a task for the development and implementation of a PQP, including discrete QC reviews, comment resolution meetings with MDT, and documenting written responses to comments. Consultant project schedules should show discrete tasks or summary tasks corresponding to EPS activities, and any QC/QA task should be embedded within the corresponding EPS tasks.

The level of effort for medium and high-risk projects may warrant additional QA/QC effort (budget) or additional tasks to mitigate risks. The Consultant's assignment of specific hours to QC or mitigation activities may aid the CPE in his/her oversight of PQP implementation.

9.3.5 Documentation and Records

All documentation required as a part of the PQP shall be made available to the CPE upon request. The CPE and Consultant should discuss and agree upon which records will be routinely submitted to MDT for information and use. All responses to comments shall be responded to in writing.

An integral tool in Consultant project administration is the Comment Response Matrix. Refer to Chapter 8 regarding tracking, resolution and disposition of MDT review comments throughout the life of a Consultant project.

9.3.6 Quality Audits

The PQP may contain a provision for Consultant auditing of its own QC/QA program. The CPE may request an audit of the Consultant's quality records at any time, with two weeks written notice. The Consultant shall make the quality records available and provide a suitable workspace.

9.3.7 Preventative Action

MDT may take preventative action on specific projects to help eliminate the causes of potential adverse conditions. The Consultant Design Engineer and/or Consultant Plans Engineer and/or TA Engineer will determine preventative actions, in consultation with the CPE. Preventative actions include:

- Audits,
- Management Reviews,
- Training,
- Constructability Reviews, and
- Independent or Peer Reviews.

9.3.8 Project Close-Out

Consultant projects shall be closed out in accordance with the Consultant's PQP project close-out procedures and MDT requirements (see Chapter 8). As a part of the project close out, the CPE will prepare a Consultant evaluation with specific measures for evaluating project quality and effectiveness of the PQP (see Chapter 8).

9.3.9 Monitoring Results

The Consultant Design Engineer will periodically evaluate the effectiveness of the Consultant QA/QC program.

9.4 PROJECT QUALITY PLAN CONTENT

The following is provided as a guide for the content of a Project Quality Plan. The CPE and the Consultant will tailor the PQP to the specific project.

I. Introduction

Include a brief introduction to describe the proposed scope, purpose and need, constraints, risk, etc.

II. Management and Organization

Describe the management and organization of the project design team. Identify roles and responsibilities of team members for QA/QC. Include a Quality Control Team organizational chart. Describe management and responsibilities of QA/QC process for sub consultants.

III. Communication Protocol

Describe the communication protocol for project development. Refer to Communication Protocol in Chapter 8. For example, the Consultant should:

- Inform the CPE of any issues, risk or decisions that affect project schedule, scope, budget or quality,
- Submit all deliverables to CPE, and
- Submit monthly progress reports according to the professional services agreement with MDT.
    - When projects are late, there is at least one critical issue (the schedule). A discussion should be included on what is currently delaying the schedule, what tasks are on the critical path and what strategies are being incorporated to get the project back on schedule

IV. Risk Management

Project risk management is the management of the project risks identified through risk analysis to minimize the impacts of threats and maximize the chances for opportunities. Risk management is a scalable activity and should be commensurate with the size and complexity of the project under consideration. Simpler projects will have less chances of risk and can be managed by the Consultant and the CPE. Larger, more complex projects may require a formal risk management plan with involvement from the Project Sponsor, functional managers, District Construction personnel, possibly outside experts and others. Risk management is a continuous process starting at project inception and running through all phases of the project. For medium to high risk factors, incorporate mitigation measures in the PQP. Refer to MDT Risk Management Guidelines on the MDT website for more details.

An example of risk management is how a Consultant may deal with potential utility conflicts. For high risk utility conflicts proper management includes a SUE I with locates at level B or C accuracy and likely a SUE II follow-up with level A accuracy. For low risk utility conflicts, a consultant may include a SUE I survey with one call locates.

V. Completeness and Correctness Criteria

The purpose of the completeness and correctness criteria is to work with the MDT up front to define what it means for a deliverable to be considered complete and correct. There should be no surprises when deliverables are submitted. Utilize the following to define correctness and completeness:

- Scope of Services defined in the Contract
- Applicable standards
- MDT guidelines and general requirements
- MDT manuals and design memos
- MDT Standard Details, Design standards and Specifications
- MDT activity descriptions and checklist
- CADD Standards
- Electronic File Naming Convention. Follow MDT guidelines to ensure files are named appropriately and will be accepted by MDT's Document Management System (DMS).
- Format requirements of submittals.
- MDT project specific requirements

VI. Quality Assurance Activities

Quality assurance activities focus on the processes being used to build the solution, and can be validated by a functional manager, project manager or third party reviewer. Describe the major quality assurance activities and techniques that will be used on the project. Examples of quality assurance activities are:

- MDT's project development process that includes Scoping, AGR, PIH & FPR

- Description of policies and process for managing schedule, scope and budget.

- Description of policies and process for the documentation of design decisions. Include project comment/response matrix, MDT milestone Reports, E-mails, letters or memos, design calculations, etc.

- Documentation of design exceptions. Include process for tracking design exceptions and timing for submitting for approval. Proposed design exceptions introduce risk to the project. The design exception may not be approved, requiring changes to the design, R/W, environmental impacts, permitting, budgeting etc.

Discussing and submitting design exceptions for approval as soon as practicable reduces this risk.

- Electronic File Management. Describe the process to ensure that multiple versions of the same file are not created or worked on and that only updated files are submitted to MDT. MDT does not want a mass submittal of all files for a submittal review. Only submit the appropriate files that have been newly created or revised.

- Standard Policies

VII. Quality Control Activities

Quality control activities are performed continually throughout a project to verify that project deliverables are of high quality. Include these activities in the project schedule and budget for. Describe the major quality control activities and techniques that will be used on the project. The following are examples:

- Formal and informal reviews. Match the level of review with the level of risk.
    - Reviews may include Independent, Peer, Constructability, Biddability, High Risk Items, code and technical reviews.
    - Value Analysis
    - Milestone Reviews (AGR, PIH, etc.)
- Detailed review process for Technical work that ensures all items are checked, issues addressed and revisions are made.
    - An example of this process is one in which an independent reviewer marks all items they agree with in yellow and marks all items they question in red; originator addresses redlines in blue and sends product back to reviewer for another review until all issues have been addressed.
- Checklists to ensure that deliverables are consistent and contain all necessary information.

VIII. Personnel Registration, Certification and Training

The Consultant proposal must specify the registration, certification and training of all staff performing work under the contract. Requirements should consider any medium or high project-specific risk factors and standard MDT policies and practices.

IX. Stamping and Sealing of Documents

Identify who is going to stamp and seal project documents.

X. Project Quality Control Documentation

Describe Quality Control Documentation.

XI. Close Out Activities

Follow retention of records according to the professional services agreement with MDT. For files that are “Drafts” MDT’s retention policy is to retain only if deemed useful for historical purpose. After the project is closed, the need for historical reference is typically no longer required. Complete project closeout activities including disposition of geotechnical soil samples, contract closeout, project design file archiving, and accounting records archiving.

XII. PQP Updates

Complete and submit updates to the PQP as necessary due to changes in project scope, staffing, risk, or for other changes that may affect quality.

Chapter 10
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Chapter 11
ACCOUNTING AND AUDITING GUIDELINES

The proper compliance with accounting and auditing standards is essential to government accountability to the public. Government officials entrusted with public resources are responsible for implementing public functions legally, effectively, efficiently, economically, ethically and equitably. Legislators, government officials and the public need assurances that:

- Government manages public resources and uses its authority properly and in compliance with laws and regulations.
- Government programs are achieving their objectives and desired outcomes.
- Government managers are held accountable for their use of public resources.

The MDT Audit Services is responsible for providing the Department's internal audit function. The Unit administers a comprehensive program of audits and investigations to ensure MDT's conformance with the applicable laws, regulations and policies that govern the MDT program. In addition, the Audit Services helps to determine if Consultants comply with contract requirements and ensuring that all charges to the Department are reasonable and allowable per State and Federal laws and regulations.

Chapter 11 discusses basic accounting and auditing concepts, and the Chapter documents MDT policies and procedures that apply to Consultant firms retained by MDT. The audience for the Chapter is the Consultant Design Bureau, especially the Consultant Project Engineers, and Consultants providing services to MDT. The Chapter is not intended for day-to-day use by the Audit Services.

11.1 MDT REQUIREMENTS AND PROCEDURES

11.1.1 General

Section 11.1 presents the MDT processes for the major activities of the Audit Services that impact the MDT Consultant Program.

11.1.2 Risk Based Analysis of Indirect Cost Rate

MDT employs a risk-based oversight process to provide reasonable assurance of consultant compliance with Federal cost principles for indirect cost.

Chapter 7 discusses the contract negotiations process for Consultant projects. An important element of this process is the Consultant's submission of and MDT evaluation of the Consultant's indirect cost rate. As discussed in Chapter 7, the Consultant will have preferably provided a risk

assessment package for its indirect cost rate at the scoping meeting, or the Consultant will have an accepted rate on file with MDT. Otherwise, the risk assessment package must be submitted with the cost proposal. See Section 11.2 for MDT requirements on various aspects of indirect cost rates.

If MDT has not accepted the Consultant's indirect cost rate for the project, the CPE will submit the Consultant's risk assessment package to the Audit Services. The CPE will prepare the transmittal memo to Audit Services, which is signed by the Consultant Plans Engineer. The CPE will request that the Audit Services conduct its indirect cost rate risk based analysis and provide recommendations on the acceptance or rejection of the Consultant's indirect cost rate.

The analysis of the Consultant's documentation for its proposed indirect cost rate by the Audit Services will include:

- Does the report contain an opinion that indicates that the audited Schedule of Indirect Costs is fairly presented in accordance with applicable Federal regulations?

- Does the report contain a scope that indicates that the audit was performed in accordance with Government Auditing Standards?

- Does the scope indicate that Title 48, CFR Part 31 was used in determining acceptable costs?

- Did the CPA issue a report on the internal control and compliance with laws, regulations and provisions of contracts or grant agreements as required by Government Auditing Standards?

- Did the auditor disclose all significant deficiencies and material weaknesses that were found in the internal control in the auditor's report?

- Are the disclosure notes to the report adequate? At a minimum, the following should be disclosed if applicable;

    + description of the company,
    + basis of accounting,
    + description of accounting policies,
    + description of indirect cost rate structure,
    + single or multiple base,
    + dual rate for field and home office,
    + other direct costs consistently charged,
    + cost allocation policies,
    + description of labor-related costs,
    + project labor,
    + variances,
    + paid time off,
    + paid overtime and uncompensated overtime,

+ highly compensated employees,
+ pension/deferred compensation/employee stock option plans,
+ contract labor,
+ description of depreciation/leasing policies,
+ related party transactions,
+ facilities capital cost of money,
+ list of executives/principals, and
+ list of direct cost accounts and amounts.

- Does the Indirect Cost Statement Report contain a statement of costs presented, adjustments and allowed costs per audit, and explanations of the adjustments?

For an indirect cost rate risk based analysis, the Audit Services concentrates on those items in the above list that most impact the indirect cost rate.

Upon receipt of the Audit Services findings, the Administrative Assistant in the Consultant Design Bureau will distribute the reply to the Consultant Design Engineer, the Consultant Plans Engineer, the applicable CPE, the master contract file and the indirect cost rate audit file. The Administrative Assistant will update the Consultant Information System (CIS) within five working days.

The Consultant Design Bureau does not submit the recommendation from the Audit Services to the Consultant. The Consultant Design Engineer will independently evaluate if the Audit Services recommendation is appropriate. In cases where the Consultant Design Engineer disagrees with the Audit Services recommendation, the Consultant Design Engineer will meet with the Audit Services to resolve the issue(s).

