

CASE STUDY

# Gardner's Basin Back Bay

Atlantic City, New Jersey

## HISTORY

Beyond the casinos and boardwalk of Atlantic City, NJ sits Gardner's Basin Back Bay. The area at the north end of Absecon Island is home to the aquarium, commercial fishing boats, outdoor concerts, dolphin tours, Crafters Village, and a collection of charming restaurants. This historic area of Gardner's Basin Back Bay is getting a \$3.6 million renovation.

## PROBLEM

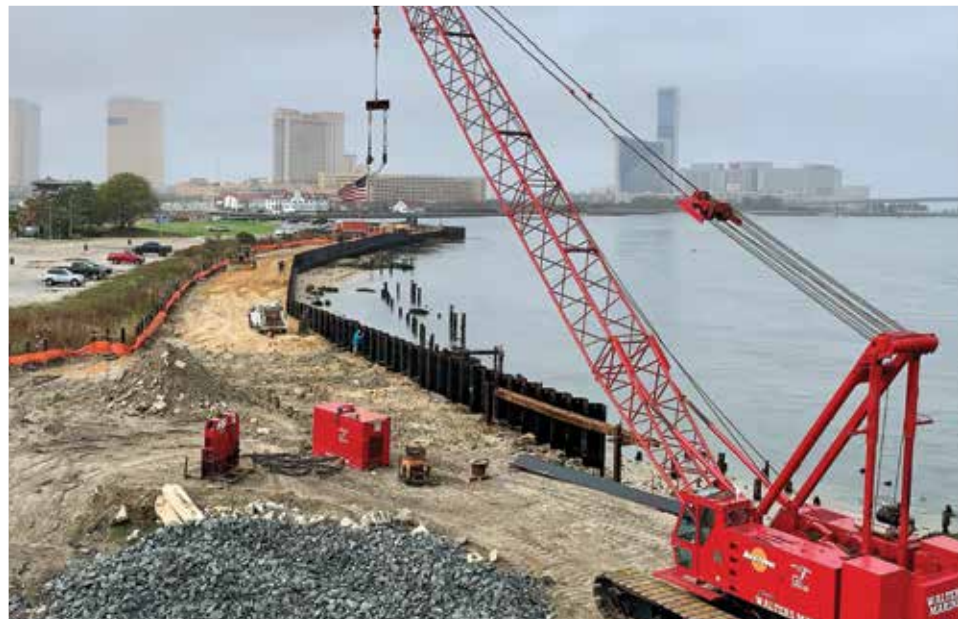
Gardner's Basin is situated on Absecon Inlet, which leads from the Atlantic Ocean through the barrier islands in Atlantic County, NJ. Storm surge along the eastern seaboard causes billions of dollars' worth of damage on a yearly basis. Nowhere is that as evident as the coastline of New Jersey. Several devastating storms have hit the shore over the last 20 years, including Hurricane Andrew and Superstorm Sandy.

Over the years, these storms, storm surges, and other issues have caused the erosion of the timber bulkhead that protected the area around Gardiner's Basin. The lack of a bulkhead contributes to flooding on a regular basis in the Back Bay.

## SOLUTION

The renovations in the Back Bay will include a new bulkhead in the inlet. The contract for the bulkhead project was awarded to Walters Marine Construction Inc., located in Ocean View, NJ. Walters Marine has worked with Nucor Skyline over the years on many different projects, and trusted Nucor Skyline with their steel sheet pile needs for this project.

Nucor Skyline supplied NZ 26 sheet pile and C6x8.2 double channel walers for this job. Prior



to delivery, the sheet piles were coated with 16mils Amerlock 2GF at 100% on both sides to extend their life in the harsher marine elements. The NZ 26 sheet pile, with the Larssen interlock, has one of the most watertight seals, making it ideal for marine use.

Walters Marine used a Manitowoc M65W Crawler Crane and an HPSI 150 vibratory hammer for the installation of the sheet piles in the sandy and silty soils of the basin. The piles were driven seamlessly into the soils, allowing construction to be completed quickly and efficiently.

The walers were installed once the sheet piles were driven to design depth. Following this installation, wooden forms were built to create the new concrete bulkhead, using the sheet piles as the sturdy foundation.

## PROJECT PARTNERS

Owner  
Atlantic City, NJ

General Contractor  
Walters Marine Construction Inc. –  
Ocean View, NJ

## PRODUCTS

Sheet Pile: NZ 26 sheet pile @ 45' (765 tons)  
Walers: C6x8.2 double channel walers

## PROJECT TIME FRAME

March 2019 to October 2020