

# **AGENDA**

Unless specifically noticed otherwise, this meeting and all other meetings of this body are open to the public. Proper notice has been posted and given to the media in accordance with Wisconsin Statutes so that citizens may be aware of the time, place and purpose of the meeting.

## **MEETING NOTICE**

### **BOARD OF PUBLIC WORKS**

**Monday, September 30<sup>th</sup>, 2019**

**4:30 p.m.**

**Council Chamber, New London Municipal Building**

#### **Agenda Information**

1. Call meeting to order, Adopt Agenda
2. Wastewater Treatment Plant Updates
3. Consider purchase of sewer camera
4. Review additional costs for the WWTP Digester project and consider granting authorization for the Director of Public Services to approve specified change orders
5. Review 2020 Capital Project and Equipment Items
6. Discuss upcoming street priorities and project list
7. Discuss bi-annual PASER rating process
8. Director's Report
9. Next Month Agenda Items
10. Adjournment

**Mike Barrington, Chairman  
Board of Public Works**

*Agenda items are listed so as to accurately describe the actions or issue being considered instead of simply the document listing title or the parties to a contract. This is done as such titles or a list of parties to a contract conveys insufficient information to the public on whether a topic or project they are interested in is being considered. It is the policy of the City of New London to comply in good faith with all applicable regulations, guidelines, etc. put forth in the American with Disabilities Act (ADA). To that end, it is the City's intent to provide equal opportunity for everyone to participate in all programs and/or services offered, to attend every public meeting scheduled, and to utilize all public facilities available. Any person(s) in need of an alternative format (i.e. larger print, audio tapes, Braille, readers, interpreters, amplifiers, transcript) regarding information disseminated by the City of New London should notify the City 48 hours prior to a meeting, etc., or allow 48 hours after a request for a copy of brochures, notices, etc. for delivery of that alternative format. Contact ADA Coordinator Chad Hoerth by telephone through: (Relay Wisconsin) – or 920/982-8500 and in person/letter at 215 N. Shawano Street, New London, WI 54961.*

**\*PLEASE NOTE:** Discussion regarding the topic of potentially designating ATV/UTV routes on New London city streets will be postponed to a future meeting date to allow staff and board member time to further research the topic and gain additional citizen input.

# Memorandum

**To:** Board of Public Works

**From:** Chad Hoerth, Director of Public Services

**Date:** 9-26-19

**Re:** September 30<sup>th</sup>, 2019 Board of Public Works Meeting

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- Consider purchase of sewer camera – (Ben’s report also explains this topic): In the last year we’ve had a few demos on a new type of camera that can be used for televising sanitary or storm sewer mains. The purpose of this camera is for a quick deploy situation and to gain further information on situational issues. For those who are new to the Board or council we do have a “push camera” that was purchased in 2015. The push camera mounts to the front of our jetting hose on the sewer vacuum truck. The camera is pushed through the pipe by the jetting hose’s water pressure. We have used this in many situations to give us an idea of situations that are occurring in the pipe. The new proposed camera is a different type of technology. Instead of pushing the camera down the entire sewer main, this type of camera is stationed to the open end of the sewer main pipe and zooms into the pipe to give us a picture of what is going on. There are several benefits to this type of camera over the old one:
  - Quicker deploy: We unfortunately get a fair amount of calls for sewer back up situations, most of which are issues with private laterals and not the sewer main. When a backup is reported we still need to respond to the early report to make sure it’s not an issue with the main. Typically the crew will report to the site with the sewer cleaning/vac truck, run the jetting hose down the main and if it goes through the pipe to the next man hole we “assume” the main is clear. At that point they could connect the existing camera on the jetting hose and run it again to get a video of the sanitary main. The challenge is that the process takes time and they cannot view the live video with this camera. It is somewhat of a lengthy process to set up the truck, run the jetter down the main, connect the camera, run the jetter down the main again, retrieve the SD card from the camera and then put the SD card into a computer or tablet to view the video. With the new zoom camera when the employee responds to a sewer back up complaint or another issue to investigate, the employee can set up the camera in much less time at the front of the pipe and zoom down the pipe and view a live picture of the situation (which of course can be recorded when they are viewing it). In this case we can quickly see what’s going on first before we act to see if there is any type of blockage. We can even show the homeowner right there on the spot that the sewer main is (*hopefully*) clear. This can speed up response calls (including

after hour/overtime situations) as the employee can determine and document quicker that the sewer main is clear and be on their way.

