

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

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

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

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

## RFP SPECIFIC INFORMATION

BUREAU OF HIGHWAYS

BUREAU OF TRANSPORTATION PLANNING \*\*

OTHER

THE SERVICE WAS POSTED ON THE ANTICIPATED QUARTERLY REQUESTS FOR PROPOSALS

NO

YES

DATED \_\_\_\_\_ THROUGH \_\_\_\_\_

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

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

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

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

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

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

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

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

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

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

## BID SHEET INSTRUCTIONS

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

**PROPOSAL SUBMITTAL INFORMATION**

REQUIRED NUMBER OF COPIES FOR PROJECT MANAGER	PROPOSAL/BID DUE DATE	TIME DUE
---	-----------------------	----------

**PROPOSAL AND BID SHEET MAILING ADDRESSES**

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

MDOT Project Manager

MDOT Other

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

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

**GENERAL INFORMATION**

Any questions relative to the scope of services must be submitted by e-mail to the MDOT Project Manager. Questions must be received by the Project Manager at least four (4) working days prior to the due date and time specified above. All questions and answers will be placed on the MDOT website as soon as possible after receipt of the questions, and at least three (3) days prior to the RFP due date deadline. The names of vendors submitting questions will not be disclosed.

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

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

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

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

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

Michigan Department of Transportation

SCOPE OF SERVICE  
FOR  
TRAFFIC & SAFETY SERVICES  
Traffic Signal Modernization Design

**CONTROL SECTION(S):** 33082

**JOB NUMBER(S):** 110593C & 113942C

**PROJECT LOCATIONS:** 6 Signalized Locations on M-43 (Grand River) from Collingwood Drive to Park Lake Road in Ingham County

- 1) M-43 (Grand River) @ Collingwood, City of East Lansing, Ingham County (33082-01-3)
- 2) M-43 (Grand River) @ Bogue Street, City of East Lansing, Ingham County (33082-01-9)
- 3) M-43 (Grand River) @ Northwind, City of East Lansing, Ingham County (33082-01-29)
- 4) M-43 (Grand River) @ Hagadorn Road, City of East Lansing, Ingham County (33082-01-4)
- 5) M-43 (Grand River) @ Stoddard Street, City of East Lansing, Ingham County (33082-01-17)
- 6) M-43 (Grand River) @ Park Lake, Meridian Township, Ingham County (33082-01-27)

**PROJECT DESCRIPTION:**

Signal Modernization Design for intersections # 2, 4 & 5 including any ramp design necessary to comply with MDOT design practices and ADA requirements at all the required locations, **Pedestrian Pushbutton Design for intersections # 3 & 6** and **Signal Staging Design** during road reconstruction of M-43 (Grand River) for all the 6 Signalized intersections number 1-6 (from Collingwood Drive to Park Lake).

**Int #2) M-43 (Grand River) @ Bogue Street:**

**Signal Modernization Design** for this intersection consists of the design for upgrading of the existing traffic signal equipment including but not limited to 16-Load Switch Base-Mounted ("EPAC" type controllers), 12 inch Traffic Signal AND Pedestrian heads, **Pedestrian push button actuated for crossing M-43 (Grand River, East Leg), Countdown Pedestrian indication for crossing the East and South Legs, Flashing Yellow Arrow display for the westbound M-43(Grand River) Left Turns and a 5-Section RTGA facing South, ADA Ramp Design (if necessary), Two embedded loop design for westbound M-43 (Grand river) Left Turn Lane (6 ft X 30 ft), illuminated case sign 1-Way LED, Box Span wire, signal support poles and supporting structures (if necessary) and Radio Interconnect Design (if necessary).**

**Int #4) M-43 (Grand river) @ Hagadorn Road:**

**Signal Modernization Design** for this intersection consists of the design for upgrading of the existing traffic signal equipment including but not limited to 16-Load Switch Base-Mounted ("EPAC" type controllers), 12 inch Traffic Signal and Pedestrian heads, **Pedestrian push button actuated and Countdown indication for crossing all legs, 5-Section RTGA facing East, West and South, ADA Ramp Design (if necessary), embedded 6 ft X 30 ft traffic loop design for all approach lanes ( with 2 in all Left-Turn Lanes and 1 in all Thru Lanes and in all Right-Turn Lanes ), Non illuminated case sign 1-Way Diamond Sheet, Box Span**

wire, signal support poles and supporting structures (if necessary) and Radio Interconnect Design (if necessary).

