

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			
MDOT PROJECT MANAGER: Check all items to be included in RFP WHITE = REQUIRED ** = OPTIONAL Check the appropriate Tier in the box below		CONSULTANT: Provide only checked items below in proposal	
<input type="checkbox"/> TIER I (\$50,000 - \$150,000)	<input type="checkbox"/> TIER II (\$150,000-\$1,000,000)	<input type="checkbox"/> TIER III (>\$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"/>	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	<input type="checkbox"/>	Presentation **
N/A	N/A	<input type="checkbox"/>	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

ENGINEERING SERVICES BUREAU OF TRANSPORTATION PLANNING OTHER

THE SERVICE WAS POSTED ON THE ANTICIPATED QUARTERLY REQUESTS FOR PROPOSALS

NO YES DATED _____ THROUGH _____

Prequalified Services – See 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 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. 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
- 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
DESIGN SERVICES**

Revised 9.2.14

CONTROL SECTION(S): 82194

JOB NUMBER(S): 116287D and 116291D

PROJECT LOCATION:

B01 of 82194: I-75 over the Rouge River

B01-5 of 82194: I-75 NB Off Ramp over Conrail Railroad

B01-6 of 82194: I-75 SB On Ramp over Dearborn Street and Conrail Railroad

S06 of 82194: I-75 over Fort Street

City of Detroit, Wayne County, Michigan.

PROJECT DESCRIPTION:

Work involved in the design of the project consists of:

Provide a detailed analysis of various bridge pier caps to be determined by MDOT.

Preparation of the plans and specifications for the removal and replacement of the existing bridge decks on the bridges listed above. In addition to the deck replacements the scope of work on the bridges will include structural steel repairs.

The reconstruction of the bridge approaches to transition from the revised elevations on the bridges to the existing elevations along I-75 and the local roads. This includes replacing the existing bridge approach pavement, pavement relief joints, concrete barrier, curb and gutter, and guardrail.

Maintaining traffic along I-75 and the local roads crossed over by the bridges included in this project. Traffic along I-75 will be maintained using part width construction. The Consultant will perform the mobility analysis along with the safety review and crash analysis as needed for the Work Zone Mobility tasks, up to and including the Transportation Management Plan. Based on this analysis the Consultant will recommend the parameters within which traffic along I-75 must be maintained.

The preliminary and final load rating of each of the bridge superstructures is included in this project accounting for the proposed work. The load rating must be completed using the Load Factor Rating (LFR) method, and utilizing the AASHTOWare Bridge Rating software or another program approved by the MDOT Load Rating Engineer. The preliminary load rating will be completed and submitted with the Preliminary Structure Plans. The final load rating will be completed and submitted with the Final Structure Plans. The load rating deliverables must

include a completed assumption form, summary form, program file and program output in PDF format.

A topographic survey is being completed by MDOT and will be provided to the selected Consultant. It is not anticipated that any additional survey will be required for this project.

A Project Area Contamination Survey (PACS) is being completed by MDOT. The results of the PACS will be provided to the selected Consultant.

The scope of work will be verified at a Scope Verification Meeting with MDOT personnel and the selected Consultant following the selection. This meeting will be scheduled prior to the Consultant's submittal of the Priced Proposal to the MDOT Project Manager.

Note: This service will complete PE activities to approximately 30% (schedule and milestones to be discussed at Scope Verification Meeting), upon which time MDOT may elect to deliver the project via Design/Build. Should MDOT elect to use the Design/Build delivery method, the contract will be terminated.

The Consultant working on this project will not be precluded from joining a Design/Build team.

The Design/Build contract would then be selected via MDOT's RFP process. All documents and reports developed prior to the 30% milestone will be made available to all potential Design/Build Teams.

If MDOT does not elect to use the Design/Build delivery method, costs will be negotiated for PE services to continue to completion (Contract Letting for Construction).

