



The ocean platform and installation procedures utilized in the implementation of MRCE's geotechnical design for the 3.5 mile outfall included extensive scour backfill for protection of the piping.

Ponce Ocean Outfall

Ponce, Puerto Rico

PROJECT HIGHLIGHTS:

- Scour protection for 3+ mile stretch of piping in ocean
- Comprehensive geotechnical and structural engineering services
- Coordination with regulatory/government agencies
- Construction phase support services including inspection

Mueser Rutledge Consulting Engineers (MRCE) provided geotechnical services as part of the design team for this 3.5-mile, 48-inch-diameter ocean outfall which terminates in 450 feet of water. The firm planned and provided resident engineering services for geotechnical and bathymetric investigations which included borings, piston cores, echo soundings, side scan sonar mapping, visual examination of bottom features by remote operated vehicles, and diver survey. The overall design work and geotechnical analysis included:

- Bottom stability and scour backfill requirements for protection from wave forces
- Design and preparation of construction documents for bedding
- Protection of the outfall pipe
- Evaluating pipe support