

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

	REQUISITION NUMBER	DUE DATE	
MDOT PROJECT MANAGER	JOB NUMBER (JN)	CONTROL SECTION (CS)	
DESCRIPTION			
<b>MDOT PROJECT MANAGER:</b> Check all items to be included in RFP  WHITE = REQUIRED GRAY SHADING = OPTIONAL  Check the appropriate Tier in the box below		<b>CONSULTANT:</b> Provide only checked items below in proposal	
<input type="checkbox"/> <b>TIER I</b> (\$25,000-\$99,999)	<input type="checkbox"/> <b>TIER II</b> (\$100,000-\$250,000)	<input type="checkbox"/> <b>TIER III</b> (>\$250,000)	
<input 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"/>	Organizational Chart
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Qualifications of Team
Not required as part of Official RFP	Not required as part of Official RFP	<input type="checkbox"/>	Quality Assurance/Quality Control
<input 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 p=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) ( <b>No Resumes</b> )	7 pages (MDOT Forms not counted)	14 pages (MDOT forms not counted)	Total maximum pages for RFP <b>not including key personnel resumes.</b> Resumes limited to 2 pages per key staff personnel.

**PROPOSAL AND BID SHEET EMAIL ADDRESS** – [mdot-rfp-response@michigan.gov](mailto:mdot-rfp-response@michigan.gov)

### 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 five (5) 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

**5100J** – Consultant Data and Signature Sheet (Required only for firms not currently prequalified with MDOT)

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

**REQUEST FOR PROPOSAL**

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 Services Contracts" and "Guideline for Completing a Low Bid Sheet(S)\*, if a low bid is involved as part of the selection process. **Reference 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 \_\_\_\_ 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 is required with Proposal for firms not currently prequalified with MDOT**

**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 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.

**Qualification 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. The vendor that has met established qualification threshold and 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**

Bid Sheet(s) must be submitted in accordance with the "Guidelines for Completing a Low Bid Sheet(s)\* (available on MDOT's website). Bid Sheet(s) are located at the end of the Scope of Services. Submit bid sheet(s) separate from the proposal, to the email address: [mdot-rfp-response@michigan.gov](mailto:mdot-rfp-response@michigan.gov). Failure to comply with this procedure may result in your bid being rejected from consideration.

**NOTIFICATION  
MANDATORY ELECTRONIC SUBMITTAL**

**Proposals submitted for this project must be submitted electronically.**

**The following are changes to the Proposal Submittal Requirements:**

- Eliminated the Following Requirements:
  - Safety Program
  - Communication Plan
  - Past Performance as *a separate section*
  - Separate section for DBE Statement of goals. Include information in Qualification of Team section
  
- Implemented the Following Changes:
  - All proposals require an Organization Chart
  - Resumes must be a maximum of two pages
  - Only Key (lead) staff resumes may be submitted
  - Tier III proposal reduced from 19 to 14 pages
  - Forms 5100D, 5100I, and 5100G combined – 5100D
  - Forms 5100B and 5100H combined – 5100B
  - RFP's will be posted on a weekly basis -- on Mondays

**The following are Requirements for Electronic Submittals:**

- Proposals must be prepared using the most current guidelines
- The proposal must be bookmarked to clearly identify the proposal sections (See Below)
- For any section not required per the RFP, the bookmark must be edited to include “N/A” after the bookmark title.  
**Example:** Understanding of Service – N/A
- Proposals must be assembled and saved as a single PDF file
- PDF file must be 5 megabytes or smaller
- PDF file must be submitted via e-mail to [MDOT-RFP-Response@michigan.gov](mailto:MDOT-RFP-Response@michigan.gov)
- MDOT's requisition number and company name must be included in the subject line of the e-mail. The PDF shall be named using the following format:
  - Requisition#XXX\_Company Name.PDF
- MDOT will not accept multiple submittals
- Proposals must be *received* by MDOT on or before the due date and time specified in each RFP

**If the submittals do not comply with the requirements, they may be determined unresponsive.**

The Consultant's will receive an e-mail reply/notification from MDOT when the proposal is received. Please retain a copy of this e-mail as proof that the proposal was received on time. **Consultants are responsible for ensuring the MDOT receives the proposal on time.**

**\*\*Contact Contract Services Division immediately at 517-373-4680 if you do not get an auto response\*\***

**Required Bookmarking Format:**

- I. Request for Proposal Cover Sheet Form 5100D
  - A. Consultant Data and Signature Sheet, Form 5100J (if applicable)
- II. Understanding of Service
  - A. Innovations
- III. Qualifications of Team
  - A. Structure of Project Team
    - 1. Role of Firms
    - 2. Role of Key Personnel
  - B. Organization Chart
  - C. Location
- IV. Quality Assurance / Quality Control Plan
- V. Resumes of Key Staff
- VI. Pricing Documents/Bid Sheet (if applicable)

**2/14/12**

**NOTIFICATION  
E-VERIFY REQUIREMENTS**

E-Verify is an Internet based system that allows an employer, using information reported on an employee's Form I-9, Employment Eligibility Verification, to determine the eligibility of that employee to work in the United States. There is no charge to employers to use E-Verify. The E-Verify system is operated by the Department of Homeland Security (DHS) in partnership with the Social Security Administration. E-Verify is available in Spanish.