The work required within the contract (approximately 30%) will include, (but may not be limited to) completion of the structure studies, investigation and recommendation of accelerated bridge construction alternatives, development and recommendation of maintenance of traffic and staging alternatives, completion of the preliminary load rating, and assisting MDOT with the initial railroad coordination and utility coordination.

ANTICIPATED SERVICE START DATE: November 3, 2014

ANTICIPATED SERVICE COMPLETION DATE: April 30, 2017

DBE PARTICIPATION REQUIREMENT: 7%

PRIMARY PREQUALIFICATION CLASSIFICATION(S):

Complex Bridges

Bridge Load Rating Analysis

SECONDARY PREQUALIFICATION CLASSIFICATION(S):

Complex Urban Freeway Design
Freeway Lighting
Maintaining Traffic Plans and Provisions
Safety Studies
Traffic Capacity Analysis and Geometric Studies (precautionary)
Permanent Freeway Traffic Signing Plans (precautionary)
Pavement Marking Plans (precautionary)
Traffic Signal Design (precautionary)
Geotechnical Engineering Services (precautionary)

The prequalifications listed as “precautionary” in the above list will be required **if MDOT does not elect to use the Design/Build delivery method.** The Consultant team must account for these prequalifications on the design team.

Short listed firms may be required to meet with MDOT personnel for a presentation.

PREFERRED QUALIFICATIONS AND CRITERIA (FOR NON-CLASSIFIED SERVICES):

1) UTILITY COORDINATION

The Consultant and MDOT shall share responsibilities for project Utility Coordination. See attached “Scope of Services for Utility Coordination”.

MDOT PROJECT ENGINEER MANAGER:

Kyle C. Kopper, P.E.
MDOT – Design Division
Van Wagoner Building
425 W. Ottawa Street
P.O. Box 30050
Lansing, MI 48909
Phone: (517) 241-4175
E-Mail: KopperK1@michigan.gov

CONSTRUCTION COST:

A. The estimated cost of construction is:

1.	Mainline Pavement	\$ 2,700,000
2.	Geometric Improvement	\$
3.	Environmental	\$
4.	Drainage	\$
5.	Safety	\$
6.	Non-Motorized	\$
7.	Maintaining Traffic	\$ 500,000
8.	Miscellaneous Bridge Cost	\$76,500,000
9.	Detours and Maintaining Traffic	\$
10.	Permanent Pavement Markings/Signs/Signals	\$ 200,000
11.	Miscellaneous	\$ 100,000
	CONSTRUCTION TOTAL	\$80,000,000

B. The estimated cost of real estate is: \$0

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.

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, 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, AASHTO LRFD Bridge Design Specifications, 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.

MISCELLANEOUS INFORMATION:

MDOT's design priorities for this project include:

1. Developing a maintenance of traffic scheme that minimizes impacts to mobility and the number of daytime lane closures required along I-75.
2. Using feasible innovations that will accelerate the construction of the project and/or improve the durability of the proposed bridge decks.
3. Designing a project that uses the available construction funds effectively.

The Design/Bid/Build delivery method is currently planned for this project. Internal discussion is still ongoing, however, and there is still a possibility that the Design/Build delivery method could be utilized. If the Design/Build delivery method is used the Consultant selected for this project will be responsible for developing the project up to and including the Preliminary Plan Submittal.

Plans for the existing bridge can be downloaded from the MDOT FTP site ([ftpmdot.state.mi.us](ftp://ftpmdot.state.mi.us)). The information can be found under the "JN 116287 & 116291" directory.

A load rating of the bridges carrying I-75 over the Rouge River, I-75 NB Off Ramp over Conrail Railroad and I-75 SB On Ramp over Dearborn Street and Conrail Railroad based on the current conditions is currently underway. The models used to complete these load ratings will be made available to the selected Consultant once completed.

