

City of Appleton

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

Meeting Agenda - Final Utilities Committee

Tuesday, February 12, 2019	5:00 PM	Council Chambers, 6th Floor

- 1. Call meeting to order
- 2. Roll call of membership
- 3. Approval of minutes from previous meeting

19-0128 Approval of the January 22, 2019 Utilities Committee Meeting Minutes.

Attachments: January 22, 2019 Utilities Committee Meeting Minutes.pdf

4. Public Hearings/Appearances

5. Action Items

<u>19-0129</u>	Third Amendment of the 2018 Stormwater Management Plan Review contract with raSmith by an increase of \$7,500 for a total contract amount not to exceed \$117,500.
	Attachments: 2018A SWM Plan Review Third Amendment Memo Util Cmte.pdf
<u>19-0130</u>	Approval to single source and award 2019M Stormwater Consulting Services contract for Kernan Ravine Preliminary Engineering with Brown and Caldwell in an amount not to exceed \$41,670.
	Attachments: 2019M Kernan Ravine 30% BC Award Memo.pdf
<u>19-0131</u>	Award Unit R-19 Chemical Root Foaming of Sanitary Sewers to Great Lakes TV Seal, Inc. in an amount not to exceed \$25,000.
	<u>Attachments:</u> R-19 Chemical Root Foaming of Sanitary Sewers.pdf
<u>19-0132</u>	Award Unit K-19 Native Landscape Management Contract to Applied

Attachments: K-19 contract award util memo FINAL 02-01-2019.pdf

Ecological Services, Inc. in an amount not to exceed \$181,892.

<u>19-0133</u>	Award 2019L Leona Pond Construction Related Services Contract to Brown & Caldwell in an amount not to exceed \$32,970.
	Attachments: Brown Caldwell 2019L Leona Pond CRS Contract Util Memo FINAL 02-01-2019
<u>19-0134</u>	Governmental Responsibility Resolution for Runoff Management Grants.
	Attachments: Resolution 2019 Grant Submittal CityofAppleton.pdf
<u>19-0145</u>	Award Geotechnical Service for the Lake Intake Project to Omni Associates in the amount of \$89,695 with a contingency of \$8,900 and a total project cost not to exceed \$98,595.

Attachments: Lake Intake Geotechnical Omni Award 02-01-19 (002).pdf

6. Information Items

<u>19-0135</u> 2019 Appleton Wastewater Treatment Plant Biosolids Storage Update

Attachments: Utilities memo 180-day storage.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.



City of Appleton

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

Meeting Minutes - Final Utilities Committee

Tuesday, January 22, 2019

5:00 PM

Council Chambers, 6th Floor

1. Call meeting to order

Chairperson Baranowski called the Utilities Committee meeting to order at 5:00 p.m.

2. Roll call of membership

Present: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

3. Approval of minutes from previous meeting

<u>19-0072</u> Approval of the January 8, 2019 Utilities Committee Meeting minutes.

Attachments: January 8, 2019 Utilities Committee Meeting minutes.pdf

Meltzer moved, seconded by Reed, that the Minutes be approved. Roll Call. Motion carried by the following vote:

Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

4. Public Hearings/Appearances

5. Action Items

19-0073

Approval to single source and award the 2019I Valley Road Stormwater Management Alternatives Evaluation in an amount not to exceed \$37,400 and authorization to single source the future design contract and construction related services contract with McMahon Associates, Inc.

<u>Attachments:</u> 2019 Valley Road Stormwater Evaluation Contract Award.pdf

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

Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

19-0087

Approve Intergovernmental Agreement with the City of Menasha and Village of Fox Crossing for stormwater management related to the urbanization of Valley Road.

Attachments: Valley Road.pdf

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

Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

6. Information Items

<u>19-0074</u> WPPI Capacity Agreement Revenue Summary

<u>Attachments:</u> WPPI Capacity Agreement Revenue Summary.pdf

The summary was reviewed.

<u>19-0075</u> 2018 Water Main Break History

Attachments: Water Main Break History.pdf

The report was reviewed.

19-0076

Monthly Reports for October, November, December 2018

- Wastewater Treatment Plant Synopsis and Receiving Station Revenue Report
- Water Treatment Facility Synopsis
- Water Distribution and Meter Team Monthly Report December

<u>Attachments:</u> 2018 Q4 Wastewater Synopsis.pdf

2018 Q4 Water Synopsis.pdf

Water Main Breaks December 2018.pdf

The reports were reviewed.

