KANE COUNTY
DIVISION of TRANSPORTATION

Carl Schoedel, P.E.
Director of Transportation
County Engineer

41W011 Burlington Road
St. Charles, IL 60175
Phone: (630) 584-1170
Fax: (630) 584-5265

DATE: January 9, 2009

TO: Jean Weems
County Board Office

FROM: Linda Haines

SUBJECT: January County Board

3 – Amendment #1 to the Phase II Engineering Services Agreement with Baker Engineering for the Stearns Road Bridge Corridor, Stage 4, McLean to IL 25, Kane County Section #07-00214-20-BR with Document Vet Sheet

3 – Contract / Contract Bond with Martam Construction for the South Elgin Sedge Meadow Adaptive Management Plan, Stearns Road Bridge Corridor, Kane County Section #08-00214-21-LS with Document Vet Sheet

TRANSMITTED FOR:

( ) YOUR INFORMATION AND FILE

( ) YOUR APPROVAL AND/OR CORRECTION

( ) AS REQUESTED

(X) SEE BELOW

REMARKS: Please have the County Board Chairman sign, send to County Clerk for signature and seal, and then return to our office for further processing.

Thanks.

DOCUMENT VET SHEET
for
Karen McConnaughay
Chairman, Kane County Board

Name of Document: Amendment #1 to Phase II Engineering Services Agreement with Baker Engineering for Stearns Road Bridge Corridor, Stage 4, McLean to IL 25, Kane County Section # 07-00214-20-BR

Submitted by: Paul Holcomb

Date Submitted: December 9, 2008

Examined by: Pat Jaeger
(Print name)

(Signature)

December , 2008
(Date)

Comments:

Chairman signed: **Yes** **No** (Date)

Document returned to:

Rev. 8/05

AMENDMENT NO.1 TO THE AGREEMENT
BETWEEN THE COUNTY OF KANE & BAKER ENGINEERING, INC. FOR PHASE II ENGINEERING SERVICES OF THE
STEARNS ROAD BRIDGE CORRIDOR – STAGE 4, MCLEAN TO IL 25
KANE COUNTY SECTION NO. 07-00214-20-BR

PURCHASE ORDER # 2009

This Amendment No.1 is made this 13th day of January 2009 between COUNTY OF KANE, a body corporate and politic of the State of Illinois (hereinafter referred to as the "COUNTY"), and BAKER ENGINEERING, INC. an Illinois corporation and professional engineering firm licensed to do business in the State of Illinois, with offices at 801 West Adams Street, Suite 600, Chicago, IL. 60607 (hereinafter referred to as the "CONSULTANT").

RECITALS

WHEREAS, pursuant to Kane County Resolution No. 07-385, the COUNTY and the CONSULTANT entered into an agreement for Phase II design services for the Stearns Road Bridge Corridor – Stage 4, McLean Blvd. to IL. Route 25 (herein after referred to as the "Agreement"); and

WHEREAS, additional Stearns Road Project engineering services at a cost of Three Hundred Thirty One Thousand One Hundred Ninety Three and 66/100 Dollars ($331,193.66) are required which were not anticipated in the original scope of the Agreement; and

WHEREAS it is in the County's best interest to extend the upper limit of the Agreement by an additional Three Hundred Thirty One Thousand One Hundred Ninety Three and 66/100 Dollars ($331,193.66) from $3,425,435.04 to $3,756,628.70.

NOW, THEREFORE, in consideration of the premises, the mutual covenants and agreements herein set forth, the parties do hereby mutually covenant and agree as follows, to wit:

1.0 RECITALS INCORPORATED

1.1. The foregoing recitals are incorporated into this Amendment No. 1 as though fully set forth herein.

2.0 AGREEMENT REMAINS IN EFFECT

2.1 The Agreement remains in full force and effect except to the extent that the provisions of this Amendment No.1 conflict with the previous Agreement, in which case the provisions of this Amendment No.1 shall control.

3.0 SCOPE OF SERVICES

3.1 Additional engineering services to provided by the CONSULTANT under the terms of this Amendment No. 1 shall be according to the specifications as set

forth in Exhibit "A" hereof, which exhibit is attached hereto, incorporated into and made a part of this Amendment No. 1.

4.0 COMPENSATION

4.1 Compensation for the engineering services that are a part of this Amendment No. 1 shall be $331,193.66 based upon the scope of work set forth in Exhibit "A" which is attached hereto.

4.2 Total payments to the CONSULTANT under the terms of the Agreement and this Amendment No. 1 shall not exceed $3,756,628.70.

5.0 PROJECT SCHEDULE

5.1. This Amendment No. 1 establishes the date of termination of the Agreement to be June 30, 2011 unless otherwise extended by agreement of the Consultant and the Kane County Engineer.

Save the provisions of this Amendment No.1 all other terms and conditions of the Agreement remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the parties set their hands and seals as of the date written above:

COUNTY OF KANE

Karen McConnaughay, Chairman
Kane County Board

ATTEST:

John A. Cunningham
Kane County Clerk

BAKER ENGINEERING, INC.

NAME: David W. Pellizzari
TITLE: Vice President

ATTEST:

NAME JANICE L. CRAVENS
TITLE: ADMINISTRATIVE ASSISTANT

Exhibit "A"

KANE COUNTY DIVISION OF TRANSPORTATION
Stearns Corridor – Fox River Bridge – Contract 4

Baker Engineering, Inc.
Supplement No. 1
November 2008

Supplemental Work
Additional work to the prime agreement is necessary to complete this project while reducing the overall construction cost and schedule. This additional engineering effort is for cost saving initiatives which have reduced the estimated construction cost by nearly $1MM and due to additional studies required for the causeway permit and shared-use path detour to ensure the required construction schedule. Two (2) new Type, Size and Location studies are being required by IDOT, Bureau of Bridges and Structures (IDOT-BBS) for the construction of the appurtenant structures for the bridge. As part of these TSL's, additional geotechnical borings are needed. Additionally, KDOT has asked Baker to prepare plans for the approach pavement to the bridge carrying New Stearns Road over the North Arm of Brewster Creek. In developing the permit for the causeway, the regulatory agencies have required additional hydraulic analysis and design work for the causeway in order to obtain the necessary permits.

1. TSL for Retaining Wall #1, Study and Design of Multi-Use Path R amps Wall #2 and final plans specifications and estimates for Retaining Wall #1.

Baker will provide Type, Size and Location (TS&L) studies for KDOT review and IDOT-BBS approval. One TSL will be prepared for each of two locations. TSL #1 is for a new retaining wall and the study and preliminary design for Wall #2is for the ramp structures along the west bank wall. The purpose and location of wall #1 is to support the embankment required for new abutment location used to shorten the Fox River Bridge by eliminating span 1 and truncate the embankments' permanent eastern encroachment onto the Trolley Spur line property. The purpose for studying Wall #2 was to determine the feasibility of eliminating an acquisition from the Forest Preserve and also to accommodate a contractor haul route.

