

October 14, 2013

Mr. Peter E. Kolb  
Director  
Lake County Public Works  
650 W. Winchester Road  
Libertyville, Illinois 60048

**Re: Statement of Interest # 13035 for Professional Engineering Services  
Water, Sewer and Pretreatment Ordinance Assistance**

Dear Mr. Kolb:

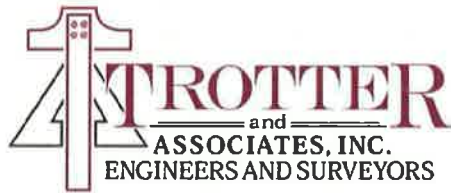
We sincerely appreciate this opportunity to offer our services. Enclosed for your review is the engineering services agreement for the referenced project. Please contact us if there are any questions or changes to the listed scope of services. We look forward to working with the Lake County Public Works on this project.

Sincerely,

TROTTER & ASSOCIATES, INC.

Scott Trotter, P.E., BCEE  
President – Trotter and Associates, Inc.

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**ATTACHMENT A  
ENGINEERING SERVICES PROPOSAL**

October 14, 2013

Mr. Peter E. Kolb  
Director  
Lake County Public Works  
650 W. Winchester Road  
Libertyville, Illinois 60048

**Re: Statement of Interest # 13035 for Professional Engineering Services  
Water, Sewer and Pretreatment Ordinance Assistance**

Dear Mr. Kolb:

Trotter and Associates, Inc. proposes to render professional engineering services for the Water, Sewer and Pretreatment Ordinance Assistance project for Lake County Public Works (LCPW).

The following scope of services is based on our discussions with Public Works staff.

**Project Description/Understanding**

LCPW provides water and sanitary sewer service to widely distributed portions of the county. LCPW operates and maintains twelve water distribution systems and four sewage treatment plants. As with other municipal entities, LCPW has a number of existing ordinances governing the connection to and use of the water and sanitary sewer systems. These ordinances have been developed over time to address a variety of operational or regulatory needs.

However, LCPW does not currently have a unified ordinance for either water or sanitary sewer, making it difficult for County staff and the regulated community to identify and comply with all of the applicable ordinance provisions. Some of the existing ordinances are dated and, in some cases, incomplete. Additionally, LCPW does not currently have an Industrial Pretreatment Ordinance. While the County is not currently obligated by USEPA to develop one, an approved Industrial Pretreatment Ordinance can help LCPW maintain compliance with its NPDES discharge permits and protect the wastewater treatment facilities from being impacted by unregulated industrial dischargers.

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630.587.0475

The purposes of this project are to:

1. Assist LCPW in developing unified Water and Sewer Ordinances utilizing the County's existing ordinances and recommending revised and/or additional ordinance language as needed;
2. Assist LCPW in developing Local Limits for the Des Plaines River STP, New Century Town STP, and Mill Creek WRF utilizing EPA-approved methodologies;
3. Develop an Industrial Pretreatment Ordinance consistent with USEPA's guidance and utilizing Local Limits specific to LCPW facilities; and,
4. Assist LCPW in identifying, meeting with and obtaining comments from the various stakeholders (both internal and external) that would potentially be impacted by the modified and new ordinances and guidelines.

### **Scope of Services**

#### **1. Coordination and Meetings**

- a. Hold project kick-off meeting with LCPW staff to review and confirm the project scope, gather existing information, establish lines of communication, review local limits process and gain consensus regarding project schedule and budget.
- b. Meet with LCPW staff to discuss Initial Review Memos for the Water and Sewer Use Ordinances and gain concurrence on general nature of changes to be made to ordinances.
- c. Meet with LCPW staff to discuss Initial Review Memos for the Pretreatment Ordinance and gain concurrence on general nature of changes to be made to ordinance.
- d. Meet with LCPW staff to review draft Sewer Use Ordinance and recommended ordinance revisions.
- e. Meet with LCPW staff to review draft Water Use Ordinance and recommended ordinance revisions.
- f. Meet with LCPW staff to review draft Pretreatment Ordinance and recommended ordinance revisions.
- g. Conduct three (3) status meetings with LCPW staff to review progress of the local limits analysis and to present intermediate results. Meetings are anticipated to occur: after an initial review of existing data and determination of pollutants of concern; after industrial loadings have been determined and the commercial and domestic analysis has been completed; and after the plant allocations have been determined.
- h. Attend one (1) stakeholder meeting to assist LCPW staff in presenting CMOM provisions of the Sewer Use Ordinance to wholesale communities not currently required to comply with the provisions.
- i. Attend two (2) Advisory Committee workshops to assist LCPW staff in presenting Water and Sewer Use Ordinances.
- j. Coordinate and facilitate two (2) stakeholder meetings to present the Pretreatment Ordinance, foster an open discussion, obtain feedback, and address concerns.
- k. Coordinate and facilitate a public hearing as required for establishing the Pretreatment local limits.