7. Adjournment

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

Aye: 5 - Baranowski, Meltzer, Reed, Dvorachek and Raasch

6epartment of Public Works - Engineering Division

MEMO

TO: Utilities Committee

FROM: Paula Vandehey, Director of Public Works

Pete Neuberger, Staff Engineer Sue Olson, Staff Engineer

DATE: February 5, 2019

RE: Third Amendment to the 2018 Stormwater Management Plan Review contract with raSmith by

an increase of \$7,500 for a total contact amount not to exceed \$117,500.

The Department of Public Works is requesting a third amendment to the contract with raSmith for 2018 Stormwater Management Plan Reviews by an increase of \$7,500, for a total contact amount not to exceed \$117,500.

Approximately ten (10) stormwater management plan reviews were started in 2018 but have not yet been completed. Staff believes that it is most efficient and cost effective to stay with raSmith to complete these plan reviews as opposed to starting with the new plan review consultant part way through a project.

Work under this contract is charged on an hourly basis and is therefore only used as needed. In order to keep projects moving forward, staff is requesting this amendment now, before the current contract is completely spent.

Department of Public Works – Engineering Division MEMO

TO: Utilities Committee

FROM: Paula Vandehey, Director of Public Works

Sue Olson, Staff Engineer Pete Neuberger, Staff Engineer

DATE: February 5, 2018

RE: Approval to single source and award 2019M stormwater consulting services contract

for Kernan Ravine Preliminary Engineering with Brown and Caldwell in an amount

not to exceed \$41,670.

The Department of Public Works is requesting approval to single source and award 2019M stormwater consulting services contract for Kernan Ravine Preliminary Engineering with Brown and Caldwell (BC) in an amount not to exceed \$41,670.

As previously reported to the Utilities Committee, the major rainstorms that occurred in August and September 2018 caused a 30 inch storm sewer in the ravine west of the intersection of Kernan Avenue and Dewey Street to collapse. The storm sewer is over 20 feet deep and is located in an easement crossing residential properties and underneath a garage. Staff believes that this is an emergency situation and a new pipe needs to be installed in 2019.

The new storm pipe cannot discharge into the ravine without proper stabilization to prevent erosion of the ravine. Therefore, any solution is expected to require a variety of permits from the Wisconsin Department of Natural Resources (WDNR) and possible the Army Corps of Engineers, (ACOE), including Chapter 30 and wetland permits.

The Kernan Ravine is part of the 2006 East College Avenue study. This study is already being updated as part of the 2019C Newberry Street contract with BC. The Newberry project went through an RFP process, with BC being selected as the most qualified and cost effective consultant. BC has also performed successfully on past stream stabilization projects for the City, such as the stream in Reid Golf Course and Apple Creek north of CTH JJ. Based on this information staff believes that BC has demonstrated their qualifications for modeling and design as needed for the Kernan Ravine project. Therefore staff is requesting to single source the Kernan Ravine project to BC.

Work under this contract will include:

- Expanding the update of the East College Avenue water quantity model beyond Newberry Street for the Kernan Ravine
- Determining the correct size pipe to replace the existing pipe

- Evaluating different construction methods (tunnel, open cut) and site access for construction
- Preparing 30% designs for the new pipe
- Meeting with regulatory staff and neighbors
- Evaluating options for energy dissipation and ravine stabilization
- Preparing 30% designs for the ravine stabilization

With satisfactory performance by the consultant, it is anticipated that shortly after an alternative is selected, a request to contract for bidding documents and permitting will be brought to committee for approval.

CITY OF APPLETON Department of Public Works

MEMORANDUM

Mun	nce Committee icipal Services Committee ties Committee of Contract
The Department of	Public Works recommends that the following described work:
R-19 Chemical I	Root Foaming of Sanitary Sewers
Be awarded to:	(
Name:	Great Lakes TV Seal, Inc.
Address:	3600 Kewaunee Road
_	Green Bay, WI 54311
_	
•	
In the amount of:	·
With a %	contingency of:
For a project total	
** OR **	
In an amount Not	Γο Exceed : \$25,000.00
Bud	get: \$25,000.00
Estim	ate: \$25,000.00
Committee D	ate: 02/12/19
Council D	ate: 02/20/19

CHEMICAL ROOT FOAMING OF SANITARY SEWERS

BID TABULATION

Unit R-19 January 28, 2019

<u>ITEM</u>	DESCRIPTION	Quantity	<u>Units</u>
1.	8"/9" Sanitary Sewer	10,181	lin.ft.
2.	10" Sanitary Sewer	7,423	lin.ft.
3.	12" Sanitary Sewer	1,748	lin.ft.
4.	15" Sanitary Sewer	1,460	lin.ft.

