

### **BOARD OF WATERWORKS COMMISSIONERS AGENDA**

### June 03, 2024 at 3:30 PM

Water Utility Admin Office, 72 Park Avenue, Sheboygan WI

Persons with disabilities who need accommodations to attend this meeting should contact the Sheboygan Water Utility, (920) 459-3805. Persons other than commission, committee, and board members who wish to participate remotely shall provide notice to the Utility at 920-459-3805 at least 24 hours before the meeting so that the person may be provided a remote link for that purpose.

### **OPENING OF MEETING**

1. Pledge of Allegiance

### MINUTES

2. Approve minutes of the April 15, 2024 Board meeting

### REPORTS

- 3. Financial reports and approval of vouchers
- 4. Superintendent's report including operations, construction-maintenance, and customer relations/fiscal
- 5. Update on RWI/tour

### ITEMS FOR DISCUSSION AND POSSIBLE ACTION

- 6. Request approval for CityWorks proposal
- 7. Review of new intake results
- 8. Review commercial insurance proposal

### PERSONNEL

9. Update on personnel issues

### NEXT MEETING

10. Next meeting will take place on: July 15, 2024

### ADJOURN

11. Motion to Adjourn

# In compliance with Wisconsin's Open Meetings Law, this agenda was posted in the following locations more than 24 hours prior to the time of the meeting:

City Hall • Mead Public Library Sheboygan County Administration Building • City's website



### **REPORT OF BILLING**

### APRIL 2024

Quarterly Metered*		<u>2024</u>	<u>2023</u>	Increase or <u>(Decrease)</u>
(Dist II - between Union	Residential	200,837.09	192,353.00	8,484.09
and Superior Ave.)	Multi-Family	27,809.14	27,220.09	589.05
	Commercial	66,929.35	62,431.43	4,497.92
	Industrial	6,076.89	6,807.48	(730.59)
	Public	<u>9,962.25</u>	<u>9,379.91</u>	582.34
	Subtotal	311,614.72	298,191.91	13,422.81

\* Billing for scheduled district only for the three preceding months usage.

Public Fire Protection	69,585.15	70,264.65	(679.50)
Monthly Metered	<u>418,482.10</u>	<u>374,838.24</u>	<u>43,643.86</u>
<b>Sheboygan Net</b>	<b>799,681.97</b>	<b>743,294.80</b>	<b>56,387.17</b>
Sheboygan Falls	64,033.35	47,830.00	16,203.35
Kohler	<u>36,257.32</u>	<u>28,592.38</u>	<u>7,664.94</u>
<b>Total</b>	<b>899,972.64</b>	<b>819,717.18</b>	<b>80,255.46</b>

Total accumulative billing for 2024 is \$3,224,809.79. An increase of \$33,796.59 from 2023 accounted for as follows:

	2024 Total Year to Date
Sheboygan	7,141.58
Sheboygan Falls	19,769.78
Kohler	<u>6,885.23</u>
	33,796.59

Total bills mailed April, 2024:

6,377

Residential	5,300	Wholesale	5
Multi-Family	110	Multi-Family	10
Commercial	776	Commercial	20
Industrial	34	Industrial	65
Public	54	Public	3
Quarterly	6,274	Monthly	103



### RETURN ON RATE BASE April 30, 2024

	APRIL 2024			APRIL 2023		
Add 2 YR Average						
Utility Plant Balance	\$	99,129,972	\$	76,654,409		
Materials and Supplies Inventory	\$	256,960	\$	267,678		
<u>Less 2 YR Average</u>						
Reserve for Depreciation	\$	27,140,505	\$	25,609,913		
Customer Adv for Const	\$	-	\$	1,564		
Average Rate Base	\$	72,246,427	\$	51,310,610		
Net Operating Income YTD	\$	325,235	\$	284,768		
Net Operating Income As a						
Percent of Average Net Rate Base		0.45%		0.55%		

Rate base is calculated using the two year average balance in the following accounts:

Utility Plant Balance - includes all capital assets less any contributed capital assets.

Materials and Supplies Inventory - includes all materials and supplies on hand and in inventory.

Reserve for Depreciation - includes depreciation on capital assets less any contributed capital assets.



#### **CASH RESERVE**

April 30, 2024

Ending balance on report for March 31, 2024	9,396,674.50
Plus: Receipts	612,085.89
Misc Receipts	92,886.45
Direct Pay Receipts	428,582.07
LSL Repayment	19,261.15
Allocation Entry Error	(3,034.62)
Money Market/CDARs Investment Interest	12,793.26
Minus:	(994,651.96)
Disbursements - vendors and payroll	142.25
Bank Service Fees & Credits	(77,506.54)
Health & Dental Claims/Adm Costs	(1,368.56)
NSF Checks & Customer Refunds	(9,679.26)
Invoice Cloud/Paymentech Deposit Fees	29.22
Reallocate Sewer/Garbage - payments	(732.42)
Reallocate Sewer/Garbage - monthly	(19,183.15)
Segregate LSL Payments to Revolving Loan Cash	2,898.94
Correct Cash Receipt and OBD Manual Payment	0.02
WRS Preliminary Reconciliation	(3,245.40)
Automated Credit Card Payments	(3,699.79)
Utility Water Payments	<b>\$ 9,452,252.05</b>
Note: The above amount includes:	612,359.69
Bond Reserve Fund	492,654.76
LSL Revolving Loan Fund *	1,023,611.15
Money Market Investment	289,426.62
ARPA Money Market Restricted - RWI	524,629.60
6 Month CD	1,565,371.84
3 Month CD	1,050,395.24
9 Month CD	\$ 5,558,448.90
Total	3,893,803.15

\*LSL revolving loan fund is cash available for funding LSL replacement and comes from customer repayment of LSL loans.



### STATEMENT OF NET POSITION APRIL 30, 2024 AND 2023

Assets and Other Debits Utility Plant	Year to Date <u>2024</u>	Year to Date <u>2023</u>	Liabilities and Other Credits Proprietary Capital	Year to Date <u>2024</u>	Year to Date <u>2023</u>
Utility Plant	123,615,000	90,519,061	Capital Paid by Municipal	1,640,701	1,640,701
Depreciation- Utility Plant	30,135,436	28,433,705	Unapprop. Earned Surplus	61,897,439	53,985,340
Net Utility Plant	\$ 93,479,564	\$ 62,085,356	Total Proprietary Capital	\$ 63,538,140	\$ 55,626,041
Other Property and Investments			Bonds, Loans & Advances	39,673,130	15,001,786
Appropriated Funds	782,081	3,624,237	Total Long Term Debt	\$ 39,673,130	\$ 15,001,786
Bond Redemption Fund	612,360	644,320	-		
Net Pension Asset <sup>1</sup>	-	992,887	Current & Accrued Liabilities		
Deferred Outflow - Pension & OPEB <sup>1</sup>	2,648,031	2,025,204	Accounts Payable	81	40
Total Other Prop & Investment	\$ 4,042,472	\$ 7,286,647	Accrued Liabilities	1,208,465	1,446,635
			Unearned Revenue <sup>4</sup>	270,987	5,028,941
Current and Accrued Assets			Total Current & Accrued Liab.	\$ 1,479,533	\$ 6,475,616
Cash & Investments	8,058,561	9,267,182			
Accounts Receivable	1,354,102	1,470,092	Deferred Credits		
LSL Loan Receivable <sup>2</sup>	674,854	146,935	Bond Premium	122,413	155,285
Grant Receivable - Restricted <sup>3</sup>	0	7,865	Pre 2003 Depr on Contributed Assets	-	16,710
Materials & Supplies Inventory	262,943	250,977	Other Deferred Credits	0	0
Prepaid Expenses	41,275	22,237		\$ 122,413	\$ 171,995
Total Current & Accrued Assets	\$ 10,391,735	\$ 11,165,288	<b>Operating Reserves</b>		
			Net Pension & OPEB Liability <sup>1</sup>	835,240	190,275
Total Assets and Debits	\$ 107,913,771	\$ 80,537,291	Deferred Inflow - Pension & OPEB <sup>1</sup>	1,533,534	2,402,200
			Accrued Vac & Sick Leave	731,780	669,378
			Total Operating Reserve	\$ 3,100,554	\$ 3,261,853
			Total Liab & Other Credits	\$ 107,913,771	\$ 80,537,291

<sup>1</sup> See full audited Financial Statements for disclosures and details regarding pensions and OPEB.

<sup>2</sup> Receivable related to the SWU LSL loan program.

<sup>3</sup> Grants Receivable - Restricted pertains to the Lead Water Service Lateral Replacement Program funded by the DNR.

<sup>4</sup>Unearned Revenue is the remaining balance of unspent American Rescue Plan Act funding designated to the Raw Water Improvement project.



### STATEMENT OF REVENUE, EXPENSES AND CHANGES IN NET POSITION

#### APRIL 30, 2024 AND 2023

	2024			2023			Incr (Decr)		% Incr/Decr	
		MONTH	YTD		MONTH		YTD		YTD	YTD
Sales Revenue	\$	908,889 \$	2,919,927	\$	827,556	\$	2,887,044	\$	32,883	1.14%
Other Water Revenue <sup>1</sup>	\$	4,555 \$	14,827	\$	4,620	\$	21,319		(6,491)	-30.45%
Total Operating Revenues	\$	913,444 \$	2,934,754	\$ \$	832,176	\$	2,908,362	\$	26,392	0.91%
Operating Expenses <sup>2</sup>		341,954	1,435,689		365,690		1,394,623		41,065	2.94%
Maintenance Expenses <sup>3</sup>		96,815	321,107		87,277		337,635		(16,528)	-4.90%
Depreciation Expenses		125,242	517,982		132,079		545,035		(27,053)	-4.96%
Taxes <sup>4</sup>		95,079	334,742		96,073		346,302		(11,560)	-3.34%
Total Operating Expenses	\$	659,090 \$	2,609,519	\$	681,119	\$	2,623,595	\$	(14,076)	-0.54%
Utility Operating Income	\$	254,355 \$	325,235	\$	151,057	\$	284,767	\$	40,468	14.21%
Other Income & Expense										
Non-operating Grant Revenue		-	-		7,865		36,901		(36,901)	
Non-Operating Grant Expenses		-	-		(7,865)		(36,901)		36,901	
Bond Premium		2,739	10,957		2,739		10,957		-	
Interest Earned on Investments		19,346	75,021		6,786		24,234		50,788	
Contributions		-	-		-		-		-	
Other Expense		-	-		-		-		-	
Misc Amortization		-	-		2,094		8,378		(8,378)	
Bond Interest Expense		(60,568)	(203,376)		(89,492)		(358,564)		155,188	
Change in Net Position	\$	215,872 \$	207,838	\$	73,185	\$	(30,228)	\$	238,066	

<sup>1</sup> The decrease in Other Water Revenues is due to a decrease in billed miscellaneous services.

<sup>2</sup> The increase in Operating Expense is due to the purchase of meter IT hardware and software, an increase of LSL costs from prior year, new equipment lease, an increase in customer service records and collections costs, legal and auditing fees, and purchase of uniform clothing for work crews.

<sup>3</sup> The decrease in Maintenance Expense in 2024 is due to a large rehabilition project in upper garage area in 2023 and timing of treatment equipment maintenance in 2024.

<sup>4</sup> The decrease in Tax Expense is due to a decrease in the City tax rates.