The purpose and location of the ramps are to elevate path users to the multi-use path bridge level. While the design effort for these ramps was included in the prime agreement, the new requirement mandated by IDOT-BBS for providing a separate TS&L study specific to the ramps was unknown and not included in the prime agreement.

New geotechnical borings are also required for the retaining walls and ramps. Baker will coordinate the geotechnical survey to obtain borings and interpret that data for inclusion on the TSL submittals to IDOT BBS. Wang Engineering will perform a total of 5 supplemental borings required for the TSL's which is included in this supplement as services by others.

TSL Wall #1	125 hrs
Final PS&E for Wall #1	400 hrs
Wall #2 study and preliminary design	100 hrs
Data Verification, modifications to preliminary design - Baker	24 hrs
TOTAL	**649 hrs**

Five (5) additional borings and analyses (see attached)	**$44,512.00**

2. Bridge Approach Pavement for North Arm of Brewster Creek

Baker will prepare details for the bridge approach pavement for the bridges carrying Stearns Road over the North Arm of Brewster Creek to be included in and let with the Contract 4 PS&E set. These details will incorporate the bike path and concrete barrier on the westbound approach pavement to match into the bridge structure designed in Contract 1A.

North Arm Brewster Creek Bridge Approach Pavement	**20 hrs**

3. Causeway Development, Hydraulic Analysis and Constructability

Due to the heightened sensitivity of the United Stated Army Corp of Engineers (USACOE) to flooding and erosion caused by construction conditions of recent bridge projects on the Fox River, additional effort is required to obtain a section 404 permit while maintaining ample contractor flexibility in terms of access to the river. In order to keep the permit request classified as a minor modification (1 month review versus 6 to 9 month delay for major modification) Baker will lead a coordination/design effort to identify a means to permit the project, provide the necessary contractor access and identify a construction scheme to limit the potential for constriction delay. Baker will provide additional permit application support for CBBEL through the development of buildable causeway parameters necessary for obtaining a final 404 permit. This is an iterative process which will require multiple internal meetings and meetings with the USACOE (200 hrs). Effort will include exhibit preparations and an additional permit update meeting (2 ppl at 6 hrs = 12 hrs), a joint field meeting (8 hrs) to explain the project to the regulatory agencies, a field meeting with Kane County Forest preserve District (2 ppl at 6 hrs) and iterative input/re-design to assist in running the hydraulic model (20 hrs). Develop exhibits and coordinate submittal for IDNR-OWR to advertise for 21-day public comment period (24 hours). Baker to meet and coordinate as necessary within Baker as well as outside entities including crane operators, steel fabricators, and pre-fab truss vendors to identify the most cost-effective causeway parameters. CBBEL-West will lead the meeting joint agency meeting and be responsible for the necessary hydraulic work to obtain the permit in advance of bid award within their original contract scope.

Constructability/Contractor Access Study	200 hrs
Agency Coordination, Meetings, Field visits	32 hrs
Review of Hydraulic Assessment - Baker	20 hr
IDNR-OWR	24 hrs
TOTAL	**276 hrs**

Causeway Hydraulics-CBBEL	**$24,421.54**
Causeway Permitting-CBBEL	**$13,681.14**

4. Bike Path Detour Study

Baker will prepare a conceptual Multi-Use path detour study to assess several alternates to will avoid a complete closure of the Fox River Trail for the duration of the Highway/Bridge project. The report will evaluate feasibility, schedule implications, capital cost, and user impact of the identified alternatives. The report will summarize information for each detour allowing stakeholder evaluation of alternatives.

Detour Study	**60 hrs**

5. Historic Site Survey and Design

Baker to coordinate survey and a layout of points defining access to historic site along east bank of Fox River. Work also includes path design (horizontal and vertical alignments) and typical section.

Horizontal Geometry	16 hrs
Vertical Geometry	16 hrs
Project Quantities	4 hrs
TOTAL	**36 hrs**

6. Additional Bridge Aesthetics

This additional effort includes rendering development (150 hrs) and pick-a-bridge presentation (3 ppl at 4 hrs) additional rendering development and details and a revised pick-a-bridge model. Rendering development includes the additional effort to incorporate various pier aesthetic strategies based on meetings/discussions with KDOT staff and County executives, contractors and formliner providers. Investigations and feasibility assessment for the following items is required; bike railings (20 hrs), pre-fabricated truss modifications to mimic CC&P railroad bridge (16 hours), lighting modifications (24 hrs) and new renderings to incorporate new/revised elements (80 hrs).

Additional Bridge Aesthetics	302 hrs
TOTAL	**302 hrs**

7. Railroad/Trolley Coordination and Constructability

This additional effort includes meeting with trolley group (4ppl at 6 hrs) and preparation of minutes. Constructability and access evaluations will need to be conducted to identify feasible contractor access while minimizing risk and protecting track, roadbed, catenaries and utilities (100 hrs), and develop special provisions (120 hrs). Special provisions to include various details up to and including plan drawings to depict temporary crossings and riding surfaces, primary and secondary catenaries protection schemes, access protection. Right of Way and easement requirements will be evaluated and presented to KDOT. Two field visits will also be conducted to check field conditions for the trolley and utilities (2 ppl at 6 hrs, twice). Kimicata Rail Consulting will be used to define technical requirements for the special provisions needed for this work.

Trolley Coordination and Constructability	**268 hrs**
Rail Design – Kimicata Rail Consulting	**$12,000**

8. Hydraulic Report for McLean Blvd Box Culvert (Portion for Stage 4 Only)

Per IDOT requirements, CBBEL to prepare a hydraulic report for the McLean Boulevard box culvert. Details can be found in the CBBEL scope of work document found as an attachment in this proposal.

McLean Avenue Hydraulic Report - CBBEL and CBBEL/West	**$12,895.69**
TASK SUB-TOTAL	**1611 hrs**

9. QUALITY CONTROL/QUALITY ASSURANCE

Baker to perform internal QC/QA on deliverables prior to submission. Two percent of total task hours (1611 @ 3% = 48 hrs).

QC/QA	**48 hrs**

10. Project Administration/Management, Project Coordination and Meetings

Baker to provide necessary project management and coordination of additional scope items (1611 hrs @ 3% = 48. Technical Advisory Committee meeting (1ppl @ 5hrs), project corridor meetings (1.5ppl @ 5 hrs @ 10 meetings) and meeting with forest preserve (1ppl@ 5 hrs).

