

INTRODUCED BY: COUNCIL MEMBER(s) Jerry

1 **AN ORDINANCE TO AUTHORIZE THE COUNTY EXECUTIVE TO**
2 **AWARD THE ENGINEERING SERVICES CONTRACT AND TO EXECUTE**
3 **THE AGREEMENT BETWEEN JEFFERSON COUNTY, MISSOURI AND**
4 **THOUVENOT, WADE & MOERCHEN, INC. (TWM)., FOR SECKMAN ROAD**
5 **@ MASTODON STATE PARK PROJECT DESIGNATED AS PROJECT STP-**
6 **7202 (604) IN COUNCIL DISTRICT 4.**

7 **WHEREAS**, Jefferson County, Missouri issued a Request for Qualifications for
8 design and construction engineering services for the Seckman Road @ Mastodon State
9 Park Project designated as Project STP-7202 (604); and

10 **WHEREAS**, Jefferson County, Missouri in response to a certain Request for
11 Qualifications issued by the County, received proposals for design and construction
12 engineering services for the Seckman Road @ Mastodon State Park Project designated as
13 Project STP-7202 (604); and

14 **WHEREAS**, after reviewing the proposals, the County selected three qualified
15 engineering firms to interview for the Seckman Road @ Mastodon State Park Project.
16 Those firms were Thouvenot, Wade & Moerchen, Inc. (TWM), HDR Engineering, Inc.,
17 and Horner & Shifron, Inc.; and

FILED

JAN 30 2020

1 **WHEREAS**, after interviewing the three qualified engineering firms, Jefferson
2 County has determined that a certain engineering firm, Thouvenot, Wade & Moerchen,
3 INC. (TWM), represents the best qualified proposal for the Seckman Road @ Mastodon
4 State Park Project and meets the Request for Qualifications by the County; and

5 **WHEREAS**, Jefferson County, Missouri finds it now necessary and in the best
6 interest of the County to award the Seckman Road @ Mastodon State Park Project to
7 Thouvenot, Wade & Moerchen, Inc. (TWM), as the best qualified firm and to execute an
8 agreement for the design and construction engineering services contract not to exceed one
9 hundred twenty-nine thousand, four hundred and forty five dollars (**\$129,445.00**), subject
10 to budgetary limitations and conditional on the concurrence of the Missouri Department
11 of Transportation and the Federal Highway Administration. A copy of said agreement is
12 attached hereto as Exhibit A.

13 **BE IT ENACTED BY THE JEFFERSON COUNTY, MISSOURI,**
14 **COUNCIL, AS FOLLOWS:**

15 Section 1. Jefferson County awards the design and construction engineering
16 services contract for the Seckman Road @ Mastodon State Park Project to the best
17 qualified firm for the project, being Thouvenot, Wade & Moerchen, Inc. (TWM), in an
18 amount not to exceed one hundred twenty-nine thousand, four hundred and forty five
19 dollars (**\$129,445.00**) subject to budgetary limitations and conditional on the concurrence
20 of the Missouri Department of Transportation and the Federal Highway Administration.

21 Section 2. The Jefferson County, Missouri, Council authorizes the County
22 Executive to execute any agreement or document necessary to effectuate the award of the

1 contract set forth in the Ordinance. A copy of said agreement is attached hereto as Exhibit
2 A and incorporated by reference.

3 Section 3. Copies of all Request for Qualifications, responses thereto, any contract
4 agreements and change orders shall be maintained by the Department of the County
5 Clerk consistent with the rules and procedures for the maintenance and retention of
6 records as promulgated by the Secretary of State.

7 Section 4. This Ordinance shall be in full force and effect from and after its date
8 of approval. If any part of this Ordinance is invalid for any reason, such invalidity shall
9 not affect the remainder of this Ordinance.

**THIS BILL BEING DULY INTRODUCED, THE MEMBERS OF THE
JEFFERSON COUNTY, MISSOURI, COUNCIL VOTED AS FOLLOWS:**

Council Member District 1, Brian Haskins _____

Council Member District 2, Renee Reuter _____

Council Member District 3, Phil Hendrickson _____

Council Member District 4, Charles Groeteke _____

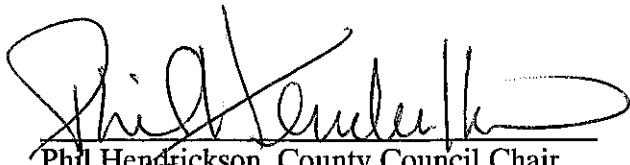
Council Member District 5, Tracey Perry _____

Council Member District 6, Daniel Stallman _____

Council Member District 7, James Terry _____

THE ABOVE BILL ON THIS 27 DAY OF January, 2020:

PASSED FAILED



Phil Hendrickson, County Council Chair



Pat Schlette
Pat Schlette, Council Executive Assistant

THIS BILL WAS APPROVED BY THE JEFFERSON COUNTY EXECUTIVE AND ENACTED AS AN ORDINANCE OF JEFFERSON COUNTY, MISSOURI, THIS 30th DAY OF January, 2020.

THIS BILL WAS VETOED AND RETURNED TO THE JEFFERSON COUNTY, MISSOURI, COUNCIL WITH WRITTEN OBJECTIONS BY THE JEFFERSON COUNTY EXECUTIVE, THIS DAY OF , 2020.



Dennis J. Gannon
Dennis J. Gannon, Jefferson County, Missouri, Executive

ATTEST:



Ken Waller
Ken Waller, County Clerk

BY: Katherine P. Missey

Reading Date: 01-27-2020

SPONSER: JEFFERSON COUNTY, MISSOURI

LCOATION: Seckman Road @ Mastodon State Park Entrance

PROJECT: STP-7202 (604)

THIS CONTRACT is between the Jefferson County, Missouri, hereinafter referred to as the "Local Agency", and TWM, Inc. with offices located at 720 Olive Street, Suite 200A, St. Louis, MO 63101 hereinafter referred to as the "Engineer".

INASMUCH as funds have been made available by the Federal Highway Administration through its Surface Transportation Program (STP), coordinated through the Missouri Department of Transportation, the Local Agency intends to add shoulders, left turn lane, realignment of the park entrance, and requires professional engineering services. The Engineer will provide the Local Agency with professional services hereinafter detailed for the design and construction engineering services of the desired improvements and the Local Agency will pay the Engineer as provided in this contract. It is mutually agreed as follows:

ARTICLE I – SCOPE OF SERVICES

Refer to Attachment A for the Scope of Services for the project.

ARTICLE II - DISADVANTAGED BUSINESS ENTERPRISE (DBE) REQUIREMENTS:

- A. DBE Goal: The following DBE goal has been established for this Agreement. The dollar value of services and related equipment, supplies, and materials used in furtherance thereof which is credited toward this goal will be based on the amount actually paid to DBE firms. The goal for the percentage of services to be awarded to DBE firms is 18% of the total Agreement dollar value.
- B. DBE Participation Obtained by Engineer: The Engineer has obtained DBE participation, and agrees to use DBE firms to complete, 19.9% of the total services to be performed under this Agreement, by dollar value. The DBE firms which the Engineer shall use, and the type and dollar value of the services each DBE will perform, is as follows:

DBE Firm Name, Street and complete mailing address	Type of DBE Service	Total \$ Value of the DBE Subcontract	Contract \$ Amount to Apply to Total DBE Goal	Percentage of Subcontract dollar value applicable to total goal
ABNA 4140 Lindell Blvd St. Louis, MO 63108	Drainage Design, Geotechnical Services, Drilling, Laboratory Testing	\$25,770.00	25,770.00	100%

ARTICLE III-ADDITIONAL SERVICES

The Local Agency reserves the right to request additional work, and changed or unforeseen conditions may require changes and work beyond the scope of this contract. In this event, a supplement to this agreement shall be executed and submitted for the approval of MoDOT prior to performing the additional or changed work or incurring any additional cost thereof. Any change in compensation will be covered in the supplement.

ARTICLE IV - RESPONSIBILITIES OF LOCAL AGENCY

The Local Agency will cooperate fully with the Engineer in the development of the project, including the following:

- A. make available all information pertaining to the project which may be in the possession of the Local Agency;
- B. provide the Engineer with the Local Agency's requirements for the project;
- C. make provisions for the Engineer to enter upon property at the project site for the performance of his duties;
- D. examine all studies and layouts developed by the Engineer, obtain reviews by MoDOT, and render decisions thereon in a prompt manner so as not to delay the Engineer;
- E. designate a Local Agency's employee to act as Local Agency's Person in Responsible Charge under this contract, such person shall have authority to transmit instructions, interpret the Local Agency's policies and render decisions with respect to matters covered by this agreement (see EPG 136.3);
- F. perform appraisals and appraisal review, negotiate with property owners and otherwise provide all services in connection with acquiring all right-of-way needed to construct this project.

ARTICLE V - PERIOD OF SERVICE

The Engineer will commence work within two weeks after receiving notice to proceed from the Local Agency. The general phases of work will be completed in accordance with the following schedule:

- A. Survey Acquisition – Within 30 calendar days after receiving notice to proceed (Estimated at 1/03/20 from County)
- B. Preliminary Design Phase – Within 180 calendar days after receipt of completed survey.
- C. Right of Way Phase – Within 120 calendar days after receipt of final approval of preliminary plans by MoDOT.
- D. Final Design Phase – Within 365 calendar days after completion of review of preliminary plans by Local Agency and MoDOT.

- E. PS&E Approval by MODOT shall be completed on or before 2/28/22 for 2022 Construction.
- F. Construction Engineering Phase – As required in Article I – Scope of Services, Attachment A.
- G. Construction Phase shall be completed 90 days after construction final completion schedule.

The Local Agency will grant time extensions for delays due to unforeseeable causes beyond the control of and without fault or negligence of the Engineer. Requests for extensions of time shall be made in writing by the Engineer, before that phase of work is scheduled to be completed, stating fully the events giving rise to the request and justification for the time extension requested.

ARTICLE VI – STANDARDS

The Engineer shall be responsible for working with the Local Agency in determining the appropriate design parameters and construction specifications for the project using good engineering judgment based on the specific site conditions, Local Agency needs, and guidance provided in the most current version of EPG 136 LPA Policy. If the project is on the state highway system or is a bridge project, then the latest version of MoDOT's Engineering Policy Guide (EPG) and Missouri Standard Specifications for Highway Construction shall be used (see EPG 136.7). The project plans must also be in compliance with the latest ADA (Americans with Disabilities Act) Regulations.

