

**AGREEMENT # 13264 FOR PROFESSIONAL SERVICES FOR LCPWD SOUTHEAST
LAKE FPA SMOKE TESTING**

For Lake County

This AGREEMENT is entered into by and between Lake County (hereafter "County") and RJN Group, Inc., 200 West Front Street Wheaton, Il 60187 hereafter("Engineer").

RECITALS

WHEREAS, Lake County is seeking a Consultant to provide professional services to identify sources of infiltration / inflow of clear water flow entering the sanitary sewer collection system in Long Grove and Forest Lake for Lake County Public Works Department.

WHEREAS, the Consultant is a professional provider of Infiltration / Inflow Consulting services; and

NOW, THEREFORE, County and the Consultant AGREE AS FOLLOWS:

SECTION 1. AGREEMENT DOCUMENTS

This AGREEMENT constitutes the entire agreement between the County and the Consultant.

SECTION 2. SCOPE OF SERVICES

The Consultant shall provide professional services as described in Attachment "A".

SECTION 3. DURATION

This work shall be completed within 6 weeks after execution of this Agreement or within the schedule as approved by Lake County Public Works.

SECTION 4. INDEMNIFICATION

The Consultant agrees to indemnify, save harmless and defend Lake County, its agents, servants, and employees, and each of them against and hold it and them harmless from any and all lawsuits, claims, demands, liabilities, losses and expenses, including court costs and attorney's fees, for or on account of any injury to any person, or any death at any time resulting from such injury, or any damage to property, which may arise or which may be alleged to have arisen out of Consultant's negligent acts in connection with the work covered by this contract. The foregoing indemnity shall apply except if such injury, death or damage is caused directly by the willful and wanton conduct of Lake County, its agents, servants, or employees or any other person indemnified hereunder.

SECTION 5. INSURANCE

The Consultant must obtain, for the Contract term and any extension of it, insurance issued by a company or companies qualified to do business in the State of Illinois and provide the County with evidence of insurance. Insurance in the following types and amounts is necessary:

- ❑ **Worker’s Compensation Insurance** covering all liability of the Contractor arising under the Worker’s Compensation Act and Worker’s Occupational Disease Act at statutory limits.
- ❑ **Professional Liability** to include, but not be limited to, coverage for Errors and Omissions to respond to claims for loss therefrom.

General Aggregate Limit	\$ 3,000,000
Each Occurrence Limit	\$ 1,000,000

- ❑ **Automobile Liability:**

Bodily Injury, Property Damage (Each Occurrence Limit)	\$ 1,000,000
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Consultant agrees that with respect to the above required Comprehensive Professional Liability and Automobile Liability insurance, Lake County and the County shall:

Be named as additional insured by endorsement as their interest may appear (not applicable to Professional Liability insurance);

Be provided with thirty (30) days notice, in writing, of cancellation or material change;

Be provided with Certificates of Insurance evidencing the above required insurance, prior to commencement of this Contract and thereafter with certificates evidencing renewals or replacements of said policies of insurance at least fifteen (15) days prior to the expiration of cancellation of any such policies. Forward Notices and Certificates of Insurance to: Lake County Central Services, 18 N. County St, Waukegan, IL 60085-4350.

SECTION 6. AGREEMENT PRICE

County will pay to the Consultant the amount of \$117,996.30 not to exceed \$120,000.00 including expenses.

SECTION 7. INVOICES & PAYMENT

Invoices may be submitted for work performed on a monthly basis based upon the percent of work completed in the amount not to exceed in Section 6. Submit invoice(s) detailing the services provided. Payments shall be made in accordance with the Local Government Prompt Payment Act.

SECTION 8. STATEMENT OF OWNERSHIP

The documents prepared by the Consultant for this Project are the property of the County, and Consultant may not use the documents for any purpose not relating to the Project without the County’s consent, except for the Consultant’s services related to this project. All such documents shall be the property of the County who may use them without Consultant’s permission for any current or future Lake county Project; provided however, any use except for the specific purpose intended by this Agreement will be at the County’s sole risk and without liability or legal exposure to the Consultant.

