

## CITY OF OAK CREEK WATER & SEWER UTILITY

### OFFICIAL NOTICE

**PLEASE TAKE NOTICE** that the Water and Sewer Utility Commission will meet at the Oak Creek Water & Sewer Utility, 170 West Drexel Avenue, Oak Creek, Wisconsin, 53154 on **Tuesday, December 11, 2018, at 10:00 am.**

The purpose of this meeting will be to discuss the topics listed on the attached agenda.

It is possible that members of and possibly a quorum of members of our governmental bodies of the municipality may be in attendance at the above-stated meeting to gather information; no action will be taken by any governmental body at the above-stated meeting other than the governmental body specifically referred to above in this notice.

### **PUBLIC NOTICE**

**Please Note:** Upon reasonable notice, a good faith effort will be made to accommodate the needs of disabled individuals through sign language interpreters or other auxiliary aid at no cost to the individual to participate in public meetings. Due to the difficulty in finding interpreters, requests should be made as far in advance as possible, preferably a minimum of 48 hours. For additional information or to request this service, contact the Oak Creek City Clerk at 414-766-7023 or write to the ADA Coordinator at the Health Department, City Hall, 8040 South 6<sup>th</sup> Street, Oak Creek, Wisconsin, 53154.

**DATED**, at Oak Creek, Wisconsin, this the 6th day of December, 2018.

/s/ Michael J. Sullivan  
General Manager

**A G E N D A**  
**WATER AND SEWER UTILITY COMMISSIONERS**  
**CITY OF OAK CREEK**

<u>TIME</u>	<u>DATE</u>	<u>LOCATION</u>
10:00 am	Tuesday December 11, 2018	Headquarters Building 170 West Drexel Avenue

**1.0 OPENING OF MEETING**

- 1.1 Roll Call
- 1.2 Minutes Approval - Regular Meeting 11-13-18

**2.0 CLOSED SESSION**

- 2.1 Closed session in accordance with Section 19.85 (1) (e) and (g) of the Wisconsin State Statutes for the following purpose:
  - A. Water Quality Improvement Project
  - B. Oak Creek – Franklin Municipal Water and Sewer Agreement

**3.0 PROJECT APPROVALS**

**4.0 MISCELLANEOUS MATTERS**

- 4.1 25<sup>th</sup> Consecutive Certificate of Achievement for Excellence in Financial Reporting
- 4.2 Chemical Bids

**5.0 FINANCIAL MATTERS**

- 5.1 Project Payment Approval
- 5.2 Voucher Approval
- 5.3 Utility Investments
- 5.4 2019 Capital Budget Approval

**6.0 ADMINISTRATIVE & OPERATIONS REPORTS**

- 6.1 Aldermanic Report
- 6.2 Administrative Operations Report
- 6.3 Engineering Operations Report
- 6.4 Distribution Operations Report
- 6.5 Plant Operations Report
- 6.6 Manager's Report

**7.0 ADJOURN**

# Memorandum

**To:** OCWSU Commissioners  
**CC:** OCWSU Staff  
**From:** Plant Manager Robe  
**Date:** 12/5/2018  
**Re:** Chemical Bids

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The chemical quotes for 2019 are as follows:

<b>Coagulant</b>	<b>H1050A</b>
<b>2019 Bid</b>	<b>\$0.2600/lb.</b>
2018 Bid	\$0.2400/lb.
Est. Usage	325,000 lbs.
Est. Cost	\$84,500.00

Vendor: ChemTrade-only bid

<b>Disinfectant</b>	<b>Sodium Hypochlorite</b>
<b>2019 Bid</b>	<b>\$0.07800/lb.</b>
2018 Bid	\$0.07100/lb.
Est. Usage	550,000 lbs.
Est. Cost	\$42,900.00

Vendor: Olin-low bid

**Fluoride                      Hydrofluosilicic Acid**

**2019 Bid                      \$0.1760/lb.**

2018 Bid                      \$0.1680/lb.

Est. Usage                      75,000 lbs.

