



City of Appleton

100 North Appleton Street
Appleton, WI 54911-4799
www.appleton.org

Meeting Agenda - Final-revised Utilities Committee

Tuesday, May 25, 2021

5:00 PM

Council Chambers, 6th Floor

1. Call meeting to order

2. Roll call of membership

3. Approval of minutes from previous meeting

[21-0698](#) Approval of the May 11, 2021 Utilities Committee Meeting Minutes.

Attachments: [May 11, 2021 Utilities Committee Meeting Minutes.pdf](#)

4. **Public Hearings/Apearances**

5. **Action Items**

[21-0699](#) Award Unit R-21 Chemical Root Foaming of Sanitary Sewers to Duke's Root Control in an amount not to exceed \$25,000.

Attachments: [R-21 Bid Tab.pdf](#)

[21-0701](#) Award the 2021 Secondary Clarifier Drive Removal, Rebuild, and Reinstallation Contract to Sabel Mechanical in the amount of \$174,302 with a 15% contingency of \$26,145 for a project total not to exceed \$200,447.

Attachments: [210519_Finance Memo_Final Clarifier Rebuild Work.pdf](#)

[21-0700](#) Award the Sole Source Purchase of Secondary Clarifier Drive Rebuild Parts through Evoqua Water Technologies LLC in the amount of \$105,964.

Attachments: [210519_Finance Memo_Final Clarifier Rebuild Work.pdf](#)

[21-0702](#) Approve Amendment #1 to McMahon contract for 2021 Solids Dewatering Equipment Upgrades to increase for additional HVAC design and construction management services in the amount of \$27,000 resulting in a decrease to contingency from \$32,587 to \$5,587. Overall contract increased from \$325,872 to \$352,872.

Attachments: [utilities memo - Engineering Dewatering Equipment 05-21-21.pdf](#)

[21-0727](#) Award Organic Recycling Contractor Services to Hsu Growing Supply for an extended one (1) year term ending December 31, 2021.

Attachments: [210517 UCM HSU contract extension 2021.pdf](#)

6. Information Items

[21-0703](#) Monthly Reports for April 2021:
- Water Distribution and Meter Team Monthly Report

Attachments: [Water Main Breaks April 2021.pdf](#)

7. Adjournment

Notice is hereby given that a quorum of the Common Council may be present during this meeting, although no Council action will be taken.

Reasonable Accommodations for Persons with Disabilities will be made upon Request and if Feasible.

For questions on the agenda, contact Chris Shaw at 920-832-5945 or Paula Vandehey at 920-832-6474.



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Meeting Minutes - Final Utilities Committee

Tuesday, May 11, 2021

5:00 PM

Council Chambers, 6th Floor

1. Call meeting to order

Vice-Chairperson Smith called the Utilities Committee meeting to order at 5:00 p.m.

2. Roll call of membership

Present: 4 - Smith, Doran, Martin and Thao

Absent: 1 - Meltzer

3. Approval of minutes from previous meeting

[21-0630](#)

Approval of the April 27, 2021 Utilities Committee Meeting Minutes.

Attachments: [April 27, 2021 Utilities Committee Meeting minutes.pdf](#)

**Doran moved, seconded by Thao, that the Minutes be approved. Roll Call.
Motion carried by the following vote:**

Aye: 4 - Smith, Doran, Martin and Thao

Absent: 1 - Meltzer

4. Public Hearings/Appearances

5. Action Items

[21-0631](#)

Award Unit F-21, Sanitary and Storm Sewer Cleaning and Televising, to Green Bay Pipe and TV, LLC in an amount not to exceed \$272,500.

Attachments: [F-21 Contract Award Form.pdf](#)
[F-21 Bid Tab.pdf](#)

Martin moved, seconded by Doran, that the Report Action Item be recommended for approval. Roll Call. Motion carried by the following vote:

Aye: 4 - Smith, Doran, Martin and Thao

Absent: 1 - Meltzer

[21-0633](#)

Award the Lead Service Line Replacement Plan to Arcadis in an amount not to exceed \$52,626.

