

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 _____

<input type="checkbox"/> Prequalified Services – See page ___ of the attached Scope of Services for required Prequalification Classifications.	<input type="checkbox"/> 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)
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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 5	PROPOSAL/BID DUE DATE 6/24/10	TIME DUE 4:00 pm local time
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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

Gisso Shams, Consultant Coordination Engineer
Operations-Traffic and Safety
425 W. Ottawa Street
Lansing, MI 48909

Bid Opening 6/24/2010 at 1:30 pm

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

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

MDOT FORMS REQUIRED AS PART OF PROPOSAL SUBMISSION

5100D – Request for Proposal Cover Sheet

5100G – Certification of Availability of Key Personnel

5100I – Conflict of Interest Statement

5100J - Consultant Data and Signature Sheet (Required only for Non-Prequalified Work)

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Michigan Department of Transportation

**SPECIAL BIDDING INFORMATION
FOR
TRAFFIC AND SAFETY SERVICES
Retro-Reflectivity Measurements**

The Michigan Department of Transportation (MDOT) will receive sealed bids from firms to provide retro-reflectivity readings of various pavement marking materials as well as various measures of material presence in report form for 14 Regions/Transportation Service Centers (TSCs) numbered below:

1. **Bay Region**, JN 106991 which consists of the following counties: Arenac, Bay, Clare, Genesee, Gladwin, Gratiot, Huron, Isabella, Lapeer, Midland, Saginaw, Sanilac, and Tuscola
2. **Grand Region**, JN 106998, which consists of the following counties: Ionia, Kent, Mecosta, Montcalm, Muskegon, Newaygo, Oceana, and Ottawa
3. **Metro Region**, JN 107001, which consists of the following counties: Macomb, Oakland, St. Clair, and Wayne
4. **North Region** which consists of the following TSCs:
 - a. **Alpena TSC**, JN 106986, which consists of the following counties: Alcona, Alpena, Iosco, Montmorency, Oscoda, and Presque Isle
 - b. **Cadillac TSC**, JN 107665, which consists of the following counties: Lake, Manistee, Mason, Missaukee, Osceola, and Wexford
 - c. **Grayling TSC**, JN 106993, which consists of the following counties: Cheboygan, Crawford, Emmet, Ogemaw, Otsego, and Roscommon
 - d. **Traverse City TSC**, JN 106996, which consists of the following counties: Antrim, Benzie, Charlevoix, Grand Traverse, Kalkaska, and Leelanau
5. **Southwest Region**, which consists of the following TSCs:
 - a. **Coloma TSC**, JN 107002, which consists of the following counties: Berrien, Cass, and Van Buren
 - b. **Kalamazoo TSC**, JN 106994, which consists of the following counties: Allegan, Kalamazoo, and St. Joseph
 - c. **Marshall TSC**, JN 106988, which consists of the following counties: Barry, Branch, and Calhoun
6. **Superior Region**, JN 106999, which consists of all counties in Michigan's Upper Peninsula

7. University Region, which consists of the following TSCs:

- a. Brighton TSC**, JN 106995, which consists of the following counties: Livingston, Monroe, and Washtenaw
- b. Jackson TSC**, JN 106989, which consists of the following counties: Hillsdale, Jackson, and Lenawee
- c. Lansing TSC**, JN 106993, which consists of the following counties: Clinton, Eaton, Ingham, and Shiawassee

MDOT proposes to enter into a contract or contracts for retro-reflectivity readings and the corresponding reports in each numbered Region/TSC listed above. Consultants interested in any or all of the Regions/TSCs listed above should **submit a bid sheet for each one to be considered, in accordance with the "Guidelines for Completing a Low Bid Sheet and Acceptance/Rejection of Bids.**

Bids are due by June 21, 2010 at 4 p.m. local time to:

Gisso Shams, Consultant Coordinator Engineer
Michigan Department of Transportation
Division of Operations
425 W. Ottawa Street
Lansing, Michigan 48933
(517) 241-0232

The lowest "Total Bid" price from the bid sheets for each Region/TSC will be used for selection. Multiple selections and contracts may result from this advertisement.

A public bid opening will be held on June 22, at 1:30 p.m. at the following location:

Michigan Department of Transportation
Division of Operations
425 W. Ottawa Street
Lansing, Michigan 48933

Consultants need not be present at the bid opening, but are welcome to attend.

GENERAL NOTICE:

Bids must be signed by an agent authorized to bind the Consultant. Bids must remain valid for a period of at least 120 days from the bids due date.

All information in a Consultant's proposal/bid and any contract resulting from it are subject to disclosure under the provisions of the "Freedom of Information Act," 1976 Public Act No. 42, as amended, MCL 15.231, et seq.

