



# **ENGINEERING PROFESSIONAL SERVICES GUIDELINES**

**MISSOURI DEPARTMENT  
OF  
TRANSPORTATION**

**March 2007**

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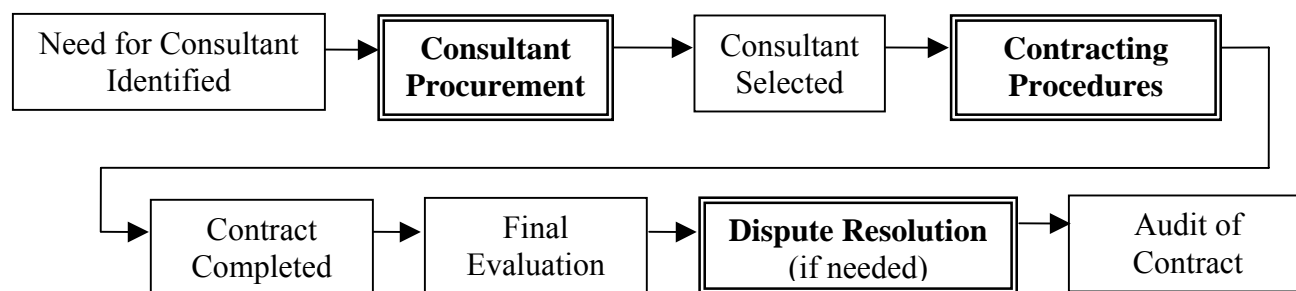
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# INTRODUCTION

When projected workloads and available resources indicate the need for a consultant's professional services on a project, the EPS Guidelines provide Missouri Department of Transportation (MoDOT) staff with the basic information needed to engage a consultant for the provision of specific services. Any reference herein regarding a district performing certain functions or having certain responsibilities also applies to individual Central Office divisions if they directly administer the contract. In that case, the division will assume the responsibilities described for the district.

These guidelines are composed of three sections – consultant procurement, contracting procedures, and dispute resolution.



**Section I – Consultant Procurement Process** describes policies and procedures related to hiring a consultant:

1. Approval to hire a consultant
2. Soliciting letters of interest from consultants
3. Selecting a consultant
4. Approval of selected consultant

**Section II – Contracting Procedures** describes the activities a Project Manager performs while the contract is active:

1. Which contract to use
2. Negotiating man-hours of effort required by the consultant
3. Pre-audit process
4. Executing the contract
5. Invoice procedures
6. Evaluating the consultant's performance

**Section III – Dispute Resolution Process** describes the formal process for resolving a disagreement between the consultant and MoDOT:

1. How the process is started
2. Documentation required
3. Meetings between consultant and MoDOT
4. Concluding the process

## **THE PROFESSIONAL SERVICES COMMITTEE (PSC) AND QUALIFICATION BASED SELECTION (QBS)**

The PSC ensures that MoDOT follows State and Federal guidelines for the use of engineering consultants. The committee is composed of the Director of Program Delivery (who chairs the committee), the State Design Engineer, and the State Bridge Engineer. At times the committee may incorporate additional members, such as the Transportation Planning Director for contracts involving a planning study, feasibility study, or major investment study. The State Construction and Materials Engineer is added when the selection involves construction and materials inspection or geotechnical services. The State Traffic Engineer will be a member when the selection involves traffic modeling or Intelligent Transportation Systems (ITS) and the Environmental & Historic Preservation Manager is added if the selection involves EA or EIS preparation. The Community Relations Director is added for projects with extensive public involvement or the use of a public involvement sub-consultant. On behalf of the committee, the Chair approves or rejects the selection of the consultant. The PSC provides comments as needed.

MoDOT is committed to getting the best value for every dollar spent. How is that accomplished when selecting professional services where low bid selection may compromise the quality of the services? The process is called QBS and is governed by both State and Federal regulations.

At the federal level, the Brooks Act (Public Law 92-582, 1972) requires agencies to “promote open competition by advertising, ranking, selecting, and negotiating contracts based on demonstrated competence and qualifications for the type of engineering and design services being procured, and at a fair and reasonable price.” This requirement applies to all federally funded projects.

The State of Missouri, Sections 8.285 thru 8.291 RSMo, requires QBS for all architectural and engineering professional services and reflects the language of the federal legislation.

MoDOT’s QBS process can be summarized in 7 Steps:

1. MoDOT solicits qualifications for identified professional services.
2. Interested professionals submit qualifications.
3. MoDOT evaluates the firms based on a) practical design, b) experience and competence, c) the capacity of the firm to perform the work in the timeframe needed, d) past performance, and e) proximity to and familiarity with the project area. The top 2 - 5 firms are placed on the “short list.”
4. MoDOT evaluates the firms on the short list to determine the firm most qualified to perform the services. This may include interviews or presentations. Performance evaluations from the Design Consultant Database are reviewed for past performance ratings.
5. MoDOT provides an initial scope of services. The best scope and method of delivery are negotiated between MoDOT and the consultant.
6. Consulting firm determines the hours and fee needed to deliver the services.
7. MoDOT and the consultant negotiate to assure the hours and fees are reasonable and fair. If an agreement cannot be reached with the first short listed firm, negotiations will be terminated and initiated with the second firm.

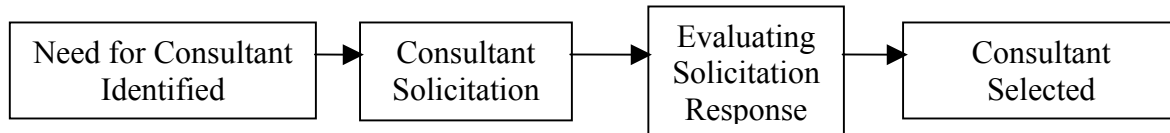
The PSC is responsible for ensuring that MoDOT follows QBS process. The committee chair approval is required at several stages. The PSC provides comments to the PSC chair on any project concerns at any time in the process.

1. The PSC chair approves the district or division engineer's request to solicit consultants to provide professional services for MoDOT.
2. For contracts involving presentations, the PSC chair approves the "short list" first and is invited to attend the presentations.
3. For standard contracts and supplemental agreements, the PSC chair approves the consultant selection, the negotiated number of man-hours and the "not to exceed" amount of the contract concurrent with the execution of the contract. The PSC and division liaisons provide review and comment to the chair prior to approval.
4. The PSC chair executes all standard and supplemental contracts.
5. For on-call, hourly rate contracts, the PSC chair approves district and division consultant selections.

Exceptions to this process are for execution of contracts involving emergency projects and for MoDOT's three Design/Build projects where authority to procure consultants and execute contracts has been delegated to the specific Project Directors.

This manual provides guidance in assuring that proper QBS procedures are easy to understand and expectations clear.

## Section I – Consultant Selection



### A. SOLICITATION OF INTEREST FROM CONSULTANTS

Projects are selected and prioritized using the Planning Framework. When projected workloads and available resources indicate the need for a consultant’s professional services on a project, the District Design Engineer (DDE) informs the Project Manager (PM), who develops a general description of the work needed. The PM and DDE discuss the need with the Assistant District Engineer and District Engineer (DE). After the DE agrees with the need to hire a consultant, the PM works with the core team to develop a more detailed scope of work to aid the PM in developing a cost estimate for the proposed consultant services. Preliminary Engineering funds must be identified as a part of the current Statewide Transportation Improvement Plan (STIP). Based upon the cost estimate, the PM determines the general type of contract needed, hourly rate or standard, and whether federal monies will be used for the contract. Boilerplate contract forms can be found at:

<http://wwwi/intranet/cc/contracts.asp?f=DE&nav=modot>

If the project involves services for ITS, a major bridge, federal funding or is expected to exceed \$1,000,000 the **DE1** Federal Assistance contract should be used. The expected scope of work should be sent to the External Civil Rights Administrator for review to set a Disadvantaged Business Enterprise (DBE) goal for the contract. If a goal is set, it is to be included in the solicitation for services. A standard **DE1-SF** State Funded contract may be used for services with an estimated cost up to \$1,000,000 and where no federal funding is expected.

An hourly rate contract, **DE1-MOU** can be used when the estimated cost is less than \$100,000 and the scope of services fits the established Work Categories (listed in “C. HOURLY RATE CONTRACTS”). A standard contract should be used when the estimated cost is close to \$100,000 or there is a high likelihood of changes to the scope of services may push the contract over the \$100,000 ceiling for hourly rate contracts. The \$100,000 is a cumulative limit for all MOUs for the same job number.

#### A-1. LIST OF CONSULTANTS INTERESTED IN PROVIDING SERVICES TO MoDOT

The MoDOT Design Division maintains a Lotus Notes database of consulting firms who have expressed an interest in providing professional services to MoDOT. This information is obtained from the Standard Form 254 or Standard Form 330 Part 2 (contains information regarding their staffing and qualifications) completed by the consultant. Data from this form is also used during

the selection process. Many consultants ask how to get on the list to provide consulting services to MoDOT. A consulting firm that would like to be added to the list of firms contacted when MoDOT needs services should complete a Standard Form 254 or Standard Form 330 Part 2 and submit it to the Design Division. Standard Forms 254 and 330 (with instructions) are available on the General Information for Consultants Internet website at:

[www.modot.mo.gov/business/consultant\\_resources/geninfodesignconsultans.htm](http://www.modot.mo.gov/business/consultant_resources/geninfodesignconsultans.htm)

The consultant is responsible for updating this staffing and qualification information annually. The updates should indicate changes in mailing address, contact personnel, staffing, or types of work. The consultant must also be registered to do business in the state of Missouri and must be in good standing with the Secretary of State's Office. The Secretary of State's website will be used to ensure these requirements are fulfilled. Questions concerning these requirements should be directed to the Design Division.

The Lotus Notes database can be accessed as follows:

1. Start Lotus Notes
2. Select File → Database → Open
3. Server = LNAPP2
4. In the Database window scroll down, select "DE," and double click
5. Select "Design Consultant Database" and double click to open

This same database also contains evaluations of a consultant's past performance.

## **A-2. STANDARD SOLICITATION**

The solicitation method described here is used for the majority of MoDOT projects. This method gives all consultants equal consideration during the solicitation process, without preconceived opinions of qualifications. Projects involving MoDOT funding and/or MoDOT right of way require prior approval by the PSC chair to use any solicitation method that deviates from the one described.

The PM prepares a letter requesting the PSC chair's approval to solicit consultants and gives it to the DE or Division Engineer for review, signature, and submittal to the PSC chair (see Attachment 1 for a sample letter), with a copy to the State Design Engineer. The request stipulates the services needed, a cost estimate and estimated "not to exceed" amount for the services, the type of selection process to be used and the contracting schedule.

Design Division circulates the information provided by the District or Division to all specialized work units such as Bridge, Soils and Geology, Environmental, Historic Preservation, Maintenance, Traffic, IS, and Construction for their review and comment to ensure the correct projects and services are being requested. The information is also provided to the Design Liaison Engineers (DLE) and DE's to determine if in-house staff are available in another district. The Design Division forwards any comments received from the specialized work units or DLE to the district for information and, if necessary, makes revisions to the request. When all involved parties agree on the content, the PSC chair approves the request. The PM develops information for the consultant solicitation and submits it to the State Design Engineer (Attachment 2).

The Design Division then posts the solicitation on MoDOT's General Information for Consultants website and issues a notification to all consultants included in the Lotus Notes Consultant Database that a new solicitation has been posted and provides the DE with a copy of the consultant solicitation and the date by which the consultants must respond.

The solicitation describes the type of services that are needed and instructs consultants who wish to be considered for these services to send a letter expressing their interest to the appropriate district office. The solicitation must include the DBE goal, if applicable, a detailed schedule that will be adhered to for the selection process and the contract negotiations process. The solicitation must also state whether the incentive/disincentive program will be used (see Section II, G-4. INCENTIVE AND DISINCENTIVE PROGRAM). The solicitation can range from a simple listing of the county, route, anticipated construction cost, type of project to be constructed, and services to be provided by the consultant to a detailed Request for Qualification (RFQ) or Request for Proposal (RFP), depending on the complexity of the project.

Neither the solicitation, nor the letter of interest, shall contain any information concerning man-hours, labor rates, or cost information. If a maximum known value is available to fund the professional services contract, it may be noted in the solicitation to avoid submission of letters by consultants unable to provide the services for the expenditure MoDOT has determined is reasonable for the project. Cost information can only be considered once a consultant has been selected and a contract is being negotiated. Should a consultant submit cost information with their letter of interest, RFQ, or RFP, the recipient of the information must remove it from the letter before giving copies to other members of the selection team. A consultant submitting cost information should not automatically be disqualified unless the selection team believes the information submitted resulted in the consultant gaining an advantage over other consultants.

### **A-3. MODIFIED SOLICITATION**

There are times when the standard solicitation process will not work, takes too long, or is too cumbersome for the needs of the project. In addition, some specialized work units in MoDOT (e.g., Bridge, Soils and Geology, Environmental, Historic Preservation, and Photogrammetry) use a "modified solicitation" method because of the unique services requested. Consultants providing specialized services to these units provide their qualifications directly to the units, which evaluate consultant qualifications and maintain a list of qualified firms. When a consultant is needed and the situation fits one of the conditions listed below, the DE or specialized work unit gets PSC chair approval to do a modified solicitation.

The three special conditions warranting solicitation of letters of interest from the limited group of consultants are:

1. The critical nature of the work requires an accelerated selection process. The term "critical nature" refers to tasks required as a result of unanticipated events, legal actions or compliance with directives from regulatory agencies. However, the PSC chair will consider each individual case on its own merits.

2. The scope of services requires a highly specialized knowledge and expertise that limits the number of qualified firms. Examples are underwater bridge inspection, designs to address environmental mitigation, cultural resource investigations, and design-build.
3. The work qualifies for the small purchases category. This category includes those contracts with a cost less than \$25,000 and required services that are outside the work categories for an hourly rate contract.

## **B. CONSULTANT PROCUREMENT**

The consultant's expression of interest in providing services for MoDOT may range from a short letter outlining the firm's experience and approach to the project to the submission of a detailed explanation of qualifications, based on the specific criteria contained in the solicitation. The procurement process will determine whether the selected consultant is qualified professionally, is financially capable of performing the services required, and has available properly trained and experienced personnel to perform the required services within the specified time. Various factors and information can be considered to evaluate consultants and determine whether these qualities are present. It is required that the consultant be evaluated on the criteria listed in Attachment 3; however, additional criteria may also be considered. All roadway and bridge consultants must be evaluated on their past performance at delivering plans that apply practical design concepts.

