VILLAGE OF LOMBARD REQUEST FOR BOARD OF TRUSTEES ACTION

For Inclusion on Board Agenda Bids and Proposals

TO :	President and Village Board of Trustees					
FROM:	Scott Niehaus, Villa	ige Mar	nager			
DATE :	<u>June 7, 2017</u>	Agend	la Date <u>June</u>	e 15, 2017		
TITLE :	Waiver of Bids - Midwest Water Group, Inc. SL-RAT Acoustic Pipeline Assesment Project					
SUBMITTED BY:	Brian Jack, Utilities	Superi	ntendent			
RESULTS: Date Bids Were Put Total Number of Bi		- fication	Bidding Clo	osed		
Bid Security Requir		ilcatioi	Yes	– No	1	
			Yes	No.		
Performance Bond Required Were Any Bids Withdrawn			Yes	No		
Explanation:						
Waiver of Bids Req	mested?	X	Yes	N	0	
If yes, explain:						
	ded to Lowest		Yes	N	0	
Responsible Bidder						
If no, explain:						
Amount of Award	e/budget estimate <u>\$</u> 1 <u>\$93,475 FY 2017</u> V 475) and RM PROG	Vater &	Sewer Capi	ital Reserve	e Fund 520.	790.715.75350
BACKGROUND/ Waive bids and aw exceed \$93,475 in F	RECOMMENDATION Vard a contract for SL	ON: -RAT A	Acoustic Pipe	eline Assesi	nent for am	ount not to
слесси фубулу пт 1	12017					
	d Bidder Worked for	Village	Previously	X Yes		
	of work acceptable			_XYes		
	cordance with Public			Yes	_X_No	
Waiver of bids - Pu	ıblic Act 85-1295 doe	s not ap	oply	X Yes		
REVIEW (as neede	od).					
				Date		
	nge Attorney XX Date nce Director XX Date					
	/illage Manager XX Date Date					
Village Mallager AA						

NOTE: All materials must be submitted to and approved by the Village Manager's Office by 4:30 pm, Wednesday, prior to the Board Agenda distribution.



MEMORANDUM

To:

Scott Niehaus, Village Manager

Through:

Carl S. Goldsmith, Director of Public Works 1/2

From:

Brian M. Jack, Utilities Superintenden

Date:

June 7, 2017

Subject:

SL-RAT Acoustic Pipeline Monitoring & Assessment Project

Waiver of Bid

Background

The Underground Utilities Division maintains 140 miles of sanitary and 110 miles of storm sewer mains to include flushing/cleaning, televising, and repairs. Flushing and cleaning is completed by in-house crews on a four year rotating cycle of sewer mains eight inches up to fifteen inches in diameter. Sewer mains fifteen inches and larger are completed via contractor following the same four year cycle one year behind the inhouse crews. The Division strives to eliminate all Sanitary Sewer Overflows (SSOs) and disruption in sewer service to the residents of Lombard.

In 2007 the Public Works Department began treating sewer mains with a chemical root treatment to slow and eliminate the growth of tree roots in the mains. This program has been successful in reducing the number of SSOs down to less than one per year on average. It has also reduced the frequency in sewer flushing/cleaning in the treated areas due to the reduction in tree roots and the collection of debris due to the roots allowing the Division to increase flushing/cleaning in areas needing more frequent attention.

As technology progresses in maintenance and inspections, the Public Works Department continually looks for techniques to increase efficiencies, reduce costs, and increase services to its residents.

Discussion

The Utilities Group was presented with a new technology and process of an acoustic inspection tool (Sewer Line – Rapid Assessment Tool or **SL-RAT**) which provides sewer line blockage assessment in sewer mains. This tool uses active acoustic transmissions through a selected section of sewer main to determine the amount of blockage in that section of pipe. Once all of the data is collected, a report is generated with a condition

or blockage rating of the inspected sewer main segments. This will allow the Underground Utilities Division to focus more on higher priority sewer mains with a higher percentage of blockages and not have to flush or clean basically clear sewer mains. With this technology and inspection program, more frequent flushing and cleaning can be done in problem areas increasing service levels and more efficient operations and reduced costs. Although this technology cannot pinpoint blockages or see what type of blockage is in the pipe, it is a fraction of the cost of video inspection. It is intended to aid the Village in focusing its routine flushing and cleaning program, video inspections, repairs, and replacements in areas needed instead of doing blanket video inspection and flushing/cleaning of the entire system.

