

Department of Engineering
Tim Bryan, P.E., PTOE, County Engineer

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MEMORANDUM

November 13, 2024

To: Casey Brannon, Supervisor, District I
Trey Baxter, Supervisor, District II
Gerald Steen, Supervisor, District III
Karl Banks, Supervisor, District IV
Paul Griffin, Supervisor, District V

From: Tim Bryan, P.E., PTOE
County Engineer

Re: Professional Services Agreement
Yandell Road Signal Installation at N Old Canton Road

The Engineering Department requests approval of the design contract with Benchmark Engineering & Surveying, LLC for the design of the Yandell Road Signal Installation at N Old Canton Road Project for a fee not to exceed \$357,676.04 and to authorize the Board President to sign the contract.

AGREEMENT
BETWEEN OWNER AND BENCHMARK ENGINEERING & SURVEYING, LLC
FOR PROFESSIONAL SERVICES

THIS IS AN AGREEMENT effective as of _____ (“Effective Date”) between the **Madison County Board of Supervisors** (“Owner”) and **Benchmark Engineering & Surveying, LLC** (“Engineer”).

Owner’s Project, of which Engineer’s services under this Agreement are a part, is generally identified as follows: **Yandell Road Signal Installation at North Old Canton Rd., STP-7024-00(001)LPA, 109649/701000.**

Part 1 – Scope of Services

The general project scope includes topographic and boundary surveying, preliminary (Phase A) design services, Final (phase B) design services, bid phase coordination and management, coordination with the engineering firms on adjacent projects for the roadway widening and new traffic signal improvements at Yandell Rd. and North Old Canton Rd. Engineer’s services under this Agreement are generally identified as follows:

- 1.01 Engineer’s scope of services as listed Exhibit 2 – (Attached)
- 1.02 Basic Agreement and Period of Service – Engineer shall provide or furnish the Services set forth in this Agreement until the project has been let to construction.

Part 2 – Invoicing and Payment

2.01 *Payment Procedures*

- A. *Invoices:* Engineer shall invoice Owner for services rendered for the previous month. For lump sum and percentage methods of payment, the invoice will be based on the Engineer’s estimation (in percentage) of work completed at the time of billing. Invoice will show an amount due with a general description of services, % complete, & amount remaining in Contract. For Cost-Plus-Fixed-Fee method of payment, the amount of fixed fee billed shall be based on the proportion of the costs incurred at the time of billing to the maximum allowable costs established for this Agreement.
- B. *Invoice Due Date & Penalties:* Invoices are due and payable within 30 days of receipt. If Owner fails to make any payment due Engineer for Services, Additional Services, and/or expenses within 30 days after receipt of Engineer’s invoice, then (1) the amounts due Engineer may be increased at the rate of 1.5% per month from said thirtieth day, and (2) in addition, Engineer may, after giving seven days written notice to Owner, suspend Services under this Agreement until Engineer has been paid in full all amounts due for Services, Additional Services, expenses, and other related charges. Owner waives any and all claims against Engineer for any such suspension.

- C. *Payment:* As compensation for Engineer providing or furnishing Services and Additional Services, Owner shall pay Engineer as set forth in Paragraphs 2.01, 2.02 and 2.03. If Owner disputes an invoice, either as to amount or entitlement, then Owner shall promptly advise Engineer in writing of the specific basis for doing so, may withhold only that portion so disputed, and must pay the undisputed portion.

2.02 *Basis of Payment — Proposed Fee*

- A. Owner shall pay Engineer for Services as follows:

1. We propose a Cost + Fixed Fee contract with a Not to Exceed (NTE) amount of **\$357,676.04** with a Fixed Fee of **\$31,837.56** for the Scope of Work described above based on the fee proposal shown Exhibit 1. Each invoice will have an itemized breakdown of the personnel, description of services and hours worked for that invoice period.
2. In addition to the Proposed Fee amount(s), reimbursement for the following expenses:
 - a. Copies of construction plan sheets, plan sets or contract documents (specifications) for use by someone other than Engineer.
 - b. Costs for mailing project documents via UPS, FedEx, US Mail or other courier services.

- 2.03 *Additional Services:* For Additional Services that are not included in the attached scope of services, Exhibit 2, Owner shall pay Engineer at the standard hourly rates defined in the attached fee proposal.

Part 3 – General Terms and Conditions

3.01 *Termination*

- A. The obligation to continue performance under this Agreement may be terminated:
1. For cause,
 - a. By either party upon 30 days written notice in the event of substantial failure by the other party to perform in accordance with the Agreement's terms through no fault of the terminating party. Failure to pay Engineer for its services is a substantial failure to perform and a basis for termination.
 - b. By Engineer:
 - 1) upon seven days written notice if Owner demands that Engineer furnish or perform services contrary to Engineer's responsibilities as a licensed professional; or
 - 2) upon seven days written notice if the Engineer's Services are delayed for more than 90 days for reasons beyond Engineer's control, or as the result of the presence at the Site of undisclosed Constituents of Concern, as set forth in Paragraph 3.03.i.
 - c. Engineer shall have no liability to Owner on account of a termination for cause by Engineer.
 - d. Notwithstanding the foregoing, this Agreement will not terminate as a result of a substantial failure under Paragraph 3.01.A.1.a if the party receiving such notice begins, within seven days of receipt of such notice, to correct its substantial failure to perform and proceeds diligently to cure such failure within no more than 30 days of receipt of notice; provided, however, that if and to the extent such substantial failure cannot be reasonably cured within such 30 day period, and if such party has diligently attempted to cure the same and thereafter continues diligently to cure the same, then the cure period provided for herein shall extend up to, but in no case more than, 60 days after the date of receipt of the notice.
 2. For convenience, by Owner effective upon Engineer's receipt of written notice from Owner.
- B. In the event of any termination under Paragraph 3.01, Engineer will be entitled to invoice Owner and to receive full payment for Services and Additional Services already performed or furnished in accordance with this Agreement, plus reimbursement of expenses incurred through the effective date of termination in connection with providing the Services and Additional Services, and Engineer's consultants' charges, if any.

