

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

	REQUISITION NUMBER	DUE DATE	TIME DUE
MDOT PROJECT MANAGER	JOB NUMBER (JN)	CONTROL SECTION (CS)	
DESCRIPTION			
<b>MDOT PROJECT MANAGER:</b> Check all items to be included in RFP  WHITE = REQUIRED ** = OPTIONAL  Check the appropriate Tier in the box below		<b>CONSULTANT:</b> Provide only checked items below in proposal	
<input type="checkbox"/> <b>TIER I</b> (\$50,000 - \$150,000)	<input type="checkbox"/> <b>TIER II</b> (\$150,000-\$1,000,000)	<input type="checkbox"/> <b>TIER III</b> (>\$1,000,000)	
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Understanding of Service **
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<i>Innovations</i>
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Organizational Chart
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Qualifications of Team
Not required as part of Official RFP	Not required as part of Official RFP	<input type="checkbox"/>	Quality Assurance/Quality Control **
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<b>Location:</b> The percentage of work performed in Michigan will be used for all selections unless the project is for on-site p=inspection or survey activities, then location should be scored using the distance from the consultant office to the on-site inspection or survey activity.
N/A	N/A	<input type="checkbox"/>	Presentation **
N/A	N/A	<input type="checkbox"/>	Technical Proposal (if Presentation is required)
3 pages (MDOT Forms not counted) ( <b>No Resumes</b> )	7 pages (MDOT Forms not counted)	14 pages (MDOT forms not counted)	Total maximum pages for RFP <b>not including key personnel resumes.</b> Resumes limited to 2 pages per key staff personnel.

**PROPOSAL AND BID SHEET EMAIL ADDRESS – [mdot-rfp-response@michigan.gov](mailto:mdot-rfp-response@michigan.gov)**

### GENERAL INFORMATION

Any questions relative to the scope of services must be submitted by e-mail to the MDOT Project Manager. Questions must be received by the Project Manager at least five (5) working days prior to the due date and time specified above. All questions and answers will be placed on the MDOT website as soon as possible after receipt of the questions, and at least three (3) days prior to the RFP due date deadline. The names of vendors submitting questions will not be disclosed.

MDOT is an equal opportunity employer and MDOT DBE firms are encouraged to apply. The participating DBE firm, as currently certified by MDOT's Office of Equal Opportunity, shall be listed in the Proposal.

### MDOT FORMS REQUIRED AS PART OF PROPOSAL SUBMISSION

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

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

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

**REQUEST FOR PROPOSAL**

The Michigan Department of Transportation (MDOT) is seeking professional services for the project contained in the attached scope of services.

If your firm is interested in providing services, please indicate your interest by submitting a Proposal, Proposal/Bid Sheet or Bid Sheet as indicated below. The documents must be submitted in accordance with the latest (Consultant/Vendor Selection Guidelines for Services Contracts" and "Guideline for Completing a Low Bid Sheet(S)\*, if a low bid is involved as part of the selection process. **Reference Guidelines are available on MDOT's website under Doing Business > Vendor/Consultant Services > Vendor/Consultant Selections.**

**RFP SPECIFIC INFORMATION**

ENGINEERING SERVICES       BUREAU OF TRANSPORTATION PLANNING       OTHER

THE SERVICE WAS POSTED ON THE ANTICIPATED QUARTERLY REQUESTS FOR PROPOSALS

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

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

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

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

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

**For a cost plus fixed fee contract**, the selected vendor must have a cost accounting system to support a cost plus fixed fee contract. This type of system has a job-order cost accounting system for the recording and accumulation of costs incurred under its contracts. Each project is assigned a job number so that costs may be segregated and accumulated in the vendor's job-order accounting system.

**Qualification Based Selection / Low Bid** – Use Consultant/Vendor Selection Guidelines. See Bid Sheet instructions for additional information.

For Qualification Review/Low Bid selections, the selection team will review the proposals submitted. The vendor that has met established qualification threshold and with the lowest bid will be selected.

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

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

**BID SHEET INSTRUCTIONS**

Bid Sheet(s) must be submitted in accordance with the "Guidelines for Completing a Low Bid Sheet(s)\* (available on MDOT's website). Bid Sheet(s) are located at the end of the Scope of Services. Submit bid sheet(s) with the proposal, to the email address: [mdot-rfp-response@michigan.gov](mailto:mdot-rfp-response@michigan.gov). Failure to comply with this procedure may result in your bid being rejected from consideration.

**PARTNERSHIP CHARTER AGREEMENT**

MDOT and ACEC created a Partnership Charter Agreement which establishes guidelines to assist MDOT and Consultants in successful partnering. Both the Consultant and MDOT Project Manager are reminded to review the [ACEC-MDOT Partnership Charter Agreement](#) and are asked to follow all communications, issues resolution and other procedures and guidance's contained therein.

**NOTIFICATION  
MANDATORY ELECTRONIC SUBMITTAL**

**Proposals submitted for this project must be submitted electronically.**

**The following are changes to the Proposal Submittal Requirements:**

- Eliminated the Following Requirements:
  - Safety Program
  - Communication Plan
  - Past Performance as *a separate section*
  - Separate section for DBE Statement of goals. Include information in Qualification of Team section
  
- Implemented the Following Changes:
  - All proposals require an Organization Chart
  - Resumes must be a maximum of two pages
  - Only Key (lead) staff resumes may be submitted
  - Tier III proposal reduced from 19 to 14 pages
  - Forms 5100D, 5100I, and 5100G combined – 5100D
  - Forms 5100B and 5100H combined – 5100B
  - RFP's will be posted on a weekly basis -- on Mondays

