


Municipality Lake County Div. of Transportation	<b>L O C A L  A G E N C Y</b>	 <b>Illinois Department of Transportation</b>  <b>Preliminary Engineering Services Agreement For Motor Fuel Tax Funds</b>	<b>C O N S U L T A N T</b>	Name McClure Engineering Assocs., Inc
Township				Address 2728 Grand Avenue
County Lake				City Waukegan
Section 09-00171-13-BT				State Illinois

THIS AGREEMENT is made and entered into this 14th day of April, 2009 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 Prairie Crossing Bike Path

Route 48 Length --- Mi. 5100 FT (Structure No.                     )

Termini IL Rte. 176 to Peterson Road

Description: Phase I Engineering Studies and completion of a Project Development Report in accordance with the LRS11, LCDOT Scoping Report, LCDOT Survey Procedures, and Scope of Services attached hereto and made a part hereof.

#### Agreement Provisions

##### The Engineer Agrees,

1. To perform or be responsible for the performance of the following engineering services for the LA, in connection with the proposed improvements herein before described, and checked below:
  - a.  Make such detailed surveys as are necessary for the preparation of detailed roadway plans
  - b.  Make stream and flood plain hydraulic surveys and gather high water data, and flood histories for the preparation of detailed bridge plans.
  - c.  Make or cause to be made such soil surveys or subsurface investigations including borings and soil profiles and analyses thereof as may be required to furnish sufficient data for the design of the proposed improvement. Such investigations are to be made in accordance with the current requirements of the DEPARTMENT.
  - d.  Make or cause to be made such traffic studies and counts and special intersection studies as may be required to furnish sufficient data for the design of the proposed improvement.
  - e.  Prepare Army Corps of Engineers Permit, Lake County Stormwater Management Commission Permit, Department of Natural Resources-Office of Water Resources Permit, Bridge waterway sketch, and/or Channel Change sketch, Utility plan and locations, and Railroad Crossing work agreements.
  - f.  Prepare Preliminary Bridge design and Hydraulic Report, (including economic analysis of bridge or culvert types) and high water effects on roadway overflows and bridge approaches.
  - g.  Make complete general and detailed plans, special provisions, proposals and estimates of cost and furnish the LA with one (1) copy of each document in both hardcopy and electronic format. Additional copies of any or all documents, if required, shall be furnished to the LA by the ENGINEER at 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.
  - 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 and of the DEPARTMENT. It is being understood that all such reports, plats, plans and drafts shall, before being finally accepted, be subject to approval by the LA and the DEPARTMENT.

(3) To attend conferences at any reasonable time when requested to do so by representatives of the LA or the Department.

(4) In the event plans or surveys are found to be in error during construction of the SECTION and revisions of the plans or survey corrections are necessary, the ENGINEER agrees that he will perform such work without expense to the LA, even though final payment has been received by him. He shall give immediate attention to these changes so there will be a minimum delay to the Contractor.

(5) That basic survey notes and sketches, charts, computations and other data prepared or obtained by the Engineer pursuant to this AGREEMENT will be made available, upon request, to the LA or the DEPARTMENT without cost and without restriction or limitations as to their use.

(6) That all plans and other documents furnished by the ENGINEER pursuant to this AGREEMENT will be endorsed by him and will show his professional seal where such is required by law.

**The LA Agrees,**

1. To pay the ENGINEER as compensation for all services performed as stipulated in paragraphs 1a, 1g, 1i, 2, 3, 5 and 6 in accordance with one of the following methods indicated by a check mark:

a.  A sum of money equal to \_\_\_\_\_ percent of the awarded contract cost of the proposed improvement as approved by the DEPARTMENT.

b.  A sum of money equal to the percent of the awarded contract cost for the proposed improvement as approved by the DEPARTMENT based on the following schedule:

Schedule for Percentages Based on Awarded Contract Cost

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

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

2. To pay for services stipulated in paragraphs 1a, 1c, 1g of the ENGINEER AGREES at actual cost of performing such work plus 115 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 1c. 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 \$73,787.97

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

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

4. That, should the improvement be abandoned at any time after the ENGINEER has performed any part of the services provided for in paragraphs 1a, through 1h and prior to the completion of such services, the LA shall reimburse the ENGINEER for his actual costs plus 115 percent incurred up to the time he is notified in writing of such abandonment - "actual cost" being defined as in paragraph 2 of THE LA AGREES.
5. That, should the LA require changes in any of the detailed plans, specifications or estimates except for those required pursuant to paragraph 4 of THE ENGINEER AGREES, after they have been approved by the DEPARTMENT, the LA will pay the ENGINEER for such changes on the basis of actual cost plus 115 percent to cover profit, overhead and readiness to serve - "actual cost" being defined as in paragraph 2 of THE LA AGREES. It is understood that "changes" as used in this paragraph shall in no way relieve the ENGINEER of his responsibility to prepare a complete and adequate set of plans and specifications.