The district, and/or division, forms a team to review the consultant responses and select a firm to provide the necessary services. The team shall include at least three members, one of whom is from the Central Office (usually a Design or Structural Liaison Engineer). If a major component of the project is a specialty area supported only by Central Office staff, that division should be asked to participate as well. If federal funding will be used for the consultant's work, as in a full-oversight project, the Federal Highway Administration (FHWA) must be offered the opportunity to participate as a team member. Should another entity (KDOT, IDOT, MPO, city, county, etc.) be funding part of the cost of the work, that entity must be offered the opportunity to participate as a member of the selection team. If the consultant's team is expected to include a public involvement sub-consultant, the PSC, including the Community Relations Director, should be invited to participate on the team.

### **B-1. EVALUATING THE SOLICITATION RESPONSE AND PREPARING THE SHORT LIST OF INTERESTED FIRMS**

Prior to receiving the solicitation responses, the team develops criteria for selecting the "short list" (Attachment 3) and a rating form (Attachment 4) for documenting the results. While the team determines the criteria chosen, they should be specific to the project needs. The list below is a generic range of items that must be considered at minimum. Based on the unique aspects of each project, additional criteria can and should be used.

- a. The consultant's current personnel and their qualifications are evaluated based upon:
  - i. Brochures, résumés, and other data the firm submits that indicate in detail the education and experience of key personnel. If necessary, the team will personally interview firm members.
  - ii. Personal knowledge of the past performance of key personnel.
  - iii. The experience of the consultant's key personnel in related work such as computer aided drafting and design, photogrammetry, traffic analysis, soil analysis, structural design, hydraulics, signalization, lighting, environmental documents, historic preservation, etc.
- b. The consultant's firm is evaluated on experience in the type of design or other professional services required under the proposed contract – such as rural, urban, bridge, planning studies, environmental studies, etc. – and the complexity of those services.
- c. MoDOT's past experience with the consultant for other engineering or professional services is evaluated based on:
  - i. The quality of the work the consultant has delivered for MoDOT.
  - ii. The consultant evaluation forms for MoDOT contracts completed by MoDOT staff shall be reviewed to ensure the consultant has received a satisfactory or better rating. Ratings less than satisfactory will warrant further investigation to determine if noted deficiencies have been corrected. The evaluations can be found in the Design Consultant Database in Lotus Notes.
  - iii. The consultant's past performance related to practical design should be considered separately from the overall performance.
- d. The consultant's proximity to and familiarity with the project area.
- e. The financial status of a consultant is considered sound and adequate unless there is evidence to the contrary. Investigation into the consultant's financial status is not required.
- f. The adequacy of the consultant's instant staffing, together with available additional staffing for the proposed service, is evaluated to ensure that the consultant can provide the required services in the desired time frame. The consultant's present work load of existing MoDOT contracts for design or other professional services can be a factor in this determination.

The team develops a short list by reviewing the letters of interest or proposals received, consultant evaluation forms for previous MoDOT work, available information concerning the consultant's staffing levels and qualifications, and the work experience of the firms. Each response should be rated on the established criteria contained in the rating form created for the project. This information must be kept to document the process of selecting the short list.

For the majority of MoDOT contracts, the short list does not require PSC chair approval; it simply documents the consultant selection process. However, for any selection that involves a presentation, the PSC chair must approve the short list (Attachment 5). The shortlist will be added, in alphabetical order, to the same General Information for Consultants website with the anticipated date of the final selection.

The short-listed consultants must participate in a presentation or interview session with the selection team for projects that involve a feasibility study, an environmental assessment, environmental impact statement, major river bridge design, or a major investment study. If the scope of services includes extensive public involvement or the use of a public involvement sub-consultant, the short-listed firms must give presentations to the selection team. The consultant interview or presentation may also be used with any type of project for which the PSC chair or the district determines it to be necessary or desirable.

For services other than those specifically noted above as requiring a consultant presentation or interview, selection may be made without interviews or presentations as discussed in “B-3, TYPICAL CONSULTANT SELECTION WITHOUT INTERVIEWS OR PRESENTATION”.

## **B-2. CONSULTANT SELECTION WITH INTERVIEWS OR PRESENTATIONS**

The short-listed consultants must participate in a presentation or interview session with the selection team for projects that involve a feasibility study, an environmental assessment, environmental impact statement, major river bridge design, or a major investment study. If the scope of services includes extensive public involvement or the use of a public involvement sub-consultant, the short-listed firms must give presentations to the selection team.

### **a. Presentations**

The leader of the selection team will coordinate with the Central Office to arrange for individual consultant presentations before the entire PSC, including a representative of Community Relations, the DE, and appropriate district staff. Before the presentations, the selection team must determine the scoring criteria to be used. These criteria can include many variables, but each element must be assigned a point value and expectations for assigning the maximum points should be developed. See Attachment 6 for a sample letter inviting the consultant to present. Following these presentations, the selection team and the PSC will reach consensus on which consultant will be selected to provide the professional services. A sample format for these presentations (the time indicated is a guideline) follows:

- i. Introduction of selection committee (5 minutes)
- ii. Presentation (15-20 minutes)
- iii. Questions from selection team on the presentation or handouts (20-30 minutes)
- iv. Close (5–10 minutes)
- v. Time between presentations (30 minutes)

After each consultant presentation, the selection team moves to a private location to discuss the presentation as that consultant leaves and the next is setting up for their presentation. After the final presentation, each member of the selection team will individually develop a numeric score to rate each firm based on the pre-determined criteria and scoring process. Attachment 7 is an example of the type of criteria that can be used and suggested point values. Although use of the

example is not required, the criteria and scoring process **must** be determined prior to the actual presentation. The team will, as a group, compare these scores and discuss how they were determined; the team must reach consensus on the consultant to select.

The team will create a rating summary (Attachment 8) for all the firms, clearly indicating which firm is recommended for selection and documenting the selection process. The rating summary is only one tool used in the selection. Although selection of the highest scoring firm is not required, if it is not selected the reasons must be documented. This documentation will be kept in the project file and a copy sent to the Central Office for approval by the PSC chair. The team must receive approval before notifying the consultant that was selected or any other parties. The approved selection will be posted on the General Information for Consultants website.

#### **b. Interviews**

For a feasibility study, environmental assessment, environmental impact statement, major river bridge design, or major investment study, the selection team should conduct interviews with the short-listed firms. This requires considerable preparatory work; however, the selection team can limit the number of consultant staff and specify particular individuals as well as the opening topics. (See Attachment 9 for a sample letter of invitation). Before the interviews, the selection team must determine the interview questions to be asked along with a description of the correct type of answer. Depending on the complexity of the questions, 15 – 18 questions will fill the time allotted. Additionally, the scoring criteria to be used must be pre-determined. These criteria can include many variables, but each element must be assigned a point value and expectations for allocating the maximum points should be developed. The consultants should not be allowed to bring anything into the interview. A sample format for an interview (with time guidelines) follows:

- i. Introduction and opening comments by consultant (5 – 10 minutes)
- ii. The consultant responds to predetermined questions (45 minutes)
- iii. Closing comments from consultant (5 minutes)
- iv. Time between interviews (30 minutes)

During the interview, each team member individually scores the consultant as each question is answered. After each interview, the selection team discusses the consultant responses and averages the scores from the entire team. After the final interview, the team will, as a group, compare these scores and discuss how the firms rank; the team must reach consensus on the consultant to select. The team will create a rating summary clearly indicating which firm is recommended for selection and documenting the selection process. The rating summary is only one tool used in the selection. Although selection of the highest scoring firm is not required, if it is not selected the reasons must be documented. This documentation will be kept in the project file and a copy sent to the Central Office with the contract for approval by the PSC chair. The team will notify the consultant of their selection and the final selection will be posted on the General Information for Consultants website.

#### **B-3. TYPICAL CONSULTANT SELECTION WITHOUT INTERVIEWS OR PRESENTATION**

The majority of projects needing consultant services do not require interviews or presentations and the selection team may select a consultant based upon the available qualification data used to

develop the short list. Specific conditions that allow the selection of consultants in this manner are:

1. The scope and cost of the contract is considered to be minor or routine in nature.
2. The district or division is very familiar with the qualifications and capabilities of all the short-listed firms from previous services or presentations and believes presentations or interviews will not increase knowledge of the short-listed firms.
3. The need for an accelerated selection process due to the critical nature of the contract.

Once a short list of firms has been developed, the selection team will rate these firms based on previously defined performance criteria to determine which is best suited to provide the professional services required. Each member of the selection team will individually develop a numeric score to rate each firm using the categories listed in Attachments 3 and 4. The team will, as a group, compare these scores and discuss how they were determined. The team must reach consensus on the consultant to select. The team will create a rating summary (Attachment 8) clearly indicating which firm has been recommended for selection and documenting the selection process. This documentation will be kept in the project file and a copy sent to the Central Office with the contract when it is submitted for execution by the PSC chair. The team may notify the consultant of their selection and the final selection will be posted on the General Information for Consultants website.

#### **B-4. NONCOMPETITIVE CONSULTANT SELECTION**

If approved by the PSC chair, a consultant may be selected in a noncompetitive manner under the following circumstances:

1. The service is only available from a single provider.
2. There is an urgency (involving public safety) that requires the selection be made expeditiously, thus insufficient time for the normal solicitation and selection process.
3. After using the normal solicitation process, the PSC determines there is inadequate consultant interest in providing the services.
4. A special circumstance exists that meets the approval of the PSC chair.

Noncompetitive selection involves recommending a consultant to the PSC based upon the consultant's qualifications (including past experience) to perform the services required. With the recommendation of the other PSC members, the PSC chair can approve the selection of the consultant. Selections involving Federal-aid contracts must be submitted for FHWA approval prior to using the consultant.

### **C. MASTER AGREEMENTS FOR HOURLY RATE CONTRACTS**

Hourly rate contracts are used for quick delivery of small projects that are limited in scope. These contracts are not intended as a means of bypassing the normal selection and negotiation process. The Design Division maintains a list of consultants that have been approved to perform services under the terms of an hourly rate contract in 12 categories.

District Work Categories:

1. Planning and Conceptual Studies Services
2. Roadway Design Services
3. Traffic Operations, Design and Micro-Modeling Services
4. Surveying Services
5. Construction and Materials Inspection and Testing Services

Division Work Categories:

1. Intelligent Transportation Systems Services
2. Geotechnical Services
3. Bridge Design Services
4. Photogrammetric Services
5. Environmental Services – Hazardous Waste, Noise Studies
6. Cultural Resource Services
7. Subsurface Utility Engineering

Each district and division has specific consultants that are authorized to provide services in the noted categories. A district/division may only use the consultants that are authorized for their district/division. Deletions or additions to the master list require the PSC chair's approval. The master list can be accessed on the MoDOT public web page by selecting "Business with MoDOT" → "General Information for Design Consultants" → "District/Division Hourly Rate Consultant Contracts."

All consultants that have submitted either Standard Form 254 or Standard Form 330 Part II (standard forms on public web page) are sent an e-mail soliciting their interest in entering into an hourly rate contract to provide services. The normal selection and rating process is used to select a firm from those who express interest; one letter summarizing the selection(s) is then sent from each district or functional unit to the chair of the PSC. The summary letter should include the recommended consultant(s) and the rating sheet for all the short-listed firms. When soliciting interest for services under the hourly rate contract, firms should be selected based upon the quality of past work in performing the needed services for MoDOT. Consideration should be given to firms that have not provided services to MoDOT. Hourly rate contracts are a good opportunity to try new and small firms to see what quality of work they can provide.

The PSC chair approves the selection of consultants to perform hourly rate services. Every three years those needing such services develop a short list of qualified consultants from those who have submitted letters of interest and recommend them for selection to the PSC chair. To ensure that hourly rate contracts are used as intended, the PSC has established several guidelines:

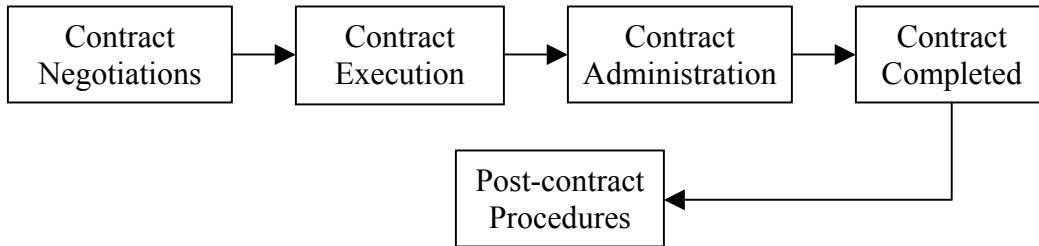
1. The hourly rate contract may be executed for a maximum period of three years, although the master agreement may include provisions for a one-year extension at the end of the three-year period.
2. No single MOU will exceed a total cost of \$100,000, nor shall a single job number have multiple MOUs executed for services that exceed a \$100,000 total. MOUs within the

\$100,000 limit do not need prior PSC approval for execution and can be executed by the DE or division engineer.

3. Requests for authorization to exceed the \$100,000 limit should be made to the appropriate division. The division forwards the request to the PSC chair, who must obtain the authority of the Commission to execute the MOU. Typically, a standard contract will be used for the amount over the hourly rate limit.

The Design Division develops a “Master Hourly Rate Agreement” to be executed by the selected consultant(s). This agreement outlines the basic conditions of the contractual relationship and specifies work category, billing rates, and overhead rates. The master agreement is the foundation for a Memorandum of Understanding (MOU) that the district later executes with a consultant to address the need for a specific scope of services on a project (more information in Section II, “C-2. MOUs FOR HOURLY RATE SERVICES”).

## Section II – Contracting Procedures



### A. CONTRACT NEGOTIATIONS

In all cases, contract negotiation starts once the selection is made and should follow the schedule provided in the solicitation. If man hours and project costs cannot be agreed to in a reasonable amount of time, negotiations will be terminated and the next ranked consultant on the short list will be notified to begin negotiations. Be sure to consult CCO early in the negotiation phase for any proposed changes in the agreement language. Modifications to the standard agreement language may be considered only where no other compromise can be reached to successfully negotiate the agreement, and must be approved “as to form” by CCO.

The standard contracts can be found in the left panel of CCO’s website. Click the down arrow below “Contracts” and select “DE” to see a listing of all the standard contracts for the Design Division. The most commonly used contracts are:

1. DE1 for federally funded professional services
2. DE1-SF for state funded professional services
3. DE1-SUP for supplemental agreements to DE1 and DE1-SF
4. DE1-MOU for hourly rate memorandums of understanding

#### A-1. PREPARING A TENTATIVE CONTRACT

The district, with assistance from the appropriate division, prepares a more detailed scope of services and a refined pre-negotiation estimate of the man-hours that MoDOT would require to perform the service. The MoDOT Sample Scope of Services (located on the “DE-Contracts” tab accessed in Microsoft Word by selecting File → New) for the appropriate type of service is used as a starting point for preparing the scope of services and is modified as necessary to fit the individual project. The district and the division will concur in the tentative scope of services and ensure that it adequately describes the services to be performed.

