

AGENDA

A MEETING OF THE MUNICIPAL SERVICES COMMITTEE TO BE HELD ON MONDAY, JULY 27, 2020, AT 5:30 P.M. AT THE VILLAGE HALL, 835 MIDWAY DRIVE, IN THE VILLAGE OF WILLOWBROOK, DUPAGE COUNTY, ILLINOIS

DUE TO THE COVID 19 PANDEMIC THE VILLAGE WILL BE UTILIZING A CONFERENCE CALL FOR THIS MEETING.

THE PUBLIC CAN UTILIZE THE FOLLOWING CALL IN NUMBER:

Dial in Phone Number: 630-920-2488
Code: 012153#

Written Public Comments Can Be Submitted By 5:15 pm on July 27, 2020 to mmertens@willowbrook.il.us

1. CALL TO ORDER
2. ROLL CALL
3. APPROVAL OF MINUTES:
 - a. June 22, 2020 Meeting of the Municipal Services Committee
4. Discuss Potable Water Circulation Equipment for the 3-Million Gallon Standpipe
5. Discuss Valve Exercising Program / Leak Survey Pro-Maps Atlas Update Program
6. SUPERINTENDENT OF PUBLIC WORKS UPDATE
 - a. Clarendon Hills Culvert project
 - b. MFT Program
 - c. Water and Refuse Reports
 - d. May 2020 Monthly Permit Activity Report
7. VISITOR'S BUSINESS

(Public comment is limited to three minutes per person)

8. ADJOURNMENT

Mayor

Frank A. Trilla

Village Clerk

Leroy R. Hansen

Village Trustees

Sue Berglund

Umberto Davi

Terrence Kelly

Michael Mistele

Gayle Neal

Paul Oggerino

Village Administrator

Brian Pabst

Chief of Police

Robert Schaller

Director of Finance

Carrie Dittman



MINUTES OF THE REGULAR MEETING OF THE MUNICIPAL SERVICES COMMITTEE OF THE VILLAGE OF WILLOWBROOK HELD ON MONDAY, JUNE 22, 2020 AT 5:30 P.M. AT THE VILLAGE HALL, 835 MIDWAY DRIVE, IN THE VILLAGE OF WILLOWBROOK, DUPAGE COUNTY, ILLINOIS

1. CALL TO ORDER

Chairman Oggerino called the meeting to order at 5:30 PM. It was noted that this meeting was held via conference call due to the Covid-19 pandemic.

2. ROLL CALL

Those present at roll call were Chairman Paul Oggerino, and Assistant Village Administrator Michael Mertens.

Also present via conference call were Trustee Terrence Kelly, Trustee Sue Berglund, and Superintendent of Public Works Joe Coons.

3. APPROVAL OF MINUTES

After review of the draft minutes from the May 26, 2020 meeting of the Municipal Services Committee, Trustee Terrence Kelly made a motion to approve the minutes as presented. Trustee Sue Berglund seconded the Motion. Roll call vote. Motion Carried.

4. DISCUSSION – THE CULVERT REPLACEMENT PROGRAM AT CLARENDON HILLS ROAD AND KNOLLWOOD DRIVE

Superintendent Coons discussed the condition of the culvert pipe under Clarendon Hills Road at Knollwood Drive as being in poor condition with portions of the pipe collapsing. This repair was added to the storm maintenance budget line for FY 2020/21. The amount budgeted for this project is \$32,500. The amount for the various contractor expenses came in at \$29,964.20. The recommended project vendors are as follows:

- H&R Construction (installation) at \$14,985.00,
- Traffic Control and Signage (detour signage) at \$4,300.00,
- Alliance Concrete Sawing & Drilling (street cutting) at \$6,240.00,
- Falco's Landscaping (concrete) at \$2,500.00, and
- Welch Brothers (culvert) at \$1,939.20.

Superintendent Coons outlined the steps to complete the project. The project should take four (4) to five (5) days to complete. The final asphalt repair will be completed as part of the 2020 MFT road program. Superintendent Coons recommended that this job be done sooner than later to prevent a total collapse of the pipe that could lead to flooding. Trustee Berglund asked about notification to the residents in the surrounding area. Superintendent Coons advised that the proper notification would be done to the residential properties once the project was approved. Staff recommends the Committee to refer these proposals to the Village Board for formal consideration at the June 22, 2020 Village Board meeting. Assistant Administrator Mertens added that there are five (5) resolutions related to this project on the consent agenda for the Board meeting this evening.

Trustee Terrence Kelly made a motion to recommend the project to the Village Board as presented. Trustee Sue Berglund seconded the Motion. Roll call vote. Motion Carried.

5. DISCUSS WATER LATE FEES AND WATER SHUTOFFS DURING THE COVID-19 PANDEMIC

Assistant Administrator Mertens explained that due to the Covid-19 Pandemic, staff was directed not to issue late fees on water bills and not to do water shut-offs for both commercial and residential properties. Assistant Administrator Mertens is seeking direction from the Committee on the timing for resuming ~~our~~ normal billing and shutoff process.

The normal process is as follows:

- The next billing cycle starts July 1, 2020.
- Payments are due 30 days after the bill is issued.
- On the 31st day, a 10% penalty is added to any unpaid accounts giving the account holder an additional fifteen (15) days to pay before a shutoff letter is mailed and \$25 is added to their account.
- The shutoff date for said letter is the day after the following second Monday of the month board meeting.
- If payment is not made, water is shutoff and a \$70 fee is added to the account.
- Residential properties are billed over three (3) billing cycles during each quarter. Commercial properties are billed every month.

The average amount in late fees per mailing is \$1,407.00. A survey was done of surrounding communities to see how this situation was being handled. DuPage County is currently not applying late fees or doing water shut offs. Most of the surrounding Villages are doing the same practices as Willowbrook but are looking to resume standard operations. Assistant Administrator Mertens recommended the Village resume our normal process starting with the July billing cycle and to waive past late fees from the previous three (3) months. Trustee Kelly asked who had decided to implement the no late fees and shut offs. Assistant Administrator Mertens said that this was decided by Mayor Trilla.

Upon discussion, the consensus of the Committee was to concur with the staff recommendation. A roll call was done to recommend going back to business as usual, and the motion was passed.

Assistant Administrator Mertens said that he would notify the full board of the recommendation by the Committee.

6. SUPERINTENDENT OF PUBLIC WORKS UPDATE

Meter Testing Project – Superintendent Coons advised that this project was in the final stages with only a few businesses left to complete. The Village replaced 2-3 meters at the time of this meeting.

MFT Program – The Village is currently waiting on the State authorization of the program. The project will go out for bid once we get authority from the State. The Bid package is anticipate being presented to the Village Board on July 27th or August 10th. Once the contract is awarded, the Village then must give notice back to the State. Staff would anticipate the construction to commence in September.

Assistant Administrator Mertens advised that there would be a separate contract for the grinding and resurfacing of the Village Hall parking lot.

Water and Refuse Reports – Refuse report was normal, and the water report numbers were still down compared to last year due to the shutdown.

May 2020 Monthly Permit Activity Report – Standard report with a few substantial permits issued.

Superintendent Coons also added that the annual fire hydrant program has started. The program requires early morning hours to do this work as not to effect normal business operations.

The Public Works Department is looking to fill a summertime position due to one of its members leaving for a new internship.

7. VISITORS BUSINESS

None

8. ADJOURNMENT

Motion to adjourn was made by Trustee Kelly, seconded by Trustee Berglund. Roll call vote. Motion Carried.

The meeting was adjourned at 5:53 PM.

MUNICIPAL SERVICES COMMITTEE MEETING
AGENDA ITEM SUMMARY SHEET

AGENDA ITEM DESCRIPTION

Discuss Potable Water Circulation Equipment for the 3-Million Gallon Standpipe

COMMITTEE REVIEW

- ☐ Finance/Administration
☒ Municipal Services
☐ Public Safety

Meeting Date:

July 27th 2020

- | | |
|---|---|
| <input type="checkbox"/> Discussion Only | <input checked="" type="checkbox"/> Approval of Staff Recommendation (for consideration by Village Board at a later date) |
| <input type="checkbox"/> Seeking Feedback | <input type="checkbox"/> Approval of Staff Recommendation (for <u>immediate</u> consideration by Village Board) |
| <input type="checkbox"/> Regular Report | <input type="checkbox"/> Report/documents requested by Committee |

BACKGROUND

A standpipe water circulation system was included as part of the Village of Willowbrook FY 2020/2021 water improvement program. The budgeted amount for the capital improvement program was in an amount of \$25,000. The potable water circulation system is proposed for the 3-million-gallon standpipe at the Public Works facility located on Willowbrook Centre Parkway.

In the winter of 2018/19 a polar vortex hit the Midwest region. This deep freeze triggered ice to form in the standpipe that caused significant damage to the cathodic protection equipment inside the tank. The standpipe needed to be completely drained to make the necessary repairs.

Public works staff recommend the installation of the water circulation system as the mixer system helps circulate the water in the tank to keep it from becoming stagnant at the bottom of the tank, and to keep chlorine levels consistent in the standpipe. Another benefit of the circulation system would be to keep water moving in the tank during the cold winter months to prevent ice buildup.

The potable water circulation system is summarized as follows:

GS-A15 Submersible Air Mixer System by GridBee	\$19,725.00
Installation of the Air Mixer System	\$5,000.00
Total	\$24,475.00

Note Jude Vickery works for Corrpro/Aegion and has done the maintenance on our cathodic protection for our water tanks for many years and is familiar with our system. SCADA connection provided by others.

STAFF RECOMMENDATION

Staff recommends the purchase and installation of the potable water circulation system.

Quote

Jude Vickery
43 West St.
Bristol, IL 60512-9764
630-777-2350
judevickery@live.com

DATE	Quote #
7/2/2019	266

BILL TO
Christopher B. Burke Engineering, Ltd 9575 W. Higgins Rd. Rosemont, IL 60018

ITEM	DESCRIPTION	QTY	RATE	AMOUNT
Custom Work	GS-A15 Submersible Air Mixer with 0.5hp compressor, GS-A Air Hose Cold Weather Kit: w/ air hose heating element, 150' interior and 200' exterior air hose, GS Series Control Box with SCADA Monitoring, and freight charges.	1		19,380.00
Custom Work	Installation of all equipment listed above, including parts, labor, testing, and energizing system. (SCADA connection provided by others.)	1		5,000.00

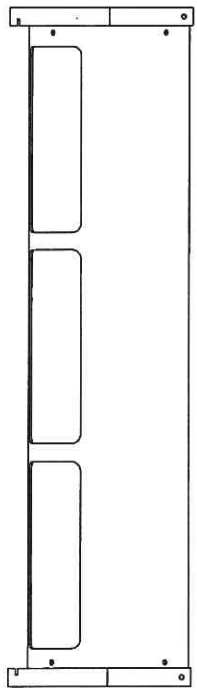
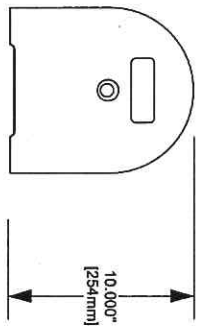
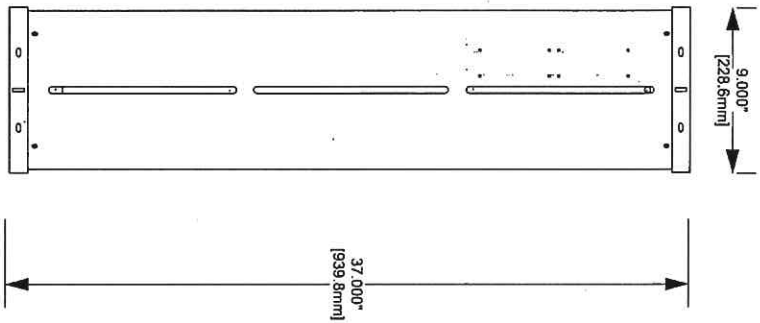
Any sales tax, if applicable, will be added to final invoice. Equipment charges based on quote from Medora Corporation to Christopher B. Burke Engineering, Ltd.