SECTION 9. TERMINATION

The County reserves the right to terminate this Agreement, or any part of this contract, at the completion of any Phase or upon thirty (30) days written notice. In case of such termination, the Consultant shall be entitled to receive payment from the County for work completed to date in accordance with terms and conditions of this Agreement. In the event that this Agreement is terminated due to the Consultant's default, the County shall be entitled to contract for consulting services elsewhere and charge the Consultant with any or all losses incurred, including attorney's fees and expenses.

SECTION 10. SCHEDULE:

The Consultant shall submit for the County's approval a schedule for the performance of the Consultant's services which may be adjusted as the Project proceeds, and shall include allowances for periods of time required for the County's review and for approval of submissions by authorities having jurisdiction over the Project. Time limits established by this schedule approved by the County shall not, except for reasonable cause, be exceeded by the Consultant or the County.

SECTION 11. OWNER'S REPRESENTATIVE:

The County shall designate a representative authorized to act on the County's behalf with respect to the Project. The County or such authorized representative shall render decisions in a timely manner pertaining to documents submitted by the Consultant in order to avoid unreasonable delay in the orderly and sequential progress of the Consultant's services.

SECTION 13. JURISDICTION, VENUE, CHOICE OF LAW

This Agreement shall be governed by and construed according to the laws of the State of Illinois. Jurisdiction and venue shall be exclusively found in the 19th Judicial Circuit Court, State of Illinois.

SECTION 14. INDEPENDENT CONTRACTOR

The Consultant is an independent contractor and no employee or agent of the Consultant shall be deemed for any reason to be an employee or agent of the County.

SECTION 15. WARRANTS

The Consultant represents and warrants to the County that none of the work included in this contract will in any way infringe upon the property rights of others. The Consultant shall defend all suits or claims for infringement of any patent, copyright or trademark rights and shall hold the County harmless from loss on account thereof.

SECTION 16. ASSIGNMENT

Neither the Consultant nor the County shall assign any duties of performance under this Agreement without the express prior written consent of the other.

SECTION 17. MODIFICATION

This Agreement may be amended or supplemented only by an instrument in writing executed by the party against whom enforcement is sought.

SECTION 18. DISPUTE RESOLUTION

All issues, claims, or disputes arising out of this Agreement shall be resolved in accordance with the Appeals and Remedies Provisions in Article 9 of the Lake County Purchasing Ordinance.

SECTION 19. NO IMPLIED WAIVERS

The failure of either party at any time to require performance by the other party of any provision of this Agreement shall not affect in any way the full right to require such performance at any time thereafter. Nor shall the waiver by either party of a breach of any provision of this Agreement be taken or held to be a waiver of the provision itself.

SECTION 20. SEVERABILITY

If any part of this Agreement shall be held to be invalid for any reason, the remainder of this Agreement shall be valid to the fullest extent permitted by law.

SECTION 21. CHANGE IN STATUS

The Consultant shall notify the County promptly of any change in it's status resulting from any of the following: (a) vendor is acquired by another party; (b) vendor becomes insolvent; (c) vendor, voluntary or by operation law, becomes subject to the provisions of any chapter of the Bankruptcy Act; (d) vendor ceases to conduct it's operations in normal course of business. The County shall have the option to terminate Agreement with the Consultant immediately on written notice based on any such change in status.

SECTION 21. DELIVERABLES


- Prepare draft smoke testing notification letter for LCPWD to send to affected residents and commercial customers
- Prepare smoke testing door hangers for distribution by RJN staff to each customer with contact information
- Notify local fire and police departments of planned testing activities including daily updates
- Provide equipment and smoke necessary for smoke testing
- Erect smoke testing signs near testing area
- Collect smoke testing data with handheld electronic data collection equipment
- Smoke test approximately 131,000 linear feet of sanitary sewers tributary to flow meters LG-01 , LG-02 and LC-04.
- GPS locate each identified defect and record with digital photograph
- Provide data analysis of each sewer system tested
- Provide summary report with estimated rehabilitation method and associated cost
- Provide draft, and final report, files, data and photographs outlined in proposal (see attachment)

IN WITNESS HEREOF, the undersigned have caused this Agreement to be executed in their respective names on the dates hereinafter enumerated.

