

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

MDOT PROJECT MANAGER			JOB NUMBER (JN)	CONTROL SECTION (CS)
DESCRIPTION				
MDOT PROJECT MANAGER: Check all items to be included in RFP WHITE = REQUIRED GRAY SHADING = OPTIONAL			CONSULTANT: Provide only checked items below in proposal	
Check the appropriate Tier in the box below				
TIER I (\$25,000-\$99,999)	TIER II (\$100,000-\$250,000)	TIER III (>\$250,000)		
			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	
			Location: The percentage of work performed in Michigan will be used for all selections unless the project is for on-site inspection or survey activities, then location should be scored using the distance from the consultant office to the on-site inspection or survey activity.	
N/A	N/A		Presentation	
N/A	N/A		Technical Proposal (if Presentation is required)	
3 pages (MDOT Forms not counted) (No Resumes)	7 pages (MDOT Forms not counted)	19 pages (MDOT Forms not counted)	Total maximum pages for RFP not including key personnel resumes	

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 Required with Proposal)**

Qualifications Based Selection – Use Consultant/Vendor Selection Guidelines

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

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

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

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

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

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

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

BID SHEET INSTRUCTIONS

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

PROPOSAL SUBMITTAL INFORMATION

REQUIRED NUMBER OF COPIES FOR PROJECT MANAGER	PROPOSAL/BID DUE DATE	TIME DUE
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PROPOSAL AND BID SHEET MAILING ADDRESSES

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

MDOT Project Manager

MDOT Other

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

Lansing Regular Mail	OR	Lansing Overnight Mail
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 Non-Prequalified Work)

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

Michigan Department of Transportation

**SCOPE OF SERVICE
FOR
EARLY PRELIMINARY ENGINEERING SERVICES
Roadway Scoping**

CONTROL SECTION: 58151

JOB NUMBER: 115255

PROJECT LOCATION:

I-75 from the State Line to south of the North Dixie Highway interchange (CS 58151, MP 0-15.219), located in the Erie, LaSalle, Monroe and Frenchtown Townships, and the Cities of Monroe and Luna Pier in Monroe County. The approximate project length is 15.2 miles.

PROJECT DESCRIPTION:

Prepare preliminary and final road scoping packages for a 4R fix on the above noted roadway as defined in Attachment A. Reconstruction of all interchange ramps within the limits of the scope should also be included in the Scoping Documents. The I-75/Front/Elm interchange will be more fully evaluated in separate preliminary and final Feasibility Study packages as defined in Attachment B. Due to the size/length of the project, it will need to be broken into multiple jobs not to exceed \$38 million (includes construction and CE) each. The exact location of the split will be determined during the scoping process. The pavement fix will be subject to modification until the conclusion of the preliminary scope review meeting. The preliminary 4R proposed fix is assumed to be roadway reconstruction, bridge widening (only if needed to meet 4R Guidelines or mobility needs), drainage improvements, barrier wall replacement, ramp reconstruction.

The scope of services will include a detailed review of maintaining traffic and mobility (including, but not limited to C03 analysis, draft TMP, Synchro analysis, and HCS analysis) for the proposed 4R work on I-75 as well as the reconstruction of the Front/Elm Street interchange.

The survey work will be limited to minor pick-up of information needed for the Feasibility Study that can't be obtained from other existing sources.

ANTICIPATED SERVICE START DATE: June 5, 2012

ANTICIPATED SERVICE COMPLETION DATE: June 15, 2013

PRIMARY PREQUALIFICATION CLASSIFICATION:

Complex Urban Freeway Design

SECONDARY PREQUALIFICATION CLASSIFICATION(S):

Maintaining Traffic Plans & Provisions
Safety Studies
Traffic Capacity Analysis and Geometric Studies
Bridge Scoping
Hydraulics
Road Design Survey

The Department's pre-qualification is not a guarantee or warranty of the sub consultant's ability to perform or complete the work subcontracted. The Consultant remains fully responsible to the Department for completion of the work according to the authorization as if no portion of it had been subcontracted.

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

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

DBE REQUIREMENT: 0%

MDOT PROJECT ENGINEER MANAGER:

Lynne Kirby, P.E.
Cost & Scheduling Engineer
MDOT Brighton Transportation Service Center
10321 E Grand River, Suite 500, Brighton, Michigan 48116
Phone: (810) 225-2627
Fax: (810) 227-7929
E-mail: kirbyl@michigan.gov

ESTIMATED PROJECT CONSTRUCTION COST:

A cost estimate shall be developed for each project location. Each cost estimate shall include 2012

costs and 2018 costs (5.0% annual inflation). The following are the items that shall be considered:

1. The estimated construction cost shall address:
 - A. Safety Related Work
 - B. Base, Surface and Shoulder
 - C. Non-Motorized
 - D. Geometric Improvements
 - E. Improve Alignment (Vertical/Horizontal)
 - F. Drainage Adjustment and Improvement
 - G. Joint Repair and Pavement Patching
 - H. Detours and Maintaining Traffic
 - I. Permanent Pavement Markings/Signs/Signals
 - J. Environmental
 - K. Miscellaneous

2. For each project location, identify the estimated number of real estate parcels and type (grading permit, easement or fee). The ROW appraisal will be prepared by MDOT.

REQUIRED MDOT GUIDELINES AND STANDARDS:

The scoping documents shall be developed in accordance with the current MDOT Project Scoping Manual. In addition, work shall conform to current MDOT, FHWA, and AASHTO practices, guidelines, policies, and standards including, but not limited to, MDOT Road Design Manual, MDOT Standard Plans, MDOT Drainage Manual, MDOT Work Zone Safety and Mobility Manual, AASHTO Roadside Design Guide, A Policy on Geometric Design of Highways and Streets, A Policy on Design Standards Interstate System, and Michigan Manual of Uniform Traffic Control Devices.

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

CONSULTANT RESPONSIBILITIES:

Complete the scoping package for the design of these projects including, but not limited to the following as described in the current MDOT Scoping Manual:

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 Protection Equipment (PPE) policy as stated in the MDOT Guidance Document #10118.

1. The MDOT Project Manager shall be the official MDOT contact person for the Consultant. The Consultant must either address or send a copy of all correspondence to the MDOT

Project Manager. This includes all sub consultant correspondence and verbal contact records.

2. 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 project scoping by the project completion date. Attention shall be given to critical target dates that may require a large lead time.
3. Maintain a Scoping Project Record which includes a history of significant events (changes, comments, etc.) which influenced the development of the scopes, dates of submittals and receipt of information.
4. The Consultant shall contact, in writing, the MDOT Project Manager whenever discoveries or design alternatives have the potential to require significant changes in the limits, quantities, costs, or right-of-way of the project.
5. Attend any project-related meetings as directed by the MDOT Project Manager.
6. 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 bring an additional person to all meetings whose sole responsibility will be to take notes/minutes. The Consultant shall also distribute the minutes to all meeting attendees.
7. For each project location, determine impacts of the proposed pavement treatment on the existing horizontal and vertical alignments, pavements, curb and gutter, drainage, right of way (ROW), etc.. Every effort shall be made to minimize ROW impacts within the limits of the project. In areas of potential ROW impacts, the Consultant shall document and identify the potential need for additional ROW, by station or address, type of ROW required (grading permit, easement or fee) and roadside improvements proposed (i.e. fencing, turf establishment, landscaping, non motorized, etc.). ROW impacts shall be documented in terms area of potential need (grading permit, easement, or fee). The ROW appraisal will be prepared by MDOT.
8. For each project location, determine the impacts to structures within the project limits that are required to meet 4R Guidelines. Prepare a spreadsheet indicating the facility affected and a brief description of the scope of bridge work required to meet 4R guidelines (widen, replace). **The Consultant will not provide a detailed bridge scoping report.** This information will be provided to the Region Bridge Engineer for future bridge scoping.
9. Generate Base Sheets for the project location, using the Base Map and formatted as described in REQUIRED MDOT FORMAT, for the entire project limits.
10. Prepare existing and proposed general typical cross sections for the project location as described in REQUIRED MDOT FORMAT.

