


Local Agency McHenry County	L O C A L A G E N C Y	 Illinois Department of Transportation	C O N S U L T A N T	Consultant AECOM Technical Services, Inc.
County McHenry				Address 303 E. Wacker Dr., Ste. 1400
Section 10-00377-00-BR				City Chicago
Project No. BRS-011(059)				State IL
Job No. D-91-747-10				Zip Code 60601
Contact Name/Phone/E-mail Address Mr. Benjamin Redding 815-334-4980 BAREdding@co.mchenry.il.us		Preliminary Engineering Services Agreement For Federal Participation		Contact Name/Phone/E-mail Address Dan Manojlovski, P.E. 312-373-6676 dan.manoilovski@aecom.com

THIS AGREEMENT is made and entered into this _____ day of _____, _____ between the above Local Agency (LA) and Consultant (ENGINEER) and covers certain professional engineering services in connection with the PROJECT. Federal-aid funds allotted to the LA by the state of Illinois under the general supervision of the Illinois Department of Transportation (STATE) will be used entirely or in part to finance engineering services as described under AGREEMENT PROVISIONS.

Project Description

Name Deerpass Road (T 59) Route CH 47 Length 0.25 mi Structure No. 056-3029&3030

Termini Over Kishwaukee River main channel and north auxiliary channel 0.7 mi. north of IL Rte 176

Description Addition of Phase III assistance for the replacement of SN 056-3029 and SN 056-3030 with new structure SN 056-3189. Environmental coordination and additional Phase II engineering for the replacement of the structures.

Agreement Provisions

I. THE ENGINEER AGREES,

1. To perform or be responsible for the performance, in accordance with STATE approved design standards and policies, of engineering services for the LA for the proposed improvement herein described.
2. To attend any and all meetings and visit the site of the proposed improvement at any reasonable time when requested by representatives of the LA or STATE.
3. To complete the services herein described within _____ calendar days from the date of the Notice to Proceed from the LA, excluding from consideration periods of delay caused by circumstances beyond the control of the ENGINEER.
4. The classifications of the employees used in the work should be consistent with the employee classifications and estimated man-hours shown in EXHIBIT A. If higher-salaried personnel of the firm, including the Principal Engineer, perform services that are indicated in Exhibit A to be performed by lesser-salaried personnel, the wage rate billed for such services shall be commensurate with the payroll rate for the work performed.
5. That the ENGINEER is qualified technically and is entirely conversant with the design standards and policies applicable for the PROJECT; and that the ENGINEER has sufficient properly trained, organized and experienced personnel to perform the services enumerated herein.
6. That the ENGINEER shall be responsible for the accuracy of the work and shall promptly make necessary revisions or corrections resulting from the ENGINEER's errors, omissions or negligent acts without additional compensation. Acceptance of work by the STATE will not relieve the ENGINEER of the responsibility to make subsequent correction of any such errors or omissions or for clarification of any ambiguities.
7. That all plans and other documents furnished by the ENGINEER pursuant to this AGREEMENT will be endorsed by the ENGINEER and will affix the ENGINEER's professional seal when such seal is required by law. Plans for structures to be built as a part of the improvement will be prepared under the supervision of a registered structural engineer and will affix structural engineer seal when such seal is required by law. It will be the ENGINEER's responsibility to affix the proper seal as required by the Bureau of Local Roads and Streets manual published by the STATE.
8. That the ENGINEER will comply with applicable federal statutes, state of Illinois statutes, and local laws or ordinances of the LA.