If the contract cost will be \$1,000,000 or more, contact the Resource Management Division at this time to determine whether federal funding will be available for financing the contract. The decision to use federal or state funds determines the appropriate contract language to be used. If federal funds are used to pay for professional services, the district must send a copy of the scope of services to the External Civil Rights Administrator for their review and determination of the DBE goal that must be met by the consultant.

The MoDOT unit responsible for the contract, either the district or the division, provides the consultant with a printed, or PDF format electronic copy of the tentative contract. The tentative scope of services may be provided in a non-PDF electronic format. Consultants do not receive electronic copies of MoDOT's Sample Consultant Contract in a non-PDF format; the standard consultant contract language cannot be changed without Chief Counsel's input.

After reviewing the tentative contract and scope of services, the consultant prepares a proposal containing a detailed estimate of cost that includes, at a minimum, man-hours, basic pay rates, overhead rates, direct costs, and fixed fee. Each of these items is reviewed to ensure it is reasonable with respect to the type of work involved and anticipated size of the contract.

## **A-2. LIABILITY INSURANCE**

The MoDOT Standard Consultant Contract language includes provisions for the amount of liability insurance that the consultant must provide to cover claims that may result from errors, omissions, or negligent acts of the consultant. These may be increased or decreased after following the procedures outlined in the Acceptance of MHTC Liability, available through the CCO, and with the approval of the PSC Chair, depending on the nature and complexity of the services.

A copy of the certificate of liability insurance for the prime consultant and sub consultants is to be requested by the project manager and kept in the project files with the executed contract. It is the responsibility of the consultant to meet the insurance requirements of the contract. Receipt of the certificate does not imply approval of the amounts.

## **A-3. PAYMENT BOND**

State statute requires that a non-engineering or non-surveying consultant, or one who is contracting the services of a sub consultant who is a non-engineering, non-surveying firm, to provide a payment bond as security against monetary claims (such as would result from the prime consultant's nonpayment of sub consultants) made against individual members of the Missouri Highways and Transportation Commission (also referenced herein as MHTC or the Commission). However, this provision only addresses the cost of contracted work **greater** than \$25,000 and only non-engineering and non-surveying firms. Engineering and surveying firms are exempt from the requirements for a payment bond. The following will be used to define an engineering firm:

1. The name of the consultant contains engineer or engineering.
2. The company's letterhead states that the company provides engineering services.
3. The company's website states that the company provides engineering services.
4. The Missouri Board of Engineers, Architects, and Land Surveyors certifies that the company is an engineering company.

The prime consultant must provide a payment bond for any contract with a total value of more than \$25,000 where any non-engineering, non-surveying sub consultants is providing non-engineering and non-surveying services (e.g., geotechnical investigations including, but not limited to, collecting soil samples; archaeological investigations; aerial photography; any

excavation work; etc.) and/or applicable direct costs such as printing, copying, any equipment rental, etc.

When the sub consultant is also an engineering firm and performs the non-engineering services with its own in-house staff and company-owned equipment, these services do not count toward the \$25,000 limit. For instances in which the prime engineering service consultant anticipates using only other professional engineering consultants to perform subcontract work, no payment bond is required.

The payment bond value shall equal the amount of the total subcontracted non-engineering services and applicable direct costs. If there is uncertainty about whether an item of work is considered as non-engineering or as an applicable direct cost, it should be included in the amount covered by the payment bond. Fully document all decisions regarding contracted services not included in the payment bond amount and retain in the project file until the contract has been closed and audited for final payments. A copy of the payment bond is to be requested by the project manager and kept in the district project files with the executed contract.

#### **A-4. REVIEW OF CONSULTANT PROPOSAL**

##### **a. Man-Hours Review**

In order to establish a measure of “fair and reasonable” a pre-negotiation estimate is required by Federal regulation 49 CFR 18.36. The PM should develop an estimate based on the man-hours that the district would require to perform the same service. The consultant man-hour estimate is reviewed and compared with the MoDOT estimate. The consultant’s fee proposal submittal must include detailed cost breakdowns by sub-task and by job title. For any subtask on the scope, it should be known how many different people, how many hours per person, any direct expenses, etc. for the prime and any subs. The consultant’s man-hours and costs are also compared with data from previously executed consultant contracts for similar services. Negotiations should occur to assure that man-hours in the contract are comparable to the MoDOT estimated hours and those from similar projects. PM’s should confer with the appropriate Central Office liaison engineer for concurrence with the review. A draft of the contract is to be sent to Central Office Design for review and submittal to the Audit and Investigations Division and CCO as needed.

If MoDOT cannot negotiate a contract with the consultant to perform the required services within a reasonable amount of man-hours and a cost that is fair and reasonable, the negotiations may be formally terminated and MoDOT may choose to perform the service with its own forces or negotiate a contract with the consultant rated number two during the selection process. If a contract cannot be negotiated with the second consultant, MoDOT may choose to negotiate with the third consultant. At any time, all proposals may be rejected and MoDOT can re-advertise the project with a revised scope.

##### **b. Fixed Fee Review**

The fixed fee is based on the complexity of the project, risk to the consultant, and the amount of sub consultant management and should not exceed the MoDOT Allowable Profit Curve shown in Attachment 10. The consultant’s fixed fee as a percent of the direct salary costs will not exceed

the maximum allowable profit indicated by the curve. No fixed fee is allowed on direct expenses. Sub consultants are a direct expense to the prime consultant. It should be noted that the “fixed fee” is fixed and will be paid in full even if the consultant does not use all of the hours in the contract. Care should be taken not to over estimate man-hours.

**c. Pre-negotiation Audit Evaluation**

Central Office Design will submit the draft proposal to the Audits and Investigations Unit (AI) for a review of the overhead and salary rates in the proposal. Overhead and salary rates are subject to an audit evaluation to test for allow ability as required by 23 CFR 172.5 (c) and Part 31 of the Federal Acquisition Regulation (FAR).

- i. Audit Evaluation. The contract proposal is subjected to an audit evaluation if the cost of the contract exceeds \$100,000. An audit evaluation is also performed for a contract of any dollar amount if any of the following are true:
  1. There is insufficient knowledge of the consultant’s accounting system.
  2. There is previous unfavorable experience regarding the reliability of the consultant’s accounting system.
  3. The contract involves procurement of new equipment or supplies for which cost experience is lacking.
  
- ii. Hourly Rate or Lump Sum Contract Audit Evaluation. AI must review all consultant hourly rate master agreements prior to contract approval. Any lump sum contract for engineering services is required to have a pre-negotiation audit before approval. The chairman of the PSC must be notified of the use of a lump sum contract prior to the solicitation or the request for letters of interest.
  
- iii. Required Cost Documentation. Proper cost documentation consists of a detailed overhead schedule, financial statement information, and any other data necessary to show that the consultant has developed an acceptable accounting system and is aware of the FHWA’s cost eligibility and documentation procedures. Acceptable overhead and indirect costs must be in compliance with Part 36 of the Federal Acquisition Regulations Systems (FARS).

An independent audit (an audit performed by another state/federal agency or by a private CPA) is acceptable if the information is current and of sufficient detail. Copies of these audits must be submitted with the proposal. Cost proposals must show hourly labor rates, amount or percent of fixed fee/profit charged, and the overhead percentage used in the proposal.

- iv. Audit Results. The results of the audit evaluation are considered before contract negotiations are finalized. The audit evaluation verifies the inclusion of itemized costs that are evident and in accordance with sound accounting principles for the following:
  1. Direct salary
  2. Payroll additives
  3. General overhead

4. Direct costs
5. Profit

The evaluation ensures that the consultant has an adequate system for segregating and accumulating reasonable, allocatable, and allowable costs for the proposed work. The integrity of individual items is determined and inappropriate charges are subject to exclusion. The proposal may be returned to the consultant with suggestions for alterations and/or revisions. The contract is not finalized until all questionable audit matters have been resolved.

MoDOT reserves the right to negotiate any audited costs that are believed to be excessive. If project costs cannot be agreed to in a reasonable amount of time, termination of the negotiations may be considered and the next qualified consultant on the short list may be asked to submit an estimate of project costs.

#### **A-5. ASSURANCES**

Prior to executing a contract with a consultant, MoDOT will assure the following:

1. The consultant has been apprised of all applicable technical work requirements and administrative controls, including those of the FHWA and any other agencies that may have jurisdictions over the project.
2. After selection, the firm was provided all pertinent information relative to the desired engineering services or other professional services requested. The tentative contract set out the scope of the services in sufficient detail to provide the consultant with a definite knowledge of the services and results expected. The consultant was instructed to submit a proposal that indicated clearly identifiable, sufficiently detailed, and easily auditable charges for the work and/or units of work. These proposed charges (rates and man-hours) were reviewed for acceptability before negotiations proceeded.
3. Contracts include a requirement for a three-year retention of records after the final payment is made under the contract. On actual cost contracts, the consultant was informed that records must be open for inspection by authorized government personnel.

#### **A-6. DOCUMENTATION OF NEGOTIATIONS AND RECORDS RETENTION**

All written correspondence with the consultant during the course of the negotiations is included in and made part of the project file for the consultant contract. Document in writing all verbal communication and personal visits with the consultant regarding the contract negotiations and also include in the project file. These records shall be maintained for a period of three years after the final invoice is submitted. If any litigation, claim, negotiation, audit, or other action involving the records is started before the expiration of the three-year period, the records are retained until completion of the action and resolution of all issues arising from it or until the end of the three-year period, whichever is later.

## **B. CONTRACT APPROVAL AND EXECUTION**

### **B-1. PROFESSIONAL SERVICES COMMITTEE (PSC) APPROVAL**

MoDOT has identified a team to monitor the selection of engineering consultants and ensure that any engineering contracts satisfy the requirements of the Brooks Act, 23 CFR 172 and RSMO Section 8. These regulations prescribe policies and procedures for contracting to ensure that a qualified consultant is obtained through an equitable selection process and that prescribed work is properly accomplished in a timely manner and at a reasonable cost. The PSC was created to fulfill this role.

The PSC will have the contract language reviewed to see whether any changes to the standard contract language are acceptable. A Central Office liaison engineer will review the scope of services to see whether it is appropriate and provides clear and concise directions to the consultant. They will also review the cost estimate to ensure that the number of man-hours anticipated by the consultant is reasonable.

Once the district, the division, and AI agree to the man-hours, salary rates, overhead rates, direct costs, and fixed fee, the information is submitted to the PSC for review and for the PSC chair's approval. Attachment 11 is a sample letter requesting PSC approval of the final consultant selection and negotiated hours and costs. The submittal letter to the PSC documents that the above procedures have been followed and the requirements of Brooks Act, 23 CFR 172 and RSMO Section 8 have been satisfied. When approved by the PSC, the standard contract language, the scope of services, and the consultant's cost proposal are made part of a formal agreement for execution.

### **B-2. EXECUTION OF CONTRACTS**

MHTC authorization to execute the contract may be obtained in one of following ways:

#### **a. Projects in the Statewide Transportation Improvement Program (STIP)**

The Commission's approval of the STIP includes delegation of authority to execute professional services contracts for projects contained in the STIP. The district or division will forward four copies of the contract, executed by the consultant, to the Design Division, who will submit them to CCO for approval as to form and then to the Commission Secretary, who has the appropriate individuals execute them.

#### **b. Projects Not Included in the STIP**

To obtain authorization to execute contracts for projects that are not included in the approved STIP and have a contract ceiling exceeding \$25,000, the contracts must be presented to the MHTC at a regularly scheduled monthly meeting. The appropriate division places these contracts on the Commission agenda for the next meeting. The DE or division engineer should be prepared to discuss this item at the Commission meeting in case questions arise. After obtaining authorization to execute the contract from the Commission, the contract administrator forwards four copies of the contract, executed by the consultant, to CCO for approval as to form and then to the Commission Secretary, who has the appropriate individuals execute them.

### **B-3. REVIEW BY CHIEF COUNSEL’S OFFICE (CCO)**

The contracts are submitted to CCO for approval as to form. If one of the approved standard contracts is used and no modifications are made, the CCO will not need to review the contract language prior to its submission for approval of form at the time of execution. If changes are made to the standard contract language, a copy of the CCO approval must be included with the submittal of the draft contract prior to execution by the Consultant.

After CCO approves the contract as to form, it is forwarded to the Commission Secretary for execution. MOUs do not require CCO review (Refer to “C. HOURLY RATE CONTRACTS” for details on executing MOUs).

### **B-4. DISTRIBUTING THE EXECUTED CONTRACT**

Design Division distributes copies of the executed contract except for Bridge projects and projects not included in the STIP, which the Project Manager is responsible for distributing. After the contract is executed, one copy is provided to each of the following:

1. The consultant – should have original signature
2. The Commission Secretary keeps a copy with original signature
3. The project file in the district/division.
4. Design Division – adds to statewide tracking database for consultant activities
5. Audits and Investigations (for end of contract audit)
6. Controller’s Office – for paying invoices
7. Resource Management – for federally funded contracts only, no copy required for contracts that are 100 percent state-funded.

If federal funds were used to finance the contract, Resource Management submits a copy of the executed contract to the FHWA Finance Section for approval. Federal funds will not be paid for charges to the contract prior to FHWA approval. Any supplemental agreements are also submitted to the FHWA after execution.

The project manger is responsible for sending a Notice to Proceed letter to the consultant. An Example may be found in Attachment 12.

## **C. HOURLY RATE CONTRACTS**

### **C-1. MASTER AGREEMENTS FOR HOURLY RATE SERVICES**

Hourly rate contracts are an effective tool for small, short-duration contracts under \$100,000. They are similar to a standard contract but are separated into two parts. The first part, called Hourly Rate Contract or Master Agreement, establishes the hourly billing rates that the consultant may charge when providing services. The hourly billing rates include labor rates, payroll additives, general and administrative overhead, and profit. The Master Agreement contains all the general contract language that is not project-specific, such as insurance, non-discrimination, and audit requirements. The second part is the MOU and includes the project-specific scope of services and cost estimates.

