

International Boundary and Water Commission

United States and Mexico

United States Section

4191 N. Mesa, El Paso, TX 79902



Edinburg Pump Station Levee Rehabilitation

Contract Number: 191BWC22C0001
Contractor: Conti Federal Services, LLC
Notice to Proceed (NTP): January 19, 2022 - Design
December 8, 2022 - Construction
Substantial Completion: November 2023
Awarded Contract Price: \$6,498,887

As part of USIBWC's goal to rehabilitate all of our levees in the Lower Rio Grande Flood Control Project to meet Federal Emergency Management Agency (FEMA) requirements, this project was issued to construct 160 feet of concrete floodwalls and 800 feet of earthen levee adjacent to the Edinburg Pump Station. The Edinburg Pump Station, located in Peñitas, Texas, is owned and operated by the Hidalgo County Irrigation District No. 1 (HCID1). Due to its location, it is often referred to as the Peñitas Pump Station. In 2020, HCID1 upgraded their pump station and constructed 30 foot concrete floodwalls on each side of the building. While this project is extremely small in its total length, it is tying into these previously constructed floodwalls to form a continuous flood risk reduction structure.

This design-build project had to address subsurface soil issues that provided seepage corridors and that provided a poor foundation. The final design includes two 80 foot long floodwalls (one on each side of the pump house) that are 14 feet tall and 22.5 feet wide with concrete 1.5 to 2.5 feet thick. To strengthen the foundation and prevent the floodwalls from moving and sinking, each floodwall is supported by 34 14x73 H piles driven into the soil 25 feet deep. The westside floodwall also has a sheet pile cutoff wall installed 30 feet deep into the foundation. After the earthen levees are built connecting the floodwalls, the site will be revegetated with native grasses.



Photo taken northwest of the pump house. The current earth levees are on the landside and tie into the concrete floodwalls extending from the pump house. Photo taken July 15, 2020.



Excerpt from construction drawings showing site layout and location of new levee.



Contractor using auger to predrill for H piles under floodwall. 4/3/2023



Workers tying rebar on eastern 14 ft tall floodwall. 4/20/2023



Fully prepared western floodwall foundation with 34 H piles set 25 ft deep with sheet piling down 30 ft. 5/2/2023



Completed eastern floodwall looking upstream/NW along riverside of wall. 5/2/2023



Construction of western levee from landside. 6/12/2023