9. The undersigned certifies neither the ENGINEER nor I have:
- a. employed or retained for commission, percentage, brokerage, contingent fee or other considerations, any firm or person (other than a bona fide employee working solely for me or the above ENGINEER) to solicit or secure this AGREEMENT,
 - b. agreed, as an express or implied condition for obtaining this AGREEMENT, to employ or retain the services of any firm or person in connection with carrying out the AGREEMENT or
 - c. paid, or agreed to pay any firm, organization or person (other than a bona fide employee working solely for me or the above ENGINEER) any fee, contribution, donation or consideration of any kind for, or in connection with, procuring or carrying out the AGREEMENT.
 - d. are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal department or agency,
 - e. have not within a three-year period preceding the AGREEMENT been convicted of or had a civil judgment rendered against them for commission of fraud or criminal offense in connection with obtaining, attempting to obtain or performing a public (Federal, State or local) 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,
 - f. are not presently indicted for or otherwise criminally or civilly charged by a government entity (Federal, State or local) with commission of any of the offenses enumerated in paragraph (e) and
 - g. have not within a three-year period preceding this AGREEMENT had one or more public transactions (Federal, State or local) terminated for cause or default.
10. To pay its subconsultants for satisfactory performance no later than 30 days from receipt of each payment from the LA.
11. To submit all invoices to the LA within one year of the completion of the work called for in this AGREEMENT or any subsequent Amendment or Supplement.
12. To submit BLR 05613, Engineering Payment Report, to the STATE upon completion of the project (Exhibit B).
13. Scope of Services to be provided by the ENGINEER:
- Make such detailed surveys as are necessary for the planning and design of the PROJECT.
 - Make stream and flood plain hydraulic surveys and gather both existing bridge upstream and downstream high water data and flood flow histories.
 - Prepare applications for U.S. Army Corps of Engineers Permit, Illinois Department of Natural Resources Office of Water Resources Permit and Illinois Environmental Protection Agency Section 404 Water Quality Certification.
 - Design and/or approve cofferdams and superstructure shop drawings.
 - Prepare Bridge Condition Report and Preliminary Bridge Design and Hydraulic Report, (including economic analysis of bridge or culvert types and high water effects on roadway overflows and bridge approaches).
 - Prepare the necessary environmental and planning documents including the Project Development Report, Environmental Class of Action Determination or Environmental Assessment, State Clearinghouse, Substate Clearinghouse and all necessary environmental clearances.
 - Make such soil surveys or subsurface investigations including borings and soil profiles as may be required to furnish sufficient data for the design of the proposed improvement. Such investigations to be made in accordance with the current Standard Specifications for Road and Bridge Construction, Bureau of Local Roads and Streets Administrative Policies, Federal-Aid Procedures for Local Highway Improvements or any other applicable requirements of the STATE.
 - Analyze and evaluate the soil surveys and structure borings to determine the roadway structural design and bridge foundation.
 - Prepare preliminary roadway and drainage structure plans and meet with representatives of the LA and STATE at the site of the improvement for review of plans prior to the establishment of final vertical and horizontal alignment, location and size of drainage structures, and compliance with applicable design requirements and policies.
 - 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.
 - Complete the general and detailed plans, special provisions and estimate of cost. Contract plans shall be prepared in accordance with the guidelines contained in the Bureau of Local Roads and Streets manual. The special provisions and detailed estimate of cost shall be furnished in quadruplicate.
 - Furnish the LA with survey and drafts in quadruplicate all necessary right-of-way dedications, construction easements and borrow pit and channel change agreements including prints of the corresponding plats and staking as required.

II. THE LA AGREES,

1. To furnish the ENGINEER all presently available survey data and information
2. To pay the ENGINEER as compensation for all services rendered in accordance with this AGREEMENT, on the basis of the following compensation formulas:

Cost Plus Fixed Fee CPFF = 14.5%[DL + R(DL) + OH(DL) + IHDC], or
 CPFF = 14.5%[DL + R(DL) + 1.4(DL) + IHDC], or
 CPFF = 14.5%[(2.3 + R)DL + IHDC]

Where: DL = Direct Labor
 IHDC = In House Direct Costs
 OH = Consultant Firm's Actual Overhead Factor
 R = Complexity Factor

Specific Rate (Pay per element)

Lump Sum _____

3. To pay the ENGINEER using one of the following methods as required by 49 CFR part 26 and 605 ILCS 5/5-409:

With Retainage

- a) **For the first 50% of completed work**, and upon receipt of monthly invoices from the ENGINEER and the approval thereof by the LA, monthly payments for the work performed shall be due and payable to the ENGINEER, such payments to be equal to 90% of the value of the partially completed work minus all previous partial payments made to the ENGINEER.
- b) **After 50% of the work is completed**, and upon receipt of monthly invoices from the ENGINEER and the approval thereof by the LA, monthly payments covering work performed shall be due and payable to the ENGINEER, such payments to be equal to 95% of the value of the partially completed work minus all previous partial payments made to the ENGINEER.
- c) **Final Payment** – Upon approval of the work by the LA but not later than 60 days after the work is completed and reports have been made and accepted by the LA and the STATE, a sum of money equal to the basic fee as determined in this AGREEMENT less the total of the amounts of partial payments previously paid to the ENGINEER shall be due and payable to the ENGINEER.

