Battery E Activated Sludge Facility, OWRP

Project Number	21-092-3P
Service Area	North
Location	O'Brien WRP
Engineering Consultant	AECOM Technical Services
Engineering Contractor	To be determined
Estimated Construction Cost	\$325,005,000
Contract Award Date	November 2025
Substantial Completion Date	August 2029
Project Description	This project will construct a new activated sludge facility entitled Battery E, which shall consist of an aeration tank battery, return activated sludge fermenter tank, final settling tanks, operating gallery building, influent and effluent conduits, post aeration channel, utility tunnel, and all other supporting infrastructure.
Project Justification	Per the National Pollutant Discharge Elimination System permits for the O'Brien WRP, the District must meet a new 1.0 mg/L monthly average total phosphorus effluent limit beginning August 1, 2027, and a 0.5 mg/L annual geometric mean total phosphorus effluent limit by January 1, 2030. Sidestream enhanced biological phosphorus removal through return activated sludge fermentation will be used to meet these new limits. The addition of sidestream enhanced biological phosphorus removal will decrease aeration volume and existing capacity by almost 16 percent by converting existing aeration tankage to return activated sludge fermentation tanks. Therefore, a new activated sludge aeration battery, Battery E, is required to make up for the lost aeration volume. Battery E will also allow for more extensive rehabilitation of existing Batteries A, B, and C, which are nearing 100 years old, to ensure continued operation of the O'Brien WRP for another 100 years.
Project Status	Design