

14 Mile Slough Pump Station Wins Second Local Award

The City of Stockton's 14 Mile Slough Pump Station Project, designed by West Yost Associates, has won two local industry awards. These awards include:

**American Public Works Association (APWA)
Sacramento Chapter
2007 Project of Year Award**
(in the category for large agency, environmental)

**American Society of Civil Engineers (ASCE)
Sacramento Section
2007 Environmental and
Water Resources Institute Award**

The pump station, which was designed as an interim facility with a capacity of only 3.75 million gallons per day (mgd), was replaced by a new station designed for 22.5 mgd of capacity. The new pump station's capacity represents a nearly 700% increase in the facility's size. In addition, this project will represent one of the largest trench-style wet well pump stations in California.

Unique features of the project include a trench-style wet well configuration that provides multiple benefits, and some unique construction techniques used to overcome site issues such as high groundwater.

Dewatering was a key issue early in the project. The groundwater table varied from -2 feet to -5 feet, and the groundwater contained MTBE, precluding direct discharge to the river. Pumping volumes reached 1 mgd during the winter months. The construction also addressed extremely dense soil condition in the deeper sections of the project site. An ABI Mobilram pile-driving machine was used to allow the contractor to pre-drill and then drive the sheet piling using a vibratory hammer with a down force.



Location, location, location: The location of the 14 Mile Slough Pump Station was largely responsible for the pump station's major design features, including its size (to serve the growing community) and its trench-style configuration (to address high groundwater in the area).

“ Although sanitary sewer system projects and infrastructure are rarely called glamorous, this project is significant in its scale, as the project represented nearly a 700-percent increase in capacity, and in its size, as one of the largest trench-style pump stations in California. Along with additional capacity, the new station is designed to do more to address maintenance issues and to be more operator-friendly...The City is proud of this project, appreciative of the design and construction team's efforts, and we fully support the nomination of this worthy project. ”

Mark Madison
Director of Municipal Utilities
City of Stockton