Subtotal	24,380.00
0% Tax	
Total	24,380.00
Balance Due	24,380.00

GS-A15 FEATURES

Technology Description	Submersible, air powered, circulation equipment for potable water tanks and reservoirs. Designed for continuous operation and can be installed through roof hatch without requiring tank entry.
Minimum Access Opening / Machine Size/Weight	Machine can be installed through 12 inch (30 cm) diameter opening. Assembled machine is 3 feet (0.9 meter) in length X 10 inch (25.4 cm) in diameter and weighs 50 pounds (23 kg).
Materials of Construction	316 stainless steel shell and hardware construction. GS-A15 has been constructed using materials safe for use with potable water. See certifications section below.
Air Supply Accessory	See Accessory Air Supply Specification Sheet.
Recommended Air Supply	1 to 4 cubic feet per minute (0.03 to 0.12 cubic meters per minute) @ 1psi (7.0 kiloPascal) + head pressure of water height above machine.
Air Hose Connection	Machine is provided with a 1/2 inch air hose connection point supplied with 100 ft air hose. For self-supplied air source, a 1/2 inch valve and 0-30 psi pressure gauge are included for regulating air to machine.
Minimum Operating Depth	Machine requires 20 inches (0.5 m) of water to effectively circulate. No damage to machine when run dry in shallow water or drained condition.
Maximum Operating Depth	Maximum air discharge depth is limited by the air supply pressure available.
Sealed Tank Fitting	316 stainless steel tank fitting and strain relief fitting included for sealed hose entry through tank roof.
Retrieval Chain	100 ft (30 m) of 316 stainless steel retrieval chain included for machine installation and retrieval without requiring tank entry.
Accessories Available	(1) Extended Hose and Chain Kit (100')
Warranty	Limited 5-year parts and labor warranty on mixer. Limited 1-year manufacturers warranty on Air Supply Accessory. See GS Warranty Statement for Details.
Certifications	Medora Corporation's potable water products are certified to ANSI/NSF Standard 61, including Annex G for low-lead content. Learn more at: www.medoraco.com/std61
Enclosed Area Warning	Air powered mixers should not be used in enclosed areas where methane or other explosive gases could build up. Some gases can explode when combined with air. Please verify that you have proper ventilation to prevent a buildup of methane gas or other gases in the headspace above the explosion limit.

Subject to change without notice.



MATERIAL: T316 Stainless Steel		PROPERTY AND CONFIDENTIAL	
Acetron® GP acetel Quadrant EPP		THIS DRAWING IS THE PROPERTY OF MEDORA CORPORATION. ANY REPRODUCTION IN PART OR IN WHOLE WITHOUT THE WRITTEN PERMISSION OF MEDORA CORPORATION IS PROHIBITED.	
Tivar® 1000 UHMW-PE Virgin		TITLE:	
SCALE: 1:10		MODEL GS-A15	
DRAWN BY: Medora Corp.		OVERALL DIMENSIONS	
DATE: 2016/05/27		DOCUMENT: 1803_20160527	

MUNICIPAL SERVICES COMMITTEE MEETING
AGENDA ITEM SUMMARY SHEET

AGENDA ITEM DESCRIPTION

COMMITTEE REVIEW

Discuss Valve Exercising Program/Leak Survey Pro-Maps Atlas Update Program

- ☐ Finance/Administration
☒ Municipal Services
☐ Public Safety

Meeting Date:

July 27th 2020

- | | |
|--|---|
| <input type="checkbox"/> Discussion Only | <input type="checkbox"/> Approval of Staff Recommendation (for consideration by Village Board at a later date) |
| <input checked="" type="checkbox"/> Seeking Feedback | <input type="checkbox"/> Approval of Staff Recommendation (for <u>immediate</u> consideration by Village Board) |
| <input type="checkbox"/> Regular Report | <input type="checkbox"/> Report/documents requested by Committee |

BACKGROUND

The Village of Willowbrook has budgeted to have a valve exercising and leak detection program completed for Village watermain system. The proposed program would locate and operate all designated valves in the system in accordance with American Water Works Association standards. The data location is gathered and incorporated into GPS system. It is important that the Village know the exact location of the valve system in case of water main breaks, shut off needs or firefighting efforts. The valve exercising portion will help us to determine if we have deficiencies in our system that may need repairs. Also included is the Pro-Maps Atlas Update Program or G.I.S. system. The maps of the water system that the village currently references are outdated and, in some cases, incorrect with the location of watermains, valves and fire hydrants. Improvements and expansions of roads and right of ways have made the current maps obsolete. Once the G.I.S. system is in place, the Public Works Department can add other utilities to the program, such as: streetlights, storm sewers, traffic signs and all the residential water shut off valves. This can all be done in house at no additional cost and allow the department to be more efficient.

The water distribution system leak survey helps isolate possible leaks within our water system. This program utilizes listening points of contact, such as valves, hydrants, service vales or meters, on certain intervals depending on the construction material type (Metallic @ 500 ft., Concrete @ 300 ft., & PVC/HDPE @ 150 ft.). Once located the Village works with our contractor to repair them to reduce our water loss throughout our system. As discussed at a previous Board meeting, our water loss was 13% last year. The Illinois Department of Natural Resources would like the water loss to be less than 10%. It is imperative to find the deficiencies in our system so that we can become compliant to the standards of the Illinois Department of Natural Resources.

M.E Simpson Co., Inc. has provided a professional service proposal for the work that would be performed, including training and technical support, is summarized as follows:

2020 Valves Assessed. GPS and Exercise at \$50 each (Approx. 500)	\$25,000.00
2020 GPS Collection for Hydrants \$10.00 each (Approx. 600)	\$6,000.00
2020 Leak Survey at \$110.00 per mile (Approx. 42 miles)	\$4,620.00
2020 Water Atlas Update Program	\$14,900.00
2020 Annual Online Subscription per user fee (2 at \$1,500 each)	\$3,000.00
Trimble Water – R1 GNSS Receiver Package	\$2,495.00
Total 2020 Program	\$56,015.00

Funding for this program is available in the FY 2020/21 Water System Improvement budget.

REQUEST FOR FEEDBACK

M.E. Simpson Co., Inc has been a trusted name in the water industry for many years. Staff recommends consideration of this program as part of our water system improvement program.

Water Distribution System Valve
Exercising Program / Leak Survey
Proposal



June 23, 2020

Mr. Joe Coons
Superintendent of Public Works
Village of Willowbrook
7760 Quincy Street
Willowbrook, IL 60527

RE: PROPOSAL FOR A WATER DISTRIBUTION SYSTEM VALVE EXERCISING PROGRAM/LEAK SURVEY

Dear Mr. Coons,

M.E. Simpson Co., Inc. is pleased to present the Village of Willowbrook our proposal for a Water Distribution System Valve Assessment and Exercising Program. We are honored to be considered for this work and are confident our team will help make the project a success.

M.E. Simpson Co., Inc. is a Professional Services Firm dedicated to developing and providing programs and services designed to maximize peak performance for our clients' water distribution systems. Many of these programs are universally recognized as a part of "Best Management Practices" (BMPs) for utilities. We pride ourselves on delivering solid solutions using the highest quality technical and professional services by way of state-of-the-art technology and a skilled and well-trained staff of professionals. Our highly-educated engineers and technical team are committed to the success of this project. They will be ready at a moment's notice to relieve your staff's burden and ensure a seamless continuation of your services.

Our services were developed and refined to provide utilities with programs that can be customized to meet their needs. From complete "Turn-Key" services to assisting with the development of "in-house" programs for utilities, M.E. Simpson Co., Inc. serves our clients with this ultimate goal: to deliver to the public the implicit faith that **"the water is always safe to drink"**.

Thank you for your consideration and this opportunity to acquaint you with our Valve Exercising and Assessment Services and offer this response. We are committed to exceeding your expectations.

Sincerely,

Randy Lusk
Regional Manager

Randy Lusk
Innovations & Solutions Manager

3406 Enterprise Avenue
Valparaiso, IN 46383

800.255.1521 P
888.531.2444 F

Randy.Lusk@mesimpson.com

SCOPE OF WORK

Valve Assessment and Exercising Program Scope of Services

Project Field Approach

The **Valve Assessment and Exercising Program** is conducted in the field by our technicians. M.E. Simpson Co., Inc. will locate and operate all designated valves in the system in accordance with AWWA standards (American Water Works Association Manual M-44, "Distribution Valves: Installation, Field Testing and Maintenance"). The important operation, location and asset management details of the valves will be noted and compiled on our "Valve Exercising and Assessment Report" and submitted to your office for your permanent records.

Valve Assessment and Exercising

The **Water Distribution System Valve Assessment and Exercising Program** is conducted in the field by our Project Team (M.E. Simpson Co., Inc. uses **TWO** trained technicians on each valve team). All valves are operated manually and when necessary, M.E. Simpson Co., Inc. uses a hydraulic valve machine capable of operating 2" through 60" valves. This machine can be set with a torque as low as 5 foot pounds and is capable of increasing up to 2500 foot pounds. The hydraulic valve operator with the "adjustable torque control" feature, along with experienced operating personnel, prevents excessive breakage during valve operating. M.E. Simpson Co., Inc. will furnish all labor, material, transportation, tools, and equipment necessary to perform the program. M.E. Simpson Co., Inc. shall be required to provide such skilled and trained personnel and equipment necessary to complete the work herein specified. We will locate and operate each main line valve in the system. The important operation and location details of each valve will be noted and compiled on our "Valve Assessment and Exercising Report" and submitted to your office, in an electronic format, for your permanent records.

The importance of the **Valve Assessment and Exercising Program** is apparent when major emergencies arise and Utility personnel are unable to either locate or close a valve or several valves during a water main break. The same problem occurs when valves that are normally closed need to be opened during a firefighting effort and these valves then fail in the closed position. These situations can occur when valves are not operated annually or at least every two years.

An organized field approach to this Valve Exercising and Assessment project will include the following:

- ◆ **Introduce and maintain an interactive role** with the Utility Staff for the Valve Program. Conduct short interviews with staff about particulars of the distribution system such as problem areas prone to poor fire flow, age of pipe, and pressure problems in the distribution system. This will allow for a greater understanding of how the distribution system is functioning allowing priorities to be assigned to particular segments of the work
- ◆ **Divide areas of the distribution system** into geographic areas that can be assessed in progression and problems identified in an orderly fashion. This would include setting a schedule and maintaining a level of Field Staffing that will insure completion of the valve assessments within the schedule and budget allotted. This will require all maps of the distribution system to be examined during the course of the planning sessions to formulate a workable plan of action

- ◆ **Perform valve assessments on the distribution system** and document all locations and valves in a manner that will allow a prioritized list of maintenance items to be pursued according to the described "Scope of Work"
- ◆ **Locate** all valves in a manner that will allow their positions to be known and readily re-creatable by Utility personnel upon demand. (GPS Coordinates can be taken or the Utility can provide their GPS data for the records)
- ◆ **Document** each valve operated and individual valve data to such an extent as to provide information characteristic to each specific attribute as defined by the Utility
- ◆ **Provide constant communication** with the Utility staff so valves with issues can be addressed in a timely manner
- ◆ **Provide instruction and council to Utility staff** during the course of the valve exercising and assessments so once the program is concluded, the Utility staff will have a complete understanding of all the parameters of conducting valve exercising and assessments with the established goal of reducing the amount of maintenance required for the distribution system while providing up to date data for the Utility for each and every valve
- ◆ **Provide daily reporting** during the course of the project as well as a final report indicating all the pertinent details regarding the Valve Assessment and Exercising Program.
- ◆ **Provide recommendations for future valve assessment and exercising programs** such as a methodology and frequency for valve operating

Valve Location - General

- ◆ **Examine the water maps** to determine the anticipated location of each water valve.
- ◆ **Attempt to verify** the existence of all water valves shown on the water atlas by visual inspection.
- ◆ **Search for water valves** shown, but not identified by visual inspection, using a magnetic locator.
- ◆ **Employ a combination** of recorded information, manual and technical testing techniques as needed to establish the location of remaining water valves.
- ◆ **Identify locations where a water valve is expected**, but not shown on the water map, and proceed through verification and search process.
- ◆ **Two attempts shall be made to locate "lost" valves** before these are turned into the Utility for location. M.E. Simpson Co. will ask permission to trace existing water mains by means of line locating equipment to establish the configuration of existing water mains and probable location of water valves should search by magnetic locator fail. If the utility cannot locate the valve within five working days, M.E. Simpson Co. shall be paid for the attempted locate.
- ◆ **Located valve boxes or valve vault covers** shall be painted with an environmentally formulated precautionary blue paint for future identification.

