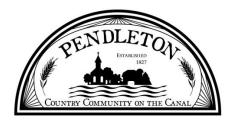
TOWN OF PENDLETON

6570 Campbell Boulevard Lockport, NY 14094



Supervisor Joel Maerten Councilman Jason Evchich Councilman David Fischer Councilman Justin Graham Councilman David Leible

At the regular meeting of the Town Board of the Town of Pendleton, Niagara County, New York, held in the Board Room at the Town of Pendleton Town Hall, 6570 Campbell Boulevard, Lockport, New York, 14094 at 7:00 p.m. on February 10, 2020.

WHEREAS, the Town of Pendleton operates a water distribution system, servicing property owners within the Town as well as providing roadside sources of water for fire protection services; and

WHEREAS, it is incumbent upon the Town of Pendleton to properly maintain all components of the water distribution system, limiting losses and ensuring continuous and reliable service; and

WHEREAS, efforts to date have been unsuccessful in identifying sources of water loss and such water loss exceeds acceptable and anticipated levels, necessitating further investigation to identify sources of water loss; and

WHEREAS, it is necessary and prudent to retain the services of experts who have the knowledge, tools, and experience necessary for identification of sources of water loss; and

WHEREAS, the Town of Pendleton has received a proposal for services from New York Leak Detection and upon review the Town Engineer has recommended to the Town Board that acceptance of said proposal is in the Town's best interest; and

NOW, **THEREFORE BE IT RESOLVED,** by the Town Board of the Town of Pendleton on this 10th day of February 2020:

- 1) The Town Board accepts the proposal for leak detection from New York Leak Detection (NYLD)
- 2) NYLD will conduct a comprehensive survey of the Town's water distribution system and will provide a written summary report upon completion of the work outlined in NYLD's proposal

Resolution Page: 1 of 2

- 3) Upon completion of the outlined work NYLD will be compensated up to \$9,900.00
- 4) This resolution shall take effect immediately upon approval by resolution of the Town Board.

The above resolution was offered by			, who moved for its
adoption, and seconded by		•	
The following vote was taken and re-	corded as:		
	Aye	Nay	
Supervisor Joel Maerten	-	-	
Councilman Jason Evchich			
Councilman David Fischer			
Councilman Justin Graham			
Councilman David Leible			



January 27, 2020

Town of Pendleton Dave Britton 6640 Campbell Blvd. Lockport, NY 14094 716-625-8033 David.britton@ghd.com

RE: Proposal - Leak Detection Survey

Dear Mr. Britton:

Thank you for contacting NYLD to provide a leak detection survey for the Town of Pendleton water distribution system.

New York Leak Detection, Inc. (hereafter referred to as NYLD) was organized to provide the best professional water leak detection services, fire flow testing, utility location, survey grade utility mapping, video inspection, data logging, and ground penetrating radar technology under one roof. NYLD is active in instructing and exhibiting leak detection and location services for the New York Rural Water Association, American Water Works Association and private water companies throughout the East Coast.

NYLD will conduct a comprehensive survey and, when appropriate, will perform the survey at night to minimize the effect of daytime usage and provide a higher degree of accuracy. The final leak survey report is a complete, easy-to-read summary of leaks detected and organized according to Type, Location, Estimated Gallons of Loss, and Priority Classification. NYLD ensures its clients will receive a complete and professional survey.

The cost for a comprehensive leak detection survey and report on approximately 58 miles of water distribution is \$9,900.00.

*Estimate only – NYLD has calculated costs based on the information and maps provided by the customer. The actual quantities may vary from those given depending on several factors beyond NYLD's control. If during the execution of the work, NYLD anticipates changes which would impact the estimated cost, NYLD will estimate the additional service and contemporaneously seek the customer's authorization of the changes.

NYLD provides all state-of-the-art electronics including: Ground Penetrating Radar 250 MHz (0'-30' depths), 500 MHz (0'-6' depths), 1000 MHz (0'-2' depths), variable wattage magnetometers, video inspection camera with locatable heads, computerized electronic acoustic leak locators, 350' fiberglass rods with sonde transmitters (15' and 40' depth potential), and all necessary support tools.

