

**Hillsboro City Council Meeting
September 5, 2023**

The meeting was called to order at 7:00 pm.

Roll call was taken and those present were Mayor Downs and Commissioners Wright, Butler, Ward and Justison.

The "Pledge of Allegiance" was recited.

Minutes of the previous meetings were approved.

Commissioners' reports:

Commissioner Butler read his report for public properties and it will be included in the minutes. Butler said the street department has been picking up brush and oil & chipping roads.

Commissioner Justison reported the police department is working short staffed and commended them for their work and said the SRO has been delayed because of the short staff. Justison said the new deck gun has been installed on engine 601 and fire hydrant testing would begin soon. Justison said the Police and Fire Board was meeting on September 12th and would be testing for a new hire in the fire department. Mike Lee said there would be a Zoning Board of Appeals meeting held soon on two items and he has been doing some federal research for the meeting. Lee said he has had 6 property owners comply with notices and would be sending out more letters soon.

Commissioner Wright read her report and it will be included in the minutes.

Commissioner Ward had nothing to report.

Mayor Downs asked everyone to not tear up the roads after they were oil & chipped.

Community Planner's report will be included in the minutes.

The City Engineer Jeremy Connor said a preconstruction meeting will be held for the Mechanic Street pipe replacement and another meeting was held for the Helston Place project. Connor said the Tremont Street and Fairground Avenue projects are at IDOT for their review.

There were no public comments.

Tim Ferguson addressed the Council to discuss the annual report from Woodard & Curran. The report will be included in the minutes.

Motion was made by Commissioner Justison and seconded by Commissioner Ward to approve closing the southwest corner of the square on April 13, 2024 for a powerlifting contest. Motion carried 5-0.

Motion was made by Commissioner Justison and seconded by Commissioner Wright to approve closing Wood Street from South Main Street to Gunning Street at 5 pm on September 15th for a concert. Motion carried 5-0.

Motion was made by Commissioner Justison and seconded by Commissioner Wright to approve the 5th payment of \$26,400.00 to the Glenn Shoals Lake Club for the South Marina boat dock. Motion carried 5-0.

Motion was made by Commissioner Ward and seconded by Commissioner Wright to approve payment of \$139,180.00 for the concrete work around the courthouse square. Motion carried 5-0.

Motion was made by Commissioner Butler and seconded by Commissioner Ward to approve the annual dam inspection of structure No. 5 by Hurst & Rosche for a cost of \$2,500.00. Motion carried 5-0.

Motion was made by Commissioner Butler and seconded by Commissioner Wright to approve a contract with FS Propane for winter propane. Motion carried 5-0.

Motion was made by Commissioner Ward and seconded by Commissioner Wright to adopt Resolution No. 2023-09 a resolution to contract with Illinois Codification Services to update the Hillsboro Zoning Code. Motion carried 5-0.

Motion was made by Commissioner Ward and seconded by Commissioner Butler to approve a \$2,091.50 Façade Improvement Grant reimbursement to Brian Sullivan for work done at 311 Berry Street. Motion carried 5-0.

Motion was made by Commissioner Ward and seconded by Commissioner Butler to approve a \$2,127.99 Façade Improvement Grant reimbursement to Connie Childers for work done at 101 South Main Street. Motion carried 5-0.

Motion was made by Commissioner Wright and seconded by Commissioner Butler to approve paying \$1,646.79 for sod around the Old Courthouse. The other half of the bill will be paid by Montgomery County. Motion carried 5-0.

Motion was made by Commissioner Butler and seconded by Commissioner Wright to approve a bid from Stutz Excavating in the amount of \$431,700.00 for Lake Hillsboro spillway repairs. Motion carried 5-0.

Motion was made by Commissioner Ward and seconded by Commissioner Wright to approve the Sherwood Forest campers contract. Motion carried 5-0.

Motion was made by Commissioner Justison and seconded by Commissioner Butler to adopt Ordinance No. 1773 a certain amendment to the Façade Improvement Grant. Motion carried 5-0.

Motion was made by Commissioner Justison and seconded by Commissioner Butler to adopt Ordinance No. 1774 a zoning amendment for property located at 120 Ice Plant Road. The zoning will now be zoned R-2. Motion carried 5-0.

Motion was made by Commissioner Justison and seconded by Commissioner Wright to approve a revolving loan of \$15,000.00 for Caitlyn & Kenny Voyles for equipment located at Hilltop Elite Academy of Tumbling. Motion carried 5-0.

Motion was made by Commissioner Justison and seconded by Commissioner Wright to approve purchasing bunker gear from Mac's Fire & Safety for a cost of \$21,249.50. Motion carried 5-0.

Motion to Adjourn was made at 8:02 pm by Commissioner Justison and seconded by Commissioner Wright. Motion carried 5-0.

Respectfully Submitted,
Cory M. Davidson, City Clerk

Parks & Public Properties Dept. Work Summary

Council Meeting Report-September 5, 2023

- Continued work toward completion of disc golf course-installed a retaining wall on hole #16 tee pad, spayed emergent brush in timber fairways, built a bridge across deep ditch on hole #6, building forms to pour concrete for tee pads, etc.
- Aaron Schultz and the HHS Building Trades class have begun prep work for the pavilion at Central Park
- Submitted an application for the Trees Forever "Recover, Replant, Restore!" tree grant to reimburse cost of trees to be planted in the parks and campground
- Continued work with the Imagine Hillsboro Central Park committee for additional features and amenities at Central Park playground area.
- Worked with the City Attorney on creation of a camper agreement and the proposed adjacent land sales/lease
- Parks department stuff: Mowing, continued weed eating, checking/cleaning restrooms, servicing dog park, boom mowing, emptying trash cans, picking up trash, mower repairs and maintenance, weed and brush spraying, continued sampling and testing of streams and lakes for watershed plan data collection, stripped rotted/unsightly boards from picnic tables, replaced door knob at Marina, ground stumps near Fireman's Clubhouse, replaced u-joint on stump grinder, deep cleaning of refrigerators at Fireman's Clubhouse and Challacombe, replaced ceiling fans at Challacombe House, repaired dog waste station at dog park, etc.