Est. Cost                      \$13,200.00

Vendor: Alexander

Rowell low bid @ \$0.1680/lb. not recommended due to product impurities

**Potassium Permanganate      Carus Free Flowing**

**2019 Bid                      \$3.55/lb.**

2018 Bid                      \$3.55/lb.

Est. Usage                      6,000 lbs.

Est. Cost                      \$21,300.00

Vendor: Hawkins Chemical-only bid

**Powdered Activated Carbon**

**2019 Bid                      \$0.78/lb.**

2018 Bid                      \$0.68/lb.

Est. Usage                      30,000 lbs.

Est. Cost                      \$23,400.00

Vendor: Thatcher Company-low bid

# 2019 CAPITAL BUDGET

## SUMMARY SHEET

### Capital Budget Financed by Operations:

Administrative and General	\$	-
Distribution		193,100.00
Engineering		12,000.00
Treatment Plant		62,232.00
Capital Improvement Projects		1,775,000.00
Projects in Progress		<u>13,052,965.00</u>
<b>Total 2019 Capital Budget</b>	<b>\$</b>	<b><u>15,095,297.00</u></b>

## 2019 CAPITAL BUDGET

		<u>Total</u>	<u>Water</u>	<u>Sewer</u>
Administration		\$ -	\$ -	\$ -
Distribution	Meter Exchange Program	82,000.00	82,000.00	-
	Howell Tower Washing	6,100.00	6,100.00	-
	Excavator and Trailer	105,000.00	105,000.00	-
	Subtotal	<u>193,100.00</u>	<u>193,100.00</u>	<u>-</u>
Engineering	Digger's Hotline Ticket Automation and GIS Interface	12,000.00	8,400.00	3,600.00
	Subtotal	<u>12,000.00</u>	<u>8,400.00</u>	<u>3,600.00</u>
Treatment Plant	Replacement of Turbidity Meters	25,000.00	25,000.00	-
	Replacement of Coagulation Control Center (CCC) Parts	8,000.00	8,000.00	-
	Complete Conversion of the Treatment Plant and Raw Water Buildings to LED Lighting	22,232.00	22,232.00	-
	Repair and Sealing of North and South Parking Lots	7,000.00	7,000.00	-
	Subtotal	<u>62,232.00</u>	<u>62,232.00</u>	<u>-</u>
Projects	Wildwood Drive Water Main and Sanitary Sewer Relay	700,000.00	700,000.00	-
	Fitzsimmons Road Water Main Relay	430,000.00	430,000.00	-
	College Avenue Water Main Extension	645,000.00	645,000.00	-
	Subtotal	<u>1,775,000.00</u>	<u>1,775,000.00</u>	<u>-</u>
<b>TOTAL</b>		<u>\$2,042,332.00</u>	<u>\$2,038,732.00</u>	<u>\$3,600.00</u>

### Five Year History

<u>Year</u>	<u>Total</u>	<u>Water</u>	<u>Sewer</u>
2018	\$8,309,087.00	\$7,161,102.00	\$1,147,985.00
2017	4,764,150.00	3,328,500.00	1,435,650.00
2016	4,969,650.00	4,197,250.00	772,400.00
2015	1,875,000.00	1,758,500.00	116,500.00
2014	9,205,450.00	8,476,750.00	728,700.00

# 2019 CAPITAL BUDGET

## ADMINISTRATIVE AND GENERAL

TOTAL ADMINISTRATIVE AND GENERAL BUDGET

\$ -

Water  
Sewer

-  
-

\$ -

# 2019 CAPITAL BUDGET

## DISTRIBUTION

**Meter Exchange Program** \$ 82,000.00

The meter department wants to continue the change out program, exchanging 450 meters and heads per year. The price of \$182.57 is locked in until June 1, 2019.

Water 82,000.00

**Howell Tower Washing** 6,100.00

The last time Howell Tower was cleaned on the outside was in 2008, and it needs to be washed again to remove the mildew and help protect the paint for a longer life.

