

LEAK DETECTION SURVEY CONTRACT

Leak Detection Survey (the “**Contract**”) is entered between the Village of Buffalo Grove (hereinafter the “**Village**” or “**Owner**”), an Illinois home-rule unit of government, and Consulting Engineering, Inc. (hereinafter the “**Contractor**”) on this 23rd day of June, 2020 (the “**Effective Date**”). The Village and the Contractor are hereinafter sometimes collectively referred to as the “**Parties**” and individually as a “**Party**”.

RECITALS

WHEREAS, the Village has solicited bids for the Work (defined below), Contractor has submitted a bid for the Work and Village has selected Contractor for the Work based on their bid; and

WHEREAS, the Contractor wishes to enter into this Contract with the Village and the Village wishes to enter into this Contract with the Contractor for the Work;

NOW THEREFORE, for and in consideration of the mutual covenants and promises herein contained, the adequacy and sufficiency of which are hereby acknowledged by the Parties, it is agreed as follows:

ARTICLE I - WORK TO BE DONE BY THE CONTRACTOR

The Village does hereby hire and contract with the Contractor to provide all the labor, equipment, materials and/or services described more thoroughly on Contract **Exhibit A** (the “**Work**”) which is incorporated into the Contract by this reference.

ARTICLE II - CONTRACT DOCUMENTS

The following exhibits are attached hereto and incorporated herein by this reference:

- Contract Exhibit A – Description of the Work**
- Contract Exhibit B – Schedule of Prices**
- Contract Exhibit C – Performance and Payment Bond**

If any term or provision of this Contract shall conflict with any term or provision of the exhibits referenced above, the terms and provisions of the exhibit shall control.

ARTICLE III - CONTRACT AMOUNT

The Village agrees to pay the Contractor for the proper and timely performance of the Work in strict accordance with this Contract as detailed in **Contract Exhibit B** (the “**Schedule of Prices**”) Unless explicitly provided otherwise in this Contract, the detailed sums shall be the full and exclusive compensation owed to the Contractor for the Work; and Contractor may not seek additional payments from the Village.

Escalation

Written requests for price revisions after the first term shall be submitted at least sixty (60) calendar days in advance of the biennial contract period. Requests must be based upon and include documentation of the actual change in the cost of the components involved in the contract and shall not include overhead, or profit and shall not exceed the CPI-All Urban Consumers, Chicago or 2.5% whichever is less.

The Village of Buffalo Grove reserves the right to reject a proposed price increase and terminate the Contract.

ARTICLE IV – APPLICATION FOR PAYMENT

The Contractor shall be paid at most once a month and only after providing the Village the following:

1. An executed and notarized Contractor’s Sworn Statement in a form similar to AIA G702 or AIA G703;

All payments under this Contract must be approved by the Village’s Board at regularly scheduled meetings. The Village reserves the right to request any receipts, invoices, proof of payments as the Village, in its sole discretion, may deem necessary to justify the payment requested *prior* to paying the requested payment. The Contractor shall furnish with his final application for payment a Final Lien Waiver from itself and, if not already provided, from every subcontractor and materialman of the Work.

The Contractor acknowledges that the Village is a unit of local government and that all payments under the Contract are subject to the Local Government Prompt Payment Act, 50 ILCS 505 et seq. To that extent, the Village shall have forty-five calendar (45) days from receipt of a bill or invoice to pay the same before it is considered late under the Contract. Interest, if any, charged for any late payments will be subject to the interest rate caps specified in the Prompt Payment Act.

ARTICLE V – CONTRACT TIME

Term. The Village will enter into a contract for one (1) year with two (2) possible one (1) year extensions. At the end of any contract term, The Village of Buffalo Grove reserves the right to extend this contract for a period of up to sixty (60) calendar days for the purpose of securing a new contract.

For any year beyond the initial year, this Contract is contingent upon the appropriation of sufficient funds by the Village Board; no charges shall be assessed for failure of the Village to appropriate funds in future contract years.

ARTICLE VI – PERFORMANCE and PAYMENT BOND

The Contractor shall provide the Village with a performance and payment bond in substantially the same form as on **Contract Exhibit C** (the “**Performance and Payment Bond**”) prior to Contractor beginning any Work and within 10 calendar days of the Notice of Award sent to the Contractor.

ARTICLE VII – ACCIDENT PREVENTION

The Contractor shall exercise every precaution at all times to protect itself, the property of the Village and the property of others. The safety provision of all applicable laws and ordinances shall be strictly observed by the Contractor at all times. Any practice deemed hazardous or dangerous by the Director of Public Works or his authorized representatives shall be immediately discontinued by the Contractor upon receipt of instructions from the Director of Public Works or his authorized representatives. To the fullest extent permitted by law, the Contractor shall be solely responsible for all safety-related matters.

ARTICLE VIII – INDEMNIFICATION

To the fullest extent permitted by law, the Contractor agrees to defend, pay on behalf of, indemnify, and hold harmless the Village, its elected and appointed officials, agents, employees and volunteers and others working on behalf of the Village against any and all claims, demands, suits or loss, including all costs connected therewith, and for any damages which may be asserted, claimed or recovered against or from the Village, its elected and appointed officials, agents, employees and volunteers and others working on behalf of the Village, by reason of personal injury, including bodily injury and death, and/or property damage, whether damage to property of the Village or of a third party, including loss of use thereof, which arises out of or is in any way connected or associated with the Contract and the Work.

ARTICLE IX – CONTRACTORS INSURANCE

Contractor shall procure and maintain, for the duration of the Contract and any maintenance period, insurance against claims for injuries to persons or damages to property, which may arise from or in connection with the performance of the work hereunder by the Contractor, his agents, representatives, employees or subcontractors.

A. Minimum Scope of Insurance: Coverage shall be at least as broad as:

Insurance Services Office Commercial General Liability occurrence form CG 0001 with the Village of Buffalo Grove named as additional insured on a primary and non-contributory basis. This primary, non-contributory additional insured coverage shall be confirmed through the following required policy endorsements: ISO Additional Insured Endorsement CG 20 10 or CG 20 26 and CG 20 01 04 13

1. Insurance Services Office Commercial General Liability occurrence form CG 0001 with the Village named as additional insured, on a form at least as broad as the ISO Additional Insured Endorsement CG 2010 and CG 2026
2. Insurance Service Office Business Auto Liability coverage form number CA 0001, Symbol 01 "Any Auto."
3. Workers' Compensation as required by the Labor Code of the State of Illinois and Employers' Liability insurance.

B. Minimum Limits of Insurance: Contractor shall maintain limits no less than:

1. Commercial General Liability: \$1,000,000 combined single limit per occurrence for bodily injury, personal injury and property damage. The general aggregate shall be twice the required occurrence limit. Minimum General Aggregate shall be no less than \$2,000,000 or a project/contract specific aggregate of \$1,000,000.
2. Business Automobile Liability: \$1,000,000 combined single limit per accident for bodily injury and property damage.
3. Workers' Compensation and Employers' Liability: Workers' Compensation coverage with statutory limits and Employers' Liability limits of \$500,000 per accident.

C. Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by the Village. At the option of the Village, either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as it respects the Village, its officials, agents, employees and volunteers; or the Contractor shall procure a bond guaranteeing payment of losses and related investigation, claim administration and defense expenses.

D. Other Insurance Provisions

The policies are to contain, or be endorsed to contain, the following provisions:

1. General Liability and Automobile Liability Coverages:
 - a. The Village, its officials, agents, employees and volunteers are to be covered as insureds as respects: liability arising out of activities performed by or on behalf of the Contractor; products and completed operations of the Contractor; premises owned, leased or used by the Contractor; or automobiles owned, leased, hired or borrowed by the Contractor. The coverage shall contain no special limitations on the scope of protection afforded to the Village, its officials, agents, employees and volunteers.
2. The Contractor's insurance coverage shall be primary and non-contributory as respects the Village, its officials, agents, employees and volunteers. Any insurance or self-insurance maintained by the Village, its officials, agents, employees and volunteers shall be excess of Contractor's insurance and shall not contribute with it.
3. Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the Village, its officials, agents, employees and volunteers.
4. The Contractor's insurance shall contain a Severability of Interests/Cross Liability clause or language stating that Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
5. If any commercial general liability insurance is being provided under an excess or umbrella liability policy that does not "follow form," then the Contractor shall be required to name the Village, its officials, employees, agents and volunteers as additional insureds
6. All general liability coverages shall be provided on an occurrence policy form. Claims-made general liability policies will not be accepted.
7. The contractor and all subcontractors hereby agree to waive any limitation as to the amount of contribution recoverable against them by the Village. This specifically includes any limitation imposed by any state statute, regulation, or case law including any Workers' Compensation Act provision that applies a limitation to the amount recoverable in contribution such as Kotecki v. Cyclops Welding

E. All Coverages:

1. No Waiver. Under no circumstances shall the Village be deemed to have waived any of the insurance requirements of this Contract by any act or omission, including, but not limited to:
 - a. Allowing work by Contractor or any subcontractor to start before receipt of Certificates of Insurance and Additional Insured Endorsements.
 - b. Failure to examine, or to demand correction of any deficiency, of any Certificate of Insurance and Additional Insured Endorsement received.
2. Each insurance policy required shall have the Village expressly endorsed onto the policy as a Cancellation Notice Recipient. Should any of the policies be cancelled before the expiration date thereof, notice will be delivered in accordance with the policy provisions.

F. Acceptability of Insurers

Insurance is to be placed with insurers with a Best's rating of no less than A-, VII and licensed to do business in the State of Illinois.

G. Verification of Coverage

Contractor shall furnish the Village with certificates of insurance naming the Village, its officials, agents, employees, and volunteers as additional insured's and with original endorsements, affecting coverage required herein. The certificates and endorsements for each insurance policy are to be signed by a person authorized by that insurer to bind coverage on its behalf. The certificates and endorsements are to be received and approved by the Village before any work commences. The Village reserves the right to request full certified copies of the insurance policies and endorsements.

H. Subcontractors

Contractor shall include all subcontractors as insured's under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverage's for subcontractors shall be subject to all of the requirements stated herein.

I. Assumption of Liability

The contractor assumes liability for all injury to or death of any person or persons including employees of the contractor, any subcontractor, any supplier or any other person and assumes liability for all damage to property sustained by any person or persons occasioned by or in any way arising out of any work performed pursuant to the Contract.

J. Workers' Compensation and Employers' Liability Coverage

The insurer shall agree to waive all rights of subrogation against the Village of Buffalo Grove, its officials, employees, agents and volunteers for losses arising from work performed by Contractor for the municipality.

K. Failure to Comply

In the event the Contractor fails to obtain or maintain any insurance coverage's required under this contract, The Village may purchase such insurance coverage's and charge the expense thereof to the Contractor.

ARTICLE X – CERTIFICATE OF AUTHORITY AND SURETY CERTIFICATE

The Contractor shall furnish the Village with a current Certificate of Authority or Surety Certificate issued by the Illinois Department of Insurance for the bonding company and insurance company they are using. In lieu of a Certificate of Authority of Surety Certificate, the Contractor may provide certificate of good standing from the Illinois Department of Insurance’s website.

ARTICLE XI – COPYRIGHTS AND LICENSES

The Contractor agrees that all documents of any kind whatsoever, and in whatever medium expressed, prepared by the Contractor and the Contractor’s consultants in connection with the Work (collectively, the “**Documents**”) or otherwise pursuant to this Contract and all rights therein (including trademarks, trade names, rights or use, copyrights and/or other proprietary rights) shall be and remain the sole property of the Village (regardless of whether the Village or the Contractor terminates this Contract for any reason whatsoever). The Contractor hereby agrees that the Documents are or shall be deemed to be “Works for Hire” within the meaning of Section 101 of the Copyright Act, and the Contractor hereby assigns to the Village all right, title and interest therein. Notwithstanding, the Contractor shall indemnify and hold harmless the Village, its appointed and elected officials, employees, agents and volunteers from and against all claims, damages, losses, and expenses (including attorneys’ fees and court and arbitration costs) arising out of any infringement of patent rights or copyrights incident to the Documents and the Work.

