

## CHECKLIST TO DESIGNATE AREAS OF EVALUATION FOR REQUESTS FOR PROPOSAL (RFP)

|  |   |   |   |                                 |
|--|---|---|---|---------------------------------|
| MDOT PROJECT MANAGER<br>Katharine Hulley   |   |   | JOB NUMBER (JN)<br>various  | CONTROL SECTION (CS)<br>various |
| DESCRIPTION IF NO JN/CS<br>Value Engineering Studies   |   |   |   |                                 |
| <b>MDOT PROJECT MANAGER:</b> Check all items to be included in RFP.<br><br>WHITE = REQUIRED<br>GRAY SHADING = OPTIONAL |   |   | <b>CONSULTANT:</b> Provide only checked items below in proposal.  |                                 |
| Check the appropriate Tier in the box below  |   |   |   |                                 |
| <input checked="" type="checkbox"/><br><b>TIER I</b><br>(\$25,000-\$99,999)  | <input type="checkbox"/><br><b>TIER II</b><br>(\$100,000-\$250,000) | <input type="checkbox"/><br><b>TIER III</b><br>(>\$250,000) |   |                                 |
| <input checked="" type="checkbox"/>  | <input type="checkbox"/>  | <input type="checkbox"/>                                    | Understanding of Service  |                                 |
| <input type="checkbox"/>   | <input type="checkbox"/>  | <input type="checkbox"/>                                    | <i>Innovations</i>  |                                 |
| <input type="checkbox"/>   | <input type="checkbox"/>  | <input type="checkbox"/>                                    | <i>Safety Program</i>   |                                 |
| N/A  | <input type="checkbox"/>  | <input type="checkbox"/>                                    | Organization Chart  |                                 |
| <input checked="" type="checkbox"/>  | <input type="checkbox"/>  | <input type="checkbox"/>                                    | Qualifications of Team  |                                 |
| <input checked="" type="checkbox"/>  | <input type="checkbox"/>  | <input type="checkbox"/>                                    | Past Performance  |                                 |
| Not required as part of official RFP   | Not required as part of official RFP                                | <input type="checkbox"/>                                    | Quality Assurance/Quality Control   |                                 |
| <input checked="" type="checkbox"/>  | <input type="checkbox"/>  | <input type="checkbox"/>                                    | <b>Location:</b> The percentage of work performed in Michigan will be used for all selections unless the project is for on-site inspection or survey activities, then location should be scored using the distance from the consultant office to the on-site inspection or survey activity. |                                 |
| N/A  | N/A   | <input type="checkbox"/>                                    | Presentation  |                                 |
| N/A  | N/A   | <input type="checkbox"/>                                    | Technical Proposal (if Presentation is required)  |                                 |
| 3 pages (MDOT forms not counted)<br><b>(No Resumes)</b>  | 7 pages (MDOT forms not counted)                                    | 19 pages (MDOT forms not counted)                           | Total maximum pages for RFP <b>not including key personnel resumes</b>  |                                 |

The Michigan Department of Transportation (MDOT) is seeking professional services for the project contained in the attached scope of services.

If your firm is interested in providing services, please indicate your interest by submitting a Proposal, Proposal/Bid Sheet or Bid Sheet as indicated below. The documents must be submitted in accordance with the latest "Consultant/Vendor Selection Guidelines for Service Contracts" and "Guideline for Completing a Low Bid Sheet(s)", if a low bid is involved as part of the selection process. **Referenced Guidelines are available on MDOT's website under Doing Business > Vendor/Consultant Services > Vendor/Consultant Selections.**

## RFP SPECIFIC INFORMATION

BUREAU OF HIGHWAYS       BUREAU OF TRANSPORTATION PLANNING \*\*       OTHER

THE SERVICE WAS POSTED ON THE ANTICIPATED QUARTERLY REQUESTS FOR PROPOSALS

NO       YES      DATED \_\_\_\_\_ THROUGH \_\_\_\_\_

**Prequalified Services** – See page 3 of the attached Scope of Services for required Prequalification Classifications.

**Non-Prequalified Services** - If selected, the vendor must make sure that current financial information, including labor rates, overhead computations, and financial statements, if overhead is not audited, is on file with MDOT's Office of Commission Audits. This information must be on file for the prime vendor and all sub vendors so that the contract will not be delayed. **(Form 5100J Required with Proposal)**

**Qualifications Based Selection** – Use Consultant/Vendor Selection Guidelines

**For all Qualifications Based Selections**, the section team will review the information submitted and will select the firm considered most qualified to perform the services based on the proposals. The selected vendor will be contacted to confirm capacity. Upon confirmation, that firm will be asked to prepare a priced proposal. Negotiations will be conducted with the firm selected.

