

Municipal Water

Date Completed:

Ongoing

Construction Cost:

\$1.77 Billion

Client or Owner's Rep:

*Mr. Wayne Murphy, PE
Houston Waterworks Team*

Highlights:

- ✓ **Medium Voltage Electrical and Generator Switchgears**
- ✓ **Site Electrical**
- ✓ **High Service Pump Station**
- ✓ **Dewatering and Sludge Handling Facilities**
- ✓ **Electrical Substation Conceptual Design and Requisition Assistance**

3-D Rendering: Intake Structure and Pump Station

Northeast Water Purification Plant (NEWPP) 320 mgd Expansion

City of Houston | Houston, Texas

Project Description | The City of Houston's Northeast Water Purification Plant (NEWPP) Expansion Project is a design-build project that will add 320 million gallons per day (mgd) by 2024 to the existing water plant's capacity. The expansion project will allow the City and the regional water authorities to meet projected demands, while fulfilling requirements set by the Harris-Galveston and Fort Bend Subsidence Districts resulting in a shift from historical groundwater usage to a predominant reliance on surface water.

Services Provided | KGI is a sub-consultant to Houston Waterworks Team, a joint venture of CDM Smith and Jacobs (formerly CH2M Hill). Key project aspects include:

- Design and construction of a new water facility that includes an intake and a pumping and conveyance system.
 - Construction of treatment facilities with a combined maximum water capacity of 320 MGD.
 - Construct electrical supply facilities and a new electrical substation.
 - Build a high service pump station and ground storage tanks.
- KGI is responsible for all the medium voltage electrical distribution for the entire expansion. In addition, KGI was involved in the electrical design of the following:
- Main and Generator Switchgears
 - High Service Pump Station
 - Backwash Equalization and Ground Storage Tanks
 - Thickened Sludge and Equalization and Dewatering
 - Site Electrical

