Clear Form

Michigan Department
Of Transportation
5100B (07/16)

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

REQUISITION NUMBER	DUE DATE	TIME DUE
2065	10/10/16	noon est

MDOT PROJECT MANAGER	JOB NUMBER (JN)	CONTROL SECTION (CS)
Bonnie Yu	119434C, 129183C	25032, 82111

DESCRIPTION
Design services for 2 pump station rehabilitation projects, one in Wayne Co., and one in Genesee Co.

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. When applicable, Best Value scoring criteria is listed separately in the RFP.

☐ **TIER 1 ($50,000 - $150,000)**	☑ **TIER II ($150,000-$1,000,000)**	☐ **TIER III (>$1,000,000)**	
☐	☑	☐	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 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) Resumes will only be accepted for Best Value Selections	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 E-MAIL ADDRESS – mdot-rfp-response@michigan.gov

The Consultants 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 that MDOT receives the proposal on time.
*Contact Contract Services Division immediately at 517-373-4680 if you do not get an auto response.

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 for all firms performing non-prequalified services on this project.)

(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."

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, 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 all firms performing non-prequalified services on this project.

☑ **Qualification 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.)

BID SHEET INSTRUCTIONS

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

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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

CONTROL SECTION(S): 25032, 82111

JOB NUMBER(S): 119434C, 129183C

PROJECT LOCATION:
The project is for the rehabilitation of 2 existing pump stations at the following locations:

JN 119434C: D01 of 25032, I-75 at Arlene, City of Flint, Genesee County
Letting Date: 4/6/2018

JN 129183C: D02 of 82111, Congress/N.B. M-10 Ramp at Larned, City of Detroit, Wayne County
Letting Date: 11/3/2017

PROJECT DESCRIPTION:

Work involved in the design of these projects consists of development of final plans and specifications for each individual job number for rehabilitation of the pump stations including but not limited to the following:

A. Replace existing pumps with submersible or vertical style pumps.
B. Service, replace, or upgrade electrical control equipment to accommodate generators.
C. Structural rehabilitation of existing pumps stations.
D. Replacement of trash racks, ladders, doors and railings.
E. Hatch replacement.
F. Modify structure to meet confined space / hazardous area requirements.
G. Additional heating and/or ventilation requirements.
H. Install remote monitoring system.

ANTICIPATED SERVICE START DATE: October 3, 2016

ANTICIPATED SERVICE COMPLETION DATE: July 31, 2018

DBE PARTICIPATION REQUIREMENT: 0%

PRIMARY PREQUALIFICATION CLASSIFICATION(S):
Design – Utilities: Pump Stations

SECONDARY PREQUALIFICATION CLASSIFICATION(S):
Design – Buildings
Design – Roadway
Design – Traffic: Work Zone Maintenance of Traffic
Surveying – Road Design

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

1) UTILITY COORDINATION
   The Consultant shall be responsible for project Utility Coordination. See attached "Scope of Services for Utility Coordination".

MDOT PROJECT ENGINEER MANAGER:

Bonnie Yu, P.E.
Contracts Project Manager
Detroit TSC
1060 West Fort Street, Detroit, MI 48226
Phone: 313.967.5412
Fax: 313.965.6340
Email: yub@michigan.gov

CONSTRUCTION COST:
JN 119434: $1,212,750
JN 129183: $1,143,000

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, etc.).

The Consultant is required to use the MDOT Current Version of Bentley Microstation/GEOPAK or PowerGEOPAK (published at Section 2.2.2 of the Design Submittal Requirements) with the current MDOT workspace (published at Section 2.2.1 of the Design Submittal Requirements).

3D Models are required for all applicable projects. See Chapter 2 of the Design Submittal Requirements for a complete listing of applicable projects. The consultant shall comply with all MDOT CADD standards and file naming conventions.

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 Meeting(s) - ***Unless otherwise noted in the Scope of Service for Utility Coordination***
   6. Final Trnsport item cost estimates

B. Furnish pertinent reference materials.

C. Furnish prints of an example of a similar project and old plans of the area, if available. Furnish the E.A.

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

E. Coordinate any necessary utility relocation(s) - ***Unless otherwise noted in the Scope of Service for Utility Coordination***

F. 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, Railroad coordination requirements, utility conflict resolution, local agency meetings, etc.