**The following are Requirements for Electronic Submittals:**

- Proposals must be prepared using the most current guidelines
- The proposal must be bookmarked to clearly identify the proposal sections (See Below)
- For any section not required per the RFP, the bookmark must be edited to include “N/A” after the bookmark title.  
**Example:** Understanding of Service – N/A
- Proposals must be assembled and saved as a single PDF file
- PDF file must be 5 megabytes or smaller
- PDF file must be submitted via e-mail to [MDOT-RFP-Response@michigan.gov](mailto:MDOT-RFP-Response@michigan.gov)
- MDOT's requisition number and company name must be included in the subject line of the e-mail. The PDF shall be named using the following format:
  - Requisition#XXX\_Company Name.PDF
- MDOT will not accept multiple submittals
- Proposals must be *received* by MDOT on or before the due date and time specified in each RFP

**If the submittals do not comply with the requirements, they may be determined unresponsive.**

The Consultant's will receive an e-mail reply/notification from MDOT when the proposal is received. Please retain a copy of this e-mail as proof that the proposal was received on time. **Consultants are responsible for ensuring the MDOT receives the proposal on time.**

**\*\*Contact Contract Services Division immediately at 517-373-4680 if you do not get an auto response\*\***

**Required Bookmarking Format:**

- I. Request for Proposal Cover Sheet Form 5100D
  - A. Consultant Data and Signature Sheet, Form 5100J (if applicable)
- II. Understanding of Service
  - A. Innovations
- III. Qualifications of Team
  - A. Structure of Project Team
    - 1. Role of Firms
    - 2. Role of Key Personnel
  - B. Organization Chart
  - C. Location
- IV. Quality Assurance / Quality Control Plan
- V. Resumes of Key Staff
- VI. Pricing Documents/Bid Sheet (if applicable)

**2/14/12**

**NOTIFICATION  
E-VERIFY REQUIREMENTS**

E-Verify is an Internet based system that allows an employer, using information reported on an employee's Form I-9, Employment Eligibility Verification, to determine the eligibility of that employee to work in the United States. There is no charge to employers to use E-Verify. The E-Verify system is operated by the Department of Homeland Security (DHS) in partnership with the Social Security Administration. E-Verify is available in Spanish.

The State of Michigan is requiring, under Public Act 200 of 2012, Section 381, that as a condition of each contract or subcontract for construction, maintenance, or engineering services that the pre-qualified contractor or subcontractor agree to use the E-Verify system to verify that all persons hired during the contract term by the contractor or subcontractor are legally present and authorized to work in the United States.

Information on registration for and use of the E-Verify program can be obtained via the Internet at the DHS Web site: <http://www.dhs.gov/E-Verify>.

The documentation supporting the usage of the E-Verify system must be maintained by each consultant and be made available to MDOT upon request.

It is the responsibility of the prime consultant to include the E-Verify requirement documented in this NOTIFICATION in all tiers of subcontracts.

9/13/12

**Michigan Department of Transportation**

**SCOPE OF SERVICE  
FOR  
DESIGN SERVICES**

**CONTROL SECTION(S):** 03072

**JOB NUMBER(S):** 123525C & 124085C

**PROJECT LOCATION:**

The project is located on M-40 from south of Interchange Drive to Waverly Road in the city of Holland. The project length is 0.50 miles.

**PROJECT DESCRIPTION:**

Work involved in the design of the project consists of relocating Interchange Drive, driveway modifications at the Tulip City Truck Stop, minor widening of M-40 to provide two southbound lanes over I-196, realignment of 64<sup>th</sup> Street to create new intersection at Cabill Drive, modifications to Cabill Drive and minor widening on M-40 to provide dedicated right turn lane to Cabill Drive.

Design of new traffic signal installations at relocated Interchange Drive (03072-01-016) and relocated 64<sup>th</sup> Street intersections (03072-01-019).

**ANTICIPATED SERVICE START DATE:** 01/05/2015

**ANTICIPATED SERVICE COMPLETION DATE:** 01/08/2016

**DBE PARTICIPATION REQUIREMENT:** 6%

**PRIMARY PREQUALIFICATION CLASSIFICATION(S):**

Roadway Rehabilitation and Rural Freeways

**SECONDARY PREQUALIFICATION CLASSIFICATION(S):**

Geotechnical Engineering Services  
Municipal Utilities  
Maintaining Traffic Plans and Provisions  
Permanent Non-Freeway Traffic Signing Plans  
Pavement Marking Plans  
Traffic Signal Design  
Traffic Capacity Analysis and Geometric Studies  
Hydraulic Surveys  
Short and Medium Span Bridges (*precautionary*)

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

1) UTILITY COORDINATION

X MDOT shall be responsible for project Utility Coordination

**MDOT PROJECT ENGINEER MANAGER:**

Jon Sytsma, Cost & Scheduling Engineer  
Kalamazoo TSC  
5372 South 9<sup>th</sup> Street  
(269) 375-8710  
(269) 544-0080  
sytsmaj@michigan.gov

**CONSTRUCTION COST:**

A. The estimated cost of construction is:

1.	<b>Mainline Pavement</b>	<b>\$917,000</b>
2.	<b>Drainage</b>	<b>\$95,000</b>
3.	<b>Maintaining Traffic</b>	<b>\$105,000</b>
4.	<b>Signals</b>	<b>\$335,000</b>
5.	<b>Permanent Pavement Markings/Signs</b>	<b>\$30,000</b>
6.	<b>Miscellaneous</b>	<b><u>\$390,000</u></b>
	<b>CONSTRUCTION TOTAL</b>	<b>\$1,872,000</b>

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

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

**REQUIRED MDOT GUIDELINES AND STANDARDS:**

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

The Consultant is required to use the current MDOT1 workspace version of Bentley MicroStation for CADD applications and Bentley GEOPAK for road design. Consultant shall comply with all MDOT CADD standards and file naming conventions.