Information & Data Collection

- ◆ All of the information and data collected will be provided in an electronic format so that it may be uploaded to the Utility's GIS-Based application. This will be accomplished either live as the project is proceeding by the means of a laptop or tablet type device with a wireless connection to the internet and login onto the Utility's GIS-Based application or Pro Maps. Data will also be delivered to the Utility at the end of the project in an electronic format.
- ◆ The data collected shall include, but not be limited to, the following water valve information:
- ◆ Identifying number presently employed by the Utility's GIS-Based application or created by M.E. Simpson Co., Inc.
- ◆ Location referenced by coordinates in landmark system presently employed by the Utility's GIS-Based application
- ◆ Location by street and cross-street names
- ◆ Photo showing location of each valve
- ◆ Size
- ◆ Type
- ◆ Identified Problems: Box/Vault full of debris and/or water, Paved Over, Sealed Shut, Misaligned, Buried, Chlorination Whip in Vault, Bent Stem, Packing Leak, Missing Operating Nut, Rounded Operating Nut, Bolt Deterioration, Broken Stem, Inaccessible, Structural Deficiencies
- ◆ Operating nut depth
- ◆ Enclosure type
- ◆ Number of turns to achieve full closure
- ◆ Direction of closure
- ◆ Present valve position
- ◆ Date operated
- ◆ **Documentation:** As stated above; all documentation will be performed either "live", online through the Utility's GIS-Based online application or Pro Maps. Data will also be delivered to the Utility at the end of the project in an electronic format.
- ◆ All of the information and data collected will be compiled by means of electronic tablet or laptop computer.
- ◆ The data collected shall include, but not be limited to, the following water valve information:
 - Identifying number consistent and compatible with system presently employed by the Utility
 - Location referenced by coordinates in landmark system approved by the Utility
 - Size
 - Type
 - Operating nut depth
 - Enclosure type
 - Number of turns to achieve full closure

- Direction of closure
- Present valve position
- Date operated

GPS Locations

M.E. Simpson Company's Project Team will furnish all labor, material, transportation, tools, and equipment necessary to perform GPS locations on specified appurtenances in the distribution system, then take these GPS locations and import them into a GPS database, showing all the important locational details needed and desired by the Utility. The Project Team shall be required to provide such skilled and trained personnel and equipment necessary to complete the work herein specified. There will be a minimum of Two Persons per team performing the asset assessments at all times.

- 💧 Work in an orderly and **safe** manner to insure protection of the local residents, Utility employees, and the Field Staff so that no **avoidable** accidents occur.
- 💧 All Field Staff will have readily observable identification badges worn while in the field. All vehicles used in the field will have company signs attached.
- 💧 Project Team Personnel will meet with the Utility to review the project guidelines and answer any questions on procedures.
- 💧 As a part of the program, mapping discrepancies found on the current atlases will be noted and included as a part of the final report so the Utility will have a listing of needed corrections. This will be included as a part of the periodic reporting to the Utility, thus enabling the Utility to keep up with mapping corrections made by the Project Team.
- 💧 A progression map shall be maintained for each section under study indicating all assets located on the map. This will be especially helpful in quickly determining the work progress of the crews in the field.
- 💧 It may be necessary to conduct parts of the asset assessment during "off hours" such as at night. This may be required in areas of high traffic volume where traffic may affect the ability to conduct safe collection of GPS points, and traffic volume may affect the ability of the Project Team to be able to safely GPS valves on busy streets. The Project Team will give 24-hour advanced notice of intent to GPS valves in a particular area that may require after hours work or nighttime work. This is so the Utility can plan for the area to be worked in, give notification to the Police department, as well as other Public Works Divisions as to the activity that will take place.
- 💧 Examine the water maps to determine the anticipated location of each asset/appurtenance chosen.
- 💧 Attempt to verify the existence of all selected assets shown on the atlases by visual inspection.
- 💧 Search for assets shown, but not identified by visual inspection, using a magnetic locator.
- 💧 Employ a combination of recorded information, manual and technical testing techniques as needed to establish the location of remaining assets.
- 💧 Identify locations where a main line valve or water main is expected, but not shown on the current maps, and proceed through verification and search process.

GPS Asset Location

- ◆ Once the assets have been physically located, the Project Team will perform the following:
- ◆ The Project Team will collect GPS Coordinates of all assets assessed using the above “Scope of Work”
- ◆ The Project Team will work with the Utility to develop a “data dictionary” which will define the information to be collected for each attribute. The data dictionary shall have the following but not limited to:
 - Date and time the information was gathered.
 - The unique identifying number for each attribute consistent and compatible with system presently employed by the *Utility*.
 - Location for each attribute referenced by Northing and Easting coordinates generated from the GPS location in the Utility’s local State Plane Coordinate system.
 - Type of Attribute (Example: mainline valve, hydrant, tee, elbow, four-way cross, major service line, etc.).
 - Offset information if the attribute needs to have the location determined by an offset coordinate due to blocked signals from the GPS satellites.
 - Any other data required to be collected as part of the attribute data set as defined by the data Dictionary. This data dictionary will be assembled by the Project Team and the Utility.
- ◆ The accuracy of each GPS location will be sub-meter.
- ◆ GPS locations will need to have readings from at least four satellites in position and a reading from a local GPS beacon, or five satellites for the position to be considered accurate as a differentially corrected GPS location.
- ◆ “PDOP” readings need to be less than 5. “PDOP” readings greater than 5 will not be considered as accurate locations.
- ◆ A minimum of 30 readings for each position shall be taken.
- ◆ Position of the GPS satellites shall be given primary consideration. The position of the satellites shall be recorded as part of the data. If the satellites are low on the horizon (below 15 degrees), it is expected that the project team will wait until the position is better before attempting to gather the GPS position.
- ◆ The information collected will be differentially corrected using Pathfinder software database with the ability to export the information into a format acceptable to the Utility such as Microsoft Access, Microsoft Excel, .DXF file, or .SHP file for use in the Utility’s GIS system or CAD mapping program, and also included in the Polcon Pro Valve® database if a valve program is part of the work.
- ◆ All locations will be differentially corrected for accuracy. A stationary beacon or mobile beacon can be set up to allow differential correction. All data will be “Post-Processed”, so that a comparison can be made to a Local stationary GPS receiver. The locations of the stationary GPS stations will be obtained from the Internet. This will allow for a greater accuracy of the GPS locations.

Documentation of GPS Locations

- ◆ The Project Team will provide a location report for each asset located, included in a database or excel spreadsheet on a USB in a format agreed upon between the Utility and the Project Team.
- ◆ The GPS data collected shall include but is not limited to the following information:
 - *Identifying number consistent and compatible with system presently employed by the Utility.*
 - *Location referenced by coordinates using the Illinois State Plane Coordinate System.*
 - *Type of structure.*
 - *Date and time data was collected.*

Valve Exercising

The M.E. Simpson Co., Inc. Project Team will:

- ◆ Operate/Exercise selected valves in accordance with the AWWA manual M-44, "Distribution Valves: Selection, Installation, Field Testing and Maintenance"
- ◆ Valves requiring an operating torque greater than one hundred (100) foot-pounds shall be operated by a portable and/or truck mounted hydraulic valve machine. The valve operators used by M.E. Simpson Co., Inc. have torque-limiting capabilities that allow incremental settings from fifty (50) to twenty-five hundred (2500) foot-pounds of torque.
- ◆ The machine shall be solely and completely dependent upon the operator for continuous control of direction and torque, otherwise known as "non-locking" or "torque limiter" capability.
- ◆ All valves will be operated with the minimum torque required preventing valve damage.
- ◆ Using AWWA C500-02 Standards, the following maximum torques shall be as follows:
 - 4" gate valves – **200 ft. lbs.**
 - 6" through 12" gate valves – **300 ft. lbs.**
 - Gate valves larger than 12" – **600 ft. lbs.**
 - Butterfly valves – **200ft. lbs.**
- ◆ With guidance, review by M.E. Simpson Co. staff engineers, Utility review and Utility permission, maximum torque limits may be exceeded on a case by case basis to attempt to get the valve to operate.
- ◆ During initial valve closure, the valve will be turned no more than five (5) turns before turn direction is reversed to two (2) turns, thus allowing the threads of the stem and gate to free themselves. This closure and partial reversal process shall be repeated until the valve has achieved full closure.
- ◆ The valves will then be operated from full open to full closure until such time as this can be done without further turn range improvement or no further reduction in the required operating torque is noted, through a **minimum of three (3) consecutive ranges of operations**, or the valve is easily turning below 70 ft. lbs. of torque. All valves, regardless of operating torque, will be exercised repeatedly towards the closed position or "working the bottom" until there is

no further increase in the number of turns from the fully opened position to the full closed position.

- 💧 **The M.E. Simpson Co., Inc. Project Team shall notify** the Utility, of intent to operate a certain group of water valves. The Team shall obtain permission to perform the work, at least twenty-four (24) hours or one (1) working day in advance of the intended start of that work.
- 💧 **Valves found in the closed position** shall be reported to the Utility immediately so verification can be made for operating or not.
- 💧 If there is reasonable evidence that a valve might break during the operating process, the Utility **will be notified immediately** and a decision will be made by the Utility to attempt or not to attempt the process.
- 💧 **Any valves that fail or break during operation will be repaired or replaced by the Utility. M.E. Simpson Company cannot be held responsible for possible valve failures during the operating procedure.**

Documentation of Valve Exercising

Identifying number consistent and compatible with system presently employed by the Utility.

- Valve Number
- Size of Valve
- Type of Valve (Gate, Butterfly, Other)
- Valve Box/Vault
- Direction of Closure
- Depth of Operating Nut
- Valve Use (Mainline, Crossover, Service Line)
- 💧 Location information
 - Street Name
 - Cross Street Name
 - House Number (if available)
 - Site Location (Street, Parkway, Driveway, Easement, Centerline)
- 💧 Box/Vault Condition
 - Valve Box full of Debris
 - Valve Vault full of water
 - Paved Over
 - Valve Box Misaligned
 - Valve Box Buried
- 💧 Operational Conditions of Valve
 - Final Number of turns to close
 - Final Position
 - Date Turned
 - Crew performing operation

- Valve Problems (Bent stem, Packing Leak, Missing Operating Nut, Rounded Operating Nut, Broken Stem, Inaccessible)
- Comments

Valve Exercising

M.E. Simpson Co., Inc. takes great care when exercising/operating valves in the water distribution system. Even with our years of proven experience in water system operations problems occasionally occur. Any valves that break or fail during the assessment program will be repaired or replaced at the expense of the water utility. M.E. Simpson Co., Inc. cannot be held responsible for possible valve failures during their operation due to pre-existing conditions. M.E. Simpson Co., Inc. cannot be held responsible for damage done to the water system during valve operating, such as water leaks, discolored water and turbidity that can possibly occur during the process.

Equipment

The following equipment will be used for valve exercising/assessment work during the valve program for the Utility. All material listed will be on the job site at all times.