Districts and Divisions select qualified consultants from those submitting letters of interest in response to a solicitation as discussed in Section I, “D. HOURLY RATE CONTRACTS.” Steps for obtaining professional services on an hourly rate basis include:

1. The PSC chair will approve the selection of a consultant for a particular work category and district. The Design Division begins developing the master agreement.
2. The consultant prepares a schedule of hourly billing rates that will be negotiated and attached to the agreement as Exhibit 1. The standard master agreement is located on MoDOT’s internal website under “Chief Counsel’s Office.” From the dropdown menu under “contracts” on the left-hand panel, select the folder labeled “DE.”
3. The master agreement will include hourly rates for each type of employee and each type of service. Since the amount of future services to be performed under the agreement is unknown, the allowable profit based upon direct labor cost is limited to 12 percent.
4. Once the hourly billing rates have been negotiated sufficiently to satisfy the Design Division, the rates are forwarded to AI for review. AI determines whether the costs are comparable to those for similar services and checks to see that the overhead rates are consistent with the latest audited information.
5. After AI concurs with cost information, Design Division instructs the consultant to submit four executed copies of the master agreement. The Design Division forwards the agreement to the CCO for approval as to form, then to the Commission Secretary for execution. Once MoDOT executes the agreement, the Commission Secretary retains one copy and returns the remaining copies to the Design Division. Design then distributes copies as detailed in “B-4. DISTRIBUTING THE EXECUTED CONTRACT.” The district then follows the procedures below for executing individual MOUs to obtain services as the need arises.

## **C-2. MOUs FOR HOURLY RATE SERVICES**

The DE or division engineer (with occasional exceptions) executes MOUs for hourly rate professional services as described in MHTC Policy “Delegation of Authority for Approval and Execution of Documents” (see also previous discussion in Section I, “C. HOURLY RATE CONTRACTS”).

1. The contract administrator notifies the appropriate division of executed MOUs and supplemental agreements and distributes copies of the MOUs and supplemental agreements as detailed in “B-4. DISTRIBUTING THE EXECUTED CONTRACT,” except that copies for the Commission Secretary and Resource Management are omitted. A copy of the MOU with any supporting documentation and a cover letter serves as proper notification to the division.
2. All original contracts, supplemental agreements, and MOUs will be executed by all parties prior to any services being performed under the contract. The consultant shall be given a written notice to proceed; documenting the date services can start being charged to the contract.
3. The PSC chair must approve any request from a consultant for a one-year extension of the contract beyond the original three-year period.

4. Consultants may change billing rates annually but the first change in billing rates cannot occur before the contract's one-year anniversary and changes in rates apply only to MOUs executed after the date approved for the change.
5. A copy of the approved billing rates being used in the MOU is to be attached to the MOU. Only approved personnel and rates are authorized for use.

## **D. CONTRACT ADMINISTRATION**

A MoDOT employee will be assigned as the contract administrator for each contract, including contracts in which the services are for project management of a construction project or for contract administration. The department's contract administrator is responsible for administering the contract and overseeing the consultant's progress towards the provision of services required by the contract. Some of these responsibilities are:

1. Scheduling and attending progress meetings with the consultant and being involved in decisions leading to change orders or supplemental agreements.
2. Being familiar with the qualifications and responsibilities of the consultant's staff.
3. Assuring that costs billed are consistent with the acceptability and performance of the consultant's work.
4. Monitoring the consultant's operations, as necessary, and adequately documenting contract performance (prior to final settlement of the contract) for later use.
5. Conducting interim technical and audit evaluations as deemed necessary during the performance of the consultant contract.
6. Completing performance evaluations in the Design Consultant Database at major milestones and at the completion of the contract. An evaluation is to be completed at least annually.
7. Notifying the Design Division, the Controller's Office and AI when a project is complete and finalized. The project manager should make arrangements with the Resident Engineer to be notified when construction is complete.

## **E. PAYING INVOICES**

The consultant files a monthly invoice and progress report to the contract administrator (Attachments 13 and 14). The progress report indicates the time period during which the services were provided, completion date, any authorized delays, and the percentage of the work completed relative to the proposed schedule for various job phases and for the total job.

The contract administrator should make every effort to see that the consultant is paid in a timely manner. Missouri law states that the consultant is entitled to interest if the invoice is not paid in 45 days. The 45-day period starts when all questions about the invoice have been addressed and agreed to by both parties.

The contract administrator sends a copy of the invoice to the Controller's Office, Accounts Payable Section with a cover letter stating that the contract administrator has reviewed the invoice and approves it for payment. A copy of the cover letter must also be sent to the Design Division so the amount invoiced can be tracked in the consultant database.

The letter should state the amount invoiced and also the percentage of the contract complete, the amount to be paid to the consultant to date, the activity code from which the funds should be taken, and that the invoice payment will not exceed the maximum amount payable on the contract. If the contract encompasses more than one job number, the cover letter and all invoices must clearly state how much is to be applied to each job number as well as the total contract. When the last invoice is submitted for payment, the cover letter should include a statement notifying the Controller's Office that the contract is complete. The following is a list of information that should be present in some form on the invoice:

1. Date of invoice
2. Invoice number
3. Name of consultant
4. Address
5. MoDOT job number
6. Company work order or project number
7. Period covered by the invoice (i.e., January 1–30, 2005)
8. The not-to-exceed amount for the contract, including supplements
9. Amount invoiced to date
10. Total of all charges for the invoice
11. Employee name/classification
12. Hours worked on each task during the period (overtime and regular hours must be separated)
13. Pay rate
14. Total for each employee/classification (hours worked X pay rate)
15. Total for all labor
16. Overhead rate and amount charged for overhead (total labor \$ X overhead rate)
17. Subtotal for labor and overhead
18. Portion of fixed fee billed
19. Subtotal for labor, overhead and fixed fee
20. Direct expenses charged—itemized in detail such as listing all expense accounts paid, copies billed, telephone charges, CADD charges, sub consultants, etc.
21. Total of direct expenses billed

If errors are found on the consultant invoice, the contract administrator should contact the consultant and request a corrected invoice. The contract administrator should never change an invoice. If the consultant makes an error and requests more reimbursement than allowed by the contract, the contract administrator may submit the invoice and authorize payment of an amount less than the invoice requests. The reasons for paying an amount different than the invoice requests must be clearly documented in the cover letter.

Consultant invoices may be submitted electronically to the contract administrator and to the Controller's Office at:

[Contractual.Payments@modot.mo.gov](mailto:Contractual.Payments@modot.mo.gov)

Invoices for projects administered by the Bridge Division should be directed to:

[BRInvoiceAdmin@modot.mo.gov](mailto:BRInvoiceAdmin@modot.mo.gov) and to the Controller's Office.

Approval of invoiced amounts may be sent electronically to the Controller's Office at the link above and copied to Design for tracking at

[DEInvoiceAdmin@modot.mo.gov](mailto:DEInvoiceAdmin@modot.mo.gov)

Electronic payments to a consultant may be set up by submitting an "Electronic Funds Transfer" form. Information is available at

[http://www.modot.mo.gov/business/consultant\\_resources/geninfodesignconsultans.htm](http://www.modot.mo.gov/business/consultant_resources/geninfodesignconsultans.htm)

## **F. SUPPLEMENTAL AGREEMENTS**

A supplemental agreement is used for extra services not anticipated in the original contract or adjustments to contracted services. Costs associated with these "new" services may be covered by the unit costs included in the original contract or by a newly negotiated cost in the supplemental agreement. When a supplemental agreement to an hourly rate contract is needed, the unit salary costs for the service provided by the supplement must be the same as those salary costs contained in the master agreement. Direct costs and overhead costs for the services contained in the supplemental agreement should reflect the costs that will be in effect during the performance of the service.

Once it is determined that the scope of services needs modification, the contract administrator follows the same negotiation process for the supplemental agreement that is followed for new contracts through submission to the PSC. Any change in the scope of services, whether it results in a change in cost or not, must be included in an approved supplemental agreement. If a DBE goal was established in the original contract it will continue to apply. The Scope and Estimate is to be sent to External Civil Rights for a DBE goal evaluation. The DBE participation should be tabulated in the supplemental agreement (**DE1-FASUP**). The agreement must be executed prior to the consultant receiving authorization to proceed with the modified scope of services.

When a supplemental agreement is necessary, additional funds to cover the added costs in the contract must be identified from the appropriate budget category and be approved as a necessary expenditure. The contract information is submitted to the PSC chair for approval (see Attachment 15). If approved, the supplemental agreement is then submitted to AI for a pre-audit of hourly billing rates and overheads, to CCO for approval as to form, and to the Commission Secretary for execution. A copy of the supplemental agreement is provided to the Federal Aid Section for obligation of additional federal funds, if applicable.

## **G. POST-CONTRACT PROCEDURES**

### **G-1. FINAL AUDIT**

MoDOT conducts a final audit to determine total allowable contract costs, unless the contract is on a firm, fixed-price basis. Allowable cost principles are identified based on the experience of MoDOT personnel in administering past contracts and in accordance with applicable

requirements of 48 CFR Part 31, Federal Acquisition Regulation (FAR), and 23 CFR 172, Administration of Engineering and Design Related Service Contracts.

The contract administrator is responsible for notifying AI when the contract is substantially complete. The final audit may be conducted any time after the project is let; the consultant contract need not be completed for the final audit to be conducted.

Should MoDOT agree prior to contract execution that it is necessary for a consultant to purchase special equipment, materials, or property to accomplish the required services, MoDOT will establish a before and after value and will receive an appropriate credit for any residual values. This credit is passed on to FHWA.

## **G-2. PERFORMANCE EVALUATION**

The MoDOT contract administrator must perform an evaluation (through the Lotus Notes Design Consultant Database) of the consultant's performance under any EPS' contract with MoDOT at each project milestone and at a minimum, on an annual basis during the term of the consultant's services provided by the contract. Input for the evaluation should be requested from other divisions that may have project experience with the company, such as the Environmental, or Construction Divisions. MoDOT's contract administrator also completes a final comprehensive evaluation of the consultant's performance within 30 days after contract completion. The evaluation is included in the project file. MoDOT personnel complete another evaluation of the consultant's performance within 30 days of completion of the construction phase of the project.

Upon completing any evaluation, furnish a copy to the consultant prior to meeting with the district or division project manager to discuss the evaluation. These evaluations are included in MoDOT's Design Consultant Database and are used during consideration of the consultant for future work assignments. The contract administrator is defined as the project manager, or other person who is responsible for reviewing and approving the consultant's invoices.

## **G-3. RESTITUTION FOR ERRORS AND OMISSIONS**

At times, errors or omissions in the project design or in the information provided for the project may become evident during a project's bidding or construction phases. When this occurs, the causes surrounding the errors or omissions are investigated to determine a final resolution, which may require financial restitution. A face-to-face meeting between the DE and the consultant will take place to discuss the situation.

The procedure for investigating errors or omissions is:

1. Contractor/RE initializes a change order with the reason code – CD (Consultant Design Error). The RE and PM from Construction and Design review the change order and develop recommendation for action and assessment of both direct and indirect costs. Use form in Attachment 16.
2. The District Construction and Material Engineer and the DE review and provide comments.

3. The DE reviews and makes final district recommendations. Form is forwarded to the Construction Division.
4. The Construction Division Liaison Engineer, the Design Division Liaison Engineer and CCO jointly make the final decision regarding pursuit of reimbursement. The district is informed of the decision.
5. If the decision is to pursue recovery of costs, then CCO drafts a “Letter of Notice” for the DE’s signature.
6. The DE sends the Letter of Notice to the Controller’s Division – Accounts Receivable Section (CT A/R) requesting an invoice be created. A copy is to be sent to the Design Division.
7. Upon receipt of DE’ Letter of Notice to the design consultant, Controller’s Division will create an invoice for the amount of the claim and submit it directly to the design consultant with the Letter of Notice. The revenue source code of 1814-05 “Design Consultant Claims” will be used to track reimbursement by design consultants.
8. If the consultant does not respond by the “respond by date” in the Letter of Notice, then the Design Liaison Engineer presents the background information to senior management, who make a decision whether or not to begin legal proceedings to pursue reimbursement of costs. If legal proceedings are pursued, Design Liaison Engineer notifies Controller’s Division – Accounts Receivable.

Should formal dispute resolution as detailed in Section III be initiated during the above procedure, the following steps will ensure MoDOT receives payment:

1. The contract administrator, with the help of CCO, prepares and provides the controller with a letter from the Director of Program Delivery to the consultant indicating the Dispute Resolution Committee’s (DRC) decision and the dollar amount of restitution.
2. The controller prepares an invoice for the amount of the restitution payment and sends it to the consultant with the letter from the Director of Program Delivery. A copy of the letter and invoice is provided to the Design Division and the district.

These documents indicate the payment is made to Department of Revenue – Credit State Road Fund and mailed to:

Missouri Department of Transportation  
 Controller’s Office  
 P.O. Box 270  
 Jefferson City, Mo. 65102

3. The controller will track the invoice to ensure payment is received from the consultant in a timely manner.

#### **G-4. INCENTIVE AND DISINCENTIVE PROGRAM**

MoDOT has instituted an incentive and disincentive program with the consulting industry to assure that consultants:

1. Deliver the most cost-efficient design that provides the right solution to the identified need (i.e., Practical Design)
2. Deliver quality plans

3. Deliver the roadway and bridge design plans on time as required in the contract
4. Prepare construction cost estimates that are within an acceptable range of the contract award amount

The incentive and/or disincentives vary according to the listed category. This program will not be used on every MoDOT roadway and bridge design contract. The incentive and disincentives will be used in whole or in part on major projects that are critical to MoDOT accountability with the public. Fifty percent of the fixed fee is the maximum disincentive that can be incurred. When the district requests approval from the PSC chair to solicit consultant services, the approval will specify whether the contract will or will not include the incentive/disincentive program. Project specific incentives and disincentives will be noted in the contract agreement.

