


DRAFT

Municipality	LOCAL AGENCY	 Illinois Department of Transportation Preliminary Engineering Services Agreement For Motor Fuel Tax Funds	CONSULTANT	Name Bloom Companies, LLC
Township				Address 600 West Fulton Suite 701
County Lake County				City Chicago
Section 14-00000-07-GM				State IL 60661

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 Gilmer Road

Route Cty V76 Length _____ Mi. _____ FT (Structure No. NA)

Termini Gilmer Road 200' southeast of Sequoia Road

Description:

Removal and replacement of existing steel arch culvert with headwalls with a concrete box culvert with concrete headwalls.

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 (delegated to LCSMC), Bridge waterway sketch, and/or Channel Change sketch, and Utility plan and locations,
 - f. ☒ Prepare Preliminary Bridge design and Hydraulic Report 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 1 copy of the plans, special provisions, proposals and estimates, plus an electronic copy. 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 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.

Note: Four copies to be submitted to the Regional Engineer

- 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 LA. It is being understood that all such reports, plats, plans and drafts shall, before being finally accepted, be subject to approval by the LA.
 - (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 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 180 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.

The Total Not-to-Exceed Contract Amount shall be \$195,429.11

2. 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.

3. 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 180 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.
4. 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 the LA will

pay the ENGINEER for such changes on the basis of actual cost plus 180 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, 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.
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:

(Municipality/Township/County) of the

ATTEST: State of Illinois, acting by and through its

By _____

Clerk By _____

(Seal) Title _____

Executed by the ENGINEER:

ATTEST: _____

By _____ By _____

Title _____ Title _____

Gilmer Road Retaining Wall and Culvert Replacement

The following scope of services has been developed from the Final Scoping Report, dated December 2, 2014, developed by the Lake County Division of Transportation for retaining wall and culvert repairs and from our meeting of April 20, 2015.

The retaining wall and culvert location is Gilmer Road 200 feet southeast of Sequoia Road. The culvert conveys the West Branch of Indian Creek under Gilmer Road.

This proposal breaks down the proposed scope into four stages. They are:

- I. Preliminary Design and Assessments
- II. Prefinal Design (PS&E)
- III. Final Design (PS&E)
- IV. Construction Services.

I. Preliminary Design and Assessment Stage

This part of the scope is to determine the parameters that will provide the information and decisions to the County to ensure that the proposed design is in accordance with their needs and desires and that it can be permitted before committing additional resources to design refinement.

The major tasks associated with this are:

1. Topographic Survey (by Dynasty). This will form the basis of all design efforts. This survey will be in accordance with LCDOT requirements. This effort will also include a field JULIE locate and hydraulic survey for use in permitting (see Permitting below). The survey will not be a Property Survey. Property boundaries will be determined from the Lake County GIS system.
2. Geotechnical Investigations (by Wang). This will be used to establish design parameters the placement of the culvert, the design of the retaining walls.
3. Environmental Inventories (by Huff & Huff). This will include a wetland delineation in the area and Preliminary Environmental Site Assessment (PESA) to determine if there are special waste issues. These are necessary because the project will disturb the area, including potentially outside the right-of-way and materials will need to be disposed of off site.
4. Field Reconnaissance. We will revisit the site to take additional observations and photos. This reconnaissance will include a sign inventory within the possible construction limits and an inventory of possible detour roads.
5. Sizing of the replacement culvert. Based upon discussions with LCSMC the culvert will need to be larger than the existing. However, with the proposed extension of the culvert to improve the offset for guardrail, a hydraulic model will need to be run. This model will compare the proposed culvert to its replacement to ensure that the new culvert does not create over 0.04' of head for the 100-year flood at the right-of-way line. Since there is a regulatory floodway and model, we will need to secure a copy of it and develop ours to conform to it.
6. Roadway Preliminary Design. As the roadway is to be widened to accommodate an improved guardrail offset, we will develop a typical section to demonstrate that. That typical section will be used to establish the culvert length. We will use this to also develop preliminary cross-sections to determine the project footprint. After this, we will perform a barrier warrant analysis to establish the limits of the guardrail and the overall improvement.

7. Maintenance of Traffic (Detour). As the existing roadway is too narrow to maintain traffic during construction, we will develop a detour concept for the County, with a preference for County or State Routes. This concept will be used for coordination with outside affected parties.
8. Permitting Investigations. This stage will involve preliminary permitting activities verify and establish parameters.
 - a. Floodway. With the wall being pushed out for the guardrail, there will be floodway fill. We will determine the fill for the 0-10 year flood stage, 10-100 year stage and how that might be compensated. Options include excavation adjoining the defined floodway and sizing the culvert to provide the compensation directly. This will coordinated with the LCSMC.
 - b. Section 404 Permitting. With the wetlands established and the footprint establish, we will prepare a wetland impact exhibit showing the extent of the wetland impacts and the types of wetlands impacted. This will be coordinated with the LCSMC. Depending upon the extent of the impact, we propose preliminary coordination with the USACE. With USACE we also propose to discuss the proposed construction with staging to seek their concurrence.
 - c. Stormwater Management. Considering the scope of work, we expect this to be nominal involvement. We will work with LCSMC to let them know the scope and to verify the requirements.
 - d. Cultural Resources. Per the Scoping Report, the culvert was constructed before 1990. While not apparently architecturally or historically interesting, there will be a Section 404 Permit and some temporary easements. We will perform nominal coordination with IHPA.
9. Structural Preliminary Design (TS&L). This will show the type of walls and culverts, the type and length of each. It will also show any special staging considerations.
10. Constructability Issues. This will review utility conflicts, maintenance of creek flow, temporary easements and other issues that may arise. This will also include a notification of the scope of work to utilities to make them aware of any potential conflicts.
11. Cost Estimate. We will provide a cost estimate for the project.
12. Concept Report & Review. In this document we will summarize the above for the County's review. After LCDOT has a chance to review, we will meet with the County to discuss.

II. Prefinal Design (PS&E) Stage

After the County has reviewed the Concept Report and consensus reached on how to proceed, we will proceed with the Prefinal Design. This submittal is expected to consist of:

1. Plan Sheets (with estimated sheet count):
 - a. Cover sheet (1)
 - b. General Notes / Summary of Quantities (1)
 - c. Typical Sections (1)
 - d. Schedule of Quantities (2)
 - e. Boring Log (2)
 - f. Alignment, Ties and Benchmarks (1)
 - g. Plan & Profile (1)
 - h. Suggested Construction Staging (2)
 - i. Traffic Control/Detour (3)
 - j. Erosion Control & Landscaping (2)
 - k. Wall Plan, Elevations, Sections and Details (3)
 - l. Culvert Plan, Elevations, Sections and Details (3)
 - m. Miscellaneous Project Specific Details (2)

- n. Cross-sections (2)
- o. IDOT and LCDOT Standards and Details (20)
- 2. Specifications
- 3. Estimates
- 4. Permits. During this stage we will prepare the draft Floodway, Section 404, Stormwater Management and SWPP permits.
- 5. Construction Easement Documents
- 6. Utility Coordination. Once LCDOT agrees with the Prefinal Plan we will send the plans out for utility coordination and conduct follow-up.
- 7. Plan Review

With the concurrence of LCDOT the conclusion of this stage, we will initiate the formal utility coordination with affected utilities and submit draft permits to LCSMC and USACE.

III. Final Design (PS&E) Stage

During this stage we will incorporate comments received from Lake County DOT, LCSMC and USACE to finalize the plans and permits. We will also finalize all utility coordination issues.

The submittal will consist of final versions of the list under the Prefinal Design Stage. The submittal will be one hard copy of the total bid package and an electronic copy. The electronic copy will be in the format described in Attachment B "Electronic Bid Package Format and Submittal.

We will also be available for the bid opening and review of bid proposals.

IV. Construction Services Stage

Bloom will be available for shop drawing reviews and to respond to RFI.