The contents of the selected Consultant's proposal/bid shall become contractual obligations if a contract ensues. Failure of the selected Consultant to accept these obligations and/or honor these bids will result in cancellation of the contract.

It is the Consultant's responsibility to familiarize themselves with all laws, ordinances, permits, traffic, safety and health regulations, haul route restrictions, MIOSHA, NPDES, etc. The State of Michigan has recently passed a 'no texting while driving' law.

Any questions should be submitted by e-mail to Jill Morena at morenaj@michigan.gov. Questions must be received no less than four business days prior to the bids due date.

Michigan Department of Transportation

**SCOPE OF SERVICES
FOR
TRAFFIC AND SAFETY SERVICES**
Retro-Reflectivity Measurements

CONTROL SECTION: 84900

JOB NUMBER(S) AND LOCATIONS:

Location 1	JN 106986	Alpena TSC
Location 2	JN 106991	Bay Region
Location 3	JN 106995	Brighton TSC
Location 4	JN 107665	Cadillac TSC
Location 5	JN 106998	Grand Region
Location 6	JN 106993	Grayling TSC
Location 7	JN 106989	Jackson TSC
Location 8	JN 106983	Lansing TSC
Location 9	JN 107001	Metro Region
Location 10	JN 107002	Coloma TSC
Location 11	JN 106994	Kalamazoo TSC
Location 12	JN 106988	Marshall TSC
Location 13	JN 106999	Superior Region
Location 14	JN 106996	Traverse City TSC

PROJECT DESCRIPTION:

Depending on the Region/TSC, provide retro-reflectivity measurements in report form for any or all of the following products. Presence measures will also be called for on various products.

Maintenance Materials:

Waterborne Paint – Fall 2010 and Spring 2011

Sprayable Thermoplastic – Fall 2010 and Spring 2011

Durable Materials:

Polyurea – Spring 2011

Modified Urethane – Spring 2011

Wet Reflective Tape – Spring 2011

Measurements taken on rumble strips are to be reported, but noted separately from the measurements taken on non-rumble strip locations.

ANTICIPATED SERVICE START DATE: October 1, 2010

ANTICIPATED SERVICE COMPLETION DATE:

November 30, 2010-Fall Readings - Maintenance Materials

June 15, 2011-Spring Readings - Maintenance Materials

June 15, 2011-Spring Readings - Durable Materials

PRIMARY PREQUALIFICATION CLASSIFICATION(S): N/A

SECONDARY PREQUALIFICATION CLASSIFICATION(S): N/A

DBE REQUIREMENT: N/A

MDOT PROJECT ENGINEER MANAGER:

Jill G. Morena, Senior Pavement Marking/Delineation/Rumble Strip Engineer

Traffic Operations

Michigan Department of Transportation

P.O. Box 30050

Lansing, MI 48909

Phone: 517-373-3340

Fax: 517-241-2567

E-mail:morenaj@michigan.gov

DESCRIPTION:

Fall 2010 - Maintenance Materials - Waterborne Paint and Sprayable Thermoplastic

The Michigan Department of Transportation (MDOT) will have mobile retro-reflectivity measurements taken on 10 to 20 percent of all state trunklines between October 1 and October 31, 2010. Continuous reflectivity measurements are taken, over a minimum of two miles, and averaged together for each test section.

These measurements allow MDOT to monitor the quality of markings on the roadways and are used to adjust final payment to pavement marking Contractors.

In 2008, 2009, and 2010 centerline rumble strips were milled in various locations around the state.

Reflectivity measurements taken on centerlines striped in the rumble strips are to be reported separately as they will not be used to adjust final payment to the pavement marking Contractors.

MDOT also requires 10 to 20 percent of the freeway shoulder rumble strip markings located in the North Region be measured this year.

MDOT is seeking bids for the retro-reflective measurement of waterborne and/or sprayable thermoplastic pavement marking materials on the pavement marking projects in the 14 locations noted previously.

Spring 2011 Maintenance Materials - Waterborne Paint and Sprayable Thermoplastic

MDOT will have mobile retro-reflectivity measurements taken on 10 to 20 percent of all state trunklines between April 1, 2011, and June 15, 2011, in the Regions/TSCs/locations listed below. Continuous reflectivity measurements are taken, over a minimum of two miles, and averaged together for each test section.

Presence will be measured by video documentation of these routes as well as a subjective summary from the Consultant. The summary will be by way of a number between 1 and 5. A guideline for determining the rating will be provided to the Consultant prior to beginning work.

When measuring presence, a videotape shall be provided of the locations at a minimum of one (1) mile per route. The video shall have an overlay showing the retro reflectivity numbers.