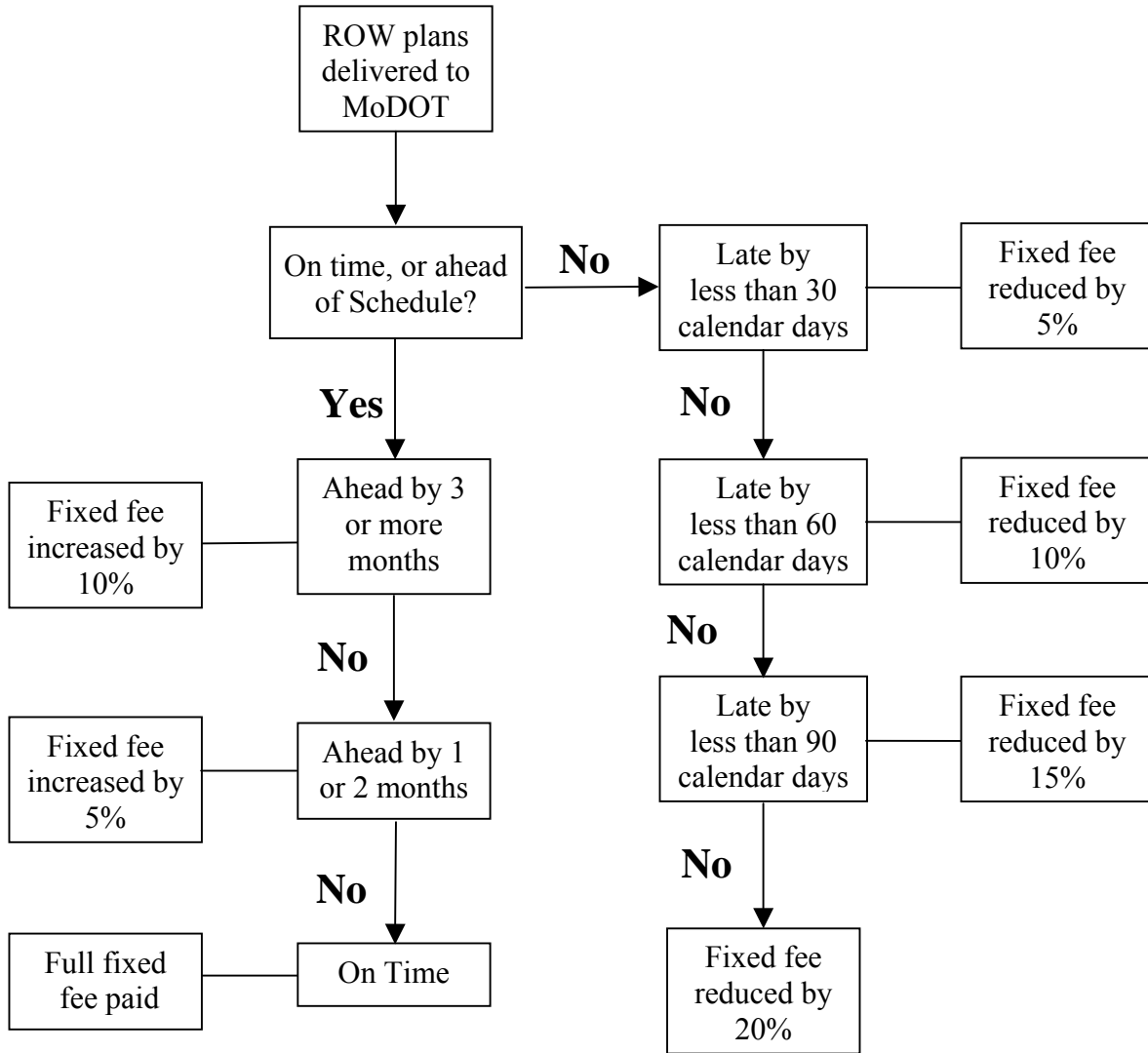
**a. Cost-effective Design (Practical Design) and Quality Plans**

The consultant's performance on delivering the most cost-efficient design that provides the right solution for the identified need will become a part of the consultant performance evaluation. Quality of Plans will be based on the score for overall performance.

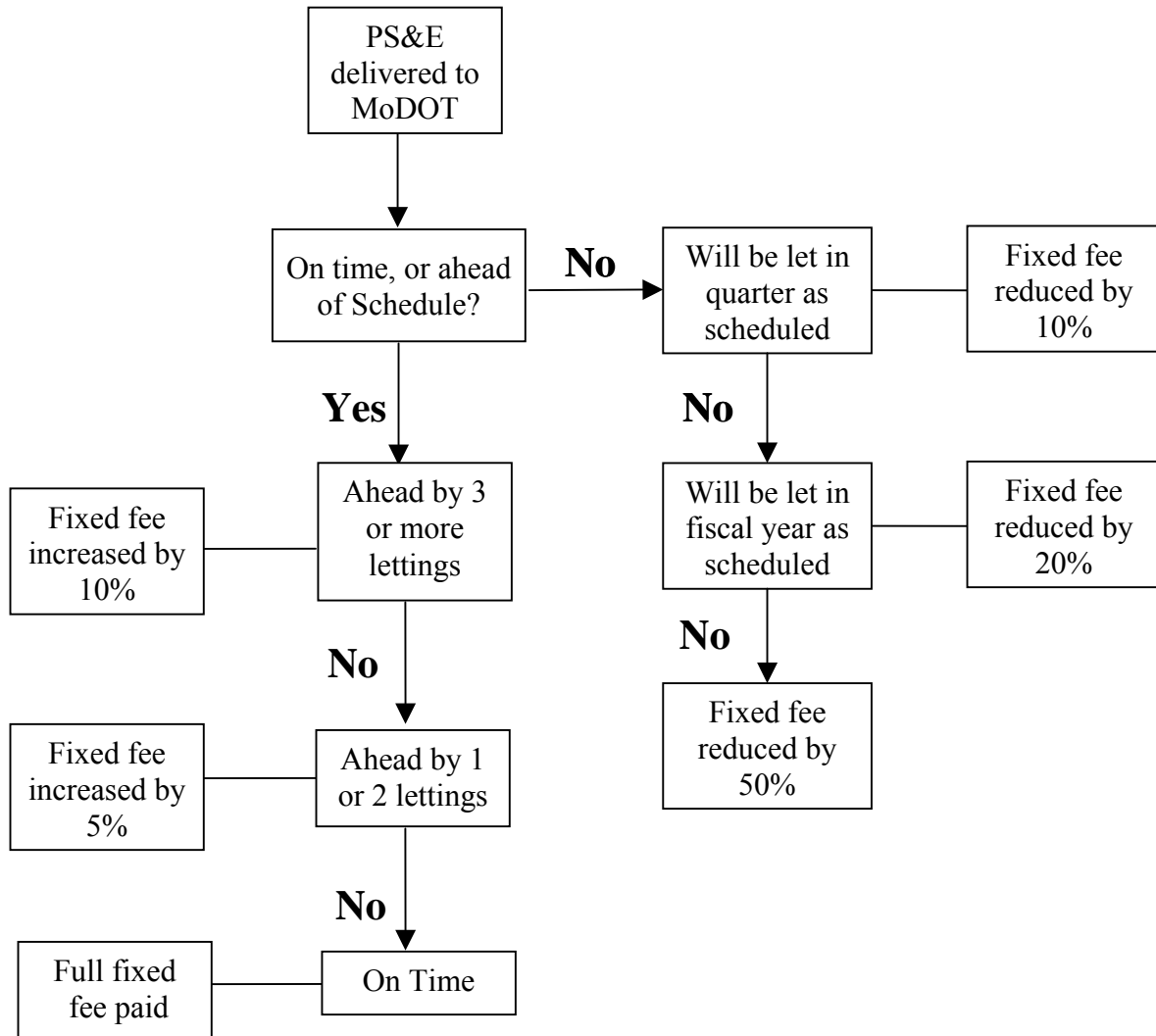
Evaluation scores must be considered on all future contract selections. Consultants who perform poorly or who do not deliver cost-effective designs will not be considered for future contracts until they demonstrate to MoDOT that significant changes have been made within their company to address the concerns. The PSC will monitor this performance and MoDOT staff will be kept informed on the status of any firms that are not being allowed to compete for projects.

**b. Deliver Roadway and Bridge Design Plans on Time**

- i. Right of Way Plans. The project manager should use the flowchart below to determine whether the incentives or disincentive are applicable based on the scheduled delivery date contained in the current contract or supplemental agreement. If changes are made by MoDOT that impact scheduling, the letting date will be re-negotiated

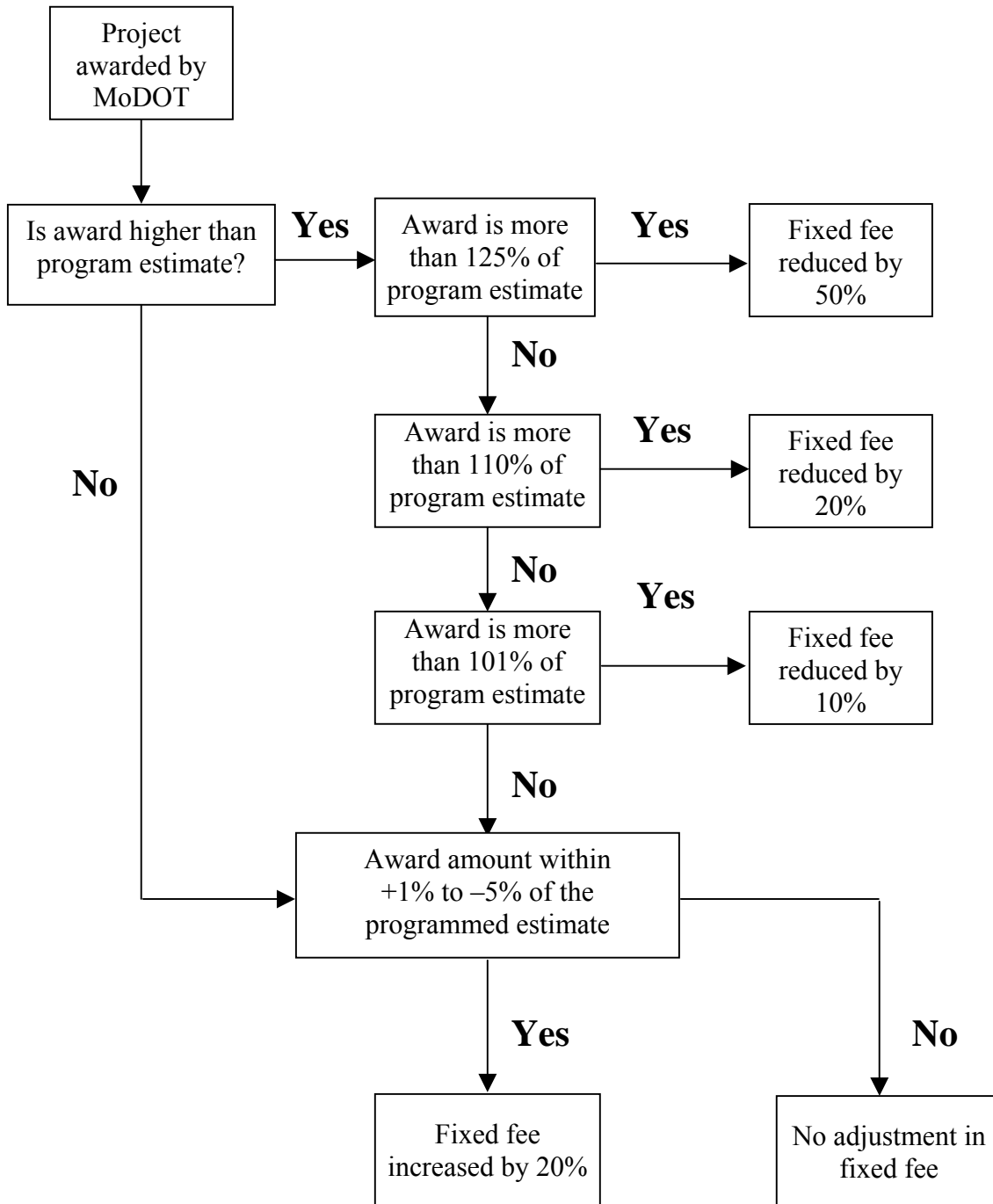


ii. Final Plans, Surveys, and Estimates. The project manager should use the flowchart below to determine whether the incentive or disincentive is applicable based on the scheduled delivery date contained in the current contract or supplemental agreement. If changes are made by MoDOT that impact scheduling, the letting date will be re-negotiated.

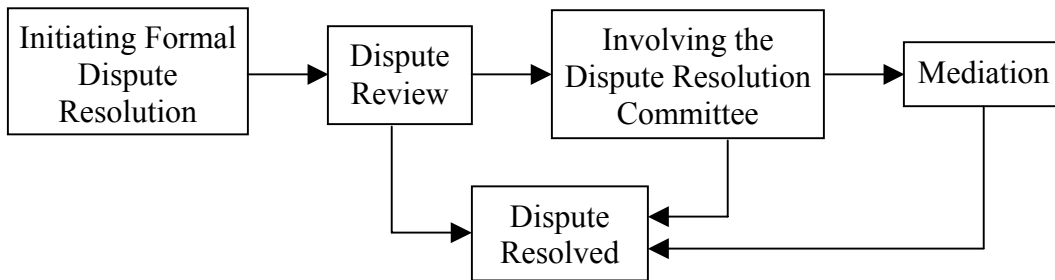


**c. Accurate Cost Estimates**

Accurate estimates are critical for MoDOT to be able to deliver the program promised to the public. Program estimates are published in the STIP and each district programs sufficient projects each year to spend every dollar allocated. Poor estimating causes MoDOT numerous problems at letting. Once the project budget has been set it is then the design consultant’s responsibility to design a good project that satisfies the purpose and need within that budget. The project manager should use the flowchart below to determine whether the consultant qualifies for an incentive or disincentive based on their project estimates.



## Section III – Dispute Resolution



### A. INTRODUCTION

Once a consultant is selected to work for MoDOT, circumstances may arise that lead to a dispute between MoDOT’s contract administrator and the consultant. In most cases, a complete understanding and recognition of each party’s concerns will result in successful resolution of the disagreement. However, when that is not the case, this dispute resolution procedure is used. See Figure III-1

The relationship between the consultant and MoDOT is a professional contractual relationship. All parties to the contract should understand the dispute resolution process. The contract administrator and the consultant should make every attempt to fully understand the dispute and express honest statements of fact prior to initiating formal dispute resolution. In this context, the contract administrator is defined as the person who authorizes MoDOT’s payment of the consultant invoices.

Before initiating formal dispute resolution, the following activities should occur:

1. The district engineer, or division engineer (hereinafter indicated by “DE”) prepares a letter to the consultant outlining the contested issues.
2. The disputing parties (project manager level for both MoDOT and consultant) participate in a face-to-face meeting.
3. The consulting firm conveys the firm’s recommendations for resolving the dispute.
4. MoDOT’s representative discusses the consultant’s proposed resolution and responds in a letter, either accepting the proposal or offering a rebuttal.
5. MoDOT and the consultant attempt to negotiate a settlement.

If the contract administrator and the consultant reach an agreement that provides the consultant with payment greater, or less than the contract maximum, the contract administrator needs to initiate a supplemental agreement and follow normal procedures to get the supplemental agreement executed, including approval by the PSC. If no settlement is forthcoming, formal dispute resolution is initiated.

## **B. INITIATING FORMAL DISPUTE RESOLUTION**

When attempts between the contract administrator and the consultant have failed to resolve the disagreement, the consultant should enumerate the firm's concerns in a letter to the DE, thereby initiating formal dispute resolution. A Dispute Resolution File should be started by the contract administrator.

Disagreements may arise over the scope of services, fees, hours, the consultant evaluation, errors and omissions, or other issues. Initiation of the resolution process will in no way be reflected on negatively in the consultant's performance evaluation. The consultant's letter to the district engineer should specifically outline the disagreement and the consultant's view of the issues.

