

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

|  |   |   |   |
|--|---|---|---|
|  | REQUISITION NUMBER  | DUE DATE  | TIME DUE  |
| MDOT PROJECT MANAGER   | JOB NUMBER (JN)   | CONTROL SECTION (CS)  |   |
| DESCRIPTION  |   |   |   |
| <b>MDOT PROJECT MANAGER:</b> Check all items to be included in RFP<br><br>WHITE = REQUIRED<br>** = OPTIONAL<br><br>Check the appropriate Tier in the box below |   | <b>CONSULTANT:</b> Provide only checked items below in proposal |   |
| <input type="checkbox"/><br><b>TIER I</b><br>(\$50,000 - \$150,000)  | <input type="checkbox"/><br><b>TIER II</b><br>(\$150,000-\$1,000,000) | <input type="checkbox"/><br><b>TIER III</b><br>(>\$1,000,000)   |   |
| <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**

ENGINEERING SERVICES                       BUREAU OF TRANSPORTATION PLANNING                       OTHER

THE SERVICE WAS POSTED ON THE ANTICIPATED QUARTERLY REQUESTS FOR PROPOSALS  
 NO     YES    DATED \_\_\_\_\_ THROUGH \_\_\_\_\_

|   |   |
|---|---|
| <input type="checkbox"/> <b>Prequalified Services</b> – See the attached Scope of Services for required Prequalification Classifications. | <input type="checkbox"/> <b>Non-Prequalified Services</b> – 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. <b>Form 5100J is required with Proposal for firms not currently prequalified with MDOT</b> |
|---|---|

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

**For all Qualifications Based Selections**, the selection team will review the information submitted and will select the firm considered most qualified to perform the services based on the proposals. The selected 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 Based Selection / 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.

**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) with 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.

**PARTNERSHIP CHARTER AGREEMENT**

MDOT and ACEC created a Partnership Charter Agreement which establishes guidelines to assist MDOT and Consultants in successful partnering. Both the Consultant and MDOT Project Manager are reminded to review the [ACEC-MDOT Partnership Charter Agreement](#) and are asked to follow all communications, issues resolution and other procedures and guidance’s contained therein.

**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  
TRAFFIC AND SAFETY DESIGN SERVICES  
Revised as of August 18, 2014  
Survey Scope included**

**CONTROL SECTION(S):** 84900

**JOB NUMBER(S):** 124607A

**PROJECT LOCATION:**

The project is located at the following project locations:

1. 82132-01-001 M-3 (Conn) Randolph @ Larned Street
2. 82072-01-009 M-3 (Gratiot) @ St. Antoine Street
3. 82062-01-035 US-12 (Michigan) @ 3rd
4. 82151-01-001 M-53 (Van Dyke) @ Harper
5. 82112-01-001 M-10 (Lodge) SB Service Drive @ Chicago
6. 82123-01-106 I-96 (Jeffries) WB off ramp @ Joy Road
7. 82073-01-007 M-85 (Fort Street) @ Springwells Street/Westend Street
8. 82121-01-059 M-5 (Grand River) @ McIntyre Street (Removal only)
9. 82121-01-099 M-5 (Grand River) @ Burt Road
10. 82072-01-008 M-3 (Gratiot) @ Beaubien Street
11. 82072-01-007 M-3 (Gratiot) @ Brush Street
12. 82071-01-009 I-75 SB Service Dr @ M-85 Conn. (Clark)
13. 82071-01-109 I-75 NB Service Dr @ M-85 (Clark)  
Splitting previously one signal into the above 2 signals
14. 82062-01-037 US-12 (Michigan) @ 1st (Removal only)
15. 82062-01-045 US-12 (Michigan) @ 6<sup>th</sup> (Removal only)
16. 82062-01-030 US-12 (Michigan) @ I-75 SB off ramp/20th (Remove 20th street signal only)
17. 82151-01-009 M-53 (Van Dyke) @ Outer Drive
18. 82121-01-095 M-5 @ Patton (radio only)

**PROJECT DESCRIPTION:**

Perform signal, sidewalk ramp design services, survey, geotechnical services and subsurface utility engineering for 18 signal locations as listed above.

No E-PROPOSAL is needed.

**ANTICIPATED SERVICE START DATE:** October 1, 2014

**ANTICIPATED SERVICE COMPLETION DATE:** March 3, 2017

**PRIMARY PREQUALIFICATION CLASSIFICATION:**

Traffic Signal Design

**SECONDARY PREQUALIFICATION CLASSIFICATION:**

Road Design Survey  
Right of Way Surveys  
Geotechnical Engineering Services  
Roads and Streets  
Pavement Marking  
Subsurface Utility Engineering

**DBE REQUIREMENT:** N/A

**MDOT PROJECT ENGINEER MANAGER:**

Erik Smalley, Engineer Manager  
Lansing, Division of Operations  
6333 Lansing Road, Lansing, MI 48917  
517-636-6108  
smalley@michigan.gov

**REQUIRED MDOT GUIDELINES AND STANDARDS:**

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

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

**GENERAL INFORMATION:**

The Consultant shall furnish, to the satisfaction of the Department, all services, labor and equipment necessary to provide signal, sidewalk ramp design services, surveys and geotechnical services for the locations signal design.

The Consultant shall furnish all services and labor necessary to perform the services described herein. The Consultant will also furnish materials, equipment, supplies, and incidentals necessary to perform the services (other than those designated in writing to be furnished by the Department), and check and/or test the materials, equipment, supplies, and incidentals as necessary in carrying out this work. The services will be performed to the satisfaction of the Department consistent with applicable professional standards.

## **CONSULTANT RESPONSIBILITIES:**

Complete the design of this project including, but not limited to the following:

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 Protective Equipment (PPE) policy as stated in the MDOT Guidance Document #10118.

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 design by the project plan completion date. Attention shall be given to critical target dates that may require a large lead time, such as geotechnical requirements, ROW submittal dates, Railroad coordination requirements, utility conflict resolution, local agency meetings, etc.