## **MISCELLANEOUS INFORMATION:**

See attachment for design concept.

## **MDOT RESPONSIBILITIES:**

- A. Schedule and/or conduct the following:
  - 1. Project related meetings
  - 2. Base Plan Review
  - 3. The Plan Review
  - 4. Omissions/Errors/Check
  - 5. Utility Coordination Meeting(s)
  - 6. Final Transport item cost estimates
- B. Furnish pertinent reference materials.
- C. Furnish prints of an example of a similar project and old plans of the area, if available. Furnish the E.A.
- D. Obtain all permits for the project as outlined in previous section.
- E. Coordinate any necessary utility relocation(s)
- F. Furnish FTP site for software download and instructions for the MDOT Stand Alone Proposal Estimator's Worksheet (SAPW).
- G. Provide layout request and timing permits for signal locations.
- H. Provide design of simple traffic signal operation.
- I. Provide topographic design survey (Hydraulic survey where required is the responsibility of the Consultant).

## **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. Prepare required plans, typical cross-sections, details, and specifications required for design and construction.
- B. Compute and verify all plan quantities.
- C. Conduct hydraulic survey where applicable.
- D. Perform geotechnical analysis.
- E. Prepare staging plans and special provisions for maintaining traffic during construction.
- F. Provide solutions to any unique problems that may arise during the design of this project.
- G. 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.
- H. 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.
- I. If excavation is required, submit the excavation locations which may contain contamination. Project Manager then can proceed in requesting a Project Area Contamination Survey (PACS).
- 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 (in Adobe PDF format) of the required specifications and plan set materials for distribution by MDOT for all reviews for this project.
- L. Prepare and submit electronically (native format or 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 MDOT Project Manager shall be the official MDOT contact person for the Consultant **and shall be made aware of all communications regarding this project.** The Consultant must either address or send a copy of all correspondence to the MDOT Project Manager. This includes all Subcontractor correspondence and verbal contact records.
- P. The Consultant shall contact the MDOT Project Manager whenever discoveries or design alternatives have the potential to require changes in the scope, limits, quantities, costs, or right-of-way of the project.
- Q. The Consultant shall be responsible for obtaining and showing on the plans the location and names of all existing utilities within the limits of the project. In the course of resolving utility conflicts, the Consultant shall make modifications to the plans or design details and provide assistance as directed by the MDOT Utility Coordinator and/or Project Manager. The Consultant shall attend any utility meetings called to ensure that the concerns are addressed on the plans involving utilities. The Consultant shall assist in the review of utility permit requests to ensure compatibility with the project.
- R. The Consultant shall be responsible for all traffic control required to perform the tasks as outlined in this Scope of Design Services.
- S. The Consultant shall be responsible for obtaining up to date access permits and pertinent information for tasks in MDOT Right of Way (ROW).
- T. This information can be obtained through Joe Rios, Utilities/Permits Section, Development Services Division at (517) 241-2103.
- U. On the first of each month, the Consultant Project Manager shall submit a monthly project progress report to the Project Manager.

#### **DELIVERABLES:**

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

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

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

At final Plan Turn-In, Reference Information Documents (RID) shall be delivered to MDOT with standard naming conventions and content. The RID files included will depend on the design survey and work type of the project. These files range from CADD, existing terrain, proposed cross sections, 3D models and files generated for Automated Machine Guidance (AMG) and automated inspection/stakeout activities.

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

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

All plans, special provisions, estimates, and other project related items shall meet all MDOT requirements and detailing practices (i.e., format, materials, symbols, patterns, and layout) or as otherwise directed by the Project Manager. All plans, specifications, and other project related items are subject to review and approval by MDOT.

**PROJECT SCHEDULE:**

The Consultant shall use the following events to prepare the proposed implementation schedule as required in the Guidelines for the Preparation of Responses on Assigned Design Services Contracts. These dates shall be used in preparing the Consultant’s Monthly Progress Reports.

**MDOT  
Preconstruction  
Tasks  
Consultant Checklist  
P/PMS Form Only**

**MDOT PRECONSTRUCTION  
TASKS  
CONSULTANT CHECKLIST**

**Version 11  
Updated  
08-26-2013**

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

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

**STUDY (EARLY PRELIMINARY ENGINEERING)**

		<b>P/PMS TASK NUMBER AND DESCRIPTION</b>		<b>DATE TO BE COMPLETED BY</b>	
		<b>CONSULTANT CONTRACT AUTHORIZATION/EXECUTION</b>		<b>(mm/dd/yyyy)</b>	
<b>YES</b>	<b>NO</b>			<b>/</b>	<b>/</b>
<b><u>INFORMATION GATHERING/STUDIES</u></b>					
<input type="checkbox"/>	X	1115	Traffic Data Collection for Studies	/	/
<input type="checkbox"/>	X	1120	Prepare Traffic Analysis Report for Studies	/	/
<input type="checkbox"/>	X	1125	Traffic Capacity Analysis for Studies	/	/
<input type="checkbox"/>	X	1155	Request/Perform Safety Analysis for Studies	/	/
<input type="checkbox"/>	X	1300	Traffic Impact Study	/	/
<input type="checkbox"/>	X	1350	Determine Need for Interstate Access Change Request	/	/
<input type="checkbox"/>	X	1400	Feasibility Study	/	/
<input type="checkbox"/>	X	1500	Corridor Study	/	/
<input type="checkbox"/>	X	1555	Interstate Access Change Request	/	/
<input type="checkbox"/>	X	<i><u>155M</u></i>	<i><u>FHWA Approval of Interstate Access Change Request</u></i>	/	/
<input type="checkbox"/>	X	1600	Access Management Study Plan	/	/
<input type="checkbox"/>	X	1700	Other Miscellaneous Studies	/	/
<b><u>EPE SCOPING ANALYSIS</u></b>					
<input type="checkbox"/>	X	2100	Scope Verification and Initiation of EPE Activities	/	/
<input type="checkbox"/>	X	2115	Prepare Traffic Analysis Report for EPE/Design	/	/
<input type="checkbox"/>	X	2120	Traffic Data Collection for EPE/Design	/	/
<input type="checkbox"/>	X	2125	Traffic Capacity Analysis for EPE/Design	/	/

