

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

MDOT PROJECT MANAGER Mark Sweeney		JOB NUMBER (JN) 89091	CONTROL SECTION (CS) 50111
DESCRIPTION Design Services for maintaining traffic, pavement marking, signals, freeway signs and replace ITS facilities			
<b>MDOT PROJECT MANAGER:</b> Check all items to be included in RFP  WHITE = REQUIRED GRAY SHADING = OPTIONAL		<b>CONSULTANT:</b> Provide only checked items below in proposal	
Check the appropriate Tier in the box below			
<input type="checkbox"/> <b>TIER I</b> (\$25,000-\$99,999)	<input type="checkbox"/> <b>TIER II</b> (\$100,000-\$250,000)	<input checked="" type="checkbox"/> <b>TIER III</b> (>\$250,000)	
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Understanding of Service
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i>Innovations</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Safety Program</i>
N/A	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Organizational Chart
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Qualifications of Team
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	Past Performance
Not required As part of Official RFP	Not required As part of Official RFP	<input checked="" type="checkbox"/>	Quality Assurance/Quality Control
<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<b>Location:</b> The percentage of work performed in Michigan will be used for all selections unless the project is for on-site inspection or survey activities, then location should be scored using the distance from the consultant office to the on-site inspection or survey activity.
N/A	N/A	<input type="checkbox"/>	Presentation
N/A	N/A	<input type="checkbox"/>	Technical Proposal (if Presentation is required)
3 pages (MDOT Forms not counted) <b>(No Resumes)</b>	7 pages (MDOT Forms not counted)	19 pages (MDOT Forms not counted)	<b>Total maximum pages for RFP not including key personnel resumes</b>

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 Service Contracts" and "Guideline for Completing a Low Bid Sheet(s)", if a low bid is involved as part of the selection process. **Referenced Guidelines are available on MDOT's website under Doing Business > Vendor/Consultant Services > Vendor/Consultant Selections.**

## RFP SPECIFIC INFORMATION

BUREAU OF HIGHWAYS       BUREAU OF TRANSPORTATION PLANNING \*\*       OTHER

THE SERVICE WAS POSTED ON THE ANTICIPATED QUARTERLY REQUESTS FOR PROPOSALS

NO       YES      DATED \_\_\_\_\_ THROUGH \_\_\_\_\_

**Prequalified Services** – See page 3 of the attached Scope of Services for required Prequalification Classifications.

**Non-Prequalified Services** - If selected, the vendor must make sure that current financial information, including labor rates, overhead computations, and financial statements, if overhead is not audited, is on file with MDOT's Office of Commission Audits. This information must be on file for the prime vendor and all sub vendors so that the contract will not be delayed. **(Form 5100J Required with Proposal)**

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

**For all Qualifications Based Selections**, the section team will review the information submitted and will select the firm considered most qualified to perform the services based on the proposals. The selected vendor will be contacted to confirm capacity. Upon confirmation, that firm will be asked to prepare a priced proposal. Negotiations will be conducted with the firm selected.

**\*\*For RFP's that originate in Bureau of Transportation Planning only**, a priced proposal must be submitted at the same time as, but separate from, the proposal. Submit directly to the Contract Administrator/Selection Specialist, Bureau of Transportation Planning (see address list, page 2). The priced proposal must be submitted in a sealed envelope, clearly marked "**PRICE PROPOSAL.**" The vendor's name and return address **MUST** be on the front of the envelope. The priced proposal will only be opened for the highest scoring proposal. Unopened priced proposals will be returned to the unselected vendor(s). Failure to comply with this procedure may result in your priced proposal being opened erroneously by the mail room.

**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.

**Qualifications Review / Low Bid** - Use Consultant/Vendor Selection Guidelines. See Bid Sheet Instructions for additional information.

For Qualification Review/Low Bid selections, the selection team will review the proposals submitted and post the date of the bid opening on the MDOT website. The notification will be posted at least two business days prior to the bid opening. Only bids from vendors that meet proposal requirements will be opened. The vendor with the lowest bid will be selected. The selected vendor may be contacted to confirm capacity.

**Best Value** - Use Consultant/Vendor Selection Guidelines. See Bid Sheet Instructions below for additional information. The bid amount is a component of the total proposal score, not the determining factor of the selection.

**Low Bid** (no qualifications review required - no proposal required.) See Bid Sheet Instructions below for additional instructions.

## BID SHEET INSTRUCTIONS

A bid sheet(s) must be submitted in accordance with the "Guideline for Completing a Low Bid Sheet(s)" (available on MDOT's website). The Bid Sheet(s) is located at the end of the Scope of Services. Submit bid sheet(s) separate from the proposal, to the address indicated below. The bid sheet(s) must be submitted in a sealed manila envelope, clearly marked "**SEALED BID.**" The vendor's name and return address **MUST** be on the front of the envelope. Failure to comply with this procedure may result in your bid being opened erroneously by the mail room and the bid being rejected from consideration.

**PROPOSAL SUBMITTAL INFORMATION**

REQUIRED NUMBER OF COPIES FOR PROJECT MANAGER 6	PROPOSAL/BID DUE DATE 9/29/10	TIME DUE 12:00
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**PROPOSAL AND BID SHEET MAILING ADDRESSES**

Mail the multiple proposal bundle to the MDOT Project Manager or Other indicated below.

- MDOT Project Manager  MDOT Other

Michigan Department of Transportation  
18101 West Nine Mile Road  
Southfield, Mi 48075  
Attn: Mark Sweeney

Mail one additional stapled copy of the proposal to the Lansing Office indicated below.

Lansing Regular Mail	OR	Lansing Overnight Mail
<input checked="" type="checkbox"/> Secretary, Contract Services Div - B470 Michigan Department of Transportation PO Box 30050 Lansing, MI 48909		Secretary, Contract Services Div - B470 Michigan Department of Transportation 425 W. Ottawa Lansing, MI 48933
<input type="checkbox"/> Contract Administrator/Selection Specialist Bureau of Transportation Planning B470 Michigan Department of Transportation PO Box 30050 Lansing, MI 48909		Contract Administrator/Selection Specialist Bureau of Transportation Planning B470 Michigan Department of Transportation 425 W. Ottawa Lansing, MI 48933

**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 four (4) 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

The following two American Recovery and Reinvestment Act of 2009 (ARRA) notifications, **ARRA MONTHLY EMPLOYMENT REPORTS** and **REQUIRED CONTRACT PROVISIONS TO IMPLEMENT AMERICAN RECOVERY AND REINVESTMENT ACT (ARRA) SECTIONS 902 AND 1515**, are attached to this Request For Proposal for your understanding. These two notifications are only applicable for those projects/contracts funded with ARRA funds and will be included in contract Exhibits.

**MDOT FORMS REQUIRED AS PART OF PROPOSAL SUBMISSION**

- 5100D** – Request for Proposal Cover Sheet
- 5100G** – Certification of Availability of Key Personnel
- 5100I** – Conflict of Interest Statement
- 5100J** - Consultant Data and Signature Sheet (Required only for Non-Prequalified Work)

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

**Notification**  
**ARRA MONTHLY EMPLOYMENT REPORTS**  
**Note: This Notification is only applicable for those projects/contracts funded with ARRA funds. If you have questions, please contact MDOT Contract Services Division at (517) 335-0071.**

The American Recovery and Reinvestment Act of 2009 (ARRA), requires states receiving stimulus funds for highway projects to provide monthly reports to the Federal Highway Administration (FHWA) regarding the number of employees of the prime contractors, all-tier subcontractors and consultants on ARRA funded projects.