- A. Prepare plans, details, and specifications required for design and construction of electronic traffic control devices which may include all of the following:
  - 1. Modernization plans
  - 2. Sidewalk ramp plans (with pushbuttons as required)
  - 3. Right-of-way (ROW) plans including:
    - a. Preliminary ROW Plans
    - b. Marked Final ROW Plans
    - c. Property Legal Instruments
  - 4. Temporary signal plans as required for maintaining traffic during construction.
  - 5. Signal staging plans as required for maintaining traffic during construction.
  - 6. Pedestrian detour plans (if typical pedestrian detour plan is insufficient) as required for maintaining traffic during construction.
  - 7. Road design survey.
  - 8. Right of way surveys.
  - 9. Geotechnical engineering services.
  - 10. Pavement marking plans.
  - 11. Subsurface Utility Engineering.
  
- B. Distribute proposed plans (as required), details (as required), and specifications (as required) at the following design stages:
  - 1. Base plans (typically using survey file provided by MDOT)
  - 2. Preliminary ROW plans
  - 3. Preliminary plans
  - 4. Final ROW plans
  - 5. OEC plans
  - 6. Final plans
  
- C. Schedule, attend, and provide meeting minutes for project related meetings as directed by the MDOT Project Manager including:
  - 1. Site review meeting.

2. Kick off meeting.
  3. Radio Interconnect field survey (as required)
    - a. Document results on the Signal Radio Survey Form #1516:  
[http://mdotwas1.mdot.state.mi.us/public/webforms/detail.cfm?ALLFORMS\\_FormNumber=1516](http://mdotwas1.mdot.state.mi.us/public/webforms/detail.cfm?ALLFORMS_FormNumber=1516)
  4. Plan review meeting at preliminary plan stage
  5. Utility coordination meeting (coordinate scheduling with utility coordinator)
    - a. Provide a utility conflict summary document to the utility engineer
  6. Utility coordination field meetings as required (coordinate scheduling with utility coordinator)
    - a. The consultant will stake proposed foundation locations in the field prior to any field utility coordination meeting.
    - b. Provide list of utility companies that should be invited for each location
    - c. Provide summary of known or potential utility conflicts by quadrant for each location
  7. Right-of-way meeting, if needed.
  8. OEC meeting prior to plan completion.
  9. Second OEC meeting, if needed.
  10. For design related meetings, the consultant is responsible for inviting the following personnel:
    - a. All local and maintaining agencies
    - b. The following MDOT personnel:  
 TSC Traffic & Safety Engineer, Region Development Engineer, TSC Construction Engineer, Utility Engineer, Electrician, Maintenance Supervisor, Region Traffic Safety & Operations Engineer, Environmental Coordinator, Region Real Estate Property Manager, Lansing Signals Design, Lansing Signals Operations, and Project Manager
- D. Perform any design/coordination tasks with any railroad company involved within the project limits, including (but not limited to):
1. Determine railroad contact person(s)
  2. Complete any applications required by the railroad company to perform the proposed traffic signal work.
  3. Coordinate with railroad company to get the requested all applications/permits needed to complete the work.
- E. Compute and verify all plan quantities.
- F. Provide solutions to any unique problems that may arise during the design of this project.
- G. Maintain a Design Project Record which includes a history of significant events (changes, comments, etc.) which influenced the development of the plans, dates of submittals and receipt of information.
- H. Prepare and submit electronically (native format or Adobe PDF) any design information or calculations.

- I. The MDOT Project Manager shall be the official MDOT contact person for the Consultant **and shall be made aware of all communications regarding this project.** The Consultant must either address or send a copy of all correspondence to the MDOT Project Manager. This includes all Subcontractor correspondence and verbal contact records.
- J. The Consultant shall contact the MDOT Project Manager whenever discoveries or design alternatives have the potential to require changes in the scope, limits, quantities, costs, or right-of-way of the project.
- K. Submit RID documents in the required format(s).

### **UTILITIES**

The Consultant shall be responsible for obtaining and showing on the plans 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 plans or design details and provide assistance as directed by the MDOT Utility Coordinator and/or Project Manager. The Consultant shall attend any utility meetings called to ensure that the concerns are addressed on the plans involving utilities. In addition, consultant shall be responsible for subsurface engineering.

### **TRAFFIC CONTROL**

The Consultant shall be responsible for all traffic control required to perform the tasks as outlined in this Scope of Design Services.

### **MONTHLY PROGRESS REPORT**

On the first Monday of each month, the Consultant Project Manager shall submit a progress report of the previous month's activities, as well as a plan for the current month's activities to the Project Manager.

### **MDOT RESPONSIBILITIES**

MDOT staff will:

- Receive and pass on all utility information
- Assist in scheduling and conducting utility coordination meeting(s)
- Coordinate any necessary utility relocation
- Furnish Special Details and pertinent reference materials
- Provide layout request, existing signal plan (if available), and timing permits
- Review and comment on the submittals. Additional submittals may be required depending on completeness and accuracy of those submitted.

### **DELIVERABLES:**

The Consultant shall deliver all computer files associated with the project in their native format (spreadsheets, CADD files, GEOPAK files, etc.) on DVD, CD or uploaded to FTP website, as directed by the MDOT Project Manager. All road-related CADD/GEOPAK files shall be created and identified with standard MDOT file names as shown in Appendix A of the Road Design Manual. All signal related CADD files shall be identified with standard MDOT signal file

names as shown in the following link:

[http://mdotwas1.mdot.state.mi.us/public/tands/Details\\_Web/mdot\\_signal\\_consult\\_v8.pdf](http://mdotwas1.mdot.state.mi.us/public/tands/Details_Web/mdot_signal_consult_v8.pdf). It is the Consultant's responsibility to obtain updated MicroStation and GEOPAK seed/configuration files necessary to comply with MDOT's CADD standards which are posted to the bulletin board system. When the use of GEOPAK road design software is necessary to develop plans all pay items shall be placed into the CADD file using GEOPAK's Design and Computation Manager so that Quantity Manager can be used to transfer pay item information to SAPW/Trns\*port. Any CADD/GEOPAK files that do not conform to MDOT standards will be returned to the Consultant for correction at the Consultant's expense.

