Michigan Department
Of Transportation
5100B (03/12)

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

REQUISITION NUMBER	DUE DATE	TIME DUE
1210	5/13/2013	noon EST

MDOT PROJECT MANAGER	JOB NUMBER (JN)	CONTROL SECTION (CS)
Jason Garza	119814	56011

DESCRIPTION
Design services for M-18 from US-10 to Midland/Gladwin COL in Midland County (C.S. 56011)

MDOT PROJECT MANAGER: Check all items to be included in RFP WHITE = REQUIRED GRAY SHADING = OPTIONAL Check the appropriate Tier in the box below			**CONSULTANT:** Provide only checked items below in proposal
☐ **TIER 1 ($25,000-$99,999)**	☐ **TIER II ($100,000-$250,000)**	☑ **TIER III (>$250,000)**	
☐	☐	☑	Understanding of Service
☐	☐	☑	*Innovations*
☐	☐	☑	Organizational Chart
☐	☐	☑	Qualifications of Team
Not required as part of Official RFP	Not required as part of Official RFP	☑	Quality Assurance/Quality Control
☐	☐	☑	**Location:** 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	☐	Presentation
N/A	N/A	☐	Technical Proposal (if Presentation is required)
3 pages (MDOT Forms not counted) **(No Resumes)**	7 pages (MDOT Forms not counted)	14 pages (MDOT forms not counted)	Total maximum pages for RFP **not including key personnel resumes.** Resumes limited to 2 pages per key staff personnel.

PROPOSAL AND BID SHEET EMAIL ADDRESS – 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 April 2013 THROUGH June 2013

☑ **Prequalified Services** – See page 2 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. 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
- 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

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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
DESIGN SERVICES
Revised as of 5.6.13

CONTROL SECTION(S): 56011

JOB NUMBER(S): 119814C

PROJECT LOCATION:

The project is located along M-18 from US-10 northerly to the Midland/Gladwin COL in Midland County. The project length is 5.7 miles.

PROJECT DESCRIPTION:

Work involved in the design of the project consists of the development and preparation of plans, details, specifications and cost estimates (including meeting attendance) for the following:

The project scope includes cold milling with a two course HMA overlay, concrete joint repairs, drainage upgrades and other miscellaneous safety upgrades. Traffic shall be maintained by part width. Construction is anticipated for 2018.

ANTICIPATED SERVICE START DATE: 6/2013

ANTICIPATED SERVICE COMPLETION DATE: 4/30/2015

PRIMARY PREQUALIFICATION CLASSIFICATION(S):

Roadway Rehabilitation & Rural Freeways

SECONDARY PREQUALIFICATION CLASSIFICATION(S):

Maintaining Traffic Plans and Provisions
Pavement Marking Plans
~~Permanent Freeway Traffic Signing Plans~~
Permanent Non-Freeway Traffic Signing Plans
Hydraulic Surveys
Road Design Surveys
Geotechnical Engineering Services
Hydraulic

DBE REQUIREMENT: 10%

MDOT PROJECT ENGINEER MANAGER:

Jason Garza
Cost & Scheduling Engineer
MDOT Mt. Pleasant TSC
1212 Corporate Drive
Mt. Pleasant, MI 48858
989-775-6104 Ext 316
989-775-6329
garzaj3@michigan.gov

All inquiries about this Request for Proposal should be directed to the MDOT Project Manager by email.

CONSTRUCTION COST:

A. The estimated cost of construction is:

1. Mainline Pavement	$1,800,000
2. Geometric Improvement	$
3. Drainage	$ 50,000
5. Safety	$ 98,600
6. Non-Motorized	$
7. Maintaining Traffic	$ 310,000
8. Miscellaneous Bridge Cost	$
9. Detours and Maintaining Traffic	$
10. Permanent Pavement Markings/Signs/Signals	$ 28,000
11. Miscellaneous	$ 450,000
CONSTRUCTION TOTAL	$2,736,600

The above construction total is the amount of funding programmed for this project. The Consultant is expected to design the project within the programmed amount.

If at any time the estimated cost of construction varies by more than 5% of the current programmed amount, then the Consultant will be required to submit a letter to the MDOT Project Manager justifying the changes in the construction cost estimate.

