

Municipality CHAMPAIGN COUNTY HIGHWAY DEPT.	LOCAL AGENCY	 Illinois Department of Transportation Preliminary Engineering Services Agreement For Motor Fuel Tax Funds	CONSULTANT	Name WHKS & CO. ENGINEERING
Township				Address 3695 6th St. Frontage Rd. W, Ste. A
County CHAMPAIGN				City SPRINGFIELD
Section 19-00077-00-BR				State ILLINOIS 62703

THIS AGREEMENT is made and entered into this _____ day of _____, 2019 between the above Local Agency (LA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the improvement of the above SECTION. Motor Fuel Tax Funds, allotted to the LA by the State of Illinois under the general supervision of the State Department of Transportation, hereinafter called the "DEPARTMENT", will be used entirely or in part to finance ENGINEERING services as described under AGREEMENT PROVISIONS.

Section Description

Name County Highway 13 (2500E, 560N) over Little Vermilion Ditch – S.N. 010-0224 (exist.)

Route CH 13 Length 0.189 Mi. 1000 FT Structure No. 010-0224 (exist.)
010-4589 (prop.)

Termini From ± 1000' south of structure to ± 1000' north of structure

Description:

REMOVE EXISTING BRIDGE AND CONSTRUCT NEW BRIDGE AND APPROACH ROADWAY AS NECESSARY.

Agreement Provisions

The Engineer Agrees,

1. To perform or be responsible for the performance of the following engineering services for the LA, in connection with the proposed improvements herein before described, and checked below:
 - a. ☒ Make such detailed surveys as are necessary for the preparation of detailed roadway plans
 - b. ☒ Make stream and flood plain hydraulic surveys and gather high water data, and flood histories for the preparation of detailed bridge plans.
 - c. ☒ Make or cause to be made such soil surveys or subsurface investigations including borings and soil profiles and analyses thereof as may be required to furnish sufficient data for the design of the proposed improvement. Such investigations are to be made in accordance with the current requirements of the DEPARTMENT.
 - d. ☐ Make or cause to be made such traffic studies and counts and special intersection studies as may be required to furnish sufficient data for the design of the proposed improvement.
 - e. ☒ Prepare Army Corps of Engineers Permit, Department of Natural Resources-Office of Water Resources Permit, Bridge waterway sketch, and/or Channel Change sketch, Utility plan and locations, and Railroad Crossing work agreements.
 - f. ☒ Prepare Preliminary Bridge design and Hydraulic Report, (including economic analysis of bridge or culvert types) and high water effects on roadway overflows and bridge approaches.
 - g. ☒ Make complete general and detailed plans, special provisions, proposals and estimates of cost and furnish the LA with five (5) copies of the plans, special provisions, proposals and estimates. Additional copies of any or all documents, if required, shall be furnished to the LA by the ENGINEER at his actual cost for reproduction.
 - h. ☐ Furnish the LA with survey and drafts in quadruplicate of all necessary right-of-way dedications, construction easement and borrow pit and channel change agreements including prints of the corresponding plats and staking as required.

Note: Four copies to be submitted to the Regional Engineer

- i. ☒ Assist the LA in the tabulation and interpretation of the contractors' proposals
 - j. ☒ Prepare the necessary environmental documents in accordance with the procedures adopted by the DEPARTMENT's Bureau of Local Roads & Streets.
 - k. ☐ Prepare the Project Development Report when required by the DEPARTMENT.
- (2) That all reports, plans, plats and special provisions to be furnished by the ENGINEER pursuant to the AGREEMENT, will be in accordance with current standard specifications and policies of the DEPARTMENT. It is being understood that all such reports, plats, plans and drafts shall, before being finally accepted, be subject to approval by the LA and the DEPARTMENT.
- (3) To attend conferences at any reasonable time when requested to do so by representatives of the LA or the Department.
- (4) In the event plans or surveys are found to be in error during construction of the SECTION and revisions of the plans or survey corrections are necessary, the ENGINEER agrees that he will perform such work without expense to the LA, even though final payment has been received by him. He shall give immediate attention to these changes so there will be a minimum delay to the Contractor.
- (5) That basic survey notes and sketches, charts, computations and other data prepared or obtained by the Engineer pursuant to this AGREEMENT will be made available, upon request, to the LA or the DEPARTMENT without cost and without restriction or limitations as to their use.
- (6) That all plans and other documents furnished by the ENGINEER pursuant to this AGREEMENT will be endorsed by him and will show his professional seal where such is required by law.