Plan files shall be submitted in their native .dgn format with standard naming conventions as well as plotted into a combined Adobe PDF file. Plan sheets shall be plotted to Adobe PDF with full text search and level on/off capabilities in 11" x 17" format ( 8 1/2" x 11" for log jobs). A title sheet shall be plotted stamped and signed then scanned for inclusion with the Adobe PDF set. The original title sheet will be sent to the MDOT Project Manager.

Stand Alone Proposal Estimator's Worksheet (SAPW) shall be used to generate the .txt and .csv files necessary for import into the Trns\*port bid letting software. The SAPW files shall be transmitted electronically by the method specified by the MDOT Project Manager.

The proposed signal plans will typically require a scale of 1"=30' when plotted to 11" x 17". Full traffic signals must also include quadrant details at a 1"=10' scale showing all utilities and proposed facilities.

Other plan sheets that are required for this project shall be completed by the Consultant. These include, but are not limited to the following plan sheets:

- A. The title sheet. MDOT will provide a map of the area on a disk in our workstation format. If the map is not available, MDOT will provide a map that could be used. The Consultant shall be responsible for any revisions to the title sheet and the title sheet and map shall meet MDOT format and layout guidelines.
- B. Sidewalk ramp plans with pushbuttons (as required) including existing and proposed grades
- C. Right-of-way plans including:
  - 1. Section and government corners
  - 2. Consents to reconstruct sidewalk
  - 3. Grading limits
- D. Surveys plans includes, but no limited to:
  - 1. Requested map scale: 1" = 30'.
  - 2. Topo and ADA ramp survey.
  - 3. Property government corners.
  - 4. Property legal ROW determination.
  - 5. For utility and drainage: surface manifestations only.

6. For terrain mapping: hard surface shots with defining ADA ramp description.
7. For requested project deliverables:
  - CADD/Electronic files meeting MDOT standards/Workspace.
  - Survey reports & deliverables electronic portfolio.
  - Contours. Contours interval = 0.50 feet.
  - 3D Microstation files.
8. Additional survey comments:

Topographic survey includes: Intersection geometry from tangent to tangent and 200' beyond tangents; All visible utilities and all MISS DIG utility markings (note surveyor must call in MISS DIG at least 14 days prior to survey to ensure they are marked. Please inform us when MISS DIG utilities are marked).

Right of way survey includes: Defining location of existing ROW lines; ROW information must be sufficient for acquisition of additional ROW if needed; Topographic limits must include all existing ADA ramps, all traffic signal equipment, and 20' behind ROW line; ROW survey to include staking and/or painting of ROW lines (Please notify us prior to staking/painting).

ADA ramp survey includes: Elevations of back of curb and gutter (edge and flowline) every 3' along the radii from tangent to tangent (and 20 feet beyond any existing ramps); Any drainage (or other) structures in or adjacent to the curb and gutter must be mapped to facilitate ADA ramp design.

- E. Radio interconnect plan (as required), showing location of antennas, masters, repeaters, and remotes per the completed radio survey.
- F. Construction staging and maintaining pedestrian access plans including:
  1. Temporary signal plans for road or bridge projects
  2. Signal staging plans for road or bridge projects
  3. Pedestrian detour plans (if typical pedestrian detour plan is insufficient) may be included as 8 1/2"x11" sheets within the maintaining traffic special provision or in the plans as 11"x17" sheets.
- G. Geotechnical Engineering Services plans including:
  1. Soil investigations.
  2. Strain pole foundation recommendation.
  3. Plans in both PDF and DGN formats.
- H. Pavement marking plan(s).
- I. Utility contact sheet listing the contact names and phone numbers for each utility having facilities within the project limits
- J. Note Sheet.

~~K.~~ Witness and benchmark sheet(s). ~~Survey information will be provided by MDOT.~~

~~L.~~ Soil boring log sheet(s). ~~Soil boring information will be provided by MDOT.~~

M. Project specific Special Details

All plans, special provisions, estimates, and other project related items shall meet MDOT requirements and detailing practices (i.e., format, materials, symbols, patterns, and layout) or as otherwise directed by the Project Manager. All plans, specifications, and other project related items are subject to review and approval by MDOT.

**PROJECT SCHEDULE:**

The Consultant shall use the following events 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 Consultant’s Monthly Progress Reports.

MDOT  
Preconstruction Tasks  
Consultant Checklist  
P/PMS Form Only

**MDOT PRECONSTRUCTION TASKS  
CONSULTANT CHECKLIST**

Version 6  
Updated  
05/18/2011

Please indicate with a check in the box next to each task number whether you believe that task will require consultant involvement on the job. Milestones (a specific event at a point in time) are italicized and underlined. See the [P/PMS Task Manual](#) for more details. Scheduling assistance may be accomplished with estimated completion dates. While not part of P/PMS, an Authorization Milestone and Post-Design Tasks have been included for your reference.