11. Compute and verify all quantities necessary to complete the Project Concept Statement and the Project Scoping Checklist, and calculate a detailed cost estimate using the Scoping estimator Tool (Trns-port).
12. Complete the Statewide Scoping Package Master Checklist – ROAD, Road Scoping Report & Details Worksheet, Culvert Scope Inspection Forms as needed, and Constructability Checklist per the MDOT Scoping Manual.
13. For each project location, review and document the existing drainage system, open or enclosed, and identify areas of possible improvements. Identify the available drainage outlets, identify each outlet's drainage restrictions, and develop some preliminary discharge rates at each location to determine the need for detention. For areas of possible major drainage improvements, document the location, condition, recommended treatment and cost estimate (include whether sewer video taping is recommended and its estimated cost). Send a letter identifying where major drainage improvements are recommended (list the location, condition and recommended treatment) to the MDOT Project Manager. With approval from MDOT, incorporate the fixes into the estimates, and incorporate information into Road Scoping Report & Details Worksheet.
14. If watermains and/or sanitary sewers are present within the project limits, the Consultant shall evaluate the necessity for the relocation of watermains and sanitary sewers, in accordance with MDOT Design Division's Informational Memorandum #441B and #402R dated April 13, 1992. Send a letter to the MDOT Project Manager identifying where watermain and/or sanitary sewer relocation is needed/ recommended. Provide the limits, an explanation for the relocation and a cost estimate for each location.
15. For each project location, submit requests to applicable utility owners for preliminary utility information. Submittals to the utility company shall include: a completed MDOT approved form, and a minimum of two (2) copies of location map and Base Sheets (See Attachment E). With the utility information, document and identify any possible utility conflicts and estimate the cost of relocation and/or adjustment.
16. For each project location, review and document scope conformance to design elements as listed in Attachment D and MDOT's 3R/4R Guidelines for freeway jobs. Prepare a comprehensive table of the values used for the evaluation of the design elements. The table shall, at a minimum, contain the following: minimum values as per design standards for the associated design element, reference where the minimum value as per design standards were derived from, all values used to determine conformance, where values used for conformance were derived from and all formulas used for the calculation of values. The table of values will be submitted with a list of required Design Exceptions prior to the submittal of the Preliminary Scoping package. This information will be presented to the FHWA for review and approval to proceed with required Design Exceptions.

For the Preliminary Scoping Package, documentation shall include Existing Condition, Treatment as per Design Standards, and Proposed Treatment. If the Proposed Treatment is

not in accordance with the Treatment as per Design Standard, an additional section shall be added entitled Reason for not Meeting Design Standards. This section shall provide documentation for the justification for not being in conformance.

For the Final Scoping Package, complete a Design Exception Request for all potential formal design exception needs. Note that cost alone will not be suffice justification for the not bringing the features up to standard.

17. For each project location, review and document the roadside safety related items (i.e. guardrail, barriers, attenuators, etc.) which need to be modified or included in the project. Documentation to include location, existing type and condition, and the recommended treatment. This information shall be included in the appropriate area of the Road Scoping Report & Detailed Worksheet.
18. Perform crash analysis and recommend countermeasures. This shall include, but not limited to, the following:
 - A. Performing Crash Analysis. This shall include the last three (3) years of reliable data for the analysis period. If there is a fatality within those three (3) years, the analysis shall include the details of the specific fatality. MDOT will furnish three (3) years of data.
 - B. Determine Countermeasures based on the Crash Analysis. Determine ROW impacts for each countermeasure identified. Determine the construction cost estimate for each countermeasure. Summarize countermeasures which shall include each crash pattern and countermeasure individually listed, along with their associated ROW impacts and construction cost estimate. ROW impacts shall be documented in terms area of potential need along with the type of ROW required (grading permit, easement, or fee). The ROW appraisal will be prepared by MDOT. The construction cost estimate for each countermeasure recommendation shall be presented in the Preliminary Scoping Package and shall be reviewed and approved by MDOT prior to inclusion in the Final Scoping Package.
19. For each project location, document and identify locations of possible environmental issues which may impact the project, and estimate the cost of treatment. This information shall be included in the appropriate area of the Road Scoping Report & Detailed Worksheet and shall also be entered into a separate spreadsheet and submitted as part of the Final Deliverable Package.
20. For each project location, document and identify (location and who has responsibility for) any existing lighting that has potential for being impacted, or should be included, in the project. Incorporate work into the estimate. (Lighting on Non-Freeway roads is the responsibility of the local jurisdiction).
21. For each project location, develop the Maintaining Traffic Concept and Mobility Analysis as per Attachment C.

22. For each project location, identify, contact and coordinate with all affected governmental agencies (County, and/or city, township) within the project limits (and directly abutting, if any part of the construction influence area will be within another agencies area). Coordination will involve, at a minimum, an initial letter stating the project and its scope and requesting local input, within 30 days, in the development of the detailed scope. A follow up letter, if no response is given, and a final letter stating the process that occurred and what the final scope will be to all affected governmental agencies. There may be the need to attend meetings and receive and return telephone calls from the affected agencies. Any and all local requests shall be reviewed with MDOT before any commitment to work shall be given to the affected agencies. MDOT shall be informed of any meeting with the affected agencies a minimum of 72 hours in advance of the meeting. All discussions with agencies shall be documented and submitted with the monthly progress reports.

For each project location, prepare a spreadsheet summary of the local coordination that occurred. The summary shall document the planning/coordination process that occurred with each of the affected local agencies. The summary shall include, at a minimum, specifically what was sent to who and when, what was received from who and when and what responses were made (and why) to who and when. The information shall be entered into a separate spreadsheet and submitted as part of the Final Deliverable Package. The spreadsheet shall be prepared as stated in REQUIRED MDOT FORMAT.

23. For each project location, incorporate any MDOT identified and/or approved (if approved, include copy of MDOT approval) local needs/requests into project scope.
24. For each project location, provide photographs and digital files (.jpg files) of the existing roadway and roadside conditions to document the needs as identified in the project scope.
25. Prepare a spreadsheet summary for each project location. Each line of the summary shall contain the following information: control section, job number, freeway or non freeway, route, location, affected governmental agencies, work description, Beginning Mile Point, Ending Mile Point, length, lane miles, construction cost, construction cost per lane mile, and potential ROW areas/ types. Each spreadsheet shall be prepared as stated in REQUIRED MDOT FORMAT. The information shall be entered into a separate spreadsheet and submitted as part of the Final Deliverable Package for each project location
26. For each project location, the Final Deliverable Package shall include an updated electronic document addressing all comments received from the Final Scoping Package review. In addition, submit two (2) paper copies in a labeled three ring binder, each with an index and tabbed sections.
27. For each project location, prepare CPM (Critical Path Method) schedule

TRAFFIC CONTROL:

The Consultant shall be responsible for requesting 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 scoping documents and provide assistance as directed by Pascal Bui, Brighton Transportation Service Center Utilities Engineer and/or the MDOT Project Manager. The Consultant shall be responsible for all traffic control required to perform the tasks as outlined in this Project Scope of Design Services.

UTILITIES:

The Consultant shall be responsible for requesting 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 scoping documents and provide assistance as directed by Pascal Bui, Brighton Transportation Service Center Utilities Engineer at (810) 227-4681 and/or the MDOT Project Manager. The Consultant shall be responsible for all traffic control required to perform the tasks as outlined in this Project Scope of Services.

MONTHLY PROGRESS REPORT:

On the first Monday of each month, the Consultant shall submit a monthly project progress report via email to the MDOT Project Manager. The monthly progress report shall follow the guidelines in Attachment F.

