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COMMITMENT & INTEGRITY DRIVE RESULTS

Monthly Operating REPORT

Monmouth, Illinois

Department of
Public Works

September 2017



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EXECUTIVE SUMMARY

The September 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.

Highlighted activities for the month are listed below:

- Well 10 went online October 11th, all operating permits were received from IEPA
- South Sunny Lane road and drainage project was completed and the road opened on September 14th
- OSLAD grant project at the campground got underway in late September with the constructing of the handicap accessible fishing dock
- CDBG grant application for replacement of the water main along East 9th and South 5th is on schedule for submittal by mid-December. The project design and permitting is currently under review by IEPA
- ITEP grant application is in progress for submittal by early December. WIRC and Barry Sheff from Woodard Curran are working together to meet the requirements of the grant application. Jan, Lew and I met with Barry in mid-October for a progress update.
- The 8" transite water main was successfully retired through the Casey's property at the intersection of 34/67. We did have to re-tap and install a new service line to Metal Crafters as it was discovered they were tapped into the transite. Also, 2 additional valves were installed on the 12" water main in that same area which allows us better control on that pipe in the event of a main break.
- Lew, Jennifer Anders and I met with a development group to re-look at the potential for utilizing the bio-gas from the North Pre-Treatment Plant to make "green" anhydrous ammonia. The developer has received preliminary authorization from their investment group to actively pursue an agreement with the City of Monmouth that would result in the construction of a \$25 million ammonia production plant at the City's Pre-Treatment property with the City receiving revenues from the sale of the ammonia produced using bio-gas

Feel free to stop by the office or give me a call, 309-734-4026 if you have any questions or comments.

Regards, Andy

1. HEALTH AND SAFETY/STAFF

Staff completed the annual hearing conservation training through our PureSafety online interactive program. There were no safety incidents or near misses in September. One recordable lost time accident for the year involving a minor hand injury.

Dalton Simpson started with us in August. Dalton is a life-long resident of Monmouth and works out of the Street Department as a laborer. He just passed his CDL written test and continues to do very well in his duties. Dalton fills a position that was vacated due to an employee retirement earlier in the year.

2. WASTEWATER TREATMENT

The Consolidated WWTP treated and discharged 87 million gallons of wastewater in the month of September. There were no combined sewer overflow events in September. The weather station at the plant reported 1.1” 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 2-1: Water Quality vs. NPDES Permit Limits

	Monthly Average	Permit Limit
Flow (MGD)	2.8	4.62
Ammonia N mg/l	0.1	1.5
CBOD5 mg/l	1	10
Total Phos	1	1
Chlorides mg/l	448	500
Suspended Solids mg/l	3	12

3. WATER TREATMENT

The water treatment plants produced 85 million gallons of finished water in September. 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 3-1: Monthly Chemical Usage for Ion Exchange Softening

	Daily Average	Monthly Total
Treated Water to System	2.62 MG	79 MG
Poly Phosphate Usage-lbs.	82	2,472 lbs
Salt Usage — tons	5.3	158 tons
Chlorine Usage - lbs.	103	3,075 lbs

IEPA completed their inspection of the water facilities. This inspection is performed by their field operations staff every 3 years.

4. REVENUE COLLECTION

Table 4-1: FY to date

The table below outlines the revenue collected through the month of September from the Municipal Services billings.

PAYMENT TOTALS 2017-2018 FISCAL YEAR									
MONTH	WATER	SEWER	LANDFILL	RECYCLE	GARBAGE	YARD WASTE	FARM BONDS	FARM SURCHARGE	PENALTY
MAY '17	\$215,671.89	\$181,412.62	\$22,531.07	\$15,217.48	\$36,009.98	\$2,817.50	\$15,886.40	\$0.00	\$2,111.84
JUNE	\$229,035.75	\$185,314.05	\$21,675.38	\$14,587.52	\$34,276.33	\$2,676.41	\$15,886.40	\$0.00	\$2,415.97
JULY	\$226,645.63	\$177,343.57	\$20,382.92	\$13,761.42	\$33,176.67	\$2,586.98	\$15,886.40	\$0.00	\$2,521.86
AUGUST	\$239,768.02	\$184,406.12	\$21,489.03	\$14,114.30	\$33,102.77	\$2,609.82	\$15,886.40	\$0.00	\$2,301.30
SEPTEMBER	\$230,056.22	\$177,006.99	\$20,634.09	\$13,930.35	\$33,406.80	\$2,589.03	\$15,886.40	\$0.00	\$3,730.94
OCTOBER	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
NOVEMBER	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
DECEMBER	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
JANUARY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
FEBRUARY	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
MARCH	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
APRIL '18	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
YEAR TO DATE	\$1,141,177.51	\$905,483.35	\$106,712.49	\$71,611.07	\$169,972.55	\$13,279.74	\$79,432.00	\$0.00	\$13,081.91

