



woodardcurran.com
COMMITMENT & INTEGRITY DRIVE RESULTS

Monthly Operating REPORT

Monmouth, Illinois

Department of
Public Works

November 2016



TABLE OF CONTENTS

SECTION	PAGE NO.
Executive Summary.....	ES-1
1. WASTEWATER TREATMENT	1-1
2. WATER TREATMENT	2-2
3. BILLING AND COLLECTION	3-1
4. ESTIMATED ANNUAL COST.....	4-1
5. MAINTENANCE/REPAIR COST DETAIL.....	1
5.1 Maintenance and Repair Costs	1
5.2 Chemical Cost Detail	3
6. HEALTH & SAFETY	4
7. CAPITAL 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 November 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.

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 90 million gallons of wastewater in the month of November. There were 2 combined sewer overflow events in November. The weather station at the plant reported 1.75” of rainfall during the month. The Consolidated Plant continues to produce excellent effluent quality. The table below outlines the water quality vs. NPDES permit limits.

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

	Monthly Average	Permit Limit
Flow (MGD)	3.55	4.62
Ammonia N mg/l	0.2	1.5
CBOD5 mg/l	2	10
Chlorides mg/l	354	500
Suspended Solids mg/l	6	12
Total Phosphorus	1.0	1.0

2. WATER TREATMENT

The water treatment plants produced 75 million gallons of finished water in November. 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	2.5 MG	75 MG
Poly Phosphate Usage-lbs.	75	2,148 lbs
Salt Usage — tons	4.75	143 tons
Chlorine Usage - lbs.	102	3,062 lbs

3. BILLING AND COLLECTION

Table 3-1: Billing/Collection

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

DATE	PAYMENTS	PAYMENTS NOVEMBER 2016						FARM BONDS	FARM SURCHARGE	PENALTY
		WATER	SEWER	LANDFILL	RECYCLE	GARBAGE	YARD WASTE			
11/01/16	\$9,897.23	\$4,261.95	\$2,915.35	\$815.98	\$544.59	\$1,277.95	\$79.95	\$0.00	\$0.00	\$1.46
11/02/16	\$9,022.22	\$3,814.59	\$2,568.84	\$786.36	\$514.30	\$1,259.45	\$78.68	\$0.00	\$0.00	\$0.00
11/03/16	\$20,534.14	\$9,261.64	\$6,740.04	\$1,309.72	\$856.92	\$2,223.23	\$139.10	\$0.00	\$0.00	\$3.49
11/04/16	\$141,839.77	\$61,921.54	\$66,116.86	\$1,450.24	\$948.02	\$2,230.77	\$138.45	\$0.00	\$9,032.23	\$1.66
11/07/16	\$67,141.52	\$31,557.06	\$21,441.84	\$4,324.33	\$2,838.55	\$6,552.35	\$410.15	\$0.00	\$0.00	\$17.24
11/08/16	\$28,041.14	\$5,230.66	\$3,748.25	\$897.56	\$593.57	\$1,585.00	\$99.42	\$15,886.40	\$0.00	\$0.28
11/09/16	\$78,514.57	\$38,042.78	\$34,769.64	\$1,772.92	\$1,161.56	\$2,578.97	\$161.20	\$0.00	\$0.00	\$27.50
11/10/16	\$72,671.42	\$36,567.81	\$22,484.44	\$3,979.19	\$2,582.89	\$6,636.19	\$413.40	\$0.00	\$0.00	\$7.50
11/14/16	\$8,293.11	\$3,304.52	\$2,467.67	\$652.14	\$422.79	\$1,098.10	\$68.90	\$0.00	\$0.00	\$278.99
11/15/16	\$8,991.94	\$3,755.02	\$2,603.49	\$696.30	\$458.92	\$1,106.98	\$67.63	\$0.00	\$0.00	\$303.60
11/16/16	\$6,938.90	\$3,025.71	\$2,100.77	\$444.31	\$288.02	\$778.54	\$48.75	\$0.00	\$0.00	\$252.80
11/17/16	\$5,549.94	\$2,349.46	\$1,756.77	\$374.00	\$242.48	\$585.43	\$36.40	\$0.00	\$0.00	\$205.40
11/18/16	\$6,677.69	\$2,911.70	\$2,102.17	\$407.37	\$267.94	\$715.75	\$44.85	\$0.00	\$0.00	\$227.91
11/21/16	\$5,904.36	\$2,501.08	\$1,797.31	\$409.71	\$265.63	\$671.77	\$42.25	\$0.00	\$0.00	\$216.61
11/28/16	\$15,910.38	\$6,602.76	\$4,599.54	\$1,376.59	\$938.74	\$2,228.98	\$139.37	\$0.00	\$0.00	\$24.40
11/29/16	\$8,522.11	\$3,545.64	\$2,480.80	\$747.93	\$511.64	\$1,160.09	\$72.80	\$0.00	\$0.00	\$3.21
11/30/16	\$7,634.82	\$3,173.68	\$2,261.44	\$643.27	\$433.80	\$1,041.27	\$65.00	\$0.00	\$0.00	\$16.36
	\$0.00									
	\$0.00									
TOTAL	\$502,085.26	\$221,827.60	\$182,955.22	\$21,087.92	\$13,870.36	\$33,730.82	\$2,106.30	\$15,886.40	\$9,032.23	\$1,588.41

