

Municipality	LOCAL AGENCY	 Illinois Department of Transportation Preliminary Engineering Services Agreement For Motor Fuel Tax Funds	CONSULTANT	Name GRAEF-USA
Township				Address 8501 W Higgins Road, Suite 280
County Lake				City Chicago
Section 14-00144-18-CH				State Illinois

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. 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 Sidewalk improvements and related intersection improvements.

Route Ela Road Length 0.09 Mi. 500.00 FT (Structure No. _____)

Termini From 250 feet south of Rand Road to Terrace Lane, Lake Zurich, IL

Description:

Add sidewalk improvements, related cross walks and pedestrian signal heads to plans being prepared for intersection improvements to the Rand Road and Ela Road intersection.

Agreement Provisions

The Engineer Agrees,

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

Note: Four copies to be submitted to the Regional Engineer

DRAFT

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

The LA Agrees,

1. To pay the ENGINEER as compensation for all services performed as stipulated in paragraphs 1a, 1g, 1i, 2, 3, 5 and 6 in accordance with one of the following methods indicated by a check mark:
- 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	24,972.52	(see note)
	_____	%
	_____	%
	_____	%
	_____	%
	_____	%

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

2. To pay for services stipulated in paragraphs 1b, 1c, 1d, 1e, 1f, 1h, 1j & 1k of the ENGINEER AGREES at actual cost of performing such work plus _____ percent to cover profit, overhead and readiness to serve - "actual cost" being defined as material cost plus payrolls, insurance, social security and retirement deductions. Traveling and other out-of-pocket expenses will be reimbursed to the ENGINEER at his actual cost. Subject to the approval of the LA, the ENGINEER may sublet all or part of the services provided under the paragraph 1b, 1c, 1d, 1e, 1f, 1h, 1j & 1k. If the ENGINEER sublets all or part of this work, the LA will pay the cost to the ENGINEER plus a five (5) percent service charge.

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

3. That payments due the ENGINEER for services rendered in accordance with this AGREEMENT will be made as soon as practicable after the services have been performed in accordance with the following schedule:
 - a. Upon completion of detailed plans, special provisions, proposals and estimate of cost - being the work required by paragraphs 1a through 1g under THE ENGINEER AGREES - to the satisfaction of the LA and their approval by the DEPARTMENT, 90 percent of the total fee due under this AGREEMENT based on the approved estimate of cost.
 - b. Upon award of the contract for the improvement by the LA and its approval by the DEPARTMENT, 100 percent of the total fee due under the AGREEMENT based on the awarded contract cost, less any amounts paid under "a" above.

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

4. That, should the improvement be abandoned at any time after the ENGINEER has performed any part of the services provided for in paragraphs 1a, through 1h and prior to the completion of such services, the LA shall reimburse the ENGINEER for his actual costs plus _____ percent incurred up to the time he 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 _____ 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 his responsibility to prepare a complete and adequate set of plans and specifications.

It is Mutually Agreed,

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



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

Executed by the LA:

ATTEST: Lake County of the
(Municipality/Township/County)
State of Illinois, acting by and through its
By _____

Clerk
(Seal) By _____
Title _____

Executed by the ENGINEER:

ATTEST: Graef-USA Inc.
8501 West Higgins Road, Suite 280
Chicago, IL 60631
By 
Title Vice President By 
Title Principal, Project Manager

Approved

Date

Department of Transportation

Regional Engineer

**Ela road Sidewalk
South of US 12 (Rand Rd.) to IL 22
Plan preparation
Village of Lake Zurich
Lake County
Project Scope**

Project Description. The work will consist of the preparation of improvement plans for adding approximately 200 feet of sidewalk on the east side of Ela Road north of US 12 (Rand Rd.) and 200 feet south of US 12 (Rand Rd.) on the west side to connect to the existing sidewalk. Traffic Signal Plans will be enhanced to provide pedestrian signal movements on the north and west legs of the US 12 (Rand Rd.)/Ela Road intersection. The work will be performed within the limits of the current PESA Report from the Phase I Project Report.

The following is a list of tasks associated with the project.

Task 1. Survey, Base-mapping and Field Check.

