

Battery A Improvements and Battery B Installation of Mechanical Mixers, SWRP

Project Number 08-174-3D
Service Area Stickney
Location Stickney WRP
Engineering Consultant In-house design
Engineering Contractor To be determined
Estimated Construction Cost \$54,500,000
Contract Award Date July 2024



Substantial Completion Date May 2026

Project Description This project entails concrete rehabilitation and the installation of railing at the Battery A final settling tanks and influent channels, air piping replacement in the Battery A aeration tanks, and the installation of mechanical mixers in the Battery B aeration tanks at the Stickney WRP. This project also includes the installation of a transfer slab below "F" Street to protect the Battery A main effluent conduit below and allow heavy traffic over the road.

Project Justification This project will rehabilitate the 80-year-old concrete in the Battery A final settling tanks, which is severely deteriorated in some locations and falling into the tanks. The addition of railing around final settling tanks and along the mixed liquor channel will safeguard against employees, contractors, and/or visitors falling into the tanks and channels. The addition of safety davit sleeves will allow for the use of portable davit hoists, making any necessary emergency retrieval of injured person(s) from tanks safer and quicker. In addition, this project will replace the air drops in the Battery A aeration tanks which are corroded and broken in multiple locations, resulting in inefficient aeration. Mechanical mixers will be installed in the Battery B aeration tanks, which is required to properly mix the anaerobic zones in the biological phosphorus removal process. Lastly, the installation of a load transfer slab over the main effluent conduit will permit the replacement of "F" Street to allow heavy truck and construction traffic. Historically, traffic on this street has been limited to light single axle vehicles. Increasing the road capacity will improve construction access and facilitate improvements in the future.

Project Status Design