Great Lakes T	V Seal, Inc.	Dukes Root Control, Inc.		
Unit Price	<u>Total</u>	<u>Unit Price</u>	<u>Total</u>	
\$0.96	\$9,773.76	\$1.15	\$11,708.15	
\$0.97	\$7,200.31	\$1.15	\$8,536.45	
\$0.99	\$1,730.52	\$1.15	\$2,010.20	
\$1.04	\$1,518.40	\$1.15	\$1,679.00	

\$20,222.99

\$23,933.80

Department of Public Works – Engineering Division

MEMO

TO: Utilities Committee

FROM: Paula Vandehey, Director of Public Works

Pete Neuberger, Staff Engineer

SUBJECT: Award Unit K-19 Native Landscape Management Contract to Applied Ecological Services,

Inc., in an amount not to exceed \$181,892.

DATE: February 5, 2019

The Department of Public Works recommends award of the K-19 Native Landscape Management Contract to Applied Ecological Services, Inc. (AES), in an amount not to exceed \$181,892 (budget \$193,035).

The following tasks are included in this contract:

Native Vegetation Maintenance and New Installation at City Stormwater Ponds and Channels

- Provide vegetation inspections and recommendations.
- Provide invasive species and algae control through herbicide, mowing, brushing, and/or controlled burns.
- Provide preparation, seeding, planting, and erosion control at sparsely established areas and new sites.
- Maintain pond aerators.

In addition to work at DPW sites, the proposed contract amount includes \$3,775.81 of work at Facilities Department sites, to be paid by Facilities Department through interdepartmental agreement.

The Department of Public Works requests that the Utilities Committee approve a contract with AES, who was the 2017 and 2018 contractor, for these services. This request is consistent with the approved 2018 stormwater budget, the March 15, 2017 Unit K-17 approval by the Common Council, and the March 2017 award memo by the Department of Public Works requesting use of AES as its consultant/contractor for native landscaping through 2021, subject to contractor performance in the prior year and annual contract approval.

AES performed well as the 2017 and 2018 contractor, demonstrating good customer service, expertise, and cost-effectiveness. Proposed K-19 unit prices include a 2% unit price increase compared to the K-18 unit prices, which is in line with the proposed annual unit price adjustment in the original 2017 AES proposal.

Therefore the Department of Public Works recommends awarding Unit K-19 Native Landscape Management to Applied Ecological Services in an amount not to exceed \$181,892.

Department of Public Works – Engineering Division

MEMO

TO: Utilities Committee

FROM: Paula Vandehey, Director of Public Works

Pete Neuberger, Staff Engineer

DATE: February 5, 2019

RE: Award 2019L Leona Pond Construction Related Services Contract to Brown & Caldwell,

in an amount not to exceed \$32,970.

The Department of Public Works staff recommends award of the referenced contract using a single-source quote from the pond's design engineer, Brown & Caldwell, in an amount not to exceed \$32,970 (budget \$35,000). Project scope is as follows:

Brown & Caldwell will provide the following services, on an as-needed basis, during construction of Leona Pond in 2019:

- Assist the City in answering design questions from contractor during construction.
- Assist the City in answering design questions from regulatory agency personnel during construction.
- Assist the City in preparing final report and related documentation for WDNR construction grant.
- Assist the City in considering and developing potential change orders.
- Review contractor submittals.
- Update the XP-SWMM model and WinSLAMM model for pond and storm sewer, based on as-built information.
- Calculate as-built earthwork quantities for payment using City survey data.

This request is consistent with the consultant construction services item in the DPW Stormwater Utility budget.

Therefore, the Department of Public Works requests that the Utilities Committee approve award of the 2019L Leona Pond Construction Related Services Contract to Brown & Caldwell, in an amount not to exceed \$32,970.

GOVERNMENTAL RESPONSIBILITY RESOLUTION FOR RUNOFF MANAGEMENT GRANTS

WHEREAS, the <u>City of Appleton</u> is interested in acquiring a Grant from the Wisconsin Department of Natural Resources for the purpose of implementing measures to control agricultural or urban storm water runoff pollution sources (as described in the application and pursuant to ss. 281.65 or 281.66, Wis. Stats., and chs. NR 151, 153 and 155); and

WHEREAS, a cost-sharing grant is required to carry out the project: <u>Citywide Stormwater Management Plan Update</u>

THEREFORE, BE IT RESOLVED, that the <u>City of Appleton</u>

HEREBY AUTHORIZES the <u>Director of Public Works</u>, <u>Department of Public Works</u> to act on behalf of <u>the City of Appleton</u> to:

- Sign and submit an application to the State of Wisconsin Department of Natural Resources for any financial aid that may be available;
- Sign a grant agreement between the local government (applicant) and the Department of Natural Resources;
- Sign and submit reimbursement claims along with necessary supporting documentation;
- Sign and submit interim and final reports and other documentation as required by the grant agreement;
 and
- Take necessary action to undertake, direct and complete the approved project.

