KNOXVILLE UTILITIES BOARD
FOURTH CREEK WWTP
COMPOSITE CORRECTION PLAN
KNOXVILLE, TENNESSEE

Reynolds Construction

Project Description

The Work included, but was not limited to, the following:

- New flow diversion structure including an automated by-pass screen and flow control gates
- 18-MGD submersible pump station with four 70-HP submersible pumps
- Wet-weather ballasted flocculation treatment unit capable of treating 20 MGD of raw screened wastewater and associated 645 sf sand pumping building
- 3,500 sf bi-level chemical storage/ blower building
- Plant site drain pump station with three 20-HP submersible pumps
- New fully buried (14.5' deep) 34' x 52' chlorine contact tank
- Additional effluent pumping capacity consisting of two 40-HP can type pumps, VFD's and associated controls
- 1,880 sf electrical/ generator building; with new 1,500 kW generator
- Replacement of existing sludge transfer pumping system with two new 40-HP dry pit submersible pumps and associated drives and controls. Modifications to existing compressor building to install equipment, controls, and piping for Chemically Enhanced Primary Treatment (CEPT); miscellaneous yard piping consisting of ductile iron pipe up to 54" diameter; to I&C systems; and miscellaneous site work and grading. Sheet piling was also installed to protect an existing outfall pipe.

At a Glance

Contract Amount:
$17.9 M

Notice to Proceed:
January 31, 2012

Completion Date:
November 7, 2013

MGD:
34.0

Owner:
Knoxville Utilities Board

Engineer:
CDM Smith

Reynolds completely re-designed the chlorine contact Tank addition from 54" piping to concrete which was faster and cheaper to install.