<u>Surveying and Mapping Equipment include:</u> Leica 780862 R400 Total Station with Power Search & Automatic Target Aiming, Leica 772300 RH15 Radio Handle with Integrated Radio Modem and Radio Antenna, Leica 781600 CS15 3.5G & Radio Field Controller, Leica GNSS Smart Antenna Geodetic 120 channels, and Carlson/AutoCAD 2011 software. Crossover technologies are maximized to ensure the highest degree of accuracy on all location projects.

<u>Specialized Services Available Upon Request:</u> Profiler EMP-400 (electromagnetic induction sensor), Pressurized Pipe Inspection for internal condition assessment and leak detection utilizing JD7 Investigator, Valve Exercising Services including operation and cleaning of valve boxes and data collection utilizing Wachs Grand LX Valve Maintenance Trailer.

Should you have any questions, you may contact me via e-mail or at the phone/fax numbers provided below. Thank you for the opportunity to submit this proposal.

Sincerely,

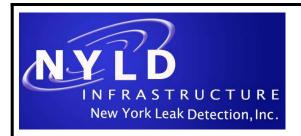
Mark Manzari Vice President Director of Operations

Phone (315) 469-4601 • Toll Free (800) 928-4350 • Fax (315) 469-2868 PO Box 269 Jamesville, NY 13078 • www.nyld.com • info@nyld.com



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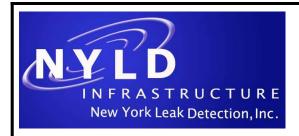
FED-ID. 10-1299320	
Please acknowledge your acceptance of this proposal by si	igning below and returning to NYLD.
Print Name & Title	Date
Signature of Authorized Party	
Pricing is valid for 30 days from date of proposal.	
	ing of a schedule cancellation. If NYLD is able to re-schedule with another .D is unable to re-schedule with another party, client will be billed for the full
	ting is an art as well as a science, and that there are innumerable variables accuracy in locating underground leaks or utilities, and disclaims all liability
NYLD strives to provide the highest quality service with the ework provides our customers with the information they need	experience of the technicians and equipment used. It is our desire that our without adverse consequences.



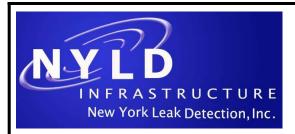
Leak Detection Methods & Procedures

New York Leak Detection, Inc. (NYLD) surveys for and pinpoints water leaks using the latest non-invasive, non-intrusive leak detection technology available. NYLD uses a sonic leak detection sound amplification instrument in conjunction with a sensitive transducer, as well as various sophisticated equipment from correlators to ground microphones. NYLD equips each mobile unit with pipe tracing and box locating equipment. Experienced, skilled Water Loss Specialists are fully trained to operate the leak detection equipment. A detailed report of leak locations, estimated water loss, and areas covered is supplied daily. A final report is provided at the completion of the project. In general, most leak detection surveys are performed during early morning periods for optimal low usage conditions.

- NYLD will review the water distribution maps of the client's system for familiarization of the pipe network and available appurtenances (valves, services, hydrants, etc.) to be used as contact points.
- As the leak survey progresses, NYLD determines the distance that even quiet leak sounds travel in various pipe materials, pipe sizes, and pressure zones in each area of the distribution system. This will be done by asking the municipality to slightly turn on fire hydrants, hose bibs, etc., creating a simulated quiet leak sound. Appurtenances in that area are then checked with a sound amplification instrument to see how far the simulated leak sound travels, thus determining how often NYLD will make contact with appurtenances in a given section of the water distribution system.
- NYLD then conducts a comprehensive survey by making physical contact with all available main line
 appurtenances and selected customer services. NYLD uses a sonic leak detection sound amplification
 instrument designed for this purpose. When surveying PVC pipelines, NYLD will make contact with all
 available appurtenances.
- Contact is then made with pipe appurtenances at intervals no greater than 300 feet where contact points are available and accessible, or at predetermined distances as noted in Paragraph B (whichever distance is less). This allows for even more quiet leaks to be located.
- When normal contact points are not available or cannot be created within a reasonable distance (as described in Paragraph D), NYLD will attempt to use a sonic ground listening instrument making physical ground contact at intervals no greater than 6 feet directly over the pipe. If conditions do not allow this procedure, NYLD's Water Loss Specialist will advise the client at time of the project. If excessive ambient noise precludes the effectiveness of the ground listening device in an area during daytime hours, arrangements will be made to schedule this portion of the survey for night time hours. NYLD will preapprove these situations with the customer. Ground listening devices are employed when ground cover is pavement, cement or a similar hard surface. Direct contact to the main line at intervals outlined in preparation for service will result in the most thorough survey.
- When ground cover is not a hard surface, probe rods will be used at 6-foot intervals when normal contact
 points are not available (as described in Paragraph D). A sound amplification instrument with
 attachments is used on probe rods. Probe rods will be driven into the ground a minimum of 6" directly
 over the pipe when ground conditions allow.