Project Administration, Management and Meetings	**133 hrs**

Total Baker Effort:	**1,792 hrs**
Total Sub-Consultant Cost:	**$107,510.37**

PAYROLL ESCALATION TABLE
FIXED RAISES

FIRM NAME: Baker Engineering
PRIME/SUPPLEMENT: Supplement #1

DATE: 11/24/08
PSB NO.:

CONTRACT TERM	12 MONTHS	OVERHEAD RATE	159.00%
START DATE	5/15/2008	COMPLEXITY FACTOR	
RAISE DATE	5/1/2009	% OF RAISE	3.00%

ESCALATION PER YEAR

5/15/2008 - 5/1/2009				
12				
12				

= 100.00%
= 1.0000

The total escalation for this project would be: 0.00%

DF-824-039
REV 12/04

PAYROLL RATES

FIRM NAME **Baker Engineering** DATE **11/24/08**
PRIME/SUPPLEMENT **Supplement #1**
PSB NO.

ESCALATION FACTOR **0.00%**

CLASSIFICATION	CURRENT RATE	PROPOSED RATE	CALCULATED RATE	DIFF
Project Principal	$70.00	$70.00	$70.00	$0.00
Project Manager II/III	$58.18	$58.18	$58.18	$0.00
Project Manager I	$49.00	$49.00	$49.00	$0.00
Project Engineer I/II	$36.46	$36.46	$36.46	$0.00
Civil Associate II	$28.88	$28.88	$28.88	$0.00
Civil Associate I	$26.14	$26.14	$26.14	$0.00
CAD Drafter	$21.96	$21.96	$21.96	$0.00
Admin	$20.45	$20.45	$20.45	$0.00
Senior Bridge Engineer	$47.77	$47.77	$47.77	$0.00
Bridge Engineer	$36.34	$36.34	$36.34	$0.00
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00
			$0.00	$0.00

PREPARED BY THE AGREEMENTS UNIT Printed 11/24/2008 1:08 AM

COST PLUS FIXED FEE
COST ESTIMATE OF CONSULTANT SERVICES

DF-824-039
REV 12/04

FIRM Baker Engineering — **DATE** 11/24/08
PSB
PRIME/SUPPLEMENT Supplement #1 — **OVERHEAD RATE** 1.59 — **COMPLEXITY FACTOR** 0

DBE DROP BOX	ITEM	MANHOURS (A)	PAYROLL (B)	OVERHEAD & FRINGE BENF (C)	IN-HOUSE DIRECT COSTS (D)	FIXED FEE (E)	Outside Direct Costs (F)	SERVICES BY OTHERS (G)	DBE TOTAL (H)	TOTAL (B-G)	% OF GRAND TOTAL
1	TSL's-Ret.Wall, Ramps	649	26,686.90	42,432.17		9,874.15		44,512.00		123,505.22	37.29%
2	Bridge Approach Pave	20	638.24	1,014.80		236.15				1,889.19	0.57%
3	Causeway_Access_Hy	276	13,269.08	21,097.84		4,909.56		38,102.68		77,379.16	23.36%
4	Bike Path Detour Study	60	2,394.32	3,806.97		885.90				7,087.19	2.14%
5	Historic Site Survey & I	36	1,166.00	1,853.94		431.42				3,451.36	1.04%
6	Bridge Aesthetic Detail	302	9,419.48	14,976.97		3,485.21				27,881.66	8.42%
7	Trolley Coord & Constr	268	12,057.12	19,170.82		4,461.13		12,000.00		47,689.08	14.40%
8	Hyd. Report (Stage 4)	0	0.00	0.00		0.00		12,895.69		12,895.69	3.89%
9	QC/QA	48	2,417.88	3,844.43		894.62				7,156.92	2.16%
10	Administration, Proj Co	133	7,519.66	11,956.26		2,782.27				22,258.19	6.72%
	Subconsultant DL					0.00					
	TOTALS	1792	75,568.68	120,154.20	0.00	27,960.41	0.00	107,510.37	0.00	**331,193.66**	100.00%

DBE 0.00%

DBE
PREPARED BY THE AGREEMENTS UNIT

Printed 11/24/2008 1:08 AM

DF-824-039
REV 12/04

AVERAGE HOURLY PROJECT RATES

FIRM Baker Engineering
PSB
PRIME/SUPPLEMENT Supplement #1

DATE 11/24/08

SHEET 1 OF 5

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJECT RATES			TSL's-Ret.Wall, Ramps & G						Bridge Approach Paveme			Causeway_Access_Hydr			Bike Path Detour Study		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Project Principal	70.00	79	4.41%	3.09	18	2.77%	1.94							16	5.80%	4.06	1	1.67%	1.17
Project Manager II/III	58.18	231	12.89%	7.50	12	1.85%	1.08							64	23.19%	13.49	16	26.67%	15.51
Project Manager I	49.00	201	11.22%	5.50	15	2.31%	1.13							60	21.74%	10.65			
Project Engineer I/II	36.46	108	6.03%	2.20	24	3.70%	1.35				8	40.00%	14.58	56	20.29%	7.40	20	33.33%	12.15
Civil Associate II	28.88	103	5.75%	1.66							12	60.00%	17.33	20	7.25%	2.09	23	38.33%	11.07
Civil Associate I	26.14	88	4.91%	1.28	80	12.33%	3.22												
CAD Drafter	21.96	248	13.84%	3.04															
Admin	20.45	0																	
Senior Bridge Engine	47.77	474	26.45%	12.64	250	38.52%	18.40							60	21.74%	10.38			
Bridge Engineer	36.34	260	14.51%	5.27	250	38.52%	14.00												
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
		0																	
TOTALS		1792	100%	$42.17	649	100.00%	$41.12	0	0%	$0.00	20	100%	$31.91	276	100%	$48.08	60	100%	$39.91

PREPARED BY THE AGREEMENTS UNIT

Printed 11/24/2008 1:08 AM

DF-824-039
REV 12/04

AVERAGE HOURLY PROJECT RATES

FIRM Baker Engineering
PSB
PRIME/SUPPLEMENT Supplement #1

DATE 11/24/08

SHEET 2 **OF** 5

PAYROLL CLASSIFICATION	AVG HOURLY RATES	Historic Site Survey & Design			Bridge Aesthetic Detail Rende			Trolley Coord & Constructabi			Hyd. Report (Stage 4)			QC/QA			Administration, Proj Coordinat		
		Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg	Hours	% Part.	Wgtd Avg
Project Principal	70.00				12	3.97%	2.78	8	2.99%	2.09							24	18.05%	12.63
Project Manager II/III	58.18	2	5.56%	3.23	28	9.27%	5.39	40	14.93%	8.68				12	25.00%	14.55	57	42.86%	24.93
Project Manager I	49.00	4	11.11%	5.44	10	3.31%	1.62	80	29.85%	14.63							32	24.06%	11.79
Project Engineer I/II	36.46																		
Civil Associate II	28.88	24	66.67%	19.25	8	2.65%	0.77	16	5.97%	1.72									
Civil Associate I	26.14				8	2.65%	0.69												
CAD Drafter	21.96	4	11.11%	2.44	200	66.23%	14.54	44	16.42%	3.61									
Admin	20.45																		
Senior Bridge Engine	47.77				28	9.27%	4.43	80	29.85%	14.26				36	75.00%	35.83	20	15.04%	7.18
Bridge Engineer	36.34	2	5.56%	2.02	8	2.65%	0.96												
TOTALS		36	100%	$32.39	302	100%	$31.19	268	100%	$44.99	0	0%	$0.00	48	100%	$50.37	133	100%	$56.54

PREPARED BY THE AGREEMENTS UNIT

Printed 11/24/2008 1:08 AM

Christopher B. Burke Engineering West, Ltd.
Stearns Road Stage 4 Contract Out of Scope Effort

Task 1 – Causeway and Pedestrian Bridge Hydraulics: Utilizing the model developed for the permanent structure CBBEL evaluated several causeway alternatives. The hydraulics were developed to balance construction access and to minimize the potential for increased water surface evaluations for all flood events. Causeway alternatives developed by Baker were tested and refined throughout the process.