### APPROVAL OF VOUCHERS April 30, 2024

Total Of The General Vouchers	\$	762,171.85
Gross Payroll	\$	214,661.24
Net Payroll	\$	131,883.69

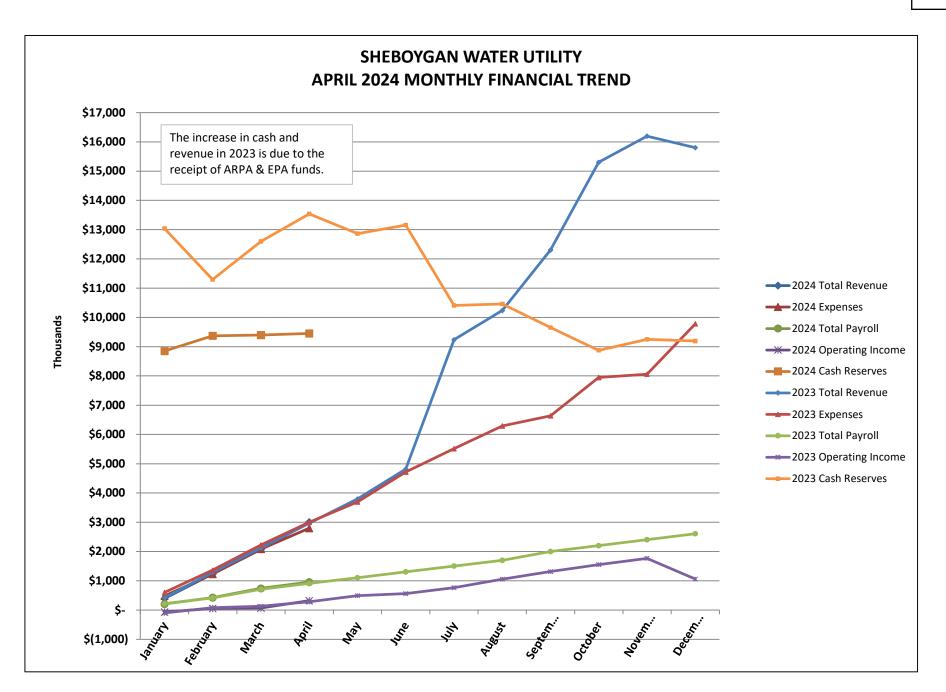
### **BOARD OF WATER COMMISSIONERS**

PRESIDENT

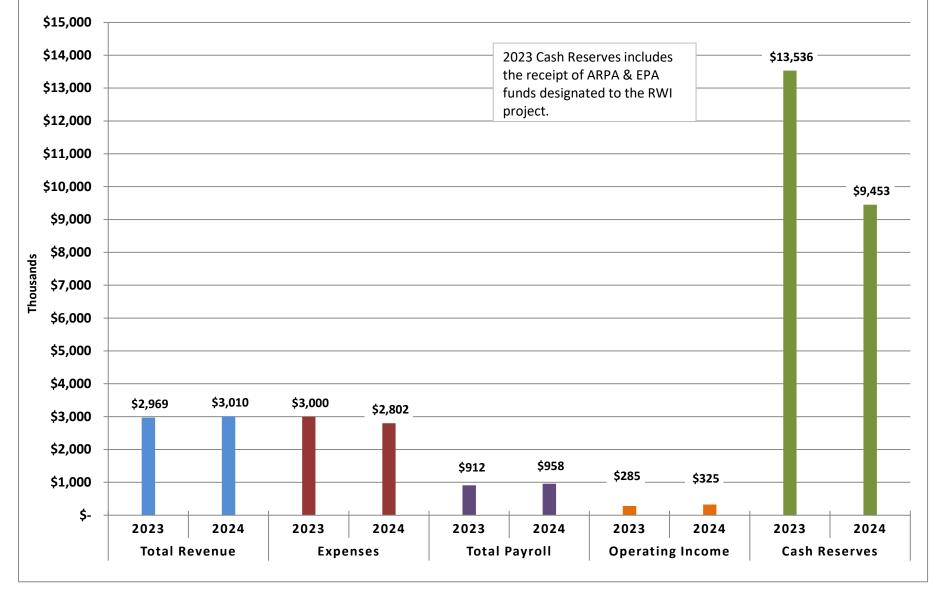
SECRETARY

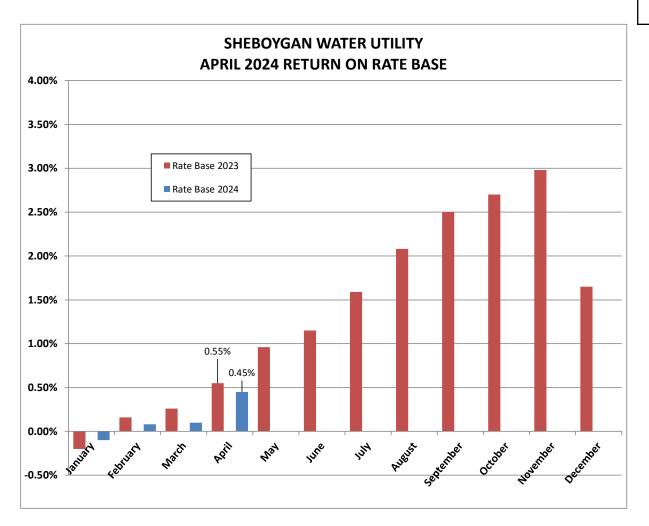
MEMBER

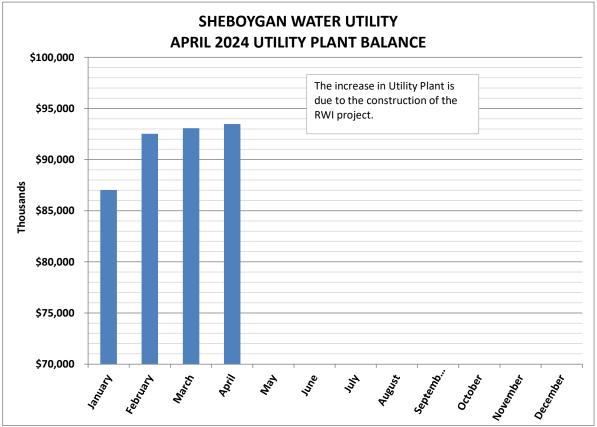
SUPERINTENDENT



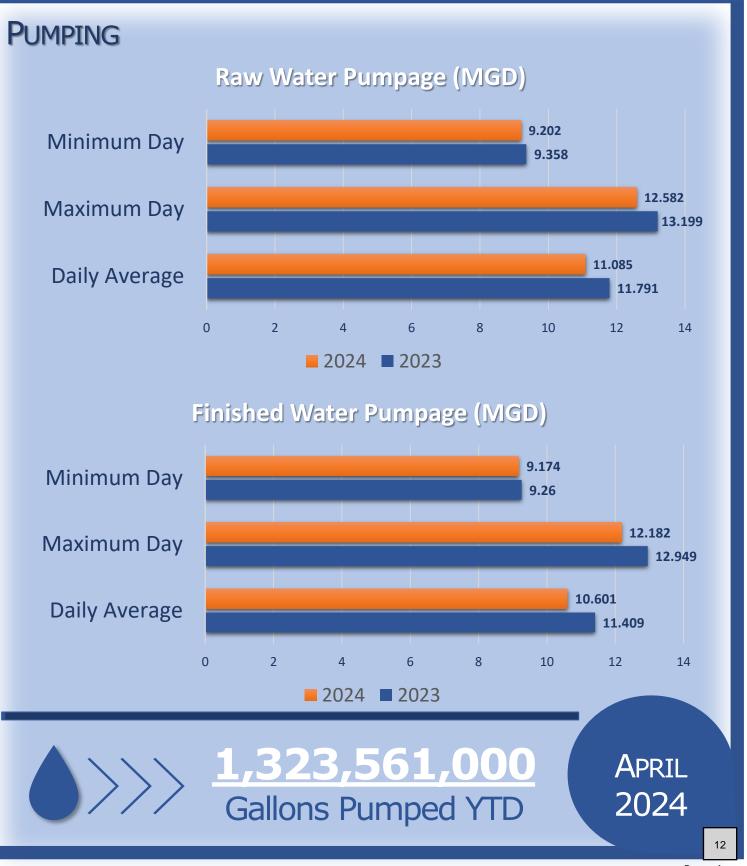
### SHEBOYGAN WATER UTILITY APRIL 2024 YTD FINANCIAL POSITION







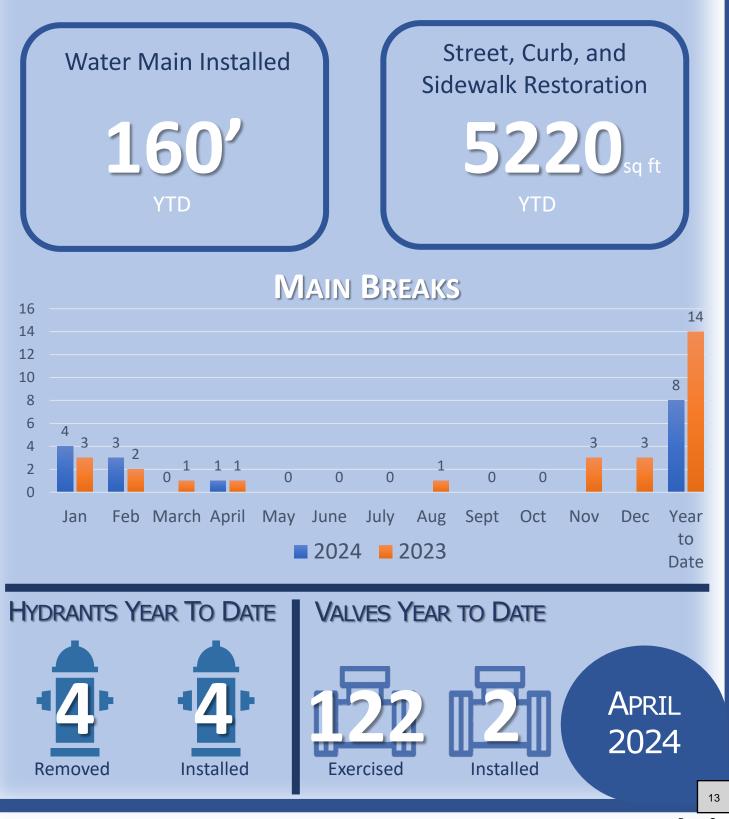
# **OPERATIONS MONTHLY REPORT**



Item 4.

# DISTRIBUTION MONTHLY REPORT

## WATER MAIN



Page 2

# **OPERATIONS MONTHLY REPORT**

# WATER QUALITY

Raw Water						
	2023	2024				
Turbidity	7	2.2				
рН	8.25	8.29				
Alkalinity	116.1	109.5				
Temperature	40.5	40.9				
Positive Bacteriological Testing	5.6	0.5				





Finished Water							
	2023	2024					
Turbidity	0.037	0.043					
рН	7.58	7.74					
Alkalinity	105.8	103.7					
Temp.	42.5	43.4					
Chlorine Residual	0.84	0.82					
Fluoride Residual	0.71	0.7					
Orthophosphate Residual	1.46	1.48					
Bacteriological Testing	0	0					

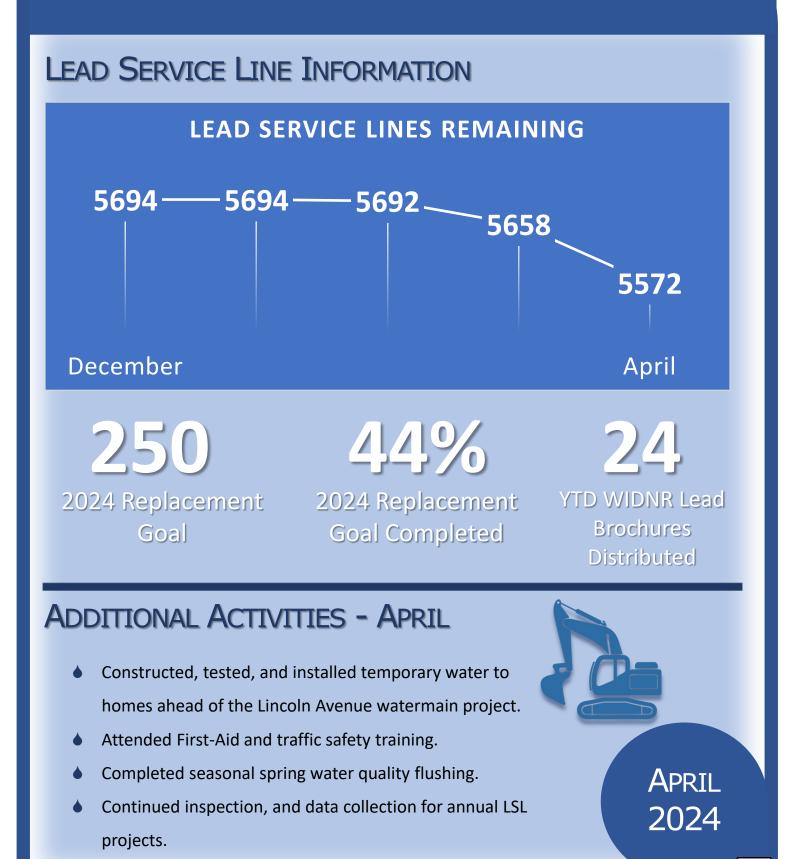
# ADDITIONAL ACTIVITIES - APRIL

- Routine Plant Operations
- Routine Plant and Remote Site Maintenance
- RWI Project
- Annual WDNR Lab Testing and Monitoring
- RWI Training
- Plant Exterior Light Work
- Filter to Waste Valve Controller Replacements
- Shift Coverage
- Water Quality Notes:
- Aluminum Sulfate Usage Down 45.6%
- Raw Turbidity Down 68.5%