The State of Michigan is requiring, under Public Act 200 of 2012, Section 381, that as a condition of each contract or subcontract for construction, maintenance, or engineering services that the pre-qualified contractor or subcontractor agree to use the E-Verify system to verify that all persons hired during the contract term by the contractor or subcontractor are legally present and authorized to work in the United States.

Information on registration for and use of the E-Verify program can be obtained via the Internet at the DHS Web site: <http://www.dhs.gov/E-Verify>.

The documentation supporting the usage of the E-Verify system must be maintained by each consultant and be made available to MDOT upon request.

It is the responsibility of the prime consultant to include the E-Verify requirement documented in this NOTIFICATION in all tiers of subcontracts.

9/13/12

**Michigan Department of Transportation**

**SCOPE OF SERVICE  
FOR  
PRE-DESIGN SERVICES  
Roadway Scoping**

**CONTROL SECTIONS:** 46061, 46062

**PR NUMBERS:** 946402, 947102

**JOB NUMBER:** 118634

**PROJECT LOCATION:**

US-223 from the US-127 (CS: 46061 MP: 0.000 & PR: 946402 MP: 0.000) to Industrial Drive (CS: 46062 MP: 0.92 & PR: 946402 MP 18.019) and US-223 from Ogden Highway (CS: 46062 MP: 5.295 & PR: 946402 MP 22.80) to High Street (CS: 46062 MP: 12.09 & PR: 947102 MP: 0.302), located in the townships of Woodstock, Rollin, Rome, Adrian, Palmyra, and Blissfield in Lenawee County. Approximate project length is 26.25 miles.

**PROJECT DESCRIPTION:**

Prepare preliminary and final road scoping packages for a 3R fix on the above noted roadway section as defined in Attachment A. Due to the size/length of the project, it will need to be broken into 3 separate sections. The exact locations of the split will be determined during the scoping process. The pavement fix will be subject to modification until the conclusion of the preliminary scoping package review meeting. The preliminary 3R proposed fix is assumed to include cold milling, detail 7 and 8 joint repairs, minor drainage improvements, and a 2 course HMA overlay.

The scope of services will include a detailed review of the maintaining traffic and mobility (including but not limited to C03 analysis and draft TMP) for the proposed work limits.

**ANTICIPATED SERVICE START DATE:** June 3, 2013

**ANTICIPATED SERVICE COMPLETION DATE:** May 2, 2014

**PRIMARY PREQUALIFICATION CLASSIFICATION:**

Roads and Streets

**SECONDARY PREQUALIFICATION CLASSIFICATION(S):**

Municipal Utilities  
Maintaining Traffic Plans and Provisions  
Safety Studies

**DBE REQUIREMENT:** N/A

**MDOT PROJECT ENGINEER MANAGER:**

Name: Samuel N. Sorensen, P.E. – Assistant Operations Engineer  
Address: MDOT Jackson Transportation Service Center  
2750 N. Elm Road  
Jackson, Michigan 49201  
Phone: (517) 780-5282  
Fax: (517) 780-5454  
E-mail: sorensens1@michigan.gov

**ESTIMATED PROJECT CONSTRUCTION COST:**

The scoping document will include 3 separate cost estimates based on the project limits determined during the scoping process. The estimate shall include 2015 costs and 2020 costs (5.0% annual inflation). The following are the items that shall be considered:

1. The estimated construction cost shall address:
  - A. Safety Related Work
  - B. Base, Surface and Shoulder
  - C. Non-Motorized (including ADA requirements)
  - D. Geometric Improvements
  - E. Improve Alignment (Vertical/Horizontal)
  - F. Drainage Adjustment and Improvement
  - G. Joint Repair and Pavement Patching
  - H. Detours and Maintaining Traffic
  - I. Permanent Pavement Markings/Signs/Signals
  - J. Environmental
  - K. Miscellaneous
  
2. Identify the estimated number of real estate parcels and type (Consent to Grade, Consent to Reconstruct Drive, Easement or Fee). The ROW appraisal will be prepared by MDOT.

**REQUIRED MDOT GUIDELINES AND STANDARDS:**

The scoping document shall be developed in accordance with the current MDOT Project Scoping Manual. In addition, work shall conform to current MDOT, FHWA, and AASHTO practices, guidelines, policies, and standards including, but not limited to, MDOT Road Design Manual, MDOT Standard Plans, MDOT Drainage Manual, MDOT Work Zone Safety and Mobility Manual, AASHTO Roadside Design Guide, A Policy on Geometric Design of Highways and Streets, A Policy on Design Standards Interstate System, and Michigan Manual of Uniform Traffic Control Devices.

The Consultant is required to use MDOT’s current version of Bentley MicroStation for CADD applications and Bentley GEOPAK for road design. The Consultant shall comply with all MDOT CADD standards and file naming conventions.