Task 2 – Causeway and Pedestrian Bridge Permitting: CBBEWL worked with Baker and CBBEL to develop a Phase I causeway concept for construction of the main river bridge. The work included evaluating the permit opportunities and constraints for establishing a partial causeway on both sides of the Fox River. The concept was vetted in a meeting with the USACE and revisions to the concept were made and represented. Permitting of the causeway was added to the USACE permit submittal in August 2008. CBBEL submitted a Permit Application to IDNR.

Task 3 – McLean Blvd. Culvert Hydraulic Report: CBBEWL prepared a Hydraulic Report required by the IDOT District 1 Hydraulics Office for the McLean Blvd. box culvert. This report was required because an area that wasn't previously tributary to the McLean Blvd. drainage was added during the design phase following Phase I approval. The flow diversion was created as a result of the County's desire to reduce ROW take. The effort included hydrologic and hydraulic modeling necessary to satisfy IDOT that the drainage was handled properly and that adequate capacity was present to handle the diversion. The work also included the preparation of all necessary exhibit and calculation for an IDOT Hydraulic Report. The effort included is only the portion estimated as necessary for Stage 4.

DF-824-039
REV 12/04

PAYROLL ESCALATION TABLE
FIXED RAISES

FIRM NAME Burke Engineering
PRIME/SUPPLEMENT Subconsultant

DATE 11/24/08
PSB NO.

CONTRACT TERM	20 MONTHS	OVERHEAD RATE	139.00%
START DATE	11/15/2007	COMPLEXITY FACTOR	
RAISE DATE	5/1/2008	% OF RAISE	3.00%

ESCALATION PER YEAR

11/15/2007 - 5/1/2008	5/2/2008 - 5/1/2009	5/2/2009 - 7/1/2009		
6 / 20	12 / 20	2 / 20		
= 30.00%	61.80%	10.61%		

= 1.0241

The total escalation for this project would be: 2.41%

DF-824-039
REV 12/04

PAYROLL RATES

FIRM NAME Burke Engineering DATE 11/24/08
PRIME/SUPPLEMENT Subconsultant
PSB NO.

ESCALATION FACTOR 2.41%

CLASSIFICATION	CURRENT RATE	PROPOSED RATE	CALCULATED RATE	DIFF
Principal	$70.00	$70.00	$71.69	$1.69
Engineer VI	$67.78	$67.78	$69.41	$1.63
Engineer V	$55.70	$55.70	$57.04	$1.34
Engineer IV	$45.32	$45.32	$46.41	$1.09
Engineer III	$36.15	$36.15	$37.02	$0.87
Engineer I/II	$27.93	$27.93	$28.60	$0.67
Env. Res. Spec. V	$53.75	$53.75	$55.04	$1.29
Env. Res. Spec.IV	$40.27	$40.27	$41.24	$0.97
Env. Res. Spec. III	$35.19	$35.19	$36.04	$0.85
Env. Res. Spec. II	$27.50	$27.50	$28.16	$0.66
Env. Res. Technician	$29.50	$29.50	$30.21	$0.71
Survey V	$64.00	$64.00	$65.54	$1.54
Survey IV	$45.00	$45.00	$46.08	$1.08
Survey III	$43.00	$43.00	$44.04	$1.04
Survey II	$27.79	$27.79	$28.46	$0.67
Survey I	$23.67	$23.67	$24.24	$0.57
Cad Manager	$44.00	$44.00	$45.06	$1.06
Asst. Cad Manager	$42.50	$42.50	$43.52	$1.02
Cad II	$36.62	$36.62	$37.50	$0.88
Cad I	$23.23	$23.23	$23.79	$0.56
Engineering Tech IV	$42.02	$42.02	$43.03	$1.01
Engineering Tech III	$32.80	$32.80	$33.59	$0.79
Engineering Tech I/II	$20.00	$20.00	$20.48	$0.48
GIS Specialist III	$32.50	$32.50	$33.28	$0.78
GIS Specialist I/II	$17.50	$17.50	$17.92	$0.42
Administrative	$25.29	$25.29	$25.90	$0.61
Engineering Intern	$13.00	$13.00	$13.31	$0.31

DF-824-039
REV 12/04

COST PLUS FIXED FEE
COST ESTIMATE OF CONSULTANT SERVICES

FIRM Burke Engineering DATE 11/24/08

PSB 1.39

PRIME/SUPPLEMENT Subconsultant 0

DBE DROP BOX	ITEM	MANHOURS (A)	PAYROLL (B)	OVERHEAD & FRINGE BENF (C)	FIXED FEE (E)	SERVICES BY OTHERS (G)	DBE TOTAL (H)	TOTAL (B-G)	% OF GRAND TOTAL
	SUPPLEMENT NUMBER 1								
		0							
	Causeway Hydraulics	200	8,848.38	12,299.25	3,273.90			24,421.54	47.89%
	Causeway Permitting	54	2,420.70	3,364.78	895.66	7,000.00		13,681.14	26.83%
	McLean Blvd Hydraulic Report	36	2,226.70	3,095.11	823.88	6,750.00		12,895.69	25.29%
	TOTALS	290	13,495.79	18,759.14	4,993.44	13,750.00	0.00	50,998.37	100.00%

