

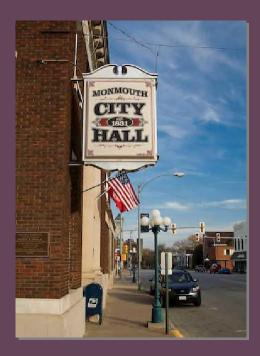
# Woodardcurran.com

Monthly Operating REPORT

Monmouth, Illinois

Department of Public Works

January 2017





# TABLE OF CONTENTS

SEC	TION		PAGE NO.
Exe	cutive S	Summary	ES-1
1.	WASTI	EWATER TREATMENT	1-1
2.	WATE	R TREATMENT	
3.	BILLIN	IG AND COLLECTION	
4.	ESTIM	ATED ANNUAL COST	4-1
5.	MAINT	ENANCE/REPAIR COST DETAIL	1
	5.1 5.2	Maintenance and Repair Costs Chemical Cost Detail	1
6.	HEALT	TH & SAFETY	4
7.	CAPIT	AL PROJECTS	

# LIST OF TABLES

TABLE		PAGE NO.
Table 1-1:	Water Quality vs. NPDES Permit Limits	1-1
Table 2-1:	Monthly Chemical Usage for Ion Exchange Softening	2-2
Table 3-1:	Billing/Collection	3-1
Table 4-1:	Estimated Annual Budget – Year 2	4-1
Table 5-1:	Maintenance and Repair Costs	1
Table 5-2:	Process Chemical Costs	3



## **EXECUTIVE SUMMARY**

The January Public Works monthly report provides an overview of the month's activities and statistical data including: wastewater treatment effluent quality, water production, billing and collection statistics for municipal services, maintenance activities, maintenance and repair costs vs. monthly thresholds, water treatment chemical costs, overall project cost and performance to annual budget.

Due to the continued mild winter conditions to date we continue to perform at about 5% under budget on cost through January.

Bid opening for the CSO Phase 1 Screw Pump project was held January 17<sup>th</sup>. Low bid from Leander Construction was approved by the City Council at the February 6<sup>th</sup> City Council Meeting.

I will be on vacation from March 4-11 out of state but will be happy to answer any questions you may have when I return.

Feel free to stop by the office or give me a call, 309-734-4026.

Regards, Andy



## 1. WASTEWATER TREATMENT

The Consolidated WWTP treated and discharged 110 million gallons of wastewater in the month of January. There was 1 combined sewer overflow event in January. The weather station at the plant reported 1.9" of rainfall and 1" of snow during the month. The Consolidated Plant continues to produce excellent effluent quality. The table below outlines the water quality vs. NPDES permit limits.

	Monthly Average	Permit Limit
Flow (MGD)	3.54	4.62
Ammonia N mg/l	1.1	1.5
CBOD5 mg/l	3	10
Chlorides mg/l	348	500
Suspended Solids mg/l	12	12
Total Phosphorus	0.9	1.0

#### Table 1-1: Water Quality vs. NPDES Permit Limits



## 2. WATER TREATMENT

The water treatment plants produced 78 million gallons of finished water in January. Finished water quality met all standards per the Clean Water Act for drinking water. The table below outlines the chemical usage for ion exchange softening for the month.

#### Table 2-1: Monthly Chemical Usage for Ion Exchange Softening

	Daily Average	Monthly Total
Treated Water to System	2.53 MG	78 MG
Poly Phosphate Usage-lbs.	79	2,448 lbs
Salt Usage – tons	4.9	153 tons
Chlorine Usage - Ibs.	100	3,087 lbs



## 3. BILLING AND COLLECTION

#### Table 3-1: Billing/Collection

The table below outlines the revenue collected for the month of January from the Municipal Services billings.