---

**It is Mutually Agreed,**

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

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

Executed by the LA:

County of Lake of the  
(Municipality/Township/County)

ATTEST:

State of Illinois, acting by and through its

By \_\_\_\_\_

LAKE COUNTY

Clerk

(Seal)

By \_\_\_\_\_

Title \_\_\_\_\_

Executed by the ENGINEER:

ATTEST:

By

  
LARRY F. JOHNSON, P.E.

Title PRESIDENT/CEO

By

  
HARLAN M. DOLAND, P.E., P.L.S.

Title DIVISION MANAGER/VICE PRESIDENT

Approved

\_\_\_\_\_  
Date

Department of Transportation

\_\_\_\_\_  
Regional Engineer

**Exhibit A  
Preliminary Engineering**

**Route:**

Local Agency: LAKE  
(Municipality/Township/County)  
Section: 05-00171-12-BT  
Project: Prairie Crossing Bike Path  
Job No.:

\*Firm's approved rates on file with  
IDOT's Bureau of Accounting and  
Auditing:  
Payroll Burden & Fringe Rate 93.18%  
Overhead & Expense Rate 95.98%  
Complexity Factor 0.035

**Cost Estimate of Consultant's Services in Dollars**

Element of Work Surveys, Plans, Specifications, Estimate	Employee Classification	Man- Hours	Pay- Roll Rate	Pay- Roll Costs	Payroll Burden & Fringe Costs	Overhead and Expenses*	Profit	Total
DATA COLLECTION, COMPILATION, REVIEW AND EVALUATION	PROJECT MGR	12	48.24	\$578.88	\$539.28	\$655.61	\$251.07	\$1,924.84
	PROF. ENGINEER	24	34.99	\$839.76	\$782.32	\$806.00	\$364.21	\$2,792.29
	ENG. TECH	4	20.55	\$106.20	\$88.94	\$101.93	\$46.06	\$363.13
SURVEYS	PARTY CHIEF	24	33.13	\$795.12	\$740.73	\$763.16	\$344.85	\$2,643.88
	INSRMT OPERTR	48	24.40	\$1,171.20	\$1,091.09	\$1,124.12	\$607.96	\$3,894.37
	SURVEY TECH	48	18.37	\$881.76	\$821.45	\$846.31	\$382.43	\$2,831.95
SOIL BORINGS	SUBCONTRACTOR							\$1,737.00
ALIGNMENT AND GEOMETRIC STUDIES	PROJECT MGR	4	48.24	\$192.96	\$179.76	\$185.20	\$83.69	\$641.61
	PROF. ENGINEER	40	34.99	\$1,399.60	\$1,303.87	\$1,343.34	\$607.02	\$4,953.93
	ENG. TECH	116	26.55	\$3,078.80	\$2,869.14	\$2,955.99	\$1,335.74	\$10,240.67
DRAINAGE AND HYDRAULIC STUDIES	PROJECT MGR	2	48.24	\$86.48	\$89.88	\$92.60	\$41.84	\$320.80
	PROF. ENGINEER	24	34.99	\$839.76	\$782.32	\$806.00	\$364.21	\$2,792.29
	ENG. TECH	30	26.55	\$796.50	\$742.02	\$764.48	\$345.45	\$2,648.45
REVIEW AGENCY COORDINATION	PRINCIPAL ENGR.	16	62.55	\$1,000.80	\$932.35	\$980.57	\$434.06	\$3,327.78
	PROJECT MGR	32	48.24	\$1,643.68	\$1,438.09	\$1,481.62	\$668.51	\$5,132.90
	CAD. TECH	18	26.55	\$424.80	\$395.74	\$407.72	\$194.24	\$1,412.90
PROJECT REPORT	PRINCIPAL ENGR.	4	62.55	\$250.20	\$233.09	\$240.14	\$108.51	\$831.94
	PROJECT MGR	28	48.24	\$1,350.72	\$1,258.33	\$1,298.42	\$585.82	\$4,491.29
	PROF. ENGINEER	32	34.99	\$1,119.68	\$1,043.09	\$1,074.67	\$485.62	\$3,723.06
	ENGR/CAD TECH	120	26.55	\$3,186.00	\$2,968.08	\$3,057.92	\$1,381.80	\$10,593.80
	CLERICAL	8	20.08	\$160.64	\$149.65	\$154.18	\$69.67	\$534.14
	PRINCIPAL ENGR.	10	62.55	\$625.50	\$582.72	\$600.35	\$271.29	\$2,079.86
PROJECT MANAGEMENT AND ADMINISTRATION	PROJECT MGR	10	48.24	\$482.40	\$449.40	\$463.01	\$209.22	\$1,604.03
	CLERICAL	4	20.08	\$80.32	\$74.83	\$77.09	\$34.84	\$287.08
	ALLOWANCE							\$2,214.50
Totals		656		\$21,002.76	\$19,586.17	\$20,158.43	\$9,109.11	\$73,787.97