ARTICLE XII – NOTICE

All notices, demands, requests, consents, approvals and other communications required or permitted to be given hereunder (a “**Notice**”) shall be in writing and shall be deemed effective three (3) business days after mailing if mailed by certified mail with return receipt requested and immediately if served personally, and shall be addressed to the following:

IF TO THE VILLAGE:	Village of Buffalo Grove 50 Raupp Blvd Buffalo Grove, IL 60089 mreynolds@vbg.org ATTN: Director of Public Works
WITH COPIES TO:	Cc: pbrankin@schainbanks.com Cc:brobinson@vbg.org
IF TO THE CONTRACTOR:	Consulting Engineering Inc. 13477 Prospect Road Suite 214 Strongsville, OH 44149 Y.Chan@cengr.co ATTN: Y Chan

ARTICLE XIII – CHANGE ORDERS

If the Village requests any change to the Work the Village shall do so by delivering Notice of the same to the Contractor and the change requested by the Village shall be effective upon receipt of the Notice by the Contractor. The Contractor may propose a change to the Work by delivering Notice of the proposed change along with a description of the changes full effect on the Work to the Village; provided, such requested change shall not be deemed accepted until the Village has delivered to the Contractor Notice of the same. Prior to approving a proposed change to the Work by the Contractor, the Village may request such additional documentation as it deems necessary to investigate the proposed change. The Contractor shall be responsible for informing all its employees and subcontractors of any changes to the Work, whether such change is requested by the Contractor or the Village.

If the Village deems it proper or necessary in the execution of the Work to make any alteration which will increase or diminish the quantity of labor or material or the expense of the Work, even to the elimination of one or more items, such alteration shall not annul or vitiate the Contract hereby entered into. The elimination of any part of the Work shall not increase the unit price for any of the remaining Work.

ARTICLE XIV – NOTICE OF STARTING WORK

The Contractor shall provide Notice to the Village prior to the Contractor, or its employees or subcontractors, starting the Work or any phase of the Work.

ARTICLE XV – SEQUENCE OF THE WORK

The Director of Public Works shall have the power to direct the order and sequence of the Work. On any major portion of the Work, all accessories shall be set coincident with the main construction. Payment for major portions of the Work may be withheld until proper completion of accessories.

ARTICLE XVI – SUPERVISION

The Director of Public Works shall have override power to superintend and direct the Work, and the Contractor shall perform all of the Work herein specified to the satisfaction, approval and acceptance of the Director of Public Works. The Contractor shall have at all times a competent foreman or superintendent at the Work's site, who shall have full authority to act for the Contractor and to receive and execute orders from the Director of Public Works, and any instructions given to such superintendant or person, executing work for the Contractor, shall be binding on the Contractor as though it was personally given to the Contractor.

ARTICLE XVII – STANDARD OF WORK AND WORKERS

The Contractor shall employ competent staff and shall discharge, at the request of the Director of Public Works, any incompetent, unfaithful, abusive or disorderly workers in its employ. Where experts or skilled workers must be employed, only expert or skilled workers shall be employed.

ARTICLE XVIII – CONDITIONS OF THE WORK SITE

The Contractor shall provide and maintain such sanitary accommodations for the use of its employees as may be necessary to comply with the State and local Board of Health requirements. Public nuisances will not be permitted. The Contractor shall leave said Work's site(s) in the best possible condition to the complete satisfaction of the Director of Public Works. No vehicles of any kind shall be placed, parked, or operated upon any grass areas at any time except as authorized by the Director of Public Works or his authorized representative. Further, the Contractor shall exercise every precaution for the protection of all persons and all property. The safety provisions of all-applicable laws and ordinances shall be strictly observed. Any practice hazardous in the opinion of the Director of Public Works or his authorized representatives shall be immediately discontinued by the Contractor upon his receipt of instructions from the Director of Public Works or his authorized representative. To the maximum extent permitted by law, the Contractor shall be responsible for all safety-related matters.

ARTICLE XIX – WARRANTY PERIOD

All material and workmanship shall be warranted and guaranteed according to manufacturer's recommendation after inspection and approval by the Director of Public Works or his designated representative. All work performed by the Contractor shall be warranted by the Contractor following completion and final acceptance of the Work for a period of twelve (12) months from the date of final, and not substantial, completion.

ARTICLE XX – ACCIDENTS

In the event of any accident of any kind that involves the general public or property of the Village or a third party, the Contractor shall immediately notify the Director of Public Works by phone as well as provide Notice of the same. The Notice shall include a full accounting of all details of the accident. The Contractor shall furnish the Village with copies of all reports of such accidents at the same time that the reports are forwarded to any other interested parties.

ARTICLE XXI – NO ASSIGNMENT

If the Contractor sublets or assigns any part of the Work then the Contractor shall not under any circumstances be relieved of its liabilities hereunder. All transactions of the Village shall be with the Contractor. Subcontractors shall be recognized only in the capacity of employees or workmen and shall be subject to the same requirements as to character and competence. The Contractor shall not assign, transfer, convey, sell or otherwise dispose of the whole or any part of this Contract to any person, firm or corporation without written consent of the Director of Public Works or his authorized representative.

ARTICLE XXII – DEFAULT

The following shall constitute a default an “**Event of Default**” by the Contractor under this Contract:

- A. If the Contractor shall fail to strictly observe or perform one or more of the terms, conditions, covenants and agreements of this Contract;
- B. If there shall be placed on any property owned by the Village any mechanics’, materialmens’ or suppliers’ lien;
- C. If there shall be instituted any proceeding against the Contractor seeking liquidation, dissolution or similar relief and the same shall not be dismissed within forty-five (45) calendar days;
- D. If there shall be appointed any trustee, receiver or liquidator of the Contractor and such appointment shall not have been vacated within forty-five (45) calendar days; and
- E. If the Contractor fails to maintain or obtain any and all permits, licenses and the like, if any, required by the Village, State or Federal governments for the Work.

Upon any Event of Default the Village shall have the option of (i) terminating the Contract; (ii) pursuing any remedy available to it at law or in equity; or (iii) pursuing both simultaneously. In addition, upon an Event of Default, the Village may withhold payments due to the Contractor until it has hired a replacement of the Contractor and deducted all costs of hiring a replacement.

ARTICLE XXIII – DELAYS

The Contractor shall not be liable in damages for delays in performance when such delay is the result of fire, flood, strike, acts of God, or by any other circumstances which are beyond the control of the Contractor; provided, however, under such circumstances the Village may, at its option, cancel the Contract.

ARTICLE XXIV – COMPLIANCE WITH LAWS

The Contractor shall comply with all applicable laws, regulations and rules promulgated by any federal, state, local, or other governmental authority or regulatory body pertaining to all aspects of the Work, now in effect, or which may become in effect during the performance of the Work. The scope of the laws, regulations, and rules referred to in this paragraph includes, but is in no way limited to, the Illinois Human Rights Act, Illinois Equal Pay Act of 2003, Occupational Safety & Health Act along with the standards and regulations promulgated pursuant thereto (including but not limited to those safety requirements involving work on elevated platforms), all forms of traffic regulations, public Village, Interstate and Intrastate Commerce Commission regulations, Workers’ Compensation Laws, Public Construction Bond Act, Public Works Preference Act, Employment of Illinois Workers on Public Works Act, USA Security Act, federal Social Security Act (and any of its titles), and any other law, rule or regulation of the Illinois Department of Labor, Department of Transportation, Illinois Environmental Protection Act, Illinois Department of Natural Resources, Illinois Department of Human Rights, Human Rights Commission, EEOC, and the Village of Buffalo Grove. Notwithstanding the following, the Contractor shall particularly note that:

A. NO DISCRIMINATION – The Contractor shall comply with the provisions of the Illinois Public Works Employment Discrimination Act and the Illinois Human Rights Act/Equal Opportunity Clause which, pursuant to Illinois law, are deemed to be part of this Contract.

B. FREEDOM OF INFORMATION - The Contractor agrees to furnish all documentation related to the Contract, the Work and any documentation related to the Village required under an Illinois Freedom of Information Act (ILCS 140/1 et. seq.) (“**FOIA**”) request within five (5) calendar days after the Village issues Notice of such request to the Contractor. The Contractor agrees to defend, indemnify and hold harmless the Village, and agrees to pay all reasonable costs connected therewith (including, but not limited to attorney’s and witness fees, filing fees and any other expenses) for the Village to defend any and all causes, actions, causes of action, disputes, prosecutions, or conflicts arising from Contractor’s actual or alleged violation of FOIA or the Contractor’s failure to furnish all documentation related to a FOIA request within five (5) calendar days after Notice from the Village for the same. Furthermore, should the Contractor request that the Village utilize a lawful exemption under FOIA in relation to any FOIA request thereby denying that request, Contractor agrees to pay all costs connected therewith (such as attorneys' and witness fees, filing fees and any other expenses) to defend the denial of the request. This defense shall include, but not be limited to, any challenged or appealed denials of FOIA requests to either the Illinois Attorney General or a court of competent jurisdiction.

C. ILLINOIS WORKERS ON PUBLIC WORKS ACT - To the extent applicable, the Contractor shall comply with the Illinois Workers on Public Works Act, 30 ILCS 570/1 et seq., and shall provide to the Village any supporting documentation necessary to show such compliance.

D. NOT A BLOCKED PERSON - The Contractor affirms and covenants that neither the Contractor nor any individual employed by the Contractor for this Work or under this Contract is a person forbidden from doing business with a unit of local government under Executive Order No. 13224 (Sept 23, 2001), 66 Fed.Reg. 49,079 (Sept 23, 2001) or is a person registered on the Specially Designated Nationals and Blocked Persons List. The Contractor shall indemnify the Village from all costs associated with failure to comply with this paragraph.

E. SUBSTANCE ABUSE PREVENTION ON PUBLIC WORKS ACT - The Contractor knows, understands and acknowledges its obligations under the Substance Abuse Prevention on Public Works Act (820 ILCS 265/1 et seq.), and shall comply and require all subcontractors and lower tiered contractors to comply with the requirements and provisions thereof.

ARTICLE XXV – NO WAIVER OF RIGHTS

A waiver by the Village of any Event of Default or any term of provision of this Contract shall not be a waiver of the same Event of Default, another Event of Default or any other term or provision of this Contract.

ARTICLE XXVI – CONTROLLING LAW AND VENUE

This Contract is entered into in the State of Illinois, for work to be performed in the State of Illinois and shall be governed by and construed in accordance with the laws of the State of Illinois. Any legal matters or dispute shall be resolved in the Circuit Court of Cook County and the Parties hereby submit to the jurisdiction of such Circuit Court. This Contract shall be construed without regard to any presumption or other rule requiring construction against the Party causing the Contract to be drafted.

