

Capital Improvement Plan

2011 *thru* 2015

Department Public Works
Contact Water/Wastewater Manager
Type Improvement
Useful Life Unlimited
Category Wastewater
Priority 2 Very Important

City of Gardner, Kansas

Project # PWWW-15-09
Project Name Sewer Line Replacement/Repair Project

Cash or Debt: Cash

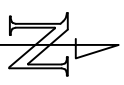
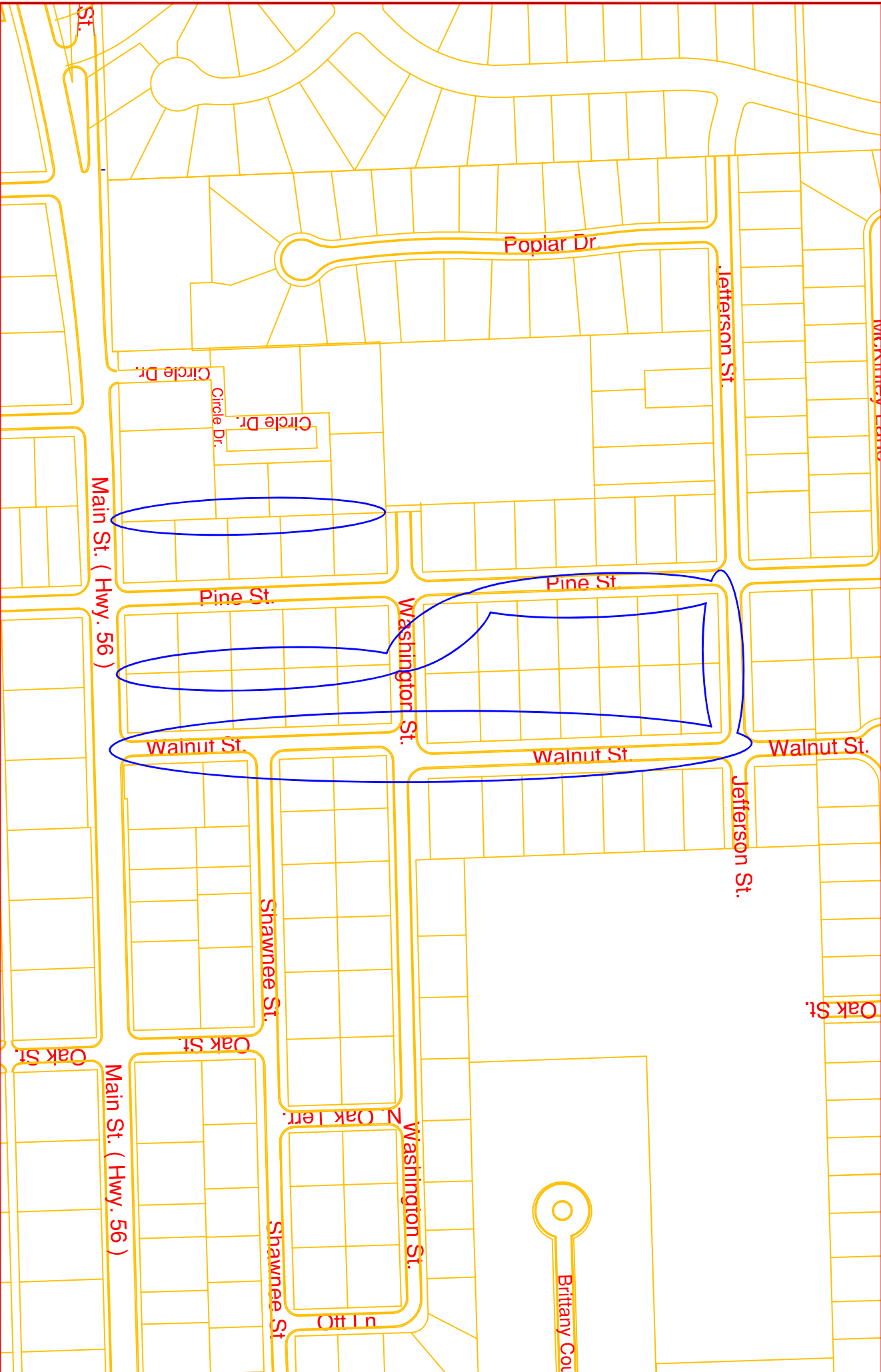
Description	Total Project Cost: \$5,700,000
Replace or repair at least one line segment per year on the collection system. This could include large point repairs, replacement of segments with line sags, rehab of manholes, or full replacement of some segments. The following is a list of tentative projects: Rehab all Brick Manholes in the City--\$334,000 Walnut Street Main to Jefferson, replace, line, rehab---\$300,000 estimate. No detail to date. Pine St./Walnut St. Main to Washington, lining---\$50,000 estimate. No detail to date. Point Repairs in the Manor Area---\$50,000 estimate. No detail to date. Various Point Repairs Downtown Area---\$75,000 estimate. No detail to date. Circle Dr./Pine St. Main to Washington---\$300,000 estimate. No detail to date.	