The LA Agrees,

1. ~~To pay the ENGINEER as compensation for all services performed as stipulated in paragraphs 1a, 1g, 1i, 2, 3, 5 and 6 in accordance with one of the following methods indicated by a check mark: SEE ADDENDUM~~
- a. ☒ A sum of money equal to _____ percent of the awarded contract cost of the proposed improvement as approved by the DEPARTMENT. SEE ADDENDUM
 - b. ☐ A sum of money equal to the percent of the awarded contract cost for the proposed improvement as approved by the DEPARTMENT based on the following schedule:

Schedule for Percentages Based on Awarded Contract Cost

Awarded Cost	Percentage Fees	(see note)
Under \$50,000	_____	%
	_____	%
	_____	%
	_____	%
	_____	%

Note: Not necessarily a percentage. Could use per diem, cost-plus or lump sum.

2. ~~To pay for services stipulated in paragraphs 1b, 1c, 1d, 1e, 1f, 1h, 1j & 1k of the ENGINEER AGREES at actual cost of performing such work plus _____ percent to cover profit, overhead and readiness to serve "actual cost" being defined as material cost plus payroll, insurance, social security and retirement deductions. Traveling and other out-of-pocket expenses will be reimbursed to the ENGINEER at his actual cost. Subject to the approval of the LA, the ENGINEER may sublet all or part of the services provided under the paragraph 1b, 1c, 1d, 1e, 1f, 1h, 1j & 1k. If the ENGINEER sublets all or part of this work, the LA will pay the cost to the ENGINEER plus a five (5) percent service charge. SEE ADDENDUM~~
- "Cost to Engineer" to be verified by furnishing the LA and the DEPARTMENT copies of invoices from the party doing the work. The classifications of the employees used in the work should be consistent with the employee classifications for the services performed. If the personnel of the firm, including the Principal Engineer, perform routine services that should normally be performed by lesser-salaried personnel, the wage rate billed for such services shall be commensurate with the work performed.

3. That payments due the ENGINEER for services rendered in accordance with this AGREEMENT will be made as soon as practicable after the services have been performed in accordance with the following schedule:

- a. ~~Upon completion of detailed plans, special provisions, proposals and estimate of cost being the work required by paragraphs 1a through 1g under THE ENGINEER AGREES to the satisfaction of the LA and their approval by the DEPARTMENT, 90 percent of the total fee due under this AGREEMENT based on the approved estimate of cost.~~
- b. ~~Upon award of the contract for the improvement by the LA and its approval by the DEPARTMENT, 100 percent of the total fee due under the AGREEMENT based on the awarded contract cost, less any amounts paid under "a" above.~~

By Mutual agreement, partial payments, ~~not to exceed 90 percent of the amount earned,~~ may be made from time to time as the work progresses.

4. That, should the improvement be abandoned at any time after the ENGINEER has performed any part of the services provided for in paragraphs 1a, through 1h and prior to the completion of such services, the LA shall reimburse the ENGINEER for his actual costs plus 180 percent incurred up to the time he is notified in writing of such abandonment - "actual cost" being defined as material cost plus payrolls, insurance, social security and retirement deductions.
5. That, should the LA require changes in any of the detailed plans, specifications or estimates except for those required pay the ENGINEER for such changes on the basis of actual cost plus 180 percent to cover profit, overhead and readiness to serve - "actual cost" being defined as in paragraph 4 of THE LA AGREES. It is understood that "changes" as used in this paragraph shall in no way relieve the ENGINEER of his responsibility to prepare a complete and adequate set of plans and specifications.