<input type="checkbox"/>	X	2130	Prepare Project Purpose and Need	/	/
<input type="checkbox"/>	X	<u>213M</u>	<u>Concurrence by Regulatory Agencies with the Purpose and Need</u>	/	/
<input type="checkbox"/>	X	2140	Develop and Review Illustrative Alternatives	/	/
<input type="checkbox"/>	X	2155	Request/Perform Safety Analysis for EPE/Design	/	/
<input type="checkbox"/>	X	2160	Prepare and Review EIS Scoping Document	/	/
<input type="checkbox"/>	X	<u>216M</u>	<u>Public Information Meeting</u>	/	/

**MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST**

**STUDY (EARLY PRELIMINARY ENGINEERING) (cont'd)**

		<b>P/PMS TASK NUMBER AND DESCRIPTION</b>		<b>DATE TO BE COMPLETED BY</b>	
<b>YES</b>	<b>NO</b>			<b>(mm/dd/yyyy)</b>	
<b><u>EPE DRAFT ANALYSIS</u></b>					
<input type="checkbox"/>	X	2310	Conduct Technical SEE Studies	/	/
<input type="checkbox"/>	X	2311	Cultural Resources Survey	/	/
<input type="checkbox"/>	X	2312	Recreational Survey – Section 4(f)/6(f)	/	/
<b><u>EPE DRAFT ANALYSIS (cont'd)</u></b>					
<input type="checkbox"/>	X	2313	Endangered Species Survey	/	/
<input type="checkbox"/>	X	2314	Wetland Assessment	/	/
<input type="checkbox"/>	X	2315	Wetland Mitigation	/	/
<input type="checkbox"/>	X	2316	Other Technical Reports	/	/
<input type="checkbox"/>	X	2321	Prepare for Aerial Photography	/	/
<input type="checkbox"/>	X	2322	Finish/Print Aerial Photography	/	/
<input type="checkbox"/>	X	2330	Collect EPE Geotechnical Data	/	/
<input type="checkbox"/>	X	2340	Develop and Review Practical Alternatives	/	/
<input type="checkbox"/>	X	<u>233M</u>	<u>Aerial Photography Flight</u>	/	/
<input type="checkbox"/>	X	2360	Prepare and Review EA	/	/
<input type="checkbox"/>	X	<u>236M</u>	<u>Approval of EA by FHWA</u>	/	/
<input type="checkbox"/>	X	2370	Prepare and Review Draft EIS	/	/
<input type="checkbox"/>	X	<u>237M</u>	<u>Approval of Draft EIS by FHWA</u>	/	/
<input type="checkbox"/>	X	2380	Distribute EA	/	/
<input type="checkbox"/>	X	<u>238M</u>	<u>Public Hearing for EA</u>	/	/
<input type="checkbox"/>	X	2390	Distribute DEIS	/	/
<input type="checkbox"/>	X	<u>239M</u>	<u>Public Hearing for DEIS</u>	/	/
<b><u>EPE FINAL ANALYSIS</u></b>					
<input type="checkbox"/>	X	2510	Determine and Review Recommended Alternative	/	/
<input type="checkbox"/>	X	<u>250M</u>	<u>Concurrence by Reg Agencies with Recom Alternatives</u>	/	/
<input type="checkbox"/>	X	2525	Prepare and Review Engineering Report	/	/
<input type="checkbox"/>	X	2530	Prepare and Review Request for FONSI	/	/
<input type="checkbox"/>	X	<u>252M</u>	<u>Approval of FONSI by FHWA</u>	/	/
<input type="checkbox"/>	X	2540	Prepare and Review FEIS	/	/
<input type="checkbox"/>	X	<u>254M</u>	<u>Approval of FEIS by FHWA</u>	/	/

<input type="checkbox"/>	X	2550	Obtain ROD	/	/
<input type="checkbox"/>	X	<u>255M</u>	<u>ROD Issued by FHWA</u>	/	/
<input type="checkbox"/>	X	2570	ITS Concept of Operations	/	/

**CONTAMINATION INVESTIGATION**

<input type="checkbox"/>	X	2810	Project Area Contamination Survey (PCS)	/	/
<input type="checkbox"/>	X	2820	Preliminary Site Investigation (PSI) for Contamination	/	/

**MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST**

**PRELIMINARY ENGINEERING - DESIGN**

		<b>P/PMS TASK NUMBER AND DESCRIPTION</b>		<b>DATE TO BE COMPLETED BY</b> (mm/dd/yyyy)	
<b>YES</b>	<b>NO</b>				
<b><u>DESIGN SCOPE VERIFICATION AND BASE PLAN PREPARATION</u></b>					
X	<input type="checkbox"/>	3130	Verify Design Scope of Work and Cost	/	/
<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"/>	3325	Geotechnical Structure Site Characterization	/	/
<input type="checkbox"/>	X	3330	Conduct Design Survey	/	/
<input type="checkbox"/>	X	3340	Conduct Structure Survey	/	/
X	<input type="checkbox"/>	3350	Conduct Hydraulics Survey	/	/
X	<input type="checkbox"/>	3360	Prepare Base Plans	/	/
<input type="checkbox"/>	X	<u>311M</u>	<u>Utility Notification</u>	/	/
X	<input type="checkbox"/>	3361	Review and Submit Preliminary ROW Plans	/	/
<input type="checkbox"/>	X	<u>331M</u>	<u>Preliminary ROW Plans Distributed</u>	03/04/2015	
<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	/	/
<input type="checkbox"/>	X	3385	Preliminary Load Rating	/	/
X	<input type="checkbox"/>	<u>332M</u>	<u>Base Plan Review (Pre-GI Inspection)</u>	03/04/2015	
X	<input type="checkbox"/>	3390	Develop the Maintaining Traffic Concepts	/	/
<b><u>PRELIMINARY PLANS PREPARATION</u></b>					
<input type="checkbox"/>	<input type="checkbox"/>	3500	Develop Transportation Management Plan	/	/
X	<input type="checkbox"/>	3510	Perform Roadway Geotechnical Investigation	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3520	Conduct Hydraulic/Hydrologic and Scour Analysis	/	/
X	<input type="checkbox"/>	3522	Conduct Drainage Study, Storm Sewer Design, and use Structural Best Management Practices	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3530	Geotechnical Foundation Engineering Report	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3535	Conduct Str. Review for Arch. & Aesthetic Improvements	/	/
X	<input type="checkbox"/>	3540	Develop the Maintaining Traffic Plan	/	/
X	<input type="checkbox"/>	3551	Prepare/Review Preliminary Traffic Signal Design Plan	/	/

X	<input type="checkbox"/>	3552	Develop Preliminary Pavement Marking Plan	/	/
X	<input type="checkbox"/>	3553	Develop Preliminary Non-Freeway Signing Plan	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3554	Develop Preliminary Freeway Signing Plan	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3555	Prepare/Review Preliminary Traffic Signal Operations	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3570	Prepare Preliminary Structure Plans	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3580	Develop Preliminary Plans	/	/
X	<input type="checkbox"/>	3581	Review and Submit Final ROW Plans	/	/
<input type="checkbox"/>	<input type="checkbox"/>	<u>351M</u>	<u>Final ROW Plans Distributed</u>		04/06/2015

**MDOT PRECONSTRUCTION TASKS CONSULTANT CHECKLIST**

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

		<b>P/PMS TASK NUMBER AND DESCRIPTION</b>		<b>DATE TO BE COMPLETED BY</b>	
<b>YES</b>	<b>NO</b>			<b>(mm/dd/yyyy)</b>	
<b><u>PRELIMINARY PLANS PREPARATION (cont'd)</u></b>					
<input type="checkbox"/>	<input type="checkbox"/>	3585	Final ITS Concept Design and Meeting	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3590	Review Preliminary Plans (Hold Plan Review Meeting)	/	/
X	<input type="checkbox"/>	<u>352M</u>	<u>THE Plan Review (Grade Inspection)</u>		07/01/2015
<input type="checkbox"/>	<input type="checkbox"/>	3595	Conduct ITS Structure Foundation Investigation	/	/
<b><u>UTILITIES</u></b>					
<input type="checkbox"/>	<input type="checkbox"/>	3610	Compile Utility Information	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3615	Compile ITS Utility Information	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3650	Coordinate RR Involvement for Grade Separations	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3655	Coordinate RR Involvement for At-Grade Crossings	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3660	Resolve Utility Issues	/	/
<input type="checkbox"/>	<input type="checkbox"/>	<u>360M</u>	<u>Utility Conflict Resolution Plan Distribution</u>	/	/
<input type="checkbox"/>	<input type="checkbox"/>	<u>361M</u>	<u>Utility Meeting</u>	/	/
X	<input type="checkbox"/>	3670	Develop Municipal Utility Plans	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3672	Develop Special Drainage Structures Plans	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3675	Develop Electrical Plans	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3680	Preliminary ITS Communication Analysis	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3690	Power Design (Power Drop in Field)	/	/
<b><u>MITIGATION/PERMITS</u></b>					
<input type="checkbox"/>	<input type="checkbox"/>	3710	Develop Required Mitigation	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3720	Assemble Environmental Permit Applications	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3730	Obtain Environmental Permit	/	/
<b><u>FINAL PLAN PREPARATION</u></b>					
<input type="checkbox"/>	<input type="checkbox"/>	3815	Geotechnical Structure Design Review	/	/
X	<input type="checkbox"/>	3821	Prepare/Review Final Traffic Signal Design Plan	/	/
X	<input type="checkbox"/>	3822	Complete Permanent Pavement Marking Plan	/	/
X	<input type="checkbox"/>	3823	Complete Non-Freeway Signing Plan	/	/

<input type="checkbox"/>	<input type="checkbox"/>	3824	Complete Freeway Signing Plan	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3825	Prepare/Review Final Traffic Signal Operations	/	/
X	<input type="checkbox"/>	3830	Complete the Maintaining Traffic Plan	/	/
X	<input type="checkbox"/>	3840	Develop Final Plans and Specifications	/	/
X	<input type="checkbox"/>	<u>380M</u>	<u>Plan Completion</u>	08/14/2015	
<input type="checkbox"/>	<input type="checkbox"/>	3850	Develop Structure Final Plans and Specifications	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3870	Hold Omissions/Errors Check (OEC) Meeting	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3875	Final Load Rating	/	/

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

		<b>P/PMS TASK NUMBER AND DESCRIPTION</b>		<b>DATE TO BE COMPLETED BY</b>	
<b>YES</b>	<b>NO</b>			<b>(mm/dd/yyyy)</b>	
<b><u>FINAL PLAN PREPARATION (cont'd)</u></b>					
<input type="checkbox"/>	<input type="checkbox"/>	<u>387M</u>	<u>Omissions/Errors Checks Meeting</u>	/	/
<input type="checkbox"/>	<input type="checkbox"/>	<u>389M</u>	<u>Plan Turn-In</u>	09/07/2015	
<input type="checkbox"/>	<input type="checkbox"/>	3880	CPM Quality Assurance Review	/	/
<input type="checkbox"/>	<input type="checkbox"/>	3890	Final ITS Communication Analysis	/	/

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

Compensation for this project shall be on an **actual cost plus fixed fee** basis. This basis of payment typically includes an estimate of labor hours by classification or employee, hourly labor rates, applied overhead, other direct costs, subconsultant costs, and applied fixed fee. The fixed fee for profit allowed for this project is 11.0% of the cost of direct labor and overhead.