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	\$99,112	\$870,703	\$794,364	\$1,492,633
Utilities	\$2,500	\$4,589	\$17,500	\$16,316	\$30,000
Chemicals Costs	\$22,667	\$15,914	\$158,667	\$146,132	\$272,000
Maintenance and Repair Costs	\$27,833	\$15,897	\$194,833	\$222,527	\$334,000
Sludge Disposal Costs	\$0	\$5,000	\$0	\$5,000	\$0
Lab Supplies & Equipment	\$3,375	\$3,497	\$23,625	\$21,320	\$40,500
Office Supplies	\$1,500	\$909	\$10,500	\$11,808	\$18,000
Miscellaneous Expenses	\$5,017	\$5,688	\$35,117	\$39,430	\$60,200
Other Operating Costs	\$12,494	\$10,939	\$87,457	\$85,752	\$149,927
Overhead (G&A of D.L.)	\$28,087	\$22,380	\$196,610	\$179,373	\$337,046
Subtotal of Costs - Contract Year 4	\$227,859	\$183,925	\$1,595,012	\$1,522,022	\$2,734,306
Fixed Fee for Contract Year 4	\$16,406	\$13,243	\$114,841	\$109,586	\$196,870

5. MAINTENANCE/REPAIR COST DETAIL

5.1 MAINTENANCE AND REPAIR COSTS

Maintenance and Repair costs as compared to the monthly threshold

Table 5-1: Maintenance and Repair Costs

	Month	YTD
Grounds	687	11,640
Electrical	2,297	18,912
Street	5,005	67,380
Water Distribution	3,514	33,434
Sewer Collection	363	3,817
Instrumentation	0	1,718
Mechanical	1,285	53,569
Vehicle	1,963	23,671
Tools	325	525
Janitorial/Misc.	458	4,446
HVAC Maintenance	0	2,859
Maintenance Agreements	0	113
Landscaping	0	442
Snow Removal	0	0
Total Expenditures	15,897	222,527
Threshold	27,833	194,833
Over (Under)	(11,936)	27,694

A SUMMARY OF MAINTENANCE & REPAIR ACTIVITIES:

Water/Street Facilities

Maintenance staff completed 62 preventative and 19 corrective work orders for the water plants, distribution system, and fleet in November. 96 requests for service were responded to by service personnel. 144 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 7 water meters
- Repaired water main NE quadrant
- Repaired water main 100 block West Harlem
- Repaired water service 501 South 5th
- Replaced E-Stop on chlorine booster pump South Water Plant

Wastewater Facilities

Maintenance staff performed 88 preventatives and 0 corrective work orders at the Consolidated Plant, and, 36 preventatives work orders and 0 corrective work order at the Pre-Treatment plant.

Street/Grounds/Right of Way/Fleet

- Various tree removal
- Street patching
- Scheduled vehicle service work (lube, oil, filters)
- Replaced compressor T16
- Repaired electrical problem T17
- Repaired electrical short/wiring T14
- Replaced window SW1 (old leaf truck)
- Replaced sensor and air tube T11
- Repaired leaf machine

5.2 CHEMICAL COST DETAIL

Process chemical costs for water treatment

Table 5-2: Process Chemical Costs

	Month	YTD
Chlorine	2,044	13,345
Salt	13,870	114,307
Polyphosphate	0	18,481
Total	15,914	146,133
Threshold	22,667	158,669
Over (Under)	(6,753)	(12,536)

6. HEALTH & SAFETY

Woodard and Curran Health and Safety conducted a 2-day site inspection/audit to identify any safety deficiencies and review all written programs, standard operating procedures, and emergency response procedures.

7. CAPITAL PROJECTS

Well 10 is drilled to depth. Well yield and water quality sampling were completed December 23rd. Upon review of the data collected, contractor was given notice to order the well pump, pump shaft, column pipe, and well house. C2 permit application will be filed with IEPA, upon review the City will receive the C2 permit and work can be completed. Normal review time is about 60 days.

CSO Phase 1 was advertised for bid in December and a pre-bid meeting was held on December 20th. Bid letting is set for January 10th.

Monmouth College continued construction of their parking lot on East Boston Avenue. Included in that project will be installation of a 24" storm sewer to collect and transport run-off from the parking lot, East Boston and North 5th, and, East Boston and North 6th Street.

Barry Scheff from Woodard & Curran was in town in mid-November to begin looking at options for dealing with our downtown sewer interceptor and potential run off abatement solutions in the downtown area. Both of those items are in conceptual planning stages at this time.