



CSI Geo was tasked with the geotechnical investigation and engineering analyses for the design of an 8,000 ft long floodwall and floodgates within the Bayou Segnette State Park. The project is a part of the West Bank and Vicinity, New Orleans, Louisiana, Hurricane Protection Project. The project site is located just west of the town of Westwego, in Jefferson Parish, Louisiana.

The existing floodwall and flood gates will be upgraded to meet new flood control criteria. The current levee and floodwall system are at an approximate elevation of +6'. The proposed flood protection upgrade would bring the system to elevation +14' to meet the new 100-yr flood protection.

Soil borings and laboratory test data used on this project were provided by the USACE. Soil borings were comprised of 5 inch diameter Undisturbed Sampling (UDS) Borings, in addition to Cone Penetration Test (CPT) Soundings. Both the CPT data and the laboratory test data from the UD samples were used for the determination of soil parameters along the length of the project.

Our scope of work included:

- Development of design parameters
- Performance of stability analysis for T-Wall monoliths by the Spencer's method of slope stability analysis
- Performance of Method of Planes analysis for pile supported cantilever walls (T-Walls) as a check of Spencer's method
- Estimating compressive and tensile pile capacities for T-Wall foundations
- Design of seepage cutoff wall
- Development of horizontal subgrade moduli and overburden effective stress curves
- Documenting findings in a geotechnical design report
- Performing an Independent Technical Review (ITR)
- Engineering During Construction (EDC) services

Client
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Location
Jefferson Parish, LA

Service(s)
Geotechnical Engineering

Project Engineer(s)

- Bruce Khosrozadeh, PE
- Carlos Cepero, PE