11.1.3 Contract Compliance Audit

11.1.3.1 Objective

Each year, the Audit Services selects a sample of MDT Consultants (approximately 5 to 10) for a contract compliance audit. MDT uses a risk-based selection process based on several factors, typically size of the contract, number of amendments, etc. Contract compliance audits are performed at the Consultant's home office. The objective of these audits is to examine specific MDT Consultant projects to determine if the costs incurred (and charged to MDT) on that project meet the terms of the contract. For a contract compliance audit, the Audit Services uses items listed in Section 11.1.2 to check a sample of direct cost charged to the contract for compliance, and checks for compliance with significant contract provisions. The Audit Services will prepare a report on its audit, which is submitted to the Consultant Design Engineer for a final determination. The report will be incorporated into the MDT Consultant Information System (CIS).

11.1.3.2 Approval/Appeal

After Audit Services has completed the contract compliance audit report, the following outlines the steps and timelines that apply to processing the report:

1. Audit Exit Conference. An exit conference is held between the External Audit Manager, Auditor in charge and the Consultant. The Consultant is presented with a copy of the draft Audit Report prior to the conference and the audit is explained. The intent of the Audit Exit Conference is to explain to the Consultant the findings of the audit and answer questions regarding the audit. At this point the audit report is in draft form. The consultant can still provide support or additional information that may change the audit report. After the Audit Exit Conference, the Audit Report is finalized.

2. The Final Audit Report is submitted to the Consultant Design Engineer.

3. The Consultant Design Engineer forwards the Audit Report along with a management decision to the Consultant within 21 calendar days. Consultant Design Engineer may contact the Consultant prior to sending them the audit report to determine how to approach the recommendations of the audit.

    a. MDT owes the Consultant money. Consultant has 30 calendar days from receipt of the Final Audit Report to submit an invoice to MDT for additional payment. MDT will submit payment to the Consultant within 30 calendar days of receiving invoice from the Consultant.

    b. The Consultant owes MDT money. MDT may determine to bill the Consultant or pay for the difference without Federal Participation. Any state expenditure to offset Federal Participation will need to be approved by the Division Administrator. MDT will include a bill if appropriate with the Final Audit report when sending this to the Consultant. The Consultant will submit payment within 30 calendar days of receipt of the bill to:

        Administration Division – Collections Section
        Montana Department of Transportation
        2701 Prospect Ave.
        P.O. Box 201001
        Helena MT 59620-1001

    c. Audit recommends changes in Consultant processes. Consultant Design Engineer requests Consultant to address Audit recommendations which may include a plan from the consultant to comply with audit recommendations. The Consultant is expected to develop an action plan and implement it to correct deficiencies. The consultant will be given adequate time to develop and implement their action plan. Failure to correct deficiencies may result in holding payments for work, termination of contract(s) and loss of eligibility for future work with MDT until an action plan is implemented.

4. Consultant Appeal. If the Consultant disputes the Final Audit Report or any portion thereof, written notification identifying what is being disputed must be sent to the Consultant Design Engineer stating that it is initiating the appeal process. The following applies:

   a. If notification is not received within 21 calendar days from the date the Final Audit Report is received from the Consultant Design Engineer, the Consultant has lost the right to appeal the audit and 3(a), 3(b) or 3(c) will apply, as applicable.

   b. If a request for appeal is received after the 21 calendar day timeline, the Consultant will be notified of the loss of appeal rights by a letter sent from the Consultant Design Engineer via certified mail.

5. Informal Hearing. If written notification of appeal has been received within the 21 calendar day timeline, the Consultant Design Engineer will schedule an Informal Hearing to occur within 30 calendar days of receiving the Consultant's request for appeal. The following applies:

   a. The Consultant, Consultant Design Engineer, Chief Auditor or designee, Highways & Engineering Division Administrator and Preconstruction Engineer will attend the Informal Hearing. The CDE will facilitate the meeting informing the participants of the background information and allowing the consultant to present their appeal.

   b. Following the Informal Hearing, the Highways & Engineering Division Administrator and Preconstruction Engineer will jointly issue a decision to the Consultant Design Engineer.

   c. A written notification of the decision will be issued by the Consultant Design Engineer and transmitted to the Consultant via certified mail within 14 calendar days of the Informal Hearing.

   d. If the Consultant accepts the decision resulting from the Informal Hearing, 3(a), 3(b) or 3(c) will apply, as applicable.

6. Consultant Dispute. If the Consultant disputes the decision resulting from the Informal Hearing, written notification must be sent to the Consultant Design Engineer citing specific points of disagreement. The following applies:

   a. If notification of a dispute is not received within 21 calendar days from the date of the Informal Hearing decision letter, the Consultant has lost the right to appeal the audit and 3(a), 3(b) or 3(c) will apply, as applicable.

   b. If a notification of dispute is received after the 21 calendar day timeline, the Consultant will be notified of the lost appeal rights by a letter sent from the Consultant Design Engineer via certified mail.

7. Formal Hearing/Final Resolution. If a written notification of dispute has been received within the 21 calendar day timeline, the Consultant Design Engineer will schedule a Formal Hearing to occur within 45 calendar days of receiving the Consultant's notification of dispute. The following applies:

   a. The Consultant, Consultant Design Engineer, Chief Auditor or designee, Chief Operating Officer and/or Director will attend the Formal Hearing. The CDE will facilitate the meeting informing the participants of the background information and allowing the consultant to present their appeal.

   b. Following the Formal Hearing, the Chief Operating Officer and/or Director will jointly issue a final decision to the Consultant Design Engineer.

   c. A written notification of the decision will be issued by the Consultant Design Engineer and transmitted to the Consultant via certified mail within 14 calendar days of the Formal Hearing. This decision will be considered final.

11.1.4 MDT Application of National References

Section 11.4 briefly describes several of the major national references that pertain to accounting and auditing for Consultant projects. The following documents the MDT application of each reference:

1. Federal Acquisition Regulation (FAR). It is mandatory that all Consultants retained by MDT comply with 48 CFR Part 31 of the FAR requirements, including the determination of an indirect cost rate on all Federal-aid projects.

2. Federal Highway Administration (FHWA). Contracts for engineering and design related services will meet the requirements of 23 CFR Part 172 for Consultant selection and negotiation for all Federal-aid projects. Specifically for audits, see 23 CFR 172.11 which, for indirect cost rates, mandates the use of 48 CFR Part 31 of FAR. FHWA requires the application of these indirect cost rates to contract estimates, negotiations and payment. Further, 23 CFR 172.11(b) states that indirect cost rates shall not be limited by any administrative or de facto ceilings established internally by a State DOT.

3. Generally Accepted Government Auditing Standards. MDT has mandated the application of the *Government Auditing Standards* (also known as the *Yellow Book*) to audits performed on Consultants retained by the Department. This publication presents the Generally Accepted Government Auditing Standards (GAGAS).

4. AASHTO Uniform Audit and Accounting Guide. The governing regulations for MDT audits include FAR, 23 CFR Part 172 and GAGAS. However, the AASHTO *Uniform Audit and Accounting Guide* discusses how these regulations specifically apply to Consultants hired by State DOTs. Therefore, the *Guide* is a valuable resource to the MDT Audit Services in its audit of MDT Consultants.

5. AICPA Professional Standards. The AICPA *Professional Standards* serves as a resource to MDT for Consultant audits and is used in conjunction with the Generally Accepted Government Auditing Standards (GAGAS), which incorporates portions of AICPA's financial audit standards into the GAGAS standards.

6. FASB Accounting Standards. The FASB *Accounting Standards* serves as a resource to MDT auditors for Consultant audits.

11.2 INDIRECT COST RATE REQUIREMENTS

The MDT has elected to utilize the Risk Based Analysis method outlined in 23 CFR Part 172..11(c) to evaluate indirect cost rates submitted by consultants. Appendix A of this Manual contains MDT's Indirect Cost Rate Requirements. Indirect cost rate requirements apply to both prime and sub consultants.

11.2.1 Timing

The fiscal year for most Consultants is based on the calendar year. Generally, unless stipulated otherwise by the Consultant Design Engineer, MDT will accept an indirect cost rate up to six months after the close of the Consultant's fiscal year. For example, an external audit for CY 2016 is acceptable to MDT until June 30, 2018. However, in this example, if the 2017 indirect cost rate is available, then the 2017 rate must be used.

11.2.2 Limiting of Indirect Cost Rate

As required by 23 CFR 172.11(b), MDT does not establish a "cap" on the indirect cost rate calculated from an audit to ensure compliance with FAR. The Consultant can elect to use a lower indirect cost rate, which must be submitted in writing.

11.2.3 Provisional Rate

Establishing an indirect cost rate, particularly an audited rate, to ensure compliance with FAR can require considerable time. Therefore, if a selected Consultant does not have an accepted indirect cost rate with MDT that meets the timing requirements in Section 11.2.1, MDT may accept a provisional indirect cost rate to not delay the start of work. The Consultant will propose a good-faith rate (with supporting documentation) and, if accepted by MDT, the provisional rate will be used by the Consultant to submit monthly invoices to the CPE.

The Consultant must provide, within six months following the acceptance of the provisional rate, an indirect cost rate in accordance with MDT's indirect cost rate guidance to ensure compliance with FAR, and the Consultant must provide the documentation to MDT within two weeks of its availability. The Audit Services will conduct its normal review and issue its recommendations. Once MDT has accepted the indirect cost rate, on the next applicable monthly invoice, the Consultant will make any necessary adjustments to all previous invoices.

The provisional indirect cost rate will be used to establish the total contract value during contract negotiations. This maximum contract value will not be altered based on the final rate accepted by MDT.

11.2.4 Negotiated Indirect Cost Rates

MDT has the option to negotiate an indirect cost rate rather than require an indirect cost rate. Examples include where:

- The Consultant has only recently gone into business.
- The Consultant has only recently established an acceptable accounting system.
- The Consultant has recently realized a significant change in its business practices.
- The Consultant's definitions of its fiscal year have recently changed.
- The Consultant requests using a lower rate than previously established with MDT.
- The Consultant wishes to continue use of an existing accepted rate for a fixed-rate contract (but the rate is expired). In the case that the Consultant has an updated, accepted, and valid overhead rate, the existing contract rate must be less than the updated rate if the Consultant wishes to continue using the existing contract rate.

In these cases, MDT's objective will be to negotiate a mutually acceptable indirect cost rate that is fair and reasonable. The Consultant will provide MDT with documentation that supports the proposed indirect cost rate whenever possible. When negotiating the rate, MDT will consider the reliability of the documentation provided, the estimated value of the services to be rendered, and the comparative closeness of the proposed rate to the average indirect cost rate for Consultants.

11.2.5 Loaded Hourly Rate

For some cases, per MDT Cost Rate Requirements, a loaded hourly rate will be accepted. The loaded hourly rate includes direct labor and indirect cost only. MDT will render a judgment that the proposed loaded hourly rate is reasonable and customary based on the Consultant's skills and experience, and the services provided. The Consultant must certify that all charges included in the loaded rate are allowable under FARs (refer to the Certification of Loaded Rate Compliance). A fixed fee is established to cover the Consultant's profit and other business expenses not allowable or otherwise included as a direct or indirect cost. The fixed fee is applied in addition to the loaded hourly rate. Other direct expenses (travel, etc.) are also tracked and billed separate from the loaded hourly rate.

11.2.6 Indirect Cost Rate Application to Contracts

As stated in the Standard Agreement, the Consultant must select one of the following approaches at the time of Consultant signature on the contract:

- The indirect cost rate approved by MDT will remain fixed throughout the contract duration. Any time the contract completion date is extended, the consultant will be required to utilize their current overhead rate if one is available. "Available" means the Consultant has calculated their overhead rate and, when applicable, had it audited. If the overhead rate is not available, the Consultant may choose to submit an indirect cost rate for consideration by MDT or continue use of their existing accepted rate for the contract (even

if the overhead rate is expired). If the Consultant chooses to continue use of their existing accepted rate for the contract, but the rate has expired, the rate will be considered a negotiated rate.

The requirement will apply each and every time the completion date is extended regardless of how much contract time has elapsed nor how many times the completion date has been extended. There should be only one applicable overhead rate for each contract.

- The indirect cost rate will be adjusted annually based on MDT audit requirements. The newly established indirect cost rate will be effective beginning with the month after it is received by the Department.

Once the Consultant has made its selection, this becomes an irrevocable decision on its indirect cost rate under the Agreement.

In addition, any subconsultants are required to accept the approach selected by the prime Consultant.

