


Municipality	LOCAL AGENCY	 <b>Illinois Department of Transportation</b>	CONSULTANT	Name Amec Foster Wheeler Environment and Infrastructure, Inc.
Township				Address 8745 W. Higgins Road, Suite 300
County Lake County – Division of Transportation				City Chicago
Section 16-00059-11-BR				State Illinois
		<b>Preliminary Engineering Services Agreement For Non-Motor Fuel Tax Funds</b>		

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 improvement of the above SECTION. Non-Motor Fuel Tax Funds, allotted to the LA by the State of Illinois, under the general supervision of the State Department of Transportation, hereinafter called the "DEPARTMENT", will be used entirely or in part to finance ENGINEERING services as described under AGREEMENT PROVISIONS.

### Section Description

Name Grass Lake Road Retaining Wall Rehabilitation Supplement 1

Route 18 Length 0 Mi. 2500 FT (Structure No. NA )

Termini Two steel sheet pile retaining walls, one east of and the second west of the Grass Lake Road Bridge

Description:

Additional Roadway work, and structural work added to the scope of services for this rehabilitation project

### Agreement Provisions

#### The Engineer Agrees,

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

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

**The LA Agrees,**

1. To pay the ENGINEER as compensation for all services rendered in accordance with this AGREEMENT according to the following method indicated by a check mark:
  - a. ☐ A sum of money equal to \_\_\_\_\_ percent of the awarded contract cost of the proposed improvement as approved by the DEPARTMENT.
  - b. ☐ A sum of money equal to the percent of the awarded contract cost for the proposed improvement as approved by the DEPARTMENT based on the following schedule:

**Schedule for Percentages Based on Awarded Contract Cost**

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

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

2. To pay for all services rendered in accordance with this AGREEMENT at the actual cost of performing such work plus    percent to cover profit, overhead and readiness to serve - "actual cost" being defined as material cost plus payrolls, insurance, social security and retirement deductions. Traveling and other out-of-pocket expenses will be reimbursed to the ENGINEER at the ENGINEER's actual cost. Subject to the approval of the LA, the ENGINEER may sublet all or part of the services provided in section 1 of the ENGINEER AGREES. If the ENGINEER sublets all or part of this work, the LA will pay the cost to the ENGINEER plus an additional service charge of up to five (5) percent.

"Cost to Engineer" to be verified by furnishing the LA ~~and the DEPARTMENT~~ copies of invoices from the party doing the work. The classifications of the employees used in the work should be consistent with the employee classifications for the services performed. If the personnel of the firm, including the Principal Engineer, perform routine services that should normally be performed by lesser-salaried personnel, the wage rate billed for such services shall be commensurate with the work performed. **\*See the CECs**

**The Total Not-to-Exceed Contract Amount shall be \$16,732.10**

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

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

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

4. That, should the improvement be abandoned at any time after the ENGINEER has performed any part of the services provided for in sections 1 and 3 of the ENGINEER AGREES and prior to the completion of such services, the LA shall reimburse the ENGINEER for the ENGINEER's actual costs plus 15 percent incurred up to the time the ENGINEER is notified in writing of such abandonment - "actual cost" being defined as in paragraph 2 of the LA AGREES.
5. That, should the LA require changes in any of the detailed plans, specifications or estimates except for those required pursuant to paragraph 4 of the ENGINEER AGREES, ~~after they have been approved by the DEPARTMENT,~~ the LA will pay the ENGINEER for such changes on the basis of actual cost plus 15 percent to cover profit, overhead and readiness to serve - "actual cost" being defined as in paragraph 2 of the LA AGREES. It is understood that "changes" as used in this paragraph shall in no way relieve the ENGINEER of the ENGINEER's responsibility to prepare a complete and adequate set of plans and specifications.

