

Municipality	L O C A L A G E N C Y	 Illinois Department of Transportation	C O N S U L T A N T	Name Gewalt Hamilton Associates
Township				Address 625 Forest Edge Drive
County Lake County – Division of Transportation		Preliminary Engineering Services Agreement For Motor Fuel Tax Funds		City Vernon Hills
Section 19-00135-15-RS				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 Washington Street Resurfacing

Route Washington St. Length 1.87 Mi. 9,810 FT (Structure No. N/A)

Termini Lake Street to US Route 45

Description: Project includes milling (2.5") and resurfacing (0.75" Level Binder, 1.75" HMA Surface mix E N70) of Washington Street beginning approximately 1,400 feet east of Lake Street to west of US Route 45 (Omission at IL Route 83 intersection). Longitudinal Joint Sealer shall also be placed under the surface course throughout the project limits.

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 and** 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	(see note)
Under \$50,000	_____	%
	_____	%
	_____	%

~~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 \$182,205

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 ** 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 ** 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.

****See the CECS**

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 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 quintuplicate 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) Title Chair, Lake County Board

RECOMMENDED FOR EXECUTION

Shane E. Schneider, P.E.
Director of Transportation/County Engineer
Lake County

Executed by the ENGINEER:

ATTEST: Gewalt Hamilton Associates, Inc.
Engineering Firm
625 Forest Edge Drive
Street Address
Vernon Hills, IL 60061
City, State
By Patrick J. Glenn
Title Patrick J. Glenn, Secretary
By Michael T. Shrake
Title Michael T. Shrake, President

Approved
Date
Department of Transportation
Regional Engineer
County Engineer
On behalf of IDOT pursuant to Agreement
of Understanding dated May 3, 2018

Note: Five (5) Original Executed Contracts – (2) LCDOT; (2) IDOT District 1, Local Roads; (1) Consultant

EXHIBIT A – SCOPE OF SERVICES

Phase II Design Engineering Services
Lake County Division of Transportation

Washington Street Resurfacing from Lake Street to US Rte. 45
Section No. 19-00135-15-RS

June 10, 2020

Gewalt Hamilton Associates, Inc. (GHA) will provide Phase II Design Engineering Services to the Lake County Division of Transportation (LCDOT) for the resurfacing as follows:

- Washington Street Resurfacing from Lake Street to US Rte. 45. The length of the improvement is approximately 9,810 ft. (1.86 miles) along Washington Street. The improvements will generally consist of a 2-1/2" HMA surface removal, placement of 3/4" HMA leveling course, 1-3/4" HMA surface course mix E N70 from Lake Street to US Route 45 with an omission at IL Route 83 intersection. Longitudinal Joint Sealer will also be placed under the surface course throughout the project limits.

GHA will be responsible for completing final PS&E no later than December 1, 2020 for a Letting Date of February 1, 2021.

Task 1 – Project Administration and Management

LCDOT Kick-off meeting: GHA will attend a kick-off meeting with LCDOT staff to discuss the Phase II design for the Washington Street Resurfacing Project to determine milestone schedule, including project specific requirements, and overall project scope. It is understood that the LCDOT will require one (1) review.

Project Coordination: GHA will coordinate the improvements along Washington Street with various other agencies, including Illinois Department of Transportation (IDOT) and Utility Companies as necessary. GHA will also coordinate with the Village of Grayslake and the Lake County Stormwater Management Commission (LCSMC) for roadway resurfacing within a floodplain/floodway.

Task 2 – Data Collection and Topographic Survey

Data Collection: GHA will conduct field review with LCDOT staff to determine the overall scope of the project as well as identifying the limits of improvements.

Topographic Survey: GHA will conduct the necessary topographic survey of the existing sidewalk curb ramps within the project limits including the intersections of Chesapeake Blvd, Atkinson Road, Lancer Lane, Sextant Drive, and Mainsail Drive utilizing Robotic Total Station. In addition, GHA will conduct topographic survey of miscellaneous areas requiring detailed elevations for areas (Sextant to Mainsail) identified in the Lake County Scoping Reports. GHA will establish the alignment and ties for Washington Street based on current LCDOT records.

All required survey will follow LCDOT design survey procedures (Attachment 2). The alignment and survey will be established using Illinois State Plane Coordinates and NAVD88 datum.

Task 3 – Pre-Final Plans, Special Provisions, and Estimates (90%)

Pre-Final Plans: GHA will develop pre-final plans for the resurfacing of Washington Street based on field survey, field inspections, and the LCDOT scoping report for the proposed project.

Pre-Final Special Provisions: GHA will prepare the final contract special provisions booklet, GHA will include the IDOT Supplemental and Recurring Special Provision checklist, BDE Special Provision checklist, and project specific special provisions required for the contract.

Pre-Final Estimates: GHA will prepare pre-final estimates of cost and time based on the summary of quantities calculated for the pre-final plans.

Pre-Final Review: GHA will submit pre-final plans to the LCDOT, as determined in the kick-off meeting, to provide sufficient time for review and comment.

Task 4 – Final Plans, Special Provisions and Estimates (100%)

Final Plans: All comments received pertaining to the pre-final plans will be addressed and a disposition to comments will be provided and changes will be incorporated into the final engineering plans.

Final Special Provisions: All comments received pertaining to the pre-final special provisions will be addressed and a disposition to comments will be provided.

Final Quantity Calculations: The quantities will be updated based on changes made to the plans after the pre-final plan review.

Final Estimates: The final estimates of cost and time will be updated based on the revised quantities.