11.2.7 Vendor-Type Services

MDT does not require an indirect cost rate for vendor-type services, including:

- printing and binding,
- Geotech Drilling
- traffic data collection, and
- traffic control devices.

These types of services are not professional type services and are normally solicited on a unit-price or total-cost basis that is customary for the type of service. In most cases, vendor-type services will be included as a subcontractor to a prime Consultant.

11.2.8 Timely Submission of Indirect Cost Rate Data

The Consultant is required to submit indirect cost rate data in a complete and timely manner. The documentation must be submitted to MDT within 30 calendar days of the audit date or within 30 calendar days of its calculation for unaudited rates.

11.2.9 Other Issues

Occasionally, other issues related to indirect cost rates arise. The following briefly discusses two of these.

11.2.9.1 Cognizant Agency/Cognizant Audits

MDT shall accept a consultant's or sub consultant's indirect cost rate(s) as established for a 1 year applicable accounting period by a cognizant agency that has:

A. Performed an audit in accordance with generally accepted government auditing standards to test compliance with the requirements of the Federal cost principles and issued an audit report of the consultant's indirect cost rates(s); or

B. Conducted a review of an audit report and related workpapers prepared by a certified public accountant and issued a letter of concurrence with the related audited indirect cost rate(s).

A cognizant agency means any governmental agency that has performed an audit in accordance with generally accepted government auditing standards to test compliance with the requirements of the Federal cost principles (as specified in 48 CFR part 31) and issued an audit report of the consultant's indirect cost rate, or any described agency that has conducted a review of an audit report and related workpapers prepared by a certified public accountant and issued a letter of concurrence with the audited indirect cost rate(s). A cognizant may be any of the following:

1. A Federal Agency;
2. A State transportation agency of the State where the consultant's accounting and financial records are locate; or
3. A State transportation agency to which cognizance for the particular indirect cost rate(s) of a consulting firm has been delegated or transferred in writing by the State transportation agency identified in section 2 above.

11.2.9.2 Field Office Indirect Cost Rates

A field office indirect cost rate is not typically required from Consultants. When required or proposed, the following applies to segregating the company-wide indirect cost rate into home office and field office rates:

1. Home Office Indirect Cost Rate. A rate that excludes field office expenses (e.g., field office direct labor, direct costs, overhead and support services allocations).

2. Field Office Indirect Cost Rate. A rate that applies to field office work where facilities are being provided or paid for by MDT over a period of time. The field office rate may be used for construction engineering, construction inspection and other projects as approved by MDT. Because the Consultant's field office employees are not working out of their own offices and are not receiving office support in their day-to-day activities, the hours billed for them may not qualify for the Consultant's full indirect cost rate. The purpose of the field rate is to pay the Consultant for the fringe benefits and home office support they do provide to their field employees.

11.3 BASIC ACCOUNTING CONCEPTS

This Section presents basic accounting concepts, especially those that apply to indirect cost rate audits. These should be of interest to the Consultant Design Bureau staff, especially Consultant Project Engineers when negotiating contracts (Chapter 7), administering Consultant projects (Chapter 8) and interfacing with the Audit Services.

11.3.1 Definitions

The following basic definitions apply to accounting:

1. Actual Costs. Amounts determined on the basis of cost incurred and supported by original source documentation, as compared to forecasted costs, or costs thought to have been incurred, or costs based on historical averages.

2. Agreement. A contract. A binding, legal document that identifies the deliverable goods and services being provided, under what conditions, and the method of payment for such services.

3. Allocable. A cost is allocable (to an agreement or cost of work being performed for the government) if it benefits both the agreement and other work of the firm and the cost can be distributed in reasonable proportion to the benefits of incurring that cost.

4. Allowable Cost. An item of cost that can be billed directly as a project cost or indirectly as an indirect cost by the Consultant.

5. Billing Rate. The billing rate generally refers to the hourly labor rate being charged for work on an agreement. For a cost-plus-fixed-fee agreement, the billing rate will be the employee's actual payroll rate. For an all-inclusive hourly rate agreement, the billing rate will include the actual payroll rate plus an indirect cost percentage plus an amount for fee.

6. Cost Accounting Standards. Cost Accounting Standards (CAS) are the rules, regulations and standards that are promulgated by the Cost Accounting Standards Board (CASB). The CASB is located within the Office of Federal Procurement Policy, which is under the direction of the Office of Management and Budget (OMB) of the Federal government.

7. Cost Center. Cost centers are used to accumulate and segregate costs.

8. Cost Principles. The underlying basis for determining how costs should be recorded when they are allowable or unallowable, and the specific basis for treating various costs as either allowable or unallowable.

9. Direct Cost. Any cost than can be attributed to a specific, final cost objective; i.e., a project-related cost. Direct costs include labor, materials and reimbursables incurred specifically for an agreement. It is irrelevant whether or not the costs are actually billed; i.e., all costs for lump-sum agreements must be included in direct costs.

10. Facilities Capital Cost of Money (FCCM). An imputed cost factor that allows for investment in building and equipment. The resulting FCCM rate is not a form of interest on borrowing. The FCCM factor is determined by calculating the average net book value of the firm's capital assets (i.e., land, buildings, equipment) for the fiscal year and multiplying this amount by the cost of money rate.

11. Finding. A statement of noncompliance with the terms of an agreement. A finding includes the condition, criteria, cause, effect and a recommendation for correction.

12. General Administrative Expenses. Any management, financial and other expense that is incurred by or allocated to a business unit, and which is for the general management and administration of the business as a whole.

13. Generally Accepted Auditing Standards (GAAS). These are standards for financial statement audits set forth by the American Institute of Certified Public Accountants. The standards pertain to auditors' professional qualifications, the quality of audit effort, and the characteristics of professional and meaningful audit reports.

14. Generally Accepted Government Auditing Standards (GAGAS). These are standards for audits of government organizations, programs, activities and functions, and of government assistance received by contractors, non-profit organizations and other non-government organizations. These standards also incorporate GAAS for financial-related audits.

15. Indirect Cost. Any cost not directly identified with a single, final cost objective, but identified with two or more final cost objectives or an intermediate cost objective. Consultants recover their indirect costs in their indirect cost rate.

16. Indirect Cost Rate. A computed rate (also called an "overhead rate") usually developed by adding together all of a firm's costs that cannot be associated with a single-cost objective (i.e., "indirect" costs), including general and administrative costs and fringe benefit costs, then dividing by a base value, usually direct labor dollars, to obtain a percentage. This rate is applied to direct labor to allow a firm to recover the share of indirect costs allowable to the agreement.

17. Internal Control. The plan of organization and methods and procedures adopted by management to ensure that its goals and objectives are met; that resources are used consistent with laws, regulations and policies; that resources are safeguarded against waste, loss and misuse; and that reliable data are obtained, maintained and fairly disclosed in reports.

18. Overhead Rate. See "Indirect Cost Rate." The two terms are used interchangeably.

19. Provisional Hourly Rate Agreement. An agreement in which hourly billing rates that include labor, indirect costs and fee are negotiated in advance, but are subject to adjustment after an audit determines actual labor and indirect rates and MDT accepts rate.

20. Record of Negotiation. A summary memorandum prepared by the contracting officer regarding the reconciliation between the Consultant's proposal and the MDT estimate. It includes contract rate negotiations, disposition of significant matters in the pre-award audit report and, if applicable, reasons why audit recommendations were not followed. It is required by 48 CFR 42.706(b).

21. Risk-based analysis. A risk-based oversight process to provide reasonable assurance of consultant compliance with Federal cost principles on FAHP funded contracts. In addition to ensuring allowability of direct contract costs, the risk based process addresses the evaluation and acceptance of consultant and subconsultant indirect cost rates for application to contracts. A risk-based oversight process consist of risk assessments, mitigation and evaluation procedures.

22. Source Documentation. Original documents, including but not limited to time sheets, invoices, hotel receipts, rental slips, gasoline tickets, canceled checks, tax returns, insurance policies, minutes of corporate meetings, etc., that support the costs recorded in the firm's accounting ledgers.

23. Unallowable Cost. An item of cost that cannot be billed directly or indirectly by a Consultant. These types of costs, if found during an audit, will be purged from the costs billed directly or from those billed indirectly via an indirect cost rate.

11.3.2 Consultant Responsibilities for Accounting System

The following briefly discusses the responsibilities of Consultants for their accounting system.

11.3.2.1 Prepare Timely and Accurate Financial Information

Consultants performing work for MDT and other government agencies are responsible for preparing timely, accurate financial information in accordance with government accounting standards. This includes:

- Schedule of Indirect Costs,
- Financial Statements, and
- Disclosures.

The MDT Audit Services may evaluate the firm's compliance with these standards when performing an audit for compliance with the contract.

11.3.2.2 Maintain Effective Internal Control Structure

Consultants performing work for MDT and other government agencies are responsible for maintaining effective internal control structures in accordance with government accounting standards and written internal policies and procedures. Key elements of internal controls include:

1. Systems for Monitoring Compliance. The Consultant must be able to document its compliance with government accounting and auditing requirements (e.g., compliance with 48 CFR Part 31).

2. Estimating System and Preparation of Proposals. The Consultant must be able to demonstrate that it has the required estimating system process in place to ensure that reliable cost estimates support contract proposals; that cost data is accurate, current and complete; and that the overall estimating process is consistent with well-documented practices and policies in place.

3. Cost Accounting, Timekeeping and Invoicing Systems. The Consultant must be able to demonstrate that it has the required cost accounting, time-keeping and invoicing systems critical for government contracting. Maintaining effective controls ensures that:

   - Costs are accurately allocated to cost objectives, are reasonable and in accordance with contract requirements.
   - Unallowable costs are identified and segregated.
   - Cost allocation practices are reasonable and follow required government accounting practices.
   - Costs incurred on projects are periodically reconciled to financial statements.

4. Accounting for Labor. The Consultant must be able to demonstrate that it has an effective system of internal control over the labor-charging/time-keeping function. The Consultant should have procedures ensuring that labor hours are accurately recorded including any corrections to timesheets. Such procedures shall also ensure that the total labor dollars reflected in labor distribution summaries agree with the total labor charges as entered in the time-keeping and payroll systems.

11.3.3 Cost Principles

11.3.3.1 General

The *Federal Acquisition Regulations* (FAR) contains cost principles and procedures for pricing contracts, subcontracts and amendments to contracts. The following is a general discussion of applicable cost principles described in Part 31 of FAR as it may interest CPEs. Rate structures and cost allocation methods must be consistent for all Federal and State government contracts.

11.3.3.2 Allowable

The total cost of a contract includes all costs properly allowable to the contract under the specific contract provisions. One important criteria is “reasonableness.” A cost is reasonable if, in its nature and amount, it does not exceed that which would be incurred by a prudent person in the

conduct of competitive business. The reasonableness of specific costs is not always easy to determine because such a determination depends to some extent on judgment and interpretation of FAR. Costs that are unallowable must be identified and excluded from any billing, claim or proposal applicable to a government contract.

11.3.3.3 Allocable

To be allowable, a cost must also be allocable; i.e., it must be assignable or chargeable to one or more cost objectives or cost centers on the basis of relative benefits received or some other equitable relationship. A cost is allocable to a government contract if it:

- is incurred specifically for the contract;
- benefits both the contract and other work, and can be distributed in reasonable proportion to the benefits received; or
- is necessary to the overall operation of the business, although a direct relationship to any particular cost objective cannot be shown.

11.3.3.4 Indirect Costs

Indirect costs should be accumulated by logical cost groupings with due consideration of the reasons for incurring such costs. A distribution base common to all cost objectives or projects is selected for allocation of an indirect cost pool. Most Consultants use direct labor as the base for developing indirect cost rates.

A cost cannot be charged as direct and also be included in any indirect cost pool. However, minor-dollar direct cost items may be treated as an indirect cost if the accounting treatment is consistently applied to all projects and produces substantially the same results as treating the cost as a direct cost.

The base period for most Consultant's indirect cost rates will normally be the firm's fiscal year (e.g., January to December or July to June). For MDT projects, an agreed upon rate may be used over the duration of the contract. See Section 11.2.6.

11.3.4 Cost Accounting

11.3.4.1 Allocation Bases

An allocation base is the means by which indirect costs are distributed to final cost objectives. There are a variety of allocation bases that are commonly used in cost accounting systems for allocating indirect costs. Whatever base is used for cost allocation, it must be consistent for all government contracts.