A Supplemental Survey will be conducted to coordinate the survey prepared by Lake County with the survey done by GRAEF. Base maps will be prepared from the Supplemental Survey for the combined project area. A field check of the combined topographic survey will be performed to verify the contents of the survey.

Task 2. Modify Phase I Report to include Pedestrian Movements

1. Prepare technical Memorandum to the Phase I Report to Include Pedestrian Movements
2. Modify INTERIM Intersection Design Study to add Pedestrian Phases on the north side of US 12 (Rand Rd.) and on the west side of Ela Road.
3. Meet with IDOT Bureau of Traffic concerning additions.

Task 2. Improvement Plans

Improvement plan sheets to be added to the project plan set. Estimated sheets are:

- a. Typical Sections - 1 sheet
- b. Modify Alignment Plan – 1 sheet
- c. Roadway/Drainage Sheets, 20 Scale - 1 sheet
- d. Modify Erosion Control/Landscaping, 50 Scale – 1 sheet.
- e. Modify Traffic Signal plans – 2 sheets
- f. Cross Sections
- g. Special Provisions
 1. Standard Specifications for Road and Bridge Construction.
 2. Supplemental Specifications and Recurring Special Provisions
 3. District One Special Provisions
 4. BDE Special Provisions
 5. Project Specific Special Provisions

Task 3. Quantities and Estimates

- a. A Quantity Calculation file for the sidewalk improvements will be prepared for the project.
- b. An estimate of cost will be prepared for the sidewalk portion of the project.

Task 4. Meetings

- a. Two meetings at LCDOT.
- b. One meeting at IDOT.

Task 5. Quality Control/ Quality Assurance

A QC/QA review will be performed for the Preliminary, Pre-final and Final submittals.

Task 6. Administration

Administrative time includes staffing issues, invoicing and overall Project management.

Schedule

A schedule for the project will be developed.

PAYROLL ESCALATION TABLE FIXED RAISES

FIRM NAME
PRIME/SUPPLEMENT

GRAEF

DATE 03/12/14
PTB NO. Ela Road Sidewalk

CONTRACT TERM
START DATE
RAISE DATE

10 MONTHS
3/1/2014
4/1/2014

OVERHEAD RATE 167.53%
COMPLEXITY FACTOR 3.00%
% OF RAISE

ESCALATION PER YEAR

3/1/2014 - 4/1/2014

1 10

= 10.00%
= 1.0270

4/2/2014 - 1/1/2015

9 10

92.70%

The total escalation for this project would be:

2.70%

PAYROLL RATES

FIRM NAME
PRIME/SUPPLEMENT
PSB NO.

GRAEF

DATE

03/12/14

Ela Road Sidewalk

ESCALATION FACTOR

2.70%

CLASSIFICATION	CURRENT RATE	CALCULATED RATE
Professional IX	\$64.46	\$66.20
Professional VII	\$51.17	\$52.55
Professional VI	\$47.50	\$48.78
Professional V	\$41.90	\$43.03
Professional IV	\$35.14	\$36.09
Professional III	\$31.32	\$32.17
Professional II	\$26.13	\$26.84
Professional I	\$24.35	\$25.01
Technician IV	\$29.38	\$30.17
Technician III	\$25.07	\$25.75
Technician II	\$21.83	\$22.42
Technician I	\$14.88	\$15.28
Administrative	\$21.86	\$22.45

Subconsultants

FIRM NAME GRAEF
PRIME/SUPPLEMENT
PSB NO. Ela Road Sidewalk

DATE 03/12/14

NAME	Direct Labor Total	Contribution to Prime Consultant
None		0.00
		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