ARTICLE VII - COMPENSATION

For services provided under this contract, the Local Agency will compensate the Engineer as follows:

- A. For design services, including work through the construction contract award stage, the Local Agency will pay the Engineer the actual costs incurred plus a predetermined fixed fee of **\$11,038.34**, with a ceiling established for said design services in the amount of **\$122,580.00**, which amount shall not be exceeded.
- B. For construction engineering services, the Local Agency will pay the Engineer the actual costs incurred plus a predetermined fixed fee of **\$858.84**, with a ceiling established for said design services in the amount of **\$6,865**, which amount shall not be exceeded.
- C. The compensation outlined above has been derived from estimates of cost which are detailed in Attachment B. Any major changes in work, extra work, exceeding of the contract ceiling, or change in the predetermined fixed fee will require a supplement to this contract, as covered in Article III - ADDITIONAL SERVICES.
- D. Actual costs in Sections A and B above are defined as:
 - 1. Actual payroll salaries paid to employees for time that they are productively engaged in work covered by this contract, plus
 - 2. An amount estimated at **85.94%** of actual salaries in Item 1 above for payroll additives, including payroll taxes, holiday and vacation pay, sick leave pay, insurance benefits, retirement and incentive pay, plus

3. An amount estimated at 81.82% of actual salaries in Item 1 above for general administrative overhead, based on the Engineer's system for allocating indirect costs in accordance with sound accounting principles and business practice, plus
4. Other costs directly attributable to the project but not included in the above overhead, such as vehicle mileage, meals and lodging, printing, surveying expendables, and computer time, plus
5. Project costs incurred by others on a subcontract basis, said costs to be passed through the Engineer on the basis of reasonable and actual cost as invoiced by the subcontractors.

E. The rates shown for additives and overhead in Sections VII. D.2 and VII. D.3 above are the established Engineer's overhead rate accepted at the time of contract execution and shall be utilized throughout the life of this contract for billing purposes.

F. The payment of costs under this contract will be limited to costs which are allowable under 23 CFR 172 and 48 CFR 31.

G. **METHOD OF PAYMENT** - Partial payments for work satisfactorily completed will be made to the Engineer upon receipt of itemized invoices by the Local Agency. Invoices will be submitted no more frequently than once every two weeks and must be submitted monthly for invoices greater than \$10,000. A pro-rated portion of the fixed fee will be paid with each invoice. Upon receipt of the invoice and progress report, the Local Agency will, as soon as practical, but not later than 45 days from receipt, pay the Engineer for the services rendered, including the proportion of the fixed fee earned as reflected by the estimate of the portion of the services completed as shown by the progress report, less partial payments previously made. A late payment charge of one and one half percent (1.5%) per month shall be assessed for those invoiced amount not paid, through no fault of the Engineer, within 45 days after the Local Agency's receipt of the Engineer's invoice. The Local Agency will not be liable for the late payment charge on any invoice which requests payment for costs which exceed the proportion of the maximum amount payable earned as reflected by the estimate of the portion of the services completed, as shown by the progress report. The payment, other than the fixed fee, will be subject to final audit of actual expenses during the period of the Agreement.

H. **PAYMENT MILESTONES** - The following are the maximum percentage limits (as a % of the Design Services Fee, unless noted otherwise**) for the engineering service contract compensation that will be paid for the stated phase of work performed:

1. Survey Completed	= maximum of 25%
2. Preliminary Plans Submitted to MoDOT	= maximum of 50%
3. Preliminary Plans Approved by MoDOT	= maximum of 55%
4. Right of Way Plans Submitted to MoDOT	= maximum of 60%
5. Right of Way Plans Approved by MoDOT	= maximum of 65%
6. PS&E Submitted to MoDOT	= maximum of 95%
7. PS&E Approved by MoDOT	= maximum of 100%
8. Completion of Construction Engineering	= 100% (** of the TOTAL contract fee)

H. **PROPERTY ACCOUNTABILITY** - If it becomes necessary to acquire any specialized equipment for the performance of this contract, appropriate credit will be given for any residual value of said equipment after completion of usage of the equipment.

ARTICLE VIII - COVENANT AGAINST CONTINGENT FEES

The Engineer warrants that he has not employed or retained any company or person, other than a bona fide employee working for the Engineer, to solicit or secure this agreement, and that he has not paid or agreed to pay any company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gifts, or any other consideration, contingent upon or resulting from the award or making of this contract. For breach or violation of this warranty, the Local Agency shall have the right to annul this agreement without liability, or in its discretion to deduct from the contract price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift, or contingent fee, plus reasonable attorney's fees.

ARTICLE IX - SUBLETTING, ASSIGNMENT OR TRANSFER

No portion of the work covered by this contract, except as provided herein, shall be sublet or transferred without the written consent of the Local Agency. The subletting of the work shall in no way relieve the Engineer of his primary responsibility for the quality and performance of the work. It is the intention of the Engineer to engage subcontractors for the purposes of:

Sub-Consultant Name	Address	Services
ABNA	4140 Lindell Blvd St. Louis, MO 63108	Drainage Design Geotech. Investigation
Wood	15933 Clayton Road Suite 215 (Ballwin) St. Louis, MO 63011	Archaeological Surveying

ARTICLE X - PROFESSIONAL ENDORSEMENT

All plans, specifications and other documents shall be endorsed by the Engineer and shall reflect the name and seal of the Professional Engineer endorsing the work. By signing and sealing the PS&E submittals the Engineer of Record will be representing to MoDOT that the design is meeting the intent of the federal aid programs.

ARTICLE XI - RETENTION OF RECORDS

The Engineer shall maintain all records, survey notes, design documents, cost and accounting records, construction records and other records pertaining to this contract and to the project covered by this contract, for a period of not less than three years following final payment by FHWA. Said records shall be made available for inspection by authorized representatives of the Local Agency, MoDOT or the federal government during regular working hours at the Engineer's place of business.

ARTICLE XII - OWNERSHIP OF DOCUMENTS

Plans, tracings, maps and specifications prepared under this contract shall be delivered to and become the property of the Local Agency upon termination or completion of work. Basic survey notes, design computations and other data prepared under this contract shall be made available to the Local Agency upon request. All such information produced under this contract shall be available for use by the Local Agency without restriction or limitation on its use. If the Local Agency incorporates any portion of the work into a project other than that for which it was performed, the Local Agency shall save the Engineer harmless from any claims and liabilities resulting from such use.

ARTICLE XIII – SUSPENSION OR TERMINATION OF AGREEMENT

- A. The Local Agency may, without being in breach hereof, suspend or terminate the Engineer's services under this Agreement, or any part of them, for cause or for the convenience of the Local Agency, upon giving to the Engineer at least fifteen (15) days' prior written notice of the effective date thereof. The Engineer shall not accelerate performance of services during the fifteen (15) day period without the express written request of the Local Agency.
- B. Should the Agreement be suspended or terminated for the convenience of the Local Agency, the Local Agency will pay to the Engineer its costs as set forth in Attachment B including actual hours expended prior to such suspension or termination and direct costs as defined in this Agreement for services performed by the Engineer, a proportional amount of the fixed fee based upon an estimated percentage of Agreement completion, plus reasonable costs incurred by the Engineer in suspending or terminating the services. The payment will make no other allowances for damages or anticipated fees or profits. In the event of a suspension of the services, the Engineer's compensation and schedule for performance of services hereunder shall be equitably adjusted upon resumption of performance of the services.
- C. The Engineer shall remain liable to the Local Agency for any claims or damages occasioned by any failure, default, or negligent errors and/or omission in carrying out the provisions of this Agreement during its life, including those giving rise to a termination for non-performance or breach by Engineer. This liability shall survive and shall not be waived, or estopped by final payment under this Agreement.

- D. The Engineer shall not be liable for any errors or omissions contained in deliverables which are incomplete as a result of a suspension or termination where the Engineer is deprived of the opportunity to complete the Engineer's services.
- E. Upon the occurrence of any of the following events, the Engineer may suspend performance hereunder by giving the Local Agency 30 days advance written notice and may continue such suspension until the condition is satisfactorily remedied by the Local Agency. In the event the condition is not remedied within 120 days of the Engineer's original notice, the Engineer may terminate this agreement.
 - 1. Receipt of written notice from the Local Agency that funds are no longer available to continue performance.
 - 2. The Local Agency's persistent failure to make payment to the Engineer in a timely manner.
 - 3. Any material contract breach by the Local Agency.

ARTICLE XIV - DECISIONS UNDER THIS CONTRACT

The Local Agency will determine the acceptability of work performed under this contract, and will decide all questions which may arise concerning the project. The Local Agency's decision shall be final and conclusive.

ARTICLE XV - SUCCESSORS AND ASSIGNS

The Local Agency and the Engineer agree that this contract and all contracts entered into under the provisions of this contract shall be binding upon the parties hereto and their successors and assigns.

ARTICLE XVI - COMPLIANCE WITH LAWS

The Engineer shall comply with all federal, state, and local laws, ordinances, and regulations applicable to the work, including Title VII of the Civil Rights Act of 1964, as amended (42 U.S.C. 200d, 200e) as well as with any applicable titles of the Americans with Disabilities Act (42 U.S.C. 12101, et seq.) and non-discrimination clauses incorporated herein, and shall procure all licenses and permits necessary for the fulfillment of obligations under this contract.

ARTICLE XVII - RESPONSIBILITY FOR CLAIMS AND LIABILITY

The Engineer agrees to save harmless the Local Agency, MoDOT and FHWA from all claims and liability due to his negligent acts or the negligent acts of his employees, agents or subcontractors.

ARTICLE XVIII - NONDISCRIMINATION

The Engineer, with regard to the work performed by it after award and prior to completion of the contract work, will not discriminate on the ground of race, color or national origin in the selection and retention of subcontractors. The Engineer will comply with Title VII of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d, 2000e), as well as with any applicable titles of the Americans with

Disabilities Act (42 U.S.C. 12101, et seq.). More specifically, the Engineer will comply with the regulations of the Department of Transportation relative to nondiscrimination in federally assisted programs of the Department of Transportation, as contained in 49 CFR 21 through Appendix H and 23 CFR 710.405 which are herein incorporated by reference and made a part of this contract. In all solicitations either by competitive bidding or negotiation made by the Engineer for work to be performed under a subcontract, including procurements of materials or equipment, each potential subcontractor or supplier shall be notified by the Engineer's obligations under this contract and the regulations relative to non-discrimination on the ground of color, race or national origin.