This detailed letter must include:

1. A clear description of the items that are being disputed
2. What the consultant desires to resolve the dispute
3. Background—the sequence of events that led to the dispute
4. Documentation to support the request
5. All correspondence between the parties relating to the items in dispute (including e-mail)
6. A listing of previous attempts to resolve the issue (including e-mail)
7. A copy of the contract and any supplemental agreements

Upon receiving the consultant's letter and documentation, the DE will have the contract administrator prepare a similar letter, also addressed to the DE, outlining the administrator's view of the disagreement with particular attention to the information in the consultant's letter. MoDOT may also initiate formal dispute resolution by the contract administrator sending a letter, under the DE's signature, to the consultant contact listed in the contract. The consultant should be directed to respond to the department's letter. As a courtesy, the contract administrator should notify the consultant project manager before writing this letter.

## **C. Dispute Review by District or Division Engineer**

The contract administrator transmits the letter documenting the issues of the dispute, with the consultant's letter attached, to MoDOT's DE for review. In addition, the DE also notifies the Director of Program Delivery, who chairs the PSC, that formal dispute resolution has been initiated. With this notice, the State Design Engineer begins tracking the dispute resolution process. Whenever the two parties in the dispute reach a resolution, the State Design Engineer should be notified of the following:

1. Where in the process resolution was reached
2. The date resolution was reached
3. What resolution was reached

The DE evaluates the information in the letters, discussing it with the contract administrator and the consultant project manager as necessary.

## **D. MEETING OF THE TWO PARTIES**

The DE arranges a meeting with the consultant principal. If an agreement is reached after discussion between the district engineer and the consultant principal, the DE provides a letter to the firm indicating the terms of the agreement. However if agreement is still not reached, the dispute may be taken to the Dispute Resolution Committee.

## **E. DISPUTE RESOLUTION COMMITTEE**

The Dispute Resolution Committee (DRC) is comprised of the Director of Program Delivery (acting as chair), Director of System Management, and Chief Financial Officer. In preparation for the DRC's meeting, the district engineer will share written details of the formal dispute resolution's outcome to this point with the committee members. The committee will review this information together with other background information, including the original letters from the contract administrator and the consultant project manager outlining the dispute. When the committee meets, all representatives of the disputing parties are given the opportunity to attend. The DRC discusses the issues with the disputing parties and tries to reach a resolution satisfactory to both parties. If a resolution cannot be reached, an offer of mediation is made to the two parties. Should both parties agree to use mediation to settle the claim, they will share the cost of mediation equally.

If an agreement is reached, the district engineer sends the consultant a letter outlining the resolution of the dispute.

## **F. MEDIATION**

All future MoDOT consultant contracts will contain language describing the dispute resolution process and the role of the mediator. A mediator is an outside party who facilitates a discussion between the disputing parties and enables them to explore options to reach agreement. Responsibility for dispute resolution is solely that of MoDOT and the consultant. The mediator has knowledge of the process and the general terms of the dispute but is not intimately knowledgeable of all project details.

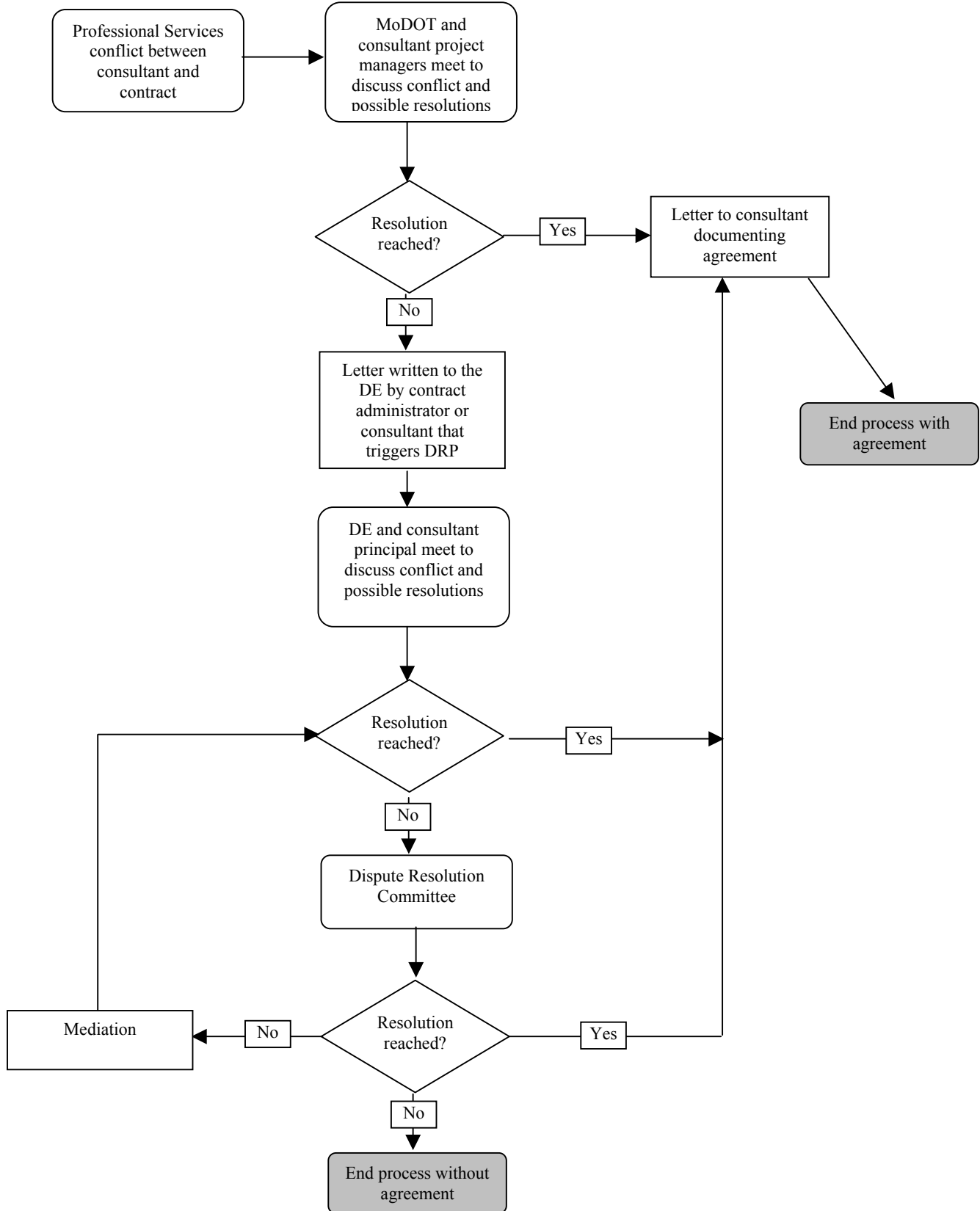
After the consultant has accepted MoDOT's offer for mediation, the State Design Engineer is responsible for making arrangements for a mediator. This includes selecting an approved mediator from a list (developed jointly by ACEC and MoDOT) and arranging the time and place of the meeting. Participants at the meeting are limited to the DE, the DRC's chair, the consultant principal, and the mediator. Others, including the contract administrator and the consultant project manager, are not active participants in this meeting but may provide information if the mediator so requests. Legal representation is optional. The disputing parties share the cost of mediation equally.

Should the mediation result in the dispute's resolution, the DE sends the consultant a letter explaining the resolution of the dispute. However, should the mediation not result in resolution of the dispute, the issue is returned to the Dispute Resolution Committee for further action.

## **G. FINAL DECISION BY THE DRC**

When mediation fails, the State Design Engineer will notify the DRC and provide any additional information gathered during the mediation process. The DRC will meet and, following discussion, reach a decision by a simple majority (e.g., two votes in favor of resolution). Upon decision by the DRC, the chair provides a letter to the district engineer or division engineer and the consultant principal informing them of the decision. Upon receiving this information, the contract administrator informs the State Design Engineer that the dispute resolution process has been completed and provides the information listed under “C. DISTRICT ENGINEER OR DIVISION ENGINEER (DE) REVIEWS THE DISPUTE”. When the consultant receives the letter from the chair of the Dispute Resolution Committee, the firm may respond; however, formal dispute resolution will have been completed and MoDOT will not entertain further appeals from the consultant.

# Dispute Resolution Process (DRP)





# MEMORANDUM

## Missouri Department of Transportation Division

TO: Dave Nichols  
Chair, Professional Services Committee

CC: Kathy Harvey – de  
Shyam Gupta – br  
Structural Liaison Engineer - de

FROM: District Engineer or Division Engineer

DATE: December 15, 2005

SUBJECT: Division  
Route (\_\_\_\_), (\_\_\_\_) County  
Job No. (\_\_\_\_)  
PSC Approval to Solicit Consultants

Project Description - This project will provide for the improvement of (length) of Route (route) in (county) County from (termini) to (termini).

Fiscal Year project to be awarded. \_\_\_\_\_  
Amount of estimated construction cost. \_\_\_\_\_  
Amount of PE in tentative STIP. \_\_\_\_\_  
Budget Cap. \_\_\_\_\_

Scope of Services - The consultant will provide professional, technical and other personnel, equipment, material, and all other things necessary for preparing (scope of services). This contract will include the following services (Check all that apply):

- Photogrammetry
- Surveying
- Bridge Design
- Roadway Design
- Geotechnical
- Environmental
- Historic Preservation
- A large amount of public involvement by the consultant; presentation required
- Interviews will be conducted with consultant for selection process; required for EA, EIS, MIS, projects

DBE Requirements - This contract will have a DBE goal of \_\_\_\_\_%.

Period of Service - The consultant will complete the scope of services within (*number*) calendar days from the issuance of the notice to proceed inclusive of necessary review time.

Cost - Total estimated cost for these services \$(*estimated contract ceiling*).

Selection Process:     Standard Solicitation    }  
                                  Modified Solicitation    } Check all that apply  
                                  Interviews    }  
                                  Presentations    }

Selection Schedule:    Solicitation response date    \_\_\_\_\_  
                                 Notification of shortlist date    \_\_\_\_\_  
                                 Date of interviews or presentations    \_\_\_\_\_  
                                 Date of selection    \_\_\_\_\_  
                                 Execution of Contract by date    \_\_\_\_\_

Incentives and Disincentive used on this contract:  
                                  Dis/Incentive for ROW Plans being late    }  
                                  Dis/Incentive for PS&E being late    } Check all  
                                  Dis/Incentive for Programming Estimate inaccuracies    } that apply

Division Liaisons involved in project review:  
                                 Design \_\_\_\_\_  
                                 Bridge \_\_\_\_\_  
                                 Other (Traffic, Environmental, etc) \_\_\_\_\_

APPROVED: \_\_\_\_\_ Date: \_\_\_\_\_  
                                 David B. Nichols  
                                 Chair, Professional Services Committee

## SAMPLE INFORMATION FOR SOLICITATION

### District 4

<b>Jackson County, Route I-470</b>	
<b>Job No:</b>	J411641
<b>Location:</b>	I-470/Route 50 interchange in Lee's Summit
<b>Proposed Improvement:</b>	Add half-diamond interchanges on I-470 at Pryor Road and Blue Parkway with connector roadways over Route 50. Includes grading, drainage, paving, bridges and retaining walls.
<b>Length:</b>	3.75 miles
<b>Approximate Construction Cost:</b>	\$33 Million
<b>Consultant Services Required:</b>	Preliminary design (roadway and bridge), right of way plans, and final design plans* for the proposed improvement, and preliminary design (roadway and bridge) and right of way plans for ultimate (future) modifications to the existing cloverleaf interchange at I-470/Route 50.
<b>DBE Goal (if applicable)</b>	
<b>Other Comments:</b>	<p>The consultant will prepare preliminary roadway plans and preliminary bridge design for the proposed improvements, (5 bridges and several retaining walls) plus preliminary roadway plans, right of way plans, and bridge memoranda for ultimate (future) modifications to the existing I-470/Route 50 cloverleaf interchange. The ultimate modifications will replace two of the existing loop ramps with directional ramps, add lanes and collector-distributor roadways on I-470, add lanes on Route 50, and modify existing diamond interchanges at Route 350/Colbern Road, and Route 50/Chipman Road. (6 bridges and possible retaining walls)</p> <p>Microstation and GeoPak electronic files for these 20% plans will be provided. An access justification report has been approved by FHWA for modifying access to the interstate system and the project has been environmentally classified as a categorical exclusion.</p> <p>*Final Plans may be added as a Supplemental Agreement</p>

## CRITERIA FOR EVALUATING CONSULTANTS

1. Practical Design (25 points) - Rate the consulting firm for past performance using Practical Design in the work it has performed. The maximum value of 25 points is for successful and ambitious efforts on previous projects. A value of 25 points may be assigned for above-average experience, while 15 points may be given for experience adequate to perform the contract. A firm with no previous experience in Practical Design may be given a reduced value based on perceived potential.
2. Overall Past Performance (20 points) - Rate the adequacy of firms that have previously performed work under contract with MoDOT or other agencies in related fields, assigning a maximum of 20 points. Refer to the evaluations in the Design Consultant Database. (20=excellent, 15=adequate, 10=fair, 0=inadequate).
3. Qualifications of Personnel (25 points) - Rate the qualifications of employees designated to this specific job, assigning a maximum of 25 points for the most qualified personnel. Those rated 15 points are considered good but lack extensive experience in the particular type of service desired. A value of 10 points is assigned to firms with well-qualified personnel who have no experience in the proposed area of work. Reduce the rating for a level of personnel inadequate to handle the firm's indicated workload.
4. Familiarity and Capability (15 points) - Evaluate the firm's familiarity and ability to comply with the monitoring procedures and contract requirements, using a maximum of 15 points for a consultant that previously performed satisfactory work for MoDOT. Firms that have performed similar type work only for other governmental agencies are assigned a maximum of 10 points.
5. General Experience of Firm (10 points) - Evaluate the consulting firm for experience on similar and related types of work it has performed. The maximum value of 10 points is for many years of established practice in the proposed type of work and related studies. A value of 7 points may be assigned for above-average experience, while 5 points may be given for experience adequate to perform the contract. The points for a firm with little operating experience in the selected field may be reduced further.
6. Accessibility (5 points) - Priority is given to firms with a previously established record of responsiveness to their clients' needs and a familiarity with the area in which the project is located. A value of 5 points should be allocated to such firms, with lesser values given to firms not satisfying these requirements.

Note – Except for Practical Design, the point values shown on this page are recommended values only and may be adjusted according to project specific priorities.

Date: March 3, 2005

## Consultant Selection Rating

County, Route, Job No.