**Int #5) M-43 (Grand river) @ Stoddard:**

This is a Pedestrian Signal for pedestrian crossing M-43 (Grand River). **Signal Modernization Design** for this intersection consists of the design for upgrading of the existing traffic signal equipment including but not limited to Pole Mounted (Mod 50 “EPAC” type controller), 12 inch Signal Heads with Three-Color heads facing the M-43 approaches and Flashing Red signal heads facing the southbound Stoddard street approach and install Pedestrian pushbuttons and Countdown pedestrian indications for crossing M-43 (Grand River).

**Int #3) M-43 (Grand River) @ Northwind :**

**Design** for this intersection consists of the Modernization design of the existing Pedestrian Pushbutton which is impacted due to the sidewalk work needed by the Road JN 110593C.

**Int #6) M-43 (Grand River) @ Park Lake Road:**

**Design** for this intersection consists of the Modernization design of the existing Pedestrian Pushbutton which is impacted due to the sidewalk work needed by the Road JN 110593C.

**M-43 (Grand River) from Collingwood to Park Lake Road (6 signalized intersection):**

**Signal Staging Plans (possible Three Stages)** for all 6 Signalized Intersections needed for maintaining traffic during the reconstruction road JN 110593C on M-43 (Grand River).

**NOTE:** The Signal Modernization Designs for intersection #2, 4 & 5 will be designed under JN 113942C, Installed under JN 113942A and this Signal Modernization Work should be done in conjunction with the Road JN 113942C, Signal Staging plans for all 6 intersections (1-6) and Pedestrian Pushbutton Design for both intersections #3 & 6 will be designed under the Road JN110593C and Installed under road JN 110593A.

**The existing drawings and Layout Request Form for the above mentioned intersections will be provided to the consultant.**

**NOTE:** **First option for signal design** should be **“Box Span” design**. The signal designs should incorporate the use of LED technology. The consultant identifies and notes the existing posted speed limit on all approaches of the intersection(s) on the plan. Design for Radio Interconnect requires performing the Radio Survey and submitting the Signal Radio Survey Form. The Signal Radio Survey Form can be found via the following link: <http://www.mdot.state.mi.us/webforms>

Copy of Final Approved Electronic files of all signal plans must be submitted to Traffic Signal Unit.

**ANTICIPATED SERVICE START DATE:** September 7, 2011

**ANTICIPATED SERVICE COMPLETION DATE:** May 15, 2012

**PRIMARY PREQUALIFICATION CLASSIFICATIONS:**

Traffic Signal Design

**SECONDARY PREQUALIFICATION CLASSIFICATION(S):**

Geotechnical Engineering Services

Roads & Streets

**DBE REQUIREMENT:** N/A

**PROJECT MANAGER:**

Douglas Adelman

Traffic and Safety Support Area

Michigan Department of Transportation

Murray D. Van Wagoner Building

P.O. Box 30050

Lansing, MI 48909

Ph: 517- 373-2363

Fax: 517- 373-2330

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

**General Requirements:**

Design and develop traffic signal contract plans, proposal package, engineering documents, and related work necessary for new installation or modernization of electronic traffic signal control devices to be accomplished by contract bid letting. New traffic signal work typically includes installation of: signal support poles and/or pedestals, span wire, traffic and pedestrian signals, and traffic signal controller. Modernization traffic signal work typically includes the replacement, as needed, of: signal support poles and/or pedestals, span wire (if appropriate), traffic and pedestrian signals, traffic loops, handholes, and traffic signal control equipment.

