

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

MDOT PROJECT MANAGER			JOB NUMBER (JN)	CONTROL SECTION (CS)
DESCRIPTION				
<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				
<b>TIER I</b> <b>(\$25,000-\$99,999)</b>	<b>TIER II</b> <b>(\$100,000-\$250,000)</b>	<b>TIER III</b> <b>(&gt;\$250,000)</b>		
			Understanding of Service	
			<i>Innovations</i>	
			<i>Safety Program</i>	
N/A			Organizational Chart	
			Qualifications of Team	
			Past Performance	
Not required As part of Official RFP	Not required As part of Official RFP		Quality Assurance/Quality Control	
			<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		Presentation	
N/A	N/A		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)	Total maximum pages for RFP <b>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 \_\_\_ of the attached Scope of Services for required Prequalification Classifications.

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

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

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

**\*\*For 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	PROPOSAL/BID DUE DATE	TIME DUE
---	-----------------------	----------

**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

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

<b>Lansing Regular Mail</b>	<b>OR</b>	<b>Lansing Overnight Mail</b>
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
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

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

**5100D** – Request for Proposal Cover Sheet

**5100J** – Consultant Data and Signature Sheet (Required only for firms not currently prequalified with MDOT)

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

# Michigan Department of Transportation

## SCOPE OF SERVICE FOR DESIGN SERVICES

**CONTROL SECTION(S):** 80012, 80013

**JOB NUMBER(S):** 113251C

**PROJECT LOCATION:**

Four bridges located on I-196 in Van Buren County are in this project: I-196 NB & SB over CR 378, M-140 over I-196 and M-43 over I-196.

**PROJECT DESCRIPTION:**

Each of four bridges on I-196 will be treated with repairs and a deck overlay. The requested design service includes the associated bridge approach work. Associated bridge approach work includes concrete approach slabs, hot mix asphalt resurfacing, hot mix asphalt shoulder reconstruction, guardrail, and drainage replacement. Maintenance of traffic items includes temporary pavement, temporary traffic signals, temporary concrete barrier, temporary signing, temporary drainage items, and temporary pavement markings. MDOT is providing the structure design.

**ANTICIPATED SERVICE START DATE:** April 13, 2012

**ANTICIPATED SERVICE COMPLETION DATE:** January 31, 2014

**PRIMARY PREQUALIFICATION CLASSIFICATION(S):**

Roadway Rehabilitation & Rural Freeways

**SECONDARY PREQUALIFICATION CLASSIFICATION(S):**

Maintaining Traffic Plans and Provisions  
Pavement Marking Plans  
Permanent Freeway Traffic Signing Plans  
Traffic Signal Design  
Road Design Surveys

**DBE REQUIREMENT:** 7%

**MDOT PROJECT ENGINEER MANAGER:**

Kyle Rudlaff, Transportation Engineer 13 Licensed Specialist  
Southwest Region, Coloma TSC  
3880 Red Arrow Highway  
Benton Harbor, MI 49022  
PH: (269) 849-2347  
Fax Number: (269) 849-1227

**E-mail: rudlaffk@michigan.gov**

**CONSTRUCTION COST:**

A. The estimated cost of construction is:

1.	Mainline Pavement	\$	500,000
2.	Earthwork	\$	110,000
3.	Drainage	\$	40,000
4.	Guardrail	\$	60,000
5.	Maintaining Traffic	\$	380,000
6.	Permanent Pavement Markings/Signs	\$	10,000
7.	Mobilization/Staking	\$	80,000
8.	Restoration/Clearing	\$	20,000
9.	Miscellaneous/Contingency	\$	<u>100,000</u>
CONSTRUCTION TOTAL		\$	1,300,000

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

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

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

**REQUIRED MDOT GUIDELINES AND STANDARDS:**

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

NOTE: A process change mandated by federal audit of MDOT’s design process puts the Omissions and Errors Check Meeting after the Plan Completion. Please keep this in mind when preparing your schedule. See MDOT Road Design Manual, Chapter 14 – Procedures – Section 14.54 for corroboration. See “For Your Information” contacts at the end of this document for more info or questions.

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.