- ◆ Truck mounted or trailer mounted hydraulic valve operator with adjustable torque control
- ◆ Portable hydraulic valve operator adjustable torque control
- ◆ Truck mounted or trailer mounted Vacuum capable of 300 CFM
- ◆ Trucks are equipped with either a Honda 6.5 horsepower pump capable of discharging 150 GPM or a Stanley Hydraulic pump capable of discharging 450 GPM
- ◆ Extendable valve keys for manual operation
- ◆ All necessary hand tools needed
- ◆ Truck mounted Arrow Board/Signage, and warning lights on trucks.
- ◆ Traffic control equipment, including properly sized traffic cones with reflective stripes, when needed or required.
- ◆ A "Fischer M-Scope" / "Schonstedt" / "Chicago Tape" magnetic locator
- ◆ A "Radio Detection RD4000" series line locator
- ◆ **For *OPTIONAL GPS Location Services (if chosen)*:** A Trimble GPS GeoExplorer 6000 Series GeoXH hand held receiver, and related equipment

SCOPE OF WORK

Water Distribution System Leak Survey

The Field Scope of Service for the Leak Survey is understood to be the following:

M.E. Simpson Co., Inc. will furnish all labor, material, transportation, tools, and equipment necessary to survey the water distribution system areas selected by the City. M.E. Simpson Co., Inc. shall be required to provide such skilled and trained personnel and equipment necessary to complete the

work herein specified. **There will be a minimum of Two Persons per team working on the survey at all times.**

- 💧 Work in an orderly and **safe** manner to insure protection of the local residents, Utility employees, and the Field Staff so that no **avoidable** accidents occur.
- 💧 All Field Staff will have readily observable identification badges worn while in the field.
- 💧 The leak detection equipment to be used will be that which was described in the “Equipment to be used” section.
- 💧 Initially listen to **all fire hydrants, all accessible main line valves**, and when necessary, selected service connections in the entire distribution system by making physical contact with the valve, hydrant, pipe, or B-box. (Listening points that are not accessible will be given to the Utility and when corrected they will be listened to.)
- 💧 Listening points of contact will be: valves, hydrants, service valves or meter settings. The 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.
- 💧 Specific listening distances will be determined by pipe material. Metallic type pipes; no greater than 500’ between listening points. Non-Metallic AC/Concrete type pipes; no greater than 300’ between listening points. Non-Metallic PVC/HDPE type pipes; no greater than 150’ between listening points.
- 💧 A “suspected leak” log shall be maintained indicating all areas where suspected leak noise was heard. This log will be reviewed when the Project Team is verifying the suspected leak area for confirmation of the actual existence of a leak. This log will be a part of the periodic reports turned into the Utility regardless of an actual leak located in the area or not, with an explanation of the noise source.
- 💧 When leak noise has been detected and or suspected, the Project Team 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 Project Team 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 and also so that the Water Utility will have an idea of where the water main is located prior to excavation. Non-metallic pipe locations will be “interpolated” as best that can be identified, given the line location of metallic services, Utility knowledge of the area, or other information regarding the actual location of the main.
- 💧 The Project Team will use “State of the Art” Electronic Leak Correlators to determine if a leak is present and use the same equipment to pinpoint the leak.
- 💧 For PVC water mains only the Echologics LeakFinder-ST w/hydrophones leak correlator or Fluid Conservation Systems (FCS) TriCorr Touch leak correlator, will be used for correlations because of the ability for these correlators to be able to analyze the particular sound frequencies inherent to PVC pipe.
- 💧 The leak location will be marked in the field (on the surface) using environmentally formulated Precautionary Blue paint.

- ◆ The Project Team 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 locations of leaks requiring immediate attention (immediate threat to life, injury or traffic) will be turned in as quickly as possible to facilitate the repair process.
- ◆ The Project Team will report daily or per request of the Utility, to assigned Utility Professional 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 Project Team to be able to safely access main line valves in the middle of the street. The Project Team will give 24-hour advanced notice of intent to survey a particular area that may require after hours surveying or nighttime surveying. This is so the Utility can plan for the area to be surveyed, give notification to the Police department, as well as other Public Works Divisions as to the activity that will take place.
- ◆ As a part of the leak program, mapping discrepancies found, distribution assets found in disrepair will be noted and turned into the utility.
- ◆ Leaks verified on the customer’s side of a service shut-off will not be located beyond the shut-off. If a leak appears to be on the Customers’ side, the Utility will be notified first, then the customer notified and permission granted prior to the water being shut off even for short periods of time where possible and as time allows, as well as the ability for the customer to respond.
- ◆ If the Utility requests leak locations beyond the service shut off on the customer’s side of the service line, this will result in an additional charge to the leak survey based on an hourly rate and this service must be agreed upon between the Utility and M.E. Simpson Co., Inc. prior to the start of the survey.
- ◆ Valves and hydrants will not be operated without Utility permission. Valves and hydrants that break during this type of operation are the sole responsibility of the Utility. M.E. Simpson Co., Inc. cannot be responsible for valves and hydrants that break due to pre-existing conditions.
- ◆ The Utility is encouraged to dig up and repair the leaks located as soon as possible so that the area may be re-surveyed while the Project Team is still working on the survey in that general geographical location to ensure no other leaks are present in that area.

Equipment List

- ◆ FCS **S30** Gutermann **AquaScope** electronically enhanced listening device.
- ◆ Echologics **LeakFinder-ST w/hydrophones**; FCS **AC Digital**, **TriCorr Touch** or Vivax-Metrotech **HL6000X** leak correlator systems.
- ◆ **RADIO Detection** Line Locators.
- ◆ **Chicago Tape**, **Fisher M-Scope** or **Schonstedt** magnetic locators.

- 💧 **All necessary valve keys and hand tools**
- 💧 Truck mounted arrow board/signage and warning lights.
- 💧 Traffic control equipment, including properly sized traffic cones with reflective stripes.

Quality Control and Accuracy of Leak Locations

The level of accuracy of leak detection is a matter of taking in all the above considerations and applying those considerations to each individual potential leak location as it is being evaluated. Any statement made as to the level of accuracy of leak locations must be considered based on the individual conditions of each leak.

Locating leaks on a distribution system can be very challenging. It is not a perfect science. Pipes and fittings can leak for a variety of reasons (age, poor installation, material failures, bad soils, etc.), and the ability to locate leaks is dependent on the stated variables listed in the "Project Approach". By employing a strict methodology in the field for conducting a leak survey, these variables can be accounted for and mitigated. The depth of experience of the Project Team is extremely important to maintaining the ability to have accurate locations of leaks. Additionally, crews work as Two-Person Teams in the field, double checking the progress of the work as the survey progresses. The systematic procedure for leak confirmation has been stated in the Scope of Field Service and is restated here.

"Suspected leak areas are always listened to a second time, preferably at a different time of day than originally listened to. The mains and services will be line located to insure correct pipe distances are used for the correlations. Correlations may need to be performed several times with several configurations to insure all the possible scenarios have been covered. Sewer manholes may need to be opened and flows observed. If there is any doubt as to the existence of a leak, the area may be checked and correlated at different times to rule out water usage or other factors. The progress of the survey will be monitored by the use of daily logs and a progression map with suspected leak noise indications marked and possible leak locations will be maintained. Field leak location forms will be turned into the Utility according to the agreed schedule. The Project Team will follow up on leak locations by monitoring the repair schedule of the Utility. That way in case a potential leak location is wrong, the Project Team can return to the site and determine why the leak location was incorrect, and correct it. This means maintaining a good level of communication between the Project Team in the field, and the Utility. As a matter of Quality Control for leaks in the field, our Correlators, FCS TriCorr Touch and Echologics LeakFinder-ST have the distinct ability to be able to detect and pinpoint more than one leak in the same relative area, thus allowing better leak coverage and insuring that one leak is not "masking" another leak in the same area. The use of progress reports and meetings will allow for open discussions of problems encountered so solutions can be examined."

Utility Observations

The M.E. Simpson Co., Inc. Project Team will welcome having staff of the Utility observe field procedures while the Valve Assessment and Exercising program is in progress. They will be happy to explain and demonstrate the equipment and techniques that are employed by M.E. Simpson Co., Inc. for assessing and exercising valves in the Water System.

Final Reports, Documentations & Communications

M.E. Simpson Co, Inc. will perform the following:

- 💧 Project Team will **meet daily** with assigned Utility personnel to go over areas of assessment program for prior workday and plan current day and valves exercised.
- 💧 The field technicians will be readily available by cellular phone. This will facilitate communications between the Utility and the field technicians. A **24-hour toll-free 800 number** is available for direct contact with M.E. Simpson Co., Inc. for emergencies.
- 💧 **The Project Manager will meet** with the Utility regularly for a progress report.
- 💧 **Prepare a progress report** at selected intervals for the Utility if requested.
- 💧 Provide a list of material deficiencies such as, broken valves, valves with minor issues and mapping discrepancies on a weekly (in Pro-Maps™ format). The list will also be included with the final report that will include the following;
 1. Mechanical deficiencies discovered
 2. Mapping errors on the water atlas
 3. Broken Valves
 4. Major Deficiencies
 5. Minor Deficiencies
- 💧 **Prepare the final report** at the completion of the project which will include all valve location, information and documentation reports, total of valves assessed and exercised, and a list of problems found in the system during the course of the valve assessment and exercising program that need the attention of the Water Utility. **This final report shall be made available for submission to the Utility within thirty (30) working days of the completion of the fieldwork.**

Effective communication...
accurate documentation...
**Insuring the success for
the valve exercising program**

Assumptions & Services Provided by the Utility

- 💧 The Utility, in an acceptable electronic format, will furnish all maps, atlases, and records, necessary to properly conduct the valve-operating program.
- 💧 The Utility, in an acceptable electronic format, will provide all Valve ID numbers, type of valve (if known), Map page numbers or grid number, and any other additional information that can aide in helping the overall success of the program.
- 💧 The Utility, in an acceptable electronic format, will furnish all GPS Coordinate data.
- 💧 The Utility, in an acceptable electronic format, will provide records such as old valve cards or any additional information that would make the valve location and operating easier to perform. This information shall be regarded as **CONFIDENTIAL** by M.E. Simpson Co., Inc., and will not be shared with anyone outside of the Utility without consent of the Utility.

- ◆ The Utility will notify other departments as to the activity of Valve Assessment and Exercising Program so that various departments are aware that a program is in progress. This is to insure that if there should be a problem with part of the distribution system, notification can be made promptly.
- ◆ The Utility will also make available, on a reasonable but periodic basis, certain personnel with a working knowledge of the water system who may be helpful in attempting to locate particularly hard-to-find valves 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.
- ◆ The Utility will assist, if needed, to help gain entry into sites that may be difficult to get into due to security issues or other concerns. This may be required of areas where distribution mains run in easements on private property.

PROJECT SAFETY PLAN

M.E. Simpson Co., Inc.'s Safety Programs cover all aspects of the work performed by M.E. Simpson Co., Inc. We take great pride in our safety plan/policy/program and that is evident in our EMR scores over the last five years. The safety of our employees, the utilities employees and that of the general public is our #1 priority.

Our Safety Plan/Policy/Program, with all of its parts, is 60 pages in length. In an effort to be more efficient and less wasteful we do not print copies of the safety program for RFPs. There is nothing secretive or proprietary contained within our plan/policy/program and we are happy to share its contents. If you would like a PDF copy of our plan/policy/program please contact Terrence Williams, Operations Manager, at 800.255.1521 and a copy of our program will be sent via email to you.

Below is an overview of our plan/policy/program:



Safety is a major part of any project. M.E. Simpson Co., Inc. always provides a safe work environment for its employees. **Our staff is trained in General Industry OSHA rules, Confined Space Entry & Self-Rescue, First Responder First Aid, CPR, and Traffic Control.**

While in the field on your project, M.E. Simpson Co., Inc. and its employees will follow all of the necessary safety procedures to protect themselves, your staff and the general public.

M.E. Simpson Co., Inc. uses Two-Man Teams for Safety and Quality Assurance.

Therefore M.E. Simpson Co., Inc. adheres to the following:

- ◆ The Project Manager and the Field Manager will be trained in accordance with OSHA Standard 1910 (General Industry) and be in possession of an OSHA 10 Hour or 30 Hour Card.
- ◆ Any listening points located in a "confined space" such as pit and vault installations that **require entry** will be treated in accordance with the safety rules regarding **Confined Space Entry, designated by the Utility, The Department of Labor and OSHA.**
 - All personnel are **trained and certified** in Confined Space Entry & Self-Rescue.
- ◆ We will follow all safety rules regarding **First Responder First Aid & CPR, designated by the Utility, The Department of Labor and OSHA.**
 - All personnel are **trained and certified** in First Responder First Aid & CPR.
- ◆ We will follow all **traffic safety rules, designated by the Utility, The Department of Labor, OSHA, and the State Department of Transportation (per MUTCD).**
 - All personnel are **trained and certified**, by the **AMERICAN TRAFFIC SAFETY SERVICES ASSOCIATION (ATSSA)** in Traffic Control and Safety.

