

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

Research Administration Use Only

	REQUISITION NUMBER 2110	DUE DATE 12/19/2016	TIME DUE Noon est
MDOT PROJECT MANAGER Bill Stonebrook	JOB NUMBER (JN)		CONTROL SECTION (CS)
DESCRIPTION Slope Restoration on Urban Freeways			
Check all items to be included in RFP		Provide only checked items below in proposal	
Check the appropriate Tier in the box below			
<input type="checkbox"/> TIER I (\$50,000-\$150,999)	<input checked="" type="checkbox"/> TIER II (\$150,000-\$1,000,000)	<input type="checkbox"/> TIER III (>\$1,000,000)	Best Value Scoring is listed in the RFP
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Understanding of Service
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Past Performance
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Qualifications of Team
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Quality Assurance/Quality Control
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	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	<input type="checkbox"/>	Presentation
N/A	N/A	<input type="checkbox"/>	Technical Proposal (if Presentation is required)

The prime consultant must be a Michigan university. The prime consultant/vendor is responsible for the successful completion of the service and is expected to perform at least 40 percent of the services, by dollar value. The basis of payment is Actual Costs as defined in standard MDOT contracts.

To submit a proposal, please follow the [MDOT Consultant Vendor Selection Guidelines for Research Administration-Revised September 2015](#).

RFP SPECIFIC INFORMATION

Problem Title: Slope Restoration on Urban Freeways

OR Number: 16-008

This is Best Value Selection which means the budget amount submitted with the proposal is a component of the proposal score, not the determining factor of the selection.

PROPOSAL SUBMITTAL INFORMATION

PROPOSAL AND BID SHEET EMAIL ADDRESS –

mdot-rfp-response@michigan.gov with a CC to
mdot-research@michigan.gov

GENERAL INFORMATION

Any questions relative to the Research Problem Statement must be submitted by e-mail to:

mdot-research@michigan.gov. Questions must be received by 4 business days prior to the RFP due date at 5:00 p.m. EST. All questions and answers will be placed on the MDOT RFP Web site as soon as possible after receipt of the questions and at least three (3) days prior to the due date listed above. The names of organizations 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 AND RESEARCH FORMS REQUIRED AS PART OF PROPOSAL SUBMISSION:

5100D- Request for Proposal Cover Sheet

Schedule of Research Activities Form- Appendix B

Deliverables Table- Appendix A

5100J- Consultant Data and Presignature sheet is required for signatory on this proposal

Research Proposal Budget Form Worksheet Appendix C (Universities)

5101S – Notice of Intent to Subcontract (if applicable)

OR

Bid Sheet and Budget Exhibits required in [Priced Proposal Guidelines](#) (Consultants)

Proposals must be submitted for this project electronically. Proposal Submittal Requirements Can Be Found At the Following Link
http://www.michigan.gov/documents/MDOT_Consultant-Vendor_Selection_Guidelines-0106_145222_7.pdf?20150707153457

In PART IV – INSTRUCTION FOR SUBMITTING PROPOSALS

NOTIFICATION

E-VERIFY REQUIREMENTS

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

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

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

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

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

9/13/12

Michigan Department of Transportation

SCOPE OF SERVICE FOR RESEARCH SERVICES

TITLE: Slope Restoration on Urban Freeways
OR#: 16-008

LOCATION: Various locations throughout the state

WORK DESCRIPTION: Research on Slope Restoration on Urban Freeways

ANTICIPATED START DATE: April 1, 2017

ANTICIPATED COMPLETION DATE: July 31, 2020

BUDGET: The budget for this project cannot exceed \$348,391.20.

MDOT RESEARCH PROJECT ADMINISTRATION MANAGER:

Bill Stonebrook
425 W. Ottawa
Lansing, Michigan 48909
E-MAIL: mdot-research@michigan.gov

GENERAL INFORMATION:

1. PROBLEM TO ADDRESS

In metropolitan Detroit, erosion on steep slopes adjacent to the interstate is a serious maintenance, safety and aesthetic issue. The standard treatment for covering slopes is turf seeding. While turf can be a solution to some erosion problems, it is presenting many challenges on steep slopes. Our goal is to research and subsequently develop best practices and viable alternatives to turf as a solution for slope stabilization.