The cost for complying with this Notification must be borne by the prime contractor, and all-tiers of subcontractors and consultants, as part of their overhead and is deemed to be included in the payments made under this contract.

Within 10 days after the end of each month in which work is performed on this contract, all prime contractors and consultants must provide the Engineer a monthly report on MERS at <https://sso.state.mi.us/> providing employment information on each ARRA project, which will include, for work performed in that preceding month:

- The total number of employees who performed work on this contract.
- The total number of hours worked by employees who performed work on this contract.
- The total wages of employees who performed work on this contract.

*Prime Consultants are responsible for reporting on all subconsultants' employment information in MERS, as the sub consultants will not have access to do so.*

In addition, the prime contractor must provide a total payment amount made to any subcontractor who is a certified DBE in that preceding month.

This Notification shall be included as a part of each subcontract executed by the prime contractor, and all-tiers of subcontractors and consultants.

If necessary to conform to guidance provided by FHWA concerning the ARRA reporting requirements, the prime contractor, and all-tiers of subcontractors and consultants will revise their reporting as directed by the Engineer.

**Failure to comply with the reporting requirements under ARRA would jeopardize the Department's continued receipt of ARRA funding.**

**Accordingly, if a contractor or any-tier of subcontractor or consultant fails to comply with this Notification, the Department may withhold contract payments until compliance is achieved. If the Department is compelled to incur costs because of such a breach, the amount of those costs may be deducted from payments otherwise to be made under this contract. Additional sanctions may include reduction or elimination of prequalification ratings and removal of bidding privileges.**

**NOTIFICATION  
REQUIRED CONTRACT PROVISIONS TO IMPLEMENT AMERICAN  
RECOVERY AND REINVESTMENT ACT (ARRA) SECTIONS 902 AND 1515**

**Note: This notification is only applicable for those projects/contracts funded with ARRA funds. If you have questions, please contact MDOT Contract Services Division at (517) 335-0071.**

In accordance with requirements under section 902 of the American Recovery and Reinvestment Act of 2009 (ARRA), the following language is made a part of this contract and is to be made a part of all tier subcontracts or consultant contracts:

The U.S. Comptroller General and his representatives have the authority:

- (1) To examine any records of the contractor or any of its subcontractors, or any State or local agency administering such contract, that directly pertain to, and involve transactions relating to, the contract or subcontract; and
- (2) To interview any officer or employee of the contractor or any of its subcontractors, or of any State or local government agency administering the contract, regarding such transactions.

The Comptroller General and his representatives have the authority and rights provided under Section 902 of the ARRA with respect to this contract. As provided in section 902, nothing in section 902 shall be interpreted to limit or restrict in any way any existing authority of the Comptroller General.

In accordance with the requirements of section 1515(a) of the ARRA any representatives of the Inspector General have the authority:

- (1) To examine any records of the contractor or grantee, any of its subcontractors or sub-grantees, or any State or local agency administering such contract, that pertain to, and involve transactions relating to the contract, subcontract, grant, or sub-grant; and
- (2) To interview any officer or employee of the contractor, grantee, sub-grantee or agency regarding such transactions.

Nothing set forth in section 1515 of the ARRA shall be interpreted to limit or restrict in any way any existing authority of an inspector general.

**Michigan Department of Transportation**

**SCOPE OF SERVICE  
FOR  
DESIGN SERVICES**

**CONTROL SECTION:** 50111

**JOB NUMBER:** 89091C

**PROJECT LOCATION:** This project is located on I-94, between 11 Mile Road and Masonic Blvd., within the cities of Roseville and St. Clair Shores, Macomb County. The project length is approximately 3 miles.

**PROJECT DESCRIPTION:**

The road work for this mill and resurfacing project will be designed by MDOT. The Consultant portion of this project consists of all but is not limited to the following:

- A. Adjust, replace and / or install signs (freeway).
- B. Adjust, replace and / or install signals (*to be included if the existing signals at the 12 Mile Road ramp terminals and SB Gratiot connector terminal are impacted by the Maintaining Traffic staging. Otherwise, no signal work is included*).
- C. Adjust, replace and / or install pavement markings.
- D. Adjust, replace and / or install ITS facilities.
- E. Adjust and / or relocate Municipal Utilities, as is required.
- F. Maintaining Traffic
- G. Crash Analysis
- H. Design Exceptions

The Consultant will be responsible for providing to MDOT all required plans and special provisions for inclusion into the MDOT plan set. The Consultant will be responsible for coordination work required to resolve design related continuity, project phasing and construction staging issues.

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

**DBE PARTICIPATION:** 10%

**ANTICIPATED START DATE:** October 2010

**ANTICIPATED COMPLETION DATE:** November 2012

**PRIMARY PREQUALIFICATION CLASSIFICATION:**

Maintaining Traffic Plans & Provisions

**SECONDARY PREQUALIFICATION CLASSIFICATION(S):**

Pavement Marking Plans

Permanent Freeway Traffic Signing Plans

Traffic Signal Design *(to be included if the existing signals at the 12 Mile Road ramp terminals and SB Gratiot connector terminal are impacted by the Maintaining Traffic staging. Otherwise, no signal work is included).*

Safety Studies

Municipal Utilities

Intelligent Transportation Systems

\*Roadway Rehabilitation and Rural Freeways *(Design drafting technician only)*

\*\* Road Design Surveys *(Survey information was obtained for this project. The survey prequalification is included should additional survey information be required. )*

**MDOT PROJECT ENGINEER MANAGER:**

Mark A. Sweeney – Project Manager

MDOT – Metro Region Office

18101 West Nine Mile Road

Southfield, Michigan 48075

Phone: 248-483-5151

Fax: 248-483-5148

E-mail: [sweeneym@michigan.gov](mailto:sweeneym@michigan.gov)

**CONSTRUCTION COST:**

A. The estimated cost of construction is:

1.	Mill & Resurface	\$ 3,482,000
2.	Concrete Pavement Repair	\$ 1,820,000
3.	Curb & Shoulder Reconstruction	\$ 2,697,000
4.	Gratiot (M-3) Connector	\$ 533,000
5.	12 Mile Road Interchange	\$ 445,000
6.	Drainage Contingency	\$ 449,000
7.	Permanent Traffic Control Devices	\$ 2,246,000
8.	Maintaining Traffic	\$ 898,000
9.	Miscellaneous	\$ 1,346,000
10.	Mobilization	<u>\$ 696,000</u>
	<b>CONSTRUCTION TOTAL</b>	<b>\$14,612,000</b>

The above construction total is the amount of estimated construction cost at the time of scoping.

**REQUIRED MDOT GUIDELINES AND STANDARDS:**

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

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

### **PRE-QUALIFICATION AND SUBCONTRACTING OF CONTRACT WORK:**

The Prime Consultant must be prequalified by the Department in all primary prequalification classifications.

The Department's prequalification is not a guarantee or warranty of the Subcontracted Consultant's ability to perform or complete the work. The Primary Consultant remains fully responsible to the Department for completion of the work according to the contract as if no portion of it had been subcontracted.