Reflectivity measurements taken on centerlines striped in the rumble strips are to be reported separately.

These measurements will allow MDOT to monitor the quality of markings on the roadways and will be used evaluate both the brightness and **presence** of maintenance materials after winter.

Spring 2011 retro reflectivity and **presence** measurements will be taken in the following Regions/TSCs/Routes and final reports will be provided:

Grayling TSC

Grand Region

Lansing TSC

Spring 2010 - Durable Materials – Polyurea, Modified Urethane, Wet Reflective Tape

The Michigan Department of Transportation (MDOT) will have mobile retro-reflectivity measurements taken on the locations shown below. **The various routes including the locations shown below will require 100 percent of the length of the route be measured for retro-reflectivity.**

Presence will be measured by video documentation of these routes as well as a subjective summary from the Consultant. The summary will be by way of a number between 1 and 5. A guideline for determining the rating will be provided to the Consultant prior to beginning work.

When measuring presence, a videotape shall be provided of the locations at a minimum of one (1) mile per route. The video shall have an overlay showing the retro reflectivity numbers.

These measurements will allow MDOT to assess the quality of durable markings on the roadways and to determine if any policy changes should be made.

MDOT is seeking bids for the retro-reflective measurement on the locations noted below:

Various routes in the Coloma TSC including:

I-94 From 10 miles East of the MI – IN border to the MI – IN border

Various routes in the Marshall TSC including:

I-69 From 10 miles North of the MI – IN border to the MI – IN border

Various routes in the Metro Region including:

I-75 From 10 miles North of the MI – OH border to the MI – OH border

Measurement quantities per Region, TSC or location have been listed separately in Attachment A, pages 1 through 14.

CONSULTANT RESPONSIBILITIES:

Two weeks prior to beginning work, the Consultant shall contact the MDOT-Operations, Traffic and Safety Project Manager, the MDOT Delivery Engineer and the Pavement Marking Contractor to arrange an on-site meeting. Contact names will be provided upon contract award.

The contract work includes the following tasks:

1. Performing fall 2010 retro-reflective measurements on maintenance materials placed in 2010. Separate rumble strip measurements from other measurements. **Provide final fall 2010 maintenance material report.**
2. Performing spring 2011 retro-reflective measurements on maintenance materials placed in 2010. Separate rumble strip measurements from other measurements. **Provide final spring 2011 maintenance material report.**
3. Performing spring 2011 presence measurements on maintenance materials placed in 2010 via videotape and MDOT visual guideline. Provide a presence measurement a minimum of one (1) mile per route. The video shall have an overlay showing the retro reflectivity numbers. **Include in final spring 2011 maintenance material report.**
4. Performing spring 2011 retro-reflective measurements on durable products placed at various times in the past. **Provide final spring 2011 durable material report.**
5. Performing spring 2011 presence measurements on durable materials via videotape and MDOT visual guideline. Provide a presence measurement a minimum of one (1) mile per route. The video shall have an overlay showing the retro reflectivity numbers. **Include in final spring 2011 durable material report.**

Failure to complete the above tasks as described in this scope of services may initiate termination of the contract.

Prior to starting work, the Consultant will provide the Project Manager and appropriate Construction staff a schedule of work to be completed for the first week. Thereafter, the Consultant will provide a weekly schedule to the Project Manager and appropriate Construction staff to ensure the program is properly measured.

The Consultant shall work directly with appropriate Construction staff and the pavement marking Contractor to obtain completed contract work records. Since retro-reflective measurements on the maintenance material routes are random, the resulting final retro-reflective measurements shall be considered representative of the entire route.

Equipment and Personnel Requirements

Quality assurance documentation shall be provided by the Consultant to indicate that a daily calibration process has been done successfully on the measurement equipment. Calibration tolerances shall be per the measurement equipment Manufacturer's recommendation. Operating temperatures shall be per the measurement equipment Manufacturer's recommendation. MDOT reserves the right at any time to have the calibration verified in the field.

Equipment requirements for this work shall be 30 meter mobile laser technology. Use of other mobile equipment or use of hand-held equipment will not be allowed unless for purposes of reading verification.

For all measurements, a videotape overlay showing the measurements and a video of the roadway shall be required on any sites the Consultant measures at or below 100 millicandelas (mcd). When taking Fall 2010 measurements, if, in the estimation of the Consultant the markings are consistently measuring below 100mcd immediately call the contact person for the affected Region/TSC and the MDOT-Operations, Traffic and Safety Project Manager.

When measuring **presence**, a videotape shall be provided of the locations a minimum of one (1) mile per route. The video shall have an overlay showing the retro reflectivity numbers.