**\*\*For RFP's that originate in Bureau of Transportation Planning only**, a priced proposal must be submitted at the same time as, but separate from, the proposal. Submit directly to the Contract Administrator/Selection Specialist, Bureau of Transportation Planning (see address list, page 2). The priced proposal must be submitted in a sealed envelope, clearly marked "**PRICE PROPOSAL.**" The vendor's name and return address **MUST** be on the front of the envelope. The priced proposal will only be opened for the highest scoring proposal. Unopened priced proposals will be returned to the unselected vendor(s). Failure to comply with this procedure may result in your priced proposal being opened erroneously by the mail room.

**For a cost plus fixed fee contract**, the selected vendor must have a cost accounting system to support a cost plus fixed fee contract. This type of system has a job-order cost accounting system for the recording and accumulation of costs incurred under its contracts. Each project is assigned a job number so that costs may be segregated and accumulated in the vendor's job-order accounting system.

**Qualifications Review / Low Bid** - Use Consultant/Vendor Selection Guidelines. See Bid Sheet Instructions for additional information.

For Qualification Review/Low Bid selections, the selection team will review the proposals submitted and post the date of the bid opening on the MDOT website. The notification will be posted at least two business days prior to the bid opening. Only bids from vendors that meet proposal requirements will be opened. The vendor with the lowest bid will be selected. The selected vendor may be contacted to confirm capacity.

**Best Value** - Use Consultant/Vendor Selection Guidelines. See Bid Sheet Instructions below for additional information. The bid amount is a component of the total proposal score, not the determining factor of the selection.

**Low Bid** (no qualifications review required - no proposal required.) See Bid Sheet Instructions below for additional instructions.

## BID SHEET INSTRUCTIONS

A bid sheet(s) must be submitted in accordance with the "Guideline for Completing a Low Bid Sheet(s)" (available on MDOT's website). The Bid Sheet(s) is located at the end of the Scope of Services. Submit bid sheet(s) separate from the proposal, to the address indicated below. The bid sheet(s) must be submitted in a sealed manila envelope, clearly marked "**SEALED BID.**" The vendor's name and return address **MUST** be on the front of the envelope. Failure to comply with this procedure may result in your bid being opened erroneously by the mail room and the bid being rejected from consideration.

**PROPOSAL SUBMITTAL INFORMATION**

|  |                                   |                      |
|--|-----------------------------------|----------------------|
| REQUIRED NUMBER OF COPIES FOR PROJECT MANAGER<br>8 | PROPOSAL/BID DUE DATE<br>11/30/09 | TIME DUE<br>11:00 am |
|--|-----------------------------------|----------------------|

**PROPOSAL AND BID SHEET MAILING ADDRESSES**

Mail the multiple proposal bundle to the MDOT Project Manager or Other indicated below.

- MDOT Project Manager  MDOT Other

Katharine J. Hulley, P.E.  
425 W. Ottawa, Design Division  
PO Box 30050  
Lansing, Michigan 48909

Mail one additional stapled copy of the proposal to the Lansing Office indicated below.

**Lansing Regular Mail****OR****Lansing Overnight Mail**

- Secretary, Contract Services Div - B470  
Michigan Department of Transportation  
PO Box 30050  
Lansing, MI 48909

Secretary, Contract Services Div - B470  
Michigan Department of Transportation  
425 W. Ottawa  
Lansing, MI 48933

- Contract Administrator/Selection Specialist  
Bureau of Transportation Planning B470  
Michigan Department of Transportation  
PO Box 30050  
Lansing, MI 48909

Contract Administrator/Selection Specialist  
Bureau of Transportation Planning B470  
Michigan Department of Transportation  
425 W. Ottawa  
Lansing, MI 48933

**GENERAL INFORMATION**

Any questions relative to the scope of services must be submitted by e-mail to the MDOT Project Manager. Questions must be received by the Project Manager at least four (4) working days prior to the due date and time specified above. All questions and answers will be placed on the MDOT website as soon as possible after receipt of the questions, and at least three (3) days prior to the RFP due date deadline. The names of vendors submitting questions will not be disclosed.