Task 5 – Permitting

Lake County Stormwater Management (LCSMC) Permitting: There are Three floodplain / floodway areas along the Washington Street corridor. GHA will coordinate and obtain necessary permits from LCSMC for resurfacing a roadway that is below the BFE.

ACOE Permitting: Any work proposed around culvert outfalls may require a Letter of No Objection (LONO) with the Army Corp of Engineers.

IDOT Permitting: Concrete patching along Washington Street may require Maintenance of Traffic impacting IL Route 83. Thus, coordination with IDOT Permits may be required.

IDNR EcoCAT submission will be made for endangered species consultation.

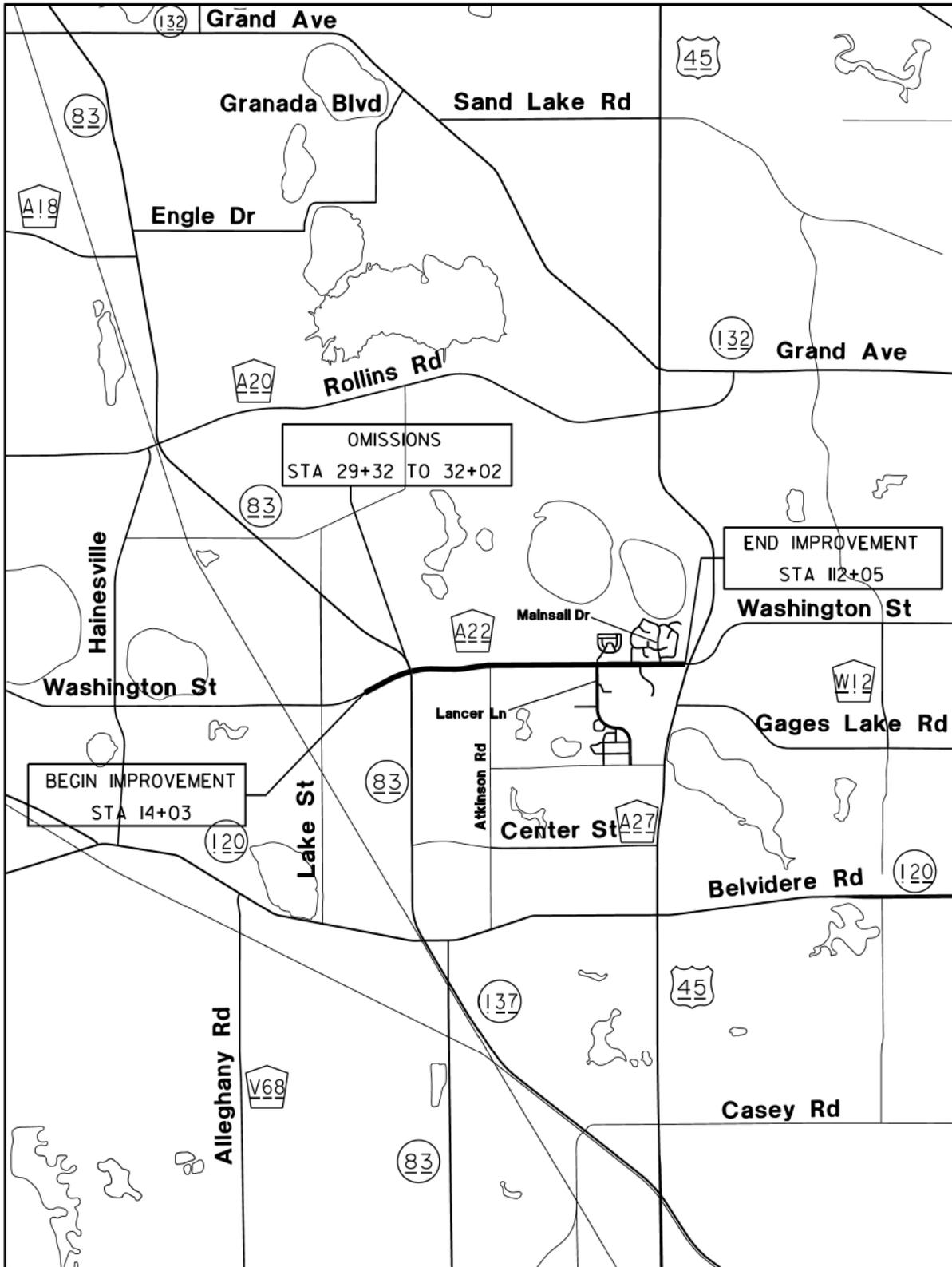
Task 6 – CCDD Spoil Management

The County is proposing to add bicycle friendly paved shoulders in locations paved shoulders do not exist requiring earth excavation. There are proposed sidewalk replacement locations to meet ADA requirements that will require earth excavation. GHA will utilize the services of Huff & Huff to perform soil management services for documentation of final disposition at Clean Construction and Demolition Debris (CCDD) facilities. Huff & Huff's proposal dated June 4, 2020 is attached (Attachment 1) to this proposal.

Task 7 – Quality Assurance / Quality Control

Pre-Final QA/QC Review: Prior to submission of pre-final plans to the LCDOT for review, GHA will perform an internal Quality Assurance / Quality Control review of the completed design. The review will be performed by a professional engineer independent of the design team. The review will consider constructability issues as well as identification of required pay items, quantities of work, and special provisions required.

Final QA/QC Review: Prior to submission of final plans to the LCDOT, GHA will perform a second QA/QC review of the plans and special provisions.