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From: Tim Ferguson
Sent: Tuesday, September 5, 2023 10:03 AM
To: Kendra Wright
Cc: cityhall hillsboroillinois.net
Subject: Water and Sewer Report

Water:

August samples collected by the IEPA showed elevated levels of microcystins in the Raw Water compared to earlier months. We also showed a trace in the Finished Water leaving the plant, but the drinking water is still well within compliance levels. We have adjusted our chemical feed to further enhance removal rates.

The treatment plant started the annual "Free Burn" on August 30th. This will continue until mid October and is coinciding with hydrant flushing which will begin later this week.

High Service Pump #2 has been rehabbed by Illinois Electric Works. The new rotating assembly was installed without fuss and is up and running. The old unit was in as bad as shape as #1 was, severe deterioration of the impellor vanes. Both #1 & #2 are operating at original design specs now.

Sewer:

A homeowner on Leva Street reported a continued sewer backup issue. The Sewer Dept investigated the matter and cleaned the main. It was determined to be an issue with the residents sewer lateral near the connection point to the main.

The grit chamber was cleaned last week by Vogel and Sewer Dept Staff. We are targeting this every two months to stay on top of it.

DMR QA Testing results were posted. There are two analysis' (Fecal Coliform and Ammonia) that we will be retesting due to unfavorable results. All others were acceptable and we are good until next year.

Tim Ferguson
Project Manager | Principal



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Economic Development and Community Planner Report 09/05/2023

Midwest CDI conference year two went very well. I learned a lot and enjoyed networking and learning about what other communities are doing as far as community and economic development.

Attended the SCI (South Central Illinois) Training and Innovation Center grand open house on Monday Aug 28th along with Governor Pritzker and Deputy Governor Andy Manar. The facility has really come a long way in a short time. We saw students in their classroom environment and it was really exciting to see this project come to fruition. There is a long way to go, but the fact that it is up and running is a huge win for Hillsboro and all Montgomery County students.

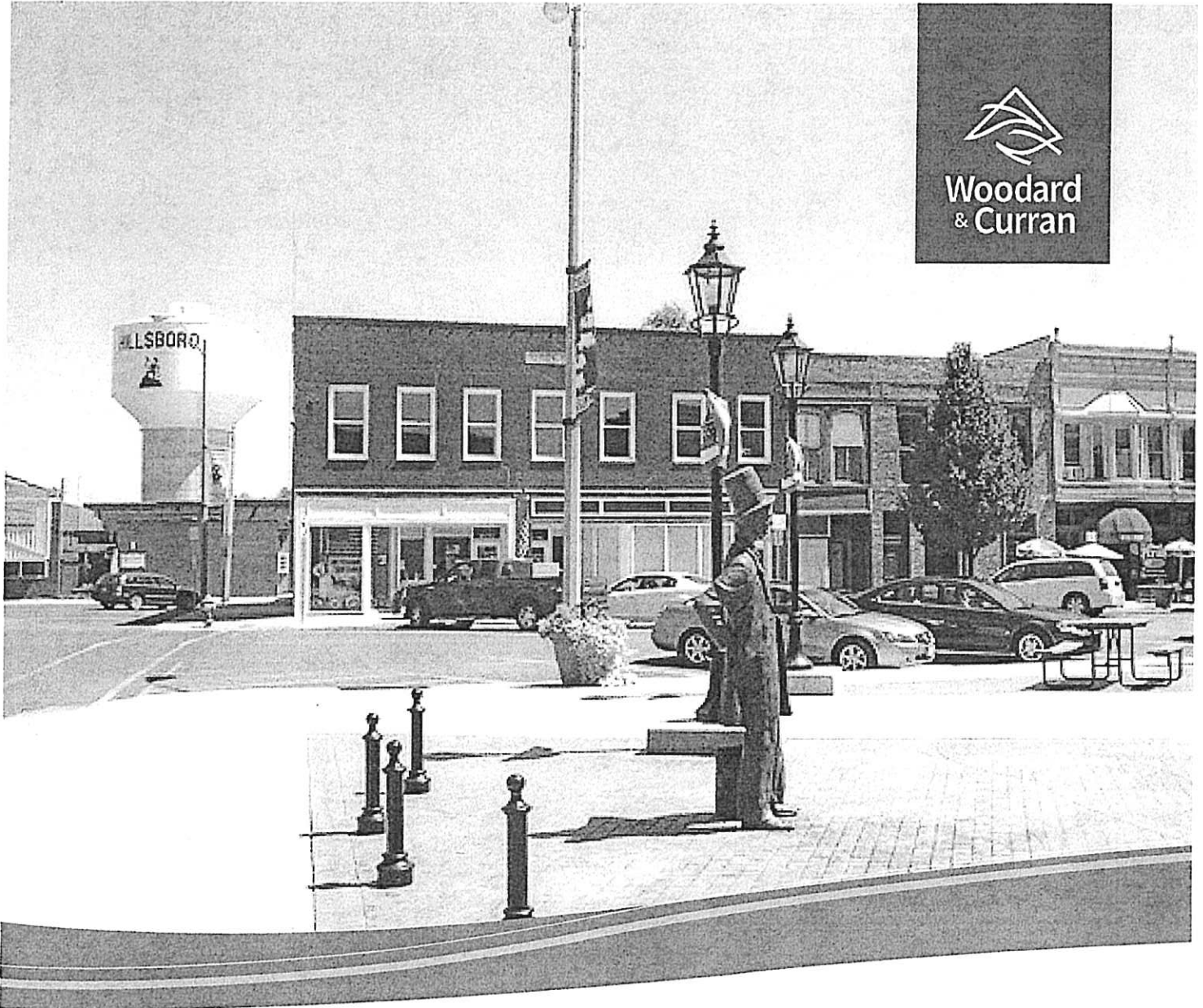
Moran's office on the Capital Improvement Plan and Redevelopment Agreements – Cory and I met with Emily and Jared with Moran's office on Aug 30th to make some changes to her draft and we spoke to them about some options for funding the projects. Cory and I will discuss these options further with council.

I continue to work with businesses on redevelopment agreements and façade grants.

MCEDC board hired Bill Montgomery as the Executive Director. Bill will be attending county meetings with me, as well as other municipal meetings in order to get to know the needs of the region better. We feel that Bill will be a great fit and are very excited to bring him on board.

Continue to attend the county committee meetings and full board meetings.