**STUDY (EARLY PRELIMINARY ENGINEERING)**

|                                    |                          | <b>P/PMS TASK NUMBER AND DESCRIPTION</b>  | <b>DATE TO BE COMPLETED BY</b><br>(mm/dd/yyyy) |          |
|------------------------------------|--------------------------|---|--|----------|
| <b>YES</b>                         | <b>NO</b>                | <b>CONSULTANT CONTRACT AUTHORIZATION/EXECUTION</b>                              | <b>/</b>                                       | <b>/</b> |
| <b><u>EPE SCOPING ANALYSIS</u></b> |                          |   |  |          |
| <input type="checkbox"/>           | <input type="checkbox"/> | 2100 Scope Verification and Initiation of EPE Activities                        | /  | /        |
| <input type="checkbox"/>           | <input type="checkbox"/> | <i><u>210M Program &amp; Project Review Board Concurrence</u></i>               | /  | /        |
| <input type="checkbox"/>           | <input type="checkbox"/> | 2115 Traffic Data Collection  | /  | /        |
| <input type="checkbox"/>           | <input type="checkbox"/> | 2120 Prepare Traffic Analysis Report  | /  | /        |
| <input type="checkbox"/>           | <input type="checkbox"/> | 2125 Traffic Capacity Analysis  | /  | /        |
| <input type="checkbox"/>           | <input type="checkbox"/> | 2130 Prepare Project Justification  | /  | /        |
| <input type="checkbox"/>           | <input type="checkbox"/> | <i><u>213M Concurrence by Regulatory Agencies with the Purpose and Need</u></i> | /  | /        |
| <input type="checkbox"/>           | <input type="checkbox"/> | 2140 Develop and Review Illustrative Alternatives                               | /  | /        |
| <input type="checkbox"/>           | <input type="checkbox"/> | 2155 Request/Perform Safety Analysis  | /  | /        |
| <input type="checkbox"/>           | <input type="checkbox"/> | 2160 Prepare and Review EIS Scoping Document                                    | /  | /        |
| <input type="checkbox"/>           | <input type="checkbox"/> | <i><u>211M Public Information Meeting</u></i>                                   | /  | /        |

**EPE DRAFT ANALYSIS**

|                          |                          |             |   |   |   |
|--------------------------|--------------------------|-------------|---|---|---|
| <input type="checkbox"/> | <input type="checkbox"/> | 2310        | Conduct Technical SEE Studies             | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | 2311        | Cultural Resources Survey                 | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | 2312        | Recreational Survey – Section 4(f)/6(f)   | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | 2313        | Endangered Species Survey                 | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | 2314        | Wetland Assessment                        | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | 2315        | Wetland Mitigation                        | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | 2316        | Other Technical Reports                   | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | 2321        | Prepare for Aerial Photography            | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | 2322        | Finish/Print Aerial Photography           | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | 2330        | Collect EPE Geotechnical Data             | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | 2340        | Develop and Review Practical Alternatives | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | <u>233M</u> | <u>Aerial Photography Flight</u>          | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | 2360        | Prepare and Review EA                     | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | <u>231M</u> | <u>Approval of EA by FHWA</u>             | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | 2370        | Prepare and Review Draft EIS              | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | <u>237M</u> | <u>Approval of Draft EIS by FHWA</u>      | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | 2380        | Distribute EA                             | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | <u>232M</u> | <u>Public Hearing for EA</u>              | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | 2390        | Distribute DEIS                           | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | <u>239M</u> | <u>Public Hearing for DEIS</u>            | / | / |

**MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST**

**STUDY (EARLY PRELIMINARY ENGINEERING) (cont'd)**

|                                  |                          | <b>P/PMS TASK NUMBER AND DESCRIPTION</b> | <b>DATE TO BE COMPLETED BY</b>  |     |
|----------------------------------|--------------------------|--|---|-----|
| <b>YES</b>                       | <b>NO</b>                |  | <b>(mm/dd/yyyy)</b>   |     |
| <b><u>EPE FINAL ANALYSIS</u></b> |                          |  |   |     |
| <input type="checkbox"/>         | <input type="checkbox"/> | 2510                                     | Determine and Review Recommended Alternative                            | / / |
| <input type="checkbox"/>         | <input type="checkbox"/> | <u>250M</u>                              | <u>Concurrence by Regulatory Agencies with Recommended Alternatives</u> | / / |
| <input type="checkbox"/>         | <input type="checkbox"/> | 2525                                     | Prepare and Review Engineering Report                                   | / / |
| <input type="checkbox"/>         | <input type="checkbox"/> | 2530                                     | Prepare and Review Request for FONSI                                    | / / |
| <input type="checkbox"/>         | <input type="checkbox"/> | <u>252M</u>                              | <u>Approval of FONSI by FHWA</u>  | / / |
| <input type="checkbox"/>         | <input type="checkbox"/> | 2540                                     | Prepare and Review FEIS   | / / |
| <input type="checkbox"/>         | <input type="checkbox"/> | <u>254M</u>                              | <u>Approval of FEIS by FHWA</u>   | / / |
| <input type="checkbox"/>         | <input type="checkbox"/> | 2550                                     | Obtain ROD  | / / |
| <input type="checkbox"/>         | <input type="checkbox"/> | <u>255M</u>                              | <u>ROD Issued by FHWA</u>   | / / |
| <input type="checkbox"/>         | <input type="checkbox"/> | 2570                                     | ITS Concept of Operations   | / / |

**CONTAMINATION INVESTIGATION**

|                          |                          |      |  |   |   |
|--------------------------|--------------------------|------|--|---|---|
| <input type="checkbox"/> | <input type="checkbox"/> | 2810 | Project Area Contamination Survey (PCS)                | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | 2820 | Preliminary Site Investigation (PSI) for Contamination | / | / |

**PRELIMINARY ENGINEERING - DESIGN**

**DESIGN SCOPE VERIFICATION AND BASE PLAN PREPARATION**

|                                     |                          |             |   |   |   |
|-------------------------------------|--------------------------|-------------|---|---|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3130        | Verify Design Scope of Work and Cost        | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3310        | Prepare Aerial Topographic Mapping          | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3320        | Conduct Photogrammetric Control Survey      | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3321        | Set Aerial Photo Targets                    | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3330        | Conduct Design Survey                       | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3340        | Conduct Structure Survey                    | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3350        | Conduct Hydraulics Survey                   | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3360        | Prepare Base Plans                          | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>311M</u> | <u>Utility Notification</u>                 | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3361        | Review and Submit Preliminary ROW Plans     | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>331M</u> | <u>Preliminary ROW Plans Distributed</u>    | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3365        | Pre-Conceptual ITS Design and Meeting       | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3370        | Prepare Structure Study                     | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3375        | Conduct Value Engineering Study             | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3380        | Review Base Plans                           | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>332M</u> | <u>Base Plan Review (Pre-GI Inspection)</u> | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3390        | Develop the Maintaining Traffic Concepts    | / | / |

**MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST**

**PRELIMINARY ENGINEERING - DESIGN (cont'd)**

|   |                          | <b>P/PMS TASK NUMBER AND DESCRIPTION</b> |  | <b>DATE TO BE COMPLETED BY</b> |   |
|---|--------------------------|--|--|--------------------------------|---|
| <b>YES</b>                                  | <b>NO</b>                |  |  | <b>(mm/dd/yyyy)</b>            |   |
| <b><u>PRELIMINARY PLANS PREPARATION</u></b> |                          |  |  |                                |   |
| <input type="checkbox"/>                    | <input type="checkbox"/> | 3510                                     | Perform Roadway Geotechnical Investigation   | /                              | / |
| <input type="checkbox"/>                    | <input type="checkbox"/> | 3520                                     | Conduct Hydraulic/Hydrologic and Scour Analysis  | /                              | / |
| <input type="checkbox"/>                    | <input type="checkbox"/> | 3522                                     | Conduct Drainage Study, Storm Sewer Design, and use Structural Best Management Practices | /                              | / |
| <input type="checkbox"/>                    | <input type="checkbox"/> | 3530                                     | Conduct Structure Foundation Investigation   | /                              | / |
| <input type="checkbox"/>                    | <input type="checkbox"/> | 3535                                     | Conduct Structure Review for Architectural and Aesthetic Improvements                    | /                              | / |
| <input type="checkbox"/>                    | <input type="checkbox"/> | 3540                                     | Develop the Maintaining Traffic Plan   | /                              | / |
| <input checked="" type="checkbox"/>         | <input type="checkbox"/> | 3551                                     | Prepare/Review Preliminary Traffic Signal Design Plan                                    | /                              | / |

|                                     |                          |             |  |   |   |
|-------------------------------------|--------------------------|-------------|--|---|---|
| <input type="checkbox"/>            | <input type="checkbox"/> | 3552        | Develop Preliminary Pavement Marking Plan            | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3553        | Develop Preliminary Non-Freeway Signing Plan         | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3554        | Develop Preliminary Freeway Signing Plan             | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3555        | Prepare/Review Preliminary Traffic Signal Operations | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3570        | Prepare Preliminary Structure Plans                  | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3580        | Develop Preliminary Plans                            | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3581        | Review and Submit Final ROW Plans                    | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | <u>351M</u> | <u>Final ROW Plans Distributed</u>                   | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3585        | Final ITS Concept Design and Meeting                 | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3590        | Review Preliminary Plans (Hold Plan Review Meeting)  | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>352M</u> | <u>THE Plan Review (Grade Inspection)</u>            | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3595        | Conduct ITS Structure Foundation Investigation       | / | / |

**UTILITIES**

|                                     |                          |             |  |   |   |
|-------------------------------------|--------------------------|-------------|--|---|---|
| <b>x</b>                            |                          | 3610        | Compile Utility Information                          | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3615        | Compile ITS Utility Information                      | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3650        | Coordinate RR Involvement for Grade Separations      | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3655        | Coordinate RR Involvement for At-Grade Crossings     | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3660        | Resolve Utility Issues                               | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>360M</u> | <u>Utility Conflict Resolution Plan Distribution</u> | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>361M</u> | <u>Utility Meeting</u>                               | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3670        | Develop Municipal Utility Plans                      | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3672        | Develop Special Drainage Structures Plans            | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3675        | Develop Electrical Plans                             | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3680        | Preliminary ITS Communication Analysis               | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3690        | Power Design (Power Drop in Field)                   | / | / |

**MITIGATION/PERMITS**

|                          |                          |      |  |   |   |
|--------------------------|--------------------------|------|--|---|---|
| <input type="checkbox"/> | <input type="checkbox"/> | 3710 | Develop Required Mitigation                | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | 3720 | Assemble Environmental Permit Applications | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | 3730 | Obtain Environmental Permit                | / | / |

**MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST**

**PRELIMINARY ENGINEERING - DESIGN (cont'd)**

|                                      |                          | <b>P/PMS TASK NUMBER AND DESCRIPTION</b> |   | <b>DATE TO BE COMPLETED BY</b> |   |
|--------------------------------------|--------------------------|--|---|--------------------------------|---|
| <b>YES</b>                           | <b>NO</b>                |  |   | <b>(mm/dd/yyyy)</b>            |   |
| <b><u>FINAL PLAN PREPARATION</u></b> |                          |  |   |                                |   |
| <input checked="" type="checkbox"/>  | <input type="checkbox"/> | 3821                                     | Prepare/Review Final Traffic Signal Design Plan | /                              | / |
| <input type="checkbox"/>             | <input type="checkbox"/> | 3822                                     | Complete Permanent Pavement Marking Plan        | /                              | / |
| <input type="checkbox"/>             | <input type="checkbox"/> | 3823                                     | Complete Non-Freeway Signing Plan               | /                              | / |
| <input type="checkbox"/>             | <input type="checkbox"/> | 3824                                     | Complete Freeway Signing Plan                   | /                              | / |
| <input type="checkbox"/>             | <input type="checkbox"/> | 3825                                     | Prepare/Review Final Traffic Signal Operations  | /                              | / |

|                                     |                          |             |  |   |   |
|-------------------------------------|--------------------------|-------------|--|---|---|
| <input type="checkbox"/>            | <input type="checkbox"/> | 3830        | Complete the Maintaining Traffic Plan            | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3840        | Develop Final Plans and Specifications           | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>380M</u> | <u>Plan Completion</u>                           | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3850        | Develop Structure Final Plans and Specifications | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3870        | Hold Omissions/Errors Check (OEC) Meeting        | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>387M</u> | <u>Omissions/Errors Checks Meeting</u>           | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>389M</u> | <u>Plan Turn-In</u>                              | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3880        | CPM Quality Assurance Review                     | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 3890        | Final ITS Communication Analysis                 | / | / |