We assume that the costs of all permits and mitigation measures (including wetland banking) will be paid for directly by LCDOT.

Administration and Management

We will monitor our progress throughout the project to ensure that we meet all LCDOT deadlines and maintain the quality of our deliverable. We will provide written monthly progress reports as part of the invoicing process to LCDOT summarizing the status of the project, as well as budgetary issues.

ATTACHMENT B

ELECTRONIC BID PACKAGE FORMAT AND SUBMITTAL

To facilitate posting projects to the LCDOT web site, consultants shall provide electronic copies of the bid documents as follows:

1. A .pdf file of each individual plan sheet.
 - a. Each individual sheet file shall be printed to a .pdf file. Only sheets that require signatures and/or seals may be scanned. All plan sheets shall be printed to scale as full size - 22" x 34" (ANSI D). This facilitates the printing of half-size (11" x 17") sheets to scale.
 - b. The files shall be named as:
 - i. **A-ZZZZZ\$Sheet_XXXX_Title.pdf**
 - ii. A-ZZZZZ is the LCDOT CPMS Pin # assigned to the project. The "XXXX" in the file name shall be a sequential 4 digit number beginning at 0001. The numbers shall include all preceding 0's. The 0's are necessary to align the individual files in order on the web site.
 - iii. For example the cover sheet of the project (PIN # B-00300) would be B-00300\$Sheet_0001_Cover_Sheet.pdf.
2. A .pdf file of the entire plan set.
 - a. The individual plan sheets shall be combined into a single file.
 - b. The file shall be named: **A-ZZZZZ\$Full_Plan_Set.pdf**.
 - c. A scanned copy of the cover sheet with County Engineer's signature will be added by LCDOT.
3. A compiled .pdf file of the final contract book (specifications).
 - a. The file shall be compiled from individual documents (word processing, spreadsheets, design standards/details, etc.) printed to .pdf files and individual files already in .pdf format. Only documents that cannot be transmitted electronically or that require signatures and/or seals may be scanned.
 - b. The file shall be named: **A-ZZZZZ\$Contract_Specifications.pdf**.
 - c. A scanned copy of the cover page with County Engineer's signature will be added by LCDOT.
4. If a soils report for the project has been prepared, the consultant shall include a .pdf file named: **A-ZZZZZ\$Soils_Report.pdf**.

The consultant shall provide the above files on a CD. LCDOT does not have an ftp site. If the consultant has an ftp site arrangements may be made to transfer the files.

**MAN-HOURS
SUMMARY FORM**

PROJECT Gilmer Road
Walls Culvert
West Branch Indian Creek

ITEM	# OF SHEETS	MH PER SHEET	EXTENDED MH'S	TOTALS
Preliminary Design and Assessment Stage				
Topographic Survey (by Dynasty)				
Geotechnical Investigation (by Wang)				
Environmental Inventories (by Huff & Huff)				
Field Reconnaissance			16	
Sizing of Replacement Culvert				
HEC-RAS Modelling			100	
Summary Report with Recommendations			32	
Roadway Preliminary Design				
Develop Cross-sections			10	
Develop Typical Sections			6	
Guardrail Analysis			10	
Maintenance of Traffic (Detour)			8	
Permitting Investigations				
Floodway			16	
Section 404 Permitting			32	
Stormwater Management			2	
Cultural Resources			2	
Structural Preliminary Design				
Culvert TS&L			32	
Walls TS&L			24	
Constructability				
Utilities			4	
Easements			4	
Staging/Maintenance of Creek Flow			4	
Cost Estimate			12	
Concept Report and Presentation			40	
Stage Total				354
Prefinal and Final Design (PS&E) Stages				
Plan Set				
Cover Sheet	1	10	10	
General Notes / Summary of Quantities	1	24	24	
Typical Sections	1	16	16	
Schedule of Quantities	2	20	40	
Boring Log	2	6	12	
Alignment, Ties and Benchmarks	1	18	18	
Plan & Profile (1" = 20')	1	24	24	
Suggested Construction Staging	2	16	32	
Traffic Control/Detour	3	14	42	
Erosion Control & Landscaping	2	16	32	
Wall Plans	3	32	96	
Culvert Plans	3	32	96	
Misc. Project Specific Details	2	10	20	
Cross-Sections	2	12	24	
IDOT and LCDOT Standards and Details	20	2	40	
Plan Sheet Subtotal	46		526	
Special Provisions			56	
Estimates			36	



**MAN-HOURS
SUMMARY FORM**

PROJECT Gilmer Road
Walls Culvert
West Branch Indian Creek

Permits		
Floodway	24	
Section 404	64	
Stormwater Management	4	
SWPP	24	
Permits Subtotal	116	
Construction Easement Documents (by Dynasty)	0	
Utility Coordination	32	
Plan Review	20	
PS&E Subtotal		786
Construction Services	24	24
Administration/Management	48	48
GRAND TOTAL		1212

Gilmer Road
Direct Costs Breakdown

ITEM	Travel				Printing				Delivery			Misc	Total Out of House Direct
	# of Trips	Auto Daily Rate	Tolls /Trip	Extended	# of Packages	# of Sheets	\$ per sheet	Extended	# of deliveries	\$/ delivery	Extended		
Preliminary Design and Assessment Stage													
General Reviews and Coordination	4	\$65.00	\$10.00	\$300.00									\$909.20
LCDOT Submittal					5	40	\$0.12	\$24.00	1	\$15.00	\$15.00		
Utilities					10	6	\$0.17	\$10.20	6	\$10.00	\$60.00		
Flood Insurance Model												\$500.00	
Prefinal and Final Design (PS&E) Stages													\$1,007.80
General Reviews and Coordination	3	\$65.00	\$10.00	\$225.00									
LCDOT Submittal (full size plans)					2	50	\$1.10	\$110.00	1	\$15.00	\$15.00		
LCDOT Submittal (qtr size plans)					6	50	\$0.17	\$61.00	3	\$15.00	\$45.00		
LCDOT Submittal (specs & estimates)					6	70	\$0.12	\$50.40					
Utilities					12	15	\$0.17	\$30.60	6	\$10.00	\$60.00		
Permits	4	\$65.00	\$10.00	\$300.00	8	30	\$0.17	\$40.80	8	\$10.00	\$80.00		
Construction Services													
Administration/Management													
Grand Totals				\$825.00				\$317.00			\$275.00	\$500.00	\$1,917.00



Payroll Escalation Table
Fixed Raises
New Formula

FIRM NAME
PRIME/SUPPLEMENT

Bloom Companies, LLC

DATE 05/04/15
PTB NO.

CONTRACT TERM
START DATE
RAISE DATE

14 MONTHS
6/1/2015
1/1/2016

OVERHEAD RATE
COMPLEXITY FACTOR
% OF RAISE

0.00%
0
3.00%

ESCALATION PER YEAR

6/1/2015 - 1/1/2016

7
14

= 50.00%
= 1.0150

1/2/2016 - 8/1/2016

7
14

51.50%

The total escalation for this project would be:

1.50%



Payroll Rates

FIRM NAME	<u>Bloom Companies, LLC</u>	DATE	<u>05/04/15</u>
PRIME/SUPPLEMENT	<u> </u>		
PTB NO.	<u> </u>		

ESCALATION FACTOR **1.50%**

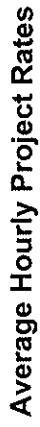
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Firm	Bloom Companies, LLC
Route	Gilmer Road
Section	
County	Lake
Job No.	
PTB & Item	