LOCATION MAP

WASHINGTON STREET
SECTION 19-00135-15-RS

EXHIBIT B – ANTICIPATED PLAN SHEETS

Phase II Design Engineering Services
Lake County Division of Transportation

Washington Street Resurfacing from Lake Street to US Rte. 45
Section No. 19-00135-15-RS

June 10, 2020

<u>Anticipated Plan Sheets</u>	<u>No. of Sheets</u>
1. Cover Sheet	1
2. LCDOT General Notes	3
3. Summary of Quantities	1
4. Schedule of Quantities	16
5. Alignment, Ties and Benchmarks	4
6. Typical Sections	2
7. Traffic Control Plan	4
8. Removal and Adjust Sheets	20
9. Plan Sheets	20
10. Sidewalk ADA Plans	6
11. Sidewalk Plan & Profile (Sextant to Mainsail)	2
12. Sidewalk Cross Sections (Sextant to Mainsail)	2
13. Project Specific Details	3
14. LCDOT Standard Details	10
15. IDOT Highway Standards	<u>20</u>
Anticipated Total Sheets:	114

	Principal	CE VI	CE V	CE IV	CE III	CE II	CE I	LS IV	LS III	LS II	LS I	GISP III	GISP I	EC II	EC I	ET V	ET IV	ET III	ET II	ET I	AD I	Total Hours
I. Project Administration and Management																						
Meetings		4		8	8																2	22
Project Management		12		40	80																16	148
Utility Coordination as Necessary							16														8	24
I. Category Subtotal	0	16	0	48	88	0	16	0	0	0	0	0	0	0	0	0	0	0	0	0	26	194
II. Data Collection and Topographic Survey																						
Confirm Field Control								4														4
Topo Survey Existing Conditions (ADA Ramps)										16												16
Topo Survey Existing Conditions (Sidewalk Gap)										24												24
Reduction of Field Survey (Office)																				32		32
Site Visit with LCDOT Staff		4		4			4															12
Obtain and Review Existing Plans				8	8		12															28
II. Category Subtotal	0	4	0	12	8	0	16	4	0	40	0	0	0	0	0	0	0	32	0	0	0	116
III. Pre-Final Plans, Special Provisions, and Estimates																						
A. Pre-Final Plans																						0
Cover Sheet, General Notes, Standards				2			8															10
Summary of Quantities				4	8		4															16
Schedule of Quantities							12															12
Typical Sections				4	16																	20
Traffic Control Plan					4		12															16
Removal and Adjustment Plan				24	48		64					4									80	220
Resurfacing Plan		4		24	48		80					4									80	240
Erosion and Sediment Control Plan					2		8															10
Sidewalk ADA Details				4	8		8														16	36
Sidewalk Plans & Cross Sections				4	8		8														12	32
Details and Standards					2		4														8	14
B. Pre-Final Special Provisions																						
Recurring and Supplemental Special Provisions				2																		2
BDE Special Provisions				2																		2
Project Specific Special Provisions		2		6	16																24	48
C. Pre-Final Schedule of Quantities				4	12		16														40	72
D. Pre-Final Estimate of Cost and Time				4	4		8															16
E. Pre-Final Review Meeting with LCDOT		4		4			4														2	14
III. Category Subtotal	0	10	0	88	176	0	236	0	0	0	0	8	0	0	0	0	0	0	0	236	0	780
IV. Final Plans, Special Provisions, and Estimates																						
A. Final Plans																						0
Cover Sheet, General Notes, Standards							2															2
Summary of Quantities					2		4															6
Schedule of Quantities				2	4		8															14
Typical Sections					2																4	6
Traffic Control Plan					2		4														4	10
Removal and Adjustment Plan				2	4		8														8	22
Resurfacing Plan				4	4		8														12	28
Erosion and Sediment Control Plan																					8	8

	Principal	CE VI	CE V	CE IV	CE III	CE II	CE I	LS IV	LS III	LS II	LS I	GISP III	GISP I	EC II	EC I	ET V	ET IV	ET III	ET II	ET I	AD I	Total Hours
Sidewalk ADA Details					4													8				12
Sidewalk Plans & Cross Sections					4													4				8
Details and Standards																		4				4
B. Final Special Provisions																						
Recurring and Supplemental Special Provisions							2															2
BDE Special Provisions							2															2
Project Specific Special Provisions				4	4																8	16
C. Final Schedule of Quantities				2	8		8											12				30
D. Final Estimate of Cost and Time				2	2																	4
E. Final Review Meeting with LCDOT		4		4			4															12
IV. Category Subtotal	0	4	0	20	40	0	50	0	0	0	0	0	0	0	0	0	0	64	0	0	8	186
V. Permitting																						
SMC Permitting			4	8		16															4	32
IDOT Permitting				4		8															4	16
IDNR EcoCAT														2								2
V. Category Subtotal	0	0	4	12	0	24	0	0	0	0	0	0	0	2	0	0	0	0	0	0	8	50
VI. CCDD Soil Management																						
Coordination with Huff & Huff				4																		4
V. Category Subtotal	0	0	0	4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4
VII. Quality Assurance / Quality Control																						
Pre-Final QA/QC Review		24		32																		56
Final QA/QC Review		16		24																		40
V. Category Subtotal	0	40	0	56	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	96
Total Man-Hours																						1426

PAYROLL ESCALATION TABLE FIXED RAISES

FIRM NAME Gewalt Hamilton Associates, li
 PRIME/SUPPLEMENT Prime
 Prepared By Gewalt Hamilton Associates, li