All Subcontract Consultant communications with the Department shall be through the Primary Consultant to the MDOT Project Manager. This requirement may be waived if a written communication plan is approved by the MDOT Project Manager.

The Department may direct the immediate removal of any Subcontracted Consultant working in violation of this subsection. Any costs or damages incurred are assumed by the Primary Consultant by acceptance of the contract. It is further understood that the Primary Consultant's responsibilities in the performance of the contract, in case of an approved subcontract, are the same as if the Primary Consultant had conducted the work with their own organization.

### **CONSULTANT RESPONSIBILITIES:**

#### **A. DESIGN SCOPE OF WORK**

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

1. Perform design surveys. **A design survey was conducted for this project and will be made available to the selected consultant.** The survey tasks have been included should additional survey information be required (See Attachment A).
2. Assist MDOT with preparing required plans, typical cross-sections, details, and specifications required for design and construction (as needed).
3. Compute and verify plan quantities.

4. Prepare staging plans and special provisions for maintaining traffic during construction.
5. Prepare pavement marking plans and special provisions.
6. Prepare traffic signal plans and special provisions (*to be included if the existing traffic signals at the 12 Mile Road ramp terminals and SB Gratiot connector terminal are impacted by Maintaining Traffic staging. Otherwise no signal work is included*)
7. Prepare permanent signing plans and special provisions for freeway sign upgrading.
8. Prepare ITS plans and special provisions. MDOT Traffic and Safety will provide direction as to what will be required as part of this project. The consultant team will be responsible for all the work required to prepare the plans and special provisions.
9. Perform a Crash Analysis and Safety Review for this project. (See Attachment B).
10. Prepare the accident analysis report for this project. A separate report will be required for each of the design elements included within design exception requests.
11. Prepare design exceptions and supporting cost estimates for the design exceptions, as requested by the MDOT road design engineer.
12. Prepare Municipal Utility plans and special provisions (to include public water, storm and sanitary services).
13. Provide solutions to any unique problems that may arise during the design of this project.
14. Provide drafting assistance as requested.
15. 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.

#### **A. OTHER RELATED RESPONSIBILITIES**

1. 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.
2. 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.
3. **PPMS TASK 3130 – VERIFY DESIGN SCOPE OF WORK AND COST**  
See the P/PMS Task Manual for details.
4. **PPMS TASK 3330 - CONDUCT DESIGN SURVEY**  
Perform surveys as necessary to design this project (See the P/PMS Task Manual and Attachment A for details). The Consultant's survey shall be as complete and accurate as necessary to:
  1. Calculate and verify plan quantities to the Consultant's standards.
  2. Locate and lay out the future construction of this project.
  3. Perpetuate affected property controlling corners for monument preservation

As part of the design proposal, the Consultant shall present a detailed survey work plan for review, evaluation and acceptance by the MDOT Project Manager. A final survey report for review and approval by the MDOT Survey Unit is required. Acceptance of the survey by MDOT Design Survey does not in any way relieve the Consultant of responsibility and liability for the content of the survey.

The Consultant will be responsible for providing elevation view sketches at both sides of each and every bridge in the project area. The sketch must show the elevation of the roadway at 2 feet inside of the inside edge of metal and 2 feet outside of the outside edge of metal, as well as the interior lane lines, crown point, and shoulder edges. The corresponding elevation of the structure underclearance immediately overhead must also be shown. Both directions will be handled separately and similarly, as will the cross roads. All underclearance sketches must be shown looking up station.

5. **BASE PLAN REVIEW**

6. **PPMS TASK 3390 - DEVELOP THE MAINTAINING TRAFFIC CONCEPTS**  
See the P/PMS Task Manual for details.
7. **MAINTAINING TRAFFIC RESTRICTIONS**  
This includes providing all Traffic Control Devices and Flaggers when needed.
8. **P/PMS TASK 3540 - DEVELOP MAINTAINING TRAFFIC PLAN**  
See the P/PMS Task Manual for details.
9. **P/PMS TASK 3551 - PERFORM/REVIEW PRELIMINARY TRAFFIC SIGNAL DESIGN PLAN**  
See the P/PMS Task Manual for details.  
*(to be included if the existing signals at the 12 Mile Road ramp terminals and SB Gratiot connector terminal are impacted by the Maintaining Traffic staging. Otherwise, no signal work is included).*
10. **P/PMS TASK 3552 - DEVELOP PRELIMINARY PERMANENT PAVEMENT MARKING PLAN**  
See the P/PMS Task Manual for details.
11. **P/PMS TASK 3554 - DEVELOP PRELIMINARY FREEWAY SIGNING PLAN**  
See the P/PMS Task Manual for details.
12. **THE PLAN REVIEW**
13. **P/PMS TASK 3670 - DEVELOP MUNICIPAL UTILITY PLANS**  
See the P/PMS Task Manual for details.
14. **OBTAIN REQUIRED MUNICIPAL UTILITY PERMITS**  
See the P/PMS Task Manual for details.
15. **P/PMS TASK 3821 - PREPARE/REVIEW FINAL TRAFFIC SIGNAL DESIGN PLAN**  
See the P/PMS Task Manual for details.  
*(to be included if the existing signals at the 12 Mile Road ramp terminals and SB Gratiot connector terminal are impacted by the Maintaining Traffic staging. Otherwise, no signal work is included).*
16. **P/PMS TASK 3822 - COMPLETE PERMANENT PAVEMENT MARKING PLAN**  
See the P/PMS Task Manual for details.
17. **P/PMS TASK 3824 - COMPLETE FREEWAY SIGNING PLAN**  
See the P/PMS Task Manual for details.

18. **P/PMS TASK 3830 - COMPLETE THE CONSTRUCTION ZONE TRAFFIC CONTROL PLAN**  
See the P/PMS Task Manual for details.
19. **PLAN COMPLETION**
20. **P/PMS TASK 3870 - HOLD OMISSIONS/ERRORS CHECK (OEC) MEETING**  
See the P/PMS Task Manual for details.
21. **PLAN TURN IN**
22. **CRASH ANALYSIS.** Perform a crash analysis and determine the recommended countermeasures, (See Attachment B). This shall include, but shall not be limited to, performing the crash analysis, which shall include the last 3 years of reliable data for the analysis period. If there has been a fatality within those 3 years, then the analysis shall incorporate the last 7 years of reliable data. The Consultant will be furnished with 3 years of data. If 7 years of data is required, the Consultant shall request in writing, the additional crash data from the MDOT Project Manager (requests may take up to two weeks from the date the request is received to fill).
23. Determine countermeasures based on crash analysis and provide a detailed drawing explaining each recommendation. Determine the construction cost estimate for each countermeasure using MDOT Pay Items.
24. 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 **AFTER RECEIVING APPROVAL FROM THE MDOT PROJECT MANAGER TO DO SO.** MDOT will provide and distribute official meeting minutes for The Plan Review Meeting.
25. 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.
26. 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 (ie. county drain commission) and related mitigation. MDOT will submit permit requests.
27. Attend any project-related meetings as directed by the MDOT Project Manager.
28. 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 sub-consultant correspondence and verbal contact records.

29. 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.
30. Submit all design files electronically (**in both native and pdf formats**) at all submittals.