Current documentations of safety training and certifications can be provided for all project personnel for the Utility. These certifications are current and up to date (for 2019) for all project personnel.

VALVES TO BE EXERCISED

The total number of valves to be exercised for the Utility is approximately **500** main line valves. The number of valves exercised and assessed may vary from the estimated number above. Any additional valves shall be charged a per unit price.

WATER MAIN TO BE SURVEYED

The total mileage to be surveyed will be 42 miles of water main.

PROPOSED PROJECT SCHEDULE

Project Start Date: TBD

Hold Kick-off meeting: TBD, to cover goals and objectives of Project.

Fieldwork to be completed and documented: TBD days depending on number of valves to be exercised and assessed.

Valves Reports: Thirty (30) working days after fieldwork is completed for the project.

INVESTMENT

A commitment to improving and maximizing Village of Willowbrook's water distribution system for future generations.

M.E. Simpson Co., Inc. is pleased to offer the Village of Willowbrook our proposal for a Valve Assessment and Exercising program. This program is based on locating, exercising, assessing and documenting approximately **500** valves in the Village of Willowbrook's water distribution system. The exercising and documentation will be done by one of our two-man teams', in accordance with the above Scope of Service, with all necessary equipment furnished by M.E. Simpson Co., Inc. as described within this document.

2020 Valves Assessed, GPS and Exercised at \$50.00 each (Approx. 500)	\$25,000.00**
2020 GPS Collection for Hydrants \$10.00 each (Approx. 600)	\$6,000.00*
2020 Leak Survey at \$110.00 per mile (Approx. 42 Miles)	\$4,620.00*

** Any mileage over the 42 miles will be assessed a per mile fee of \$110.00 per mile. Any Hydrant GPS over the approx... 600 will be assessed a fee of \$10.00 per. In order for these prices to be valid, these projects need to be in conjunction of the Valve Assessment Program.*

*** Any additional valves beyond the original sated amount per year will be assessed a per valve fee for that year.*

These fees are all based on approximate numbers of valves to be exercised and assessed. **The total price will change according to the actual number of valves completed.** All procedures will be followed according to the above scope of services.

We thank you for this opportunity to acquaint you with our Valve Exercising and Assessment Program and offer this proposal. If you have further inquiries or you wish to discuss our service in more detail, do not hesitate to call us.

Pro-Maps Atlas Update Program Proposal



June 23, 2020

Mr. Joe Coons
Village of Willowbrook
Superintendent of Public Works
7760 Quincy Street
Willowbrook, IL 60527

RE: PROPOSAL FOR A PRO-MAPS™ ATLAS UPDATE PROGRAM

Dear Mr. Coons,

M.E. Simpson Co., Inc. is pleased to present the Village of Willowbrook our proposal for a Water Distribution System Pro-Maps™ Atlas Update Program. We are honored to be considered for this work and are confident our team will help make the project a success.

M.E. Simpson Co., Inc. is a Professional Services Firm dedicated to developing and providing programs and services designed to maximize peak performance for our clients' water distribution systems. Many of these programs are universally recognized as a part of "Best Management Practices" (BMPs) for utilities. We pride ourselves on delivering solid solutions using the highest quality technical and professional services by way of state-of-the-art technology and a skilled and well-trained staff of professionals. Our highly-educated engineers and technical team are committed to the success of this project. They will be ready at a moment's notice to relieve your staff's burden and ensure a seamless continuation of your services.

Our services were developed and refined to provide utilities with programs that can be customized to meet their needs. From complete "Turn-Key" services to assisting with the development of "in-house" programs for utilities, M.E. Simpson Co., Inc. serves our clients with this ultimate goal: to deliver to the public the implicit faith that **"the water is always safe to drink"**.

Thank you for your consideration and this opportunity to acquaint you with our Pro-Maps™ Atlas Update Services and offer this response. We are committed to exceeding your expectations.

Sincerely,

Randy Lusk
Regional Manager

Randy Lusk
Innovations & Solutions Manager

3406 Enterprise Avenue
Valparaiso, IN 46383

800.255.1521 T
888.531.2444 F

Randy.Lusk@mesimpson.com

SCOPE OF WORK

Water Atlas Scope of Services

Our Asset Management Program, Water Atlas Updating is a multi-phase plan encompassing a select group of our services that will assist your Utility in improving records and information as well as optimizing your distribution system's operational performance. Our program will be structured around your specific needs so that you can optimize your results and maintain flexibility in the performance of the various tasks. The Project Team will submit a questionnaire for particular details required for the review.

The Utility will provide all relevant information to conduct the water atlas update program. All data will be provided in an electronic format. In the collection and review of the data, a hierarchical approach will be used.

- ◆ Current information found in the water utility reports, maps, records, GPS data and files will be used as the initial set of data. If the Utility has done previous work with M.E. Simpson Company and Pro-Valve drawings/Pro-Hydrant datasheets are available, they will also be used as reference material during atlas creation. Some discrepancies among the data sets will be resolved by contacting water utility staff.
- ◆ Older legacy water utility data may be consulted and used.
- ◆ Records such as, as-built drawings, installation records and related information will be used as reference information for the Utility's distribution system. Meeting with key Utility staff members to gather information and knowledge about the water system will also be utilized when needed.
- ◆ Base Maps will be provided by the Utility in an electronic format, preferably shapefiles for ESRI. Base maps usually include county, street, and parcel information. M.E. Simpson Company will use this information as a foundation for the water system data to create the updated water atlas for your GIS records. If base maps cannot be provided by the Utility, a standard ERSI base map will be used at an additional cost.
- ◆ System Verification of key assets and related appurtenances will be conducted to create a field verified atlas when necessary as determined by M.E. Simpson Company.
- ◆ GPS Locations and coordinates of the water, waste water, or storm water system attributes will be provided by the Utility in a suitable electronic format. If GPS coordinates do not exist, M.E. Simpson Company can provide GPS Location Services at an additional fee. A water atlas update program cannot be done if GPS coordinates are not provided.
- ◆ The Utility will receive a PMF (Published Map File) on a flash drive and will also receive an updated PMF file after each project (service) is completed. Updated atlas data will be within the scope of the current project. For example: if a valve exercising program is taking place in town by MESCO staff, atlas updates regarding valve placement will be conducted.

- ◆ The Utility will receive one (1) 17"x22" printed copy of the updated atlas created by M.E. Simpson Company. Printed pages of atlas will be based upon section data supplied by the Utility. If section data is not available, printed pages of the atlas will be determined by M.E. Simpson Company.
- ◆ Water mains on the updated atlas will be color coded based upon the size of main, valve structures will be color coded based upon operability, and hydrant structures will be color coded based upon flow rate and operability. Color coding will be pre-determined by M.E. Simpson Company. Any changes to the color coding system set in place could result in additional charges.
- ◆ Additional updates out of scope will be performed only upon agreement between the Utility and M.E. Simpson Company at an additional charge.
- ◆ Optional or additional paper copies of the atlas are available for an additional charge.
- ◆ Online access to a digital atlas / data will be available for an additional subscription fee.

PRO-MAPS™ Online Subscription

The Utility will have access to their GIS data through Pro-Maps™. Pro-Maps™ Online Subscription program is an online application technology that brings your water, wastewater, and stormwater system maps and data with you wherever you go. This web based real-time product allows your staff to view, inspect, and collect data on your water, wastewater, and stormwater systems in real time. M.E. Simpson Co., Inc. has teamed with Trimble® Water to bring you our Pro-Maps™ program, using Trimble® Unity, a GIS-Centric Cloud and Mobile Software as our platform. Trimble® Unity provides for a product that focuses on workflow and business process improvement with the added benefit of better information for decision making and regulatory compliance for all your water, wastewater, and stormwater mapping data and GIS needs. The features included in this subscription are as follows:

- ◆ The Utility will be supplied with a username and password for each user license that is purchased.
- ◆ Map assets such as valves and hydrants can be added to the water atlas to account for new structures in the system. These structures can be added by manually selecting the position or with a GPS collection device such as a Trimble® R1 or R2 unit. In order to collect GPS points through the application, a mobile device with an internet connection is needed; such as a cell phone or tablet device. Access to the state's real-time network is also necessary to collect and process GPS points instantly. Signing up for this service is the responsibility of the Utility and may be a paid-for service depending on the state of operation. The Utility will also have the ability to add service records to all main line valves and hydrants in the water system.
- ◆ Deleting assets from the water system will be handled by M.E. Simpson Company at no additional charge. This includes but is not limited to: main line valves, fire hydrants, water mains, etc. This is to ensure the integrity of the data remains intact. Please allow 72 hours for updates handled by M.E. Simpson Company.

- 💧 Pro-Maps™ online subscription access also includes a live trace function that allows the user to confine water main breaks by indicating which valves are needed for isolation.
- 💧 Pro-Maps™ has the ability to display the base map view in multiple formats such as; ESRI Topo, ESRI World Street and ESRI Aerial.
- 💧 Photographs of each asset can be collected and stored within Trimble Unity's software. These photographs will display the visual condition as well as the location of the asset.
- 💧 All edits made to the water atlas will take 24 hours to reflect on field equipment due to the offline functionality of the software. If changes are made, please allow 24 hours for updates to appear. Changes made on the desktop version of the software will be updated immediately.
- 💧 Current geodatabase files and shapefiles pertaining to the work completed during the atlas update program will be readily available to the Utility at no additional cost.
- 💧 All of the items listed above are a part of the Pro-Maps™ online subscription service and will only be accessible with an annual subscription fee. The Utility will be notified 60 days prior to the end of the subscription. If the Utility chooses not to renew, the subscription will be cancelled and the Utility will lose access to their online data. Once the subscription is cancelled, the Utility will receive their most recent data in an agreed upon format such as; shapefiles, excel spreadsheet, PMF file placed on a flash drive and delivered to the Utility.

M.E. Simpson Company's Project Team will furnish all labor, material, and equipment necessary to perform water atlas updates. The Project Team shall be required to provide such skilled and trained personnel and equipment necessary to complete the work herein specified.

- 💧 Project Team Personnel will meet with the Utility to review the project guidelines and answer any questions on procedures.
- 💧 Examine the water maps to determine the anticipated location of each asset (mainline valve, hydrant, valve vault, major service valves, etc.)

Final Reports, Documentations & Communications

M.E. Simpson Co, Inc. will perform the following:

- ◆ Project Team will **meet at regularly scheduled intervals** with assigned Utility personnel to go over areas and progress of atlas update program.
- ◆ Our technicians and Engineers will be readily available by phone and email. This will facilitate communications between the Utility and the technicians and engineers. A **24-hour toll-free number** (800) 255-1521 is available for direct contact with M.E. Simpson Co., Inc. professionals.
- ◆ **The Project Manager will meet** with the Utility regularly for a progress report.
- ◆ **Prepare a progress report** at selected intervals for the Utility if requested.
- ◆ **Deliver the completed water atlas** at the completion of the project, which will include all water atlas documentation per "Scope of Work" for the Utility **of the of the water atlas and after the draft has been approved.**

Effective communication...
accurate documentation...
**Insuring the success for
the atlas update program**

Assumptions & Services Provided by the Utility

- ◆ The Utility will furnish all maps, atlases, as-builts, records, data, and information necessary in an electronic format to properly conduct the water atlas program.
- ◆ The Utility will furnish all GPS coordinates and related data for all water, waste water, storm water and related structures. (If this data does not exist, M.E. Simpson Company can provide GPS location services at an additional fee).
- ◆ The Utility will provide records such as pipe installation records, valve installation records, meter installation records or any additional information in an electronic format that would make the water atlas updates easier to perform. This information shall be regarded as **CONFIDENTIAL** by M.E. Simpson Co., Inc., and will not be shared with anyone outside of the Utility without consent of the Utility.
- ◆ The Utility will notify other departments as to the activity of the water atlas so that various departments are aware that a program is in progress and can provide information needed to complete the atlas.

- 💧 The Utility will also make available, on a reasonable but periodic basis, certain personnel with a working knowledge of the water system who will be helpful in reviewing records, gathering records 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.

PROPOSED PROJECT SCHEDULE

Project Start Date: TBD

Hold Kick-off meeting: TBD, to cover goals and objectives of Project.