ARTICLE XIX – LOBBY CERTIFICATION

CERTIFICATION ON LOBBYING: Since federal funds are being used for this agreement, the Engineer's signature on this agreement constitutes the execution of all certifications on lobbying which are required by 49 C.F.R. Part 20 including Appendix A and B to Part 20. Engineer agrees to abide by all certification or disclosure requirements in 49 C.F.R. Part 20 which are incorporated herein by reference.

ARTICLE XX – INSURANCE

- A. The Engineer shall maintain commercial general liability, automobile liability, and worker's compensation and employer's liability insurance in full force and effect to protect the Engineer from claims under Worker's Compensation Acts, claims for damages for personal injury or death, and for damages to property arising from the negligent acts, errors, or omissions of the Engineer and its employees, agents, and Subconsultants in the performance of the services covered by this Agreement, including, without limitation, risks insured against in commercial general liability policies.
- B. The Engineer shall also maintain professional liability insurance to protect the Engineer against the negligent acts, errors, or omissions of the Engineer and those for whom it is legally responsible, arising out of the performance of professional services under this Agreement.
- C. The Engineer's insurance coverage shall be for not less than the following limits of liability:
 1. Commercial General Liability: \$500,000 per person up to \$3,000,000 per occurrence;
 2. Automobile Liability: \$500,000 per person up to \$3,000,000 per occurrence;
 3. Worker's Compensation in accordance with the statutory limits; and Employer's Liability: \$1,000,000; and

4. Professional ("Errors and Omissions") Liability: \$1,000,000, each claim and in the annual aggregate.

D. The Engineer shall, upon request at any time, provide the Local Agency with certificates of insurance evidencing the Engineer's commercial general or professional liability ("Errors and Omissions") policies and evidencing that they and all other required insurance are in effect as to the services under this Agreement.

E. Any insurance policy required as specified in (ARTICLE XX) shall be written by a company which is incorporated in the United States of America or is based in the United States of America. Each insurance policy must be issued by a company authorized to issue such insurance in the State of Missouri.

ARTICLE XXI - ATTACHMENTS

The following exhibits are attached hereto and are hereby made part of this contract:

Attachment A – Scope of Service

Attachment B - Estimate of Cost

TWM (3 pages)
ABNA (6 pages)

Attachment C - Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions.

Attachment D - Certification Regarding Debarment, Suspension, and Other Responsibility Matters- Lower Tier Covered Transactions.

Attachment E - DBE Contract Provisions

Attachment F- Fig. 136.4.15 Conflict of Interest Disclosure Form

Attachment G - Subs (under \$25,000 feem Backup)
Wood (5 pages)

Executed by the Engineer this 9th day of OCTOBER, 2019

Executed by the County this 30th day of January, 2020

FOR: JEFFERSON COUNTY, MISSOURI

BY: Dennis J. Gannon
COUNTY EXECUTIVE

ATTEST: Ken Wallace Katherine E. Missey
County Clerk Deputy Clerk

FOR: TWM, Inc.

BY: Robert S. DeConcini
Robert S. DeConcini, President

ATTEST: Paul K. Homahn
Paul K. Homahn, Senior Vice President

I hereby certify under Section 50.660 RSMo there is either: (1) a balance of funds, otherwise unencumbered, to the credit of the appropriation to which the obligation contained herein is chargeable, and a cash balance otherwise unencumbered, in the Treasury, to the credit of the fund from which payment is to be made, each sufficient to meet the obligation contained herein; or (2) bonds or taxes have been authorized by vote of the people and there is a sufficient unencumbered amount of the bonds yet to be sold or of the taxes levied and yet to be collected to meet the obligation in case there is not a sufficient unencumbered cash balance in the treasury.

APPROVED AS TO FORM

Kristy L. Darnell
COUNTY AUDITOR

GHD
COUNTY COUNSELOR

ATTACHMENT A

Seckman Road at Mastodon State Park
Project No. STP-7202 (604)
TIP #6913E-20

Seckman Road at Mastodon State Park
Realign Intersection – Left Turn Lane,
Shoulders (8')

Scope of Services

I. Programming Phase

- a. Provide information and complete Programming Data FIG III-1 LPA along with a county location map for each phase. The submittal letters should include a statement requesting that the project be classified as a categorical exclusion under the criteria in 23 CFR771.
- b. Additional Forms and information that will be required to be submitted include the following:
 - i. "Cultural Resources Assessment Questionnaire Form" to be submitted to the Missouri Department of Natural Resources. It is anticipated that an archaeological survey will be required by the Department of Natural Resources and a Phase I survey of the area shall be included.
 - ii. Complete the required information for the State Historic Preservation Officer assuming a new alignment and a construction cost over \$150,000.00.
 - iii. Complete "Form AD-1006" to be submitted to the Soil Conservation Services. A sketch showing the location of the project on a USGS map shall be included. A letter shall be completed with the form to address the requirements of the Farmland Protection Policy Act.
 - iv. Submit and complete MoDOT Request for Environmental Review within its entirety.
 - v. It is anticipated that FHWA will require a Section 4(f) or (6f) Evaluation Process for the project.
 - vi. Submit, Enter, and complete all required information on MoDOT's Request for Environmental Review (RER) web portal.

ORDINANCE

No. 20-011 (p)

vii. Obtain Environmental clearance for the project prior to submittal of preliminary plans, or receive MoDOT clearance to proceed to preliminary plan development phase. Environmental clearance or temporary waiver shall be obtained within the required length of time necessary as to not delay submittal and approval of preliminary plans as specified in attachment "C".

II. Field Surveys and Data Collection Phase

- a. The consultant shall complete a general field check of the project to evaluate existing topographic conditions.
- b. Existing right-of-way and property lines shall be located.
- c. A survey baseline (and/or construction centerline) shall be established and be tied to the nearest section corner. The land surveyor shall provide a centerline description for the proposed alignment.
- d. Topography survey covering area sufficient for this roadway realignment and reconstruction project.
- e. Roadway cross-section shall be obtained at 50 foot intervals, a sufficient distance beyond the construction limits shall be used to determine drainage patterns and any other necessary cross-section.
- f. Existing utility services shall be located.
- g. Vertical Control: a project bench mark shall be established and tied to nearest USGS bench mark. Project elevations shall be issued on this newly established bench mark.
- h. Horizontal Control: at least three horizontal control points shall be established.
- i. Discuss geometric alignment and other project element options with the County before proceeding with Preliminary Design Phase. The Consultant shall limit the number of options to two or three.

III. Preliminary Design Phase

- a. After all field survey data has been obtained and platted, the Engineer shall provide PDF drawings to the County as 22" x 34" plan sheets. Delivery method shall be at the discretion of the County.
- b. Preliminary plan and profile at a scale that shows the plan clearly and that are approximately 30% complete. Said plan to include the following:
 - i. Cover sheet with legend, sheet index, location map and abbreviations.
 - ii. Proposed typical sections.

- iii. Reference tie sheet depicting adopted and set control for the project. Each reference point shall be three-point tied to existing features located outside proposed construction limits.
- iv. Split plan and profile sheets drawn to a scale of 1" equals 20' horizontally and 1" equals 5' vertically. Design of horizontal and vertical alignment shall be sufficient to provide construction limits and cross sections.
- v. Topographic information of the existing roadway and the creeks.
- vi. Existing property lines and easements (based on existing documents and field surveys).
- vii. Approximate construction limits, easements and new right of way lines will be shown on the plan/profile sheets and will be based on the approximate construction limits.
- viii. The location of all utilities, and book and page if the easement is on private property, based on available information, including any known wells and individual waste systems.
- ix. Side road profiles for each of the abutting roadways, drawn to a scale of 1" equals to 20' horizontally and 1" equals 5' vertically will be shown on separate profile sheets.
- x. A preliminary analysis of stormwater drainage impacts will be completed. A preliminary stormwater drainage layout will be designed and shown on plan sheets. A technical memorandum will be completed summarizing this task. Cross sections for mainline and *side* roads will be shown at fifty-foot intervals along the proposed centerlines of the alignment, drawn at a scale of 1" equals 5' both horizontally and vertically. For the preliminary cross sections, only proposed pavement will be shown to generate construction limits. Driveway sections will also be shown at the preliminary plan stage.
- xi. Prepare Engineer's Estimate of Probable Cost (EEOPC) – The Consultant will, based on the preliminary plans, complete a preliminary engineer's estimate of probable cost utilizing MoDOT's unit bid price history, as well as other sources of published unit bid prices for construction.
- xii. Proposed improvements including; all roadway elements, drainage, retaining walls, landscaping, etc.

c. In addition to the above tasks, included *in* the preliminary plan preparations is:

- i. Utility Coordination - The Consultant will provide a preliminary

phase plan submittal to utility providers. This will include a full set of D size plans (which will include title sheet, typical section sheets, plan sheets, and cross section sheets). A PDF copy of this plan set will be made as well for forwarding to the utility companies. Upon request, electronic cad files of the plan sheets shall be made available to the utilities for their use. The county shall coordinate all utility relocation efforts.

- ii. Organize, provide presentation material, and attend One (1) Open House Public Meeting to present the preliminary plans to the affected stakeholders, elected County officials, and other interested parties; up to three (3) Consultant employees shall be on hand at the public meeting to assist with presentations and answer stakeholder questions. The open house public meeting shall be located at a facility within the neighborhood of the proposed project.
- iii. One (1) Copy of 11x17 preliminary plans for each stakeholder to take home, as well as a quick fact sheet for the project, limited to fifty (50) copies of each.
- iv. For the public meetings, the Consultant will provide two (2) copies of the strip map of the proposed design, showing the existing topography, proposed infrastructure limited to pavement limits, curb and gutter locations, sidewalks, property information, construction limits, proposed right of way takings, and hatching. The strip maps will be mounted on display boards and will be on a high gloss paper. One (1) sample copy of the strip map will be provided one week prior to the meeting for County comments and questions. Consultant will work with the County to provide the quick fact sheet and a questionnaire/comment form for those in attendance at the public meeting.
- v. Organize, provide presentation material, and attend a maximum of three (3) design progress review meetings at the public works office in Hillsboro, MO.
- vi. Drainage Design - In order for an accurate and complete picture of the right of way needs for the project, the drainage design will be expedited. The drainage design will include:
 1. Assessment of the existing and proposed watershed and drainage areas.
 2. Assessment of the existing storm sewer drainage network (condition, location, capacity, etc.) to determine the extent it can be reused.