If steel poles are required for a location, soil borings need to be taken. The first step is to request soil borings from the Region soils engineer (provide the proposed pole locations). The Region soils engineer will inform the consultant if existing soil boring data is available, or if the Region soils engineer can perform the borings, or if the consultant must perform the soil borings.

If it is determined during construction, the design is not constructible due to consultant design error; the signal design consultant will be responsible for correcting the design at no additional cost to MDOT. If the constructability is based on changes made by MDOT, the consultant will be compensated.

**CONSULTANT RESPONSIBILITIES:**

- 1) The designer shall arrange for an on-site design meeting with, MDOT University Region Electricians (Craig Chedester & Joe Armstead), MDOT Lansing Signals Unit, Lansing TSC Traffic & Safety Engineer ( Hilary Owen ), Lansing TSC Delivery/Utility Engineer (Jeremy McDonald), Lansing TSC Utility Engineer (Ghazi Mustafa), Lansing TSC Cost & Scheduling/Development Engineer (Robert Leppala), Lansing TSC Assistant Development Engineer (Dionisia Tebbe) and City of East Lansing Traffic Engineer(Ron Lacasse) to review the proposed modernization design plans.
- Any non-typical pedestrian detour plans must be developed as part of the proposal or plan sheets. MDOT will provide a typical pedestrian detour plan for the proposal.
  - Proposed plan views must have a 1"=30' scale when plotted to 11"x17".
  - Utility Coordination:
    - a) The consultant will call in a design/survey Miss Dig at least two weeks prior to any design survey or design field visit. The consultant will include design/survey Miss Dig locates and all other utility information on the plans (both existing and proposed plans). MDOT will provide the consultant with all information received from soliciting the utility companies.
    - b) The consultant will stake proposed foundation locations in the field prior to any field utility coordination meeting.
    - c) The consultant will attend utility coordination meetings and on-site field meetings as required with the utility engineer and the affected utility companies in the area and make any necessary design and plan revisions. The consultant will assist MDOT personnel until utility conflicts are resolved.
  - Meetings:
    - d) The consultant is responsible for scheduling, attending, and providing meeting minutes for the following meetings:
      - i) Design kick off meeting
      - ii) Plan review meeting at preliminary plan stage
      - iii) Utility coordination meeting (coordinate scheduling with utility engineer)
      - iv) Utility coordination field meetings as required (coordinate scheduling with utility engineer)
      - v) OEC meeting prior to plan completion.
  - Perform strain pole foundation design as required. The MDOT has developed a strain pole foundation design table for box span signals. This table can be found on the Traffic and Safety website in the signals correspondence and guidelines area. A special foundation design may be necessary depending on site specific soil properties and proposed signal layout and geometry.
  - Perform design service including the design and preparation of base plans, preliminary (75%) plans, **OEC plans**, final plans, "E proposal" package, specifications, wiring diagrams, interconnect drawings, bills of materials, measurement and payment items, and cost estimates for all construction work for this project, including necessary alterations to power, lighting, and interconnect facilities. Traffic signal work may include installation of: signal support poles and/or pedestals, span wire, traffic and pedestrian signals, and traffic signal controller, traffic loops, handholes, wireless interconnect, and video detection.

