



PROJECT PROFILE

Lynchburg Pump Station Baytown, TX

Owner: Coastal Water Authority (CWA)
Houston, TX
Engineer: KBR - Kellog, Brown & Root
Contractor: Pepper Lawson Construction

Overview

The Coastal Water Authority is a government agency of the State of Texas whose purpose is to finance, construct, own and operate raw surface water facilities for use in Harris, Liberty and Chambers counties.



The CWA system provides Trinity River water to agricultural, industrial, and

municipal customers. The conveyance system includes the Trinity River pump station, the Main Canal, the Lynchburg Reservoir, the Cedar Point Lateral, the Lake Houston pump station, and the West Canal. The Trinity River pump station near Liberty has an existing capacity of 723 mgd and an ultimate design capacity of 1,300 mgd. The main canal runs westerly from the Trinity River pump station about 22 miles to the Lynchburg Reservoir (north of the Houston Ship Channel). The total capacity of the canal is approximately 1,300 mgd from the Trinity River Pump Station to the Cedar Point Lateral. Downstream of the Cedar Point Lateral, the canal has a capacity of 1,100 mgd. The Lynchburg Reservoir has an impoundment capacity of 4,600 acre-feet. The Cedar Point Lateral, with a design capacity of 230 mgd, is located about 8 miles southwest of the Trinity River pump station and diverts water from the main canal southward. The Lake Houston pump station diverts water from Lake Houston into the CWA west canal, which travels southwesterly until it terminates at the City of Houston East Water Purification Plant.

Lynchburg Reservoir and Pump Station

The CWA distribution system consists of pressure pipelines that start at the Lynchburg Reservoir with the Lynchburg Pump Station and extend southwest about 10 miles to the Bayport Industrial complex and eastward along State Highway 225 conveying raw water to industrial users. The Lynchburg pump station covers approximately 220



acres, including reservoirs. It is located at 908 South Crosby Lynchburg Road, Houston, Texas in Harris County. The site is on a narrow peninsula near the northern border of Galveston Bay.

Pump Details

S.O. 9809511

Qty-1

Morris Series 7100 NC, VOS, Model 30x36-62 4V D7; Rated: 42,600 USGPM at 180 ft. TDH; Ductile Iron wet-end, CA-6NM SS impeller, SS wear rings, 1045 steel shaft, Chesterton 221 mechanical seal SC/SC w/ Spiraltrac, Oil lubrication system, bearing RTDs, vibration switch, 42"x36" suction nozzle with handhole, 304SS pump and motor soleplate.



Motors: 3000 HP, 440 RPM, Vertical Solid-Shaft, WP-II, 3/60/4000, Inverter Duty

Accessories: Galvanized steel walkway system including ladders, guardrails, kick plates and hatches; seal water system including booster pump, control panel, self-cleaning strainer, gauges, flow meter and appurtenances; intermediate flexible lineshaft system.



S.O. 9806152

Qty-2

Morris Series 7100 NC, VOS, Model 30x36-62 4V D7; Rated: 45,000 US-GPM at 190 ft. TDH; construction similar to S.O. 9809511 except with ASTM B148 GR. C95400 aluminum bronze impeller and packed stuffing box.