Lake County:

RJN Group, Inc.:

RuthAnne Hall
Purchasing Agent
Lake County Purchasing Division



Michael N. Young P.E.
Principal

Date _____

Date 9/20/13



The Choice for Collection System Solutions

www.rjn.com

September 13, 2013

Mr. Frederick J. Treven
Senior Civil Engineer
Lake County Department of Public Works
650 West Winchester Road
Libertyville, Illinois 60048

SUBJECT: PROPOSAL FOR PROFESSIONAL ENGINEERING SERVICES
SOUTHEAST LAKE FPA SMOKE TESTING
LONG GROVE AND FOREST LAKE

Dear Mr. Treven:

RJN Group, Inc. (RJN) is pleased to submit this proposal to assist the Lake County Department of Public Works (County) in identifying and reducing inflow and infiltration (I/I) in the sanitary sewer system.

PROJECT UNDERSTANDING AND APPROACH

RJN is currently providing flow monitoring services for the County in the Southeast Lake Facilities Planning Area (FPA). Some of the sanitary sewers in the FPA are owned and maintained by the County and others are owned and maintained by the municipality. RJN met with County staff on August 7, 2013 to discuss the preliminary findings of this flow monitoring.

The data shows that clear water is entering the sanitary system during rain events throughout the FPA, including in County owned areas. The County is interested in identifying sources of I/I that are allowing this clear water flow to enter the collection system in areas the County owns and maintains.

I/I sources can be identified by completing a Sanitary Sewer Evaluation Study (SSES), which can contain many components. One of these components is smoke testing. Using the methods outlined below, RJN will use smoke testing to identify various defects in the collection system that are the contributing sources of I/I. Common identified sources include leaky manholes, cracked main lines and laterals, connected downspouts, directly connected storm sewers, connected foundation drains, area, patio, and driveway drains, and broken cleanouts. Additionally indirect connections such as leaking storm sewers crossing sanitary sewers can also be identified.

The County has requested this proposal for smoke testing the sanitary sewer system tributary to three of the flow monitoring locations. Flow meters LG-01 and LG-02 are located in Long Grove just upstream of the Route 22 Lift Station. Flow Meter LC-04 is located near Illinois Route 22 and Krueger Road and measures flow from the Forest Lake area. A map of each area is attached to this proposal. Based on the GIS information provided by the County, the total footage of each area is as follows:

- LG-01 – 38,229 feet
- LG-02 – 23,258 feet
- LC-04 – 69,620 feet
- TOTAL – 131,107 feet

During the RJN smoke testing process, non-toxic smoke is blown into a sewer segment through manholes at both ends. Defects are identified by where smoke exits the ground or structure. Smoke testing is only as effective as the process used. RJN's will use a 4-person crew and smoke test only one segment at a time using two smoke blowers on consecutive manholes. When necessary, sandbagging is used to minimize smoke entering other segments.

RJN uses handheld mobile data collectors to collect smoke testing results. A GPS mapping grade location is found for each defect, and a photo is taken. Using these handheld units reduces opportunities for errors and reduces the opportunity for missing information, illegible handwriting, etc. The data is then integrated into GIS in order to assist in mapping defects and organizing the results.

PROPOSED SCOPE OF SERVICES

Our proposed scope of work is as follows:

1. Prepare a draft resident smoke testing notification letter for the County to send to the affected residents and business owners. The letters will include RJN contact information for use during the smoke testing.
2. Prepare smoke testing door hangers to be hung by RJN staff at each address less than one week prior to smoke testing. The door hangers will also include RJN contact information.
3. Notify the local fire and police departments of planned smoke testing activities, including daily updates.
4. Provide equipment and smoke necessary for smoke testing.