			PAYM	ENTS JANUARY	2017						
DATE			054/55			0100105			FARM		
DATE	PAYMENTS	WATER	SEWER	LANDFILL	RECYCLE	GARBAGE	YARD WASTE				PENALTY
01/03/17	\$31,230.28	\$13,839.16	\$9,570.63	\$2,308.42	\$1,554.73	\$3,710.48	\$231.65	\$0.00	\$0.00	\$0.00	\$15.21
01/04/17	\$9,559.85	\$4,107.28	\$2,818.26	\$784.92	\$528.59	\$1,234.53	\$77.56	\$0.00	\$0.00	\$0.00	\$8.71
01/05/17	\$49,383.10	\$22,463.44	\$16,381.44	\$3,114.93	\$2,121.88	\$4,989.34	\$312.00	\$0.00	\$0.00	\$0.00	\$0.07
01/06/17	\$41,887.48	\$20,342.93	\$16,321.39	\$1,606.25	\$1,089.56	\$2,376.22	\$148.20	\$0.00	\$0.00	\$0.00	\$2.93
01/09/17	\$41,884.66	\$18,950.85	\$12,899.34	\$2,802.92	\$1,897.24	\$4,994.38	\$313.95	\$0.00	\$0.00	\$0.00	\$25.98
01/10/17	\$210,979.23	\$93,881.28	\$88,511.04	\$3,083.36	\$2,068.58	\$4,838.06	\$302.25	\$15,886.40	\$2,341.07	\$60.62	\$6.57
01/11/17	\$3,968.39	\$1,687.57	\$1,131.89	\$304.31	\$203.37	\$486.60	\$30.43	\$0.00	\$0.00	\$0.00	\$124.22
01/12/17	\$4,837.95	\$2,034.95	\$1,476.53	\$336.95	\$225.20	\$563.14	\$35.10	\$0.00	\$0.00	\$0.00	\$166.08
01/13/17	\$14,269.86	\$6,079.31	\$4,673.07	\$869.35	\$580.35	\$1,451.79	\$89.70	\$0.00	\$0.00	\$0.00	\$526.29
01/17/17	\$19,008.29	\$8,254.64	\$6,109.89	\$1,160.90	\$779.17	\$1,869.70	\$116.17	\$0.00	\$0.00	\$0.00	\$717.82
01/18/17	\$5,587.37	\$2,605.79	\$1,855.80	\$278.34	\$186.00	\$401.06	\$24.70	\$0.00	\$0.00	\$0.00	\$235.68
01/19/17	\$5,298.81	\$2,297.71	\$1,650.03	\$333.82	\$223.10	\$555.39	\$33.80	\$0.00	\$0.00	\$0.00	\$204.96
01/20/17	\$7,002.35	\$3,118.80	\$2,226.15	\$394.71	\$267.38	\$678.34	\$42.65	\$0.00	\$0.00	\$0.00	\$274.32
01/23/17	\$3,467.32	\$1,125.75	\$1,410.26	\$224.04	\$154.01	\$352.96	\$24.32	\$0.00	\$0.00	\$92.64	\$83.34
01/27/17	\$5,968.97	\$2,416.15	\$1,769.45	\$507.44	\$338.44	\$857.42	\$56.26	\$0.00	\$0.00	\$0.00	\$23.81
01/30/17	\$15,108.79	\$6,211.86	\$4,305.09	\$1,371.69	\$932.77	\$2,146.84	\$136.63	\$0.00	\$0.00	\$0.00	\$3.91
01/31/17	\$7,093.75	\$3,241.67	\$2,005.36	\$539.32	\$368.46	\$881.96	\$54.59	\$0.00	\$0.00	\$0.00	\$2.39
	\$0.00	. ,									
	\$0.00										
TOTAL	\$476,536.45	\$212,659.14	\$175,115.62	\$20,021.67	\$13,518.83	\$32,388.21	\$2,029.96	\$15,886.40	\$2,341.07	\$153.26	\$2,422.29

