

Local Agency Lake County Division of Transportation	L O C A L A G E N C Y	 Illinois Department of Transportation Preliminary Engineering Services Agreement For Federal Participation	C O N S U L T A N T	Consultant Amec Foster Wheeler Environment & Infrastructure, Inc.
County Lake				Address 8745 W. Higgins Road, Suite 300
Section 14-00265-01-BR				City Chicago
Project No.				State Illinois
Job No.				Zip Code 60631
Contact Name/Phone/E-mail Address				Contact Name/Phone/E-mail Address Gary Baker, PE 773-693-6030 gary.baker@amecfw.com

THIS AGREEMENT is made and entered into this _____ day of _____, 2015 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	Skokie Valley Bike Path over Lake Cook Road	Route	NA	Length	500' +_	Structure No.	TBD
Termini	North of Lake Cook Road to South of Lake Cook Road (section 14-00265-01-BR)						

Description Phase I engineering services for preparation of a project development report for a new bridge to carry the Skokie Valley Bike Path over Lake Cook Road.

Agreement Provisions

I. THE ENGINEER AGREES,

- 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.
- 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.
- To complete the services herein described within 365 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.
- 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.
- 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.
- 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.
- 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.
- 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:
- 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,
 - 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
 - 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.
 - are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by any Federal department or agency,
 - 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,
 - 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
 - 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: (see attached detailed scope of services)
- ☒ 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 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.

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 (31 U.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
Amec Foster Wheeler Environment & Infrastructure, Inc.	91-1641772	278,984.99
Sub-Consultants:	TIN Number	Agreement Amount
Wang Engineering, Inc.	36-3191909	23,403.11
Compass Surveying, Ltd	36-3211988	24,819.03
	Sub-Consultant Total:	48,222.14
	Prime Consultant Total:	278,984.99
	Total for all Work:	327,207.13

Executed by the LA:

Lake County

(Municipality/Township/County)

ATTEST:

By: _____

Lake County Clerk

By: _____

Title: Chairman of the County Board

RECOMMENDED FOR EXECUTION

(SEAL)

Paula J. Trigg, P.E.
Director of Transportation/County Engineer
Lake County

Executed by the ENGINEER:

ATTEST:

By: Jo Ann M Gentile

Title: Executive Assistant

By: Gary Baker

Title: Senior Associate
Amec Foster Wheeler Environment & Infrastructure, Inc.

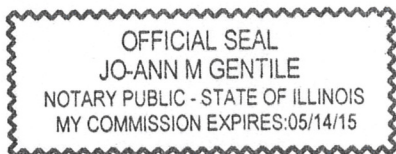


Exhibit A - Preliminary Engineering

Route: Skokie Valley Bike Path over Lake Cook
 Local Agency: Lake County
 (Municipality/Township/County)
 Section: 14-00265-01BR
 Project: _____
 Job No.: _____

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

Overhead Rate (OH) 161.1 %
 Complexity Factor (R) 0.00
 Calendar Days 365

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
Data Collection		93		3,670.49	6,133.75			1,277.33	11,081.57
Environmental/Permits		154		7,655.48	12,793.07			2,664.11	23,112.65
Wetland Delineation		152		6,231.13	10,412.83			2,168.43	18,812.39
Drainage Studies		45		1,787.22	2,986.62			621.95	5,395.79
Survey		10		445.07	743.75	24,819.03		154.88	26,162.74
Geometric Studies		91		3,578.33	5,979.74			1,245.26	10,803.33
Bridge Alternatives		396		15,276.34	25,528.29			5,316.17	46,120.80
Landscape/Aesthetics		84		4,478.19	7,483.50			1,558.41	13,520.10
Geotechnical		10		518.84	867.03	23,403.11		180.56	24,969.54
Utility Coordination		138		6,208.86	10,375.62			2,160.68	18,745.16
Railroad Coordination		40		1,817.97	3,038.01			632.65	5,488.63
Project Development		254		10,711.97	17,900.77			3,727.76	32,340.50
Traffic Management		132		5,455.77	9,117.14			1,898.61	16,471.51
Public Involvement		272		11,185.21	18,691.61			3,892.45	33,769.28
Meetings		124		6,080.25	10,160.71			2,115.93	18,356.88
Administration		72		2,685.82	4,488.27		6,421.00	934.66	14,529.75
QAQC		48		2,492.97	4,166.00			867.55	7,526.51
Totals		2115		90,279.88	150,866.71	48,222.14	6,421.00	31,417.40	327,207.13

Prime Consultant

Name	Amec Foster Wheeler Environment &
Address	8745 W. Higgins Road, Suite 300, Chicago,
Telephone	773-693-6030
TIN Number	91-1641772

Local Agency	Lake County
Section Number	14-00265-01-BR
Project Number	
Job Number	

This form is to verify the amount paid to the Sub-consultant on the above captioned contract. Under penalty of law for perjury or falsification, the undersigned certifies that work was executed by the Sub-consultant for the amount listed below.

Sub-Consultant Name	TIN Number	Actual Payment from Prime
Wang Engineering, Inc.	36-3191909	
Compass Surveying, Ltd.	36-3211988	
	Sub-Consultant Total:	
	Prime Consultant Total:	
	Total for all Work Completed:	

Date _____

Note: The Department of Transportation is requesting disclosure of information that is necessary to accomplish the statutory purpose as outlined under state and federal law. Disclosure of this information is REQUIRED and shall be deemed as concurring with the payment amount specified above.

For information about IDOTs collection and use of confidential information review the department's [Identity Protection Policy](#).

Skokie Valley Path Bike Bridge Study
Lake County Division of Transportation
April 23, 2015

Scope of Work

The CONSULTANT, Amec Foster Wheeler Environment and Infrastructure, Inc. agrees to perform, at the discretion of the Lake County Division of Transportation, the services described below:

This work shall include the following: Phase I engineering services for the preparation of a Design Report for a pedestrian bridge that will extend the Skokie Valley Bike Path south over Lake Cook Road from Highland Park to Northbrook, Illinois. The bridge will carry pedestrian, bicyclist and service vehicle traffic. The pedestrian bridge will connect to the existing path to the north of Lake Cook road. To the south of Lake Cook Road, a temporary turn-around will be designed with the intent that the path will be extended further south by others, in the future. The pedestrian bridge will be designed to accommodate a 10' wide bike path with 2' shoulders on either side resulting in a 14' wide horizontal clearance requirement for the bridge.

Although Phase 1 of the project will be funded by local Lake County funds, the work shall be developed as being eligible for possible federal funding. Phase II design engineering is not part of this scope of work. Phase II engineering services can be provided and negotiated separately from this contract.

The following task list is described in further detail under Part II – Detailed Scope:

- 1.0 Collection, Compilation, Review and Evaluation of Data;
- 2.0 Environmental Data Coordination, Inventory and Analysis, Agency Coordination and Permits;
- 3.0 Wetland Delineation;
- 4.0 Drainage Studies;
- 5.0 Topographic Survey and Scanning of Existing Structures (Bridges and Electrical Towers);
- 6.0 Geometric Studies;
- 7.0 Bridge Alternatives and Sketches;
- 8.0 Landscape Architecture/Aesthetic Treatments;
- 9.0 Geotechnical Engineering;
- 10.0 Utility Coordination;
- 11.0 Railroad Coordination;
- 12.0 Draft Preliminary Project Development Report, Preliminary Project Development Report, and Final Project Development Report including plans and profile sheets, typical sections, cost estimate and correspondence;
- 13.0 Traffic Management Plan (Maintenance of Traffic) for Skokie Valley Bike Path and Lake-Cook Road;
- 14.0 Public Involvement Activities;
- 15.0 Meetings;
- 16.0 Administration;
- 17.0 Quality Assurance and Quality Control.

Progress Reports will be submitted on a monthly basis and will include a statement summarizing the work performed during the report period and an outline of the work expected to be performed during the following period.

The CONSULTANT is responsible for preparing the Project Development Report in accordance with the Illinois Department of Transportation's Bureau of Local Roads and Streets Policies and Procedures for Federal-Aid Projects.

PART II – DETAILED SCOPE

The general responsibilities of the CONSULTANT to complete the Project are as follows:

1.0 Collection, Compilation, Review and Evaluation of Data

The CONSULTANT shall:

- 1.1 Review all data collected by the professional staff in each requisite discipline, including items to be provided by the Lake County Division of Transportation and Cook County Department of Transportation and Highways.
 - Existing Roadway Plans (where available)
 - Existing Structural Plans
 - LiDar Mapping and TIN.files (most recently flown mapping)
 - Right-of-Way Plats (existing)
 - Lake County Geographic Information System Mapped Wetland Areas
 - Relevant Data (all other data available)
- 1.2 The CONSULTANT will coordinate with Cook County to determine current right of way and property lines on an approximate 25' wide strip within the ComEd right of way that is a separate parcel.
- 1.3 The CONSULTANT will create a base map of all data collected in MicroStation.