APRIL 2024

14

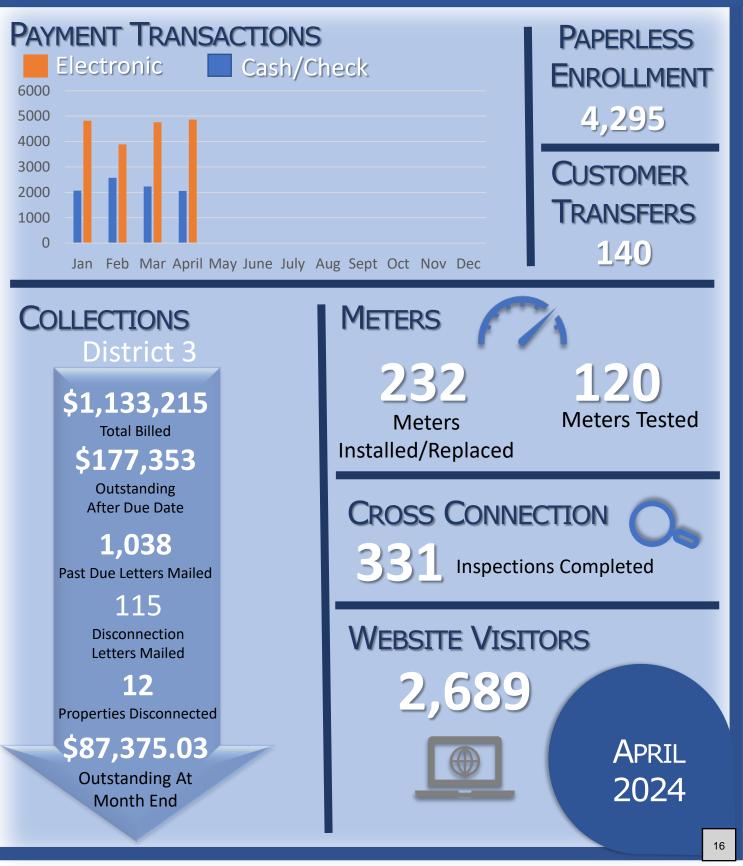
# DISTRIBUTION MONTHLY REPORT



15

Item 4.

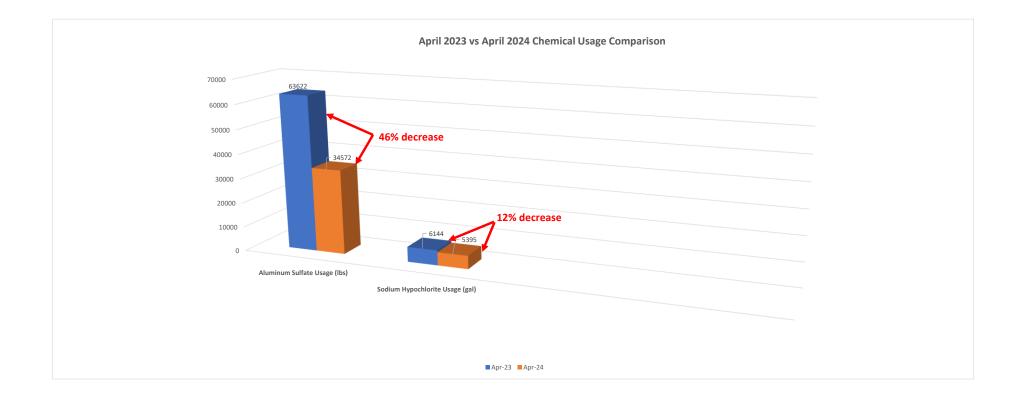
# CUSTOMER RELATIONS & FISCAL SUMMARY



# CUSTOMER RELATIONS & FISCAL SUMMARY



Item 4.









# PROPOSAL

Cityworks AMS Implementation for Water

Prepared for:

Sheboygan Water Utility

February 1, 2024

CONTACT:

Brandon Wright 801-376-8160 bwright@centricitygis.com





## **Table of Contents**

•



## **About Centricity GIS**

### Introduction

Centricity

Centricity GIS, LLC is a leading GIS Consulting company that provides a wide range of implementation, data, and application development services. Our founder, Brandon Wright, is a seasoned professional with 20 years of experience in GIS, Asset Management, and systems integration. All of our technical staff have at least 8 years of expertise in their respective disciplines, ensuring that we deliver high-quality services to our clients.

We are committed to meeting the unique needs of our clients and offer tailored solutions that meet their specific requirements. In addition to providing services for specific projects, we also provide on-site resources such as programmers, analysts, and technicians to augment an agency's staff.

As a Cityworks Business Partner, we specialize in CMMS and GIS services for public agencies such as Cities, Counties, and Water Agencies. Our partnership allows us to provide the best solutions that meet our clients' needs by leveraging Cityworks and ESRI technologies. From out-of-the-box solutions using Esri's ArcGIS for Local Government solutions to custom PLL implementations, we help agencies realize their return on investment as quickly as possible.

At Centricity GIS, we pride ourselves on delivering high-quality services, leveraging our technical expertise and extensive experience in GIS and Asset Management. Our goal is to help our clients achieve their goals and deliver exceptional value We are located in Cedar Hills, Utah, about 30 minutes from Cityworks headquarters.



### Experience.

Centricity GIS is a full-service asset management and permitting consulting firm. We serve municipal governments and private and public utilities, providing triedand-true implementation strategies that focus on your business processes, workflows, system requirements, and training.

With nearly 20 years of experience in the Asset Management and Permitting Industry, we have performed over 50 unique Cityworks implementations. Our extensive knowledge in system design and implementation allows us to leverage the flexibility and power of the Cityworks platform.

We also have in-house developers that specialize in core Cityworks integrations and development tools. Our expertise in permitting enables us to be efficient and effective during all phases of implementation. We have a proven track record of integrating Cityworks with many types of systems.



Page | 3



## **Cover Pages/Executive Summary**

February 1, 2024

Subject: Cityworks AMS Implementation

Wes:

This proposal outlines implementation services for the Cityworks AMS solution at the Sheboygan Water Utility. What sets Cityworks apart is its ability to fully leverage your GIS throughout your work process. This means that we'll use your map data as the system of record, eliminating the need to sync your GIS records with your Asset Management database. Using your GIS as the asset system of record unlocks all of the Esri platform functionality, including analytics, mobile apps, website publishing, and keeps your GIS records clean and up to date for interdepartmental use across the enterprise as well as for your customers if the Utility chooses to do so.

We understand that the Utility is looking for a comprehensive solution that can modernize its service delivery processes, and we are confident that we have the expertise to deliver a software solution that meets their requirements.

In addition, Cityworks AMS will enable the Utility to store accurate data to provide financial forecasts for services and communicate with your financial system for strategic cost and expenditure analysis. We understand the importance of this feature in decision-making processes that involve budget allocation and long-term planning, and we will ensure that our software solution provides detailed reports and analytics that the Utility can use to identify areas of importance based on activity trend analysis.

Overall, we believe that the Cityworks software solution is the right fit for the District, and we are committed to providing you with a robust, scalable, and reliable software solution that can meet their evolving needs. We look forward to the opportunity to work with the Utility and deliver a software solution that will transform your service delivery processes and improve data-driven decision-making.

Centricity GIS, a Cityworks Business Partner based in Cedar Hills, Utah, is uniquely qualified to provide these implementation services. Our founder has over 20 years of experience completing Cityworks implementation projects, having previously worked for Cityworks.

Partnering with us ensures a comprehensive implementation process that guarantees a successful Cityworks deployment for your organization. This proposal covers the following implementation services:

• Workflow Review Meetings (Remote)





- Initial Cityworks AMS Database Configuration for the following divisions: Water
  - Service Requests, Work Orders, Inspections
  - Setup Employees, and Equipment
  - Storeroom (Warehouse Inventory Management)
- Review of Configured Database (Remote)
- Admin User Training (Remote)
  - Administration Level
- End User Training (Onsite)
  - o Supervisor Level
  - Field Staff Level
- Rollout Support (Onsite)
- Ad-Hoc Support
- Caselle Integration Discovery Meetings

This proposal provides information and scoping to support your goals as listed and we look forward to demonstrating our capabilities through our software and extensive client references locally and throughout the US. We look forward to a long business relationship with the Sheboygan Water Utility and help it become a more efficient, strategic and GIS data driven organization for many years to come.

**Project Title:** Cityworks AMS Implementation **Proposer:** Centricity GIS, LLC **Authorized Representative:** 

> Brandon Wright President Centricity GIS, LLC 10659 N Sahalee St Cedar Hills, UT 84062 801-376-8160 bwright@CentricityGIS.com



Our project approach includes the following steps:

**Discovery Phase:** We will work closely with the City's team to gain a comprehensive understanding of their current service delivery processes and requirements for Cityworks AMS. This will include an assessment of the City's current data infrastructure, analysis of service delivery trends, and identification of key performance indicators (KPIs) that will be used to measure the success of the project.

**Design Phase:** Based on the information gathered during the discovery phase, we will design a customized Cityworks AMS solution that meets the City's specific needs. This will include developing workflows for service requests and work orders, and incorporating advanced analytics capabilities for data analysis and trend identification.

**Development Phase:** Once the design has been approved by the City, we will proceed with the configuration of the Cityworks AMS solution. Our team of experienced developers will ensure that the software is built to the highest quality standards and is user-friendly, efficient, and scalable.

**Testing Phase:** Before delivering the software to the City, we will conduct extensive testing to ensure that all features and functionalities are working as expected. This will include testing for reliability, scalability, and usability. We will also conduct user acceptance testing (UAT) to ensure that the software meets the City's requirements and that it is intuitive for end-users to operate.

**Deployment Phase:** After testing is complete and the Utility has approved the software, we will deploy it in a manner that is least disruptive to their ongoing service delivery processes. We will provide training to end-users on how to operate the software and will be available for ongoing support.

**Maintenance Phase:** After the deployment, Cityworks will continue to provide maintenance and support services, as defined in their Update and Support agreement with the District, to ensure that the software remains operational and up-to-date. This will include regular software updates, bug fixes, and technical support to address any issues that may arise.

















In summary, our project approach is designed to ensure that the Utility receives a customized, user-friendly, and scalable Cityworks AMS software solution that meets their specific requirements. We are committed to providing ongoing support to ensure that the software remains operational and meets the District's evolving needs.

Sincerely,

Brandon Wright Founder | President 801-376-8160





## **Approach and Methodology**

### A. INTRODUCTION

Implementing the Cityworks Asset Management System (AMS) within the Sheboygan Water Utility is an endeavor of considerable importance and complexity. This initiative calls for an in-depth integration of multiple dimensions: advanced software and hardware, relevant data, and tailored business processes specific to the water district's operations. These components, when expertly aligned, offer efficient handling of assets, work orders, service requests, inspections, and a variety of reports - key to the successful operation of the district.