## PRELIMINARY ENGINEERING – RIGHT OF WAY

### EARLY RIGHT OF WAY WORK

|                                     |                          |             |   |   |   |
|-------------------------------------|--------------------------|-------------|---|---|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4120        | Obtain Preliminary Title Commitments    | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4130        | Prepare Marked Final Right Of Way Plans | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>413M</u> | <u>Approved Marked Final ROW</u>        | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4140        | Prepare Property Legal Instruments      | / | / |

### ROW ACQUISITION

|                          |                          |             |  |   |   |
|--------------------------|--------------------------|-------------|--|---|---|
| <input type="checkbox"/> | <input type="checkbox"/> | 4411        | Preliminary Interviews   | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | <u>441M</u> | <u>Post-Decision Meeting</u>   | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | 4412        | Real Estate Services Assignment Proposal and Fee Estimate (Form 633s) for Appraisal Work Authorization | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | 4413        | Appraisal Reports  | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | 4420        | Appraisal Review Reports   | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | 4430        | Acquire Right Of Way Parcels   | / | / |
| <input type="checkbox"/> | <input type="checkbox"/> | 4510        | Conduct Right Of Way Survey & Staking  | / | / |

### ROW RELOCATION

|                                     |                          |             |                                  |   |   |
|-------------------------------------|--------------------------|-------------|----------------------------------|---|---|
| <input type="checkbox"/>            | <input type="checkbox"/> | 4710        | Relocation Assistance            | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 4720        | Prepare Improvement Removal Plan | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <u>442M</u> | <u>ROW Certification</u>         | / | / |

## MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

### POST LETTING/AWARD TASKS (for reference only)

|     |    | P/PMS TASK NUMBER AND DESCRIPTION | DATE TO BE COMPLETED BY |
|-----|----|-----------------------------------|-------------------------|
| YES | NO |                                   | (mm/dd/yyyy)            |

|                                     |                          |      |  |   |   |
|-------------------------------------|--------------------------|------|--|---|---|
| <input type="checkbox"/>            | <input type="checkbox"/> | 4810 | Complete Acquisition Process                     | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 4820 | Manage Excess Real Estate                        | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 4830 | Provide Post-Certification Relocation Assistance | / | / |
| <input type="checkbox"/>            | <input type="checkbox"/> | 4910 | Conduct ROW Monumentation                        | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 5010 | Construction Phase Engineering and Assistance    | / | / |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 5020 | Prepare As-Built Drawings                        | / | / |

### **FOR YOUR INFORMATION**

For questions on specific tasks, refer to the P/PMS Task Manual located on the MDOT Bulletin Board System.

For assistance in accessing this manual, please contact one of following:

**Dennis Kelley: (517) 373-4614**

### **PAYMENT SCHEDULE**

Compensation for this Scope of Services shall be on an actual cost plus fixed fee basis.

### **CONSULTANT PAYMENT – Actual Cost Plus Fixed Fee:**

Compensation for this project shall be on an **actual cost plus fixed fee** basis. This basis of payment typically includes an estimate of labor hours by classification or employee, hourly labor rates, applied overhead, other direct costs, subconsultant costs, and applied fixed fee. The fixed fee for profit allowed for this project is 11.0% of the cost of direct labor and overhead.

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 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.

Direct expenses, if applicable, will not be paid in excess of that allowed by the Department for its own employees in accordance with the State of Michigan's Standardized Travel Regulations. Supporting documentation must be submitted with the billing for all eligible expenses on the project in accordance with the Reimbursement Guidelines. The only hours that will be considered allowable charges for this contract are those that are directly attributable to the activities of this project.

MDOT will reimburse the consultant for vehicle expenses and the costs of travel to and from project sites in accordance with MDOT's Travel and Vehicle Expense Reimbursement Guidelines, dated May 1, 2013. The guidelines can be found at [http://www.michigan.gov/documents/mdot/Final\\_Travel\\_Guidelines\\_05-01-13\\_420289\\_7.pdf?20130509082418](http://www.michigan.gov/documents/mdot/Final_Travel_Guidelines_05-01-13_420289_7.pdf?20130509082418). MDOT's travel and vehicle expense reimbursement policies are intended primarily for construction engineering work. Reimbursement for travel to and from project sites and for vehicle expenses for all other types of work will be approved on a case by case basis.

MDOT will pay overtime in accordance with MDOT's Overtime Reimbursement Guidelines, dated May 1, 2013. The guidelines can be found at [http://www.michigan.gov/documents/mdot/Final\\_Overtime\\_Guidelines\\_05-01-13\\_420286\\_7.pdf?20130509081848](http://www.michigan.gov/documents/mdot/Final_Overtime_Guidelines_05-01-13_420286_7.pdf?20130509081848). MDOT's overtime reimbursement policies are intended primarily for construction engineering work. Overtime reimbursement for all other types of work will be approved on a case by case basis.

**ATTACHMENT A**  
**SCOPE OF SERVICE**  
**FOR**  
**DESIGN SURVEYS**  
March 2013

**Survey Limits: As needed for Design, Right of Way, and Construction. A description of**

survey limits detailing length, width and cross roads must be included in the Survey Work Plan.

**NOTES:** The Selected Consultant shall discuss the scope of this survey with an MDOT Region Surveyor or an MDOT Lansing Design Surveyor before submitting a priced proposal.

The Selected Consultant surveyor must contact the Region or TSC Traffic and Safety Engineer for work restrictions in the project area prior to submitting a priced proposal.

A **detailed Survey Work Plan must** be included in the project proposal. A **spreadsheet estimate** of hours by specific survey task such as horizontal control, leveling, mapping, alignment determination, etc., **must** be included in the **priced proposal**.

It is the responsibility of the Professional Surveyor to safeguard all corners of the United States Public Land Survey System, published Geodetic Control and any other Property Controlling corners that may be in danger of being destroyed by the proposed construction project.