MDOT RESPONSIBILITIES:

- A. Schedule and/or conduct the following:
 - 1. Project related meetings
 - 2. Base Plan Review
 - 3. The Plan Review
 - 4. Omissions/Errors/Check
 - 5. Utility Coordination Meetings
 - 6. Final Transport item cost estimates using Consultant supplied SAPW files.
- B. Furnish the topographic survey for the project.
- C. Furnish pertinent reference materials.
- D. Furnish prints of an example of a similar project and old plans of the area, if available.
- E. Obtain all permits for the project as outlined in the next section using Consultant supplied information.
- F. Coordinate any necessary utility relocations.
- G. Coordinate with affected railroads using Consultant supplied information.
- H. Furnish traffic data for I-75.
- I. Furnish a pavement design using Consultant supplied soil information.
- J. Furnish FTP site for software download and instructions for the MDOT Stand Alone Proposal Estimator's Worksheet (SAPW).

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. As part of the maintenance of traffic, conduct a comprehensive mobility analysis and investigate alternative maintenance of traffic schemes. The Consultant will evaluate if the threshold criteria contained in MDOT's Work Zone Safety and Mobility Policy are exceeded. If so, mitigating measures shall be analyzed and recommended.
- B. Prepare a Transportation Management Plan (TMP) per the Work Zone Safety and Mobility Manual. The TMP must evaluate a minimum of five (5) maintenance of traffic alternatives. For each alternative studied the Consultant must provide a list of advantages and disadvantages, a summary of the user delay costs associated with each option and recommended an alternative for MDOT's consideration.
- C. Compare all controlling geometric elements within the project limits with current design criteria. Prepare design exceptions for all controlling elements that do not meet the current design criteria.
- D. Obtain roadway soil borings of sufficient depth and number to provide information to MDOT for the design of the approach pavement.
- E. With concurrence from MDOT's Metro Region/Taylor TSC Traffic Engineer, provide traffic control required to obtain the soil borings.
- F. Provide design services for the installation of lighting on the bridge and upgrading the electrical system as required. This will include coordination with the City of Detroit Department of Public Lighting, the Public Lighting Authority and Detroit Edison. There are existing lights on the bridge. The proposed lighting should be consistent with the lighting that exists along I-75 Road approaching the bridge.
- G. Provide solutions to any unique problems that may arise during the design of this project.

- H. Investigate and propose feasible innovations that will accelerate the construction of the project, improve the durability of the proposed infrastructure, or facilitate the required maintenance of traffic scheme as directed by MDOT. This should include, but is not limited to the use of full depth, precast concrete deck panels with high performance concrete closure pours, or carbon fiber reinforced polymer (CFRP) deck panel post tensioning.
- I. Elements of the bridge will incorporate carbon fiber reinforced polymer (CFRP) in lieu of traditional post tensioning materials if full depth concrete deck panels are found to be feasible. To assist the Consultant in implementing CFRP Lawrence Technological University (LTU) will be involved in the review of all aspects of the project including, but not limited to reviewing the analysis, design, the development of design details, calculations, construction and design drawings and documents, and verification of the use of proper technical data. LTU has been working on research and development of this technology, and has established design criteria and details. The Consultant shall allot adequate time for coordination and reviews with LTU as the final responsibility for the design is assumed to be that of the Consultant.
- J. After the submittal of the Structure Study for the project the Consultant will make a technical presentation to the MDOT Statewide Bridge Alignment Team on the recommended innovations for the project.
- K. Participate in a Value Engineering Study of the project. This will include, but is not limited to, providing project related information to MDOT for use by the Value Engineering Team and attending a minimum of two meetings.
- L. Assist MDOT with coordination with the railroads impacted by this project. This is anticipated to include sending plans electronically to the railroads for review if requested by MDOT and providing written answers to design questions received from the railroads.
- M. After the Plan Completion for the project the Consultant will make a technical presentation to MDOT bridge staff on the selection and design of the innovations incorporated into this project.
- N. Public information and/or stakeholder meetings will be required for this project. The Consultant will be responsible for the preparation of any presentations, animations and display boards required for these meetings.
- O. Prepare required plans, typical cross-sections, details, and specifications required for design and construction. This project will be required to follow the Design Deliverable Enhancement Package (DDEP). Provide RID at final turn in.
- P. Compute and verify all plan quantities.