## **CONSULTANT RESPONSIBILITIES:**

Complete the scoping package for the design of this project including, but not limited to the following as described in the current MDOT Scoping Manual:

The Consultant must adhere to all applicable OSHA and MIOSHA safety standards, including the appropriate traffic signs for the activities and conditions for this job and perform field operations in accordance with the Department's Personal Protection Equipment (PPE) policy as stated in the MDOT Guidance Document #10118.

1. The MDOT Project Manager shall be the official MDOT contact person for the Consultant. The Consultant must either address or send a copy of all correspondence to the MDOT Project Manager. This includes all sub consultant correspondence and verbal contact records.
2. Meet with the MDOT Project Manager to review project, location of data sources and contact persons, and review relevant MDOT operations. The Consultant shall review and clarify project issues, data needs and availability, and the sequence of events and team meetings that are essential to complete the project scoping by the project completion date. Attention shall be given to critical target dates that may require a large lead time.
3. Maintain a Scoping Project Record which includes a history of significant events (changes, comments, etc.) which influenced the development of the scopes, dates of submittals and receipt of information.
4. The Consultant shall contact, in writing, the MDOT Project Manager whenever discoveries or design alternatives have the potential to require significant changes in the limits, quantities, costs, or right-of-way of the project.
5. Attend any project-related meetings as directed by the MDOT Project Manager.
6. The Consultant representative shall record and submit type-written minutes for all project related meetings to the MDOT Project Manager within two weeks of the meeting. The Consultant shall bring an additional person to all meetings whose sole responsibility will be to take notes/minutes. The Consultant shall also distribute the minutes to all meeting attendees.
7. Determine impacts of the proposed pavement treatment on the existing horizontal and vertical alignments, pavements, curb and gutter, drainage, right of way (ROW), etc.. Every effort shall be made to minimize ROW impacts within the limits of the project. In areas of potential ROW impacts, the Consultant shall document and identify the potential need for additional ROW, by station or address, type of ROW required (grading permit, easement or fee) and roadside improvements proposed (i.e. fencing, turf establishment, landscaping, non

motorized, etc.). ROW impacts shall be documented in terms area of potential need (grading permit, easement, or fee). The ROW appraisal will be prepared by MDOT.

8. Generate a Base Map for the project location formatted as described in Attachment A.
9. Prepare existing and proposed general typical cross sections for the project location as described in Attachment A.
10. Compute and verify all quantities necessary to complete the Project Concept Statement and the Project Scoping Checklist, and calculate a detailed cost estimate using the Scoping estimator Tool (Trns-port).
11. Complete the Statewide Scoping Package Master Checklist – ROAD, Road Scoping Report & Details Worksheet, Culvert Scope Inspection Forms as needed, and Constructability Checklist per the MDOT Scoping Manual.
12. For the project location, review and document the existing drainage systems and provide a preliminary design for open storm water systems including drive and cross culverts as required based on project area features. Send a letter identifying where major drainage improvements are recommended (list the location, condition and recommended treatment) to the MDOT Project Manager. With approval from MDOT, incorporate the fixes into the estimates, and incorporate information into Road Scoping Report & Details Worksheet.
13. If watermains and/or sanitary sewers are present within the project limits, the Consultant shall evaluate the necessity for the relocation of watermains and sanitary sewers, in accordance with MDOT Design Division's Informational Memorandum #441B and #402R dated April 13, 1992. Send a letter to the MDOT Project Manager identifying where watermain and/or sanitary sewer relocation is needed/ recommended. Provide the limits, an explanation for the relocation and a cost estimate for each location.
14. Submit requests to applicable utility owners for preliminary utility information. Submittals to the utility company shall include: a completed MDOT approved form, and a minimum of two (2) copies of location map and Base Map (refer to Attachment E). With the utility information, document and identify any possible utility conflicts and estimate the cost of relocation and/or adjustment.
15. Review and document scope conformance to design elements as listed in Attachment D and MDOT's Guidelines for Non-Freeway Surfacing, Restoration and Rehabilitation (3R). Prepare a comprehensive table of the values used for the evaluation of the design elements. The table shall, at a minimum, contain the following: minimum values as per design standards for the associated design element, reference where the minimum value as per design standards were derived from, all values used to determine conformance, where values used for conformance were derived from and all formulas used for the calculation of values.

The table of values will be submitted with a list of required Design Exceptions prior to the submittal of the Preliminary Scoping package.

For the Preliminary Scoping Package, documentation shall include Existing Condition, Treatment as per Design Standards, and Proposed Treatment. If the Proposed Treatment is not in accordance with the Treatment as per Design Standard, an additional section shall be added entitled Reason for not Meeting Design Standards. This section shall provide documentation for the justification for not being in conformance.

For the Final Scoping Package, complete a Design Exception Request for all potential formal design exception needs. Note that cost alone will not be suffice justification for the not bringing the features up to standard.