The success of this specific Cityworks AMS implementation at Sheboygan Water Utility hinges on a strategic and thorough plan. This plan must take into consideration the district's unique objectives, precise requirements, resources available, and desired timelines. If executed with proficiency, this implementation will significantly empower the Sheboygan Water Utility, enabling more effective asset management, which in turn promises to elevate productivity, reduce operational costs, and enhance service quality within the district.

### B. OVERVIEW

This project methodology is meticulously crafted to establish a holistic and robust blueprint for the Cityworks AMS implementation at the Sheboygan Water Utility. Our strategy is structured in several distinctive, yet interconnected, phases which will ensure a smooth and effective transition. The progressive layout of these phases is as follows:

1. **Discovery Phase (Kickoff Meetings):** In this initial stage, the project ensemble will engage in close collaboration with the organization's stakeholders to gain a nuanced understanding of the prevailing asset management methodologies, systems, and data. This will involve discerning the specific business needs, pinpointing the objectives, and determining the key success indicators for the Cityworks AMS implementation at the Sheboygan Water Utility.

The culmination of this exploratory phase will yield a comprehensive grasp of the district's existing operational landscape, along with the creation of a forward-looking roadmap. This strategic guide will outline the trajectory towards an optimally configured Cityworks AMS, providing a clearly defined path to the future state of enhanced asset management.





- 2. **Design Phase (Database Configuration):** During this phase, the project team will design the Cityworks AMS solution based on the business requirements and objectives. The team will develop the functional and technical specifications, data migration plan, integration plan, and customizations. The team will also design the user interface, workflows, and reports. The outcome of this phase will be a detailed design of the Cityworks AMS solution.
- 3. Development Phase (Database Review and Additional Information Config): During this phase, the project team will develop and configure the Cityworks AMS solution. The team will implement the functional and technical specifications, data migration plan, integration plan, and customizations. The team will also develop the user interface, workflows, and reports. The outcome of this phase will be a fully functional Cityworks AMS solution.
- 4. **Testing Phase (User Acceptance Testing):** During this phase, the project team will test the Cityworks AMS solution to ensure that it meets the business requirements and objectives. The team will perform unit, integration, system, and user acceptance testing. The team will also identify and resolve any defects. The outcome of this phase will be a fully tested and validated Cityworks AMS solution.
- 5. **Deployment Phase (Admin & End User Training, Go Live Support):** During this phase, the project team will deploy the Cityworks AMS solution into the production environment. The team will perform the data migration, system configuration, and user training. The team will also provide post-deployment support to ensure the solution is fully operational. The outcome of this phase will be a fully deployed Cityworks AMS solution.
- 6. **Post-Deployment Phase (Ad-Hoc Support):** During this phase, the project team will provide post-deployment support and maintenance to ensure the Cityworks AMS solution is operating at peak performance. The team will also perform a post-implementation review to identify any lessons learned and opportunities for improvement. The outcome of this phase will be a fully operational and optimized Cityworks AMS solution.

### **Conclusion:**

This project approach provides a structured and comprehensive framework for the Cityworks AMS implementation. The approach considers the organization's objectives, requirements, resources, and timelines. It ensures that the Cityworks





AMS solution is designed, developed, tested, deployed, and supported to meet the organization's needs and expectations. The project team will work closely with the organization's stakeholders to ensure a successful implementation that delivers tangible benefits and ROI.

### Scope:

This scope of work identifies the tasks required for the successful implementation of Cityworks for Tracy Cityworks AMS. Centricity GIS understands that the following requirements have been identified by the District's and will be included in implementation:

- Workflow Review Meetings (Remote)
- Initial Cityworks AMS Database Configuration for the following divisions: Controls, Operations, Distribution, System Maintenance, Regulatory Compliance, General Services.
  - o Service Requests, Work Orders, Inspections
  - Setup Employees, and Equipment
  - Storeroom (Warehouse Inventory Management)
- Review of Configured Database (Remote)
- Admin User Training (Remote)
  - Administration Level
- End User Training (Onsite)
  - o Supervisor Level
  - Field Staff Level
- Rollout Support
- Ad-Hoc Support
- Caselle Integration Discovery Meetings (no integration built, but discovery on requirements)

We'll ensure that all of these requirements are met during the implementation process and that the final Cityworks solution is tailored to the District's specific needs. Our team is dedicated to providing a successful and streamlined implementation experience.





### TASK 1: WORKFLOW REVIEW MEETING (REMOTE)

As part of the implementation process, we'll arrange a dedicated meeting with Utility staff to comprehensively review and refine the workflows to be established within the Cityworks AMS application. This collaborative session serves as a forum for the Utility to shape the system's setup to align closely with their unique needs and processes.

During this vital encounter, the Cityworks team will evaluate the District's existing workflows, shedding light on potential areas for enhancement. Guided by best practices and industry benchmarks, our experts will suggest revisions and modifications to streamline these workflows. The Utility will be encouraged to contribute their insights, voice any queries or concerns, and provide feedback on the suggested changes.



This Workflow Review Meeting is a key ingredient in guaranteeing that the Cityworks AMS system is customized to bolster the District's business processes and workflows. By refining these workflows, we can elevate operational efficiency, curtail costs, and reinforce the effective management of the District's assets.

Capitalizing on the Cityworks team's extensive experience in asset management and deep comprehension of the Cityworks AMS system, we are dedicated to ensuring that the workflows are not just functional but also optimized, delivering the most advantageous results for the District.

Tasks:

- 1. Meet with Utility staff to review and understand the Utility workflows.
- 2. Get documentation from Utility that will provide the basis for the Business Unit AMS configuration.
  - a. Print Documents
  - b. Reports
  - c. Diagrams, Etc.

### Remote

Deliverable Milestones:

a. Meeting Note





### TASK 2: INITIAL CITYWORKS SYSTEM DESIGN & CONFIGURATION

This task involves the detailed configuration of the Cityworks system and database, a critical phase during which our Cityworks team collaborates with the client to intricately design and calibrate the system to match their distinct requirements. This process encompasses identifying the client's variety of asset types, understanding their data requisites, decoding their workflows, and appreciating their business procedures - all in order to configure the system most aptly.

The Initial Cityworks System Design & Configuration is an integral juncture in the Cityworks AMS implementation process; it sets the cornerstone for the complete system. A system that is adeptly designed and configured can enable



organizations to make their operations more seamless, boost data accuracy, and facilitate superior asset-related decision-making. Through our close collaboration with the client during this pivotal stage, the Cityworks team is committed to customizing a system that is precisely attuned to their needs, promising to deliver unmatched value in the long run.

Tasks:

- 1. Initial Cityworks AMS Database Configuration for the following divisions: Controls, Operations, Distribution, System Maintenance, Regulatory Compliance, General Services.
  - a. Service Requests, Work Orders, Inspections
  - b. Setup Employees, and Equipment
  - c. Storeroom (Warehouse Inventory Management)
- 2. Reports
- 3. GIS Integration
- 4. Field Module Setup

Deliverable Milestones:

a. Configured Database





### TASK 3: DATABASE REVIEW (REMOTE)

This task involves an in-depth, onsite meeting with the Utility staff, aimed at reviewing both the newly configured workflows and the Cityworks setup. The goal

of this collaboration is to meticulously scrutinize the District's asset data and Cityworks information. Our primary objective is to confirm the accuracy, completeness, and organization of the data.

Such careful evaluation ensures that the District's setup aligns seamlessly with the newly configured Cityworks AMS, thereby promoting operational efficiency, enhancing data reliability, and guaranteeing optimal asset management.



Tasks:

- 1. Database Review
- 2. Workflow changes and configuration changes as needed
  - a. Onsite Workshops
  - b. Configuration and Documentation
  - c. Demonstrate Configuration
  - d. Sheboygan Water Utility Internal Review and Feedback

### Remote

- a. Meeting Notes
- b. Configuration changes





### TASK 4: ADDITIONAL INFORMATION CONFIGURATION (REMOTE)

In this remote operation, Centricity GIS will engage in configuring supplementary information that emerges as part of the application process. This includes data derived from application forms, associated fees and deposits, varying types of contractors, as well as any auxiliary applicationrelated data that warrants tracking within the Cityworks system.

Our aim with this task is to create a comprehensive, data-rich environment within Cityworks, ensuring that every piece of pertinent information is captured and organized efficiently, thereby promoting seamless tracking and management of all elements related to asset management.



Tasks:

- 1. Configure additional info
- 2. Up to 6 Custom Crystal Reports
- 3. Configure Respond Inboxes for End Users (up to 2 inboxes per user)
- 4. Creation of Saved Searches for Inboxes
- 5. Creation of Saved Advanced Queries for Respond Dashboards

- a. Meeting Notes
- b. Any additional configuration changes and Inboxes and Dashboards





### TASK 5: ADMIN TRAINING (REMOTE)

Centricity GIS will deliver onsite Administrator training for the Cityworks system, for which the Utility will furnish the necessary training facilities and computers. The selection of Administrator users will be determined during the initial Kickoff and Configuration stages of the implementation.

Upon completing the Administrator user training, Centricity GIS will pivot to a "Train-the-Trainer" approach, focusing on key department staff members. The intent of this session is to equip these individuals with the knowledge and procedural understanding required to guide the training of all other field personnel who will be utilizing the system.

During the Administrator Training, a specific segment will be dedicated to Crystal Reports to ensure that the District's Administrator staff gain proficiency in generating custom reports, as per the District's requirements.



Additionally, the Administrator Training will place substantial emphasis on Searching/Reporting within Cityworks. This is designed to instill a deep understanding of how to effectively extract and organize data from the Cityworks system, thereby empowering the District's staff with the skills to manipulate and interpret their asset data efficiently.

### Remote

- a. Admin Training
- b. Report Training
- c. Copy of training material used in training session delivered in digital format (PDF)
- d. Preparation for Go-live





### TASK 6: END USER TRAINING (ONSITE)

Centricity GIS will facilitate an onsite training program specifically designed for the primary or "End Users" of the Cityworks system. The Utility is responsible for supplying the requisite training facilities and computer equipment for staff use during this training.

The objective of this training phase is to equip all field personnel with the essential knowledge and procedural proficiency to seamlessly use the Cityworks system.

This comprehensive training program will span over five days onsite, with a segmented focus:

- **Supervisor Level Training:** This module, spanning over two days, will cater to supervisory personnel, providing them with an advanced understanding of the Cityworks system.
- Field Support Level Training: Over the course of three days, this session will equip field support staff with practical knowledge and handson experience, preparing them for effective usage of the Cityworks system in their day-to-day roles.

By the end of this training period, we aim for all End Users to feel comfortable and confident in navigating the Cityworks system, ensuring efficient asset management across the District.

### Training will occur over 3 days Onsite

Includes:

3 Days Field Support Level

- a. User Training completed
- b. Copy of training material used in training session delivered in digital format (PDF)
- c. Go-live





### TASK 7: ROLLOUT SUPPORT (ONSITE)

Upon the successful completion of the configuration, installation, and training phases, Centricity GIS will offer onsite Rollout Support to ensure a smooth transition to the new Cityworks system. This support involves:

- 1. Data/Inbox Display Consultation: We will collaborate with the department manager or chosen representative to ascertain which data and inboxes need to be prominently displayed.
- 2. Dashboard Development: We will create customized end user and management inboxes/dashboards, designed for easy access and overview of critical data.
- 3. Cityworks Reconfiguration: We will undertake necessary reconfigurations of the Cityworks system, based on the insights gained during the Work Flow Meetings and Administrator training.
- 4. Mobile Apps Configuration: To ensure accessibility and flexibility, we will configure Cityworks Mobile Apps, allowing for on-the-go management of assets.

This intensive support phase will be conducted over four days onsite. Our goal is to ensure that the transition to the new system is as seamless as possible, fostering a sense of confidence and ease amongst all users.



### 2 Days Onsite

Deliverable Milestones:

a. Onsite Roll Out Support





#### TASK 8: AD-HOC SUPPORT

Upon successful completion of the configuration, installation, and training phases, Centricity GIS will provide Ad-Hoc Support services to address any emergent issues or complications. These services, which encompass troubleshooting and additional support, can be availed as necessary, up to a total of 60 hours.