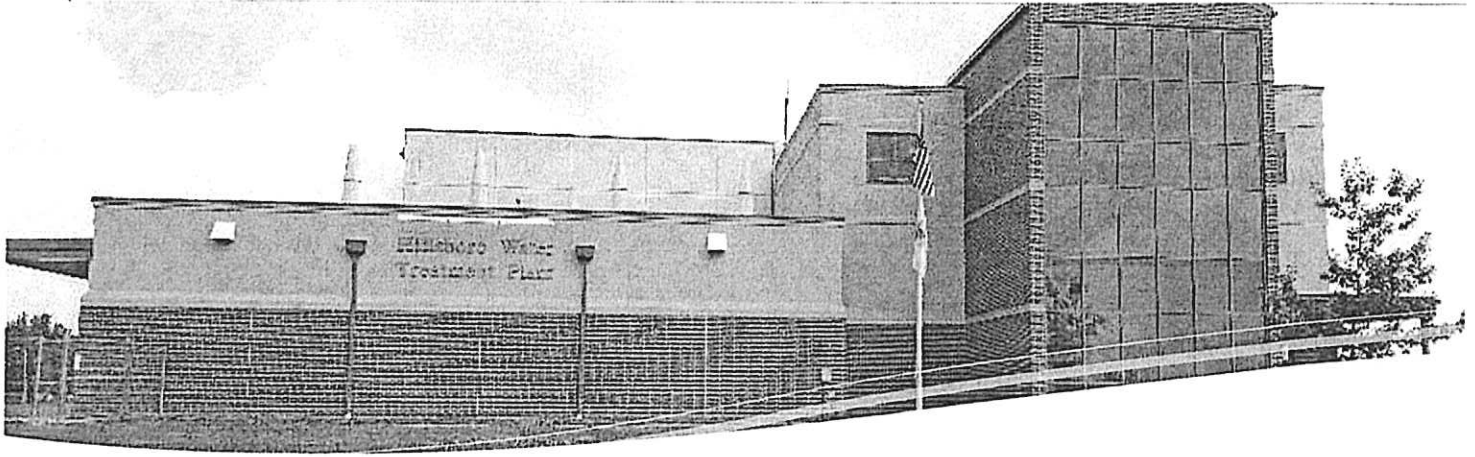
The Smithsonian Exhibit left today. A group of volunteers packed it all up on Sunday Sept 3. Thank you to everyone involved.



Annual Operating Report CITY OF HILLSBORO, IL WATER AND SEWER

May 2022 - April 2023

woodardcurran.com



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HILLSBORO



EXECUTIVE SUMMARY

The City of Hillsboro and Woodard & Curran executed a contract for operation and maintenance of the Water Treatment Plant on May 1, 2018, and began operation of the Waste Treatment Plant on October 1, 2018.

The following report is an annual summary for the period of May 1, 2022, through April 30, 2023.

Staff – Two new individuals joined the O&M Project Team in the summer of 2022. Jason Black and Mike Wells have each taken a role at the water plant and sewer plant, respectively, and are both doing a phenomenal job since they have started. They were hired to fill a couple of vacancies created by employee transfers back to the City.

Safety – Safety of our team is the number one priority at Woodard & Curran. Woodard & Curran provides safety training to the staff monthly in either an on-line platform which is self-driven or in person through a safety professional. Employees receive training to comply with all the regulatory requirements for the specific workplace conditions at the operation.

There were no safety incidents for contract year 05A. The success of our safety program is demonstrated by the fact we have had no injuries or lost accidents at the operation since the City partnered with Woodard and Curran!! We currently have had 5+ years of safety compliance.

Wastewater Treatment – The Treatment Plant saw an increase of just over 5% for the year. Inflow and Infiltration are still a major issue contributing to the annual volume of water the sewer treated.

USDA has awarded the City over \$8 Million in grants to assist with the construction of the new WWTP. Design is nearing the 60% completion mark with the anticipation of bidding the overall project in late 2023 or early 2024.

Hickory Street Lift Station was a major capital expenditure undertaken by the City in 2022. Rehab to the station has paid significant dividends to the operation as we have not had a single issue since the repairs were completed. Prior to the project, staff visited the site at least on a weekly occurrence, if not more.

Water Treatment – The plant continues to produce safe, compliant drinking water for the City of Hillsboro and the surrounding communities. Flow for the past year increased slightly.

- » Water Meters are still being installed as the City can get product from the vendor. Supply chain issues from Badger Meter are slowly starting to get better. The City is approximately 30% complete in getting the system swapped out. Most of the major users have been switched out or converted. As more meters are installed in the system, we can begin to accurately track the water produced vs water sold to determine the accounted for water.
- » Lead and Copper regulations are starting to take full effect from the law passed in 2021. A grant for lead service inventory was applied for by Woodard & Curran in 2022. That grant was not approved by IEPA, but a second round of the program was set up in an attempt to fund locations that did not receive funding in round one. The preliminary inventory was sent in to IEPA with roughly 1200 lead or unknown services.
- » Lastly, the City hired Northwater Consulting to create Watershed Management Plans for both Old Lake Hillsboro and Glenn Shoals. This will provide significant long-term benefits to the City on their biggest assets.

HILLSBORO

SECTION 1

HEALTH & SAFETY



1.1 Summary of Lost Time/Safety Incidents

Safety is the number one priority at Woodard & Curran. There were ZERO safety incidents from May 1, 2022 – April 30, 2023. We are now operating beyond 5 years of no lost time accidents.

1.2 Summary of Training

As employees within the organization, the staff received Health & Safety training through Woodard & Curran Health & Safety staff as well as on-line training sessions. Topics included, but were not limited to:

- » Bloodborne Pathogen Safety
- » CPR & First Aid Review
- » Severe Weather
- » Fall Protection – On-line and Instructor Led
- » Dangerous Animal and Plant Safety
- » Fire Extinguisher Training – On-line and In Person Field-Demonstrations.
- » Ladder Safety and Use
- » Cold Stress
- » Personal Protective Equipment
 - › Eye and Face, Hand and Arm, Body Protection, Hearing Conservation
- » Preventing Back Injuries
- » COVID-19 Safety and Precautions

1.3 Summary of Tasks Completed

Several required regulatory tasks are to be addressed on an annual basis. Formal training is required on certain topics and updates/reviews of plans and policies are needed as well. Some of these items:

- » Confined Space Inventory and Entry Policy
- » Lock Out / Tagout Program
- » Emergency Action Plan
- » Safety Data Sheets / Chemical Inventory
- » Hazard Assessment and Job Safety Analysis