16. Review and document the roadside safety related items (i.e. guardrail, barriers, attenuators, etc.) which need to be modified or included in the project. Documentation to include location, existing type and condition, and the recommended treatment. This information shall be included in the appropriate area of the Road Scoping Report & Detailed Worksheet.
17. Perform crash analysis and recommend countermeasures. This shall include, but not limited to, the following:
  - A. Performing Crash Analysis. This shall include the last three (3) years of reliable data for the analysis period. If there is a fatality within those three (3) years, the analysis shall include the details of the specific fatality. MDOT will furnish three (3) years of data.
  - B. Determine Countermeasures based on the Crash Analysis. Determine ROW impacts for each countermeasure identified. Determine the construction cost estimate for each countermeasure. Summarize countermeasures which shall include each crash pattern and countermeasure individually listed, along with their associated ROW impacts and construction cost estimate. ROW impacts shall be documented in terms area of potential need along with the type of ROW required (grading permit, easement, or fee). The ROW appraisal will be prepared by MDOT. The construction cost estimate for each countermeasure recommendation shall be presented in the Preliminary Scoping Package and shall be reviewed and approved by MDOT prior to inclusion in the Final Scoping Package.
18. Document and identify locations of possible environmental issues which may impact the project, and estimate the cost of treatment. This information shall be included in the appropriate area of the Road Scoping Report & Detailed Worksheet and shall also be entered into a separate spreadsheet and submitted as part of the Final Deliverable Package.

19. Document and identify (location and who has responsibility for) any existing lighting that has potential for being impacted, or should be included, in the project. Incorporate work into the estimate. (Lighting on Non-Freeway roads is the responsibility of the local jurisdiction).
20. For each project location, develop the Maintaining Traffic Concept and Mobility Analysis as per Attachment C.
21. Identify, contact and coordinate with all affected governmental agencies (County, and/or city, township) within the project limits (and directly abutting, if any part of the construction influence area will be within another agencies area). Coordination will involve, at a minimum, an initial letter stating the project and its scope and requesting local input, within 30 days, in the development of the detailed scope. A follow up letter, if no response is given, and a final letter stating the process that occurred and what the final scope will be to all affected governmental agencies. There may be the need to attend meetings and receive and return telephone calls from the affected agencies. Any and all local requests shall be reviewed with MDOT before any commitment to work shall be given to the affected agencies. MDOT shall be informed of any meeting with the affected agencies a minimum of 72 hours in advance of the meeting. All discussions with agencies shall be documented and submitted with the monthly progress reports.

Prepare a spreadsheet summary of the local coordination that occurred. The summary shall document the planning/coordination process that occurred with each of the affected local agencies. The summary shall include, at a minimum, specifically what was sent to who and when, what was received from who and when and what responses were made (and why) to who and when. The information shall be entered into a separate spreadsheet and submitted as part of the Final Deliverable Package. The spreadsheet shall be prepared as stated in Attachment A.

22. Incorporate any MDOT identified and/or approved (if approved, include copy of MDOT approval) local needs/requests into project scope.
23. Provide photographs and digital files ( .jpg files) of the existing roadway and roadside conditions to document the needs as identified in the project scope.
24. Prepare a spreadsheet summary for each project location. Each line of the summary shall contain the following information: control section, job number, freeway or non freeway, route, location, affected governmental agencies, work description, Beginning Mile Point, Ending Mile Point, length, lane miles, construction cost, construction cost per lane mile, and potential ROW areas/ types. Each spreadsheet shall be prepared as stated in Attachment A. The information shall be entered into a separate spreadsheet and submitted as part of the Final Deliverable Package for each project location

25. The Final Deliverable Package shall include an updated electronic document addressing all comments received from the Final Scoping Package review. In addition, submit two (2) paper copies in a labeled three ring binder, each with an index and tabbed sections.

**UTILITIES:**

The Consultant shall be responsible for requesting the location and names of all existing utilities within the limits of the project. In the course of resolving utility conflicts, the Consultant shall make modifications to the scoping documents and provide assistance as directed by Jared Boll, Jackson Transportation Service Center Utilities Engineer at (517) 780-6205 and/or the MDOT Project Manager. The Consultant shall be responsible for all traffic control required to perform the tasks as outlined in this Project Scope of Services.

The Consultant shall be responsible for obtaining up to date access permits and pertinent information for tasks in MDOT Right of Way (ROW). This information can be obtained through Doug Jordan, Jackson Transportation Service Center Permits at (517) 780-5103.

**MONTHLY PROGRESS REPORT:**

On the first Monday of each month, the Consultant shall submit a monthly project progress report via email to the MDOT Project Manager. The monthly progress report shall follow the guidelines in Attachment B.

**MDOT RESPONSIBILITIES:**

1. Schedule and/or conduct the following:
  1. Project related meetings.
  2. Coordinate all scoping activities that require MDOT personnel.
2. Furnish prints or electronic files of old plans and a copy of the Control Section Log of the area, if available.
3. Furnish available soil boring/pavement core information.
4. Perform pavement designs and geotechnical analysis. Supply relevant geotechnical quantities.
5. Furnish a list of the utility companies present within the control section(s) of the project.
6. Furnish ROW maps of the area, if requested.
7. Furnish project selection justification data, including Pavement Management System data and Sufficiency Rating data.
8. Furnish inspection reports for the structures in the area, for information purposes.
9. Furnish current crash history data.