ADDITIONAL INFORMATION:

Reference files associated with this project are placed on MDOT's FTP site: ftp://ftpmdot.state.mi.us/ under the folder "119814"

Work shall conform to current MDOT, FHWA, and AASHTO practices, guidelines, policies, and standards (i.e., Road Design Manual, Standard Plans, Published MDOT Design Advisories,

Drainage Manual, Roadside Design Guide, A Policy on Geometric Design of Highways and Streets, Michigan Manual of Uniform Traffic Control Devices, etc.).
The Consultant is required to use the current MDOT1 workspace 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.

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.

CONSULTANT RESPONSIBILITIES:

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

A. 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.

B. Perform design surveys. See Attachment A for more information.

C. Perform project scoping to verify the type of work prior to the start of design. The scoping document shall follow the Road Scoping Manual (October 2009) and all applicable forms and checklists.

D. Prepare required plans, typical cross-sections, details, and specifications required for design and construction to OEC level of completion.

E. Compute and verify all plan quantities.

F. All Maintenance of Traffic (MOT) work in the project is a Consultant task. The Consultant shall furnish the special provision for maintaining traffic, all applicable maintaining traffic pay items, quantity estimates and the Transportation Management Plan (TMP).

G. Prepare staging plans and special provisions for maintaining traffic during construction.

H. The Consultant shall complete a drainage study. The Consultant shall prepare MDEQ permits for MDOT submittal, if required.

I. The Consultant is responsible for the design of the soil erosion and sedimentation control measures. This design is to be provided on the preliminary plans. The Consultant is expected to make revisions in this design according to comments provided at the Plan Review.

J. Coordinate, as needed, with the TSC Utility Engineer.

K. Provide solutions to any unique problems that may arise during the design of this project.

L. The Consultant may be required to provide Design Services during the construction phase of this project. If Construction Assistance is required, then a separate authorization for those services will be issued.

M. 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.

N. If excavation is required, submit the excavation locations which may contain contamination. Project Manager then can proceed in requesting a Project Area Contamination Survey (PACS).

O. The Consultant shall be required to prepare and submit a CPM network for the construction of this project.

P. 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. MDOT will distribute official meeting minutes for all meetings.

Q. The Consultant will provide to MDOT at the scheduled submittal dates, electronic copies (in Adobe PDF format) of the required specifications and plan set materials for distribution by MDOT for all reviews for this project.

R. Prepare and submit electronically (native format or Adobe PDF) any information, calculations, hydraulic studies, or drawings required by MDOT for acquiring any permit (ie. NPDES, DEQ, etc), approvals (i.e. county drain commission) and related mitigation. MDOT will submit permit requests.

S. Attend any project-related meetings as directed by the MDOT Project Manager.

T. Attend information meetings (i.e., public hearings, open houses, etc.) with the public and public officials to assist in responding to concerns and questions. May require the preparation of displays such as maps, marked-up plans, etc.

U. The Consultant shall assist in the review of utility permit requests, incorporate the information in the design plans, and respond within 2 weeks from receipt of the permit.

V. 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.

W. 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.

PROJECT SCHEDULE

Refer to the MDOT PPMS Task List for this project. The Consultant shall use the tasks 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.

For questions on specific tasks, refer to the PPMS Task Manual on the MDOT Bulletin Board System. For assistance in accessing this manual, please contact:

Dennis Kelley
(517) 373-4614
KelleyD2@michigan.gov

MONTHLY PROGRESS REPORT

On the first of each month, the Consultant shall submit a monthly project progress report to the MDOT Project Manager.

TRAFFIC CONTROL

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

MDOT PERMITS & UTILITIES

The Consultant shall be responsible for obtaining up to date access permits and pertinent information for tasks in MDOT Right of Way (ROW).

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 Permits Engineer and/or Project Manager. The Consultant shall attend any utility meetings called to ensure that the concerns are addressed on the plans involving utilities. The Consultant shall assist in the review of utility permit requests to ensure compatibility with the project. The Consultant shall provide for the survey staking of various proposed facilities, and existing ROW so as to locate potential utility conflicts and aid in the completion of utility relocation plans for all municipal and private utility companies. The Consultant shall verify any utility information (location, size, type, etc.) through researching historical as-built information for the project area.