Field Work

Progress Schedule

Fall 2010 - Maintenance Materials

All marking data collection is to be performed between October 1, 2010, and October 30, 2010. Fourteen (14) reports will be issued. These reports and any videotapes will be due November 30, 2010.

Spring 2011 - Maintenance Materials

All marking data collection is to be performed between April 1, 2011, and May 31, 2011. Six (6) reports will be issued. These reports and any videotapes will be due June 15, 2011.

Spring 2011 - Durable Materials

All marking data collection is to be performed between April 1, 2011, and June 7, 2011. Three (3) reports will be issued. These reports and any videotapes will be due June 15, 2011.

Reports

Fall 2010 - Maintenance Materials

Fourteen (14) reports will be issued. These reports and any videotapes will be due Nov 30, 2010.

Spring 2011- Maintenance Materials

Six (6) reports will be issued. These reports and any videotapes will be due June 15, 2011.

Spring 2011- Durable Materials

Three (3) reports will be issued. These reports and any videotapes will be due June 15, 2011.

All measurement reports shall contain the following:

- Route identification.
- Date and direction the route is measured.
- Location of the section measured so MDOT personnel or the Contractor may return to the exact location to review the measurement site. The description shall include as a minimum, the control section, the starting and stopping point by control section mileage point, and a physical description of the start point (i.e. Main Street).
- Average of each line per route measured.
- Line average for each line and color by material type and line width.
- Identification of the measurements taken on rumble strips (centerline or shoulder rumble strips).
- Measurement vehicle/laser identification number.
- Breakdown of the percentage of adjustment by route for the Fall 2010 reports.
- Comparison of the data collected on each route to the adjusted pay schedule listed in the proposal for the Fall 2010 reports.
- Identify the Manufacturer/Supplier of both the bead and binder used. MDOT will provide this information for the durable products.
- Report retro reflectivity measurements and averages for each material separately.

All spring 2011 measurement reports shall contain the above information as well as the following:

- Provide one video recording representative of the line presence per route. The length of video will vary depending on the consistency of line presence. Minimum road length per route is one (1) mile.
- Summary of the line presence per route using MDOT supplied guideline for determination of presence.

For the Consultant's information and use in the Fall 2010 Maintenance Materials reports, Attachment B is the "Special Provision for Waterborne and Sprayable Thermoplastic Pavement Markings-Adjusted Payment" for the Fall 2010 pavement marking contracts which are being measured.

This special provision includes adjusted bid price ranges for yellow and white markings based on retro reflectivity measurements.

The Consultant will provide four (4) bound copies of each report and provide a copy of each report on CD.

Provide one video of areas under 100 mcd per Region or TSC, if needed.

Liquidated damages in the amount of \$1,000.00 per report per day may be assessed against the measurement contract for each day the report is not delivered to the Project Manager.

Summary of Data Files

The Consultant will provide a database table containing a summary of **all raw data** collected in the Region or TSC.

Among other things, this file shall contain:

1. Control Section
2. Actual mile point.
3. Pavement marking product type. For the durable measurements, this information will be provided by MDOT.
4. Material Manufacturer.
5. Bead type and Supplier.
6. A count of the 0.1 mile station averages falling within specified ranges

The summary of data files shall be delivered to the Project Manager or designee prior to final payment.

REQUIRED GUIDELINES AND STANDARDS:

Safety: The Consultant shall perform field operations in accordance with the department's Personal Protective Equipment (PPE) Policy as stated in MDOT Guidance Document #10118. The Consultant shall perform field operations in accordance with MIOSHA regulations and accepted safety practices.

MEASUREMENT AND PAYMENT:

Travel and sustenance are included in all pay items below and are the responsibility of the Consultant.

Fall 2010 - Maintenance Material pay items:

The pay items, **Retro-Reflectivity Measurement, White, 4 inch, Retro-Reflectivity Measurement, White, 6 inch, Retro-Reflectivity Measurement, Yellow, 4 inch, and Retro-Reflectivity Measurement, Yellow, 6 inch** includes all mobilization, labor, equipment, sampling, data files, and analysis of retro-reflective measurements.

The Project Manager will be provided with a copy of the analytical results as described in this scope of services. This item will be paid for at the unit price per foot within the maximum quantity indicated. The department will not make final payment on fall 2010 reports until all reports have been issued, the adjusted bid prices have been administered, and the pavement marking Contractor's contract with the department has been finalized.

The Consultant shall ensure the measurements taken are from the proper Contractor-related work area. Work measured that is identified in an area other than the assigned measurement project area will not be paid for.