Office work to be completed and documented: TBD days depending on number of attributes/appurtenances to be documented, corrections made, pipe locations entered and corrections made.

INVESTMENT

A commitment to improving and maximizing the Village of Willowbrook's water distribution system for future generations.

M.E. Simpson Co., Inc. is pleased to offer the Village of Willowbrook our proposal for a Water Atlas Update program. This program is based on updating, correcting, documenting and digitizing the water system atlas and records for the Village of Willowbrook's water distribution system. The atlas update program will be done by in house professional staff in accordance with the above Scope of Service with all necessary equipment furnished by M.E. Simpson Co., Inc. as described within this document.

Water Atlas Update Program

2020 Water Atlas Update program	\$14,900.00
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Water Atlas Update Program (2 year program)

2020 Water Atlas Update program	\$ 7,450.00
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2021 Water Atlas Update program	\$ 7,450.00
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Annual Online Data Subscription: **

2020 Annual Online Subscription per user fee (2 at \$1,500.00 each)	\$3,000.00
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2021 Annual Online Subscription per user fee (2 at \$1,500.00 each)	\$3,000.00
---	------------

This program will include (2) Android Based Tablets for Deliverables

All procedures will be followed according to the above scope of services. We thank you for this opportunity to acquaint you with our Water Atlas Update Program and offer this proposal. If you have further inquiries or you wish to discuss our service in more detail, do not hesitate to call us.

Trimble Water Receiver Package Proposal

SALES QUOTATION

Quote Number 00005488

**Your order quotation**

Thank you for choosing Trimble Water

Account Name Willowbrook IL, Village of

Created Date 6/22/2020

Ship To Willowbrook, IL
USA

Expiration Date 9/20/2020

Bill To Willowbrook, IL
USA

Main Contact Joe Coons

Main Contact Email jcoons@willowbrook.il.us
Address

Quote Line Items

Product Code	Product	Sales Price	Quantity	Total Price
TW-PG2AAA-101-00	Trimble Water - R1 GNSS Receiver Package	USD 2,495.00	1.00	USD 2,495.00
Total Price				USD 2,495.00

Quotation & Shipping Terms

Payment Terms Net 30 Days

FOB Method SHIP DOCK - FOB Shipping Dock (Customer
Pays Freight)

Lead Time 2-4 weeks ARO (Standard Items)

Shipping Method GROUND - Ground Service

1. Customer is responsible for shipping charges to destination and charges will be added at the time of shipment. If an estimate of the freight charge is required contact Trimble Water Inside sales at the email below.

2. Applicable taxes will be added to the order and invoice following booking of the order. If you have any questions contact Trimble Water Inside sales at the email below.

Email Contact: TrimbleWater_InsideSales@trimble.com.

Prepared By Brian Simpkins

To accept this quotation, sign here and return: _____

Terms and Conditions of Sale

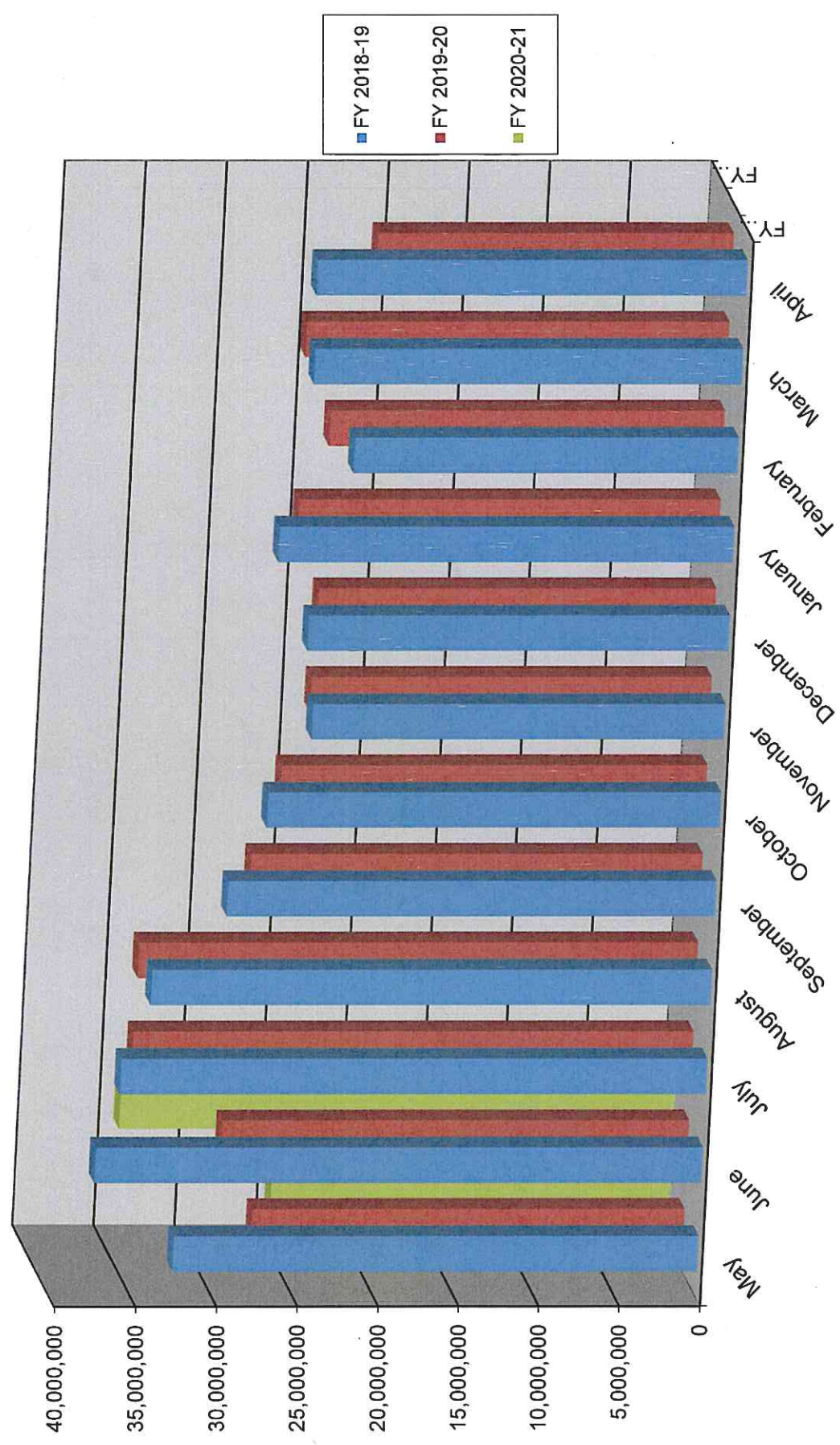
The Trimble Water Terms and Conditions of Sale are located [here](#).**THANK YOU FOR YOUR BUSINESS!**

Trimble Inc.
935 Stewart Drive
Sunnyvale, CA 94085

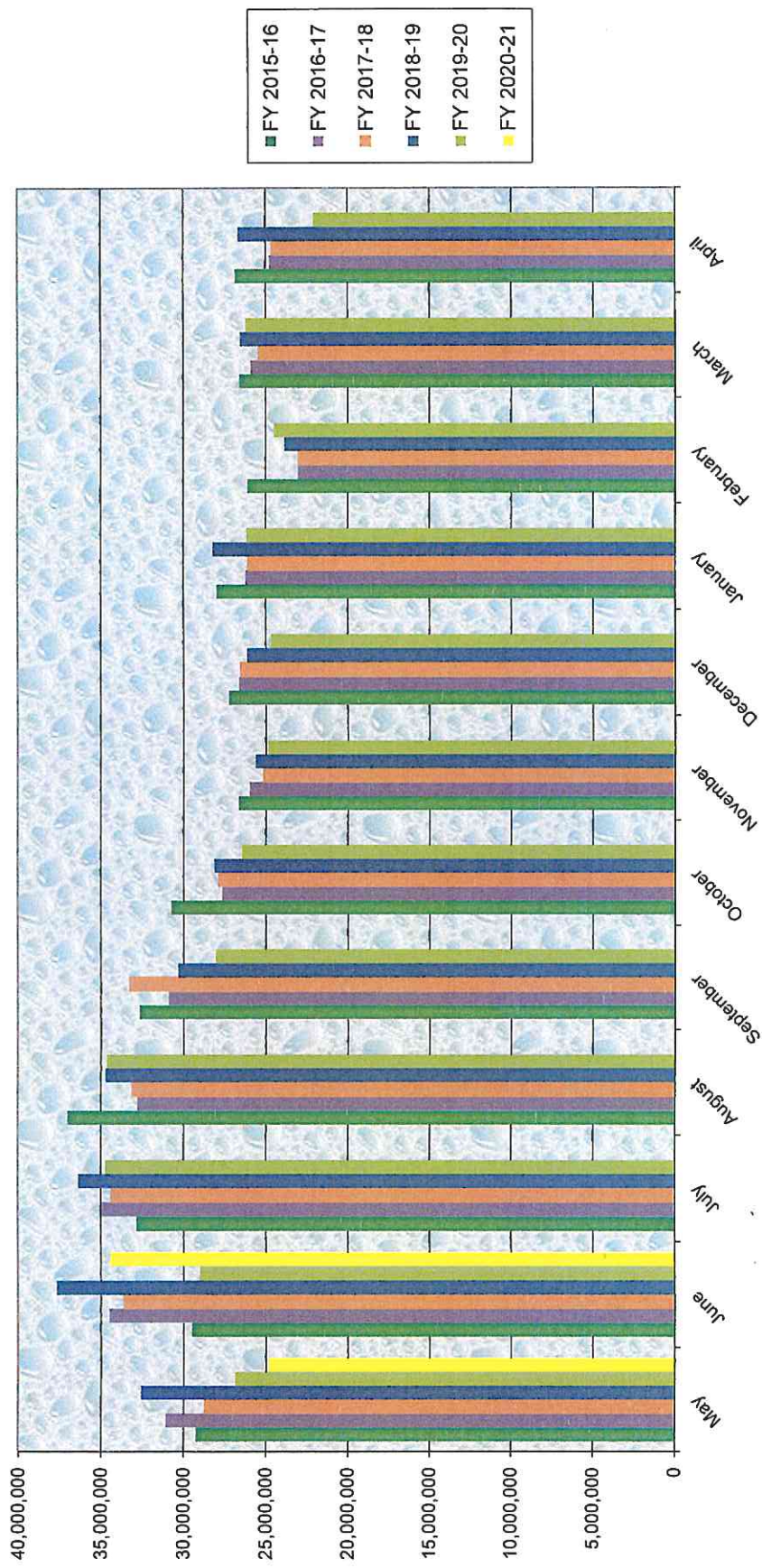
Email: trimblewater_insales@trimble.com
Website: www.trimblewater.com



Monthly Pumpage Chart



Month	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
May	31,000	30,000	31,000	32,000	33,000	35,000
June	31,000	31,000	32,000	33,000	34,000	36,000
July	33,000	34,000	35,000	36,000	37,000	38,000
August	34,000	35,000	36,000	37,000	38,000	39,000
September	32,000	33,000	34,000	35,000	36,000	37,000
October	30,000	31,000	32,000	33,000	34,000	35,000
November	32,000	33,000	34,000	35,000	36,000	37,000
December	33,000	34,000	35,000	36,000	37,000	38,000
January	32,000	33,000	34,000	35,000	36,000	37,000
February	31,000	32,000	33,000	34,000	35,000	36,000
March	32,000	33,000	34,000	35,000	36,000	37,000
April	31,000	32,000	33,000	34,000	35,000	36,000



Month	2014-15	2015-16	2016-17	2017-18	2018-19	2019-20	2020-21
May	29,547,000	29,213,000	31,048,000	28,681,000	32,538,000	26,828,000	24,806,000
June	32,193,000	29,447,000	34,451,000	33,573,000	37,621,000	28,968,000	34,376,000
July	33,122,000	32,813,000	34,898,000	34,333,000	36,319,000	34,699,000	
August	32,796,000	36,985,000	32,739,000	33,061,000	34,685,000	34,602,000	
September	31,869,000	32,623,000	30,853,000	33,220,000	30,268,000	27,999,000	
October	28,728,000	30,690,000	27,589,000	27,807,000	28,071,000	26,404,000	
November	25,364,000	26,585,000	25,929,000	25,066,000	25,580,000	24,820,000	
December	26,710,000	27,194,000	26,581,000	26,480,000	26,088,000	24,643,000	
January	28,505,000	27,915,000	26,165,000	26,040,000	28,169,000	26,108,000	
February	25,484,000	26,048,000	22,962,000	22,950,000	23,791,000	24,453,000	
March	28,779,000	26,552,000	25,855,000	25,388,000	26,502,000	26,164,000	
April	25,255,000	26,791,000	24,720,000	24,583,000	26,615,000	22,048,000	
TOTAL	348,352,000	352,856,000	343,790,000	341,182,000	356,247,000	327,736,000	59,182,000

All table figures are in millions of gallons sold on a monthly basis per fiscal year.