Without Retainage

- a) **For progressive payments** – Upon receipt of monthly invoices from the ENGINEER and the approval thereof by the LA, monthly payments for the work performed shall be due and payable to the ENGINEER, such payments to be equal to the value of the partially completed work minus all previous partial payments made to the ENGINEER.
- b) **Final Payment** – Upon approval of the work by the LA but not later than 60 days after the work is completed and reports have been made and accepted by the LA and STATE, a sum o money equal to the basic fee as determined in this AGREEMENT less the total of the amounts of partial payments previously paid to the ENGINEER shall be due and payable to the ENGINEER.

4. The recipient shall not discriminate on the basis of race, color, national origin or sex in the award and performance of any DOT-assisted contract or in the administration of its DBE program or the requirements of 49 CFR part 26. The recipient shall take all necessary and reasonable steps under 49 CFR part 26 to ensure nondiscrimination in the award and administration of DOT-assisted contracts. The recipient's DBE program, as required by 49 CFR part 26 and as approved by DOT, is incorporated by reference in this agreement. Implementation of this program is a legal obligation and failure to carry out its terms shall be treated as violation of this agreement. Upon notification to the recipient of its failure to carry out its approved program, the Department may impose sanctions as provided for under part 26 and may, in appropriate cases, refer the matter for enforcement under 18 U.S.C. 1001 and/or the Program Fraud Civil Remedies Act of 1986 (31U.S.C. 3801 et seq.).

III. IT IS MUTALLY AGREED,

1. That no work shall be commenced by the ENGINEER prior to issuance by the LA of a written Notice to Proceed.
2. That tracings, plans, specifications, estimates, maps and other documents prepared by the ENGINEER in accordance with this AGREEMENT shall be delivered to and become the property of the LA and that basic survey notes, sketches, charts and other data prepared or obtained in accordance with this AGREEMENT shall be made available, upon request, to the LA or to the STATE, without restriction or limitation as to their use.

3. That all reports, plans, estimates and special provisions furnished by the ENGINEER shall be in accordance with the current Standard Specifications for Road and Bridge Construction, Bureau of Local Roads and Streets Administrative Policies, Federal-Aid Procedures for Local Highway Improvements or any other applicable requirements of the STATE, it being understood that all such furnished documents shall be approved by the LA and the STATE before final acceptance. During the performance of the engineering services herein provided for, the ENGINEER shall be responsible for any loss or damage to the documents herein enumerated while they are in the ENGINEER's possession and any such loss or damage shall be restored at the ENGINEER's expense.
4. That none of the services to be furnished by the ENGINEER shall be sublet, assigned or transferred to any other party or parties without written consent of the LA. The consent to sublet, assign or otherwise transfer any portion of the services to be furnished by the ENGINEER shall not be construed to relieve the ENGINEER of any responsibility for the fulfillment of this agreement.
5. To maintain, for a minimum of 3 years after the completion of the contract, adequate books, records and supporting documents to verify the amounts, recipients and uses of all disbursements of funds passing in conjunction with the contract; the contract and all books, records and supporting documents related to the contract shall be available for review and audit by the Auditor General and the STATE; and to provide full access to all relevant materials. Failure to maintain the books, records and supporting documents required by this section shall establish a presumption in favor of the STATE for the recovery of any funds paid by the STATE under the contract for which adequate books, records and supporting documentation are not available to support their purported disbursement.
6. The payment by the LA in accordance with numbered paragraph 3 of Section II will be considered payment in full for all services rendered in accordance with this AGREEMENT whether or not they be actually enumerated in this AGREEMENT.
7. That the ENGINEER shall be responsible for any and all damages to property or persons arising out of an error, omission and/or negligent act in the prosecution of the ENGINEER's work and shall indemnify and save harmless the LA, the STATE, and their officers, agents and employees from all suits, claims, actions or damages of any nature whatsoever resulting there from. These indemnities shall not be limited by the listing of any insurance policy.
8. This AGREEMENT may be terminated by the LA upon giving notice in writing to the ENGINEER at the ENGINEER's last known post office address. Upon such termination, the ENGINEER shall cause to be delivered to the LA all drawings, plats, surveys, reports, permits, agreements, soils and foundation analysis, provisions, specifications, partial and completed estimates and data, if any from soil survey and subsurface investigation with the understanding that all such material becomes the property of the LA. The LA will be responsible for reimbursement of all eligible expenses to date of the written notice of termination.
9. This certification is required by the Drug Free Workplace Act (30ILCS 580). The Drug Free Workplace Act requires that no grantee or contractor shall receive a grant or be considered for the purpose of being awarded a contract for the procurement of any property or service from the State unless that grantee or contractor will provide a drug free workplace. False certification or violation of the certification may result in sanctions including, but not limited to, suspension of contract or grant payments, termination of a contract or grant and debarment of the contracting or grant opportunities with the State for at least one (1) year but no more than five (5) years.