MDOT is an equal opportunity employer and MDOT DBE firms are encouraged to apply. The participating DBE firm, as currently certified by MDOT's Office of Equal Opportunity, shall be listed in the Proposal

**MDOT FORMS REQUIRED AS PART OF PROPOSAL SUBMISSION**

- 5100D** – Request for Proposal Cover Sheet
- 5100G** – Certification of Availability of Key Personnel
- 5100I** – Conflict of Interest Statement
- 5100J** - Consultant Data and Signature Sheet (Required only for Non-Prequalified Work)

**(These forms are not included in the proposal maximum page count.)**

## **Notification**

### **ARRA MONTHLY EMPLOYMENT REPORTS**

**Note: This Notification is only applicable for those projects/contracts funded with ARRA funds. If you have questions, please contact MDOT Contract Services Division at (517) 335-0071.**

The American Recovery and Reinvestment Act of 2009 (ARRA), requires states receiving stimulus funds for highway projects to provide monthly reports to the Federal Highway Administration (FHWA) regarding the number of employees of prime contractors, all-tier subcontractors and consultants on ARRA funded projects.

The cost for complying with this Notification must be borne by the prime contractor, and all-tiers of subcontractors and consultants, as part of their overhead and is deemed to be included in the payments made under this contract.

Within 10 days after the end of each month in which work is performed on this contract, all prime contractors, and all-tier subcontractors and consultants, must provide the Engineer a monthly report, in a format and on forms approved by the Engineer, which shall include, for work performed in that preceding month:

- The total number of employees who performed work on this contract
- The total number of hours worked by employees who performed work on this contract
- The total wages of employees who performed work on this contract

In addition, the prime contractor must provide a total payment amount made to any subcontractor who is a certified DBE in that preceding month.

This Notification shall be included as a part of each subcontract executed by the prime contractor, and all-tiers of subcontractors and consultants.

If necessary to conform to guidance provided by FHWA concerning the ARRA reporting requirements, the prime contractor, and all-tiers of subcontractors and consultants will revise their reporting as directed by the Engineer.

**Failure to comply with the reporting requirements under ARRA would jeopardize the Department's continued receipt of ARRA funding.**

**Accordingly, if a contractor or any-tier of subcontractor or consultant fails to comply with this Notification, the Department may withhold contract payments until compliance is achieved. If the Department is compelled to incur costs because of such a breach, the amount of those costs may be deducted from payments otherwise to be made under this contract. Additional sanctions may include reduction or elimination of prequalification ratings and removal of bidding privileges.**

**NOTIFICATION**  
**REQUIRED CONTRACT PROVISIONS TO IMPLEMENT AMERICAN**  
**RECOVERY AND REINVESTMENT ACT (ARRA) SECTIONS 902 AND 1515**

**Note: This Notification is only applicable for those projects/contracts funded with ARRA funds. If you have questions, please contact MDOT Contract Services Division at (517) 335-0071.**

In accordance with requirements under section 902 of the American Recovery and Reinvestment Act of 2009 (ARRA), the following language is made a part of this contract and is to be made a part of all tier subcontracts or consultant contracts:

The U.S. Comptroller General and his representatives have the authority:

- (1) to examine any records of the contractor or any of its subcontractors, or any State or local agency administering such contract, that directly pertain to, and involve transactions relating to, the contract or subcontract; and
- (2) to interview any officer or employee of the contractor or any of its subcontractors, or of any State or local government agency administering the contract, regarding such transactions.

The Comptroller General and his representatives have the authority and rights provided under Section 902 of the ARRA with respect to this contract. As provided in section 902, nothing in section 902 shall be interpreted to limit or restrict in any way any existing authority of the Comptroller General.

In accordance with the requirements of section 1515(a) of the ARRA any representatives of the Inspector General have the authority:

- (1) to examine any records of the contractor or grantee, any of its subcontractors or subgrantees, or any State or local agency administering such contract, that pertain to, and involve transactions relating to the contract, subcontract, grant, or subgrant; and
- (2) to interview any officer or employee of the contractor, grantee, subgrantee or agency regarding such transactions.