2.0 Environmental Data Coordination, Inventory and Analysis

The CONSULTANT shall:

- 2.1 Collect information on cultural and historic resources and prepare a submittal to the Illinois Historic Preservation Agency (IHPA) for Section 106 review. The submittal shall consist of a cover letter that describes the proposed project and a general plan view of the sight. Information gathered for the request would be based on on-line resources including the IHPA HARGIS mapping tool and the National Register of Historic Places database. This information will then be imported to the project ArcGIS base map of the project.
- 2.2 Collect information and prepare a submittal to the Illinois Department of Natural Resources (IDNR) and US Fish and Wildlife Service (USFWS) for Section 7 consultation on impacts to state and federally listed threatened and endangered species. The submittal shall include utilizing the IDNR's EcoCAT website and USFWS's iPaC to submit project information to initiate agency review of project impacts. If listed species are identified within the vicinity of the project area, further consultation would be needed with the appropriate agency to minimize potential adverse effects. This information will then be imported to the ArcGIS base map of the project.
- 2.3 If the project disturbs more than 1 acre of land, an NPDES Stormwater Permit shall be prepared for the IEPA. It is assumed this could be completed during Phase II.

2.4 Document presence of other environmental features as required to complete environmental review per Illinois Department of Transportation's Bureau of Local Roads and Streets Policies and Procedures for Federal-Aid Projects. This information will be imported into the project ArcGIS base map.

- Floodplains
- Section 4(f) Lands
- Air Quality
- Noise

2.5 Per the Bureau of Local Roads and Streets Policies and Procedures for Federal Aid Projects as the project crosses or otherwise involve a railroad's right-of-way other than a single rail rural right-of-way with no maintenance facilities, a PESA must be prepared. As this project is not anticipated to impact the railroad ROW other than a potential temporary easement, a PESA is not included in this scope of work. This will be confirmed during the Phase I process.

3.0 Wetland Delineation The CONSULTANT shall:

3.1 Collect information in the vicinity of the project required in support of a defensible wetland determination and delineation. This includes the acquisition and review of all available mapping, hydrologic, and soils data. Amec Foster Wheeler anticipates needing to collect the following:

- National Wetland Inventory (NWI) maps,
- Lake County Wetland Inventory maps and similar Cook County information,
- USGS quadrangle maps,
- Natural Resources Conservation Service (NRCS) soil survey mapping and hydric soils lists,
- Lake County Soil Survey maps and similar Cook County information,
- Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps,
- USGS flood of record maps, and
- Current aerial photography.

3.2 Perform a field visit observing and documenting limits of any wetlands in the vicinity of the project. This wetland delineation would be led by a Certified Wetland Scientist, Stephen Stumne. The survey area would include both to the north and to the south of Lake Cook Road (in both Lake and Cook Counties). It is anticipated that the field effort would include one day in the field and one day of travel for two (2) consultant team members. Travel expenses and travel time shall be included in the visit.

Wetlands within the study area will be identified and delineated in accordance with the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Midwest Region (Version 2.0, dated August 2010). Streams, if present, will be photographed and documented to characterize the composition of the stream channel, stream width, and adjacent vegetation. Each wetland and stream identified

in the field will be given a unique identification number, located using global positioning system (GPS) equipment, and flagged in the field. Data collected in the field with GPS will be uploaded into a project-specific geographic information system (GIS) database for quantifications and mapping and for preparation of report exhibits.

Wetland areas will be considered jurisdictional wetlands if they meet all three wetland criteria described in the Regional Supplement – vegetation, soils and hydrology. In addition, wetlands must be connected or adjacent to jurisdictional waters of the United States in order to be classified as jurisdictional wetlands. Those that are not jurisdictional (isolated wetlands and waters) would be protected by the Lake County Stormwater Management Commission (SMC).

- 3.3 The Lake County Watershed Development Ordinance (WDO) includes provisions for the protection of isolated waters and wetlands that are not under jurisdiction of the USACE Chicago District. The WDO requires an applicant to obtain a written Jurisdictional Determination (JD) for all wetlands and waters identified on a development site by submitting a request to the SMC or the USACE to determine who has jurisdiction. Therefore, a wetland determination report for the proposed project site would be provided to either agency depending on the delineation findings. A nominal review fee would be required for SWC review if wetlands are found in the project site. This will satisfy both Lake and Cook County requirements.
- 3.4 Coordinate with the appropriate agency (SWC or USACE) on mitigation strategies if wetlands will be impacted by construction activities.

4.0 Drainage Studies

The CONSULTANT shall:

- 4.1 The existing area in the vicinity of the new pedestrian bridge drains to the ditch adjacent to the railroad tracks to the west. The CONSULTANT shall perform preliminary designs during the PDR process to ensure that the addition of the pedestrian bridge, and any modifications or additions to the existing path to the north or south of Lake Cook Road will not result in ponding water along or adjacent to the Skokie Valley Bike Path. Findings will be presented in the PDR. The CONSULTANT shall also investigate if any detention will be required as a result of the bridge or path extension. If detention is required, potential locations will be identified in the PDR.

There shall be no drainage design to Lake Cook Road with this scope of work.

5.0 Topographic Survey and Scanning of Existing Structures (Bridges and Electrical Towers)

- 5.1 Upon authorization and prior to field work phase, The Lake County Division of Transportation Land Surveyor will be contacted to obtain vertical control information (benchmarks) in or near the “survey area”. Horizontal control will be on State Plane Coordinates NAD83. The current tax maps of the land surrounding the “survey area” will be obtained and copies will be procured of all (adjacent) recorded subdivision plats for use in looking for existing ROW and property line monumentation. IDOT will be contacted for any roadway dedication maps / plats and contact ComEd for any “strip maps” they have for their ROW in this area.

Once horizontal and vertical control has been established, RTK GPS (Trimble R-10 / TSC3 collectors) will be utilized along with conventional leveling and robotic total stations to “tie- in” all found monumentation, all improvements, visible utilities and trees over 4” throughout the survey area. Laser scanning techniques will also be used to scan several power poles as well as the “lowest” wires (in relation to Lake-Cook Road), and low mast arm that may have future wires, to obtain their elevations. In addition, the lowest level(s) of the existing railroad bridge will be scanned to ascertain its height above the existing pavement of Lake Cook Road, as well as physically locating the existing railroad tracks throughout the survey area. Invert elevations will be obtained for all sanitary, storm (drainage) and water utilities within the survey area. Topographic coverage will include 50 foot cross sections (paced grid) for Lake-Cook Road as well as the Skokie Valley Bike path corridor. The sidewalk north of Lake Cook Road above the retaining wall leading to the apartment complex will be included in the survey. No topographic information will be taken within the railroad ROW without “flaggers” from the railroad.

Using symbology as approved by the engineer, all existing survey data will be plotted at a convenient scale, including all RIM/invert data, line work, topographic cross-sections, visible utilities and existing ROW’s – as determined by found monumentation and record information and generate 1 foot contour intervals throughout the mapped area.

Proposed Easement locations will be identified, but no plats and legals will be prepared as part of the Phase I scope.

6.0 Geometric Studies
The CONSULTANT shall:

- 6.1 Create the applicable design criteria based on the facility type. Study geometric alternatives, including horizontal and vertical alignments of a bridge carrying the multi-use path over Lake Cook Road, tie-in to the existing path north of Lake Cook Road and maintaining the path connection to the existing sidewalk along north side of the Lake Cook Road. At the south of the roadway, the new path would end at a turn around. Any and all improvements to the path, including temporary access during construction, will be designed to comply with current ADA policies and standards.
- 6.2 Prepare working cross sections at 25 ft intervals plus key locations to evaluate each of alternatives. Cross sections sheets will be developed for the selected alternative and included in the Project Development Report.

7.0 Bridge Alternatives and Sketches

The CONSULTANT shall:

- 7.1 Develop bridge and abutment alternatives based on geometric layout of bike path. These alternatives shall include prefabricated steel truss structures as well as designs featuring conventional highway bridge components. Architectural enhancements will be incorporated into these alternatives. The abutments will either be conventional concrete abutments or retaining wall supported abutments if required by geometry.
- 7.2 Prepare sketches for each alternative developed. These shall be presented to Lake County and Cook County for review and comment and then at the Stakeholder Involvement Group and Public Informational Meetings. They shall be modified based on feedback. Ultimately a preferred alternative will be selected by Lake County and Cook County.
- 7.3 Prepare Plan and Elevation drawings of the selected alternative for inclusion in the Project Development Report.
- 7.4 Submit a Type Size and Location set of plans of the selected alternative to the IDOT Bureau of Local Roads, for ultimate delivery to the IDOT Bureau of Bridges and Structures.

8.0 Landscape Architecture/Aesthetic Treatments

The CONSULTANT shall:

- 8.1 Develop aesthetic enhancement alternatives for the bridges and abutments described in 7.0 above.
- 8.2 Alternatives shall be prepared for the areas surrounding each end of the pedestrian bridge. Benches, informational signs, and plantings will all be included in the design of these areas. Sketches will be prepared for each alternative developed. These shall be presented to Lake County and Cook County for review and comment and then at the Stakeholder Involvement Group meetings and Public Informational Meetings. The designs shall be modified based on feedback. Ultimately a preferred alternative will be selected by Lake County and Cook County. The preferred alternative shall be presented in the Project Development Report.