1.4 ARC FLASH RISK ASSESSMENT COMPLETION

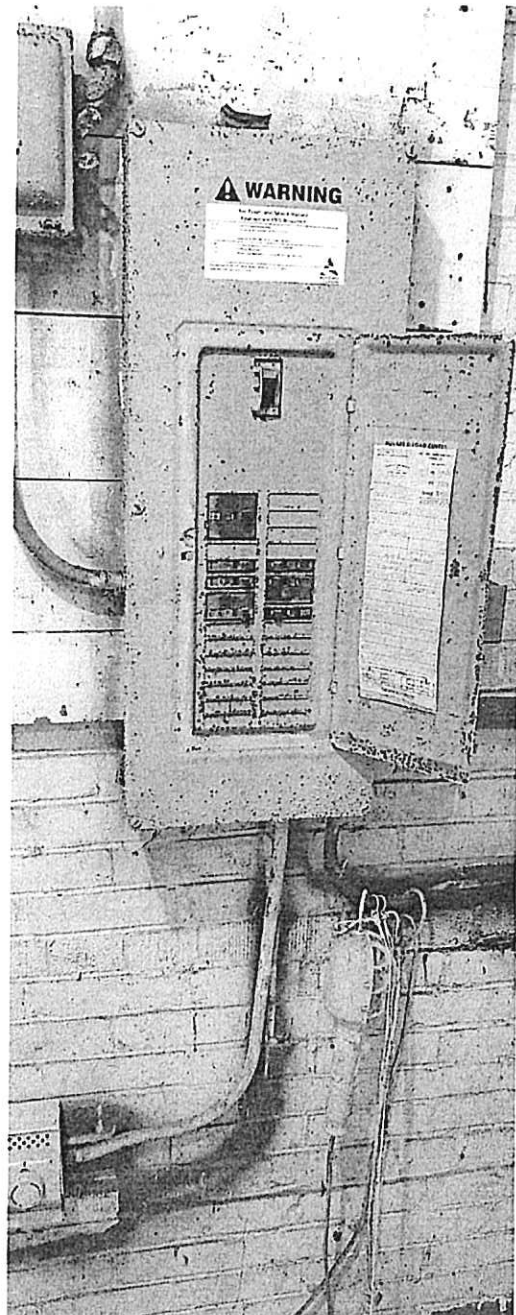
In late 2019 and early 2020, the Arc Flash assessments for the Water and Sewer plants, respectively, were completed. We are working through addressing the findings. This process will be completed again in 5 years. A majority of the Lift Stations in the sewer system show signs of corrosion and improper modifications. The following items are still outstanding from the assessment for the water and sewer system:

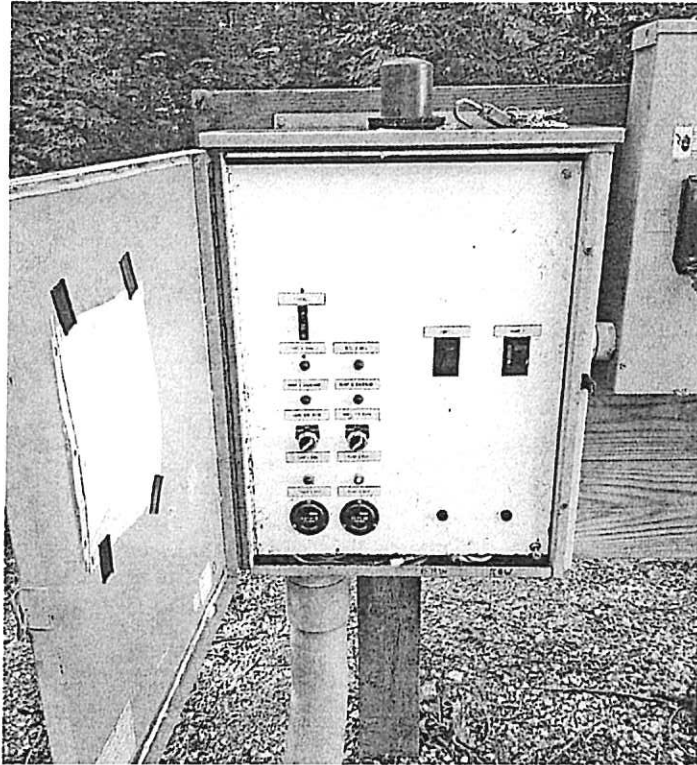
Location		Outstanding Item
Locker Plant Lift Station	9	The power panel is showing significant signs of corrosion, resulting in damage to the panel enclosure, main lugs, and the loss of manufacturer labeling on the main breaker. W&C recommends the replacement of the power panel and all associated appurtenances with new equipment rated for the environmental conditions.
Hillcrest Lift Station	16	During data collection, it was observed that the Hillcrest lift station does not have a disconnecting means upstream of the pump control panel. As a result, opening the dead front of this pump control panel exposes the worker to energized equipment that cannot be de-energized without a utility shut down. W&C recommends installing a main circuit breaker upstream of the pump control panel, either within its enclosure, or integral to the lift station's meter enclosure.
	18	The lift station pump control panel does not fit correctly over the pump feeder breakers, resulting in the Pump 1 breaker being inaccessible without first defeating the dead front, and exposing the worker to energized parts. W&C recommends modifying or replacing the dead front.
Clark Lift Station	19	Conduit sealing compound within the pump control panel was cracked, and significant corrosion was observed on the ground conductors, aluminum lugs, and other exposed metal parts within the pump control panel and the main service disconnect. W&C recommends modifying the conduits entering the wet well to include explosion proof conduit seal and having the utility meter enclosure evaluated for corrosion as well.
Ash St. Lift Station	20	The main service disconnect has rusted to the point where the defeat mechanism has failed, and the enclosure could not be opened without causing additional damage. Additionally, while the main disconnect has a two-pole breaker, the enclosure's dead front is designed for a three-pole breaker, leaving the energized bus exposed. W&C recommends replacing the main service disconnect with a new weatherproof enclosure that is designed for a single-phase service.

Issues surrounding Lakewood #1, Lakewood #2, Clark, and the Locker Plant are part of plans in the City's capital budget for 23/24. Hillcrest and Ash will be addressed with M&R funds through the Woodard & Curran O&M Budget.