3.02 *Successors, Assigns, and Beneficiaries*

- A. Owner and Engineer are hereby bound and the successors, executors, administrators, and legal representatives of Owner and Engineer (and to the extent permitted by Paragraph 3.02.B the assigns of Owner and Engineer) are hereby bound to the other party to this Agreement and to the successors, executors, administrators, and legal representatives (and said assigns) of such other party, in respect of all covenants, agreements, and obligations of this Agreement.
- B. Neither Owner nor Engineer may assign, sublet, or transfer any rights under or interest (including, but without limitation, money that is due or may become due) in this Agreement without the written consent of the other party, except to the extent that any assignment, subletting, or transfer is mandated by law. Unless specifically stated to the contrary in any written consent to an assignment, no assignment will release or discharge the assignor from any duty or responsibility under this Agreement.
- C. Unless expressly provided otherwise, nothing in this Agreement shall be construed to create, impose, or give rise to any duty owed by Owner or Engineer to any Constructor, other third-party individual or entity, or to any surety for or employee of any of them. All duties and responsibilities undertaken pursuant to this Agreement will be for the sole and exclusive benefit of Owner and Engineer and not for the benefit of any other party.

3.03 *General Considerations*

- A. The standard of care for all professional engineering and related services performed or furnished by Engineer under this Agreement will be the care and skill ordinarily used by members of the subject profession practicing under similar circumstances at the same time and in the same locality. Engineer makes no warranties, express or implied, under this Agreement or otherwise, in connection with any services performed or furnished by Engineer or in any report, opinion, document or otherwise. Subject to the foregoing standard of care, Engineer and its consultants may use or rely upon design elements and information ordinarily or customarily furnished by others, including, but not limited to, specialty contractors, manufacturers, suppliers, and the publishers of technical standards.
- B. Engineer shall not at any time supervise, direct, control, or have authority over any Constructor's work, nor shall Engineer have authority over or be responsible for the means, methods, techniques, sequences, or procedures of construction selected or used by any Constructor, or the safety precautions and programs incident thereto, for security or safety at the Project site, nor for any failure of a Constructor to comply with laws and regulations applicable to such Constructor's furnishing and performing of its work. Engineer shall not be responsible for the acts or omissions of any Constructor.
- C. Engineer neither guarantees the performance of any Constructor nor assumes responsibility for any Constructor's failure to furnish and perform its work.
- D. Engineer has no means or methods for locating underground utilities and is 100% dependent on utility companies and 811 (One Call) to locate such, therefore, Engineer does not provide any type of certification or guarantee of the location, size, type, etc. of any underground utilities located on or near the project site whether these lines are shown or not shown on the drawings and shall be held harmless for any errors, omissions, increase in construction costs or required utility relocations or changes to the construction drawings due to existing underground utility conflicts that arise before or during construction.
- E. Engineer's opinions (if any) of probable construction cost are to be made on the basis of Engineer's experience, qualifications, and general familiarity with the construction industry. However, because Engineer has no control over the cost of labor, materials, equipment, or services furnished by others, or over contractors' methods of determining prices, or over competitive bidding or market conditions, Engineer cannot and does not guarantee that proposals, bids, or actual construction cost will not vary from opinions of probable construction cost prepared by Engineer. If Owner requires greater assurance as to probable construction cost, then Owner agrees to obtain an independent cost estimate.
- F. Engineer shall not be responsible for any decision made regarding the construction contract requirements, or any application, interpretation, clarification, or modification of the construction contract documents other than those made by Engineer or its consultants.
- G. All documents prepared or furnished by Engineer are instruments of service, and Engineer retains an ownership and property interest (including the copyright and the right of reuse) in such documents, whether or not the Project is completed. Owner shall have a limited license to use the documents on the Project, extensions of the Project, and for related uses of the Owner, subject to receipt by Engineer of full payment due and owing for all Services and Additional Services relating to preparation of the documents and subject to the following limitations:
 - 1. Owner acknowledges that such documents are not intended or represented to be suitable for use on the Project unless completed by Engineer, or for use or reuse by Owner or others on extensions of the Project, on any other project, or for any other use or purpose, without written verification or adaptation by Engineer;
 - 2. any such use or reuse, or any modification of the documents, without written verification, completion, or adaptation by Engineer, as appropriate for the specific purpose intended, will be at Owner's sole risk and without liability or legal exposure to Engineer or to its officers, directors, members, partners, agents, employees, and consultants;

3. To the fullest extent permitted by law, Owner shall indemnify and hold harmless Engineer and its officers, directors, members, partners, agents, employees, and consultants from all claims, damages, losses, and expenses, including attorneys' fees, arising out of or resulting from any use, reuse, or modification of the documents without written verification, completion, or adaptation by Engineer; and
 4. such limited license to Owner shall not create any rights in third parties.
- H. Owner and Engineer may transmit, and shall accept, Project-related correspondence, documents, text, data, drawings, information, and graphics, in electronic media or digital format, either directly, or through access to a secure Project website, in accordance with a mutually agreeable protocol.
- I. Engineer shall maintain during the performance of services contemplated by the Agreement the following insurance coverage and provide the Owner with satisfactory evidence of such upon request:
1. Workers Compensation for statutory limits in compliance with the applicable state and federal laws, and Employer's Liability with a limit of \$1,000,000 with a waiver of the insurer's right of subrogation against the OWNER for both Workers' Compensation and Employer's Liability policies;
 2. Commercial General Liability including Products and Completed Operations, Contractual Liability and Broad Form Property and Personal Injury Liability with a combined single limit of \$1,000,000 per occurrence and in the aggregate which shall name the OWNER as an additional insured with a waiver of subrogation;
 3. Automobile Liability Insurance with a combined single limit of \$1,000,000 for bodily injury and property damage with respect to vehicles either owned, non-owned, and leased by ENGINEER in the performance of services contemplated by the Agreement which shall name the OWNER as an additional insured with a waiver of subrogation;
 4. Professional Liability Insurance in the amount of \$1,000,000 per claim and in the aggregate
- J. Engineer agrees to the fullest extent permitted by law, to indemnify and hold the Owner, its officers, directors, employees and affiliates harmless from any damage, liability, or cost to the extent caused by the Engineer's negligent acts, errors, or omissions in the performance of professional services under this Agreement and those of his or her sub consultants or anyone for whom the Engineer is legally liable. The Owner agrees, to the fullest extent permitted by law, to indemnify and hold the Engineer, its officers, directors, employees and affiliates harmless from any damage, liability, or cost to the extent caused by the Owner's negligent acts, errors, or omissions in the performance of professional services under this Agreement and those of his or her sub consultants or anyone for whom the Owner is legally liable, and arising from the projects that is the subject of this Agreement. Engineer is not obligated to indemnify the Owner in any manner whatsoever for the Owner's own negligence.
- K. Neither the Owner nor the Engineer shall be responsible or liable for delays or failures if such delay arises out of causes beyond either's control. Such causes may include but are not limited to acts of God or of the public enemy, fires, floods, epidemics, freight embargoes, computer or communications failures, acts or omissions of subcontractors or third parties or demands or requirements of governmental agencies.
- L. To the fullest extent permitted by law, Owner and Engineer (1) waive against each other, and the other's employees, officers, directors, members, agents, insurers, partners, and consultants, any and all claims for or entitlement to special, incidental, indirect, or consequential damages arising out of, resulting from, or in any way related to this Agreement or the Project, and (2) agree that the total aggregate liability of the Engineer under this Agreement for claims, damages, cost, or injury arising from any of the Engineer's errors or omissions shall be limited to the insurance requirements listed above.
- M. The parties acknowledge that Engineer's Services do not include any services related to unknown or undisclosed Constituents of Concern. If Engineer or any other party encounters, uncovers, or reveals an unknown or undisclosed Constituent of Concern, then Engineer may, at its option and without liability for consequential or any other damages, suspend performance of Services on the portion of the Project affected thereby until such portion of the Project is no longer affected, or terminate this Agreement for cause if it is not practical to continue providing Services.
- N. Owner and Engineer agree to negotiate each dispute between them in good faith during the 30 days after notice of dispute. If negotiations are unsuccessful in resolving the dispute, then the dispute shall be mediated. If mediation is unsuccessful, then the parties may exercise their rights at law.
- O. This Agreement is to be governed by the laws of the state of Mississippi.
- P. Engineer's Services and Additional Services do not include: (1) serving as a "municipal advisor" for purposes of the registration requirements of Section 975 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (2010) or the municipal advisor registration rules issued by the Securities and Exchange Commission; (2) advising Owner, or any municipal entity or other person or entity, regarding municipal financial products or the issuance of municipal securities, including advice with respect to the structure, timing, terms, or other similar matters concerning such products or issuances; (3) providing surety bonding or insurance-related advice, recommendations, counseling, or research, or enforcement of construction insurance or surety bonding requirements; or (4) providing legal advice or representation.

