

UNITED STATES

## Port of Tampa - Berth 214 Tampa, FL



**Owner**  
Port of Tampa

**Engineer**  
Hall Engineering Group

**General contractor**  
PCS Civil

**Dates of work**  
2018/10 2018/11

### Main figures

Wick drains  
900 EA.



### Description

In an effort to expand its reach and capacity, Port Tampa Bay spent years building relationships, marketing itself to major shippers and investing \$24 million in two 300-ft-tall gantry cranes to handle bigger ships. The result has been a spike in cargo deliveries, including two weekly container ships from Asia.

The port's commitment to growth enabled it to secure a \$19.8 million grant as part of the US Department of Transportation's INFRA Grant program. This program recognizes innovative projects that improve infrastructure in critical areas where transportation networks intersect. Port Tampa Bay earmarked the grant money for the Berth 214 project, an intermodal project connecting cargo arriving by ship to road or rail. This grant would enable the port to meet existing market demand by expediting construction of a new, 1,300-ft-long berth and a 30-acre container yard.

Due to the soft and compressible nature of the soils at the site, USW, part of Menard Group USA, was contracted to provide ground improvement for a proposed surface parking lot, a truck road and a container/cargo yard as part of the Berth 214 project. The selected technique was wick drains.

### Ground conditions

The soil consists of a surficial layer of limerock and fine sand extending to depths of 1 to 3 ft below ground surface. A 2- to 4-ft clay stratum underlies the surficial layer. Alternating strata of clayey fine sand, clay and fine sand were encountered beneath the clays to a depth of 30 ft.

### Solution

A total of 900 wick drains were installed to depths of 10 ft. The successful installation of wick drains mitigated settlement and provided suitable bearing under the surface parking lot, truck road and container/cargo yard. All work was completed in one continuous phase with the installation of 90,000 LF of wick drains. All quality control testing met or exceeded the specified requirements.