A:IDOT0808

McCLURE ENGINEERING ASSOCIATES, INC.  
ACTIVE PERSONNEL CATEGORY LISTINGS  
REPORT: EMPLOYEE CLASSIFICATION LIST

DATE: 08/05/08

<u>CLASSIFICATIONS</u>	<u>AVERAGE HR. RATE</u>
PRINCIPAL	62.55
LICENSED STRUCTURAL ENGINEER	47.00
PROJECT MANAGER	48.24
PROF. LAND SURVEYOR	38.06
PROFESSIONAL CIVIL ENGINEER	34.99
SURVEY PARTY CHIEF	33.13
SURVEY INSTRUMENT OPERATOR	24.40
ENGINEER TECHNICIAN	26.55
DRAFTERS/CADD	26.55
ENGR. INTERN/SURVEY INTERN	25.80
CLERICAL	20.08
SURVEY TECHNICIAN	18.37

Note: Annual salary adjustments (raises) are given on anniversary dates through out the year.  
Salary adjustments generally average 5% annually.

LAKE COUNTY  
DIVISION OF TRANSPORTATION  
PRAIRIE CROSSING BIKE PATH  
SCOPE OF SERVICES  
MANHOUR PROJECTIONS

PHASE I ENGINEERING

TASK 1

Data Collection, Compilation, Review and Evaluation

1.	Data Collection	8
2.	Field Trip to Area	16
3.	Meetings with Lake County Division of Transportation	8
4.	Meetings and Coordination with IDOT BLRS	<u>8</u>
	Total Task 1	40

TASK 2

Surveys

1.	Topographic Survey	<u>120</u>
	Total Task 2	120

TASK 3

Soil Borings

1.	Soil Borings	Allowance	\$1737.00
	Total Task 3		\$1737.00

TASK 4

Alignment and Geometric Studies

1.	Alignment Studies and Impact Analysis	40
2.	Profile and Cross Section Studies	40
3.	Refine Typical Cross Section	16
4.	Utility Studies and Impact Analysis	16
5.	Finalize Proposed Geometry	40
6.	Coordination Meetings	<u>8</u>
	Total Task 4	160

TASK 5

Drainage and Hydraulic Studies

1.	Drainage Analysis	40
2.	Erosion Control	<u>16</u>
	Total Task 5	56

TASK 6

Review Agency Coordination

1.	Review Agency Coordination	8
2.	Coordination with Mundelein Park and Recreation District	24
3.	Coordination with Utility Companies	16
4.	Prepare Project Exhibits, Maps and Charts	<u>16</u>
	Total Task 6	64



TASK 7

Project Report

1.	Prepare project report in accordance with IDOT requirements	40
2.	Prepare Environmental Documents in accordance with IDOT requirements	16
3.	Local Coordination Summary	16
4.	Produce Exhibits	40
5.	Assemble and Submit the Report	40
6.	Report Revisions per Review Comments	<u>40</u>
	Total Task 7	192