### **C. TRAFFIC CONTROL AND MDOT PERMITS**

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

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

### **D. MONTHLY PROGRESS REPORT**

On the first of each month, the Consultant Project Manager shall submit a monthly project progress report to **Mark Sweeney** the Project Manager and **Ishrat Jahan**, the Road Consultant Coordinator. The monthly progress report shall follow the guidelines in Attachment D.

### **MDOT RESPONSIBILITIES:**

- A. Schedule and/or conduct the following:
  1. Project related meetings.
  2. Base Plan Review
  3. The Plan Review
  4. Utility Meetings.
  5. Quantity summary sheets and final item cost estimates.
  6. Packaging of plans and proposal.
- B. Furnish Special Details and pertinent reference materials.
- C. Furnish prints of an example of a similar project and old plans of the area, if available.
- D. Supply information on existing pavement structure as necessary.

- H. Furnish FTP site for software download and instructions for the MDOT Stand Alone Proposal Estimator's Worksheet (SAPW).

**DELIVERABLES:**

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

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 posted to the bulletin board system. When the use of GEOPAK road design software is necessary to develop plans all pay items shall be placed into the CADD file using GEOPAK's Design and Computation Manager so that Quantity Manager can be used to transfer pay item information to SAPW/Trns\*port. Any CADD/GEOPAK files that do not conform to MDOT standards will be returned to the Consultant for correction at the Consultant's expense.

Proposal documents shall be submitted in their native format with standard naming conventions. 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 capturing a legally signed document or a hard copy version of a document is all that exists.

Full size (cut size 24" x 36") and half size (cut size 11" x 17") plans including plan sheets and profile sheets will be required. The project will require a ratio (scale) of 1:40; scale and layout of sheets to be discussed with the MDOT Project Manager.

Plan files shall be submitted in their native dgn format with standard naming conventions as well as plotted into a combined Adobe PDF file. Plan sheets shall be plotted to Adobe PDF with full text search and level on/off capabilities in each full size (24" x 36") and half size (11" x 17") formats. A full size title sheet shall be plotted stamped and signed then scanned for inclusion with the Adobe PDF set. The original title sheet will be sent to the MDOT Project Manager.

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

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

- A. Project specific Special Details.
- B. Construction staging and traffic control plans.
- C. Pavement marking plan(s).

- D. Signing plan(s)
- E. Signal plan(s) *(to be included if the existing traffic signals at the 12 Mile Road ramp terminals and SB Gratiot connector terminal are impacted by Maintaining Traffic staging. Otherwise no signal work is included)*
- F. ITS plan(s)
- G. Municipal Utility plan(s)

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 be responsible for the completion of all Program Project Management System (P/PMS) Tasks indicated with an “x” for yes on the checklist below.

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.

	<b>MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST</b>	
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Please indicate with a check in the box next to each task number whether you believe that task will require consultant involvement on the job. Milestones (a specific event at a point in time) are italicized and underlined. See the P/PMS Task Manual for more details.

**STUDY (EARLY PRELIMINARY ENGINEERING)**

		P/PMS TASK NUMBER AND DESCRIPTION	DATE TO BE COMPLETED BY (mm/dd/yyyy)
YES	NO		
		<b><u>EPE SCOPING ANALYSIS</u></b>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2120 Prepare Traffic Analysis Report	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2130 Prepare Project Justification	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i><u>213M Concurrence by Regulatory Agencies with the Purpose and Need</u></i>	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2140 Develop and Review Illustrative Alternatives	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2155 Request/Perform Safety Analysis	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2160 Prepare and Review EIS Scoping Document	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i><u>211M Public Information Meeting</u></i>	_/_/____
		<b><u>EPE DRAFT ANALYSIS</u></b>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2310 Conduct Technical SEE Studies	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2321 Prepare for Aerial Photography	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2322 Finish/Print Aerial Photography	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2330 Collect EPE Geotechnical Data	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2340 Develop and Review Practical Alternatives	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i><u>233M Aerial Photography Flight</u></i>	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2360 Prepare and Review EA or DEIS	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i><u>231M Draft Submission to FHWA</u></i>	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2380 Circulate EA or DEIS	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i><u>232M Public Hearing</u></i>	_/_/____
		<b><u>EPE FINAL ANALYSIS</u></b>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2510 Determine and Review Recommended Alternative	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i><u>250M Concurrence by Regulatory Agencies with Recommended Alternatives</u></i>	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2525 Prepare and Review Engineering Report	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2530 Prepare and Review Request for FONSI or FEIS	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i><u>252M Final Submission to FHWA</u></i>	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2550 Obtain FONSI or ROD	_/_/____
		<b><u>CONTAMINATION INVESTIGATION</u></b>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2810 Project Area Contamination Survey (PCS)	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	2820 Preliminary Site Investigation (PSI) for Contamination	_/_/____

# MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

## PRELIMINARY ENGINEERING - DESIGN

		P/PMS TASK NUMBER AND DESCRIPTION	DATE TO BE COMPLETED BY (mm/dd/yyyy)
YES	NO		
		<b><u>DESIGN SCOPE VERIFICATION AND BASE PLAN PREPARATION</u></b>	
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3130 Verify Design Scope of Work and Cost	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3310 Prepare Aerial Topographic Mapping	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3320 Conduct Photogrammetric Control Survey	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3321 Set Aerial Photo Targets	_/_/____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3330 Conduct Design Survey	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3340 Conduct Structure Survey	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3350 Conduct Hydraulics Survey	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3360 Prepare Base Plans	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i>331M Utility Notification</i>	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3361 Review and Submit Preliminary ROW Plans	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i>331M Preliminary ROW Plans Distributed</i>	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3370 Prepare Structure Study	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3375 Conduct Value Engineering Study	_/_/____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3380 Review Base Plans	_/_/____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>332M Base Plan Review (Pre-GI Inspection)</i>	_/_/____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3390 Develop the Maintaining Traffic Concepts	_/_/____
		<b><u>PRELIMINARY PLANS PREPARATION</u></b>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3510 Perform Roadway Geotechnical Investigation	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3520 Conduct Hydraulic/Hydrologic and Scour Analysis	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3522 Conduct Drainage Study, Storm Sewer Design, and use Structural Best Management Practices	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3530 Conduct Structure Foundation Investigation	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3535 Conduct Structure Review for Architectural and 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 checked="" 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 checked="" type="checkbox"/>	3555 Prepare/Review Preliminary Traffic Signal Operations	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3570 Prepare Preliminary Structure Plans	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3580 Develop Preliminary Plans	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3581 Review and Submit Final ROW Plans	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i>351M Final ROW Plans Distributed</i>	_/_/____
<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>	11/2011

## 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		
		<b><u>UTILITIES</u></b>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3610 Compile Utility Information	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3650 Coordinate RR Involvement for Grade Separations	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3655 Coordinate RR Involvement for At-Grade Crossings	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3660 Resolve Utility Issues	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i>360M Utility Conflict Resolution Plan Distribution</i>	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i>361M Utility Meeting</i>	_/_/____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3670 Develop Municipal Utility Plans	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3672 Develop Special Drainage Structures Plans	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3675 Develop Electrical Plans	_/_/____
		<b><u>MITIGATION/PERMITS</u></b>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3710 Develop Required Mitigation	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3720 Submit Environmental Permit Applications	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3730 Obtain Environmental Permit	_/_/____
		<b><u>FINAL PLAN PREPARATION</u></b>	
<input checked="" 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 checked="" type="checkbox"/>	3823 Complete Non-Freeway Signing Plan	_/_/____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3824 Complete Freeway Signing Plan	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3825 Prepare/Review Final Traffic Signal Operations	_/_/____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	3830 Complete the Maintaining Traffic Plan	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3840 Develop Final Plans and Specifications	_/_/____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>380M Plan Completion</i>	03/2012
<input type="checkbox"/>	<input checked="" 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"/>	<i>387M Omissions/Errors Checks Meeting</i>	_/_/____
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<i>389M Plan Turn-In</i>	07/2012
<input type="checkbox"/>	<input checked="" type="checkbox"/>	3880 CPM Quality Assurance Review	_/_/____

\*Dates reflect MDOT schedule dates, for which this consultant services may need to be performed in advance (as directed by the MDOT project Manager).

## MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

### PRELIMINARY ENGINEERING – RIGHT OF WAY

		P/PMS TASK NUMBER AND DESCRIPTION	DATE TO BE COMPLETED BY
YES	NO		(mm/dd/yyyy)
		<b><u>EARLY RIGHT OF WAY WORK</u></b>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	4120 Obtain Preliminary Title Commitments	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	4130 Prepare Marked Final Right Of Way Plans	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i>413M Approved Marked Final ROW</i>	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	4140 Prepare Property Legal Instruments	_/_/____
		<b><u>ROW ACQUISITION</u></b>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	4411 Preliminary Interviews	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i>441M Post-Decision Meeting</i>	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	4412 Real Estate Services Assignment Proposal and Fee Estimate (Form 633s) for Appraisal Work Authorization	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	4413 Appraisal Reports	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	4420 Appraisal Review Reports	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	4430 Acquire Right Of Way Parcels	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	4510 Conduct Right Of Way Survey & Staking	_/_/____
		<b><u>ROW RELOCATION</u></b>	
<input type="checkbox"/>	<input checked="" type="checkbox"/>	4710 Relocation Assistance	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	4720 Prepare Improvement Removal Plan	_/_/____
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<i>442M ROW Certification</i>	_/_/____

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

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

All billings for services must be directed to the Department and follow the current guidelines. The latest copy of the "Professional Engineering Service Reimbursement Guidelines for Bureau of Highways" is available on MDOT's website. This document contains instructions and forms that must be followed and used for billing. Payment may be delayed or decreased if the instructions are not followed.

Payment to the Consultant for services rendered shall not exceed the maximum amount unless an increase is approved in accordance with the contract with the Consultant. Typically, billings must be submitted within 60 days after the completion of services for the current billing. The final billing must be received within 60 days of the completion of services. Refer to your contract for your specific contract terms.

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

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

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

### **FOR YOUR INFORMATION**

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

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

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

**Tonya Nobach: (517) 335-1927**

## ATTACHMENT A

### SURVEY SCOPE OF WORK

Survey Limits: As needed for Design, Right of Way, and Construction. A description of survey limits detailing length, width and cross roads must be included in the Survey Work Plan.

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

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

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

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

#### **GENERAL REQUIREMENTS:**

1. Surveys must comply with **all Michigan law** relative to land surveying.
2. Surveys must be done under the **direct supervision** of a Professional Surveyor licensed to practice in the State of Michigan.
3. Work in any of the following categories of survey: Road Design, Structure, Hydraulic, Right-of-Way, and/or Ground Control (Photogrammetric) must be completed by a survey firm which is pre-qualified by MDOT for that category.
4. Surveys must meet all requirements of the Michigan Department of Transportation (MDOT) Design Surveys *Standards of Practice* dated March 2008, the MDOT Design Survey Manual on-line, and the MDOT RTK guidelines. Please contact the Design Survey office to clarify any specific questions regarding these standards.
5. Consultants must obtain all necessary permits required to perform this survey on any public and/or private property, including an up-to-date permit from the MDOT Utilities

Coordination and Permits Section.



- a. The **Administrative** section will include the following items: a completed copy of the MDOT Form 222(5/01) entitled “SURVEY NOTES: RECEIPT AND TRANSMITTAL”; the limits of the survey and original survey scope as determined by the Consultant Surveyor and Design Engineer; a complete synopsis of the survey **that shall include, but not be limited to** horizontal and vertical control datums used, methodology, a complete discussion of government corners recovered, perpetuated or otherwise used as part of the survey, problems encountered, and a statement from the Consultant surveyor supervising the project certifying compliance with Michigan Department of Transportation (MDOT) Design Surveys *Standards of Practice* dated March 2008; as well as documentation of all project specific meetings and/or conversations with MDOT Survey personnel.

Also included in the Administrative section shall be a copy of the **Survey Project Portfolio QA/QC Check-off list**, available on the MDOT Design Survey File Transfer Protocol (FTP) site at <ftp://ftp.michtrans.net/>. The consultant Username is “survcons.” The consultant Password is “\$urvcon\$.” This document shall be signed and certified by the Professional Surveyor responsible for the project QA/QC. It is highly recommended that the consultant become familiar with this document prior to preparing the proposal and again prior to assembling the final portfolio. **Failure to use and include this document shall result in the immediate return of the project portfolio for completion.**

- b. The **Alignment** section will contain a MicroStation drawing of the alignment; coordinates and stationing of alignment points set or found; curve data with P.I. coordinates; a designation of alignment type such as as-constructed (best fit), legal, or survey; an explanation of how the alignment was determined; and all supporting documentation.
- c. The **Control** section must contain the data collected and copies of all research documents used to establish the **horizontal and vertical** reference systems for the project, and must include a thorough written explanation describing how the systems were established. This section should also contain control traverse and GPS raw data (electronic only), least squares analysis for both traverse and benchmarks, and a list of control point coordinates and witnesses. A complete benchmark list with datum, description, station and offset, and elevation shall also be included. This information must be submitted in hardcopy as well as ASCII and MicroStation electronic file format on Compact Discs (CD’s). Also, a sketch of the control traverse, showing any ties (government corners, property, alignment, etc.) shall be included in this section. It is recommended that the project’s survey control be submitted for review as soon as it is available.
- d. The **Property** section contains all information that is utilized regarding the real property affected by the project, and all necessary property ties. This may include

copies of all recorded Land Corner Recordation Certificates for the government corners used or reestablished, recorded plats, recorded certified surveys, tax maps, tax descriptions, and adjacent/riparian owners.