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

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

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

MDOT will reimburse the consultant for vehicle expenses and the costs of travel to and from project sites in accordance with MDOT's Travel and Vehicle Expense Reimbursement Guidelines, dated May 1, 2013. The guidelines can be found at [http://www.michigan.gov/documents/mdot/Final\\_Travel\\_Guidelines\\_05-01-13\\_420289\\_7.pdf?20130509082418](http://www.michigan.gov/documents/mdot/Final_Travel_Guidelines_05-01-13_420289_7.pdf?20130509082418). MDOT's travel and vehicle expense reimbursement policies are intended primarily for construction engineering work. Reimbursement for travel to and from project sites and for vehicle expenses for all other types of work will be approved on a case by case basis.

MDOT will pay overtime in accordance with MDOT's Overtime Reimbursement Guidelines, dated May 1, 2013. The guidelines can be found at [http://www.michigan.gov/documents/mdot/Final\\_Overtime\\_Guidelines\\_05-01-13\\_420286\\_7.pdf?20130509081848](http://www.michigan.gov/documents/mdot/Final_Overtime_Guidelines_05-01-13_420286_7.pdf?20130509081848). MDOT's overtime reimbursement policies are intended primarily for construction engineering work. Overtime reimbursement for all other types of work will be approved on a case by case basis.

**ATTACHMENT A**  
**SCOPE FOR HYDRAULIC SURVEY**

**C.S. 03072 Job No. 123525 & 124085**

**Relocated Interchange Drive and Relocated 64<sup>th</sup> Street over unnamed tributary to the Tulip Intercounty Drain  
Allegan County**

The Consultant shall perform a hydraulic survey, which provides geometric data on the stream channel upstream and downstream of the structure. **Two weeks** prior to starting the hydraulic survey, the Consultant surveyor shall contact the Hydraulics Unit Supervisor or the Assistant Hydraulics Unit Leader to schedule a site visit with an MDOT Hydraulics engineer. The purpose of the site visit is to discuss details of the survey and to clarify the intent of the survey. Contact the Hydraulics Unit supervisor, Chris Potvin at 517-335-1919 or Larry Wiggins at 517-373-1713. Notes must be taken at the site visit and submitted promptly to the MDOT Survey Coordinator or Region Surveyor, and the MDOT Hydraulic Engineer.

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, and an MDOT contact person (the MDOT Project Manager or Consultant Survey Coordinator/Region Surveyor).

The Consultant must make every effort to minimize brush cutting on private property. The use of paint on private property is prohibited.

Channel cross-sections shall be taken normal to the direction of *flood* flow and tied to the roadway alignment baseline established for the structure or a project coordinate system so they can be accurately plotted. The sections shall be extended to the edge of the floodplain, to the elevation of the top of the road at the structure, or to a distance beyond the river bank agreed upon with the MDOT Hydraulics engineer at the site visit. Shots must be taken at significant break points on the banks and channel bottom. Any high water marks and date of occurrence (if available) shall be noted.

**Since the hydraulic analysis is to be performed by Consultant staff**, the Consultant shall meet the following requirements for hydraulic cross-sections:

1. Cross-sections shall be submitted electronically in a format acceptable to the Design Engineer-Hydraulics/Hydrology.
2. The centerline of all berms such as roads, railroads, or driveways that cross the stream must be included as a separate chain. Each centerline chain must also have a description or comment that identifies the type of centerline, such as “railroad berm” or “farm drive.”
3. Each cross-section shall be submitted with the points in the chain running all left to right, looking downstream.

4. The cross-sections generally must extend 50 feet past the top of the slope up from the stream.
5. The water surface elevations at each cross section shall be taken at the left edge of water and right edge of water looking downstream. The Consultant must note if any stream bed cross sections were dry, and water surface elevation shots were unavailable.

The project surveyor must ensure that all required information is legible and in a form which is easily accessible to the Hydraulics/Hydrology Unit. The consultant shall deliver the following three files:

- A three dimensional microstation file containing only Hydraulic survey data including labeled cross sections.
- The CAiCE file supporting the microstation file.
- A Microsoft Excel file with each set of cross sectional station and elevation data separated and labeled.

Other formats must be discussed in advance with the Survey Project Manager or MDOT Hydraulics Engineer.

All elevations shall be referenced to the North American Vertical Datum of 1988 (NAVD88), or project datum, if established and different. If a project datum is used, the MDOT Hydraulics Engineer may require a reference to NAVD88 or National Geodetic Vertical Datum of 1929 (NGVD29). Two benchmarks must be established at the stream crossing, one on each side of the stream. All benchmarks must be accurately described. Benchmark leveling shall be a closed loop of at least third-order accuracy, which requires an error of closure between known benchmarks of not more than 0.06 feet times the square root of the distance in Miles.