HEREBY agrees to budget the necessary funds for the Citywide Stormwater Management Plan Update in the 2020 budget.

	requirements pertaining	ton shall comply with all state and federal laws, to implementation of this project and to fulfillment	t of
Adopted this	day of	, 2019.	

,		_,	
I hereby certify that the foregoing res	olution was duly add	opted by	at
a legal meeting on	day of	, 2019.	
Authorized Signature:		Title: <u>City Mayor</u>	



Department of Utilities Water Treatment Facility 2281 Manitowoc Road Menasha, WI 920-832-5945 tel. 920-832-5949 fax

TO: Chairperson Ed Baranowski and Members of the Utilities Committee

FROM: Chris Shaw, Utilities Director

DATE: February 1, 2019

RE: Award Geotechnical Service for the Lake Intake Project to Omni

Associates in the Amount of \$89,695 with a Contingency of \$8,900 and a

Total Project Cost not to exceed \$98,595

BACKGROUND:

The Appleton Water Treatment Facility (AWTF) draws raw water from Lake Winnebago. Raw water is pumped from the City's Lake Station to the Appleton Water Treatment Facility (AWTF). The lake intake and shorewell were constructed in 1968. The intent of this project is to address reliability and redundancy in raw water treatment and conveyance.

McMahon Associates was approved by the Utilities Committee to complete a preliminary engineering study and complete a conditions assessment of the intake, shorewell, chemical systems, treatment processes and electrical systems. Upon completion of a conditions assessment, an alternatives analysis will provide a baseline for project decisions to be made.

As part of the alternatives analysis an important element that needs to be completed in order to define the project and prepare bidding documents is the geotechnical engineering. City staff has completed a Request for Proposal process for that work. Four engineering firms with similar project experience and the appropriate credentials were invited to participate.

The scope of geotechnical work was broken into two phases. The first phase provide information associated with conventional marine construction for work in Lake Winnebago. The approach calls for multiple borings, soil sampling and analyses required for addressing the dredge permitting issues under NR 347. The second phase calls for multiple borings along the proposed land pipe route from the shorewell to the AWTF. The project approach for this phase is that a combination of open cut and directional drilling construction will be approved by the State.

QUOTATION RESULTS:

A request for proposal (RFP) was distributed to for geotechnical engineering firms. Each firm had previous engineering experience with similar engineering analyses over land and for water intakes.

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One firm, Professional Service Industries, Inc., opted not to provide a proposal based on the specifics of this project. Table 1 identifies the invited engineering firms along with proposal pricing. Due to the similar nature of the project scope, cost was the only consideration for determining value.

COMPANY	Cost		
Omni Associates, Inc.	\$89,695		
American Engineering Testing, Inc.	\$100,015		
ECS Midwest, LLC	\$164,145		
Professional Service Industries, Inc.	NA		

Notes: DNP – Did Not Propose, NA – Non Applicable

An evaluation team completed their review and scoring of the submitted proposals. The evaluation team found that Omni had met the RFP requirements and was the least cost.

RECOMMENDATION:

Award Geotechnical Service for the Lake Intake Project to Omni Associates in the Amount of \$89,695 with a Contingency of \$8,900 and a total project cost not to exceed \$98,595 If you have any questions regarding this project please contact Chris Shaw at ph: 920-997-4200.



Department of Utilities
Wastewater Treatment Plant
2006 East Newberry Street
Appleton, Wisconsin 54915 – 2758
920 – 832 – 5945 tel.
920 – 832 – 5949 fax

To: Chairperson Baranowski and Members of the Utilities Committee

From: Director of Utilities Chris Shaw

Deputy Director of Utilities Chris Stempa

Environmental Programs Coordinator Brian Kreski

Date: January 30, 2019

RE: 2019 APPLETON WASTEWATER TREATMENT PLANT

BIOSOLIDS STORAGE UPDATE

Appleton Wastewater Treatment Plant Biosolids Program:

Since 2000 the Appleton Wastewater Treatment Plant (AWWTP) has produced an annual average of 23,500 wet tons of biosolids (table 1) and applies approximately 22,000 wet tons to agricultural fields as part of the Biosolids Management Program. The program is committed to effectively manage and utilize 100% of the biosolids produced through beneficial use alternatives such as agricultural land application and biosolids composting. The AWWTP Biosolids Program is regulated by the Wisconsin Department of Natural resources (WDNR) and is required to provide 180 storage for the municipal biosolids produced (NR 204).