- d. The **Mapping** section contains all survey notes, research documents, and collected data used to produce the maps necessary for this project. All topographic plots, as well as utilities and drainage information, are to be placed in this section. Raw data in electronic form only, but not on the .PDF file.
  - e. The **Miscellaneous** section contains any information not included in the previous sections. The project Surveyor's Report should specify any items included in this section.
15. **All data**, whether electronic or paper, **must be recorded on non-rewritable Compact Discs (CD's) or DVD's**. All paper files, including MicroStation files, must be scanned and/or converted to Adobe Acrobat .PDF format. It is not necessary to include raw survey data files in the Adobe file. CD's must be organized in the same manner as the portfolio, such as by Administrative section, Control section, etc. A Table of Contents in Adobe Acrobat format is required that has all .PDF pages of the CD bookmarked/linked so each place in the .PDF archive can be accessed with a single click of the computer mouse. Specified format files such as ASCII text, CAiCE and MicroStation must have separate access in native format outside of the .PDF file. CD's must be labeled with the control section, job number, data type and file names.
  16. It is not necessary to label each individual paper page in the portfolio.
  17. Each category of survey must be packaged separately (i.e., Structure surveys separate from Road surveys and Hydraulic surveys). CD's must be labeled with the Control Section, Job Number, data type and file names.
  18. The Consultant representative shall record and submit typewritten 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.
  19. The MDOT Project Manager is the official contact for the Consultant. The Consultant must send a copy of all project correspondence to the MDOT Project Manager. The MDOT Project Manager shall be made aware of all communications regarding this project. Any survey related questions regarding this project should be directed to a Survey Consultant Project Manager or MDOT Region Surveyor.

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

must also be sent to the MDOT Project Manager for Design.

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

## **WORK RESTRICTIONS**

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

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

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

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

Traffic shall be maintained by the Consultant throughout the project in accordance with Sections 812, 922, 103.05 and 103.06 of the *Standard Specifications for Construction*, 2003 edition, [www.mdot.state.mi.us/specbook/](http://www.mdot.state.mi.us/specbook/), and Supplemental Specification 03SS001(2) Errata to the 2003 Standard Specifications and all other supplemental specifications currently in effect against the Standard Specifications for Construction. All traffic control devices shall conform to the current edition, as revised, of the *Michigan Manual of Uniform Traffic Control Devices* (MMUTCD). All warning signs for maintenance of traffic used on this project shall be fabricated with prismatic retro-reflective sheeting, and shall be set up five feet above ground.

The Consultant shall use MDOT standard “maintaining traffic” typicals for any and all closures.

Typical MDOT traffic control diagrams are available on line at [www.mdot.state.mi.us/tands/plans.cfm](http://www.mdot.state.mi.us/tands/plans.cfm)

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

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

MDOT maintenance crews and/or Contract Maintenance Agencies may perform maintenance

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

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

The Consultant's attention is called to the requirements of cooperation with others as covered in Article 104.07 of the 2003 Standard Specifications for Construction. Other contracts or maintenance operations may occur during the life of the project.

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

## **FIELD SURVEY**

The purpose of the field survey is to obtain all information and data required by the project design engineer, to leave control in the field for future construction staking, and to provide a sufficient history of the area to enable the MDOT Design Survey Unit to perform dependable surveys in the future. The Consultant surveyor must discuss the scope of this survey with the project design engineer before initiating any work on this project. Notes of this meeting and a detailed Survey Work Plan with an estimate of hours broken down by specific survey task must be submitted to the MDOT Project Manager and Survey Consultant Project Manager within two weeks of this meeting.

## **CONTROL**

A three dimensional control system must be established throughout the project area. This control shall be based on the Michigan State Plane Coordinate System NAD1983 (CORS) horizontal datum and NAVD 1988 vertical datum. All subsequent control must be based on the established control. Any traverse/control points or bench marks established must adhere to the Michigan Department of Transportation (MDOT) Design Surveys *Standards of Practice* dated March 2008 and be listed in the Control pocket of the portfolio. Contact the MDOT Survey Consultant Coordinator or Region Surveyor for existing control in the area.

OPUS positioning may be used as a check, and for determining Primary Control as defined in the MDOT Standards of Practice for Design Survey March 2008. For any and all OPUS solutions, a RINEX format file with a minimum of two hours of GPS data must be included, as well as the OPUS solution (extended version) from NGS. All OPUS solutions must be verified within 0.20 foot, either by a separate OPUS solution from an independent occupation, or by a least squares adjustment based on NGS/CORS positions.

If GPS-derived elevations are used, the Surveyor's Report and the Witness List and Witness Sheet for the project must clearly state that the vertical datum is "NAVD 1988 GPS-derived from Geoid XX." Geoid03 is the recommended Geoid at this time September 2008.

A mapping control point that is a rebar in the ground should not be considered a benchmark. The elevation of a rebar that is a control point should be verified or re-established prior to use as a benchmark.

A Witness list sheet for this project must be provided that has a formula for grid to ground conversion, with a statement that a mapping control point that is a rebar in the ground should not be considered a benchmark, and its elevation should be verified or re-established prior to use.

**All Witness lists, for horizontal control, benchmarks, government corners, and alignment points, must use all capital letters exclusively.**

The Consultant must provide a **MicroStation file** that contains the benchmark list and horizontal control point list, government corner list, and alignment point list. The type of alignment must be described. This file must also provide a formula for a grid to ground conversion. This file must be named **JNxxxxwit.dgn** and formatted as an MDOT plan sheet. An example MicroStation file will be provided on the MDOT Design Survey ftp site. **Upper case letters must be used exclusively**, as they are easier to read on half size plan sheet.

#### PROPERTY/GOVERNMENT CORNERS

Any PLSS corners within the project limits must be recovered or established and tied to the project coordinate system. Any PLSS corners necessary for legal alignment determination and/or property ties for Right of Way issues must be recovered or established and tied to the project coordinate system.

All PLSS corners must be recorded in accordance with PA 74 of 1970, as amended, and all applicable administrative rules. A copy of each **recorded** Land Corner Recordation Certificate must be submitted to the MDOT Design Survey Office as part of the final report. All PLSS corners located in hard surface roads must be protected by a monument box, regardless of impending construction. The Consultant shall provide to the Survey Consultant Project Manager a list of any affected Government or Property Controlling Corners in the detailed work plan for discussion or approval.

The Consultant surveyor must contact the County Remonumentation Representative prior to beginning work on the project to inform him of proposed corner perpetuation activities, and to obtain information pertinent to PLSS corners and/or property controlling corners affected by project construction.

All **monument boxes** through the project area must be accounted for by the Consultant surveyor, shown on the project mapping, and have a recorded LCRC submitted in the survey portfolio.

## ALIGNMENT

Since most existing alignment points locate and define the boundary between the public Right of Way and private ownership, legal alignment points are considered Property Controlling Corners and must be recovered and recorded in accordance with PA 74 of 1970, as amended, and all applicable administrative rules. A copy of each recorded Land Corner Recordation Certificate must be submitted in the Property Section of the final portfolio.

The Consultant must clearly define in the Work Plan what type of alignment(s) is proposed, Legal, Survey or As Constructed, how the stationing will be established, and whether or not the alignment(s) will be staked in the field.

An **alignment sheet** must be prepared and submitted that shows the alignment(s) with stationing and coordinates, and the source of stationing, curve data, and the alignment definition. All alignments must be **annotated** as in the following examples: As Constructed alignment for CS 45011 as surveyed in 2006, or Legal Alignment of 1952 for CS 38016 as surveyed in 2008. Showing government corners with distances along government lines to the alignment are also appropriate for this CADD drawing. MDOT MicroStation format is required. Some tangents may be graphically shortened to “shrink” the drawing to fit paper size.

The Consultant must provide an **alignment control point list with witnesses** for all alignment points found or set. This list must include datum, point designations, descriptions, coordinates, combined Scale Factor, and witnesses. This list may be appended to the witness list for horizontal and vertical control points. Witness lists must use only uppercase letters.