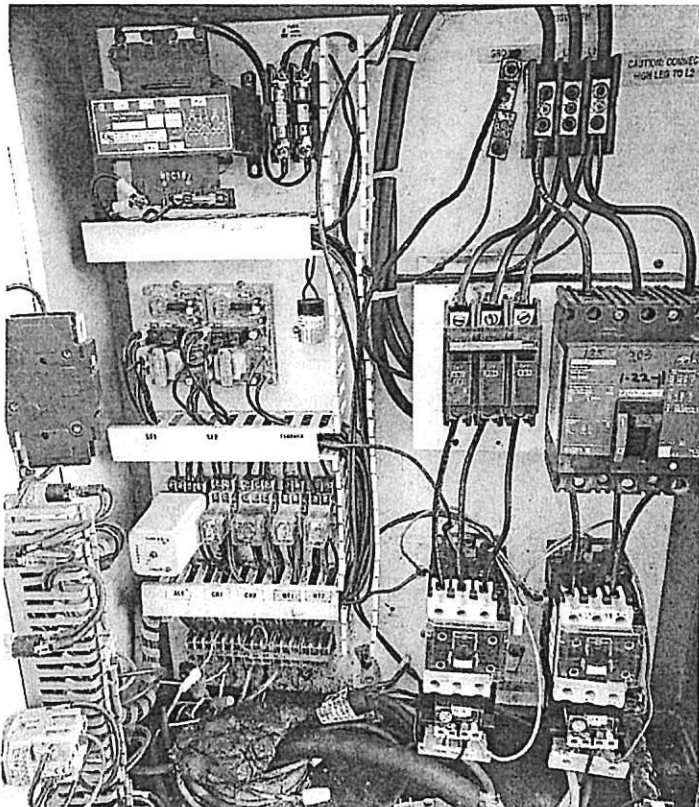
Locker Plant Pump Station
Both photos represent item 9 on page 6 of
this report.





Clark Pump Station

Top photo represents item 18 on page 6 of this report.
 Bottom photo represents item 19 on page 6 of this report.



Ash Street Pump Station

The phone below represents item 20 on page 6 of this report.



Location

Outstanding Item

	28	The dead front is missing from the pump control panel, as a result of newly installed pump motor starters being too large for the dead front to close properly. W&C recommends either adding a modified dead front to the pump control panel to prevent exposure to energized components, or replacing the pump control panel with a new electrical enclosure that can more appropriately accommodate the electrical equipment
Lakewood #1 Lift Station	29	The dead front is missing from the lift station's enclosed main circuit breaker. Due to the condition of the site's main disconnect, W&C recommends replacing the entire enclosure.
	30	A single gang metal weatherproof box is connected to the bottom of the main circuit breaker enclosure. This box does not have a cover, which may allow pests to enter the main circuit breaker enclosure. W&C recommends removing this box and its associated hardware and capping or sealing the knockout in the bottom of the main circuit breaker enclosure.
	31	The load side of the pump 1 motor starter is showing early signs of heat damage. W&C recommends evaluating the motor starter and feeder cables for repair or replacement.
	32	The main circuit breaker enclosure is showing signs of corrosion. The bolt holding the dead front has been rusted in place. W&C recommends replacing the enclosure's dead front and evaluating the enclosure itself for potential replacement due to damage.
Lakewood #2 Lift Station	33	A single gang metal weatherproof receptacle enclosure is connected to the bottom of the main circuit breaker enclosure. The knockout in the main circuit breaker enclosure for this receptacle circuit has corroded to the point that the circuit's conduit locknut has fallen through, and the receptacle is now hanging from its feeder cable. W&C recommends replacing the receptacle feeder cable and refeeding the circuit following the replacement of the main circuit breaker enclosure
Carbon Silo	2	PAC SILO, 5kA SCCR, 14.653KA available fault. To adequately protect PAC SILO, we recommend installing a fused disconnect at the control panel with 50-amp Bussman LPS-RK-SP current limiting fuses or equivalent.
MCC Room	3	Panel D, 10kA SCCR, 10.194KA available fault. Recommend replacing it with a higher SCCR rated panelboard.
Lime Silo	4	Feeder breaker MDP: LIME SYSTEM. The breaker is rated for 18KA, available fault current at this location is 22.45KA. Recommend replacing this breaker with Square D FH breaker rated 25KA, 100A frame with 50A trip.
ATS / MCC Room	6	A service disconnect w/ overcurrent protection as required by NEC Section 230 does not exist. Currently the service conductors terminate at the automatic transfer switch which is not service rated. Recommend installing Main Service Disconnect ahead of transfer switch.

The Carbon Silo, MCC Room, and Lime Silo projects will be addressed in the summer of 2023 through funds in the Woodard & Curran O&M budget.

The ATS/MCC project will be further reviewed internally. Due to the nature of this project and the complexity, the Operations and Safety teams will discuss if there can be some administrative control put in place. If so, this project will be put on pause until the next plant upgrade is completed at a later date.

SECTION 2

WASTEWATER TREATMENT

2.1 Overview

The WWTP treated and discharged 548.48 Million Gallons (1.50MG/day) of wastewater from May 1, 2022 – April 30, 2023. The WWTP is still significantly impacted by Infiltration and point source discharges during rain events. The table below outlines the water quality vs. National Pollutant Discharge Elimination System permit limits.