A. Perform design surveys.

B. Prepare required plans, typical cross-sections, details, and specifications required for design and construction.

C. Compute and verify all plan quantities.

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

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

F. 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.

G. Maintain a Design Project Record in ProjectWise, which includes a history of significant events (changes, comments, etc.) which influenced the development of the plans, dates of submittals and receipt of information.

H. 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).

I. The Consultant shall prepare and submit in ProjectWise (in PDF format) a CPM network for the construction of this project.

J. The Consultant representative shall record the minutes and submit in ProjectWise (in PDF format), 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.

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

L. Prepare and submit electronically (native format or PDF) into MDOT ProjectWise, 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.

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

N. 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.

O. 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.

P. 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.

Q. The Consultant shall be responsible for obtaining and showing on the plans the location and names of all existing utilities within the limits of the project. In the course of resolving utility conflicts, the Consultant shall make modifications to the plans or design details and provide assistance as directed by the MDOT Utility Coordinator and/or Project Manager. The Consultant shall attend any utility meetings called to ensure that the concerns are addressed on the plans involving utilities. The Consultant shall assist in the review of utility permit requests to ensure compatibility with the project.

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

S. 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, Development Services Division at (517) 241-2103.

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

DELIVERABLES:

The Consultant shall enter in MDOT ProjectWise, in the appropriate folders all electronic files associated with the project in their native format (spreadsheets, CADD files, GEOPAK files, Roadway Designer Templates etc.) 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, to MDOT ProjectWise, in the appropriate folders, in their native format with standard naming conventions as well as combined into one 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 submitted to MDOT ProjectWise in the appropriate folders in a set in PDF 11" x 17" format. For final Plan Turn-In, a title sheet shall be printed, signed, sealed, and then scanned for inclusion with the PDF set. The original title sheet shall be sent to the MDOT Project Manager.

Reference Information Documents (RID) shall be entered into MDOT ProjectWise in the appropriate folder with standard naming conventions and content at milestone submittals as defined by Chapter 4 of the Design Submittal Requirements. The RID files included will depend on the design survey deliverables and project template (See Chapter 2 of the Design Submittal Requirements). 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 xml files necessary for import into the Trns*port bid letting software. The SAPW files shall be entered into MDOT ProjectWise in the appropriate folder.

The project removal, construction, and profile sheets will require a scale of **1"=80' or as approved by the Project Manager.** See Section 1.02.12 of the Road Design Manual for further direction.

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.

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.

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.

STUDY (EARLY PRELIMINARY ENGINEERING)

YES	NO	P/PMS TASK NUMBER AND DESCRIPTION		DATE TO BE COMPLETED BY (mm/dd/yyyy)	
		CONSULTANT CONTRACT AUTHORIZATION/EXECUTION		/	/
		INFORMATION GATHERING/STUDIES			
☐	X	1115	Traffic Data Collection for Studies	/	/
☐	X	1120	Prepare Traffic Analysis Report for Studies	/	/
☐	X	1125	Traffic Capacity Analysis for Studies	/	/
☐	X	1155	Request/Perform Safety Analysis for Studies	/	/
☐	X	1300	Traffic Impact Study	/	/
☐	X	1350	Determine Need for Interstate Access Change Request	/	/
☐	X	1400	Feasibility Study	/	/
☐	X	1500	Corridor Study	/	/
☐	X	1555	Interstate Access Change Request	/	/
☐	X	*155M*	*FHWA Approval of Interstate Access Change Request*	/	/
☐	X	1600	Access Management Study Plan	/	/
X	☐	1700	Other Miscellaneous Studies (Asbestos Investigations)	/	/
		EPE SCOPING ANALYSIS			
☐	X	2100	Scope Verification and Initiation of EPE Activities	/	/
☐	X	2115	Prepare Traffic Analysis Report for EPE/Design	/	/
☐	X	2120	Traffic Data Collection for EPE/Design	/	/
☐	X	2125	Traffic Capacity Analysis for EPE/Design	/	/
☐	X	2130	Prepare Project Purpose and Need	/	/
☐	X	*213M*	*Concurrence by Regulatory Agencies with the Purpose and Need*	/	/
☐	X	2140	Develop and Review Illustrative Alternatives	/	/
☐	X	2155	Request/Perform Safety Analysis for EPE/Design	/	/
☐	X	2160	Prepare and Review EIS Scoping Document	/	/
☐	X	*216M*	*Public Information Meeting*	/	/

MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

STUDY (EARLY PRELIMINARY ENGINEERING) (cont'd)

YES	NO	P/PMS TASK NUMBER AND DESCRIPTION		DATE TO BE COMPLETED BY (mm/dd/yyyy)	
		EPE DRAFT ANALYSIS			
☐	X	2310	Conduct Technical SEE Studies	/	/

☐	X	2311	Cultural Resources Survey	/	/
☐	X	2312	Recreational Survey – Section 4(f)/6(f)	/	/
		EPE DRAFT ANALYSIS (cont'd)			
☐	X	2313	Endangered Species Survey	/	/
☐	X	2314	Wetland Assessment	/	/
☐	X	2315	Wetland Mitigation	/	/
☐	X	2316	Other Technical Reports	/	/
☐	X	2321	Prepare for Aerial Photography	/	/
☐	X	2322	Finish/Print Aerial Photography	/	/
☐	X	2330	Collect EPE Geotechnical Data	/	/
☐	X	2340	Develop and Review Practical Alternatives	/	/
☐	X	*233M*	*Aerial Photography Flight*	/	/
☐	X	2360	Prepare and Review EA	/	/
☐	X	*236M*	*Approval of EA by FHWA*	/	/
☐	X	2370	Prepare and Review Draft EIS	/	/
☐	X	*237M*	*Approval of Draft EIS by FHWA*	/	/
☐	X	2380	Distribute EA	/	/
☐	X	*238M*	*Public Hearing for EA*	/	/
☐	X	2390	Distribute DEIS	/	/
☐	X	*239M*	*Public Hearing for DEIS*	/	/
		EPE FINAL ANALYSIS			
☐	X	2510	Determine and Review Recommended Alternative	/	/
☐	X	*250M*	*Concurrence by Reg Agencies with Recom Alternatives*	/	/
☐	X	2525	Prepare and Review Engineering Report	/	/
☐	X	2530	Prepare and Review Request for FONSI	/	/
☐	X	*252M*	*Approval of FONSI by FHWA*	/	/
☐	X	2540	Prepare and Review FEIS	/	/
☐	X	*254M*	*Approval of FEIS by FHWA*	/	/
☐	X	2550	Obtain ROD	/	/
☐	X	*255M*	*ROD Issued by FHWA*	/	/
☐	X	2570	ITS Concept of Operations	/	/
		CONTAMINATION INVESTIGATION			
☐	X	2810	Project Area Contamination Survey (PCS)	/	/
☐	X	2820	Preliminary Site Investigation (PSI) for Contamination	/	/

MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

PRELIMINARY ENGINEERING - DESIGN

YES	NO	P/PMS TASK NUMBER AND DESCRIPTION		DATE TO BE COMPLETED BY (mm/dd/yyyy)
		DESIGN SCOPE VERIFICATION AND BASE PLAN PREPARATION		
X	☐	3130	Verify Design Scope of Work and Cost	/ /
☐	X	3310	Prepare Aerial Topographic Mapping	/ /
☐	X	3320	Conduct Photogrammetric Control Survey	/ /
☐	X	3321	Set Aerial Photo Targets	/ /
☐	X	3325	Geotechnical Structure Site Characterization	/ /
X	☐	3330	Conduct Design Survey	/ /
☐	X	3340	Conduct Structure Survey	/ /
☐	X	3350	Conduct Hydraulics Survey	/ /
☐	X	3360	Prepare Base Plans	/ /
X	☐	*311M*	*Utility Notification*	/ /
☐	X	3365	Pre-Conceptual ITS Design and Meeting	/ /
☐	X	3370	Prepare Structure Study	/ /
☐	X	3375	Conduct Value Engineering Study	/ /
X	☐	3380	Review Base Plans	/ /
☐	X	3385	Preliminary Load Rating	/ /
☐	X	*332M*	*Base Plan Review (Pre-GI Inspection)*	/ /
X	☐	3390	Develop the Maintaining Traffic Concepts	/ /
		PRELIMINARY PLANS PREPARATION		
☐	X	3500	Develop Transportation Management Plan	/ /
☐	X	3510	Perform Roadway Geotechnical Investigation	/ /
☐	X	3520	Conduct Hydraulic/Hydrologic and Scour Analysis	/ /
X	☐	3522	Conduct Drainage Study, Storm Sewer Design, and use Structural Best Management Practices	/ /
☐	X	3530	Geotechnical Foundation Engineering Report	/ /
☐	X	3535	Conduct Str. Review for Arch. & Aesthetic Improvements	/ /
X	☐	3540	Develop the Maintaining Traffic Plan	/ /
☐	X	3551	Prepare/Review Preliminary Traffic Signal Design Plan	/ /
☐	X	3552	Develop Preliminary Pavement Marking Plan	/ /
☐	X	3553	Develop Preliminary Non-Freeway Signing Plan	/ /
☐	X	3554	Develop Preliminary Freeway Signing Plan	/ /
☐	X	3555	Prepare/Review Preliminary Traffic Signal Operations	/ /
☐	X	3570	Prepare Preliminary Structure Plans	/ /
X	☐	3580	Develop Preliminary Plans	/ /
☐	X	3585	Final ITS Concept Design and Meeting	/ /
X	☐	3590	Review The Plans	/ /
X	☐	*352M*	*THE Plan Review Meeting*	5/1/2017
☐	X	3595	Conduct ITS Structure Foundation Investigation	/ /