2. RESEARCH OBJECTIVES

1. A thorough examination would include methods and practices necessary to specify correct soils, plant species, cultural practices, planting standards, short and long term maintenance plans, and quantified benefits and costs.
2. Provide best practice recommendations for slope restoration and continued maintenance

3. URGENCY AND IMPLEMENTATION BENEFIT TO MDOT

MDOT will use this information to establish specific best practices for controlling erosion on steep slopes throughout the Metro Detroit Region and eventually statewide. Best practices include design and maintenance plans and will be distributed department wide and posted on an (interactive) web page for use by design professionals and maintenance engineers statewide. Benefits include increased savings from decreased mowing contracts, increased safety for operators of mowing equipment, decreased or elimination of erosion settling into the great lakes waterways resulting in full compliance with Part 91 of the Soil and Sedimentation Control of the Natural Resources and Environmental Protection Act, Public Acts 1994 PA 451, which prohibits the deposition of sediment into major waterways, established best practices for use in design and maintenance development. Tested practices will eliminate costly trial and error solutions. Dissemination of reference materials and best practice standards to design and maintenance professionals statewide.

4. RISKS OR OBSTACLES TO RESEARCH

Location of study sites on freeways cause safety and access and travel issues.

5. DESIRED QUALIFICATIONS IN AN INVESTIGATOR(S)

Lead and co-researcher/investigators will have a terminal degree(s) in horticulture, forestry, botany or plant sciences or landscape architecture. PhD preferred for lead and co-researcher. A team of graduate students are encouraged and must be pursuing a degree in horticulture, forestry, botany, plant or earth sciences or landscape architecture. Undergraduate students are encouraged to participate in a subordinate position and must be pursuing a degree in any natural science field or professional design profession such as civil engineering or landscape architecture. Consultants for the purpose of providing documentation, drawings, survey or CAD services must be MDOT approved. A list of approved consultants can be provided by MDOT.

At least One (1) college series course and working experiences under statisticians.

CONSULTANT RESPONSIBILITIES:

1. Analyze existing research regarding erosion control, restoration and maintenance on steep slopes adjacent to freeways.
 - a. Include a survey of regional governmental transportation departments and their best practices; evaluate and report findings.
 - b. Include nationwide literature search regarding slope stabilization in the transportation industry; evaluate and report findings.
 - c. Review and thoroughly understand problems and successes with current slope restoration projects in the MDOT Metro Region at following locations:
 1. I-696; 9.18 miles east and west bound between I-75 and I-94, through the cities of Warren, Macomb and St. Clair Shores.
 2. I-75 Hamtramck, .06 miles on I-75 through the city of Hamtramck.
 3. M-10; 1 acre total; east and west bound between Evergreen and Ten Mile Roads in the city of Southfield.

2. Identify field research location(s) with one acre designated for best practices and the other acre as a control section that would be installed and maintained according to MDOT standards, preferably in the I-696 corridor, using the following guidelines:

- a. Differential slope orientation (north and south facing slopes).
- b. Varied degrees of slope.
- c. Within the limits of the MDOT long-term maintenance contract.
- d. Each site (best practices and control) will be a maximum of one acre and a minimum of one-quarter acre.
- e. Representative of typical urban transportation corridor environment.
- f. Varied distances from top of barrier wall.
- g. Any factor necessary to provide thorough investigative research.

3. Provide MDOT with research work plan that includes at minimum the following items by April 1, 2017:

- a. Provide an outline and timeline for research work plan and field monitoring.
- b. Landscape design with plant list, planting specifications and rationale/intent for each research plot.
- c. Depict or list how guidelines from Task Item 2.a through b are integrated into research plans.
- d. Submit landscape design in MDOT standard, preferably in .dgn (Microstation) format; dwg. (AutoCad) will be accepted as when accompanied with .pdf files.
- e. Provide meeting schedule for status updates with MDOT team, university researchers and installation contractor.