05/04/15

ITEM	MANHOURS (A)	PAYROLL (B)	(2.80+R) TIMES PAYROLL (C)	DIRECT COSTS (D)	SERVICES BY OTHERS (E)	DBE TOTAL (C+D+E)	TOTAL (C+D+E)	% OF GRAND TOTAL
Prelim Design & Assess.	354	13,820.24	38,696.67	909.20			39,605.87	20.27%
PS & E	786	29,847.09	83,571.85	1,007.80			84,579.65	43.28%
Construction Services	24	1,169.28	3,273.98				3,273.98	1.68%
Admin	48	2,574.04	7,207.31				7,207.31	3.69%
Geotech Investigations (Wang)					18,416.35		18,416.35	9.42%
Env. Investigations (H & H)					17,255.94		17,255.94	8.83%
Survey (Dynasty)					25,090.00		25,090.00	12.84%
TOTALS	1212	47,410.65	132,749.82	1,917.00	60,762.29		195,429.11	100.00%



Average Hourly Project Rates

Sheet 1 OF 1

[illegible]



915 Harger Road, Suite 330
Oak Brook, IL 60523
Phone (630) 684-9100
Fax (630) 684-9120
Website: <http://huffnhuff.com>

April 29, 2015

Mr. Michael Okrent, P.E.
Bloom Companies, LLC
600 W. Fulton Street, Suite 701
Chicago, IL 6066

**Re: Environmental Services for
Gilmer Road over West Branch Indian Creek
Village of Hawthorn Woods, Lake County, Illinois
Proposal No.: 81.PT00037.16**

Dear Mr. Okrent:

Huff & Huff, Inc., a subsidiary of GZA GeoEnvironmental, Inc. (Consultant) is pleased to submit this proposal to Bloom Companies, LLC. (Client) to initiate environmental services in conjunction with the proposed Gilmer Road over West Branch Indian Creek culvert and headwall replacement project in the Village of Hawthorn Woods, Lake County, Illinois. This proposal presents our project understanding, the scope of services, and cost for completing the project.

1. PROJECT UNDERSTANDING

The Lake County Division of Transportation is proposing the replacement of the Gilmer Road culvert and headwall over the West Branch Indian Creek. The project is proposed to be constructed in the summer of 2016 in the Village of Hawthorn Woods, Lake County, Illinois. Consultant has been requested to provide environmental services.

Consultant will complete the wetland delineation, Jurisdictional Determination (JD) and boundary verification with the Lake County Stormwater Management Commission (SMC), pre-application meeting with the U.S. Army Corps of Engineers (USACE) and review of the Section 404 permit submittal to the USACE, and Preliminary Environmental Site Assessment (PESA).

2. SCOPE OF SERVICES

Task 1 – Wetland Delineation

A. Off-site Record/Document Review

Based on available mapping as well as current aerial photography, it is anticipated there is one wetland/"Waters of the U.S" (WOUS) present within the project limits.

The following records/documents will be reviewed prior to conducting the field investigation. The sources to be reviewed and used include:

- U.S. Geological Survey Topographic Map
- National Wetlands Inventory Map (NWI)
- Lake County Soil Survey
- Lake County Wetland Inventory
- Lake County Advanced Identification (ADID) Map
- FEMA Floodplain Maps
- Hydric Soils of the United States
- Aerial Photographs

B. On-Site Investigation (Field Inventory)

The on-site investigation will be conducted by Consultant staff experienced in Federal methods for conducting wetland delineations. Consultant will classify and define hydric soils, hydrophytic vegetation, and evidence of hydrology to determine if wetlands are present. The wetland perimeters will be surveyed in the field using Global Positioning System equipment.

A wetland delineation of the project site will be conducted that will meet the requirements of Executive Order 11990, "Protection of Wetlands;" Section 404 of the Federal Water Pollution Control Act as amended by the Clean Water Act (Corps of Engineers, Section 404 Permit) and the Illinois Environmental Protection Agency Section 401 Guidelines regulations. These regulations pertain to the placement of fill or alteration of drainage within wetlands of any type and apply to privately as well as publicly-owned wetlands. The investigation will meet the requirements of these regulations by identifying the type, functions, and boundaries of the involved wetlands.

Wetlands found will be classified according to type using the "Classification of Wetlands and Deep Water Habitats of the United States" by Cowardin. Wetland boundaries will be defined using the Corps of Engineers Regional Supplement to the COE Wetlands Delineation Manual (USACOE, 2010). This includes a soil investigation to determine the presence or absence of hydric soils and an analysis of the dominant plant species. Field observations will be made on any evidence indicating the hydrology of the area and on water sources that are supporting these wetlands. Functions of these wetlands will be evaluated from field observations.

In addition to the wetland/WOUS's identified by aerial photography, the entire project area will be investigated in the event that unmapped wetlands are present. The NWI map for the project area does not identify wetlands within the project limits. The ADID map identifies one wetland within the project limits.

Task 2 – Wetland Report

Upon completion of the wetland delineations, a wetland delineation report will be prepared summarizing the findings of the formal delineation upon completion. This report will be used for the basis of permitting.

Wetland delineation data sheets will be included in the report, which summarize the findings of the field investigation. A minimum of one wetland and one upland data point is needed for each wetland encountered.

Specific items to be included are as follows:

- a) Map showing the wetland/WOUS boundaries and project boundaries
- b) COE data sheets with color photos
- c) Written description of wetland functional classification
- d) Floristic Quality Index Rating assessment
- e) Mitigation options
- f) Jurisdictional Summary Table
- g) Identification of 303d impaired waterways
- h) Farmed Wetland Determination

A formal delineation of wetlands is required in accordance with the Chicago District Corps of Engineers (COE) regulations, prior to permitting any wetland impacts. In the Chicago District, within Illinois, the wetland delineation report must include a floristic quality assessment. Any impacts to wetlands will require permits. Consultant will provide four bound hard copies of the Wetland and WOUS Investigation Report and one CD containing a PDF of the report and shape files of the wetland and WOUS boundary.

Task 3 – Jurisdictional Determination (JD)/Permitting Assistance

A jurisdictional determination (JD) is required from the COE to determine whether the on-site wetlands are under the jurisdiction of the COE or whether they are considered isolated. JD forms will require signatures from the landowner. In Lake County, the SMC will conduct a Preliminary JD (PJD) and boundary verification for a fee. Consultant will complete and submit the PJD and boundary verification request forms to the SMC. This task includes time for one site visit with the SMC to conduct the PJD and boundary verification. This scope assumes LCDOT will use the intra-County electronic fund to pay the required PJD and boundary verification fees.

This scope of services includes the compilation of the Joint Application for submittal to the Corps of Engineers, including a pre-application meeting with Client and the COE to discuss alternatives, permitting, and potential conceptual mitigation options. It is anticipated the proposed project will meet the requirements of the Regional Permit (RP) program. If the proposed project does not meet the requirements of the RP program, an Individual Permit (IP) will be required. Consultant will work with the Client to compile the required permitting materials for submittal. This scope of services does not include Individual Permitting or mitigation design.

Task 4 – Preliminary Environmental Site Assessment (PESA)

Consultant will prepare a Preliminary Environmental Site Assessment (PESA) for the project corridor. IDOT completes PESAs for state rights of way; however, Consultant will complete the

PESA for the local roads portions of projects. The specific methods used to prepare the assessment are contained in the following:

- A Manual for Conducting Preliminary Environmental Site Assessments for Illinois Department of Transportation Highway Projects (Erdmann et al., 2012)
- ASTM International (ASTM) standard 1527-13
- The Illinois Department of Transportation's (IDOT's) Bureau of Design and Environment (BDE) Procedure Memorandum Number 10-07, *Special Waste Procedures*. This memo was incorporated into Chapter 27-3 of the IDOT BDE Manual in June 2012.
- IDOT Bureau of Local Roads and Streets (BLRS) Manual, Chapter 20-12, Special Waste, July 2013.
- Public Act 96-1416
- Clean Construction or Demolition Debris Fill Operations (CCDD) and Uncontaminated Soil Fill Operations: Amendments to 35 Illinois Administrative Code 1100. Effective on August 27, 2012.