ARTICLE XXVII – MISCELLANEOUS

- A. AMENDMENT** – This Contract may be amended only in writing executed by both Parties.
- B. NO RECORDING** – This Contract, or a memorandum thereof, may not be recorded in any form by either Party. If either Party records this Contract, or a memorandum thereof, they shall immediately file a release of the same.
- C. SECTION HEADINGS** – The headings in the Contract are intended for convenience only and shall not be taken into consideration in any construction or interpretation of the Contract.
- D. NO THIRD PARTY BENEFICIARIES** – This Contract does not confer any rights or benefits on any third party.
- E. BINDING EFFECT** – This Contract shall be binding and inure to the benefit of the Parties hereto, their respective legal representatives, heirs and successors-in-interest.
- F. ENTIRE AGREEMENT** – This Contract supersedes all prior agreements and understandings and constitutes the entire understanding between the Parties relating to the subject matter hereof.
- G. SEVERABILITY** - If any term, condition or provision of the Contract is adjudicated invalid or unenforceable, the remainder of the Contract shall not be affected and shall remain in full force and effect, to the fullest extent permitted by law.
- H. TORT IMMUNITY DEFENSES** - Nothing contained in this Contract is intended to constitute nor shall constitute a waiver of the rights, defenses, and immunities provided or available to the Village under the Local Governmental and Governmental Employees Tort Immunity Act, 745 ILCS 10 *et seq.*
- I. CALENDAR DAYS AND TIME.** Unless otherwise provided in this Contract, any reference in this Contract to “day” or “days” shall mean calendar days and not business days. If the date for giving of any notice required to be given, or the performance of any obligation, under this Contract falls on a Saturday, Sunday or federal holiday, then the notice or obligation may be given or performed on the next business day after that Saturday, Sunday or federal holiday.
- J. TERMINATION OF CONTRACT.** The Contract may be terminated, in whole or in part, by either party if the other party substantially fails to fulfill its obligations under the Contract through no fault of the terminating party; or the Village may terminate the Contract, in whole or in part, for its convenience. However, no such termination may be effected unless the terminating party gives the other party: (1) not less than thirty (30) calendar days written notice by certified mail of intent to terminate, and (2) an opportunity for a meeting with the terminating party before termination.

K. COUNTERPARTS – This Contract may be executed by the Parties in any number of counterparts, each of which shall be deemed an original, but all of which together shall constitute an original instrument.

IN WITNESS WHEREOF, the Parties hereto have caused the Contract to be executed as of the Effective Date.

Village of Buffalo Grove,

Consulting Engineering Inc.

By: _____
Name: Dane Bragg
Title: Village Manager

By:  _____
Name: Y Chan
Title: Principal Owner

CONTRACT EXHIBIT A- DESCRIPTION OF THE WORK

The work services, equipment, labor and/or materials below shall be collectively referred to as the “Work”:

LEAK DETECTION SURVEY SCOPE OF SERVICE

The Village of Buffalo Grove desires the Contractor to develop, plan and execute a program to perform leak detection services on the water distribution system. This program will address the Village of Buffalo Grove water distribution system.

This work shall essentially consist of the following elements:

- Complete leak detection of the entire water distribution system through listening to all accessible main line valves, fire hydrants and needed appurtenances to ensure complete coverage of the system.
- ~183 miles of Village water main line 99% Ductile Iron Pipe(DIP) & Cast Iron Pipe (CIP) and 2000 feet of High-density polyethylene (HDPE) pipe
- ~1900 Main line valves in 60” valve vaults
- ~2600 Fire hydrants with aux valves in 6” boxes
- ~12,000 private service lines with service valves DIP, CIP and Copper

Surveying the above appurtenances to locate leaks ensuring that distances between listening points are not greater than 500’ on metallic type pipes, not greater than 300’ on concrete type pipes and no more than 150’ on PVC and HDPE type pipes.

- Correlation of found leaks.
- Compilation of the leak detection information into a complete and comprehensive report.

DETAILED SCOPE

- Listen to **all fire hydrants, all main line valves**, and when necessary, selected service connections in the entire distribution system. Physical contact with the pipe, valve, hydrant auxiliary valve, hydrant, or service connection.
- **Metallic type pipes**; listening distances will not exceed 500' between points. I.E.: pipe, valves, hydrant auxiliary valves, hydrants, service valves or meter settings will be used with preference of listening points in order as follows; direct contact with the pipe, main line valves, hydrant valves, hydrants, then service valves or meter settings.
- **PVC and HDPE type pipe**; All accessible valves, hydrants, service valves or meter settings will be used with preference of listening points in order as follows; direct contact with the pipe, main line valves, hydrant valves, hydrants, then service valves or meter settings. Listening distances will not exceed 150’.

DETAILED SCOPE (cont)

- A “Leak” log shall be maintained indicating all areas where suspected leak noise was heard. Information to be collected should include but is not limited to GPS location, signal strength, length from nearest valve, date, and time of day.
- When leak noise has been detected and or suspected, the Contractor will verify the suspected area a second time to confirm the noise. At least four hours will pass between the initial listening of the area before a second listen and confirmation is attempted.
- The Contractor will line locate the water main and service lines in the immediate area so the correct pipe distances can be input into the leak correlator. For HDPE type pipe, locations will be interpolated to the best of the Contractors ability.
- The leak location will be marked in the field (on the surface) using environmentally formulated Precautionary Blue paint.
- Sub-meter GPS coordinates will be taken for all leak locations found using a Trimble R1 or approved equivalent.
- Contractor shall use an ArcGIS collector such as, Cartegraph system or approved equivalent for leak location documentation.
- The Contractor will document all leak locations with a diagram indicating the location of the leak. Other information related to that correlation will be included as part of the field sheet such as the filters used for the correlation, line locations, distances between sensors, etc.
- The Contractor will report daily or per request of the Village, to the Director of Public Works or assigned designee and go over the progress of the previous day, as well as cover what will be surveyed the current day.
- It may be necessary to conduct parts of the Leak Survey during “off hours” such as at night. This may be required in areas of high traffic volume where traffic noise may affect the ability to detect leak noise, and traffic volume may affect the ability of the Contractor to be able to safely access main line valves in the middle of the street. The Contractor will give 24-hour advanced notice of intent to survey a particular area that may require after hours surveying or nighttime surveying.
- All of the Contractor’s employees shall have readily observable identification badges worn while in the field.
 - *A minimum of Two Person Project Teams are required and shall work together for safety reasons and not working apart in separate areas of the distribution system. The use of One Person Project Teams is not acceptable and will not be allowed to perform work on the water system.*
- *Subcontracting is not allowed for leaking tracing or leak survey services, Contractor must use its own qualified personnel*
- The electronic listening equipment to be used will be an FCS S30 and/or AquaScope or approved equal.
- The leak detection equipment to be used will be an Echologics LeakFinder-ST and/or FCS TriCorr Touch Pro correlator or approved equivalent.
- Bidder shall provide with their Bid a listing of equipment to be used on this project.

SAFETY

The Village of Buffalo Grove is committed to the safety of its personnel and the general public. The Contractor must comply with all the Village of Buffalo Grove safety requirements and those of the City, County, State and Federal Government. The submitting firm will provide their safety record (last three years) and a project safety plan. As a part of the Village of Buffalo Grove's Safety and Risk Management plans; Two Man Project Teams are required and will work together during the course of the project. The use of one-man project team is not acceptable and will be considered non-responsive as it relates to this Bid.

The Contractor will adhere to the following:

- Proper PPE (personal protection equipment) shall be worn at all times. A class III reflective safety vest will be worn for all work. Class II is not be acceptable.

- The Project Team will follow all traffic safety rules, as is designated by the *Village, The Department of Labor, OSHA and the State Department of Transportation*. Project personnel will be trained (certified were applicable) by an organization such as the *AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA)*, in Traffic Control and Safety (MUTCD Standards).

- The Project Team will follow all procedures regarding Work Place First Aid & CPR, as is designated by the *Village, The Department of Labor and OSHA*. Project personnel will be trained (certified were applicable) in First Aid & CPR.

- The Project Manager and the Project Leader will be trained in accordance with OSHA Standard 1910 (General Industry) and be in possession of an OSHA 10 Hour or 30 Hour Card.

A minimum of Two Person Project Teams are required and shall work together for safety reasons and not working apart in separate areas of the distribution system. The use of One Person Project Teams is not acceptable and will not be allowed to perform work on the water system.

DOCUMENTATIONS and COMMUNICATIONS

The Contractor is expected to perform the following:

- Conduct a kick-off meeting with the Village to cover the goals of the project and outline work procedures. The field crew will meet daily or as agreed upon, with assigned Village personnel to go over areas of the fire hydrant assessment program for the prior workday, and plan current day and areas to survey.
- Contractor will use an online Data collector that provides a deliverable such as Cartegraph or approved equivalent
- At the end of each day, or as requested, a list of any leaks located.
- Location of the leak.
- Estimation of leak.
- Information collected by the Project Team during the leak detection program and any other information provided by the Village shall be regarded as **CONFIDENTIAL** and will not be shared without permission from the Village.
- A **leak detection log** of activity will be included with the final report that will include the following:
 - *Areas work performed in*
 - *Type of problems observed*
 - *Location of leaks discovered*
 - *Line Segment Mapping errors on the water atlas*

The Village of Buffalo Grove Public Works Department utilizes Cartegraph OMS for work flow and asset management system. All suspected leaks are to be entered into Cartegraph by the Contractor, and all information related to the suspected leak shall be identified and included as the Contractor creates the Cartegraph OMS Task. It is the responsibility of the Contractor to create the Cartegraph OMS Task the same day that the leak was found. The Village of Buffalo Grove Public Works Department will provide the Contractor's staff an iPad and with training on Cartegraph OMS and the expected work flow.

Atlas Corrections and Notations

The Contractor will document and note any corrections needed on the Village's Atlas using village provided Cartegraph asset management system or printed Atlas. These notations shall be documented as a part of the final report so the Village can make corrections to their existing atlas.

A Final report will be prepared at the completion of the project which will include all leak location reports and other problems found in the system during the course of the leak detection program that need the attention of the Water Village. This final report shall be made available for submission to the Water Department within thirty (30) days of the completion of the fieldwork.

- **If requested**, the Contractor shall present findings of the Leak Detection Program to the Village at a Village Council Meeting at no additional charge.

EMERGENCY RESPONSE SERVICE

The Contractor shall be called upon from time to time to respond after business hours (4 p.m. and 7 a.m.) or during regular business hours (7 a.m. and 4 p.m.) when not performing work in the Village to assist crews with locating possible main breaks. In these instances the Contractor shall be compensated at an hourly rate that shall be inclusive of all labor, materials, and equipment as identified herein. The Contractor will not be compensated for travel time to the site for emergency services. The Contractor shall respond within two (2) hours of receiving the call.

ASSUMPTIONS AND SERVICES PROVIDED BY THE VILLAGE

- The *Village* will furnish all maps, atlases, and records necessary, in a suitable electronic format to properly conduct the leak detection program
- The *Village* may assist as necessary where traffic control may be extreme.
- The *Village* will also make available, on a reasonable but periodic basis, certain personnel with a working knowledge of the water system who may be helpful with the leak detection program and for general information about the water system. *This person will not need to assist the Project Team on a full time basis*, but only on an “as needed” basis.
- This assistance shall be provided during regular working days, Monday through Friday, 7:00AM-3:00PM.

The Village will assist, if needed, to locate *all nonmetallic pipes* within the service area.

FIRM EXPERIENCE

The Bidder shall provide a company overview covering all the services provided. This should include its primary line of business; how long the company has been in business, and how long the company has been providing leak detection services with regard to this Bid.

The Bidder will submit at least five (5) project references where the Bidder has completed similar work in size and scope in the last three (3) years. This submittal will include the following:

- A brief description of the work completed.
- Contracted amount.
- Time required completing the project.
- Findings of the project.
- Projected annualized cost saving to the VILLAGE authorizing the project.
- Contact names, phone numbers, addresses, and e-mail addresses of the VILLAGE authorizing the project.
- The Village would prefer that the Bidder have a local office.

