

Municipal Wastewater

Date Completed:

2013

Construction Cost:

\$9.0 Million

Client or Owner's Rep:

Mr. Brent Nicholas, PE
Project Manager, CDM Smith

Highlights:

- ✓ **Electrical, Instrumentation and Controls**
- ✓ **Medium Voltage**
- ✓ **VFDs**
- ✓ **Rehabilitation**
- ✓ **Construction Phasing to Keep Existing Plant in Operation**

Photos: 2300 Volt Pump Motor

69th Street Wastewater Treatment Plant Improvements Package 3

City of Houston | Houston, Texas

Project Description | The project included improvements to Influent Lift Station, Clarifiers, RAS Pump Stations, Forward Feed Pipe Gallery, Flash Dryer Burners and 1st & 2nd Step Reactors.

Services Provided | As a sub-consultant to CDM Smith, KGI was responsible for evaluation of the existing electrical system and recommendation of proposed improvements. KGI was responsible for preparing bid documents related to electrical, instrumentation and controls portion of the project. In addition, KGI participated in the construction phase services including preparing final punch list items. Some of the major improvements included:

- Replace existing four (4) 600 HP variable speed pumps with new 600 HP variable frequency drive dry pit non-clog centrifugal pumps.
- Replacement of twelve (12) RAS pump motors with high efficiency inverter duty motors.
- Replacement of twelve (12) RAS pump Eddy Current Clutch Adjustable Speed Drives with Variable Frequency Drives.
- Installation of new lighting in eight (8) pump stations