5. During smoke testing, erect smoke testing signs near the testing area and answer resident and owner field and phone questions.
6. Use handheld electronic data collection equipment for collecting smoke testing data.
7. Smoke test approximately 131,000 linear feet of sanitary sewers tributary to sanitary flow meters LG-01, LG-02 and LC-04.
8. GPS locate (sub-meter mapping grade) each identified defect and take a minimum of one digital photograph of each defect.
9. Provide data analysis as follows:
 - Compile field data and develop complete list of defects;
 - Assign an estimated flow to each defect; and
 - Determine an estimated rehabilitation method and estimate an associated cost for each defect.
10. Provide a letter report addressing the following:
 - Summary of work completed;
 - GIS map of identified defects;
 - List of defects prioritized by cost effectiveness for rehabilitation;
 - Recommendations for rehabilitation, including potential procurement methods and recommended contractors/vendors for various type of rehabilitation
11. Provide the following deliverables:
 - Up to 5 color copies and PDF of draft report;
 - Address District comments and submit up to 10 color copies of final report; and
 - Provide a digital copy of final report files, data, and photographs.
12. Provide project management services for the duration of the project. Attend up to three meetings with the County.

ITEMS REQUESTED FROM COUNTY

We request that the County finalize the draft smoke testing letters and send to the businesses and residents within the study area. Due to the tight schedule, it is important that this be completed in a timely fashion.

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Mr. Frederick J. Treven
September 13, 2013

PROPOSED SCHEDULE

Properly conducted smoke testing requires dry conditions and is usually conducted from mid-June through mid-November. Based on a Notice to Proceed no later than October 15, 2013 and pending weather suitable for smoke testing, the smoke testing will be completed within six weeks of a notice to proceed. The letter report will be submitted within six weeks of completion of the smoke testing.

PROPOSED FEE

This work will be billed at the unit price rate of \$0.90 per foot smoke tested. This rate is based on a minimum quantity of smoke testing of 30,000 linear feet. Based on the estimated footage of 131,107 linear feet, the total billing is estimated to be \$117,996.30.

It is our experience that the actual sewer length does not exactly agree with the GIS. Therefore, we recommend an agreement for a not-to-exceed amount of \$120,000 to allow for footage adjustments. The County will be provided a GIS map of the sewers smoke tested and will only be invoiced for footage actually tested.

The County will be invoiced for services as follows:

- Completion of smoke testing - 85%
- Submittal of draft report - 12%
- Submittal of final report - 3%

Feel free to contact me at (630) 682-4700 x314 if you would like to discuss this proposal. We appreciate the opportunity to provide this proposal to the District.

RJN Group, Inc.