TASK 8

Project Management and Administration

Total Manhours

<u>24</u>	
Total Task 8	24
	656

McCLURE ENGINEERING ASSOCIATES, INC.  
 SCOPE OF SERVICES  
TRAVELING AND OUT-OF-POCKET EXPENSES

<u>Item</u>	<u>Quantity</u>	<u>Unit Price</u>	<u>Total</u>
Travel (Site Visits/Meetings)	13 trips @ 30 mi=390mi	\$0.55	\$ 214.50
Copies (8½ x 11)	2,500 Each	\$0.20	\$ 500.00
Bluelines/Sepias/Prints (22 x 34)	500 Each	\$2.00	\$1,000.00
UPS*	1	Lump Sum	<u>\$ 500.00</u>
TOTAL			\$2,214.50

\*Lump sum allowance since UPS will be based on weight and size of item shipped throughout the project.



office: 1-847-870-0544

fax: 1-847-870-0661

www.sollandmaterialconsultants.com

us@soilandmaterialconsultants.com

March 3, 2009

Proposal No. 11,085

Mr. Harlan M. Doland  
McClure Engineering Associates, Inc.  
2728 Grand Avenue  
Waukegan, IL 60085

Re: Geotechnical Investigation  
Prairie Crossing Bike Path  
Lake County, Illinois

Dear Mr. Doland:

Submitted for your consideration is our proposal to provide the requested subsurface soil investigation, engineering evaluation and report along 3 incomplete sections of the bike path. Our services will be provided in accordance with the guidelines stated below.

#### Field Investigation

We propose the layout of 9 borings (3 per section) at various locations and in areas accessible to our truck mounted drilling equipment. We will contact JULIE for location of public utilities. We will take reasonable precautions to minimize surface and subsurface damage due to our operations. We cannot be responsible for the cost of site restoration resulting from accessing and performing the investigation.

The borings will be power auger drilled and soils sampled using a split barrel sampler at intervals of 2.5 feet within 5.0 feet of the surface. Additional boring depth and sampling may be provided if organic soil conditions are present at a depth of 5.0 feet.

#### Laboratory Testing

Soil samples will be returned to our laboratory for review and tested to determine moisture content. Competent samples of cohesive soils will be tested further to determine dry unit weight and unconfined compressive strength.

#### Engineering Evaluation, Report

The field investigation and laboratory testing will be completed under the direction of a Registered Professional Engineer. Preliminary information will be available upon request. Upon completion of the investigation an engineering evaluation will be completed and a report prepared. The report will present our findings and appropriate recommendations.

---

8 WEST COLLEGE DRIVE • ARLINGTON HEIGHTS, IL 60004

SOIL BORINGS • SITE INVESTIGATIONS • PAVEMENT INVESTIGATIONS • GEOTECHNICAL ENGINEERING  
TESTING OF • SOIL • ASPHALT • CONCRETE • MORTAR • STEEL

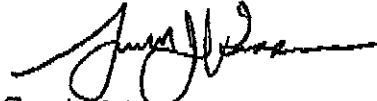
Charges

Our unit charges and the estimated total cost for the investigation are indicated on the attached Schedule of Fees. Final billing will be based on this schedule. If additional services are requested that are beyond the scope of the proposed investigation, they will be provided at our established unit prices.

Your consideration of this proposal is appreciated. The attached General Conditions are understood to be part of this proposal. If acceptable, please execute and return one copy to our office. Should you have any questions concerning the scope of the investigation, please let us know.

Very truly yours,

SOIL AND MATERIAL CONSULTANTS, INC.



Gerald J. Kissner, P.E.  
President

GJK:kg

Proposal Accepted By:

Client \_\_\_\_\_  
Street \_\_\_\_\_  
Town \_\_\_\_\_ State \_\_\_\_\_ Zip Code \_\_\_\_\_  
Phone (     ) \_\_\_\_\_ Fax (     ) \_\_\_\_\_  
Signature \_\_\_\_\_ Position \_\_\_\_\_  
Printed Name \_\_\_\_\_ Date \_\_\_\_\_

**SCHEDULE OF FEES -- SUBSURFACE SOIL INVESTIGATION**

**Field**

Boring Layout	2 hr.	\$	80.00 /hr.	\$	160.00
Utility Location	1 hr.	\$	80.00 /hr.	\$	80.00
Mobilization	1	\$	Lump Sum	\$	225.00
Drilling (9 at 5')	45 ft.	\$	11.00 /ft.	\$	495.00
Split Barrel Sampling	18 ea.	\$	8.00 ea.	\$	144.00