Nothing set forth in section 1515 of the ARRA shall be interpreted to limit or restrict in any way any existing authority of an inspector general.

## **Michigan Department of Transportation**

### **SCOPE OF SERVICE FOR VALUE ENGINEERING STUDIES**

The following Scope of Work covers multiple Value Engineering (VE) studies. The Department will select firms pre-qualified to perform VE studies on the project. The projects to have the VE studies are given at the beginning of the scope of work. Since each study is estimated to cost less than \$100,000, this selection will follow the Tier One selection process.

The project limits may be lengthened from that shown if additional work is found adjacent to the given project. The Job Number identified is the primary reference number for this VE Study. Other Job Numbers may be associated with each project to be studied and are used to identify separate elements of the project.

Conflict of interest: MDOT will not consider a VE firm to perform a VE Study on projects where that firm is also providing design services. If a current employee of a construction company is selected by the VE firm and participates as a member of the VE study team, the construction company will not be eligible to bid to construct the project as a prime contractor or as a subcontractor. The construction company employing any VE team member must provide a signed statement agreeing to this provision before the start of the VE study.

#### **MDOT VE studies are managed by:**

Katharine J. Hulley, P.E.  
State Value Engineer  
Manager, Production Support Unit  
Design Division, Lansing  
[hulleyk@michigan.gov](mailto:hulleyk@michigan.gov)

#### **VE STUDIES FOR THIS RFP - to be done January through June 2010**

The firms selected to perform the VE Study must not be involved in the design of the project. Direct any inquiries to Katharine Hulley; [hulleyk@michigan.gov](mailto:hulleyk@michigan.gov); do not call any other MDOT staff until you are Notified of Selection.

#### **I-75 – Linwood Road to Pinconning Road; JN 106856 – CS 09035**

Rubblize, HMA Resurfacing, drainage and safety improvements.

Estimated Cost: \$31 M

Design Project Manager: Kimberly Zimmer-Janeczko, Bay City TSC

Scheduled let date – February 2011.

**US-31 – Polk To Pentwater River and Cross Overs; JN 90073 and 104449 – CS 64015**

JN 104449 - Construct temporary freeway median crossovers and reconstruct the Monroe Road interchange ramps for maintenance of traffic for FY 2011 R&R JN 90073.

JN 90073 - Mainline and ramp reconstruction, ramp acceleration and deceleration lane extensions, drainage and safety upgrades.

Estimated cost: \$25 M

Design Project Manager: Leighann Mikesell, Muskegon TSC

Scheduled let dates – May 2010 and February 2011.

**US-24 from Carter to Pennsylvania; JN 76899 – CS 82052**

Reconstruct plus center left turn lane - project may or may not be concrete, need LCCA.

Estimated cost - \$26 M

Design Project Manager: Rosezella Townsel, Taylor TSC

Scheduled let date – October 2014 (this is a “shelf” project)

**I-94 @ I-69 Interchange; JN 85489 – CS 77023**

Interchange reconstruction; Estimated cost - \$24 M

Design Project Manager: Jeff Pitt, Port Huron TSC

Schedule let date – October 2011

**M-97 From Hayes to 14 Mile; JN 45735 – CS 50031**

Reconstruction (no widening); Estimated cost - \$33 M

Design Project Manager: Steve Minton, Macomb TSC

Schedule let date – October 2011

**I-75 – Janes to I-675 and Zilwalkee bridge work; JN 87509 and 105176 – CS 73111 and 73112**

JN 87509 - Reconstruction, concrete barrier wall, drainage and safety improvements, ramp improvements. Concrete pavement repairs, spall repairs, joint sealing and HMA shoulders on Zilwaukee Bridge Ramps. LCCA required for final pavement design. Estimated cost - \$32M

JN 105176 – Zilwalkee Bridge work – Estimated cost \$19 M

Design Project Managers: Kimberly Zimmer-Janeczko, Bay City TSC and Phillip Grotenhuis, Design, Lansing

Schedule let date – October 2011

**M-14 from East of Earhart to Washtenaw County line; JN100246 – CS 81103**

2" milling HMA pavement and 2 " HMA overlay from Earhart Rd to M-153, repairing & patching concrete pavement and two course 4" overlay from M-153 to Washtenaw/Wayne county line. Widen outside shoulders to 12 ft(POB to M-153), superelevation corrections, reconstruct WB under s07 to improve underclearance, lengthen ramp accel\decel lanes, replace ROW fence as needed.