- Q. This Agreement (including any expressly incorporated attachments), constitutes the entire agreement between Owner and Engineer and supersedes all prior written or oral understandings. This Agreement may only be amended, supplemented, modified, or canceled by a duly executed written instrument.
- R. Both parties agree that to the fullest extent permitted by law, that the time period for bringing claims, except for claims for indemnification, under this Agreement shall expire one year after Project completion.

Part 4 – Definitions

- A. *Constructor*—Any person or entity (not including the Engineer, its employees, agents, representatives, and consultants), performing or supporting construction activities relating to the Project, including but not limited to contractors, subcontractors, suppliers, Owner’s work forces, utility companies, construction managers, testing firms, shippers, and truckers, and the employees, agents, and representatives of any or all of them.
- B. *Constituent of Concern*—Asbestos, petroleum, radioactive material, polychlorinated biphenyls (PCBs), hazardous waste, and any substance, product, waste, or other material of any nature whatsoever that is or becomes listed, regulated, or addressed pursuant to (a) the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. §§9601 et seq. (“CERCLA”); (b) the Hazardous Materials Transportation Act, 49 U.S.C. §§5101 et seq.; (c) the Resource Conservation and Recovery Act, 42 U.S.C. §§6901 et seq. (“RCRA”); (d) the Toxic Substances Control Act, 15 U.S.C. §§2601 et seq.; (e) the Clean Water Act, 33 U.S.C. §§1251 et seq.; (f) the Clean Air Act, 42 U.S.C. §§7401 et seq.; or (g) any other federal, State, or local statute, law, rule, regulation, ordinance, resolution, code, order, or decree regulating, relating to, or imposing liability or standards of conduct concerning, any hazardous, toxic, or dangerous waste, substance, or material.

IN WITNESS WHEREOF, the parties hereto have executed this Agreement per the Effective Date.

Owner: Madison County Board
Board of Supervisors

Engineer: Benchmark Engineering & Surveying, LLC

By: _____
(Signature)

By: _____
(Signature)

Name: Gerald Steen
(Print)

Name: Matthew Miller, P.E., P.L.S.
(Print)

Title: Board President

Title: Vice-President

Date: _____

Date: _____

Witness: _____
(Signature)

Witness: _____
(Signature)

Witness Name: _____
(Print)

Witness Name: _____
(Print)

Exhibit 2 (Scope of Services)

Yandell Road Signal Installation at North Old Canton Rd.

STP-7024-00(001)LPA 109649/701000

The following services shall be performed by Benchmark Engineering and Surveying, LLC following the Mississippi Department of Transportation Local Public Agency (LPA) process.

The following services will be performed by the ENGINEER in accordance with this Agreement and the latest MDOT Project Development Manual (PDM) Guidelines for the Owner/LPA at the time of execution of this Agreement.

In accordance with the PDM, a monthly progress report is required to be submitted by the 7th day of each month for the life of the project (activation through obligation). In addition, the Madison County Board of Supervisors have requested quarterly project updates from the ENGINEER at open board meetings.

Items provided by the Owner:

- Current Traffic Studies and/or Signal Warrant Analyses by others
- Any available as-built construction plans, utility permits, bridge inspection and pile driving reports, drawings and other information pertinent to the Project.
- Any previous studies, environmental assessments, conceptual plans, etc. pertinent to the Project.

General Requirements and Scope of Services:

Benchmark Engineering and Surveying, LLC (ENGINEER) shall provide engineering/technical assistance to the OWNER for the referenced project. These services shall include:

Professional Surveying Services – Topographic and Right of Way surveying will be required to obtain natural ground, features, utilities, and existing Right of Way for approximately 300 linear feet east and 300 linear feet west of the intersection and approximately 1,000 linear feet north and south of the intersection. Plats, Legals and other proposed Right of Way documentation will not be included in this Agreement.

Professional Environmental Services – The environmental design, studies, and documents for this Agreement shall meet the requirements of the National Environmental Quality Act 23 CFR-771 and FHWA Technical Advisory 6640.8A and MDOT. This project is expected by the ENGINEER to be a Categorical

Exclusion (CE) by MDOT and FHWA, for which an ENV-160 document, supporting documentation and approvals will be required (cultural resources, wetlands and other waters, social and economic report, agency correspondence, and MDAH approval.) An Environmental Assessment (EA) or Environmental Impact Statement (EIS) is not included in the scope of services provided.