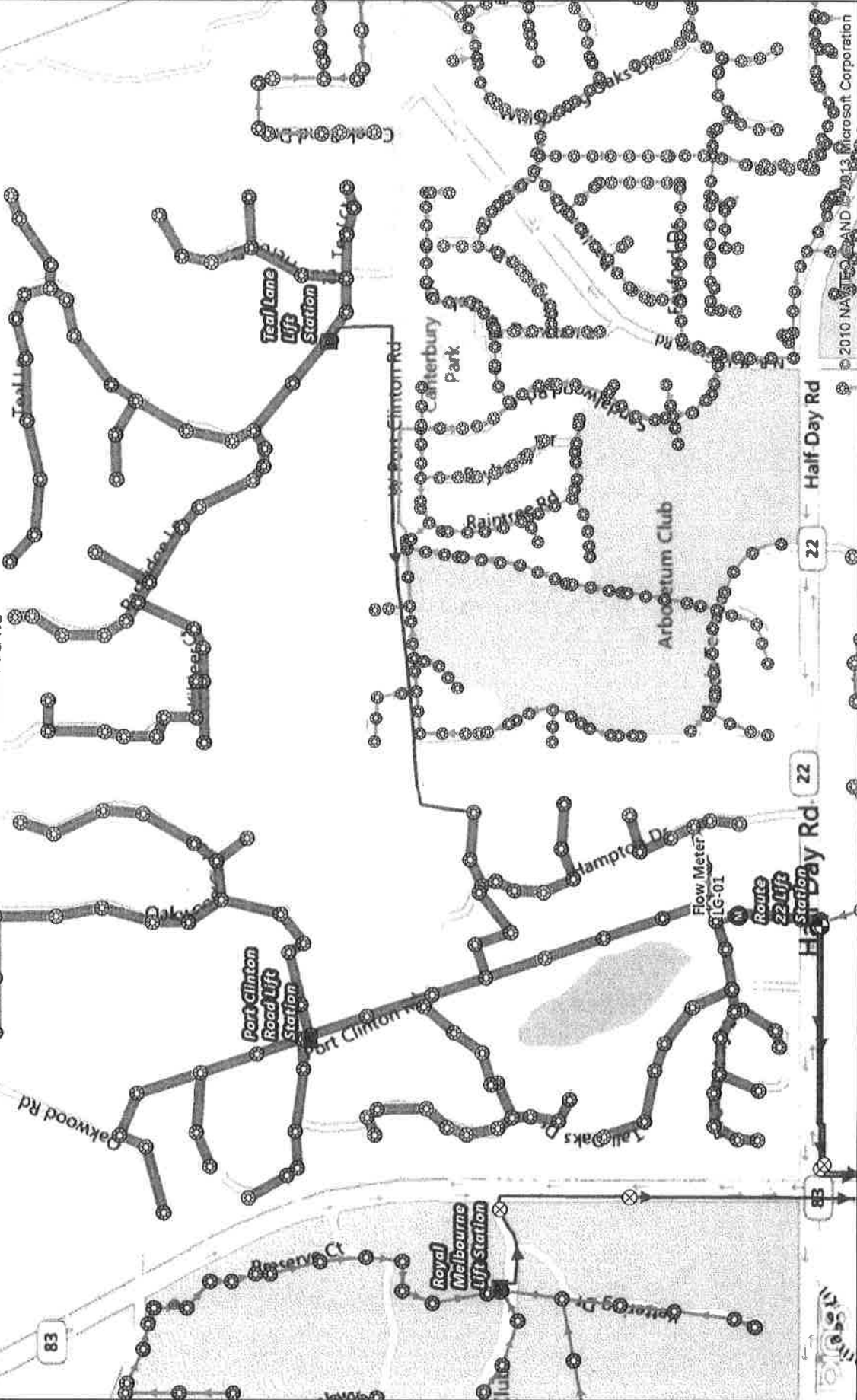
Michael N. Young, P.E.
Principal

Enclosure

Total Smoke Testing Length
38,229

Noble Circle

Oakwood Rd



Manholes (circle with crosshair) Lateral Point (circle with dot) Collector (line with arrow) Pump Station (square) System Valve (circle with crosshair) Flow Meter (circle with 'X')