3. Type, size, and location of the necessary drainage features for the project, including enclosed drainage features (inlets and pipes).
4. Culvert (pipe) profile sheets drawn at a scale of 1" equals to 20' horizontally and 1" equals 5' vertically.

- d. Apply to MoDOT for any required design variances.
- e. Submit preliminary drawings to Jefferson County for review and comment. Jefferson County will submit the plans to MoDOT for review and approval.
- f. Geotechnical investigation(s), as required, to determine rock cut and pavement requirements.
- g. Provide the county with a preliminary estimate of construction cost.
- h. Discuss the right of way needs and requirements of the County before proceeding with the Right of Way plan development phase.
- i. Receive approval of preliminary plans from MoDOT within the time-frame specified in attachment "C"

IV. Right-of-way and TCE Acquisition

- a. Right-of-way plans shall be completed and submitted to the county after approval of preliminary plans. They shall include all items required per the "Local Public Agency Right-of-Way Manual". This shall include obtaining approval from MoDOT to proceed with right-of-way activities. Right-of-way acquisition may involve Federal Funds.
- b. Prepare all permanent and temporary easements and new right-of-way plats, as required, for each parcel, complete with legal descriptions for each and a legal description for the centerline of the road. Acquisition documents shall be prepared in accordance with Jefferson County ordinances, policies, and standards, and shall be suitable for recording with the Jefferson County Recorder of Deeds. Right of Way plats shall be handled as Warranty Deeds.
- c. Metes and bounds descriptions meeting Missouri Minimum Standards for all new right of way, permanent easements, and temporary easements will be provided for each parcel. One (1) Microsoft Word document containing all the required easements or takings will be provided for each parcel.
- d. Obtain ROW negotiation clearance ("A" Date) from MoDOT within the time specified in attachment "C"
- e. In addition to the aforementioned requirements, the following items and

assumptions are also included in this phase of work:

- i. It is assumed that revisions to the submitted legal descriptions will be required based on the results of negotiations and design changes. The number of revised legal descriptions shall be limited to five (5) legal descriptions. Any legal descriptions requiring revision over this limit will require a contract amendment. The revisions resulting from negotiations will also be incorporated into the Construction Plans and Documents at this time.
- ii. It is understood that the County will provide all right of way and easement negotiation services for this project, including the preparation of individual property drawings or sketches to aid in negotiations. Individual exhibits by parcel is not required.
- iii. Any work required for condemnation, should it be required for any parcels, is specifically excluded from this scope.
- iv. All work under this phase will be completed under the direction and control of a Missouri Licensed Professional Land Surveyor.
 1. A maximum of two (2) design progress meetings will be included for this phase of the project. These meetings will include time required to coordinate design and legal descriptions to the specific needs of the right of way appraiser/negotiator, as well as site visits to investigate additional design scenarios to aid in right of way negotiations.
 2. Right of Way Plans shall be separate drawings from those used for design and construction details. The Right of Way (ROW) Plans will show alignment, geometric design, removal of improvements, drainage facilities, property lines and ownership, other land survey information, street lines and existing right of way and existing easements. The ROW Plans will also include any plan details, which will require additional right of way or easements during the construction phase of the project such as temporary pavement, temporary erosion control, etc. Right of Way Plans include title sheet, typical sections, split plan and profile sheets, and cross sections of the roadway, entrances, and side roads. Areas of new right of way, permanent easements and/or temporary easements required from each individual property owner may be shown in tabular form on the respective sheets. Property lines, ownership, street lines existing right of way and existing easements and other land survey information will be shown.
 3. Right of Way Plans shall conform to the Missouri Department

of Transportation's Right of Way Checklist found in the Engineering Policy Guide, Section 236.13.

4. Organize, produce presentation material, and attend One (1) Open House Public Hearing to present the right of way plans to the affected stakeholders, elected County officials, and other interested parties; up to three (3) Consultant employees shall be on hand at the public meeting to assist with presentations and answer stakeholder questions.
5. Prepare all permanent and temporary easements and new right-of-way plats, as required, for each parcel, complete with legal descriptions for each and a legal description for the centerline of the road. Acquisitions documents shall be prepared in accordance with Jefferson County ordinances, policies, and standards, and shall be suitable for recording with the Jefferson County Recorder of Deeds. Right of way plats shall be handled as Warranty Deeds.

V. Final Design Phase

- a. After receipt of approval of the preliminary plans from Jefferson County and MoDOT, the Engineer shall begin preparing the final design in accordance with the expectations of the County Project Manager or County Engineer in terms of constructability and material preference.
- b. The Final Design Phase shall include the following tasks:
 - i. A maximum of four (4) design progress review meetings -one of which will be a plan-in-hand type of site visit that will field verify the final design plan set against existing conditions.
 - ii. Prepare final Design Plans
 - iii. Prepare final technical specifications (Job Special Provisions)
 - iv. Prepare final Engineer's Estimate of Probable Cost
 - v. Final Field Check - Consultant will complete a final field check of the project to review the proposed design against the existing conditions.
 - vi. Incorporate any negotiated items from the ROW acquisition phase into the final design.
 - vii. Submit Plans, Specifications (JSP only), and Estimate (PS&E) to Jefferson County for comment within the timeframe specified in attachment "C"

- viii. Revise Project Plans, Specifications, and Estimate based upon comments from Jefferson County.
- ix. Resubmit Plans, Specifications (JSP's Only) and estimate to Jefferson County for final review. Jefferson County will Submit the PS&E to MoDOT for comment.
- x. Incorporate final comments from MoDOT into the plans and technical specifications. Make all necessary plan, specification, and estimate revisions in order to receive PS&E approval and Authority to advertise from MoDOT.
- xi. Utilities: If requested, the consultant shall contact all utilities that may be affected by this project and shall make arrangements as necessary (temporary or permanent), that said utilities will not impede the contractor when he begins the project. This item shall be completed prior to advertising for construction bids.
- xii. Discuss with adjoining property owners the locations of any wells or individual waste systems that might affect this project. This also includes MODNR with historic and preservation features located within the property that will affect the project. Show on plans.
- xiii. Provide Jefferson County with a PDF files of the project plans, estimate of cost, and job special provisions, a spreadsheet file (.csv, .xls...) of the estimate of cost, and a .dwg cad file of the project plan and right of way sheets. The consultant understands these files may be shared with other parties for the purposes of project development. Jefferson County understands that cad files are not to be considered accurate enough to be used by a surveyor for project layout.
- xiv. The consultant shall provide the county with copies of all correspondence with other parties where the consultant has provided representation or acted as a representative on behalf of the county. This includes but is not limited to regulatory and permitting agencies and property owners.

c. The final design shall include the following information:

- i. Cover Sheet with location map, sheet index, and legend of symbols.
- ii. Summary of Quantities Sheet ("2A" Sheet), and a Summary of quantities

sheet ("2B" Sheet) showing the breakdown of quantity locations. These sheets may be combined on one sheet if space allows.

- iii. Proposed typical sections
- iv. Reference tie sheet depicting adopted and set control for the project. Each reference point shall be three-point tied to existing features located outside proposed construction limits. Reference points should be located approximately five hundred feet (500') apart.
- v. Plan and profile sheet at a scale of 1" = 20' horizontally and 1" = 5' vertically, showing existing topography, the proposed improvements including roadway reconnection, all existing and proposed easements, existing utilities and relocations, if required, creek channel modifications, construction limits, profile grade and creek flow line, and incorporate all review comments from Jefferson County, Army Corps of Engineers, Missouri Department of Natural Resources, and Missouri Department of Transportation.
- vi. Side road profiles, drawn to a scale of 1" equal to 20' horizontally and 1" equals 5' vertically will be shown on separate profile sheets.
- vii. Intersection geometries at both Mastodon State Park Entrances and warping details will be provided for each intersection.
- viii. Typical waterway channel sections (if modifications are required).
- ix. All permanent and temporary easements and new right-of-way are to be shown on the plans or included within the plan sheets.
- x. Cross sections for the mainline and side roads shall be provided at fifty-foot intervals along the proposed centerline of the alignment. Cross sections will be drawn at a scale of 1" equals 5' both horizontally and vertically. For each cross section, right of way, easement, and utility information will be graphically shown.
- xi. General construction detail sheet(s)
- xii. Proposed storm sewer design, calculations, and storm sewer profiles. Profiles for storm sewer pipe to be drawn at a scale of 1" equals to 20' horizontally and 1" equals 5' vertically.
- xiii. Pavement Marking and Signage plans will be shown on a split plan/plan sheet drawn at a scale of 1" equal to 50' horizontally.

- xiv. Erosion control plans will be provided on a split plan/plan sheet drawn at a scale of 1" equal to 20' horizontally.
- xv. Traffic staging plans. It shall be assumed that at least one lane shall remain open to public travel at all times unless the consultant can reasonably justify a lack of feasibility for keeping the project limits open to public travel.
- xvi. Construction Phasing and Staging shown on split plan sheets drawn to a scale of 1" equals 50'. Construction Phasing and Staging Plans will show required road closures, detours, and required signage
- xvii. Create technical specification (Job Special Provisions) for all required items, activities, and requirements of the contractor.
- xviii. A signed and sealed estimate of construction cost in PDF and spreadsheet format

VI. Construction Engineering Phase

- a. Review shop drawings when submitted for compliance with the drawings and specifications. Review material certifications submitted by the contractor.
- b. Make revisions (if any) to the drawings shown on markups provided by the Contractor. Submit reproducible and a copy of the record drawings to Jefferson County.
- c. Set permanent right of way property pins upon completion of the project.