PREPARED BY THE AGREEMENTS UNIT

Printed 11/24/2008 1:08 AM

DF-824-039
REV 12/04

AVERAGE HOURLY PROJECT RATES

FIRM Burke Engineering
PSB
PRIME/SUPPLEMENT Subconsultant

DATE 11/24/08

SHEET 1 OF 1

PAYROLL CLASSIFICATION	AVG HOURLY RATES	TOTAL PROJECT RATES									Causeway Hydraulics			Causeway Permitting			McLean Blvd Hydraulic R		
		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	71.69	0																	
Engineer VI	69.41	28	9.66%	6.70							12	6.00%	4.16	2	3.70%	2.57	14	38.89%	26.99
Engineer V	57.04	58	20.00%	11.41							24	12.00%	6.85	12	22.22%	12.68	22	61.11%	34.86
Engineer IV	46.41	72	24.83%	11.52							60	30.00%	13.92	12	22.22%	10.31			
Engineer III	37.02	100	34.48%	12.77							80	40.00%	14.81	20	37.04%	13.71			
Engineer I/II	28.60	0																	
Env. Res. Spec. V	55.04	0																	
Env. Res. Spec.IV	41.24	0																	
Env. Res. Spec. III	36.04	0																	
Env. Res. Spec. II	28.16	0																	
	30.21	0																	
Survey V	65.54	0																	
Survey IV	46.08	0																	
Survey III	44.04	0																	
Survey II	28.46	0																	
Survey I	24.24	0																	
Cad Manager	45.06	0																	
Asst. Cad Manager	43.52	0																	
Cad II	37.50	32	11.03%	4.14							24	12.00%	4.50	8	14.81%	5.56			
Cad I	23.79	0																	
Engineering Tech IV	43.03	0																	
Engineering Tech III	33.59	0																	
Engineering Tech I/II	20.48	0																	
GIS Specialist III	33.28	0																	
GIS Specialist I/II	17.92	0																	
Administrative	25.90	0																	
Engineering Intern	13.31	0																	
TOTALS		290	100%	$46.54	0	0.00%	$0.00	0	0%	$0.00	200	100%	$44.24	54	100%	$44.83	36	100%	$61.85

PREPARED BY THE AGREEMENTS UNIT

Printed 11/24/2008 1:08 AM

Wang Engineering

1145 North Main Street
Lombard, Illinois 60148
Phone (630) 953-9928
www.wangeng.com

March 11, 2008

Mr. Kent Zinn, P.E.
Baker Engineering, Inc.
801 W. Adams Street, Suite 600
Chicago, IL 60607

Reference: **New Stearns Road Corridor and the Fox River crossing**
FAP 361, Section 98-00214-02-BR
South Elgin, Kane County, Illinois

Subject: Additional Geotechnical Engineering Services
WEI Supplemental Proposal No. P070814S1

Dear Mr. Zinn:

Wang Engineering, Inc. (WEI) is pleased to submit this supplemental proposal for additional geotechnical investigations and engineering services to support the design of the proposed New Stearns Road over the Fox River in Kane County, Illinois. The following is our understanding:

1. A new MSE retaining wall is proposed to be located parallel to the Interchange Railroad track in the span 1 area on the northeast of the west abutment and possibly a small MSE wall southeast of the west abutment on the east side of the Fox River.
2. A new Mixed-use path ramp will be constructed along the Fox River, north and south of the proposed bridge on the east bank of the Fox River.

Our original proposal (P070814 dated October 2, 2007) included geotechnical work for IL Route 25 portion at the intersection of New Stearns Road. However, we now understand that the IDOT will provide geotechnical engineering services for IL Route 25 which will include performing borings and engineering analysis, and providing complete Roadway Geotechnical Report. Per your request, this supplemental proposal includes cost saving for not performing geotechnical work in this proposal.

Based on this project understanding and discussion with Baker Engineering, Inc. (Baker), the following describes our geotechnical services, as well as our proposed scope of work and cost estimate.

Scope of Work:

The purpose of our geotechnical investigations will be to determine the soil and groundwater conditions, perform geotechnical engineering analyses, and provide recommendations for the design of the new retaining wall and the Mixed-use path ramp structure. WEI will perform borings, laboratory testing, engineering analyses, and prepare geotechnical reports as per IDOT procedure/criteria. IDOT 1999 Geotechnical Manual and 2006 Bridge Manual requirements will be followed. We propose the following geotechnical engineering services.

- Perform one structure borings for a new MSE retaining wall parallel to Interchange Railroad. For estimating purposes we assumed one boring to a depth of 80 feet. A separate SGR will be prepared.
- Perform 4 structure borings, 2 north and 2 south of the bridge, for a new Mixed-use path ramp structure. For estimating purposes, we assumed 4 borings to 80 feet depth. A separate SGR will be prepared.

Geotechnical Drilling Services:
WEI will provide equipment, labor, and associated materials to drill and sample borings. The borings will be advanced with hollow stem augers or rotary mud. Soil samples will be collected with split barrel samplers according to AASHTO T 206-87, "Penetration Test and Split-Barrel Sampling of Soils." The soil will be sampled in accordance with 1999 IDOT Geotechnical Manual.

Field Supervision:
Before drilling, WEI will clear utilities through JULIE. WEI will also obtain the required permits. The field engineer will monitor drilling activities, maintain daily field notes and the soil boring logs, as well as receive, classify, and prepare soil samples for laboratory analysis. The field engineer will also perform penetrometer and Rimac unconfined compressive strength tests on cohesive soil samples; he will also monitor the groundwater level in boreholes.

Laboratory Testing:
After the completion of the drilling, all soil samples will be transported daily to our in-house laboratory in Lombard, Illinois. The soil-testing program will include natural moisture content, Atterberg limits and particle size analysis.

Engineering Analyses and Recommendations:
The geotechnical reports 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 proposed construction. The reports will also include site location map, boring location plan, boring logs, and soil profiles. The boring logs will also be provided in Microstation format to be included with the contract plans.

Scheduling:
WEI will start the project expediently upon receiving written authorization to proceed. We estimate that the field work would require 5 working days for completion after utilities clearance, permitting, and access agreements. The laboratory tests would be performed concurrent with the field investigation and would extend two weeks after the completion of field work. The geotechnical reports would be provided three weeks after the completion of laboratory program. WEI will expedite the project to our fullest means to meet your submittal deadlines.

Assumptions:
The cost estimate was prepared assuming the following conditions.

1. It is our understanding that Baker or the Kane County Division of Transportation (KDOT) will send letter to the properties owners informing about our work and provide us access approval to enter the property,
2. Baker will assist WEI in accessing the property,
3. The borings will be located in the field by WEI and as-drilled boring locations would be surveyed by Baker or their surveying Subconsultant,
4. No hazardous materials will be encountered, and
5. The current prevailing wages for the drilling personnel are reflected in the drilling cost.

If any of the above mentioned assumptions are not confirmed during the execution of the described scope of work in this proposal, additional costs might be incurred.

Estimated Cost:
WEI proposes to provide the above tasks on time and expense basis according to the attached cost estimates prepared separately for each scope of work. WEI will not exceed this upper limit without the KDOT and Baker approval. The breakdown of the cost is as follow.

1. Cost estimate for the MSE wall:	$12,928.55
2. Cost estimate for the ramp structure:	$31,583.50
3. Cost saving for IL Route 25 work:	$7,698.01

Considering additional costs and saving as described above, the net supplemental cost is estimated to be $36,814.04.

Wang Engineering, Inc. appreciates the opportunity to present this proposal. We look forward to continue our work with Baker Engineering, Inc. and the Kane County Division of Transportation on this project. If you have questions or if you require additional information, please contact us at (630) 953-9928.

