

VILLAGE OF MAPLE PARK KANE AND DEKALB COUNTIES, ILLINOIS

RESOLUTION 2021-05

A RESOLUTION RATIFYING AND AUTHORIZING A WATER IMPROVEMENT FUND EXPENDITURE WITH WATER WELL SOLUTIONS ILLINOIS, LLC IN AN AMOUNT NOT TO EXCEED \$45,413.50 FOR THE REHABILITATION OF WELL #4

WHEREAS, the Village of Maple Park ("The Village") is a municipality in accordance with the Constitution of the State of Illinois of 1970; and

WHEREAS, in October 2020, the Village of Maple Park began experiencing cloudy water issues and the Village addressed the issues by replacing and adding a valve to decrease the volume of oxygen in the water; however, this did not alleviate the situation; and,

WHEREAS, the Village brought in Water Well Solutions Illinois, LLC, to televise and evaluate Well #4; and,

WHEREAS, the evaluation determined the well needed to be rehabilitated and the motor, bowl, and sections of the column pipe need to be replaced. The cost of rehabilitation is \$45,413.50 and will take approximately two (2) weeks to complete once the parts have been received: and,

WHEREAS, the Village Board authorized the Village Administrator to sign the January 14, 2021 Water Well Solution Illinois, LLC Proposal to complete the work and is now formally ratifying the Administrator's signature on the Proposal; and,

WHEREAS, the rehabilitation work on Well #4 will be paid for out of Water Improvement Funds 52-10-5600 Maintenance and Repair and will include this expenditure in a budget amendment for FY2021.

NOW, THEREFORE, BE IT RESOLVED BY THE PRESIDENT AND BOARD OF TRUSTEES FOR THE VILLAGE OF MAPLE PARK, LOCATED IN DEKALB AND KANE COUNTIES, ILLINOIS, AS FOLLOWS:

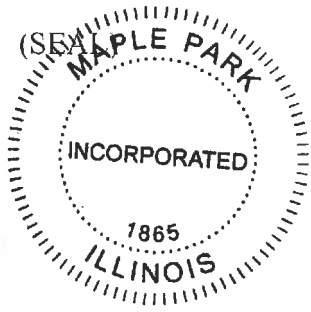
SECTION 1. The Village Board ratifies the Village Administrator's execution of the January 14, 2021 Well #4 Project Proposal from Water Well Solutions Illinois, LLC, "Exhibit A." and authorizes the expenditures out of Water Improvement Funds 52-10-5600 Maintenance and Repair

PASSED by the Board of Trustees of the Village of Maple Park, Kane and DeKalb Counties, Illinois at its regular Board meeting held on 2nd day of February, 2021.

Ayes: Ward, Rebone, Higgins, Harris, Fahnestock, Dalton

Nays: _____

Absent: _____



Kathleen Curtis

Kathleen Curtis, Village President

ATTEST:

Theresa D'Amato

Theresa D'Amato, Village Clerk



January 14, 2021

Jeremy Lin
Village of Maple Park
302 Willow Street
Maple Park, IL 60151-0220

RE: VILLAGE OF MAPLE PARK WELL NO. 4 PULL & INSPECTION REPORT:

Mr. Lin;

Our records indicate that Well No. 4 consists of a 40Hp, 460v, 1800rpm Submersible motor set approximately 400ft on 5" T&C Epoxy Coated column pipe. Well No. 4 was drilled in 1983 to a depth of 960ft and is pulling from the St. Peter's sandstone formation.

Inspection Report:

We did identify that the column pipe was in fact draining back down the column pipe due to two failed check valves. The water column had drained back to the SWL. The first check was found with debris in it causing it to stick open, the second check valves tension spring had failed allowing the water column to drain back.

Well No. 5 is experiencing similar issues and both need to be addressed before the column pipe separates and you lose the pumping equipment down the well. If this situation is left unaddressed, there is a potential to lose both wells. We believe that since both Well No. 4 and Well No. 5 were installed in 2003, that due to the age Well No. 5's the check valves in Well No. 5 have likely failed as well.