#### **GENERAL REQUIREMENTS:**

1. Surveys must comply with **all Michigan law** relative to land surveying.
2. Surveys must be done under the **direct supervision** of a Professional Surveyor licensed to practice in the State of Michigan, according to Public Act 299 of 1980.
3. Work in any of the following categories of survey: Road Design, Structure, Hydraulic, Right-of-Way, Photogrammetric Ground Control, and/or Geodetic Control must be completed by a survey firm which is pre-qualified by MDOT for that category.
4. Surveys must meet all requirements of the Michigan Department of Transportation (MDOT) Design Surveys *Standards of Practice* dated March 2013. Please contact the MDOT Design Survey office to clarify any specific questions regarding these standards.
5. Consultants must obtain all necessary permits required to perform this survey on any public and/or private property, including an up-to-date permit from the MDOT Utilities Coordination and Permits Section.
6. Prior to performing the survey, the Consultant must contact all landowners upon whose lands they will enter. The contact may be personal, phone or letter, but must be documented. This notice must include the reasons for the survey on private land, the approximate time the survey is to take place, the extent of the survey including potential brush cutting (which must be minimized), and an MDOT contact person (the MDOT Project Manager or designate).

7. The Consultant must contact any and all Railroads prior to commencing field survey on railroad property. The cost for any permit, flaggers and/or training that is required by the Railroad will be considered as a direct cost, but only if included in the Consultant's priced proposal.
8. 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.
9. Consultants are responsible for a comprehensive and conscientious research of all records, including MDOT records, essential for the completion of this project.
10. Measurements, stationing, recorded data, and computations must be in **International Feet**, unless specified otherwise by the MDOT Project Manager.
11. Coordinate values shall be based upon the Michigan State Plane coordinate system NAD83. All elevations must be based upon the North American Vertical Datum of 1988 (NAVD88). The datums must be clearly stated in the Survey Work Plan and subsequent submittal.
12. **If paper copies are required**, the survey notes must be submitted to the Design Survey Unit in 10" by 12" divided portfolios with flap covers. As many portfolios should be used as are needed to contain all of the required documents and Compact Discs (CD's) or DVD's. Duplicate CD's must be included in the portfolio, with one set labeled "Region Surveyor". **Electronic submittal only unless specified otherwise.**
13. Each portfolio and CD must be labeled on the outside as in the following example:  
 Survey Notes for:  
 Route, Location and Project Limits [I-94 under Beaubien Street ]  
 Control Section [S06 of 82024] Job Number [45197D] Date [ *of submittal* ]  
 By [ *Name of Firm* ]  
 Michigan Professional Surveyor [ ] License # [ ]
14. Each submittal is to be divided into six sections. These sections are to be labeled as follows: **Administrative, Alignment, Control, Property, Mapping, and Miscellaneous.**
15. To be included in the Administrative section shall be a copy of the **Survey Project Portfolio QA/QC Check-off list**, March 2013 revision, available from the MDOT Survey Support Unit. This document shall be signed and certified by the Professional Surveyor responsible for the project QA/QC. It is highly recommended that the consultant become familiar with this document prior to preparing the proposal and again prior to assembling the final portfolio. **Failure to use and include this document may result in the immediate return of the project portfolio for completion.**
16. **All data**, whether electronic or paper, **must be recorded on non-rewritable Compact Discs (CD's) or DVD's.** All paper files, including MicroStation files, must be scanned

and/or converted to Adobe Acrobat .PDF format. It is not necessary to include raw survey data files in the Adobe file. CD's must be organized in the same manner as the portfolio, such as by Administrative section, Control section, etc. A Table of Contents in Adobe Acrobat format is required that has all .PDF pages of the CD bookmarked/linked so each place in the .PDF archive can be accessed with a single click of the computer mouse. Specified format files such as Microsoft Word and MicroStation must have separate access in native format outside of the .PDF file.

17. The MDOT Project Manager is the official contact for the Consultant. The Consultant must send a copy of all project correspondence to the MDOT Project Manager. The MDOT Project Manager shall be made aware of all communications regarding this project. Any survey related questions regarding this project should be directed to an MDOT Survey Consultant Project Manager or MDOT Region Surveyor. **The MDOT Project Manager must be copied on any and all correspondence.**

At the completion of this survey for this project, legible copies of all field survey notes, all electronic data, and all research records obtained for this project will be considered the property of MDOT and **must be sent to** the MDOT, Design Division, Supervising Land Surveyor, P.O. Box 30050, Lansing, MI 48909. Please use MDOT's Form 222(5/01) entitled "SURVEY NOTES: RECEIPT AND TRANSMITTAL" for all transmittals. A copy of this transmittal form must also be sent to the MDOT Project Manager for Design.

**Acceptance of this survey by the MDOT Supervising Land Surveyor and/or the MDOT Project Manager does not relieve the Consultant of any liability for the content of the survey.**

## **WORK RESTRICTIONS**

The Selected Consultant, and the Selected Consultant only, is advised to discuss Traffic Control scenarios with the MDOT Traffic and Safety Engineer at the closest MDOT TSC prior to submitting a priced proposal.

No work shall be performed or lane closures allowed during the Memorial Day, July 4<sup>th</sup>, or Labor Day holiday periods, as defined by the MDOT Project Manager or representative specifically designated by the Project Manager (the Traffic & Safety Engineer at the MDOT TSC).

Work on weekends, if approved, shall be as directed by the MDOT Project Manager or Designate.

The Consultant must call the MDOT Region or TSC Traffic and Safety Engineer before beginning work to inform him or her of surveying activity in the area. The MDOT Region or TSC must be notified at least two weeks prior to lane closures so advance notice can be posted on the Web site.

Traffic shall be maintained by the Consultant throughout the project in accordance with Sections 812, 922, 103.05 and 103.06 of the *Standard Specifications for Construction*, 2012 edition,

<http://mdotwas1.mdot.state.mi.us/public/specbook/2012/> and any Supplemental Specifications currently in effect clarifying the Standard Specifications for Construction. All traffic control devices shall conform to the current edition, as revised, of the *Michigan Manual of Uniform Traffic Control Devices* (MMUTCD). All warning signs for maintenance of traffic used on this project shall be fabricated with prismatic retro-reflective sheeting, and shall be set up five feet above ground.