9.0 Geotechnical Engineering

- 9.1 The scope of services will include the preparation of a Structure Geotechnical Report in connection with the Bridge Type, size and Location (TSL) Plan. Based on the existing drawings, the railroad bridge was designed to be supported on metal shell concrete piles of estimated length of 29 feet, whereas the reinforced concrete walls to be supported on shallow footings.

Two structure soil borings are proposed to be conducted from the Lake County Road elevations to approximately 50 feet below ground surface (bgs). The minimum distance from the walls should be 4 feet to clear the existing walls' foundations. Moreover, to determine the soil conditions behind the walls, we proposed hand auger borings to 15 feet. To obtain the hand auger borings we only will need permission from ComEd to work within their easement. Since the proposed boring locations will

be 60 feet away from the railroad tracks, we don't anticipate the need of UPRR permitting and flagging operations.

Engineering analyses will be performed in accordance with the IDOT Bridge Manual and prepare a Structure Geotechnical Report (SGR) in accordance with IDOT All Geotechnical Manual Users Memoranda. The SGR will include a site location map, boring location plan, boring logs, geotechnical items necessary for the design and construction of a single span structure.

- 9.2 Geotechnical Drilling Services — Wang will provide equipment, labor, and associated materials to drill and sample two 50-foot deep geotechnical borings. Traffic control will be required. A truck-mounted drilling rig will be used. The soil will be sampled at 2.5-foot intervals to 30 feet bgs and at 5.0-foot intervals thereafter. The boreholes will be advanced with hollow stem augers, and soil samples will be collected with split-barrel samplers according to AASHTO T 206, "Penetration Test and Split-Barrel Sampling of Soils." After drilling completion, the boreholes will be backfilled with bentonite chips or grout. The hand auger borings will be 15 feet deep and will be obtained with a hand operated Geoprobe System.
- 9.3 Field Supervision — Prior to drilling, Wang will meet with LCDOT and AMEC and present the proposed boring locations plan and the traffic control set up. After approval of the boring plan by LCDOT and AMEC, Wang will layout the boring locations and clear utilities through JULIE and obtain the necessary permits and agreements. As needed, Wang will coordinate field activities with LCDOT, Cook County DOH, and ComEd. A field engineer will monitor drilling activities, maintain daily field notes, log the soil borings, as well as receive, classify, and prepare soil samples for laboratory analysis, observe the groundwater level in boreholes, and survey as-drilled boring locations. At the conclusion of the field activities, Wang will meet again with LCDOT and AMEC to discuss the findings, borehole backfilling, surface restoration and site cleanup and project closure activities.
- 9.4 Laboratory Testing — The laboratory testing program will include natural moisture content (AASHTO T-265), particle size (AASHTO T-88) and Atterberg limits analyses (AASHTO T-89, T-90).
- 9.5 Engineering Analysis and Recommendations —A Structure Geotechnical Report (SGR) will be prepared and submitted. The report will include a site location map, boring location plan, description of subsurface investigation and field and laboratory testing methods, boring logs, laboratory test results, and assessments of the site soil and groundwater conditions. We will provide analyses and recommendations for foundations design and construction.
- 9.6 Scheduling - Wang will start the project expediently upon prior authorization to proceed. Their boring layout and field services plan will be presented in a meeting with Amec Foster Wheeler, Lake County and Cook County before proceeding. It is anticipated that after utility clearance, two working days will be necessary to complete the drilling phase of the project. Preliminary findings will then be presented to the Counties and then the SGR will be prepared in coordination with the TS&L plan and will be scheduled for the same date delivery.

9.7 This scope was prepared assuming the following conditions:

- Work hours will be restricted;
- Coordination with the counties and ComEd are needed before starting the field work
- Traffic control will be required;
- Cook County permitting will be required for lane closures on Lake Cook Road; and
- No hazardous materials are present on site.

10.0 Utility Coordination - Lake County and Cook County will make initial contact with ComEd and other utilities owning facilities within the anticipated work area and will describe for them the project, scope and coordination that will be required.
The CONSULTANT shall:

10.1 Follow up routinely with ComEd and other utilities to provide updates on alternatives being developed to identify any fatal flaws in geometry or constructability prior to their being presented at public meetings.

10.2 Coordinate with utility companies to identify and locate any overhead and underground facilities in the anticipated work area including possible future configurations. Determine the need for utility relocations and begin coordination of relocation design plans where necessary.

10.3 Prepare an existing Utility Plan using appropriate symbols per IDOT CAD Standards. Include both horizontal & vertical location of utilities.

10.4 Identify any temporary easements, right-of-entry agreements or special safety standards that may be required by utility companies during construction.

10.5 Assist Lake County and Cook County with the preparation of utility agreements as needed

11.0 Railroad Coordination - Lake County will make initial contact with the Union Pacific Railroad to inform them of the project, scope and coordination that will be required. Lake County will also work with the Railroad on the issue of pedestrians crossing over the tracks north of Lake Cook Road to gain access to the bike path.
The CONSULTANT shall:

11.1 Follow up routinely with the Railroad to provide updates on alternatives being developed to identify any fatal flaws in geometry or constructability prior to their being presented at public meetings.

11.2 Identify any temporary easements, right-of-entry agreements or special safety standards that may be required by the Railroad during surveying or construction activities and describe this information in the Project Development report.

12.0 Draft Preliminary Project Development Report, Preliminary Project Development Report, and Final Project Development Report
The CONSULTANT shall prepare:

- 12.1 A Draft Project Development Report shall be prepared in accordance with the Illinois Department of Transportation's Bureau of Local Roads and Streets Policies and Procedures for Federal-Aid Projects.

The Project Development Report shall include:

- Project location
- Existing conditions
- Traffic data
- Project purpose and need
- Design guidelines
- Proposed improvement
 - Roadway
 - Path/ADA
 - Structures
 - Drainage
 - Utilities
 - Railroad impacts
 - Erosion & sediment control
 - Traffic control
- Design variances
- Cost estimate
- Safety
- Right-of-way requirements
- Environmental issues
- Commitments
- Public involvement
- Other coordination

Exhibits will include:

- Location map
- Selected alternative plan and profile sheets (1"=20')
- Selected alternative typical sections
- Utility plan
- Drainage plan
- Bridge description, plan and elevation
- Traffic management plan
- Environmental resources plan
- Selected alternative cross sections

- 12.2 A Preliminary Project Development Report will be prepared incorporating all comments on the Draft Preliminary Design Report.

- 12.3 A Final Project Development Report will be prepared incorporating all comments on the Preliminary Design Report.

- 13.0 A Traffic Management Plan (TMP) for Skokie Valley Bike Path and Lake-Cook Road. A Preliminary TMP will be prepared followed by a Final TMP incorporating comments. The CONSULTANT shall:

- 13.1 Develop a TMP to address construction sequence and maintenance of traffic during construction. TMP shall include any lanes on Lake Cook Road that would require temporary closure during construction. Detouring the road is not anticipated.
 - 13.2 The existing bike path shall remain open and have access to Lake Cook Road throughout construction. A temporary access path plan will be developed to Lake Cook Road from the north to be used throughout construction.
 - 13.3 Give due consideration to Constructability given the constraints presented by the railroad, ComEd lines, other utilities and impacts to traffic on Lake Cook Road.
- 14.0 Public Informational Meetings: The CONSULTANT shall prepare for and attend meetings with the Chamber of Commerce, bicycle groups, local residents, and other stakeholders and interested parties. This shall consist of two (2) Public Informational Meetings (PIM) and four (4) Stakeholder Involvement Group (SIG) Meetings. Activities will include the following:
- 14.1 Stakeholder Involvement Groups Meetings: Prepare and attend meetings as described below. Three (3) consultant team members will attend each meeting. All meetings will be one (1) hour. This does not include travel to meeting location and return.
 - Consultant will work with Lake County and Cook County to develop a list of stakeholders to be invited to the Stakeholder Involvement Group meetings.
 - Consultant will prepare the correspondences to the stakeholders.
 - The first Stakeholder Involvement Group meeting will be held to inform the group about the project startup and purpose.
 - A second Stakeholder Involvement Group meeting will be held prior to the first Public Informational Meeting to present bridge alternatives and gather feedback.
 - A third Stakeholder Involvement Group meeting shall be to present a structural type and solicit feedback. The Preferred Alternative will be selected by Lake County and Cook County.
 - The fourth SIG meeting is reserved for presenting project progress.
 - 14.2 The CONSULTANT shall prepare for, coordinate and attend two (2) Public Information Meetings, to be held in an open-house format. Comment forms will be prepared and provided at each meeting. Three (3) consultant team members will attend each meeting. All meetings will be two (2) hours, (5-7pm). This does not include travel to meeting location and return. The consultant shall secure the location of the Public Meeting Site.
 - One (1) public meeting will be held after the initial Stakeholder Involvement Group Meeting to present bridge alternatives to the public and gather feedback. Exhibit boards and 8.5" x 11" handouts will be prepared and provided at the meeting.
 - After the preferred bridge alternative is selected, a second Public Information Meeting will be held to announce the selected design.