COST ESTIMATE OF CONSULTANT SERVICES

FIRM	GRAEF	DATE	03/12/14
PSB	Ela Road Sidewalk	OVERHEAD RATE	1.6753
PRIME/SUPPLEMENT		COMPLEXITY FACTOR	0

DBE DROP BOX	ITEM	MANHOURS (A)	PAYROLL (B)	OVERHEAD & FRINGE BENF (C)	IN-HOUSE DIRECT COSTS (D)	FIXED FEE (E)	Outside Direct Costs (F)	SERVICES BY OTHERS (G)	DBE TOTAL (H)	TOTAL (B-G)	% OF GRAND TOTAL
	Supp Survey & Fld Chk	28	868.84	1,455.57		321.47	109.80			2,755.68	11.03%
	Modify Phase I Report	28	1,177.11	1,972.01		435.53				3,584.64	14.35%
	Improvement plans	94	3,294.80	5,519.78		1,219.08	221.80			10,255.46	41.07%
	Quantities & Estimates	12	472.91	792.27		174.98				1,440.16	5.77%
	Meetings	24	983.91	1,648.34		364.05	99.43			3,095.72	12.40%
	QC/QA	16	840.83	1,408.63		311.11				2,560.57	10.25%
	Administration	8	420.41	704.32		155.55				1,280.28	5.13%
	Subconsultant DL					0.00				0.00	0.00%
	TOTALS	210	8,058.81	13,500.92	0.00	2,981.76	431.03	0.00	0.00	24,972.52	100.00%

DBE

DBE 0.00%

AVERAGE HOURLY PROJECT RATES

FIRM GRAEF
PSB Ela Road Sidewalk
PRIME/SUPPLEMENT

DATE 03/12/14

SHEET 1 OF 2

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJECT RATES			Supp Survey & Fld Chk			Modify Phase I Report			Improvement plans			Quantities & Estimates			Meetings		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Professional IX	66.20	0									6	6.38%	3.35				4	16.67%	8.76
Professional VII	52.55	34	16.19%	8.51															
Professional VI	48.78	0																	
Professional V	43.03	66	31.43%	13.52	4	14.29%	6.15	24	85.71%	36.88	18	19.15%	8.24	8	66.67%	28.69	12	50.00%	21.52
Professional IV	36.09	14	6.67%	2.41				4	14.29%	5.16	10	10.64%	3.84						
Professional III	32.17	64	30.48%	9.80	4	14.29%	4.60				48	51.06%	16.43	4	33.33%	10.72	8	33.33%	10.72
Professional II	26.84	0																	
Professional I	25.01	12	5.71%	1.43							12	12.77%	3.19						
Technician IV	30.17	12	5.71%	1.72	12	42.86%	12.93												
Technician III	25.75	8	3.81%	0.98	8	28.57%	7.36												
Technician II	22.42	0																	
Technician I	15.28	0																	
Administrative	22.45	0																	
		0																	
		0																	
		0																	
		0																	
TOTALS		210	100%	\$38.38	28	100.00%	\$31.03	28	100%	\$42.04	94	100%	\$35.05	12	100%	\$39.41	24	100%	\$41.00

158 12

FIRM GRAEF
Project: Ela Road Sidewalk

Project Costs

Meetings

LCDOT

Mileage	67 miles per trip @	2 trips @	\$ 0.560	per mile =	\$ 75.04
Tolls		2 trips @	\$ 1.70	per trip =	\$ 3.40

Mileage	34 miles per trip @	1 trips @	\$ 0.560	per mile =	\$ 19.04
Tolls		1 trips @	\$ 1.95	per trip =	\$ 1.95

\$ 99.43

Supplemental Survey

Mileage	95 miles per trip @	2 trips @	\$ 0.560	per mile =	\$ 106.40
Tolls		2 loc @	\$ 1.70	per trip =	\$ 3.40

\$ 109.80

Improvement Plans

Preliminary

Full Size	16 sets @	4 sheets/set @	\$ 1.50	per sheet	\$ 96.00
1/4 Size	15 sets @	4 sheets/set @	\$ 0.17	per sheet	\$ 10.20

\$ 106.20

Prefinal

Full Size	9 sets @	4 sheets/set @	\$ 1.50	per sheet	\$ 54.00
1/4 Size	15 sets @	4 sheets/set @	\$ 0.17	per sheet	\$ 10.20

\$ 64.20

Final

Full Size Mylar	1 sets @	4 sheets/set @	\$ 4.50	per sheet	\$ 18.00
Full Size prints	5 sets @	4 sheets/set @	\$ 1.50	per sheet	\$ 30.00
1/4 Size	5 sets @	4 sheets/set @	\$ 0.17	per sheet	\$ 3.40

\$ 51.40

Total Direct Cost

\$ 431.03