

Municipal Wastewater

Date Completed:

2014

Construction Cost:

\$3.91 Million

Client or Owner's Rep:

Ms. Lauren Tracy, PE
City of Austin Project Engineer

Highlights:

- ✓ **Minimal Disruption of Operation of Existing WWTP**
- ✓ **Challenging equipment issues eliminated**
- ✓ **Nagging operational issues addressed**
- ✓ **Chlorine and SO₂ scrubbers**

Photo: Chlorine & SO₂ Scrubbers and Caustic Storage Tank at Walnut Creek.



Walnut Creek WWTP Miscellaneous Improvements

City of Austin | Austin, Texas

Project Description | Walnut Creek Wastewater Treatment Plant is a critical treatment plant for the City of Austin serving the entire Northern section of the City service area. The project includes performing several miscellaneous improvements to various portions of the plant to improve plant operations and maintenance.

Services Provided | City of Austin selected KGI performed all engineering, design, managed sub consultant engineering efforts, permitting, equipment design, and CADD support. KGI prepared a preliminary engineering report (PER) which identified several options for providing numerous improvements for and improving operation and maintenance of the plant.

KGI worked closely with project manager, plant engineers, operations and maintenance personnel in carefully selecting equipment by touring installed and operating facilities with similar equipment. KGI's own personnel provided all related mechanical, electrical, and Civil engineering designs. KGI developed opinion of probable construction cost, recommendations were prepared, and KGI collaborated with City staff in determining the recommended alternative.

After the preferred option was selected, the KGI team prepared the 30%/60%/90%/100% plans, specifications, and cost estimates. Elements of the project included the following items:

- Improvements to Influent Flow Distribution Box
- Sanitary Pump Station for Administration Building
- Increase Plant Influent Raw Water Well Capacity
- Evaluate Alternatives to Existing Screenings Screw Conveyor
- Miscellaneous Improvements at Grit Chamber
- Improvements to Complex 1 Primary Clarifier Sludge Pumps
- Improvements to Complex 1 Excess Flow Wet Well
- Improvements to Complex Primary Treatment Sludge Line
- Installation of Chlorine and SO₂ Scrubber Systems
- Installation of New Caustic Storage and Pumping System
- Misc. Improvements at Complex#1 Activated Sludge Plant

KGI also performed the bid and construction phase services, with the project being successfully completed in 2014 within City's expectations for budget and schedule duration. The project was designed and constructed on budget and schedule. The plant operating and maintenance personnel are very satisfied with the performance of the new equipment.