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)
		UTILITIES		
X	☐	3610	Compile Utility Information	/ /
☐	X	3615	Compile ITS Utility Information	/ /
☐	X	3650	Coordinate RR Involvement for Grade Separations	/ /
☐	X	3655	Coordinate RR Involvement for At-Grade Crossings	/ /
X	☐	3660	Resolve Utility Issues	/ /
X	☐	*360M*	*Utility Conflict Resolution Plan Distribution*	/ /
X	☐	*361M*	*Utility Meeting*	/ /
	X	3670	Develop Municipal Utility Plans	/ /
X	☐	3672	Develop Special Drainage Structures Plans	/ /
X	☐	3675	Develop Electrical Plans	/ /
☐	X	3680	Preliminary ITS Communication Analysis	/ /
☐	X	3690	Power Design (Power Drop in Field)	/ /
		MITIGATION/PERMITS		
☐	X	3710	Develop Required Mitigation	/ /
☐	X	3720	Assemble Environmental Permit Applications	/ /
☐	X	3730	Obtain Environmental Permit	/ /
		FINAL PLAN PREPARATION		
☐	X	3815	Geotechnical Structure Design Review	/ /
☐	X	3821	Prepare/Review Final Traffic Signal Design Plan	/ /
☐	X	3822	Complete Permanent Pavement Marking Plan	/ /
☐	X	3823	Complete Non-Freeway Signing Plan	/ /
☐	X	3824	Complete Freeway Signing Plan	/ /
☐	X	3825	Prepare/Review Final Traffic Signal Operations	/ /
X	☐	3830	Complete the Maintaining Traffic Plan	/ /
X	☐	3840	Develop Final Plans and Specifications	/ /
X	☐	*380M*	*Plan Completion*	6/19/2017
☐	X	3850	Develop Structure Final Plans and Specifications	/ /
X	☐	3870	Hold Omissions/Errors Check (OEC) Meeting	/ /
☐	X	3875	Final Load Rating	/ /
X	☐	*387M*	*Omissions/Errors Checks Meeting*	7/24/2017
X	☐	*389M*	*Plan Turn-In*	8/14/2017
☐	X	3880	CPM Quality Assurance Review	/ /
☐	X	3890	Final ITS Communication Analysis	/ /

MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

PRELIMINARY ENGINEERING – RIGHT OF WAY

YES	NO	P/PMS TASK NUMBER AND DESCRIPTION	DATE TO BE COMPLETED BY (mm/dd/yyyy)
		EARLY RIGHT OF WAY WORK	
☐	X	4100 Real Estate Pre-Technical Work (combines 411M, 4120)	/ /
☐	X	4150 Real Estate Technical Work (combines 4130, 4140)	/ /
☐	X	*413M Approved Marked Final ROW*	/ /
		ROW APPRAISAL	
☐	X	4350 Real Estate Appraisals (combines 4411, 4412, 4413, 4420)	/ /
		ROW ACQUISITION	
☐	X	4450 Real Estate Acquisitions (combines 4430, 4710, 4720)	/ /
☐	X	4510 Conduct Right Of Way Survey & Staking	/ /
☐	X	*442M ROW Certification*	/ /

MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

POST LETTING/AWARD TASKS (for reference only)

YES	NO	P/PMS TASK NUMBER AND DESCRIPTION	DATE TO BE COMPLETED BY (mm/dd/yyyy)
☐	X	4810 Complete Acquisition Process	/ /
☐	X	4820 Manage Excess Real Estate	/ /
☐	X	4830 Provide Post-Certification Relocation Assistance	/ /
☐	X	4910 Conduct ROW Monumentation	/ /
X	☐	5010 Construction Phase Engineering and Assistance	/ /
☐	X	5020 Prepare As-Built Drawings	/ /

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. 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.