A. Historical Research

The project corridor's historical land use/ownership records will be developed from standard historical sources. Historical aerial photographs or historical maps, such as Sanborn Fire Insurance Maps, will be reviewed, as available. The review will identify land use over time and potential areas of environmental concern, such as areas of surface disturbance and outside storage.

B. Site Evaluation

Current environmental features and conditions of sites adjacent to the right-of-way/project areas will be evaluated. A site walkover of potential right-of-way/project areas designated for excavation and/or acquisition will be conducted for first-hand evaluation of current environmental conditions within the project limits. All of the features and conditions listed above will be investigated and, as appropriate, documented in photographs. The land-use and housekeeping practices of adjacent properties also will be evaluated in accordance with ASTM protocols.

C. Records Review

A records review will be conducted to determine potential environmental concerns within the study area. The reviews will include a search of standard state and federal environmental record databases in accordance with the specifications of ASTM standards. The searches are based on the outline of the study areas.

Specifically, Consultant will search each database to identify any potential sources requiring further investigation. As appropriate, Freedom of Information Act (FOIA) requests will be filed with the Illinois Environmental Protection Agency (IEPA) to obtain additional data pertaining to identified sites.

D. Report Preparation

A PESA report summarizing the results of the evaluation will be prepared for the project corridor. The following information will be included in the reports:

- a) The project location and description
- b) Historical uses of corridor.
- c) The area geology and hydrology.
- d) The environmental status of sites adjacent to the corridor regarding chemical use and storage, underground and aboveground storage tanks, solid waste, special waste, and hazardous waste, wastewater, and PCBs.
- e) An analysis of the site inspection.
- f) A summary of the findings regarding any environmental concerns. This will include IDOT's per Memo 66-10 (still active and reissued as BDE PM 10-07) and identification of Potentially Impacted Properties (PIPs) per Subpart F, Section 1100, 35 IAC, related to Clean Construction Demolition Debris management.

Task 5 – QA/QC and Project Management

Time under this task includes time for project management and QA/QC of the wetland and PESA reports as well as the PJD submittal as described above.

3. COST ESTIMATE

Costs for these services are presented in the Cost Estimate for Consultant Services.

4. SCHEDULE

The wetland delineation will be conducted during the 2015 growing season (April 15 to October 1) in Lake County. The wetland delineation will be initiated within four weeks after the start of the growing season or the Notice to Proceed is given, whichever is later. Consultant will work with Client to conduct the PESA within six months of project letting. The PESA report will be completed within four weeks after the PESA site visit is conducted.

5. TERMS AND CONDITIONS FOR PROFESSIONAL SERVICES

© 2008 by GZA GeoEnvironmental, Inc.

Bloom Companies, LLC:

Site: Gilmer Road over West Branch Indian Creek

These Terms and Conditions, together with Consultant's Proposal, make up the Agreement between with Consultant, Bloom Companies, LLC, named above.

1. Services. H&H will perform the services set forth in its Proposal and any amendments or change orders authorized by you. Any request or direction from you that would require extra work or additional time for performance or would result in an increase in H&H's costs will be the subject of a negotiated amendment or change order.

2. Standard of Care. H&H will perform the services with the degree of skill and care ordinarily exercised by qualified professionals performing the same type of services at the same time under similar conditions in the same or similar locality. **NO WARRANTY, EXPRESS OR IMPLIED, INCLUDING WARRANTY OF MARKETABILITY OR FITNESS FOR A PARTICULAR PURPOSE, IS MADE OR INTENDED BY H&H'S PROPOSAL OR BY ANY OF H&H'S ORAL OR WRITTEN REPORTS.**

3. Payment.

- a. Except as otherwise stated in the Proposal, you will compensate H&H for the services at the rates set forth in the applicable Proposal, amendment or change order; reimburse its expenses, which will include a communication fee calculated as a percentage of labor invoiced; and pay any sales or similar taxes thereon.
- b. Any retainer specified in H&H's Proposal shall be due prior to the start of services and will be applied to the final invoice for services.
- c. H&H will submit invoices periodically, and payment will be due within 20 days from invoice date. Overdue payments will bear interest at 1½ percent per month or, if lower, the maximum lawful rate. H&H may terminate its services upon 10 days' written notice anytime your payment is overdue on this or any other project and you will pay for all services through termination, plus termination costs. You will reimburse H&H's costs of collecting overdue invoices, including reasonable attorneys' fees.

4. Your Responsibilities.

- a. Except as otherwise agreed, you will secure the approvals, permits, licenses and consents necessary for performance of the services. If you are the owner or operator of the Site, you will provide H&H with all documents, plans, information concerning underground structures (including but not limited to utilities, conduits, pipes, and tanks), information related to hazardous materials or other environmental or geotechnical conditions at the site and other information that may be pertinent to the services or, if you are not the owner or operator of the Site, you agree to make reasonable efforts to obtain these same documents and provide them to H&H. Unless otherwise indicated in writing, H&H will be entitled to rely on documents and information you provide.
- b. If you use the services of a construction contractor at the Site, you agree to use best and reasonable efforts to include in your agreement(s) with the construction contractor provisions obligating the latter:
 - (i) to indemnify, defend and hold harmless, to the fullest extent permitted by law, you and H&H, its officers, employees and principals, for or on account of any claims, liabilities, costs and expenses, including attorneys' fees, arising out of or relating to the design or implementation of construction means, methods, procedures, techniques, and sequences of construction, including safety precautions or programs, of the contractor, or any of its subcontractors or any engineer engaged by it;
 - (ii) to name you and H&H as additional insureds under general liability and builder's risk insurance coverages maintained by the contractor, or any of its subcontractors; and
 - (iii) to require that all of its subcontractors agree and be bound to the obligations set forth in (i) and (ii) above.
- c. In the event that you are unable to secure such provisions in the agreement(s) with the construction contractor, you shall promptly notify H&H and H&H shall have the opportunity to negotiate with you reasonable substitute risk allocation and insurance indemnities and protections.

5. Right of Entry. You grant H&H and its subcontractor(s) permission to enter the site to perform the services. If you do not own the site, you represent and warrant that the owner has granted permission for H&H to enter the site and perform the services; you will provide reasonable verification on request; and you will indemnify H&H for any claims by the site owner related to alleged trespass by H&H or its subcontractors.

6. Reliance. The services, information, and other data furnished by you shall be at your expense, and H&H may rely upon all information and data that you furnish, including the accuracy and completeness thereof. You acknowledge that the quality of the services provided by H&H is directly related to the accuracy and completeness of the information and data that you furnish to H&H. **H&H's REPORTS ARE PREPARED FOR AND MADE AVAILABLE FOR YOUR SOLE USE. YOU ACKNOWLEDGE AND AGREE THAT USE OF OR RELIANCE UPON THE REPORT OR THE FINDINGS IN THE REPORT BY ANY OTHER PARTY, OR FOR ANY OTHER PROJECT OR PURPOSE, SHALL BE AT YOUR OR SUCH OTHER PARTY'S SOLE RISK AND WITHOUT ANY LIABILITY TO H&H.**

7. H&H Professionals. H&H employees or consultants may act as licensed, certified or registered professionals (including but not limited to Professional Engineers, Licensed Site or Environmental Professionals, or Certified Industrial Hygienists, collectively referred to in this section as "H&H Professionals") whose duties may include the rendering of independent professional opinions. You acknowledge that a federal, state or local agency or other third party may audit the services of H&H or other contractor/consultant(s), which audit may require additional services, even though H&H and such H&H Professionals have each performed such services in accordance with the standard of care set forth herein. You agree to compensate H&H for all services performed in response to such an audit, or to meet additional requirements resulting from such an audit, at the rates set forth in the applicable Proposal, amendment or change order.