It is Mutually Agreed,

1. That any difference between the ENGINEER and the LA concerning their interpretation of the provisions of this Agreement shall be referred to a committee of disinterested parties consisting of one member appointed by the ENGINEER, one member appointed by the LA and a third member appointed by the two other members for disposition and that the committee's decision shall be final.
2. This AGREEMENT may be terminated by the LA upon giving notice in writing to the ENGINEER at his last known post office address. Upon such termination, the ENGINEER shall cause to be delivered to the LA all surveys, permits, agreements, preliminary bridge design & hydraulic report, drawings, specifications, partial and completed estimates and data, if any from traffic studies and soil survey and subsurface investigations with the understanding that all such material becomes the property of the LA. The ENGINEER shall be paid for any services completed and any services partially completed in accordance with Section 4 of THE LA AGREES.
3. That if the contract for construction has not been awarded one year after the acceptance of the plans by the LA and their approval by the DEPARTMENT, the LA will pay the ENGINEER the balance of the engineering fee due to make 100 percent of the total fees due under this AGREEMENT, based on the estimate of cost as prepared by the ENGINEER and approved by the LA and the DEPARTMENT.
4. That the ENGINEER warrants that he/she has not employed or retained any company or person, other than a bona fide employee working solely for the ENGINEER, to solicit or secure this contract, and that he/she has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the ENGINEER, 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 LA shall have the right to annul this contract without liability.

IN WITNESS WHEREOF, the parties have caused the AGREEMENT to be executed in quadruplicate counterparts, each of which shall be considered as an original by their duly authorized officers.

Executed by the LA:

ATTEST: Aaron Ammon
By _____ Clerk
(Seal)

(Municipality/Township/County) of the
State of Illinois, acting by and through its
By Darlene A. Klepper
Title County Executive

Executed by the ENGINEER:

WHKS & Co.

3695 6th Street Frontage Road West, Suite A

Springfield, IL 62703
By [Signature]
Title Vice President

<p>Approved</p> <p>_____ Date Department of Transportation</p> <p>_____ Regional Engineer</p>
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ADDENDUM
Preliminary Engineering Services Agreement
For Motor Fuel Tax Funds

CH 13 (2500E, 560N) over Little Vermilion Ditch
S.N.'s 010-4589 and 010-0224 (exist.)
Champaign County Highway Dept.
Section 19-00077-00-BR
Ayers Township

Add the following sentence to item 1g of THE ENGINEER AGREES to:

Provide to the LA one digital copy of the unsealed final plans in Portable Document Format (PDF), AutoCAD drawing format (DWG) and in Digital Exchange Format (.dxf) at project completion.

Add the scope items to section 1 of THE ENGINEER AGREES to:

- g. Design and analysis of superstructure will be performed by TEG Engineering, LLC. WHKS will coordinate and incorporate superstructure design drawings and details into the final construction plan documents as received from TEG Engineering, LLC, superstructure design consultant.
- i. Review shop drawings for general conformance when applicable.

Revise item 1 and the 1st paragraph of item 2 of THE LA AGREES to read as follows:

The LA AGREES to pay the ENGINEER as compensation for all services performed as stipulated in paragraphs 1a, 1b, 1c, 1e, 1f, 1g, 1i, 1j, 1l, 2, 3, 4, 5 and 6 a sum of money NOT TO EXCEED \$72,300 which includes estimated out-of-pocket expenses of \$10,740 as shown in Attachment A.



ATTACHMENT A

Engineering Estimate Summary		
WHKS Labor Fee (Est)	\$ 58,108.77	84.4%
WHKS Direct Cost (Est)	\$ 500.00	0.7%
(R W Lamb - Survey)	\$ 10,240.00	14.9%
(MES - Soil Borings)	\$ -	0.0%
Contingency 5%	\$ 3,442.44	
Total Engineering Estimate	\$ 72,291.20	

% of Estimated Construction Cost		
Est. Construction Cost	\$ 500,000.00	\$200sf (40X82)
% Const w/o contingency	13.8%	
% Const w contingency	14.5%	

3655 6th Street Frontage Road West, Suite A
Springfield, IL 62793
Phone: (217) 463-WHKS
Fax: (217) 463-8460

Project Data

Client: Champaign County Highway Department

Route: CH 13 over Little Vermilion Ditch

Section No.: 19-00077-00-BR

Structure #'s: 010-0224(E) - 010-4589(P)

Scope: Remove and replace existing triple box culvert with a single-span tub girder bridge. Resurface roadway/shoulders as needed, install guardrail if needed. Perform field survey, obtain soil borings, conduct hydraulic analysis of proposed structure and prepare reports and permits as needed to gain design approval from District. Superstructure design and analysis will be performed by TEG Engineering LLC. Prepare final plans, special provisions and estimates for a local letting, incorporating superstructure design drawings and details from TEG Engineering LLC into final plan documents, using County bridge funding. Assist the county with minor bidding and construction questions as necessary. Letting January 2020.