Our objective is to ensure the Cityworks system's smooth operation and the client's continued satisfaction, by promptly addressing any challenges that may arise during the transition period and beyond. We're committed to delivering optimal value from the Cityworks system and ensuring the District's successful journey towards improved asset management..



#### Used as needed up to 40 hours.

- 1. Determine with department manager/champion what data/inboxes need to be displayed.
- 2. Build Inboxes Build end user and management inboxes
- 3. Cityworks Reconfiguration that needs completed based on Work Flow Meetings and Admin training.
- 4. Configuration of Mobile Apps (if applicable licenses from Cityworks apply)
- 5. Crystal Report Development
- 6. Dashboards and KPI's

Deliverable Milestones:

- a. Support as needed at negotiate rate of \$200/hr
- b. Billed as used





#### **TASK 9: STOREROOM CONFIGURATION**

The configuration of the Materials Management component, akin to the 'Storeroom' feature, is a crucial facet of the Cityworks AMS enterprise asset

management software. This procedure focuses on calibrating the system to adeptly manage inventory and vital supplies, which are fundamental for effective maintenance of assets and infrastructure.

We will engage with the department manager or the designated representative to ascertain the specific data and inboxes that need to be displayed. This collaborative approach ensures that the Materials Management



component is customized to meet the specific needs and requirements of the District, contributing to an efficient, streamlined asset management process.

- 1. Storeroom Domain Setup
- 2. Storeroom Material Import
- 3. Storeroom Group Rights Settings
- 4. Storeroom Admin Training

Deliverable Milestones:

a. Storeroom Rollout





# TASK 10: DISCOVERY PHASE FOR CITYWORKS AMS AND CASELLE FINANCE INTEGRATION Objective:

The objective of this discovery phase is to thoroughly understand the requirements, challenges, and opportunities for integrating Cityworks Asset Management System (AMS) with Caselle Finance software. This phase aims to gather essential information to define a clear scope of work, identify technical and business constraints, and provide an accurate estimation of costs and resources required for the integration, specifically tailored to the needs of municipal operations and financial management.

#### **Key Activities:**

#### 1. Stakeholder Engagement:

- Conduct targeted interviews with stakeholders involved in municipal asset management and financial operations, including IT, public works, finance, and administration departments.

- Understand the specific workflows, reporting needs, and data sharing requirements between Cityworks AMS and Caselle Finance.

#### 2. System Compatibility Review:

- Evaluate the current versions and configurations of Cityworks AMS and Caselle Finance to assess compatibility and integration capabilities.

- Identify any existing APIs, data exchange formats, or middleware that could facilitate the integration.

#### 3. Requirements Collection:

- Gather detailed functional and non-functional requirements specific to municipal operations, such as asset lifecycle management, work order financing, budget tracking, and regulatory reporting.

- Prioritize requirements based on their impact on operational efficiency and compliance.

#### 4. Data Mapping and Analysis:

- Perform a detailed analysis of the data structures in both Cityworks AMS and Caselle Finance to understand the data mapping, transformation, and synchronization needs.

- Address data integrity, consistency, and real-time data exchange requirements.

#### 5. Technical Infrastructure Assessment:

- Assess the existing technical infrastructure, including hardware, network, and security protocols, to ensure it can support the integration.

- Identify any upgrades or enhancements needed to facilitate seamless data exchange and system interoperability.

#### 6. Risk and Compliance Evaluation:





- Conduct a risk assessment focusing on data security, system availability, and potential operational disruptions.

- Review municipal, state, and federal regulations that govern financial reporting and asset management to ensure the integration complies with all legal requirements.

#### 7. Preliminary Integration Design:

- Develop a conceptual integration architecture that outlines the key components, data flows, and interactions between Cityworks AMS and Caselle Finance.

- Consider the use of integration platforms or custom development as potential solutions.

#### 8. Cost and Resource Projection:

- Provide a preliminary estimate of the integration costs, including software, hardware, development, and ongoing maintenance.

- Outline the human resources needed for the project, including internal staff and potential external consultants or developers.

#### 9. Implementation Roadmap:

- Draft a high-level project timeline, identifying critical milestones, phases, and dependencies specific to the municipal operational calendar and budget cycles.

- Highlight key decision points and approval processes required for project progression.

#### **Deliverables:**

- A detailed discovery report summarizing the integration requirements, system evaluations, data analysis, and stakeholder inputs, with a focus on municipal operational needs.

- An initial cost and resource estimation, providing a foundation for budgeting and resource allocation discussions.

#### Outcome:

The discovery phase will result in a comprehensive understanding of the integration landscape between Cityworks AMS and Caselle Finance, tailored to the unique needs of municipal operations. This foundation will enable the development of a detailed scope of work and a precise cost estimate, ensuring that the subsequent integration project is aligned with municipal objectives, operational requirements, and financial constraints.





## Firm Description & Project Organization

Centricity GIS, LLC is a premier multi-service organization that specializes in Field Asset Surveying, Geographic Information Systems (GIS), and application software services. Our team of experienced professionals provides a comprehensive range of services, including consulting, training, staffing, and technical support to meet the diverse needs of our clients.

We are committed to delivering the highest quality GIS-centric and Cityworks implementation projects, particularly in the utility industry for Water, Sewer, Storm, Gas, and Electric. Our team has over 20 years of experience in GIS and 25 years in Cityworks implementation, backed by a wealth of industry and technical expertise.

At Centricity GIS, we take pride in setting the standard for excellence in GIS and Cityworks implementation. We strive to provide our clients with the most innovative and effective solutions to help them achieve their goals and maximize their return on investment.

CENTRICITY GIS is a Dun & Bradstreet verified business (DUNS 08-085-9425).



Partners:

- Cityworks Business Partner Network
- ESRI Silver Partner



Network Silver





#### **Management**

Brandon Wright, the founder of Centricity GIS, LLC, is a highly accomplished professional with over 20 years of experience in Cityworks and GIS within the Asset Management industry. He graduated from the University of Colorado, USA, with a B.S. degree in Business Information Systems.

Mr. Wright has successfully completed over 50 Cityworks related projects, primarily implementing Cityworks systems with government agencies throughout the United States. His core competency is in implementing Cityworks Asset Management solutions for government agencies, including Water, Wastewater, Parks & Recreation, and more.

As the leader of Centricity GIS, Mr. Wright manages strategic planning, business development, and company operations. He also serves as the client liaison officer on all projects, overseeing scope, schedule, budget, and time frame.

Mr. Wright's specialties include Asset Management, Data Conversion, and Project Implementation. He is known for his exceptional project management skills and his ability to deliver high-quality results on time and within budget. His expertise and leadership have enabled Centricity GIS to become a trusted partner for government agencies and other organizations seeking GIS and Asset Management solutions.

#### **PROJECT MANAGEMENT APPROACH:**

**Initiation:** At the initiation stage, we will define the scope of the project, identify the stakeholders, and assess the feasibility of the project. We will also develop a project charter that outlines the project goals, objectives, and timelines.

**Planning:** In the planning phase, we will create a detailed project plan that includes a work breakdown structure (WBS), project schedule, resource allocation, and risk management plan. We will also define the project requirements, deliverables, and acceptance criteria.

**Execution:** During the execution phase, we will implement the project plan, monitor the progress of the project, and manage any changes to the scope, schedule, or resources. We will also ensure that the project deliverables are produced according to the specifications and quality standards.

**Monitoring and Control:** The monitoring and control phase involves tracking the progress of the project against the project plan, identifying any deviations from the plan, and taking corrective actions to keep the project on track. We will also manage project risks, communicate progress to stakeholders, and ensure that project documentation is up to date.

Closure: In the closure phase, we will deliver the project deliverables, conduct a final review of the project, and obtain approval from stakeholders. We will also

Cityworks<sup>®</sup> 42

Page | 23



close out the project, including archiving project documents and conducting a lessons learned review to identify areas for improvement.

By following this project management approach, Centricity GIS, LLC will ensure that its projects are completed on time, within budget, and to the satisfaction of its stakeholders.

#### **Software Skills**

GIS Software: ArcGIS Desktop, ArcGIS Online, ArcGIS Server, ArcGIS Pro

Asset Management Software: Cityworks PLL and AMS

Databases: Access, SQL Server, Oracle, Geodatabase

Reporting Tools: Crystal Reports, SQL Server Reporting Services





### **Qualifications and Past Performance**

The following table shows the combined project experience of our team.

• Centricity GIS Reference Sites

Client	Implementation	Support	PLL	AMS	Reporting	Integrations
Moses Lake, WA	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
West Valley City, UT	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Park City, UT	~	$\checkmark$		$\checkmark$	$\checkmark$	
Herriman, UT	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Saratoga Springs, UT	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
Rancho Palos Verdes, CA	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	
Las Gallinas Valley Sanitary District, CA		$\checkmark$		V		
Redlands, CA	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$
Cook County, IL	~	$\checkmark$	$\checkmark$	$\checkmark$	$\checkmark$	
DDOT, Washington, DC	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	
Apex, NC	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	
Houston, TX	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	
Ruidoso, NM	$\checkmark$	$\checkmark$		$\checkmark$	$\checkmark$	





## References

Item	Proposer Response
Client Reference No. 1 – Existing	SANTAČRUZ
Name	City of Santa Cruz, CA
Number of Employees	300+
Population	61,950 (2021)
Contact Name	Ken Morgan
Contact Title	Director of IT
Contact Telephone Number	831-420-5095
Contact E-Mail Address	kmorgan@santacruzca.gov
Products, Modules, Services Provider by Proposer	Cityworks AMS Water and Wastewater. Vertical Assets and Coastline Management
Implementation Kick Off Date	October 2022
Go Live Date	Estimated July 2023
Rationale for including the specific reference	Current client in the state of California implementing
Name of prior replaces/upgraded system	NA

Client Reference No. 2 – Existing	SALINAS
Name	City of Salinas, CA
Number of Employees	100+
Population	162,000
Contact Name	Eric Sandoval
Contact Title	GIS Administrator
Contact Telephone Number	831-758-7166
Contact E-Mail Address	erics@ci.salinas.ca.us
Products, Modules, Services Provider by Proposer	Cityworks AMS for Parks and Facilities
Implementation Kick Off Date	August 2022
Go Live Date	December 2022
Rationale for including the specific reference	Cityworks California Implementation
Name of prior replaces/upgraded system	None





Client Reference No. 3 – Existing	Surf City Huntingtan Beach .
Name	City of Huntington Beach, CA
Number of Employees	100+
Population	196,652
Contact Name	Bryan Arnado
Contact Title	Utilities Technology Supervisor
Contact Telephone Number	714-536-5206
Contact E-Mail Address	bryan.arnado@surfcity-hb.org
Products, Modules, Services Provider by Proposer	Cityworks AMS implementation for Parks and Sewer
Implementation Kick Off Date	May 2022
Go Live Date	September 2022
Rationale for including the specific reference	Cityworks Implementation for Parks and Sewer Laterals. Expanding to remainder of City.