Spring 2011- Maintenance Material pay items:

Retro-Reflectivity Measurement, White, 4 inch, Retro-Reflectivity Measurement, White, 6 inch, Retro-Reflectivity Measurement, Yellow, 4 inch and Retro-Reflectivity Measurement, Yellow, 6 inch includes all mobilization, labor, equipment, sampling, data files, and analysis of retro-reflective measurements, **presence measures and video.**

Spring 2011- Durable Material pay items:

The pay items **Retro-Reflectivity Measurement, White, 4 inch, Retro-Reflectivity Measurement, White, 6 inch, Retro-Reflectivity Measurement, Yellow, 4 inch and Retro-Reflectivity Measurement, Yellow, 6 inch** includes all mobilization, labor, equipment, sampling, data files, and analysis of retro-reflective measurements, **presence measures and video.**

The Consultant shall not exceed the proposed quantity shown in the pay items. Any quantities measured beyond proposed plan quantities will not be paid for by the department without prior written approval from the Project Manager.

PAYMENT SCHEDULE:

Payment for this project work shall be by **lump sum based on bid price units.**

CONSULTANT PAYMENT:

All invoices/bills for services must be directed to the department and follow the 'then current' guidelines. The latest copy of the "Professional Engineering Service Reimbursement Guidelines for Bureau of Highways" is available on MDOT's Bulletin Board System. This document contains instructions and forms that must be followed and used for invoicing/billing; payment may be delayed or decreased if the instructions are not followed.

Payment to the Consultant for Services rendered shall not exceed the "Actual Cost Plus Fixed Fee, Not to Exceed Maximum Amount" unless an increase is approved in accordance with the contract with the Consultant. All invoices/bills must be submitted within 14 calendar days of the last date of services being performed for that invoice.

Direct expenses 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 invoice/bill, for all billable expenses on the Project. The only hours that will be considered allowable charges for this contract are those 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 Engineer Manager. Reimbursement for allowed overtime hours 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 Engineer Manager.

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

MICHIGAN
DEPARTMENT OF TRANSPORTATION

SPECIAL PROVISION
FOR
**WATERBORNE AND SPRAYABLE THERMOPLASTIC
PAVEMENT MARKING-ADJUSTED PAYMENT**

T&S:JGM

1 of 3

C&T:APPR:TES:DBP:03-16-10

a. Description. Payment for waterborne and sprayable thermoplastic pavement markings applied under this contract will be subject to adjustment, depending on the value of retro-reflectivity measurements obtained by the Department. The Department will retain an amount equal to 20 percent of the value of the longitudinal pavement marking work performed under this contract until pay adjustments are determined.

b. Measurement. All 4 inch and 6 inch longitudinal markings applied on this project, both waterborne and sprayable thermoplastic, are subject to pay adjustment, except markings applied over rumble strips. If any locations measure below 100 millicandelas, the Department will determine if these locations, or other areas not measured, require additional review. The Contractor will be notified of any deficiencies. If the Department determines the deficiency is the result of field conditions, the identified areas will not be subject to pay adjustment but will be paid at the contract bid price.

1. Sampling Procedure. Approximately 20 percent of each route will be measured to determine adjustment factors. Measurements will be taken in approximate 2-mile segments, chosen to be representative of the entire route.

2. Method of Measurement. Within each 2-mile segment, markings will be measured continuously by a mobile retro-reflectometer using 30 meter geometry and an average reading will be produced for each measured line. For 4 inch yellow centerline, the Pavement Marking Contractor will provide the Retro-Reflectivity Measurement Contractor the direction in which the marking was placed. The Retro-Reflectivity Measurement Contractor will measure half of the 2-mile segments in the Region or TSC in the direction of striping and the other half in the opposite direction.

3. Timing of Measurement. Measurements on yellow markings will be taken between September 1 and October 31. Measurements on white markings will be taken between October 1 and October 31. Lines placed after the final completion date for longitudinal lines plus any extensions due to inclement weather, will not be eligible for a positive pay adjustment, but are still subject to negative pay adjustment as described herein.

c. Pay Adjustment. Use of Readings to Determine Bid Amount Adjustment. Contract bid amounts for each material width and color line will be adjusted as follows: All project segments for a given type of material and color will be assigned an equal amount of lineal footage in that category. (For example, if there are 80 measurements taken of 4 inch yellow waterborne center line, each measurement will be assumed to represent 1/80th of the total contract quantity of 4 inch yellow waterborne.)

The average retro-reflectometer reading will be used to determine the pay adjustment factor from Table 1 for each measured line within a 2-mile measurement segment:

An adjustment factor, as described above, will be determined for each individual segment. The adjustment factor determined for each segment will be multiplied by the lineal footage represented by that segment times the unit price, to determine the payment adjustment. The individual pay adjustments will then be summed to determine the net project increase or decrease in bid amount for each contract item subject to adjustment.

