

To: Mayor Jacque and City Council Members
Cc: Mick Michel, City Administrator
From: John F. Wandsnider, PE – Public Works Director/City Engineer
Date: February 15, 2024
Subject: Public Works Report: January 10 – February 14, 2024

Things have been operating well, for the most part, in the Public Works Department.

Last Month's Snow Storms – Presidential Disaster Declaration?

As you have likely heard, Governor Reynolds is seeking a Presidential Disaster Declaration for last month's "Significant Winter Storm Snowfall". All told, upwards of 27 inches of snow has been reported to have fallen in Dyersville between January 8 and January 14. As of today, we have spent nearly \$100,000 on snow removal this season, much of that going to the Jan. 8-14 response. It would be nice to be able to get some of that back.

Operation and Maintenance of Fleet, Highways, Streets, Alleys, Parks, Trails, Rivers, Creeks, etc.

The streets and fleets arm of Public Works is doing an excellent job with the operations and maintenance of Dyersville's streets system and equipment. Since mid-January, we have been experiencing unseasonably warm and mild conditions, which is a welcome change from a month ago. Of the 500 tons of salt planned for, we estimate that we have used about 225 tons. As time and conditions allow, we have been filling pot holes and repairing and maintaining equipment.

Operation and Maintenance of Drinking Water Delivery and Wastewater Disposal Systems

The water and wastewater operations arm of Public Works is also doing an excellent job maintaining Dyersville's drinking water delivery and wastewater disposal systems. The drinking water source, storage, treatment, and distribution systems are serving the city well. The wastewater collection, pumping, treatment, and disposal systems are also operating well. Please refer to the below reports from water and wastewater operations, respectively.

Status of Improvement Projects

1st Avenue West - Old Highway Road - Rehabilitation (Added 2/24)

Work has begun on developing plans for improvements to 1st Avenue West, west of the roundabout. We plan to utilize operations dollars, with assistance from available grants, to help to fund the improvement. I have attended a seminar for pursuing a grant through Delaware County. Due to the length of the project and limited availability of funds, we anticipate construction activities to occur over the next three construction seasons. We anticipate the traffic impact to be similar to 5th Avenue NE (Dyersville East Road) last construction season.

Downtown Streetscape Rehabilitation (Added 4/23)

A majority of the downtown streetscape is 20 years old **this** year! We intend to perform the rehabilitation out of our operations budget, and phase it over about 5 years. The first phase of the project is the streetscape portion (behind the curb to the building line) of the 3rd and the 4th Street intersections and the block between them. All 6 limestone medallions will be reset, this time on concrete, and the cracked and deteriorating buff-colored handicap panels will be replaced with black powder-coated cast-iron panels. A small portion of the colored and stamped concrete will need to be replaced due to excessive cracking and settling. Work will be done this FY.

Hwy 52 Manhole Replacement at 2nd Avenue (Added 11/21)

The DOT requires engineered construction plans with a complete traffic-control plan in order to issue a permit for this work to be done. Design work is proceeding and plan drawings are in production for construction this summer.

Downtown Businesses Accessibility – (Added June, 2021)

Once money is available to develop a program to address this issue, design/construction activities will begin on a phase of the work as directed.

Legacy Square – Stage (Added Spring 2021)

Programming of the lighting system is **in-process**.

20 West Industrial Park, Phase III Rise Grant App. (Added August, 2022)

Construction of the Contract C double-box-culvert **has been completed**. Contract D including roadway storm sewer, concrete paving, and lighting is planned for bidding in the spring of 2024 and construction in summer 2024.

1st Avenue W. Bridge Over Bear Creek – Deck Overlay (Added May, 2022)

Final payment of the retainage amount is on the agenda. The final construction cost was \$494,512.09. This represents a reduction in cost of \$61,480.39 below the bid price of \$555,992.48. We achieved this savings through collaboration with the design consultant to value-engineer the design, and through on-site observation and construction engineering, without compromising the integrity of the project.

3rd Avenue SW Bridge (Added to list in February, 2022)

Needs further evaluation

Field of Dreams Stormwater Wetland and Mitigation (Added to list in April, 2020)

Project substantially complete. Temporary erosion control seeding has been placed. Permanent bluegrass seeding has been completed both north and south of Beltline Rd. Native seeding was performed in late November 2022. **A map showing areas requiring attention has been prepared by the engineer. Work is expected this spring.** A live streaming camera of the site is available for viewing at:

<https://video.nest.com/live/G4AGPm8tkR>

Dyersville East Road Water and Sewer Extension 2020 (Added to list March, 2020)

Contract B Water Main construction is complete **and project is ready for city acceptance**. Meeting has taken place with controls integrator for Contract C Water Pumping Station **and start-up is being scheduled for the week of March 19**. Construction for Contract D Lift Station and Linear Sewer Onsite with Portzen Construction is **substantially complete with some punch list items remaining to be completed**. Construction is complete on the Sanitary Sewer and Force Main (EDA Contract) with Tschiggfrie Excavating. Construction is complete on the original work under Contract E with Top Grade Excavating. The additional change order work to provide utilities to the existing FOD facilities **has been completed**.