8. Hazardous Materials; H&H "Not a Generator". Before any hazardous or contaminated materials are removed from the site, you will sign manifests naming you as the generator of the waste (or, if you are not the generator, you will arrange for the generator to sign). You will select the treatment or disposal facility to which any waste is taken. H&H will not be the generator or owner of, nor will it possess, take title to, or assume legal liability for any hazardous or contaminated materials at or removed from the site. H&H will not have responsibility for or control of the site or of operations or activities at the site other than its own. H&H will not undertake, arrange for or control the handling, treatment, storage, removal, shipment, transportation or disposal of any hazardous or contaminated materials at or removed from the site, other than any laboratory samples it collects or tests. You agree to defend, indemnify and hold H&H harmless for any costs or liability incurred by H&H in defense of or in payment for any legal actions in which it is alleged that H&H is the owner, generator, treater, storer or disposer of hazardous waste.

9. Limits on H&H's Responsibility. H&H will not be responsible for the acts or omissions of contractors or others at the site, except for its own subcontractors and employees. H&H will not supervise, direct or assume control over or the authority to stop any contractor's work, nor shall H&H's professional activities or the presence of H&H or its employees and subcontractors be construed to imply that H&H has authority over or responsibility for the means, methods, techniques, sequences or procedures of construction, for work site health or safety precautions or programs, or for any failure of contractors to comply with contracts, plans, specifications or laws. Any opinions by H&H of probable costs of labor, materials, equipment or services to be furnished by others are strictly estimates and are not a guarantee that actual costs will be consistent with the estimates.

10. Changed Conditions.

- a. You recognize the uncertainties relating to the furnishing of professional services, which often require a phased or exploratory approach, with the need for additional services becoming apparent during the initial services. You also recognize that actual conditions encountered may vary significantly from those anticipated, that laws and regulations are subject to change, and that the requirements of regulatory authorities are often unpredictable.

- b. If changed or unanticipated conditions or delays make additional services necessary or result in additional costs or time for performance, H&H will notify you and the parties will negotiate appropriate changes to the scope of services, compensation and schedule.
- c. If no agreement can be reached, H&H will be entitled to terminate its services and to be equitably compensated for the services already performed. H&H will not be responsible for delays or failures to perform due to weather, labor disputes, intervention by or inability to get approvals from public authorities, acts or omissions on your part or any other causes beyond H&H's reasonable control, and you will compensate H&H for any resulting increase in its costs.

11. Documents and Information. All documents, data, calculations and work papers prepared or furnished by H&H are instruments of service and will remain H&H's property. Designs, reports, data and other work product delivered to you are for your use only, for the limited purposes disclosed to H&H. Any delayed use, use at another site, use on another project, or use by a third party will be at the user's sole risk, and without any liability to H&H. Any technology, methodology or technical information learned or developed by H&H will remain its property. Provided H&H is not in default under this Agreement, H&H's designs will not be used to complete this project by others, except by written agreement relating to use, liability and compensation.

12. Electronic Media. In accepting and utilizing any drawings, reports and data on any form of electronic media generated by H&H, you covenant and agree that all such electronic files are instruments of service of H&H, who shall be deemed the author, and shall retain all common law, statutory law and other rights, including copyrights. In the event of a conflict between the signed documents prepared by H&H and electronic files, the signed documents shall govern. You agree not to reuse these electronic files, in whole or in part, for any purpose or project other than the project that is the subject of this Agreement. Any transfer of these electronic files to others or reuse or modifications to such files by you without the prior written consent of H&H will be at the user's sole risk and without any liability to H&H.

13. Confidentiality; Subpoenas. Information about this Agreement and H&H's services and information you provide to H&H regarding your business and the site, other than information available to the public and information acquired from third parties, will be maintained in confidence and will not be disclosed to others without your consent, except as H&H reasonably believes is necessary: (a) to perform its services; (b) to comply with professional standards to protect public health, safety and the environment; and (c) to comply with laws and court orders. H&H will make reasonable efforts to give you prior notice of any disclosure under (b) or (c) above. You will reimburse H&H for responding to any subpoena or governmental inquiry or audit related to the services, at the rates set forth in the applicable Proposal, amendment or change order.

14. Insurance. During performance of the services, H&H will maintain workers compensation, commercial general liability, automobile liability, and professional liability insurance. H&H will furnish you certificates of such insurance on request.

15. Indemnification. You agree to hold harmless, indemnify, and defend H&H and its affiliates and subcontractors and their employees, officers, directors and agents (collectively referred to in this paragraph as "H&H") against all claims, suits, fines and penalties, including mandated cleanup costs and attorneys' fees and other costs of settlement and defense, which claims, suits, fines, penalties or costs arise out of or are related to this Agreement or the services, except to the extent they are caused by H&H's negligence or willful misconduct.

16. Limitation of Remedies.

- a. To the fullest extent permitted by law and notwithstanding anything else in this Agreement to the contrary, the aggregate liability of H&H and its affiliates and subcontractors and their employees, officers, directors and agents (collectively referred to in this paragraph as "H&H") for all claims arising out of this Agreement or the services is limited to \$50,000 or, if greater, 10% of the compensation received by H&H under this Agreement.
- b. You may elect to increase the limit of liability by paying an additional fee, such fee to be negotiated prior to the execution of this Agreement.
- c. Any claim will be deemed waived unless received by H&H within one year of substantial completion of the services.
- d. H&H will not be liable for lost profits, loss of use of property, delays, or other special, indirect, incidental, consequential, punitive, exemplary or multiple damages.
- e. H&H will not be liable to you or the site owner for injuries or deaths suffered by H&H's or its subcontractors' employees.
- f. You will look solely to H&H for your remedy for any claim arising out of or relating to this Agreement, including any claim arising out of or relating to alleged negligence or errors or omissions of any H&H principal, officer, employee or agent.

17. Disputes.

- a. All disputes between you and H&H shall be subject to non-binding mediation.
- b. Either party may demand mediation by serving a written notice stating the essential nature of the dispute, the amount of time or money claimed, and requiring that the matter be mediated within forty-five (45) days of service of notice.
- c. The mediation shall be administered by the American Arbitration Association in accordance with its most recent Construction Mediation Rules, or by such other person or organization as the parties may agree upon.
- d. No action or suit may be commenced unless mediation has occurred but did not resolve the dispute, or unless a statute of limitation period would expire if suit were not filed prior to such forty-five (45) days after service of notice.

18. Miscellaneous.

- a. Massachusetts law shall govern this Agreement.
- b. The above terms and conditions regarding Limitation of Remedies and Indemnification shall survive the completion of the services under this Agreement and the termination of the contract for any cause.
- c. Any amendment to these Terms and Conditions must be in writing and signed by both parties.
- d. Having received these Terms and Conditions, your oral authorization to commence services, your actions, or your use of the Report or Work Product constitutes your acceptance of them.
- e. This Agreement supersedes any contract terms, purchase orders or other documents issued by you.
- f. Neither party may assign or transfer this Agreement or any rights or duties hereunder without the written consent of the other party.
- g. Your failure or the failure of your successors or assigns to receive payment or reimbursement from any other party for any reason whatsoever shall not absolve you, your successors or assigns of any obligation to pay any sum to H&H under this agreement.
- h. These Terms and Conditions shall govern over any inconsistent terms in H&H's Proposal.
- i. The provisions of this Agreement are severable; if any provision is unenforceable it shall be appropriately limited and given effect to the extent it is enforceable.

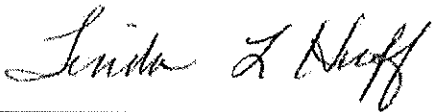
- j. The covenants and agreements contained in this Agreement shall apply to, inure to the benefit of and be binding upon the parties hereto and upon their respective successors and assigns.

BOTH PARTIES HERETO WARRANT AND REPRESENT that they have full right, power, and authority to execute this Contract.

IN WITNESS THEREOF, the parties hereto have executed this Agreement as of the day and year first specified above.

CONSULTANT
HUFF & HUFF, INC.

CLIENT
BLOOM, LLC



Signature

Signature

By Linda L. Huff, P.E.