Table 1. Adjustment Factors

White Lines		Yellow Lines	
Ave. Segment Reading (in millicandelas)	Adjustment Factor	Ave. Segment Reading (in millicandelas)	Adjustment Factor
≥321	+0.15	≥186	+0.15
240-320	0	140-185	0
175-239	-0.15	125-139	-0.15
101-174	-0.50	101-124	-0.50
≤100	-0.80	≤100	-0.80

d. Incentives and Deductions. If the cumulative pay adjustment is a positive number, the Contractor is entitled to an incentive payment up to the maximum amount shown in Table 2 for the specific job number they are working on. This incentive will be added to the bid amount due to the Contractor based on the quantities placed and the unit price bid for each job number. If the cumulative pay adjustment is a negative number, the Contractor will receive a deduction up to the maximum amount shown in Table 2 for the specific job number they are working on. This deduction will be subtracted from the bid amount due to the Contractor based on the quantities placed and the unit price bid for each job number.

Table 2. Maximum Incentive/Deduction

Job Number	Maximum Incentive	Maximum Deduction
106983	20,000.00	80,000.00
106986	20,000.00	80,000.00
106998	75,000.00	300,000.00
106988	20,000.00	80,000.00
106994	20,000.00	80,000.00
106995	20,000.00	80,000.00
106989	20,000.00	80,000.00
106993	20,000.00	80,000.00
107002	20,000.00	80,000.00
106999	75,000.00	300,000.00
106996	20,000.00	80,000.00
107001	75,000.00	300,000.00
106991	75,000.00	300,000.00
107665	20,000.00	80,000.00

e. Delayed Acceptance of Contract. Final acceptance of completed pavement marking work may be delayed 30 days beyond completion of retro-reflectivity measurement, to allow time for the computation of pay adjustment factors.

f. Measurement and Payment. Any incentive earned by the contractor as detailed in this special provision will be paid for using the following contract item (pay item):

Contract Item (Pay Item)	Pay Unit
Incentive, <u>(job number)</u>	

Retro-Reflectivity Measurements on Various Routes Statewide

All entries made on this page shall be handwritten in ink.

Alpena TSC

ITEMS OF WORK Fall 2010 Maintenance Materials		QUANTITY	UNIT	UNIT PRICE	TOTAL
Retro-Reflectivity Measurement, White,	4 inch	17,724	Foot		
	6 inch	771,066	Foot		
Retro-Reflectivity Measurement, Yellow,	4 inch	296,499	Foot		
	6 inch	0	Foot		

Total Bid: _____

Consultant Name: _____

Consultant Signature: _____

Date: _____

The Michigan Department of Transportation reserves the right to reject any or all bids.

Check "UNIT PRICE" column for omissions before entering bid total.

Retro-Reflectivity Measurements on Various Routes Statewide

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Bay Region

ITEMS OF WORK Fall 2010 Maintenance Materials		QUANTITY	UNIT	UNIT PRICE	TOTAL
Retro-Reflectivity Measurement, White,	4 inch	330,000	Foot		
	6 inch	2,670,000	Foot		
Retro-Reflectivity Measurement, Yellow,	4 inch	964,000	Foot		
	6 inch	780,000	Foot		

Total Bid: _____

Consultant Name: _____

Consultant Signature: _____

Date: _____

The Michigan Department of Transportation reserves the right to reject any or all bids.

Check "UNIT PRICE" column for omissions before entering bid total.

Retro-Reflectivity Measurements on Various Routes Statewide

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Brighton TSC

ITEMS OF WORK Fall 2010 Maintenance Materials		QUANTITY	UNIT	UNIT PRICE	TOTAL
Retro-Reflectivity Measurement, White,	4 inch	178,474	Foot		
	6 inch	818,795	Foot		
Retro-Reflectivity Measurement, Yellow,	4 inch	264,931	Foot		
	6 inch	503,951	Foot		

Total Bid: _____

Consultant Name: _____

Consultant Signature: _____

Date: _____

The Michigan Department of Transportation reserves the right to reject any or all bids.

Check "UNIT PRICE" column for omissions before entering bid total.

Retro-Reflectivity Measurements on Various Routes Statewide

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Cadillac TSC

ITEMS OF WORK Fall 2010 Maintenance Materials		QUANTITY	UNIT	UNIT PRICE	TOTAL
Retro-Reflectivity Measurement, White,	4 inch	85,896	Foot		
	6 inch	1,027,806	Foot		
Retro-Reflectivity Measurement, Yellow,	4 inch	429,941	Foot		
	6 inch	74,496	Foot		

Total Bid: _____

Consultant Name: _____

Consultant Signature: _____

Date: _____

The Michigan Department of Transportation reserves the right to reject any or all bids.