The Consultant shall use MDOT standard “maintaining traffic” typicals for any and all closures. Typical MDOT traffic control diagrams are available on line at <http://mdotwas1.mdot.state.mi.us/public/tands/plans.cfm>

### **COORDINATION WITH OTHER CONTRACTS IN THE VICINITY**

The Consultant shall coordinate operations with contractors performing work on other projects within or adjacent to the Construction Influence Area (CIA).

MDOT maintenance crews and/or Contract Maintenance Agencies may perform maintenance work within or adjacent to the CIA. The Maintenance Division of MDOT and/or Contract Maintenance Agency will coordinate their operations with the MDOT Project Manager or Designate to minimize the interference to the Consultant.

The Consultant must contact the Development Engineer at the nearest MDOT TSC for information regarding project coordination.

The Consultant’s attention is called to the requirements of cooperation with others as covered in Article 104.08 of the 2012 Standard Specifications for Construction. Other contracts or maintenance operations may occur during the life of the project.

No claim for extra compensation or adjustment in contract unit prices will be allowed on account of delay or failure of others to complete work unit scheduled.

### **POST SURVEY CLEAN-UP**

Once the survey is complete, all stakes must be removed from the MDOT median and ROW to aid the maintenance crews and adjacent property owners. All benchmarks and control points and their witnesses must remain in place.

### **FINAL REPORT: DELIVERABLES**

The final report for this project shall include:

1. In the first directory on the CD, and first pocket of the portfolio if requested, labeled **ADMINISTRATIVE**, the following will appear:

- a. MDOT's Form 222(5/01) entitled "SURVEY NOTES: RECEIPT AND TRANSMITTAL"
  - b. The project's Professional Surveyor's Report on company letterhead, consisting of:
    - i) A comprehensive synopsis of the work performed on this project, signed and sealed by the project's Professional Surveyor.
    - ii) The source and methods used to establish the project horizontal and vertical control and alignment(s) for this project.
    - iii) A detailed explanation of anything discovered during the survey of this project that may create a problem for the designer or another surveyor.
  - c. CD or DVD with all documents scanned or converted into a Master PDF file, named (JN)123456C\_TaskXXXX. Each Section and sub-section of this PDF file must be bookmarked for easy retrieval. An example can be provided upon request.
  - d. MDOT QA/QC Portfolio Checklist (revised March 2013).
2. In the second directory on the CD, and second pocket of the portfolio if requested, labeled **ALIGNMENT**, the following will appear:
- a. An annotated MicroStation drawing of the alignment(s), showing:
    - i) A statement defining the alignment(s) as **legal or non-legal**, and a key box with description of type and origin of all alignments, such as 1958 Survey Alignment, 1966 Construction Alignment or, 2013 As Constructed Alignment
    - ii) Stationing, source of stationing, and station equation to existing stationing
    - iii) Curve data, including coordinates of P.I.s, P.C.s, and P.T.s.
    - iv) Physical alignment points found or set
    - v) Control points
    - vi) Reference lines and angles of crossing (if appropriate)
    - vii) Government corners with bearing and distance ties to alignment along the government lines.
  - b. Witness list for the alignment points found or set, which shows coordinates, stationing and four witnesses for each alignment point. **WITNESS LISTS MUST USE ONLY UPPER CASE LETTERS.**

- c. LCRC's for legal alignment points with physical monumentation, found or set.
3. In the third directory on the CD, and third pocket of the portfolio if requested, labeled **CONTROL**, the following will appear:
  - a. Documentation of horizontal and vertical datum sources.
  - b. OPUS documentation, long version.
  - c. Least squares adjustments for the horizontal and vertical control.
  - d. It is not necessary to submit electronic raw survey data in hardcopy form, nor in the .PDF file.
  - e. Text files which contain the witness lists for the horizontal alignment points, horizontal control points, benchmarks and government corners. All witness lists must note the datum(s), a combined scale factor for state plane grid-to-ground conversion, and an example thereof. **WITNESS LISTS MUST USE ONLY UPPERCASE LETTERS.**
  - f. An MDOT-formatted Microsoft Word file, **SurveyInfoSheet.doc**, showing the data in e. above, using **ONLY UPPER CASE LETTERS.**
4. In the fourth directory on the CD, and fourth pocket of the portfolio if requested, labeled **PROPERTY**, the following will appear:
  - a. Tax maps and descriptions with owner names, addresses and phone numbers, if Right of Way is to be acquired, or if riparian ownerships are required.
  - b. Maps, plats, and recorded surveys.
  - c. Documents such as plats, Act 132 Certificates and/or tax maps marked with point numbers as property ties, if Right of Way is to be acquired.
  - d. Legible **recorded** copies of all Land Corner Recordation Certificates (LCRC) filed for the government corners (PLSS corners and Property Controlling Corners) used for computations and/or in danger of obliteration by impending construction.
5. In the fifth directory on the CD, and fifth pocket of the portfolio if requested, labeled **MAPPING**, the following will appear:
  - a. Mapping files in MDOT MicroStation V8i format in the current MDOT workspace, and also converted to .PDF format. **ALL POINT AND LINE DESCRIPTIONS MUST USE**

ONLY UPPER CASE LETTERS. Naming convention: 123456C\_PL\_3D.dgn and 123456C\_PL\_2D.

- b. All Geopak design files produced by survey, including: .xml alignment files, triangle.dgn file, .dtm, .tin, and .gpk files.
  - c. All field survey notes and electronic mapping data used for the project. It is not necessary to submit electronic raw survey data in hardcopy form, nor in the .PDF file.
  - d. All supporting and supplemental information or data, such as drainage and utilities, electronically only if possible.
6. In the sixth directory on the CD, and sixth pocket of the portfolio if requested, labeled **MISCELLANEOUS**, the following will appear:
- a. Any photographs taken for clarity of an area
  - b. Any newspaper clippings related to the project
  - c. Any information not covered in this scope that will be of benefit to the designer or another surveyor