- Perform Design Service for drilled shaft foundations as required including soil boring information, identification of any suspected contamination of the boring site, and preliminary foundation investigation. (Refer to MDOT's website.) The following information must be provided for proper analysis of strain pole foundations:
    - e) Accurate pole location information
    - f) Soil classification
    - g) Standard penetration values every 2.5 feet (750 mm) extending 20 feet (6.1 m) below the ground surface elevation (blows/foot in accordance with ASTM D1586)
    - h) Unconfined compressive shearing resistance (PSF, for cohesive soils)
    - i) Ground water table elevation
- 2) The Consultant shall contact the Region Materials/Testing Engineer or Soils Engineer before proceeding with any geotechnical work and submit the results of the preliminary subsurface investigation for their review, approval, and recommendations for foundation design.
  - 3) In the performance of design service, govern all project design and plan work by the applicable codes, standards, and practices of the Michigan Department of Transportation, hereinafter referred to as the department, and the current *Michigan Manual of Uniform Traffic Control Devices*.
  - 4) Supply all materials necessary for completion of the projects, except as hereinafter described, including incidental prints required.
  - 5) All documents prepared by the Consultant, including, drawings, estimates, specifications, field notes, investigation studies, etc., are the property of the department.
  - 6) All plan sheets shall be developed using computer-aided drafting technology. The system shall be Intergraph Microstation, or one that processes data exactly as Intergraph will, no translations or system revisions being necessary by the department.
  - 7) Refer to Suggested Traffic Signal Design Procedure: MDOT website.
  - 8) Refer to Requirements for Preliminary Geotechnical Investigations for Signal Foundations: MDOT website.
  - 9) Plans are to be designed using the 2003 Standard Specifications.
  - 10) Perform any design/coordination tasks with any railroad company involved within the project limits, including (but not limited to):
    - a) Determine railroad contact person(s)
    - b) Complete any applications required by the railroad company to perform the proposed traffic signal work.
    - c) Include related notes and special provisions as required in the proposal.
  - 11) Any existing or proposed pedestrian pushbuttons and ramps must be accessible per ADA guidelines and MDOT design practices including:
    - a) Pushbutton must be within 24" from edge of sidewalk
    - b) The pushbutton must be located in the middle of a 4' pushbutton landing (maximum slope of 2%).
    - c) ADA ramps are required at every crosswalk controlled by a pedestrian signal head.
    - d) Sidewalk is required to connect ADA ramps on a quadrant.

- 12) Perform sidewalk and ramp design as needed to comply with MDOT design practices and ADA requirements. For all stop and go traffic signals, all ADA ramps will be replaced unless the existing ramps are compliant with MDOT design practices and ADA guidelines. For flashing signals, pedestrian ramps will not be replaced unless they are disturbed.

### **Task 1: Base Plan Preparation**

1. Design and develop contract base plans necessary for new installation or modernization of electronic traffic signal control devices to be accomplished by contract bid letting. Base plans include (but are not limited to):
  - a. Existing road rights-of-way (ROW)
  - b. Field measured/surveyed road and lane geometry and posted speed limits
  - c. Field measured/surveyed locations of any visible utilities
  - d. **Utility note sheet listing the contact names and phone numbers for each utility having facilities within the project limits.**
  - e. **Field measured/surveyed locations of all utility markings from design/survey Miss Dig**
  - f. **All utility information received from MDOT soliciting utility companies**
  - g. Proposed types and locations of poles and controller
  - h. Proposed traffic and pedestrian signal head types and locations
  - i. Proposed pushbuttons, traffic loops, and antennas
  - j. Proposed traffic signal removal (if required) and installation plan(s)
  - k. Proposed phasing (as required)
  - l. POCH diagram for proposed attachments to wood poles (not required for steel pole attachments)
2. Where applicable, the intersection and ADA ramp survey will be used to develop base plans
3. If existing or proposed equipment appear to be outside existing right-of-way, contact Douglas Adelman (517-373-2363), Traffic Signal Unit in Lansing.

### **Task 1: Deliverables (Base Plans)**

1. All traffic signal plan and interconnect sheets (no details required) in the following formats:
  - a. One 11x17 pdf file Distributed as follows:
    - i. Traffic Signals Unit: Pdf file
    - ii. TSC Delivery Engineer: Pdf file
    - iii. TSC Traffic & Safety Engineer: Pdf file
    - iv. TSC Utilities Engineer: Pdf file
    - v. Region Soils Engineer: Pdf file
    - vi. Region Traffic & Safety Engineer: Pdf file
    - vii. Maintaining Agency (if applicable): Pdf file
    - viii. Utility company supplying power: Pdf file