EXPERIENCE OF KEY PERSONNEL

The Village of Buffalo Grove is desirous of a quality Contractor that can provide the Village of Buffalo Grove with the services listed below in a safe, efficient and professional manner. As a condition of this request the firm must provide experienced, courteous, professional, trained and qualified personnel. At a minimum, the project team shall be consist of the following personnel:

- A Project Manager with five (5) years of managing leak detection programs.
- A Field Project Leader with three (3) years of leak detection programs, and
- A Field Technician is not required to have experience if he/she has been employed by the Contractor for less than one (1) year. However, the Village of Buffalo Grove prefers the Technician to have completed training (certified where applicable) in traffic control and flagging (ATSSA and/or MUTCD Standards), confined space entry, CPR and First Aid within six (6) months of his/her hire date. The Technician/Laborer will also have an OSHA 10 Hour Card in General Industry (OSHA Standard 1910) within the same six (6) month period.
- Work shall be conducted by the Contractor. No Sub-Contractors shall be used for leaking tracing or leak survey services

PROJECT METHODOLOGY SUBMITTAL

Submittal shall include:

1. Details of company such as address, phone number, etc.
2. Bid number
3. Highlights of Bidder's qualifications
4. Understanding of project
5. Proposed Schedule
6. Description of services to be provided and the methods to be used.
7. Sample Reports
8. A statement of understanding indicating that Subcontractors are NOT allowed to be employed for leaking tracing or leak survey services
9. This project will be staffed by full time employees of the Contractor

PROPOSED SCHEDULE

The Bidder will submit as part of the Bid, a work schedule detailing the work plan. This will include a time and date estimate for each task session of the project. A calendar and Gantt chart showing the proposed timeline shall be provided for detailing the work schedule. This schedule shall include time and dates from the kick-off meeting to the submission of the final report. Interim reporting will be detailed as well as the day to day activity monitoring. Any meeting involving the Village shall be identified here as well.

Leak Survey detection work shall be completed no later than October 31st. of each year

LEAK DETECTION SCHEDULE OF PRICES

The Bidder shall supply the *Village* a **unit price (per mile of water main)** and a **total price** for the proposed Leak Detection Survey. This Unit price will include all costs associated with the Leak Detection Program for the selected contiguous areas in the distribution system.



**Proposal for
Water Leak Detection Survey**

The Village of Buffalo Grove



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1. Cover Letter and Contact Information

Consulting Engineering Inc. (CEI) is pleased to submit its technical proposal through this transmittal letter to the Village of Buffalo Grove for their Leak Detection Program. The listed staff is 100% available for this project.

We believe our response meets the requirements set out by The Village of Buffalo Grove in the contract documents. If the Village of Buffalo Grove determines that CEI's response is deficient in any way, CEI respectfully requests to be notified and, where appropriate, given the opportunity to correct any such deficiency.

Please, forward any questions, comments, or concerns regarding this solicitation response to me via the contact information below. On behalf of the CEI team, we thank you for the opportunity to respond to this contract documents and look forward to serving the Village of Buffalo Grove.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Ray Chan'.

Ray Chan, P.E.
President
440-238-9699 x200
Ray.Chan@cengr.co

A handwritten signature in blue ink, appearing to read 'Y Chan'.

Y Chan
Civil Engineer | Principal
440-238-9699 x206
Y.Chan@cengr.co



2. Firm Background

Founded in 1984, Consulting Engineering, Inc. (CEI) is a bona fide RSB/MBE/DBE/CSB/EDGE-certified team of consultants specially trained for the requirements of this project. CEI maintains a team of highly-qualified engineers, technicians, surveyors, and inspectors.

Since 1984, CEI has successfully completed hundreds of design projects including transportation systems, water systems, site improvements, land surveying, structural design, and construction inspection/administration, and has dispatched personnel across the country.

Our leak service crews are highly-trained professionals with the expertise necessary to deliver your program objectives. We utilize the latest state-of-the-art analog and digital leak detection equipment to identify, pinpoint, measure, and reduce water losses. CEI has the deep experience and qualifications needed to make the Village of Buffalo Grove program a resounding success.

CEI is pleased to provide the Village of Buffalo Grove with this proposal to perform distribution system leak detection surveys using conventional leak detection methods. The purpose of this program is to identify and reduce water loss through hands-on field activities. Our approach will provide the Village of Buffalo Grove the flexibility to have a turnkey program and path to reducing your water loss.

CEI understands that leak detection surveys are an important revenue reclamation activity for the Village of Buffalo Grove. We will develop a program plan that meets your objectives and delivers real results. We will efficiently survey the contract miles for potential leaks then perform a second pass of the potential leak locations to validate initial findings prior to reporting to the Village of Buffalo Grove. Our goal is to provide valuable leak detection information of your system and mitigate false positives.

3. Personnel & Qualifications

Experienced Oversight –30+ years of experience

President, Ray C. S. Chan, P.E., is well-acquainted with water infrastructure projects, specializing in leak detection in the Cleveland Water System and a majority of the Cleveland master-metered suburban cities, including City of East Cleveland, Cleveland Heights (a client since 1990), the City of Bedford, the City of Lakewood, and other surrounding suburbs.

Ray C. S. Chan, P.E., will be responsible for the program oversight. Mr. Chan has specialized in leak detection and location since 1974. He was the engineer-in-charge for the Pitometer Associates, assigned to the Cleveland Water Department in the early '80s. Part of his assignment was to detect and pinpoint leaks for the entire system (5,360 miles) including applying first generation leak correlation technique to pinpointing. Being in business for over thirty years, Mr. Chan believes in a team effort focused on clear communication while emphasizing quality assurance. Deliverables are expected to stay under budget while meeting established deadlines.

Project Manager – 15+ years of experience

Y Chan is a civil engineer from the Ohio State University who has managed civil design projects and leak detection programs for CEI for the past 5 years. He managed the 130 miles Middleborough, MA comprehensive leak detection project in 2016 and is currently managing CEI's leak survey teams as a part of the Cleveland Water Department's (CWD) 2016-2017 water audit. CEI's leak detection team is tasked with surveying 2,100 miles of water distribution system piping. As a part of the survey, the team is documenting listening points including asset defects, GIS mapping errors, photos, and acoustic results in ArcGIS collector so the data is readily accessible to CWD.

Field Services Manager – 10+ years of experience

Maurice Little is an expert at the use of leak detection survey equipment and electronic correlating equipment. Conceptual skills, coupled with leak detection training and field experience provide for the skills, knowledge and expertise to evaluate and pinpoint leaking assets, documents findings and make recommendations for rehabilitation. Mr. Little has strong strategic leak detection planning, execution and training skills and has personally performed leak detection on over 3,000 miles of main.

Training and Certifications - ArcGIS Collector, OSHA ten (10) Hour, Field Operations Classroom Trained, Valve Operator, Truck Safety, Equipment and Inspection Training, Trimble Operation and Data Management Training, First Aid/CPR Certification, Confined Space Entry Trained, Flagger Certification, Hydrant Flushing/ Flow Trained (AWWA M17, NFPA 291), DOT Certified Vehicle Driver.

Field Services Technician – 3+ years of experience

JR Pena is a Leak Detection Specialist currently conducting the 2,100 mile acoustic survey on direct contact points for the City of Cleveland Water Department. Mr. Pena has experience with Aquatest, Metrotech, and Z-Corr products as well as traditional equipment. Mr. Pena has been trained and currently performs work on ArcGIS Collector. Mr. Pena has experience as an AMR Network Auditor performing installations, testing, and programming electrical meter endpoints of residential, commercial, and industrial installations.

Data Integrity, Office Support, Civil Engineer – 30+ years of experience

Henry Wong was a Leak Detection Specialist with CEI in the '80s and '90s who now provides support to field services using ArcGIS online, scheduling access to inaccessible areas, tracking crew production, verifying data integrity, generating daily reports, etc.

4. Quality and Features of Proposed Equipment

Vivax-Metrotech HL50

The HL50, Vivax-Metrotech's new acoustic water network survey tool is a simple to operate leak locator. Its outstanding acoustic properties enable the operator to locate large and small water leaks. Three basic filter settings allow the user to adjust to any leak scenario. The integrated LCD screen displays the actual measured sound level as a number and simultaneously as a bar graph. After each new measurement the previous level will still be displayed to compare sound levels



This listening device will be used to execute the first pass leak detection survey, identify potential leak noises. Based on the digital readout, we will be able to prioritize the second pass verification and pinpointing through the system. In addition, upon the follow-up visit, the applicable appurtenance will be rechecked to confirm the leak noise is still present, at or greater than the value of the initial visit. This will confirm a leak is indeed present and eliminate false-positive reporting.

Subsurface Leak Detection LC-2500

The SubSurface LC-2500 Leak Noise Correlator is very lightweight and compact, yet it offers full capabilities for programming and correlating leak noise from many different pipe materials and pipe diameters. Great Sensors, powerful radios and fast processing of sounds make the LC-2500 truly the best performing correlator on the market.



This correlator will be used during the second pass for QA/QC and pinpointing of the leak noises qualified by the HL-50 from the first pass. Multiple correlations will be used to localize the suspected leak source to be verified by ground mics or additional inspection. The graphical display will indicate to the technician possible size and characteristics of the leak.

CST/Berger Magna-Trak Locator

The Magna-Trak locates ferromagnetic objects which may be concealed by earth, road surface, snow, and/or water. These objects may include hydrants, marker magnets, manhole covers, valve rods, surveying marks and rods, water meters, etc.

This metal detector will be used to locate potentially buried assets which may prove especially useful during nighttime operations, areas of heavy vegetation, or where visibility may be poor.



Vivax-Metrotech VM-810 Line Locator

The antenna system in the locator is different from a normal locator. Rather than place antennas on the same center line, one antenna is offset to the right and another to the left. Coupled with extremely sensitive electronics enables the locator to find which antenna is receiving the strongest signal, indicating which direction one should move to be over the buried line. The VM-810's Distance Sensitive Left/Right Guidance provides a sharper, crisper, response, allowing for greater accuracy in line location.



This line locator will verify the line location in the street to enable accurate pinpointing and field markings of leak locations.

Data-Enabled Collection Devices

Project team members each have GPS data-enabled devices with ArcGIS Collector installed. Manufacturers include Samsung, Apple, and LG. Data-enabled devices include phones as well as tablet/PCs.

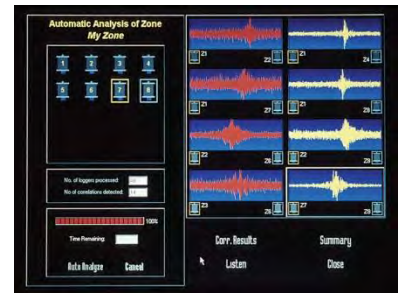
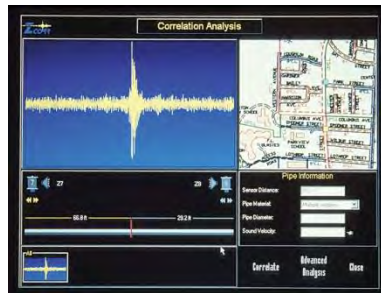
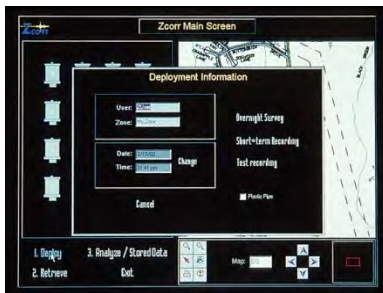
ZCorr Digital Correlating Loggers

ZCorr digital correlating loggers offer significant advantages over listening loggers by detecting and pinpointing multiple leaks in a zone overnight. ZCorr's technical advances make leak surveying viable for water utilities at less effort and cost.