**PROJECT INFORMATION AND CONSULTANT TASKS:**

The design services requested consist of all the road design work related to this I-196 bridge rehabilitation project. The below listed items provide a supplemental description of the project and deliverables to be provided by the Consultant. The project includes, but is not limited to the following items:

1. The I-196 bridges over CR 378 (Exit 13) will each have substructure repairs, beam repairs, railing replacement, and a deep deck overlay. I-196 inside shoulders shall be reconstructed to 8 feet paved for 750 feet on each side of each bridge to carry a single lane of I-196 during bridge work. The outside shoulders will be milled and resurfaced at a depth of 4 inches for a distance of 750 feet on each side of each bridge. Temporary concrete barrier will be used on and under each bridge deck. A hard wired temporary signal shall be constructed to regulate traffic on CR 378 during bridge construction. New concrete approach slabs, guardrail terminals, and downspout drains shall be constructed.
2. The M-140 bridge over I-196 (Exit 18) will receive substructure repairs, beam repair, zone paint, and a shallow deck overlay. I-196 median shoulders shall be widened to 8 feet paved to carry a single lane of I-196 traffic that is shifted away from the bridge painting containment enclosure. M-140 shoulders shall be reconstructed to 8 feet paved for 300 feet on each side of the bridge to carry a single lane of M-140 in alternating directions during bridge work. Additional temporary pavement will be placed along M-140 to create temporary turn lanes into freeway entrance ramps during bridge work. Temporary pavement shall be placed behind the exit ramp gores to maintain traffic to I-196 exit ramps during bridge work. Temporary concrete barrier will be used on and under the bridge deck. A hard wired temporary signal shall be constructed in front of each exit ramp terminal to regulate traffic on M-140 and at exit ramp terminals during bridge work. New concrete approach slabs, guardrail terminals, and downspout drains shall be constructed.
3. The M-43 bridge over I-196 will receive substructure repairs, beam repairs, pier cap replacement, major deck repairs, and a deck overlay. M-43 shoulders are in good condition and are able to carry a single lane of M-140 in alternating directions during bridge work. Temporary concrete barrier will be used on and under the bridge deck. A hard wired temporary signal shall be constructed in to regulate traffic on M-43. New concrete approach slabs, guardrail terminals, and downspout drains shall be constructed.
4. The overall maintenance of traffic (MOT) concept involves maintaining a single lane of I-196 traffic in each direction at all times. The Consultant shall be involved in customizing the staging plan and progress schedule to maintain two lanes of I-196 traffic in each direction during holiday periods and possibly weekly peak traffic periods to be determined later. As indicated above, non-freeway traffic shall be maintained with hard wired temporary signals with actuation at each of the three bridge work locations. I-196 exit ramps at M-140 (Exit 18) shall be maintained at all times. The I-196 bridge over M-140 shall be staged to be constructed in 2015, which is one year after the CR 378 and M-43 locations are constructed. The Consultant shall anticipate

preparation of different staging alternatives, including cost estimates, to assist in selecting the most ideal construction staging. The Consultant provided MOT work zone signing plan will show the sign location and legend for each sign used in each sequence. The I-196 single lane closures shall be located such that the left lane is closed first. Traffic shifts will be utilized to transition traffic to the left or right as necessary. Design the maintenance of traffic for all project work.

5. The Consultant shall complete a Mobility Analysis and Transportation Management Plan for this project as described in the MDOT Work Zone Safety and Mobility Manual.
6. The Road Design Survey is being provided by MDOT. The Consultant shall set up 40 hours to accomplish supplemental survey data collection. This task requires pre-approval by the the MDOT Project Manager. The MDOT design survey is anticipated to have adequately obtained surface data from shoulder to shoulder for all project areas. No traffic control shall be added into the authorization for this activity. If it is later determined to be required, this is considered additional service. The supplemental survey data collection product shall be provided to the MDOT Southwest Region Surveyor in a portfolio as described in Attachment A.
7. The Consultant shall provide removal, construction, sheets with details as necessary to successfully show project work to be constructed.
8. Pavement designs will be provided by MDOT. A combination of roadway resurfacing and reconstruction shall be utilized to afford space to form the new concrete bridge approach slabs and transition the roadway cross slope and profile into the bridge approach slab, which will be constructed flush with bridge deck and at a uniform 2% cross slope. The M-140 approach work shall include replacement of several concrete pavement slabs to accomplish the noted transitions and place the minimum number of expansion joints shown on MDOT Standard Plans.
9. The concept for project drainage is to upgrade the inlets, sewers, and headwalls that receive flow from each side of each bridge deck.
10. The Consultant shall evaluate roadside slopes and roadside hazards and design guardrail or other barriers for permanent and temporary traffic patterns.
11. The Consultant shall trace into the plans from aerial photography topographical landmarks that would fall on the plan sheet but outside the I-94 ROW to improve the pictorial references available on the plan sheets. Drives, billboards, towers, structures, and land use labels are examples of such items to be posted on the plans.
12. All soil erosion control items must be shown on plan sheets with associated key numbers and notes where applicable. The Consultant will provide the design for these measures. MDOT staff will review measures shown on preliminary plans and make comments. The Consultant shall adjust the plan according to the comments.