Water 6,100.00

**Excavator and Trailer** 105,000.00

This budget item is to replace the 1998 John Deere 310 SE Backhoe with a 19,000 pound excavator and trailer. The backhoe is 20 years old with over 5,400 hours on it. The estimated cost of a new excavator and trailer to transport it is \$145,000. There is \$40,000 already set aside from previous years' budgets to purchase the new excavator and trailer, so the Utility would need to add \$105,000 to this year's budget. The 1998 backhoe would be sold on Wisconsin Surplus Auction, and has an estimated resale value of \$15,000.

The benefits of purchasing an excavator over another backhoe are as follows:

- Efficiency for the Utility -  
On most repairs, using an excavator would narrow up the space needed by only taking one lane of traffic to do the repair. Therefore, it would limit the need to close roads due to work which causes an inconvenience to local residents. It would also save time since a crew of three could have all of the equipment on site in one trip instead of having to jockey equipment back and forth.
- Cost savings -  
There are areas in Oak Creek where it is not practical to close roads to do a repair. South Chicago Road is one that a contractor would be called in to do the repair. The cost for water main repairs average about \$5,500 per job. There are some instances where a contractor would have to be called; for example, if the main is too deep where a larger machine is needed.

Water 105,000.00

**TOTAL DISTRIBUTION BUDGET** \$ 193,100.00

Water 193,100.00

Sewer -

\$ 193,100.00



# 2019 CAPITAL BUDGET

## ENGINEERING

### Digger's Hotline Ticket Automation and GIS Interface

\$ 12,000.00

This project will automate the process of receiving Digger's Hotline locate requests. Software for this project will enable the Utility to log and save locating requests digitally, and utilize GIS functionality to improve the work processes involved. The process would change from receiving locating requests by fax to receiving them by email. In turn, a GIS dashboard will be set up and populate as digital locate requests are brought in. After-hours locates will remain unchanged.

The benefits of this system are as follows:

- The Utility Locator will save time on data entry (approximately 4,800 tickets per year).
- Data entry errors are eliminated.
- The Utility Locator no longer has to sort the route on a daily basis, tickets would appear on the digital map utilizing coordinates provided in emails.
- Office staff would no longer have to keep watch over the fax machine and call or text emergency tickets to the Utility Locator.
- Eliminates the need for Digger's Hotline fax machine and supplies (analog phone line, paper, toner, etc.)
- Provides for easier access to information for public inquiries about flags/work in homeowners' yards and questions from contractors about past tickets.
- Software has the capability to incorporate photos of completed work with ticket record.



Water	8,400.00
Sewer	3,600.00

**TOTAL ENGINEERING BUDGET**

\$ 12,000.00

# 2019 CAPITAL BUDGET

## TREATMENT PLANT

<b>Replacement of Turbidity Meters</b>		\$ 25,000.00
<p>The turbidity meters used in the treatment plant are no longer supported. Currently, there are 23 units in use at the plant. A two-year replacement schedule is in place, and this amount is needed to complete the replacement of the 23 units, a lab counter top unit and calibration accessories. The 2018 budget included \$40,000 for turbidity meters, and this \$25,000 will increase the total budget for this item to \$65,000.</p>		
Water	25,000.00	
 <b>Replacement of Coagulation Control Center (CCC) Parts</b>		 8,000.00
<p>The current valves and actuators on the CCC are approaching ten years of age. This is a critical part of our treatment process, and we currently have no spare or replacement parts in stock. The old parts will be saved to use in emergency situations.</p>		
Water	8,000.00	
 <b>Complete Conversion of the Treatment Plant and Raw Water Buildings to LED Lighting</b>		 22,232.00
<p>The treatment plant has undergone a partial conversion to LED lighting. This amount is needed to complete the conversion of both inside and outside fixtures at both the treatment plant and raw water buildings. The return on investment is approximately .65 years.</p>		
Water	22,232.00	
 <b>Repair and Sealing of the North and South Treatment Plant Parking Lots</b>		 <u>7,000.00</u>
<p>The parking lots at the treatment plant are showing wear. This budget amount is for repairing the larger cracks, sealing the surface and striping the parking lots.</p>		
Water	7,000.00	
 <b>TOTAL TREATMENT PLANT BUDGET</b>		 <u><u>\$ 62,232.00</u></u>
	Water	62,232.00
	Sewer	-
		<u><u>\$ 62,232.00</u></u>