ZCorr is a software-driven approach that allows a distribution system leak survey to be efficiently directed from the office, integrating leak detection data, maps, and database tools to:

- Plan the survey and print deployment orders
- Pinpoint leaks and print repair reports
- Track survey progress and performance

The ZCorr survey has 3 steps: DEPLOY, RETRIEVE and ANALYZE. Each step can be performed either in the office or in the field.



5. Methodology

Prior to the daily execution of leak detection survey activities, all pre-work and planning will have been completed and abide by state DOT & MUTCD standards. Number of personnel will be driven by volume of work and urgency of completion. Daily, the sequence of work will include all the following activities with the Project Manager overseeing all activities:

- Safety meeting
- Locating starting asset to begin survey
- Listen to 100% of accessible hydrants, hydrant auxiliary valves, main line valves, and curb stops (if needed) for leak sounds
- Maximum Listening distances – metallic pipe
 - Above 65 psi system pressure 400ft
 - 45 psi – 65 psi system pressure 300ft
 - Below 45 psi 200ft
- If no leak sound heard, move to next identified asset in leak detection survey. If a leak sound is heard, document for verification during the second pass.
- Suspected leaks will be reported to the utility daily with priority given to visible water leaks.
- During second pass verification we will identify other nearby assets and determine if a leak noise is also audible at other locations. This is to narrow leak location points and assess the probable size of the leak (valves/meter boxes, etc.).
- Begin correlation between the two assets with highest audible sound of suspect leak then place correlator sensors on two identified assets.
- On control box enter all know information (distance, pipe material, etc.).
- If correlators identify leak and the main location is known, then mark off with measuring wheel and paint.
- Document leak location markings with a digital photograph.
- Record pinpointed leak characteristics including, but not limited to:
 - Address
 - Suspected leak type
 - Estimated GPM (Class 1>15k GPD; Class 2=5k to 15k GPD; Class 3<5000GPD)
 - Location information with GPS coordinates
 - Recommended corrective action
 - Additional information that will assist in the prioritization of repairs
- Reporting will happen after the second phase has been completed in a manner to eliminate phase positive leaks.
- Leakage rates will be determined by a combination of the acoustic survey (first pass) results as recorded by the listening device and the size and shape of the correlation graph.
- All leak detection results will be compiled into a comprehensive report which will further describe the overall results of the leak detection surveys, recommendations, and conclusions.
- We will conduct our work without in-field assistance from our client. Should our client assign somebody to ride-along, it is their responsibility to do so at our pace with no interference to our methodology.

Inspection of water mains will be based on pipe material with the following guidelines to maximize both effectiveness and efficiency:

- Metallic Pipelines - listening through direct contact with water assets 300 linear ft (91.4m), which may include hydrants and mainline valves.



- Non-Metallic pipelines - listening through direct contact to all accessible water assets including valves, hydrants, service connections, air releases, visible pipe sections, etc. Digital correlating loggers with the ability to record sound for desktop analysis may also be utilized. (See ZCorr Loggers)

The standard equipment listed in our proposal is the expected equipment to be available and utilized on this project. Our equipment has proven to achieve the desired results of locating and pinpointing potential leaks on various pipe materials. All equipment has been used for 7+ projects. We perpetually carry brand new backups. The sound attenuation of non-metallic pipe demands a more frequent testing interval so we will be utilizing more contact points. The digital loggers will be utilized when there is a lack of contact points or ambient noise becomes problematic and we want to test sections of pipe overnight.

Repaired Leak Sites

After each leak has been successfully repaired or stopped, the Surveyor shall electronically re-survey every repaired leak site to verify a positive repair by the Village or the property owner, plus detect and locate any possible undiscovered leakage whose sound may have coincidentally been masked or overpowered by the original leak's sound.

Adverse Conditions

CEI understands that the team may encounter various topographies, pipe materials, soil types, vegetation conditions, roadway surface covers, etc. which may add additional constraints to the leak identification effort. To combat these conditions, CEI will utilize additional techniques to pinpoint the source of a suspected leak.

- Line Locator
 - Confirming the pipeline location will be the first step in pinpointing a leak in adverse conditions. This allows the technician to prioritize the search area leading to visual inspection of other utility assets for water infiltration.
- Visual Inspection of other utilities
 - Identifying the location of other utility assets and manholes allows the technician to perform visual inspections where they may see water infiltration from the suspected leak which will in turn reduce the search area and aid in the pinpointing effort.
- Water sampling
 - Taking a residual chlorine measurement of any visible water or water infiltration of another utility will add confidence that a leak is present.
- Ground mic utilization
 - In situations where there aren't 2 assets to correlate on either side of a suspected leak, a ground mic may be utilized for pinpointing.
 - A ground mic may be used to confirm correlated results.
 - A ground mic plate will be used on non-paved surfaces as most ground mics are designed for paved roads.
- Static pressure testing
 - Pinpointing crews will be equipped with gauges that can be affixed to a fire hydrant to check the system pressure to see if a leak may be present.
- Overnight loggers
 - For high ambient noise situations, CEI may utilize overnight loggers with the ability to correlate and record suspected leak sounds.

13477 PROSPECT ROAD, SUITE 214, STRONGSVILLE, OHIO 44149

Tel: 440.238.9699

Email: ce@consultingengineeringinc.com, www.consultingengineeringinc.com



6. Health & Safety Policy

It is the policy of Consulting Engineering Inc. to provide a safe and healthy culture for our employees and to observe all State and Federal Laws and Regulations, including but not limited to training and certifications associated with our tasks in the context with which they are performed to follow safe practices and to recognize, correct, and/or avoid unsafe working conditions.

Active participation and adherence to the Safety Program is a condition of employment. No individual should work at a job that he or she knows is not safe. Therefore, we must make every workplace safe by detecting, correcting, and reporting unsafe conditions, as well as the detection of unsafe work practices.

Our Safety Policy has equal importance with Consulting Engineering Inc.'s policies of providing the best quality and most productive service in our industry with a goal to prevent all accidents and injuries. Because of the many different hazards of our industry, we must maintain a constant safety awareness to achieve this goal.

Leak Detection Safety

Our plan conforms to the MUTCD (Section 6G.02 Type of Temporary Traffic Control Zone Activities, Work Duration). Our work follows the guidelines of mobile work (work that moves intermittently or continuously) which specifically mentions frequent stops for activities such as utility operations.

Our traffic plan satisfies Canada's Traffic Control Manual (Sections 18.3 Standards of Traffic Control and 8.24 High-visibility Apparel).

CEI's work vehicle(s) maintain an oscillating dome light, traffic cones, 4-way blinkers, CEI magnets, CEI branded DOT-approved reflective high-visibility clothing, and a survey sign for advanced traffic warning to increase visibility. The survey sign is periodically retrieved and repositioned in advanced warning areas.

Any concerns additional concerns may be found in the adverse conditions detailed in the methodology and will be addressed in the kickoff meeting.

7. References

Recently Completed Projects

Customer: Springfield, IL Water, Light, and Power (\$28,000 Contract)
Contact: Josh Stewart, P.E. | Water Distribution Engineer; 217-789-2323 x1610
Material: Metallic | Completed: 2019 | System Age: ~100 years
Services Rendered: Leak detection survey services for 224 miles of water distribution piping while documenting all listening points and leak detection results. 20 hydrant leaks, 4 valve leaks, and 7 service leaks, and 7 correlated mainline leaks were confirmed with an estimated total of 129 GPM of water less. Additionally, the condition and mapping discrepancies of 186 assets were reported to the City.

Customer: Lowell, MA Regional Water Utility (\$24,725 Contract)
Contact: Paul Pires | Superintendent of Distribution; ppires@lowellma.gov
Material: Metallic | Completed: 2019 | System Age: ~100 years
Services Rendered: Leak detection survey services for 215 miles of water distribution piping while documenting all listening points and leak detection results. 8 hydrants leaks, and 7 service leaks, and 8 correlated mainline leaks were confirmed with an estimated total of 154 GPM of water less.

Customer: Cleveland Water Department (\$130,000 Contract)
Contact: Chris Kocsan; 216-664-2444
Material: Metallic | Completed: 2017 | System Age: ~100 years
Services Rendered: Leak detection survey services for 2,100 miles of water distribution piping while documenting all listening points and leak detection results in ArcGIS/ESRI. 38,186 assets were surveyed, 414 leaks pinpointed, 1,370 assets were found with defects, 636 assets had mapping discrepancies, 515 assets were not in GIS, 121 assets had location/configuration errors.

Customer: New Hampshire Department of Environmental Services (\$71,317.35 Contract)
Contact: Stacey Herbold | Water Conservation Program; 603-271-6685
Material: Metallic, PVC, and AC | Completed: 2018
Services Rendered: Leak detection survey, pinpointing, asset defects, and mapping discrepancies for 731.5 miles of water distribution piping while documenting all listening. Results were reported diagrammatically on 34 separate reports for each municipality and 1 Final Comprehensive Report. The results were broken out by percent of leak volume by type, percent by leak type, number of visible vs. non-visible leaks, and volume of visible vs. non-visible leaks. 32 leaks were found with estimated loss of 125 GPM amounting to 3.91 GPM per leak. This calculates out to 0.17 GPM/mi. At \$4.78/1000 gals, the detected 180,000 GPD or 65,700,000 GPY these discovered leaks yield a savings of \$314,046.00/yr.

Customer: City of Flagstaff, AZ (\$38,250 & \$25,572.50 Contract)
Contact: Erin Young | Water Resources Manager; 928-213-2405
Material: PVC and AC | Completed: 2017 & 2018 | System Age ~27-47 years |
Services Rendered: Leak detection survey, pinpointing, and valve assessment services for 220 miles (2017) and 98 miles (2018) of water distribution piping while documenting all listening points and leak detection results in ArcGIS/ESRI. In 2017, 5137 assets were assessed, 58 GIS discrepancies found, 27 hydrant leaks, 1 valve leak, and 1 service leak were included in the final report and documented electronically. In 2018, 2355 assets were assessed, 166 assets were missing, 11 assets were inaccurate locations, 19 hydrant leaks, 3 valve leaks, 1 meter leak, and 2 miscellaneous were included in the final report and documented electronically.



Customer: City of Batavia, IL (\$27,750 & \$23,750 Contract)
Contact: Jeremy Barkei | Water and Sewer Superintendent; 630-454-2452
Material: Metallic | Completed: 2017 & 2018
Services Rendered: Leak detection survey, pinpointing, asset defects, and mapping discrepancies for 190 miles (2017) and 190 miles (2018) of water distribution piping while documenting all listening. In 2017, 6 hydrant leaks, 2 water main leaks, 9 asset defects, and 18 mapping discrepancies were reported. In 2018, 5 hydrant leaks, 1 irrigation leak, 1 service leak, 1 valve leak, 1 joint leak. 13 mapping discrepancies, and numerous miscellaneous documented results were reported.

Customer: City of Surrey, British Columbia, Canada (\$94,261.49CAD Contract)
Contact: Newton, Conti, P.E. | Project Engineer; 604-591-4381
Material: Metallic, PVC, and AC | Completed: 2017 | System Age ~50 years |
Services Rendered: Leak detection survey and pinpointing services for 180 miles of metallic, PVC, and asbestos cement (AC) water distribution piping while documenting all listening points and leak detection results for 4 of their 15 largest areas: Semiahmoo, Semiahmoo/Douglas, Clayton, and Cloverdale. 1 hydrant leak and 1 distribution main leak was confirmed. Mapping discrepancies between in-field findings and COSMOS, the City's online mapping system were recorded and reported where applicable.