- 14.3 Dry Run Meetings: Prior to each public informational meeting, coordinate and attend a dry run meeting (two total) with Lake and Cook County. Two (2) consultant team members will attend each meeting. This includes preparation of materials to be ready for review at the dry run.
- These meetings will be one (1) hour long. This does not include travel to the meeting location and the return.
 - Public-meeting-ready exhibits and 8.5" x 11" handouts will be provided and reviewed at these meetings.
 - The CONSULTANT shall make any changes to the exhibits and handouts as directed by Lake and Cook County. These changes will be made prior to the open house public meetings.
- 14.4 The CONSULTANT shall create display exhibits for the open house public meetings and the stakeholders meetings. These shall include poster size up to (but not exceeding) ANSI E size exhibits. These will be prepared from the base map information in ArcGIS.
- 15.0 Meetings
The CONSULTANT shall:
- 15.1 Schedule and attend a project kickoff meeting for all discipline leads at the project site.
- 15.2 Prepare exhibits for and attend one FHWA coordination meeting. Three (3) consultant team members shall attend the meeting. Meetings shall include travel and travel time.
- 15.3 Attend a review meeting for the Preliminary Project Development Report with Lake County and Cook County. A maximum of three (3) consultant team members shall attend the meeting. Meeting shall include travel and travel time.
- 15.4 Coordinate and meet with Lake and Cook counties on landscaping and bridge aesthetics. The first meeting will be a face to face meeting with both counties. All subsequent meetings will be either in person or via videoconference or teleconference, as needed.
- 15.5 Maintain regular coordination activities with Lake County as the project progresses.
- 16.0 Administration
The CONSULTANT shall:
- 16.1 Perform all miscellaneous administrative tasks including preparing a health and safety plan for the project; preparing all correspondence, coordinating with Lake County on administrative matters, internal team coordination, assistance with report printing and delivery; and preparing monthly progress reports to accompany the monthly invoices.

17.0 Quality Assurance and Quality Control
The CONSULTANT shall:

- 17.1 Prepare a project specific QA/QC Plan document and implement the actions required of the QA/QC Plan including technical and QA/QC review prior to each milestone submittal.



Skokie Valley Bike Path

Scope of Land Surveying Services:

Upon authorization and prior to field work phase, the current tax maps of the land surrounding the “survey area” will be obtained and copies will be procured of all (adjacent) recorded subdivision plats for use in looking for existing ROW and property line monumentation. IDOT will be contacted for any roadway dedication maps / plats and we will contact ComEd for any “strip maps” they have for their ROW in this area. We will also contact the Lake County Division of Transportation’s Land Surveyor to obtain vertical control information (benchmarks) in or near the “survey area”. Horizontal control will be on State Plane Coordinates NAD83.

Once we have established horizontal and vertical control, we will utilize RTK GPS (Trimble R-10 / TSC3 collectors) along with conventional leveling and robotic total stations to “tie-in” all found monumentation, all improvements, visible utilities and trees over 4” throughout the survey area. Laser scanning techniques will also be used to scan several power poles, including the lower “arm” on the ComEd tower as well as the “lowest” wires (in relation to Lake-Cook Road), to obtain their elevations. In addition, we will scan the lowest level(s) of the existing railroad bridge to ascertain its height above the existing pavement of Lake – Cook Road, as well as physically locating the existing railroad tracks throughout the survey area. Invert elevations will be obtained for all sanitary, storm (drainage) and water utilities within the survey area. Topographic coverage will include 50 foot cross sections (paced grid) for Lake-Cook Road as well as the Skokie Valley Bike path corridor (as shown on the attached exhibit). No topographic information will be taken within the railroad ROW without “flaggers” from the railroad. Our survey fee does not include the cost of “flaggers”.

Using symbology as approved by the engineer, we will plot all existing survey data at a convenient scale, including all RIM/invert data, line work, topographic cross-sections, visible utilities and existing ROW’s – as determined by found monumentation and record information and generate 1 foot contour intervals throughout the mapped area.

Proposed easements locations as provided by engineer will be identified, but no plats and legals will be prepared as part of the Phase I scope.

COST PLUS FIXED FEE

DATE _____

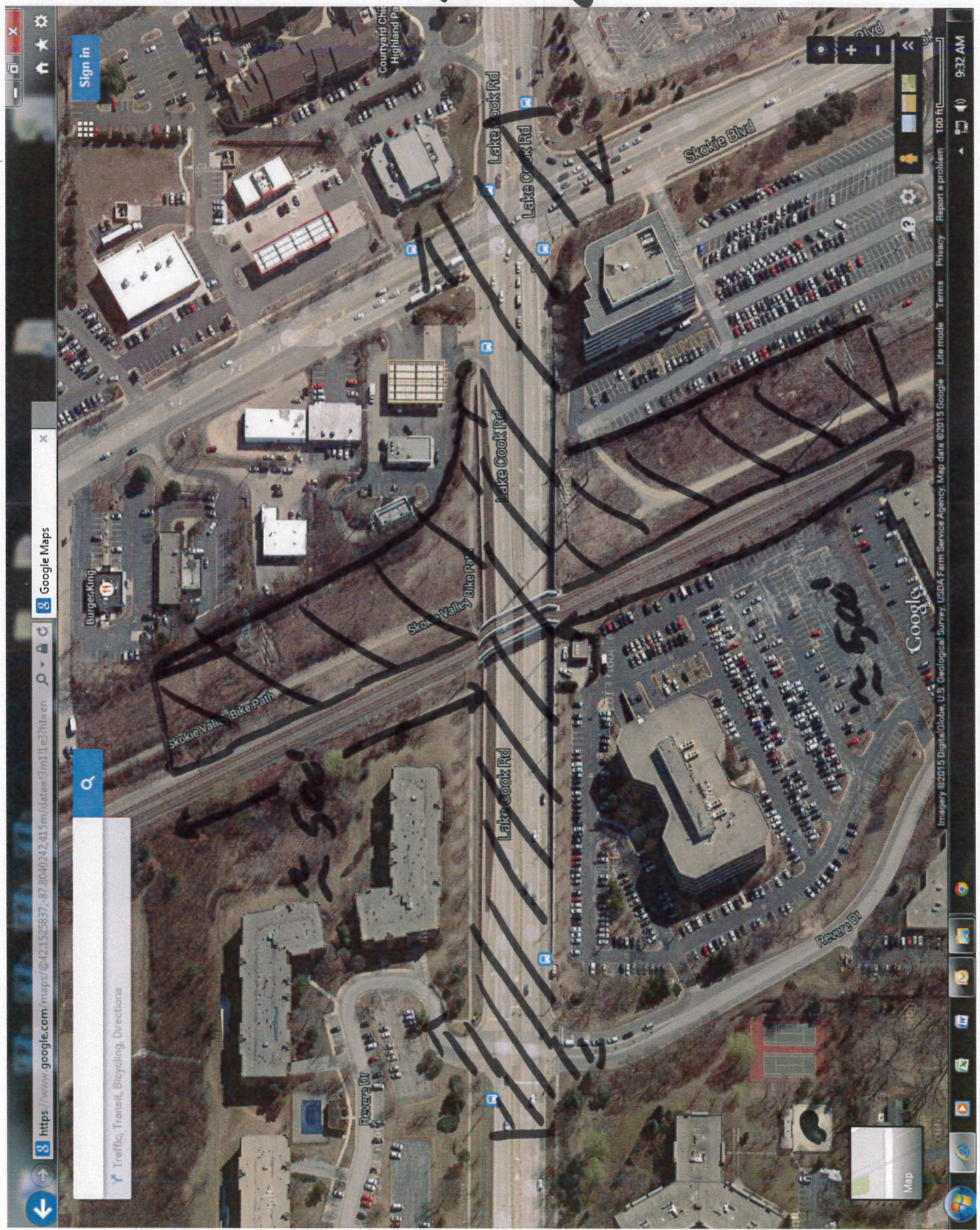
1.117

0

Printed 4/8/2015Bureau of Design and Environment (Rev. 04/03/15)
DBE

Q

~led
in at
corners



April 20, 2015

Mr. Gary Baker, P. E.
Amec Foster Wheeler
Environment & Infrastructure
8745 West Higgins Road, Suite 300
Chicago IL 60631

Reference: Proposal for Geotechnical Engineering Services
Skokie Valley Bike Path Bridge over Lake Cook Road
Section No. 14-00265-01-BR
Lake and Cook Counties, Illinois
Wang P150331

Dear Mr. Baker:

Wang Engineering, Inc. (Wang) is pleased to submit this proposal for geotechnical engineering services for the design and construction of the proposed Skokie Valley Bike Path Bridge over Lake Cook Road, in Lake and Cook Counties, Illinois. The proposed bridge will connect the existing bike path from its current terminus on the north side of Lake Cook Road to a proposed bike path on the south side. Within the project area, Lake Cook Road is under the jurisdiction of the Cook County Department of Transportation and Highways.