Geotechnical – The geotechnical investigations and reports will be provided by an approved SUB-CONSULTANT to the ENGINEER. All investigations and reports shall follow the MDOT PDM requirements. SUB-CONSULTANT will include bridge substructure recommendations and pavement recommendations in this report.

Roadway Design – The ENGINEER will design and produce Phase A - Field Review Plans, Phase A – Final Right of Way Plans, Phase B – Office Review Plans and Specifications, Phase B – PS&E Construction Plans (Final) and Specification for the widening of Yandell Rd. from a 2-lane open ditch Roadway Section to a 5-lane Curb and Gutter Roadway Section, connecting to the roadway designs provided by other Engineering firms approximately 300 linear feet east and west of the intersection.

Bridge Design – The ENGINEER will design and produce preliminary and final bridge widening plans and specifications accommodating the proposed 5-lane roadway for the Yandell Rd. Bridge (Structure No. SA45-033). This is expected to be bid separately and not through the LPA process.

Bridge Hydraulic Design – The ENGINEER will produce studies and design the hydraulics for the proposed bridge widening of the Yandell Rd. Bridge (Structure No. SA45-033) to ensure that no adverse impacts will be felt upstream and/or downstream of the bridge.

Traffic/Signal Design – The ENGINEER will design and produce Phase A - Field Review Plans, Phase B – Office Review Plans, Phase B – PS&E Construction Plans (Final) for the new traffic signal required at the intersection, while accommodating the 5-lane roadway section, and proposed turn lanes as indicated by the Traffic Study (by others).

Bid Phase (General) and Project Management – The ENGINEER will manage and oversee the project through the Bid Phase, including MDOT coordination and submittals, until the project is awarded to a Contractor.

Summary

Yandell Road Signal Installation at North Old Canton Rd.
 Madison County
 STP-7024-00(001)LPA 109649/701000
 Benchmark Engineering & Surveying, LLC
 10/9/2024

	Man-Hours	Sub-Consultants Fee	Salary Cost	Overhead	FCCM	Total Labor Cost	Direct Cost	Fixed Fee	Total Cost
Activation	46		\$2463.50	\$2,889.93	\$0.00	\$5,353.43		\$642.41	\$5,995.84
Meetings & Coordination	252		\$16,761.29	\$19,662.67	\$0.00	\$36,423.96		\$4,370.88	\$40,794.83
Environmental & Coordination	44	\$31,500.00	\$2,663.48	\$3,124.53	\$0.00	\$5,788.01		\$694.56	\$37,982.57
Geotechnical	18	\$29,025.46	\$1,168.28	\$1,370.51	\$0.00	\$2,538.79		\$304.65	\$31,868.90
Roadway	977		\$47,320.24	\$55,511.37	\$0.00	\$102,831.61		\$12,339.79	\$115,171.41
Bridge	339		\$24,891.61	\$29,200.35	\$0.00	\$54,091.96		\$6,491.03	\$60,582.99
Hydraulics	100		\$10,816.92	\$12,689.33	\$0.00	\$23,506.25		\$2,820.75	\$26,327.00
Survey	218		\$9,664.90	\$11,337.89	\$0.00	\$21,002.79		\$2,520.34	\$23,523.13
PS&E/Advertisement	103		\$6,339.43	\$7,436.79	\$0.00	\$13,776.22		\$1,653.15	\$15,429.36
Total	2097	\$60,525.46	\$122,089.65	\$143,223.37		\$265,313.02		\$31,837.56	\$357,676.04

Grand Total \$357,676.04

Activation Sheet

Yandell Road Signal Installation at North Old Canton Rd.

Madison County

STP-7024-00(001)LPA 109649/701000

Benchmark Engineering & Surveying, LLC

10/9/2024

MDOT Process Item Description	No. Sheets	Estimated Hours								
		Principal	Project Manager	Project Engineer	Hydraulics Engineer	Sr. Engineer Intern	Engineer Intern	Survey Party Chief	Survey CAD Tech	Survey CAD Tech
Project Activation										
LPA 100			2.0							2.0
LPA 700/800			4.0			20.0				24.0
Kickoff Meeting		3.0	3.0		3.0	3.0				12.0
Quality Control		4.0	4.0							8.0
Total Hours		7.0	13.0		3.0	23.0				46.0

Raw Labor Rates		\$84.14	\$62.50	\$43.27	\$57.69	\$38.65	\$33.65	\$38.11	\$38.75	
Labor Cost		589.0	812.5		173.1	889.0				2,463.50

Overhead % 117.3100% \$2,889.93

Fixed Fee % 12.00% \$642.41

FCCM Overhead % 0.00% \$0.00

<u>Direct Costs:</u>	Qty.	Unit Price ¹
Mileage		
Meals		
Lodging		
Postage		
Supplies		
Reproductions		
Other		

¹ See State Travel Handbook

Total Direct Costs:

Prime Total \$5,995.84

Subconsultant A	
Subconsultant B	
Subconsultant Total	

Project Total \$5,995.84

Meetings Sheet

Yandell Road Signal Installation at North Old Canton Rd.
Madison County
STP-7024-00(001)LPA 109649/701000
Benchmark Engineering & Surveying, LLC
10/9/2024

MDOT Process Item Description	No.	Estimated Hours									
	Sheets	Principal	Project Manager	Project Engineer	Hydraulics Engineer	Sr. Engineer Intern	Engineer Intern	Survey Party Chief	Survey CAD Tech	Total Hours	Total Hours
Field Review											
Print and Distribute Plans			1.0			1.0				2.0	2.0
Conduct Plan in Hand review		6.0	6.0	6.0	6.0	6.0				30.0	30.0
Prepare Field Review Report			4.0							4.0	4.0
Monthly Progress Reports (8 @ .5 hr)			4.0								
Coordination with Adjacent Firms		20.0	32.0							52.0	52.0
										0.0	-----
Office Review											
Print Plans and Specifications				8.0						8.0	8.0
Compile Design Notebook			4.0	16.0						20.0	20.0
Prepare ROW/Util Status Report			4.0							4.0	4.0
Conduct Plan Review		8.0	8.0	8.0	8.0					32.0	32.0
Prepare Office Review Report				4.0						4.0	4.0
Monthly Progress Reports (12 @ .5 hr)			6.0								
Coordination with Adjacent Firms		20.0	40.0							60.0	60.0
										0.0	-----
PS&E Assembly											
MDOT Coordination			24.0							24.0	24.0
Quality Control		12.0								12.0	12.0

Total Hours	66.0	133.0	42.0	14.0	7.0						252.0
Raw Labor Rates	\$84.14	\$62.50	\$43.27	\$57.69	\$38.65	\$33.65	\$38.11				
Labor Cost	5553.2	8312.5	1817.3	807.7	270.6						16,761.29

	Overhead	%	117.31%			\$19,662.67
	Fixed Fee	%	12.00%			\$4,370.88
	FCCM Overhead	%	0.00%			\$0.00

Direct Costs:	Qty.	Unit Price ¹	
Mileage			
Meals			
Lodging			
Postage			
Supplies			
Reproductions			
Other			

¹ See State Travel Handbook

Total Direct Costs:		
	Prime Total	\$40,794.83
	Subconsultant A	
	Subconsultant B	
	Subconsultant Total	
	Project Total	\$40,794.83

Environmental Sheet

Yandell Road Signal Installation at North Old Canton Rd.