**Laboratory**

Moisture Content	27 ea.	\$	3.00 ea.	\$	81.00
Unit Weight	18 ea.	\$	3.00 ea.	\$	54.00
Unconfined Compressive Strength	18 ea.	\$	6.00 ea.	\$	108.00

**Report**

Senior Engineer (P.E.)	3 hr.	\$	130.00 /hr.	\$	390.00
------------------------	-------	----	-------------	----	--------

---

Estimated Total Cost: \$ 1,737.00

## TERMS AND CONDITIONS

Soil and Material Consultants, Inc. (SMC) scope of work defined in the proposal was based on information provided by the client. If incomplete, inaccurate or if unexpected site conditions are discovered, the scope of work may change.

### GEOTECHNICAL INVESTIGATIONS

Client will furnish SMC with right-of-access to the site. SMC will take reasonable precautions to minimize site damage due to its operations, but has not included in the fee the cost of restoration of any resulting damage. SMC shall not be liable for damage or injury due to encountering subsurface structures (pipes, tanks, utilities or others) not called to SMC's attention in writing or are not correctly shown on the drawings furnished by client or client's representative. If the client desires, SMC will restore any damage to the site and add the cost of restoration to the fee.

Field work, laboratory testing and engineering analysis will be performed in accordance with generally accepted soil and foundation engineering practices. Samples are retained in our laboratory for 30 days from date of report and then destroyed unless other disposition is requested. The data reported applies only to the soils sampled and the conditions encountered at each boring location. This does not imply or guarantee that soils between borings will be identical in character. Isolated inclusions of better or poorer soils can be found on any site. SMC will not be liable for extra work or other consequences due to changed conditions encountered between borings.

Any exploration, testing and analysis associated with the investigation will be performed by SMC for the client's sole use to fulfill the purpose of this Agreement. SMC is not responsible for use or interpretation of the information by others. The client recognizes that subsurface conditions may vary from those encountered in borings or explorations. Information and recommendations developed by SMC are based solely on available information and for the currently proposed improvement.

Documents including but not limited to technical reports, original boring logs, field data, field notes, laboratory test data, calculations, reports of inspection and testing, geotechnical reports, technical reports, submittals and estimates furnished to the client or its agents pursuant to this agreement are not intended or represented to be suitable for reuse by the client or others on extensions of this project or on any other project. Any reuse without SMC's written consent will be at user's sole risk and without liability or legal exposure to SMC. User shall indemnify and hold harmless SMC from all claims, damages, losses and expenses including attorney's fees arising out of or resulting therefrom. To the maximum extent permitted by law, the Client agrees to limit SMC liability for clients' damages to \$100,000 or the fee, whichever is lesser. This limitation shall apply regardless of the cause of action or legal theory pled or asserted.

Soil and Material Consultants, Inc. is a Professional Engineering Corporation. Engineering services are often completed by extension through technical staff. The unit rates presented in this proposal do not reflect charges associated with organized labor. Future agreements, if any, with organized labor will invalidate some of the unit rates presented. Required rate adjustments will be presented to the client for acceptance prior to providing services at the adjusted rates.

Services are invoiced monthly for the preceding period. Client agrees to pay each invoice within thirty (30) days of receipt and further agrees to pay interest on all amounts not paid at the rate of 2.0% per month, an annual rate of 24%, from the due date. Client agrees to pay all reasonable costs of collection including staff time, court costs, Attorneys' fees and related expenses, if this account becomes delinquent. Client agrees that reports furnished to the client but not paid for in full remain the sole property of SMC and will not be used for design, construction, permits, licensing, sales or other gain.

### TESTING SERVICES

Client shall furnish SMC with at least one working day's notice on any part-time (less than 8 hours/day) job when field personnel are requested. SMC shall make reasonable effort to provide field personnel in a timely manner but reserves the right to schedule field personnel as deemed appropriate. Minimum charges will be billed when work cancellations are received after field personnel have left for the project site.

SMC personnel will provide a professional service based on observations and testing of the work of a contractor, subcontractor, or other service/material provider, as specifically requested. SMC field personnel will look for general conformance with project specifications, plans and/or soil report but does not accept the responsibility to control or direct the work of others. Discrepancies noted by SMC office or field personnel will be referred to client or client's representative.