MDOT RESPONSIBILITIES:

1. For each project location, schedule and/or conduct the following:
 1. Project related meetings.
 2. Coordinate all scoping activities that require MDOT personnel.
2. For each project location, furnish prints or electronic files of old plans and a copy of the Control Section Log of the area, if available.
3. For each project location, furnish available soil boring/pavement core information.
4. For each project location, perform pavement designs and geotechnical analysis. Supply relevant geotechnical quantities.
5. For each project location, furnish a list of the utility companies present within the control section(s) of the project.
6. For each project location, furnish ROW maps of the area, if requested.
7. For each project location, furnish project selection justification data, including Pavement Management System data and Sufficiency Rating data.
8. For each project location, furnish inspection reports for the structures in the area, for information purposes.
9. For each project location, furnish current crash history data.

10. For each project location, furnish list of people invited to each Scope Review Meeting.
11. For the project location, furnish available traffic count information.

PROJECT SCHEDULE:

The Consultant shall use the following milestone dates 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. A minimum of ten (10) working days will be needed for MDOT review of the Preliminary Scoping Package.

<u>Milestone Date</u>	<u>Description</u>
Week of 4/9/2012	Tentative Scope/Kick off Meeting(prior to submittal of Priced Proposal)
September 15, 2012	Submittal of MOT Concepts/Mobility for review (Attachment C)
November 15, 2012	Submittal of Draft Feasibility Study
January 4, 2013	Submittal of Preliminary Scoping Package
Week of 1/21/2013	Preliminary Scope Review Meeting with MDOT Staff
February 22, 2013	Submittal of Final Scoping Package & Final Feasibility study
Week of 3/18/2013	Final Scope Review Meeting with MDOT Staff
April 8, 2013	Final Deliverable Package

CONSULTANT PAYMENT - Milestone:

Compensation for this project shall be on a **milestone** basis. Such compensation shall be divided into payments for the following portions of the services and in the following amounts:

1.	Preliminary Scoping Package	30%
2.	Preliminary Feasibility study	10%
3.	Final Scoping Package	40%
4.	Final Feasibility study	10%
3.	Final Deliverable Package	10%

Total Reimbursement for services

100%

All milestone payment percentages are negotiable except for the Final Deliverable Package. The MDOT Project Manager may authorize payment if the milestone is delayed due to circumstances beyond the Consultant's control.

Definition for Milestone Payment Schedule Items:

Preliminary Scoping Package - This payment milestone is considered complete and eligible for compensation when the required number of copies, prepared under the required format and containing all information as stated in this scope of work for the Preliminary Scoping Package and all requested associated documents are received and approved by the MDOT Project Manager. **For the Preliminary submittal, the scope shall be delivered as one package. Within the package, the Consultant will present the recommended split of projects. Each project shall be no more than \$38 million for the A Phase (includes construction & CE)**

Preliminary Feasibility Study - This payment milestone is considered complete and eligible for compensation when the required number of copies, prepared under the required format and containing all information as stated in this scope of work for the Preliminary Feasibility Study and all requested associated documents are received and approved by the MDOT Project Manager.

Final Scoping Package - This payment milestone is considered complete and eligible for compensation when the required number of copies, prepared under the required format, containing all requested changes, modifications and/or additions as identified through the review of the Preliminary Scope and through the Scope Review Meetings, containing all information as stated in this scope of work for Final Scoping Package and all requested associated documents are received and approved by the MDOT Project Manager. **This deliverable may include separate packages for each individual project as determined after the review of the Preliminary Scoping Package.**

Final Feasibility Study - This payment milestone is considered complete and eligible for compensation when the required number of copies, prepared under the required format, containing all requested changes, modifications and/or additions as identified through the review of the Preliminary Feasibility Study and through the Scope Review Meetings, containing all information as stated in this scope of work for Final Feasibility Study and all requested associated documents are received and approved by the MDOT Project Manager.

Final Deliverable Package - This payment milestone is considered complete and eligible for compensation when the packages are prepared under the required format and containing all information as stated in this scope of work for the Final Deliverable Package and all requested associated documents are received and approved by the MDOT Project Manager.

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. Please note: Labor supporting documentation must be submitted with your billing for all labor performed on a milestone basis project.

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.

**ATTACHMENT A
CS 58151 - JN 115255**

**Road Scoping on I-75 from State Line to the south of the North Dixie Highway Interchange
in Monroe County**

REQUIRED MDOT FORMAT

Preliminary Scoping Package

The Preliminary Scoping Package shall be presented in electronic format and on regular letter size paper (8 ½" x 11") with the exception of Base Maps, sketches and diagrams which shall be on 11" x 17" paper (and folded to match the 8 ½" x 11" paper). The Consultant shall submit two (2) copies of the Preliminary Scoping Package. The electronic document shall utilize bookmarks to direct readers to each individual section of the package.

The Preliminary Scoping Package will have a cover sheet shall be entitled "Preliminary Scoping Package" and should also include the Control Section, Job Number, Route, and location description. An index shall also be included in the package. If there are any items, in the Consultant's opinion, that need further review, discussion and/or additional information is needed from MDOT, those items shall be clearly listed on a cover sheet accompanying the Preliminary Scoping Package. The photographs included in the documents shall be in an electronic .jpg format with printouts at 4" x 6", in color, labeled with the location, direction from which the picture was taken, date, particular feature needing improvement and the approximate mile point in the Package. No fewer than 8 and no greater than 24 photos per project location are required.

A Preliminary Scoping Package and cost estimate shall be submitted on or before **January 4, 2013** for MDOT review and comment. The Preliminary Scoping Package shall address all the items listed under CONSULTANT RESPONSIBILITIES. If any of the aforementioned items are not included or not sufficiently complete as determined by the MDOT Project Manager, the Preliminary Scoping Package will be rejected. The Consultant will have up to five (5) working days to make the changes. No additional compensation will be given to the Consultant for costs associated with making the changes directed by the MDOT Project Manager.

In the Preliminary Scoping Package, if there are any items, in the Consultant's opinion, that need further review, discussion and/or additional information is needed from MDOT, those items shall be clearly listed on a cover sheet accompanying the Preliminary Scoping Package.

Final Scoping Package

The Final Scoping Package shall be presented in an electronic format. The electronic document shall utilize bookmarks to direct readers to each individual section of the package. In addition to the electronic document, the Consultant shall submit two (2) copies of the Final Scoping Package presented in a labeled (cover and side to be entitled Final Scoping Package and should also include the Control Section, Job Number, Route, and location description.) three ring binder, with an index and tabbed sections, containing 8 ½" x 11" regular letter size paper for the majority of the documents. 11" x 17" paper may be used for Base Maps, sketches and diagrams. The photographs included in the documents shall be in an electronic .jpg format with printouts at 4" x 6", in color, labeled with the location, direction from which the picture was taken, date, particular feature

needing improvement and the approximate mile point in the Package. No fewer than 8 and no greater than 24 photos per project location are required.

A Final Scoping Package shall be submitted on or before **February 22, 2013**. The Final Scoping Packages shall address and document all the items listed under CONSULTANT RESPONSIBILITIES and incorporate the comments and/or changes received from the Preliminary Scoping Packages and the Preliminary Scope Review meetings. If any of the aforementioned items are not included or not sufficiently complete as determined by the MDOT Project Manager, the Final Scoping Packages will be rejected. The Consultant will have up to five (5) working days to make the changes. No additional compensation will be given to the Consultant for costs associated with making the changes directed by the MDOT Project Manager.

Before the final spreadsheets are submitted as part of the Final Scoping Packages, a preliminary copy for each project location (both hard copy and electronic format) shall be submitted to the MDOT Project Manager for review and approval as to form and content.

Final Deliverables Package

For each project location, the Final Deliverable Package shall include an updated electronic document addressing all comments received from the Final Scoping Package review. In addition, submit two (2) paper copies in a labeled three ring binder, each with an index and tabbed sections. For each project location, a single CD ROM shall be prepared for the electronic files of the Base Sheets(.dgn files), cross sections (.dgn files), photos (.jpg files), location map (.dgn file), and summary sheet(s) (.docx files).