Typed Name

Typed Name

Principal

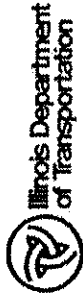
Officer's Title

Officer's Title

April 29, 2015

Date

Date



Payroll Escalation Table
Fixed Raises

FIRM NAME
PRIME/SUPPLEMENT

Huff & Huff, Inc.
Bloom LLC

DATE 4/28/2015
PTB NO.

CONTRACT TERM
START DATE
RAISE DATE

12 MONTHS
5/1/2015
3/1/2016

OVERHEAD RATE 148.80%
COMPLEXITY FACTOR 0
% OF RAISE 3.00%

ESCALATION PER YEAR

5/1/2015 - 3/1/2016
10
12

3/2/2016 - 5/1/2016
2
12

= 83.33%
= 1.0050

17.17%

The total escalation for this project would be:

0.50%



Payroll Rates

FIRM NAME	<u>Huff & Huff, Inc.</u>
PRIME/SUPPLEMENT	<u>Bloom LLC</u>
PTB NO.	

DATE 4/28/2015

ESCALATION FACTOR **0.50%**

[illegible]



**Illinois Department
of Transportation**

**Cost Estimate of
Consultant Services
(CPFF)**

Firm Huff & Huff, Inc.

Date 4/28/2015

Route Gilmer Road over West Branch Indian Creek

Overhead Rate 148.80%

Section _____

County Lake

Job No. _____

Complexity Factor 0

PTB & Item _____

Item	Manhours	Payroll	Overhead & Fringe Benefits	In-House Direct Costs	Fixed Fee	Outside Direct Costs	Services By Others	Total	% of Grand Total
Wetland Delineation	10	331.05	492.60	43.05	125.67	0.00	0.00	992.37	5.75%
Wetland Report	34	1,136.70	1,691.40	33.30	414.90	40.00	0.00	3,316.30	19.22%
JD/ RP Permitting	70	2,419.32	3,599.94	158.35	895.75	40.00	0.00	7,113.36	41.22%
PESA	44	1,464.41	2,179.04	49.55	535.48	270.00	0.00	4,498.47	26.07%
QA/QC & Project Managem	9	468.78	697.54	0.00	169.12	0.00	0.00	1,335.43	7.74%
TOTALS	167	5,820.24	8,660.52	284.25	2,140.93	350.00	0.00	17,255.94	100.00%

Method of Compensation:

Cost Plus Fixed Fee 1

Cost Plus Fixed Fee 2

Cost Plus Fixed Fee 3

Specific Rate

Lump Sum

☒ 14.5%[DL + R(DL) + OH(DL) + IHDC]
☐ 14.5%[DL + R(DL) + 1.4(DL) + IHDC]
☐ 14.5%[(2.3 + R)DL + IHDC]
☐
☐



Huff & Huff, Inc.

Date 4/28/2015

Sheet 1 OF 1

BDE 025 (Rev. 2/06)
PRINTED 4/28/2015, 5:02 PM
PAGE 4

HUFF & HUFF, INC.
SUMMARY OF INHOUSE DIRECT COSTS

Project:

DIRECT

Task 1 - Wetland Delineation

Trips - Company	70 miles	x	1 x	\$ 0.575	= \$	40.25
Reproduction	1 sets	x	20 x	\$ 0.03	= \$	0.60
Color copies	1 sets	x	20 x	\$ 0.11	= \$	2.20
			0 x	\$ -	= \$	-
Task Total						\$ 43.05

Task 2 - Wetland Report

Reproduction	6 sets	x	75 x	\$ 0.03	= \$	13.50
Color copies	6 sets	x	30 x	\$ 0.11	= \$	19.80
			0 x	\$ -	= \$	-
Task Total						\$ 33.30

Task 3 - JD/RP Permitting

Trips - Company	70 miles	x	2 x	\$ 0.575	= \$	80.50
Trips - Company	50 miles	x	1 x	\$ 0.575	= \$	28.75
Parking			1 x	\$ 38.00	= \$	38.00
Reproduction	2 sets	x	75 x	\$ 0.03	= \$	4.50
Color copies	2 sets	x	30 x	\$ 0.11	= \$	6.60
			0 x	\$ -	= \$	-
Task Total						\$ 158.35

Task 4 - PESA

Trips - Company	70 miles	x	1 x	\$ 0.575	= \$	40.25
Reproduction	1 sets	x	200 x	\$ 0.03	= \$	6.00
Color copies	1 sets	x	30 x	\$ 0.11	= \$	3.30
			0 x	\$ -	= \$	-
Task Total						\$ 49.55

Task 5 - QA/QC & Project Management

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

GRAND TOTAL \$ 284.25

HUFF & HUFF, INC.
SUMMARY OF OUTSIDE DIRECT COSTS

Project:

				<u>OUTSIDE</u>
Task 1 - Wetland Delineation				
	0 x	\$ -	= \$	-
		Task Total	\$	-
Task 2 - Wetland Report				
Federal Express	2 x	\$ 20.00	= \$	40.00
	0 x	\$ -	= \$	-
		Task Total	\$	40.00
Task 3 - JD/RP Permitting				
Federal Express	2 x	\$ 20.00	= \$	40.00
	0 x	\$ -	= \$	-
		Task Total	\$	40.00
Task 4 - PESA				
Federal Express	1 x	\$ 20.00	= \$	20.00
Records Search	1 x	\$ 250.00	= \$	250.00
	0 x	\$ -	= \$	-
		Task Total	\$	270.00
Task 5 - QA/QC & Project Management				
		Task Total	\$	-
GRAND TOTAL				\$ 350.00

F:\Proposal-FY2016\Bloom\Gilmer Road over Indian Creek IDOT CECS CPFF BLR.xls]COST EST



May 1, 2015

Michael Okrent
Bloom Companies, LLC.
600 W. Fulton Street Suite 701
Chicago, Illinois 60661

Subject: **Survey Estimate for Gilmer Road in Hawthorne Woods**

Dear Mike:

Thank you for the opportunity to provide our services for subject project. Dynasty Group is pleased to submit this estimate for professional land surveying services.

Various Engineering Surveys

\$25,090

Per our correspondence regarding the requested services, Dynasty Group proposes to provide all surveying services as discussed. We would like to reiterate those discussions as follows:

ASSUMPTION & LIMITATIONS

1. Limit of Survey

- a. Topo of 1000 feet of Gilmer Rd.; 500 feet each way from Indian Creek. Topo to extend to 75 feet each side of roadway for first 300 feet and then reduce to 50 feet each side of roadway for remaining 200 feet.
- b. Cross sections to be at 50 foot intervals along limits for Gilmer Road.
- c. Limited hydraulic survey along Indian Creek. Cross sections to extend 80 feet on each side of creek at face of culvert, and up and down stream at 20 feet, 50 feet, 100 feet, 200 feet, and 500 feet.
- d. Locate low wire of any aerial wires within 50 feet of culvert.
- e. Locate and determine ground elevation of up to 6 borings.
- f. Locate any J.U.L.I.E. markers within project limits, provided that said markers are in place prior to the commencement of our field operations.
- g. Write up to 2 Temporary Construction Easement descriptions with exhibits
- h. Anticipated direct costs for this project: \$65/ crew day for vehicle.

All work will be performed in accordance with Lake County Criteria. An attempt will be made to locate the nearest RMS Bench mark based on the historical FIRM map for the area. Any effort to locate any flood study benchmarks beyond the closest one to the project will be considered outside of the limits of this agreement and will only be performed upon your direction, approval and billed at our Time and Materials rate



Dynasty Group

Engineering & Surveying

Deliverables will include:

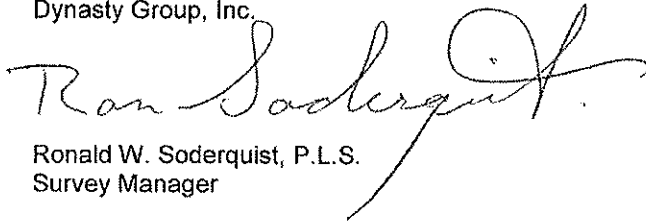
- Field notes
- Electronic survey files in Microstation format V8 3D

The survey files will contain 3D data in Illinois State Plane Coordinate system (NAD 83 & NAVD 88)

If you have any questions or would like to discuss this estimate in more detail, please feel free to give us a call. Again, thank you for the opportunity to make this proposal.

