

**CITY OF BYRON  
COMMITTEE OF THE WHOLE SPECIAL MEETING  
WEDNESDAY, JULY 21, 2021  
BYRON CITY HALL COUNCIL CHAMBERS  
5:00 PM**

**CALL TO ORDER** – Mayor Rickard called the meeting to order at 5:00 p.m.

- 1. ROLL CALL – Aldermen present:** \*Todd Isaacs, Mittzi Fulrath, Cheryl Metz, Zeke Hobbie, Jessica Nehring, Michael Gyorkos. Six members present by roll call vote.  
**Quorum established.**

\* - denotes start of the roll call vote

**Aldermen Absent:** Emily Gerdes, Christy Hanlin

<b>PRESENT:</b>	<b>Mayor</b>	John Rickard
	<b>City Clerk</b>	Caryn Huber
	<b>City Attorney</b>	Aaron Szeto
	<b>Dir. Of Public Works</b>	Aaron Vincer
	<b>Engineer</b>	Jason Stoll, Gene Stoll
		Matt Johnson (Fehr-Graham)

- 2. APPROVAL OF AGENDA – Alderman Isaacs motioned to approve the agenda as presented. Motion seconded by Alderman Gyorkos. Agenda approved by council consent.**

- 3. PUBLIC COMMENT – None**

- 4. WASTE WATER TREATMENT PLANT PRESENTATION** – Director Vincer began by showing the council a document found at one of our well sites. The document was written in 1914 and shows the special assessment charges to city residents for installing the original sewer system in town. Engineer Stoll introduced Matt Johnson, Civil Engineer, from the Fehr-Graham Champaign office.

Engineer Johnson has examined the sanitary sewer system. The plant already has failed components – treatment stages that no longer work. Several components have been operating since the late 60s. He noted a red line on a map of the sewer plant. The line crosses through the plant and indicates the flood plain of the Rock River. When the area floods, access to the flood plain area is cut off, and cannot be accessed until the water recedes. In 2016, Headworks was built and, according to Engineer Johnson, “leaves a lot to be desired”. The screening unit inside is responsible for removing large material that shouldn’t be in the sanitary sewer (plastic products, rubber products, etc.). He observed these pieces getting through the main screen to a bar screen right before treatment. He also observed that there is no grit removal system in Headworks, which he assumed was a result of budgeting. The fact that there is no grit removal means the grit remains in the treatment units and reduces the service life of components. The primary clarifier is non-operational and the aerobic digester has not operated in many years.

In order to assess capacity, he looked at historical census data and population projections for the next several decades. Currently, the system services a population of

3,700, and the capacity is rated at 5,700 people. It is unlikely the population will increase by 2,000 people, and therefore a capacity increase is not necessary.

One option is to take no action. This will eventually mean more units failing, and our actions to rectify this would be dictated by the EPA. Regionalization is another option that needs to be studied prior to applying for funds. The only place that is big enough to treat our water, Rock River Reclamation, is not close enough. We would need to build a station and a pipeline to move water there. We would pay the same amount that Rockford pays for water. A more likely option is to use what we have but improve it, however, nothing new would be put in the flood plain, and the treatment system is landlocked.

The option they are recommending is a moving bed bio-reactor. It is a cheaper build and is easier to operate. It will also fit on the existing land that is on the opposite side of the flood plain. There are still tanks that are in reasonable shape that they would repurpose and reuse. In every treatment plant, there is a liquid treatment train and a solid treatment train. The liquid treatment produces clear liquid, and the solid produces solids from the raw sewage. Problems with the liquid treatment train typically need immediate operator attention, whereas solids usually don't. They can be stored and left alone for longer periods of time. The tanks in the flood plain would be converted into solid storage. If new tanks need to be built, they would need to be built outside of the flood plain. Engineer Johnson explained that because land at the site is so limited, he recommends leaving some land available for the possibility of future regulations such as the addition of phosphorus or nitrogen. Alderman Hobbie asked if fill could be used in the flood plain. It can, but Engineer Stoll explained that it is difficult, and the area would need to be built up one foot above flood elevation.

As part of the recommended plan, a new control building would be built. The current electric equipment is old, and the new building would house the main electric and central SCADA system. Another new building would handle grit removal, and another would house the disinfection system. Because of the way Headworks was constructed, the grit system now needs to be downstream of the inflowing pumps. This causes more wear and tear on the pumps, but it is not economical to change it. Headworks will still be used for screening and pumping, however the screen will be replaced. Alderman Fulrath asked Engineer Stoll how this happened. Engineer Stoll explained the decision was made by the group (Jeff, Operator, EEI) primarily because of cost. EEI wrote the specification. Alderman Metz asked if it is more cost effective to start new rather than retrofit the screen. Engineer Johnson said it is more cost effective to do the screen replacement and the grit removal downstream.

The technology is currently being put in in South Beloit and Mahomet IL. It was developed 15 years ago. If the city decides to approve the recommendation, they would need to decide whether to do it in phases or all at once. Engineer Johnson did point out that if a project is phased, things usually get missed. The financing is also percentage based. The more we build at one time, the more loan principal is forgiven. Additionally, a phased project costs more in mobilization and demobilization costs.

Current monthly water and sewer rates are \$28.18/month plus \$8.68/1,000 gallons after 2,000 gallons. New monthly rates (based on 85% loan) would be \$34.43/month plus \$9.23/month plus \$7.96/1,000 gallons. The first number represents debt service, the second is reserves, and the third is operations and maintenance. The average monthly bill for water and sewer averages \$60/month currently. After the full project, the average

monthly bill would be \$85/month, or 1.67% of the median household income. The affordability criteria for the loan requires that this rate be below 3%.

The total project cost is \$14,469,000. IEPA financing terms are 30 years at .833%. With a potential grant of \$2,170,250 (15% of total loan), the project cost becomes \$12,298,650.

Construction would be sequenced, and therefore will take approximately 5-1/2 years to complete. Proposed timeline includes submitting a facility plan to IEPA next month. A public hearing would be in November, and a rate ordinance voted on in December 2021. Improvements should be completed by June 2026, however, the project closeout isn't expected until May 2027 to allow time for corrections.

Alderman Isaacs asked when the rate change would go into effect. The \$85 combined sewer and water rate would need to be in place by November 2025. The location of the current public works building would be part of the new treatment plant, and a new public works building would need to be built. In order for it to be included with this financing, it will have to be built on the WWTP site.

- 5. ADJOURN – Alderman Fulrath motioned to adjourn the meeting. Seconded by Alderman Hobbie. Roll call vote: Isaacs, AYE; Fulrath, AYE; Metz, AYE; Hobbie, AYE; Nehring, AYE; Gyorkos, AYE. Motion passed: AYE, 6; NAY, 0; ABS, 0.**

Mayor Rickard adjourned the meeting at 6:07 pm.

Respectfully Submitted,

*Caryn A. Huber*

City Clerk of Byron, Illinois

<b>MAYOR JOHN RICKARD</b>	<b>CITY CLERK CARYN A. HUBER</b>
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