All spreadsheets shall be created using Excel (.xls files). Before the final spreadsheets are submitted, as part of each of the Final Deliverable Packages, a preliminary copy (both hard copy and electronic format) shall be submitted to the MDOT Project Manager for review and approval as to form and content.

The Final Deliverable Package shall be submitted on or before **April 8, 2013**. The Final Deliverable Package shall include items under CONSULTANT RESPONSIBILITIES.

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

THE PRELIMINARY AND FINAL SCOPING PACKAGES

The Preliminary and Final Scoping Packages shall contain the following, and shall be assembled in the order as listed.

The Preliminary and Final Scoping Packages

The Preliminary and Final Scoping Packages for each project location shall contain the following, and shall be assembled in the order as listed.

1. **List of Invitees and Sign In Sheet for Scope Review Meeting**

The list of people invited to the Scope Review Meeting (to be supplied by the MDOT Project Manager and the actual sign-in sheet from the Scope Review Meeting).

2. **Location Map**

A location map shall show a map of the project area showing the roadway name, roadway number, project beginning, project ending, project length, major cross streets, interchanges and local municipalities affected. The Location Map shall be presented on a regular letter size paper (8 ½ " x 11").

3. **Sign off sheet**

A sheet listing the members of the Consultant's Scoping Team (the members name, members signature and area of contribution). Also on this sheet, the Vendor is to list all the sources used in establishing existing information (old plans used, date of on site visits, etc.).

4. **Summary**

A project specific Summary. Refer to Attachment G.

5. **Minutes from Scope Review Meeting**

Project specific notes from the Scope Review Meeting.

6. **Photographs - Road Only**

Provide actual photographs and digital files (.jpg files on attached CD ROM) of the existing roadway and roadside conditions to document the needs as identified in the project scope. The photographs included in the documents shall be 4" x 6", in color, labeled with the location, direction from which the picture was taken, date, particular feature needing improvement and the approximate mile point. No fewer than 8 and no greater than 24 photos per project location are required.

7. **Base Map**

Generate a single Base Map, created electronically using the MicroStation design software and formatted as described in REQUIRED MDOT FORMAT, of the existing roadway using information from old plans, and/or, on site field reviews. The Base Map is used to visually describe the existing roadway within the limits of the project on one page. The project limits for this task shall be defined as the greater of either 400 feet beyond the Point of Beginning (POB) and the Point of Ending (POE) or the limits needed to fully accommodate the maintaining traffic limits as determined in Attachment C. The detail of the Base Map is to include the location of existing roadways, bridges, railroads and cross roads. The Base Map is to show all existing features; i.e. edge of pavements, edge of shoulders, curb lines, drainage courses etc. and label all roads, railroads and drainage features. The Base Map is to represent existing conditions without showing proposed work.

An 11" x 17", a reduced size copy, of the electronically created base map, showing the entire project limits, on 1 page, is to be provided. If it is recommended that the project can be designed in log job

format, then an 8 ½" x 11", full size copy, of the electronically created base map, showing the entire project limits on one (1) page, is to be provided.

8. **Existing and Proposed Typical Cross Sections**

Prepare existing typical cross sections and proposed typical cross sections - generally one per standard cross section area (i.e. if the road changes from a three lane to a five lane section, a cross section for the three lanes and for the five lane sections will be needed).

The typical cross sections, for each standard cross section area, are to be created on 8 ½" x 11" sheets, with the existing typical cross section for the standard cross section area, drawn above the proposed typical cross section for the same standard cross section area.

The existing typicals for each standard cross section shall detail the existing conditions (pavement type, lane width, curb and gutter, shoulders, side slopes, ditch locations, setback to existing right of way limits, storm sewer/drainage structure locations, etc.). The proposed typicals for each standard cross section shall detail the proposed pavement treatments (cold mill, resurface or reconstruct, etc.). The proposed typicals shall also show new lane widths, curb and gutter/shoulders, drainage structures (new, adjusted or tapped into existing), storm sewers and ditches, etc.

The MDOT reviewer, by viewing the typical cross sections, should be able to understand the existing pavement section, the proposed pavement section, and all of the work that is expected to implement the project. For example, if additional right of way will be required, the typicals should provide a visual explanation as to why so that the MDOT reviewers can evaluate options.

9. **Detailed Cost Estimate**

Estimates are to be as detailed as possible. They shall be developed using the most recent MDOT Pay Items and are to be provided in spread sheet format. Individual Pay Item costs shall be rolled up into a Construction Cost.

10. **MDOT Pavement Recommendation**

The actual Pavement Recommendation as provided by MDOT (i.e.: memo, letter, e-mail, etc.).

11. **MDOT Maintaining Traffic Recommendation**

The written recommendation for maintaining traffic ad mobility and the maintaining traffic typicals, as outlined in Attachment C.

12. **Table of Values for Determination of Scope Conformance to 3R/4R and Design Elements**

Prepare a table of the values used for the evaluation of the elements as listed in Attachment E and 3R/4R Guidelines for non-freeway jobs. The table shall, at a minimum, contain the following: minimum values as per design standards for the associated design element, reference where the minimum value as per design standards were derived from, all values used to determine conformance, where values used for conformance were derived from and all formulas used for the calculation of values.

13. **3R / 4R Breakdown and Scope Conformance to Design Elements**

For the Preliminary Scoping Package, documentation shall include Existing Condition, Treatment as per Design Standards, and Proposed Treatment. If the Proposed Treatment is not in accordance with the Treatment as per Design Standard, an additional section shall be added entitled "Reason for not Meeting Design Standards". This section shall provide documentation for the justification for not being in conformance.

For the Final Scoping Package, complete a Design Exception Request for all potential formal design exception needs. Note that cost alone will not suffice justification for the not bringing the features up to standard. See Attachment D for list of Design Elements Subject to Formal Design Exceptions, for blank forms and for an example of the data types required.

14. **Crash Analysis and Countermeasure Recommendations**

Summary of countermeasure recommendation(s) which shall include each location's crash pattern and countermeasure individually listed along with the associated ROW impacts (area and type) and construction cost estimate.

15. **CPM**

An 11" x 17" plot of the Critical Path Method (CPM) network. The critical path shall be clearly identified on the plot. A larger plot may be required for complex networks. Accompanying the plot shall be the Work Day / Completion Date Determination Worksheet and a list of any other assumptions or controlling factors used in creating the network.; all of which shall be printed on 8 ½ " x 11" paper. Also, an electronic format of the CPM shall be included.

2. **Details/Checklist**

Include in this section completed Statewide Scoping Package Master Checklist – Road, Road Scoping Report & Details Worksheet, MPINS Project Concept Statement (provided by MDOT), Program Revision Request (provided by MDOT), and Constructability Checklist.

16. **Correspondence** (MDOT, Utility, Local and Other)

Actual correspondence sent and received, organized by correspondent, in order of latest date.

17. **Quantity Calculations**

.Also included in this location are all hand calculations and assumptions. Also include estimates for any additional option analyzed.

18. **Field Notes**

19. **Base Sheets**

Generate Base Sheets, using the Base Map and formatted as described in REQUIRED MDOT FORMAT, for the entire project limits.