Madison County

STP-7024-00(001)LPA 109649/701000

Benchmark Engineering & Surveying, LLC

10/9/2024

MDOT Process Item Description	No.	Estimated Hours								Total Hours
	Sheets	Principal	Project Manager	Project Engineer	Hydraulics Engineer	Sr. Engineer Intern	Engineer Intern	Survey Party Chief	Survey CAD Tech	
Environmental Documentation										-----
Wetland Investigation										
ENV-160										
Permits										-----
NPDES										
USACE										
Quality Control & Coordination		12.0	20.0				12.0			44.0
Total Hours		12.0	20.0				12.0			44.0

Raw Labor Rates		\$84.14	\$62.50	\$43.27	\$57.69	\$38.65	\$33.65	\$38.11	\$38.75	
Labor Cost		1009.7	1250.0				403.8			2,663.48
						Overhead	%	117.31%		\$3,124.53
						Fixed Fee	%	12.00%		\$694.56
						FCCM Overhead	%	0.00%		\$0.00

<u>Direct Costs:</u>	Qty.	Unit Price ¹
Mileage		
Meals		
Lodging		
Postage		
Supplies		
Reproductions		
Other		

¹ See State Travel Handbook

Total Direct Costs:

Prime Total		\$6,482.57
Subconsultant A		
Subconsultant B	\$31,500.00	
Subconsultant Total		\$31,500.00
Project Total		\$37,982.57

Geotechnical Sheet

Yandell Road Signal Installation at North Old Canton Rd.
Madison County
STP-7024-00(001)LPA 109649/701000
Benchmark Engineering & Surveying, LLC
10/9/2024

MDOT Process Item Description	No.	Estimated Hours									Total Hours	Total Hours
	Sheets	Principal	Project Manager	Project Engineer	Hydraulics Engineer	Sr. Engineer Intern	Engineer Intern	Survey Party Chief	Survey CAD Tech	Total Hours		
Geotechnical Field Investigation											0.0	
Coordinate Field Investigation											0.0	
Data Assimilation											0.0	
Pile Capacities											0.0	
Report Preparation											0.0	
Geotechnical Coordination		2.0	16.0								18.0	18.0
Total Hours		2.0	16.0									18.0

Raw Labor Rates		\$84.14	\$62.50	\$43.27	\$57.69	\$38.65	\$33.65	\$38.11	\$38.75		
Labor Cost		168.3	1000.0								1,168.28
							Overhead	%	117.31%		\$1,370.51
							Fixed Fee	%	12.00%		\$304.65
							FCCM Overhead	%	0.00%		\$0.00

<u>Field and Lab.</u>	Qty.	Unit Price ¹

Total Direct Costs:

Prime Total			\$2,843.44
Subconsultant A		\$29,025.46	
Subconsultant B			
Subconsultant Total			\$29,025.46
Project Total			\$31,868.90

Roadway Sheet

Yandell Road Signal Installation at North Old Canton Rd.
 Madison County
 STP-7024-00(001)LPA 109649/701000
 Benchmark Engineering & Surveying, LLC
 10/9/2024

MDOT Process Item Description	No.		Estimated Hours							Total Hours
	Sheets	Principal	Project Manager	Project Engineer	Hydraulics Engineer	Sr. Engineer Intern	Engineer Intern	Survey Party Chief	Survey CAD Tech	
Field Review										-----
Horizontal Alignment Design										-----
Mainline			12.0	32.0						66.0
Minor Intersecting Roads			6.0	16.0						22.0
Vertical Alignment Design										-----
Mainline-New Alignment and/or Regrade Existing Lanes			8.0	40.0						48.0
Cross Sections										-----
Run Pattern Lines						4.0				4.0
Cut Existing Cross Sections						16.0				16.0
Evaluate/Run Shape Files						4.0				4.0
Determine Proposed Template Criteria						16.0				16.0
Generate Proposed Templates						12.0				12.0
Determine Constructability Issues			60.0							60.0
Adjust Cross Sections For Revised Bridge Recommendations						8.0				8.0
Phased Construction Details			28.0			40.0				68.0
Preliminary Earthwork Calculations			4.0	12.0						16.0
Plan Profile Sheets										-----
Sheet Clean-Up and Organization			2.0			12.0				14.0
Add Notes, Bridges, & Pipes In Profile View			2.0			16.0				18.0
Adjust Profile for Revised Bridge Recommendations			1.0			6.0				7.0
Erosion Control Sheets				4.0		6.0				10.0
Miscellaneous Sheets										-----
Special Design Sheets (Signal)			4.0	20.0		32.0				56.0
Conceptual Permanent Striping			4.0			12.0				16.0
Conceptual Permanent Signing Plan			2.0			8.0				10.0

Traffic Control Plan										-----
Evaluate Construction Phasing			32.0			8.0				40.0
TCP Sheets			2.0			32.0				34.0
TCP Typical Sections			2.0			16.0				18.0

Revise Plans Per Conceptual Review			4.0			16.0				20.0

QA/QC		24.0	54.0							78.0
Office Review										-----
Typical Sections										-----
Add Paving Details & Notes						4.0				4.0

Summary of Quantity Sheets										-----
Create SQ Sheets						2.0				2.0
Select Appropriate Pay Items			2.0			6.0				8.0
Add Footnotes			2.0			4.0				6.0

Estimated Quantity Sheets										-----
Earthwork (phased if necessary)			2.0			24.0				26.0
Drainage Structures						8.0				8.0
Permanent Erosion Control						2.0				2.0
Traffic Control				6.0						6.0
Pavement Marking (permanent and temporary)				4.0						4.0
Removal Items				4.0						4.0
Side Drains				2.0						2.0
Guardrail				4.0						4.0
Junction Boxes										
Box Culverts										
Bridge End Pavement			2.0	4.0						6.0
Permanent Signing				2.0						2.0
Hydraulic Design Data				2.0						2.0