Direct labor cost is the most common base used by Consultants to allocate indirect costs on MDT contracts. Direct labor costs are generally all project hours multiplied by labor rates and summarized for all employees within the applicable allocation unit.

11.3.4.2 Cost Centers

Cost centers are established to accumulate and segregate costs. The functional cost center method segregates costs unique to a business activity, typically for direct costing. Another method is focused on the corporate structure. Some examples of cost centers used for accumulating costs are groupings of regional offices, specific subsidiaries, affiliates, divisions or field offices.

11.3.4.3 Allocated Costs

These include the following:

1. Fringe Benefits. Fringe benefits are the costs associated with the business' portion of payroll taxes and benefits in employment. Such costs generally include payroll taxes, pension plan contributions, medical insurance costs, life insurance and employee welfare expenses.

2. Indirect Costs. These costs are those that may benefit or are associated with two or more business activities, but are not specifically allocated to an activity for reasons of practicality. Indirect costs differ from general and administrative costs (see Item #3) in that these costs can be associated with a cost center based on benefit. Some examples of indirect costs are rent, depreciation, employee recruitment and training, and general or professional insurance policy costs.

3. General and Administrative Costs. This expense generally is all costs associated with the entire business' operation, which cannot be specifically identified with a smaller unit of business activities. For example, certain management or administrative costs that are incurred for an entire business unit may be considered G&A, but other accounting or legal costs benefiting a segment of the business may be considered part of the overhead pool of that specific segment.

4. Computer/CADD Costs. Generally, this pool includes costs such as equipment depreciation or rental; software including license costs; employee training costs on new software; equipment maintenance; cost of special facilities or locations; and systems development labor or support costs.

5. Company Vehicles. Company vehicles are cars, survey trucks and vans that may be used for a direct or indirect cost objective. Pooled costs may include depreciation, lease costs, maintenance, insurance and operation costs such as fuel.

6. Equipment. Costs accumulated to this pool are similar to both computer and company vehicle pools. Company equipment can be a wide variety of items that are used in various activities.

7. Printing/Copying/Plan Reproduction. Costs in this pool are generally associated with reproduction from a single page copied to multiple prints of large specialized drawings or blue prints.

11.3.4.4 Direct Labor

Direct labor costs are usually the most significant basis of costs incurred in the performance of government contracts. Incurred labor costs form the basis for estimating labor for future contracts. It is, therefore, imperative that Consultants establish and maintain an effective system of internal control over the labor-charging function.

Unlike other items of cost, labor is not supported by external documentation or physical evidence to provide an independent check or balance. The key element in any labor-charging system is the individual employee. It is critical to internal control systems that management fully indoctrinate employees on their independent responsibility for accurately recording time charges. This is the single most important feature management can emphasize in recognizing its responsibility to owners, creditors and customers to guard against fraud, waste and significant errors in the labor-charging functions.

An adequate labor accounting system, manual or electronic, will create an audit trail whenever an employee creates a timesheet entry. A system that allows an audit trail to be destroyed is inadequate because the integrity of the system can be easily compromised. The Consultant should have policies and procedures for training employees to reasonably assure that all employees are aware of the importance of proper time charging.

11.3.4.5 Uncompensated Overtime

Policies on compensating for work in excess of 40 hours per week varies among Consultant firms. In many cases, for salaried employees, this is considered uncompensated overtime. Therefore, MDT policy is that Consultants cannot bill the Department for uncompensated overtime. However, the Consultant should have procedures to ensure that all hours worked are recorded, whether they are paid or not, to ensure the proper distribution of labor costs. This is necessary because labor rates and labor indirect costs can be affected by total hours worked, not just paid hours worked.

11.3.4.6 Compensated Overtime

Consultants should have the capability of maintaining records that segregate compensated overtime amounts as direct or indirect costs, especially when a “premium” is paid to employees for overtime; see Section 11.3.4.7. An acceptable method is to charge overtime as a direct cost

when it is the Consultant's regularly established policy and when appropriate tests demonstrate that this policy results in equitable cost allocations.

MDT policy is that Consultant employees can charge overtime to a MDT contract without MDT approval if the rate of pay for the compensated overtime is at the regular pay rate (i.e., there is no premium pay).

11.3.4.7 Premium Pay for Overtime

Premium pay refers to Consultant employee pay for overtime at a rate higher than the regular pay rate. The Consultant must have prior, written approval from the Consultant Design Engineer before the Consultant can pay an employee a premium for overtime and bill the Department at the premium rate.

11.3.4.8 Internal Controls for Labor

The Consultant should have procedures to ensure that labor hours are accurately recorded and that any corrections to time-keeping records are documented, including appropriate authorizations and approvals.

The Consultant should have procedures requiring that the total labor dollars reflected in labor distribution summaries agree with the total labor charges as entered in the time-keeping and payroll systems. This reconciliation ensures that the labor charges to contracts represent actual paid or accrued costs and that such costs are appropriately recorded in the accounting records.

11.3.4.9 Contract Labor

In some cases, firms contract for services provided by engineers, technicians, etc., rather than hire these individuals as employees. This is commonly referred to as "contract labor," and these individuals are referred to as "independent contractors." The accounting treatment varies, depending on the circumstances under which the purchased labor costs are incurred. Two acceptable methods of accounting for this labor are:

- charged as a direct cost to projects, or
- treated as other labor (direct or indirect as appropriate).

Contract labor must share in an allocation of indirect expenses where such a relationship exists, and the allocation method must be consistent with the Consultant's accounting practices. A separate allocation base for contract labor may be necessary to allocate significant costs to contract labor (e.g., supervision and occupancy costs) or to eliminate other costs (e.g., fringe benefits) that do not benefit contract labor.

11.3.4.10 Other Direct Costs

Other direct costs typically include subcontracts, travel, long-distance phone calls and outside printing. Costs based on charge-out rates developed by the company, typically mileage and copying, are addressed in Chapter 7. To be treated as a direct cost, the item must have been needed for and used on that job; i.e., “but for this job,” the cost would not have been incurred. All similar costs must be treated as direct costs.

11.4 NATIONAL REFERENCES

This Section presents a brief description of the major national publications used by the Audit Services as a reference to assist in determining compliance with State and Federal laws and regulations. Section 11.1.4 presents the application of each publication to MDT operations.

11.4.1 *Federal Acquisition Regulations*

The *Federal Acquisition Regulations* (FAR) is the primary, authoritative source for the acquisition of supplies and services by government agencies. In particular, Part 31 "Contract Cost Principles and Procedures" has special application to the MDT Consultant Program because it establishes the cost principles and procedures for:

- the pricing of contracts, subcontracts and amendments to contracts when a cost analysis is performed;
- the determination, negotiation or allowance of costs when required by a contract clause; and
- detailed explanations of specific rules for allowable and unallowable costs.

11.4.2 Federal Highway Administration

The governing FHWA legal requirement for engineering and design related professional service contracts is 23 CFR Part 172 "Procurement, Management, And Administration of Engineering and Design Related Service Contracts." The Part 172 policies and procedures apply to Federally funded contracts and have been issued to ensure that a Consultant is selected through an equitable selection process, and that the work is properly accomplished in a timely manner and at fair and reasonable cost. 23 CFR Part 172 discusses methods of procurement, audits and approvals.

11.4.3 *Generally Accepted Government Auditing Standards ("Yellow Book")*

The professional standards and guidance contained in the *Yellow Book*, commonly referred to as the Generally Accepted Government Auditing Standards (GAGAS), provide a framework for conducting government audits with "competence, integrity, objectivity and independence." The Comptroller General of the United States publishes the GAGAS. These standards are for use by auditors of entities that receive government awards. Audits performed under GAGAS provide information used for oversight, accountability and improvements of government programs and operations.

11.4.4 AASHTO *Uniform Audit and Accounting Guide*

This *Guide* has been developed by the Audit Subcommittee of the American Association of State Highway and Transportation Officials (AASHTO) with assistance from the American Council of Engineering Companies (ACEC) and FHWA. The AASHTO Audit Subcommittee is comprised of the senior staff member responsible for the audit function for each State DOT.

The purpose of the *Uniform Audit and Accounting Guide* is to provide a tool that can be used by individual State auditors, Consultant firms and CPA firms that audit Consultant firms. The primary focus of the *Guide* is auditing and reporting on the indirect costs and resultant indirect cost rates of Consultants who perform engineering-related work for State DOTs.

This *Guide* is not intended to be an auditing procedures manual but, rather, a guide that will assist individuals in understanding terminology, policies, audit techniques and sources for regulations and specific procedures.

11.4.5 AICPA *Professional Standards*

The American Institute of Certified Public Accountants (AICPA) *Professional Standards* provides audit guidance, techniques and reporting standards that apply to audits of non-public companies (e.g., Consultant firms) by certified public accountants.

The International Standards for the Professional Practice of Internal Auditing (IIA Standards) provide guidance for the conduct of internal auditing at both the organizational and individual auditor levels. They are the result of careful study, consultation and deliberation on the basic principles for providing internal audit services.

11.4.6 FASB *Accounting Standards*

The Financial Accounting Standards Board (FASB) *Accounting Standards* is an integration of currently effective accounting and reporting standards. Material is drawn from AICPA Accounting Research Bulletins, APB Opinions, FASB Statements of Financial Accounting Standards and FASB Interpretations. Although its focus is primarily publicly traded corporations, some of the material may be helpful to government auditors.

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Chapter 12
CONTRACT PROVISIONS

Chapter 12 briefly discusses selected provisions that are included in contracts between MDT and Consultants. The objective is to provide Consultant Project Engineers and the Consultant community with some elaboration on the purpose and implementation of these selected provisions.

12.1 GENERAL

12.1.1 Description

A contract is a binding agreement between two parties that is based on and enforceable by legal requirements. The contract documents the obligations between the two parties. A contractual relationship is evidenced by:

- an offer,
- acceptance of the offer, and
- valid consideration.

Each party to a contract acquires rights and duties relative to the rights and duties of the other parties. When a dispute over the intent of a contract arises, a fundamental precept is that the written word takes precedence over any verbal understandings.

12.1.2 MDT Standard Agreement

MDT and Consultants enter into a contractual arrangement for the Consultant to provide professional services to the Department. This contract must comply with all Federal and State laws, regulations, etc., that govern the provision of professional services. MDT and the Montana Chapter of the American Council of Engineering Companies (ACEC) have mutually developed a Standard Agreement to:

- meet all governing legal requirements, and
- expedite the process of executing a contract for a specific project.

The Standard Agreement is modified to incorporate the project-specific elements as negotiated between MDT and the Consultant and will include:

- scope of services,
- schedule, and
- cost.

Chapter 7 discusses in detail the negotiation process used to develop the project-specific elements.

12.2 INSURANCE

12.2.1 General

In general, MDT requires that Consultants under contract secure insurance to cover the types of losses that may result during or from the project. Consultants must provide the necessary certificates of insurance to MDT before contract execution.

12.2.2 Errors and Omissions

For most Consultant projects, MDT requires that Consultants have insurance for errors and omissions (E&O), also known as professional liability insurance. E&O insurance covers Consultants for any damages that they may cause through a negligent act, error or omission. For projects requiring E&O insurance, a Consultant's obligation to indemnify and hold harmless the State for a Consultant's "negligent acts, errors or omissions" is covered in the Standard Agreement. This provision establishes the legal basis for MDT to recover such charges from a Consultant.

The Standard Agreement documents the Consultant requirement for Errors and Omissions insurance.

Appendix B of this Manual contains MDT's philosophy and resolution procedures regarding errors and omissions.

12.2.3 Workers Compensation

Montana State law requires that all businesses operating in the State carry workers compensation insurance. This insurance covers workers injured on the job, whether they are hurt on the workplace premises or elsewhere, or in auto accidents while on business. It also covers work-related illnesses. The insurance protects employers from lawsuits resulting from workplace accidents and provides medical care and compensation for lost income to employees hurt in workplace accidents.

Workers compensation provides payments to injured workers, without regard to who was at fault in the accident, for time lost from work and for medical and rehabilitation services. It also provides death benefits to surviving spouses and dependents.