DATE 06/10/20
 PTB-ITEM# 0

CONTRACT TERM 12 MONTHS
 START DATE 7/1/2020
 RAISE DATE 5/1/2021
 END DATE 6/30/2021

OVERHEAD RATE 160.00%
 COMPLEXITY FACTOR 0
 % OF RAISE 3%

ESCALATION PER YEAR

year	First date	Last date	Months	% of Contract
0	7/1/2020	5/1/2021	10	83.33%
1	5/2/2021	7/1/2021	2	17.17%

The total escalation = 0.50%

PAYROLL RATES

FIRM NAME Gewalt Hamilton Associates DATE 06/10/20
 PRIME/SUPPLEMENT Prime
 PTB-ITEM # 0

ESCALATION FACTOR 0.50%

Note: Rates should be capped on the AVG 1 tab as necessary

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Advising Principal	\$35.50	\$35.68
Principal	\$70.00	\$70.35
CE VI	\$70.00	\$70.35
CE V	\$67.65	\$67.99
CE IV	\$57.00	\$57.29
CE III	\$44.50	\$44.72
CE II	\$33.15	\$33.32
CE I	\$26.68	\$26.81
LS IV	\$48.13	\$48.37
LS II	\$37.69	\$37.88
GISP III	\$55.00	\$55.28
EC II	\$31.40	\$31.56
ET V	\$58.98	\$59.27
ET IV	\$37.58	\$37.77
ET III	\$30.20	\$30.35
ET II	\$27.25	\$27.39
ET I	\$20.59	\$20.69
AD I	\$23.50	\$23.62

COST PLUS FIXED FEE COST ESTIMATE OF CONSULTANT SERVICES

Bureau of Design and Environment
Prepared By: Consultant

FIRM Gewalt Hamilton Associates, Inc
PTB-ITEM # 0
PRIME/SUPPLEMENT Prime

OVERHEAD RATE 160.00%
COMPLEXITY FACTOR 0

DATE 06/10/20

DBE DROP BOX	ITEM	MANHOURS (A)	PAYROLL (B)	OVERHEAD & FRINGE BENF (C)	DIRECT COSTS (D)	FIXED FEE (E)	SERVICES BY OTHERS (G)	DBE TOTAL (H)	TOTAL (B-G)	% OF GRAND TOTAL
	Project Admin & Mgmt	194	8,848	14,157		3,274		-	26,279	14.42%
	Data Collect, Survey	116	4,434	7,095	144	1,641		-	13,314	7.31%
	Pre-Final PS&E	780	28,159	45,055	500	10,419		-	84,133	46.17%
	Final PS&E	186	6,687	10,699	375	2,474		-	20,235	11.11%
	Permitting	50	2,011	3,218		744		-	5,973	3.28%
	CCDD Soil Management	4	179	286		66	13,896	-	14,427	7.92%
	QA/QC	96	6,008	9,613		2,223		-	17,844	9.79%
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AVERAGE HOURLY PROJECT RATES

FIRM Gewalt Hamilton Associates, Inc
PTB-ITEM# 0
PRIME/SUPPLEMENT Prime

DATE 06/10/20

SHEET 1 OF 5

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			Project Admin & Mgmt			Data Collect, Survey			Pre-Final PS&E			Final PS&E			Permitting		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Advising Principal	35.68	0.0																	
Principal	70.00	0.0																	
CE VI	70.00	74.0	5.19%	3.63	16	8.25%	5.77	4	3.45%	2.41	10	1.28%	0.90	4	2.15%	1.51			
CE V	67.99	4.0	0.28%	0.19													4	8.00%	5.44
CE IV	57.29	236.0	16.55%	9.48	48	24.74%	14.17	12	10.34%	5.93	88	11.28%	6.46	20	10.75%	6.16	12	24.00%	13.75
CE III	44.72	316.0	22.16%	9.91	88	45.36%	20.29	8	6.90%	3.08	176	22.56%	10.09	40	21.51%	9.62			
CE II	33.32	24.0	1.68%	0.56													24	48.00%	15.99
CE I	26.81	318.0	22.30%	5.98	16	8.25%	2.21	16	13.79%	3.70	236	30.26%	8.11	50	26.88%	7.21			
LS IV	48.37	4.0	0.28%	0.14				4	3.45%	1.67									
LS II	37.88	40.0	2.81%	1.06				40	34.48%	13.06									
GISP III	55.28	8.0	0.56%	0.31							8	1.03%	0.57						
EC II	31.56	2.0	0.14%	0.04													2	4.00%	1.26
ET V	59.27	0.0																	
ET IV	37.77	0.0																	
ET III	30.35	332.0	23.28%	7.07				32	27.59%	8.37	236	30.26%	9.18	64	34.41%	10.44			
ET II	27.39	0.0																	
ET I	20.69	0.0																	
AD I	23.62	68.0	4.77%	1.13	26	13.40%	3.17				26	3.33%	0.79	8	4.30%	1.02	8	16.00%	3.78
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TOTALS		1426.0	100%	\$39.50	194.0	100.00%	\$45.61	116.0	100%	\$38.22	780.0	100%	\$36.10	186.0	100%	\$35.95	50.0	100%	\$40.22

AVERAGE HOURLY PROJECT RATES

FIRM Gewalt Hamilton Associates, Inc
PTB-ITEM# 0
PRIME/SUPPLEMENT Prime

DATE 06/10/20
SHEET 2 OF 5

PAYROLL CLASSIFICATION	AVG HOURLY RATES	CCDD Soil Management			QA/QC														
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg			
Advising Principal	35.68																		
Principal	70.00																		
CE VI	70.00				40	41.67%	29.17												
CE V	67.99																		
CE IV	57.29				56	58.33%	33.42												
CE III	44.72	4	100.00%	44.72															
CE II	33.32																		
CE I	26.81																		
LS IV	48.37																		
LS II	37.88																		
GISP III	55.28																		
EC II	31.56																		
ET V	59.27																		
ET IV	37.77																		
ET III	30.35																		
ET II	27.39																		
ET I	20.69																		
AD I	23.62																		
TOTALS		4.0	100%	\$44.72	96.0	100%	\$62.58	0.0	0%	\$0.00	0.0	0%	\$0.00	0.0	0%	\$0.00	0.0	0%	\$0.00