Any questions regarding MDOT permits and/or utilities should be directed to:

Michael Loynes
Utilities Engineer
MDOT Mt. Pleasant TSC
1212 Corporate Drive
Mt. Pleasant, MI 48858
(989) 775-6104 Ext 306
LoynesM@michigan.gov

DELIVERABLES:

The 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 drafting standards and file naming conventions.

The Consultant shall deliver all computer files associated with the project in their native format (spreadsheets, CADD files, GEOPAK files, Roadway Designer Templates etc.) on DVD, CD or uploaded to a FTP site, as directed by the MDOT Project Manager. All CADD/GEOPAK files shall be created and identified with standard MDOT file names. It is the Consultant's responsibility to obtain up to date MicroStation and GEOPAK seed/configuration files necessary to comply with MDOT's CADD standards which are published monthly to the MDOT website. Any CADD/GEOPAK files that do not conform to MDOT standards will be returned to the Consultant for correction at the Consultant's expense.

Proposal documents shall be submitted in their native format with standard naming conventions as well as combined into one Adobe PDF file in the sequence specified by MDOT. To provide text search capabilities the combined proposal shall be created by converting native electronic files to PDF. Scanning to PDF is discouraged except in instances where it is necessary to capture a legally signed document or a hard copy version of a document is all that exists.

Plan sheets shall be printed to an Adobe PDF set in 11" x 17" format. For final Plan Turn-In, a title sheet shall be printed, signed, sealed, and then scanned for inclusion with the Adobe PDF set. The original title sheet shall be sent to the MDOT Project Manager.

At final Plan Turn-In, Reference Information Documents (RID) shall be delivered to MDOT with standard naming conventions and content. The RID files included will depend on the design

survey and work type of the project. These files range from CADD, existing terrain, proposed cross sections, 3D models and files generated for Automated Machine Guidance (AMG) and automated inspection/stakeout activities.

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 project removal, construction, and profile sheets will require a scale of **1"=80' or as approved by the Project Manager.**

All plans, special provisions, estimates, and other project related items shall meet all 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.

MDOT RESPONSIBILITIES:

A. Schedule and/or conduct the following:
   1. Scope Verification Meeting
   2. Base Plan Review/Geometrics
   3. The Plan Review
   4. Utility Coordination Meetings
   5. Omissions/Errors/Check (OEC).

B. Furnish pertinent reference materials.
   1. Quantity summary sheets and final item cost estimates
   2. Packaging of plans and proposal
   3. Special Details and pertinent reference materials
   4. As-built plans
   5. Pavement design
   6. Traffic analysis
   7. Crash analysis

C. Obtain all permits for the project as outlined in previous section.

D. Coordinate any necessary utility relocation.

E. MDOT Bay Region Real Estate Division will be responsible for obtaining all ROW acquisitions.

F. MDOT will provide the following:
   1. Utility Company
   2. Railroad Company
   3. Project Stakeholders
   4. FHWA

5. Other MDOT Divisions

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.

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.

The use of overtime hours is not acceptable unless prior written approval is granted by the MDOT Region Engineer/Bureau Director and the MDOT Project Manager. Reimbursement for overtime hours that are allowed will be limited to time spent on this project in excess of forty hours per person per week. Any variations to this rule should be included in the priced proposal submitted by the Consultant and must have prior written approval by the MDOT Region Engineer/Bureau Director and the MDOT Project Manager.

The fixed fee for profit allowed for this project is 11.0% of the cost of direct labor and overhead.

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

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.