Client Reference No. 4 – Existing	<b>AMERICAN FORK</b>
Name	American Fork City, UT
Number of Employees	100+
Population	35,000
Contact Name	Jay Brems
Contact Title	Water Dept Manager
Contact Telephone Number	801-404-6129 x58
Contact E-Mail Address	jbrems@americanfork.gov
Products, Modules, Services Provider by Proposer	Cityworks AMS implementation City wide
Implementation Kick Off Date	October 2020
Go Live Date	March 2021
Rationale for including the specific reference	Cityworks City wide implementation. Including Citizen
	Reporting system tied into Cityworks.
Name of prior replaces/upgraded system	Elements





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Item	Proposer Response
Client Reference No. 5 – Existing	MOSES LAKE
Name	City of Moses Lake, Washington
Number of Employees	300+
Population	24,009 (2018)
Contact Name	Cindy Smith
Contact Title	GIS Program Manager
Contact Telephone Number	509-764-3754
Contact E-Mail Address	csmith@cityofml.com
Products, Modules, Services Provider by Proposer	Cityworks AMS and PLL. Citywide Implementation.
	Building, Planning, Fire, Code Enforcement.
Implementation Kick Off Date	February 2020
Go Live Date	November 2020
Rationale for including the specific reference	Current client in the state of Washington
Name of prior replaces/upgraded system	Dude Solutions

Client Reference No. 6 – Existing	PARK CITY 1884
Name	Park City, Utah
Number of Employees	100+
Population	8500
Contact Name	Scott Barrell
Contact Title	GIS Analyst
Contact Telephone Number	801-573-5470
Contact E-Mail Address	
	Scott.barrell@parkcity.org
Products, Modules, Services Provider by Proposer	Citywide Cityworks AMS for water distribution and treatment
Implementation Kick Off Date	December 1, 2017
Go Live Date	November 1, 2018
Rationale for including the specific reference	Cityworks Water reference site
Name of prior replaces/upgraded system	iWorQ





Client Reference No. 7 – Existing	
Name	Dixon, CA
Number of Employees	100+
Population	20,084
Contact Name	Josh Hudson
Contact Title	Operations Supervisor - Water Distribution Division
Contact Telephone Number	530-682-3265
Contact E-Mail Address	jhudson@cityofdixon.us
Products, Modules, Services Provider by Proposer	Cityworks AMS implementation for Water
Implementation Kick Off Date	November 1, 2020
Go Live Date	May 15, 2021
Rationale for including the specific reference	Full Cityworks AMS Implementation for Water group including Facility work orders and inspections.





#### **EDUCATION**

Bachelor of Science Degree, Business Information Systems, University of Colorado



## Brandon Wright Founder/Project Oversight

Mr. Wright has over 20 years of experience providing Asset Management and GIS services to public agencies. Mr. Wright has been responsible for directing asset management projects and addressing logistical and technical concerns. Prior to working at Centricity GIS, Mr. Wright worked Cityworks for 10 years.

Services include database development/administration and maintenance, map creation, needs assessment, implementation and integration. Integration services include integrating GIS databases (SQL Server or Oracle) with other systems such as Asset Management Systems, Customer Billing, Document Management and Work Orders. He also provides system training, and general IT consulting services.

#### Summary of Skills

- Expertise using ESRI's ArcGIS software products, ArcGIS Desktop 10.x, ArcGIS Server, ArcGIS Online
- Experience in administration of Cityworks AMS & PLL
- Cityworks PLL Administration Training
- Expertise in Mapping, GIS Data Modeling, Systems Integration, Needs Assessments
- Over 10 years of Project Management experience
- Database experience with SQL Server, Oracle, and Microsoft Access

#### **Representative Projects**

- Moses Lake, Washington, Cityworks and PLL Implementation
- Rancho Palos Verdes, Cityworks Implementation
- Vista Irrigation District, Cityworks Implementation
- San Mateo, Cityworks Implementation
- Cook County, IL, Cityworks and PLL Implementation
- Saratoga Spring, UT, Cityworks and PLL Implementation
- Houston, TX, Cityworks Implementation/Expansion
- DDOT (Washington, D.C.), Cityworks Implementation/Expansion
- Columbia, SC, Cityworks Implementation/Expansion
- Lafayette, LA, Cityworks Implementation
- El Paso, TX, Cityworks Implementation/Expansion
- Apex, NC, Cityworks Implementation





# **Implementation Fee/Cost Proposal**

### **Cityworks Implementation Costs**

Task	Description	Tot	al Cost
1	Workflow Review Meetings (Remote)	\$	1,000
	Kickoff Meeting & Workflow Meetings		
-	Meeting Notes		
2	Initial Cityworks Database Configuration	\$	30,000
	Configuration for Cityworks AMS		
3	Database Review (Remote)	\$	2,000
	Post Review Changes		
	Meeting Notes and Action Items	-	5 000
4	Additional Information Configuration	\$	5,000
	Dashboards Saved Searches		
	Inboxes		
	Configuration Changes		
	Crystal Reports (Up to 6 Crystal Reports Developed)		
5	Admin Training (Remote)	\$	2,000
	Onsite Admin Training for Utility Admin Users		,
6	End User Training (3 Days Onsite)	\$	10,500
	Onsite End User Training for End Users		
7	Rollout Support (2 Days Onsite)	\$	7,000
	Onsite Support for End Users when system goes live		
8	Ad-Hoc Support (up to 40 hours)	\$	8,000
	Configuration Changes		
	Admin Support		
	Dashboards/KPI's		
	Mobile App Configuration Any other Ad-Hoc Support that may be needed		
	Crystal Report Development		
	(Up to 40 Hours) Billed at \$200/Hr As Used, Post Go		
	Live.		
9	Cityworks Storeroom	\$	10,000
	Configuration, Setup and Rollout of Cityworks Storeroom		
	Materials Management for Cityworks AMS		
	Total Implementation Including Addition Compart	¢	75 500
	Total Implementation Including Ad-Hoc Support	<u>\$</u>	<u>75,500</u>





### Addendum 1 – Work Specification Requirements/Details

The District's goal is to implement a system that provides the following features:

#### Map Centric Asset Visualization

Cityworks is pleased to know Sheboygan Water Utility is looking for a Map Centric software EAM solution. Cityworks invented the term and platform called GIS-Centric, which goes far beyond just visualizing your asset and work data in a GIS map.

#### Cityworks provides the strongest GIS integration in the market.

Not only is Cityworks integrated to Esri's GIS, it leverages the platform for extended functionality in Esri analytics and Esri core field apps such as Collector and Survey 123. We integrate to Esri SSO for user login ease. Beyond showing work order data, asset data and condition data in a map, everything you do in Cityworks from an asset, work, projects, service request and inspection can be viewed in GIS maps. Our Mobile field applications begin with a map view.

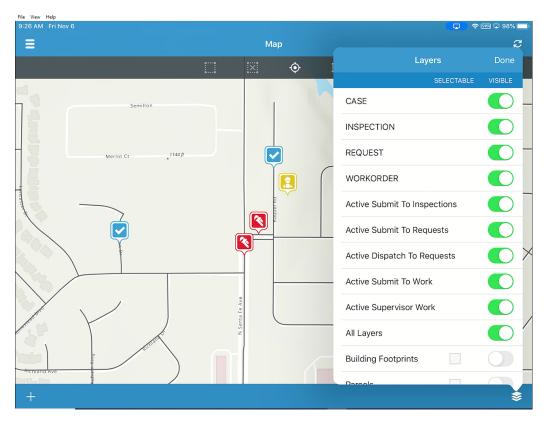


Figure 1 Cityworks Mobile Map based interface enables users to visualize work locations Upon Login.

#### Your GIS is the Cityworks asset inventory record.

*Cityworks uses the GIS tables as the asset inventory record.* We eliminate the huge resource overhead it takes to synchronize asset data in a CMMS/Asset Management system and the GIS asset records. There is no need to track two separate asset records







any longer. Cityworks plugs right into your existing feature classes and database object classes out of the box. Your GIS record *is* the asset data. This may not be important to the end user, but from a management and data continuity standpoint, Cityworks eliminates a lot of redundant work and duplication of records.

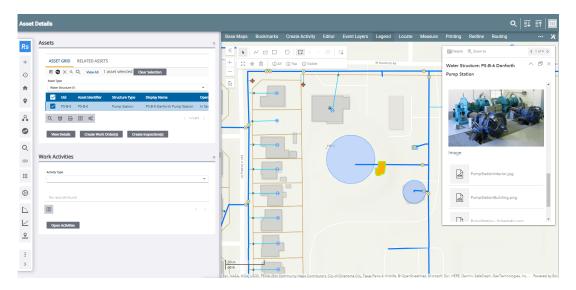


Figure 2 Cityworks GIS Asset Record Pump Station Selected from a Map View.

sset Details			
Asset Identifier	PS-B-6		
Structure Type	Pump Station		1
Display Name	PS-B-6 Danforth Pump Station		
Operational Status	In Service		
ESFType			
Lifecycle Status	Operation & Maintenance		
Location Description	1540 W Danforth Rd		Sale See LAN
Address	1540 W Danforth Rd		
Owned By	Our Agency		
Maintained By	Our Agency	and the second sec	
Primary Image	pumpstation.jpg		
Condition Score	75		
Condition Date	03/09/2023, 6:54 AM		
Warranty Date	09/14/1992, 11:00 PM		
Install Date	09/14/1987, 11:00 PM	Total Cost	Total Hours
Install Cost	150617		
Exp Replace Date	09/14/2062, 11:00 PM	\$42,813.17	1 7 2 6
Exp Replace Cost	185988	Ψ <del>4</del> Ζ,013.17	1,236
Age	32		,
	* 00 £.C		

Figure 3 Details of GIS Attributes, Costs, Hours and Work History in Cityworks.





Cityworks will provide Sheboygan Water Utility the ability to view your maps in 2D as well as 3D. Notice the same GIS view below of Water Tank Structures and the Pump Station in 2D and 3d views.





#### Cityworks is a Platinum Esri Business Partner.

esri Partner Network

As the sole Esri Platinum partner in our competitive space, we have advantages in a number of areas. We develop our software to comply with newly planned Esri releases,

along with their development resources to ensure the most "release ready" system in our marketspace. We work with an Esri resource who is specifically dedicated to working with Cityworks. We have built our products according to the Esri vision and philosophy because we know GIS and spatial intelligence is the future. Nobody else in our space can provide this vision and process like Cityworks can. You can also see a list of Local Government Partners on the Esri Website.

https://www.esri.com/content/dam/esrisites/en-us/media/pdf/arcgis-for-local-governmentspecialty-list.pdf

#### **Asset Management**

#### Cityworks provides full life cycle management including:

- Installation and Construction
- Asset Inventory Maintenance Scheduling
- Emergency Management & Regulation Compliance
- Criticality Data: Risk Assessment Scenarios
- Installation, Replacement Costs, Replacement Dates
- Asset Lifecycle Curve Modeling
- Rehabilitation and Replacement Planning

There are many management tools to the Cityworks system, and we extend to our customers the ability to visualize multiple scenario analytics with your asset data. At the very basic level we can set up asset replacement forecasts based on asset age, replacement dates and replacement costs.

At the more advanced levels, we can use data such as asset condition, asset curves, risk, criticality, environmental factors and history of maintenance work as factors to include in a deeper, multi factor, weighted analysis for CIP projects.

No matter the level of data the Utility has today, there is a clean and clear path from basic to advanced asset analytics to ensure maximum use of the GIS and work history data you already have existing today.

Additionally, Cityworks can help with project and budget management, CIP Planning, Environmental Regulations (FOG, IPT, Stormwater Quality, NASSCO etc.) and Federal requirements such as FEMA reporting and AWIA reporting.





					ks Coordinate Conversion Create Activity Data View Editor
Calculation Search	1			arch Results	
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Figure 4 Cityworks Operational Insights with Asset Curves & Heat Mapping High Risk Asset Areas.

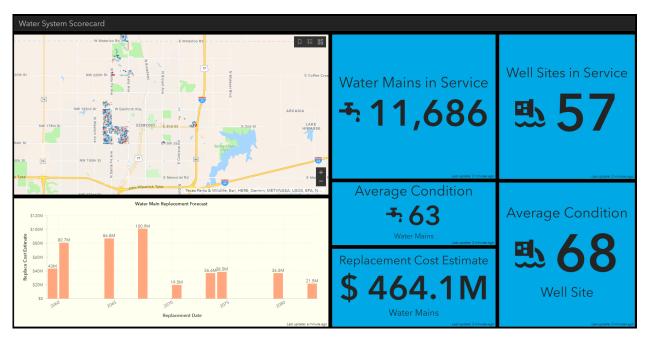


Figure 5 Esri Dashboard with Spatially Enabled Views Showing CIP Budget Forecast based on Replacement Dates and Costs.