Sincerely,

WANG ENGINEERING, INC.

Corina T. Farez, P.E., P.G.
Vice President

Mohammed (Mike) A. Kothawala, P.E.
Project Manager

Attachments:
Cost Estimate for Consultant Services

COST ESTIMATE
ADDITIONAL GEOTECHNICAL ENGINEERING SERVICES
MSE RETAINING WALLS
FOR
BAKER ENGINEERING, INC.

WEI # P070814S1

WEI Project # 707-11-01
Date: 11-Mar-08

FIELD INVESTIGATIONS

Task Description	Units	Unit Price	Extended Cost
Drilling Coordination	0	$115.00 /Hour	$0.00
Mobilization (Truck Mounted Drill Rig)	0	$623.15 /Each	$0.00
Mobilization (ATV Mounted Drill Rig)	1	$963.05 /Each	$963.05
ATV Daily Charge	0	$283.25 /Day	$0.00
Daily Mobilization	0	$141.63 /Day	$0.00
Stand-By Time Drill Mounted on Truck	0	$283.25 /Hour	$0.00
Stand-By Time Drill Mounted on ATV	0	$283.25 /Hour	$0.00
Drilling and Sampling			
Retaining Wall Borings			
Drilling including split spoon sampling at 2.5' sample interval to 30', 5' sample interval thereafter (SPT, Penetrometer, Rimac, Visual Classification Included)			
1 Boring @ 80 bgs			
Between 0 and 30 Feet			
Normal Working Hours	30.0	$20.60 /Foot	$618.00
Restricted Hours (6 Hrs)	0.0	$26.63 /Foot	$0.00
Night Work	0.0	$25.50 /Foot	$0.00
Between 30 and 50 Feet			
Normal Working Hours	20.0	$23.79 /Foot	$475.80
Restricted Hours (6 Hrs)	0.0	$30.59 /Foot	$0.00
Night Work	0.0	$29.46 /Foot	$0.00
Between 50 and 75 Feet			
Normal Working Hours	25.0	$26.63 /Foot	$665.75
Restricted Hours (6 Hrs)	0.0	$33.42 /Foot	$0.00
Night Work	0.0	$31.72 /Foot	$0.00
Between 75 and 100 Feet			
Normal Working Hours	5.0	$28.32 /Foot	$141.60
Restricted Hours (6 Hrs)	0.0	$35.41 /Foot	$0.00
Night Work	0.0	$35.12 /Foot	$0.00
Borehole Abandonment and Surface Restoration			
Boring Backfilling with Lean Grout for Structure Borings Only			
Normal Working Hours	80	$7.36 /Foot	$588.80
Restricted Hours (6 Hrs)	0	$8.50 /Foot	$0.00
Night Work	0	$8.50 /Foot	$0.00
		Total Field Investigation	**$3,453.00**

WANG ENGINEERING, INC.

COST ESTIMATE WEI # P070814S1

ADDITIONAL GEOTECHNICAL ENGINEERING SERVICES

MSE RETAINING WALLS

FOR

BAKER ENGINEERING, INC.

FIELD ACTIVITIES

	Units	*Unit Price*	*Extended Cost*
Permitting and Coordination of Field Activities (JULIE)			
Project Manager	1 Hrs.	$133.95 /Hour	$133.95
Staff Engineer	6 Hrs.	$84.60 /Hour	$507.60
Drilling and Sampling Supervision			
Field Inspector including travel time	10 Hrs.	$55.80 /Hour	$558.00
Support Vehicle including tolls	2 Days	$50.50 /Day	$101.00
	Cost Estimate for Field Supervision		***$1,300.55***

LABORATORY TESTING

AASHTO R18

Item Description	**Units**	**Unit Price**	**Extended Cost**
Natural Moisture Content Determination	25 No.	$5.92 /Test	$148.00
Atterberg Limit Testing	2 No.	$62.00 /Test	$124.00
Particle Size Analysis			
Unwashed Sieve Analysis	0 No.	$53.60 /Test	$0.00
Washed Sieve Analysis	0 No.	$62.00 /Test	$0.00
Hydrometer Analysis	0 No.	$68.70 /Test	$0.00
Combined Sieve and Hydrometer Analysis	2 No.	$100.40 /Test	$200.80
Soil Finer than #200 Sieve	0 No.	$41.20 /Test	$0.00
		Total Laboratory Testing	***$472.80***

ENGINEERING ANALYSIS AND REPORTING

Classification	**Units**	**Hourly Rates**	**Extended Cost**
Principal-in-Charge	1 Hrs.	$160.50 /Hr.	$160.50
QA/QC Reviewer	2 Hrs.	$160.50 /Hr.	$321.00
Project Manager	4 Hrs.	$133.95 /Hr.	$535.80
Senior Engineer	24 Hrs.	$133.95 /Hr.	$3,214.80
Project Engineer	16 Hrs.	$86.07 /Hr.	$1,377.12
Staff Engineer	20 Hrs.	$84.60 /Hr.	$1,692.00
Assistant Staff Engineer	4 Hrs.	$55.80 /Hr.	$223.20
Laboratory Technician	2 Hrs.	$55.80 /Hr.	$111.60
Project Administrative Assistant	1 Hrs.	$66.18 /Hr.	$66.18
	Engineering and Analysis and Reporting		***$7,702.20***

Total Geotechnical Investigation Cost $9,028.55

WANG ENGINEERING, INC.

COST ESTIMATE
ADDITIONAL GEOTECHNICAL ENGINEERING SERVICES
MIXED-USE RAMP BORINGS
FOR
BAKER ENGINEERING, INC.