YEAR TO DATE LAST YEAR (gallons):	26,828,000
YEAR TO DATE THIS YEAR (gallons):	59,182,000
DIFFERENCE (gallons):	0
PERCENTAGE DIFFERENCE (+/-):	120.60%
FY20/21 PUMPAGE PROJECTION (gallons):	330,000,000
FY 20/21 GALLONS PUMPED TO DATE:	59,182,000
CURRENT PERCENTAGE PUMPED COMPARED TO	17.93%

Village of Willowbrook

MONTHLY DATA REPORT

Tons Collected by Month

	Refuse	Recyclables	Yard Waste
January-20	105.86	44.79	
February-20	71.69	37.36	
March-20	77.30	36.25	
April-20	125.93	51.78	6.20
May-20	111.36	49.91	6.50
June-20	98.26	41.32	8.34
July-20			
August-20			
September-20			
October-20			
November-20			
December-20			
Totals	590.40	261.41	21.04
Monthly Average	98.40	43.57	7.01
Weekly Average	22.71	10.05	1.62

Recycling Detail

Paper	Commingled
Fiber	Containers

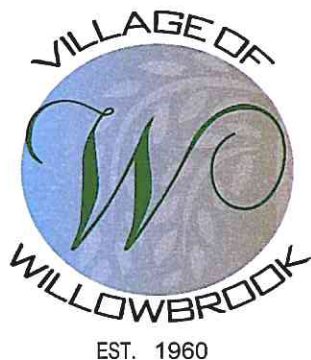
31.18	13.61
26.01	11.35
25.23	11.02
36.04	15.74
34.74	15.17
28.76	12.56
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00
0.00	0.00

Email To:

[llowbrook.il.us; apassero@willowbrook.il.us;](mailto:apassero@willowbrook.il.us)
apassero@willowbrook.il.us

Percentage of Materials Collected





Willowbrook

835 Midway Drive
Willowbrook, IL 60527-5549

Phone: (630) 323-8215 Fax: (630) 323-0787 www.willowbrookil.org

MONTHLY REPORT
MUNICIPAL SERVICES DEPARTMENT
June, 2020

Mayor

Frank A. Trilla

Village Clerk

Leroy R. Hansen

Village Trustees

Sue Berglund

Umberto Davi

Terrence Kelly

Michael Mistele

Gayle Neal

Paul Oggerino

**Village
Administrator**

Brian Pabst

Chief of Police

Robert Schaller

**Director of
Finance**

Carrie Dittman

Permits Issued:	
Asphalt	3
Addition Res	1
Buildout	1
Cables	3
Concrete	3
Demo Intr	1
Drainage	2
Drain tiles	1
Ext. Repairs	2
Fence	1
Inter Rem R	2
Inter Repairs	1
Irrigation	3
Pool A/G	1
Pavers	1
RTU	1
Re-Occp	2
Roof	8
Shed	1
Sign	1
Water Discon	1
Water Heater	2
Window/Doors	4
TOTALS	46
Plan Review Deposit Fee	2
Permit Revenue for June 2020	\$ 20,616.93
Total Revenue Collected for Fiscal YTD	\$ 61,807.37.
Total Budgeted Revenue for Fiscal Year 20/21	\$ 295 000.00
Total Percentage of Budgeted Revenue Collected to Date	20.95
Certificate of Occupancy, Final	3
Certificate of Occupancy, Temporary	2

Respectfully submitted,

Michael Mertens-Assistant Village Administrator



Proud Member of the
Illinois Route 66 Scenic Byway

MUNICIPAL SERVICES DEPARTMENT

PERMIT REVENUE

Fiscal Year 2020-2021

MONTH	CURRENT FISCAL YEAR 2020-2021	PRIOR FISCAL YEAR 2019-2020
MAY	\$ 41,190.44	\$ 24,660.45
JUNE	\$ 20,616.93	\$ 18,235.23
JULY		\$ 86,968.36
AUGUST		\$ 13,262.60
SEPTEMBER		\$ 18,390.75
OCTOBER		\$ 59,207.60
NOVEMBER		\$ 19,078.16
DECEMBER		\$ 19,940.06
JANUARY		\$ 145,370.82
FEBRUARY		\$ 29,837.34
MARCH		\$ 29,705.09
APRIL		\$ 146,939.37
COLLECTED REVENUE	\$ 61,807.37	\$ 611,595.83
BUDGETED REVENUE	\$ 295,000.00	\$ 280,000.00
REVENUES COLLECTED- (OVER)/UNDER BUDGET	\$ 233,192.63	\$ (331,595.83)
PERCENTAGE OF BUDGETED REVENUE COLLECTED	20.95%	218.43%

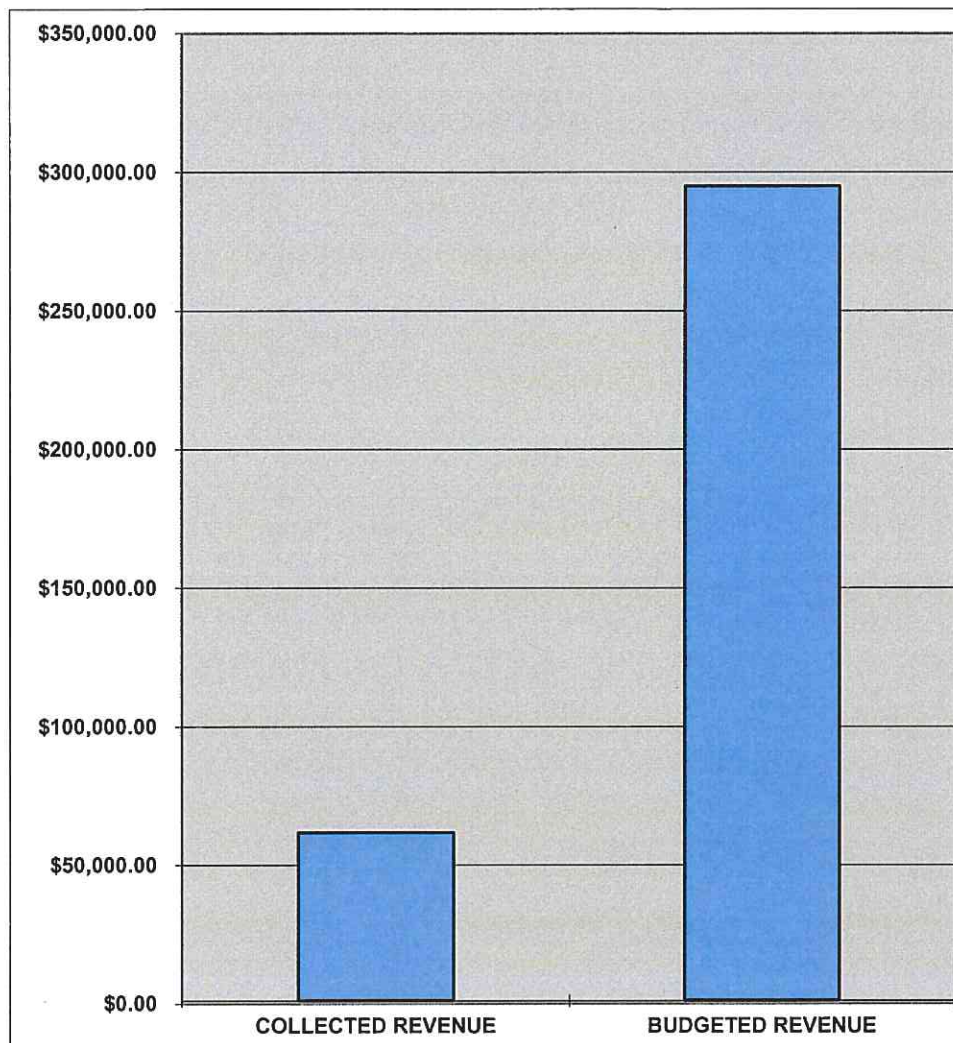
MUNICIPAL SERVICES DEPARTMENT

PERMIT REVENUE

	Fiscal Year 20-21	Fiscal Year 19-20
COLLECTED REVENUE	\$ 61,807.37	\$ 611,595.83
BUDGETED REVENUE	\$ 295,000.00	\$ 280,000.00