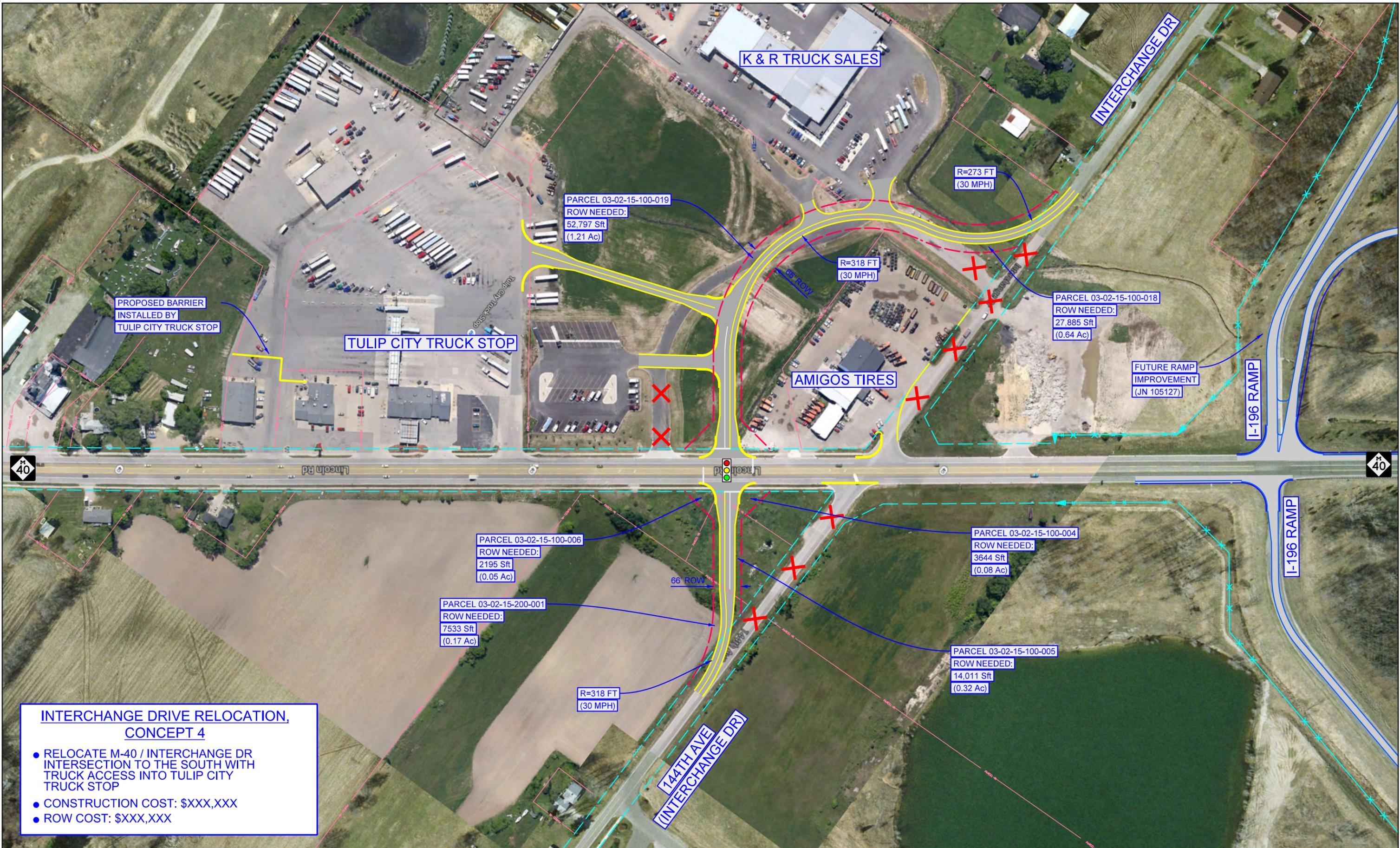
Note: It is not necessary to provide least squares analyses for horizontal and vertical control for a Hydraulics Survey upstream and downstream from the structure. Electronic evidence of horizontal and vertical closure is required. The surveyor must use professional judgment to determine whether the closures are acceptable for use on a Hydraulics Survey. It is necessary to provide accurate elevations for underclearances, road profiles, weirs, and anything that controls flow. It is not necessary to provide extremely accurate closures for vertical and horizontal control used for hydraulics cross-sections.

It is not necessary to provide a witness list of horizontal control points set for hydraulics cross-sections.

**THE NOTES FOR THE HYDRAULIC SURVEY MUST BE PACKAGED IN A SEPARATE PORTFOLIO.** All field measurements, notes, sketches, and calculations must be included in the final transmission. Two separate, identical, and complete portfolios must be provided.

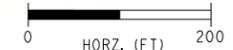
Specifically, the following data shall be delivered for each of the following locations:

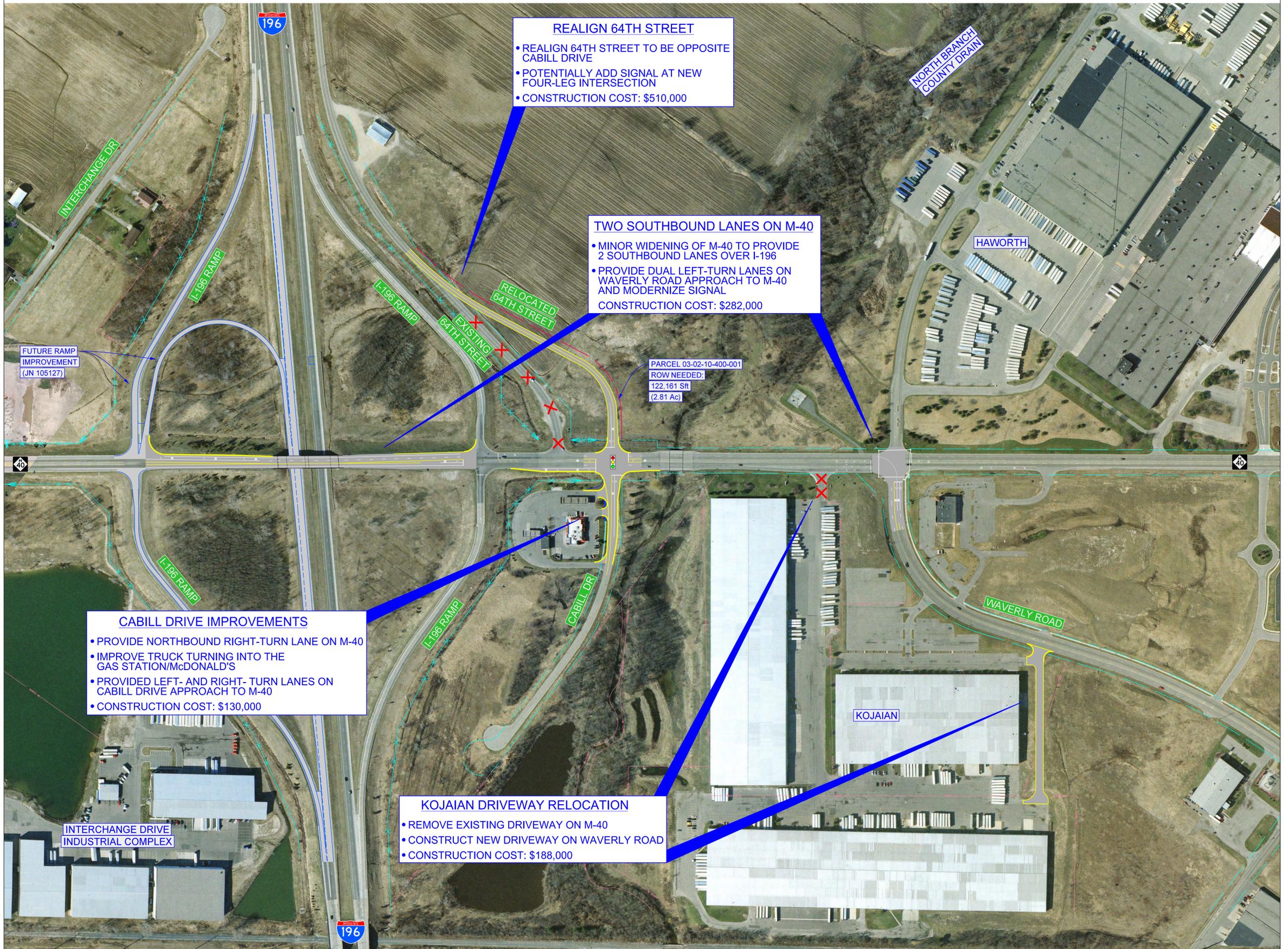
1. Four cross sections of the stream:
  - a. One at the upstream face of the culvert,
  - b. One at the downstream face of the culvert,
  - c. One cross section downstream where the channel returns to its natural state (outside the influence of the road embankment and ditch line),
  - d. One cross section upstream where the channel returns to its natural state.
  - e. If the culvert is to be extended beyond these limits, take a section at the location of the proposed upstream and downstream face of the culvert.
  - f. Take sections left and right approximately 50 feet outside the top of bank.
2. Ten water surface elevation and stream flow line (bottom) elevations:
  - a. 5 at 50-foot intervals upstream of the most upstream cross section, starting 50 feet from the cross section.
  - b. 5 at 50-foot intervals downstream of the most downstream cross section, starting 50 feet from the cross section.
3. A sketch of the structure with length, dimensions, and type (RCP, CMP, etc.) of culvert, as well as invert elevations, crown elevations, channel flow line elevations, and footing elevations (if applicable) at both ends. Use culvert data sheets.
4. A road profile along the crown of the highway
5. Top width of roadway, shoulder to shoulder.
6. Pictures looking upstream and downstream of the culvert, pictures of the upstream and downstream face, and pictures looking up and down the road.
7. Names and addresses of the riparian owners in the four quadrants of the structure.



**INTERCHANGE DRIVE RELOCATION,  
CONCEPT 4**

- RELOCATE M-40 / INTERCHANGE DR INTERSECTION TO THE SOUTH WITH TRUCK ACCESS INTO TULIP CITY TRUCK STOP
- CONSTRUCTION COST: \$XXX,XXX
- ROW COST: \$XXX,XXX





**REALIGN 64TH STREET**

- REALIGN 64TH STREET TO BE OPPOSITE CABILL DRIVE
- POTENTIALLY ADD SIGNAL AT NEW FOUR-LEG INTERSECTION
- CONSTRUCTION COST: \$510,000

**TWO SOUTHBOUND LANES ON M-40**

- MINOR WIDENING OF M-40 TO PROVIDE 2 SOUTHBOUND LANES OVER I-196
- PROVIDE DUAL LEFT-TURN LANES ON WAVERLY ROAD APPROACH TO M-40 AND MODERNIZE SIGNAL
- CONSTRUCTION COST: \$282,000

**CABILL DRIVE IMPROVEMENTS**

- PROVIDE NORTHBOUND RIGHT-TURN LANE ON M-40
- IMPROVE TRUCK TURNING INTO THE GAS STATION/McDONALD'S
- PROVIDED LEFT- AND RIGHT- TURN LANES ON CABILL DRIVE APPROACH TO M-40
- CONSTRUCTION COST: \$130,000

**KOJAIAN DRIVEWAY RELOCATION**

- REMOVE EXISTING DRIVEWAY ON M-40
- CONSTRUCT NEW DRIVEWAY ON WAVERLY ROAD
- CONSTRUCTION COST: \$188,000

PARCEL 03-02-10-400-001  
ROW NEEDED:  
122,161 S.F.  
(2.81 Ac)