SCOPE OF WORK

Wang's scope of services will include the preparation of a Structure Geotechnical Report in connection with the Bridge Type, size and Location (TSL) Plan. Based on the existing drawings, the railroad bridge was designed to be supported on metal shell concrete piles of estimated length of 29 feet, whereas the reinforced concrete walls to be supported on shallow footings.

We propose two structure soil borings be conducted from the Lake County Road elevations to approximately 50 feet below ground surface (bgs). The minimum distance from the walls should be 4 feet to clear the existing walls' foundations. Moreover, to determine the soil conditions behind the walls, we proposed hand auger borings to 15 feet. To obtain the hand auger borings we only will need permission from ComEd to work within their easement. Since the proposed boring locations will be 60 feet away from the railroad tracks, we don't anticipate the need of UPRR permitting and flagging operations. Proposed boring locations are presented on the attached exhibit.

Wang will perform engineering analyses in accordance with the IDOT Bridge Manual and prepare a structure geotechnical report (SGR) in accordance with IDOT All Geotechnical Manual Users Memoranda. The SGR will include a site location map, boring location plan, boring logs, geotechnical items necessary for the design and construction of a single span structure.

Geotechnical Drilling Services — Wang will provide equipment, labor, and associated materials to drill and sample two 50-foot deep geotechnical borings. Traffic control will be required. A truck-mounted drilling rig will be used. The soil will be sampled at 2.5-foot intervals to 30 feet bgs and at 5.0-foot intervals thereafter. The boreholes will be advanced with hollow stem augers, and soil samples will be collected with split-barrel

samplers according to AASHTO T 206, "Penetration Test and Split-Barrel Sampling of Soils." After drilling completion, the boreholes will be backfilled with bentonite chips or grout. The hand auger borings will be 15 feet deep and will be obtained with a hand operated Geoprobe System.

Field Supervision — Prior to drilling, Wang will meet with LCDOT and AMEC and present the proposed boring locations plan and the traffic control set up. After approval of the boring plan by LCDOT and AMEC, Wang will layout the boring locations and clear utilities through JULIE and obtain the necessary permits and agreements. As needed, Wang will coordinate field activities with LCDOT, Cook County DOH, and ComED. A field engineer will monitor drilling activities, maintain daily field notes, log the soil borings, as well as receive, classify, and prepare soil samples for laboratory analysis, observe the groundwater level in boreholes, and survey as-drilled boring locations. At the conclusion of the field activities, Wang will meet again with LCDOT and AMEC to discuss the findings, borehole backfilling, surface restoration and site cleanup and project closure activities.

Laboratory Testing — The laboratory testing program will include natural moisture content (AASHTO T-265), particle size (AASHTO T-88) and Atterberg limits analyses (AASHTO T-89, T-90).

Engineering Analysis and Recommendations — Wang will prepare and submit a Structure Geotechnical Report (SGR). The report will include site location map, boring location plan, description of subsurface investigation and field and laboratory testing methods, boring logs, laboratory test results, and assessments of the site soil and groundwater conditions. We will provide analyses and recommendations for foundations design and construction.

SCHEDULING

Wang will start the project expediently upon prior authorization to proceed. We anticipate that after utility clearance two working days will be necessary to complete the drilling phase of the project. The SGR will be prepared in connection with the TS&L plan and will be scheduled for the same date delivery.

ESTIMATED COST

Wang proposes to provide the above tasks on time and expense basis according to the attached cost estimate. This cost estimate was prepared assuming the following conditions:

- Work hours will be restricted;
- Traffic control will be required;
- Cook County permitting will be required for lane closures on the Lake County Road; and
- No hazardous materials are present on site.

Wang Engineering, Inc. appreciates the opportunity to present this cost estimate, and we look forward to working with AMEC and the Lake County Division of Transportation. Please call us if you have any questions or if you require additional information regarding this proposal.

Sincerely,

WANG ENGINEERING, INC.

A handwritten signature in black ink, reading 'Colin T. Farz'.



Corina T. Farez, PE, PG
Vice President

Attachments: Boring Location Plan, Cost Estimate for Consultant Services, Direct Cost Breakdown

PAYROLL ESCALATION TABLE FIXED RAISES

FIRM NAME Wang Engineering, Inc.
PRIME/SUPPLEMENT Prime

DATE 04/20/15
PTB NO. NA

CONTRACT TERM 12 MONTHS
START DATE 7/1/2015
RAISE DATE 1/1/2016

OVERHEAD RATE 116.61%
COMPLEXITY FACTOR 0
% OF RAISE 3.00%

ESCALATION PER YEAR

7/1/2015 - 1/1/2016

1/2/2016 - 7/1/2016

6
12

6
12

6
12

6
12

6
12

= 50.00%
= 1.0150

51.50%

The total escalation for this project would be:

1.50%

PAYROLL RATES

FIRM NAME
PRIME/SUPPLEMENT
PSB NO.

Wang Engineering, Inc.
Prime
NA

DATE
04/20/15

ESCALATION FACTOR 1.50%

CLASSIFICATION	CURRENT RATE	CALCULATED RATE
Principal in Charge	\$ 74.20	\$70.00
Project Manager/Senior Engineer	\$ 54.72	\$55.54
Project Engineer/Project Geologist	\$ 33.43	\$33.93
Project Assistant Engineer/Assistant Geologist	\$ 23.34	\$23.69
Laboratory Technician	\$ 20.63	\$20.94
Project Administrative Assistant	\$ 25.32	\$25.70
QC/QA Reviewer	\$ 52.71	\$53.50

Subconsultants

FIRM NAME

PRIME/SUPPLEMENT

PSB NO.

Wang Engineering, Inc.

Prime

NA

DATE

04/20/15

NAME	Direct Labor Total	Contribution to Prime Consultant
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
		0.00
Total	0.00	0.00

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 PLUS FIXED FEE
COST ESTIMATE OF CONSULTANT SERVICES**

DATE 04/20/15

DBE 100.00%

Printed 4/20/2015 11:14 AM

Wang Eng Wang Engineering, Inc.	
NA	NA
Prime	Prime

SHEET 1 OF 2

Printed 4/20/2015 11:14 AM

AVERAGE HOURLY PROJECT RATES

FIRM
PSB
PRIME/SUPPLEMENT

Wang Engineering, Inc.
NA
Prime

DATE 04/20/15

SHEET 2 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Project Management																	
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Principal in Charge	70.00	1	14.29%	10.00															
Project Manager/Senior Engineer	55.54	5	71.43%	39.67															
Project Engineer/Project Geologist	33.93																		
Project Assistant Engineer/Assistant Geologist	23.69																		
Laboratory Technician	20.94																		
Project Administrative Assistant	25.70	1	14.29%	3.67															
QC/QA Reviewer	53.50																		
TOTALS		7	100%	\$53.34	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00	0	0%	\$0.00