Sincerely,

Dynasty Group, Inc.



Ronald W. Soderquist, P.L.S.
Survey Manager

Encl.

DESIGN SURVEY PROCEDURES (Revised 12/4/14)

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, Pls, 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 all 100-foot interval station locations on the survey base line for construction when on paved surfaces with a P.K. or Mag nail and spray paint. ~~The baseline for relocated alignments when off pavement will be marked 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, Pls, 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.

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 type* 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. Base Drawing at 1:1. 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



Payroll Escalation Table
Anniversary Raises

FIRM NAME PRIME/SUPPLEMENT	Dynasty Group	DATE PTB NO.	05/04/15
CONTRACT TERM START DATE RAISE DATE	6 MONTHS 6/1/2015 Anniversary	OVERHEAD RATE COMPLEXITY FACTOR % OF RAISE	 3.00%

ESCALATION PER YEAR

DETERMINE THE MID POINT OF THE AGREEMENT

3

CACULATE THE ESCALATION FACTOR TO THE MIDPOINT OF THE CONTRACT

0.75%

The total escalation for this project would be:

0.75%



**Illinois Department
of Transportation**

Payroll Rates

FIRM NAME Dynasty Group DATE 05/04/15
PRIME/SUPPLEMENT _____
PTB NO. _____

ESCALATION FACTOR 0.75%

CLASSIFICATION	CURRENT RATE	ESCALATED RATE
Project Principal	\$70.00	\$70.00
Project manager	\$59.82	\$60.27
Land Surveyor	\$55.47	\$55.89
Senior Engineer	\$44.18	\$44.51
Engineer	\$37.87	\$38.15
Junior Engineer	\$27.46	\$27.67
Senior Technician	\$43.00	\$43.32
Technician	\$35.68	\$35.95
Junior Technician	\$24.78	\$24.97
Intern	\$15.00	\$15.11
Project Administrator	\$30.30	\$30.53
Administrative assistant	\$21.00	\$21.16



Firm	Dynasty Group
Route	
Section	
County	
Job No.	
PTB & Item	

05/04/15

③

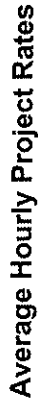
DBE 0.00%



Consultant Dynasty Group

Sheet 1 OF 1

BDE 021 (Rev. 2/06)
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PAGE 4



Average Hourly Project Rates

Consultant Dynasty Group

Date 05/04/15

Sheet 2 OF 1

BDE 021 (Rev. 2/06)
PRINTED 5/4/2015, 1:48 PM
PAGE 5

May 1, 2015

Mr. M. Michael Okrent
Bloom Companies, LLC
600 W. Fulton Street, Suite 701
Chicago, IL 60661

Proposal for Geotechnical Engineering Services
LCDOT Retaining Wall Maintenance 2016
Gilmer Road Culvert Replacement
Lake County, Illinois
Wang P150429

Dear Mr. Okrent:

Wang Engineering, Inc. (Wang) is pleased to submit this proposal for geotechnical engineering services to support the replacement of the existing culvert carrying Gilmer Road over Indian Creek. The structure is located 200 feet southeast of Sequoia Road in the Village of Hawthorn Woods, Lake County, Illinois.

SCOPE OF WORK

Wang understands the proposed engineering works include the removal and replacement of the existing arch culvert with a new precast culvert as well as the replacement of the existing block wing walls with cast-in-place concrete with formliners. Wetlands are present on both sides of culvert. Wang proposes to perform two 30-foot deep structure borings from the existing mainline roadway staggered diagonally on each roadway as well as two hand augers at the wing wall areas. The boring termination depths and sampling program may be adjusted according to the actual subsurface conditions encountered during our investigation. To accomplish these objectives, Wang will complete the following tasks:

Geotechnical Drilling Services — Wang will provide equipment, labor, and associated materials to drill and sample two 30-foot deep structure borings along the mainline. Traffic control with flagger will be required for carrying out the drilling operations. The boreholes will be advanced with hollow stem augers, and the soil will be sampled at 2.5-foot intervals to 30 feet bgs and at 5.0-foot intervals thereafter in the structure boreholes. Soil samples will be collected with split-barrel samplers according to AASHTO T 206, "Penetration Test and Split-Barrel Sampling of Soils." Also, two 6 to 10 foot deep hand augers will be performed at each end of the proposed wing walls.

Field Supervision — Prior to drilling, Wang will layout the borings and clear utilities through JULIE. A field soils 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. The field engineer will measure the pavement thickness of the mainline roadway during drilling of the structure borings; will perform penetrometer and Rimac unconfined compressive strength tests on cohesive soil samples; will also observe the groundwater level in boreholes during drilling. As-drilled boring locations will be surveyed with a mapping-grade GPS and transit level. The boreholes will be backfilled with soil cuttings and bentonite pellets, and pavements patched.

Laboratory Testing — The soil testing program will include natural moisture content, Atterberg limits, organic content, and particle size analyses.

Engineering Analysis and Recommendations — A Geotechnical Report will include a detailed description of soil and groundwater conditions encountered, field and laboratory testing procedures and results, geotechnical engineering analyses performed, and recommendations and criteria for the design and construction of the culvert and wing walls. The report will also include site location map, boring location plan, boring logs, and soil profile. We assume a draft report will be submitted for review; the final report will address issues raised by reviewers.

SCHEDULING

Wang will start the project expediently upon receiving written authorization to proceed. We estimate the fieldwork would require one to two days after utilities clearance, permitting, and access agreements. The laboratory would be performed after the field investigations and would extend one to two weeks after the completion of fieldwork. The report will be provided one to two weeks after the completion of laboratory program. Wang will expedite the project to our fullest means to meet Bloom's and Lake County Division of Transportation's submittal deadlines.

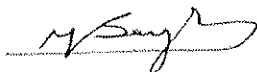
ESTIMATED COST

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:

- Drilling unit costs are considered prevailing rate under the Prevailing Wage Act (820 ILCS 130/0.01);
- Work on Gilmer Road will be restricted between 9:00 AM and 4:00 PM;
- Work will be completed using a truck mounted drill rig during day time.
- Traffic control with roadway flaggers is required to complete the borings;
- No additional insurance beyond our standard coverage is required; 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 Bloom. Please call us if you have any questions or if you require additional information regarding this proposal.

Sincerely,
WANG ENGINEERING, INC.