The Standard Agreement documents the Consultant requirement for Workers Compensation insurance.

12.2.4 Commercial General Liability

This insurance covers bodily injury, personal injury, or property damage claims as may be caused by the negligent acts of the Consultant.

The Standard Agreement documents the Consultant requirement for Commercial General Liability insurance.

12.2.5 Automobile Liability

This insurance covers personal injury and property damage related to the use of automobiles caused by the negligent acts of the Consultant, and must cover all motor vehicles owned, leased, hired, or borrowed by the Consultant.

The Standard Agreement documents the Consultant requirement for Automobile Liability insurance.

12.3 LICENSES/REGISTRATION/COMPLIANCE WITH LAWS

In general, the Consultant must secure all licenses and obtain all registrations necessary for the lawful performance of its work. On MDT projects, the following may be required to provide professional services to the Department:

- proof that the Consultant firm has been authorized by the Montana Board of Professional Engineers and Land Surveyors to engage in the required services (see the Standard Agreement);
- proof that the applicable Consultant personnel are licensed professional engineers in their respective fields of practice or licensed land surveyors in the State of Montana (see the Standard Agreement);
- proof that the Consultant is registered to do business in the State of Montana with the Secretary of State's office, either a Certificate of Existence or a Certificate of Authorization; and
- general compliance with existing laws, ordinances and regulations of the Standard Agreement.

12.4 CERTIFICATES/DISCLOSURES

The MDT Standard Agreement includes the following certificates and disclosures.

12.4.1 Non-Discrimination Notice

This Notice requires that the Consultant will comply with all Federal and State laws, which are enumerated in this Notice, prohibiting any discriminatory practices through:

- compliance with Title VI of the Civil Rights Act,
- compliance with Montana Governmental Code of Fair Practices,
- compliance with Americans with Disabilities Act, and
- compliance with participation by Disadvantaged Business Enterprises.

12.5 ISSUE RESOLUTION

MDT policy is to take all necessary proactive measures to avoid and minimize any disputes and, especially, to avoid litigation. The key element to issue avoidance is early notification of any potential problems by either MDT or the Consultant. The MDT Standard Agreement either explicitly or implicitly incorporates this principle. For example, the Standard Agreement states the following:

- MDT must provide prompt written notice to the Consultant of any developments that affect the scope or schedule for Consultant services.
- MDT requires conferences to be held as necessary to discuss matters pertinent to work progress.
- MDT requires that Consultants include monthly progress reports, which should address any issues that may or will adversely affect the progress of work.

When issues do arise, MDT and the Consultant must take all reasonable efforts to resolve the issue informally and in a timely manner. On a Project or Special Project, the Consultant Project Engineer will be the primary point of contact. On Term Contracts, the MDT functional unit responsible for the Consultant project will be the primary point of contact.

If an impasse is reached, informally or formally, then:

- Formal notification must be in writing.
- Notification should go to the CPE and ultimately to the CDE.

12.6 DBE REQUIREMENTS

The Civil Rights Bureau is responsible for the MDT Disadvantaged Business Enterprise (DBE) program. The Bureau has published the *MDT DBE Program Manual* to document the Department's policies and procedures on DBE participation. The Bureau also maintains the "MDT DBE Directory," which lists those firms in the State of Montana that meet the Department's requirements for DBE certification.

Article IV, Section 12 of the MDT Standard Agreement documents DBE requirements on Consultant projects. MDT establishes an annual DBE goal for all aspects of transportation-related contracting including Consultant design that is approved by FHWA. All projects are required to meet or exceed the DBE goal. The DBE Program monitors projects throughout the year and will set project-specific goals on all contracts if the overall DBE goal is not being met. The DBE Program also monitors all contracts to ensure that good-faith efforts are being met as described in the *MDT DBE Program Manual*. If a DBE firm is used, each invoice submitted by the Consultant must document the current and cumulative payments to the DBE firm.

APPENDIX A – INDIRECT COST RATE GUIDANCE

Summary

Appendix A contains MDT's Indirect Cost Rate guidance. To ensure consistency, this guidance applies to all contracts administered through MDT's Consultant Design Bureau; including Engineering, Surveying, and Architecture (**ESA**) and **non-ESA** work, as well as both **prime consultants** and **sub-consultants**.

Background

The procedures contained herein were developed to ensure compliance with Federal Regulations (23 CFR 172). These regulations stipulate, in part, that:

- All federally-reimbursed costs must be allowable in accordance with Federal cost principles
- The State Agency (MDT) must provide assurance that indirect cost rates are allowable in accordance with Federal cost principles
    - How the DOT ensures that is up to them:
        - If an indirect cost rate has been established by a cognizant agency by audit or review of independent audit and work papers, this need is satisfied and the DOT must accept the rate
        - If a cognizant rate is not available, the DOT may utilize one of the following options:
            A. Perform an audit of the Consultant's rate with their own personnel
            B. Review an independent audit and related work papers prepared by a certified public accountant
            C. Establish a temporary provisional rate, with the contract costs being adjusted later based on an approved audited final rate
            D. Perform a Risk Assessment

The MDT has elected to utilize the Risk Assessment method to provide assurance that indirect cost rates are allowable in accordance with Federal cost principles. The method selected is the most beneficial to both parties (MDT and Consultants), allows for more flexibility while ensuring federal reimbursement compliance, and allows distribution of risk to both parties.

Guidance and Application

- Total contract value $50,000 or less
    - If the total contract value or amount of work is $50,000 or under (including sub-consultant compensation and all other costs), an indirect cost rate is not required (loaded/fully burdened rates are allowed).
- Total contract value more than $50,000, up to and including $250,000
    - If the total contract value or amount of work is more than $50,000, up to and including $250,000 (including sub-consultant compensation and all other costs), an indirect cost rate is required. While an audited rate is not mandated in this case, a Risk Assessment will be completed to aid the MDT in determining if the rate may be unaudited or if an indirect cost rate audit report prepared by an authorized external agency (i.e. independent CPA firm, cognizant agency) is required.
- Total contract value more than $250,000
    - If the contract value or amount of work is more than $250,000 (including sub-consultant compensation and all other costs), then the consultant must submit an indirect cost rate audit report prepared by an authorized external agency (i.e. independent CPA firm, cognizant agency). A Risk Assessment will be completed by MDT.

- Regardless of contract size or total amount of services (prime or sub-consultant), if the firm has an indirect cost rate accepted by MDT or has a cognizant audit from another cognizant agency, the rate must be used.
- A rate is not required for sub-consultant services that are commodity-type services using unit prices or fee schedules such as laboratory testing and drilling subcontracts, or services commonly provided on a per unit basis;
- For cases where an indirect cost rate is required (audited or unaudited):
  - The rate must be based the firm's latest completed fiscal year's costs;
  - Establishment of the rate must follow the parameters established in the most current version of the AASHTO Audit Guide;
  - The consultant must prepare and submit a Risk Assessment Package, consisting of:
    1) Internal Control Questionnaire (ICQ),
    2) Certification of Indirect Costs,
    3) National Compensation Matrix, and
    4) Indirect Cost Rate Schedule

  AASHTO's Audit web page (https://audit.transportation.org/) contains information on items 1 and 3, as well as the AASHTO Audit Guide and other valuable information on indirect cost rates. The AASHTO Audit Guide provides information on how to complete an Indirect Cost Rate Schedule (item 4). The Indirect Cost Rate Certification form (item 2) can be found on MDT's webpage: (http://www.mdt.mt.gov/other/webdata/external/cdb/forms/MDT-CDB-001-Certification_of_Indirect_Costs.PDF)
- The Risk Assessment Package is not required if the firm is submitting a cognizant audit from another cognizant agency. Only one Risk Assessment is needed for each consultant fiscal year.
- The dollar thresholds stated above refer to the contract size. At the outset of a contract, this will be the original contract amount. However, contract amendments that increase the contract value may result in a different indirect cost rate requirement. For example, if a firm's original contract is $45,000, an indirect cost rate is not required. However, if an amendment is proposed that puts the total value over $50,000, then an indirect cost rate (and risk assessment) is required.

Summary Table

	Prime Consultants		Sub-Consultants	
	ESA	Non-ESA	ESA	Non-ESA
≤ $50,000	not required	not required	not required	not required
> $50,000, ≤ $250,000	unaudited w/Risk Assessment	unaudited w/Risk Assessment	unaudited w/Risk Assessment	unaudited w/Risk Assessment
>$250,000	audited w/Risk Assessment	audited w/Risk Assessment	audited w/Risk Assessment	audited w/Risk Assessment
Exceptions:	- If firm has a current rate accepted by MDT (or has a cognizant audit rate from a different agency), it must be used - Sub-consultant vendor-type services do not require an indirect cost rate - Risk Assessment may result in requirement that an audited rate be submitted in place of unaudited rate - Cognizant Audited Rate does not require Risk Assessment			

EXAMPLES

- ***Scenario 1:*** ABC Engineering is selected to complete the engineering work for a project with MDT. ABC Engineering is the prime consultant, and thereby the contract holder with MDT. The value of the contract is expected to be over $250,000 (including sub-consultant work and all other costs).

  Indirect Cost Rate requirement: An indirect cost rate audit is required for ABC Engineering for the life of the contract. If it is *a fixed rate* contract, the rate accepted by MDT at the time of the initial contract will remain the same through the original contract expiration date. If it is an *annual rate* contract, ABC Engineering will need to submit an updated indirect cost rate audit each year.

- ***Scenario 2:*** ABC Engineering is selected to complete the engineering work for a project with MDT. ABC Engineering hires XYZ Consulting as a sub-consultant. The amount of work that XYZ Consulting is expected to complete on the project is expected to be less than $50,000.

  Indirect Cost Rate requirement: An indirect cost rate for XYZ Consulting is not required, so loaded rates may be used. However, if XYZ Consulting already has a current indirect cost rate that has been accepted by MDT or a cognizant agency, the indirect cost rate must be used. MDT will determine reasonableness of the loaded rate, if used.

- ***Scenario 3:*** ABC Engineering was selected to complete the engineering work for a project with MDT. ABC Engineering hired XYZ Consulting as a sub-consultant. At the time of the contract execution, XYZ Consulting was expected to complete their work for less than $50,000; therefore XYZ Consulting elected to utilize fully loaded rates. However, some additional work is required that will put XYZ Consulting's compensation over $50,000.

  Indirect Cost Rate requirement: An indirect cost rate for XYZ Consulting is now required. If the total compensation will remain under $250,000, an audited indirect cost rate is not required by rule, but could be required as a result of the Risk Assessment. If the total compensation is expected to go over $250,000, an indirect cost rate audit is required by rule. The contract amendment will not be executed until an indirect cost rate is established and accepted.

- ***Scenario 4:*** ABC Engineering is selected for a term contract with MDT. The value of the term contract is $100,000.

  Indirect Cost Rate requirement: An indirect cost rate is required for ABC Engineering for the life of the term contract. ABC Engineering must submit a Risk Assessment Package. If it is *a fixed rate* contract, the rate accepted by MDT at the time of the initial contract will remain the same through the original contract expiration date. If it is an *annual rate* contract, ABC Engineering will need to submit an updated indirect cost rate and Risk Assessment Package each year. The indirect cost rate requirement in this scenario is based on the value of the term contract, regardless of whether or not any task/term assignments are executed. If the contract value of the term contract is amended at any time (fixed rate or annual rate contract) that puts the value of the contract at more than $250,000, an audited rate is required.