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#### **It is Mutually Agreed,**

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

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

Executed by the LA:

ATTEST: \_\_\_\_\_ County of Lake \_\_\_\_\_ of the  
(Municipality/Township/County)  
State of Illinois, acting by and through its  
County Board  
By \_\_\_\_\_  
Lake County Clerk  
(Seal) By \_\_\_\_\_  
Title Chairman of the County Board

RECOMMENDED FOR EXECUTION

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

Executed by the ENGINEER:

\_\_\_\_\_  
Amec Foster Wheeler Environment and Infrastructure, Inc.  
Engineering Firm  
8745 W. Higgins Road, Suite 300  
Street Address  
Chicago, IL  
City, State

ATTEST:

By Jessica Harding  
Title Senior Marketing Coordinator

By [Signature]  
Title OFFICE MANAGER - CHICAGO OPERATIONS



**Note: Three (3) Original Executed Contracts – (2) LCDOT; (1) Consultant**

# Scope of Services

## Grass Lake Road Retaining Walls

### Supplement 1

March 24, 2017

This Scope of Services is to serve as a supplement to the contract signed on November 8<sup>th</sup>, 2016 for the Rehabilitation of the Grass Lake Road Retaining Walls. This contract was split into two phases. Phase I was the geotechnical investigation at these walls to determine the exact scope for their stabilization. Phase II was the preparation of contract documents (plans, specifications, cost estimate) for the stabilization. A general Phase II scope was assumed at the time of the original contract. It was written into that original scope that if at the conclusion of the Phase I analysis it was determined that additional design elements would be required, this would be discussed with the Lake County Division of Transportation to add it to the contract. Amec Foster Wheeler Environment and Infrastructure, Inc. (AmecFW) attended a scoping meeting with the Lake County Division of Transportation on March 2<sup>nd</sup>, 2017. At that meeting the results of AmecFW's geotechnical investigation was presented. Recommendations were made for the stabilization of the retaining walls that exceeded the scope that was assumed in the original contract.

On March 21<sup>st</sup>, 2017 we received an e-mail communication from Satrugan Shrestha of the Lake County Division of Transportation informing us the revised scope had been approved and authorizing us to begin the Phase II portion of the design. Additional scope items are described herein:

1.1 Site Measurements – AmecFW will return to the site to measure the slopes on the south embankments. In order to place the deadman anchors in the slope, we will need to know general dimensions. A two person team with basic survey equipment will be able to get the required information and will be more cost effective than subcontracting a professional surveyor.

1.2 Additional Roadway Elements – AmecFW will prepare a stated Maintenance of Traffic (MOT) plan. Construction will be staged to allow for one lane of traffic to be open during construction. This single lane will be controlled by a temporary traffic signal to allow traffic movements in both directions.

The single faced concrete barrier that separates the bike path from Grass Lake Road has rotated in some locations due to the movement and instability of the retaining walls. To correct this rotation, and to facilitate the placement of the anchor rods under the road, it was decided to completely replace the barrier, and install impact attenuators at each end to be in compliance with current standards.

The guardrail along the south side of Grass Lake Road will also be replaced with the current standard.

There will be a small amount of earthwork required to sink the deadman anchors into the south slopes. Minor landscaping will be designed to conceal these concrete blocks. This may include additional topsoil, mulch, or planting of bushes. The walers installed on the retaining wall shall be painted to match the existing color of the sheet pile wall.

1.3 Additional Structural Services – Trenches will have to be installed under the existing approach slabs. To facilitate this, the existing bridge approach slabs will require removal and replacement. This will be done within the projects stages.

We will further investigate ways to salvage the pedestrian railing/fencing along the retaining walls. However if necessary we will provide details to install the current Lake County standard railing along both walls.

**COST PLUS FIXED FEE**

DF-824-039  
REV 12/04  
03/24/17

Amec Foster Wheeler Environment and Infrastructure

Grass Lake Road Supplement 1

# PRIME COMPLEXITY FACTOR

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DATE \_\_\_\_\_

[illegible]Subconsultant

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