Testing Services furnished by SMC are defined as the taking of soil and/or material tests at various locations and the making of visual observations relating to earthwork, foundations, and/or materials as specifically requested by the client and agreed to by SMC, and will be limited to those specifically agreed services. Such services will be performed by SMC using that degree of care and skill ordinarily exercised, under similar circumstances, by reputable members of the profession practicing in this or similar localities.

Observations and testing of soils and/or materials by SMC in no way implies a guarantee or warranty of the work of the contractor, subcontractor, or other service/material provider. SMC's work or failure to perform same shall in no way excuse such contractor, subcontractor or other service/material provider from liability in the event of subsequently discovered defects, omissions, errors, deficiencies or failure to perform in accordance with the project plans and specifications. SMC field personnel shall not be responsible for superintendence of the construction process nor direction of the work of the contractor, subcontractor, or other service/material provider. SMC's work shall not include determining or implementing the means, methods, techniques, sequences or procedures of construction. SMC shall not be responsible for evaluating, reporting or affecting job conditions concerning health, safety or welfare.

Route: Along Midlothian Road  
 Local Agency: LAKE COUNTY  
 (Mundelein/Freemont/Lake)  
 Section: 05-00171-12-BT  
 Project: Prairie Crossing Bike Path  
 Job No.:

	2 0 0 9												2 0 1 0		
	APRIL	MAY	JUNE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MAR			
DATA COLLECTION, COMPIATION, REVIEW AND EVALUATION															
SURVEYS															
SOIL BORINGS															
ALIGNMENT AND GEOMETRIC STUDIES															
DRAINAGE AND HYDRAULIC STUDIES															
REVIEW AGENCY COORDINATION															
PROJECT REPORT															
PROJECT MANAGEMENT AND ADMIN.															

State of Illinois  
Department of Transportation  
Bureau of Local Roads and Streets

SPECIAL PROVISION  
FOR  
EMPLOYMENT PRACTICES

Effective: January 1, 1999

In addition to all other labor requirements set forth in this proposal and in the Standard Specifications for Road and Bridge Construction, adopted by the Department of Transportation, during the performance of this contract, the Contractor for itself, its assignees, and successors in interest (hereinafter referred to as the "Contractor") agrees as follows:

**Selection Of Labor.** The Contractor shall comply with all Illinois statutes pertaining to the selection of labor.

**Equal Employment Opportunity.** During the performance of this contract, the Contractor agrees as follows:

- (a) That it will not discriminate against any employee or applicant for employment because of race, color, religion, sex, national origin, ancestry, age, marital status, physical or mental handicap or unfavorable discharge from military service, and further that it will examine all job classifications to determine if minority persons or women are underutilized and will take appropriate affirmative action to rectify any such underutilization.
- (b) That, if it hires additional employees in order to perform this contract or any portion hereof, it will determine the availability of minorities and women in the area(s) from which it may reasonably recruit and it will hire for each job classification for which employees are hired in such a way that minorities and women are not underutilized.
- (c) That, in all solicitations or advertisements for employees placed by it or on its behalf, it will state that all applicants will be afforded equal opportunity without discrimination because of race, color, religion, sex, national origin, ancestry, age, marital status, physical or mental handicap or unfavorable discharge from military service.
- (d) That it will send to each labor organization or representative of workers with which it has or is bound by collective bargaining or other agreement or understanding, a notice advising such labor organization or representative of the Contractor's obligations under the Illinois Human Rights Act and the Department's Rules and Regulations. If any such labor organization or representative fails or refuses to cooperate with the Contractor in its efforts



CHECK SHEET LRS11

- to comply with so such Act and Rules and Regulations, the Contractor will promptly so notify the Illinois Department of Human Rights and the contracting agency and will recruit employees from other sources when necessary to fulfill its obligations thereunder.
- (e) That it will submit reports as required by the Department of Human Rights Rules and Regulations, furnish all relevant information as may from time to time be requested by the Department or the contracting agency, and in all respects comply with the Illinois Human Rights Act and the Department's Rules and Regulations.
  - (f) That it will permit access to all relevant books, records, accounts and work sites by personnel of the contracting agency Illinois Department of Human Rights for purposes of investigation to ascertain compliance with the Illinois Human Rights Act and the Department's Rules and Regulations.
  - (g) That it will include verbatim or by reference the provisions of this clause in every subcontract so that such provisions will be binding upon every such subcontractor. In the same manner as with other provisions of this contract, the Contractor will be liable for compliance with applicable provisions of this clause by all its subcontractors; and further it will promptly notify the contracting agency and the Illinois Department of Human Rights in the event any subcontractor fails or refuses to comply therewith. In addition, the Contractor will not utilize any subcontractor declared by the subcontracts with the State of Illinois or any of its political subdivisions or municipal corporations.