All **monument boxes** through the project area must be accounted for by the Consultant surveyor, shown on the project mapping, and have a recorded LCRC submitted with the survey portfolio.

## MAPPING

The Consultant must submit a **CAiCE software file, named MDOTjob#.zip**, utilizing CAiCE’s built-in archive feature, of all survey mapping points and data files for the mapping area. If a Digital Terrain Model is needed for the project, it must be created in CAiCE and named EXRD. **The CAiCE software used must be Version 10.6 or newer.**

The Consultant is responsible for using the latest MDOT CAiCE Feature Codes, files and Plans Production tugboat (macro), available on the MDOT Design Survey File Transfer Protocol (FTP) site at <ftp://ftp.michtrans.net/>. The consultant Username is “survcons.” The consultant Password is “\$urvcon\$.” The tugboat can also be used to convert CAiCE files into Geopak and MicroStation formats.

The Consultant must provide an electronic **MicroStation Intergraph Version 8 format file** of the mapping area. This file must be named MDOTjob#pl.dgn, for example **79023Cpl.dgn**, and must be submitted **in a sub-directory outside of the CAiCE archive file** named “MicroStation.” The MicroStation file will be a 2-D file of the planimetric features including contours. This file must be sized appropriately, utilize the seed file **seedrd\_c.dgn** with working units of 1000, 1, and be compiled in standard MDOT format. The Consultant is responsible for using the latest MDOT Resource files, color table, and cell files, available on the MDOT File Library site under CAD\_V8. Go to <http://mdotwas1.mdot.state.mi.us/public/bbs/>

For a comprehensive list of MicroStation level designations, contents and line attributes, refer to the “MDOT V8 Level Feature Code List\_08.pdf” table located on the MDOT Design Survey File Transfer Protocol web site. This table replaces the former Attachments AA, C & D. Also in the ftp site, the Consultant should refer to the V8GROUP&ALPHA LIST\_08.pdf file for Data Collection Codes.

The Consultant must submit **files created from CAiCE that are formatted for design in Geopak** software. This can be accomplished by using the MDOT Plans Production CAiCE Tugboat (macro), which is available on the MDOT Design Survey File Transfer Protocol (FTP) site. The Consultant must submit a 3D MicroStation Triangle file and the same Triangle file in Geopak DAT format. **This DAT file is generated through the new (August 2008) MDOT tugboat.** The Consultant must also submit a Survey Chain (TIN Boundary) around the edited Triangle file with the name and Feature “CLIP.” A Job#.XML file must be included for each separate alignment. Each alignment must be computed separately, and uniquely named to include the JN and a description, such as 79585\_AsC\_Wbd.XML. These files must be submitted electronically **in a subdirectory outside of the CAiCE archive file** named “Geopak.”

## POST SURVEY CLEAN-UP

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

## FINAL REPORT: DELIVERABLES

The final report for this project shall include:

1. In the first pocket of the portfolio, labeled **ADMINISTRATIVE**, the following will appear:
  - . MDOT’s Form 222(5/01) entitled “SURVEY NOTES: RECEIPT AND TRANSMITTAL”
  - . The project’s Professional Surveyor's Report on company letterhead consisting of:
    - ) A comprehensive synopsis of the work performed on this project, signed **and sealed** by the project’s Professional Surveyor.
    - ) The source and methods used to establish the project horizontal and vertical control and alignment(s) for this project.

- ) A detailed explanation of anything discovered during the survey of this project that may create a problem for the designer or another surveyor.
  - . CD or DVD with all documents scanned or converted into PDF files. Each page must be inserted in a master PDF file and bookmarked for easy retrieval. An example can be provided upon request.
  - . MDOT QA/QC Portfolio Checklist (revised March 2008).
- 0. In the second pocket of the portfolio, labeled **ALIGNMENT**, the following will appear:
  - . An annotated MicroStation drawing of the alignment(s), showing:
    - ) A statement defining the alignment(s) as **legal, as constructed, or survey**
    - ) Stationing, source of stationing, and station equation to existing stationing
    - ) Horizontal coordinates of P.I.'s, at a minimum
    - ) Curve data
    - ) Alignment points found or set
    - ) Control points
    - ) Reference lines and angles of crossing (if appropriate)
    - ) Government corners and ties to government lines
  - . Witness list for the alignment points found or set, which shows coordinates, stationing and four witnesses for each alignment point. Witness lists must use only uppercase letters.
  - . LCRC's for alignment points found.
- 0. In the third pocket of the portfolio, labeled **CONTROL**, the following will appear:
  - . Documentation of horizontal and vertical datum sources.
  - . OPUS documentation.
  - . Least squares adjustments for the horizontal and vertical control.
  - . It is not necessary to submit electronic raw survey data in hardcopy form, or in the .PDF file.
  - . Text files, hardcopy and on CD, which contain the witness lists for the horizontal alignment ties, horizontal control points, benchmarks and government corners. All witness lists must note the datum(s), a combined scale factor for state plane grid-to-ground conversion, and an example thereof. Witness lists must use only uppercase letters.
  - . A MicroStation V8 file showing the data in d. above, using only upper case letters.
- 0. In the fourth pocket of the portfolio, labeled **PROPERTY**, the following will appear:
  - . Tax maps and descriptions with owner names, addresses and phone numbers, if Right of Way is to be acquired, or if riparian ownerships are required.
  - . Maps, plats, and recorded surveys.
  - . Documents such as plats, Act 132 Certificates and/or tax maps marked with point numbers as property ties, if Right of Way is to be acquired.
  - . Legible **recorded** copies of all Land Corner Recordation Certificates (LCRC) filed for the government corners (PLSS corners and Property Controlling Corners) used for computations and/or in danger of obliteration by impending construction.

33. In the fifth pocket of the portfolio, labeled **MAPPING**, the following will appear:
- . Mapping file in MicroStation V8 format, and also converted to .PDF format. Hardcopy signed and sealed. All point and line descriptions must use only upper case letters.
  - . An archived CAiCE software file.
  - . Geopak files produced from CAiCE.
  - . All field survey notes and electronic mapping data used for the project. It is not necessary to submit electronic raw survey data in hardcopy form, or in the .PDF file.
  - . All supporting and supplemental information or data, such as drainage and utilities, electronically only if possible.
39. In the sixth pocket of the portfolio, labeled **MISCELLANEOUS**, the following will appear:
- . Any photographs taken for clarity of an area
  - . Any newspaper clippings related to the project
  - . Any information not covered in this scope that will be of benefit to the designer or another surveyor

#### **General Notes**

- a. It is the responsibility of the Consultant to insure that all electronic files submitted to MDOT conform to the required format and that all documents are legible.
- a. The Consultant must organize and label the various sections of the portfolio as required by the Standards of Practice for MDOT Design Surveys dated March 2008.
- b. All research documents are required to be scanned and placed on the CD.
- b. It is desirable to limit paper and to include as much electronic data as possible on Compact Disc or DVD, including scanned items, to facilitate future electronic storage and transmission of survey data. **Duplicate CD's must be included in the portfolio, with one set labeled "Region Surveyor".**

## **ATTACHMENT B**

### **SCOPE OF WORK FOR CRASH ANALYSIS REPORTS**

The Consultant shall provide MDOT with a Crash Analysis Report, which shall detail the safety performance of the project location (includes not only the mainline, but all ramps, major and minor intersections, and crossovers within the project limits), and provide detailed graphic depiction of countermeasures, and cost/benefit analysis for crash concentration locations.