Name: Skokie Valley Bike Path Bridge
RFP/PTB/PSB/Item: NA
Contract/Job: NA

Date: 04/20/2015
Wang No.: P150331

Task Description	Units	Unit Price	Extended Cost
DRILLING, SAMPLING & INSITU TESTING			
Drilling Coordination	2.0 Hours	\$97.00 /Hour	\$194.00
Utilities Clearance, Site Access, Permitting	8.0 Hours	\$97.00 /Hour	\$776.00
Mobilization (Truck-mounted Drill Rig)	1	\$790.00 /Each	\$790.00
Drilling Crew Daily Travel & Support Vehicle	2 Days	\$165.00 /Day	\$330.00
Stand-by Hourly Rate - Truck-mounted Drill Rig (Two-Man Crew & Equipment)	0.0 Hours	\$350.00 /Hour	\$0.00
Mobilization (ATV-mounted Drill Rig)	0	\$1,350.00 /Each	\$0.00
ATV-mounted Drill Rig Daily Charge	0 Days	\$305.00 /Day	\$0.00
Drilling Crew Daily Travel & Support Vehicle	0 Days	\$165.00 /Day	\$0.00
Stand-by Hourly Rate - ATV-Mounted Drill Rig (Two-Man Crew & Equipment)	0.0 Hours	\$350.00 /Hour	\$0.00
Portable Water Tank	0 Days	\$155.00 /Day	\$0.00
Lighting for Night Field Activities	0 Nights	\$115.00 /Night	\$0.00
<u>Drilling and Sampling</u>			
<u>Structure Borings</u>			
<i>Drilling including split spoon sampling at 2.5-foot intervals to 30 feet and at 5-foot intervals thereafter (SPT, Penetrometer, Rimac, Visual Classification Included)</i>			
Between 0 and 75 Feet			
Normal Working Hours	0.0 Feet	\$32.00 /Foot	\$0.00
Restricted Hours (6 Hours)	100.0 Feet	\$36.00 /Foot	\$3,600.00
Night Work	0.0 Feet	\$34.00 /Foot	\$0.00
Between 75 and 100 Feet			
Normal Working Hours	0.0 Feet	\$34.00 /Foot	\$0.00
Restricted Hours (6 Hours)	0.0 Feet	\$40.00 /Foot	\$0.00
Night Work	0.0 Feet	\$35.00 /Foot	\$0.00
Between 100 and 125 Feet			
Normal Working Hours	0.0 Feet	\$40.00 /Foot	\$0.00
Restricted Hours (6 Hours)	0.0 Feet	\$51.00 /Foot	\$0.00
Night Work	0.0 Feet	\$46.00 /Foot	\$0.00
Between 125 and 150 Feet			
Normal Working Hours	0.0 Feet	\$46.00 /Foot	\$0.00
Restricted Hours (6 Hours)	0.0 Feet	\$60.00 /Foot	\$0.00
Night Work	0.0 Feet	\$56.00 /Foot	\$0.00
Additional Split-Spoon Sample	0.0 Samples	\$45.00 /Sample	\$0.00
<u>Roadway Borings</u>			
<i>Drilling including continuous split spoon sampling to 10 feet (SPT, Penetrometer, Visual Classification Included)</i>			
Continuous Sampling			
Normal Hours	0.0 Feet	\$32.00 /Foot	\$0.00
Restricted Hours (6 Hours)	0.0 Feet	\$36.00 /Foot	\$0.00
Night Hours	0.0 Feet	\$34.00 /Foot	\$0.00
<u>Shelby Tube Borings</u>			
<i>Blind drilling and Shelby tube sampling at selected depths</i>			
Drill without sampling			
Normal Working Hours	0.0 Feet	\$22.00 /Foot	\$0.00
Restricted Hours (6 Hours)	0.0 Feet	\$27.00 /Foot	\$0.00
Night Work	0.0 Feet	\$25.00 /Foot	\$0.00
Shelby Tube Samples			
Normal Working Hours	0 Samples	\$61.00 /Sample	\$0.00
Restricted Hours (6 Hours)	0 Samples	\$71.00 /Sample	\$0.00
Night Work	0 Samples	\$67.00 /Sample	\$0.00
<u>Rock Coring</u>			
Rock Coring Setup			
Set Casing Below 40 Feet	0 Setups	\$367.00 /Setup	\$0.00
Normal Working Hours			
Normal Working Hours	0.0 Feet	\$14.00 /Foot	\$0.00
Restricted Hours (6 Hours)	0.0 Feet	\$16.00 /Foot	\$0.00
Night Work	0.0 Feet	\$15.00 /Foot	\$0.00
Rock Coring			
Normal Working Hours	0.0 Feet	\$61.00 /Foot	\$0.00
Restricted Hours (6 Hours)	0.0 Feet	\$75.00 /Foot	\$0.00
Night Work	0.0 Feet	\$67.00 /Foot	\$0.00

Name: Skokie Valley Bike Path Bridge
RFP/PTB/PSB/Item: NA
Contract/Job: NA

Date: 04/20/2015
Wang No.: P150331

Task Description	Units	Unit Price	Extended Cost
<u>Drilling & Sampling - Hourly - two-man crew</u>			
Two-Man Crew - normal working hrs	0.0 Hours	\$352.00 /Hour	\$0.00
Two-Man Crew - overtime (2 hrs per day)	0.0 Hours	\$439.00 /Hour	\$0.00
<u>Drilling & Sampling - Hourly - three-man crew</u>			
Two-Man Crew and Field Supervisor- normal working hrs	0.0 Hours	\$475.00 /Hour	\$0.00
Two-Man Crew and Field Supervisor - overtime (2 hrs per day)	0.0 Hours	\$520.00 /Hour	\$0.00
<u>Pavement/ Deck Coring & Testing</u>			
<i>For 2-inch, 4-inch, and 6-inch diameter cores</i>			
Pavement/Deck Coring (Two-Man Crew and Equipment)			
Normal Working Hours	0.0 Hours	\$284.00 /Hour	\$0.00
Restricted Hours (6 Hours)	0.0 Hours	\$326.00 /Hour	\$0.00
Night Work	0.0 Hours	\$306.00 /Hour	\$0.00
Asbestos Content Testing			
On Deck Cores	0 Tests	\$169.00 /Test	\$0.00
<u>Hand Augering (Two-Man Crew and Equipment)</u>			
<i>Hand augering and soil sampling to 10 feet</i>			
Hand Augering			
Normal Working Hours	8.0 Hours	\$284.00 /Hour	\$2,272.00
Restricted Hours (6 Hours)	0.0 Hours	\$326.00 /Hour	\$0.00
Night Work	0.0 Hours	\$306.00 /Hour	\$0.00
<u>Piezometer/Monitoring Well Installation</u>			
2.0-inch Wells			
2" x 5' PVC Screen, .010 slot, sch 40	0 Pipes	\$30.00 /Pipe	\$0.00
2" x 10' PVC Screen, .010 slot, sch 40	0 Pipes	\$36.00 /Pipe	\$0.00
2" x 5' PVC Riser, sch 40	0 Pipes	\$19.00 /Pipe	\$0.00
2" x 10' PVC Riser, sch 40	0 Pipes	\$27.00 /Pipe	\$0.00
2" PVC Female Points	0 Points	\$10.00 /Point	\$0.00
2" PVC Slip Caps	0 Caps	\$3.00 /Cap	\$0.00
4" Manhole Cast Iron w/Twist Lock Lid	0 Lids	\$50.00 /Lid	\$0.00
2" x 5' Green Steel Standups	0 Standups	\$82.00 /Standup	\$0.00
4.0-inch Wells			
4" x 5' PVC Screen, .010 slot, sch 40	0 Pipes	\$48.00 /Pipe	\$0.00
4" x 10' PVC Screen, .010 slot, sch 40	0 Pipes	\$68.00 /Pipe	\$0.00
4" x 5' PVC Riser, sch 40	0 Pipes	\$36.00 /Pipe	\$0.00
4" x 10' PVC Riser, sch 40	0 Pipes	\$51.00 /Pipe	\$0.00
4" PVC Female Points	0 Points	\$15.00 /Point	\$0.00
4" PVC Slip Caps	0 Caps	\$15.00 /Cap	\$0.00
6.0-inch Wells			
6" x 5' PVC Screen, .010 slot, sch 40	0 Pipes	\$113.00 /Pipe	\$0.00
6" x 10' PVC Screen, .010 slot, sch 40	0 Pipes	\$167.00 /Pipe	\$0.00
6" x 5' PVC Riser, sch 40	0 Pipes	\$88.00 /Pipe	\$0.00
6" x 10' PVC Riser, sch 40	0 Pipes	\$138.00 /Pipe	\$0.00
6" PVC Female Points	0 Points	\$47.00 /Point	\$0.00
6" PVC Slip Caps	0 Caps	\$16.00 /Cap	\$0.00
Other Items			
#1B008 Masterlock, 130D	0 Locks	\$7.00 /Lock	\$0.00
55 gallon DOT Containment Drums	0 Drums	\$37.00 /Drum	\$0.00
Concrete--Quickcrete 5000	0 Bags	\$16.00 /Bag	\$0.00
3/8" Coated Bentonite Pellets, 5 Gal Bucket	0 Buckets	\$57.00 /Bucket	\$0.00
10/20 Silica Sand, 50 lb plastic bag	0 Bags	\$9.00 /Bag	\$0.00
Digital Datalogger and Barometer	0 Dataloggers	\$1,224.00 /Each	\$0.00
<u>Labor - Hourly</u>			
Two Man Drilling Crew - normal working hours	0.0 Hours	\$352.00 /Hour	\$0.00
Two Man Drilling Crew - overtime (2 hours per day)	0.0 Hours	\$439.00 /Hour	\$0.00