Customer: Town of Middleborough, MA, 2016 – 2017 (\$10,000 Contract)
Contact: James Richard S. Johnson, P.E.; 781-934-0178
Material: Metallic | Completed: 2017 | System Age ~100 years
Number: See attached letter of recommendation
Services Rendered: Leak detection survey services for 135 miles of water distribution piping while documenting all listening points and leak detection results. This rural system had ~8% unaccounted for water loss mostly suspected to come from cross country transmission mains. 1 hydrant leak was pinpointed by CEI.

Customer: Cleveland Heights, Ohio Water Department (\$35,000 Contracts)
Contact: Collette Clinkdale; 216-291-5990
Material: Metallic | Completed: 1992-2016 (annual renewal/completion) | System Age: ~100 years |
Services Rendered: Leak detection survey and pinpointing services for 140 miles of water distribution piping while documenting all listening points and leak detection results. Yearly averages included 8 distribution main leaks, 17 service leaks, and 2 valve/hydrant leaks.

Customer: Doubletree by Hilton Cleveland Independence
Contact: Jason Elo and John Hale; 216-901-9210
Material: Metallic | Completed: 2019
Services Rendered: Pinpointed water leakage on 4" water main outside of private property and verified the Customer was improperly charged for consumption.

Customer: Reserve Management for Greenwood Village
Contact: Nicki Costa; NCosta@reservemgmt.com
Material: Metallic | Completed: 2020
Services Rendered: Pinpointed water leakage on 4" water main outside of neighborhood development near meter vault. CWD repaired water main showing leak of approximately 3gpm.



Relevant Completed Projects

Customer: City of East Cleveland, Ohio Water Department

Contact: Ross Brankatelli, P.E.; 216-644-8804

Material: Metallic | System Age: ~100 years

Services Rendered: Leak detection survey and pinpointing services for 60 miles of water distribution piping while documenting all listening points and leak detection results. Yearly averages included 3 distribution main leaks and 9 service leaks.

Customer: Cleveland Heights Public Schools - Monticello Middle School

Contact: James Patton

Material: Metallic

Services Rendered: Pinpointed water leakage within school property.

Customer: City of Bedford Ohio Water Department

Contact: Stephen Schreiber, P.E. (retired)

Material: Metallic

Services Rendered: Leak detection survey and pinpointing services for 120 miles of water distribution piping while documenting all listening points and leak detection results. Yearly averages included 3 distribution main leaks and 9 service leaks.



EXHIBIT A - PUBLIC CONTRACT STATEMENT

This Public Contract Statement (the "Contract Statement") has been executed by the below supplier, contractor or vendor (collectively the "Contractor") in order for the Village of Buffalo Grove to obtain certain information necessary prior to awarding a public contract. The Contract Statement shall be executed and notarized and submitted as part of the Bid Proposal.

CERTIFICATION OF CONTRACTOR/BIDDER

In order to comply with 720 Illinois Compiled Statutes 5/33 E-1 et seq., the Village of Buffalo Grove requires the following certification be acknowledged:

The Contractor certifies that it is not barred from bidding or supplying any goods, services or construction let by the Village of Buffalo Grove with or without bid, due to any violation of either Section 5/33 E-3 or 5/33 E-4 of Article 33E, Public Contracts, of the Chapter 720 of the Illinois Compiled Statutes, as amended. This act relates to interference with public contracting, bid rigging and rotating, kickbacks, and bidding.

CERTIFICATION RELATIVE TO 65 ILCS 5/11-42.1.1

In order to comply with 65 Illinois Compiled Statutes 5/11-42.1.1, the Village of Buffalo Grove requires the following certification:

The Contractor does hereby swear and affirm that it is not delinquent in the payment of any tax administered by the Illinois Department of Revenue unless it is contesting such tax in accordance with the procedures established by the appropriate revenue act, its liability for the tax or the amount of the tax. The undersigned further understands that making a false statement herein: (1) is a Class A misdemeanor, and (2) voids the contract and allows the Village to recover all amounts paid to it under the contract.

CONFLICT OF INTEREST

The Village of Buffalo Grove Municipal Code requires the following verification relative to conflict of interest and compliance with general ethics requirements of the Village:

The Contractor represents and warrants to the Village of Buffalo Grove as a term and condition of acceptance of their Bid Proposal that none of the following Village officials is either an officer or director of Contractor nor owns five percent (5%) or more of the Contractor: the Village President, the members of the Village Board of Trustees, the Village Clerk, the Village Treasurer, the members of the Zoning Board of Appeals and the Plan Commission, the Village Manager and his/her Assistant, or the heads of the various departments within the Village.

If the foregoing representation and warranty is inaccurate, state the name of the Village official who either is an officer or director of your business entity or owns five percent (5%) or more thereof: N/A

IN WITNESS WHEREOF, the below Contractor has signed and sealed this Contract Statement as of this 4 day of June, 2020

Y Chan

Print Name of Contractor

Signature

Principal

Print Title

Given under my hand and official seal, this 4 day of June, 2020



MARY KELLER
NOTARY PUBLIC
STATE OF OHIO
Comm. Expires
12-04-2022
Recorded in
Cuyahoga County

Mary Keller
Notary Public



Finance Department
Fifty Raupp Blvd.
Buffalo Grove, IL 60089-2198
Phone 847-459-2525
Fax 847-459-7906

Leak Detection Survey Addendum #1

TO: Prospective Respondents and Other Interested Parties

FROM: Village of Buffalo Grove Finance Department

ISSUE DATE: June 1, 2020

SUBJECT: ADDENDUM #1

Note: This Addendum is hereby declared a part of the original Bid documents and in case of conflict, the provisions in the following Addendum shall govern.

The following changes and clarifications shall be made to the Bid Documents for the Leak Detection Survey project.

Q1: The Bid document requests 3 copies of the bid documents, are three copies required?

A1: No, a single uploaded file of the required documents as detailed on page 8 of the Bid documents is all that is required.

Q2: Where are the High-density polyethylene (HDPE) pipes located?

A2: See attached maps.

PROSPECTIVE RESPONDENTS ARE TO ACKNOWLEDGE RECEIPT OF ADDENDUM #1.
PLEASE INCLUDE AND NOTE THIS ADDENDUM IN YOUR RESPONSE.

RESPONDENT: Consulting Engineering Inc

SIGNED:  DATE: 6/4/2020

TITLE : Principal Owner

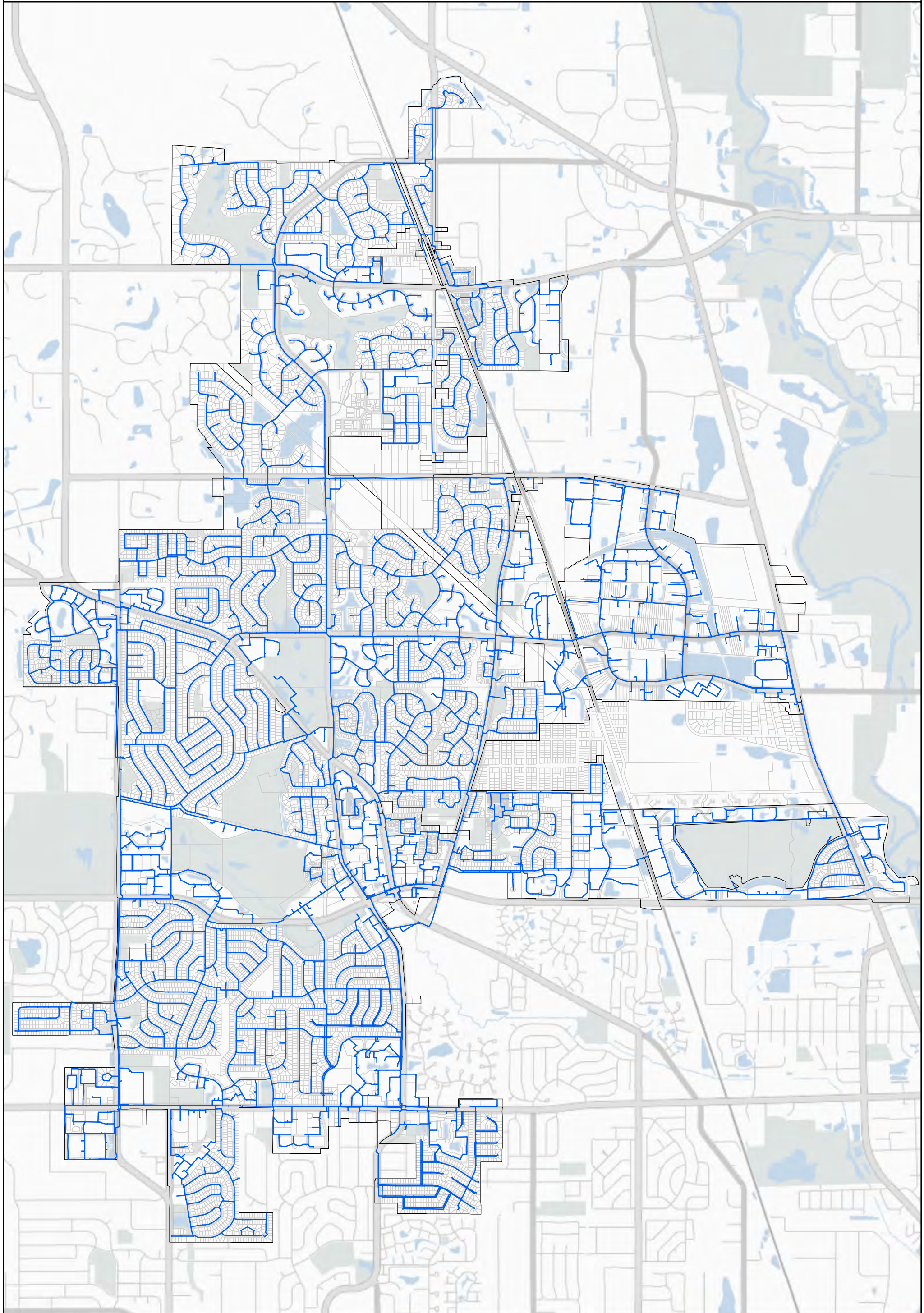
APPENDIX A – AREA MAPS



Water System

GIS Consortium

Date: 5/15/2020



CONTRACT EXHIBIT B- SCHEDULE OF PRICES

[Insert Schedule of Prices]

EXHIBIT B – SCHEDULE OF PRICES

Leak Detection Survey

TO: THE VILLAGE OF BUFFALO GROVE, ILLINOIS

50 Raupp Blvd, Buffalo Grove, Illinois 60089

FULL NAME OF BIDDER: Consulting Engineering Inc.

MAIN BUSINESS ADDRESS: 13477 Prospect Road Suite 214; Strongsville, OH 44136

PLACE OF BUSINESS: 13477 Prospect Road Suite 214; Strongsville, OH 44136

The undersigned, declares that it has carefully examined the location of the proposed work, the Contract Documents, and all other documents referred to or mentioned in the Contract Documents and it proposes and agrees, if this Bid is accepted, that it will contract with the Village, in the form of the Contract attached, to complete the Work titled "Leak Detection Survey", and that it will take in full payment therefore the sums set forth in the following Schedule of Prices.

If this bid is accepted, and the undersigned fails to contract as aforesaid and to give the Bond for Faithful Performance required by the Special Conditions of the Contract and by law, and to provide all insurance as required by the Contract Documents within fifteen (15) calendar days after the date of the award of the Contract, the Village, at its option, may determine that the bidder has abandoned this Bid, and thereupon this Bid and the acceptance thereof shall be null and void, and such security accompanying this Bid shall be forfeited and shall be the property of the Village of Buffalo Grove not as penalty, but as liquidated damages.