A Subsidiary of GZA



June 4, 2020

Mr. Kevin L. Belgrave, P.E., PTOE
Director of Transportation Engineer
Gewalt Hamilton Associates, Inc.
625 Forest Edge Drive
Vernon Hills, Illinois 60061

via email: kbelgrave@gha-engineers.com

**Re: Environmental Science Services – CCDD Documentation
Washington Street Resurfacing and ADA Sidewalk Improvements
Grayslake, Lake County, Illinois
Proposal No. 81.PB00009.21**

Dear Mr. Belgrave:

Huff & Huff, Inc. (H&H), a subsidiary of GZA, Inc. (Subconsultant), is pleased to present this revised proposal to Gewalt Hamilton Associates, Inc. (GHA) to provide environmental science services for the Phase II design of the Lake County Division of Transportation (LCDOT) Washington Street Improvements, with limits extending from 1,400 feet east of Lake Street to just west of US Route 45, an approximate distance of 9,800 feet, excluding the intersection with Route 83 which is IDOT jurisdiction. GHA has requested completion of documentation for final disposition of project spoils at a Clean Construction or Demolition Debris (CCDD) or Uncontaminated Soil Fill Operation (USFO) facility.

We understand the improvements include roadway resurfacing, addition of bicycle friendly shoulders, and ADA improvements at five (5) intersections. Specifically, we understand that only resurfacing will occur between the western project limit and Route 83 and also from western limit to Mainsail Drive. Paved shoulder installation is proposed for locations that currently do not have paved shoulders, including these general areas along Washington Street:

- ~500' section along north, side west of Atkinson;
- ~900' section along south side, west of Atkinson; and
- ~700' section along north side, east of Atkinson.

The ADA improvements are associated with the following intersections with Washington Street:

- Chesapeake Boulevard, two (2) north side quadrants;
- Atkinson Road, all four (4) quadrants;
- Lancer Lane, all four (4) quadrants;
- Sexton Drive, two (2) north quadrants; and
- Mainsail Drive, two (2) north quadrants.

This proposal presents our approach and costs based on our understanding of the proposed improvements and expectations that final disposition of project spoils may be at the Thelen Sand and Gravel (Thelen) CCDD facility. We mention this because Thelen has their own internal sampling protocol requirements to consider acceptance of project spoils.

GEOTECHNICAL

ENVIRONMENTAL

ECOLOGICAL

WATER

CONSTRUCTION
MANAGEMENT

915 Harger Road
Suite 330
Oak Brook, IL 60523
T: 630.684.9100
F: 630.684.9120
www.huffnhuff.com
www.gza.com



1. SCOPE OF SERVICES

The scope of services proposed includes the following:

Task 1 – Records Search, Review, and Confirmation of Listings

H&H will obtain a database to review and document potentially impacted properties (PIPs) associated with the project area. A site visit will be conducted to confirm the location and nature of identified sites and to also pre-mark proposed boring locations for utility locating purposes. Borings will be placed along the project corridor to address sites that will be identified in Task 1, in relationship to areas of proposed work, and to provide full project corridor coverage to fulfill the sampling protocols required by Thelen which include parameter-specific requirements and both volume-based and linear-based requirements.

Task 2 – Soil Sampling & Analysis

Based on the database review, H&H will confirm a sampling protocol for the project area and also in consideration of current trends in the CCDD industry with regarding to sampling and documentation protocols, specifically to address Thelen's required sampling protocols. We anticipate conducting a series of hand auger soil borings to an approximate depth of 2 feet below ground surface at up to forty-one (41) locations. The following is a list of proposed laboratory analyses:

- Volatile organic compounds (VOCs, up to 25 samples);
- Polynuclear aromatic hydrocarbons (PNAs, up to 25 samples);
- RCRA metals via total method (7 of the 8 RCRA metals, excluding chromium, up to 25 samples);
- Chromium and iron via toxicity characteristic leaching procedure (TCLP, up to 25 samples);
- Supplemental TCLP for RCRA compounds that fail total results (up to 5 samples); and
- Soil pH (up to 41 laboratory samples).

The analytical results will be compared to the Maximum Allowable Concentration (MAC) values to determine compliance with acceptance at a CCDD facility, including the pH range of 6.25 to 9.0. Any locations that do not achieve the MAC values of the pH requirements will be cited as excluded from CCDD disposal and identified by IDOT soil classification nomenclature for use in determining associated pay items and special provisions within the bidding documents. This task also includes the development of a project-specific health & safety plan for use when conducting field work on the project.

Task 3 – Preparation of LPC-663 Form

Based on findings of the due diligence and if analytical results achieve the MAC values, H&H will prepare the LPC-663 Form documentation which includes a cover letter summary of the findings, the LPC-663 Form (H&H-signed), a narrative of the due diligence, sampling and results, and supporting documentation (figures, database, laboratory report). The LPC packet of information will be provided to GHA electronically and also to CCDD facilities seeking pre-authorization of acceptance letters for inclusion in the bidding documents.