Name: Skokie Valley Bike Path Bridge
RFP/PTB/PSB/Item: NA
Contract/Job: NA

Date: 04/20/2015
Wang No.: P150331

Task Description	Units	Unit Price	Extended Cost
<u>Barge Drilling on a Navigable Waterway</u>			
<i>Price may vary depending on size and extent of waterway</i>			
Barge and Crane Mobilization	At Cost		\$0.00
Barge and Crane Daily Charge	At Cost		\$0.00
Barge and Crane Demobilization	At Cost		\$0.00
<u>Specialized Insitu Testing</u>			
Pressuremeter Testing			
Mobilization	0	\$525.00 /Each	\$0.00
Testing	0 Days	\$2,150.00 /Day	\$0.00
Vane Shear	0 Tests	\$112.00 /Test	\$0.00
Dilatometer Testing	0 Tests	\$790.00 /Test	\$0.00
Piezometric Cone Penetrometer			
Mobilization (Truck Mounted CPT)	0	\$5,000.00 /Each	\$0.00
CPTU	0.0 Feet	\$24.00 /Foot	\$0.00
Seismic Wave Measurement	0 Tests	\$184.00 /Test	\$0.00
Pore Pressure Dissipation Test	0 Tests	\$579.00 /Test	\$0.00
Photoionization Detector (PID)	0 Days	\$425.00 /Day	\$0.00
Water Infiltration/Percolation Test			
Double Ring Infiltrometer Test (ASTM D3385)	0 Tests	\$1,100.00 /Test	\$0.00
Single Ring Infiltrometer Test (Chicago Stormwater Ordinance)	0 Tests	\$600.00 /Test	\$0.00
Note: Drilling crew will be billed as standby for the duration of pressuremeter, vane shear, and dilatometer testing			
<u>Borehole Abandonment and Surface Restoration</u>			
Backfilling Borehole			
Normal Working Hours	0.0 Feet	\$9.00 /Foot	\$0.00
Restricted Hours (6 Hours)	100.0 Feet	\$10.00 /Foot	\$1,000.00
Night Work	0.0 Feet	\$9.00 /Foot	\$0.00
Pavement/Deck Patching			
Asphalt	0 Patches	\$17.00 /Each	\$0.00
Concrete	2 Patches	\$17.00 /Each	\$34.00
Patching of Full Deck Coring	0 Patches	\$320.00 /Each	\$0.00
Soil Cutting Removal	0.0 Hours	\$320.00 /Hour	\$0.00
<u>Boring Location Accessibility</u>			
Private Utility Determination	At Cost		\$0.00
Tree Clearance	At Cost		\$0.00
Guardrail Removal and Replacement	At Cost		\$0.00
Dozer / Equipment Rental	At Cost		\$0.00
<u>Railroad Fees</u>			
Permitting	At Cost		\$0.00
Railroad Protective Insurance	At Cost		\$0.00
Railroad Flagman	At Cost		\$0.00
<u>State/County/Municipal Fees</u>			
Pavement Opening Permit	At Cost		\$0.00
Insurance and Bonding	At Cost		\$0.00
<u>Surveying of Boring Locations</u>			
Two-man crew	1.0 Hours	\$220.00 /Hour	\$220.00
			\$ 9,216.00

Name: Skokie Valley Bike Path Bridge
RFP/PTB/PSB/Item: NA
Contract/Job: NA

Date: 04/20/2015
Wang No.: P150331

Task Description			Units	Unit Price	Extended Cost
LABORATORY TESTING					
Soil Index Tests					
T265	D2216	Water Content	30 Tests	\$9.50 /Test	\$285.00
--	D7263	Unit Weight (Density)	0 Tests	\$35.00 /Test	\$0.00
T100	D854	Specific Gravity	0 Tests	\$64.00 /Test	\$0.00
--	--	Void Ratio, Porosity, and Saturation	0 Tests	\$104.00 /Test	\$0.00
--	D4972	pH of Soil	0 Tests	\$57.00 /Test	\$0.00
T267	D2974	Organic Content by LOI	0 Tests	\$59.00 /Test	\$0.00
T194	--	Organic Content by Wet Combustion	0 Tests	\$129.00 /Test	\$0.00
Particle Size Distribution					
T88	D422	Sieve Analysis	0 Tests	\$75.00 /Test	\$0.00
T88	D422	Hydrometer Analysis	0 Tests	\$79.00 /Test	\$0.00
T88	D422	Combined Sieve and Hydrometer	2 Tests	\$119.00 /Test	\$238.00
--	D1140	Percent Finer than No. 200 Sieve	0 Tests	\$49.00 /Test	\$0.00
Atterberg Limits					
T89, T90	D4318	Liquid and Plastic Limits	2 Tests	\$75.00 /Test	\$150.00
T92	D427	Shrinkage Factors	0 Tests	\$88.00 /Test	\$0.00
Classification of Soils					
--	D2488	Visual Manual	0 Samples	\$18.00 /Sample	\$0.00
--	D2487	Unified Soil Classification System	0 Samples	\$189.00 /Sample	\$0.00
M145	--	AASHTO Classification	0 Samples	\$189.00 /Sample	\$0.00
--	--	USDA Classification	0 Samples	\$119.00 /Sample	\$0.00
Soil Settlement, Swelling, and Collapse Potential					
T216	D2435	One-Dimensional Consolidation	0 Tests	\$540.00 /Test	\$0.00
--	D4546	One-Dimensional Swell	0 Tests	\$525.00 /Test	\$0.00
--	D5333	Collapse Potential	0 Tests	\$289.00 /Test	\$0.00
Shear Strength of Soil					
		Hand Penetrometer	0 Tests	\$4.50 /Test	\$0.00
		Rimac Unconfined Compressive Strength	0 Tests	\$14.00 /Test	\$0.00
T208	D2166	Unconfined Compressive Strength	0 Tests	\$79.00 /Test	\$0.00
T236	D3080	Direct Shear of Soils (3 points)	0 Tests	\$694.00 /Test	\$0.00
T296	D2850	UU Triaxial Compression (3 points)	0 Tests	\$326.00 /Test	\$0.00
T297	D4767	CU Triaxial Compression (3 points)	0 Tests	\$1,100.00 /Test	\$0.00
T297	D4767	CD Triaxial Compression (3 points)	0 Tests	\$1,100.00 /Test	\$0.00
	D7012	Peak Uniaxial Compressive Strength of Rock Core	0 Tests	\$158.00 /Test	\$0.00
Laboratory Compaction Tests					
T99	D698	Moisture-Density of Soils (Standard Effort)	0 Tests	\$194.00 /Test	\$0.00
T180	D1557	Moisture-Density of Soils (Modified Effort)	0 Tests	\$204.00 /Test	\$0.00
T193	--	Illinois Bearing Ratio (1 point)	0 Tests	\$490.00 /Test	\$0.00
T193	D1883	California Bearing Ratio (3 points)	0 Tests	\$893.00 /Test	\$0.00
Coefficient of Permeability					
T215	D2434	Hydraulic Conductivity (Constant Head)	0 Tests	\$438.00 /Test	\$0.00
--	D5084	Hydraulic Conductivity (Flexible Wall)	0 Tests	\$459.00 /Test	\$0.00
Additional Sample Preparation Procedures					
		Removal of Organic Matter	0 Samples	\$84.00 /Sample	\$0.00
		Extrusion & Preservation of Undisturbed Samples	0 Samples	\$27.00 /Sample	\$0.00
		Logging & Classification of Undisturbed Samples	0 Samples	\$63.00 /Sample	\$0.00
		Remolding and Trimming of Samples	0 Samples	\$60.00 /Sample	\$0.00
Planting Soil Mix Testing					
		Chemical Analyses & Mitigation Recommendations (300 g sample required)			
		pH, CEC, Soluble Salts, OM, P, K, Other Nutrients	0 Tests	\$112.00 /Test	\$0.00
		Residual Chemicals , Herbicides Full Screen	0 Tests	\$627.00 /Test	\$0.00
		Mechanical Analyses & Mitigation Recommendations (1,000 g sample required)			
T88	D422	Combined Sieve and Hydrometer	0 Tests	\$119.00 /Test	\$0.00
Analytical Laboratory Services - for CCDD					
		Volatile Organic Components (VOC)	0 No	\$194.00 /Each	\$0.00
		SemiVOC including PNA's	0 No	\$326.00 /Each	\$0.00
		PCB	0 No	\$131.00 /Each	\$0.00
		Total Metals	0 No	\$204.00 /Each	\$0.00
		PH Determination	0 No	\$22.00 /Each	\$0.00
Corrosion Testing					
		(Resistivity, Chlorides, pH, Redox, and Sulfates)	0 No	\$280.50 /Each	\$0.00
					\$673.00