- Distance: The existing push camera does not have the capability for us to determine how far down the pipe there is an issue. For example in the situation of a broken pipe, we can push the existing camera down the pipe and see there is an issue when we later review the video, however we have no way to determine how far down the line the issue may be. The zoom camera has a laser on it in which it can point to an issue on the screen and the operator can see exactly how far down the line the issue may be.

I don't see this quite replacing our existing camera as in some situations there still would be a benefit to pushing the camera down the line, but just like many new types of technology it provides new benefits that the older technology doesn't have. We're recommending purchasing this camera with funds raised from GLK foods hauling high strength waste to our plant this past spring.

- Review additional costs for the WWTP Digester project and consider granting authorization for the Director of Public Services to approve specified change orders: Ben's WWTP report indicates additional work or costs that are being requested in the Digester project. He provided the information on the projects. My information below provides a snapshot where we are at financially with this project in relation to the contingency budget. We'll discuss how we want to proceed with these issues.

Contingency Budget:	\$218,915.00
Change orders Director has approved to date	-\$45,273.00
Updated stairwell cost	-\$16,342.00
<b>Remaining Contingency Budget:</b>	<b>\$157,300.00</b>

Estimated additional cost for concrete repairs in south tank (\$28,000 est. - \$17,000 allowance)	-\$11,000.00
Estimated additional cost for structural reinforcement of both digester covers (\$70,000 est. - \$49,000 allowance)	-\$21,000.00
<b>Updated Remaining Contingency Budget:</b>	<b>\$125,300.00</b>

Estimated cost for concrete repairs in north tank	TBD
Estimated cost for concrete repairs in basement (Bldg 40)	TBD

Review 2020 Capital Project and Equipment Items: At the meeting I'll provide a report of potential capital project and equipment items for discussion.

Discuss upcoming street priorities and project list: Just like the above item, I'll provide a list of street priorities we're looking at for updating our 5 year street plan.

Discuss bi-annual PASER rating process: Per state law, municipalities are required to evaluate and rank their roads on odd numbered years. We plan on doing this in the next few weeks. If anyone is interested in being involved in this process let me know (but be forewarned that it's going to take one or two full days to drive over each street and evaluate/rank them).

#### Directors Report:

- Years of Service Report:
  - Dale Wegner (Street Operator) completed 41 years of service with the city on September 11<sup>th</sup>.
- Cedar Street and North Ridge Drive Projects- For the most part this project is wrapping up. MCC paved the top layer of asphalt on Wednesday, September 25<sup>th</sup>. Some landscaping will still need to be done before we can close out the project.
- Klatt Road- MCC also paved the top layer of asphalt on Klatt Road on Tuesday September 24<sup>th</sup> and shouldered the road on Wednesday the 25<sup>th</sup>.
- Rail Road crossing upgrades- Unfortunately we've hit a standstill with Canadian National and our partnership with the High Street and Industrial Loop Road Rail Road Crossing projects. Early in the design phase we proposed that the city would make improvements outside the rails (as we had some of our utilities to fix in a few spots) and asked them to improve the inside of the rail with wood timbers, similar to what they did at the Beacon Ave crossing. Canadian National approved our construction permit in their Right of Way and we figured we were in agreement with the improvements, again just like the Beacon Ave crossing. Recently I heard through our contractor that CN changed their mind and was looking at just paving in-

between the rails instead of upgrading them with the timbers. I immediately contacted our CN rep for an update and really didn't get a good answer other than it's out of her hands. I've since then also have heard rumors that they may not make any improvements at all. I've left some additional messages with the CN Rep to confirm these rumors but have not heard anything back yet. So at this time I have no idea on the status of these projects.