ATTACHMENT B: ESTIMATE OF COST

Seckman Road at Mastodon State Park Project No. STP-7202(604) - Jefferson County, MO

1. PROGRAMMING PHASE			
Project Manager	\$42.50	20	\$850.00
Lead Project Engineer II	\$39.00	24	\$936.00
Staff Engineer	\$28.00	8	\$224.00
2. FIELD SURVEYS AND DATA COLLECTION PHASE			
QA/QC	\$57.00	2	\$114.00
Project Manager	\$42.50	10	\$425.00
Survey Project Manager	\$35.00	9	\$315.00
Registered Land Surveyor	\$38.50	16	\$616.00
Technician II	\$24.00	10	\$240.00
Survey Crew (1 man w/Robotics or GPS)	\$29.00	20	\$580.00
Survey Crew (2 man crew w/Robotics or GPS)	\$53.50	30	\$1,605.00
3. PRELIMINARY DESIGN PHASE			
QA/QC	\$57.00	2	\$114.00
Project Manager	\$42.50	47	\$1,997.50
Lead Project Engineer II	\$39.00	57	\$2,223.00
Staff Engineer	\$28.00	91	\$2,548.00
Registered Land Surveyor	\$38.50	2	\$77.00
4. RIGHT OF WAY AND TCE ACQUISITION PHASE			
QA/QC	\$57.00	4	\$228.00
Project Manager	\$42.50	33	\$1,402.50
Lead Project Engineer II	\$39.00	36	\$1,404.00
Staff Engineer	\$28.00	36	\$1,008.00
Survey Project Manager	\$35.00	10	\$350.00
Registered Land Surveyor	\$38.50	13	\$500.50
Technician II	\$24.00	12	\$288.00
5. FINAL DESIGN PHASE			
QA/QC	\$57.00	4	\$228.00
Project Manager	\$42.50	50	\$2,125.00
Lead Project Engineer II	\$39.00	90	\$3,510.00
Staff Engineer	\$28.00	134	\$3,752.00
6. CONSTRUCTION ENGINEERING PHASE			
Project Manager	\$42.50	16	\$680.00
Lead Project Engineer II	\$39.00	12	\$468.00
Staff Engineer	\$28.00	16	\$448.00
Survey Project Manager	\$35.00	1	\$35.00
Registered Land Surveyor	\$38.50	2	\$77.00
Survey Crew (2 man crew w/Robotics or GPS)	\$53.50	10	\$535.00
TWM Labor Sub-Total (PE)		864	hrs
			\$31,071.50
<i>TWM Payroll Overhead, Gen. & Admin Overhead</i>		<i>(Est. at 167.76% X Subtotal)</i>	
		\$52,125.55	
Total Labor and Overhead		\$83,197.05	
<i>TWM Fixed Fee</i>		<i>(14.3% X Total Labor and Overhead)</i>	
		\$11,897.18	
TWM Total Labor, Overhead & Fixed Fee (PE)		\$95,094.23	
<i>Other Direct Costs</i>	Mileage: 725 miles	Rate = \$ 0.580	\$420.50
	Subconsultant: <i>ABNA Engineering (Drainage Design/Geotech)**DBE**</i>		\$25,770.00
	Subconsultant: <i>Wood. (Phase 1 Archeological Survey)</i>		\$4,980.00
	Title Commitments: <i>5 @ \$450/each</i>		\$2,250.00
	Printing, Postage, and Copies <i>(Display Boards - 4 @ \$170/each; Copies)</i>		\$930.27
	Direct Cost and Subconsultant Subtotal	DBE % = 19.91%	\$34,350.77
TOTAL FOR THOUVENOT, WADE & MOERCHEN, INC. (PRELIMINARY ENGINEERING)		\$129,445.00	

ATTACHMENT B: ESTIMATE OF COST

Local Agency:
Project:

Jefferson County, Missouri
STP-7202(604) - Seckman Road Improvements at Mastodon State Park

TWM Project No. :
Project Length:
Anticipated Construction Cost of Project:

T44190141

0.22 miles =
\$850,000

TWM Staff Time Estimate

Basic Scope of Engineering Services	Estimated Sheet Count	QA/QC	Project Manager	Lead Project Engineer II	Staff Engineer	Hours by Classification			Survey Personnel	Survey Crew (1 man w/Robotics or GPS)	Survey Crew (2 man crew w/Robotics or GPS)	Total Cost Per Task	Total Hours with Total Cost Per Task
						Survey Project Manager	Registered Land Surveyor	Technician II					
1. PROGRAMMING PHASE													
A. LPA Programming Letter	0	1	20	24	8	0	0	0	0	0	0	0	\$81.50
B. Environmental Studies			2	2									\$0.00
i. Cultural Resources / Phase I Survey (Performed by Wood; TWM Time is for Coord.)			1	2									\$163.00
ii. SHPO Information			12	16	8								\$163.00
iii. Form AD-1006													\$120.50
iv. FIMWA Section 4(f) and 6(f) Evaluation													\$135.00
v. MoDOT RER Submittal - Location/Conceptual Phase													\$124.00
Phase Sub-Total =	0	2	10	12	25	9	16	10	20	30	0	0	\$2,010.00
2. FIELD SURVEYS AND DATA COLLECTION PHASE													
A. General Project Field Check & Utility locate request						4	2		2		2		\$275.00
B. Establish Project Vertical and Horizontal Control						0.5	1		2		2		\$162.00
C. Locate Existing ROW/Boundary Lines						1	10	2	16				\$932.00
D. Topographic Survey (cross sections every 50')						0.5	1	6		30			\$1,803.00
E. Create Project Conteline Description tied to Section Corner						1	2						\$112.00
F. TWM Quality Control Plan (Qa/QC) - Field Survey Phase			2	2		1	2						\$297.00
G. Generate and Coordinate Conceptual Geometric Layout (2-3 Options)			8	12	24								\$1,481.00
Phase Sub-Total =	\$114.00	\$425.00	\$469.00	\$700.00	\$315.00	\$616.00	\$240.00	\$560.00	\$1,665.00	\$1,665.00	\$5,063.00	\$5,063.00	\$5,063.00
3. PRELIMINARY DESIGN PHASE													
A. Prepare Survey Field Data Plot (22" x 34" Plan Sheets)			21	2	47	57	91	0	2	0	0	0	\$231.50
B. Geotechnical Investigations - Rock & Pavement Cores (Performed by ABNA; TWM Time is for Coord.)						4	4		2				\$85.00
C. Preliminary Plans			1	1		2	4						\$0.00
i. Cover Sheet			3	1		4	8						\$232.50
ii. Proposed Typical Sections			1	1		1	4						\$422.50
iii. Reference File Sheet			5	2		8	16						\$193.50
iv. Plan-Profile Sheets			1	1		2	4						\$845.00
v. Side Road Sheets			1	4		1	1						\$232.50
D. Preliminary Stormwater Analysis and Technical Memo (Performed by ABNA; TWM Time is for Coord.)			2	2		1	1						\$209.00
E. Preliminary Drainage Layout and Design (Performed by ABNA; TWM Time is for Coord.)			10	2		4	16						\$152.00
F. Preliminary Cross Section Sheets						1	2						\$689.00
G. Coordination of Preliminary Design Plans and Electronic Files for Utility Providers						1	2	4					\$232.50
H. Open-House Public Meeting - Preliminary Design						4	4						\$0.00
i. Prepare Material Hand-out for Open-House Public Meeting						2	4	12					\$488.00
ii. Prepare Strip Map Displays for Open-House Public Meeting (3 Consultant Staff)						4	4	4					\$577.00
iii. Attend Open-House Public Meeting (3 Consultant Staff)						1	2	6					\$438.00
I. Draft Preliminary Design Plans Submittal						1	2						\$120.50
J. Draft Preliminary Design Plans and Resubmit						2	2						\$238.50
K. Design Exception Form and Submittal						1	2	4					\$163.00
L. Preliminary Estimate of Construction Cost (EECOPC)													\$232.50
M. Utility Coordination													\$241.00
N. Design Progress Meetings at County Offices (Assume 3 Meetings)						2	4						\$632.00
O. TWM Quality Control Plan (Qa/QC) - Preliminary Design Phase						8	8						\$199.00
P. MoDOT RER Submittal - Preliminary Design Phase			2	2									\$95.00
Phase Sub-Total =	\$114.00	4	33	36	10	13	12	0	0	0	0	0	\$6,153.50
4. RIGHT OF WAY AND TCE ACQUISITION PHASE													
A. Preliminary Design Phase street modifications/updates for the ROW Design Phase (Title, Typical Section, and Plan/Profile Sheets)		21		1		2	4						\$232.50
B. ROW Plan Sheets		5		2		8	12						\$733.00
i. Prepare Material Hand-out for Open-House Public Meeting													\$353.00
ii. Prepare Strip Map Displays for Open-House Public Meeting													\$465.00
iii. Attend Open-House Public Meeting (3 Consultant Staff)													\$438.00
C. Legal Descriptions for Takings on Each Parcel (Based on 5 Parcels)						1							\$532.50