13. Cost estimates in \*.csv format are to be developed at base plan, preliminary plan, and final plan process steps.
14. Plans are to show existing utilities. Existing utility information will be solicited by MDOT. Information is to be transferred to the plans by the Consultant. The MDOT Project Manager will perform the utility verification distribution. The Design Consultant is to coordinate any communication with utilities with the MDOT Utilities Engineer. The Consultant shall produce an orderly report that identifies all potential conflicts between project work and existing utilities. The Consultant shall participate in utility meetings and form design alternative to minimize utility conflicts. MDOT will coordinate utility relocations. The Coloma TSC Utility Engineer is Jarrett Burgess. He can be reached at phone number 269-849-1790.
15. Public involvement on this project is limited to supporting one public event by completing one flyer with graphics that describes the project, and several simple displays that depict the project highlights. The Consultant shall make allowance for one staff member to attend either one public meeting or one stakeholder meeting.
16. MDOT will reproduce and distribute all paper plan sets associated with project plan distributions. This includes but is not limited to Base Plans, utility distributions, Plan Review, and OEC Meetings.
17. The OEC and final design package products provided by the Consultant shall be supplied in the E-Plan and E-Proposal formats so the MDOT Project Manager can insert them into these packages with a minimum or no manipulation. The matching \*.csv file will accompany these items. The Consultant shall provide a PRE-OEC package one month prior to their target date for the OEC materials submission.
18. A period of approximately six months is expected between Consultant Plan Turn-in and the MDOT letting. An allowance of 5 Consultant hours to refresh the final package with mandated MDOT Standard Plan and/or pay item updates just prior to letting shall be set up in the Consultant work plan.
19. Interim Consultant deliverables include CADD fence files of each sheet provided for base plans, preliminary plans, and final plans. No reference files are to be used and the display must replicate the plans submitted for the respective process step. Cross Sections in \*.pdf format shall be provided at the plan review step. Cross Section in \*.pdf and \*.dgn format shall be provided with final deliverables.
20. All project documents, including final deliverables and the survey are to be provided in 100% electronic format to the Project Manager. Any products in original \*.dgn format shall be provided in both \*.dgn and \*.pdf formats. Paper documents may be submitted, but the electronic copy must also be provided. An additional paper portfolio of survey material is required to be sent to the Southwest Region Surveyor for review when complete.

21. The Design Consultant must obtain prior approval from the MDOT Project Manager before charging of hours on a task in excess of the amount estimated in the work plan. The MDOT Project Manager may delay approval of invoices when the cumulative amount charged exceeds the cumulative design progress.

**CONSULTANT RESPONSIBILITIES:**

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

The Consultant must adhere to all applicable OSHA and MIOSHA safety standards, including the appropriate traffic signs for the activities and conditions for this job and perform field operations in accordance with the Department's Personal Protective Equipment (PPE) policy as stated in the MDOT Guidance Document #10118.

Meet with the MDOT Project Manager to review project, location of data sources and contact persons, and review relevant MDOT operations. The Consultant shall review and clarify project issues, data needs and availability, and the sequence of events and team meetings that are essential to complete the design by the project plan completion date. Attention shall be given to critical target dates that may require a large lead time, such as geotechnical requirements, ROW submittal dates, Railroad coordination requirements, utility conflict resolution, local agency meetings, etc.

- A. 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 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 Preliminary Project Assessment (PPA).
- I. The Consultant shall be required to prepare and submit a CPM network for the construction of this project.
- J. The Consultant representative shall record and submit type-written minutes for all project related meetings to the MDOT Project Manager within two weeks of the meeting. The Consultant shall also distribute the minutes to all meeting attendees. MDOT will provide and distribute official meeting minutes for the Plan Review Meeting.
- K. The Consultant will provide to MDOT at the scheduled submittal dates, electronic copies 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 Adobe PDF) any information, calculations, hydraulic studies, or drawings required by MDOT for acquiring any permit (ie. NPDES, DEQ, etc), approvals (i.e. county drain commission) and related mitigation. MDOT will submit permit requests.
- 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 Consultant shall assist in the review of utility permit requests, incorporate the information in the design plans, and respond within 2 weeks from receipt of the permit.
- P. 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.
- Q. 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.