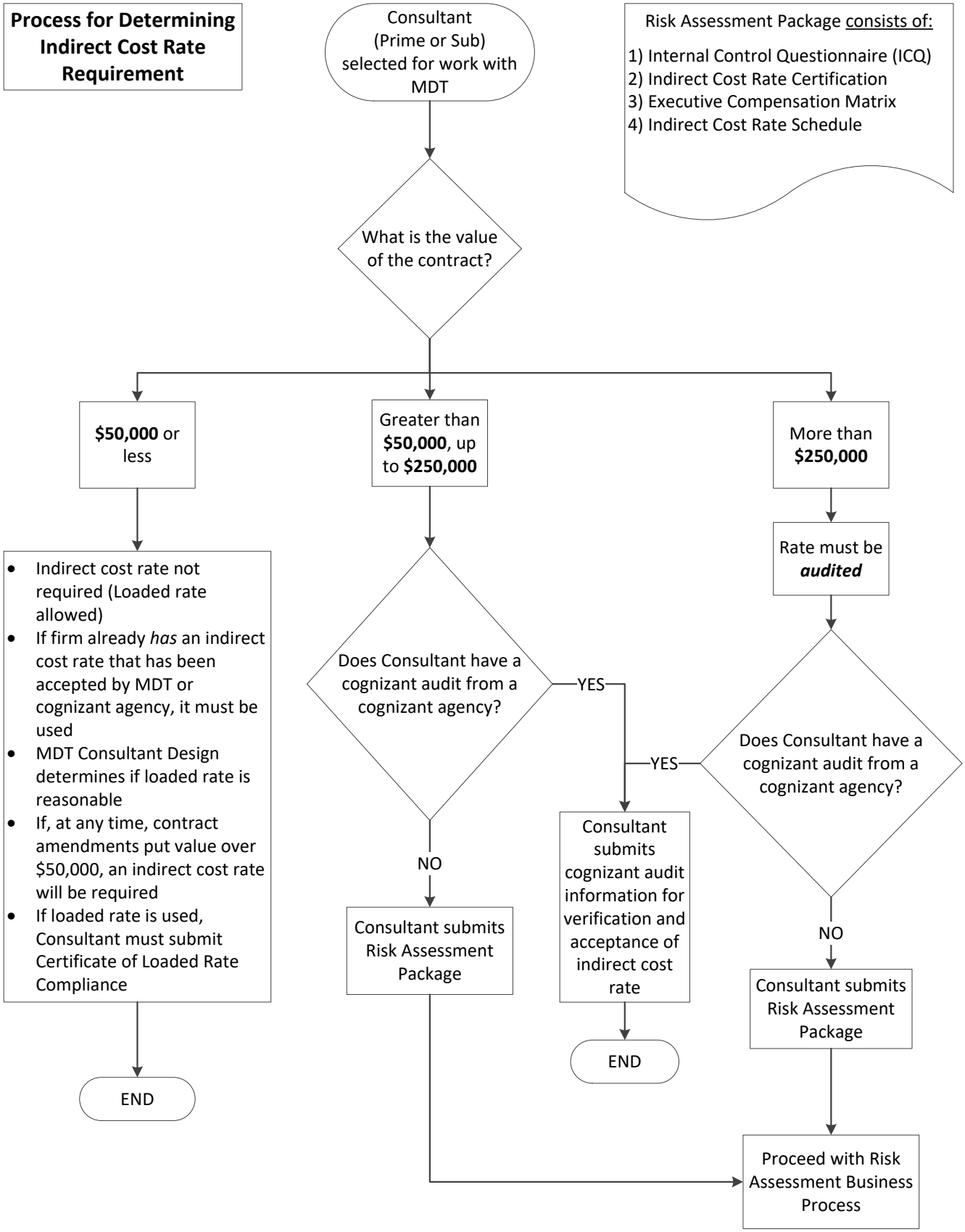


Figure A-1 — PROCESS FOR DETERMINING INDIRECT COST RATE REQUIREMENT

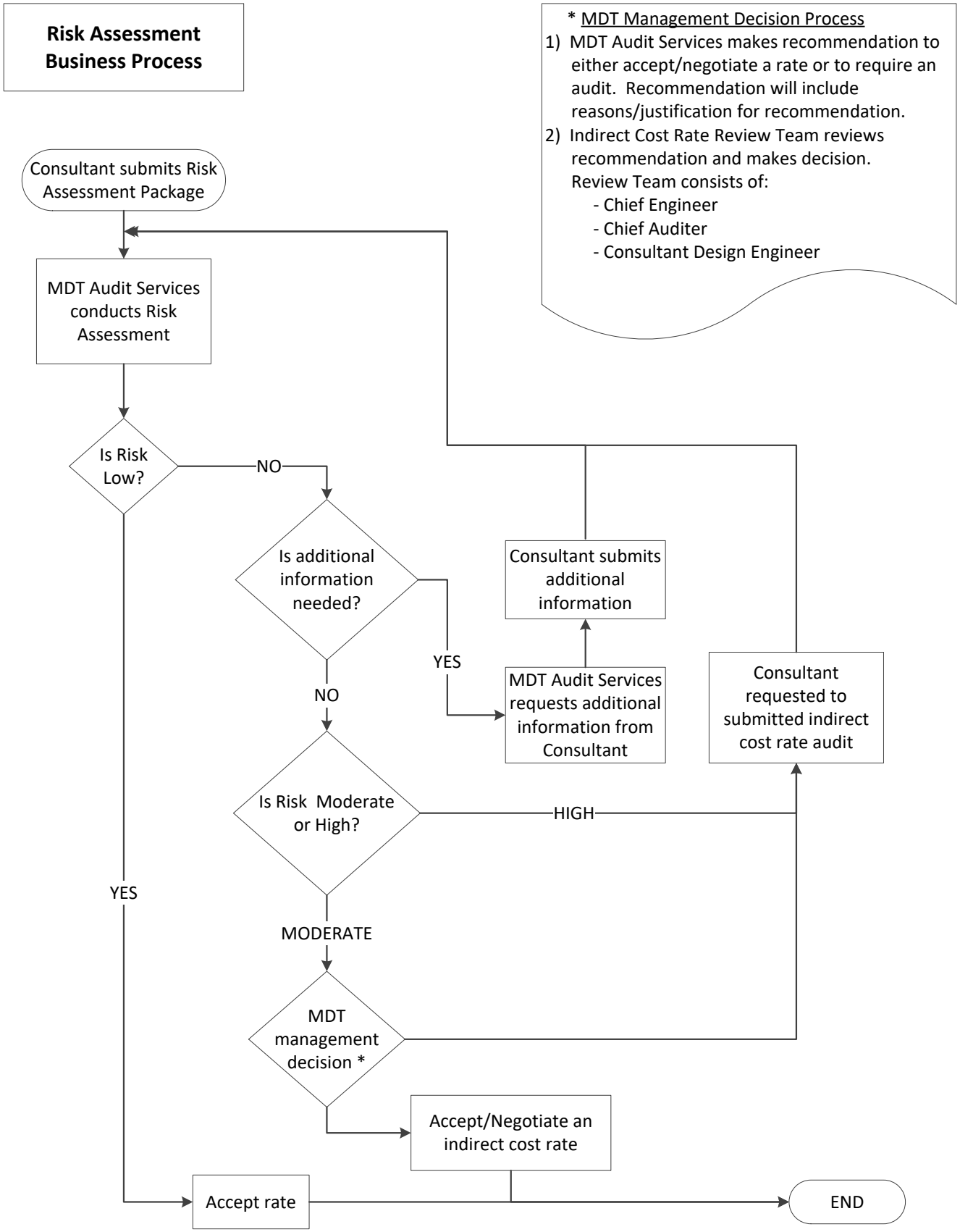


Figure A-2 — RISK ASSESSMENT BUSINESS PROCESS

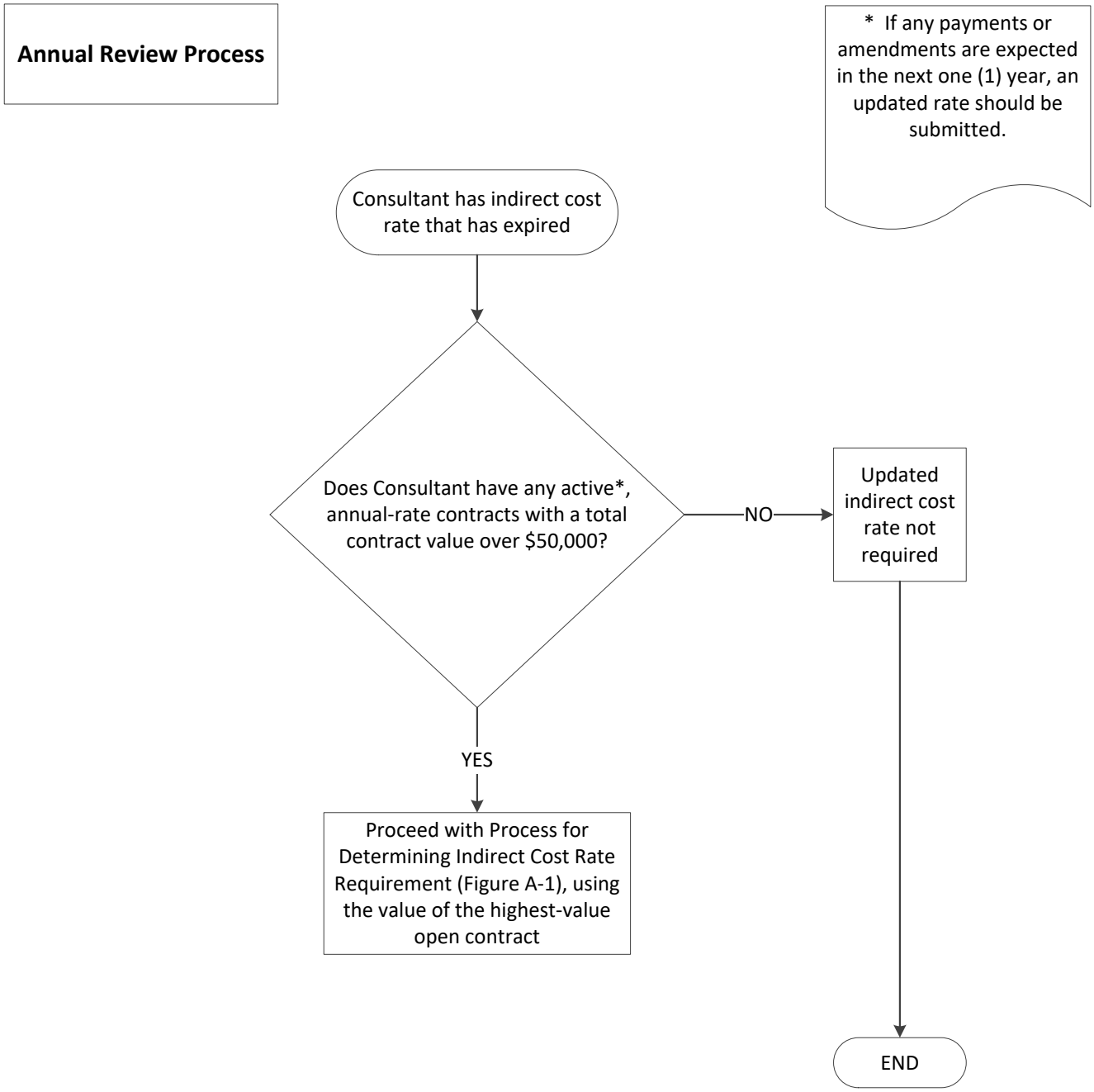


Figure A-3 — ANNUAL REVIEW PROCESS

APPENDIX B – ERRORS and OMISSIONS PROCEDURES

Appendix B contains MDT's philosophy, definitions, and procedures for Errors and Omissions.

MDT Philosophy

MDT expects that its Consultants will provide a professional service to the Department that will meet a standard of care as described in the Standard Agreement. Consultant work products should be relatively error free and meet the required standard of care for its profession. When MDT receives products that fail or result in additional construction costs due to a Consultant's error or omission, the Department may hold the Consultant responsible as described in the Standard Agreement. In addition, MDT may require payment from the Consultant for any additional costs (e.g., from a contract change order during construction) incurred by MDT that is a result from a Consultant's error or omission. The Standard Agreement states that the Consultant is responsible for the quality of its work products, in part because the Department will not make a detailed check of the Consultant's work product. Chapters 2, 3, and 8 discuss the nature of the MDT technical review.

Definitions

Error: Incorrect data shown on the plans or supporting documentation.

Omission: Something neglected or not included with the plans or supporting documentation.

Resolution Procedures

The following presents MDT's procedures to uniformly address errors and/or omissions from plans developed by Consultants. The objectives of this procedure are to:

- Allow MDT field construction personnel to quickly obtain a solution to construction problems encountered due to errors and/or omissions from plans developed by Consultants.
- Provide a mechanism and process to inform/involve various MDT units and the Consultant at logical times during the resolution period.
- Establish a uniform method to recuperate costs incurred by MDT due to errors and/or omissions on plans developed by Consultants.