For the purpose of this certification, "grantee" or "contractor" means a corporation, partnership or other entity with twenty-five (25) or more employees at the time of issuing the grant, or a department, division or other unit thereof, directly responsible for the specific performance under a contract or grant of \$5,000 or more from the State, as defined in the Act.

The contractor/grantee certifies and agrees that it will provide a drug free workplace by:

- a. Publishing a statement:
 - (1) Notifying employees that the unlawful manufacture, distribution, dispensing, possession or use of a controlled substance, including cannabis, is prohibited in the grantee's or contractor's workplace.
 - (2) Specifying the actions that will be taken against employees for violations of such prohibition.
 - (3) Notifying the employee that, as a condition of employment on such contract or grant, the employee will:
 - (a) abide by the terms of the statement; and
 - (b) notify the employer of any criminal drug statute conviction for a violation occurring in the workplace no later than five (5) days after such conviction.
- b. Establishing a drug free awareness program to inform employees about:
 - (1) The dangers of drug abuse in the workplace;
 - (2) The grantee's or contractor's policy of maintaining a drug free workplace;
 - (3) Any available drug counseling, rehabilitation and employee assistance program; and
 - (4) The penalties that may be imposed upon an employee for drug violations.
- c. Providing a copy of the statement required by subparagraph (a) to each employee engaged in the performance of the contract or grant and to post the statement in a prominent place in the workplace.
- d. Notifying the contracting or granting agency within ten (10) days after receiving notice under part (B) of paragraph (3) of subsection (a) above from an employee or otherwise receiving actual notice of such conviction.
- e. Imposing a sanction on, or requiring the satisfactory participation in a drug abuse assistance or rehabilitation program by,
- f. Assisting employees in selecting a course of action in the event drug counseling, treatment and rehabilitation is required and indicating that a trained referral team is in place.
- g. Making a good faith effort to continue to maintain a drug free workplace through implementation of the Drug Free Workplace Act.

10. The ENGINEER or subconsultant shall not discriminate on the basis of race, color, national origin or sex in the performance of this AGREEMENT. The ENGINEER shall carry out applicable requirements of 49 CFR part 26 in the administration of DOT assisted contracts. Failure by the ENGINEER to carry out these requirements is a material breach of this AGREEMENT, which may result in the termination of this AGREEMENT or such other remedy as the LA deems appropriate.

Agreement Summary

Prime Consultant:	TIN Number	Agreement Amount
AECOM Technical Services, In.c	95-2661922	\$90,414.78

Sub-Consultants:	TIN Number	Agreement Amount
Sub-Consultant Total:		
Prime Consultant Total:		\$90,414.78
Total for all Work:		\$90,414.78

Executed by the LA:

McHenry County

(Municipality/Township/County)

ATTEST:

By: _____

By: _____

McHenry County Clerk

Title: McHenry County Board Chairman

(SEAL)

Executed by the ENGINEER:

ATTEST:

AECOM Technical Services, Inc.

By: _____

By: _____

Title: Project Manager

Title: Vice President

Exhibit A - Preliminary Engineering

Route: CH 47
 Local Agency: McHenry County DOT
(Municipality/Township/County)
 Section: 10-00377-00-BR
 Project: BRS-011(059)
 Job No.: D-91-747-10

*Firm's **approved rates** on file with IDOT'S Bureau of Accounting and Auditing:

Overhead Rate (OH) 0.00 %
 Complexity Factor (R) 0.00
 Calendar Days _____

Method of Compensation:

- Cost Plus Fixed Fee 1 14.5%[DL + R(DL) + OH(DL) + IHDC]
- Cost Plus Fixed Fee 2 14.5%[DL + R(DL) + 1.4(DL) + IHDC]
- Cost Plus Fixed Fee 3 14.5%[(2.3 + R)DL + IHDC]
- Specific Rate
- Lump Sum

Cost Estimate of Consultant's Services in Dollars

Element of Work	Employee Classification	Man-Hours	Payroll Rate	Payroll Costs (DL)	Overhead*	Services by Others	In-House Direct Costs (IHDC)	Profit	Total
See attached CECS									
Totals		0.00							