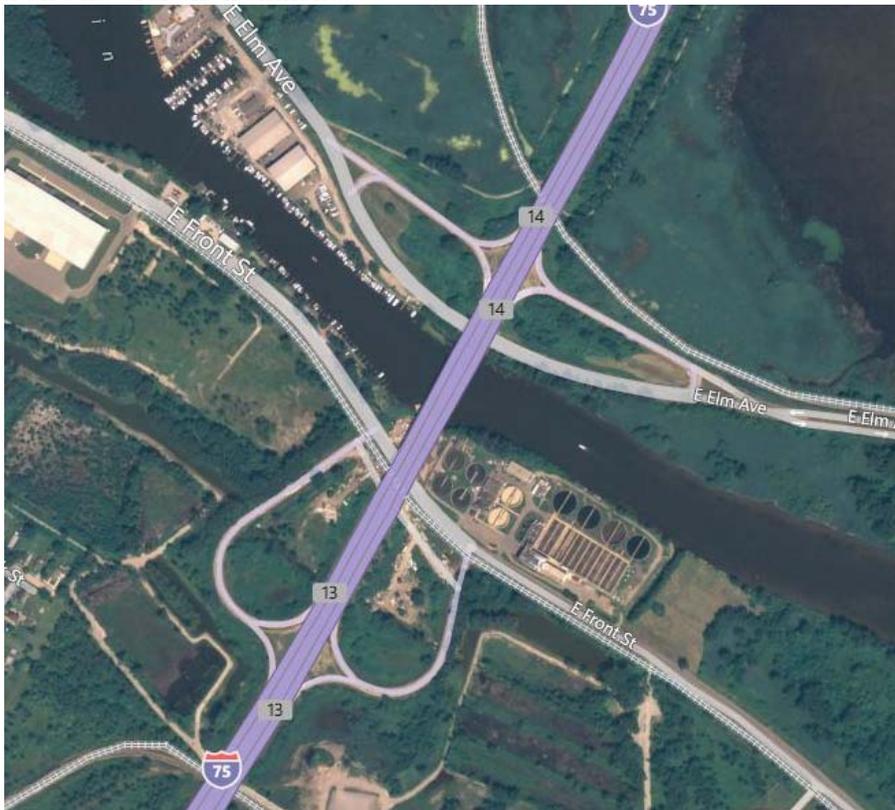
20. **Scoping Project Record**

ATTACHMENT B
CS 58151 - JN 115255
Road Scoping on I-75 from State Line to the south of the North Dixie Highway Interchange
in Monroe County
FEASIBILITY STUDY I-75 at FRONT & ELM

PROJECT DESCRIPTION:

The purpose of the feasibility study is to develop practical alternatives with costs to update the existing design of the I-75 interchanges at Front Street and Elm Street to current standards. The interchanges are aging, have a substandard design, and are in need of reconstruction.

This study will identify a recommended alternative design with a cost estimate, after careful analysis and dismissal of other viable practical alternatives. A minimum of 3 alternatives shall be evaluated. One of the alternatives will be retaining the existing interchange movements and bringing the interchange up to current design standards. The recommended alternative will modernize the interchange to current standards, while minimizing impacts to the existing bridge over the River Raisin, human and natural environments.



GENERAL INFORMATION:

This study consists of all work necessary to complete a feasibility study at the above location, with the goal of minimizing impacts to the surrounding area. At completion of the study, there will be a recommended interchange design concept developed with the least environmental (natural and human) impact, The design concept will include but not be limited to the proposed type of interchange, preliminary alignment of all ramps, potential environmental impacts, right-of-way (ROW) and utility impacts and construction cost estimates.

The feasibility study will include five (5) tasks. The tasks are:

- 1: Document Existing Conditions and Conduct Traffic Operations
- 2: Develop and Analyze Practical Alternatives for the I-75/Front/Elm interchanges
- 3: Refine Cost Estimates for Practical Alternatives
- 4: Identify a Recommended Alternative
- 5: Prepare Draft and Final Feasibility Study Reports

A coordination meeting with MDOT will occur in order to provide direction and to disseminate information already gathered. The performance of the alternatives will be evaluated by the MDOT/Consultant team in terms of how well the facility accommodates the traffic demand and maintains acceptable speeds, occupancies, and safety.

Cost estimates for the construction of the interchange designs will be developed as a part of this study. The estimates will include ROW impacts, utility relocations, and any required mitigation. Cost estimates for practical alternatives will be inflated to 2018 dollars and be prepared using an excel format, latest version.

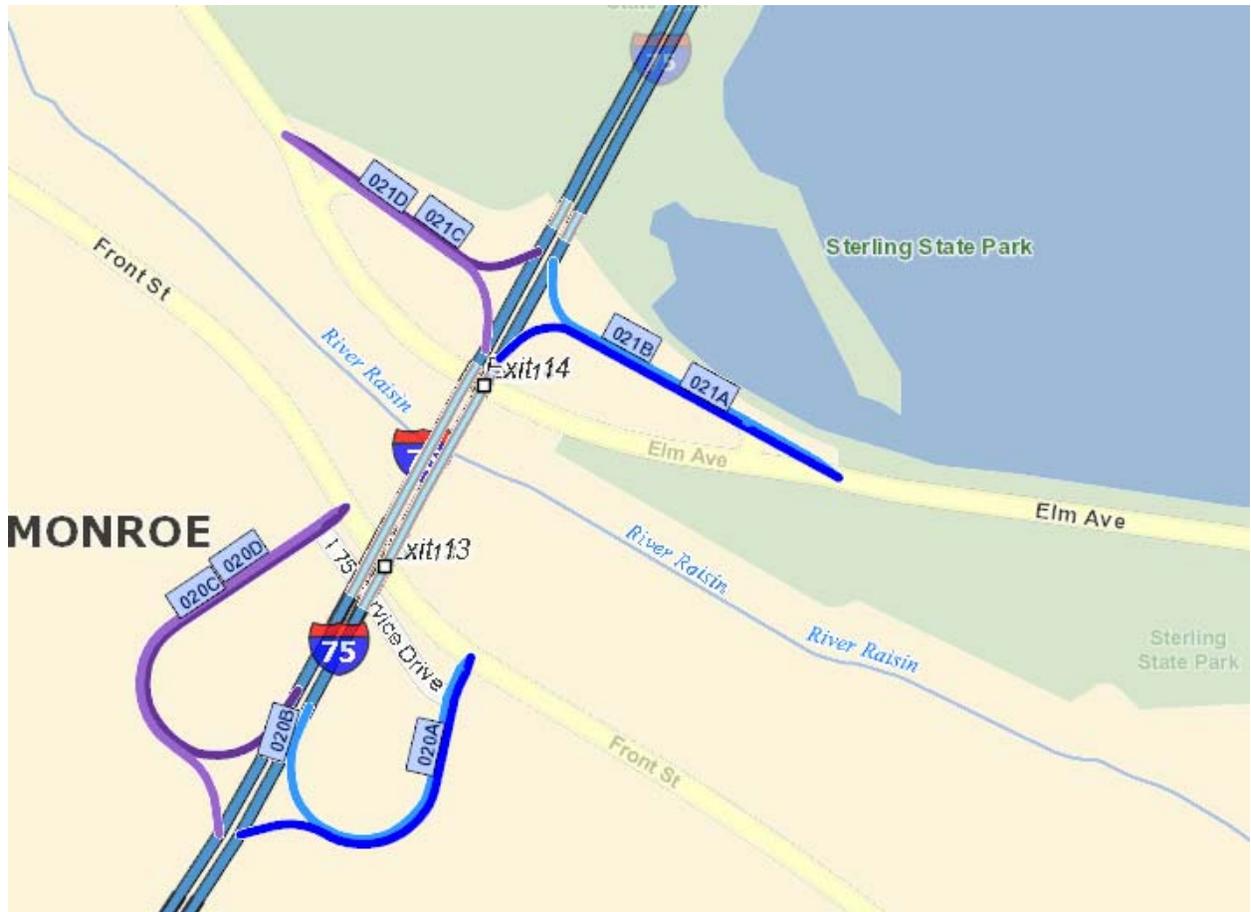
CONSULTANT RESPONSIBILITIES:

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

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.