STUDY (EARLY PRELIMINARY ENGINEERING)

		P/PMS TASK NUMBER AND DESCRIPTION	DATE TO BE COMPLETED BY
YES	**NO**		(mm/dd/yyyy)
		EPE SCOPING ANALYSIS	
☐	☐	2120 Prepare Traffic Analysis Report	__/__/____
☐	☐	2130 Prepare Project Justification	__/__/____
☐	☐	*213M Concurrence by Regulatory Agencies with the Purpose and Need*	__/__/____
☐	☐	2140 Develop and Review Illustrative Alternatives	__/__/____
☐	☐	2155 Request/Perform Safety Analysis	__/__/____
☐	☐	2160 Prepare and Review EIS Scoping Document	__/__/____
☐	☐	*211M Public Information Meeting*	__/__/____
		EPE DRAFT ANALYSIS	
☐	☐	2310 Conduct Technical SEE Studies	__/__/____
☐	☐	2321 Prepare for Aerial Photography	__/__/____
☐	☐	2322 Finish/Print Aerial Photography	__/__/____
☐	☐	2330 Collect EPE Geotechnical Data	__/__/____
☐	☐	2340 Develop and Review Practical Alternatives	__/__/____
☐	☐	*233M Aerial Photography Flight*	__/__/____
☐	☐	2360 Prepare and Review EA or DEIS	__/__/____
☐	☐	*231M Draft Submission to FHWA*	__/__/____
☐	☐	2380 Circulate EA or DEIS	__/__/____
☐	☐	*232M Public Hearing*	__/__/____
		EPE FINAL ANALYSIS	
☐	☐	2510 Determine and Review Recommended Alternative	__/__/____
☐	☐	*250M Concurrence by Regulatory Agencies with Recommended Alternatives*	__/__/____
☐	☐	2525 Prepare and Review Engineering Report	__/__/____
☐	☐	2530 Prepare and Review Request for FONSI or FEIS	__/__/____
☐	☐	*252M Final Submission to FHWA*	__/__/____
☐	☐	2550 Obtain FONSI or ROD	__/__/____

		CONTAMINATION INVESTIGATION	
☐	☐	2810 Project Area Contamination Survey (PCS)	__/__/____
☐	☐	2820 Preliminary Site Investigation (PSI) Contamination	__/__/____

PRELIMINARY ENGINEERING - DESIGN

		P/PMS TASK NUMBER AND DESCRIPTION	**DATE TO BE COMPLETED BY**
YES	**NO**		(mm/dd/yyyy)
		DESIGN SCOPE VERIFICATION AND BASE PLAN PREPARATION	
X	☐	3130 Verify Design Scope of Work and Cost	3/27/2014
☐	☐	3310 Prepare Aerial Topographic Mapping	__/__/____
☐	☐	3320 Conduct Photogrammetric Control Survey	__/__/____
☐	☐	3321 Set Aerial Photo Targets	__/__/____
X	☐	3330 Conduct Design Survey	8/6/2014
☐	☐	3340 Conduct Structure Survey	__/__/____
X	☐	3350 Conduct Hydraulics Survey	8/12/2014
X	☐	3360 Prepare Base Plans	8/6/2014
X	☐	*331M Utility Notification*	5/30/2014
☐	☐	3361 Review and Submit Preliminary ROW Plans	__/__/____
☐	☐	*331M Preliminary ROW Plans Distributed*	__/__/____
☐	☐	3370 Prepare Structure Study	__/__/____
☐	☐	3375 Conduct Value Engineering Study	__/__/____
☐	☐	3380 Review Base Plans	__/__/____
☐	☐	*332M Base Plan Review (Pre-GI Inspection)*	__/__/____
X	☐	3390 Develop the Maintaining Traffic Concepts	8/6/2014
		PRELIMINARY PLANS PREPARATION	
☐	☐	3510 Perform Roadway Geotechnical Investigation	__/__/____
X	☐	3520 Conduct Hydraulic/Hydrologic and Scour Analysis	9/6/2014
X	☐	3522 Conduct Drainage Study, Storm Sewer Design, and use Structural Best Management Practices	9/6/2014
X	☐	3500 Develop Transportation Management Plan	9/6/2014
☐	☐	3535 Conduct Structure Review for Architectural and Aesthetic Improvements	__/__/____
X	☐	3540 Develop the Maintaining Traffic Plan	9/6/2014
☐	☐	3551 Prepare/Review Preliminary Traffic Signal Design Plan	__/__/____
X	☐	3552 Develop Preliminary Pavement Marking Plan	9/6/2014
☐	☐	3553 Develop Preliminary Non-Freeway Signing Plan	__/__/____
X	☐	3554 Develop Preliminary Freeway Signing Plan	9/6/2014
☐	☐	3555 Prepare/Review Preliminary Traffic Signal Operations	__/__/____
☐	☐	3570 Prepare Preliminary Structure Plans	__/__/____
X	☐	3580 Develop Preliminary Plans	9/6/2014