10. Furnish list of people invited to each Scope Review Meeting.
11. Furnish available traffic count information.

**PROJECT SCHEDULE:**

The Consultant shall use the following milestone dates to prepare the proposed implementation schedule as required in the Guidelines for the Preparation of Responses on Assigned Design Services Contracts. These dates shall be used in preparing the Vendor’s Monthly Progress Reports. A minimum of ten (10) working days will be needed for MDOT review of the Preliminary Scoping Package.

<u>Milestone Date</u>	<u>Description</u>
May 20, 2013	Tentative Scope/Kick off Meeting ( <b>prior to submittal of Priced Proposal</b> )
November 1, 2013	Submittal of Preliminary Scoping Packages
December 2, 2013	Preliminary Scope Review Meeting with MDOT Staff
January 31, 2014	Submittal of Final Scoping Package
February 28, 2014	Final Scope Review Meeting with MDOT Staff
March 15, 2014	Final Deliverable Package

**CONSULTANT PAYMENT - Milestone:**

Compensation for this project shall be on a **milestone** basis. Such compensation shall be divided into payments for the following portions of the services and in the following amounts:

1.	Preliminary Scoping Packages	40%
2.	Final Scoping Packages	50%
3.	Final Deliverable Packages	10%
	<b>Total Reimbursement for services</b>	<b>100%</b>

All milestone payment percentages are negotiable except for the Final Deliverable Packages. The MDOT Project Manager may authorize payment if the milestone is delayed due to circumstances beyond the Consultant’s control.

Definition for Milestone Payment Schedule Items:

Preliminary Scoping Packages - This payment milestone is considered complete and eligible for compensation when the required number of copies, prepared under the required format and containing all information as stated in this scope of work for the Preliminary Scoping Package and all requested associated documents are received and approved by the MDOT Project Manager.

Final Scoping Packages - This payment milestone is considered complete and eligible for

compensation when the required number of copies, prepared under the required format, containing all requested changes, modifications and/or additions as identified through the review of the Preliminary Scope and through the Scope Review Meetings, containing all information as stated in this scope of work for Final Scoping Package and all requested associated documents are received and approved by the MDOT Project Manager.

Final Deliverable Packages - This payment milestone is considered complete and eligible for compensation when the packages are prepared under the required format and containing all information as stated in this scope of work for the Final Deliverable Package and all requested associated documents are received and approved by the MDOT Project Manager.

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. Please note: Labor supporting documentation must be submitted with your billing for all labor performed on a milestone basis project.

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 for the current billing. The final billing must be received within 60 days of the completion of services. Refer to your contract for your specific contract terms.

**ATTACHMENT A**  
**CS 46061, 46062 - JN 118634**  
**Road Scoping on US-223 in Lenawee County**

**REQUIRED MDOT FORMAT**

Preliminary Scoping Package

The Preliminary Scoping Package shall be presented in electronic format and on regular letter size paper (8 ½" x 11") with the exception of Base Maps, sketches and diagrams which shall be on 11" x 17" paper (and folded to match the 8 ½" x 11" paper). The Consultant shall submit two (2) copies of the Preliminary Scoping Package. The electronic document shall utilize bookmarks to direct readers to each individual section of the package.

The Preliminary Scoping Package will have a cover sheet shall be entitled "Preliminary Scoping Package" and should also include the Control Section, Job Number, Route, and location description. An index shall also be included in the package. If there are any items, in the Consultant's opinion, that need further review, discussion and/or additional information is needed from MDOT, those items shall be clearly listed on a cover sheet accompanying the Preliminary Scoping Package. The photographs included in the documents shall be in an electronic .jpg format with printouts at 4" x 6", in color, labeled with the location, direction from which the picture was taken, date, particular feature needing improvement and the approximate mile point in the Package. No fewer than 8 and no greater than 24 photos per project location are required.

A Preliminary Scoping Package and three separate cost estimates shall be submitted on or before **November 1, 2013** for MDOT review and comment. The Preliminary Scoping Package shall address all the items listed under CONSULTANT RESPONSIBILITIES. If any of the aforementioned items are not included or not sufficiently complete as determined by the MDOT Project Manager, the Preliminary Scoping Package will be rejected. The Vendor will have up to five (5) working days to make the changes. No additional compensation will be given to the Consultant for costs associated with making the changes directed by the MDOT Project Manager.

In the Preliminary Scoping Package, if there are any items, in the Consultant's opinion, that need further review, discussion and/or additional information is needed from MDOT, those items shall be clearly listed on a cover sheet accompanying the Preliminary Scoping Package.

Final Scoping Package

The Final Scoping Package shall be presented in an electronic format. The electronic document shall utilize bookmarks to direct readers to each individual section of the package. In addition to the electronic document, the Vendor shall submit two (2) copies of the Final Scoping Package presented in a labeled (cover and side to be entitled Final Scoping Package and should also include the Control Section, Job Number, Route, and location description.) three ring binder, with an index and tabbed sections, containing 8 ½" x 11" regular letter size paper for the majority of the documents. 11" x 17" paper may be used for Base Maps, sketches and diagrams. The photographs included in the documents shall be in an electronic .jpg format with printouts at 4" x 6", in color, labeled with the

location, direction from which the picture was taken, date, particular feature needing improvement and the approximate mile point in the Package. No fewer than 8 and no greater than 24 photos per project location are required.