TWM Staff Time Estimate

Basic Scope of Engineering Services	Estimated Sheet Count	QA/QC	Project Manager	Lead Project Engineer II	Staff Engineer	Hours by Classification			Survey Personnel	Survey Crew (1 man w/Robotics or GPS)	Total Cost Per Task	Total Hours with Total Cost Per Task
						Survey Project Manager	Registered Land Surveyor	Technician II				
D. ROW and Easement Plan Preparation for Each Parcel (Based on 5 Parcels)				1	2			3		10		\$387.50
E. Draft ROW Design Plans Submittal				1	2	4						\$120.50
F. Revise Draft ROW Plans and Resubmit				1								\$232.50
G. ROW Plan Sheet Revisions (5 Parcels Max.)				2			2	3				\$270.50
H. ROW Parcel Plan Revisions (5 Parcels Max.)				2		4	2					\$203.00
I. ROW Legal Description Revisions (5 Parcels Max.)				2			2					\$241.00
J. EECOPC: Updated for ROW Phase				2								\$449.00
K. Design Progress Meetings at County Offices (Assume 2 Meetings)				6	6							\$398.00
L. TWM Quality Control Plan (QA/QC) - ROW Design Phase	4		4									\$95.00
M. MoDOT RER Submittal - ROW Design Phase				2								\$95.00
Phase Sub-Total =	\$228.00			\$1,402.50	\$1,404.00	\$1,008.00	\$550.00	\$550.50	\$288.00	\$0.00	\$0.00	\$5,181.00
5. FINAL DESIGN PHASE	90	4		50	90	134	0	0	0	0	0	278
RCW Design Phase sheet modifications/updates for the Final Design Phase (Title, Typical Section, and Plan/Profile Sheets)												\$232.50
A. Final Design Plans	26		1	2	4							\$0.00
i. Cover Sheet				0								\$0.00
ii. Summary of Quantities Sheets	5		2	8	24							\$1,069.00
iii. Typical Sections				0	0							\$0.00
iv. Reference Points Sheet				0								\$0.00
v. Plan-Profile Sheets				2	2							\$56.00
vi. Side Road Profiles			0.5	1	1							\$88.25
vii. Intersection Geometrics and Warping Sheet	1		0.5	2	6							\$261.25
viii. Cross Sections, Mainline and Side Roads	6		2	4	8							\$465.00
ix. General Construction Details	5		2	8	16							\$845.00
x. Special Detail Sheets	2		2	4	8							\$465.00
xi. Drainage Plan / Culvert Section Sheets (Performed by ABVA; TWM Time is for Coord.)	3		2	2	1							\$191.00
xii. Pavement Marking and Signage Plans	5		1	4	8							\$422.50
xiii. Erosion Control Plans	5		1	4	8							\$728.00
xiv. Temporary Traffic Control Plans	5		2	5	16							\$1,154.00
xvi. Construction Phasing Plans	6		4	8	24							\$398.00
B. TWM Quality Control Plan (QA/QC) - Final Design Phase			4									\$95.00
C. MoDOT RER Submittal - Final Design Phase			2									\$120.50
D. Submit Draft Final PS&E to County			1	2								
E. Revise Draft Final PS&E per County and MoDOT Comments and Resubmit			2	4	8							\$465.00
F. Utility Coordination			2	4								\$241.00
G. Project Working Day Study			1	4								\$198.50
H. Final Technical Specifications (JSPs)			4		8							\$480.00
I. Prepare Final EECOPC (Signed and Sealed)			2	4								\$241.00
J. Design Progress Review Meetings (3 at County Offices and 1 on Site - Final Plans Review)	12		12									\$978.00
Phase Sub-Total =	\$228.00			\$2,125.00	\$3,510.00	\$9,752.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$9,615.00
6. CONSTRUCTION ENGINEERING PHASE	0	16	12	16	1	2	0	0	10	10	57	
A. Bidding RFI		2		2								\$163.00
B. Pre-construction Conference		4										\$170.00
C. Contractor RFI Assistance During Construction		4	4									\$325.00
D. Review Shop Drawings and Materials Certs		4	2		16							\$248.00
E. Make Revisions to Drawings (Contractor-Fed-Lines) and Submit as As-Builts		2	4									\$685.00
F. Set Permanent RCW Pins upon Project Completion		12	176	231	310	20	33	2	10			\$2,243.00
Phase Sub-Total =	\$0.00			\$468.00	\$448.00	\$35.00	\$77.00	1	\$0.00	\$0.00	10	
Total Hours	12											
Hourly Rate (See Schedule of Fees)	\$57.00			\$42.50	\$39.00	\$28.00	\$35.00	\$38.50	\$24.00	\$29.00	\$53.50	
Total Classification Cost	\$844.00			\$7,480.00	\$9,089.00	\$8,680.00	\$700.00	\$1,270.50	\$580.00	\$21,140.00	\$31,071.50	\$31,071.50
TOTAL PROJECT ENGINEERING FEE BUDGET												\$31,071.50



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Fax: (314) 454-1235

327 Missouri Ave. Ste 625
East St. Louis, IL 62201
Phone: (618) 875-5951
Fax: (618) 875-8405

September 13, 2019

Heather Copeland, PE
TWM
720 Olive
St. Louis, Missouri 63101

ATTN: **Heather Copeland**

SUBJECT: **REVISED PROPOSAL – Civil and Geotechnical and Drainage
Design Professional Services**

PROJECT: **The Relocation and Widening of Seckman Road**

Thank you for this opportunity to continue working with you. Herein we describe the professional services necessary to support design of the proposed Relocation and Widening of Seckman Road in Jefferson County.

Our Scope of work is outlined below

1. CIVIL DESIGN SCOPE OF WORK

1.1 Prepare a preliminary analysis of stormwater drainage impacts which shall include the following:

- a. Prepare a preliminary stormwater drainage layout showing on plan sheets for existing and proposed.
- b. Prepare a technical memorandum which summarizes this drainage task.

1.2 Drainage design shall include the following:

- c. Assessment of the existing storm sewer drainage network (condition, location, capacity, etc.) to determine the extent it can be reused.
- d. Type, size, and location of the necessary drainage features for the project, including enclosed drainage features (inlets and pipes – will be provided to TWM for inclusion on your drawings)
- e. Culvert (pipe) profile sheet drawn at a scale of 1" equals to 20' horizontally and 1" equals 5' vertically (assume one sheet)

1.3 Project Meetings – when required, coordination meetings will be set up with TWM and/or client to facilitate the project design (assume 2)

1.4 Review, respond and address comments of the technical memorandum from TWM and/or Jefferson County.

1.5 Prepare submittal and resubmittals necessary for obtaining the necessary permits from the Corps of Engineers and Jefferson County.



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2. GEOTECHNICAL SCOPE OF WORK

2.1 Geotechnical investigation(s), as required, to determine rock cut and pavement requirements as listed below:

a. Asphalt Coring

- Layout 4 asphalt core locations and conduct underground utility location coordination prior to our mobilization.
- Provide safety cones and signs prior to coring,
- Pavement coring crew will collect 4 asphalt pavement cores.
- Provide a letter report on asphalt cores.

b. Drilling

- Review of available geologic literature.
- Layout one soil test borings and conduct underground utility location coordination prior to our mobilization.
- Provide safety cones and signs prior to drilling,
- Drill three soil test borings to rock with split spoon samples at regular intervals. Depth to rock is estimated to be at 15 feet below the ground surface for pricing.
- Obtain and classify 5 feet of rock core from the soil boring location and prepare the borehole log.
- Borehole will be grouted with bentonite after sampling.
- ABNA will prepare a letter report addressing the findings of the subsurface investigation and geotechnical recommendation as it relates to retaining wall.
- ABNA will conduct a global stability analysis.

DESIGN FEES

(Not including bid- or construction- phase services)

Drainage Design Services	\$13,854.00
Geotechnical Services	\$8,612.00
Drilling Direct Costs	\$ 3,000.00
Laboratory Testing Costs	\$188.00
Mileage	\$116.00
Total Base Fee	\$25,770.00

HOURLY RATES FOR EXTRA WORK

<input type="checkbox"/> Survey Crew	\$164 (two-hour minimum portal-to-portal)
<input type="checkbox"/> Professional Land Surveyor	\$121
<input type="checkbox"/> Project Manager	\$190
<input type="checkbox"/> Civil Engineer	\$140
<input type="checkbox"/> CADD Designer	\$110

CHANGES

The client may, at any time, by written order, make changes within the general scope of the contract in the services to be performed. If such changes cause an increase, or decrease, in ABNA's cost of, or time required for performance of any services under this contract, whether or not changed by any order, an equitable adjustment shall be made and the



4140 Lindell Blvd
St. Louis, MO 63108
Phone: (314) 454-0222
Fax: (314) 454-1235

327 Missouri Ave. Ste 625
East St. Louis, IL 62201
Phone: (618) 875-5951
Fax: (618) 875-8405

contract shall be modified in writing accordingly. Any claim made by ABNA for additional compensation under this clause must be asserted in writing by ABNA within thirty (30) days from the receipt of a request for change in scope from the client or from when the change is claimed by ABNA. No services for which an additional cost or fee will be charged by ABNA shall be furnished without the prior authorization of the client.

TERMINATION OF AGREEMENT

This agreement may be terminated by the client with or without cause. Should the agreement be so terminated, all drawings and documents in connection with the project shall become the property of the client, who shall in that event make reasonable allowance for expenses incurred and services performed by ABNA, but shall make no allowance for damages.

SPECIAL PROVISIONS

All books, documents, papers, and other pertinent records will be maintained at ABNA's offices at all reasonable times during the contract period and for one year from the date of final payment under the contract, for inspection by the client and copies thereof shall be furnished if requested.

ACCEPTANCE

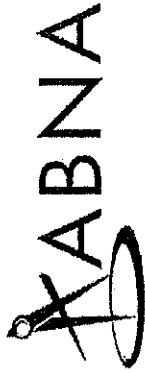
We appreciate the opportunity to submit this proposal and are prepared to commence work upon your authorization to do so, which you may provide by signing and returning one copy of this proposal.

Very Truly Yours,

David Diestelkamp, Operations Manager
ABNA Engineering, Inc.

ACCEPTED BY: TWM

By: M. Johnson
Title: Branch Manager, St. Louis Office
Date: October 29, 2019



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Phone: (314) 454-0222
Fax: (314) 454-1235
www.abnaengineering.com

9/26/2019

Fee Proposal for: The Seckman Road - Drainage Design Work

Proposal to: Relocating and Widening of Seckman Road

Engineering Fees	
Engineering Design	\$4,850
Geotech Services	
	\$3,017
Labor Total	\$7,867
OH	\$12,185
Subtotal	\$20,052
Drilling/Lab Testing/Mileage	\$3,312
Profit	\$2,406
Total	\$25,770

MAN-HOUR ESTIMATE

Seckman Road



Supplemental Fee Proposal for: The Seckman Road - Drainage Design Services

Task	Sr Prof	Mid-level Prof	Jr Prof	Sr Tech CAD/Field	Jr Tech CAD/Field	Total Cost
1 Civil Site Design	\$57.00	\$43.00	\$35.00	\$36.00	\$34.00	
1.1 Prepare a preliminary analysis of stormwater drainage		8	4	8	8	\$1,196
Prepare a preliminary stormwater drainage layouts						\$0
Prepare a Technical Memorandum						\$0
1.2 Project Meetings		8	4			\$628
1.3 Drainage Design		2	8	8	8	\$1,026
Assessment of the existing storm sewer drainage network						\$0
Indicate the type, size and location of the necessary drainage features for the project						\$0
Prepare profile sheets drawn at a scale of 1" equals to 20' horizontally and 1" equals to 5' vertically						\$0
1.4 Attend project meetings when required by TWM and/or the Jefferson County	4	8				\$572
1.5 Review, Respond and Address Comments of the technical memorandum from TWM and/or the Jefferson County	2	4	4	8		\$714
1.10 Prepare Submittal and Resubmittals Necessary for obtaining Permits from the Corps and Jefferson County	2	4	4	8		\$714
TOTAL	26	32	24	32	0	\$4,850