Well No. 4's pumping equipment has a date code of 2003. The pumping equipment is low speed and therefore can be rebuilt, however the cost of rewinding this motor and repairs to the bowl assembly would far exceed the cost of new 3600rpm pump and motor. We recommend that the equipment be reinstalled with new wire, 7 sections of column pipe, 2 new check valves and a new high-speed pump and motor.

If the Village would like to have their motor investigated further, it would need to go to the authorized service center in Lubbock, TX. Estimated lead time is 4 - 6 weeks for repairs and a cost estimated on repairs would be around \$10K.

We will still be televising the well to get an idea of the current downhole conditions. When WWS removed the pumping equipment, the crew onsite noticed heavy iron buildup and slime producing bacteria built up on the column pipe. Slime producing bacteria can cause physical plugging of the well leading to reduced flow rates. Slime bacteria and mineral encrustation can also be caused by the drain back situation. As water drains back down the column pipe, it aerates the water which precipitates out the minerals.

WWS recommends addressing this concern while the pump is out for service.

Project Scope Well No. 4:

Water Well Solutions Illinois, LLC
825 E North St - Elburn, IL 60119
Toll-Free: 888.758.9608 | Fax: 826.474.4771 | www.wwsag.com

Our proposal assumes that there is not an unknown downhole condition of either the well or pump that would prevent their removal from the well in a normal manner. Our labor would include travel time to and from the site with a (2) man pump crew and support equipment. Prevailing wage rates and certified payroll is included in our pricing.

Propose Pricing to Pull & Re-install Well No. 4 for inspection is as follows;

Village of Maple Park Well No. 4 Pull & Inspection w/Installation Proposal				
	QTY	Unit	Unit Cost	Extended Total
TEK Mobilization; Of large pump hoist, tools, and support equipment	1	LS	\$200.00	\$200.00
TEK Rig & 2-man crew; Estimated Labor to Investigate Well No. 4's drain back condition	4	HR	\$365.00	\$1,460.00
TEK Rig & 2-man crew; Estimated labor to Mobilization, pump pull, onsite inspection of column pipe, & megger readings of Submersible pump cable	9	HR	\$365.00	\$3,285.00
TEK TV Survey;	1	EA	\$1,300.00	\$1,300.00
Submersible Motor; 40Hp, 480v, 3600rpm, 6" Tesla Motor w/2 year warranty (Option: 1800rpm motor: \$22,964.00)	1	LS	\$6,113.00	\$6,113.00
Submersible Turbine Bowl; ITT Goulds 3600rpm Bowl rated for 200gpm @ 536' TDH (Option: 1800rpm Bowl \$20,131.00)	1	LS	\$6,710.00	\$6,710.00
Column Pipe; 5" Galvanized T&C column pipe Sch. 40	147	FT	\$29.13	\$4,282.11
Wire; 4/3awg heavy duty flat jacketed pump cable	410	FT	\$6.25	\$2,562.50
Check Valves; 5" Ductile Check Valves, Tape Wrapped	2	EA	\$1,100.00	\$2,200.00
Misc. Materials; Tape, S.S. Banding, Splice Kit, & Airline	1	LS	\$550.00	\$550.00
Level Transducer; New Level Transducer and Carrier Pipe	1	LS	\$4,000.00	\$4,000.00
Well Disinfection; Chemical Treatment of Well with Go2 chemistry, with surge block development & wire brushing of well casing and formation	1	LS	\$3,991.00	\$3,991.00
Rig & 2-man crew; Estimated labor for crew to tighten couplings, splice motor, mount motor to bowl, install pumping equipment, perform start-up and conduct 2 hr. flow test for performance	24	HR	\$365.00	\$8,760.00
Estimated Total				\$45,413.50

OUR already approved completed by 20/1/11

We are prepared to mobilize to the site early next week. If you have any questions, comments or concerns, please do not hesitate to contact me directly on my cell phone at (630) 201-0749 or at the office at (630) 369-9099.

Sincerely,



Todd E. Kerry
Vice President
Water Well Solutions Illinois, LLC

Signature: *Dawn Wucid-Rosbach*

Name: Dawn Wucid-Rosbach

Title: Village Administrator

Date: January 20, 2021