The Construction Engineering Services Bureau, the Consultant Design Bureau and the District Construction Engineer should be contacted immediately by the Construction Engineering Project Manager (EPM) for assistance when these situations arise. This is particularly important if resolution is slow in developing and the delay could result in additional costs. The procedures must be an interactive and iterative process among the field staff, the Consultant and the Consultant Design Bureau. Communication among all parties should occur throughout the procedure. Communication between the Department and the Consultant is intended to provide a good-faith attempt to reach an amicable solution; however, such communication or lack thereof does not preclude the Department from implementation of any solution deemed appropriate. The following flowchart provides a path and summary for this process. Additional information regarding each step can be found immediately following the flowchart.

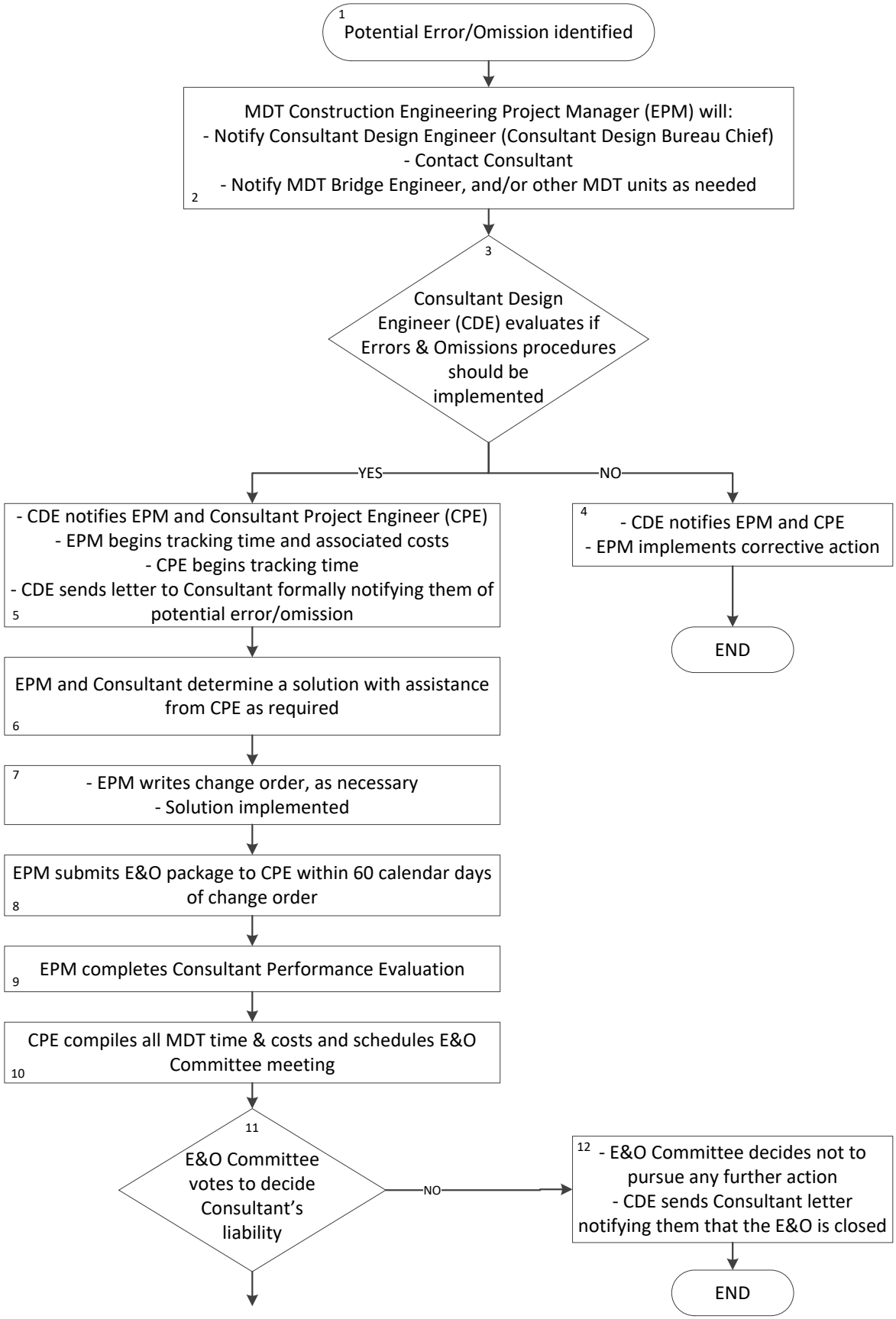


Figure B-1 — PROCEDURES FOR RESOLUTION OF ERRORS AND OMISSIONS

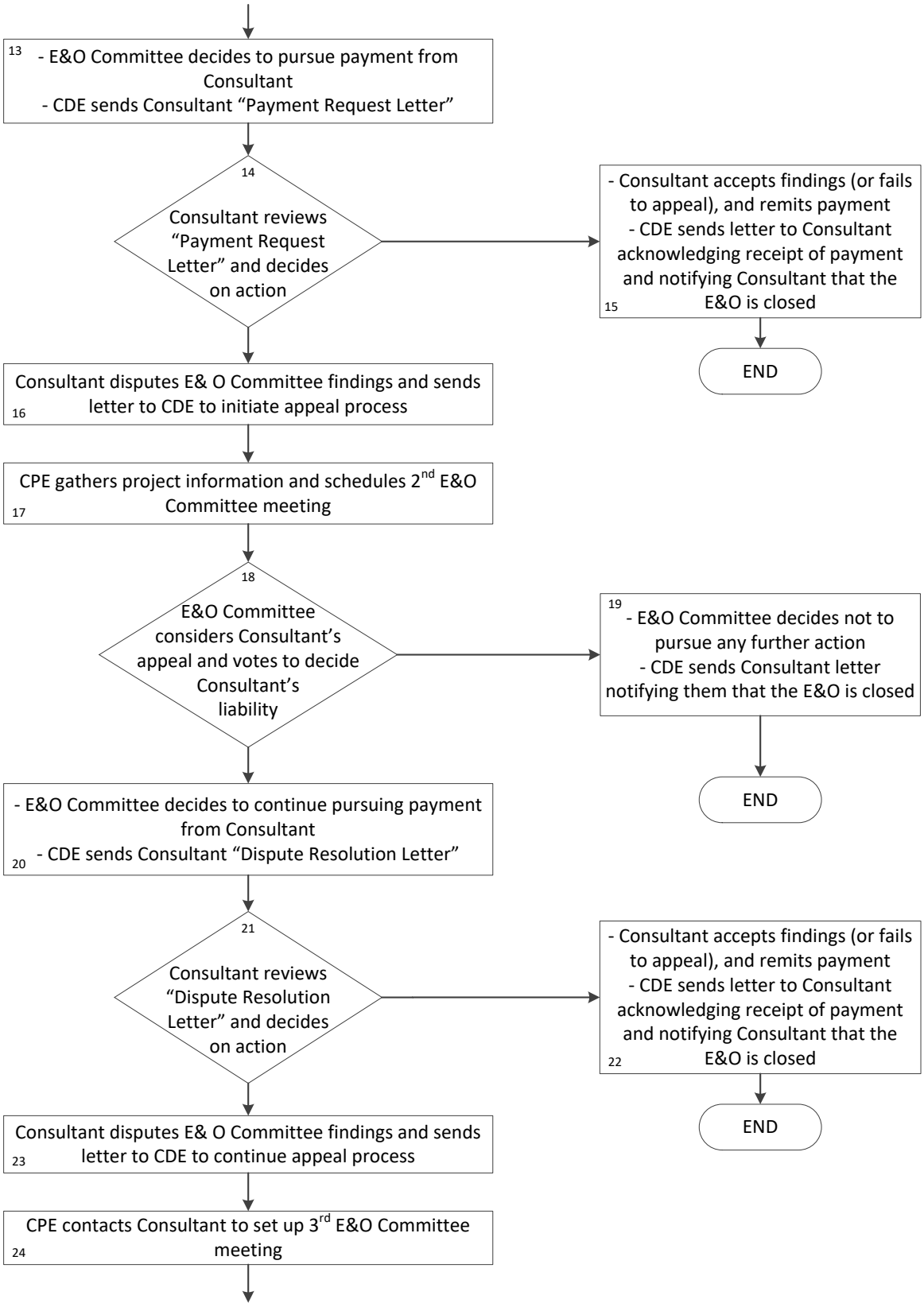


Figure B-1 — PROCEDURES FOR RESOLUTION OF ERRORS AND OMISSIONS (CON'T)

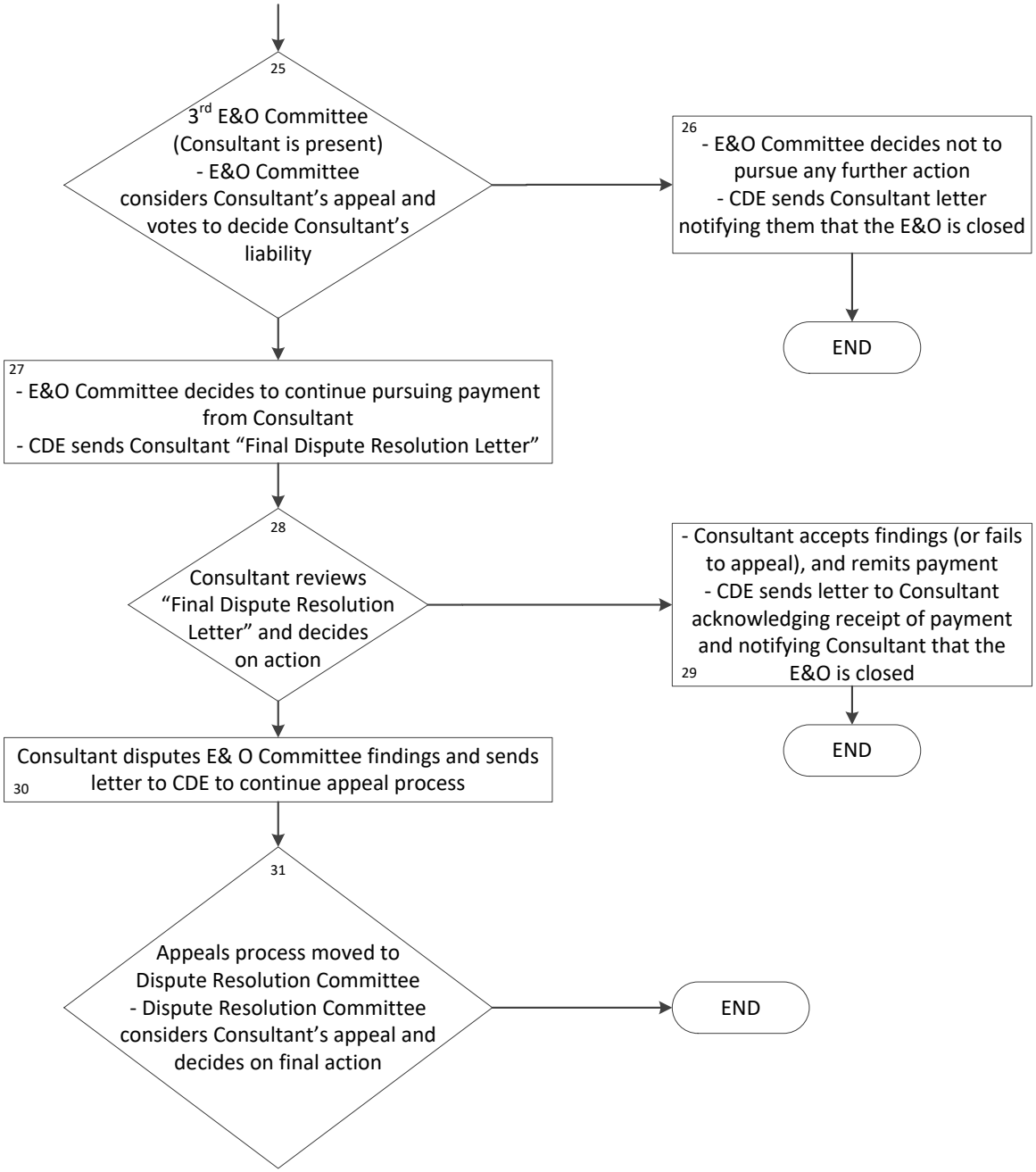


Figure B-1 — PROCEDURES FOR RESOLUTION OF ERRORS AND OMISSIONS (CON'T)

1. Box 1. The identification of a potential error and/or omission will trigger the implementation of this procedure. Initial implementation of this procedure does not necessarily imply an error and/or omission has occurred nor does it indicate an imminent charge to the Consultant. This procedure is intended to protect both the Department and the Consultant should it be determined that an error and/or omission has occurred.