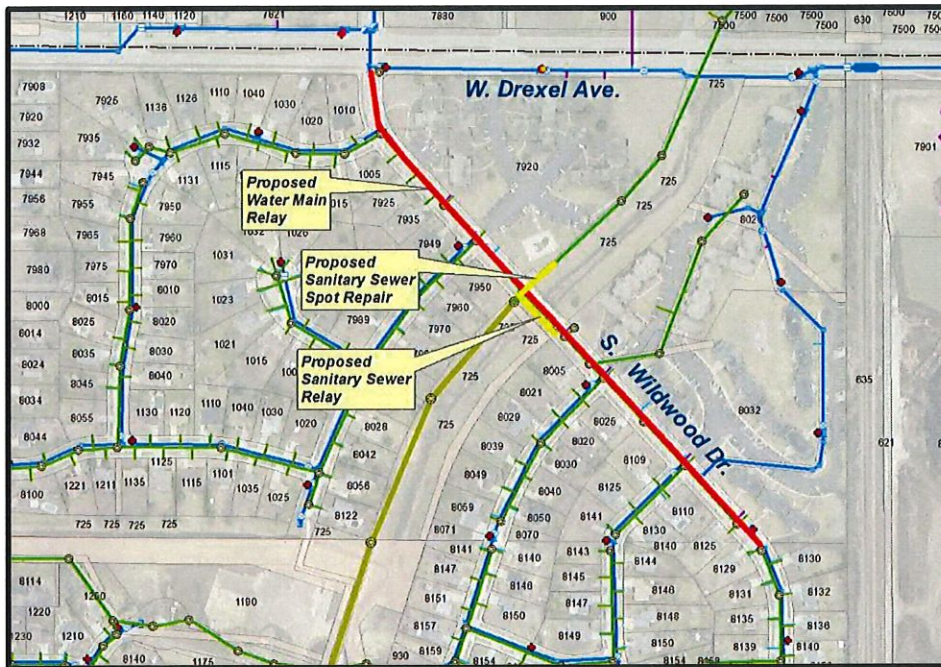
# 2019 CAPITAL BUDGET

## CAPITAL IMPROVEMENT PROJECTS

### Wildwood Drive Water Main and Sanitary Sewer Relay

\$ 700,000.00

This project includes relaying approximately 1,800' of 8" water main in Wildwood Drive from Drexel Avenue to approximately 300' south of South White Oaks Drive. The City of Oak Creek will be repaving this street in 2019, thus giving the Utility the opportunity to relay the existing 1960's vintage 8" ductile iron water main that has had several breaks within the last 20 years. Additionally, the Utility will relay approximately 250' of sanitary sewer crossing underneath the creek that has a 100% sag in it. Engineering has also identified another location where there are structural problems with the existing sanitary sewer main that will be corrected with a spot repair of approximately 50'.



Water	535,000.00
Sewer	165,000.00

### Fitzsimmons Road Water Main Relay

430,000.00

This project includes relaying approximately 650' of 12" water main in Fitzsimmons Road from Darlene Lane to approximately 650' west of Darlene Lane. The existing 1970's vintage ductile iron water main will be relayed prior to a proposed City of Oak Creek paving project. This line has experienced an unusual amount of breaks in and around the area of the water service connections where it is suspected that the main was not protected properly during installation.