Roadway Sheet

Yandell Road Signal Installation at North Old Canton Rd.
 Madison County
 STP-7024-00(001)LPA 109649/701000
 Benchmark Engineering & Surveying, LLC
 10/9/2024

Incidental Construction Items				4.0						4.0

Quantity Calculations			4.0	24.0						28.0

Plan Profile Sheets										-----
Sheet Clean-up and Organization						8.0				8.0
Design & Place Permanent Erosion Control Items						4.0				4.0
Place Earthwork Information (phased if necessary)						8.0				8.0

Traffic Control Detail Sheets										-----
Develop Phasing Narrative (if necessary)			4.0	20.0						24.0
Construction Signing Detail				2.0		12.0				14.0
TCP Sheets						20.0				20.0
TCP Typical Sections						8.0				8.0
Address Corrections From MDOT TCP Check						2.0				2.0

Special Design Sheets										-----
Erosion Control Sheets(including plan-profile EC sheets)						16.0				16.0
						4.0				4.0

QA/QC		24.0	60.0							84.0

Submit Office Review Plans										-----
2 Multi-Page PDF Files For Plans & Cross Sections				2.0						2.0
Complete/Submit Phase B Checklist			2.0							2.0
Submit Quantity Calculations (1 multi-page pdf)				2.0						2.0
Submit CADD Files										-----

Total Hours		48.0	305.0	206.0		396.0				977.0
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		\$84.14	\$62.50	\$43.27	\$57.69	\$38.65	\$33.65	\$38.11	\$38.75	
Raw Labor Rates		4038.7	19062.5	8913.6		15305.4				47,320.24
Labor Cost										
						Overhead	%	117.31%		\$55,511.37
						Fixed Fee	%	12.00%		\$12,339.79
						FCCM Overhead	%	0.00%		\$0.00

Direct Costs:	Qty.	Unit Price ¹
Mileage		
Meals		
Lodging		
Postage		
Supplies		
Reproductions		
Other		

¹ See State Travel Handbook

Total Direct Costs:

Prime Total	\$115,171.41
Subconsultant A	
Subconsultant B	
Subconsultant Total	
Project Total	\$115,171.41

Bridge Sheet

Yandell Road Signal Installation at North Old Canton Rd.
 Madison County
 STP-7024-00(001)LPA 109649/701000
 Benchmark Engineering & Surveying, LLC
 10/9/2024

MDOT Process Item Description	No.		Estimated Hours							Total Hours
	Sheets	Principal	Project Manager	Project Engineer	Hydraulics Engineer	Sr. Engineer Intern	Engineer Intern	Survey Party Chief	Survey CAD Tech	
Field Review										-----
Bridge Plans (Widening/New)										-----
Index, Quantities, & Notes			2.0			16.0				18.0
General Plan & Elevation			3.0			12.0				15.0
Abutment & Substructure			4.0			16.0				20.0
Pile Layout			2.0			12.0				14.0
Framing Plan & Girder Schedule			4.0			12.0				16.0
Prestressed Girder Details			2.0			8.0				10.0
Deck Slabs			1.0			8.0				9.0
Site Visit			4.0		4.0	4.0				12.0
QA/QC		12.0	52.0							64.0
Office Review										-----
Bridge Plans (Widening/New)										-----
Index, Quantities, & Notes						12.0				12.0
Substructure Re-Design (Using Precast Slabs for Super.)			40.0			60.0				
Load Rating			8.0							8.0
Constructability Review			40.0							40.0
QA/QC		12.0	60.0							72.0
Submit Office Review Plans										-----
2 Multi-Page PDF Files For Plans & Cross Sections			1.0	2.0						3.0
Complete/Submit Phase B Checklist			4.0							4.0
Submit Quantity Calculations (1 multi-page pdf)			1.0	4.0						5.0
Submit CADD Files				1.0						1.0
Final Plans & Specifications (Bridge)			12.0			4.0				
Bid Phase Administration (Bridge)			16.0							16.0

Totals	0.0	24.0	256.0	7.0	4.0	164.0	0.0	0.0	0.0	339.0
Total Hours		24.0	256.0	7.0	4.0	164.0				339.0
Raw Labor Rates		\$84.14	\$62.50	\$43.27	\$57.69	\$38.65	\$33.65	\$38.11	\$38.75	
Labor Cost		2019.4	16000.0	302.9	230.8	6338.6				24,891.61

Overhead	%	117.31%	\$29,200.35
Fixed Fee	%	12.00%	\$6,491.03
FCCM Overhead	%	0.00%	\$0.00

Direct Costs:	Qty.	Unit Price ¹
Mileage		
Meals		
Lodging		
Postage		
Supplies		
Reproductions		
Other		

¹ See State Travel Handbook

Total Direct Costs:

Prime Total	\$60,582.99
Subconsultant A	[]
Subconsultant B	[]
Subconsultant Total	[]
Project Total	\$60,582.99

Hydraulics Sheet

Yandell Road Signal Installation at North Old Canton Rd.
 Madison County
 STP-7024-00(001)LPA 109649/701000
 Benchmark Engineering & Surveying, LLC
 10/9/2024

MDOT Process/Item Description	No. Sheets	Estimated Hours								Total Hours
		Principal	Project Manager	Project Engineer	Hydraulics Engineer	Sr. Engineer Intern	Engineer Intern	Survey Party Chief	Survey CAD Tech	
Field Review										-----
A. Structure Recommendations					4.0					-----
Design recommendations culvert and cross drains					4.0					4.0
Drainage details							2.0			2.0
B. Storm Sewer Design					16.0					-----
Design data for Structures					4.0					4.0
Drainage details							2.0			2.0
C. Temporary Drainage Design					8.0		4.0			-----
Bioswale Design										
D. Sediment Basin Design					6.0					6.0
E. Hydraulic Models and Calculations					60.0					-----
Calculate D.A. & Flow Rate For Cross Drains, Side Drains, & Ditches					6.0					6.0
Develop Storm Drain Models					12.0					12.0
F. Hydraulic Report					16.0		4.0			20.0
G. No-Rise/No-Impact Certification					4.0					4.0
Preliminary Erosion Control Sheets					2.0		4.0			6.0
Typical Sections					2.0		4.0			6.0
QA Review		4.0	24.0							28.0
Cost Estimate										-----
Office Review										-----
General Notes										
Summary of Quantities										
Cross-Sections Draw Drainage Structures On Cross-Sections										
Cross-Sections Adjust Cross-Sections for pavement recommendation										
Drainage Detail Sheets (1"=20')										
Draw Storm Drain Inlets & Pipes In Plan/Profile View										
Add Drainage Notes In Plan/Profile View										
Cross Sections										
Erosion Control Details										
Standard Drawings										
Special Design Details										
Special Provisions										
QA Review										
Office Review										-----
Update opinion of Probable Cost										
Revise plans/special provisions per City comments										
Estimated Quantities										
Plan Sheets 1"=20'										
Misc. Details										
Quality Control										-----
Total Hours	Total Hours	4.0	24.0		144.0		20.0			100.0