Heritage Trail Pavement Extension (Added to list January 2020)

The engineer **has submitted** the final documents to the DOT **for the mandatory audit**.

Bear Creek Restoration (SRF Sponsored Project)

This project is complete. The video camera is still mounted near 3rd St. with a public video link for anyone to monitor. <https://www.senserasystems.com/public/embed/M78018326A93>

Respectfully submitted,

John F. Wandsnider, PE - Public Works Director / City Engineer

Email: jwandsnider@cityofdyersville.com cell: 563-587-9131

Memorandum

To: Mayor, City Council Members and City Administrator
From: Terry Recker, Water Operator
Date: February 8th, 2024
Subject: **Water Operation January 2024 Report**

Water Pumped

Total Water Pumped for Month	11,147,000 Gallons
Average Pumped per Day	360,000 Gallons
Maximum Daily Pumped	506,000 Gallons

Chlorine Testing

Average Free Chlorine in the System –	1.98 mg/l
Average total Chlorine in the System -	2.04 mg/l

Polyphosphate

Average Residual at Well #4	1.29 mg/l
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Water Call Outs

1 for the month
Total for the year – 6

Water Main Breaks

1 for the month
Total for the year – 7

Water Activities

21- Line Locates Completed
18-Water Work Orders Completed

Operations and Maintenance

Bacteria samples were taken, and the results were negative. The monthly operating report was completed and sent to the DNR. Preventative maintenance was completed at Well#4 and #5, including exercising water valves and doing well draw down at both wells. Daily rounds were completed for the month at both wells. Meter reading was also completed this month. I forgot to include the water main break in the Cardinal subdivision off 1st Ave and 14th Street SE on December 23rd. Krapfl Construction was able to get onsite and repair it that day. There was also another water main break at 615 1st Ave W on January 25th. Krapfl's were able to make the repairs the next day. (Pictures for both main breaks below.) Mike Schroeder started helping the water department on a part-time basis with the Lead Service Line Inventory (LSLI) mandated by the EPA and IDNR. He has made good progress completing tasks in his first month.

Water Operator,
Terry Recker

Cardinal Subdivision 12/23/23



1st Avenue West 1/25/24



Memorandum

To: Mayor, City Council Members and City Administrator

From: Wastewater Operator

Date: 01/14/2023

Subject: **Wastewater Operations –**

Influent Flows

Total Treated for Month 12,643,000 Gallons

Average Flow per Day 407,000 Gallons

Maximum Daily Flow 485,000 Gallons

Average Influent Biochemical Oxygen Demand 240 mg/l

Plant loading pounds per day of 885 lbs. plant design loading 2400 lbs. per day

Average Influent Total Suspended Solids 169 mg/l.

Plant loading pounds per day 623 lbs. plant design loading 3600 lbs. per day.

Average Influent Total Nitrogen 45.7 mg/l

Plant loading pounds per day 172 lbs.

Average Influent Phosphorous 45.5 mg/l.

Plant loading pounds per day 172 lbs.

Effluent Testing

C.B.O.D. Monthly Average	.75 mg/l	Limit - 25 mg/l
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T.S.S. Monthly Average	2.3 mg/l	Limit - 30 mg/l
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Ammonia Monthly Average	.12 mg/l	Limit – 9.4 mg/l
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Total Nitrogen	20lbs per day	Yearly Average 88lbs per
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Phosphorus	11lbs per day	Yearly Average 24lbs per
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E-coli	mg/l	Limit 126 MPN
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(E-coli only Required March-November)

Memorandum

To: Mayor, City Council Members and City Administrator

From: Wastewater Operator

Date: 02/14/2024

Subject: **Wastewater Operations –**

Influent Flows

Total Treated for Month 11,850,000 Gallons

Average Flow per Day 382,000 Gallons

Maximum Daily Flow 518,000 Gallons

Average Influent Biochemical Oxygen Demand 171 mg/l

Plant loading pounds per day of 583 lbs. plant design loading 2400 lbs. per day

Average Influent Total Suspended Solids 115 mg/l.

Plant loading pounds per day 395 lbs. plant design loading 3600 lbs. per day.

Average Influent Total Nitrogen 36 mg/l

Plant loading pounds per day 120 lbs.

Average Influent Phosphorous 5.36 mg/l.

Plant loading pounds per day 17 lbs.

Effluent Testing

C.B.O.D. Monthly Average	2.1 mg/l	Limit - 25 mg/l	
T.S.S. Monthly Average	4 mg/l	Limit - 30 mg/l	
Ammonia Monthly Average	.23 mg/l	Limit – 13 mg/l	
Total Nitrogen	22lbs per day	Yearly Average 88lbs per	
Phosphorus	3.6lbs per day	Yearly Average 24lbs per	E-coli
(March-November)	Limit 126 MPN		

Sewer Call Outs – 2 for the month at the Treatment Plant.

Total for the year – 2

On Jan 30th we pulled out our yearly toxicity test that is required on our permit. And we did get our results back showing we passed so can we remain on yearly testing. In the past we had a fail then, we were required to test quarterly that year. So, it is good we passed the yearly, so we are good for this year.

Everything has been running well. Terry Menke has been learning operations at the plant and has been doing a great job.