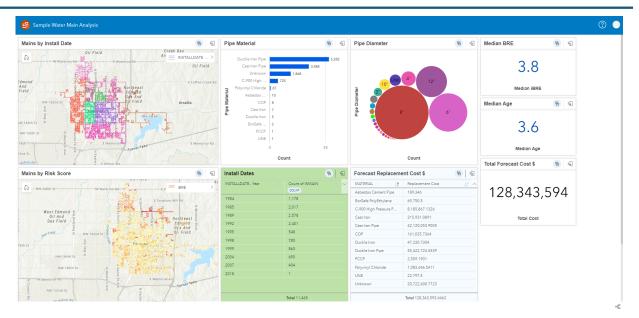
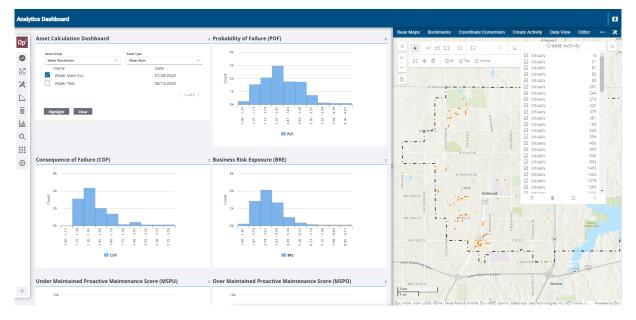


Figure 6 Water Pipe Analysis Interactive Chart Report.



*Figure 7 Water Main Risk Profile Calculated by your POF x COF =BRE. (Probability of Failure x Consequence of Failure = Business Risk Exposure.* 





#### **Work Management**

Cityworks provides Sheboygan Water Utility the ability to create easy to deploy and use work order forms to your end user needs. Multiple form profiles can be deployed based on the need for data entry. The goal for Sheboygan Water Utility is to provide only the basic needs to support a good management reporting end goal. Your Cityworks Implementation Partner will help Sheboygan Water Utility configure (not customize) Cityworks Work Order forms to include your appropriate needs for each workflow and division. Every work order, inspection and Request form has a GIS map giving the user easy map visual location for routing and identification of assets.

Multiple assets may be part of a work order such as grouped flushing or inspection "rounds" thereby making it easy to check off each asset as they move through a list.

Work orders charge labor, materials, equipment and other costs as needed for accurate time and accounting measurements.

Core to the daily interaction users have with Cityworks is their personally configured dashboards. These provide a *"Day in the Life"* of their work assignments. The dashboard displays the work order assigned to them, their completed work and items are reviewed. Any number of workflow items can be displayed. The user starts with their map or list and completes the listed item by any measure they wish to see, Priority, Map Area, Job Type etc. After opening these charts or lists or map icons, they complete the work order, and move on to the next one.

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*Figure 8 User Based Dashboard Frames in Cityworks Show Users Their Assignments for Easy Access to Daily Activities and Tracking.* 





Work	Order :			오 🗎 😣 …   타 듉 🔟
Rs	Work Order	Ŧ	Location Information $ au$	Base Maps Bookmarks Coordinate Conversion Create Activity 🔀
+	Grounds Maintenance 💌	Number Sid 136214 136214 Category Preventive *	Generade Wes Order Address	
* •	(cw) Lang, Billy Status	Date Initiated Feb 09, 2022, 1:26 AM	Loadon Dealls Shop Dearct West Rologell Spring  Map Page Tile Number	
<b>9</b> 0	· · · · ·	Low   Supervisor  (w) Cotter, Mike  Submit Date	LINEXATED           Facility Id           Leveli Id           XLocation           YLocation	
e	(w) Hamlin, Denny 🔻	Apr 18, 2023, 6:34 AM G	-10854139.377773 425485.52437826 0	
0	Apr 27, 2023, 8:00 AM	Projected Finish Apr 27, 2023, 5:00 PM D Close Date	Assets     ∓       EI = A ♥ ⊠ ∅ 0, ByType     Pattern Type       □     Type     Ud       SM     Feature Type	
N N	· · · · · · · · · · · · · · · · · · ·	Actual Start	WSTRUCTURE         PS-8-6         9         WSTRUCTURE         PS-8-6         9           Q         Image: Comparison of the structure         Image: Comparison of the structure         V         1-1-ort         >	
2	Expense Type Maintenance	Actual •	Update Vork Order XY when adding/removing assets?	
>	Instructions		Work Cycle	100an

Figure 9 Asset Work Order Form with Map.

#### Work Order Costing

*Charge time, materials and equipment to work orders.* 

Charged time and materials can also be partially charged by linear feet, or how many assets were worked on dividing the costs evenly. Problem assets can be charged individually

Materials charged are taken out of inventory for appropriate inventory tracking of parts, locations and part inventory levels

Add Work Orde	r Costs		
Nov 06, 2020	Labor		Î
Account	(ad) Admin, Public Works	Î	
Crew Sewer - CCTV	(s) Hubbard, Carol	Î	
Storeroom REMOTE	(s) Parks, Brandon	Î	
	Employee 0	+	
	Equipment		
	CCTV_Truck ~ CCTV Inspection Truck	Units * -	Ĩ
	Equipment PLCUTT ~ Liner Cutter w/Camera	Units * -	
	(Hours*		ADD COSTS





#### **Work History**

Cityworks keeps a running tab of work history for Work Orders, Service Requests and Inspections. Work history is critical to maintenance decision making. Each asset provides the associated work history at a glance to view frequencies, PM schedules and emergency work. Users can also open each historical record to drill further into the information as needed.

Water Structure - PS-B-6						
ATTRIBUTES SUMMARY	WORK ORDERS INSPECTIONS	CASES ATTACHMENTS				
pen Work Orders						
ld ld	Description	Status	Start Date		Finish Date	Submit To
136214	Grounds Maintenance	1-REQUESTED	04/27/2023, 8:00 AM		04/27/2023, 5:00 PM	(w) Hamlin, Denny
<u>136222</u>	Replace	1-REQUESTED	04/24/2023, 8:00 AM		04/24/2023, 5:00 PM	
<u>136478</u>	Water Quality Testing	1-REQUESTED	04/19/2023, 2:41 PM		04/21/2023, 2:41 PM	
losed Work Orders	Description		Actual Finish Date	Total Cost	Hours	Completed By
_			09/15/2020, 11:00 AM	\$41,340.00	1200	
136135	Install New					
<u>136135</u> <u>136136</u>	Install New Repair Scheduled		09/15/1988, 6:00 AM	\$319.00	10	
					10	
136136	Repair Scheduled		09/15/1988, 6:00 AM	\$319.00	10 0	
136136           136170	Repair Scheduled		09/15/1988, 6:00 AM 06/01/2022, 4:00 AM	\$319.00 \$5.00	10 0 10.5	
136136           136170           136230	Repair Scheduled Inspection Repair Scheduled		09/15/1988, 6:00 AM 06/01/2022, 4:00 AM 04/30/2018, 2:00 AM	\$319.00 \$5.00 \$525.25	10 0 10.5 5	
136136           136170           136230           136231	Repair Scheduled Inspection Repair Scheduled Repair Scheduled		09/15/1988, 6:00 AM 06/01/2022, 4:00 AM 04/30/2018, 2:00 AM 02/01/2019, 1:59 PM	\$319.00 \$5.00 \$525.25 \$188.11	10 0 10.5 5	< 1606 )

#### Asset Work History

Cityworks work historical records can be seen at the asset inventory detail level. All history shows up for the user and a running sum of total costs expenditures and labor hours are rolled up for analysis. Asset photos will also display.



\$4,061.17

Figure 10 Asset History Cost. Users can Open Details as Needed.





#### **Work Scheduling**

#### Resources and People Scheduling:

Cityworks will provide the Utility a truly unique approach to scheduling work. Scheduling of work types can be assigned by default in our "Designer" to an individual or crew. Area assignments can also be determined based on geography and asset location. Assignments can also be manual on-demand assignments. Cityworks assignments can also be calendar driven. However perhaps one of the most unique features we have is a Workload manager to view locations of work in a GIS Centric view. Employees can be seen in color codes and unassigned work can be assigned automatically by area or manually through a map scheduling interface.

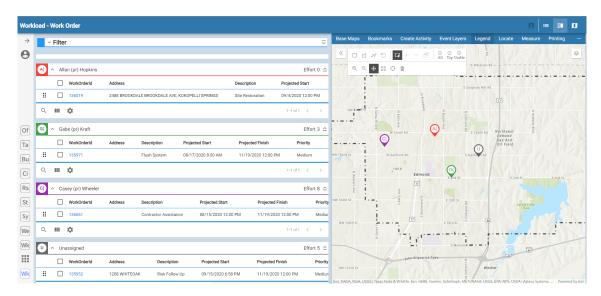


Figure 11 Map View of Spatial Scheduling of Resources.

#### Asset Scheduling:

Assets are also scheduled for preventive maintenance either by calendar time trigger or other measurements such as equipment runtime readings imported from a SCADA application. Cityworks has several SCADA interfaces with our customers to ensure PM scheduling is performed at the desired metric that best fits our customer needs and goals.





#### Service Request Tracking

Sheboygan Water Utility can seamlessly consolidate the work management process across the agency to receive all requests from internal staff to outside wholesale customers to track problems and issues reported. These can be rolled into and associated with Work Orders as needed.

Servic	e Request 💠							Q	8 🛛 😁	
Rs	Service Request		∓ li	Incident Information		Base Maps	Bookmarks	Coordinate Conversion	Create Activity	* *
+	Service Request Id 133330	Status 1-Received •		Geocode Address Apartment		+				
-⊙ ♠	Description Water: Leak * Priority	Category Public Utilities		City State		6				
9	High	Emergency?		Zip Code Landmark	ŀ					
& ©	(w) Cotter, Mike Submit To (w) Cotter, Mike	Mar 18, 2022, 7:07 AM C Submit To Date Mar 18, 2022, 7:07 AM C		Shop Tile Number           View Number <ul> <li>CHOWNING HEIGHTS</li> </ul>						
Q	Submit To Opened By (w) Cotter, Mike	Submit To Open Date May 11, 2023, 8:46 AM		Map Page District Central Central Location			+			
Θ	Dispatch To (w) Lyons, Colin	Dispatch To Date Mar 18, 2022, 7:07 AM		Details				•		
 ⊘	Investigation?	Investigation Date		Facility Id Level Id						
	Project	Projected Complete Date Mar 19, 2022, 7:07 AM		X Y Z -10849773.268 4254895.302 0						
⊮ &	Work Order Needed?	Cancel	0	Customer Calls T		_	Blackwelder			
*	Closed By Resolution	Closed Date		First Name Last Name Call Time Caller Type Comments		<u> </u>	Ave			
>	Related 😌 + 🔅 🌑 🌿	\$0.00		UNKNOWN         01/18/2022, 6:07 AM           Q, III         < 1-1 of 1 >		10 m 40 ft Esri, NASA, NGA, US	GS, FEMA   Esri C	ammunity Maps Contributors, City of	Oklahoma City, Texas	Park Powered by Esri

Figure 12 Service Request Form

Related Inspections							Ŧ	Base Maps			
Id Description	Type Asset Id	Asset Type	Date Inspecte	d By Location	Update Map	Status					
No records found								+			
■ ∞ ∞ + Ⅲ °°											 
								â			
Related Service Requests							Ŧ	-			
	scription Link Type	Priority Category	Submit To Di	spatch To Address	District Date	Closed Status					
No records found											
🖿 🐵 👳 + 🎞 🖏											
Related Work Orders							₹				
Id Description	Priority Status	Submit To	Projected Start Date	Projected Finish Date	Actual Start Date	Actual Finish Date					
136197 Repair Scheduled	1 1-REQUESTED	(w) Boyce, Darrin	04/24/2023, 8:00 AM	04/24/2023, 5:00 PM							
136198 Paint Hydrant	1 1-REQUESTED	(w) Stevenson, Kyle	04/24/2023, 8:00 AM	04/24/2023, 5:00 PM						<u> </u>	
Q 🔲 🐵 📎 + 🏢 🗘	0					< 1-2 of 2 >		_			
									z		
Related Permits							不		Blackw		
									elder Av		
Case Number	Case Type	Description	Status		Date Created S	ubtype			õ		

Figure 13 Related Work Orders, Requests and Inspections.