This scope of services is for the preparation of a feasibility study that documents the study process, development of practical alternatives, impacts related to each studied alternative, development of required mitigation, costs and the final recommended alternative design. The study will provide sufficient engineering analysis for the development and screening of alternatives, and for a cost estimate for each alternative. The study will also identify and address issues related to interchange design, bridges, ramps, shoulders and CD road design, impacts to adjacent railroads

PROJECT LOCATION



The Consultant will document the constraints and impacts surrounding the interchange, including land use, railroads and the River Raisin.

A. Perform Feasibility Study of Interchange

1. Document Existing Conditions and Conduct Traffic Operations

a. Inventory existing conditions, including utilities.

- b. Analyze existing plans, aerials and documents.
 - c. Conduct field reviews.
 - d. Review traffic data
 - e. Perform crash analysis
 - f. Create a condition diagram (include photographic diary to document existing conditions).
 - g. Analyze existing and forecasted future (2038) traffic operational conditions for A.M., P.M. and midday periods. MDOT will provide existing and forecasted traffic volumes
2. Develop and Analyze Practical Alternatives for the I-75/Front & Elm interchanges
- a. Conduct an engineering analysis to properly identify feasible and geometrically accurate alternatives, including upgrading the existing system to standards. The analyses will include geometric layout drawings, advantages and disadvantages of each, and the identification of impacts on bridges, existing horizontal and vertical alignments on roads and railroads, utilities, and ROW.
 - b. Determine environmental impacts (wetlands, threatened and endangered species, streams, flood plains, contaminated sites, recreational properties, historical, etc.), including utility impacts.
 - c. Identify engineering needs, impacts and constraints of each alternative.
 - d. Document and consider issues, impacts and constraints related to the railroad.
 - e. Estimate construction costs for each practical alternative.
 - f. Identify and provide solutions to any issues that may arise during alternatives development if possible, to make them practical alternatives.
3. Develop Cost Estimates for Practical Alternatives
- a. Cost estimates prepared in Task 2 will be refined by specific transportation elements including utilities, ROW costs and a contingency for the addition of context sensitive elements.

4. Identify a Recommended Alternative

Based upon the results of Tasks 1, 2 and 3, and specifically the traffic and safety analysis, projected future traffic conditions, improved geometrics, environmental impacts, utility impacts, railroad issues and constraints, constructability issues, etc., a recommended alternative will be advanced to the next phase for design.

5. Prepare Draft and Final Feasibility Study Reports

- a. Prepare a draft feasibility report that documents the analysis conducted, the study process, development of alternatives and the recommended alternative.
 - b. After MDOT review and concurrence on the recommended alternative, any comments will be incorporated into the final report.
 - c. Prepare a final feasibility report including the process leading to the selection of the recommended alternative.
- A. Maintain a Design Project Record which includes a history of significant events (changes, comments, etc.) which influenced the study and development of the plans, dates of submittals and receipt of information.
 - B. Record and submit type-written minutes for all project related meetings to the MDOT Project Manager for approval within two weeks of the meeting and distribute the approved minutes to all meeting attendees.
 - C. Attend any project-related meetings as directed by the MDOT Project Manager.
 - D. Review and document conformance of each alternative, as per design standards, make recommendations accordingly, identify areas where standards cannot be met, provide justifications and documentation.
 - E. Incorporate any MDOT identified safety improvement countermeasures based on MDOT's crash analysis recommendations.
 - F. Document and identify locations of possible environmental and utility impacts. A cost estimate for mitigation of the impact will also be provided.
 - G. Incorporate any MDOT identified needs/requests into study.

- H. The MDOT Project Manager shall be the official MDOT contact person for the **CONSULTANT**. 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. The MDOT Project Manager shall be made aware of all communications regarding this project.
- I. 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.
- J. Inventory and analyze existing road and railroad conditions.
- K. Document future (year 2038) traffic conditions and their impact on alternatives development.
- L. Prepare a draft and final feasibility study report incorporating any comments as, directed by MDOT.
- M. Estimate the impacts on utilities and provide cost estimates.
- N. Determine if there will be potential impacts to wetlands, streams, contaminated sites, threatened and endangered species, floodplain areas, recreational properties, and historic and archaeological resources, etc., and document them appropriately.
- O. Provide an initial cost estimate of all project elements (environmental impacts, design, ROW acquisition, construction costs, utilities, CSS contingency, railroad work, etc.)

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 for all practical alternatives. Utility impacts will be clearly defined for the practical alternatives. Costs will need to include any required mitigation. In addition, the **CONSULTANT** shall be responsible for any analyses and consequences of the proposed action on surface and groundwater resources.

MDOT RESPONSIBILITIES:

- A. Work with **CONSULTANT** to schedule and/or conduct the project related meetings.
- B. Coordinate activities that require MDOT personnel.

- C. Provide existing information for the area, including traffic and counts, crash data for the interchange and road segments, Michigan Framework GIS maps, and geographic files for the Sufficiency Guide, ROW maps, old plans if available, count stations, guard rails, bridges, or any other available data.
- D. Provide an example cost estimate form and/or any other MDOT requirements.
- E. Supply information on existing pavement or bridge structures as necessary.

DELIVERABLES:

The draft and final Feasibility Study shall be presented on regular letter size paper (8½" x 11") with the exception of maps, sketches and diagrams which shall be on 11" x 17" paper (and folded to match the 8½" x 11" paper). This report shall also be saved in an Adobe Acrobat file format and saved on CD provided to MDOT. Files for final delivery containing physical features shall have elements with GIS identification consistent with the Michigan Framework, version 8 and ESRI and Caliper geographic layers shall be created. Preliminary alignments shall be in Micro station.

15 paper copies of the draft and 10 paper copies of the final Feasibility Study will be needed. Any photographs included in the documents shall be in an electronic jpeg or bitmap format with printouts at 4" x 6", in color, labeled with the location, direction from which the picture was taken, date and particular feature needing improvement.

All project related items are subject to review and approval by the Project Manager. The **CONSULTANT** shall follow MDOT English procedures, requirements and policies.

**ATTACHMENT C
CS 58151 - JN 115255**

**Road Scoping on I-75 from State Line to the south of the North Dixie Highway Interchange
in Monroe County**

**DEVELOP MAINTAINING TRAFFIC CONCEPT FOR EACH PROJECT LOCATION
INCLUDING REQUIRED INFORMATION FOR MOBILITY AND SAFETY REVIEW.**

1. SCOPE

This procedure covers the development of a concept to maintain and control traffic during construction.

2. WORK STEPS

- A. Review the type of construction task(s) included in the project.
- B. Contact the MDOT Project Manager and request a meeting with the Brighton TSC Traffic & Safety Engineer (allow a minimum of two (2) weeks for a meeting date to be determined). Review the traffic data and the project site to determine project specific construction zone traffic requirements. Requirements shall be consistent with the constraints identified at the meeting with the Brighton TSC Traffic & Safety Engineer. Any necessary or recommended exceptions shall be clearly identified and justification provided.
- C. Using the given project specific constraints, develop alternatives for preliminary maintaining traffic concepts.
- D. Submit preliminary alternatives to the MDOT Project Manager for review and recommendations on which concepts to proceed with further analysis.
- E. For each selected concept:
 - Evaluate the mobility impacts using the procedures outlined in the MDOT Work Zone Safety and Mobility Manual.
 - Determine whether or not the concept is significant per the MDOT Work Zone Safety and Mobility Manual.
 - Prepare a preliminary cost estimate for traffic control.
- F. For the selected alternative, create a preliminary Transportation Management Plan (TMP) including a Temporary Traffic Control Plan (TTCP), Transportation Operations Plan (TOP), and Public Information Plan (PIP) as outlined in the MDOT Work Zone Safety and Mobility Manual. Items that shall be included in the preliminary TMP at a minimum are:
 1. Constraints as identified by the Brighton TSC Traffic and Safety Engineer.