**PAYROLL ESCALATION TABLE
FIXED RAISES**

FIRM NAME AECOM Technical Services
PRIME/SUPPLEMENT Supplement #1

DATE 04/18/17
PTB NO. N/A

CONTRACT TERM 18 MONTHS
START DATE 5/1/2017
RAISE DATE 1/1/2018

OVERHEAD RATE 139.14%
COMPLEXITY FACTOR 0
% OF RAISE 3.00%

ESCALATION PER YEAR

5/1/2017 - 1/1/2018
8
18

1/2/2018 - 11/1/2018
10
18

8
18

8
18

8
18

= 44.44%
= 1.0167

57.22%

The total escalation for this project would be:

1.67%

Subconsultants

FIRM NAME AECOM Technical Services
PRIME/SUPPLEMENT Supplement #1
PSB NO. N/A

DATE 04/18/17

NAME	Direct Labor Total	Contribution to Prime Consultant
Marchese and Sons, Inc.	0.00	0.00
Jorgensen & Associates,	0.00	0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
Total	0.00	0.00

AVERAGE HOURLY PROJECT RATES

FIRM AECOM Technical Services
 PSB N/A
 PRIME/SUPPLEMENT Supplement #1

DATE 04/18/17

SHEET 1 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJECT RATES			ADMINISTRATION AND MAINTENANCE			MEETINGS AND COORDINATION			CONSTRUCTION DOCUMENTS			PHASE III ASSISTANCE					
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Project Director	70.00	0																	
Project Manager	70.00	14	1.88%	1.32	4	25.00%	17.50	4	1.48%	1.03	4	1.58%	1.11	2	0.98%	0.68			
Project Eng, Sct, Plan	59.28	33	4.43%	2.63	8	50.00%	29.64				22	8.70%	5.15	3	1.46%	0.87			
Senior Eng, Sct, Plan	56.84	73	9.80%	5.57	4	25.00%	14.21	49	18.08%	10.28	4	1.58%	0.90	16	7.80%	4.44			
Engineer, Sct, Plan, A	39.39	297	39.87%	15.70				126	46.49%	18.31	107	42.29%	16.66	64	31.22%	12.30			
Resident Engineer	60.19	0																	
Construction Engineer	45.62	0																	
Inspector, Field Office	40.16	0																	
Eng Tech, Design, C	41.81	320	42.95%	17.96				84	31.00%	12.96	116	45.85%	19.17	120	58.54%	24.47			
PM Support/Project C	34.86	0																	
Administration Assit	31.13	8	1.07%	0.33				8	2.95%	0.92									
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TOTALS		745	100%	\$43.50	16	100.00%	\$61.35	271	100%	\$43.50	253	100%	\$42.99	205	100%	\$42.75	0	0%	\$0.00

HOUR ESTIMATE
AECOM

AECOM
Deerpass Road over the Kishwaukee River
Phase II Engineering Services
McHenry County Division Of Transportation

Date: April 18, 2017

	ITEM DESCRIPTION	Sheet Count	CLASSIFICATION											TOTAL HOURS		
			CIVIL				ELECTRICAL			STRUCTURAL			AA			
			PM	PE	E	TECH	PE	E	TECH	SE	E	TECH	AA			
	IDOT District 1 Standards and Details	1				2										2
	Specifications		0.5	4	10											14.5
	Estimate of Cost		0.5	1	2											3.5
	Estimate of Time		0	1	2											3
	QA / QC				8											8
6	PHASE III ASSISTANCE		2	3	14	0	0	0	0	16	50	120	0			205
	Bidding Services			1	6					2	6					15
	RFI Responses			2	6					2	8					18
	Shop Drawing Review									8	32	40				80
	Construction Meetings		2		2							0				4
	As-Built Preparation									4	4	80				88
	TOTALS		14	82	215	208	0	0	0	24	82	120	0			745

To-From	Total Mileage	
	Mileage	Number of Trips
AECOM to IDOT	58	1
AECOM to Project Site	126	3
		436

P:\60443622\100_Contract\110_Contracts\3_Supplement_1\2017-04-19_Submitted-Revised_MCDOT\With_Cultural\DeerpassPhII_Supplement1_Manhours_2017-04-19_Cultural.xls]Hour Cost Est-nocost



Direct Costs Check Sheet

Firm Name: AECOM Technical Services, Inc. PTB/Item No: N/A

REQUIRED – DIRECT COSTS WILL ONLY BE ACCEPTED FOR INCLUSION IN CONTRACT WHEN DOCUMENTED ON THIS FORM.
(Indicate only rate and quantities for this specific project.)

