

**Texas Department of Agriculture
Water Treatment Plant Modifications
City of Commerce, Texas
Project ID: 711131**



Hayter Engineering assisted the City of Commerce in obtaining a grant from the Texas Department of Agriculture. The Water Treatment Plant was constructed in the mid 1970's with a major expansion in the mid 90's. The backwash troughs and the propeller meter were both original equipment, nearly 40 years old! The troughs were significantly deteriorated and were cited in a State of Texas inspection. The propeller meter no longer functioned accurately and the operators were unable to determine precise chemical dosage for proper water treatment.

Improvements included the removal and replacement of the backwash troughs in the north and south filter banks, and the removal of a faulty 14" propeller meter which was replaced with a 14" pipe spool.

The top photo above shows the new 5/16" welded steel troughs. The steel was sandblasted and protected with three coats of NSF-approved epoxy paint. The brass components, which are called weirs, are adjustable plates that allow the operator to make sure that flow is even all the way across the filter cell that is being backwashed (cleaned).

The bottom photo shows the straight piece of PVC pipe that was used to replace the malfunctioning propeller meter. An ultrasonic flow meter was strapped to the new pipe for accurate flow measurement (ultrasonic flow measurement of water was not common practice in the mid-1970's when the water treatment plant was designed).

Services provided by Hayter Engineering are listed at right.

The project was funded by the Texas Department of Agriculture and was completed in 2012 ahead of schedule and within budget.

CLIENT

City of Commerce, Texas

CONTACT

Marc Clayton, City Manager (retired)
City of Commerce
Telephone: (903) 227-2846
E-mail: ldclayton51@yahoo.com

CONSTRUCTION COST

\$61,719.45

SERVICES PROVIDED

Application for Finance
Design Surveys
Design Plans & Specifications
Construction Bid & Award
Construction Review
Materials Testing
Record Drawings