☐	☐	3581 Review and Submit Final ROW Plans	__/__/____
☐	☐	*351M Final ROW Plans Distributed*	__/__/____
X	☐	3590 Review Preliminary Plans (Hold Plan Review Meeting)	11/8/2014
X	☐	*352M THE Plan Review (Grade Inspection)*	12/6/2014
		UTILITIES	
X	☐	3610 Compile Utility Information	1/5/2015
☐	☐	3650 Coordinate RR Involvement for Grade Separations	__/__/____
☐	☐	3655 Coordinate RR Involvement for At-Grade Crossings	__/__/____
	X	3660 Resolve Utility Issues	6/2/2015
X	☐	360M Utility Conflict Resolution Plan Distribution	1/6/2015
X	☐	361M Utility Meeting	3/7/2015
☐	☐	3670 Develop Municipal Utility Plans	__/__/____
☐	☐	3672 Develop Special Drainage Structures Plans	__/__/____
☐	☐	3675 Develop Electrical Plans	__/__/____
		MITIGATION/PERMITS	
X	☐	3710 Develop Required Mitigation	2/3/2015
X	☐	3720 Assemble Environmental Permit Applications	2/3/2015
X	☐	3730 Obtain Environmental Permit	2/3/2015
		FINAL PLAN PREPARATION	
☐	☐	3821 Prepare/Review Final Traffic Signal Design Plan	__/__/____
X	☐	3822 Complete Permanent Pavement Marking Plan	2/3/2015
☐	☐	3823 Complete Non-Freeway Signing Plan	__/__/____
X	☐	3824 Complete Freeway Signing Plan	2/3/2015
☐	☐	3825 Prepare/Review Final Traffic Signal Operations	__/__/____
X	☐	3830 Complete the Maintaining Traffic Plan	2/3/2015
X	☐	3840 Develop Final Plans and Specifications	2/3/2015
X	☐	380M Plan Completion	2/17/2015
☐	☐	3850 Develop Structure Final Plans and Specifications	__/__/____
X	☐	3870 Hold Omissions/Errors Check (OEC) Meeting	7/7/2015
X	☐	387M Omissions/Errors Checks Meeting	3/10/2015
☐	☐	389M Plan Turn-In	__/__/____
☐	☐	3880 CPM Quality Assurance Review	__/__/____

PRELIMINARY ENGINEERING – RIGHT OF WAY

		P/PMS TASK NUMBER AND DESCRIPTION	DATE TO BE COMPLETED BY
YES	**NO**		(mm/dd/yyyy)
		EARLY RIGHT OF WAY WORK	
☐	☐	4120 Obtain Preliminary Title Commitments	__/__/____

☐	☐	4130 Prepare Marked Final Right Of Way Plans	__/__/____
☐	☐	*413M Approved Marked Final ROW*	__/__/____
☐	☐	4140 Prepare Property Legal Instruments	__/__/____
		ROW ACQUISITION	
☐	☐	4411 Preliminary Interviews	__/__/____
☐	☐	*441M Post-Decision Meeting*	__/__/____
☐	☐	4412 Real Estate Services Assignment Proposal and Fee Estimate (Form 633s) for Appraisal Work Authorization	__/__/____
☐	☐	4413 Appraisal Reports	__/__/____
☐	☐	4420 Appraisal Review Reports	__/__/____
☐	☐	4430 Acquire Right Of Way Parcels	__/__/____
☐	☐	4510 Conduct Right Of Way Survey & Staking	__/__/____
		ROW RELOCATION	
☐	☐	4710 Relocation Assistance	__/__/____
☐	☐	4720 Prepare Improvement Removal Plan	__/__/____
☐	☐	*442M ROW Certification*	__/__/____

ATTACHMENT A
March 2013

SURVEY SCOPE OF WORK

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 4th, 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 al 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