If awarded a contract under this Bid, the undersigned proposes to commence work at the site within fifteen (15) calendar days after the effective date of the Notice to Proceed.

BID SECURITY

Accompanying this Bid is a Cashier's Check sent by USPS in the amount of One-thousand thirty-five dollars and twenty five cents Dollars (\$ \$1235.25).

Notes:

- (a) Insert the words "Bank Draft", "Cashier's Check", "Certified Check" or "Bid Bond", as the case may be.**
- (b) Amount must be equal to at least five percent (5%) of the Total Base Bid.**

SCHEDULE OF PRICES (CONT.)

Leak Detection Survey

Item.	Qty	Unit	Unit Price	Total
I. Leak Detection Survey	183	mile	\$ 135.00	\$ 24,705.00
II. Emergency Response rate				
a. Regular Hours	1	hour	\$ 250	w/ 3 hour minimum
b. After Hours	1	hour	\$ 250	w/ 3 hour minimum
c. Response Time		Unit		Time
1. Regular Hours		hour		1 hr on-site; 24 hr off-site
2. After Hours		hour		2 hr on-site; 24 hr off-site
3. Minimum Call Out Time		hour		24 hr

Documents to be scanned and submitted with Schedule of Prices (single file)

- Bid Bond
- Project References
- Firm Experience
- Personnel Experience
- Equipment List
- Project Methodology
- Proposed Schedule

CONTRACT EXHIBIT C- FORM OF PERFORMANCE AND PAYMENT BOND

Bond Number: CE12519500029

KNOW ALL MEN BY THESE PRESENTS, That Consulting Engineering Inc. (the "Principal") and Philadelphia Indemnity Insurance (the "Surety"), are held and firmly bound unto the Village of Buffalo Grove, an Illinois home-rule unit of government (the "Village"), the full and just sum of twenty-four thousand seven hundred and five Dollars (\$ 24,705) in lawful money of the UNITED STATES OF AMERICA as herein provided.

THE CONDITION OF THIS OBLIGATION is such that the Principal and Surety agree to bind themselves, their successors, assigns, executors, heirs and administrators, jointly and severally, for the full and faithful performance of the Work as defined in that particular Leak Detection Survey contract between Principal and the Village dated 13th day of July, 2020, (hereinafter referred to as the "Contract"), a copy of which is attached and incorporated by reference as though fully set forth herein.

NOW THE CONDITIONS OF THIS OBLIGATION ARE SUCH that if the said Principal (i) shall in all respects keep and perform all the undertakings, covenants, terms, conditions and agreements of the Contract; (ii) shall pay all sums of money due or to become due, for any labor, materials, apparatus, fixtures or equipment furnished for the Work provided in said Contract; and (iii) shall remove and replace any defects in workmanship or materials which may be apparent or may develop within the ARTICLE XIX – WARRANTY PERIOD of the Contract, then this obligation shall be null and void; otherwise it shall remain in full force and effect.

And the said Surety, for value received, hereby stipulates and agrees that no change, extension of time, alteration or addition to the terms of the Contract or the Work thereunder shall in any way affect its obligation on this Bond, and it does hereby waive notice of any such change, extension of time, alteration or addition to the terms of the Contract or to the Work.

IN WITNESS WHEREOF, we have hereunto set our hands and sea 1st day of July, 2020.

SURETY

Philadelphia Indemnity Insurance Company

By: [Signature]
Name: Massimo Schirfu
Title: Attorney - in - Fact

ATTEST

By: [Signature]

PRINCIPAL

By: [Signature]
Name: Y Chan
Title: Principal Owner

ATTEST

By: [Signature]



NOTE: Date of Bond must not be prior to date of Contract.

If Contractor is Partnership, all partners should execute Bond.

IMPORTANT: Surety companies executing Bonds must appear on the Treasury Departments most current list (Circular 570 as amended) and be authorized to transact business in the state where the Work is located.



**Bureau of Workers'
Compensation**

30 W. Spring St.
Columbus, OH 43215

Certificate of Ohio Workers' Compensation

This certifies that the employer listed below participates in the Ohio State Insurance Fund as required by law. Therefore, the employer is entitled to the rights and benefits of the fund for the period specified. This certificate is only valid if premiums and assessments, including installments, are paid by the applicable due date. To verify coverage, visit www.bwc.ohio.gov, or call 1-800-644-6292.

This certificate must be conspicuously posted.

Policy number and employer
00937630

Period Specified Below
07/01/2019 to 07/01/2020

CONSULTING ENGINEERING INC
13477 PROSPECT RD STE 214
STRONGSVILLE, OH 44149-3867



www.bwc.ohio.gov
Issued by: BWC

Administrator/CEO

You can reproduce this certificate as needed.

Ohio Bureau of Workers' Compensation

Required Posting

Section 4123.54 of the Ohio Revised Code requires notice of rebuttable presumption. Rebuttable presumption means an employee may dispute or prove untrue the presumption (or belief) that alcohol, marihuana or a controlled substance not prescribed by the employee's physician is the proximate cause (main reason) of the work-related injury.

The burden of proof is on the employee to prove the presence of alcohol, marihuana or a controlled substance was not the proximate cause of the work-related injury. An employee who tests positive or refuses to submit to chemical testing may be disqualified for compensation and benefits under the Workers' Compensation Act.



**Bureau of Workers'
Compensation**

You must post this language with the Certificate of Ohio Workers' Compensation.



Bureau of Workers' Compensation

30 W. Spring St.
Columbus, OH 43215

Certificate of Ohio Workers' Compensation

This certifies that the employer listed below participates in the Ohio State Insurance Fund as required by law. Therefore, the employer is entitled to the rights and benefits of the fund for the period specified. This certificate is only valid if premiums and assessments, including installments, are paid by the applicable due date. To verify coverage, visit www.bwc.ohio.gov, or call 1-800-644-6292.

This certificate must be conspicuously posted.

Policy number and employer
00937630

Period Specified Below
07/01/2020 to 07/01/2021

CONSULTING ENGINEERING INC
13477 PROSPECT RD STE 214
STRONGSVILLE, OH 44149-3867



www.bwc.ohio.gov
Issued by: BWC

Stephanie McCloud

Administrator/CEO

You can reproduce this certificate as needed.

Ohio Bureau of Workers' Compensation

Required Posting

Section 4123.54 of the Ohio Revised Code requires notice of rebuttable presumption. Rebuttable presumption means an employee may dispute or prove untrue the presumption (or belief) that alcohol, marihuana or a controlled substance not prescribed by the employee's physician is the proximate cause (main reason) of the work-related injury.

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Bureau of Workers' Compensation

You must post this language with the Certificate of Ohio Workers' Compensation.

VILLAGE OF BUFFALO GROVE
NON-DISCLOSURE AGREEMENT FOR PROTECTED CRITICAL
INFRASTRUCTURE INFORMATION (PCII)

I, Y Chan , an individual official employee or subcontractor of or to the Village of Buffalo Grove (Village), intending to be legally bound, hereby consent to the terms in this Agreement in consideration of my being granted conditional access to certain information, specified below, that is owned by, produced by, or in the possession of the Village.

I hereby acknowledge that I am familiar with, and I will comply with all requirements of the Protected Critical Infrastructure Information (PCII) program set out in the Critical Infrastructure Information Act of 2002 (CII Act), (Title II, Subtitle B, of the Homeland Security Act of 2002, Public Law 107-296, 196 Stat. 2135, 6 USC 101 et seq.), as amended, the implementing regulations thereto (6 CFR Part 29), as amended, and the applicable PCII Procedures Manual, as amended, and with any such requirements that may be officially communicated to me by the Village of Buffalo Grove Public Works Director (Director) or Director's designee.

I hereby acknowledge that I am familiar with, and I will comply with the standards for access, dissemination, handling, and safeguarding of the PCII to which I am granted access as cited in this Agreement and in accordance with the guidance provided to me relative to the PCII. I understand and agree to the following terms and conditions of my access to PCII indicated above:

1. I hereby acknowledge that I have received a security indoctrination concerning the nature and protection of PCII to which I have been provided conditional access, including the procedures to be followed in ascertaining whether other persons to whom I contemplate disclosing PCII have been approved for access to it, and that I understand these procedures.
2. By being granted conditional access to PCII, the Village has placed special confidence and trust in me and I am obligated to protect this information from unauthorized disclosure, in accordance with the terms of this Agreement and the laws, regulations, and directives applicable to PCII to which I am granted access.
3. I acknowledge that I understand my responsibilities and that I am familiar with and will comply with the standards for protecting such information that I may have access to in accordance with terms of this Agreement and the laws, regulations and/or directives, applicable to the information to which I am granted access. I understand that DHS may conduct inspections of my place of business pursuant to established procedures for the purpose of ensuring compliance with the conditions for access, dissemination, handling and safeguarding of PCII under this Agreement.
4. I will not disclose or release any PCII provided to me pursuant to this Agreement without proper authority or authorization. Should situations arise that warrant the disclosure or release of such

PCII, I will do so only under approved circumstances and in accordance with the laws, regulations, or directives applicable to the PCII. I will honor and comply with any and all dissemination restrictions cited to me by the proper authority.

5. (a) Upon the completion of my engagement as an employee, consultant, or subcontractor under the contract, or the completion of my work on the PCII Program, whichever occurs first, I will surrender promptly to the Director or the Director's designee, or to the appropriate PCII officer, PCII of any type whatsoever that is in my possession. (b) If the Authorized Entity is a United States Government contractor performing services in support of the PCII Program, I will not request, obtain, maintain, or use PCII unless the Director or Director's designee has first made in writing, with respect to the contractor, the certification as provided for in Section 29.8(c) of the implementing regulations to the CII Act, as amended.

6. I hereby agree that I will not alter or remove markings, which indicate a category of information or require specific handling instructions, from any material I may come in contact with, unless such alteration or removal is authorized by the Director or the Director's designee. I agree that if I use information from a sensitive document or other medium, I will carry forward any markings or other required restrictions to derivative products, and will protect them in the same matter as the original.

7. I hereby agree that I shall promptly report to the appropriate official, in accordance with the guidance issued for PCII, any loss, theft, misuse, misplacement, unauthorized disclosure, or other security violation that I have knowledge of, whether or not I am personally involved. I also understand that my anonymity will be kept to the extent possible when reporting security violations.

8. If I violate the terms and conditions of this Agreement, such violation may result in the cancellation of my conditional access to the information covered by this Agreement. This may serve as a basis for denying me conditional access to other types of information, to include classified national security information.

9. With respect to PCII, I hereby assign to the entity owning the PCII and the Village, all royalties, remunerations, and emoluments that have resulted, will result, or may result from any disclosure, publication, or revelation of PCII not consistent with the terms of this Agreement.

10. This Agreement is made and intended for the benefit of the Village and may be enforced by the Village or the Authorized Entity. By granting me conditional access to information in this context, the Village and, with respect to PCII, the Authorized Entity, may seek any remedy available to it to enforce this Agreement, including, but not limited to, application for a court order prohibiting disclosure of information in

breach of this Agreement. I understand that if I violate the terms and conditions of this Agreement, I could be subjected to administrative, disciplinary, civil, or criminal action, as appropriate, under the laws, regulations, or directives applicable to the category of information involved and neither the Village nor the Authorized Entity have waived any statutory or common law evidentiary privileges or protections that they may assert in any administrative or court proceeding to protect any sensitive information to which I have been given conditional access under the terms of this Agreement.

11. Unless and until I am released in writing by an authorized representative of the Village, I understand that all conditions and obligations imposed upon me by this Agreement apply during the time that I am granted conditional access, and at all times thereafter.