- Sink holes (Oshkosh Street & Smith Street behind State Farm insurance)- Since the river did recede in the last month, we were able to address both of the above described sink hole locations. The sink hole at Oshkosh was a basic fix as the storm sewer inlet lead broke off and collapsed from the storm sewer main. The storm sewer on Smith Street is another story. When the contractor dug that one up we quickly found that this particular storm main is badly damaged as you can see by the below picture:



The contractor who was working on the repairs stated that the pipe is cracked as far as they could see. As a temporary fix, they stuck a plastic pipe up the existing pipe as far as they could go. We will be televising this line to determine the extent of the damage and evaluating how we want to proceed.

- Algoma and Beacon outfall- The river once again came up which is hindering these projects. Parker Excavating does plan on replacing the Algoma outfall, starting construction on Wednesday, October 2<sup>nd</sup>. However unless the river recedes again, I don't anticipate we'll be able to replace the Beacon outfall once again this year. Below is a picture at the end of Beacon Ave. on September 17<sup>th</sup>. The contractor needs to replace the outfall all the way out near the yellow arrow.



## September 30<sup>th</sup> 2019 Board of Public Works

### Wastewater Notes

Televising of the sanitary and storm sewers should be wrapped up by the meeting. I have yet to see the finished report but there are a couple areas that need to be addressed. For one the line underneath the railroad tracks on Industrial Loop Road has separated and will need to be repaired. Hopefully this can be slip lined with a Cured In Place Pipe (CIPP) application so we won't have to dig underneath the railroad tracks again. I will update you in the November meeting if any other major issues are found. For the most part I am pleased areas I thought might be major clear water contributors are not.

I have included with these notes a quote from MacQueen Equipment for a sewer camera and tablet to control the camera. This unit would be used for sewer trouble calls to see if there are any issues up or down the line before the sewer truck is taken out with a two man crew. We can also use the camera to look at manholes and lift station wetwell conditions and avoid going into a confined spaces. Another use for this product is to look at sewer mains in older sections of the City to determine lines that should be root foamed. The cost of the camera, tablet and laser is \$17,900. I discussed this with Judy and she said to go ahead as we have the funds for it.

We will need the Board's approval to purchase this unit.

On the Fourth and Fifth of September Wohlt Creamery had pH violations above 10.0 on their 24 hour composite samples. According to the New London Municipal Sewer Use Ordinance any 24 hour composite sample over 10.0 is fined \$6,000. Because there were two in a row there will be an extra \$12,000 charge to Wohlt Creamery's bill for September. To complicate matters Mark Schleiwiler retired and Adam Prill has taken over management of the facility. He is new to the position and wanted to meet with Chad and I along with his wastewater guy to discuss billing and the fine structure of the Sewer Use Ordinance. We also discussed the Sewer User Agreement which was sent to Wohlt Cheese in March of 2018. As of Wednesday the 25<sup>th</sup> there is open dialog between Wohlt Creamery and the City to reach an agreement for sewerage services. I will keep you posted with our progress.

Initially we were looking at an early fall sludge application however with the 7+ inches of rain we may be pushed back to mid-October before any sludge will go out.

## Construction Notes:

The reconstruction of the digesters is continuing at a pace slower than anticipated mainly due to delays from the sandblasting and painting contractor. After sandblasting, cracks and patches from the 1987 upgrade are showing degradation and failure in the foundation of the digester complex. Shawn Riemus from Donohue inspected and has documented the questionable portions and will get an itemized cost for repairing them. The large amount of cracking that has been found throughout the 1954 era structure is going to easily surpass the **\$17,000 allowance** that was used for bidding. We will definitely be using money in the contingency.

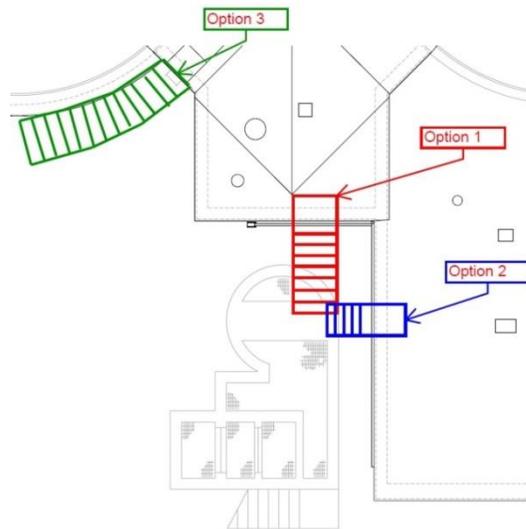


Initial costs to have the cracks in the digester portion repaired have come in at **\$28,000** however there was no itemized cost for the different types of cracking. Shawn requested a breakdown of the cost to determine if the crack filling company is injecting every crack or if they are injecting the deep cracks and coating the smaller cracks.