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Lake County Public Works  
Water, Sewer and Pretreatment Ordinance Assistance

1. Attend Finance Committee and Public Works and Transportation Committee meetings to assist LCPW staff in presenting Water Use, Sewer Use and Pretreatment Ordinances.
2. Unified Sewer Use Ordinance
  - a. Obtain existing ordinances from County including Sewer Use Ordinance; Fats, Oils and Grease (FOG) Ordinance; Septic Hauler Ordinance; and any other County ordinances that pertain to or include sections pertaining to construction, modification or use of the County's sanitary sewer system. Obtain existing CMOM program documentation.
  - b. Review existing ordinances with respect to EPA requirements, industry standards, and to identify any conflicts within or between existing County ordinances.
  - c. Review existing CMOM program document.
  - d. Prepare Initial Review Memo identifying significant deviations from EPA requirements or industry standards, inconsistencies within or between existing County ordinances, ordinance sections to be included as appendices, feasibility of combining ordinances into a single Sewer Use Ordinance, and feasibility of incorporating private service inspections.
  - e. Develop draft unified Sewer Use Ordinance.
  - f. Develop list of changes to existing ordinances required to eliminate redundancies and/or conflicts.
  - g. Revise draft ordinance to address LCPW staff comments (including any comments that may result from a review by the County's legal counsel).
  - h. Revised draft ordinance as appropriate to address Advisory Committee feedback.
  - i. Make final revisions to ordinance to address any comments received by the Finance Committee and Public Works and Transportation Committee and provide a final document to LCPW in electronic format.
3. Local Limits Evaluation
  - a. Review existing regulations and available data to determine any additional pollutants of concern in the plant, collection system or sludge.
  - b. Evaluate all Industrial Users by conducting a thorough walkthrough of each facility (2-3 IUs/day) to verify sampling location and begin sample collection and data analysis.
  - c. Coordinate with EPA for comparison of IU data and continue sampling and flow monitoring if needed (assume two additional samplings per IU).
  - d. Coordinate data analysis and summarize all results to determine pollutants of concern and industrial loadings.
  - e. Obtain service maps and identify appropriate monitoring locations within the service area to test commercial and domestic flows.
  - f. Coordinate sampling collection and obtain flow data.
  - g. Coordinate data analysis and summarize all results to determine non-regulated loadings.
  - h. Identify all hauled waste dischargers, coordinate sample collection, obtain flow data, coordinate data analysis and summarize all results to determine pollutants of concern as well as pollutant loadings.

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Lake County Public Works  
Water, Sewer and Pretreatment Ordinance Assistance