Table 2.1 - Water Quality vs. NPDES Permit Limits

Month		Flow (MG)	Ammonia	CBOD5	Suspended Solids	Total Phosphorus
May 2022	Monthly Avg	1.80	1.35 mg/l	8.26 mg/l	10.18 mg/l	2.63 mg/l
	Permit	1.04 MGD	1.5 mg/l	10 mg/l	12 mg/l	Monitor
June 2022	Monthly Avg	1.28	.69 mg/l	5.67 mg/l	9.62 mg/l	2.33 mg/l
	Permit	1.04 MGD	1.5 mg/l	10 mg/l	12 mg/l	Monitor
July 2022	Monthly Avg	1.56	.73 mg/l	5.4 mg/l	5.2 mg/l	3.13 mg/l
	Permit	1.04 MGD	1.5 mg/l	10 mg/l	12 mg/l	Monitor
August 2022	Monthly Avg	1.53	.47 mg/l	6.02 mg/l	9.24 mg/l	2.34 mg/l
	Permit	1.04 MGD	1.5 mg/l	10 mg/l	12 mg/l	Monitor
September 2022	Monthly Avg	1.32	.57 mg/l	3.98 mg/l	6.28 mg/l	.79 mg/l
	Permit	1.04 MGD	1.5 mg/l	10 mg/l	12 mg/l	Monitor
October 2022	Monthly Avg	1.12	1.25 mg/l	7.3 mg/l	8.05 mg/l	3.16 mg/l
	Permit	1.04 MGD	1.5 mg/l	10 mg/l	12 mg/l	Monitor
November 2022	Monthly Avg	1.23	2.43 mg/l	7.6 mg/l	9.0 mg/l	2.42 mg/l
	Permit	1.04 MGD	2.6 mg/l	10 mg/l	12 mg/l	Monitor
December 2022	Monthly Avg	1.32	4.64 mg/l	10.43 mg/l	7.73 mg/l	3.06 mg/l
	Permit	1.04 MGD	2.6 mg/l	10 mg/l	12 mg/l	Monitor
January 2023	Monthly Avg	1.68	2.46 mg/l	9.0 mg/l	11.8 mg/l	.99 mg/l
	Permit	1.04 MGD	2.6 mg/l	10 mg/l	12 mg/l	Monitor
February 2023	Monthly Avg	1.43	2.52 mg/l	10.81 mg/l	10.8 mg/l	2.19 mg/l
	Permit	1.04 MGD	2.6 mg/l	10 mg/l	12 mg/l	Monitor


Month		Flow (MG)	Ammonia	CBOD5	Suspended Solids	Total Phosphorus
March 2023	Monthly Avg	2.01	1.52 mg/l	7.68 mg/l	9.48 mg/l	2.37 mg/l
	Permit	1.04 MGD	1.6 mg/l	10 mg/l	12 mg/l	Monitor
April 2023	Monthly Avg	1.71	1.38 mg/l	9.42 mg/l	11.4 mg/l	2.24 mg/l
	Permit	1.04 MGD	1.5 mg/l	10 mg/l	12 mg/l	Monitor

Table 2.2 - WWTP Treated

Month	Actual Flow	Previous Year	Plant Design Average
May 2022	1.80	1.34	1.04
June 2022	1.28	1.18	1.04
July 2022	1.56	1.32	1.04
August 2022	1.53	1.29	1.04
September 2022	1.32	1.35	1.04
October 2022	1.12	1.24	1.04
November 2022	1.23	1.03	1.04
December 2022	1.32	1.19	1.04
January 2023	1.68	1.31	1.04
February 2023	1.43	1.71	1.04
March 2023	2.01	1.80	1.04
April 2023	1.71	2.34	1.04

2.2 WWTP Operational Highlights

- » The design of the new WWTP is 60% complete. USDA has allotted over \$8 million dollars in grant funds to assist with the costs. W&C is still reviewing and making changes to the project to cut costs.
- » The Hickory Street lift station was completely renovated, and to date, has not had a single issue. This was money well spent and allows funds to be used for other needs in the sewer system.
- » The 23/24 FY Budget will see at least 3 more pump station upgrades. This year the focus will be on controls and panels due to the age and deterioration of them.
- » Repairs at Challacombe Park were made by Petersburg Plumbing. Again, this was a large project that will no longer cause issues and drain the financial resources of the sewer budget.
- » Due to easement issues, Helston Street Sewer Project has not gotten off the ground. The City has taken legal action to expedite the project.
- » Brent Nehls has moved down to the sewer plant to fill a vacancy. Mike Wells was also hired and together, they are doing an incredibly good job.

- 
- » Several backups this winter occurred when grease and debris blocked a sewer on Oak Street. A commercial property was affected and had quite a mess in the building. After investigation, it was discovered where the grease originated from, and measures were taken. The City will keep a close eye on the grease traps in the community and verify they are being maintained appropriately.
 - » Rags and flushable wipes have been an issue with a few of the pump stations, however, we are now experiencing socks being flushed. This type of material in the sewer is causing a great deal of burden for the Sewer Department. In the last 6 months, we have pulled pumps at Hickory Street Lift station at least twice a month to remove blockages from the pumps.

SECTION 3

WATER TREATMENT

3.1 Overview

The WTP treated 430.1MG of Raw water from May 2022 - April 2023. The table below outlines the chemical usage for the fifth year of the agreement.

Table 3.1 - Monthly Water Quality Averages

Month	Finished Water	Treated Water	Cl2	Cationic Polymer	Ammonia	Fluoride	Poly Phosphate	Sodium Permanganate	Aluminum Sulfate	Caustic Soda
May 2022	1.006	1.162	40.55	48.06	8.1	19.19	63.13	102.06	115.32	268.26
June 2022	1.108	1.267	50.07	51.3	8.6	19.3	68	112.03	134.1	194.2
July 2022	1.093	1.232	59.06	46.03	8.87	19.94	68.48	120.87	140.26	173.84
August 2022	1.163	1.277	61.45	48.97	8.9	20.9	82.52	148.19	141.87	188.29
September 2022	1.12	1.225	54.37	45.23	-	18.63	87.87	94	123.57	189.33
October 2022	1.021	1.186	47.42	40.06	9.11	19.48	72.94	81.77	115.68	179.03
November 2022	1.011	1.148	45.07	39.67	8.87	18.83	69.97	61.4	109.73	179.73
December 2022	.989	1.153	46.74	38.61	7.97	19.32	70.77	42.9	109.58	224.94
January 2023	1.082	1.224	51.6	29.74	8.42	20.16	71.06	49.81	133.06	269.58
February 2023	.992	1.101	40.5	30.21	7.79	18.68	60.43	69.0	113.29	199.18
March 2023	.956	1.098	47.2	29	7.6	17.9	62.3	135.06	113.8	318.16
April 2023	.979	1.06	44.7	28.53	7	17.1	57.13	146.73	103.87	236.33

Table 3.2 - Water Treatment Plant Finished Water Production

Month	Monthly Water Production	Previous Year Flow	% Increase/Decrease
May 2022	31,174,000	31,969,000	-2.49%
June 2022	33,246,000	32,511,000	2.26%
July 2022	33,882,000	33,437,000	1.33%
August 2022	36,067,000	34,215,000	5.41%
September 2022	33,598,000	31,441,000	6.86%
October 2022	31,655,000	31,906,000	-0.79%
November 2022	30,315,000	28,613,000	5.95%
December 2022	30,673,000	29,401,000	4.33%
January 2023	33,535,000	30,809,000	8.85%
February 2023	27,787,000	26,995,000	2.93%
March 2023	26,629,000	28,886,000	-7.81%
April 2023	29,373,000	28,487,000	3.11%
Total	377,934,000	368,670,000	2.51%