Attachments: [Lead Service Line Replacement Plan.pdf](#)

Martin moved, seconded by Doran, that the Report Action Item be recommended for approval. Roll Call. Motion carried by the following vote:

Aye: 4 - Smith, Doran, Martin and Thao

Absent: 1 - Meltzer

6. Information Items

7. Adjournment

Doran moved, seconded by Thao, that the Utilities Committee be adjourned at 5:18 p.m.. Roll Call. Motion carried by the following vote:

Aye: 4 - Smith, Doran, Martin and Thao

Absent: 1 - Meltzer

R-21 Chemical Root Foaming of Sanitary Sewers (#7792431)

Owner: Appleton WI, City of

Solicitor: Appleton WI, City of

05/17/2021 01:45 PM CDT

Section	Titl	Line Item	Item Description	UofM	Quantity	Duke's Root Control	
						Unit Price	Extension
R-21 BASE BID							\$22,321.61
		1	8"/9" Sanitary Sewer	lin.ft.	5052	\$1.27	\$6,416.04
		2	10" Sanitary Sewer	lin.ft.	4785	\$1.27	\$6,076.95
		3	12" Sanitary Sewer	lin.ft.	3506	\$1.27	\$4,452.62
		4	15" Sanitary Sewer	lin.ft.	1070	\$1.27	\$1,358.90
		5	18" Sanitary Sewer	lin.ft.	395	\$3.98	\$1,572.10
		6	21" Sanitary Sewer	lin.ft.	500	\$4.89	\$2,445.00
Base Bid Total:							\$22,321.61



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Department of Utilities
Wastewater Treatment Plant
2006 E Newberry Street
Appleton, WI 54915-3128
920-832-5945 tel.
920-832-5949 fax

To: Chairperson Vered Meltzer and Members of the Utilities Committee

From: Utilities Deputy Director, Chris Stempa

Date: May 19, 2021

Re: Utilities Committee Action: Award the 2021 Secondary Clarifier Drive removal, Rebuild, and Reinstallation Contract to Sabel Mechanical in the amount of \$174,302 with 15% contingency of \$26,145 for a project total not to exceed \$200,447.

Utilities Committee Action: Award the Sole Source Purchase of Secondary Clarifier Drive Rebuild Parts through Evoqua Water Technologies LLC in the amount of \$105,964.

There are six secondary clarifiers located on the east/southeast side of the Appleton Wastewater Treatment Plant (AWWTP) campus. Each clarifier is 100 feet in diameter and 18 feet deep with a volume equal to 1,060,000 gallons. The clarifiers function as sedimentation tanks that remove flocs of biological growth generated in upstream activated sludge processes. The "mixed liquor" flow from activated sludge processes that contains the previously described floc is split between each of the six secondary clarifiers from which settled solids are collected for additional treatment. The treated water then flows downstream where it eventually is discharged to the Lower Fox River.

Each secondary clarifier is equipped with a continuously rotating collection mechanism for settled secondary sludge that is powered by Envirex HT60 drive units. The drive units were installed as part the major upgrades project in the early 1990's. The Utilities Department identified a 2021 CIP to replace all six drive units based on evidence of component wear and the potential for failure. A wholesale rebuild event commonly occurs every 10 years according to the manufacturer. The existing original drive units have now eclipsed the typical life expectancy of 25 years after continuous use. This is a testament to the robust construction of the clarifier equipment and the ongoing preventative maintenance program of staff.

In March 2021, an onsite inspection was performed to assess the condition of the clarifiers and determine if a rebuild option might be a viable alternative to complete replacement. The inspection revealed that the existing clarifier drives units were a good candidate for a rebuild. The rebuild option was anticipated to be up to 50% less than a wholesale replacement. A

preliminary cost for a complete drive replacement was solicited in 2020 which totaled \$561,000 (excludes engineering and contingency costs). The original equipment manufacturer (OEM) of the clarifier drives, Evoqua Water Technologies LLC (Evoqua), was asked to provide a separate lump sum cost as part of an off-site build that is described further within this memorandum. Evoqua would provide all necessary parts and services including a standard one-year warranty as part of their factory circular drive rebuild program.