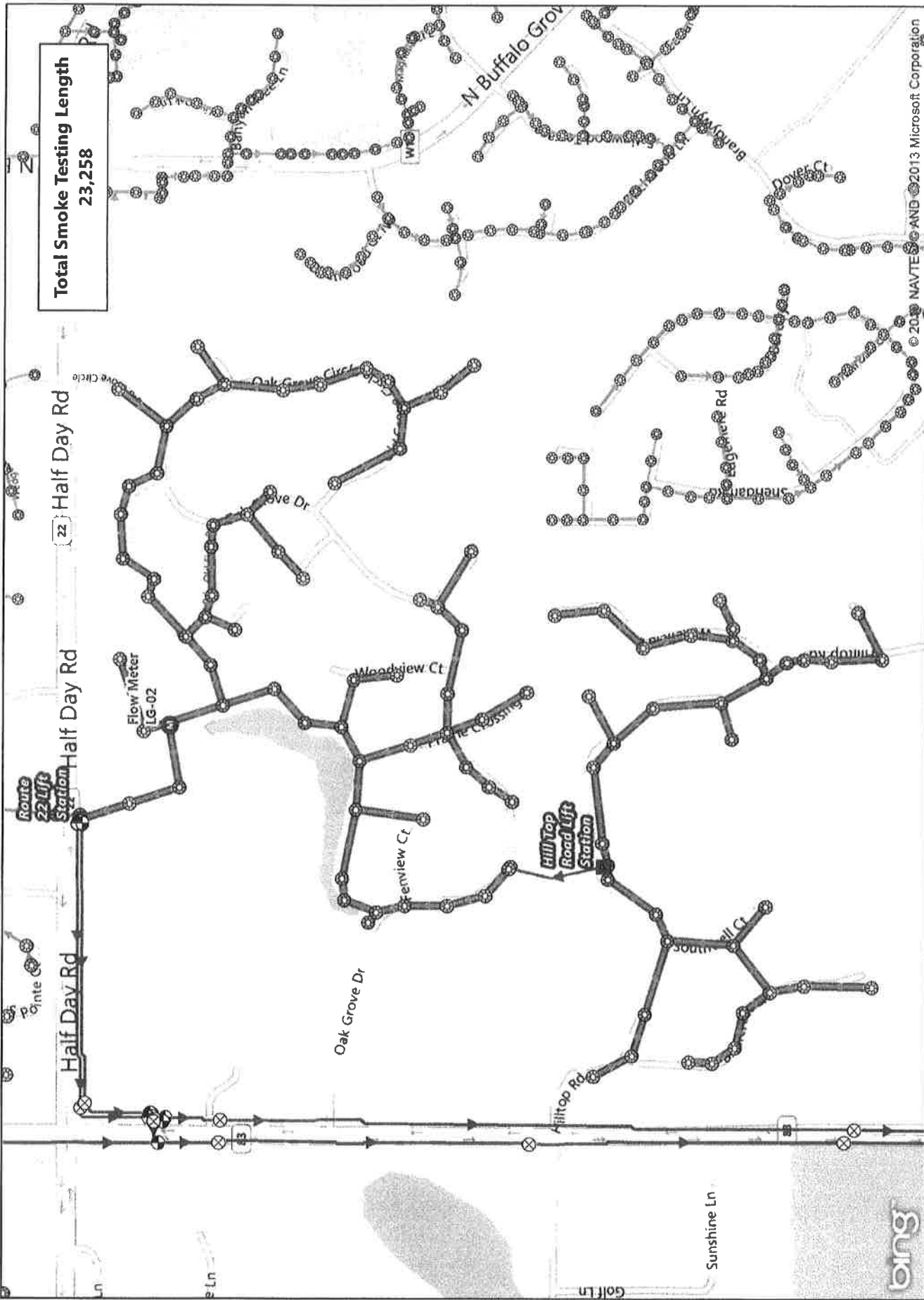
Buffalo Grove Structures (circle with crosshair) Control Valve (circle with dot) LG01 Smoke Test Sewers (thick line) Buffalo Grove Sewers (line with arrow)

Force Mains (line with arrow) Laterals (line with arrow)

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Lake County IL 11.2640.00
LG01 Proposed Smoke Testing Sewers
September 2013