WEI # P070814S1

WEI Project # 707-11-01
Date: 11-Mar-08

FIELD INVESTIGATIONS

Task Description	Units	Unit Price	Extended Cost
Drilling Coordination	0	$115.00 /Hour	$0.00
Mobilization (Truck Mounted Drill Rig)	0	$623.15 /Each	$0.00
Mobilization (ATV Mounted Drill Rig)	1	$963.05 /Each	$963.05
ATV Daily Charge	1	$283.25 /Day	$283.25
Daily Mobilization	1	$141.63 /Day	$141.63
Stand-By Time Drill Mounted on Truck	1	$283.25 /Hour	$283.25
Stand-By Time Drill Mounted on ATV	0	$283.25 /Hour	$0.00
Drilling and Sampling			
Structure Borings			
Drilling including split spoon sampling at 2.5' sample interval to 30', 5' sample interval thereafter (SPT, Penetrometer, Rimac, Visual Classification Included)			
4 Borings @ 80 feet bgs			
Between 0 and 30 Feet			
Normal Working Hours	120.0	$20.60 /Foot	$2,472.00
Restricted Hours (6 Hrs)	0.0	$26.63 /Foot	$0.00
Night Work	0.0	$25.49 /Foot	$0.00
Between 30 and 50 Feet			
Normal Working Hours	80.0	$23.79 /Foot	$1,903.20
Restricted Hours (6 Hrs)	0.0	$30.59 /Foot	$0.00
Night Work	0.0	$29.46 /Foot	$0.00
Between 50 and 75 Feet			
Normal Working Hours	100.0	$26.63 /Foot	$2,663.00
Restricted Hours (6 Hrs)	0.0	$33.42 /Foot	$0.00
Night Work	0.0	$31.72 /Foot	$0.00
Between 75 and 100 Feet			
Normal Working Hours	20.0	$28.32 /Foot	$566.40
Restricted Hours (6 Hrs)	0.0	$35.41 /Foot	$0.00
Night Work	0.0	$35.12 /Foot	$0.00
Borehole Abandonment and Surface Restoration			
Boring Backfilling with Lean Grout for Structure Borings Only			
Normal Working Hours	320	$7.36 /Foot	$2,355.20
Restricted Hours (6 Hrs)	0	$8.50 /Foot	$0.00
Night Work	0	$8.50 /Foot	$0.00
		Total Field Investigation	**$11,630.98**

WANG ENGINEERING, INC.

COST ESTIMATE
ADDITIONAL GEOTECHNICAL ENGINEERING SERVICES
MIXED-USE RAMP BORINGS
FOR
BAKER ENGINEERING, INC.

WEI # P070814S1

FIELD ACTIVITIES

	Units	Unit Price	Extended Cost
Permitting and Coordination of Field Activities (JULIE)			
Project Manager	8 Hrs.	$133.95 /Hour	$1,071.60
Staff Engineer	8 Hrs.	$84.60 /Hour	$676.80
Drilling and Sampling Supervision			
Field Inspector including travel time	48 Hrs.	$55.80 /Hour	$2,678.40
Support Vehicle including tolls	5 Days	$50.50 /Day	$252.50
	Cost Estimate for Field Supervision		*$4,679.30*

LABORATORY TESTING

Item Description	Units	Unit Price	Extended Cost
Natural Moisture Content Determination	100 No.	$5.92 /Test	$592.00
Atterberg Limit Testing	4 No.	$62.00 /Test	$248.00
Particle Size Analysis			
Unwashed Sieve Analysis	0 No.	$53.60 /Test	$0.00
Washed Sieve Analysis	4 No.	$62.00 /Test	$248.00
Hydrometer Analysis	0 No.	$68.70 /Test	$0.00
Combined Sieve and Hydrometer Analysis	4 No.	$100.40 /Test	$401.60
Soil Finer than #200 Sieve	0 No.	$41.20 /Test	$0.00
		Total Laboratory Testing	*$1,489.60*

ENGINEERING ANALYSIS AND REPORTING

Classification	Units	Hourly Rates	Extended Cost
Principal-in-Charge	2 Hrs.	$160.50 /Hr.	$321.00
QA/QC Reviewer	4 Hrs.	$160.50 /Hr.	$642.00
Project Manager	12 Hrs.	$133.95 /Hr.	$1,607.40
Senior Engineer	40 Hrs.	$133.95 /Hr.	$5,358.00
Project Engineer	32 Hrs.	$86.07 /Hr.	$2,754.24
Staff Engineer	24 Hrs.	$84.60 /Hr.	$2,030.40
Assistant Staff Engineer	16 Hrs.	$55.80 /Hr.	$892.80
Laboratory Technician	2 Hrs.	$55.80 /Hr.	$111.60
Project Administrative Assistant	1 Hrs.	$66.18 /Hr.	$66.18
	Engineering and Analysis and Reporting		*$13,783.62*

Total Geotechnical Investigation Cost *$19,952.52*

WANG ENGINEERING, INC.

COST SAVING
GEOTECHNICAL ENGINEERING FOR
IL ROUTE 25
KANE COUNTY, ILLINOIS
FOR
BAKER ENGINEERING, INC.

WEI Proposal No. P070814
Date: March 11, 2008

SITE INVESTIGATIONS

	Units	Unit Price	Extended Cost
Mobilization (Truck Mounted Drill Rig)	0 No.	$605.00 /Each	$0.00
Mobilization (ATV Mounted Drill Rig)	0 No.	$935.00 /Each	$0.00
ATV I /Day	0 Day	$275.00 /Day	$0.00
Stand-By Time Drill Mounted on Truck	0 Hrs.	$275.00 /Hour	$0.00
Stand-By Time Drill Mounted on ATV	0 Hrs.	$275.00 /Hour	$0.00
Support Auxiliary Truck	1 Days	$100.00 /Day	$100.00
Drilling Coordination and Project Management	2 Hrs.	$115.00 /Hour	$230.00
Water Truck to Service Coring	0 Days	$137.50 /Day	$0.00
Drilling and Sampling			
Ten Roadway Borings			
Drilling including split spoon sampling @ 2.0 feet continuous sampling to 10'			
(SPT, Penetrometer, Visual Classification Included)			
Continuous Sampling			
Normal Hours	100.0 Feet	$ 24.75 /Foot	$2,475.00
Restricted Hours (6 Hrs)	0.0 Feet	$ 29.70 /Foot	$0.00
Night Hours (8 Hrs)	0.0 Feet	$ 29.70 /Foot	$0.00
Between 10 and 30 Feet			
Normal Working Hours	0.0 Feet	$20.00 /Foot	$0.00
Restricted Hours (6 Hrs)	0.0 Feet	$25.85 /Foot	$0.00
Night Work	0.0 Feet	$24.75 /Foot	$0.00
Between 30 and 50 Feet			
Normal Working Hours	0.0 Feet	$23.10 /Foot	$0.00
Restricted Hours (6 Hrs)	0.0 Feet	$29.70 /Foot	$0.00
Night Work	0.0 Feet	$28.60 /Foot	$0.00
Between 50 and 75 Feet			
Normal Working Hours	0.0 Feet	$25.85 /Foot	$0.00
Restricted Hours (6 Hrs)	0.0 Feet	$32.45 /Foot	$0.00
Night Work	0.0 Feet	$30.80 /Foot	$0.00
Structure Borings			
Drilling including split spoon sampling at 2.5' sample interval to 30', 5' sample interval thereafter			
(SPT, Penetrometer, Rimac, Visual Classification Included)			
Between 0 and 30 Feet			
Normal Working Hours	0.0 Feet	$20.00 /Foot	$0.00
Restricted Hours (6 Hrs)	0.0 Feet	$25.85 /Foot	$0.00
Night Work	0.0 Feet	$24.75 /Foot	$0.00
Between 30 and 50 Feet			
Normal Working Hours	0.0 Feet	$23.10 /Foot	$0.00
Restricted Hours (6 Hrs)	0.0 Feet	$29.70 /Foot	$0.00
Night Work	0.0 Feet	$28.60 /Foot	$0.00
Between 50 and 75 Feet			
Normal Working Hours	0.0 Feet	$25.85 /Foot	$0.00
Restricted Hours (6 Hrs)	0.0 Feet	$32.45 /Foot	$0.00
Night Work	0.0 Feet	$30.80 /Foot	$0.00
Between 75 and 100 Feet			
Normal Working Hours	0.0 Feet	$27.50 /Foot	$0.00
Restricted Hours (6 Hrs)	0.0 Feet	$34.38 /Foot	$0.00
Night Work	0.0 Feet	$34.10 /Foot	$0.00
Between 100 and 125 Feet			
Normal Working Hours	0.0 Feet	$34.10 /Foot	$0.00
Restricted Hours (6 Hrs)	0.0 Feet	$45.35 /Foot	$0.00
Night Work	0.0 Feet	$39.22 /Foot	$0.00

COST SAVING
GEOTECHNICAL ENGINEERING FOR
IL ROUTE 25
KANE COUNTY, ILLINOIS
FOR
BAKER ENGINEERING, INC.