REQUEST FOR QUOTATIONS: REMOVAL, REBUILD, AND REINSTALLATION:

Based on those findings of the clarifier inspection, a Request for Quotation (RFQ) process was advanced to solicit costs from reputable contractors who would be tasked to remove and reinstall the drive units along with performing various repairs to structural components outside of the drive mechanisms. The RFQ process was completed during April 2021. Quotes were solicited from three contractors that possessed prior experience with wastewater clarifier drive removal and reinstallation services. The quotes are summarized in Table 1. Sabel Mechanical (Sabel) provided the least cost quote and has successfully completed other project work for the Department of Utilities in the past.

Table 1: Secondary Clarifier Drive Work RFQ Summary

Company	Total
Sabel Mechanical	\$94,740
Staab Construction	\$138,884
August Winter & Sons	\$179,298

Upon receiving the quotes for removal and reinstallation services, Evoqua indicated that it has worked with select contractors in Wisconsin who have rebuilt the Envirex clarifier drive units for other wastewater treatment plants. Sabel is experienced with rebuilding Envirex clarifier drives at their facility in Fond du Lac, Wisconsin. As such, Sabel was asked to provide a competitive quote for rebuild services. Within this scenario, the itemized costs identified by Evoqua for replacement equipment and rebuild parts would remain the same as their original quote with the option remaining to the City to act upon rebuild services if desired. Sabel would still honor the standard one-year warranty that Evoqua offered as part of their factory circular drive rebuild program. The results of the quotation process are summarized in Table 2. The Sabel quote was \$29,938 less than Evoqua’s for rebuild services. Award of the rebuild services to Sabel would also significantly reduce the amount of time each clarifier would be out of service because of transportation logistics (Fond du Lac vs. Atlanta, Georgia). The total quoted cost from Sabel was \$174,302 after including the removal and reinstallation cost from Table 1 above.

Table 2: Secondary Clarifier Drive Rebuild Services

Description	Evoqua	Sabel
Rebuild Services	\$109,500	\$79,562

Note: with removal and reinstallation cost

REQUEST FOR QUOTATIONS – OEM SOLE SOURCE PARTS & REBUILD SERVICES

Evoqua provided a quotation for the necessary rebuild parts identified during the March 2, 2021 conditions assessment. As the Envirex HT60 clarifier OEM, Evoqua is the sole distributor of these parts required for the rebuild work. Table 3 summarizes the parts that will be provided by Evoqua as part of the sole source purchase which includes startup support as part of post rebuild commissioning.

Table 3: Evoqua Clarifier Drive Rebuild Parts Quote

Description	Evoqua Quote
WIPER-SKIMMER,3.5 X 70 X .19"TH,NEOPRENE	\$886.80
WIPER-SKIMMER,3.5 X 5.5 X .19"TH,NEOPRNE	\$274.20
WIPER-SKIMMER,5.5 X 7 X .19"THK,NEOPRENE	\$258.00
SQUEEGE-FLDZNG VANE,0.25 x 3 x -FT,NEOPRENE	\$2,745.00
SEAL-MANF, 3.625"W X 600"L X 0.25"THK	\$4,000.00
KIT,CLAMP W/BAND 50' X.62" FSTNRS & SPLC	\$900.00
FIELD SERVICE START UP (1) TRIPS - (1) DAY PER CLARIFIER	\$13,200.00
H60LT DRIVE REBUILD PARTS	\$82,500.00
SHIPPING	\$1,200
Total	\$105,964.00

SUMMARY

The combined not to exceed total cost for both actionable recommendations are 52% less than the contractor and equipment line-item amount allocated within the CIP budget (\$637,500). That number was based on a wholesale replacement because of various unknowns at the time with the existing 30-year old equipment. The rebuild work outlined above will provide a renewed life expectancy of 20-25 years which is comparable to new replacement clarifier drives.