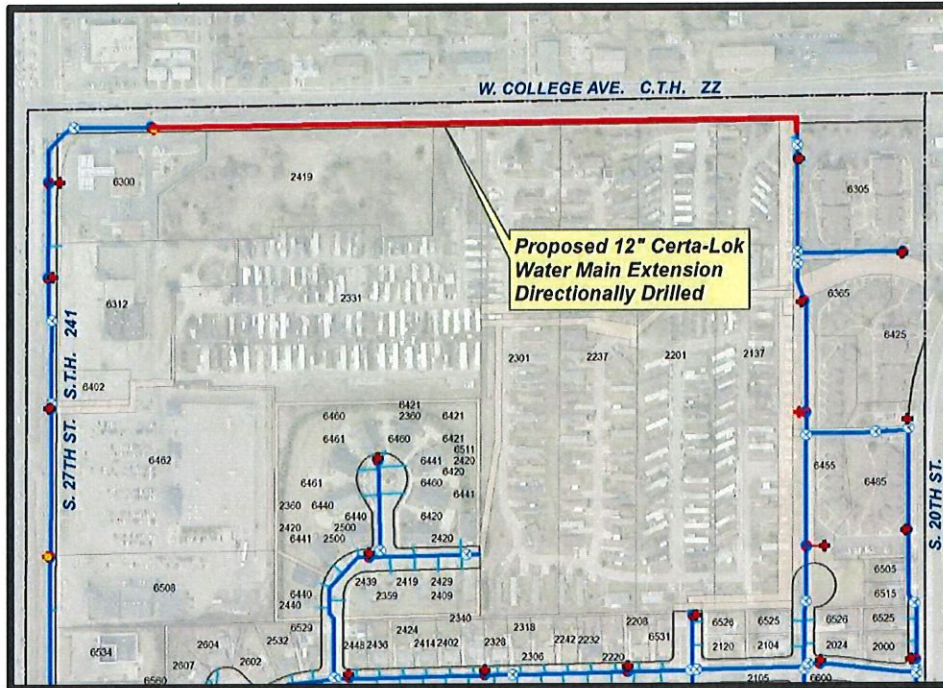


Water 430,000.00

**College Avenue Water Main Extension**

645,000.00

This project completes a 12" water main loop from South 27th Street to South 20th Street and includes directional drilling 1,850' of 12" Cert-a-lok pipe with appurtenances and associated restoration. This loop will provide for improved water quality and more importantly, a secondary feed for the business district along the South 27th Street corridor.



Water 645,000.00

**TOTAL CAPITAL IMPROVEMENT PROJECTS BUDGET**

\$ 1,775,000.00

Water	1,610,000.00
Sewer	165,000.00
	<u><u>\$ 1,775,000.00</u></u>

## 2019 CAPITAL BUDGET

<u>PROJECTS IN PROGRESS</u>		<u>Total Budgeted</u>	<u>Amount Remaining as of 12/31/18</u>	<u>Water</u>	<u>Sewer</u>
16102	CT Tank Compliance Project	\$ 7,500,000.00	\$ 7,500,000.00	\$ 7,500,000.00	\$ -
725	Full Water System Master Plan	350,000.00	350,000.00	350,000.00	-
18107	I-94 and Ryan Road Interchange Improvements	20,000.00	8,458.70	(1,541.30)	10,000.00
18105	Forest Hill Water Main Extension	600,000.00	549,570.39	549,570.39	-
-	Howell Avenue Water Main Lining (Spray Liner)	300,000.00	300,000.00	300,000.00	-
18104	South 27th Street Water Main Extension	275,000.00	248,602.25	248,602.25	-
18101	South 13th Street Hydrant and Manhole Relcation (Const)	320,000.00	191,572.67	89,014.26	102,558.41
-	Sanitary Sewer Rehabilitation Project - 2018	800,000.00	800,000.00	-	800,000.00
18108	I-94 and Puetz Road Water Main Crossing (Const)	889,665.00	795,298.69	795,298.69	-
-	Sanitary Sewer Master Plan	150,000.00	150,000.00	-	150,000.00
-	Electrical Feasibility Study at Water Treatment Plant	28,300.00	28,300.00	28,300.00	-
720	Update Processing Computers and Software at Plant	75,000.00	75,000.00	75,000.00	-
721	Replacement of Treatment Plant West Effluent Meter	40,000.00	40,000.00	40,000.00	-
723	Replacement of Turbidity Meters	40,000.00	40,000.00	40,000.00	-
18110	Treatment Plant Locker Room Remodel	350,000.00	308,281.16	308,281.16	-
397	Sewer Machine Dump Site	50,000.00	50,000.00	-	50,000.00
700	Backhoe Replacement Reserve	40,000.00	40,000.00	40,000.00	-
701	Tandem Dump Truck Reserve	40,000.00	40,000.00	40,000.00	-
17103	Ridgeview Drive and Other Water Main Loops	375,000.00	328,615.79	328,615.79	-
-	Security Upgrades	250,000.00	250,000.00	175,000.00	75,000.00
-	Low Lift Drive Landscaping Project	15,000.00	15,000.00	15,000.00	-
17106	Jewell Street Sanitary Sewer Lift Station Replacement	530,000.00	526,377.40	-	526,377.40
-	Dehumidification Equipment Installation at Plant	15,000.00	15,000.00	15,000.00	-
<b>TOTAL PROJECTS IN PROGRESS BUDGET</b>		<b>\$ 13,052,965.00</b>	<b>\$ 12,650,077.05</b>	<b>\$ 10,936,141.24</b>	<b>\$ 1,713,935.81</b>