WEI Proposal No. P070814
Date: March 11, 2008

Rock Coring				
Rock Coring Setup and 40' Casing				
Normal Working Hours	0 Each	$310.00	/Each	$0.00
Restricted Hours (6 Hrs)	0 Each	$390.00	/Each	$0.00
Night Work	0 Each	$385.00	/Each	$0.00
Set Casing Below 40'				
Normal Working Hours	0.0 Feet	$10.45	/Foot	$0.00
Restricted Hours (6 Hrs)	0.0 Feet	$13.20	/Foot	$0.00
Night Work	0.0 Feet	$13.20	/Foot	$0.00
Rock Coring				
Normal Working Hours	0.0 Feet	$49.50	/Foot	$0.00
Restricted Hours (6 Hrs)	0.0 Feet	$62.70	/Foot	$0.00
Night Work	0.0 Feet	$60.50	/Foot	$0.00
Wooden Core Boxes	0 No.	$49.50	/Each	$0.00
Cardboard Boxes				No Charge
Borehole Abandonment and Surface Restoration				
Boring Backfilling with Lean Grout for Structure Borings Only				
Normal Working Hours	0.0 Feet	$7.15	/Foot	$0.00
Restricted Hours (6 Hrs)	0.0 Feet	$8.25	/Foot	$0.00
Night Work	0.0 Feet	$8.25	/Foot	$0.00
Pavement Patching				
Asphalt	3 Bags	$15.00	/Bag	$45.00
Concrete	0 Bags	$16.50	/Bag	$0.00
Patching of Full Deck Coring	0 No.	$275.00	/Each	$0.00
Soil Cutting Removal	0 Hrs.	$275.00	/Hour	$0.00
Specialized Testing				
Pressuremeter Testing				
Pressuremeter Testing	0 Day	$4,000.00	/Day	$0.00
Modify, Equip and mobilize/demobilize, support ATV to haul pressure meter equipment into river			Lump Sum	$0.00
Dilatometer Testing	0.0 Feet	$13.20	/Foot	$0.00
Piezometric Cone Penetrometer				
Mobilization (Truck Mounted CPT)	0 No.	$1,100.00	/Each	$0.00
CPTU	0.0 Feet	$12.10	/Foot	$0.00
Seismic Wave Measurement	0 No.	$110.00	/Test	$0.00
Pore Pressure Dissipation Test	0 No.	$330.00	/Test	$0.00
Note: The pressuremeter, dilatometer, and CPT tests will be billed at cost – the above unit prices are provided for estimating purposes only.				
Traffic Control				
Shoulder Closure (1/2 mile)				
Daytime	0 Each	$ 660.00	/Each	$0.00
Night time	0 Each	$ 770.00	/Each	$0.00
Lane Closure (1 lane) (1/2 mile)				
Daytime	0 Each	$1,155.00	/Each	$0.00
Night time	0 Each	$1,320.00	/Each	$0.00
Other Probable Project Related Cost				
Boring Location Accessibility				
Private Utility Determination				At Cost
Tree Clearance				$0.00
Guardrail and Fence Removal and Replacement				At Cost
Dozer Rental				At Cost
Cost Estimate for Field Investigations				$2,850.00

COST SAVING
GEOTECHNICAL ENGINEERING FOR
IL ROUTE 25
KANE COUNTY, ILLINOIS
FOR
BAKER ENGINEERING, INC.

WEI Proposal No. P070814
Date: March 11, 2008

FIELD ACTIVITIES

	Units	Unit Price		Extended Cost
Permitting and Coordination of Field Activities (JULIE)				
Project Manager	1 Hrs.	$ 123.88	/Hour	$ 123.88
Project Engineer	2 Hrs.	$ 82.90	/Hour	$ 165.80
Drilling and Sampling Supervision				
Field Engineer including travel time	8 Hrs.	$ 65.38	/Hour	$ 523.04
Support Vehicle including tolls	1 Days	$ 44.00	/Day	$ 44.00
	Cost Estimate for Field Supervision			*$856.72*

LABORATORY TESTING

	Units	Unit Price	Extended Cost
Natural Moisture Content Determination	50 No.	$5.75 /Test	$287.50
Atterberg Limit Testing	0 No.	$60.00 /Test	$0.00
Specific Gravity Determination	0 No.	$48.50 /Test	$0.00
Particle Size Analysis			
Unwashed Sieve Analysis	0 No.	$52.00 /Test	$0.00
Washed Sieve Analysis	0 No.	$60.00 /Test	$0.00
Combined Sieve and Hydrometer Analysis	2 No.	$97.50 /Test	$195.00
	Cost Estimate for Laboratory Testing		*$482.50*

ENGINEERING ANALYSIS AND REPORTING

Prepare boring logs, soil profiles, and data reduction,				
Perform Engineering Analyses,				
Prepare Geotechnical Report.				
Principal-in-Charge	1 Hrs.	$ 142.45	/Hour	$ 142.45
QA/QC Reviewer	2 Hrs.	$ 142.45	/Hour	$ 284.90
Senior Engineer/Project Manager	4 Hrs.	$ 122.05	/Hour	$ 488.20
Project Engineer	8 Hrs.	$ 78.15	/Hour	$ 625.20
Staff/Field Engineer	16 Hrs.	$ 68.66	/Hour	$ 1,098.56
Assistant/Field Engineer	16 Hrs.	$ 50.71	/Hour	$ 811.36
Project Administrative Assistant	1 Hrs.	$ 58.12	/Hour	$ 58.12
Report Reproduction			Lump Sum	$ -
Review existing data, plans and specifications:				
Senior Engineer/Project Manager	0 Hrs.	$ 122.05	/Hour	$ -
Project Engineer	0 Hrs.	$ 78.15	/Hour	$ -
	Cost Estimate for Engineering			$ *3,508.79*

TOTAL COST ESTIMATE *$5,098.01*