A Final Scoping Package shall be submitted on or before **January 31, 2014**. The Final Scoping Packages shall address and document all the items listed under CONSULTANT RESPONSIBILITIES and incorporate the comments and/or changes received from the Preliminary Scoping Packages and the Preliminary Scope Review meetings. If any of the aforementioned items are not included or not sufficiently complete as determined by the MDOT Project Manager, the Final Scoping Packages will be rejected. The Consultant will have up to five (5) working days to make the changes. No additional compensation will be given to the Consultant for costs associated with making the changes directed by the MDOT Project Manager.

Before the final spreadsheets are submitted as part of the Final Scoping Packages, a preliminary copy for each project location (both hard copy and electronic format) shall be submitted to the MDOT Project Manager for review and approval as to form and content.

#### Final Deliverables Package

For each project location, the Final Deliverable Package shall include an updated electronic document addressing all comments received from the Final Scoping Package review. In addition, submit two (2) paper copies in a labeled three ring binder, each with an index and tabbed sections. For each project location, a single CD ROM shall be prepared for the electronic files of the Base Sheets(.dgn files), cross sections (.dgn files), photos (.jpg files), location map (.dgn file), and summary sheet(s) (.docx files).

All spreadsheets shall be created using Excel (.xls files). Before the final spreadsheets are submitted, as part of each of the Final Deliverable Packages, a preliminary copy (both hard copy and electronic format) shall be submitted to the MDOT Project Manager for review and approval as to form and content.

The Final Deliverable Package shall be submitted on or before **March 15, 2014**. The Final Deliverable Package shall include items under CONSULTANT RESPONSIBILITIES.

All work shall conform to current applicable MDOT, FHWA, and AASHTO practices, guidelines, policies, and standards (i.e. Roadside Design Guide, AASHTO Road Side Design Guide, AASHTO A Policy on Geometric Design of Highways and Streets, Michigan Manual of Uniform Traffic Control Devices, etc.).

## **THE PRELIMINARY AND FINAL SCOPING PACKAGES**

The Preliminary and Final Scoping Packages shall contain the following, and shall be assembled in the order as listed.

### **1. Location Map**

A location map shall show a map of the project area showing the roadway name, roadway number, project beginning, project ending, project length, major cross streets, design speed, and local municipalities affected. The Location Map shall be presented on a regular letter size paper (8 1/2" x 11").

### **2. Scoping Package Sign Off Sheet**

A sheet listing the members of the Consultant's Scoping Team (the members name, members signature and area of contribution).

### **3. Detail Project Summary**

Include a complete written description and explanation of the entire project scope. This should include the existing condition and proposed condition.

### **4. Scoping Checklists**

Also include a completed Statewide Scoping Package Master Checklist – Road and a completed Road Scoping Report & Details Worksheet.

### **5. Three Detailed Cost Estimates**

Estimates are to be as detailed as possible. They shall be developed using the most recent MDOT Pay Items and are to be provided as detailed in the Statewide Scoping Package Master Checklist. Individual Pay Item costs shall be rolled up into a Construction Cost. Note assumptions made in determining the estimated cost. Also include estimates for any additional option analyzed.

### **6. MDOT Pavement Recommendations and Soils Information**

The actual pavement and soils information and recommendation as provided by MDOT (ie: memo, letter, e-mail, etc.).

### **7. Maintaining Traffic Recommendation**

The written recommendation for maintaining traffic and the maintaining traffic typicals, Mobility Analysis, and all required documentation as detailed under CONSULTANT RESPONSIBILITIES.

### **8. Crash Analysis and Countermeasure Recommendation**

Traffic analysis and safety review with a summary of countermeasure recommendation(s) which shall include each location's crash pattern and countermeasure individually listed along with the associated ROW impacts (area and type) and construction cost estimate. All required information for any anticipated design exceptions.

**9. Table of Values for Determination of Scope Conformance to 3R/4R and Design Elements**

Prepare a table of the values used for the evaluation of the elements as listed in Attachment E and 3R/4R Guidelines for non-freeway jobs. The table shall, at a minimum, contain the following: minimum values as per design standards for the associated design element, reference where the minimum value as per design standards were derived from, all values used to determine conformance, where values used for conformance were derived from and all formulas used for the calculation of values.

**10. Supporting Photographs**

Provide actual photographs and digital files ( .jpg files on attached CD ROM) of the existing roadway and roadside conditions to document the needs as identified in the project scope. The photographs included in the documents shall be 4" x 6", in color, labeled with the location, direction from which the picture was taken, date, particular feature needing improvement and the approximate mile point. No fewer than 8 and no greater than 24 photos per project location are required.

**11. Existing and Proposed Typical Cross Sections**

Prepare existing typical cross sections and proposed typical cross sections - generally one per standard cross section area (i.e. if the road changes from a three lane to a five lane section, a cross section for the three lane and for the five lane sections will be needed).