4. Partner with MDOT and vendor installation contractor to provide oversight on installation and perform subsequent maintenance of research plots according to research plans and specifications as submitted in item 3 above.

5. Collect data for a minimum of two growing seasons.

6. Review and analyze data collected to determine best practices and cost-benefit ratios.

7. Present research results with final recommendations to MDOT as described in Deliverables.

Failure of any of the above will be found in noncompliance with the contract.

DELIVERABLES:

1. Provide report that details approach, methods and outcome of research and recommended best practices for slope restoration operations and continued maintenance. Report must include the following at minimum:
 - a. Plant list or combination of plant species as proven by field research to be suitable for slope restoration applications.
 - b. Provide plans showing best practice planting and construction details drawn to scale submitted in Microstation (.dgn) or (.dwg) AutoCad format and Adobe Acrobat (.pdf) format.
 - c. Provide planting and maintenance specifications in MDOT 2012 Special Provision standards.
 - d. Include as-built plans that show location and layout of research plots, plant species, and size of plant at time of planting.
 - e. Present and provide a final detailed report and design manual of field research outcomes explaining the best practices for stabilizing steep slopes. For the design manual, include detail drawings of best practices, recommended plant species, best planting methods and instructions for continued maintenance practices.

MDOT RESPONSIBILITIES:

Study best practices for establishing non-turf vegetation and maintenance on depressed freeways in MDOT's Metro Region. Currently, there is limited reliable research for this application. A thorough examination includes methods and practices necessary to specify soils, plant species, cultural practices, planting standards and short and long term maintenance plans for steep slope applications. To avoid duplicate efforts, researcher(s) will be expected to thoroughly understand MDOT's efforts to date to stabilize slopes. Through the use of maintenance funding, MDOT plans to fund the construction of the experimental plot and if necessary the control plot. The MDOT and researcher will collaborate on construction oversight in order to ensure research plots are built to research and/or MDOT standards. The MDOT and MDOT's vendor installation contractor, to be selected late 2016 see "Tasks" above, will need to coordinate with the researcher on design, construction oversight, progress meetings, permitting, and if necessary consultant coordination. The MDOT will assist the researchers in the permitting process and will monitor the researcher for compliance with all permit requirements.

COORDINATION PROCEDURES

Work will be completed in compliance with the Research Implementation Manual

CONSULTANT PAYMENT

All billings for services must be directed to the Department and follow the current Research Implementation Manual. 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.

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 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 project manager.

The basis of payment is Actual Costs for Universities and Actual Costs plus Fixed Fee for Consultants as defined in standard MDOT contracts.

PROPOSAL INFORMATION AND SCORING

Formal proposals are required and shall include the information as outlined in these Guidelines. This section is the information required in the proposal that will be used to score the qualifications of each consultant's proposal. The section numbering correlates to the score sheet. Therefore, the consultant should format their proposals consistent with the outline provided.

1. UNDERSTANDING OF SERVICE: 40 POINTS

Describe understanding of the service intended to be proposed. This information is to be based on the scope of services.

Problem Statement and Background Summary- demonstrates good understanding of problem, looks objectively at problem, specifies problem limits and restricts scope appropriately, and cites relevant literature.

Research Plan- cites specific objectives clearly, technical approach responds to all written and implied requirements, difficult areas are identified and details to overcome are given, represents novel idea or technical approach, plan is feasible, and effort is consistent with scope of problem.

Products and Implementation- proposal clearly defines products to be delivered at completion, includes practical, realistic implementation plan.

MDOT Involvement- MDOT involvement is not excessive and is clearly defined and quantified.

2. QUALIFICATIONS OF TEAM: 30 POINTS –

Describe the structure of the project team including the roles of all key personnel and subcontractors. For each subcontractor describe role in service and include what percent of the task that the subcontractor is expected to provide. Provide résumés for each of the key staff of the prime and subcontractor.

Facilities- proposer has adequate access to equipment and/or laboratory required in study.