- Q. Prepare staging plans and special provisions for maintaining traffic during construction.
- R. Prepare any specifications and/or special provisions required to supplement MDOT's Standard Specifications for Construction.
- S. 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.
- T. 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.
- U. Submit the excavation locations which may contain contamination. The MDOT Project Manager then can proceed in requesting a Project Area Contamination Survey (PACS).
- V. The Consultant shall be required to prepare and submit a CPM network for the construction of this project.
- W. The Consultant representative shall record and submit type-written minutes for all project related meetings to the MDOT Project Manager within two weeks of the meeting. The Consultant shall also distribute the minutes to all meeting attendees. MDOT will provide and distribute official meeting minutes for the Plan Review Meeting.
- X. 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.
- Y. 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.
- Z. Attend any project-related meetings as directed by the MDOT Project Manager.
- AA. 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.
- BB. 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.

- CC. 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.
- DD. The Consultant shall be responsible for 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. The Consultant shall assist in the review of utility permit requests to ensure compatibility with the project.
- EE. On the first of each month, the Consultant Project Manager shall submit a monthly project progress report to the Project Manager via e-mail.

The plans shall be submitted to MDOT as follows:

- A. A Structure Study describing the feasible innovations that were considered for this project. This shall be accompanied by a rough (square foot) estimate of cost. At the study phase consider other alternatives which may deviate from the “Project Description” to determine the most cost effective option.
- B. Preliminary Plans (Plan Review Meeting) shall be accompanied by an estimate of cost based on the quantities of major pay items shown on the plans.
- C. Pre-final plans (Pre-OEC plans) consisting of final plans that are approximately 90% complete and any special provisions and supplemental specifications that may be required.
- D. Final plans (OEC plans), Contract Quantities, updated cost estimate, and any special provisions and supplemental specification that may be required. Plan Review comments should be reflected in all sheets. Slab and Screed sheets and Bar Schedule sheets are not required.

The Consultant is not authorized to proceed with Preliminary Plans until receiving MDOT approval of the Structure Study. Additionally, the Consultant is not authorized to proceed with Final Plans until notified that FHWA has approved Preliminary Plans.

All work shall conform to AASHTO specifications, MDOT specifications, and MDOT design and detailing practices. All submittals to MDOT shall require quality assurance review and meet the attached quality assurance document. The Consultant shall maintain office records, submit monthly progress reports, and submit MDOT vouchers with their billings. The Consultant is advised that MDOT considers plans 5% complete upon approval of the study, 30% complete when the preliminary plans are distributed, and 100% complete when final plans are submitted for review.

All submittals to MDOT shall be dated and identified by structure number, control section, job number including phase, MDOT contract number, route and location.

A file containing project related correspondence, design, and any information resulting from research shall be submitted to MDOT with final deliverables.

DELIVERABLES:

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 ProjectWise, 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 PERMITS:

The Consultant shall be responsible for obtaining up to date access permits and pertinent information for tasks in MDOT Right of Way (ROW). This information can be obtained through Joe Rios, Utilities/Permits Section, Real Estate Division at (517) 241-2103.

PROJECT SCHEDULE:

The scheduled Plan Completion date for this project is **June 1, 2016**. 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

*For questions on specific tasks, refer to the P/PMS Task Manual located on the [MDOT Website](#).
For assistance in accessing this manual, please contact:
Dennis Kelley: (517) 373-4614*

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.