- i. Meet with staff and conduct a walkthrough of each plant to identify appropriate sampling locations.
  - j. Coordinate sampling collection and obtain flow data at the treatment plants. Existing data will be utilized whenever practical.
  - k. Coordinate data analysis and summarize all results to determine removal rates and sludge pollutants.
  - l. Calculate the maximum allowable headworks loading (MAHL) for each treatment plant.
  - m. Calculate the maximum allowable industrial loading (MAIL) for each treatment plant.
  - n. Prepare a memo that identifies all pollutants of concern and gives the recommended allocation of each pollutant.
4. Develop Pretreatment Ordinance
- a. Obtain draft Pretreatment Ordinance from LCPW and review ordinance with respect to EPA requirements, industry standards, and to identify any conflicts within or between existing County ordinances.
  - b. Prepare Initial Review Memo identifying significant deviations from EPA requirements or industry standards and inconsistencies within or between existing County ordinances.
  - c. Develop a draft Pretreatment Ordinance incorporating local limits.
  - d. Revise draft ordinance to address LCPW staff comments (including any comments that may result from a review by the County's legal counsel).
  - e. Work with LCPW staff to identify stakeholders affected by the ordinance update.
  - f. Revised draft ordinance as appropriate to address stakeholder feedback.
  - g. Make final revisions to ordinance to address any comments received by the Finance Committee and Public Works and Transportation Committee and provide a final document to LCPW in electronic format.
  - h. Assist County staff in presenting final ordinance to EPA if an approved pretreatment program is the goal.
5. Unified Water Use Ordinance
- a. Obtain existing County ordinances related to water use including Outside Water Use and Cross Connection Control.
  - b. Review existing ordinances with respect to EPA requirements, industry standards, and to identify any conflicts within or between existing County Ordinances.
  - c. Prepare Initial Review Memo identifying significant deviations from industry standards, inconsistencies within or between existing County Ordinances, feasibility of combining ordinances into a single Water Use Ordinance, and feasibility of incorporating private service inspections.
  - d. Develop draft unified Water Use Ordinance.
  - e. Develop list of changes to existing ordinances required to eliminate redundancies and/or conflicts.
  - f. Revise draft ordinance to address LCPW staff comments (including any comments that may result from a review by the County's legal counsel).

- g. Revised draft ordinance as appropriate to address Advisory Committee feedback.
- h. Make final revisions to ordinance to address any comments received by the Finance Committee and Public Works and Transportation Committee and provide a final document to LCPW in electronic format.

### **Compensation**

An amount equal to the cumulative hours charged to the Project by each class of ENGINEER's employees times Standard Hourly Rates for each applicable billing class for all services performed on the Project, plus Reimbursable Expenses and ENGINEER's Consultant's charges, if any. ENGINEER's Reimbursable Expenses Schedule and Standard Hourly Rates are attached to this Exhibit B.

The total compensation for services is estimated to be \$165,245.

The above fee assumes that LCPW will provide sampling equipment. The fee does not include the cost to rent sampling equipment (in the event that LCPW equipment is not available) and does not include the cost for sample analysis related to development of Local Limits.

ENGINEER shall not exceed the total estimated compensation amount unless approved in writing by CLIENT. The total estimated compensation for ENGINEER's services included in the breakdown by phases incorporates all labor, overhead, profit, Reimbursable Expenses and ENGINEER's Consultant's charges. The amounts billed for ENGINEER's services will be based on the cumulative hours charged to the PROJECT during the billing period by each class of ENGINEER's employees times Standard Hourly Rates for each applicable billing class, plus Reimbursable Expenses and ENGINEER's Consultant's charges. The Standard Hourly Rates and Reimbursable Expenses Schedule will be adjusted annually as of January 1<sup>st</sup> to reflect equitable changes in the compensation payable to ENGINEER.

### **Schedule**

Unified Sewer Use Ordinance	4 to 5 Months
Local Limits Evaluation	5 to 7 Months
Pretreatment Ordinance	4 to 5 Months
CMOM Assistance	3 to 6 Months
Unified Water Ordinance	3 to 4 Months

Sincerely,

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Lake County Public Works  
Water, Sewer and Pretreatment Ordinance Assistance

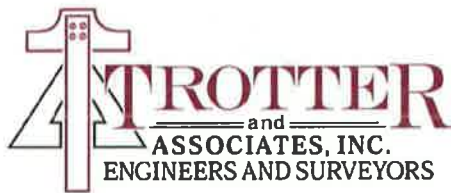
TROTTER & ASSOCIATES, INC.

Scott Trotter, P.E., BCEE  
President – Trotter and Associates, Inc.