<b>Consultant</b>	<b>Past Performance with Practical Design Max. 25</b>	<b>Overall Past Performance for MoDOT and others Max. 20</b>	<b>Qualifications of Personnel Assigned Max. 25</b>	<b>Familiarity/ Capability Max. 15</b>	<b>General Experience of Firm and Staff Max. 10</b>	<b>Accessibility of Firm and Staff Max. 5</b>	<b>Total 100 pts. Max.</b>
Consultant 1							
Consultant 2							
Consultant 3							
Consultant 4							
Consultant 5							
Consultant 6							
Consultant 7							
Consultant 8							
Consultant 9							
Consultant 10							

**Raters:** Joe Smith, Jane Doe, and John Brown

Note - More columns can be added and the points allowed for each column can be changed to more correctly reflect the needs of the project. MoDOT management requires that the consultant's past experience in implementing practical design must be considered in their rating.



## MEMORANDUM

### Missouri Department of Transportation Division

---

TO: Dave Nichols  
Chair, Professional Services Committee

CC: Kathy Harvey – de  
Shyam Gupta – br  
Design Liaison Engineer -de

FROM: District Engineer or Division Engineer

DATE: December 15, 2005

SUBJECT: Division  
Route (\_\_\_\_), (\_\_\_\_) County  
Job No. (\_\_\_\_)  
PSC Approval of Short List

Project Description - This project will provide for the improvement of (*length*) of Route (*route*) in (*county*) County from (*termini*) to (*termini*).

Short-Listed Consultants:

Consultant 1  
Consultant 2  
Consultant 3  
Consultant 4  
Consultant 5  
Consultant 6

I ask your approval of the listed consultants above so they may make presentations to our selection team. A summary of the ratings used to create the short list is attached.

APPROVED: \_\_\_\_\_ Date: \_\_\_\_\_  
David B. Nichols  
Chair, Professional Services Committee



December 15, 2005

Mr. Scott Smith, P.E.  
ABC Engineers  
1234 Main St, Suite 100  
Kansas City, MO 64100

Dear Mr. Smith:

The Missouri Department of Transportation (MoDOT) has reviewed the proposals submitted in response to the November 1, 2005, letter that requested the submission of proposals for the development of a First Tier Environmental Document (FTED) for the Interstate 70 corridor. In order to assist in making the final selection, MoDOT is asking that your firm make a presentation of your proposal before our selection committee and be available to answer their question.

Your firm was selected to make a presentation based upon your experience, qualifications and the content of your proposal. The presentation will be your final opportunity to demonstrate your ability to develop a better FTED than the other firms, which are being considered. Please take into consideration that the presentation is only thirty minutes in length. Within that short time your firm should focus on the approach you will follow to satisfy the needs of the department as described in the request for proposals. Very little time should be used to describe your past experience and qualifications, since sufficient information is contained in your proposal. The individual who will be the project manager should have a major role in the presentation. The presentation should focus on the innovative and unique ideas your firm will use to address the items outlined in the request for proposals. The presentation should include a schedule showing the timetable for completion of each element of the FTED and the total time required.

You will be allotted 60 minutes total for set up (15 minutes), presentation (30 minutes) and answering our questions (15 minutes). Your hour will begin promptly at 10 a.m. on December 10, 1999. The presentation will be located in Room 492 at the Truman Building located at 301 West High Street, Jefferson City, Missouri.

Mr. Scott Smith  
Page 2  
December 15, 2005

We look forward to meeting with you on December 10. If you have any questions about the arrangements for the presentation, please feel free to give me a call at (573) 526-5678.

Sincerely,

Jane Doe  
Project Manager

cc: Mr. Shyam Gupta-br  
Mr. Kathy Harvey-de  
Mr. Dave Nichols-de

**SAMPLE CRITERIA AND POINT VALUES FOR  
RATING PRESENTATIONS/INTERVIEWS**

Name of Firm: \_\_\_\_\_

Name of Evaluator: \_\_\_\_\_

County: \_\_\_\_\_ Route: \_\_\_\_\_ Job No.: \_\_\_\_\_

CRITERIA	Possible Score	Evaluator's Score
<b>1. Experience and technical competence relative to the task requirements and scope of work outlined</b>	<b>(45)</b>	
Consulting Firm	5	
Project Manager	25	
Other Assigned Staff	10	
<b>2. Understanding the nature of the project</b>	<b>(15)</b>	
Requirements and Regulations governing the preparation of second tier environmental studies	5	
The role of the GEC and the scope of work for the GEC and the Section Engineers	5	
General Organization and clarity of the proposal	5	
<b>3. Working arrangements with MoDOT</b>	<b>(20)</b>	
Assignment of Project Manager and commitment of staff to this project	10	
Accessibility of consultant team	5	
Number of staff and type of expertise of staff available to be committed to this project	5	
<b>4. References reflecting previous work experience of the project manager</b>	<b>(20)</b>	
Previous work experience with the department	5	
Quality of final work products	5	
Ability to meet work schedules	5	
Responsiveness to Client input	5	
<b>TOTAL SCORE:</b>	<b>100</b>	

Date: December 15, 2005

**Consultant Selection Rating**  
**St. Louis Co., Route I-70 – J6S1234**

<b>Consultant</b>	<b>Joe Smith</b>	<b>Jane Wilson</b>	<b>John Brown</b>	<b>Avg. Score 100 pts. Max.</b>
<b>Consultant 1</b>	<b>90</b>	<b>80</b>	<b>90</b>	<b>87</b>
<b>Consultant 2</b>	<b>80</b>	<b>80</b>	<b>90</b>	<b>83</b>
<b>Consultant 3</b>	<b>90</b>	<b>80</b>	<b>80</b>	<b>83</b>
<b>Consultant 4</b>	<b>70</b>	<b>70</b>	<b>70</b>	<b>70</b>
<b>Consultant 5</b>	<b>60</b>	<b>70</b>	<b>60</b>	<b>63</b>



December 15, 2005

Mr. John Smith, P.E.  
ABC Engineers  
1234 Main Street, Suite 400  
St. Louis, MO 63100

Dear Mr. Smith:

Having reviewed the proposals submitted to serve as the General Engineering Consultant (GEC) for the I-70 corridor, the Missouri Department of Transportation (MoDOT) invites your firm to attend an interview with our selection committee to assist us in making the final selection.

Your firm was selected for an interview based upon its experience, qualifications and the content of the proposal. The interview will be your final opportunity to demonstrate why your firm should be selected to represent MoDOT as the GEC while we complete the second tier of environmental studies.

The following criteria will be followed for the interview:

Each firm will be allowed to bring four people to the interview, one of whom must be the proposed project manager. Who the other three representatives are is up to you. We will start the interview by allowing you 10 minutes for a presentation on your proposal. Very little of that time should be spent describing your past experience and qualifications, since sufficient information is contained in your proposal. The presentation should focus on innovative and unique ideas your firm will use to address the items outlined in the request for proposal. MoDOT will make the First Tier Environmental Impact Statement document available for your use during the presentation and we will have your proposal with us. We are not allowing any other presentation materials to be used during the interview.

Following the opening presentation, we will engage in approximately 30 minutes of questions and answers. At the conclusion of the interview, a five-minute closing presentation will be allowed.

Mr. John Smith, P.E.  
December 15, 2005  
Page 2

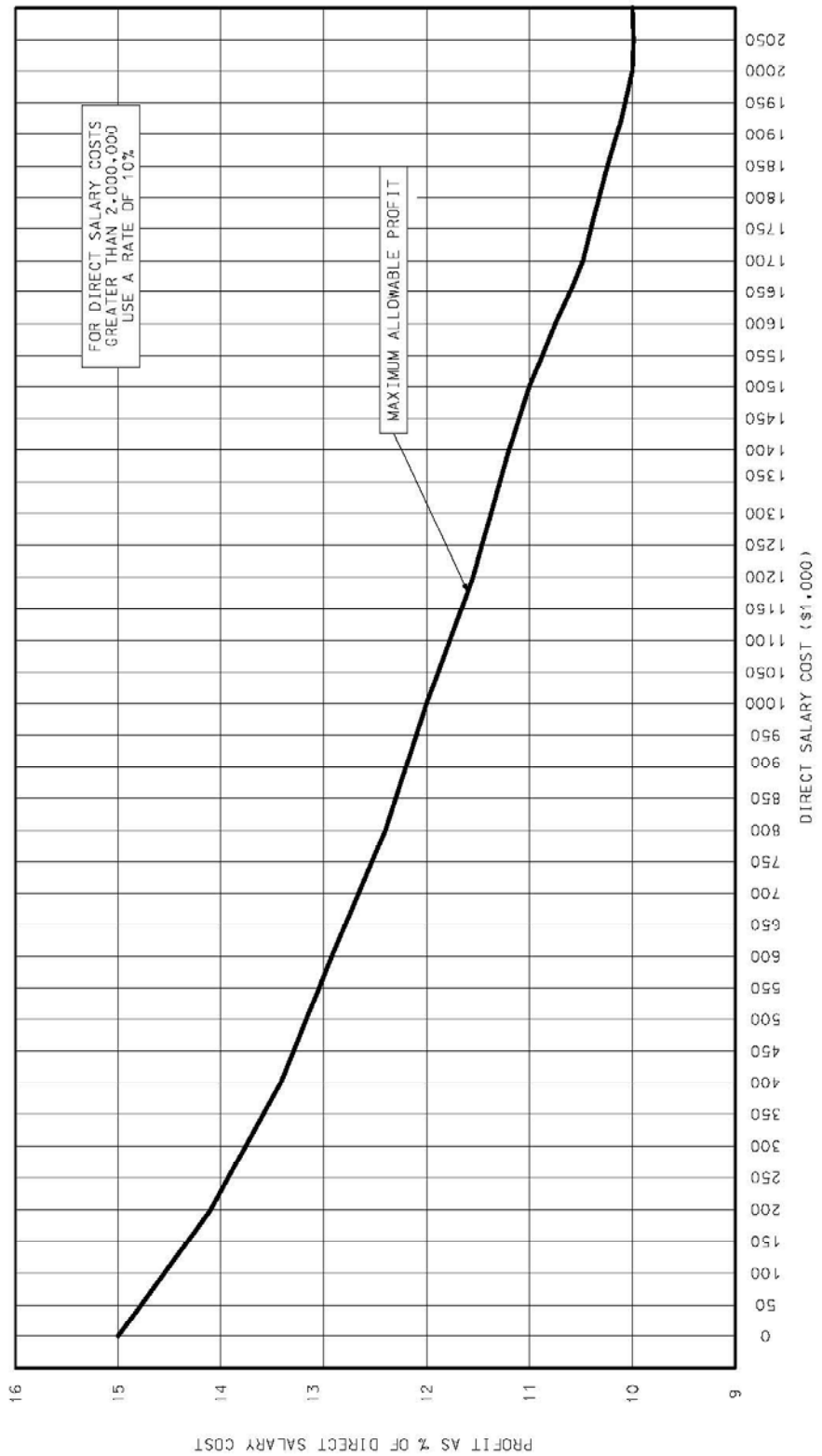
Your interview will begin promptly at 1:00 p.m. on Tuesday, November 15, 2003. The interview will be conducted in the hearing room at the MoDOT headquarters building. The hearing room is on the first floor. Currently there are security measures in place at the MoDOT building and all visitors are being asked to enter through the south door. Please check with me prior to your interview for information on the status of building security.

We look forward to meeting with you on November 15. If you have any questions about the arrangements for the interview, please feel free to give me a call at (573) 526-5678.

Sincerely,

Jane Doe  
Project Manager

**McDOT ALLOWABLE PROFIT CURVE**  
CALCULATED AS % OF DIRECT SALARY COSTS



DIRECT SALARY COSTS = DIRECT LABOR + OVERHEAD ON DIRECT LABOR + GENERAL AND ADMINISTRATIVE OVERHEAD  
DOES NOT INCLUDE TRAVEL EXPENSES, PRINTING, MISCELLANEOUS EXPENSES OR CONSULTANT COSTS.

January 2007



## MEMORANDUM

Missouri Department of Transportation

District

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TO: Dave Nichols  
Chair, Professional Services Committee

CC: Shyam Gupta – br  
Kathy Harvey – de  
Machelle Watkins – tp (*for feasibility studies, MIS, or planning studies only*)  
Dave Ahlvers – cm (*for construction inspection or geotech. contracts only*)  
Eileen Rackers – tr (*for ITS or traffic modeling contracts only*)  
Jeff Briggs – pi (*for contracts involving lots of public involvement*)  
Design Liaison Engineer – de

FROM: District Engineer or Division Engineer

DATE: December 15, 2005

SUBJECT: Division  
Route (\_\_\_\_), (\_\_\_\_) County  
Job No. (\_\_\_\_)  
PSC Approval to Execute Contract

Project Description - This project will provide the improvement of (*length*) of Route (*route*) in (*county*) County from (*termini*) to (*termini*).

Scope of Services - The consultant will provide professional, technical, and other personnel, equipment, material, and all other things necessary for preparing (*scope of services for the supplemental*). Period of Service - The consultant will complete the scope of services within (*number*) calendar days from the issuance of the notice to proceed inclusive of necessary review time.

DBE Requirements - This contract will have a DBE goal of (*number*)%.

Cost - Man-hours \_\_\_\_\_  
Engineering Cost as a percentage of Construction Cost \_\_\_\_\_ %  
Percent Profit \_\_\_\_\_ %  
Total Overhead Rate \_\_\_\_\_ %

Incentive/Disincentive – Deliver Right of Way Plans on time (\_\_\_\_), Deliver Final Plans, Surveys, and Estimates on time (\_\_\_\_), Accurate Cost Estimate (\_\_\_\_).

Certification - The approved MoDOT Consultant Selection and Contract Implementation Procedures have been followed and the requirements of the Brooks Act, 23 CFR 172, and RSMO Section 8 have been satisfied for this contract.

XX

Consultant: (Name of Firm)  
 Sub-consultants: (Name of Firm or Firms and DBE classification if applicable)  
 Cost: (Cost Excluding Fixed Fee)  
 Fixed Fee: (Amount of Fixed Fee of prime consultant only)  
 Total Cost: (Contract Ceiling)

XX

Man-hours and cost review by:

Design Technical Support Engineer \_\_\_\_\_

Bridge Structural Liaison Engineer \_\_\_\_\_

Other specialty area as applicable \_\_\_\_\_

\*\*\*\*\*

	<b>Agree</b>	<b>Request Meeting</b>	<b>Signature</b>	<b>Date</b>
Kathy Harvey State Design Engineer	_____	_____	_____	_____
Shyam Gupta State Bridge Engineer	_____	_____	_____	_____
As needed Additional Division Head	_____	_____	_____	_____

Note: Route among committee members before transmitting to Dave Nichols.

APPROVED: \_\_\_\_\_ Date: \_\_\_\_\_  
 David B. Nichols  
 Chair, Professional Services Committee

Missouri  
Department  
of Transportation



105 West Capitol Avenue  
P.O. Box 270  
Jefferson City, MO 65102  
(573) 751-2551  
Fax (573) 751-6555  
www.modot.org

Pete K. Rahn, Director

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**TO:** Mr. Consultant  
Vice President  
Engineering Group, Inc.