5. ESTIMATED ANNUAL COST

Table 5-1: Estimated Annual Budget – Year 5

Budget Category	Month Budget	Month Actual	YTD Budget	YTD Actual	Annual Budget	over(under)
Labor (D.L. + FB)	\$125,165	\$132,821	\$625,823	\$606,487	\$1,501,976	(\$19,336)
Utilities	\$2,542	\$124	\$12,708	\$8,789	\$30,500	(\$3,919)
Chemicals Costs	\$23,044	\$41,654	\$115,222	\$121,561	\$276,533	\$6,339
Maintenance\Repair	\$28,297	\$25,455	\$141,486	\$166,116	\$339,567	\$24,630
Sludge Disposal Costs	\$2,069	\$0	\$10,346	\$0	\$24,830	(\$10,346)
Lab Supplies\Equip	\$3,431	\$5,703	\$17,156	\$16,122	\$41,175	(\$1,034)
Office Supplies	\$1,525	\$1,289	\$7,625	\$8,867	\$18,300	\$1,242
Miscellaneous Expenses	\$12,201	\$5,925	\$61,003	\$31,606	\$146,408	(\$29,397)
Other Operating Costs	\$5,912	\$18,135	\$29,561	\$97,627	\$70,947	\$68,066
Overhead (G.A.)	\$28,263	\$29,992	\$141,315	\$136,949	\$339,156	(\$4,366)
Subtotal Year 5	\$232,449	\$261,098	\$1,162,247	\$1,194,124	\$2,789,392	\$31,877
Fixed Fee Year 5	\$16,736	\$18,799	\$83,682	\$85,977	\$200,836	\$2,295
Total	\$249,186	\$279,897	\$1,245,929	\$1,280,101	\$2,990,229	\$34,172

6. MAINTENANCE/REPAIR ACTIVITIES

A SUMMARY OF MAINTENANCE & REPAIR ACTIVITIES:

Water/Street Facilities

Maintenance staff completed 123 preventatives and 18 corrective work orders for the water plants, distribution system, and fleet in September. 91 requests for service were responded to by service personnel. 335 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 15 water meters
- Repaired water main 700 block North G
- Repaired water main 200 block West Boston
- Repaired curb stop 309 South Main St
- Repaired intake NW Quadrant of Town Square

Wastewater Facilities

Maintenance staff performed 87 preventatives and 2 corrective work orders at the Consolidated Plant, and, 31 preventatives work orders and 7 corrective work orders at the Pre-Treatment plant.

- Installed new battery UPS in the bar screen PLC
- Installed new capacitor on Industrial Park lift station pump
- Installed new circuit breaker for dewatering pump at pre-treatment plant
- Installed new seal clarifier lift station pump at pretreatment plant – Insurance paid from lightning strike
- Installed new breaker and GFCI outlet for waste decant pump at pre-treatment plant
- Installed new thermal overload heaters on waste pump at pre-treatment plant
- Installed new VFD on the anaerobic pump at pre-treatment plant

Street/Grounds/Right of Way/Fleet

- Various tree removal and trimming
- Scheduled vehicle service work (lube, oil, filters)
- Street sweeping
- Patching of utility excavations
- Replaced heater block T15
- Repaired intake manifold and power window switch C2

7. CAPITAL PROJECTS

Well 10 – received operating permits from IEPA and the Well went online October 11th.

CSO Phase 1 – the 45 degree angled fillets have been poured, contractor is forming outer walls and stairs, planning on pouring those by the first week of November

North WWTP Design – 3 bids were received with Leander Construction submitting the low bid of \$519,000. Recommendation to City Council to approve this bid moving forward.

CDBG water main project – Missman completed plans, sent to IEPA for approval and permitting, WIRC will complete the application for the CDBG grant. This project, if we are awarded funding, will involve replacing the water mains on East 9th Avenue from South Main to South 5th Street, and, on South 5th Street from East 9th Avenue to the water tower on East 7th Avenue.

South Sunny Lane project was completed and the road opened on September 14th.