

## City of Lawrence - Utilities Department

### 2013 Integrated Municipal Wastewater Plan Memorandum of Understanding Annual Progress Report

The Memorandum of Understanding between the City of Lawrence and the Kansas Department of Health and Environment, which acknowledges and accepts the City's Integrated Municipal Wastewater Plan, requires annual updates to review the progress and performance of the plan. This report outlines the status of the projects as identified in the City's Integrated Wastewater Plan during 2013 and the Department's projected plans for 2014.

The following projects were included in Attachment 1 of the Memorandum of Understanding between KDHE and the City of Lawrence as items with 2013 start dates in the Integrated Municipal Wastewater Plan and include their status at the end of 2013:

#### UT1302CS – Pump Station No.4 Redundant Force Main

Description – Staff discovered that the 8" force main that conveys wastewater from PS#4 in North Lawrence to the WWTP was exposed for approximately 75 feet on the river side of the Kansas River Levee. Given the critical nature of the pump station and force main, the Department is pursuing replacement of the existing force main for reliable and continuous service to North Lawrence.

Design Engineer – PEC

Construction – BRB Contractors

Completion – May 2014

Project Cost - \$1,760,000

#### Wakarusa Wastewater Treatment Plant/Influent Pump Station/Force Main

Description – Design and construction of a new wastewater treatment plant, Pump Station No. 10, and force main to the new plant. Currently the plant is in the design phase with expected construction to begin on the conveyance force main this year. Construction on the plant and pump station is expected to begin in 2015.

Design Engineer – Black & Veatch/PEC/Bartlett & West

Construction – TBD

Completion – Fall 2017 (for entire project)

Project Cost - \$54,700,000

#### UT1311 Kansas River WWTP Microturbines

Description – Installation of biogas microturbines as a green energy source to the Kansas River Wastewater Treatment Plant to utilize digester biogas and produce electricity and heat. A final report analyzing compatibility, feasibility, and costs is being completed and will be submitted to the City Commission for consideration. Construction of this project dependent on City Commission approval.

Design Engineer – Brightery, Capstone, and Unison Solutions

Construction – pending City Commission review and acceptance

Completion – January 2014 (final report); construction - TBD

City of Lawrence – Utilities Department

2013 Integrated Plan Report

Submitted – 3/30/14

Project Cost - \$1,081,600 (estimate for entire project if approved)

Rapid I/I Reduction Program

Description – Program to identify and remove inflow and infiltration sources into the sanitary sewer system. Efforts will include inspection, evaluation, and correction of imperfections in the system and incorrectly connected private sources. Currently the Utilities Department and TREKK Design Group are inspecting the city sanitary sewer in designated areas through smoke testing, manhole inspections, and flow monitoring. Evaluation of private sources of I&I are anticipated to begin in 2014.

Design Engineer – TREKK Design Group

Completion – 2020 (projected)

Project Cost - \$19,400,000 (projected over the life of the project)

UT1212 Cured in Place Pipe (CIPP) - Clay Pipe and Manhole Rehabilitation Program

Description – The Utilities Department currently identifies areas of sanitary sewers that require repair via CIPP or manhole rehabilitation. In 2013, the department installed CIPP in 17,534 linear feet of sanitary sewer. Additional CIPP will take place in 2014.

Contractor – Layne Inliner, Inc. (2013)

Completion – December 2013

Project Cost - \$395,936.35 (Cost based on 2012 Wastewater Integrated Plan for multiple years is \$33,500,000.)

The following additional projects are related to relocation of sanitary sewer lines due to construction projects and are currently underway:

UT 1205 South Lawrence Trafficway – Sanitary Sewer

Description – Sanitary Sewer relocation in conjunction with the construction of the South Lawrence Trafficway. This sanitary sewer relocation project was negotiated with KDOT's construction contractors.

Design Engineer – HNTB for both 31<sup>st</sup> & Haskell and 31<sup>st</sup> and Louisiana sections

Construction – 31<sup>st</sup> & Haskell – Emery Sapp and Sons, Inc.

31<sup>st</sup> and Louisiana Section - currently negotiating with Emery Sapp and Sons, Inc.

Completion – 2017 (based on KDOT timeframe for the South Lawrence Trafficway)

Project Cost - \$2,015,583

UT1210CS Bob Billings Parkway Sanitary Sewer

Description – Sanitary Sewer relocation in conjunction with KDOT interchange at K-10 and Bob Billings Parkway

Design Engineer – Landplan Engineering

Construction – TBD (additional construction may take place with the KDOT construction in 2016)

Completion – May 2014

Project Cost – \$744,000

PW1012 – Iowa Street Reconstruction

Description – Sanitary Sewer relocation in conjunction with KDOT reconstruction of Iowa Street from Irving Hill Road to Harvard Road and 15<sup>th</sup> Street/Bob Billings Parkway from Engel Road to Quarry Lane.

Design Engineer – Bartlett and West

Construction – Kings

Completion – November 2013

Project Cost - \$389,000

During 2014, the Lawrence Utilities Department will continue efforts in the above projects. Based on the project list in Memorandum of Understanding - Attachment 1, no other projects have been designated to begin during 2014.