It will soon be cold and most of the products used to fix cracks and coat the walls need to be above 50° F. I am concerned that if we wait until every board meeting to approve change orders regarding concrete repairs the City could be responsible for the additional cost to tent and heat the work areas which would add more cost to the project. How would the Board like to proceed with future change orders to fix these cracks?

### **Change Orders:**

At the August Board of Public Works Meeting I brought up a future Change Order to place a new stairway up to the roof of the digester complex to limit the exposure to falls down the non-compliant ladder. At the time we were given a cost between \$10,000 and \$15,000 and the Board approved a cost up to \$15,000. Unfortunately due to handrails and anchoring them to the roof brought the cost past that estimate.



**Change Order Total: \$16,342**

We will need the Board's approval to move forward with the stairway work.

The supplier of the new mixing system finally sent the engineering report to August Winters in early September. According to their data the cross members in the cover will need some structural improvements to strengthen the resistance of the potential twisting motion when the cover has snow and wind pushing on it. August Winters gave us a quote for both covers to be reinforced at \$70,000. This is a time and materials guesstimate. The allowance for structural improvements was \$49,000 and they are proceeding with the south digester. Once they are finished they will know how much it will cost for the second digester cover and we will know if there was an overestimate or if there will need to be another change order.

In 1994 new mixers were installed in the sludge storage tank. A new electrical service was buried in the area that our current project is taking place. Whoever did the work in 1994 did a subpar job on the conduit and size of wire needed to run 4 - 50 HP mixers. The conduit didn't have the appropriate couplings and they have cracked after settling and allowed water inside with the wires. The wires also have overheated due to being undersized and the insulation around the wires is cracking. The quote to have these wires and conduit replaced came in at \$12,378. I discussed this with Judy and I will be using money for the Wisconsin Replacement Fund that we have in our annual budget and not part of the project.



Wohlt Cheese							
Month	Flow	BOD		TSS		Phos.	
	gals	mg/L	lbs	mg/L	lbs	mg/L	lbs
Jan	11121	1033	103	677	66	34.9	3.3
Feb	7636	1088	86	732	57	33.2	2.6
Mar	7742	1284	125	675	75	33.0	3.0
April	13017	1331	151	940	102	34.2	3.8
May	13074	1046	116	803	86	31.3	3.4
June	12597	1212	124	1361	119	35.9	3.6
July	13268	1111	136	746	88	26.3	3.1
Aug	12555	1054	117	763	85	27.2	3.0
Sept	16783	837	135	494	78	21.0	3.2
Oct							
Nov							
Dec							
Ave	11977	1111	121	799	84	30.8	3.2
Max	16783	1331	151	1361	119	35.9	3.8
Min	7636	837	86	494	57	21.0	2.6

Influent							
Month	Flow	BOD		TSS		Phos.	
	mgd	mg/L	lbs	mg/L	lbs	mg/L	lbs
Jan	1.0264	208	1800	227	1991	4.7	41.6
Feb	0.8486	249	1813	217	1572	5.7	41.1
Mar	2.0985	174	2605	151	2081	3.9	53.9
April	2.3697	117	2223	152	2876	3.4	64.0
May	1.8861	168	2731	213	3449	3.9	63.1
June	1.4323	165	2006	213	2681	4.6	55.0
July	1.1764	210	2028	264	2560	5.5	53.0
Aug	0.8799	246	1854	346	2681	5.7	43.1
Sept	1.5478	227	2574	213	2393	4.8	57.2
Oct							
Nov							
Dec							
Ave	1.4740	196	2182	222	2476	4.7	52.4
Max	2.3697	249	2731	346	3449	5.7	64.0
Min	0.8486	117	1800	151	1572	3.4	41.1