rjngroup
The Choice for Customer System Solutions



Total Smoke Testing Length
23,258

Lake County, IL
11.2640.00
September 2013

LG02 Proposed Smoke Testing Sewers



Buffalo Grove Sewers

Force Mains

Collector

Pump Station

Flow Meter

Control Valve

System Valve

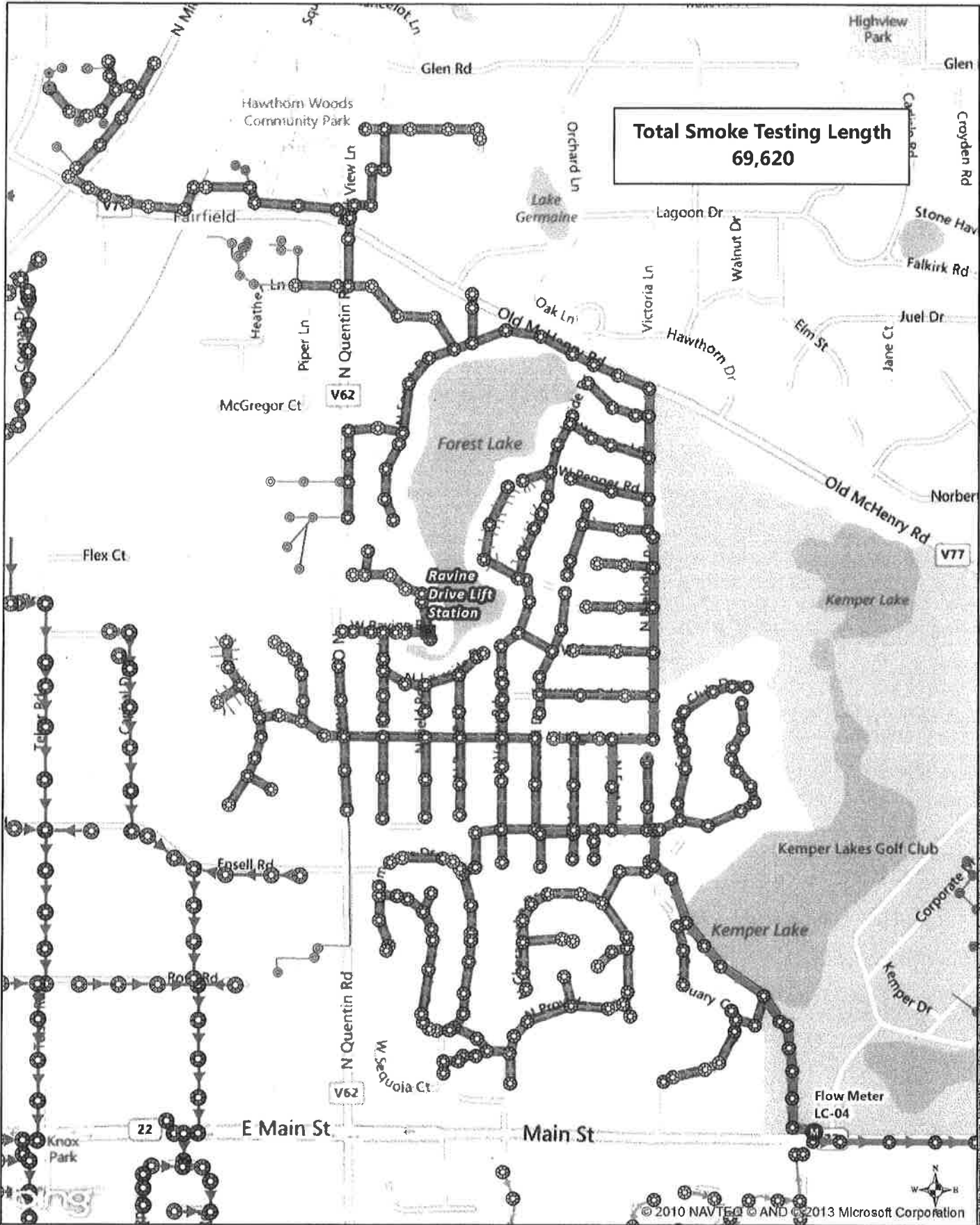
Manholes

Buffalo Grove Structures



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**Total Smoke Testing Length
69,620**



rjngroup The Infrastructure Solutions Group	Manholes	Cleanout	Lateral Point	LC04 Smoke Test Sewers	Interceptor	Laterals
	Kildeer Manhole	Flow Meter	Pump Station	Collector	Force Mains	Kildeer Gravily Main

Lake County, IL
11.2640.00
LC04 R/JN Proposed Smoke Testing Sewers
September 2013

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