## ADMINISTRATIVE OPERATIONS

November 2018

### Capital Budget:

Accounting Supervisor Stenzel prepared the Utility's capital budget for 2019.

### Delinquent Notices:

Senior Accountant Leranath compiled a list of delinquent accounts to be placed on the City of Oak Creek's tax roll. The following table summarizes the accounts rolled to the tax bills for 2018, 2017 and 2016:

	<u>2018</u>	<u>2017</u>	<u>2016</u>	<u>Variance</u> <u>2018 vs. 2017</u>	<u>Variance</u> <u>2017 vs. 2016</u>
<b>Number of delinquent notices</b>	1,498	1,459	1,406	2.67 %	3.77 %
<b>Number of customers rolled</b>	708	706	722	0.28 %	(2.22) %
<b>Amounts rolled:</b>					
Water	\$ 245,593	\$ 233,862	\$ 249,033	5.02 %	(6.09) %
Water penalties	24,564	23,095	25,069	6.36	(7.87)
Total	270,157	256,957	274,102	5.14	(6.25)
Sewer	69,213	68,439	72,255	1.13	(5.28)
Sewer penalties	6,917	6,721	7,264	2.92	(7.47)
Total	76,130	75,160	79,519	1.29	(5.48)
Metro	101,583	94,362	102,261	7.65	(7.72)
Metro penalties	10,077	9,175	10,204	9.83	(10.08)
Total	111,660	103,538	112,465	7.84	(7.94)
<b>TOTAL</b>	<u>\$ 457,947</u>	<u>\$ 435,655</u>	<u>\$ 466,086</u>	<u>5.12 %</u>	<u>(6.53) %</u>

### Utility Clerk Position:

Two candidates were selected to take the pre-employment behavioral assessment through Organization Development Consultants, Inc. One of these candidates backed out of the hiring process; and therefore, only one candidate followed through in taking the assessment. Due to her positive results on the assessment, Nicole Butler was offered the Utility Clerk position. Her start date is December 3.

### Meetings:

Accounting Supervisor Stenzel attended the Wisconsin Section of the AWWA Leadership Meeting held in Madison on November 2.

### Training:

Accounting Supervisor Stenzel attended the Wisconsin Institute of Certified Public Accountants Accounting and Auditing seminar on November 15.

Accounting Supervisor Stenzel participated in the Government Finance Officers Association Pension and OPEB webinar on November 28.