Name: Skokie Valley Bike Path Bridge
RFP/PTB/PSB/Item: NA
Contract/Job: NA

Date: 04/20/2015
Wang No.: P150331

Task Description	Units	Unit Price	Extended Cost
TRAFFIC CONTROL			
<u>Traffic Control</u>			
Shoulder Closure (1/2 mile) - Expressway			
Daytime	0.0 No.	\$850.00 /Each	\$0.00
Night time	0.0 No.	\$950.00 /Each	\$0.00
Sunday	0.0 No.	\$1,275.00 /Each	\$0.00
Shoulder Closure (1/2 mile) - Arterial			
Daytime	0.0 No.	\$650.00 /Each	\$0.00
Night time	0.0 No.	\$800.00 /Each	\$0.00
Sunday	0.0 No.	\$1,275.00 /Each	\$0.00
Lane Closure (1 lane) (1/2 mile) - Expressway			
Daytime	0.0 No.	\$1,750.00 /Each	\$0.00
Night time	0.0 No.	\$1,900.00 /Each	\$0.00
Sunday	0.0 No.	\$2,200.00 /Each	\$0.00
Lane Closure (1 lane) (1/2 mile) - Arterial			
Daytime	2.0 No.	\$750.00 /Each	\$1,500.00
Night time	0.0 No.	\$900.00 /Each	\$0.00
Sunday	0.0 No.	\$1,275.00 /Each	\$0.00
Lane Closure (2 lane) - Expressway			
Daytime	0.0 No.	\$1,900.00 /Each	\$0.00
Night time	0.0 No.	\$2,050.00 /Each	\$0.00
Sunday	0.0 No.	\$2,375.00 /Each	\$0.00
Lane Closure (2 lane) - Arterial			
Daytime	0.0 No.	\$850.00 /Each	\$0.00
Night time	0.0 No.	\$1,000.00 /Each	\$0.00
Sunday	0.0 No.	\$1,275.00 /Each	\$0.00
Each additional 1/2 mile of closure	0.0 No.	\$125.00 /Each	\$0.00
Impact Attenuator			
Straight Time	0.0 Hours	\$200.00 /Hour	\$0.00
OT & Saturday	0.0 Hours	\$225.00 /Hour	\$0.00
Sunday	0.0 Hours	\$250.00 /Hour	\$0.00
Roadway Flagmen (two-man crew)			
Straight Time	0.0 Hours	\$175.00 /Hour	\$0.00
OT & Saturday	0.0 Hours	\$200.00 /Hour	\$0.00
Sunday	0.0 Hours	\$225.00 /Hour	\$0.00
			\$1,500.00
FIELD VEHICLES & MILEAGE			
<u>Field Vehicle</u>			
Field Vehicle Mileage (>100 Miles per Day)	0.0 Miles	\$0.565 /Mile	\$0.00
Field Vehicle Daily (<100 Miles per Day)	8 Days	\$65.00 /Day	\$520.00
Tolls	0 Tolls	\$1.00 /Toll	\$0.00
			\$ 520.00
OUT-OF-TOWN EXPENSES			
<u>Lodging</u>	0 Days	\$100.00 /Day	\$0.00
<u>Per Diem</u>	0 Days	\$50.00 /Day	\$0.00
			\$ -
REPORT REPRODUCTION			
<u>Report Reproduction</u>			
Copies, Black & White, 8.5" X 11"	150 No	\$0.20 /Each	\$30.00
Copies, Color, 8.5" X 11"	6 No	\$2.50 /Each	\$15.00
Copies, Reproduction or Reduction, 24" X 36"	0 No	\$10.00 /Each	\$0.00
			\$ 45.00
SUMMARY			
DRILLING, SAMPLING & INSITU TESTING			\$9,216.00
LABORATORY TESTING			\$673.00
TRAFFIC CONTROL			\$1,500.00
FIELD VEHICLES & MILEAGE			\$520.00
OUT-OF-TOWN EXPENSES			\$0.00
REPORT REPRODUCTION			\$45.00
			\$ 11,954.00

SKOKIE VALLEY BIKE PATH PEDESTRIAN BRIDGE

Revised 04/23/2012

Item Number	Work Item	Sr Principal/ Project Manager	Principal Engineer	Senior Engineer	Project Engineer	Staff Engineer	Senior Technician	Technician	Admin	AMEC Item Total	Wang Item Total	Compass Item Total	Grand Total
1.0	Data Collection												
1.1	Review and Collect Data	1	4	4	16	16	4			45			
1.2	Unknown parcel identification			8						8			
1.3	Base Map				20	20				40			
	Subtotal:	1	4	12	36	36	4	0	0	93	0	0	93
2.0	Environmental												
2.1	Cultural Resources		16	28						44			
2.2	Endangered Species		16	28						44			
2.3	NPDES Stormwater Permit (Defer to Phase II)									0			
2.4	CE	4	16	32			10			62			
2.5	PESA		4							4			
	Subtotal:	4	52	88	0	0	10	0	0	154	0	0	154
3.0	Wetland Delineation												
3.1	Collect information			8			8			16			
3.2	Field visit		20				20			40			
3.3	Wetland Report		8	8			24			40			
3.4	Mitigation Strategies / Agency Coordination		32				24			56			
	Subtotal:	0	60	16	0	0	76	0	0	152	0	0	152
4.0	Drainage												
4.1	Drainage Studies/Plans	1		24			20			45			
	Subtotal:	1	0	24	0	0	20	0	0	45	0	0	45
5.0	Survey												
5.1	Topo survey	2		4			4			10		354	
	Subtotal:	2	0	4	0	0	4	0	0	10	0	354	364
6.0	Geometric Studies												
6.1	Alternatives	1	2	16	24					43			
6.2	Cross Sections			8		24	16			48			
	Subtotal:	1	2	24	24	24	16	0	0	91	0	0	91
7.0	Bridge Alternatives												
7.1	Develop alternatives	4	40		40	40				124			
7.2	Prepare sketches			4			60			64			
7.3	Exhibits for Phase I report			4			8			12			
7.4	Type, Size, & Location plans		16	40	40	40	60			196			
	Subtotal:	4	56	48	80	80	128	0	0	396	0	0	396
8.0	Landscape/Aesthetics												
8.1	Landscaping plans and details	8	24	12	8					52			
8.2	Bridge Concepts	8	8	8	8					32			
	Subtotal:	16	32	20	16	0	0	0	0	84	0	0	84
9.0	Geotechnical Engineering	2	4		4					10	112		
	Subtotal:	2	4	0	4	0	0	0	0	10	112	0	122
10.0	Utility Coordination												
10.1	ComEd coordination	4	8	24	20					56			
10.2	Other utility coordination		2	16						18			
10.3	Prepare Utility Plan		2	16			16			34			
10.4	Identify temporary easements			2	12					14			
10.5	Assist with Utility Permits			16						16			
	Subtotal:	4	12	74	32	0	16	0	0	138	0	0	138
11.0	Railroad Coordination												
11.1	Union Pacific coordination	4	2	8	12					26			
11.2	Identify temporary easements			2	12					14		16	
	Subtotal:	4	2	10	24	0	0	0	0	40	0	16	56
12.0	Project Development Report												
12.1	Draft Preliminary Design Report	4	8	40		24	4			80			
	Draft Preliminary Design Report exhibits	4	7	16		40	30			97			
12.2	Preliminary Design Report	2	4	24		16	2			48			
12.3	Final Design Report	1	2	16		8	2			29			
	Subtotal:	11	21	96	0	88	38	0	0	254	0	0	254
13.0	Traffic Management Plan												
13.1	MOT on Lake Cook Road		2	20		24	24			70			
13.2	MOT on the Skokie Valley Bike Path	2	2	12		16	8			40			
13.3	Constructability Review	2	20							22			
	Subtotal:	4	24	32	0	40	32	0	0	132	0	0	132
14.0	Public Involvement												
14.1	Stakeholder Involvement Group meetings	16	16	4	16	16	20		16	104			
14.2	Public Informational Meetings	12	12	8	16	16	20		16	100			
14.3	Dry Run Meetings		8	8						16			
14.4	Exhibits		2	12	32		6			52			
	Subtotal:	28	38	32	64	32	46	0	32	272	0	0	272
15.0	Meetings												
15.1	Site visit/kickoff meeting	2	2	2	2	2				10			
15.2	FHWA Coordination Meeting	4	8	8	16	16	4			56			
15.3	Milestone review meetings	2	2	2						6			
15.4	Aesthetics & County Meetings	16								16			
15.5	Ongoing Coordination	4	8	8	8	8				36			
	Subtotal:	28	20	20	26	26	4	0	0	124	0	0	124
16.0	Administration												
16.1	Miscellaneous administrative	8	8	8	8	8	8		24	72			
	Subtotal:	8	8	8	8	8	8	0	24	72	0	0	72
17.0	QA/QC												
17.1	QAQC	8	16	16		8				0			
										48			
	Subtotal:	8	16	16	0	8	0	0	0	48	0	0	48
	PROJECT SUMMARY												
1.0	Data Collection	1	4	12	36	36	4	0	0	93	0	0	93
2.0	Environmental	4	52	88	0	0	10	0	0	154	0	0	154
3.0	Wetland Delineation	0	60	16	0	0	76	0	0	152	0	0	152
4.0	Drainage	1	0	24	0	0	20	0	0	45	0	0	45
5.0	Survey	2	0	4	0	0	4	0	0	10	0	354	364
6.0	Geometric Studies	1	2	24	24	24	16	0	0	91	0	0	91
7.0	Bridge Alternatives	4	56	48	80	80	128	0	0	396	0	0	396
8.0	Landscape/Aesthetics	16	32	20	16	0	0	0	0	84	0	0	84
9.0	Geotechnical Engineering	2	4	0	4	0	0	0	0	10	112	0	122
10.0	Utility Coordination	4	12	74	32	0	16	0	0	138	0	0	138
11.0	Railroad Coordination	4	2	10	24	0	0	0	0	40	0	16	56
12.0	Project Development Report	11	21	96	0	88	38	0	0	254	0	0	254
13.0	Traffic Management Plan	4	24	32	0	40	32	0	0	132	0	0	132
14.0	Public Involvement	28	38	32	64	32	46	0	32	272	0	0	272
15.0	Meetings	28	20	20	26	26	4	0	0	124	0	0	124
16.0	Administration	8	8	8	8	8	8	0	24	72	0	0	72
17.0	QA/QC	8	16	16	0	8	0	0	0	48	0	0	48
	TOTALS	126	351	524	314	342	402	0	56	2115	112	370	2597