Met Seyhun, P.E.
Project Manager



Corina T. Farez, P.E., P.G.
Principal

Attachments: - Wang cost estimate

Name: Lake County Culvert Replacement
RFP/PTB/PSB/Item: N/A
Contract/Job: N/A

Date: 05/01/2015
Wang No.: P150429

Task Description	Units	Unit Price	Extended Cost
DRILLING, SAMPLING & INSITU TESTING			
Drilling Coordination	1.0 Hours	\$97.00 /Hour	\$97.00
Utilities Clearance, Site Access, Permitting	6.0 Hours	\$97.00 /Hour	\$582.00
Mobilization (Truck-mounted Drill Rig)	0	\$790.00 /Each	\$0.00
Drilling Crew Daily Travel & Support Vehicle	0 Days	\$165.00 /Day	\$0.00
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 - 2 structure borings - 30 feet/each</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	60.0 Feet	\$32.00 /Foot	\$1,920.00
Restricted Hours (6 Hours)	0.0 Feet	\$36.00 /Foot	\$0.00
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	0 Setups	\$367.00 /Setup	\$0.00
Set Casing Below 40 Feet			
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: Lake County Culvert Replacement
RFP/PTB/PSB/Item: N/A
Contract/Job: N/A

Date: 05/01/2015
Wang No.: P150429

Task Description	Units	Unit Price	Extended Cost
<u>Drilling & Sampling - Hourly - two-man crew</u>			
Two-Man Crew - normal working hrs	8.0 Hours	\$352.00 /Hour	\$2,816.00
Two-Man Crew - overtime (2 hrs per day)	2.0 Hours	\$439.00 /Hour	\$878.00
<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) - pavement cores			
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	6.0 Hours	\$284.00 /Hour	\$1,704.00
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: Lake County Culvert Replacement
RFP/PTB/PSB/Item: N/A
Contract/Job: N/A

Date: 05/01/2015
Wang No.: P150429

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 In Situ 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	60.0 Feet	\$9.00 /Foot	\$540.00
Restricted Hours (6 Hours)	0.0 Feet	\$10.00 /Foot	\$0.00
Night Work	0.0 Feet	\$9.00 /Foot	\$0.00
Pavement/Deck Patching			
Asphalt	4 Patches	\$17.00 /Each	\$68.00
Concrete	0 Patches	\$17.00 /Each	\$0.00
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	2.0 Hours	\$220.00 /Hour	\$440.00
			\$ 9,045.00

Name: Lake County Culvert Replacement
RFP/PTB/PSB/Item: N/A
Contract/Job: N/A

Date: 05/01/2015
Wang No.: P150429

Task Description			Units	Unit Price	Extended Cost
LABORATORY TESTING					
<u>Soil Index Tests</u>					
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 L.OI	2 Tests	\$59.00 /Test	\$118.00
T194	--	Organic Content by Wet Combustion	0 Tests	\$129.00 /Test	\$0.00
<u>Particle Size Distribution</u>					
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
<u>Atterberg Limits</u>					
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
<u>Classification of Soils</u>					
--	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
<u>Soil Settlement, Swelling, and Collapse Potential</u>					
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
<u>Shear Strength of Soil</u>					
		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
<u>Laboratory Compaction Tests</u>					
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
<u>Coefficient of Permeability</u>					
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
<u>Additional Sample Preparation Procedures</u>					
		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
<u>Planting Soil Mix Testing</u>					
		<i>Chemical Analyses & Mitigation Recommendations (300 g sample required)</i>			
		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
		<i>Mechanical Analyses & Mitigation Recommendations (1,000 g sample required)</i>			
T88	D422	Combined Sieve and Hydrometer	0 Tests	\$119.00 /Test	\$0.00
<u>Analytical Laboratory Services - for CCDD</u>					
		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
<u>Corrosion Testing</u>					
		(Resistivity, Chlorides, pH, Redox, and Sulfates)	0 No	\$280.50 /Each	\$0.00
					\$791.00

Name: Lake County Culvert Replacement
RFP/PTB/PSB/Item: N/A
Contract/Job: N/A

Date: 05/01/2015
Wang No.: P150429

Task Description	Units	Unit Price	Extended Cost
TRAFFIC CONTROL			
<i><u>Traffic Control</u></i>			
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	0.0 No.	\$750.00 /Each	\$0.00
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	10.0 Hours	\$175.00 /Hour	\$1,750.00
OT & Saturday	0.0 Hours	\$200.00 /Hour	\$0.00
Sunday	0.0 Hours	\$225.00 /Hour	\$0.00
			\$1,750.00
FIELD VEHICLES & MILEAGE			
<i><u>Field Vehicle</u></i>			
Field Vehicle Mileage (>100 Miles per Day)	0.0 Miles	\$0.565 /Mile	\$0.00
Field Vehicle Daily (<100 Miles per Day)	3 Days	\$65.00 /Day	\$195.00
Tolls	0 Tolls	\$1.00 /Toll	\$0.00
			\$ 195.00
OUT-OF-TOWN EXPENSES			
<i><u>Lodging</u></i>	0 Days	\$100.00 /Day	\$0.00
<i><u>Per Diem</u></i>	0 Days	\$50.00 /Day	\$0.00
			\$ -
REPORT REPRODUCTION			
<i><u>Report Reproduction</u></i>			
Copies, Black & White, 8.5" X 11"	0 No	\$0.20 /Each	\$0.00
Copies, Color, 8.5" X 11"	0 No	\$2.50 /Each	\$0.00
Copies, Reproduction or Reduction, 24" X 36"	0 No	\$10.00 /Each	\$0.00
			\$ -

Name: Lake County Culvert Replacement
RFP/PTB/PSB/Item: N/A
Contract/Job: N/A

Date: 05/01/2015
Wang No.: P150429

Task Description	Units	Unit Price	Extended Cost
ENGINEERING, REPORTING & MANAGEMENT			
Desk Study, Site Access & Permitting			
Senior Engineer	1.0 Hours	\$139.46 /Hour	\$139.46
Project Engineer/Project Geologist	0.0 Hours	\$85.21 /Hour	\$0.00
Assistant Engineer/Assistant Geologist	0.0 Hours	\$59.50 /Hour	\$0.00
Field Activities			
Project Engineer/Project Geologist	16.0 Hours	\$85.21 /Hour	\$1,363.36
Assistant Engineer/Assistant Geologist	0.0 Hours	\$59.50 /Hour	\$0.00
Laboratory Testing			
Project Engineer/Project Geologist	0.0 Hours	\$85.21 /Hour	\$0.00
Laboratory Technician	0.0 Hours	\$52.57 /Hour	\$0.00
Data Analyses & Engineering			
Senior Engineer	6.0 Hours	\$139.46 /Hour	\$836.76
Project Engineer/Project Geologist	9.0 Hours	\$85.21 /Hour	\$766.89
Assistant Engineer/Assistant Geologist	4.0 Hours	\$59.50 /Hour	\$238.00
Report Preparation			
Senior Engineer	8.0 Hours	\$139.46 /Hour	\$1,115.68
Project Engineer/Project Geologist	12.0 Hours	\$85.21 /Hour	\$1,022.52
Assistant Engineer/Assistant Geologist	8.0 Hours	\$59.50 /Hour	\$476.00
QC/QA Reviewer	2.0 Hours	\$134.34 /Hour	\$268.68
Project Management			
Principal in Charge	0.0 Hours	\$177.53 /Hour	\$0.00
Project Manager	2.0 Hours	\$139.46 /Hour	\$278.92
Administrative Assistant	2.0 Hours	\$64.54 /Hour	\$129.08
			\$6,635.35

SUMMARY			
DRILLING, SAMPLING & INSITU TESTING			\$9,045.00
LABORATORY TESTING			\$791.00
TRAFFIC CONTROL			\$1,750.00
FIELD VEHICLES & MILEAGE			\$195.00
OUT-OF-TOWN EXPENSES			\$0.00
REPORT REPRODUCTION			\$0.00
			\$ 11,781.00
ENGINEERING, REPORTING & MANAGEMENT			
Principal in Charge	0.0 Hours	\$177.53 /Hour	\$0.00
Project Manager	2.0 Hours	\$139.46 /Hour	\$278.92
Senior Engineer	15.0 Hours	\$139.46 /Hour	\$2,091.90
Project Engineer/Project Geologist	37.0 Hours	\$85.21 /Hour	\$3,152.77
Assistant Engineer/Assistant Geologist	12.0 Hours	\$59.50 /Hour	\$714.00
Laboratory Technician	0.0 Hours	\$52.57 /Hour	\$0.00
Administrative Assistant	2.0 Hours	\$64.54 /Hour	\$129.08
QC/QA Reviewer	2.0 Hours	\$134.34 /Hour	\$268.68
	70.0		\$ 6,635.35
TOTAL			\$ 18,416.35