Check "UNIT PRICE" column for omissions before entering bid total.

Retro-Reflectivity Measurements on Various Routes Statewide

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Traverse City TSC

ITEMS OF WORK Fall 2010 Maintenance Materials		QUANTITY	UNIT	UNIT PRICE	TOTAL
Retro-Reflectivity Measurement, White,	4 inch	128,843	Foot		
	6 inch	948,744	Foot		
Retro-Reflectivity Measurement, Yellow,	4 inch	644,911	Foot		
	6 inch	68,765	Foot		

Total Bid: _____

Consultant Name: _____

Consultant Signature: _____

Date: _____

The Michigan Department of Transportation reserves the right to reject any or all bids.

Check "UNIT PRICE" column for omissions before entering bid total.

Retro-Reflectivity Measurements on Various Routes Statewide

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Grand Region

ITEMS OF WORK Fall 2010 Maintenance Materials		QUANTITY	UNIT	UNIT PRICE	TOTAL
Retro-Reflectivity Measurement, White,	4 inch	296,717	Foot		
	6 inch	1,893,400	Foot		
Retro-Reflectivity Measurement, Yellow,	4 inch	662,785	Foot		
	6 inch	809,297	Foot		

ITEMS OF WORK Spring 2011 Maintenance Materials		QUANTITY	UNIT	UNIT PRICE	TOTAL
Retro-Reflectivity Measurement, White,	4 inch	296,717	Foot		
	6 inch	1,893,400	Foot		
Retro-Reflectivity Measurement, Yellow,	4 inch	662,785	Foot		
	6 inch	809,297	Foot		

Total Bid: _____

Consultant Name: _____

Consultant Signature: _____

Date: _____

The Michigan Department of Transportation reserves the right to reject any or all bids.

Check "UNIT PRICE" column for omissions before entering bid total.

Retro-Reflectivity Measurements on Various Routes Statewide

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Grayling TSC

ITEMS OF WORK Fall 2010 Maintenance Materials		QUANTITY	UNIT	UNIT PRICE	TOTAL
Retro-Reflectivity Measurement, White,	4 inch	270,057	Foot		
	6 inch	1,042,439	Foot		
Retro-Reflectivity Measurement, Yellow,	4 inch	482,721	Foot		
	6 inch	347,620	Foot		

ITEMS OF WORK Spring 2011 Maintenance Materials		QUANTITY	UNIT	UNIT PRICE	TOTAL
Retro-Reflectivity Measurement, White,	4 inch	270,057	Foot		
	6 inch	1,042,439	Foot		
Retro-Reflectivity Measurement, Yellow,	4 inch	482,721	Foot		
	6 inch	347,620	Foot		

Total Bid: _____

Consultant Name: _____

Consultant Signature: _____

Date: _____

The Michigan Department of Transportation reserves the right to reject any or all bids.

Check "UNIT PRICE" column for omissions before entering bid total.

Retro-Reflectivity Measurements on Various Routes Statewide

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Jackson TSC

ITEMS OF WORK Fall 2010 Maintenance Materials		QUANTITY	UNIT	UNIT PRICE	TOTAL
Retro-Reflectivity Measurement, White,	4 inch	60,220	Foot		
	6 inch	648,916	Foot		
Retro-Reflectivity Measurement, Yellow,	4 inch	318,400	Foot		
	6 inch	116,700	Foot		

Total Bid: _____

Consultant Name: _____

Consultant Signature: _____

Date: _____

The Michigan Department of Transportation reserves the right to reject any or all bids.

Check "UNIT PRICE" column for omissions before entering bid total.

Retro-Reflectivity Measurements on Various Routes Statewide

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Lansing TSC

ITEMS OF WORK Fall 2010 Maintenance Materials		QUANTITY	UNIT	UNIT PRICE	TOTAL
Retro-Reflectivity Measurement, White,	4 inch	153,000	Foot		
	6 inch	700,000	Foot		
Retro-Reflectivity Measurement, Yellow,	4 inch	303,750	Foot		
	6 inch	364,000	Foot		

ITEMS OF WORK Spring 2011 Maintenance Materials		QUANTITY	UNIT	UNIT PRICE	TOTAL
Retro-Reflectivity Measurement, White,	4 inch	153,000	Foot		
	6 inch	700,000	Foot		
Retro-Reflectivity Measurement, Yellow,	4 inch	303,750	Foot		
	6 inch	364,000	Foot		

Total Bid: _____

Consultant Name: _____

Consultant Signature: _____

Date: _____

The Michigan Department of Transportation reserves the right to reject any or all bids.