PRELIMINARY ENGINEERING - DESIGN

		P/PMS TASK NUMBER AND DESCRIPTION		DATE TO BE COMPLETED BY (mm/dd/yyyy)
YES	NO			
<u>DESIGN SCOPE VERIFICATION AND BASE PLAN PREPARATION</u>				
<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"/>	3325	Geotechnical Structure Site Characterization	/ /
<input 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 type="checkbox"/>	<input type="checkbox"/>	3360	Prepare Base Plans	/ /
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i><u>311M</u></i>	<i>Utility Notification</i>	/ /
<input type="checkbox"/>	<input type="checkbox"/>	3361	Review and Submit Preliminary ROW Plans	/ /
<input type="checkbox"/>	<input type="checkbox"/>	<i><u>331M</u></i>	<i>Preliminary ROW Plans Distributed</i>	/ /
<input type="checkbox"/>	<input type="checkbox"/>	3365	Pre-Conceptual ITS Design and Meeting	/ /
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3370	Prepare Structure Study	/ /
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3375	Conduct Value Engineering Study	/ /
<input type="checkbox"/>	<input type="checkbox"/>	3380	Review Base Plans	/ /
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3385	Preliminary Load Rating	/ /
<input type="checkbox"/>	<input type="checkbox"/>	<i><u>332M</u></i>	<i>Base Plan Review (Pre-GI Inspection)</i>	/ /
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3390	Develop the Maintaining Traffic Concepts	/ /
<u>PRELIMINARY PLANS PREPARATION</u>				
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3500	Develop Transportation Management Plan	/ /
<input checked="" 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	Geotechnical Foundation Engineering Report	/	/
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3535	Conduct Str. Review for Arch. & Aesthetic Improvements	/	/
<input checked="" 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 checked="" 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 checked="" 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 checked="" type="checkbox"/>	<input type="checkbox"/>	3570	Prepare Preliminary Structure Plans	/	/
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3580	Develop Preliminary Plans	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3581	Review and Submit Final ROW Plans	/	/
<input type="checkbox"/>	<input type="checkbox"/>	<i>351M</i>	<i>Final ROW Plans Distributed</i>	/	/

MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

PRELIMINARY ENGINEERING - DESIGN (cont'd)

YES	NO	P/PMS TASK NUMBER AND DESCRIPTION	DATE TO BE COMPLETED BY (mm/dd/yyyy)
<u>PRELIMINARY PLANS PREPARATION (cont'd)</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"/>	<i>352M THE Plan Review (Grade Inspection)</i>	/ /
<input type="checkbox"/>	<input type="checkbox"/>	3595 Conduct ITS Structure Foundation Investigation	/ /
<u>UTILITIES</u>			
<input type="checkbox"/>	<input type="checkbox"/>	3610 Compile Utility Information	/ /
<input type="checkbox"/>	<input type="checkbox"/>	3615 Compile ITS Utility Information	/ /
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3650 Coordinate RR Involvement for Grade Separations	/ /
<input 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"/>	<i>360M Utility Conflict Resolution Plan Distribution</i>	/ /
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>361M Utility Meeting</i>	/ /
<input type="checkbox"/>	<input type="checkbox"/>	3670 Develop Municipal Utility Plans	/ /
<input type="checkbox"/>	<input type="checkbox"/>	3672 Develop Special Drainage Structures Plans	/ /
<input checked="" 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)	/ /
<u>MITIGATION/PERMITS</u>			
<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	/ /
<u>FINAL PLAN PREPARATION</u>			
<input type="checkbox"/>	<input type="checkbox"/>	3815 Geotechnical Structure Design Review	/ /

<input type="checkbox"/>	<input type="checkbox"/>	3821	Prepare/Review Final Traffic Signal Design Plan	/	/
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3822	Complete Permanent Pavement Marking Plan	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3823	Complete Non-Freeway Signing Plan	/	/
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3824	Complete Freeway Signing Plan	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3825	Prepare/Review Final Traffic Signal Operations	/	/
<input checked="" 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 checked="" 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"/>	3875	Final Load Rating	/	/

MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

PRELIMINARY ENGINEERING - DESIGN (cont'd)

		P/PMS TASK NUMBER AND DESCRIPTION	DATE TO BE COMPLETED BY (mm/dd/yyyy)
YES	NO		
		<u>FINAL PLAN PREPARATION (cont'd)</u>	
<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	/ /

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. 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. 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.