The typical cross sections, for each standard cross section area, are to be created on 8 ½" x 11" sheets, with the existing typical cross section for the standard cross section area, drawn above the proposed typical cross section for the same standard cross section area.

The existing typicals for each standard cross section shall detail the existing conditions (pavement type, lane width, curb and gutter, shoulders, side slopes, ditch locations, setback to existing right of way limits, storm sewer/drainage structure locations, etc.). The proposed typicals for each standard cross section shall detail the proposed pavement treatments (cold mill, resurface or reconstruct, etc.). The proposed typicals shall also show new lane widths, curb and gutter/shoulders, drainage structures (new, adjusted or tapped into existing), storm sewers and ditches, etc..

The MDOT reviewer, by viewing the typical cross sections, should be able to understand the existing pavement section, the proposed pavement section, and all of the work that is expected to implement the project. For example, if additional right of way will be required, the typicals should provide a visual explanation as to why so that the MDOT reviewers can evaluate options.

**12. Base Map**

Generate a Base Map, created electronically using the MicroStation design software and formatted as described in DELIVERABLES, of the existing roadway using information from old plans, and/or, on site field reviews. The Strip Map is used to visually describe the existing roadway within the limits of the project on one page. The project limits for this task shall be defined as the greater of either 400 feet beyond the Point of Beginning (POB) and the Point of Ending (POE) or the limits needed to fully accommodate the maintaining traffic limits. The detail of the Base Map is to include the

location of existing roadways, bridges, railroads and cross roads. The Base Map is to show all existing features; i.e. edge of pavements, edge of shoulders, curb lines, drainage courses etc. and label all roads, railroads and drainage features. The Base Map is to represent existing conditions without showing proposed work.

**13. Environmental Impacts**

Document potential environmental impacts within the project limits including but not limited to wetlands, historic properties, recreation properties, noise, and tree removals.

**14. Field Notes/Quantity Calculations/Miscellaneous Information**

As-Builts/Old Plans, current sufficiency report, condition reports of existing sewers and culverts if available, maintenance log sheets if available, Pavement Historical Data (PHD) Data is available, ROW sheets with impacts highlighted, and existing utility information. Information which is available, but does not fit into any of the previously mentioned section.

**15. Correspondence (MDOT, Utility, Local and Other)**

Actual correspondence sent and received, organized by correspondent, in order of latest date.

**16. Minutes from Scope Review Meeting**

Project specific notes from the Scope Review Meeting.

**17. Scoping Project Record**

**ATTACHMENT B**  
**CS 46061, 46062 - JN 118634**  
**Road Scoping on US-223 in Lenawee County**

**MONTHLY PROGRESS REPORTS**

The first two pages of this attachment are the necessary layout of the Monthly progress reports and the last three pages are a completed example.

**Control Section 30062**  
**Job Number 77023**  
**Structure Number S00**  
**Date 00/00/03**

**MONTHLY PROGRESS REPORT**

- A. Work accomplished during the previous month.
- B. Anticipated work items for the upcoming month.
- C. Real or anticipated problems on the project.
- D. Update of previously approved detailed project schedule (attached), including explanations for any delays or changes.
- E. Items needed from MDOT.
- F. Copy of Verbal Contact Records for the period (attached).

**CS 46061, 46062 - JN 118634**  
**Road Scoping on US-223 in Lenawee County**  
 Scoping Schedule as of 00/00/03

Original Authorized Start Date	Original Authorized Finish Date	(Anticipated) or <b>Actual</b> Start Dates	(Anticipated) or <b>Actual</b> Finish Dates	Task Description
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	Initial Project Meeting.
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	Maintaining Traffic Meeting.
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	Field Work and Documentation.
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	Local Coordination Letters (first).
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	Review, Check and Analyze Field Data.
00/00/00	(00/00/00)	00/00/00	<b>00/00/00</b>	Generate Base Map, Base Sheets, Cross Sections, Maintaining Traffic Typical.
00/00/00	(00/00/00)	00/00/00	<b>00/00/00</b>	Perform Crash Analysis and Determine Countermeasures.
00/00/00	(00/00/00)	00/00/00	<b>00/00/00</b>	CPM Schedule.
00/00/00	(00/00/00)	00/00/00	<b>00/00/00</b>	Prepare Write Up for Maintaining Traffic.
00/00/00	(00/00/00)	00/00/00	<b>00/00/00</b>	Submit Utility Requests.
00/00/00	(00/00/00)	00/00/00	<b>00/00/00</b>	Submit Preliminary Scoping Package.
00/00/00	(00/00/00)	00/00/00	<b>00/00/00</b>	Scope Review Meeting.
00/00/00	(00/00/00)	00/00/00	<b>00/00/00</b>	Local Coordination Letters (second).
00/00/00	(00/00/00)	00/00/00	<b>00/00/00</b>	Submit Final Scoping Package.
00/00/00	(00/00/00)	00/00/00	<b>00/00/00</b>	Local Coordination Letters (third).
00/00/00	(00/00/00)	00/00/00	<b>00/00/00</b>	Submit Final Deliverable Package.