**ATTACHMENTS:**

EXHIBIT A – SCHEDULE OF HOURLY RATES AND REIMBURSABLE EXPENSES

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CLIENT Initial \_\_\_\_\_

TAI Initial \_\_\_\_\_

**EXHIBIT A**  
**SCHEDULE OF HOURLY RATES AND REIMBURSABLE EXPENSES**  
**2013 Reimbursable Expenses**

2013 Schedule of Hourly Rates		2013 Reimbursable Expenses		
Classification	Billing Rate	Item	Unit	Unit Price
Principal	\$195.30	Engineering Copies 1- 249 Sq. Ft.	Sq. Ft.	\$0.29
Senior Project Manager	\$186.90	Engineering Copies 250-999 Sq. Ft.	Sq. Ft.	\$0.27
Project Manager	\$168.00	Engineering Copies 1000-3999 Sq. Ft.	Sq. Ft.	\$0.25
Professional Land Surveyor	\$157.50	Engineering Copies 3999 Sq. Ft. & Up	Sq. Ft.	\$0.23
Project Coordinator	\$157.50	Mylar Engineering Copies up to 24" by 36"	Each	\$8.00
Senior Project Engineer	\$157.50	Color Presentation Grade Large Format Print	Sq. Ft.	\$2.00
Engineer Level IV	\$147.00	Comb Binding > 120 Sheets	Each	\$4.75
Engineer Level III	\$132.30	Comb Binding < 120 Sheets	Each	\$3.50
Engineer Level II	\$116.50	Binding Strips ( Engineering Plans)	Each	\$1.00
Engineer Level I	\$98.00	5 Mil Laminating	Each	\$1.25
Engineering Intern	\$46.50	Copy 11" x 17" - Color	Each	\$0.50
Senior Technician	\$136.50	Copy 11" x 17" - Black and White	Each	\$0.25
Technician Level IV	\$121.00	Copy 8.5" x 11" - Color	Each	\$0.25
Technician Level III	\$108.50	Copy 8.5" x 11" - Black and White	Each	\$0.12
Technician Level II	\$98.00	Recorded Documents	Each	\$25.00
Technician Level I	\$88.00	Plat Research	Time and Material	
Clerical Level II	\$68.00	Per Diem	Each Day	\$30.00
Clerical Level I	\$55.00	Field / Survey Truck	Each Day	\$45.00
Survey Crew	\$130.00	Postage and Freight	Cost	
Survey Technician Level II	\$69.30	Mileage	Per Mile	Federal Rate
Survey Technician Level I	\$56.20			
Sub Consultants	Cost Plus 5%			

*Note: On January 1<sup>st</sup> of each year, the fees and hourly rates may be escalated by an amount not to exceed five (5) percent.*

