

RELATED EXPERIENCE

CITY OF ROCHESTER SAW GRANT APPLICATION AND IMPLEMENTATION

Johnson & Anderson was contracted by the City of Rochester to prepare a Stormwater, Asset Management, and Wastewater (SAW) Grant Application for the preparation of asset management

Location:	City of Rochester, Michigan
Project Date:	2013-2017
Engineering Cost:	\$341,000
Grant Amount:	\$920,293
Client:	City of Rochester
Contact:	Mr. David Anason Public Works Director (248) 606-5478

plans for the sanitary and storm sewer systems and pump stations within the City.

J&A partnered with Anderson, Eckstein, and Westrick, Inc. (AEW) for the storm sewer investigation portion of the project. The SAW Grant application addressed the development of an analysis and planning methodology for the City of Rochester to obtain a functional work order system and sustainable approved asset management program with the Michigan Department of Environmental Quality (MDEQ). The

Wastewater Asset Management Plan (WWAMP) portion of the grant application consisted of:

- Geographical Information System (GIS) Updates;
- Computer Maintenance Management System (CMMS) Development;
- Cleaning and televising of sanitary sewers 20-40 years old not covered by S2 funds;
- Wastewater Pumping Stations inventory and assessment;
- Building GIS maps of the City's sanitary sewer system;
- CMMS integration of wastewater assets;
- Hydraulic assessment of wastewater systems;
- Fats, Oil, and Grease (FOG) Program evaluation;
- Wastewater Asset Management Funding Structure; and
- WWAMP development

The Michigan Department of Environmental Quality notified the City of Rochester of the Grant Application Award in March of 2014.

J&A was contracted by the City of Rochester for engineering services related to implementing the SAW Grant for sanitary sewers and pump stations within the City's sanitary sewage collection system. This project is ongoing. To date, J&A has inventoried and inspected all sanitary manholes in the City system, documenting existing conditions using the National Association of Sewer Service Companies (NASSCO) guidelines. An inspection report and asset photographs were recorded for each manhole. J&A has also located all existing manholes and pump stations using Global Positioning System (GPS) to establish State Plane Coordinates (northing, easting, and elevation). Currently all manhole inspection reports, photographs, and GPS data are being incorporated into GIS software.

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Currently the City and J&A are purchasing, installing, and configuring GIS, Cityworks, and Microsoft SQL Server Software to meet City specifications and requirements.

Sewer main cleaning and closed circuit television video (CCTV) began in February 2015. An investigation report will be prepared including repair strategies and prioritization of repairs with cost estimates. A manhole investigation summary report will also be prepared compiling the data collected during the manhole inspections and will include repair strategies, prioritization of repairs, and cost estimates.

A Sanitary Sewer Network was created that included all sewer manholes and sanitary piping in the GIS system using historical information as well as information gathered during this project. This will be used to create a working hydraulic model of the entire sanitary sewer system that will be used to determine collection and pumping system deficiencies for inclusion in an assessment summary report.

Compiling all the data collected concerning every part of the City Sanitary Sewer System, J&A will create an Asset Management Plan, addressing deficiencies in the system and areas of concern. The report will recommend repair strategies and prioritization of repairs with a suggested implementation schedule. Based on the system needs, a Funding Support System will be created by reviewing the existing sanitary sewer rate structure and its ability to support the Asset Management Plan. If needed, recommendations will be made for a viable rate structure in order to meet the plan requirements. This project will continue through April of 2017.