A. CCDD (LPC-Form) Documentation

The soil sample results will be compared to the Maximum Allowable Concentrations (MACs) associated with CCDD facility acceptance, including the soil pH range of 6.25 to 9.0. If results achieve the MAC values, H&H/GZA will prepare the LPC-663 documents that will be signed/stamped by H&H/GZA and included with the PSI. Locations that do not achieve the MACs (including soil pH range) will be identified as exclusion zones, not acceptable for CCDD facility disposal.

This task also includes submittal of LPC Form documentation to CCDD facilities in relatively close proximity to the project area and for a review of the documentation and to obtain a minimum of two pre-certification letters from CCDD facilities.



Task 4: Project Management

Time under this task includes project administration and management activities that include cost and schedule tracking, coordination with GHA on authorized activities, memo production, and other in-house management activities.

Task 5: QA/QC

Time under this task includes QA/QC time for the reports and submittals as described above.

2. LEVEL OF EFFORT, COST, AND SCHEDULE

Estimated hours and costs to complete the proposed scope of services is attached. CCDD work will commence within five business days of authorization to proceed, or as requested by GHA. The target completion date would be eight weeks from the date of the authorization to proceed. If an expedited schedule is necessary, H&H/GZA will coordinate with GHA to establish a schedule that is appropriate for the project needs. The cost estimate for this scope of work is presented in the attached cost sheets in IDOTs CPFF format.

3. TERMS AND CONDITIONS FOR PROFESSIONAL SERVICES

CONDITIONS OF ENGAGEMENT

The conditions of engagement are proposed to be in accordance with the AGREEMENT between Gewalt Hamilton Associates, Inc., 625 Forest Edge Drive, Vernon Hills, Illinois 60061 (“GHA”) and Huff & Huff, Inc. A subsidiary of GZA GeoEnvironmental located at 915 Harger Road, suite 330 Oak Brook, IL 60523 (“SUBCONSULTANT”) dated May 15, 2015. The terms and conditions of the AGREEMENT will be reproduced by GHA and incorporated with each specific assigned work order.

ACCEPTANCE

Upon issuance, both parties will execute the project specific Subconsultant Work Order consistent with the terms and conditions of the AGREEMENT.

We appreciate the opportunity to submit this proposal. Please feel free to contact the undersigned at (630) 684-9100 with any questions.

Very truly yours,

Huff & Huff, Inc.

Jeremy J. Reynolds
Associate Principal
Attachments: Cost Plus Fixed Fee Spreadsheets

PAYROLL ESCALATION TABLE FIXED RAISES

FIRM NAME Huff & Huff, Inc.
 PRIME/SUPPLEMENT GHA-LCDOT Washington
 Prepared By JJR

DATE 06/03/20
 PTB-ITEM# 0

CONTRACT TERM 12 MONTHS
 START DATE 6/15/2020
 RAISE DATE 7/1/2020
 END DATE 6/14/2021

OVERHEAD RATE 182.42%
 COMPLEXITY FACTOR 0
 % OF RAISE 3%

ESCALATION PER YEAR

year	First date	Last date	Months	% of Contract
0	6/15/2020	7/1/2020	1	8.33%
1	7/2/2020	6/1/2021	11	94.42%

The total escalation = 2.75%

PAYROLL RATES

FIRM NAME Huff & Huff, Inc. DATE 06/03/20
 PRIME/SUPPLEMENT GHA-LCDOT Washington
 PTB-ITEM # 0

ESCALATION FACTOR 2.75%

Note: Rates should be capped on the AVG 1 tab as necessary

CLASSIFICATION	IDOT PAYROLL RATES ON FILE	CALCULATED RATE
Principal	\$72.80	\$74.80
Associate Principal II	\$75.00	\$77.06
Associate Principal I	\$62.63	\$64.35
Senior Consultant	\$69.44	\$71.35
Senior Project Manager III	\$60.73	\$62.40
Senior Project Manager II	\$46.64	\$47.92
Senior Project Manager I	\$45.12	\$46.36
Senior Landscape Architect	\$52.74	\$54.19
Senior Planning PM	\$51.48	\$52.90
Senior Geologist PM	\$47.33	\$48.63
Senior Technical Specialist	\$46.14	\$47.41
Senior Scientist PM II	\$48.58	\$49.92
Senior Technical Scientist	\$44.24	\$45.46
Technical Graphics Technic	\$23.34	\$23.98
Scientist PM II	\$43.85	\$45.06
Engineer PM I	\$38.50	\$39.56
Assistant PM Engineer I	\$35.13	\$36.10
Engineer I	\$31.88	\$32.76
Assistant PM Scientist	\$31.50	\$32.37
Scientist E1	\$26.04	\$26.76
Scientist E2	\$24.26	\$24.93
Administrative Managers	\$42.04	\$43.20
Senior Administrative Assist	\$29.53	\$30.34



Subconsultants

FIRM NAME Huff & Huff, Inc.
PRIME/SUPPLEMENT GHA-LCDOT Washington
PTB-ITEM # 0

DATE 06/03/20

NAME	Direct Labor Total	Contribution to Prime Consultant
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Total

0.00

0.00

COST PLUS FIXED FEE COST ESTIMATE OF CONSULTANT SERVICES

Bureau of Design and Environment
Prepared By: Consultant
DATE 06/03/20

FIRM Huff & Huff, Inc.
PTB-ITEM # 0
PRIME/SUPPLEMENT GHA-LCDOT Washington

OVERHEAD RATE 182.42%
COMPLEXITY FACTOR 0

DBE DROP BOX	ITEM	MANHOURS (A)	PAYROLL (B)	OVERHEAD & FRINGE BENF (C)	DIRECT COSTS (D)	FIXED FEE (E)	SERVICES BY OTHERS (G)	DBE TOTAL (H)	TOTAL (B-G)	% OF GRAND TOTAL
	Records Search Review	10	286	522	470	106	0	-	1,384	9.96%
	Soil Sampling & Analysis	26	733	1,338	229	271	6,530	-	9,101	65.49%
	Prepare LPC form	19	696	1,269	0	257	0	-	2,222	15.99%
	Project Management	3	162	295	0	60	0	-	517	3.72%
	QAQC	4	210	384	0	78	0	-	672	4.84%
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AVERAGE HOURLY PROJECT RATES