Design Project Manager – Lynne Kirby, Brighton TSC

Schedule let date – November 2011

**US-131 from North of Cannonsville Road to M-46 and temporary cross overs; also Pierson Road to Culter Road and US-131 over Tamarack Creek; JN's 90035, 87108, 90209, 106291 and 90040; CS 59012**

JN 90035 and 87108 – (\$20 M) - Concrete Inlay, guardrail replacement, drainage improvements, and ramp rehabilitation/reconstruction.

JN 90209 - Deck replacement (including widening 5.25' for std shoulders), PCI-beam repairs, painting of the steel columns, bridge approach work and miscellaneous slope protection repairs

JN 106291 - Deep overlay, concrete approach replacement, beam end repairs, substructure patching and repairing and painting pier columns.

JN 90040 - Construction of temporary HMA cross-overs for maintenance of traffic during 2012 R&R jobs.

Design Project Managers – Bart Franklin, Howard City, TSC and Gerard Feurerstein, Design, Lansing

Estimated cost all projects - \$23 M

Schedule let date – November 2011

**US-131 from Dickenson/Brown Road to Garber Road; JN 46269 – CS 78015**

Relocation of existing route – EIS completed

Estimated cost - \$36 M

Design Project Manager – Jonathon Sytsma, Kalamazoo TSC

Scheduled let date – September 2012

**PRIMARY PREQUALIFICATION CLASSIFICATION(S):**

Value Engineering Studies

**SECONDARY PREQUALIFICATION CLASSIFICATION(S):**

N/A

**DBE REQUIREMENT:** N/A

**ASSEMBLING THE VE TEAM**

The consultant will assemble a multi-disciplined VE project team of 5-7 persons, led by a VE Facilitator. Teams should be structured so there is appropriate expertise to evaluate the major problem areas anticipated within the project. MDOT may add one or two MDOT personnel to participate with the VE team. MDOT personnel will provide additional assistance and expertise but will not replace consultant VE team members.

Recommended qualification of VE team members:

VE Facilitator: This member must be a qualified VE practitioner, experienced in performing and leading VE studies (have participated in several VE studies as a team member and as a team leader), and have sufficient VE training, education, and experience to be recognized by SAVE International as meeting the requirements for certification.

Design, construction, maintenance and traffic engineering members: These team members should have at least ten years experience in design, construction, maintenance or operations. The VE team must also include member(s) experienced in estimating construction costs and cost-benefit analysis. All members should have completed a 40-hour Value Engineering training seminar or have prior Value Engineering experience. The composition of the expertise should reflect the complexity of the project design to be studied. At least two members of the team should be experienced in the high-cost areas of the project.

Work Zone Safety and Mobility member: The Department's Guidance Document #10177 addresses the Work Zone Safety and Mobility Policy. The VE Team should include expertise to review and provide recommendations in accordance with this policy.

Constructability expert member: This member should be an experienced construction professional with who is able to add the contractor's perspective to the VE Study. If the VE firm does not have access to constructability experienced member based on their own associations, the can use the list provided by MITA. This list will be available on with the posting. **As stated above, if a current employee of a construction company is selected by the VE firm and participates as a member of the VE study team, the construction company will not be eligible to bid on the project nor partake in any of the construction activities as a subcontractor.**

Additional requirements: The VE team should have CAD capability to develop, analyze, and propose modifications within the VE time schedule. For all VE Studies, 'Read-Only' CAD files in Micro-Station format will be made available to the VE team.

## **REQUIRED STUDY ELEMENTS**

Several steps in the application of VE have been determined by the Department to be of such significance that special attention is needed. These nine (9) items shall be required in conducting every VE study:

1. Define the original project objective.
2. Identify the design criteria for the project.
3. Verify all valid project constraints.
4. Identify specifically the components and elements of high cost.
5. Determine basic and secondary functions.
6. Evaluate the alternatives by comparison.
7. Consider life cycle costs of alternatives.
8. Evaluate constructability of project and elements
9. Develop a detailed implementation plan.
10. Develop recommendations to address the Work Zone Safety and Mobility Policy requirements.