## **UTILITIES**

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

### **TRAFFIC CONTROL**

The Consultant shall be responsible proper traffic control associated with any field work perform in this authorization. The Consultant shall discuss the traffic control with the Coloma TSC Traffic and Safety Engineer prior to each work activity in the field. These operations are known to consist of scope verification and possible survey operations. Field Work is restricted to be from 9:00 a.m to 3:00 p.m. on Monday through Friday. A shoulder closure is required whenever a work vehicle is parked on the shoulder. The Consultant is expected to avoid parking on roadway shoulders to accomplish field work associated with this project. If required, the Traffic Control Typical is found in Attachment B . The Consultant shall E-mail the MDOT Project Manager, Utility and Permits Engineer, and TSC Traffic and Safety Engineer a work schedule and field contact information prior to any field work activity.

The TSC Traffic and Safety Engineer is Gary Loyola. His contact information is Ph. 269-849-2346, and E-mail: [loyolag@michigan.gov](mailto:loyolag@michigan.gov).

### **GEOTECHNICAL SERVICES**

There are no geotechnical services provided by the Consultant.

### **MDOT PERMITS**

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

### **MONTHLY PROGRESS REPORT**

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

### **MDOT RESPONSIBILITIES:**

- A. Schedule and/or conduct the following:
  1. Project related meetings.

2. The Plan Review
  3. Utility Meetings.
  4. Quantity summary sheets and final item cost estimates.
  5. 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. Furnish the environmental classification document.
  - D. Obtain all permits for the project as outlined in previous section.
  - E. Coordinate any necessary utility relocation.
  - F. 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 as well as combined into one Adobe PDF file in the sequence specified by MDOT. To provide text search capabilities the combined proposal shall be created by converting native electronic files to PDF. Scanning to PDF is discouraged except in instances where it is necessary to capturing a legally signed document or a hard copy version of a document is all that exists.

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 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.

The project construction, removal and profile sheets will require a ratio (scale) of 1:40 (English Units).

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

- A. The title sheet. MDOT will provide a map of the area on a disk in our workstation format. If the map is not available, MDOT will provide a map that could be used. The Consultant shall be responsible for any revisions to the title sheet and the title sheet and map shall meet MDOT format and layout guidelines.
- B. Note Sheet.
- C. Typical Cross-Sections.
- D. Project specific Special Details.
- E. Construction staging and traffic control plans.
- F. Detail grade sheets for critical areas.
- G. Pavement marking plan(s).
- H. Witness and benchmark sheet(s).
- I. Soil boring log sheet(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 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.

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

**PRELIMINARY ENGINEERING - DESIGN**

**DESIGN SCOPE VERIFICATION AND BASE PLAN PREPARATION**

X	<input type="checkbox"/>	3130	Verify Design Scope of Work and Cost	5/11/12	
<input type="checkbox"/>	X	3310	Prepare Aerial Topographic Mapping	/	/
<input type="checkbox"/>	X	3320	Conduct Photogrammetric Control Survey	/	/
<input type="checkbox"/>	X	3321	Set Aerial Photo Targets	/	/
X	<input type="checkbox"/>	3330	Conduct Design Survey	5/10/13	
<input type="checkbox"/>	X	3340	Conduct Structure Survey	/	/
<input type="checkbox"/>	X	3350	Conduct Hydraulics Survey	/	/
X	<input type="checkbox"/>	3360	Prepare Base Plans	8/24/12	
<input type="checkbox"/>	X	<i><u>311M</u></i>	<i>Utility Notification</i>	/	/
<input type="checkbox"/>	X	3361	Review and Submit Preliminary ROW Plans	/	/
<input type="checkbox"/>	X	<i><u>331M</u></i>	<i>Preliminary ROW Plans Distributed</i>	/	/
<input type="checkbox"/>	X	3365	Pre-Conceptual ITS Design and Meeting	/	/
<input type="checkbox"/>	X	3370	Prepare Structure Study	/	/
<input type="checkbox"/>	X	3375	Conduct Value Engineering Study	/	/
X	<input type="checkbox"/>	3380	Review Base Plans	9/14/12	
X	<input type="checkbox"/>	<i><u>332M</u></i>	<i>Base Plan Review (Pre-GI Inspection)</i>	9/14/12	
X	<input type="checkbox"/>	3390	Develop the Maintaining Traffic Concepts	8/24/12	