Item	Allowable	Contract (1) Rate	Quantity (n/a for work orders)	Total
Per Diem	Up to State Rate Maximum			\$0.00
Lodging (Overnight)	Up to State Rate Maximum	\$80.00	12.00	\$960.00
Lodging (Extended)	Actual Cost (based on IDOT's and firm's policy)			\$0.00
Air Fare Coach Rate (with two weeks' notice)	As Approved			\$0.00
Vehicles:		\$0.55	436.00	
Mileage	Up to State Rate Maximum			\$241.11
Daily Rate (owned or leased)	\$45/day			\$0.00
Overtime	(Premium Portion)			\$0.00
Tolls	Actual Cost			\$0.00
Digital Photo Processing	Actual Cost			\$0.00
Photo Processing	Actual Cost			\$0.00
Cell Phones – (traffic systems, survey, phase III only)	\$70/month/phone (maximum) – Phase III (max. of three without IDOT approval)			\$0.00
Telephone Usage (traffic system monitoring)	Actual Cost			\$0.00
2-Way Radio (survey or phase III only)	Actual Cost			\$0.00
Overnight Delivery/Postage/Courier Service	Actual Cost	\$35.00	2.00	\$70.00
Copies of Deliverables/Mylars (in-house)	Actual Cost	\$200.00	2.00	\$400.00
Copies of Deliverables/Mylars (outside)	Actual Cost			\$0.00
Specific Insurance (required for project)	Actual Cost			\$0.00
CADD	Actual Cost (max. \$15.00/hour)			\$0.00
Monuments (permanent)	Actual Cost			\$0.00
Advertisements	Actual Cost			\$0.00
Web Site	Actual Cost			\$0.00
Facility Rental for Public Meetings & Exhibits/Renderings & AV	Actual Cost			\$0.00
Transcriptions (specific to project)	Actual Cost			\$0.00
Recording Fees	Actual Cost			\$0.00
Courthouse Fees	Actual Cost			\$0.00
Testing of Soil Samples	Actual Cost			\$0.00
Lab Services	Actual Cost			\$0.00
Storm Sewer Cleaning and Televising	Actual Cost (requires 2-3 quotes)			\$0.00
Traffic Control and Protection	Actual Cost (requires 2-3 quotes)			\$0.00
Aerial Photography and Mapping	Actual Cost (requires 2-3 quotes)			\$0.00
Utility Exploratory Trenching	Actual Cost (requires 2-3 quotes)			\$0.00
Shift Differential	Actual Cost (based on firm's policy)			\$0.00
PROJECT Site Travel	Actual Cost (based on IDOT's and firm's policy)			\$0.00
	Actual Cost			\$0.00
	Actual Cost (requires 2-3 quotes)			\$0.00
	Include 2-3 vendor quotes and explanation for necessity.			\$0.00
				\$0.00
TOTAL				\$1,671.11

1) Used to determine upper limit of compensation for direct cost. Unless maximum is specified under allowable, bill at actual cost.

SCOPE OF SERVICES – SUPPLEMENT 1

CONSULTANT: AECOM
PROJECT: Structure Replacement – Phase II
Deerpass Road (T 59) over the Kishwaukee River Main Channel and the North
Auxiliary Channel
COUNTY: McHenry
LA CONTACT: Benjamin Redding, P.E.
JOB:
SECTION: 10-00377-00-BR
PROJECT:
STRUCTURE: SN 056-3029 and SN 056-3030 (Existing)
SN 056-3189 (Proposed)

Project Understanding

Existing bridges SN 056-3029 and SN 056-3030 carry Deerpass Road over the Main Channel of the Kishwaukee River and the north auxiliary channel, respectively. They were both constructed in 1966, and are comprised of precast concrete deck beams with a bituminous overlay. The Abbreviated Bridge Condition Reports (BCR) prepared for each structure received approval recommending total replacement.

AECOM Technical Services, Inc. (AECOM) is providing professional engineering services to prepare Construction Documents for bidding. All work will be performed in accordance with McHenry County Division of Transportation criteria. During the course of plan development, additional out of scope services were required to complete plans. In addition, the target letting date was moved to January 2017 and then to fall of 2017.

What follows is the scope of services for the additional work to be performed as a result of moving the project first from the November 2016 letting to the January 2017 letting, and then subsequently to the August 2017 letting. This also resulted in tree removal items being removed from the PS&E, and having been let and completed in advance of the contract. In addition to the PS&E, an Incidental Take Authorization will be required from the Illinois Department of Natural Resources for a recently discovered state threatened species, the American brook lamprey.