Staffing- personnel availability is clearly defined, shows a depth of qualified personnel, proposer has ability to manage a project of this size an sufficient resources to complete study, qualifications are directly related to the requirements of the project, plans for specific key personnel assignment included, and there is a reasonable balance between subcontractor and prime contractor.

Statistical Qualification- The required knowledge level for a research team in statistical analyses, if defined, will be in the RFP under the heading DESIRED QUALIFICATIONS IN AN INVESTIGATOR(S).

Proposals not documenting statistical training and experience levels required in the RFP may be classified as non-responsive.

3. RELEVANT PAST PERFORMANCE: 30 POINTS

The project manager will contact references and review relevant performance evaluations from the past 5 years.

Record of past accomplishment- proposer satisfactorily completed past projects, was cooperative and flexible, and ended past projects according to the original budget and time schedule.

4. QUALITY ASSURANCE/QUALITY CONTROL (QAQC) PLAN: 5 POINTS

The proposer provided an outline of a QA/QC process. The QA/QC Manager is experienced with MDOT standards and practices.

5. LOCATION: 5 POINTS

The percentage of work hours performed in Michigan will be used for all selections unless the project is for on-site inspection or survey activity. The combination of location and percentage of work performed in Michigan should not exceed 5 points.

Percentage of Work To Be Done in Michigan Score	
95% to 100%	5
80% to 94%	4
50% to 79%	3
25% to 49%	2
10% to 24%	1
Less than 10%	0

6. PRICE: 40 POINTS

Cost score is based on the lowest cost proposed divided by the current proposer cost multiplied by 40. Lowest bid shall receive 40 points.

TOTAL POINTS: 150

Research Proposal Budget Form Worksheet

Project Title _____
 Research Organization _____
 Date _____

									FY1	FY2	FY3	FY4	TOTAL	
SALARIES & WAGES -- MUST COMPLY WITH OMB CIRCULAR A-21														
Specify number of hours to be worked and hourly rate for each individual below: Examples of role of individual are Principal Investigator, Technician, Grad Student, etc. Annual wage increases must not exceed 2%														
(role of individual)														
Name of individual														
Enter FY	FY1 rate	FY1 hrs	FY2 rate	FY2 hrs	FY3 rate	FY3 hrs	FY4 rate	FY4 hrs						
rate & hrs									\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
(role of individual)														
Name of individual														
Enter FY	FY1 rate	FY1 hrs	FY2 rate	FY2 hrs	FY3 rate	FY3 hrs	FY4 rate	FY4 hrs						
rate & hrs									\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
(role of individual)														
Name of individual														
Enter FY	FY1 rate	FY1 hrs	FY2 rate	FY2 hrs	FY3 rate	FY3 hrs	FY4 rate	FY4 hrs						
rate & hrs									\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
(role of individual)														
Name of individual														
Enter FY	FY1 rate	FY1 hrs	FY2 rate	FY2 hrs	FY3 rate	FY3 hrs	FY4 rate	FY4 hrs						
rate & hrs									\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
(role of individual)														
Name of individual														
Enter FY	FY1 rate	FY1 hrs	FY2 rate	FY2 hrs	FY3 rate	FY3 hrs	FY4 rate	FY4 hrs						
rate & hrs									\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
(role of individual)														
Name of individual														
Enter FY	FY1 rate	FY1 hrs	FY2 rate	FY2 hrs	FY3 rate	FY3 hrs	FY4 rate	FY4 hrs						
rate & hrs									\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
(role of individual)														
Name of individual														
Enter FY	FY1 rate	FY1 hrs	FY2 rate	FY2 hrs	FY3 rate	FY3 hrs	FY4 rate	FY4 hrs						
rate & hrs									\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Sub-Total Salary & Wages									\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	

FRINGE BENEFITS -- MUST COMPLY WITH OMB CIRCULAR A-21

Indicate Employee, appropriate negotiated rate for each and description of who the rate applies to.
 (e.g. - Sam Smith, 25%, Summer Faculty. The rate is negotiated between the university and it's cognizant agency