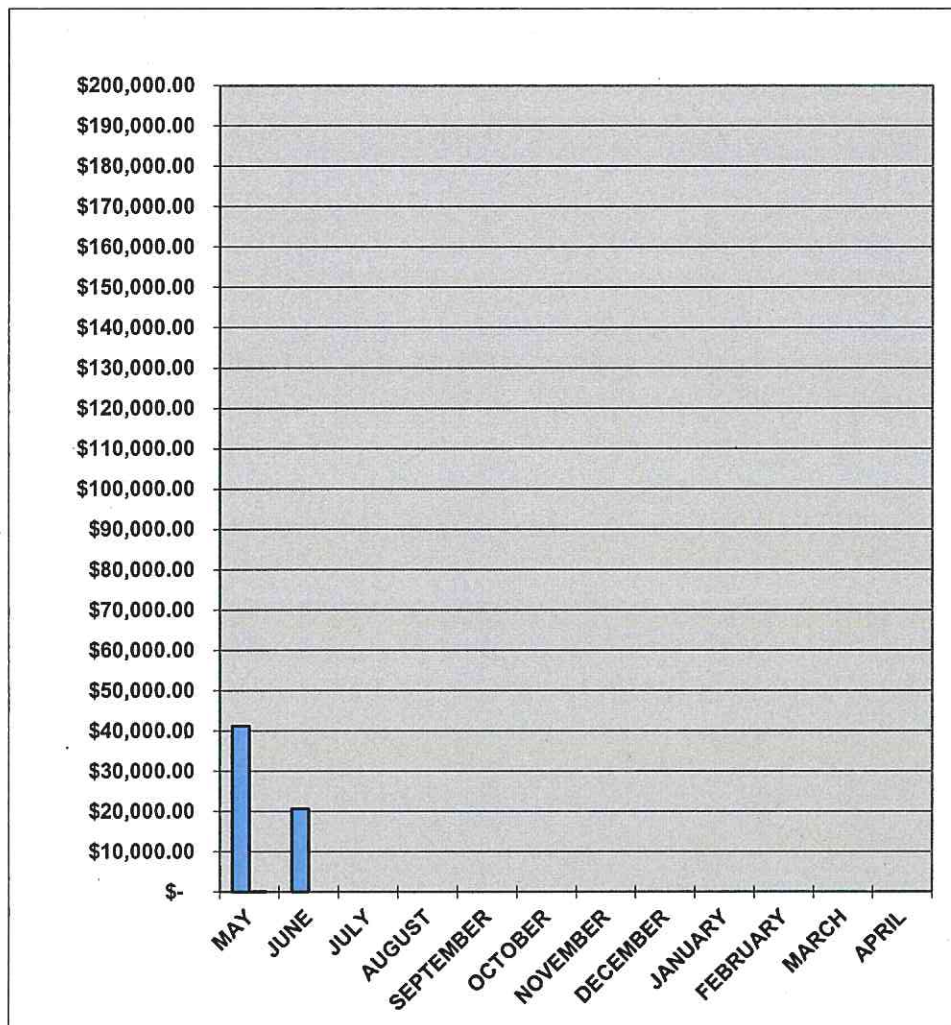
MUNICIPAL SERVICES DEPARTMENT

PERMIT REVENUE



MUNICIPAL SERVICES DEPARTMENT

PERMIT REVENUE



Permit	Date Issued:	Date Released:	Date Permit Expires:	Name:	Address:	Permit Purpose:	Business Name:	Fee:	RES / COMM:	Valuation:
20-131	05/22/20	06/03/20	12/02/21		6181 Knollwood Rd	Roof	The Knolls Assoc	\$ 195.00	M	\$ 35,800.00
20-132	05/22/20	06/03/20	12/02/21		6175 Knollwood Rd	Roof	The Knolls Assoc	\$ 195.00	M	\$ 35,800.00
20-135	06/03/20	06/04/20	12/03/21		7731 Eleanor Place	Roof		\$ 95.00	R	\$ 7,700.00
20-136	06/03/20	06/04/20	12/03/21		750 67th Place	Fence		\$ 240.00	R	\$ 6,000.00
20-122	05/18/20	06/05/20	12/04/21		7726 Eleanor Place	DW Asphalt		\$ 230.00	R	\$ 4,524.64
20-137	06/04/20	06/05/20	12/04/21		215 W 75th Street	Concrete Porch		\$180.00	R	\$ 5,000.00
20-138	06/04/20	06/05/20	12/04/21		215 W 75th Street	Asphalt DW		\$230.00	R	\$12,000.00
20-141	06/08/20	6/08/20	10/04/21		6224 Bentley	Water Disconnect			R	\$255.00
20-142	06/08/20	06/09/20	12/08/21		706 68th Street	Roof		\$95.00	R	\$ 11,649.06
20-144	06/09/20	06/09/20	03/06/21		6620 Wedgewood	Drainage		\$ 230.00	R	
20-147	06/09/20	06/09/20	12/08/21		7245 WillowWay Ln row	Cables	Comcast	NC	C	
20-148	06/09/20	06/09/20	12/08/21		359 Kingswood row	Cables	Comcast	NC	C	
20-145	06/09/20	06/10/20	12/09/21		6320 Raleigh Road	Drainage		\$ 230.00	R	
20-117	05/13/20	06/11/20	12/10/21		7726 Eleanor Place	Porch repairs		\$ 225.00	R	\$ 4,000.00
20-153	06/11/20	06/12/20	12/11/21		7535 Plaza Ct	Re-Occupancy	Hauter Brothers	\$ 250.00	C	
20-150	06/11/20	06/12/20	06/30/01		7000 Kingery Hwy	Plan Review	Shell Station	\$ 2,500.00	C	
20-155	06/10/20	06/12/20	12/11/21		7500 67th Place	Lawn Sprinkler		\$ 230.00	R	\$ 6,000.00
20-139	06/08/20	06/15/20	06/30/01		Void Void	Duplicate				
20-140	06/08/20	06/15/20	12/14/21		226 Sunset Ridge Rd	Patio		\$ 290.00	R	\$ 12,000.00
20-149	06/10/20	06/15/20	12/14/21		6346 Bentwood Dr	Lawn Sprinkler		\$ 230.00	R	\$ 7,000.00
20-154	06/11/20	06/15/20	12/14/21		7111 S Kingery Hwy	5(RTU)	Buffalo Wild Wings	\$ 820.00	C	\$ 60,000.00
20-127	05/28/20	06/16/20	12/15/21		5907 Bentley Ave	Porch Addition		\$ 425.00	R	\$ 12,000.00
20-158	06/16/20	06/16/20	03/17/21		317 75th Street	Bathroom remodel	Periodonics& Dental	\$ 1,322.75	C	\$ 9,150.00
20-156	06/16/20	06/17/20	12/16/21		6024 Clarendon Hills Rd	Equip Installation	ComED	nc	C	
20-161	06/17/20	06/17/20	12/16/21		6653 Wedgewood Ln	Water Heater		\$ 100.00	R	\$ 1,800.00
20-157	06/16/20	06/17/20	12/16/21		420 Stafford Ln	Fire Place update		\$ 305.00	R	\$ 16,500.00
20-149	06/09/20	06/17/20	12/16/21		7535 Kingery Hwy	Ext. repairs	Red Roof Inn	\$ 300.00	C	\$ 1,500.00
20-162	06/17/20	06/17/20	12/16/21		6443 Clarendon Hills Rd	Roof	The Lawns Condo Assoc	\$ 240.00	M	\$ 18,450.00
20-151	06/10/20	06/18/20	12/17/21		7719 Eleanor Place	A/G Pool		\$ 420.00	R	\$ 3,059.00
20-159	06/16/20	06/18/20	12/17/21		10 Midway Drive	Lawn Sprinkler		\$ 230.00	R	\$ 4,000.00
20-160	06/17/20	06/18/20	12/17/21		7900 Joliet	Inter Demo	Compass Real	\$ 2,066.85	C	\$ 50,000.00
20-163	06/19/20	06/19/20	12/18/21		7800 Kingery	Concrete/sealcoating	Delta Inn	\$ 250.00	C	\$ 9,000.00
20-165	06/19/20	06/23/20	12/22/21		6508 Rodgers Drive	Shed		\$ 230.00	R	\$ 2,250.00
20-137	06/22/20	06/23/20	12/22/21		101 Lake Hinsdale # 311	Patio Doors		\$ 135.00	M	\$ 4,550.00
20-138	06/22/20	06/23/20	11/27/20		834 75th Street	Temp Sign	Nail Fairy Lound	\$ 170.00	C	
20-172	06/23/20	06/23/20	12/22/21		824 Ridgemoor Dr	Roof		\$ 95.00	R	\$ 10,500.00
20-171	06/23/20	06/24/20	12/22/21		6420 Lane Crt	Windows		\$ 205.00	R	
20-174	06/24/20	06/25/20	12/24/21		604 67th Place	Asphalt DW		\$ 230.00	R	\$ 5,000.00
20-170	06/23/20	06/26/20	12/25/21		7630 Madison	Parking lot	NAI Hiffman	\$ 500.00	C	\$ 11,870.00
20-177	06/26/20	06/26/20	12/25/21		133 Waterford Dr	Basement remodel		\$ 330.00	R	
20-173	06/24/20	06/26/20	12/25/21		703 Lake Hins # 212	Patio Doors		\$ 135.00	M	\$ 5,058.00
20-176	06/26/20	06/30/01	06/30/01		5826 Bentley Ave	Drain Tile		\$ 230.00	R	\$ 20,215.00
20-094	06/09/20	06/29/20	12/28/21		650 Willowbrook Cen Pwy	Plan Review		\$ 1,000.00	C	
20-164	06/19/20	06/29/20	12/28/21		7320 S Madison	Build out	Comfortemp	\$ 3,042.33	C	\$ 100,000.00
20-181	06/26/20	06/29/20	12/28/21		7630 Plaza Ct	Re-Occupancy	Precise Bioscience	\$ 250.00	C	
20-184	06/29/20	06/29/20	12/28/21		7535 Plaza Ct	Windows	Hauter Brothers	\$ 255.00	C	\$ 7,667.00
20-186	06/30/20	06/30/20	12/29/21		6405 Raleigh Road	Water Heater		\$ 100.00	R	\$ 1,499.37
20-187	06/30/20	06/30/20	12/29/21		324 Chatelaine Ct	Roof		\$ 95.00	R	\$ 12,793.00
20-187	06/30/20	06/30/20	12/29/21		7604 Appletree lane	Roof		\$ 95.00	R	\$ 14,000.00

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User: DSCHMIDT
DB: Willowbrook

GL ACTIVITY REPORT FOR WILLOWBROOK
FROM 01-00-310-402 TO 01-00-310-402
TRANSACTIONS FROM 06/01/2020 TO 06/30/2020

Page: 1/1

Date	JNL	Type	Description	Reference #	Debits	Credits	Balance
Fund 01 GENERAL FUND							
06/01/2020			01-00-310-402 SIGN PERMITS		BEG. BALANCE		0.00
06/10/2020	CR	RCPT	Building Dept. Invoice 06/10/2020			100.00	(100.00)
06/23/2020	CR	RCPT	Building Dept. Invoice 06/23/2020			170.00	(270.00)
06/30/2020			01-00-310-402	END BALANCE	0.00	270.00	(270.00)

07/07/2020 01:30 PM
User: DSCHMIDT
DB: Willowbrook

GL ACTIVITY REPORT FOR WILLOWBROOK
FROM 01-00-310-401 TO 01-00-310-401
TRANSACTIONS FROM 06/01/2020 TO 06/30/2020

Page: 1/1

Date	JNL	Type	Description	Reference #	Debits	Credits	Balance
Fund 01 GENERAL FUND							
06/01/2020			01-00-310-401 BUILDING PERMITS		BEG. BALANCE		(41,190.44)
06/02/2020	CR	RCPT	Building Dept. Invoice 06/02/2020			35.00	(41,225.44)
06/03/2020	CR	RCPT	Building Dept. Invoice 06/03/2020			390.00	(41,615.44)
06/04/2020	CR	RCPT	Building Dept. Invoice 06/04/2020			335.00	(41,950.44)
06/05/2020	CR	RCPT	Building Dept. Invoice 06/05/2020			740.00	(42,690.44)
06/08/2020	CR	RCPT	Building Dept. Invoice 06/08/2020			255.00	(42,945.44)
06/09/2020	CR	RCPT	Building Dept. Invoice 06/09/2020			525.00	(43,470.44)
06/10/2020	CR	RCPT	Building Dept. Invoice 06/10/2020			130.00	(43,600.44)
06/11/2020	CR	RCPT	Building Dept. Invoice 06/11/2020			2,500.00	(46,100.44)
06/12/2020	CR	RCPT	Building Dept. Invoice 06/12/2020			580.00	(46,680.44)
06/12/2020	BD	TRX	SUMMARY BD 06/12/2020			250.00	(46,930.44)
06/15/2020	CR	RCPT	Building Dept. Invoice 06/15/2020			1,865.00	(48,795.44)
06/16/2020	CR	RCPT	Building Dept. Invoice 06/16/2020			1,322.75	(50,118.19)
06/17/2020	CR	RCPT	Building Dept. Invoice 06/17/2020			100.00	(50,218.19)
06/17/2020	CR	RCPT	Building Dept. Invoice 06/17/2020			300.00	(50,518.19)
06/17/2020	BD	TRX	SUMMARY BD 06/17/2020			305.00	(50,823.19)
06/18/2020	BD	TRX	SUMMARY BD 06/18/2020			240.00	(51,063.19)
06/19/2020	CR	RCPT	Building Dept. Invoice 06/19/2020			2,736.85	(53,800.04)
06/19/2020	CR	RCPT	Building Dept. Invoice 06/19/2020			230.00	(54,030.04)
06/19/2020	BD	TRX	SUMMARY BD 06/19/2020			230.00	(54,260.04)
06/19/2020	BD	TRX	SUMMARY BD 06/19/2020			275.00	(54,535.04)
06/19/2020	BD	TRX	SUMMARY BD 06/19/2020			275.00	(54,810.04)
06/22/2020	CR	RCPT	Building Dept. Invoice 06/22/2020			160.00	(54,970.04)
06/23/2020	CR	RCPT	Building Dept. Invoice 06/23/2020			135.00	(55,105.04)
06/23/2020	CR	RCPT	Building Dept. Invoice 06/23/2020			95.00	(55,200.04)
06/24/2020	CR	RCPT	Building Dept. Invoice 06/24/2020			230.00	(55,430.04)
06/25/2020	CR	RCPT	Building Dept. Invoice 06/25/2020			500.00	(55,930.04)
06/25/2020	CR	RCPT	Building Dept. Invoice 06/25/2020			205.00	(56,135.04)
06/26/2020	CR	RCPT	Building Dept. Invoice 06/26/2020			1,465.00	(57,600.04)
06/29/2020	CR	RCPT	Building Dept. Invoice 06/29/2020			605.00	(58,205.04)
06/29/2020	CR	RCPT	Building Dept. Invoice 06/29/2020			3,042.33	(61,247.37)
06/30/2020	CR	RCPT	Building Dept. Invoice 06/30/2020			195.00	(61,442.37)
06/30/2020	CR	RCPT	Building Dept. Invoice 06/30/2020			95.00	(61,537.37)
06/30/2020			01-00-310-401	END BALANCE	0.00	20,346.93	(61,537.37)