FIRM Huff & Huff, Inc.
PTB-ITEM# 0
PRIME/SUPPLEMENT GHA-LCDOT Washington

DATE 06/03/20

SHEET 1 OF 5

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJ. RATES			Records Search Review			Soil Sampling & Analysis			Prepare LPC form			Project Management			QA/QC		
		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	70.00	0.0																	
Associate Principal II	70.00	0.0																	
Associate Principal I	64.35	3.0	4.84%	3.11							1	5.26%	3.39	1	33.33%	21.45	1	25.00%	16.09
Senior Consultant	71.35	0.0																	
Senior Project Manager III	62.40	0.0																	
Senior Project Manager II	47.92	0.0																	
Senior Project Manager I	46.36	0.0																	
Senior Landscape Architect	54.19	0.0																	
Senior Planning PM	52.90	0.0																	
Senior Geologist PM	48.63	5.0	8.06%	3.92										2	66.67%	32.42	3	75.00%	36.47
Senior Technical Specialist	47.41	1.0	1.61%	0.76							1	5.26%	2.50						
Senior Scientist PM II	49.92	0.0																	
Senior Technical Scientist	45.46	4.0	6.45%	2.93							4	21.05%	9.57						
Technical Graphics Technician	23.98	0.0																	
Scientist PM II	45.06	0.0																	
Engineer PM I	39.56	0.0																	
Assistant PM Engineer I	36.10	14.0	22.58%	8.15	2	20.00%	7.22	6	23.08%	8.33	6	31.58%	11.40						
Engineer I	32.76	0.0																	
Assistant PM Scientist	32.37	0.0																	
Scientist E1	26.76	24.0	38.71%	10.36	8	80.00%	21.40	10	38.46%	10.29	6	31.58%	8.45						
Scientist E2	24.93	11.0	17.74%	4.42				10	38.46%	9.59	1	5.26%	1.31						
Administrative Managers	43.20	0.0																	
Senior Administrative Assistant	30.34	0.0																	
		0.0																	
		0.0																	
		0.0																	
		0.0																	
TOTALS		62.0	100%	\$33.66	10.0	100.00%	\$28.62	26.0	100%	\$28.21	19.0	100%	\$36.61	3.0	100%	\$53.87	4.0	100%	\$52.56

HUFF & HUFF, INC.
SUMMARY OF DIRECT COSTS
 Project: GHA - LCDOT Washington St CCDD

				<u>DIRECT</u>	
Task 1 - Records Search Review					
Trips	100 miles	x	1 x	\$0.575 =	\$ 57.50
Tolls			8 x	\$ 1.50 =	\$ 12.00
Database			1 x	\$ 400.00 =	\$ 400.00
<hr/>			0 x	\$ - =	\$ -
			Task Total		\$ 469.50
Task 2 - Soil Sampling & Analysis					
Trips	100 miles	x	2 x	\$0.575 =	\$ 115.00
Tolls			16 x	\$ 1.50 =	\$ 24.00
Field kit	1 day	x	1 x	\$ 30.00 =	\$ 30.00
pH Meter	1 day	x	1 x	\$ 10.00 =	\$ 10.00
PID Meter	1 day	x	1 x	\$ 50.00 =	\$ 50.00
<hr/>			Task Total		\$ 229.00
Task 3 - Prepare LPC Form					
<hr/>			0 x	\$ - =	\$ -
			Task Total		\$ -
Task 4 - Project Management					
<hr/>			0 x	\$ - =	\$ -
			Task Total		\$ -
Task 5 - QAQC					
<hr/>			0 x	\$ - =	\$ -
			Task Total		\$ -
GRAND TOTAL					\$ 698.50

HUFF & HUFF, INC.
SUMMARY OF SERVICES BY OTHERS
 Project: GHA - LCDOT Washington St CCDD

OUTSIDE

Task 1 - Records Search Review

	0	x	\$	-	=	\$	-
	Task Total					\$	-

Task 2 - Soil Sampling & Analysis

VOC	ea	25	x	\$	50.00	=	\$1,250.00	
PNAs	ea	25	x	\$	75.00	=	\$1,875.00	
RCRA total	ea	25	x	\$	50.00	=	\$1,250.00	
Cr + Fe TCLP	ea	25	x	\$	60.00	=	\$1,500.00	
pH	ea	41	x	\$	5.00	=	\$205.00	
RCRA TCLP	ea	5	x	\$	90.00	=	\$450.00	
							Task Total	\$ 6,530.00

Task 3 - Prepare LPC Form

	0	x	\$	-	=	\$	-
	Task Total					\$	-

Task 4 - Project Management

	0	x	\$	-	=	\$	-
	Task Total					\$	-

Task 5 - QAQC

	0	x	\$	-	=	\$	-
	Task Total					\$	-

GRAND TOTAL \$ 6,530.00

DESIGN SURVEY PROCEDURES



DESIGN SURVEY PROCEDURES (Revised 3/10/17)

HORIZONTAL ALIGNMENT

Unless otherwise specified in the services contract, the CONSULTANT is to provide the horizontal alignment. The CONSULTANT will conduct all surveying, stationing, and preparation of required plans using English units of measure and the U.S. Survey Foot. The CONSULTANT'S SURVEYOR will try to re-establish the original horizontal alignment as shown on the recorded R.O.W. plats. The CONSULTANT shall contact LCDOT's Land Surveyor to obtain R.O.W. plats and field notes before establishing the horizontal alignment and stationing. The CONSULTANT shall notify LCDOT's Surveyor immediately if the alignment cannot be reproduced or if in the CONSULTANT'S opinion the existing alignment information is in error.