Name									
(Rate Description)									
(% rate)	FY1	FY2	FY3	FY4	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Name									
(Rate Description)									
(% rate)	FY1	FY2	FY3	FY4	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Name									
(Rate Description)									
(% rate)	FY1	FY2	FY3	FY4	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Name									
(Rate Description)									
(% rate)	FY1	FY2	FY3	FY4	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Name									
(Rate Description)									
(% rate)	FY1	FY2	FY3	FY4	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Name									
(Rate Description)									
(% rate)	FY1	FY2	FY3	FY4	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Name									
(Rate Description)									
(% rate)	FY1	FY2	FY3	FY4	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Sub-Total Fringe Benefits					\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

SUBCONTRACTOR -- MUST COMPLY WITH OMB CIRCULAR A-21

A copy of the subcontractor's budget must be attached. An MDOT approved subcontract is required for subcontractor costs in excess of \$25,000 prior to payment of invoices that contain subcontractor work. List all subcontractors on a separate line.

Subcontractor Name & Amt.									\$0.00
Subcontractor Name & Amt.									\$0.00
Sub-Total Subcontractor					\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

TRAVEL -- MUST COMPLY WITH OMB CIRCULAR A-21

Must be in accordance with IDS contract requirements.

In-State Travel (Destinations within Michigan)

Provide a separate table itemizing costs.

									\$0.00
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Out-of-State Travel (Prior approval required)

Provide a separate table itemizing costs.

									\$0.00
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Sub-Total Travel					\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
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SUPPLIES -- MUST COMPLY WITH OMB CIRCULAR A-21 (Few items not allowed are: computers, printers, monitors, fax machines, printer paper, toner cartridges, pens, pencils, legal pads, clips, rubber bands, post-it notes, books, notebooks, binders, folders, diskettes, postage stamps, chairs, office furniture, calendars, paper punches, business cards, staplers, waste cans, etc.)

Provide details if cost exceeds \$2,000. Individual line items in excess of \$1,000 require a detailed explanation regardless of total cost

(Description)						\$0.00
(Description)						\$0.00
(Description)						\$0.00
(Description)						\$0.00
(Description)						\$0.00
(Description)						\$0.00
(Description)						\$0.00
Sub-Total Supplies		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

CAPITAL EQUIPMENT -- MUST COMPLY WITH OMB CIRCULAR A-21 - Purchased specifically for this project

List items with a value in excess of \$500. Equipment in excess of \$5,000 requires prior approval.

(Description)						\$0.00
(Description)						\$0.00
(Description)						\$0.00
(Description)						\$0.00
(Description)						\$0.00
(Description)						\$0.00
(Description)						\$0.00
Sub-Total Equipment		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

OTHER EXPENSES -- MUST COMPLY WITH OMB CIRCULAR A-21 (Few items not allowed are: memberships in professional & scientific organizations, local telephone lines, cell phones, etc.)

Any project expense which does not fall into another category. Provide detailed explanation of the expense and applicable breakdown of costs (e.g. graduate student tuition).

(Description)						\$0.00
(Description)						\$0.00
(Description)						\$0.00
(Description)						\$0.00
(Description)						\$0.00
Sub-Total Other Expenses		\$0.00	\$0.00	\$0.00	\$0.00	\$0.00

Total Sub-Totals \$0.00 \$0.00 \$0.00 \$0.00 \$0.00

INDIRECT COSTS -- MUST COMPLY WITH OMB CIRCULAR A-21

Indirect cost rates are negotiated between the university and it's cognizant agency. Indicate the type of negotiated indirect rate used and the percentage (e.g. On Campus Research, 52%)

(Type)		(%)								
			FY1	FY2	FY3	FY4				
Enter \$ Amt per FY							\$0.00	\$0.00	\$0.00	\$0.00
Total Indirect Costs							\$0.00	\$0.00	\$0.00	\$0.00

TOTAL PROJECT COSTS \$0.00 \$0.00 \$0.00 \$0.00 \$0.00

UNIVERSITY MATCHING FUNDS \$0.00

TOTAL MDOT PROJECT COSTS \$0.00 \$0.00 \$0.00 \$0.00 \$0.00