•



## 4. ESTIMATED ANNUAL COST

Table 4-1: Estimated Annual Budget – Year 4

Budget Category	Month Budget	Month Actual	YTD Budget	YTD Actual	Annual Budget
Labor (D.L. + FB)	\$124,386	\$100,697	\$1,119,475	\$1,025,880	\$1,492,633
Utilities	\$2,500	\$4,924	\$22,500	\$23,720	\$30,000
Chemicals Costs	\$22,667	\$13,106	\$204,000	\$194,624	\$272,000
Maintenance and Repair Costs	\$27,833	\$17,176	\$250,500	\$267,947	\$334,000
Sludge Disposal Costs	\$0	\$0	\$0	\$5,000	\$0
Lab Supplies & Equipment	\$3,375	\$2,104	\$30,375	\$27,643	\$40,500
Office Supplies	\$1,500	\$1,508	\$13,500	\$14,568	\$18,000
Miscellaneous Expenses	\$5,017	\$4,529	\$45,150	\$49,001	\$60,200
Other Operating Costs	\$12,494	\$3,208	\$112,445	\$93,379	\$149,927
Overhead (G&A of D.L.)	\$28,087	\$22,738	\$252,785	\$231,650	\$337,046
Subtotal of Costs - Contract Year 4	\$227,859	\$169,990	\$2,050,730	\$1,933,412	\$2,734,306
Fixed Fee for Contract Year 4	\$16,406	\$12,239	\$147,653	\$139,206	\$196,870



### 5. MAINTENANCE/REPAIR COST DETAIL

#### 5.1 MAINTENANCE AND REPAIR COSTS

Maintenance and Repair costs as compared to the monthly threshold

	Month	YTD
Grounds	386	12,571
Electrical	0	18,912
Street	836	71,489
Water Distribution	1,989	41,913
Sewer Collection	650	5,912
Instrumentation	0	2,340
Mechanical	9,340	65,670
Vehicle	2,759	38,334
Tools	0	610
Janitorial/Misc.	509	5,942
HVAC Maintenance	465	3,324
Maintenance Agreements	23	180
Landscaping	219	748
Snow Removal	0	0
Total Expenditures	17,176	267,946
Threshold	27,833	250,497
Over (Under)	(10,657)	17,449

#### Table 5-1: Maintenance and Repair Costs

#### A SUMMARY OF MAINTENANCE & REPAIR ACTIVITIES:

#### Water/Street Facilities

Maintenance staff completed 53 preventative and 7 corrective work orders for the water plants, distribution system, and fleet in January. 57 requests for service were responded to by service personnel. 63 requests for City utility locates from the J.U.L.I.E. call center were completed.

Water distribution system and sewer collection system items:

- Replaced 4 water meters
- Repaired water main 400 block North A
- Repaired water main 1000 block South 4th
- Repaired water main 1000 block South 10th
- Repaired water service 200 North D
- Cleaned sewer 700 block South 9<sup>th</sup>
- Replaced chlorine regulator at North Water Plant



#### **Wastewater Facilities**

Maintenance staff performed 85 preventatives and 2 corrective work orders at the Consolidated Plant, and, 44 preventatives work orders and 2 corrective work order at the Pre-Treatment plant.

- Installed replacement breaker and heater block for screw pumps
- Replaced igniter on water heater at WWTP

#### Street/Grounds/Right of Way/Fleet

- Various tree removal
- Snow removal, 1 event on January 17
- Scheduled vehicle service work (lube, oil, filters)
- Replaced upper control arm, link, and brake pads on C2



#### 5.2 CHEMICAL COST DETAIL

Process chemical costs for water treatment

	Month	YTD
Chlorine	1,752	17,724
Salt	11,354	151,406
Polyphosphate	0	25,495
Total	13,106	194,625
Threshold	22,667	204,003
Over (Under)	(9,561)	(9,378)

#### Table 5-2: Process Chemical Costs



# 6. HEALTH & SAFETY

Monthly training on recognition of electrical hazards. Staff working on deficient items identified in the most recent safety audit, the remaining items will be corrected within the next 30 days.



# 7. CAPITAL PROJECTS

Well 10 C2 permit submitted to IEPA for review and issuance

CSO Screw Pump Phase 1 bid opening and approval of low bid from Leander Construction