**P/PMS TASK NUMBER AND DESCRIPTION**

**DATE TO BE COMPLETED BY**  
(mm/dd/yyyy)

YES NO

		<b><u>PRELIMINARY PLANS PREPARATION</u></b>			
<input type="checkbox"/>	X	3510	Perform Roadway Geotechnical Investigation	/	/
<input type="checkbox"/>	X	3520	Conduct Hydraulic/Hydrologic and Scour Analysis	/	/

X	<input type="checkbox"/>	3522 Conduct Drainage Study, Storm Sewer Design, and use Structural Best Management Practices	12/07/12	
<input type="checkbox"/>	X	3530 Conduct Structure Foundation Investigation	/	/
<input type="checkbox"/>	X	3535 Conduct Structure Review for Architectural and Aesthetic Improvements	/	/
X	<input type="checkbox"/>	3540 Develop the Maintaining Traffic Plan	12/07/12	
X	<input type="checkbox"/>	3551 Prepare/Review Preliminary Traffic Signal Design Plan	/	/
X	<input type="checkbox"/>	3552 Develop Preliminary Pavement Marking Plan	12/07/12	
<input type="checkbox"/>	X	3553 Develop Preliminary Non-Freeway Signing Plan	/	/

**MDOT PRECONSTRUCTION TASKS  
CONSULTANT CHECKLIST**

		<b>PRELIMINARY ENGINEERING - DESIGN (cont'd)</b>		
<b>YES</b>	<b>NO</b>			
X	<input type="checkbox"/>	3554 Develop Preliminary Freeway Signing Plan	12/07/12	
X	<input type="checkbox"/>	3555 Prepare/Review Preliminary Traffic Signal Operations	12/07/12	
<input type="checkbox"/>	X	3570 Prepare Preliminary Structure Plans	/	/
X	<input type="checkbox"/>	3580 Develop Preliminary Plans	12/07/12	
<input type="checkbox"/>	X	3581 Review and Submit Final ROW Plans	/	/
<input type="checkbox"/>	X	<u>351M Final ROW Plans Distributed</u>	/	/
<input type="checkbox"/>	X	3585 Final ITS Concept Design and Meeting	/	/
X	<input type="checkbox"/>	3590 Review Preliminary Plans (Hold Plan Review Meeting)	1/11/13	
X	<input type="checkbox"/>	<u>352M THE Plan Review (Grade Inspection)</u>	1/11/13	
<input type="checkbox"/>	X	3595 Conduct ITS Structure Foundation Investigation	/	/

**UTILITIES**

X	<input type="checkbox"/>	3610 Compile Utility Information	8/24/12	
<input type="checkbox"/>	X	3615 Compile ITS Utility Information	/	/
<input type="checkbox"/>	X	3650 Coordinate RR Involvement for Grade Separations	/	/
<input type="checkbox"/>	X	3655 Coordinate RR Involvement for At-Grade Crossings	/	/
<input type="checkbox"/>	X	3660 Resolve Utility Issues	/	/
<input type="checkbox"/>	X	<u>360M Utility Conflict Resolution Plan Distribution</u>	/	/
X	<input type="checkbox"/>	<u>361M Utility Meeting</u>	12/22/13	
<input type="checkbox"/>	X	3670 Develop Municipal Utility Plans	/	/
<input type="checkbox"/>	X	3672 Develop Special Drainage Structures Plans	/	/
<input type="checkbox"/>	X	3675 Develop Electrical Plans	/	/
<input type="checkbox"/>	X	3680 Preliminary ITS Communication Analysis	/	/
<input type="checkbox"/>	X	3690 Power Design (Power Drop in Field)	/	/

<u>MITIGATION/PERMITS</u>				
<input type="checkbox"/>	<b>X</b>	<b>3710</b>	<b>Develop Required Mitigation</b>	/ /
<input type="checkbox"/>	<b>X</b>	<b>3720</b>	<b>Assemble Environmental Permit Applications</b>	/ /
<input type="checkbox"/>	<b>X</b>	<b>3730</b>	<b>Obtain Environmental Permit</b>	/ /

## MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST

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

		<b>P/PMS TASK NUMBER AND DESCRIPTION</b>	<b>DATE TO BE COMPLETED BY (mm/dd/yyyy)</b>
<b>YES</b>	<b>NO</b>		
<b><u>FINAL PLAN PREPARATION</u></b>			
<b>X</b>	<input type="checkbox"/>	<b>PRE-OEC Package Submission</b>	<b>3/15/13</b>
<b>X</b>	<input type="checkbox"/>	<b>PRE-OEC Meeting</b>	<b>3/26/13</b>
<b>X</b>	<input type="checkbox"/>	<b>3821 Prepare/Review Final Traffic Signal Design Plan</b>	<b>4/19/13</b>
<b>X</b>	<input type="checkbox"/>	<b>3822 Complete Permanent Pavement Marking Plan</b>	<b>4/19/13</b>
<input type="checkbox"/>	<b>X</b>	<b>3823 Complete Non-Freeway Signing Plan</b>	/ /
<b>X</b>	<input type="checkbox"/>	<b>3824 Complete Freeway Signing Plan</b>	<b>4/19/13</b>
<b>X</b>	<input type="checkbox"/>	<b>3825 Prepare/Review Final Traffic Signal Operations</b>	<b>4/19/13</b>
<b>X</b>	<input type="checkbox"/>	<b>3830 Complete the Maintaining Traffic Plan</b>	<b>4/19/13</b>
<b>X</b>	<input type="checkbox"/>	<b>3840 Develop Final Plans and Specifications</b>	<b>4/19/13</b>
<b>X</b>	<input type="checkbox"/>	<b><u>380M Plan Completion</u></b>	<b>4/19/13</b>
<input type="checkbox"/>	<b>X</b>	<b>3850 Develop Structure Final Plans and Specifications</b>	/ /
<b>X</b>	<input type="checkbox"/>	<b>3870 Hold Omissions/Errors Check (OEC) Meeting</b>	<b>5/17/13</b>
<b>X</b>	<input type="checkbox"/>	<b><u>387M Omissions/Errors Checks Meeting</u></b>	<b>5/17/13</b>
<b>X</b>	<input type="checkbox"/>	<b><u>389M Plan Turn-In</u></b>	<b>6/14/13</b>

### **FOR YOUR INFORMATION**

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

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

Dennis Kelley: (517) 373-4614

**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.

**ATTACHMENT A**  
**SURVEY SCOPE OF WORK**  
**4 Bridges on I-196, Van Buren County**

NOTES:

1. The Consultant shall discuss the scope of this survey with the MDOT Project Manager / Region Surveyor before submitting a Price Proposal:

- MDOT Project Manager: Kyle Rudlaff  
(269) 849-2347  
[RudlaffK@michigan.gov](mailto:RudlaffK@michigan.gov)
- MDOT Region Surveyor: Erik J. Schnepf, PS  
(269) 337-3922  
[SchnepfE@michigan.gov](mailto:SchnepfE@michigan.gov)

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, according to Public Act 299 of 1980.

3. Work in any of the following categories of survey: Road Design, Structure, Hydraulic, Right-of-Way, Photogrammetric Ground Control, and/or Geodetic Control must be completed by a survey firm which is pre-qualified by MDOT for that category.
4. Surveys must meet all requirements of the Michigan Department of Transportation (MDOT) Design Surveys *Standards of Practice* dated March 2009. Please contact the MDOT Design Survey office to clarify any specific questions regarding these standards.
5. Consultants must obtain all necessary permits required to perform this survey on any public and/or private property, including an up-to-date permit from the MDOT Utilities Coordination and Permits Section.
6. Prior to performing the survey, the Consultant must contact all landowners upon whose lands they will enter. The contact may be personal, phone or letter, but must be documented. This notice must include the reasons for the survey on private land, the approximate time the survey is to take place, the extent of the survey including potential brush cutting (which must be minimized), and an MDOT contact person (the MDOT Project Manager or designate).
7. The Consultant must contact any and all Railroads prior to commencing field survey on railroad property. The cost for any permit, flaggers and/or training that is required by the Railroad will be considered as a direct cost, but only if included in the Consultant's priced proposal.
8. The Consultant must adhere to all applicable OSHA and MIOSHA safety standards, including the appropriate traffic signs for the activities and conditions for this job.
9. Consultants are responsible for a comprehensive and conscientious research of all records, including MDOT records, essential for the completion of this project.
10. Measurements, stationing, recorded data, and computations must be in International Feet, unless specified otherwise by the MDOT Project Manager.
11. Coordinate values shall be based upon the Michigan State Plane coordinate system NAD83 (NSRS2007). All elevations must be based upon the North American Vertical Datum of 1988 (NAVD88). The datums must be clearly stated in the Survey Work Plan.
12. The survey notes must be submitted to the Design Survey Unit in 10" by 12" divided portfolios with flap covers. As many portfolios should be used as are needed to contain all of the required documents and Compact Discs (CD's) or DVD's. Duplicate CD's must be included in the portfolio, with one set labeled "Region Surveyor". It is desirable to limit paper documents as much as possible.
13. Each portfolio and CD must be labeled on the outside as in the following example:  
Survey Notes for:  
Route, Location and Project Limits [I-94 under Beaubien Street ]  
Control Section [S06 of 82024] Job Number [45197D] Date [ *of submittal* ]