2. Method for maintaining traffic. Typical and non-typical areas shall be addressed. All areas where the pavement widths are narrower than typical shall be clearly noted and the recommendations for maintaining traffic shall address these areas.
 3. Exceptions to constraints as identified by the Brighton TSC Traffic and Safety Engineer. Justification shall be required for any exceptions.
 4. Need for detour, staging and/or flagging operation.
 5. Need for temporary widenings and/or shoulder upgrading.
 6. Time constraints and laneage requirements (number and width).
 7. Method for maintaining traffic at cross streets.
 8. Local considerations (school buses, emergency vehicles, large traffic generators, etc.).
 9. Need for temporary traffic signals (a minimum of two signal heads in view at all times).
 10. Construction zone speed limits.
 11. Special events (parades, festivals, etc.).
 12. Recommendations for expedited construction.
 13. Statement regarding the cost of maintaining traffic as a percentage of the total project cost.
- G. Based on the preliminary written recommendation (developed above), prepare maintaining traffic typicals. Typicals shall be prepared using the existing typical cross sections developed under CONSULTANT RESPONSIBILITIES.
- H. Submit the final preliminary TMP and maintaining traffic typical with the Final Scoping Package.
- I. Verify and include the cost for maintaining traffic in the cost estimate as detailed in the MDOT Scoping Manual.

**ATTACHMENT D
CS 58151 - JN 115255**

**Road Scoping on I-75 from State Line to the south of the North Dixie Highway Interchange
in Monroe County**

13 Design Elements Subject to Formal Exceptions

- I. Design Speed
- II. Lane Width
- III. Shoulder Width
- IV. Bridge Width
- V. Structural Capacity
- VI. Horizontal Alignment
- VII. Vertical Alignment
- VIII. Grade
- IX. Stopping Sight Distance
- X. Cross Slope
- XI. Superelevation
- XII. Vertical Clearance
- XIII. Horizontal Clearance (not including clear zone)

ATTACHMENT E
CS 58151 - JN 115255

**Road Scoping on I-75 from State Line to the south of the North Dixie Highway Interchange
in Monroe County**

Preliminary Utility Information Submittal (for each project location)

Submittals to all of the utility companies are to include:

- a completed MDOT approved form (fillable copy of form 2480 to be provided by MDOT)

- two (2) copies of:
 - Location Map
 - Base Map
 - Base Sheets

Utility information is to be marked on the provided sheets and returned to:

MDOT Utility Coordinator: MDOT - Brighton TSC
Design/Utilities Engineer
10321 E Grand River.
Brighton, MI 48116

Requests for preliminary utility information are to be mailed after the delivery of the Preliminary Scoping Package to MDOT. A copy of the completed MDOT approved form for each company contacted and any specific utility information which will be provided by the MDOT Brighton TSC Utility Engineer is to be included in the Final Scoping Package.

MDOT is to provide the Consultant a list of the utility companies present within the control section(s) of the project.

ATTACHMENT F
CS 58151 - JN 115255
Road Scoping on I-75 from State Line to the south of the North Dixie Highway Interchange
in Monroe County
MONTHLY PROGRESS REPORTS

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

Control Section 58151
Job Number 115255
Date 00/00/00

MONTHLY PROGRESS REPORT

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

CS 58151 - JN 115255
Road Scoping on I-75 from State Line to south of Dixie Highway in Monroe County
 Scoping Schedule as of 00/00/00

Original Authorized Start Date	Original Authorized Finish Date	(Anticipated) or Actual Start Dates	(Anticipated) or Actual Finish Dates	Task Description
00/00/00	00/00/00	00/00/00	00/00/00	Initial Project Meeting.
00/00/00	00/00/00	00/00/00	00/00/00	Maintaining Traffic Meeting.
00/00/00	00/00/00	00/00/00	00/00/00	Field Work and Documentation.
00/00/00	00/00/00	00/00/00	00/00/00	Local Coordination Letters (first).
00/00/00	00/00/00	00/00/00	00/00/00	Review, Check and Analyze Field Data.
00/00/00	(00/00/00)	00/00/00	00/00/00	Generate Base Map, Base Sheets, Cross Sections, Maintaining Traffic Typical.
00/00/00	(00/00/00)	00/00/00	00/00/00	Perform Crash Analysis and Determine Countermeasures.
00/00/00	(00/00/00)	00/00/00	00/00/00	CPM Schedule.
00/00/00	(00/00/00)	00/00/00	00/00/00	Prepare Write Up for Maintaining Traffic.
00/00/00	(00/00/00)	00/00/00	00/00/00	Submit Utility Requests.
00/00/00	(00/00/00)	00/00/00	00/00/00	Submit Preliminary Scoping Package.
00/00/00	(00/00/00)	00/00/00	00/00/00	Scope Review Meeting.
00/00/00	(00/00/00)	00/00/00	00/00/00	Local Coordination Letters (second).
00/00/00	(00/00/00)	00/00/00	00/00/00	Submit Final Scoping Package.
00/00/00	(00/00/00)	00/00/00	00/00/00	Local Coordination Letters (third).
00/00/00	(00/00/00)	00/00/00	00/00/00	Submit Final Deliverable Package.

VERBAL CONTACT RECORD

**Control Section 58151
Job Number 115255**

Structure Number N/A

Date 00/00/00

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

**ATTACHMENT G
CS 58151 - JN 115255**

**Road Scoping on I-75 from State Line to the south of the North Dixie Highway Interchange
in Monroe County**

Scope of Work Summary

Date:

Control Section:

Job Number:

Route Number:

Limits of Project

Establish the project limits (roadway name, roadway number, project beginning, project ending, mile points, project length, major cross streets, local municipalities affected, etc). List also if this roadway is an NHS route, a non-NHS route, or is it registered as a National Historic Highway?

In addition, list the percentage of work to be completed within each local municipality.

Brief Project Description:

List the primary pavement treatment for the project (i.e.: a mill and resurface, an overlay, a reconstruction, a concrete patching, etc) and generally list additional work that will be needed for the project (drainage, curb and gutter, ramps, etc). Should average no more than 3-6 sentences.

Summary of Detailed Cost

A summary of the estimated direct construction cost. Also, list the number of lane miles within the project limits, and a price per lane mile. Also, include the estimated design hours for the project.

Summary of Project Schedule (Design, Plan Completion, Letting and Construction)

A summary of the estimated project schedule.

Existing Information Available

ADT (Traffic Count Request)

Provide the ADT within the project limits as obtained from the most recent version of the MDOT Sufficiency Rating Manual. If ADT significantly changes within the project limits, the various ADTs shall be noted along with their corresponding sections of roadway.

Design Speed

Signed Speed (mph) = _____

Design Speed (mph)= _____

List this information **for each of the major roadways, cross roads and ramps within the project limits.**

Existing

A brief description of the existing cross section (pavement type, lane width, curb and gutter, catch basins, storm sewer location, side slopes, ditch location, setback to existing right of way line, lighting, etc). Are there on street parking issues?

Proposed

A brief description of the proposed cross section (cold mill / resurface /reconstruct / etc, new lane widths, curb and gutter, catch basins (new or adjusts), storm sewers (new or tap into existing), ditches, etc). Will there be a Grade Raise? Will MITSC sensors be impacted (or do they need to be included)? Will existing lighting be impacted? Will a retaining wall, or sound wall, be affected, required or proposed?

Are there on street parking issues? Where is parking located? Will it be retained? What impact will this project have upon the existing parking agreement? Compliance with ADA regulations?

Horizontal Alignment Corrections

A brief statement addressing the existing horizontal alignment of the roadway, and the impact that the proposed project will have upon it (to include any potential corrections or recommended adjustments).

How many horizontal curves are there? Of them, how many are non-conforming? Recommended treatment?

Vertical Alignment Corrections

A brief statement addressing the existing vertical alignment of the roadway, and the impact that the proposed project will have upon it (to include any potential corrections or recommended adjustments).

How many crest / sag curves are there? Of them, how many of the curves are non-conforming? Recommended treatment?