RECOMMENDATION 1:

I am requesting an award of the Secondary Clarifier Drive Removal, Rebuild, and Reinstallation Contract to Sabel Mechanical as part of the “2021 Secondary Clarifier Rebuild Project” in the amount of \$174,302 with 15% contingency of \$26,145 for a project total not to exceed \$200,447.

RECOMMENDATION 2:

I am requesting sole source purchase award of Secondary Clarifier Drive Rebuild Parts through Evoqua Water Technologies LLC as part of “2021 Secondary Clarifier Rebuild Project” in the amount of \$105,964

If you have any questions or require additional information regarding this project please contact Chris Stempa at 920-832-5945.



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Department of Utilities
Wastewater Treatment Plant
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Appleton, WI 54915-3128
920-832-5945 tel.
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If you have any questions or require additional information regarding this project please contact Chris Stempa at 920-832-5945.



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Department of Utilities
Wastewater Treatment Plant
2006 E Newberry Street
Appleton, WI 54915
920-832-5945 tel.
920-832-5949 fax

TO: Chairperson Vered Meltzer and Members of the Utilities Committee

FROM: Chris Stempa, Utilities Deputy Director

DATE: May 21, 2021

RE: *Approve Contract Amendment #1 to McMahan for 2021 Solids Dewatering Equipment Upgrades to increase for additional HVAC design and construction management services in the amount of \$27,000 resulting in a decrease to contingency from \$32,587 to \$5,587. Overall contract increased from \$325,872 to \$352,872*

BACKGROUND:

The Appleton Wastewater Treatment Plant (AWWTP) 2021 Solids Dewatering Equipment Upgrades Project engineering service contract was awarded to McMahan by Common Council on February 3, 2021.

The engineering services provided by McMahan will guide the rehabilitation of existing equipment which has reached its useful life and associated upgrades along with schedule of estimated costs that will address immediate and long-term needs. The final design shall consider cost, functionality, versatility, expandability, efficiency, and safety. The City will evaluate each design concept or alternative as part of Phase II work from which a project will be developed for construction in 2022 and 2023.

During the design process for 2021 Solids Dewatering Equipment Upgrades Project it was determined that a complete HVAC system upgrade within the V-Building is needed as opposed to a upgrades limited only to the solids dewatering floor. The requirements needed for the new dewatering equipment would cause unexpected consequences with the existing equipment. The completion the entire HVAC system would also maximize the overall system efficiency by including heat recovery and optimizations to the upper heating loop operation.

The intent of advancing Amendment #1 is to take advantage of HVAC design improvements identified within McMahan's existing contract and bundle it with the opportunity to optimize the greater HVAC system that is interconnected within V-Building.

SUMMARY

The cost of additional engineering design and construction management services outlined Contract Amendment #1 totals \$27,000. This amendment would result in the 2021 Solids Dewatering Equipment Upgrades contract with McMahon increasing from \$325,872 to \$352,872 and a decrease to contingency from \$32,587 to \$5,587. If you have any questions regarding this project, please contact Chris Stempa at ph: 832-5945.



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920-832-5945 tel.
920-832-5949 fax

TO: Chairperson Vered Meltzer and Members of the Utilities Committee

FROM: Environmental Programs Coordinator Brian Kreski

DATE: May 20, 2021

RE: *Award Biosolids Compost Processing Contract Extension to Hsu Growing Supply for an extended one (1) year term ending December 31, 2021.*

BACKGROUND:

The Appleton Wastewater Treatment Plant (AWWTP) has operated a biosolids compost facility since the fall of 2010. Since its conception, the AWWTP has successfully contracted with Hsu Growing Supply (Hsu) for compost processing services. Year-end 2020 marked the end of the fourth consecutive contract term with Hsu. The last Organic Recycling Contractor Services request for quote (RFQ) process was completed on March 1, 2017. At that time Hsu's was the only company of six to be responsive to the utility's RFQ. Reasons provided by the non-responsive companies included the inability to meet necessary qualifications, the inability to be competitive based on process frequency and distance to mobilize equipment, and/or the services requested were outside of their preferred business model.