Item Description	Total Hours	Project Manager	Transportation Eng III	Transportation Eng II	Transportation Eng I	Structural Eng III	Structural Eng II	Structural Eng I	Hydraulic Eng III	Hydraulic Eng II	Engineering Tech III	Engineering Tech II	Engineering Tech I	Land Surveyor	Survey Technician	Admin.
001 Project Administration																
01 Project Admin and Management	8	8														
02 Billing/Invoicing (1 hour/invoice x 6 invoices)	6	6														
01 Sub-Consultant Coordination Meetings (none assumed)	4	4														
	0															
Labor Hours Subtotal	18	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Labor Costs Subtotal	\$ 4,095.00	\$ 4,095.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	5.9%															
002 Reports and Coordination																
01 Abbreviated BCRs - Not req'd	0															
02 Preliminary Bridge and Hydraulic Reports	20			4		2			6		8					
03 Clearinghouse Coordination	0															
04 Project Development Report (Not Req'd)	0															
	0															
Labor Hours Subtotal	20	0	0	4	0	2	0	0	6	0	8	0	0	0	0	0
Labor Costs Subtotal	\$ 2,602.54	\$ -	\$ -	\$ 451.48	\$ -	\$ 359.85	\$ -	\$ -	\$ 897.00	\$ -	\$ 894.40	\$ -	\$ -	\$ -	\$ -	\$ -
	3.6%															
003 Permits and Coordination																
01 ESR (Cultural, Biological, Wetlands)	18	2			8						8					
02 404 Permit (Joint Application Form)	8							4			4					
03 SWPPP (if needed)	14				6						8					
04 Asbestos Determination	2							2								
05 Utility Coordination (Jule Request)	8		2	2							4					
	0															
Labor Hours Subtotal	50	2	2	2	14	0	0	6	0	0	24	0	0	0	0	0
Labor Costs Subtotal	\$ 5,842.59	\$ 455.00	\$ 431.15	\$ 225.75	\$ 1,390.94	\$ -	\$ -	\$ 656.57	\$ -	\$ -	\$ 2,683.20	\$ -	\$ -	\$ -	\$ -	\$ -
	8.5%															
004 Hydraulics and Drainage																
01 Drainage Area/Flows (StreamStats)/Moddy basin	2								2							
02 Prepare Base HECRAS Model	20			2			2		16							
03 Analyze Natural and Existing Condition	20			2			2		16							
04 Analyze Proposed Conditions	14						2		12							
05 Ditch Hydraulics and Special Ditches	8		2	6												
06 Entrance Culverts (Assume 2 Culvert analyzed)	8		2	6												
	0															
Labor Hours Subtotal	72	0	4	16	0	0	8	0	48	0	0	0	0	0	0	0
Labor Costs Subtotal	\$ 10,373.42	\$ -	\$ 862.28	\$ 1,805.96	\$ -	\$ -	\$ 828.17	\$ -	\$ 6,877.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	15.1%															
005 Roadway Design and Plan Preparation																
01 Process Survey Data and Create DTM	14		2	2							10					
02 Roadway Design, Roadside Safety	12		2	4							6					
03 Cover, General Notes, SOQ, Schedules	8			2							6					
03 Typical Sections, Entrance Details	10			2							8					
03 Erosion Control and Drainage Details	10			2							8					
03 Alignment, Ties, Benchmarks, Coordinates	8			2							6					
03 Plan and Profile Sheet	20		2								16					
03 Cross-Sections	14			2							12					
03 Miscellaneous Details	12		2	2							8					
04 Roadway Quantities	18		2	8							8					
	0															
Labor Hours Subtotal	126	0	10	26	0	0	0	0	0	0	90	0	0	0	0	0
Labor Costs Subtotal	\$ 15,152.41	\$ -	\$ 2,155.73	\$ 2,934.69	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ 10,062.00	\$ -	\$ -	\$ -	\$ -	\$ -
	22.0%															



ATTACHMENT A

Engineering Estimate Summary		
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(MES - Soil Borings)	\$ -	0.0%
Contingency 5%	\$ 3,442.44	
Total Engineering Estimate	\$ 72,291.20	

% of Estimated Construction Cost		
Est. Construction Cost	\$ 500,000.00	\$200sf (40X62)
% Const w/o contingency	13.8%	
% Const w contingency	14.5%	