Effluent							
Month	Flow	BOD		TSS		Phos.	
	mgd	mg/L	lbs	mg/L	lbs	mg/L	lbs
Jan	1.1674	2	21	4	38	0.3	2.7
Feb	0.9654	1	5	4	36	0.2	1.7
Mar	2.1674	5	115	8	174	0.5	10.8
April	2.3688	6	128	11	223	0.5	9.0
May	1.9608	3	46	6	106	0.3	5.6
June	1.5293	5	68	15	227	0.5	6.9
July	1.3246	4	42	7	73	0.4	4.3
Aug	1.0313	2	29	5	47	0.3	2.5
Sept	1.6494	4	68	8	129	0.4	6.7
Oct							
Nov							
Dec							
Ave	1.5738	3	58	7	117	0.4	5.6
Max	2.3688	6	128	15	227	0.5	10.8
Min	0.9654	1	5	4	36	0.2	1.7
Limit:		25		30		1.0	

Utility							
Month	Rain	Super-natent	Ferric	Methane	Natural Gas	Water	Electricity
	in.	gal	gal	ft <sup>3</sup>	ft <sup>3</sup>	gal	
Jan	0.11	11,746	87	40	46	754	
Feb	0.17	10,200	86	40	47	546	
Mar	0.32	2,519	65	35	41	659	
April	0.31		108	64	23	769	
May	0.37		77	56	21	1,006	
June	0.31	15,968	92	22	28	1,294	
July	0.39	11,241	88		25	1,272	
Aug	0.20	22,016	83		18	1,528	
Sept	0.71	6,061	82		22	1,149	
Oct							
Nov							
Dec							
Ave	0.32	11,393	85	43	30	997	
Max	0.71	22,016	108	64	47	1,528	0

Min	0.11	2,519	65	22	18	546	0
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Hauled Waste		
Month	Holding	Septic
	Total gals	Total gals
Jan	757,050	63,250
Feb	647,350	79,150
Mar	1,053,600	120,750
April	1,031,740	239,700
May	1,218,830	553,350
June	939,415	510,200
July	1,016,485	427,650
Aug	872,920	432,200
Sept	754,105	262,350
Oct		
Nov		
Dec		
Total:	8,291,495	2,688,600
\$/gal	0.00875	0.02000
Total:	\$72,550.58	\$53,772.00

Mercury		
Quarterly	Inf	Eff
	ug/L	ug/L
Jan	407.00	0.73
Feb		
Mar		
April	52.30	0.82
May		
June		
July		
Aug		
Sept		
Oct		
Nov		
Dec		
Max	407.00	0.82
Min	52.30	0.73
Limit:		1.30

Ammonia	
Month	mg/L
Jan	<.14
Feb	0.76
Mar	3.7
April	6.3
May	12
June	8.3
July	5.3
Aug	0.15
Sept	<0.15
Oct	
Nov	
Dec	

Whole Effluent Toxicity
Pass

Fecal Coliform	
Month	
May	25
June	96
July	53
Aug	16
Sept	124
Limit	400



**MACQUEEN  
EQUIPMENT**



**MACQUEEN  
EMERGENCY**

MacQueen Equipment  
N60 W15835 Kohler Lane  
Menomonee Falls, WI 53051  
262-252-4744 • 800-252-4799

**Ship To:** CITY OF NEW LONDON  
215 SHAWANO ST  
NEW LONDON WI 54961

**Invoice To:** CITY OF NEW LONDON  
215 SHAWANO ST  
NEW LONDON WI 54961

Branch 02 - BRUCE MUNICIPAL		
Date 09/10/2019	Time 14:58:23 (O)	Page 1
Account No NEWLO001	Phone No 9209828503	Est No 00 Q00579
Ship Via	Purchase Order VERBAL	
Tax ID No.		
TYLER GAGE	Salesperson 142	

**EQUIPMENT ESTIMATE - NOT AN INVOICE**

Description                      **\*\* Q U O T E \*\***                      EXPIRY DATE: 10/10/2019                      Amount:

ENVIROSIGHT QUICKVIEW AIR HD  
LASER MEASUREMENT  
TWO BATTERIES AND BIPOD  
EXTENSIONS  
TABLET

Subtotal:                      17900.00  
Quote Total:                      17900.00

Authorization: \_\_\_\_\_