MAN-HOUR ESTIMATE

Seckman Road



Supplemental Fee Proposal for: The Seckman Road - Geotechnical Services

	Task	Sr Prof	Mid-level Prof	Jr Prof	Sr Tech CAD/Field	Jr Tech CAD/Field	Total Cost
2 Geotechnical		\$62.00	\$40.00	\$35.00	\$32.25	\$34.00	
2.1 Geotechnical Investigations		4	4				\$408
Asphalt Coring					24		\$774
Drilling		4	30		12		\$1,836
TOTAL		8	34	0	36	0	\$3,017

ATTACHMENT C

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, AND OTHER RESPONSIBILITY MATTERS - PRIMARY COVERED TRANSACTIONS

INSTRUCTIONS FOR CERTIFICATION

1. By signing and submitting this proposal, the prospective primary participant is providing the certification set out below.
2. The inability of a person to provide the certification required below will not necessarily result in denial of participation in this covered transaction. The prospective participant shall submit an explanation of why it cannot provide the certification set out below. The certification or explanation will be considered in connection with the department or agency's determination whether to enter into this transaction. However, failure of the prospective primary participant to furnish a certification or an explanation shall disqualify such person from participation in this transaction.
3. The certification in this clause is a material representation of fact upon which reliance was placed when the department or agency determined to enter into this transaction. If it is later determined that the prospective primary participant knowingly rendered an erroneous certification in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause of default.
4. The prospective primary participant shall provide immediate written notice to the department or agency to whom this proposal is submitted if at any time the prospective primary participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
5. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," "proposal" and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the department or agency to which this proposal is being submitted for assistance in obtaining a copy of those regulations.
6. The prospective primary participant agrees by submitting this proposal that, should the proposed covered transaction be entered into, it shall not knowingly enter into any lower tier covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency entering into this transaction.
7. The prospective primary participant further agrees by submitting this proposal that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion-- Lower Tier Covered Transaction" provided by the department or agency entering into this covered transaction, without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

8. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to check the Nonprocurement List at the Excluded Parties List System.
<https://www.epls.gov/epls/search.do?page=A&status=current&agency=69#A>.
9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
10. Except for transactions authorized under paragraph 6 of these instructions, if a participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction, in addition to other remedies available to the Federal Government, the department or agency may terminate this transaction for cause or default.

Certification Regarding Debarment, Suspension, and Other Responsibility Matters -Primary Covered Transactions

1. The prospective primary participant certifies to the best of its knowledge and belief, that it and its principals:
 - a. Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
 - b. Have not within a three-year period preceding this proposal been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain or performing a public (Federal, State or local) transaction or contract under a public transaction; violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
 - c. Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (1)(b) of this certification; and
 - d. Have not within a three-year period preceding this application/proposal had one or more public transactions (Federal, State or local) terminated for cause or default.
2. Where the prospective primary participant is unable to certify to any of the statements in this certification, such prospective participant shall attach an explanation to this proposal.

ATTACHMENT D

CERTIFICATION REGARDING DEBARMENT, SUSPENSION, INELIGIBILITY AND VOLUNTARY EXCLUSION--LOWER TIER COVERED TRANSACTIONS

INSTRUCTIONS FOR CERTIFICATION

1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out below.
2. The certification in this clause is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the department or agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
3. The prospective lower tier participant shall provide immediate written notice to the person to which this proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms "covered transaction," "debarred," "suspended," "ineligible," "lower tier covered transaction," "participant," "person," "primary covered transaction," "principal," "proposal," and "voluntarily excluded," as used in this clause, have the meanings set out in the Definitions and Coverage sections of rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective lower tier participant agrees by submitting this proposal that, should the proposed covered transaction with a person who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction, unless authorized by the department or agency with which this transaction originated.
6. The prospective lower tier participant further agrees by submitting this proposal that it will include this clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion--Lower Tier Covered Transaction," without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in a lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Nonprocurement List at the Excluded Parties List System.
<https://www.epls.gov/epls/search.do?page=A&status=current&agency=69#A>.

Attachment E
Disadvantage Business Enterprise Contract Provisions

1. Policy: It is the policy of the U.S. Department of Transportation and the Local Agency that businesses owned by socially and economically disadvantaged individuals (DBE's) as defined in 49 C.F.R. Part 26 have the maximum opportunity to participate in the performance of contracts financed in whole or in part with federal funds. Thus, the requirements of 49 C.F.R. Part 26 and Section 1101(b) of the Transportation Equity Act for the 21st Century (TEA-21) apply to this Agreement.

2. Obligation of the Engineer to DBE's: The Engineer agrees to assure that DBEs have the maximum opportunity to participate in the performance of this Agreement and any subconsultant agreement financed in whole or in part with federal funds. In this regard the Engineer shall take all necessary and reasonable steps to assure that DBEs have the maximum opportunity to compete for and perform services. The Engineer shall not discriminate on the basis of race, color, religion, creed, disability, sex, age, or national origin in the performance of this Agreement or in the award of any subsequent subconsultant agreement.

3. Geographic Area for Solicitation of DBEs: The Engineer shall seek DBEs in the same geographic area in which the solicitation for other subconsultants is made. If the Engineer cannot meet the DBE goal using DBEs from that geographic area, the Engineer shall, as a part of the effort to meet the goal, expand the search to a reasonably wider geographic area.

4. Determination of Participation Toward Meeting the DBE Goal: DBE participation shall be counted toward meeting the goal as follows:

A. Once a firm is determined to be a certified DBE, the total dollar value of the subconsultant agreement awarded to that DBE is counted toward the DBE goal set forth above.

B. The Engineer may count toward the DBE goal a portion of the total dollar value of a subconsultant agreement with a joint venture eligible under the DBE standards, equal to the percentage of the ownership and control of the DBE partner in the joint venture.

C. The Engineer may count toward the DBE goal expenditures to DBEs who perform a commercially useful function in the completion of services required in this Agreement. A DBE is considered to perform a commercially useful function when the DBE is responsible for the execution of a distinct element of the services specified in the Agreement and the carrying out of those responsibilities by actually performing, managing and supervising the services involved and providing the desired product.

D. A Engineer may count toward the DBE goal its expenditures to DBE firms consisting of fees or commissions charged for providing a bona fide service, such as professional, technical, consultant, or managerial services and assistance in the procurement of essential personnel, facilities, equipment, materials or supplies required for the performance of this Agreement, provided that the fee or commission is determined by MoDOT's External Civil Rights Division to be reasonable and not excessive as compared with fees customarily allowed for similar services.

E. The Engineer is encouraged to use the services of banks owned and controlled by socially and economically disadvantaged individuals.

5. Replacement of DBE Subconsultants: The Engineer shall make good faith efforts to replace a DBE Subconsultant, who is unable to perform satisfactorily, with another DBE Subconsultant. Replacement firms must be approved by MoDOT's External Civil Rights Division.

6. Verification of DBE Participation: Prior to final payment by the Local Agency, the Engineer shall file a list with the Local Agency showing the DBEs used and the services performed. The list shall show the actual dollar amount paid to each DBE that is applicable to the percentage participation established in this Agreement. Failure on the part of the Engineer to achieve the DBE participation specified in this Agreement may result in sanctions being imposed on the Commission for noncompliance with 49 C.F.R. Part 26 and/or Section 1101(b) of TEA-21. If the total DBE participation is less than the goal amount stated by the MoDOT's External Civil Rights Division, liquidated damages may be assessed to the Engineer.

Therefore, in order to liquidate such damages, the monetary difference between the amount of the DBE goal dollar amount and the amount actually paid to the DBEs for performing a commercially useful function will be deducted from the Engineer's payments as liquidated damages. If this Agreement is awarded with less than the goal amount stated above by MoDOT's External Civil Rights Division, that lesser amount shall become the goal amount and shall be used to determine liquidated damages. No such deduction will be made when, for reasons beyond the control of the Engineer, the DBE goal amount is not met.

7. Documentation of Good Faith Efforts to Meet the DBE Goal: The Agreement goal established by MoDOT's External Civil Rights Division. The Engineer must document the good faith efforts it made to achieve that DBE goal, if the agreed percentage specified is less than the percentage stated. Good faith efforts to meet this DBE goal amount may include such items as, but are not limited to, the following:

A. Attended a meeting scheduled by the Department to inform DBEs of contracting or consulting opportunities.

B. Advertised in general circulation trade association and socially and economically disadvantaged business directed media concerning DBE subcontracting opportunities.

C. Provided written notices to a reasonable number of specific DBEs that their interest in a subconsultant agreement is solicited in sufficient time to allow the DBEs to participate effectively.

D. Followed up on initial solicitations of interest by contacting DBEs to determine with certainty whether the DBEs were interested in subconsulting work for this Agreement.

E. Selected portions of the services to be performed by DBEs in order to increase the likelihood of meeting the DBE goal (including, where appropriate, breaking

down subconsultant agreements into economically feasible units to facilitate DBE participation).

F. Provided interested DBEs with adequate information about plans, specifications and requirements of this Agreement.

G. Negotiated in good faith with interested DBEs, and not rejecting DBEs as unqualified without sound reasons, based on a thorough investigation of their capabilities.

H. Made efforts to assist interested DBEs in obtaining any bonding, lines of credit or insurance required by the Commission or by the Engineer.

I. Made effective use of the services of available disadvantaged business organizations, minority contractors' groups, disadvantaged business assistance offices, and other organizations that provide assistance in the recruitment and placement of DBE firms.

8. Good Faith Efforts to Obtain DBE Participation: If the Engineer's agreed DBE goal amount as specified is less than the established DBE goal given, then the Engineer certifies that the following good faith efforts were taken by Engineer in an attempt to obtain the level of DBE participation set by MoDOT's External Civil Rights.

Attachment F - Fig. 136.4.15
Conflict of Interest Disclosure Form for LPA/Consultants
Local Federal-aid Transportation Projects

Firm Name (Consultant): TWM, Inc.