An SL-RAT pilot program was completed in October of 2016 of 50,000 linear feet of sewer main in the area of Roosevelt Rd. to Wilson Ave. from Westmore-Myers Rd. to Finley Rd (see enclosed map). This area was chosen due locations of higher frequency of maintenance issues and suspected high occurrences of inflow and infiltration of ground water into the sanitary sewers.

The assessment graded each sewer segment as good, fair, poor, and blocked which are represented by colors on each segment (green, yellow, red, and white respectively). The pilot program identified the following percentages within each category:

GOOD -	65%	POOR -	8%
FAIR -	23%	BLOCKED -	4%

The Underground Utilities Division focused on the poor and blocked segments for verification of the assessment through sewer flushing and root cutting to find that the assessment was accurate and the identified lines were cleared and returned to normal flows.

The current industry standard flor sewer inspection is Closed Circuit Deletion (CCTV), in which the sewer is cleaned before it is televised. This standard gives excellent information but is labor intensive and costly by having staff spend many hours watching video of good or clean sewer pipe. With the advancement of technology, the industry as a whole is shifting from cleaning before inspection to inspection before cleaning. The SL-RAT technology provides an initial inspection assessment of the Village's sewer system and will help program and guide areas of need for maintenance, repair, or replacement at a significantly lower cost and shorter time frame than typical CCTV inspections.

A comparison of cost between typical CCTV and SL-RAT inspection was done using average cost per linear foot to show the real savings this technology can provide.

Inspection Type	Price per Linear Ft	Footage of Sewer Main < 18"	Total Cost	Savings
CCTV	\$1.75	601,933 ft.	\$1,053,382.75	\$902,899.50
SL-RAT	\$0.25	601,933 ft.	\$ 135,483.25	φ 9 02,099.30

The above table represents if all sewers 18" or smaller were done by each type of inspection process. As you can see the SL-RAT is significantly less expensive by 87%. The savings will allow the Village to utilize funds to focus on areas that are in the most need of maintenance and not spend valuable funds and time on good pipe.

This new technology and pilot program results were presented to the Public Works Committee on December 12, 2016. The committee was supportive of moving forward in utilizing this technology for planning of future projects and routine maintenance in the Capital Budget. The goal is to have the entire Village Sanitary Sewer Collection system inspected by the end of 2018. Half of the Village will be completed in 2017 and the remainder in 2018. This will provide a comprehensive base line assessment of the sanitary system and will allow staff to allocate budgeted funds to targeted areas.

Staff has received the following proposal from the following firm:

VENDOR	COST PER LF	LINEAR FT	COST PER MANHOLE GPS	# OF MANHOLES	TOTAL
Midwest Water Group, INC – Chicago, IL	\$0.25	280,000	\$15.00	1,565	\$93,475

The 2017 inspection area will be from Madison St. to the southern limits of Lombard and will include the area from Madison St. to St. Charles Ave. / Main St. to Rt. 53. This area will encompass the pilot program done in 2016 so the entire southern half of Lombard will be completed. Included in the proposal is a unit cost to GPS the manhole structures in the inspection area. This information will be beneficial in recording accurate location of Village assists for the assets management program.

Recommendation

The Utilities Group recommends waiving the bidding process and accepting the proposal for the Sewer Line Inspection using the SL-RAT technology as submitted by Midwest Water Group, Inc. of Chicago, IL and authorize an agreement in an amount not to exceed \$93,475. Funds are realized in RM PROG 31 Backyard Sewer Lining and RM PROG 14 Large Diamter Sewer Flushing from substantial savings in awarded contracts for 2017.





MIDWEST WATER GROUP, INC. 4410 S HI-POINT RD. MCHENRY, IL. 60050 Phone: 866.526.6558 Fax: 866.526.6559 www.midwestwatergroup.com

Item

Date:

6/2/2017

Quote #:

2571

Inside SR: Outside SR:

Unit Price

MH CS

Total

Ship To:

Village of Lombard-PW 1051 S. Hammerschmidt Lombard, IL 60148 ATTN: Brian Jack

Qty

Bill To:

Village of Lombard 255 E. Wilson Ave Lombard, IL 60148

Description

SL-RAT INSPEC	Sewer Line Inspections using SL-RAT	280,000	0,25	70,000.00
GPS	(Minimum of 50,000 ft) GPS Coordinates	1,565	15.00	23,475,00T
	Sales Tax		0.00%	0.00



8116 South Tryon St Suite B3-203 Charlotte, NC 28273 USA

June 2, 2017

To Whom It May Concern:

InfoSense, Incorporated in Charlotte, North Carolina is the <u>sole manufacturer</u>. <u>supplier and distributor</u> of the Sewer Line Rapid Assessment Tool or SL-RAT® and its supporting software, the Sewer Line Data Organizer or SL-DOGTM. Midwest Water Group is our exclusive certified contractor for the state of Illinois. You may contact them at (630) 408-7323 or email Michelle Harrod at michelleh@midwestwatergroup.com.