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.

## 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.

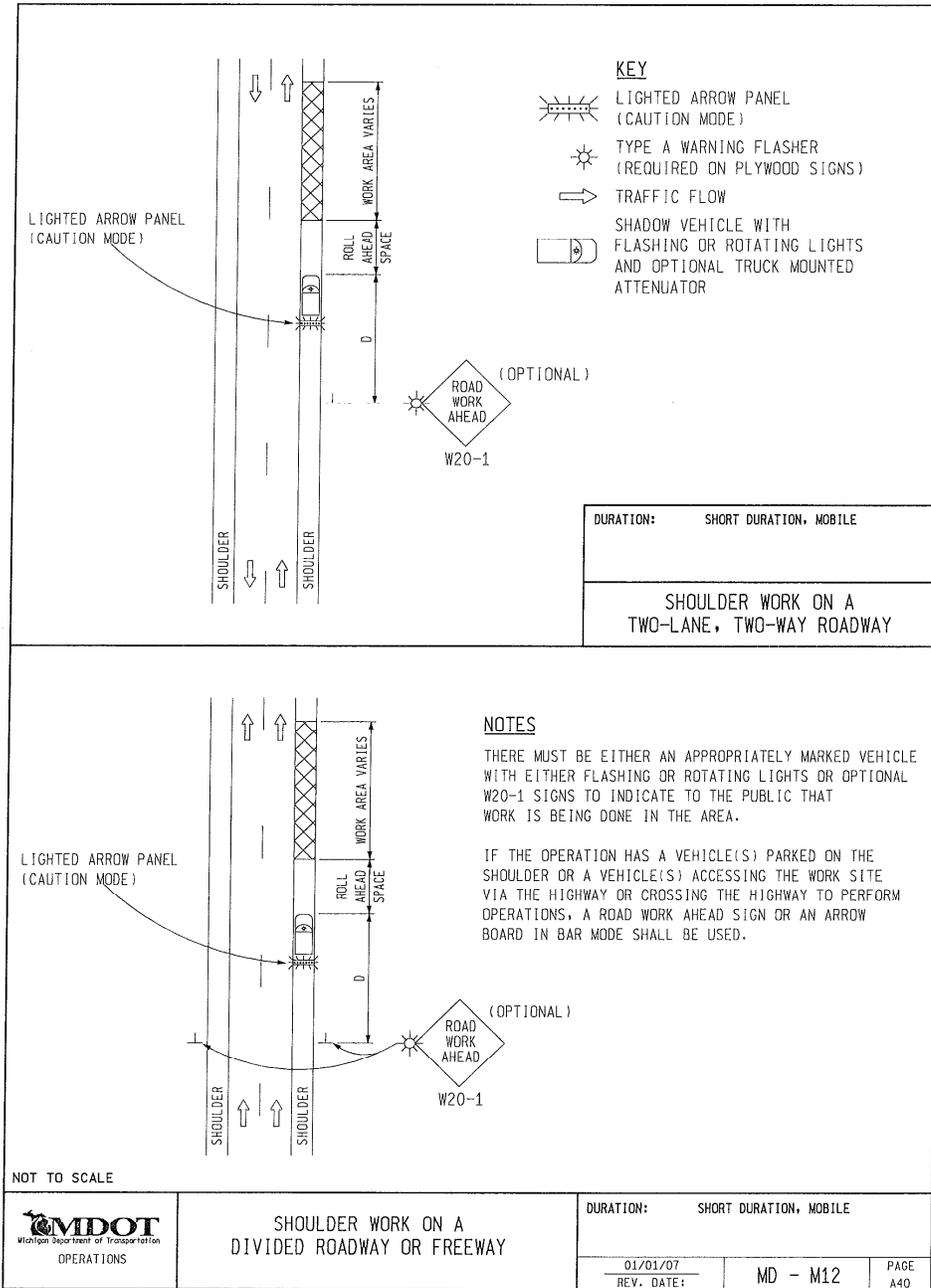
## FINAL REPORT: DELIVERABLES

The final report for this project shall include:

1. In the first pocket of the portfolio, and first directory on the CD, labeled ADMINISTRATIVE, the following will appear:
  - a. MDOT's Form 222(5/01) entitled "SURVEY NOTES: RECEIPT AND TRANSMITTAL"
  - b. The project's Professional Surveyor's Report on company letterhead consisting of:
    - i) A comprehensive synopsis of the work performed on this project, signed and sealed by the project's Professional Surveyor.
    - ii) The source and methods used to establish the project horizontal and vertical control and alignment(s) for this project.
    - iii) A detailed explanation of anything discovered during the survey of this project that may create a problem for the designer or another surveyor.
  - c. CD or DVD with all documents scanned or converted into PDF files. Each page must be inserted in a master PDF file and bookmarked for easy retrieval. An example can be provided upon request.
  - d. MDOT QA/QC Portfolio Checklist (revised March 2009).
2. In the second pocket of the portfolio, and second directory on the CD, labeled ALIGNMENT, the following will appear:
  - a. An annotated MicroStation drawing of the alignment(s), showing:
    - i) A statement defining the alignment(s) as survey, as constructed, and/or legal
    - ii) Stationing, source of stationing, and station equation to existing stationing
    - iii) Horizontal coordinates of P.I.'s, at a minimum
    - iv) Curve data
    - v) Alignment points found or set
    - vi) Control points
    - vii) Reference lines and angles of crossing (if appropriate)
    - viii) Government corners and ties to government lines
  - b. Witness list for the alignment points found or set, which shows coordinates, stationing and four witnesses for each alignment point. Witness lists must use only uppercase letters.
  - c. LCRC's for legal alignment points found or set.
3. In the third pocket of the portfolio, and third directory on the CD, labeled CONTROL, the following will appear:
  - a. Documentation of horizontal and vertical datum sources.

- b. OPUS documentation, long version..
  - c. Least squares adjustments for the horizontal and vertical control.
  - d. It is not necessary to submit electronic raw survey data in hardcopy form, or in the .PDF file.
  - e. Text files 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.
  - f. An MDOT-formatted Microsoft Word file, SurveyInfoSheet.doc, showing the data in e. above, using only upper case letters.
4. In the fourth pocket of the portfolio, and fourth directory on the CD, labeled PROPERTY, the following will appear:
- a. Tax maps and descriptions with owner names, addresses and phone numbers, if Right of Way is to be acquired, or if riparian ownerships are required.
  - b. Maps, plats, and recorded surveys.
  - c. Documents such as plats, Act 132 Certificates and/or tax maps marked with point numbers as property ties, if Right of Way is to be acquired.
  - d. Legible recorded copies of all Land Corner Recordation Certificates (LCRC) filed for the government corners (PLSS corners and Property Controlling Corners) used for computations and/or in danger of obliteration by impending construction.
5. In the fifth pocket of the portfolio, and fifth directory on the CD, labeled MAPPING, the following will appear:
- a. Mapping file in MDOT MicroStation V8 format, and also converted to .PDF format. All point and line descriptions must use only upper case letters.
  - b. An archived CAiCE software file.
  - c. Geopak files produced from CAiCE.
  - d. 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.
  - e. All supporting and supplemental information or data, such as drainage and utilities, electronically only if possible.
6. In the sixth pocket of the portfolio, and sixth directory on the CD, labeled MISCELLANEOUS, the following will appear:
- a. Any photographs taken for clarity of an area
  - b. Any newspaper clippings related to the project
  - c. Any information not covered in this scope that will be of benefit to the designer or another surveyor

**ATTACHMENT B**  
**CONSULTANT TRAFFIC CONTROL**  
**4 Bridges on I-196, in Van Buren County**



**ATTACHMENT C**

**Location Map**

**4 Bridges on I-196 in, Van Buren County**