In addition to the required elements listed above, VE studies on bridge projects shall include the following:

1. Bridge substructure requirements based on construction materials.

2. Evaluation of acceptable bridge designs based on engineering and economic basis.
3. Evaluate using life cycle costs and construction duration.

### **DEVELOPING THE VE WORK PLAN**

After notification of approval of the authorization, the selected consultant will contact the Project Manager of the job receiving the VE Study to learn additional details of the design project and establish study dates. NOTE: Pavement Type and Fix Life are not to be VE'd since they receive their own rigorous analysis.

The consultant will develop and submit a VE work plan geared toward the assigned project. In general, a 5 day 40-hour VE Study is expected; the duration of the VE Study shall be determined by the VE Consultant after discussion with MDOT staff. Actual dates of the VE Study must be coordinated with the MDOT Project Manager and VE Project Manager, Katharine Hulley.

The consultant is requested to hold the Briefing, Presentation and Decision Phases at a location within the county of the project(s) or at a location within a county adjacent to the project. The consultant may choose to conduct the other phases of this VE Study in the same near-site location or may return to an office where their phone, CAD, and other support are more readily available. If available, MDOT conference rooms may be used for the Presentation (Monday) and VE Team's Recommendations and Decision phases.

### **INVESTIGATION PHASE**

Basic project information must be available and organized before a VE study is begun; this is initiated by the Consultant VE team leader talking with or meeting with the Project Manager. The VE team leader gathers readily available data, distributes to the VE team, and all members review the items in order to be as fully knowledgeable of the project as possible prior to commencing the formal VE session. This information may include but not be limited to the following:

Images:

1. Existing aerials
2. Project photographs
3. As Built plans
4. Project area map

General project information:

1. Environmental clearance document or issues
2. Right of Way plans or concerns
3. Permit restrictions
4. Cooperative agency agreements
5. Utility plans or encroachment issues
6. Detour, staging concepts, or restrictions
7. Traffic Data
8. Crash data
9. Context Sensitive Design issues
10. Constructability issues

Road information:

1. Set of plans (size and quantity)
2. Latest project cost estimate

Structure information:

1. Current set of bridge plans
2. Bridge inspection reports
3. Geological, soils reports and foundation reports
4. Log of borings
5. Hydrology/hydraulic information
6. Latest project cost estimate

One of the first steps of the VE session will be a presentation and briefing of the VE team by the MDOT project manager and other MDOT participants. The following steps continue the VE study.

### **ANALYSIS PHASE**

In the Analysis phase, the team identifies the elements with the greatest potential for value improvement, bringing the three fundamental concepts of VE (function, cost and worth) to bear on the project. This phase requires the team to ask and answer the following basic questions, after which the team identifies the high-cost elements, functionally analyzes them, and assesses their cost / worth relationships.

What is it?

What does it do? (What is the function?)

What must it do? (Is its function Basic?)

What is it worth?

What does it cost?

### **SPECULATION PHASE**

The team applies brainstorming techniques to develop good alternatives to the proposed project design, generating a list of potential (creative) solutions to items identified in the Investigation or Analysis phases. The team uses the generic format of the function to speculate on all possible solutions to the problem presented in the function statement. All ideas have merit; the team should be creative and leave the evaluation and judgment for the next phase.

**At the end of the speculation phase, the MDOT Project Manager(s) will be available (either by phone or to come and meet) to review the speculation, answer questions or provide information to assist the VE team in the following phases.**

### **EVALUATION PHASE**

This phase determines the best alternatives by listing the advantages and disadvantages, described in general terms, of each alternative. A weighted matrix analysis might also be used to determine which alternative is best, based on the relative importance of each of the desirable criteria which must be addressed. This analysis satisfies the VE objective to achieve the best blend of performance, cost, and schedule. If the disadvantages far outweigh the advantages of

any alternative, that is noted and the alternative is dropped at this point.

### **DEVELOPMENT PHASE**

The best alternatives are fully developed through sketches, cost estimates, validation of test data, and other technical work to verify the validity of assumptions made during the study. The final step before presenting the team's analyzed recommendations to MDOT is to formulate an implementation plan which describes the process MDOT must follow to implement each recommendation.