2. Box 2. The Engineering Project Manager (EPM) will notify the Consultant Design Engineer (Consultant Design Bureau Chief), and other MDT Units as needed; i.e. Bridge Design Engineer (if the problem is bridge related), Geotechnical Engineer (if the problem is related to a geotechnical item), etc. Notification of the Consultant Design Engineer and Bridge Design Engineer are not required prior to contacting the Consultant but is preferred in the case of non-time-critical issues. The Consultant Design Engineer will determine which Consultant Project Engineer (CPE) will be addressing the problem and advise the EPM. The CPE will be the primary point of contact for the EPM, will assist with the solution, as necessary, and will aid in communication between the Department and the Consultant. The EPM will contact the Consultant directly and discuss possible solutions. **The Department is contractually obligated to provide the Consultant with an opportunity to be involved with the solution process**. The EPM will advise the CPE of the solution process.

3. Box 3. The Consultant Design Engineer will, in consultation with the CPE and other members within the Department as necessary, evaluate and determine if the error and/or omission (E&O) procedure should be further implemented.

4. Box 4. If it is determined that the E&O procedure will not be implemented, the EPM will take corrective action to find a solution. The EPM will use available resources (which may include the Department and/or the Consultant) to find an appropriate solution. When requested by the Department, the Consultant will provide assistance to determine a solution.

5. Box 5. If it is determined that the E&O procedure should be further implemented, the EPM will begin tracking costs associated with the solution. This includes MDT time spent researching and implementing the solution and notifying the Contractor to maintain a tally of costs directly attributed to the E&O. The CPE will begin charging time spent researching a solution and negotiating with the Consultant. The time charged should be to Account 9402, Activity 067, Project UPN and the construction agreement number. The Consultant Design Engineer will send a letter via certified mail to the Consultant notifying the firm of the potential E&O. The CPE will copy the letter to the EPM. The letter is necessary to satisfy the contractual obligations between the Department and the Consultant.

6. Box 6. The EPM and the Consultant will work together to determine an acceptable solution. The EPM is encouraged to use the CPE, as necessary, during the process. If the EPM encounters difficulty in working with the Consultant during any stage of the solution process, he/she should immediately contact the CPE.

7. Box 7. The EPM will write a change order and implement the solution.

8. Box 8. The EPM will summarize and submit the E&O Package, which must include narrative description, recommendations and final costs to CPE within 60 calendar days of the change order. If the E&O Package includes more than one E&O issue, each issue should be summarized independently. The narrative should include a justification and explain the cost. The EPM should include all associated Contractor costs and field personnel time/costs (time charged as shown in Box 5).

9. Box 9. The EPM will complete a Consultant Performance Evaluation (found on the MDT intranet site) to identify the strengths and weaknesses of the Consultant during the solution process. It is not intended to be tied to the potential amount of funds owed back to the Department but should rate the Consultant's performance, cooperation, responsiveness, overall quality of design/plans, etc. The Evaluation should be completed within 30 calendar days of submitting the E&O Package.

10. Box 10. The CPE compiles all appropriate MDT time and costs. During this process, it is imperative to coordinate with the Engineering Division's Fiscal Officer and Construction Administration Services Bureau to ensure that all costs are captured appropriately. The CPE will schedule the E&O Committee to occur within 30 calendar days of receiving the E&O Package from the EPM. The E&O Committee members are the Preconstruction Engineer, Construction Engineer and District Construction Engineer. The meeting is chaired by the Consultant Design Engineer. The CPE will invite others to this meeting to provide input, if necessary.

11. Box 11. The E&O Committee will review all of the compiled data presented by the CPE. The Committee will vote to determine the Consultant's liability (or portion thereof) with regard to each E&O issue. A majority vote is needed. The CPE will document the Committee meeting findings with meeting minutes and distribute them through the Consultant Design Engineer to the appropriate personnel.

12. Box 12. The E&O Committee votes not to pursue further action. The CPE will draft a letter, for the Consultant Design Engineer's signature, to the Consultant explaining the Committee findings; no further action will be taken, and the E&O issue is closed.

13. Box 13. The E&O Committee votes to pursue payment from the Consultant. Within 14 calendar days of the E&O Committee meeting, the CPE will draft a "Payment Request Letter," for the Consultant Design Engineer's signature, to the Consultant explaining in detail the findings of the E&O Committee. The Consultant Design Engineer will consult with the Legal Services Unit, as necessary. The letter will be sent via certified mail. All appropriate personnel must be copied, especially the Engineering Division's Fiscal Officer, Construction Administration Services Bureau and the E&O Committee members.

14. Box 14. The Consultant reviews the Payment Request Letter and decides what action it will take.

15. Box 15. If the Consultant accepts the findings in the Payment Request Letter, the Consultant will remit payment within 14 calendar days of receiving the certified letter to:

    Montana Department of Transportation
    Attention: Supervisor, Payment Collections Section
    2701 Prospect Avenue
    Helena, MT 59620

    Once payment is received, the CPE will draft a letter, for the Consultant Design Engineer's signature, to the Consultant acknowledging receipt of payment and notifying them that the E&O issue is closed.

    If the Consultant fails to provide written notification of its intent to appeal within 14 calendar days of receiving the Payment Request Letter, the Consultant loses the right to appeal the E&O Committee findings. The CPE will draft a letter for the Consultant Design Engineer's signature notifying the Consultant of payment due.

16. Box 16. If the Consultant disputes the E&O Committee findings, the Consultant is required to provide written notification within 14 calendar days to the Consultant Design Engineer stating that it is initiating the appeal process. The written notification from the Consultant should be specific to the points under dispute and provide back-up to support the Consultant's rationale.

17. Box 17. The CPE schedules a second E&O Committee meeting to occur within 14 calendar days of receiving the Consultant's letter requesting appeal. The CPE will be responsible for compiling all relevant information from the project file related to the Consultant's points of dispute. This information will assist the E&O Committee in its deliberation and discussion.

18. Box 18. The E&O Committee reviews the Consultant's letter and the compiled information provided by the CPE. The Committee will vote to decide the Consultant's liabilities (or portion thereof) with regard to the Consultant's appeal. A majority vote is needed. The CPE will document the Committee meeting findings with meeting minutes and distribute them through the Consultant Design Engineer to the appropriate personnel.

19. Box 19. The E&O Committee votes not to pursue further action. The CPE will draft a letter, for the Consultant Design Engineer's signature, to the Consultant explaining that, after the second review of the Committee, no further action will be taken and the E&O issue is closed.

20. Box 20. The E&O Committee votes to pursue payment from the Consultant. Within 14 calendar days, the CPE will draft a "Dispute Resolution Letter," for the Consultant Design Engineer's signature, to the Consultant explaining, in detail, the findings of the E&O Committee. The Consultant Design Engineer will consult with the Legal Services Unit, as necessary. The letter will be sent via certified mail. All appropriate personnel must be copied, including the Engineering Division's Fiscal Officer, Construction Administration Services Bureau and the E&O Committee members.

21. Box 21. The Consultant reviews the Dispute Resolution Letter and decides what action it will take.

22. Box 22. If the Consultant accepts the findings in the Dispute Resolution Letter, the Consultant will remit payment within 14 days to the address shown in Box 15. Once payment is received, the CPE will draft a letter, for the Consultant Design Engineer's signature, to the Consultant acknowledging receipt of payment and notifying them that the E&O issue is closed. If the Consultant fails to provide written notification of its intent to appeal within 14 calendar days of receiving the Dispute Resolution Letter, the Consultant loses the right to appeal the E&O Committee findings. The CPE will draft a letter for the Consultant Design Engineer's signature notifying the Consultant of payment due.

23. Box 23. If the Consultant disputes the E&O Committee findings, the Consultant is required to provide written notification within 14 calendar days to the Consultant Design Engineer stating that it is still disputing the findings of the E&O Committee and will continue the appeals process.

24. Box 24. The CPE will contact the Consultant to set a date and time that the Consultant will present its case in-person to the E&O Committee. This meeting should occur within 14 calendar days of receiving the letter from the Consultant.

25. Box 25. The E&O Committee reviews all previous Consultants letters and the compiled information provided by the CPE. Additionally, the Consultant will be present to answer questions and provide further information/clarification. Every attempt should be made to reach a resolution based on the facts of the issue(s). The Committee will vote to decide the Consultant's liabilities (or portion thereof) with regard to the Consultant's appeal. A majority vote is needed. The CPE will document the Committee meeting findings with meeting minutes and distribute them through the Consultant Design Engineer to the appropriate personnel.

26. Box 26. The E&O Committee votes not to pursue further action against the Consultant. Within 14 calendar days of the Committee meeting, the CPE will draft a letter, for the Consultant Design Engineer's signature, to the Consultant explaining that, after the third review of the Committee, no further action will be taken and the E&O issue is closed.

27. Box 27. The E&O Committee votes to pursue payment from the Consultant. Within 14 calendar days, the CPE will draft a "Final Dispute Resolution Letter," for the Consultant Design Engineer's signature, to the Consultant explaining in detail the findings of the E&O Committee. The Consultant Design Engineer will consult with the Legal Services Unit, as necessary. The letter will be sent via certified mail. All appropriate personnel must be copied, including the Engineering Division's Fiscal Officer, Construction Administration Services Bureau and the E&O Committee members.

28. Box 28. The Consultant reviews the Final Dispute Resolution Letter and decides what action it will take.

29. Box 29. If the Consultant accepts the findings in the Final Dispute Resolution Letter, the Consultant will remit payment within 14 days to the address shown in Box 15. Once payment is received, the CPE will draft a letter, for the Consultant Design Engineer's signature, to the Consultant acknowledging receipt of payment and notifying them that the E&O issue is closed. If the Consultant fails to provide written notification of the its intent to appeal within 14 calendar days of receiving the Final Dispute Resolution Letter, the Consultant loses the right to appeal the E&O Committee findings. The CPE will draft a letter for the Consultant Design Engineer signature notifying the Consultant of payment due.

30. Box 30. If the Consultant disputes the E&O Committee findings, the Consultant is required to provide written notification within 14 calendar days to the Consultant Design Engineer stating that it is still disputing the findings of the E&O Committee.

31. Box 31. At this point, the appeals process will be moved to the Dispute Resolution Committee. The Dispute Resolution Committee members are the MDT Chief Engineer (Engineering Division Administrator), MDT Chief Legal Counsel, and the residing Executive Director of the American Council of Engineering Companies of Montana (ACEC of Montana). The meeting is chaired by the Consultant Design Engineer. The CPE will invite others to this meeting to provide input, if necessary.

    Within 14 calendar days of receiving the Consultant's letter, the CPE will schedule a meeting to convene the Dispute Resolution Committee. The Consultant Design Engineer will inform the Committee of all actions that have occurred. Additionally, the Consultant may be present to answer questions and provide further information/clarification. The Dispute Resolution Committee will consider this information and direct one of the options listed below or any additional option to be offered to the Consultant. If necessary, a vote may be held. A majority vote is needed. Prior to the letter being sent to the Consultant, the Chief Engineer will receive approval from the Director's office of the option put forth in the letter. This letter is signed by the Consultant Design Engineer and is sent to the Consultant within 14 calendar days of the Dispute Resolution Committee's decision. The options include:

    - The Dispute Resolution Committee reaffirms the findings from the third E&O Committee meeting.

    - The Dispute Resolution Committee agrees with the Consultant to share equally the cost to jointly present the issue to a creditable, neutral third party panel to obtain a non-binding recommendation.

    - The Dispute Resolution Committee pursues other Alternative Dispute Resolution methods (e.g., binding arbitration).