The CONSULTANT'S SURVEYOR, prior to construction, shall stake the PCs, PIs, PTs, and POTs so that the alignment location can be verified before construction staking is initiated. The CONSULTANT'S SURVEYOR will provide four reference ties to all U.S. Public Land Survey Monuments that are located within the construction limits. The reference points should be located outside of the anticipated construction limits if practical, so that they can be used after construction to replace the monuments. The CONSULTANT shall record Monument Records for all Section and Quarter Section corners set or found within the construction limits.

The CONSULTANT will mark the baseline for relocated alignments when off pavement at the PCs, PTs, and POTs with iron rods. The rods shall be set one foot below the surface in farmed land. The CONSULTANT will advise the County of any pavement alignment variations. In cases where the proposed centerline of construction or survey baseline is different from the existing centerline of R.O.W., both shall be shown and the relationship between them shall be indicated on an Alignment & Tie sheet.

ALIGNMENT & TIE SHEET

An Alignment & Tie Sheet shall be provided as part of the final plans. The plans are to be prepared using English units of measure and the U.S. Survey Foot. The station, offset, and coordinates of the alignment points (PCs, PTs, PIs, and POTs) and survey control (traverse) points shall be shown. Coordinates for all projects shall be on the Illinois State Plane Coordinate System, - East zone, NAD83 (Adjustment). The grid (combination) factor for the project shall be shown. A list of traverse points with station, offset, and coordinates shall be provided.

VERTICAL ALIGNMENT

The North American Vertical Datum of 1988 (NAVD 88) shall be used for vertical control. Lake County Mapping Benchmarks are available on-line (<http://gis.lakeco.org/maps/>). NAVD88 benchmarks are available on-line from the National Geodetic Survey. LCDOT's Land Surveyor may also be contacted for benchmarks that may be in the area. The primary benchmarks and site benchmarks shall be listed and described on the Alignment & Tie Sheet. The location of the site benchmarks shall also be shown on the plan sheets with a symbol. Site benchmarks are to be located at less than 1000-foot intervals with a minimum of two (2) on each project.

All benchmarks shall be located on stable objects. LCDOT prefers these objects to be outside the construction limits. Some acceptable benchmark examples are, spikes in poles, bolts on fire hydrant rings, and concrete foundations.

TOPOGRAPHY

The CONSULTANT shall cut cross-sections at 50-foot intervals and at all points needing clarification. For areas of superelevation or requiring greater detail, cross-sections shall be cut at 25-foot intervals. The cross section interval should be defined in the engineering services contract.

Full cross-section profiles will be taken at all cross streets, alleys, cross road culverts, and entrances (commercial, private, and field). Half cross-sections will not be accepted because they skew the computer terrain model.

The CONSULTANT will locate and identify all trees (6 inches in diameter or greater) within the area either side of the centerline, defined by the proposed ROW or construction limits (whichever is greater) plus an additional 10 feet. The trees shall be identified by species and size. The trees shall be located by station/offset and have a ground elevation.

Streams, tributaries, or major drainage ditches located within a lateral distance of 250 feet from centerline (upstream and downstream) shall be surveyed. Alignment, profiles, and cross-sections shall be taken. The stream width shall be shown as the distance measured between the tops of the stream banks. Profile elevations along the bottom of the watercourse shall be taken at a minimum of 50-foot intervals.

The survey shall extend a minimum of 200 feet beyond the roadway construction limits. Cross-sections shall be taken a minimum of 10 feet beyond the proposed R.O.W. or construction limits (whichever is greater). Cross-sections will extend 30 feet beyond the proposed R.O.W. at entrances and 150 feet at minor side roads.

All survey data shall be collected in Illinois State Plane Coordinates – East Zone. The collected survey data for the existing topography shall have a minimum of 3rd Order Accuracy horizontally with readings to the nearest 0.1 feet for vertical on gravel or ground and readings to the nearest 0.01 feet for vertical on all other surfaces.

RAILROAD INSURANCE

The CONSULTANT will comply with the railroad's requirements when conducting a survey on the railroad's R.O.W. Usually, this includes obtaining a permit, paying a fee, obtaining Railroad Protective Liability Insurance, notification of a flagman to be present near the rails during the survey operations, and any other requirements of the railroad. The CONSULTANT is responsible for all of the foregoing requirements.

DELIVERABLES

- I. Copies from the CONSULTANT'S field books, showing benchmarks, level circuits, & structure details, such as size and inverts etc.
- II. The Base Drawing at 1:1 scale. All the topographic information shall be plotted electronically. The data shall be in Illinois State Plane Coordinates – East Zone and be recorded in a MICROSTATION (dgn) format. All CAD work shall be according to LCDOT CAD Standards. ASCII files, gpk files, and/or InRoads files containing all point information as described below shall be included. A filename “ID” acronym explanation sheet shall be provided. Backup CDs shall be provided.
- III. Point Information:
 - (1) Point number
 - (2) Northing and Easting coordinate values
 - (3) "Z" elevations
 - (4) Point identification by code
 - (5) Notes