**VERBAL CONTACT RECORD**

**Control Section 30062  
Job Number 77023**

**Structure Number N/A**

**Date 00/00/03**

Joe Engineer talked to Joe Safety and decided to use a 0.05'/ft super on ramp A leading into the bridge.

**ATTACHMENT C**  
**CS 46061, 46062 - JN 118634**  
**Road Scoping on US-223 in Lenawee County**

**DEVELOP MAINTAINING TRAFFIC CONCEPT FOR EACH PROJECT LOCATION INCLUDING REQUIRED INFORMATION FOR MOBILITY AND SAFETY REVIEW.**

**1. SCOPE**

This procedure covers the development of a concept to maintain and control traffic during construction.

**2. WORK STEPS**

- A. Review the type of construction task(s) included in the project.
- B. Contact the MDOT Project Manager and request a meeting with the Jackson TSC Traffic & Safety Engineer (allow a minimum of two (2) weeks for a meeting date to be determined). Review the traffic data and the project site to determine project specific construction zone traffic requirements. Requirements shall be consistent with the constraints identified at the meeting with the Jackson TSC Traffic & Safety Engineer. Any necessary or recommended exceptions shall be clearly identified and justification provided.
- C. Using the given project specific constraints, develop alternatives for preliminary maintaining traffic concepts.
- D. Submit preliminary alternatives to the MDOT Project Manager for review and recommendations on which concepts to proceed with further analysis.
- E. For each selected concept:
  - Evaluate the mobility impacts using the procedures outlined in the MDOT Work Zone Safety and Mobility Manual.
  - Determine whether or not the concept is significant per the MDOT Work Zone Safety and Mobility Manual.
  - Prepare a preliminary cost estimate for traffic control.
- F. For the selected alternative, create a preliminary Transportation Management Plan (TMP) including a Temporary Traffic Control Plan (TTCP), Transportation Operations Plan (TOP), and Public Information Plan (PIP) as outlined in the MDOT Work Zone Safety and Mobility Manual. Items the shall be included in the preliminary TMP at a minimum are:
  1. Constraints as identified by the Jackson TSC Traffic and Safety Engineer.
  2. Method for maintaining traffic. Typical and non-typical areas shall be addressed.

All areas where the pavement widths are narrower than typical shall be clearly noted and the recommendations for maintaining traffic shall address these areas.

3. Exceptions to constraints as identified by the Jackson TSC Traffic and Safety Engineer. Justification shall be required for any exceptions.
  4. Need for detour, staging and/or flagging operation.
  5. Need for temporary widenings and/or shoulder upgrading.
  6. Time constraints and laneage requirements (number and width).
  7. Method for maintaining traffic at cross streets.
  8. Local considerations (school buses, emergency vehicles, large traffic generators, etc.).
  9. Need for temporary traffic signals (a minimum of two signal heads in view at all times).
  10. Construction zone speed limits.
  11. Special events (parades, festivals, etc.).
  12. Recommendations for expedited construction.
  13. Statement regarding the cost of maintaining traffic as a percentage of the total project cost.
- G. Based on the preliminary written recommendation (developed above), prepare maintaining traffic typicals. Typicals shall be prepared using the existing typical cross sections developed under CONSULTANT RESPONSIBILITIES.
- H. Submit the final preliminary TMP and maintaining traffic typical with the Final Scoping Package.
- I. Verify and include the cost for maintaining traffic in the cost estimate as detailed in the MDOT Scoping Manual.

**ATTACHMENT D**  
**CS 46061, 46062 - JN 118634**  
**Road Scoping on US-223 in Lenawee County**

**13 Design Elements Subject to Formal Exceptions**

- I. Design Speed
- II. Lane Width
- III. Shoulder Width
- IV. Bridge Width
- V. Structural Capacity
- VI. Horizontal Alignment
- VII. Vertical Alignment
- VIII. Grade
- IX. Stopping Sight Distance
- X. Cross Slope
- XI. Superelevation
- XII. Vertical Clearance
- XIII. Horizontal Clearance (not including clear zone)

**ATTACHMENT E**  
**CS 46061, 46062 - JN 118634**  
**Road Scoping on US-223 in Lenawee County**

**Preliminary Utility Information Submittal (for each project location)**

Submittals to all of the utility companies are to include:

- a completed MDOT approved form (fillable copy of form 2480 to be provided by MDOT)
  
- two (2) copies of:
  - Location Map
  - Base Map
  - Base Sheets

Utility information is to be marked on the provided sheets and returned to:

**MDOT Utility Coordinator:** MDOT - Jackson TSC  
Design/Utilities Engineer  
2750 N. Elm Rd.  
Jackson, MI 49201

Requests for preliminary utility information are to be mailed after the delivery of the Preliminary Scoping Package to MDOT. A copy of the completed MDOT approved form for each company contacted and any specific utility information which will be provided by the MDOT Jackson TSC Utility Engineer is to be included in the Final Scoping Package.

MDOT is to provide the Consultant a list of the utility companies present within the control section(s) of the project.