3.2 Water Treatment - Non Daily Sampling

- » Bacti – Monthly Routine Samples – 6 per month, all were satisfactory.
- » Total Organic Carbon – Monthly – % Removal (46.3% to 58.5%)
- » Disinfection by Products – Quarterly – Highest TTHM 51.0, HAA5, 55.6 – Both in May 2022
 - › LRAA rates are well below the limit.
- » Atrazine/Simazine – Quarterly Monitoring – Highest Results, Atrazine-.47 ug/l, Simazine-.47 ug/l
- » Lead and Copper – Every 3 Years – 90th Percentile Lead – <1.0 ppb, highest recorded was 2.2 ppb.
 - › Next round of sampling will begin in 2025.
- » Inorganic Chemicals and Corrosion Control – Annually – All results within limits
- » Nitrate/Nitrite – Annually – All samples below Maximum Contaminant Levels

3.3 WTP Operational Highlights

- » The City has begun a comprehensive evaluation of the watershed not only on Glenn Shoals, but Old Hillsboro Lake too. Northwater Consulting was hired and is leading the project. This was a much-needed project and will spend ARPA funds to protect the City's largest asset.
- » Two projects regarding Lead Services were started in FY22/23. A grant to complete an inventory of the system was applied for, twice, being successful on the second try and an SRF Loan Application was submitted for a 5-year project to replace lead service lines in the City.
- » HSP #1 impellor was replace and performance was restored to design specs. Aurora Pump ended up sending a stainless-steel unit for the same price as the Alpha Nickel impellor that was ordered. This was done for the same price.

- » Demand picked back up at the water plant over the last year. Water usage is back up from where it was a year ago and we are selling more water. We are now able to keep up much better with the larger pump operational and #1 running as designed.
- » Water Meters were installed a product was available. Badger Meter is having issues with getting units out the door. We have a larger order outstanding, hopefully the delay in getting the meters is short-lived going forward. We are starting to see the benefits of the program operationally as people sign up for Eye on Water to review the account and usage.
- » Inflation has given the budget a hit, specifically to chemicals and power. The increases have tapered off as of the first part of 2023, but pricing is still elevated from 1 year ago.
- » Another successful monitoring period for Lead and Copper was achieved in 2022. This will be the last time under the first draw sample collection method. The next round will be a 5th liter collection for the system. However, with the recent results, we are really starting to see the benefits of the blended phosphate program we are doing. Both lead and copper numbers have been going down from previous years.
- » Filter #1 media was replaced this winter. Time will tell on how much improvement we will see in performance once the media is “broken in.

SECTION 4

ACTUAL VS. ANNUAL BUDGET

Table 4.1 - Hillsboro, IL Cost to Budget Track - May 1, 2023

Budget Category	Year 3 Budget	Year 3 Actual	Year 4 Budget	Year 4 Actual	Year 5 Budget	Year 5 Actual	Year 6 Budget
Labor (D.L. + FB @ 50%)	\$583,529	\$570,898	\$613,447	\$581,667	\$646,032	\$606,179	\$696,234
Utilities	\$154,836	\$166,995	\$145,656	\$160,949	\$167,256	\$186,257	\$214,260
Chemical Costs	\$299,047	\$310,279	\$312,228	\$344,777	\$354,685	\$344,653	\$393,495
Maintenance and Repair Costs	\$105,900	\$115,619	\$105,900	\$106,057	\$80,030	\$104,235	\$86,476
Sludge Disposal Costs	\$14,400	\$0	\$14,400	\$0	\$14,400	\$0	\$14,400
Lab Supplies and Equipment	\$38,700	\$39,392	\$33,000	\$25,966	\$30,516	\$31,150	\$33,120
Office Supplies	\$2,400	\$5,276	\$2,400	\$2,893	\$2,160	\$1,419	\$2,160
Safety & Miscellaneous Expenses	\$20,904	\$22,533	\$21,600	\$22,402	\$19,056	\$21,307	\$21,750
Other Operating Costs	\$29,772	\$29,923	\$14,160	\$28,319	\$13,860	\$44,277	\$18,180
Overhead (G&A 40% of D.L.)	\$155,607	\$152,239	\$163,586	\$155,111	\$172,275	\$161,647	\$185,663
Subtotal of Cost Component	\$1,405,096	\$1,413,154	\$1,426,377	\$1,428,141	\$1,500,270	\$1,501,124	\$1,665,738
Fixed Fee	\$112,407	\$113,052	\$114,110	\$114,251	\$120,022	\$120,090	\$133,259
Transition Costs	\$37,893	\$37,893	\$37,893	\$37,893	\$37,893	\$37,893	-
Total Budgeted Costs	\$1,555,396	\$1,564,100	\$1,578,380	\$1,580,285	\$1,658,185	\$1,659,107	\$1,798,997

Notes:

Year 3 – Overspend of \$8,704 will be deducted from the Year 2 carryover, remaining carryover balance is \$5,886.

Year 4 – Absorbed significant chemical increases from what was initially budgeted.

Year 5 – Utility and Chemical increases were mitigated within the ops budget. Savings in labor due to employee vacancy for first few months of budget year.