Justification
The City's collection system is aging, and some elements are over 60 years old. With an expected life for most of the lines of 60 to 80 years, and over 630,000 feet of line, we need to be replacing or rehabilitating approximately 8,000 feet each year. Budget will only allow for an average of about 400 each year. As our system ages, the need for line replacement will become critical. The cost to replace the necessary amount of line per year is approximately \$2,400,000 per year, each year. There are maintenance technics that can be done to extend the life beyond 80 year, however, this is offset with higher levels of maintenance and related costs. The amount of money recommended may or may not be sufficient to address infiltration, inflow, and rehabilitation. The amounts shown are probably minimal. Projects identified by staff.

Expenditures	2011	2012	2013	2014	2015	Total	Future
Construction	300,000	400,000	500,000	500,000	500,000	2,200,000	3,500,000
Total	300,000	400,000	500,000	500,000	500,000	2,200,000	Total

Funding Sources	2011	2012	2013	2014	2015	Total	Future
Wastewater Fund	0	0	0	0	0	0	2,000,000
Total	0	0	0	0	0	0	Total

Budget Impact/Other
As we replace some of the sanitary sewer, we will reduce our maintenance costs. As we are currently only spending about 5.2 cents per linear foot of line on maintenance, the savings don't seem to be significant. However, the cost in backups alone could range from \$10,000 to \$30,000 per home. If we replace the lines most in need of work we will save those backup costs. Quantifying the other costs is beyond the scope of our current system analyses.



PROJECT: PWWW-15-09
Various Sites

DESCRIPTION:
Sanitary Sewer Main - Repair or Replacement

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Project # PWWW-5-10
Project Name Parallel Line-Main, Center to Poplar & S. to Shop

Cash or Debt: Debt

Description **Total Project Cost: \$870,000**
 Add a parallel gravity main along Main Street (between Main and Shawnee), between Center and Poplar, then south to the Public Works Maintenance Shop.

Justification
 Gravity main is undersized for expected flows during heavy rains. There are some issues now during heavy rain storms, but no backups since the Bull Creek Lift Station was installed. Design should begin at least a year prior to the construction. The capacity issue was identified by the 2009 Wastewater Master Plan.

Expenditures	2011	2012	2013	2014	2015	Total
Planning/Design	90,000					90,000
Contingency	120,000					120,000
Engineering	60,000					60,000
Construction	600,000					600,000
Total	870,000					870,000

Funding Sources	2011	2012	2013	2014	2015	Total
Wastewater Fund	0					0
Total	0					0

Budget Impact/Other
 This will add new pipe runs, but very little maintenance is needed for gravity lines. In addition, it will add capacity to allow for additional flows during heavy rain storms.
 Design should begin as soon as funds permit. Current projections of funds would indicate a start on design in 2013 to 2014.

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