- A detailed report of peak levels at suspected leak sound locations and observations are compiled during
 the survey for reinvestigation and possible pinpointing at a later time. This reinvestigation is to increase
 the speed of the survey and will eliminate correlating on most false leak sounds (i.e., service draw).
- All indications of leaks found during a survey will be verified a second time, after which the leak shall be pinpointed to the closest probable location with a computer-based leak sound correlator (when possible).
- Pinpointed leak locations through interpretation of sound intensity, either by ear, decibel metering, or other like methods is not used when contact points are available for use with a correlator.
- The equipment utilized does not normally require valves to be operated during surveying and pinpointed. However, on occasion, services or valves may need to be operated to eliminate service draw noises or to change velocity noise. Operation of valves will be performed by the municipality.
- The equipment used will have the capability to prompt the operator to input the variables when different pipe sizes and/or pipe materials are encountered in the same span to be investigated. This is necessary to ensure accuracy of results based on the automatic computation of the correct leak sound velocity in leak pinpointing operations. Our correlator has the capability of correlating up to 7 different pipe materials or diameters within a given span. To ensure effective performance in all field environments encountered in a distribution system (i.e. traffic noise, service draw, pump operation, industrial noise, etc.) the correlator equipment provides 12 multi-range high and low pass filters.
- NYLD will furnish an experienced professional Water Loss Specialist, leak detection instruments, equipment and tools to complete the survey and leak pinpointing.
- NYLD Water Loss Specialists will perform their utmost effort to pinpoint the closest possible location all existing leaks.
- Client is to furnish qualified individual to assist in locating appurtenances (when necessary), communicating directions, and to provide maps of areas to be surveyed.
- When the customer makes a repair prior to the completion of the leak survey, NYLD will resurvey that section of the system to eliminate the existence of smaller leaks that may have been masked by a larger leak signal.



NYLD Subsurface Consultants are cross-trained in all aspects of leak detection and utility location:

- Leak Detection
- Comprehensive Leak Detection Surveys
- Fire Flow Testing
- Utility Location
- Ground Penetrating Radar
- Video Pipe Inspection
- Data Logging
- Survey Grade Utility Mapping

Standard List of Leak Detection and Utility Location Equipment

- FCS S-30 Surveyors
- LC-2500 Subsurface Correlators
- RD-8000 Cable and Pipe Locating System (Variable Wattage)
- Noggin 250 MHz (0'-30' depths), & 500 MHz (0'-6' depths), Smart Cart Ground Penetrating Radar for locating metallic and non-metallic pipes and structures
- Conquest 1000 MHz (0'-2' depths) Ground Penetrating Radar concrete imaging system
- GatorCam Video Inspection Camera with Locatable Camera Head
- 350' Fiberglass Rods with Sonde Transmitters
- Laptop Computers for mapping and reporting locations of leaks, utilities and subsurface objects
- Safety Equipment (for personal protection & traffic control)
- Numerous tools to maximize efficiency including probe rods & various water valve keys

Crossover technologies are maximized to ensure the highest degree of accuracy on all location projects

Specialized Equipment

- PosiTector UTG G3 Advanced (pipe wall thickness)
- Profiler EMP-400 (electromagnetic induction sensor)
- JD7 Investigator Pressurized Pipeline Inspection Camera
- Wachs Grand LX Valve Maintenance Trailer
- Leica RTK GPS + Robotic Total Station
- Carlson/AutoCAD software
- Correlating Data Loggers
- Akron Water Flow Test Kit