## **SURVEY PROCEDURES** (Revised 4/21/08)

### **UNITS-COORDINATES**

The CONSULTANT will conduct all surveying, stationing, and preparation of required plans using English units of measure and the U.S. Survey Foot. State Plane Coordinates – Illinois East Zone, NAD 83 shall be obtained for all alignment and survey control points.

### **HORIZONTAL ALIGNMENT**

Unless otherwise specified in the services contract, the CONSULTANT is to provide the horizontal alignment. 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 and benchmarks before establishing the horizontal alignment and stationing. Notify LCDOT's Surveyor immediately if the alignment cannot be reproduced or if in the CONSULTANT'S opinion the existing alignment information is in error.

The CONSULTANT'S SURVEYOR, prior to construction, shall stake the PCs, PIs, PTs, and POTs so that LCDOT's Surveyor can locate them later for construction staking. The CONSULTANT'S SURVEYOR will provide four reference ties to all U.S. Public Land Survey Monuments 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 100-foot intervals 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 will be indicated on the Alignment and Tie sheet.

An Alignment and Tie Sheet shall be provided as part of the final product. The Alignment and Tie sheet shall be signed and sealed by the CONSULTANT'S SURVEYOR. The station, offset and coordinates of the alignment points and survey control points shall be shown. It shall be noted whether the coordinates, stationing and distances are State Plane grid or ground surface. In the case that the information shown is ground surface distances, the State Plane Coordinates still must also be shown for all alignment points and survey control points in order that they can be located with GPS and so that the project can be referenced into our GIS maps. The coordinates may be

shown in a separate table. In either case the grid (combination) factor must also be shown.

### **VERTICAL ALIGNMENT**

Vertical control for the project shall be based on NGVD 29 or NAVD 88 benchmarks. Indicate on the plans which Datum is used. NGVD 29 Lake County Mapping Benchmarks are preferred (<http://gis.lakeco.org/maps/>). LCDOT's Land Surveyor may also be contacted for benchmarks that may be in the area. The controlling benchmarks and the site benchmarks shall be described on the plans. Site benchmarks are to be located at less than 1000-foot intervals with a minimum of two (2) on each project.

All benchmarks will be located on stable objects. LCDOT prefers these objects to be outside the construction site. Some acceptable benchmark examples are, spikes in poles, bolts on fire hydrant rings, and concrete foundations. LCDOT's surveyor can be contacted for benchmarks that may be in the area.

### **TOPOGRAPHY**

The CONSULTANT shall cut cross sections at 50-foot intervals in urban areas (100-foot intervals in rural areas) and at all points needing clarification. The cross section interval should be defined in the engineering services contract.

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

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

Streams, tributaries or major drainage ditches located within a lateral distance of 250 feet from centerline (upstream and downstream) shall be surveyed. Alignment, profiles and cross sections will 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 ROW or construction limits (whichever is greater). Cross sections will extend 30 feet beyond the proposed R.O.W. at entrances 150 feet at minor side roads.

The collected survey data for the existing topography shall have a minimum of 3<sup>rd</sup> 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 ROW. 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 recorded in a MICROSTATION .DGN format. All line work defining different elements shall be completed using LCDOT's CELL and LINE LIBRARIES (see attachment). ASCII files containing all point information as described below shall be included. Backup CD's or diskettes shall be provided.
- III. SUMMARY SHEETS showing:
  - (1) Point number
  - (2) Point identification by code and description
  - (3) Station
  - (4) Distance offset (right or left)
  - (5) Northing and Easting coordinate values
  - (6) "Z" elevations

\* Four computer printouts shall be provided:

1. List of points referenced by stations.
2. List of points referenced by sequential point numbering.
3. List of points sorted by point identification.
4. "ID" acronym explanation sheets.

An example showing the different printouts is shown on the next page.