ATTACHMENT A

SCOPE OF SERVICE
FOR
DESIGN SURVEYS
Version: June 2016

x	Surveying: Road Design (3330)
	Surveying: Structure (3340)
	Surveying: Hydraulics (3350)
	Surveying: Right of Way (4510)

(Work in any of the above Survey Services Categories must be completed by a survey firm which is pre-qualified by MDOT for that category.)

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.
3. The selected Survey Consultant must discuss the scope of this survey with an MDOT Survey Consultant Project Manager or an MDOT Region Surveyor before submitting a priced proposal.
4. The selected Survey Consultant must contact the Region or TSC Traffic and Safety Engineer for work restrictions and traffic control requirements. Costs for traffic control must be included in the priced proposal in order to be reimbursed as a direct cost.
5. A **detailed Survey Work Plan** **must** be included with the Priced 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**.
6. It is the responsibility of the Survey Consultant 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.
7. Surveys must meet all requirements of the *MDOT Design Surveys Standards of Practice* (link: http://mdotwiki.state.mi.us/design/index.php/Chapter_1_-_Survey_Manual_Introduction). Please contact the MDOT Design Survey Support Unit to clarify any specific questions regarding these standards.
8. Survey 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.

9. Prior to performing the survey, the Survey Consultant must contact all landowners upon whose lands they will enter in accordance with the *MDOT Design Surveys Standards of Practice*. A template letter can be found here: http://mdotwiki.state.mi.us/design/index.php/File:EXAMPLE_Right_of_Entry.pdf
10. The Survey 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 Survey Consultant's priced proposal.
11. The Survey Consultant must adhere to all applicable OSHA and MIOSHA safety standards, including the appropriate traffic signs for the activities and conditions for this job.
12. The MDOT Project Manager is the official contact for the Survey Consultant. The Survey 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.**

SURVEY PROJECT LIMITS:

If specific survey limits are not included, then the Survey Consultant must develop the survey limits based on the needs of the design team. A description of survey limits detailing length, width and cross roads must be included in the Survey Work Plan.

RESEARCH:

Survey Consultants are responsible for a comprehensive and conscientious research of all records, including MDOT records, essential for the completion of this project. The MDOT Design Survey Support Unit is available to assist in researching MDOT records.

CONTROL:

If not specified in this scope, Primary and Intermediate Horizontal Control Points and Benchmarks established for this project must meet the requirements specified in Chapter 3 of the *MDOT Design Surveys Standards of Practice*.

The Horizontal and Vertical datums and coordinate system must be clearly stated in the Survey Work Plan and subsequent submittals. For acceptable datums and coordinate systems refer to Chapter 3 of the *MDOT Design Surveys Standards of Practice*.

ALIGNMENT & ROW:

If not defined in this scope, the use of either a Legal or Non-legal Alignment and ROW must be determined from the needs of the design team. If it is determined that MDOT will need to acquire additional ROW with partial takes, then the **Legal** Alignment and ROW must be

determined. If it is determined that there will be partial takes, the Survey Consultant may need to prepare a Certified Survey, refer to *Chapter 4 Section 6: Certified Surveys for Real Estate Acquisition* for requirements.

MAPPING:

Mapping shall include the objects and features as needed to meet the requirements of the proposed design. The Survey Consultant's Work plan shall clearly identify mapping items that will be included in the project.