Raw Labor Rates	\$84.14	\$62.50	\$43.27	\$57.69	\$38.65	\$33.65	\$38.11	\$38.75	
Labor Cost	336.6	1500.0		8307.4		673.0			10,816.92
						Overhead	%	117.31%	\$12,689.33
						Fixed Fee	%	12.00%	\$2,820.75
						FCCM Overhead	%	0.00%	\$0.00

Direct Costs:	Qty.	Unit Price ¹
Mileage		
Meals		
Lodging		
Postage		
Supplies		
Reproductions		
Other		

Total Direct Costs:

Prime Total \$26,327.00

Subconsultant A	
Subconsultant B	
Subconsultant Total	

Project Total \$26,327.00

Survey Sheet

Yandell Road Signal Installation at North Old Canton Rd.
Madison County
STP-7024-00(001)LPA 109649/701000
Benchmark Engineering & Surveying, LLC
10/9/2024

MDOT Process Description	Item	No. Sheets	Estimated Hours								Total Hours
			Principal	Project Manager	Project Engineer	Hydraulics Engineer	Sr. Engineer Intern	Engineer Intern	Survey Party Chief	Survey CAD Tech	
Field Review											
	Gather Property Owner Information from Tax Records; to Determine ROW Limits (Property determination at a later date)									24.0	24.0
	Property Owner Interview & Questionnaire (x Properties)										
	Establish/Verify the Primary Horizontal & Vertical Control								8.0		8.0
	Establish Secondary Control Points as a Supplement to the Primary Control								8.0		8.0
	Establish and Verify Approx. x TBM's (Temporary Benchmarks)								4.0		4.0
	Perform Topographic Survey of Main Line (1,000 LF @ 50' Intervals)								20.0		20.0
	Layout and Perform Cross Sections of Main Line (1,000 LF @ 50' Intervals)								10.0		10.0
	Perform Topographic Survey of Intersecting Streets (2 side roads - 1000 LF @ 50' Intervals)								28.0		28.0
	Layout and Perform Cross Sections of Side Roads (2 side roads - 1,000 LF @ 50' Intervals)								8.0		8.0
	Traverse, Profile, & Section Major Drainage Channels (20 Locations - not within Floodway Limits)								8.0		8.0
	Utility Mapping - Locate Underground Utilities per MS. One Call System/Compiling Utility Drawings from Owners - Municipalities								16.0		16.0
	Develop Digital Terrain Model									8.0	8.0
	Generate Finalized Existing Conditions Drawing									40.0	40.0
	Quality Control		20.0	16.0							36.0
Total Hours			20.0	16.0					110.0	72.0	218.0

Raw Labor Rates	\$84.14	\$62.50	\$43.27	\$57.69	\$38.65	\$33.65	\$38.11	\$38.75	
Labor Cost	1682.8	1000.0					4192.1	2790.0	9,664.90
Overhead							%	117.31%	\$11,337.89
Fixed Fee							%	12.00%	\$2,520.34
FCCM Overhead							%	0.00%	\$0.00

Direct Costs:	Qty.	Unit Price ¹
Mileage		
Meals		
Lodging		
Postage		
Supplies		
Reproductions		
Other		

¹ See State Travel Handbook

Total Direct Costs:

Prime Total	\$23,523.13
Subconsultant A	
Subconsultant B	
Subconsultant Total	
Project Total	\$23,523.13

PS&E / Advertisement

Yandell Road Signal Installation at North Old Canton Rd.

Madison County

STP-7024-00(001)LPA 109649/701000

Benchmark Engineering & Surveying, LLC

10/9/2024

MDOT Process Description	Item	Estimated Hours									Total Hours
		No. Sheets	Principal	Project Manager	Project Engineer	Hydraulics Engineer	Sr. Engineer Intern	Engineer Intern	Survey Party Chief	Survey CAD Tech	
PS&E Assembly											-----
	Right of Way Certification			4.0							4.0
	Utility Certification			8.0							8.0
	Encroachment Certification			4.0							4.0
	Hazardous Waste Certification			1.0							1.0
	Asbestos Abatement Certification			1.0							1.0
	Compose Letters			4.0							4.0
	Compile Forms			4.0							4.0
	Print Plans			1.0			2.0				3.0
	Assemble Specifications			4.0			8.0				12.0
	Material Checklist			4.0							4.0
	MDOT Coordination			8.0							8.0
Advertisement											-----
	Print Plans and Specifications						2.0				2.0
	Prepare Advertisement			1.0			1.0				2.0
	Bidder Coordination			12.0							12.0
	Receive & Evaluate Bids			12.0							12.0
	Assemble Bids and Submit			8.0			2.0				10.0
	Quality Control		12.0								12.0
Total Hours			12.0	76.0			15.0				103.0

	Raw Labor Rates	\$84.14	\$62.50	\$43.27	\$57.69	\$38.65	\$33.65	\$38.11	\$38.75	
	Labor Cost	1009.7	4750.0			579.8				6,339.43
						Overhead	%	117.31%		\$7,436.79
						Fixed Fee	%	12.00%		\$1,653.15
						FCCM Overhead	%	0.00%		\$0.00

Direct Costs:	Qty.	Unit Price ¹
Mileage		
Meals		
Lodging		
Postage		
Supplies		
Reproductions		
Other		

¹ See State Travel Handbook

Total Direct Costs:

Prime Total \$15,429.36

Subconsultant A	
Subconsultant B	
Subconsultant Total	

Project Total \$15,429.36

Geotechnical Sheet

Yandell Road Widening at N. Old Canton Road
STP-7024-00(001)LPA 109649/701000
Burns Cooley Dennis, Inc.
10/4/2024