SCOPE OF SERVICE FOR UTILITY COORDINATION

The Consultant is directly responsible for all aspects of the project's utility coordination. The Consultant is expected to provide technical assistance to MDOT, utilities and other stakeholders regarding utility identification, project utility coordination and utility conflict resolution.

A utility is defined as any privately, publicly, municipal or cooperatively owned line, facility, or system for producing, transmitting, or distributing communication, cable television, power, electricity, light, heat, gas, oil, crude products, water, steam, waste, or any other similar commodity, including any fire or police signal system or street lighting system.

MDOT shall -

- Provide a preliminary list of utilities, with contact information, that may have facilities located within the project limits. This list may not be 100% accurate and/or complete.
- Provide assistance, if necessary, in contacting utilities to obtain facility records.
- Provide Consultant with utility responses and facility records if utility information solicitation has been performed.
- Organize and host a kick-off meeting with Consultant and MDOT prior to Consultant beginning utility coordination services.

Consultant shall -

- Maintain a Utility Conflict Matrix* spreadsheet and deliver as the bi-weekly status report.
- Distribute form letters, plans, etc. as outlined in 14.16 (Request for Utility Information) and 14.26 (Distribution of Preliminary Plans to Utilities and Utility Coordination Meeting) of the MDOT Road Design Manual.
 - Identify existing/proposed utility owners and facilities.
 - Collect and compile utility responses.
 - Follow up with non-responsive utilities.
- Schedule and conduct utility meetings for the resolution of conflicts between utility facilities and proposed construction.
 - Identify conflicts, discuss possible design modifications, develop utility relocation schemes, discuss reimbursable relocations, and discuss project scope and schedule.
 - Identify the utility's design and construction contacts and ensure the plan's note sheet utility contact information is accurate.
 - Record meeting minutes and distribute to all attendees.
- Schedule and conduct field meetings with individual utilities to resolve conflicts.
- Schedule and conduct in meetings convened for the purpose of utility betterments.
- Ensure municipal utility relocations, betterments and reimbursements follow Chapter 9 of the MDOT Road Design Manual.
- Identify eligible reimbursable utility relocations, for public/private utilities, as outlined in 23 Code of Federal Regulations (CFR) Part 645 Subparts A and B – Utilities and ensure

23 CFR Part 635.410 - Buy America Requirements are met.

- Collect documentation to evaluate reimbursable utility relocations.
- Evaluate utility relocation plans for compatibility with the proposed project.
- Ensure utility relocation schedules do not impact the project schedule.
- Confirm utility relocation permit applications are submitted to the TSC.
- Prepare the “Utilities Status Report” (MDOT Form 2286) and “Notice to Bidders - Utility Coordination” documents.
- Track and monitor utility relocation progress.

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Deliverables (Provided to the TSC Utility Coordinator and Project Manager):

- Courtesy copies of all correspondence with the utilities
- Utility Conflict Matrix
- Utility coordination meeting minutes
- Reimbursable utility relocation documentation
- Utilities Status Report and Notice to Bidders - Utility Coordination

* The Utility Conflict Matrix (UCM) is located on the <http://www.trb.org/Main/Blurbs/166731.aspx> website under Training materials > Prototype 1 – Stand-alone UCM. The UCM was developed as part of the Transportation Research Board’s (TRB) second Strategic Highway Research Program (SHRP 2) Report S2-R15B-RW-1: Identification of Utility Conflicts and Solutions which provides concepts and procedures to identify and resolve utility conflicts. Tools described in the report include utility conflict matrices that enable users to organize, track, and manage conflicts that frequently arise.