Off-Site Fabrication of Gas Storage and Sludge Digester Tanks

As a part of a contract to construct Residuals Treatment Facilities at Deer Island for the Massachusetts Water Resources Authority (MWRA), Perini/Eastern is constructing eight egg-shaped steel sludge digesters rising 110 feet above ground with a diameter of 90 feet and two sludge and gas storage tanks 139 feet high and 90 feet in diameter. The MWRA assumed that construction of the gas storage tanks and digesters could only be built in place on the site. However the MWRA allowed prequalified contractors to use other fabricators who could meet the criteria for prequalification. The narrow streets of Winthrop, MA that lead to Deer Island severely limit access to the worksite by construction personnel, equipment and materials. Considering the strict quality control requirements, limited access to the site, severely restricted laydown areas and weather conditions unfavorable to welding, Perini/Eastern pursued the option to fabricate the tanks off-site with the Electric Boat Division of General Dynamics Corporation. The Electric Boat Division had never been involved in commercial construction of this type, but they possessed the engineering and construction expertise as well as the physical facilities for the tank fabrication. The tanks were shipped by barge to the Deer Island site in pairs and each was lifted in one piece and placed on the concrete foundations.

Contact: Richard J. Rizzo
Organization: Perini Corporation
Address: 73 Mt. Wayte Avenue
City: Framingham
State/Province: MA
Postal Code: 01701
Country: USA
Phone No: 608-628-2000
FAX: 
URL: http://www.perini.com
Email: rrizzo@perini.com