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Lake County Public Works				2014 Rates		
Water and Sewer Ordinance Assistance				Sr. PM	\$ 196.00	Scott Trotter
2013-10-03 KWS				PM	\$ 176.00	Kevin Sutherland
				PE	\$ 103.00	Jillian Goodlove
				Env. Specialist	\$ 127.00	Deb Ness
Item #	Description	Sr. PM	PM	PE	Env. Specialist	Total
<b>Coordination and Meetings</b>						
1.a	Project Kickoff Meeting (Sewer Use, Water User, Pretreatment)	7	7	7	7	\$ 4,214.00
1.b	Project Meeting to Discuss Initial Review Memos for Sewer and Water Ordinances		5	5	5	\$ 2,030.00
1.c	Project Mtng to Discuss Initial Rvw Memo for Pretreatment Ord and Local Limits Process		4	4	4	\$ 1,624.00
1.d	Meet with Staff to Review Draft Sewer Use Ordinance		4	4	4	\$ 1,624.00
1.e	Meet with Staff to Review Draft Water Use Ordinance		4	4		\$ 1,116.00
1.f	Meet with Staff to Review Draft Pretreatment Ordinance		4		4	\$ 1,212.00
1.g	Local Limits Status/Review Meetings with Staff (x3)	5	15	5	15	\$ 6,040.00
1.h	Attend One (1) Stakeholder Meeting to Assist Staff in CMOM Presentation		5	5		\$ 1,395.00
1.i	Attend Two (2) Advisory Committee Meetings for Sewer and Water Ordinances		10	10	10	\$ 4,060.00
1.j	Coordinate and Attend Two (2) Stakeholder Meetings for Local Limits		12		12	\$ 3,636.00
1.k	Coordinate and Facilitate Hearing for Pretreatment Ordinance/Local Limits	5	8	5	8	\$ 3,919.00
1.l	Finance Committee and Public Works and Transportation Committee Meetings	10	10	10	10	\$ 6,020.00
	<b>Sub-total</b>					<b>\$ 36,890.00</b>
<b>Unified Sewer Use Ordinance</b>						
2.a	Collect Existing Information		1	4	12	\$ 2,112.00
2.b	Review Ordinances		4		12	\$ 2,228.00
2.c	Review Existing CMOM Program Document		4			\$ 704.00
2.d	Prepare Memo Summarizing Initial Review		2		4	\$ 860.00
2.e	Develop Draft Sewer Use Ordinance		8	4	40	\$ 6,900.00
2.f	Develop List of Changes to Other Existing Ordinances to Address Conflicts		4	4	12	\$ 2,640.00
2.g	Address Staff Comments		8	2	8	\$ 2,630.00
2.h	Address Advisory Committee Comments	4	8		12	\$ 3,716.00
2.i	Finalize Ordinance		2	2	4	\$ 1,066.00
	<b>Sub-total</b>					<b>\$ 22,856.00</b>
<b>Local Limits Evaluation (Des Plaines River, New Century Town and Mill Creek STPs)</b>						
3.a	Review Regulations and Existing Data to Identify Pollutants of Concern		4		32	\$ 4,768.00
3.b	Site Visits for Significant Industrial Users (4 SIUs at 2 per day)		2		16	\$ 2,384.00
3.c	SIU Sampling (4 SIUs, two samplings)		2		24	\$ 3,400.00
3.d	SIU Data Analysis and Administration (4 SIUs)		2		16	\$ 2,384.00
3.e	Identify In-System Sampling Points		4		4	\$ 1,212.00
3.f	Coordinate Sampling and Flow Monitoring (assume 9 sites)		4		135	\$ 17,849.00
3.g	Commercial/Residential Data Analysis		2		54	\$ 7,210.00
3.h	Hauled Waste Dischargers Analysis (assume 4 haulers)		2		8	\$ 1,368.00
3.i	Conduct Walk Through of Each POTW	24	24		24	\$ 11,976.00
3.j	Coordinate POTW Sampling Collection				12	\$ 1,524.00
3.k	POTW Data Analysis		2		40	\$ 5,432.00
3.l	Calculate MAHL for Each Plant		2		20	\$ 2,892.00
3.m	Calculate MAIL for Each Plant		2		20	\$ 2,892.00
3.n	Allocation and Implementation of Local Limits	8	8		40	\$ 8,056.00
	<b>Sub-total</b>					<b>\$ 73,347.00</b>
<b>Pretreatment Ordinance</b>						
4.a	Review County's Draft Ordinance		2		4	\$ 860.00
4.b	Prepare Memo Summarizing Initial Review		2		4	\$ 860.00
4.c	Develop Draft Pretreatment Ordinance		4		32	\$ 4,768.00
4.d	Address Staff Comments		6	2	6	\$ 2,024.00
4.e	Stakeholder Coordination		8	4	8	\$ 2,836.00
4.f	Address Stakeholder Input	4	6		12	\$ 3,364.00
4.g	Finalize Ordinance		2	2	4	\$ 1,066.00
4.h	Submit Pretreatment Ordinance to IEPA for Approval and Address Comments		4		8	\$ 1,720.00
	<b>Sub-total</b>					<b>\$ 15,778.00</b>
<b>Unified Water Use Ordinance</b>						
5.a	Collect Existing Information		4	4		\$ 1,116.00
5.b	Review Ordinances		8	2		\$ 1,614.00
5.c	Prepare Memo Summarizing Initial Review		2	4		\$ 764.00
5.d	Develop Draft Unified Water Use Ordinance		16	16		\$ 4,464.00
5.e	Develop List of Changes to Other Existing Ordinances to Address Conflicts		12	4		\$ 2,524.00
5.f	Address Staff Comments		8	2		\$ 1,614.00
5.g	Address Advisory Committee Comments	4	12	4		\$ 3,308.00
5.h	Finalize Ordinance		2	6		\$ 970.00
	<b>Sub-total</b>					<b>\$ 16,374.00</b>
					<b>Grand Total</b>	<b>\$ 165,245.00</b>