MDOT Process Item Description	Estimated Hours								Total Hours	Total Hours	
	Project Manager	Sr. Engineer	Project Engineer	Engineer	Draftsman	Technician	Clerical	Labor Classification			
Geotechnical Field Investigation											
Boring Layout			1.0	2.0			24.0			27.0	27.0
Coordinate Field Investigation	2.0		2.0	2.0	3.0					9.0	9.0
Coordinate Lab Investigation	2.0		2.0	2.0						6.0	6.0
Examine Samples		1.0	4.0	2.0						7.0	7.0
Data Assimilation/Log Preparation		2.0	4.0	3.0	5.0					14.0	14.0
Report Preparation	6.0	2.0	16.0	12.0	3.0		10.0			49.0	49.0
Totals	10.0	5.0	29.0	23.0	11.0	24.0	10.0	0.0		112.0	112.0
Total Hours	10.0	5.0	29.0	23.0	11.0	24.0	10.0			112.0	112.0

Raw Labor Rates	\$84.00	\$70.00	\$65.00	\$52.00	\$32.00	\$30.00	\$23.00	\$0.00	
Labor Cost	\$840.00	\$350.00	\$1,885.00	\$1,196.00	\$352.00	\$720.00	\$230.00		\$5,573.00
						Overhead	%	173.25%	\$9,655.22
						Fixed Fee	%	12.00%	\$1,827.39
						FCCM Overhead	%	2.19%	\$122.05

Field and Lab.	Qty.	Unit Price ¹	
Field Equip. Mob/Demot	40	\$7.50	\$300.00
Drilling in Roadway, 0-5 ft	35	\$20.00	\$700.00
Drilling Bridges, 70-150 ft	80	\$28.55	\$2,284.00
Split Spoon Sampling with Stand Pen Test (SPT)	8	\$25.00	\$200.00
Undisturbed Sampling	8	\$25.00	\$200.00
Traffic Control	2	\$1,400.00	\$2,800.00
Unconfined Compression Test T 208	4	\$60.00	\$240.00
Triaxial Compression Test (UU) T 296	4	\$90.00	\$360.00
Sand Triaxial Test (3-pt)	5	\$340.00	\$1,700.00
pH of Soils MT-30	2	\$40.00	\$80.00
Soil Resistivity MT-47	2	\$75.00	\$150.00
Atterberg Limits T 89 & T 90	15	\$65.00	\$975.00
Water Content T 265	29	\$8.00	\$232.00
% Finer Than The No. 200 Sieve T 11	5	\$50.00	\$250.00
Shrinkage Factor (Volume Change)	2	\$75.00	\$150.00
Soluble Sulfate Ion In Soils & Water MT-5E	8	\$150.00	\$1,200.00

Total Direct Costs: \$11,821.00

Direct Costs:	Quantity	Unit	Unit Price ¹	Amount
Mileage	40	Miles	\$0.67	\$26.80

¹ See State Travel Handbook

Total Direct Costs: \$26.80

Project Total \$29,025.46



October 9, 2024

Via email: lburt@benchmarkms.net

Lon Burt, P.E.
Benchmark Engineering & Surveying, LLC
660 Katherine Drive, Suite 302
Flowood, MS 39232

**RE: Intersection Improvements at N. Old Canton Rd. & Yandell Rd.
Madison County, MS
Proposed Scope of Work and Budget Estimate**

Dear Mr. Burt:

We have reviewed the information that you provided for the project in Madison County, MS. This project will widen and improve the intersection of Old Canton Road and Yandell Road. We have developed the following scope of work and budget estimates for assisting with the following environmental activities outlined below.

[Scope of Work](#)

Wetland and Other Waters Assessment

We propose to complete a wetland and other waters assessment within the boundaries of the project to determine the extent and location of any jurisdictional wetlands and/or "other waters of the United States" that may exist under the U.S. Army Corps of Engineers (USACE), Vicksburg District's purview. Once this is established, we would submit a preliminary map to you for review. If acceptable, we would then complete the mapping and draft the wetland and other waters report. This report would contain the required information to coordinate our findings with the USACE for the issuance of a jurisdictional determination, if needed. This will define the extent and location of any jurisdictional waters on the property and include concurrence from the USACE after their review.

Prior to submitting any documentation to the USACE, we would first submit our initial findings to you for review and approval as well as to discuss any potential permit/mitigation requirements that may be needed prior to construction. To complete the assessment, we propose an hourly not to exceed fee of \$10,000.00.

Nationwide Permit

We anticipate that the U.S. Army Corps of Engineers, Vicksburg District (USACE) will require the project to be authorized under a Nationwide Permit. This includes preparation of the pre-construction notification (PCN) submittal, agency meetings, and agency coordination required to complete the permit action. If an individual permit from the USACE is required, we would provide a separate budget specific to the permitting actions that would be required. To complete the permitting, we propose an hourly not to exceed fee of \$10,000.00.

USFWS Threatened & Endangered Species Coordination

We would complete the field surveys for listed species during the wetland delineation. Please note that if specialized surveys, including but not limited to audible, mist netting, or aquatic, are required we would coordinate with your company and submit a supplemental budget. To complete the coordination, we propose an hourly not to exceed fee of \$3,500.00.

Phase I Cultural Resource Survey

As part of the permitting process, the USACE will require a desktop review of the project area. The USACE Regulatory Division could require a cultural resources survey within jurisdictional waters and adjacent upland buffers for all permit actions as a condition of the Section 404 Wetlands Permit process. If additional survey requirements are necessary, we would submit an additional budget at that time. We would complete the cultural survey for \$4,500.00.

Conclusion

We propose to complete the wetland/other waters assessment, Nationwide Permit, USFWS coordination, and cultural resources survey on an hourly basis with an estimated not-to-exceed budget of \$31,500.00.

Exclusions and Limitations

This SOW does not include the following services. These services can be provided under a separate SOW and budget if necessary.

- Section 404 Individual Wetland Permit from USACE
- Compensatory mitigation and/or credit reservation

If compensatory mitigation is required, the purchase of wetland/stream credits would be a transaction between the client and the mitigation bank. Headwaters neither owns nor brokers mitigation credits.

We appreciate the opportunity to assist with the project. If you have any questions or need any additional information, please do not hesitate to contact us. If the scope and budget are acceptable, please sign below and return.

Sincerely,

A handwritten signature in black ink, appearing to read "J. Clay Cromwell". The signature is fluid and cursive, with a large initial "J" and "C".

J. Clay Cromwell
Headwaters, Inc.