### **Task 2: Preliminary (75%) Plan Preparation**

1. Design and develop preliminary (75%) contract plans necessary for new installation or modernization of electronic traffic control devices to be accomplished by contract bid letting. Preliminary (75%) plans include (in addition to base plan information):
  - (a) Location and types of utilities as provided by the utility companies and resulting from utility coordination meeting(s) as required.
  - (b) Separate Interconnect plan sheet (if the scope requires "Radio Interconnect Design")
  - (c) List of Materials and Quantities
  - (d) Wiring diagram
  - (e) ADA ramp and pushbutton design (including existing and proposed elevations)
  - (f) Point of Contact Height (POCH) diagram(s)
  - (g) Appropriate note blocks for contact persons, etc.
  - (h) Proper file names, levels, and text sizes
  - (i) Any additional right-of-way required for existing and proposed traffic signal appurtenances
  - (j) Soil boring information including depths, soil description, water level, and depth of foundation (if required)
2. Attend plan review meeting at the local TSC.

### **Task 2: Deliverables Preliminary (75%) Plans**

- 1) **A summary spreadsheet listing utility conflicts by location and quadrant including the following:**
  - a) **Specify utility conflicts as overhead or underground**
  - b) **Specify utility and owner (if unknown label as such)**
  - c) **Specify locations and utilities for which inadequate information was received**
- 2) All traffic signal plan and interconnect sheets including details.
- 3) All required special provisions, notices to bidders, and specifications in E-Proposal format including a draft progress clause, a draft coordination clause, and a draft special provision for maintaining traffic.
- 4) **Preliminary pedestrian detour plans must be included as 8 1/2"x11" sheets within the maintaining traffic special provision or in the plans as 11"x17" sheets.**
- 5) Format of Task 3 Deliverables
  - a) One electronic 11x17 pdf file (filename: Job#PLANHALF.pdf)
  - b) One electronic proposal pdf file (filename: Job#PROPOSAL.pdf)
- 6) Distribute Task 3 Deliverables as follows:
  - i) Traffic Signals Unit
  - ii) TSC Delivery Engineer
  - iii) TSC Traffic & Safety Engineer
  - iv) TSC Utilities Engineer
  - v) Region Soils Engineer
  - vi) Region Traffic & Safety Engineer
  - vii) Lansing Signal Shop
  - viii) Maintaining Agency (if applicable)
  - ix) Utility company supplying power

### **Task 3: OEC Plans and Proposal Preparation**

- 1) Incorporate the department's comments on the plans and prepare complete detailed construction OEC plans, supplemental specifications, special provisions, measurement and payment items, estimates of quantities, span calculations, and engineer's estimates of cost for all necessary construction and related work included in this project.
- 2) During preparation of the OEC plans, make such alterations, corrections, and revisions to said plans and supporting materials as are deemed necessary and desirable by the department to insure conformance of plans to good design and standard practices and to have said plans and other material in proper form for receiving bids.
- 3) During preparation of the proposal, work with the appropriate MDOT personnel to obtain final bid proposal documents including progress clause, coordination clause, special provision for maintaining traffic, and utility relocation status (form 2286).
- 4) **Pedestrian detour plans must be included as 8 1/2"x11" sheets within the maintaining traffic special provision or in the plans as 11"x17" sheets.**
- 5) Attend and provide electronic plans for the OEC meeting.

**Task 3: Deliverables (OEC Plans and Proposal):**

1. Deliver to the department electronic OEC plans, proposal and supporting documents compatible with **current"E- Proposal"** requirements (Refer to MDOT website: E-Proposal Training for MDOT Consultants Document).

**Task 4: Final Plan and Proposal Preparation**

- 1) Make any final changes necessary to the plans and proposal and supporting documents

**Task 4: Deliverables (Final Plans):**

1. Upon completion of design services for this project and final approval thereof by the department, deliver to the department final plans, proposal and supporting documents compatible with **current"E- Proposal"** requirements (Refer to MDOT website: E-Proposal Training for MDOT Consultants Document). **All CAD files must be "Intergraph Microstation Version 8 file format" and all PDF files must be Adobe Acrobat version 6.**

