

## Battery C Airlift and Air Main Rehabilitation and Aeration Tanks No. 6, 7, 8 Diffuser Plate Replacement, SWRP

**Project Number:** 09-181-3P

**Service Area:** Stickney

**Location:** Stickney WRP

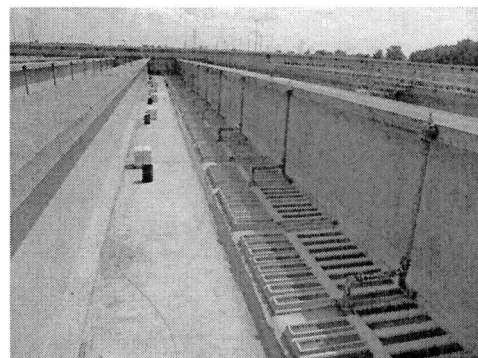
**Engineering Consultant:** In-house design

**General Contractor:** To be determined

**Estimated Construction Cost:** \$5,500,000

**Contract Award Date:** October 15, 2014\*

**Substantial Completion Date:** June 6, 2016\*



**Project Description:** The purpose of this project is to replace airlift umbrellas, rehabilitate sludge boxes, and install slide gates and workways for the sludge box outlets to the return activated sludge (RAS) channel. Work also includes replacing all dresser couplings and pipe spool pieces for air mains in manholes at the Y-walls of the aeration tanks and the channels around the aeration tanks, and replacing the fine bubble diffuser plates in Aeration Tanks No. 6, 7, and 8. All work under this project is located in Aeration Battery C.

**Project Justification:** The sludge box airlift umbrellas and concrete covers are deteriorating and need to be replaced. In order to facilitate an easier and safer means of isolating the sludge boxes from the RAS channel, new walkways and slide gates are required to be installed at the outlets. Improvements to the venting of the sludge boxes will eliminate the current spraying of a significant amount of sludge through existing vents onto walkways. The fine bubble diffuser plates in Aeration Tanks No. 6, 7, and 8 are cracked and/or clogged and inefficient. The concrete plate holders are spalled and/or cracked contributing to leaking air. The dresser couplings on the air mains within the Y-walls and the vaults on the battery perimeter are severely corroded and leaking air. Repair and/or replacement of these items will save energy and provide a proper level of service and treatment.

**Project Status:** This project is being designed.

\*Information shown is estimated.