1. ADMINISTRATION AND MANAGEMENT

- 1.1 **Administration and Management** – The AECOM Project Manager will be the liaison between AECOM and the McHenry County DOT. Additional coordination with IDOT.
- 1.2 **QA/QC** - AECOM will apply Quality Assurance/Quality Control (QA/QC) Final PS&E Submittal for the January Letting and August Letting preparation.

2. MEETINGS AND COORDINATION**2.1 Meetings and Coordination –**

- 2.1.1. AECOM will to attend one FHWA/BDE coordination meeting to present the Project Development Report Addendum.

2.2 Environmental Coordination –

2.2.1. Addendum Environmental Survey Request (ESR) – AECOM will complete an addendum to the ESR to include the wetland mitigation site and submit same to the Illinois Department of Transportation. AECOM will complete the online form by providing information on the need for the addendum and the potential for cultural resource information.

2.2.2. Project Development Report (PDR) Addendum – AECOM will provide a technical memorandum to serve as an addendum to the PDR with an update on the new threatened species, the American Brook Lamprey, which was found within the project area, and any associated mitigation.

2.2.3. Incidental Take Authorization –

- Incidental Take Authorization Draft – AECOM will prepare the draft submittal for the Incidental Take Authorization for the American Brook Lamprey.
- Incidental Take Authorization Pre-Final – AECOM will revise the draft submittal based on comments received from the MCDOT and IDNR and finalize the document.
- Incidental Take Authorization Public Notice – AECOM will prepare the public notice, revise it based on comments from MCDOT and IDNR, and publish the public notice in the State designated newspaper.
- Public Comments - AECOM will respond to the public comments as necessary and coordinate those responses with the MCDOT and the IDNR to secure the Authorization.
- Incidental Take Authorization Final – AECOM will revise the pre-final submittal based on comments received from the public, and finalize the document.

2.2.4. Phase I Archaeological Reconnaissance Survey – The Phase I Archaeological Reconnaissance Survey will identify: (1) whether archaeological resources are at or buried beneath the surface of the ground within the Project Area, and (2) if these resources are discovered in the Project Area, whether further archaeological testing (Phase II archaeological investigation) is warranted to evaluate the significance of the findings. The Phase I Archaeological Reconnaissance Survey will include the following subtasks:

- Archival Research – A Site File Search will be conducted with the IHPA. The Site File Search provides information to AECOM regarding previously recorded (or lack thereof) archaeological sites, historic buildings, or cultural sites located within the Project study corridor and the vicinity in an effort to provide an understanding of what type of archaeological materials can be expected during the field survey. The Site File Search can be done utilizing online databases from the IHPA.

Historical research of the Project study corridor will be conducted through reviews of appropriate historic maps, including such maps as county plats and atlases, fire insurance maps, or Government Land Office (GLO) maps, and other local historical documents, if available. The Historical Research can be done utilizing online resources and visits to local offices/libraries.

- Systematic field survey: The field survey scope is designed using the most efficient and agency approved/accepted field methods and is based on one mobilization of the crew. Based on the MCDOT information provided to AECOM and an analysis of aerial photographs, topographic maps, and land use cover data, the field survey scope and cost is based on approximately 70 percent of the Project Area requiring a pedestrian survey and approximately 25 percent requiring a shovel probe survey, with approximately 5 percent exempt from field survey methodology.

Survey data and archaeological data will be collected during the field survey using a handheld Trimble Geo-XH GPS unit with sub-meter accuracy. Files from the Trimble unit will then be transferred into a Geographic Information System (GIS) database for use in reporting and associated mapping.

The shovel probe, or “shovel test” method will be conducted at no greater than a 15-meter interval (typically a grid pattern) across the Project study corridor, excluding areas of previous modern land disturbance, steep slopes, and wetland areas. Shovel probe survey entails excavating and screening approximately one cubic foot of soil to sample subsurface deposits.

The pedestrian survey will be conducted at no greater than a 5-meter interval (grid pattern) across the open agricultural portions (row cropland) of the study corridor, excluding areas of previous land disturbance and wetland areas. Please note that this methodology is the most efficient method of surveying agricultural fields for archaeological resources. However, this methodology can only be implemented when the ground has sufficient ground surface visibility. Areas of modern land disturbance and open water/wetlands will not require systematic survey but will be photographed, recorded, and noted in the survey report. Modern land disturbance includes areas disturbed by recent or modern development (i.e., road construction, public utility installation, modern buildings, etc.).