**Format of Task 4 Deliverables (Final Plans):**

- a) One (1) 11"x17" paper copy of the title sheet with original stamps and signatures including a map of the area with work locations identified, a list of locations, and other items as determined by Traffic Signal Unit
- b) **Final Approved Electronic files of all signal plans must be submitted to Traffic Signal Unit.**
- c) Electronic (pdf) 11"x17" plan file (filename: Job#PLANHALF.pdf)
- d) Electronic (pdf) proposal file (filename: Job#PROPOSAL.pdf)
- e) Electronic (pdf ) files of all required supporting documents
- f) Editable electronic files of all supporting documents and of all files inserted into proposal document. For example, submit the progress clause as a word document in addition to the progress clause (pdf) which will also be inserted in the proposal pdf.
- g) One set of estimates of cost of construction (8-1/2" x 11" paper copy).

- h) One copy of all design computations as required for use by the department.
- i) Upon request by the department, make available thereto all notes utilized in preparation of the plans, supplemental specifications, and cost estimates.
- j) For all signal contracts, a "txt" or "csv" file compatible with Transport system detailing the materials used
- k) Checklist of "typical" signal details to be used
- l) All required checklists of MDOT Special Provisions extracted per E-Proposal format

**Distribute Task 4 Deliverables to Lansing Traffic Signals Unit only as follows:**

- i) One (1) 11"x17" paper copy of the title sheet
- ii) All electronic files to be delivered on a compact disk (CD) and sent via email

**MDOT RESPONSIBILITIES:**

Utilities:

MDOT staff will:

- Distribute plans to all the utility companies in the area
- Receive and pass on all utility information
- Assist in scheduling and conducting utility coordination meeting(s)
- Coordinate any necessary utility relocation

**Department Review:**

The department will review and comment on the base plan, the preliminary (75%) plan, and the OEC plan submittals. Additional plan review may be required dependent on completeness and accuracy of the plans submitted.

**Information services to be provided by the MDOT are:**

- Control section numbers
- Job numbers
- Contact information for TSC/Region/C&T personnel
- Appropriate Traffic and Safety Notes
- Available signal design plans and/or layout drawings for each location
- Available signal phasing or operational information for each location
- A Proposal file will be made available to be used as a template
- Items available on MDOT's website - [www.michigan.gov/mdot](http://www.michigan.gov/mdot) (Select: Doing Business with MDOT, Traffic & Safety Services, Typical/Details/Guides)

**1. Signal Details**

- a. MDOT Typical Signal Construction Detail Sheets
- b. MDOT Typical Signal Information Note Sheet
- c. MDOT Typical Signal Legend Sheet

**2. Traffic Consultant Files**

- a. Cell libraries
- b. Microstation information
- c. CAD instructions for consultants

- d. MDOT sample layouts
  - e. MDOT Suggested Traffic Signal Design Procedure
    - f. MDOT Requirements for Preliminary Geotechnical Investigations for Signal Foundations
    - g. Method of Measurement and Basis of Payment for Signal Contracts
    - h. Signal Span Calculation Program (non-disclosure statement required)
3. Traffic Guidelines
- Traffic Signal Head Placement Diagrams
- Signal special provisions are now available on the Design IRS menu.

**Reference Documents and Standards to be used:**

- *National Manual of Uniform Traffic Control Devices*
- *Michigan Manual of Uniform Traffic Control Devices (MMUTCD)*
- *Michigan Vehicle Code*
- Local and national electrical codes
- MDOT Standards, Specifications, and Construction Details
- MDOT Pay Item Code Book

From this list, the following documents can be ordered from MDOT Financial Services Division (517-335-2519). The Consultant must pay the cost.

- MMUTCD
- MDOT 2003 Standard Specifications for Construction
- MDOT Pay Item Code Book

**PROJECT COORDINATION:**

Coordinate design service with MDOT, Traffic and Safety Support Area, Traffic Signal Unit, Douglas Adelman (517-373-2363); overhead and/or underground utility/telephone companies.

**PAYMENT SCHEDULE**

Compensation for this Scope of Services shall be on an **actual cost plus fixed fee** basis.

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

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

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

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

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

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

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