12. Each provision of this Agreement is severable. If a court should find any provision of this Agreement to be unenforceable, all other provisions shall remain in full force and effect.

13. My execution of this Agreement shall not nullify or affect in any manner any other secrecy or non-disclosure Agreement which I have executed or may execute with the Village or any of its departments or agencies.

14. These restrictions are consistent with and do not supersede, conflict with, or otherwise alter the employee obligations, rights, or liabilities created by Executive Order No. 12958, as amended; Section 7211 of Title 5, United States Code (governing disclosures to Congress); Section 1034 of Title 10, United States Code, as amended by the Military Whistleblower Protection Act (governing disclosure to Congress by members of the military); Section 2302(b)(8) of Title 5, United States Code, as amended by the Whistleblower Protection Act (governing disclosures of illegality, waste, fraud, abuse or public health or safety threats); the Intelligence Identities Protection Act of 1982 (50 USC 421 et seq.) (governing disclosures that could expose confidential Government agents); and the statutes which protect against disclosure that may compromise the national security, including Sections 641, 793, 794, 798, and 952 of Title 18, United States Code, and Section 4(b) of the Subversive Activities Act of 1950 (50 USC 783 (b)). The definitions, requirements, obligations, rights, sanctions, and liabilities created by said Executive Order and listed statutes are incorporated into this agreement and are controlling.

15. Signing this Agreement does not bar disclosures to Congress or to an authorized official of an executive agency or the Department of Justice that are essential to reporting a substantial violation of law.

16. I represent and warrant that I have the authority to enter into this Agreement.

17. I have read this Agreement carefully and my questions, if any, have been answered. I acknowledge that the brief officer has made available to me any laws, regulations, or directives referenced in this document so that I may read them at this time, if I so choose.

I make this Agreement in good faith, without mental reservation or purpose of evasion.

Name: Y Chan

Title: Civil Engineer & Principal Owner

Company: Consulting Engineering Inc.

Signature:  _____

Date: 6/23/2020

**Philadelphia Indemnity Insurance Company
Annually Renewable Payment Bond**

KNOW ALL MEN BY THESE PRESENTS: That CONSULTING ENGINEERING INC. (hereinafter called the Principal), and Philadelphia Indemnity Insurance Company (hereinafter called the Surety), are held and firmly bound unto THE VILLAGE OF BUFFALO GROVE, ILLINOIS (hereinafter called the Obligee), in the full and just sum of Twenty-Four Thousand Seven Hundred Five and 00/100 Dollars (\$24,705.00), the payment of which sum, well and truly to be made, the said Principal and Surety bind themselves, and each of their heirs, administrators, executors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has by written agreement dated the 23rd day of June 2020 entered into a Contract with the Obligee for Leak Detection Survey which contract is hereby referred to and made a part hereof.

WHEREAS, the Obligee has agreed to accept a bond guaranteeing the payment of labor and material of said contract for a period of one year.

NOW, THEREFORE, THE CONDITIONS OF THE ABOVE OBLIGATION IS SUCH, that if the Principal shall pay for labor, materials and equipment furnished in said Contract at the time and in the manner specified during the term of this bond ,and shall reimburse said Obligee for any loss which said Obligee may sustain by reason of failure or default on the part of said Principal , than this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, HOWEVER, That this bond is subject to the following conditions:

1. This bond is for the term beginning July 13th, 2020 and ending July 12th, 2021. The bond may be extended for additional terms at the option of the surety, by continuation certificate executed by the Surety. Neither non-renewal by the surety, nor failure, nor inability of the Principal to file a replacement bond shall constitute a loss to the Obligee recoverable under this bond.
2. In the event of default by the Principal, Obligee shall deliver to Surety by certified mail, a written statement of the facts of such default, within thirty (30) days of the occurrence. In the event of default, the Surety will have the right and opportunity, at its sole discretion, to: a) cure the default; b) assume the remainder of the Contract and to perform or sublet same; c) or to tender to the Obligee funds sufficient to pay the cost of completion less the balance of the Contract price up to an amount not to exceed the penal sum of the bond. In no event shall the Surety be liable for fines, penalties, liquidated damages, or forfeitures assessed against the Principal.
3. No claim, action, suit or proceeding, except as hereinafter set forth, shall be had or maintained against the Surety on this instrument unless same be brought or instituted upon the Surety within one year from termination or expiration of the bond term.
4. No right of action shall accrue on this bond to or for the use of any person or corporation other than the Obligee named herein or the heirs, executors, administrator or successors of Obligee.
5. The aggregate liability of the surety is limited to the penal sum stated herein regardless of the number or amount of claims brought against this bond and regardless of the number of years this bond remains in force.
6. If any conflict or inconsistency exists between the Surety's obligations or undertakings as described in this bond and as described in the underlying Contract, then the terms of this bond shall prevail.

Signed and sealed this 25th day of June 2020

PRINCIPAL:

Consulting Engineering Inc.(seal)
Company (seal)



(Name & Title) Y Chan | Principal Owner

SURETY:

Philadelphia Indemnity Insurance

Massimo Schirru, Attorney-in-Fact

**Philadelphia Indemnity Insurance Company
Annually Renewable Performance Bond**

KNOW ALL MEN BY THESE PRESENTS: That CONSULTING ENGINEERING INC. (hereinafter called the Principal), and **Philadelphia Indemnity Insurance Company** (hereinafter called the Surety), are held and firmly bound unto THE VILLAGE OF BUFFALO GROVE, ILLINOIS(hereinafter called the Obligee), in the full and just sum of Twenty-Four Thousand Seven Hundred Five and 00/100 (**\$24,705.00**), the payment of which sum, well and truly to be made, the said Principal and Surety bind themselves, and each of their heirs, administrators, executors, and assigns, jointly and severally, firmly by these presents.

WHEREAS, the Principal has by written agreement dated the 23rd day of June,2020 entered into a Contract with the Obligee for Leak Detection Surveywhich contract is hereby referred to and made a part hereof.

WHEREAS, the Obligee has agreed to accept a bond guaranteeing the performance of said contract for a period of one year.

NOW, THEREFORE, THE CONDITIONS OF THE ABOVE OBLIGATION IS SUCH, that if the Principal shall well and truly perform each and every obligation in said Contract at the time and in the manner specified during the term of this bond, and shall reimburse said Obligee for any loss which said Obligee may sustain by reason of failure or default on the part of said Principal, than this obligation shall be void, otherwise to remain in full force and effect.

PROVIDED, HOWEVER, That this bond is subject to the following conditions:

1. This bond is for the term beginning July 13th, 2020 and ending July 12th, 2021. The bond may be extended for additional terms at the option of the surety, by continuation certificate executed by the Surety. Neither non-renewal by the surety, nor failure, nor inability of the Principal to file a replacement bond shall constitute a loss to the Obligee recoverable under this bond.
2. In the event of default by the Principal, Obligee shall deliver to Surety by certified mail, a written statement of the facts of such default, within thirty (30) days of the occurrence. In the event of default, the Surety will have the right and opportunity, at its sole discretion, to: a) cure the default; b) assume the remainder of the Contract and to perform or sublet same; c) or to tender to the Obligee funds sufficient to pay the cost of completion less the balance of the Contract price up to an amount not to exceed the penal sum of the bond. In no event shall the Surety be liable for fines, penalties, liquidated damages, or forfeitures assessed against the Principal.
3. No claim, action, suit or proceeding, except as hereinafter set forth, shall be had or maintained against the Surety on this instrument unless same be brought or instituted upon the Surety within one year from termination or expiration of the bond term.
4. No right of action shall accrue on this bond to or for the use of any person or corporation other than the Obligee named herein or the heirs, executors, administrator or successors of Obligee.
5. The aggregate liability of the surety is limited to the penal sum stated herein regardless of the number or amount of claims brought against this bond and regardless of the number of years this bond remains in force.
6. If any conflict or inconsistency exists between the Surety's obligations or undertakings as described in this bond and as described in the underlying Contract, then the terms of this bond shall prevail.

Signed and sealed this 25thday of June2020

PRINCIPAL:

Consulting Engineering Inc. (seal)
Company (seal)



(Name & Title) Y Chan | Principal Owner



SURETY:

Philadelphia Indemnity Insurance

Massimo Schirru, Attorney-in-Fact

PHILADELPHIA INDEMNITY INSURANCE COMPANY

One Bala Plaza, Suite 100
Bala Cynwyd, PA 19004-0950

Power of Attorney

KNOW ALL PERSONS BY THESE PRESENTS: That **PHILADELPHIA INDEMNITY INSURANCE COMPANY** (the Company), a corporation organized and existing under the laws of the Commonwealth of Pennsylvania, does hereby constitute and appoint **Michael N. Rudberg, Tayler Owen, Jill Allen Schirru and/or Massimo Schirru**, its true and lawful Attorney-in-fact with full authority to execute on its behalf bonds, undertakings, recognizances and other contracts of indemnity and writings obligatory in the nature thereof, issued in the course of its business and to bind the Company thereby, in an amount not to exceed \$25,000,000.

This Power of Attorney is granted and is signed and sealed by facsimile under and by the authority of the following Resolution adopted by the Board of Directors of PHILADELPHIA INDEMNITY INSURANCE COMPANY on the 14th of November, 2016.

RESOLVED: That the Board of Directors hereby authorizes the President or any Vice President of the Company: (1) Appoint Attorney(s) in Fact and authorize the Attorney(s) in Fact to execute on behalf of the Company bonds and undertakings, contracts of indemnity and other writings obligatory in the nature thereof and to attach the seal of the Company thereto; and (2) to remove, at any time, any such Attorney-in-Fact and revoke the authority given. And, be it

FURTHER RESOLVED: That the signatures of such officers and the seal of the Company may be affixed to any such Power of Attorney or certificate relating thereto by facsimile, and any such Power of Attorney so executed and certified by facsimile signatures and facsimile seal shall be valid and binding upon the Company in the future with respect to any bond or undertaking to which it is attached.

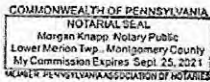
IN TESTIMONY WHEREOF, PHILADELPHIA INDEMNITY INSURANCE COMPANY HAS CAUSED THIS INSTRUMENT TO BE SIGNED AND ITS CORPORATE SEAL TO BE AFFIXED BY ITS AUTHORIZED OFFICE THIS 27TH DAY OF OCTOBER, 2017.



(Seal)

Robert D. O'Leary Jr., President & CEO
Philadelphia Indemnity Insurance Company

On this 27th day of October, 2017, before me came the individual who executed the preceding instrument, to me personally known, and being by me duly sworn said that he is the therein described and authorized officer of the **PHILADELPHIA INDEMNITY INSURANCE COMPANY**; that the seal affixed to said instrument is the Corporate seal of said Company; that the said Corporate Seal and his signature were duly affixed.



(Notary Seal)

Notary Public: Morgan Knapp
residing at: Bala Cynwyd, PA
My commission expires: September 25, 2021

I, Edward Sayago, Corporate Secretary of PHILADELPHIA INDEMNITY INSURANCE COMPANY, do hereby certify that the foregoing resolution of the Board of Directors and this Power of Attorney issued pursuant thereto on this 27th day of October, 2017 are true and correct and are still in full force and effect. I do further certify that Robert D. O'Leary Jr., who executed the Power of Attorney as President, was on the date of execution of the attached Power of Attorney the duly elected President of PHILADELPHIA INDEMNITY INSURANCE COMPANY,

In Testimony Whereof I have subscribed my name and affixed the facsimile seal of each Company this 25th day of June, 2020.



Edward Sayago, Corporate Secretary
PHILADELPHIA INDEMNITY INSURANCE COMPANY