### **PRESENTATION OF RECOMMENDATIONS**

At the completion of the VE Study, the VE team presents its recommendations to the MDOT Project Manager and support staff. This presentation is a high level overview of the recommendations developed by the VE Team. Included with the presentation should be a brief handout of the recommendations and costs. It is a two-way discussion that helps provide questions and issues that should be addressed in the draft VE report of recommendations. All members of the VE team should present but participation in the presentation is optional.

### **DRAFT VE STUDY REPORT**

Two weeks after the study is complete, or at a time requested by the MDOT Project Manager, the VE Team will send by email (pdf format) a draft of the VE Report. This draft should only contain the recommendations, all information and sketches, calculations, and design suggestions. The information on the VE study process should not be included (this is included in the final report only). The draft VE Study Report should be emailed to the MDOT and VE Project Managers. If email does not work, a CD may be requested.

### **DECISION/IMPLEMENTATION PHASE**

The VE Project Manager will coordinate with the MDOT Project Manager(s) and distribute the Draft VE Study Report to the MDOT/FHWA Decision Team. This will be at least two weeks prior to the Decision Meeting. The Decision meeting will be coordinated by the VE Project Manager, including MDOT and FHWA attendance and location. The VE Team should designate at least one person to attend, answer questions and document decisions for the final VE Report.

The Decision Team will make full and fair evaluation of all proposals and implementation of those determined to be viable are also a major part of the Value Engineering program, along with conducting a VE Study. All recommendations will receive serious consideration, but MDOT might not be able to implement all recommendations. MDOT and FHWA staff attending the Decision Meeting will determine one of three dispositions of each recommendation: Accept for Implementation; Accept for Further Study before Determining Implementation; or Reject for These Reasons.

### **FINAL VE STUDY REPORT**

A VE Study Report is compiled during the VE Study as a step-by-step record of the VE analysis. The record should be complete and understandable, as it serves as documentation to support the VE team's recommendations, track their deliberations and considerations, and aids in MDOT

implementing the recommendations. It also becomes a reference for similar components on future MDOT projects.

Typical Report format:

A typical report format is as follows:

- Executive Summary
- List of VE recommendation with the following (determine which is appropriate for each recommendation):
  - Existing condition
  - Life Cycle Cost Estimate
  - VE Alternative Description
  - VE Alternative Cost Calculations
  - Evaluation by Comparison
  - Proposed Design
  - Detail Findings or Analysis
  - Specific Recommendations and Costs
- List of Design Suggestions

In the appendix:

- Participant List
- VE Study Process
- Research Sources
- Project History (including project criteria, commitments, and constraints)
- Potential Study Areas
- Performance Criteria
- Basic Functions

## **PROJECT DELIVERABLES**

In addition to conducting the VE Study, the VE consultant shall deliver the high level presentation, the Draft VE Study Report and Final VE Study Report. This will be done electronically (pdf format) unless email does not work then a CD copy will be requested. The Final VE report shall fully document the Value Engineering process as applied to the specific project/corridor, and include a summary of the items discussed during each VE phase, a detailed description of the evaluation of each alternative carried forward for investigation, the advantages and disadvantages of each, the cost of constructing the primary function and secondary functions of each alternative carried forward, and the VE Recommendations and MDOT Decision on each recommendation. A list of VE design suggestions shall also be included.

MDOT will consider these and other VE Outcomes on any future jobs in the VE Corridor or elsewhere statewide.

**CONSULTANT PAYMENT – Lump Sum:**

Compensation for this project shall be on a **lump sum** basis. One lump sum payment will be made once the deliverable is received and approved by the MDOT Project Manager. The MDOT Project Manager may authorize partial payment if the project is delayed due to circumstances beyond the consultant's control.

All billings for services must be directed to the Department and follow the current guidelines. The latest copy of the "Professional Engineering Service Reimbursement Guidelines for Bureau of Highways" is available on MDOT's website. This document contains instructions and forms that must be followed and used for billing; payment may be delayed or decreased if the instructions are not followed.

Payment to the Consultant for services rendered shall not exceed the maximum amount unless an increase is approved in accordance with the contract with the Consultant. Typically, billings must be submitted within 60 days after the completion of services. Refer to your contract for your specific contract terms.