- Report: A Phase I Archaeological Reconnaissance Survey Report will be prepared to summarize the above-listed tasks. The report will include completion of the IHPA’s Archaeological Survey Short Report (ASSR). AECOM will submit an electronic copy of the report to you as a draft. The IHPA requires that two formal hard copies of the final report be forwarded to them for their review and comment.

AECOM’s proposal includes the estimated cost for conducting the research, field survey, and reporting efforts including agency consultation, using internal AECOM labor. AECOM will complete the cultural resources surveys with our own local qualified staff supplemented with support from other AECOM offices. The field survey portion is anticipated to require two to three 10-hour days, barring adverse weather conditions.

3. CONSTRUCTION DOCUMENTS

- 3.1 Contract Plans** - AECOM will provide engineering design services required for the preparation of Construction Documents for the bridge and roadway construction. AECOM will update the contract plans for the January 2017 and for the August 2017 letting as described below in further detail. This will include any revisions needed as a result of the Incidental Take Authorization.

3.2 Tree Removal Contract Preparation - AECOM will prepare a separate contract for tree removal to be let by MCDOT. This will include the following items:

3.2.1. Specifications - AECOM will specifications for the tree removal contract. The documents will be prepared in Microsoft Word software.

3.2.2. Quantity Take-Offs and Opinions of Cost - AECOM will conduct quantity take-offs and prepare a project opinions of cost. All cost estimates will be prepared using Microsoft Excel software.

3.2.3. Estimate of Time - AECOM will prepare Estimate of Time for the tree removal activities.

4. QUANTITIES AND ESTIMATES

4.1 Specifications - AECOM will update the line item specifications for the January 2017 and for the August 2017 letting using IDOT format. Specification Books will be submitted at Final design stage. The documents will be prepared in Microsoft Word software.

4.2 Quantity Take-Offs and Opinions of Cost - AECOM will update quantity take-offs and prepare an updated project opinions of cost for the Final submittal for the January 2017 letting and for the August 2017 letting. All cost estimates will be prepared using Microsoft Excel software.

4.3 Estimate of Time - AECOM will update the suggested Estimate of Time for Phase III construction activities to reflect the January 2017 letting and for the August 2017 letting date.

5. SUBMITTALS

The following deliverables will be made for the January 2017 and Fall of 2017 letting final submittals:

- Final Submittal:
 - 1 full-size plans (along with mylar cover sheet). (22x34)
 - 2 half-size plans (11x17)
 - Final engineer's opinion of cost
 - Detailed specifications
 - Special conditions, and IDOT Supplemental Specifications and Recurring Special Provisions.
 - Final estimate of time.
 - Documents in electronic format via two (2) CD's including quantity calculations. (.dgn, .docx, .xlsx, and .pdf)

The following deliverables will be made for the Tree Removal Contract:

- Pre-Final Submittal
 - 1 half-size plans (11x17)
 - Specifications
 - Estimate of time.

- Final Submittal:
 - 1 half-size plans (11x17)
 - Final engineer's opinion of cost
 - Detailed specifications
 - Final estimate of time.
 - Documents in electronic format. (.dgn, .docx, .xlsx, and .pdf)

6. CONSTRUCTION PHASE ASSISTANCE

AECOM assumed that MCDOT will have in-house staff perform Construction Management, but as the designer, AECOM will provide limited Construction Phase Services. Resident Engineering and Construction Inspection Services are not included. AECOM will not have authority to stop the work.

- 6.1 Bidding Services** – AECOM will respond to Contractor inquiries and issue document revisions for a level of effort that can be accommodated within the budget for this task.
- 6.2 RFI Responses** – AECOM will respond to questions and provide clarification during construction at a level of effort up to six (6) RFIs.
- 6.3 Shop Drawing Review** – AECOM will provide shop drawing review for the Deerpass Bridge work for the precast beams and the elastomeric bearings, which would include an initial submittal and a revised submittal. The demolition of the existing bridge structures will be the responsibility of the Construction Engineer.
- 6.4 Construction Meetings** – AECOM will attend an on-site construction meeting at MCDOT's request. One (1) meeting is assumed for this estimate.
- 6.5 As-Built Preparation** – AECOM will prepare as-built CAD drawings. All mark-ups including dimensions and all other information needed to prepare these CAD drawings will be provided to AECOM by the Resident Engineer. It is anticipated that up to 24 sheets would need to be prepared.