**FROM:** Your Name Here  
Project Manager

**DATE:** \_\_\_\_\_

**SUBJECT:** Program Delivery  
Route \_\_\_\_\_, \_\_\_\_\_ County  
Job No. J \_\_\_\_\_  
Notice to Proceed

Please find attached your copy of the executed contract for *(brief description of services)*. The contract Notice to Proceed date is \_\_\_\_\_, 2007. All work must be completed by \_\_\_\_\_, 2007.

Monthly invoices may be sent to me electronically at *your.name@modot.mo.gov*

If you have any questions please feel free to contact me at #####.

attachment

# INVOICE

ABC Engineers

123 Sunshine

SUITE 999

LUCKY TOWN, MO 12345

May 9, 2001

Missouri Department of Transportation  
District 6  
1590 Woodlake Drive  
Chesterfield, MO 63017-5712

Attn: Ms. Jane Doe – Project Manager

Route: I-70

County: St. Charles

Job No.: J611234

MOU No.: D6-5

Page No. 1

Invoice No. 27

Project No. XXXXX

Billing Period 1/1/99

Through 3/31/99

## Engineering Services:

1.	Direct Salaries per attached tabulation	\$6,000.00	
2.	Overhead (150% x Line 1)	<u>\$9,000.00</u>	
3.	Subtotal		\$15,000.00
4.	Fixed Fee (fixed fee \$10,000 x 25% complete*)	\$2,500	
5.	Less fixed fee previously invoiced	<u>(1,500)</u>	
6.	Subtotal		\$1,000.00
7.	Direct costs per attached tabulation**		<u>2,000.00</u>
8.	Total for this invoice		\$18,000.00
9.	Maximum fee exceeded		<u>(0.00)</u>
10.	<b>Amount to be paid</b>		\$18,000.00

\* See attached progress report

\*\* Includes sub consultants, printing costs, etc.

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Original contract executed on July 1, 1998

Original amount for this contract \$50,000.00

Supplemental No. 1 Executed July 1, 2000 \$20,000.00

Supplemental No. 2 Executed July 30, 2001 \$10,000.00

Maximum amount for this contract \$80,000.00

Total Project MH: 1,000

Total MH Used: 250

25.0% Complete

## Summation of Costs:

	<u>Total Billed</u>	
Previously Invoiced	\$0.00	
This Invoice	<u>18,000.00</u>	
Total to Date	\$18,000.00	

**ABC Engineers**

Page No. 2  
Invoice No.  
27  
Project No.  
XXXXX

DIRECT SALARIES

John Doe	80.0 Hours @	\$50.00	\$4000.00
Jane Smith	40.0 Hours @	\$50.00	<u>\$2000.00</u>
		TOTAL	\$6000.00

SUBCONSULTANTS

XT Surveying			\$1,000.00
Joe Consulting, Inc.			\$500.00

OTHER DIRECT COSTS

Lodging and Meals			\$100.00
Printing			\$200.00
UPS and Federal Express Delivery			\$150.00
US Postal Service			<u>\$50.00</u>

**TOTAL DIRECT COSTS DUE THIS INVOICE** **\$2,000.00**

# Progress Report No. 1

## **I-70/I-435 – Conceptual Design**

**JXXXXXX**

**ABC Consulting Project No. XXXXX**

**For Period: August 1, 2000 – August 31, 2000**

### **I. Work Completed This Period**

The following work tasks were completed during the above period:

- Continued preparation of conceptual plan
- Obtained parcel maps for study area
- Collected survey data

### **II. Work To Be Completed Next Period**

The following tasks are anticipated to be completed during September 2000:

- Follow up on property information
- Finalize alignment for preliminary plan

### **III. Schedule and Budget Status**

Project is on track and within budget.

### **IV. Problems and Recommended Solutions**

No significant problems were encountered during this period.

**Note:** Project managers may want to request that progress report be structured similar to the Scope of Services or Task/Hours in the contract.



MEMORANDUM

Missouri Department of Transportation
Division

TO: Dave Nichols
Chair, Professional Services Committee
CC: Shyam Gupta - br
Kathy Harvey - de
Machelle Watkins - tp (for feasibility studies, MIS, or planning studies only)
Dave Ahlvers - cm (for construction inspection or geotech. contracts only)
Eileen Rackers - tr (for ITS or traffic modeling contracts only)
Jeff Briggs - pi (for contracts that involve public involvement sub consultants)
Design Liaison Engineer - de
FROM: District Engineer or Division Engineer
DATE: December 15, 2005
SUBJECT: Division
Route ( ), ( ) County
Job No. ( )
PSC Approval to Execute Supplemental Agreement No. 1

Project Description - This project will provide the improvement of (length) of Route (route) in (county) County from (termini) to (termini).

Scope of Services - The consultant will provide professional, technical, and other personnel, equipment, material, and all other things necessary for preparing (scope of services for the supplemental).

Period of Service - The consultant will complete the scope of services within (number) calendar days from the issuance of the notice to proceed inclusive of necessary review time.

DBE Requirements - This contract will have a DBE goal of (number)%. The original contract goal was (number)%. The total DBE work applied to the contract including all supplemental agreements is (number)%.

Supplemental Cost - Man-hours
Percent Profit %
Total Overhead Charges %

Original Contract Cost - Man-hours
Percent Profit %
Total Overhead Charges %

Total Cost of "new" Contract-(original plus supplemental(s)) Man-hours \_\_\_\_\_  
 Engineering Cost as a percentage of Construction Cost \_\_\_\_\_ %  
 Percent Profit \_\_\_\_\_ %  
 Total Overhead Charges \_\_\_\_\_ %

Revisions to Original Contract and previous Supplementals:

1. (Revision number 1)
  - a. *(State Reason for Revision)*
2. (Revision number 2)
  - b. *(State Reason for Revision)*
3. ...

XX

Supplemental No.      (Number)

	<u>Current Agreement</u>	<u>Supplemental Agreement No. 1</u>	<u>New Contract Total</u>
Actual Cost	\$532,753.00	\$12,197.00	\$544,950.00
Fixed Fee	\$59,454.00	\$1,493.00	\$61,038.00
Total Cost	\$592,207.00	\$13,690.00	\$605,988.00

XX

Consultant:            (Name of Firm)  
 Sub-consultants:    (Name of Firm or Firms and DBE classification if applicable)  
 Cost:                    (Cost Excluding Fixed Fee)  
 Fixed Fee:             (Amount of Fixed Fee)  
 Total Cost:            (Contract Ceiling)

XX

Man-hours and cost review by:

Design Liaison Engineer \_\_\_\_\_

Bridge Structural Liaison Engineer \_\_\_\_\_

Other specialty area as applicable \_\_\_\_\_

\*\*\*\*\*

	<b>Agree</b>	<b>Request Meeting</b>	<b>Signature</b>	<b>Date</b>
Kathy Harvey State Design Engineer	_____	_____	_____	_____
Shyam Gupta State Bridge Engineer	_____	_____	_____	_____
As needed Additional Division Head	_____	_____	_____	_____

Note: Route among committee members before transmitting to Dave Nichols.

APPROVED: \_\_\_\_\_ Date: \_\_\_\_\_  
 David B. Nichols  
 Chair, Professional Services Committee

**RECOVERY OF COST DUE TO CONSULTANT DESIGN ERROR  
MISSOURI DEPARTMENT OF TRANSPORTATION**

**Date**

Contract ID		Job No.
County	Route	Original Bid Cost
Contractor		By
Designed By		Phone

**1. Description of design errors on the project.**

**2. Additional construction costs.**

**3. Additional overhead costs.**

**4. Total additional cost.**

\_\_\_\_\_  
\_\_\_\_\_

Resident Engineer Recommendation:

\_\_\_\_\_  
Resident Engineer

\_\_\_\_\_  
Date

Project Manager Recommendation:

\_\_\_\_\_

\_\_\_\_\_

Project Manager

Date

District Consensus:

\_\_\_\_\_  
District Engineer

\_\_\_\_\_  
Date

State Construction & Materials Recommendation:

**Approve**  
 **Reject**

\_\_\_\_\_  
State Construction & Materials Engineer

\_\_\_\_\_  
Date

Distribution: Resident Engineer, District Operations Engineer, State Construction and Materials Engineer

## Consultant Selection and Contract Administration Summary

1. District Design Engineer (DDE) realizes a need to contract for professional services with a consultant.
2. DDE informs the Project Manager (PM), who develops a general description of work needed.
3. The PM and DDE discuss the need with the Assistant District Engineer and District Engineer (DE). The DE agrees with the need to hire a consultant.
4. The PM works with the core team to develop a more detailed scope of work.
5. The PM develops an estimate of man-hours and cost for the proposed consultant services.
6. The PM determines the type of contract needed based upon the cost estimate.
  - A. For an estimated cost of less than \$100,000, can use an hourly rate contract if scope of services fits the established Work Categories.
  - B. When the estimated cost is close to \$100,000 or there is a high possibility of changes to the scope of services, use standard contract.
  - C. For estimated cost of more than \$100,000 use standard contract (DE1-SF).
  - D. If the estimated cost exceeds \$1,000,000 or the services are for ITS or a major bridge, the PM should contact the External Civil Rights Administrator for an estimated DBE goal. Federal funds may be used to pay for the professional services.
7. If an **hourly rate contract** is used, the following steps apply (if not, skip to number 8):
  - A. Check with Central Office Design to see if funds are available under the project number so that the \$100,000 cumulative limit is not exceeded.
  - B. Go to the list of approved consultants on the public web page and select one who is approved for the type of service needed in the district or division. Try to distribute work equally among the consultants on the approved list.
  - C. Contact the consultant and inform them of their selection to provide the service.
  - D. Submit a scope of services to the consultant for their review and comments.
  - E. When agreement has been reached on a scope of services, the consultant should develop an estimate of man-hours and cost for the required services.
  - E. The PM reviews the cost estimate for the following points:
    - i. The “Not to Exceed” amount of the contract proposed by the consultant is under \$100,000 and acceptable based upon the man-hour and cost estimate developed by the PM.
    - ii. The hourly billing rates used match those in the master agreement. Attach a copy of the current rates from the master agreement.
    - iii. The cost estimate for mileage does not exceed the IRS allowable reimbursement rate.
    - iv. The travel expenses (per diem) are equal to or below the allowable rate found at the federal website [www.gsa.gov](http://www.gsa.gov)
    - v. The only estimated costs are labor and travel expenses. No other direct costs are allowed except a few exceptions that will be listed in the master agreement.
  - F. Prepare the MOU (DE1-MOU) for execution by the consultant and the DE.
8. If a standard contract is used, the following steps apply:
  - A. The PM prepares a PSC approval letter requesting approval to solicit consultants.
  - B. The PM gives the letter to the DE for his review, signature, and mailing to the chair of the PSC.

- C. After receiving approval, the PM develops information for a consultant solicitation and submits it to the State Design Engineer.
- D. A copy of the consultant solicitation and the date by which the consultants must respond will be posted to the web and an email will be sent to all who are on the notification list.
- E. Form a selection team consisting of at least three people, including the PM and a Central Office Design Liaison Engineer. If the contract includes a feasibility study, planning study, major investment study, EA or EIS preparation, a public involvement sub consultant or other specialty services, see the guidelines for additional team membership requirements.
- F. The selection team should review and rate the responses to the solicitation and create a “short list” of 3 to 6 consultants to consider further.
- G. Selection can be made two ways:
  - i. For the majority of the projects, the team meets and using more detailed selection criteria and review of evaluations from the Design Consultant Database, reaches consensus on the one chosen firm.
  - ii. For certain types of projects, an interview or presentation selection process should be used.
    - a. For presentations only, PM gets the PSC approval of the short list
    - b. Conducts the interview or presentations with short listed firms
    - c. The team scores and ranks each consultant, ultimately reaching consensus on the selection.
- H. For presentations only, the PM requests the PSC chair approval on the selection.
- I. The PM notifies selected consultant of the team’s decision. Final decisions are posted on the General Information for Consultants website.
- J. The PM prepares a draft contract and scope of services and a pre-negotiation estimate of man-hours and costs. The PM should contact the following divisions for input on the scope of services, if needed:
  - i. Bridge Division
  - ii. Design Division
  - iii. Traffic Division
  - iv. Geotechnical
  - v. Environmental
  - vi. Historic Preservation
- K. PM sends this scope to the External Civil Rights Administrator for final DBE percentage when federal funds are being used.
- L. The PM sends the contract and scope of services to the consultant. The consultant will develop a cost estimate based upon man-hours and the scope of services.
- M. The consultant and the PM negotiate the scope and number of man-hours needed to perform the professional services. Liaison engineers should be involved in the review.
- N. A draft copy of the contract is sent to Central Office Design for Audit review of overhead, labor rates and acceptable direct charges.
- O. Any changes in the boilerplate contract language also require review and approval by CCO.
- P. The consultant executes 4 copies of the contract and returns it to the PM.

- Q. The PM sends all four copies of the contract to the State Design Engineer where the contract is reviewed and executed.
  - i. Original contracts are sent to CCO for review and approval as to form.
  - ii. Original contracts are sent to commission secretary for execution by the chair of the PSC.
- R. Two executed copies of the contract will be returned to the PM, who will send one of the copies to the consultant.
  - i. CO sends a copy to Audits and Investigation for their files.
  - ii. CO sends a copy to Controllers Office for processing invoices.
  - iii. A copy is filed in Design.
  - iv. A copy is sent to Resource Management to be forwarded to FHWA for approval if federal funds are being used.
- 9. Project manager should request copies of “Certificate of Insurance” and any necessary Payment Bonds from the consultant and keep in project file.
- 10. Ongoing contract administration
  - A. Review monthly invoices and progress reports for accuracy and submit invoices for payment. These may be submitted electronically.
  - B. If required, negotiate and execute supplemental agreements using the same approval process that is used for an original contract, including DBE evaluation if needed.
- 11. Conduct performance evaluations at milestones, or at least annually and at project completion.
- 12. If design errors are discovered during the construction phase of the project, the consultant will be responsible for any damages incurred. See this manual, Section II G-3 for details on process to be used.
- 13. As part of completing the consultant evaluation, the project manager should make sure a post-construction review of the consultants services are preformed. Make sure that everyone involved with the project is given a chance to provide input into the rating the consultant will receive. Arrangements should be made for the RE to notify the project manager when construction is complete.
- 14. Notify the design division when the consultant has completed the work specified in the scope of services. If the contract specifies services after the letting, the design division should be notified when the project is let. The auditors can audit the contract with out waiting for the contract to be completed.