#### **Cost Analysis**

Cityworks provides internal reports for work cost analysis as well as the ability to aggregate and manage asset costs. Cityworks provides the ability to dashboard real time costing, including internal and external dashboarding. Some of our agencies leverage the off the shelf power of Esri applications to publish real time spatially enabled mapping of completed work and related costs.

#### **Dynamic and Interactive Reporting**

Internal Dashboards:

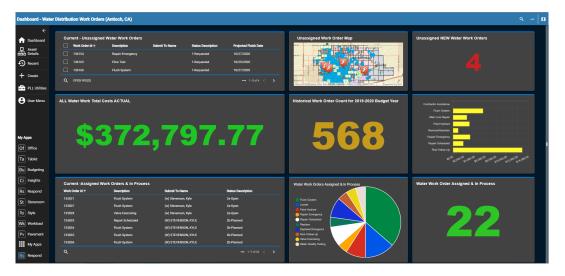


Figure 14 Respond User Dashboard.



Figure 15 Water Mainline Executive Esri Dashboard.





#### External (Public Facing) Dashboards:

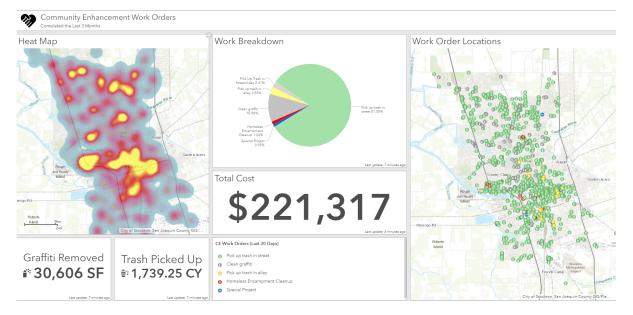
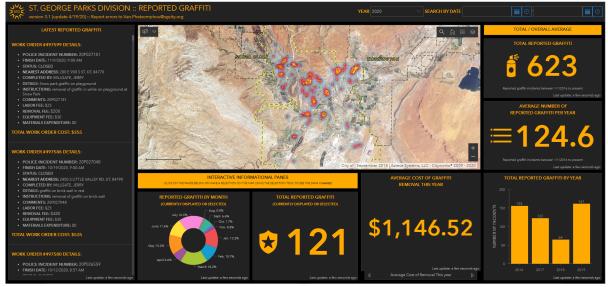


Figure 16 Public Facing Esri Dashboard showing Cityworks Data for Garbage and Graffiti Costs.



In addition to the above feature requirements, the software must allow the below functionalities:

#### Provide a map centric view of assets.

All assets in Cityworks use the GIS record. The GIS record is the Cityworks asset record. This is a true GIS Centric approach and eliminates duplicate asset records to constantly rectify between the GIS and CMMS/Asset Management System. The overhead of resources to do this is usually enormous. Beyond this, it makes leveraging everything in your maps easier with the ability to leverage Esri Apps such as Collector, Survey 123, Esri Executive Dashboards, eURL, ArcGIS Indoors etc.



Page | 44



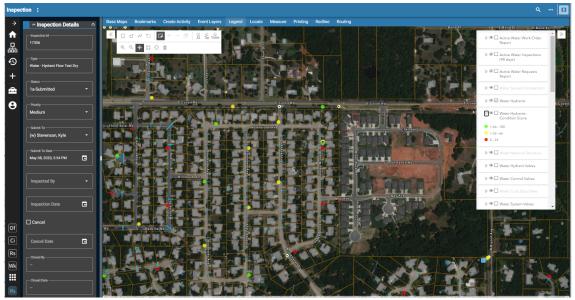


Figure 18Real Time Cityworks Maps Showing Hydrant Condition Scores



Figure 19 AMR Meter Project Dashboard showing Monthly Progress of AMR Replacements and Costs.

# Provide both a traditional hierarchical view of facility assets as well as a map view of facility assets.

Cityworks has both traditional hierarchy views along with map views of the upper Parent Site, Building or Facility.





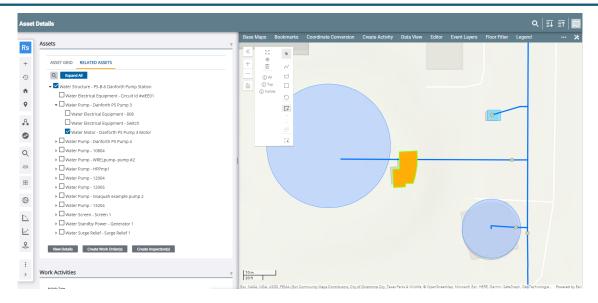


Figure 20 Pump Station Map View and Related child assets list.

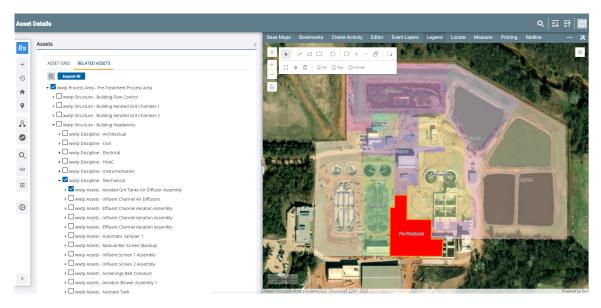
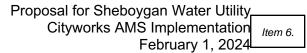


Figure 21 Plant with Process/Building/Discipline/Asset/Sub-Asset hierarchy

# Provide dynamic reporting that can be viewed digitally in dashboard format and/or public facing websites.

As demonstrated above and throughout, Cityworks enables a litany of reporting options that are interactive and spatially enabled. These tools, using our unique eURL integration to Esri make it easy to port out the dashboards and queries internally or to





#### the public.

Centricity

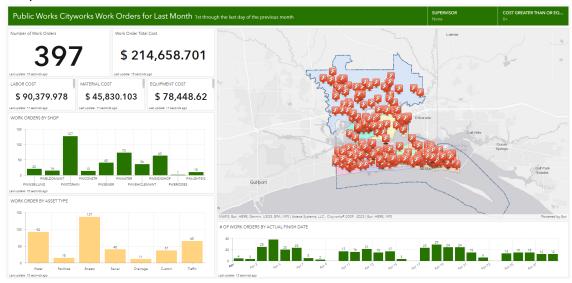


Figure 22 Public Facing Maps showing Work Location for Internal Staff & Customers to Access.

Enable the use of ESRI ArcGIS field applications, including but not limited to: Collector for ArcGIS, Navigator for ArcGIS, ArcGIS Dashboards, Explorer for ArcGIS, ArcGIS Indoors, Workforce for ArcGIS, ArcGIS Quick Capture and Survey 123 for ArcGIS.

Cityworks is always in lock step with Esri as we are the only Platinum Business Partner in the Asset Management software space, using the GIS assets as your asset repository and authoritative record.

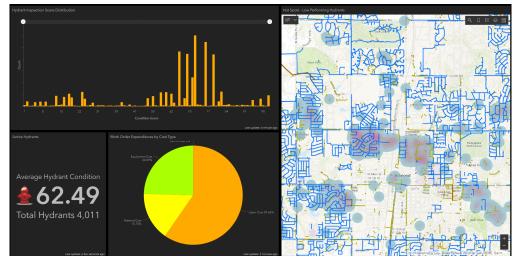


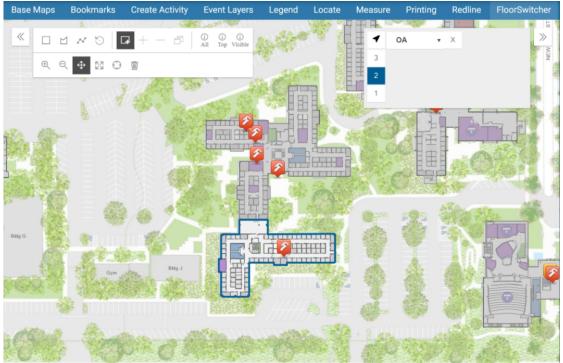
Figure 23 Esri Dashboard showing Detailed Hydrant Conditions City-Wide.







Figure 24 Esri Dashboard Showing Street Service Request Calls and KPI's.



Loma Linda University, City of Redlands, County of Riverside, San Bernardino County, Bureau of Land Management, Esri, HERE, Garmin, INCREMENT P, USGS, EPA .... Powered by Esri





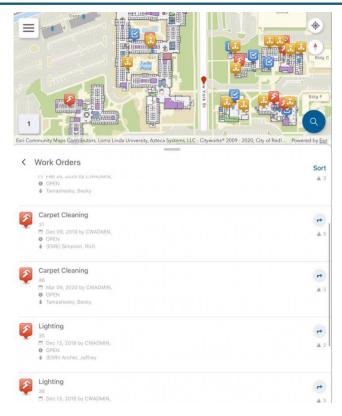


Figure 25 Cityworks Mobile ArcGIS Indoors Integration.

PM Thu May 11 ***		후 🖵 63% 🗖
🗸 Мар	Work Order	<i>z</i> 👳
Description Flow Test #136496		Add Inspection
Initiated By: (w) Cotter, Mike Priority: Medium		Add Work Order
Status: 1-REQUESTED Submit To: (W) BOYCE, DARRIN		Open In Respond
Supervisor: (w) Cotter, Mike		Open In Server
Actual Start / Finish		Open In ArcGIS Collector
Address 409 SIENA DR		Open In ArcGIS Field Maps
Location 409 SIENA DR		Open In ArcGIS Navigator
Facility Id		More
Level Id		
Predefined Instructions		Reference SOP documents. $\rightarrow$
Comments		>
Assets		Water Hydrant (0 of 1 Completed)
Labar		0 Hours
Complete		

#### Cityworks Mobile enables direct app linking to Esri products in the field:





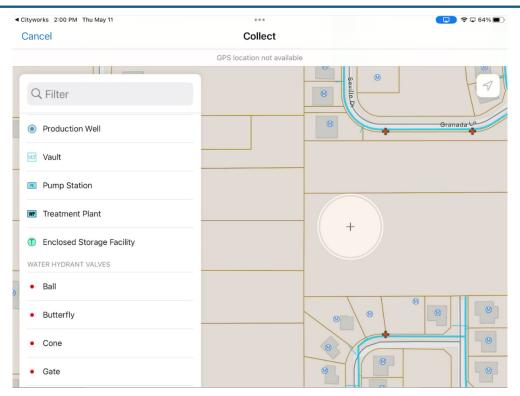


Figure 26 Esri Field Map app Directly Accessed for Data Collection in GIS from Cityworks Mobile.



Figure 27 Esri 3D BIM View of a Pump Station.





#### Support the Key Required Capabilities for the New System from above.

Cityworks supports your implementation and software platform within the annual subscription pricing. This price includes your licensing, support and upgrades. Along with phone and internet support, you will have access to MyCityworks.com website portal to get updates, check forums, new releases, documentation, ongoing training and other benefits to maximize your system performance and increase efficiency.

#### The MyCityworks portal provides access to knowledge articles, the MyCityworks community discussion forum, Ideas, Training details and registration, and other content that is available to those with permissions. The protected content includes support cases and download files. The colored tiles on this home page provide access to knowledge articles and discussion posts relevant to the tile label. Use the search in the header to find content using keywords. Don't see what you're looking for? COMMUNITY DISCUSSIONS FEATURED TOPICS ASK CITYWORKS COMMUNITY CONTACT SUPPORT ÷Ì÷-COMMUNITY DOCUMENTATION WHAT'S HOT TRENDING TOPICS ~7 EVENT LAYERS GRID VIEW а WORK ORDERS 5 • GIS 13 CITYWORKS FOR OFFICE 24 SUPPORT PARTNERS DOWNLOADS **DEVELOPERS**

Welcome to MyCityworks self-service portal

Figure 28 MyCityworks support portal

Sityworks<sup>®</sup> 70