Check "UNIT PRICE" column for omissions before entering bid total.

Retro-Reflectivity Measurements on Various Routes Statewide

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Metro Region

ITEMS OF WORK Fall 2010 Maintenance. Materials		QUANTITY	UNIT	UNIT PRICE	TOTAL
Retro-Reflectivity Measurement, White,	4 inch	490,000	Foot		
	6 inch	1,130,000	Foot		
Retro-Reflectivity Measurement, Yellow,	4 inch	470,267	Foot		
	6 inch	860,000	Foot		

ITEMS OF WORK Spring 2011 Durable Materials		QUANTITY	UNIT	UNIT PRICE	TOTAL
Retro-Reflectivity Measurement, White,	4 inch	52,800	Foot		
	6 inch	211,200	Foot		
Retro-Reflectivity Measurement, Yellow,	4 inch		Foot		
	6 inch	211,200	Foot		

Total Bid: _____

Consultant Name: _____

Consultant Signature: _____

Date: _____

The Michigan Department of Transportation reserves the right to reject any or all bids.

Check "UNIT PRICE" column for omissions before entering bid total.

Retro-Reflectivity Measurements on Various Routes Statewide

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Coloma TSC

ITEMS OF WORK Fall 2010 Maintenance Materials		QUANTITY	UNIT	UNIT PRICE	TOTAL
Retro-Reflectivity Measurement, White,	4 inch	111,400	Foot		
	6 inch	1,016,900	Foot		
Retro-Reflectivity Measurement, Yellow,	4 inch	340,000	Foot		
	6 inch	327,800	Foot		

ITEMS OF WORK Spring 2011 Durable Materials		QUANTITY	UNIT	UNIT PRICE	TOTAL
Retro-Reflectivity Measurement, White,	4 inch	52,800	Foot		
	6 inch	211,200	Foot		
Retro-Reflectivity Measurement, Yellow,	4 inch		Foot		
	6 inch	211,200	Foot		

Total Bid: _____

Consultant Name: _____

Consultant Signature: _____

Date: _____

The Michigan Department of Transportation reserves the right to reject any or all bids.

Check "UNIT PRICE" column for omissions before entering bid total.

Retro-Reflectivity Measurements on Various Routes Statewide

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Kalamazoo TSC

ITEMS OF WORK Fall 2010 Maintenance Materials		QUANTITY	UNIT	UNIT PRICE	TOTAL
Retro-Reflectivity Measurement, White,	4 inch	97,368	Foot		
	6 inch	679,020	Foot		
Retro-Reflectivity Measurement, Yellow,	4 inch	285,741	Foot		
	6 inch	256,438	Foot		

Total Bid: _____

Consultant Name: _____

Consultant Signature: _____

Date: _____

The Michigan Department of Transportation reserves the right to reject any or all bids.

Check "UNIT PRICE" column for omissions before entering bid total.

Retro-Reflectivity Measurements on Various Routes Statewide

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Marshall TSC

ITEMS OF WORK Fall 2010 Maintenance Materials		QUANTITY	UNIT	UNIT PRICE	TOTAL
Retro-Reflectivity Measurement, White,	4 inch	67,512	Foot		
	6 inch	609,202	Foot		
Retro-Reflectivity Measurement, Yellow,	4 inch	308,101	Foot		
	6 inch	181,192	Foot		

ITEMS OF WORK Spring 2011 Durable Materials		QUANTITY	UNIT	UNIT PRICE	TOTAL
Retro-Reflectivity Measurement, White,	4 inch	52,800	Foot		
	6 inch	211,200	Foot		
Retro-Reflectivity Measurement, Yellow,	4 inch		Foot		
	6 inch	211,200	Foot		

Total Bid: _____

Consultant Name: _____

Consultant Signature: _____

Date: _____

The Michigan Department of Transportation reserves the right to reject any or all bids.

Check "UNIT PRICE" column for omissions before entering bid total.

Retro-Reflectivity Measurements on Various Routes Statewide

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Superior Region

ITEMS OF WORK Fall 2010 Maintenance Materials		QUANTITY	UNIT	UNIT PRICE	TOTAL
Retro-Reflectivity Measurement, White,	4 inch	155,974	Foot		
	6 inch	3,470,000	Foot		
Retro-Reflectivity Measurement, Yellow,	4 inch	1,490,025	Foot		
	6 inch	153,465	Foot		

Total Bid: _____

Consultant Name: _____

Consultant Signature: _____

Date: _____

The Michigan Department of Transportation reserves the right to reject any or all bids.

Check "UNIT PRICE" column for omissions before entering bid total.