SECTION 5

CONSIDERATIONS

5.1 Operational & Regulatory

- » The City is still changing water meters as product and funds allow. The City has made a great commitment in taking these steps. At the current time, the City is approximately 25% to 30% complete. Continue to fund the project until all meters are replaced.
- » Work with Northwater Consulting on the watershed management plan. This is the time to assist in data collection and plan for what projects may come out of it. RCPP and 319 projects will be a part of the outcome.
- » The City has applied for funds to deal with lead services in the community. This will be a hot topic for years to come and will require a good amount of effort on behalf of the City and funds to complete. So far, there are multiple funding agencies that are giving out monies to replace lines. The City should apply for every opportunity to get these dollars as they will likely dry up as time goes on.
- » With the USDA funding the new treatment plant and terms are now known, the design process is going full speed ahead. After some cost overruns, the City will need to determine on either reductions to the project or fund more than anticipated. Woodard & Curran will provide as much information to the City to make an informed decision on how to move forward.
- » There is a fair amount of capital money in the sewer budget to begin tackling lift station issues. These are much needed projects as most of the stations are well past the useful life. Safety and operational reliability are of great concern. This will not all get corrected or updated in the current budget year so more funds in subsequent budgets will be needed.
- » - The NPDES permit issued in November 2019 requires development of a NARP. It is a Nutrient Reduction Study and is still being evaluated on how to best achieve compliance. This regulatory requirement is due to IEPA by December 2024. The hope is we can fulfill the compliance requirements through construction of the new WWTP and the Watershed management plan that Northwater is working on.
- » Lastly, the water treatment is starting to get some age on it. While it may still seem new to most, the internal components have been up and running for 13+ years and like any other asset, degrades over time. Some of the pumps and motors are starting to show signs of wear and tear, along with other valves and treatment equipment. Be mindful of the costs to keep the plant operating as designed. While we maintain the equipment to maximize its life, some things like filter media and electronics do wear out and must be replaced.

5.2 Financial/Capital Investments

Please see the 2022-2023 Capital Improvement Project lists recommended to the City of Hillsboro. There are files for the water and sewer funds respectively.

Table 5.1 - Capital Improvement Projects

Water Needs	Priority	FY 2022	FY2023	FY 2024	FY 2025
Water Meter Replacement	High	\$200,000	\$200,000	\$150,000	
Water Plant Pump Repairs	High	\$40,000	\$40,000	\$50,000	
Electrical Disconnect for WTP Main Power Feed	High	\$25,000	\$25,000	\$25,000	
Lead Service Line Replacement Plan	High	\$75,000	\$75,000	\$75,000	
Generator Maintenance	Medium	\$7,500	\$7,500	\$7,500	
Temp Roof Repairs	Medium			\$5,000	
Booster Station SCADA	Medium	\$12,000	\$12,000	\$20,000	
Total Estimated Cost		\$371,500	\$402,000	\$332,000	
Future/Ongoing Needs	Priority	FY 2022	FY2023	FY 2024	FY 2025
Water Meter Replacement	High				TBD
Lead Service Line Replacement Plant	High				TBD
Annual Water Main Replacement Fund	Medium				TBD
Water Tower Coating	Medium				\$350,000
Generator Maintenance	Medium				\$7,500
WTP Roof Repair	Medium				\$140,000
Clearwell Inspection and Cleaning	Medium				\$50,000
WTP Structure Inspection	Low				\$10,000
Completed Capital Requests	Priority	FY 2022	FY2023	FY 2024	
Huber Dr Water Line			Completed		
Water Plant Pump Repairs	High		Completed		
Filter #1 Media Replacement	High		Completed		
Hydraulic Model / GIS Mapping	High	Completed			
AWIA RRA	High	Completed			
Chemical Fee Skid for Process Chemicals	High	\$15,000	Completed		
Water Tower Coating Inspection (Signed Agreement with CIS)	Medium		Completed		
Pipe Saw w/ Power Pack	Medium		Completed		
Hydro-Excavator	Low		Completed		
Various Water Meters		In Progress	In Progress	In Progress	

Sewer Needs	Priority	FY 2022	FY2023	FY 2024	FY 2025
Design Contract for WWTP Upgrade	High	\$3,000,000	\$3,000,000	\$1,500,000*	
Construction of WWTP Upgrade	High			\$30,000,000	TBD
Nutrient Assessment and Reduction Plan (NARP) - Watershed Study	High	\$25,000	\$50,000	\$135,000	TBD
Lift Station - Repair & Replacement	High	\$75,000	\$75,000	\$150,000	\$50,000
Sewer Line Improvements Fund	Medium	\$75,000	\$75,000	\$75,000	TBD
3/4 Ton Service Truck	Medium		Completed		TBD
Capacity, Management, Operation, and Maintenance (CMOM)	Medium	\$10,000	\$10,000	\$10,000	TBD
Miscellaneous Maintenance	Medium	\$50,000	\$50,000	\$50,000	TBD
Flow Monitoring, I/I Study	Low	\$10,000	\$10,000	\$10,000	TBD
Total Estimated Cost		\$3,295,000	\$3,320,000+	\$31,920,000	TBD

SECTION 6

STAFFING & SUPPORT

All the Woodard & Curran staff listed below have been directly involved in the support and ongoing management of the operations of the facilities.

Table 6.1: On-site Staffing

Name	Title	License(s) Held
Tim Ferguson	Project Manager	Class "A" Water Class "1" Wastewater
Mike Finn	Lead Operator	Class "A" Water
Mike Renfro	Operator / Technician	Class "A" Water
Craig Traylor	Operator / Technician	Class "A" Water
Jason Black	Operator / Technician	Class "C" Water Class "A" Water Operator in Training
Brent Nehls	Operator / Technician	Class "C" Water Class "3" Wastewater
Mike Wells	Operator / Technician	Wastewater Operator Trainee



*On-site staff from left to right:
Mike Finn, Brent Nehls, Craig Traylor, Jason Black, Mike Wells, Mike Renfro*

Table 6.2: Woodard & Curran Staffing and Support Personnel

Name	Title	Function
Alyson Watson	Chief Executive Officer	Management Support
Brian Bzdawka	President O&M	Management Support
Marc Thomas	National Operations Leader	Management Support
David Kitzmiller	Operations Leader	Management Support
Greg Frieden	Area Manager	Management Support
Steve Lindemann	Health & Safety Manager	Health & Safety Support
Renaee Schield	Health & Safety Specialist	Health & Safety Support
Wendy Foreman	Health & Safety	Health & Safety Support
Brian Ravens	O&M Controller	Accounting Support
Kim Brierley	Project Administrator	Accounting Support
Monica Dannemann	Project Sales Asst	Project Support
Lindsay McAuliffe	Human Resources	HR Support
Alan Fabiano	Technology Leader	IT Support
Jackie Smith	Senior Project Assistant	Project Support Specialist
Lauren Frank	Sr. Project Manager	Engineering Support
Jen Birger	Sr. Client Manager	Engineering Support
Donald Taul	Project Manager	Engineering Support
Robert Polys	Sr. Technical Manager	Engineering Support
Michael Cho	Project Engineer	Engineering Support