3693 6th Street Frontage Road West, Suite A
Springfield, IL 62793
Phone: (217) 483-9918
Fax: (217) 483-8438

Project Data

Client: Champaign County Highway Department

Route: CH 13 over Little Vermilion Ditch

Section No.: 15-00077-00-BR

Structure #'s: 010-0224(E) - 010-4589(P)

Scope: Remove and replace existing triple box culvert with a single-span tub girder bridge. Resurface roadway/shoulders as needed, install guardrail if needed. Perform field survey, obtain soil borings, conduct hydraulic analysis of proposed structure and prepare reports and permits as needed to gain design approval from District. Superstructure design and analysis will be performed by TEG Engineering LLC. Prepare final plans, special provisions and estimates for a local letting, incorporating superstructure design drawings and details from TEG Engineering LLC into final plan documents, using County bridge funding. Assist the county with minor bidding and construction questions as necessary. Letting January 2020.

Item Description	Total Hours	Project Manager	Transportation Eng. III	Transportation Eng. II	Transportation Eng. I	Structural Eng. III	Structural Eng. II	Structural Eng. I	Hydraulic Eng. III	Hydraulic Eng. II	Engineering Tech III	Engineering Tech II	Engineering Tech I	Land Surveyor	Survey Technician	Asst.
036 Bridge Design and Plan Preparation																
01 Tub Girder Analysis and Design	0															
02 Pier Design	0															
03 Abut Design	12					2	10									
04 General Plan, Notes and Bill of Material	0															
04 Beam Details	0															
04 Railing Details	0															
04 Abutment Details	16						6				10					
04 Pier Details	0															
04 Pile Details	4				2						2					
04 Miscel Details	8				2						6					
05 Bridge Quantities	8						2	4								
Labor Hours Subtotal	48	0	0	0	4	2	16	4	0	0	18	0	0	0	0	0
Labor Costs Subtotal	\$ 5,891.66	\$ -	\$ -	\$ -	\$ 397.41	\$ 359.65	\$ 2,484.50	\$ 437.71	\$ -	\$ -	\$ 2,012.40	\$ -	\$ -	\$ -	\$ -	\$ -
	8.3%															
037 Final Plans, Specification and Estimates																
01 Special Provisions	11	1		2			8									
02 Estimate of Cost	8	1		1			4									
02 Estimate of Time	6	1		1			4									
03 Bid Documents (Local Let)	11	1		4			6									
04 Pre-Final Plan Revisions (Address IDOT comments)	5	1					2				2					
Labor Hours Subtotal	39	5	0	8	0	0	24	0	0	0	2	0	0	0	0	0
Labor Costs Subtotal	\$ 5,578.74	\$ 1,137.50	\$ -	\$ 902.96	\$ -	\$ -	\$ 3,312.66	\$ -	\$ -	\$ -	\$ 223.60	\$ -	\$ -	\$ -	\$ -	\$ -
	8.1%															
038 Miscellaneous/Other																
01 Field Check of Structure	0															
02 Shop Drawing Review (press brake tub girder)	12						12									
03 AASHTOWare Bridge Rating SLRS Form	16						16									
04 Phase 3 Involvement (address minor questions)	4	2				2										
Labor Hours Subtotal	32	2	0	0	0	2	28	0	0	0	0	0	0	0	0	0
Labor Costs Subtotal	\$ 4,879.42	\$ 455.00	\$ -	\$ -	\$ -	\$ 359.65	\$ 3,564.77	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	6.8%															
039 QC/QA																
01 Hydraulic QC/QA	6	6														
02 Roadway QC/QA	6	6														
03 Bridge QC/QA	6	6														
Labor Hours Subtotal	18	18	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Labor Costs Subtotal	\$ 4,095.00	\$ 4,095.00	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
	5.9%															
Total Labor Hours	421	45	16	16	13	6	70	10	0	0	142	0	0	0	0	0
Total Labor Cost	\$ 58,108.77	\$ 10,240.00	\$ 3,449.19	\$ 6,920.65	\$ 1,735.15	\$ 1,078.94	\$ 10,490.09	\$ 1,004.28	\$ 7,774.00	\$ -	\$ 15,673.60	\$ -	\$ -	\$ -	\$ -	\$ -