The following should be considered when determining the mapping needs for the project:

- Roadway improvements, curbs, sidewalks, signs, guardrail, light poles
- Intersection signalization equipment
- Building structures and improvements on property adjacent to project
- Drainage appurtenances including ditches, culverts, structures
- Surface manifestations of utilities and connectivity
- Terrain surface mapping
- Trees and brush classification
- Bridge structure elements, measurements, elevations, and underclearance dimensions
- Hydraulics Survey of watercourses
- Use of Static Terrestrial Laser Scanning(STLS)
- Use of Mobile Terrestrial LiDAR Survey(MTL)
- Use of Photogrammetric Mapping

TRAFFIC & SAFETY:

The Selected Survey Consultant, and the Selected Survey Consultant only, is advised to discuss Traffic Control scenarios with the local MDOT TSC Traffic and Safety Engineer prior to submitting a priced proposal. Traffic Control costs not included in the priced proposal will not be paid by MDOT.

The Survey Consultant must submit an advanced notice 5-21 days prior to beginning any work activity through the MDOT Construction Permit System (CPS) (http://www.michigan.gov/mdot/0,4616,7-151-9625_72410---,00.html).

The Survey Consultant must adhere to all work restrictions and traffic control requirements detailed in the MDOT Advanced Notice Permit.

The Survey Consultant must have a vehicle with markings/logo that identifies the company within sight distance of survey activity and must have a 360 degree flashing strobe light on the top of the vehicle whenever they are working on or near the road.

Traffic control on city streets and county roads is under the jurisdiction of the local authorities where the project is located.

COORDINATION WITH OTHER CONTRACTS IN THE VICINITY:

The Survey 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 Survey Consultant.

The Survey Consultant must contact the Operations Engineer at the local MDOT TSC for information regarding project coordination.

Other contracts or maintenance operations may occur during the life of the project. Contractors and other consultants involved with construction projects have similar requirements of cooperation and coordination of work as part of their projects as referenced in Article 104.08 of the *2012 Standard Specifications for Construction* (http://mdotcf.state.mi.us/public/specbook/2012/). Survey Consultants shall conduct their work with similar coordination efforts. The Survey Consultant will not be allowed claims for extra compensation or extensions of deadlines due to delays or failures of others to complete scheduled work.

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.

DELIVERABLES:

The **MDOT Survey QA/QC Checklist** details the files that are to be submitted to MDOT (link: http://mdotwiki.state.mi.us/design/index.php/File:MDOT_Survey_Project_Checklist_2016.xlsm) . This document shall be signed and certified by the Professional Surveyor responsible for the project QA/QC. **Failure to use and include this document may result in the immediate return of the project portfolio for completion.**

Files submitted to MDOT may vary by project type and scope, the following files **must always** be submitted to MDOT unless explicitly omitted in writing by the following MDOT personnel: MDOT Region Surveyor, MDOT Survey Consultant Manager or MDOT Supervising Land Surveyor:

- Survey Portfolio PDF (XXXXXX_Survey_20YY-MM-DD.pdf)
- Survey Information Sheet (S-XXXXXX_Survey_Info_Sheet_20YY-MM-DD.doc)
- Alignment and ROW CAD file (S-XXXXXX_Align_ROW_20YY-MM-DD.dgn)
- 3D project map (S-XXXXXX_Survey_3D_20YY-MM-DD.dgn)
- When Mobile Terrestrial LiDAR (MTL) or Static Terrestrial Laser Scanning (STLS) techniques are used, three (3) copies of the entire point cloud must be delivered to the MDOT Survey Support Unit on media with appropriate storage capacity to contain all the data on one device.
- When Photogrammetric Mapping techniques are used, three (3) copies of the raw digital

imagery, ortho-imagery and photogrammetrically extracted points cloud data must be delivered to the MDOT Survey Support Unit on media with appropriate storage capacity to contain all the data on one device.

All submitted files must be scanned and/or converted to one PDF format file. A Table of Contents in PDF format is required that has all PDF files bookmarked/linked so each place in the PDF archive can be accessed with a single click. Items required to be included in the Survey Portfolio PDF can be found in the QA/QC Checklist. Specified format files such as Microsoft Word and MicroStation GEOPAK must have separate access in native format outside of the PDF file.

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. Please include MDOT's Form 222(5/01) entitled "SURVEY NOTES: RECEIPT AND TRANSMITTAL" for all transmittals. A copy of this transmittal form must be sent to the MDOT Project Manager for Design and the MDOT Supervising Land Surveyor.

Electronic submittal only. Survey deliverables must be submitted using ProjectWise. For file naming conventions and upload locations, refer to Chapter 10 of the *MDOT Design Surveys Standards of Practice*.

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

ATTACHMENT B

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 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.

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.