The Crash Analysis Report shall, at a minimum, compare the project location features (mainline, ramps, major intersections, minor intersections and cross overs) to regional averages, identify crash concentration locations, examine crash concentration locations for crash patterns and provide countermeasures for correctable crash patterns. The Consultant shall combine a thorough review of computer-based crash records with field reviews of the roadways characteristics (geometric and operational features shall be specifically noted), to identify crash concentration locations. The Consultant shall provide a Draft Crash Analysis Report and upon review and comment by MDOT, the Consultant shall make any changes identified and submit a Final Crash Analysis Report.

The Consultant shall at a minimum review and analyze the most recent three years of MDOT crash data. If there is a fatality within those three years, the Consultant shall review and analyze an additional seven years of crash data. For the analysis, the Consultant shall stratify the data by location and the crash data shall also be aggregated by similar roadway segment characteristics. The Consultant shall quarry SEMCOG to determine regional crash averages which will provide a normative measure of comparison to aid in the identification of crash concentration locations.

The Consultant shall identify crash concentration locations and determine crash patterns. Based on the crash patterns identified for each crash concentration location, the Consultant shall develop proposed crash countermeasures. The countermeasures shall be graphically depicted, to scale, with sufficient detail to determine the countermeasures impact to the existing roadway and the proposed roadway improvement.

The countermeasures may range from simple sign / marking / signal modifications up through substantial reconstruction. The Consultant shall present countermeasures stratified into short and long-term solutions. The Consultant shall provide a construction cost estimate for each countermeasure using MDOT Pay Items and shall clearly identify any right-of-way impacts a countermeasure may have. The Consultant shall provide a full cost/benefit analysis for each countermeasure. The Consultant shall also evaluate the crash impacts on design exceptions sought.

**ATTACHMENT C**

**DELETED**

## ATTACHMENT D

### MONTHLY PROGRESS REPORTS

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

**Control Section 00000**  
**Job Number 00000C**  
**Structure Number S02**  
**Date 00/00/00**

### MONTHLY PROGRESS REPORT

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

**Structure Number - Control Section - Job Number**  
**Route, Location Description**  
Design Schedule as of 00/00/00

**LIST TASKS, SUBMITTALS, APPROVALS AND MEETINGS AS OUTLINED IN SCOPE OF DESIGN SERVICES AS NEEDED. THIS LIST IS JUST AN EXAMPLE.**

Original Authorized Start Date	Original Authorized Finish Date	(Anticipated) or Actual Start Dates	(Anticipated) or Actual Finish Dates	Task	Task Description
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	*	Initial project meeting.
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	3330	Conduct Design Survey
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	3360	Prepare Base Plans
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>		Submit Base Plans
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	3580	Develop Preliminary Plans
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	3390	Develop Construction Zone Traffic Control Concepts
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	3540	Develop Construction Zone Traffic Control Plan
00/00/00	(00/00/00)	00/00/00	<b>00/00/00</b>	3550	Develop Preliminary Traffic Operations Plan
00/00/00	(00/00/00)	00/00/00	<b>00/00/00</b>	3351	Review & Submit of Preliminary Right-Of-Way Plans
00/00/00	(00/00/00)	00/00/00	<b>00/00/00</b>		Submittal of The Plan Review Package
00/00/00	(00/00/00)	00/00/00	<b>00/00/00</b>		Completion of the Plan Review Meeting
00/00/00	(00/00/00)	00/00/00	<b>00/00/00</b>	3840	Develop Final Plans and Specifications
00/00/00	(00/00/00)	00/00/00	<b>00/00/00</b>		Submittal of final plans/proposal package to MDOT for final review.
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>	3870	Omissions/Errors Check (OEC) Meeting
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>		Consultant's Plan Completion: Final Construction Plan/Proposal package with recommendations incorporated to MDOT (two weeks after OEC Meeting)
00/00/00	<b>00/00/00</b>	00/00/00	<b>00/00/00</b>		Final Deliverables to MDOT

## *SAMPLE*

**Control Section 12345**  
**Job Number 11111C**  
**Structure Number S02**  
**Date 00/00/00**

### **MONTHLY PROGRESS REPORT**

- A. Work accomplished during the previous month.
1. During the last month we completed the Final Right of Way plans and submitted them to PM on 00/00/00.
- B. Anticipated work items for the upcoming month.
1. Submit the Preliminary Plans and related material on 00/00/00.
  2. Attend the meeting regarding the Ameritech lines on the bridge, scheduled for 00/00/00.
- C. Real or anticipated problems on the project.
1. We foresee no problems at this time.
- D. Update of previously approved detailed project schedule (attached), including explanations for any delays or changes.
1. The design is falling behind schedule because we had problems resolving the geometries of the ramps in relation to the bridge. The Preliminary Plan submittal will be the only task affected by this delay because we will make up the lost time prior to submitting the Final Plans and Specifications.
- E. Items needed from MDOT.
1. Prior to final Plan submittal we will need the latest Special provision and Supplemental Specification checklist.
- F. Copy of Verbal Contact Records for the period (attached).
1. Discussed bridge and ramp geometries with engineer of MDOT Traffic and Safety Division on 00-00-00.

**SN: S02 - CS: 12345 - JN: 11111C**  
**M-111, from There Village Limits to north of That Road**  
 Design Schedule as of 00/00/00

Original Authorized Start Date	Original Authorized Finish Date	(Anticipated) or Actual Start Dates	(Anticipated) or Actual Finish Dates	Task	Task Description
01/12/95	01/12/95	<b>01/12/95</b>	<b>01/12/95*</b>		Initial project meeting.
01/29/95	01/29/95	<b>01/30/95</b>	<b>01/30/95</b>	3330	Conduct Design Survey.
02/17/95	04/10/95	<b>02/17/95</b>	<b>04/20/95</b>	3360	Prepare Base Plans.
02/29/95	02/29/95	<b>02/29/95</b>	<b>02/29/95</b>	3390	Develop the Construction Zone Traffic Control Concepts
03/12/95	03/13/95	<b>03/12/95</b>	(03/30/95)	3540	Develop Construction Zone Traffic Control Plan
03/20/95	03/19/95	<b>03/25/95</b>	(03/30/95)	3551	Develop/Review Preliminary Traffic Signal Plan
07/01/95	07/01/95	(07/01/95)	(07/01/95)	3590	The Plan Review Meeting
07/11/95	08/11/95	(07/11/95)	(08/11/95)	3821	Complete/Review Traffic Signal Plan
09/15/95	09/15/95	(09/15/95)	(09/15/95)	3830	Complete Construction Zone Traffic Control Plan.
09/16/95	09/16/95	(09/16/95)	(09/16/95)	3840	Develop Final Plans and Specifications
09/25/95	09/23/95	(09/25/95)	(09/25/95)	3870	Omissions/Errors Check (OEC) Meeting

## VERBAL CONTACT RECORD

**Control Section** 12345  
**Job Number** 11111C  
**Structure Number** S02  
**Date** 00/00/00

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