2017 RFQ PROCESS:

In the 2017 RFQ process, proposing companies were asked to quote on specific processing volumes based on preferred compost operations. The Compost Program budget and contract award amount (over four years) is based on processing three "batches" of material annually for a total of 16,000 cubic yards (5,333 yards per batch).

Table 1: Organic Recycling Contractor Services Quotes

Company	Compost Processing			Stockpiling
	2,500 YD	5,000 YD	10,000 YD	3,500 YD
Hsu Growing Supply	\$19,125	\$26,250	\$42,500	\$12,075
Purple Cow Organics, LLC	DNQ			
Veolia	DNQ			
Soil Solutions	DNQ			
Synagro Technologies	DNQ			
Vandenberg Trucking	DNQ			

Note: DNQ: Did Not Quote

Contract language was developed within the 2017-2020 contract that allowed for a one year extension by mutual agreement. The proposed contract extension would maintain the existing pricing from the contract (see Table 1).

RECOMMENDATION:

I recommend a contract extension for organic recycling services for an additional year be awarded to Hsu for the term ending December 31, 2021. If you have any questions regarding this project, please contact Brian Kreski at 920-832-2316.

WATER MAIN BREAK/ JOINT LEAK REPORT - APRIL

YEARLY WATER MAIN BREAK COMPARISON

<u>APRIL 20</u>	<u>APRIL 21</u>	<u>YTD 20</u>	<u>YTD 21</u>
8	5	37	50

LOCATION	WORK ORDER	TYPE OF PIPE	SIZE	YEAR	BREAK	ESTIMATED DURATION	ESTIMATED WATER LOSS IN GALLONS	DOLLAR VALUE OF WATER REVENUE LOSS**
2625 Chestwood Ct.	284619	DIP	8"	1972	3" Hole	6 Hours	523,139	\$3,180.69
NOTES: A call came in of water bubbling out of road. Duration is based on time of call and soil saturation.								
1315 N. Superior St.	284745	CIP	6"	Pre 1930	1/32" Crack	105 Days	12,843,000	\$78,085.44
NOTES: Break was found with the Correlator. Duration is based on soil saturation and past water inquires. Water did not surface, must have been running down the duct pack.								
126 W. Foster St.	284957	CIP	6"	1919	1/8" Crack	111 Days	43,784,270	\$266,208.36
NOTES: Break was found with the Correlator. Duration is based on soil saturation and presence of roots growing by pipe. Water did not surface, was running into the sewer pipe and river.								
1225 W. Northland Ave.	284963	CIP	12"	1969	4" Hole	2 Hours	522,590	\$3,177.35
NOTES: A call came in of water bubbling out of road. Duration is based on time of call and soil saturation.								

**Water Loss is calculated at the residential rate of \$6.08 per 1000 gallons.

LOCATION	WORK ORDER	TYPE OF PIPE	SIZE	YEAR	BREAK	ESTIMATED DURATION	ESTIMATED WATER LOSS IN GALLONS	DOLLAR VALUE OF WATER REVENUE LOSS**
Arlington & John	285064	DIP	12"	1974	3" Hole	6 Hours	547,008	\$3,325.81

NOTES: Break was reported by APD. Duration is based on soil saturation & amount of washout.

In addition to the dollar value of water revenue lost, there is an average cost of \$9,000 to repair each water main break (including final restoration) and an average cost of \$630 to produce the lost water for each main break.

**Water Loss is calculated at the residential rate of \$6.08 per 1000 gallons.