**Workload:**

Other administrative tasks included the following:

1. Added 6 customer accounts for the month.
2. Billed 3,299 water customers and 3,417 sewer customers.

**Gallons Billed (in thousands):**

	YTD 2018	YTD 2017	YTD 2016	YTD 2015	YTD 2014	Average
Residential	371,774	368,337	394,149	382,748	373,423	378,086
Commercial	421,140	434,106	424,804	417,471	404,850	420,474
Industrial	481,483	414,828	405,463	359,439	372,230	406,689
Public Authority	12,821	13,239	13,858	21,475	16,877	15,654
Wholesale	1,041,948	1,030,386	1,130,097	1,203,894	1,119,490	1,105,163
Total	2,329,166	2,260,896	2,368,371	2,385,027	2,286,870	2,326,066
% Change to Prior Year	3.0%	-4.5%	-0.7%	4.3%	N/A	
% Change to Average	0.1%	-2.8%	1.8%	2.5%	-1.7%	

**New Customers:**

	YTD 2018	YTD 2017	YTD 2016	YTD 2015	YTD 2014	Average
Residential	31	26	26	22	20	25.0
Commercial	20	27	27	10	1	17.0
Industrial	0	0	0	1	0	0.2
Public Authority	1	0	1	3	1	1.2
Wholesale	0	0	0	0	0	-
Total	52	53	54	36	22	43.4

**New Residential Customers (YTD 2018):**

8219 S. Alisa Lane, 8223 S. Alisa Lane, 375 E. Lily Drive, 380 E. Lily Drive, 365 E. Lily Drive, 390 E. Lily Drive, 397 E. Lily Drive, 2230 W. Southland Drive, 2300 W. Southland Drive, 9441 S. Nicholson Road, 165 E. Golden Lane, 1101 E. Wildflower Drive, 10110 S. Barrington Drive, 10130 S. Barrington Drive, 990 E. Peach Tree Lane, 1880 E. Lilac Lane, 1927 E. Lilac Lane, 1927 E. Lilac Lane (lawn), 1930 E. Lilac Lane, 10311 S. Willow Creek Drive, 10390 S. Willow Creek Drive, 360 E. Forest Hill Avenue, 380 E. Forest Hill Avenue, 2620 E. Oakwood Road, 9838 S. Chicago Road, 10068 S. Macintosh Lane, 10405 S. Redwood Lane, 3413 E. Elm Road, 8675 S. 5<sup>th</sup> Avenue, 1515 E. Prairie View Drive, Psalm 127 Investments LLC, 2313

**New Commercial Customers (YTD 2018):**

Drexel Square Hotel, HSI Drexel Ridge (11 accounts), Storage Shop USA, IKEA, warehouse building on 10651 S. Oakview Parkway, Bellissimo Distribution LLC, Howell Avenue Retail II, Hoffman Storage LLC, We Energies – Admin Building, Bliffert Lumber & Fuel Co.

**New Public Authority Customers (YTD 2018):**

City of Oak Creek – 4001 E. Lake Vista Parkway



# **ENGINEERING OPERATIONS**

November 2018

## **I-94 & Puetz Road Water Main Crossing**

Globe has completed the casing and 16" water main pipe crossing at I-94 and Puetz Road. They have continued pipe installation on both the east and west side of I-94. The east side embankment has been fully restored with erosion matting and temporary seed. The contractor will soon be filling the pipe and testing the first week in December. Once the new pipe installation has been pressure tested and safe sampled, the connections on the east and west sides will be completed and the west side embankment and ditch line restored. This portion of the project should be complete in two to three weeks.

The second phase of this project will address the I-94 water main crossing south of Puetz Road. Similar to the 16" water main on the north side of Puetz Road, a new 24" pipe with casing will be jacked and bored at a different location and elevation to mitigate conflicts with the Wisconsin Department of Transportation's (WisDOT) I-94 north-leg paving project. Engineering anticipates that Phase Two will begin next year. In large part, the schedule for this part of the project will be dictated by WisDOT's prosecution and progress in this area.

## **27<sup>th</sup> Street Water Main Extension**

The contractor (Globe) has signed the contract for this project and will mobilize to the site on December 10, at which time construction will begin. Water main installation will be cumbersome at the southeast corner of S. 27<sup>th</sup> Street and W. Southbranch Boulevard due the large presence of utilities in this area. However, once clear of these obstacles, the contractor will have a relatively unobstructed path for the remaining 900' of installation. This project will take approximately four weeks to complete depending on the weather conditions.