In 2018, the AWWTP generated 27, 552 tons of biosolids (Table 1) at 31.4% total solids and land applied 26,319 wet tons of this material. The biosolids program utilized 63 permitted sites totaling 1,135 acres of agricultural permit at distances up to 65 miles away in three Wisconsin Counties (Calumet, Waupaca, and Portage).

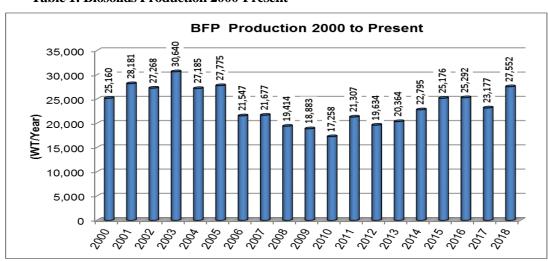


Table 1: Biosolids Production 2000-Present

Increases in hauled waste entering the AWWTP have contributed to the increase in annual biosolids production. Appleton is fortunate to have the capacity to receive this waste stream through the Hauled Waste Program. The Hauled Waste Program has become a significant revenue source (see Table 2), exceeding the \$3 million dollar plateau for the first time in 2018.

Table 2: Loadings & Revenues Summary Receiving Station Wastes

	Headworks			Receiving Station			Total	
			•					
Year	Tons	Revenue	%	Tons	Revenue	%*	Tons	Revenue
2010	71,516	\$339,701	53%	31,505	\$303,521	47%	103,021	\$643,222
2011	51,171	\$239,512	45%	31,822	\$348,565	55%	82,984	\$588,077
2012	36,056	\$186,512	28%	50,729	\$480,388	72%	86,785	\$666,900
2013	51,782	\$245,965	38%	31,818	\$373,057	62%	94,135	\$643,934
2014	96,358	\$413,882	39%	59,959	\$636,198	61%	156,317	\$1,050,080
2015	159,538	\$1,047,315	77%	47,820	\$425,532	23%	207,359	\$1,472,847
2016	241,906	\$1,633,161	79%	63,004	\$462,401	21%	304,910	\$2,161,440
2017	271,523	\$1,839,508	77%	78,935	\$862,051	23%	350,458	\$2,701,560
2018	341,334	\$2,471,075	75%	112,280	\$1,108,199	25%	453,615	\$3,576,217
5-Year	222,132	\$1,480,988	69%	72,400	\$698,876	31%	294,532	\$2,192,429
Average	222,132	φ1,400,200	U) /0	12,400	φυνυ,στυ	31 /0	277,332	Ψ2,172,429

^{*} Represents % of total yearly revenue.

Although the revenue has increased, the large volumes of hauled waste material entering the plant have contributed to significantly higher volume of biosolids in 2018 compared to the previous annual averages. The hauled waste, in combination with extremely wet weather conditions in the fall of 2018, created a potential need for AWWTP to landfill biosolids in 2019.

The AWWTP submitted a request to the WDNR in December, seeking regulatory approval to spread biosolids on frozen or snow covered agricultural fields (that meet NR 204 guidelines). The request was denied and the WDNR made recommendations to find alternate off-site storage, batch compost, or landfill a portion of the AWWTP's biosolids. Although landfilling will be the Utilities last option, we have proactively sought approval from two separate landfills (Outagamie County and Hickory Meadow).

It is our intention to start batching compost in early March which will provide approximately two weeks of storage and bring the AWWTP closer to land application. However, the land application is ultimately determined by the weather, field conditions, and road weight restrictions which can vary from year to year. AWWTP staff are evaluating a potential area located near the existing biosolids building which may allow for limited additional temporary biosolids storage. Below is a recap of the currently available options for biosolids beneficial use, temporary storage, and/or final deposition.

Option 1: Land application (weather/fields/weight limits)

Option 2: Composting (up to 1,500 wet tons of biosolids)

Option 3: Temporary storage at the AWWTP (up to 1,500 wet tons)

Option 4: Landfill (approved for 4,000 wet tons)

It is our mission at the AWWTP to provide environmentally responsible wastewater treatment, meet regulatory compliance, provide value for services, and sustainability. Recycling options will have first priority over landfilling AWWTP biosolids.

If you have any questions or require additional information regarding AWWTP Biosolids Program please contact Brian Kreski at 920-832-5945.