Crown Correction and Super Elevation

A brief statement addressing the existing pavement crown and super elevation, and the impact that the proposed project will have upon it (to include any potential corrections or recommended adjustments).

Curb and Gutter

A brief statement regarding the impact the proposed pavement treatment will have upon existing, or proposed, curb and gutter.

Slopes (FS, Ditches and BS)

A brief statement addressing the existing slopes and ditches, and the impact that the proposed project will have upon them (to include any potential corrections or recommended adjustments).

Are there any clear zone or sight distance issues? Are retaining walls or sound walls affected and/or required? Tree removals?

Drainage System

A brief statement addressing the existing drainage, and the impact that the proposed project will have upon it (to include any potential corrections or recommended adjustments). Please note that the existing drainage structures cross leads, within the limits of this project, will be cleaned out.

How will the proposed system drain? Where are the outlets? Who owns the outlets and are there any issues to be resolved in using them? Will on site detention become an issue? Etc.

(When listing structures for this section, list in order of appearance, from POB to POE.)

Sidewalk

A brief statement to establish the presence and location of existing pedestrian sidewalk, and existing sidewalk ramp terminals at sidewalk street intersections. Note: At locations of sidewalk street intersections, if not already present, ramp terminals will be installed.

Don't forget to evaluate the sidewalk needs at the bridge structures.

Compliance with ADA regulations?

Roadway over Structures (approaches, horizontal and vertical SSD, clear width during const)

List all existing structures, within the limits of this project, in which the roadway crosses over the structure. A brief statement explaining, for each structure, how the pavement transition into the deck will be addressed. Provide lane and clear shoulder widths over the structures. Are bridge struts present?

IN GENERAL, how will the proposed roadway treatment, and maintaining traffic concept, impact the existing the structures, and what is the proposed treatment?

Roadway under Structures (under clear, horiz. and vert. SSD, clear width during construction)

List all existing structures, within the limits of this project, in which the roadway passes under the

structure. A brief statement, listing the existing under clearance for each structure, explaining how the pavement will be treated below the bridge, and how the issue of under clearance will be addressed. Provide lane and clear shoulder widths under structures.

IN GENERAL, how will the proposed roadway treatment, and maintaining traffic concept, impact the existing the structures, and what is the proposed treatment?

*(When listing interchanges for this section, list in order of appearance, from POB to POE.)
(Break each interchange out separately and include the interchange ramps, listed individually).*

Bridge Work

Miscellaneous/ Aesthetic Opportunities

Interchanges and Ramps (and collector distributor roads)

What is the existing and proposed cross section? For each ramp within each interchange, a brief statement addressing the impact that the proposed project will have upon them (to include any potential corrections or recommended adjustments). May impact acceleration and deceleration lane distances, lane widths, terminal configuration, etc.

(List the ramps with their corresponding interchanges together. Separate ramps by interchange)

Cross Overs (both Median and Maintenance)

List the number of Cross Overs present within the limits of this project. A brief description of the type of Cross Overs, and the impact that the proposed project will have upon them (to include any potential corrections or recommended adjustments).

Service Drives

A brief statement addressing the service roads, and the impact that the proposed project will have upon it (to include any potential corrections or recommended adjustments).

Rail Road Crossings (structure and at-grade)

A brief statement addressing existing rail road crossings, and the impact that the proposed project will have upon them (to include any potential corrections or recommended adjustments).

Major and Minor Intersections

List all Intersections within the limits of this project. A brief description of the existing intersections, and the impact that the proposed project will have upon them (to include any potential corrections or recommended adjustments). Limits of work down cross roads?

Traffic Signals

A brief statement addressing the existing traffic signals, and the impact that the proposed project will have upon them (to include any potential corrections or recommended adjustments).

Don't forget the signals at the ramp terminals!

Commercial Driveways

List the number of commercial driveways present within the limits of this project. A brief description of the type of driveways, and the impact that the proposed project will have upon them (to include any potential corrections or recommended adjustments).

Residential Driveways

List the number of residential driveways present within the limits of this project. A brief description of the type of driveways, and the impact that the proposed project will have upon them (to include any potential corrections or recommended adjustments).

Crash Analysis Recommended Countermeasures

A summary of the recommended countermeasures as identified through the Crash Analysis, and the impact that these improvement will have upon the proposed project

When recommending a counter measure, a detail needs to be provided. The detail is to include an graphic drawing of the existing condition, the proposed treatment and the impacts that this improvement will have upon the proposed project.

Other Geometric Improvements

A brief statement addressing any additional recommended geometric improvements. A brief description of the type improvement, and the impact that they will have upon the proposed project.

Design Exceptions

Of the 13 Design Elements Subject to Formal Exceptions, provide a brief statement addressing which of the Design Elements, for this project, will require a Design Exception (please list each of the Design Elements only once). Explain where they are needed, why they are needed and the impact to the project if they are not obtained.

Provide a justification for each Design Exception noting the existing condition, treatment as per Design Standards, the proposed treatment and the reason for not meeting the standard.

This section should summarize the needs for Design Exceptions. All the needs, shall have been

mentioned in previous sections of this summary. This should be a recap of previously mentioned problems and Design Exception needs.

Traffic Signs (to include ground mounts, trusses, cantilevers and mounted on structures)

A brief statement addressing the existing traffic signs, and the impact that the proposed project will have upon them (to include any potential corrections or recommended adjustments).

Guardrail and Attenuators

A brief statement addressing the existing presences and proposed use of guardrail and attenuators, and the impact that the proposed project will have upon them

Lighting (Freeway and/or Street – Public and Privately owned)

A brief statement addressing the lighting, listing the existing condition and the impact that the proposed project will have upon it (to include any potential corrections or recommended adjustments). Who has jurisdiction over the lighting? (Freeway lighting is under MDOT jurisdiction. Non-freeway lighting non-MDOT.)

ITS Infrastructure

Public and Private Utilities

A brief statement addressing the existing public and private utilities present within the roadway, and the impact that the proposed project will have upon them (to include any potential corrections or recommended adjustments). If you foresee an impact, list cause of impact.

Do you foresee impacts to existing water or sanitary lines?

Include a list of the Agencies contacted (with addresses and contacts)

Fencing

A brief statement addressing the existing fencing, and the impact that the proposed project will have upon it (to include any potential corrections or recommended adjustments).

Right of Way

For each the roadway in general, each intersection and/or interchange, geometric improvement, recommended Crash Analysis countermeasure, commercial and/or residential driveway, signal or sign. A brief statement addressing the existing right of way, and the impact that the proposed project will have upon it (to include any potential corrections or recommended adjustments). If additional right of way is required, note type (fee take, grading permit, permit to grade drive, etc).

Environmental Issues (*impacts to wetlands? tree removal/replacement? possible permits?*)

A brief statement addressing any existing environmental issues, and the impact that the proposed project will have upon them (to include any potential corrections or recommended adjustments).

If trees will be impacted by the project, the number by type and size of each tree impacted shall be listed along with the cost for replacement.

Project Area Contamination Survey

A brief statement summarizing the findings from the Project Area Contamination Survey, and the potential impact that the proposed project will have upon them (to include any potential corrections or recommendations).

Maintaining Traffic Issues

A statement addressing how traffic will be maintained during construction. An abbreviated version of Attachment I's written recommendation for maintaining traffic.

Constructability Issues

A statement addressing areas where the scoping team feels needs to be reviewed from a constructability standpoint.

Maintenance Concerns

A statement addressing areas where the scoping team feels needs to be reviewed from a constructability standpoint.

CPM Schedule

The outcome from the CPM Schedule. List the anticipated start date, finish date and duration of construction.

Local Concerns

A brief statement addressing the local concerns or issues, and the impact that these issues may have on the proposed project.

This section shall summarize the requests and comments contained within the correspondence and communications with the local governments. It is not necessary to go into the detail contained within the actual correspondence, but the issues, impacts and recommendations shall be called out.