## **Water System Master Plan**

Engineering has received proposals from five different engineering consultants for this project: Strand, CDM Smith, Graef, Trotter, and Baxter & Woodman. The proposals were reviewed and ranked by each of the members of the internal team (Mike Sullivan, Ron Pritzlaff, Doug Schwartz, and Mike Robe). After the review, the Utility team met and selected the following three consultants to continue on to the interview phase: Strand, Graef, and CDM Smith.

Once interviews are complete, the Utility team will deliberate and select a consultant that is most qualified based on the proposal submitted and interview. Engineering expects that interviews will be complete and a final consultant candidate selected prior to Christmas 2018.

## **Utility Security Upgrades**

Engineering has engaged with members of the EPA and U.S. Army National Guard as initial information gathering for the upgrades related to the overall security of the Utility's assets. In particular, Engineering is considering both a cyber-security and physical security evaluation that will provide feasible measures available for implementation in order to provide an improved water resilience posture.

Engineering expects that the EPA and Army National Guard will assist in locating security consultants and provide assistance as to best management practices.

## **DISTRIBUTION & COLLECTION OPERATIONS**

**November 2018**

### **Water Main Breaks:**

There were no main breaks in the month of November.

### **Lateral Repairs:**

On November 1<sup>st</sup> a crew was sent to 7300 South Delaine Drive to repair a 1 1/2" copper water lateral. When the crew excavated the lateral, they found the curb stop was leaking. A new curb stop was installed. The main and lateral were installed in 1975.

### **Fire Hydrant Repairs:**

There were no hydrant repairs in the month of November.

### **Valve Repair:**

There were no valve repairs in the month of November.

### **Tower Inspections:**

In the month of October Howell Tower had a dry inspection and Sycamore Tower had a wet inspection.

### **Sewer Repairs:**

In the month of November Utility Workers performed maintenance tasks including treating roots in 6,036 feet of sewer mains, replaced three manhole frame riser rings, replaced ten manhole cover seals and cleaned the Clement Avenue lift station wet well.

### **Miscellaneous:**

In November Asphalt Contractors completed asphaltting in three areas for the Utility, 9920 South Darlene Lane, 3953 East Depot Road and 9325 South 5<sup>th</sup> Avenue.

In November Distribution workers completed the inspection of the remote water and sewer mains.

In November Distribution workers located and repaired six valves that were buried under asphalt.



## PLANT OPERATIONS

November, 2018

<b>PUMPAGE REPORT</b>	<b>2018</b>	<b>2017</b>	<b>% Change</b>	<b>5 Year %</b>
Monthly Pumpage	203,068,000	196,699,000	+3.2	+1.3
Monthly Average Day	6,768,000	6,557,000	+3.2	+1.3
Monthly Peak Day	(11/04) 9,010,000	(11/24) 8,710,000	+3.4	+3.9
Yearly Pumpage	2,545,523,000	2,441,749,000	+4.2	+1.2
Yearly Average Day	7,621,300	7,311,000	+4.2	+1.2
Yearly Peak Day	(7/11) 12,110,000	(8/27) 10,510,000	+15.2	+2.7
West Zone Pumpage	83,680,000	87,390,000	-4.2	-11.7

<b>WATER QUALITY REPORT</b>	<b>Raw Water</b>	<b>Finished Water</b>
Average Free Chlorine		1.60 mg/l
Total Chlorine		1.77 mg/l
Average Alkalinity	111.6 mg/l	112.1 mg/l
Average pH	8.3	8.1
Average Fluoride	0.14 mg/l	0.76 mg/l
Average Turbidity	7.22 NTU	0.04 NTU
High Temperature	<b>High 53.3 F Low 41.1 F</b>	
Hardness	137 mg/l	137 mg/l

**Preventative Maintenance Tasks:** Staff completed 90 preventative maintenance tasks, 4 miscellaneous work orders, and 2 safety sessions during the month.

**Operators:** Operators Ludke and Bozich have completed their probationary period.

**Plant:** The gear box in sed basin 6 was able to be repaired in place. Basin 5 gear box will be repaired at next draw down. This repair saved significant costs of replacement. The backwash tower has been taken out of service for the season.