Project Owner (LPA): Jefferson County, Missouri

Project Name: Seckman Road @ Mastodon State Park Entrance

Project Number: STP-7202 (604)

As the LPA and/or consultant for the above local federal-aid transportation project, I have:

1. Reviewed the conflict of interest information found in Missouri's Local Public Agency Manual (EPG 136.4)
2. Reviewed the Conflict of interest laws, including 23 CFR § 1.33, 49 CFR 18.36.

And, to the best of my knowledge, determined that, for myself, any owner, partner or employee, with my firm or any of my sub-consulting firms providing services for this project, including family members and personal interests of the above persons, there are:

No real or potential conflicts of interest

If no conflicts have been identified, complete and sign this form and submit to LPA

Real conflicts of interest or the potential for conflicts of Interest

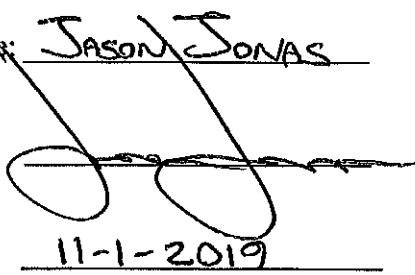
If a real or potential conflict has been identified, describe on an attached sheet the nature of the conflict, and provide a detailed description of Consultant's proposed mitigation measures (if possible). Complete and sign this form and send it, along with all attachments, to the appropriate MoDOT District Representative, along with the executed engineering services contract.

LPA

Printed Name: JASON JONAS

Signature:

Date:



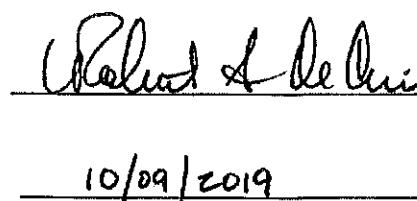
11-1-2019

Consultant

Printed Name: ROBERT S. DECONCINI

Signature:

Date:



10/09/2019

ATTACHMENT G



Wood Environment & Infrastructure Solutions, Inc.
212 East McCarty Street
Jefferson City, Missouri 65101
USA

7 October 2019

T: 573-659-0615

www.woodplc.com

Ms. Heather Copeland, P.E.
Project Manager
TWM
720 Olive Street, Suite 200A
St. Louis, MO 63101

Re: Phase I Archaeological Survey for the Seckman Road project, Jefferson County, Missouri.

Dear Ms. Copeland:

Wood Environment & Infrastructure Solutions, Inc. (Wood) is pleased to present this proposal for conducting a Phase I archaeological survey for the Seckman Road project in Imperial, Jefferson County, Missouri. This Phase I archaeological survey is necessary to satisfy compliance requirements of Section 106 of the National Historic Preservation Act of 1966 (as amended), 54 U.S.C. 300101 *et seq.* The proposed methods for the project follow guidelines set forth in the Missouri State Historic Preservation Office (MO SHPO) Guidelines (*Guidelines for Phase I Archaeological Surveys and Reports in Missouri*). We understand that the goal of the Phase I survey will be to identify and document cultural resources (i.e. archaeological sites) within the Area of Potential Effect (APE) and provide recommendations regarding the National Register of Historic Places (NRHP) eligibility status of each. Wood has the expertise, facilities, and equipment to successfully complete this project.

SCOPE OF SERVICES

Our services will include the following tasks:

BACKGROUND RESEARCH

Wood will examine archaeological site and architectural resource files, National Register listings and cultural resource reports on file at the MO SHPO office in Jefferson City, Missouri. Wood has access to the online geographic information system (GIS) inventory, as well as all paper files housed at the MO SHPO. Completion of this task will confirm (1) areas previously surveyed, whether previously recorded archaeological sites or architectural resources are located within the project area or a one-mile radius of the project area, and (2) provide information on the types of unrecorded archaeological sites and architectural resources that could be present within the project area. Background research will enhance our understanding of potential site types and inform on the probability of archaeological sites based on topographic landforms, water crossings, etc. In addition, the background research may examine historic maps, historic USGS quadrangles, and other available archival resources that may provide information on the location of historic archaeological sites.



ARCHAEOLOGY FIELDWORK

Wood expects that Phase I field survey will consist of a surface investigation of the APE along with near-surface shovel testing, as necessary. All areas within the APE that afford a surface visibility of 25 percent or greater will be subjected to a walkover reconnaissance survey. Wood will perform surface reconnaissance with transects spaced 5 meters (m) (16 feet [ft]) apart for the entire length of each transect. Judgmental shovel tests may also be excavated in surface reconnaissance areas to examine soil stratigraphy. In locations with heavy ground cover and/or low surface visibility, Wood will conduct systematic shovel testing at 15-m (50-ft) intervals to identify sites within the project area. If cultural resources are identified, radial shovel test probes (STPs) will be excavated around positive shovel tests or surface scatters (as necessary) at 5-m (16-ft) intervals within the APE. STPs will measure approximately 30 centimeters (cm) (11.8 inches [in]) in diameter and extend a minimum of 10 cm into culturally sterile subsoil. Wood assumes that shovel tests will extend to a maximum average depth of 50 cm (1.6 ft).

Costing for the survey anticipates one previously recorded archaeological site will be encountered, the Miller/Bollifer house foundation (23JE413). If the site is relocated, cultural materials recovered from shovel tests or the ground surface will be collected, and it will be both photographed and mapped using a hand-held global positioning system (GPS) unit. Land use of the site, as well as the soil profiles of STPs containing cultural material, will be documented through digital photography. If the site is identified, a Missouri Archaeological Site Recordation Form will be completed and submitted. Management recommendations on potential NRHP eligibility of the site will be provided in the report.

Wood estimates the survey will require a two-member team and the fieldwork will be completed in one day. This scope of work estimates that shovel testing will be required across the APE totaling no more than approximately 0.5 acres. These projections for field effort result in an estimate of 15 STPs to be excavated during the survey.

PROFESSIONAL REPORT OF FINDINGS

Wood will document the results of the cultural resources survey into a report of investigation in accordance with guidelines set forth by the MO SHPO. The report will be a document that details the results of the Phase I survey and NRHP recommendations for cultural resources identified. The draft cultural resources report will be submitted to TWM (Client) for review and comments. Wood can then submit to the MO SHPO for their review and comment, on behalf of the Client. The MO SHPO allows for a short form report when reporting on the results of the cultural resource survey and that is assumed to be the format Wood will use.

ASSUMPTIONS

Wood's ability to adequately provide the services as outlined above is contingent upon the following critical assumptions:

- Wood will have access to the project area including permission from the current public and private property landowners necessary to enter the project area and to conduct the investigations specified in this proposal. The Client will be responsible for informing appropriate parties;

- The client will provide Wood with current mapping that clearly shows the survey area and GIS data, if available;
- The project area will consist of two areas totaling no more than 0.5 acres to be surveyed with a maximum of 15 STPs;
- Wood assumes one archaeological site will be identified. This cost assumes no more than 50 artifacts would be recovered and no more than 10 additional STPs would be required. If additional archaeological sites are encountered, then cost will be adjusted accordingly to accommodate the additional work associated with artifact collection and analysis, site delineation, reporting, and curation;
- No mechanical deep testing is proposed at this time. If mechanical deep testing will be required after consultations with the MO SHPO, then the cost will be adjusted accordingly to accommodate this additional work;
- The MO SHPO short form will be acceptable documentation for the investigation;
- This cost assumption is based on addressing one set of comments from the client and one set of comments from the MO SHPO to complete final report;
- Timely completion of this project is dependent upon the weather; and
- See Wood's standard Terms & Conditions (attached).

SCHEDULE

Based on the information provided and our understanding of the project, Wood estimates the field and reporting aspects of this project can be completed within 3-4 weeks of notice to proceed. Adherence to this schedule is largely dependent upon favorable weather conditions and site access.

DELIVERABLES

One bound copy and one .pdf file burned to disk will be provided for submittal to the SHPO for review, and two copies will be provided to the Client. If report revisions are required by the SHPO, the required changes will be made, and the revised report will be resubmitted.

ESTIMATED FEES

Based on the scope of work described in this proposal and our understanding of the project, the cost of our services can be performed for a lump sum fee of **\$4,980**. No additional work will be performed without prior approval from the Client.

AUTHORIZATION

If this proposal is acceptable, please sign below and return the entire proposal to our office as authorization to begin work. This letter, and the attached terms and conditions will serve as our contract with you. If additional services are required or requested, the estimated fees will be renegotiated.

COST BREAKDOWN

Labor		
Estimated Hours	Hourly Rate	Total
2	\$155.00	\$310.00
12	\$90.00	\$1,080.00
40	\$70.00	\$2,800.00
12	\$45.00	\$540.00
Subtotal		\$4,730.00
Travel Expenses / Other		
Auto Rental / Gas	\$200	\$200.00
Report Production	\$50	\$50.00
Subtotal		\$250.00
Total		\$4,980.00

Thank you for the opportunity to provide our archaeological services to TWM. We look forward to working with you and your staff. If you have any questions or concerns, please contact Kathryn Drennan Warner at (573) 659-0615.

Sincerely,

Kathryn Drennan Warner, MA
Senior Archaeologist
Wood E&IS

Kathryn Drennan Warner

Signature

7 October 2019
Date

Ms. Heather Copeland, P.E.
Project Manager
TWM

H. Lohr

Signature

October 29, 2019
Date

Certificate of Final Indirect Costs

Firm: Wood Environment & Infrastructure Solutions, Inc.

Indirect Cost Rate Proposal: Home rate: \$142.68; Field rate: \$125.62
(Include Home & Field Office overhead rate(s) and, if applicable, FCCM)

Date of Proposal Preparation (mm/dd/yyyy): 10/07/2019

Fiscal Period Covered (mm/dd/yyyy to mm/dd/yyyy): 01/01/2018 to 12/31/2018

This is to certify that I have reviewed this proposal to establish final indirect cost rates and to the best of my knowledge and belief:

1. All costs included in this proposal to establish final indirect cost rates are allowable in accordance with the cost principles of the Federal Acquisition Regulation (FAR) of title 48, Code of Federal Regulations (CFR), part 31, 2 CFR 200; and
2. This proposal does not include any costs which are expressly unallowable under applicable cost principles of the FAR of 48 CFR part 31 and 2 CFR 200.

Signature: 

Name of Certifying Official (Print): Henry McKelway, PhD

Title: Cultural Resources Unit Manager

Date of Execution (mm/dd/yyyy): 29 October 2019