The SL-RAT® line of acoustic pipe inspection equipment is patent-protected under U.S. Patent #8220484 and other pending patents. InfoSense manufactures the only product that uses Active Acoustic transmissions between a transmitter and a receiver in adjacent pipes to provide an aggregate blockage assessment.

The SL-RAT® makes use of the fact that water and air flow similarly within a pipe. Our proprietary algorithms exploit this fact to assess blockage within a pipe segment – typically within 3 minutes or less and with no flow contact.

Sincerely,

Alex Churchill

COO

InfoSense, Inc.



VILLAGE OF LOMBARD

Contract for Sewer Line Inspection Using SL-RAT

This agreement is made this 15th day of June, 2017, by and between, and shall be binding upon, the Village of Lombard, an Illinois municipal Corporation hereinafter referred to as (the "Village") and <u>Midwest Water Group, INC.</u> hereinafter referred to as (the "Contractor").

Witnesseth That in consideration of the mutual promises of the parties delineated in the Contract Documents, the Contractor agrees to sell and the Village agrees to pay for the following described items as set forth in the Contract Documents:

Sewer Line Inspection Using SL-RAT in an amount not to exceed \$93,475.00

- 1. This Contract shall embrace and include all of the applicable Contract Documents listed below as if attached hereto or repeated herein:
 - a. The Contractor's Proposal dated June 6,2017
 - b. Required Certificate of Insurance, Indemnification, Venue, Other Contractor Responsibilities
- 2. The Village agrees to pay, and the Contractor agrees to accept as full payment for the items which are the subject matter of this Contract the total sum of \$93,475.00 paid in accordance with the provisions of the Local Government Prompt Payment Act and the provisions of the Contract Documents.
- 3. Risk of loss, destruction or damage of or to goods under this Contract shall be on contractor until delivery of the goods to the Village and acceptance of the goods by the Village.
- 4. The Contractor agrees to perform the terms of this Contract according to the following schedule set forth in their quotation after the Notice to Proceed has been delivered. Time is of the essence of this Contract.

IN WITNESS WHEREOF, the Village of Lombard, Illinois by Village Manager, and the Contractor have hereunto set their hands this 15th day of June, 2017.

If an individual or partnership, all individual names of each partner shall be signed or if a corporation, an officer duly authorized shall sign here:

Accepted thisday of, 20					
Individual or Partnership	p Corporatio	on			
Ву	Positi	on/Title			
Ву	Positi	on/Title			
Print Company Name		<u></u>			
THE VILLAGE OF LOM	BARD, ILLINOIS				
Accepted this 15th day of	June, 2017.				
		Keith Giagnorio Village President			
	Attest				
		Sharon Kuderna Village Clerk			

VILLAGE OF LOMBARD CONTRACTOR'S CERTIFICATION

				, having been first duly sworn, depose and states as
follows				
I	((Officer or O	wner of Company) the	_ for
1		aiii	tric	
Village and be	e of ein _t ce	Lombar g author rtifies th has a w	d and, having ized by the Catsaid Contract	(Name of Company) Ibmitted a proposal for Well #11 Abandonment to the personal knowledge of the matters certified to herein, Contractor to make the certifications set forth herein, etor: It arassment policy in place, in full compliance with 775
	2.	Departra. it is with b. it had pays	nent of Revenu contesting its li procedures es s entered into a	e payment of any tax administered by the Illinois ne, or if it is: ability for the tax or the amount of tax in accordance tablished by the appropriate revenue Act; or an agreement with the Department of Revenue for s due and is currently in compliance with that
	3. is in full compliance with the Federal Highway Administration Rule. Controlled Substances and Alcohol Use and Testing, 49 CFR Parts 40 and that			
	_			(Name of employee/driver or "all employee drivers")
			currently partic forementioned	ripating in a drug and alcohol testing program pursuant rules; and
	4.	result o	arred from con of a violation of Criminal Code	either Section 33E-3 or 33E-4 of Article 33E of the of 1961.
				By:Authorized Agent of Contractor
		ed and s ie this	worn to, 2017.	
Nota	v F	Public		