

CASE STUDY

# Sandbridge Road Bridge

Sandbridge, Virginia

#### HISTORY

The area of Sandbridge, VA, near Virginia Beach, is a popular tourist destination. Situated on the coastline at the northern end of the Outer Banks peninsula, it is surrounded by water with the Atlantic Ocean to the east and the back bay of Currituck Sound to the west.

Sandbridge is a remote community and while it receives a smaller volume of visitors than nearby Virginia Beach, there are many permanent residents in the area.

#### **PROBLEM**

There is only one public road entrance to the community, Sandbridge Road, along with a bridge that connects the area to the mainland. That bridge, Hell's Point Creek Bridge, needed to be replaced with a wider and longer structure to accommodate increased traffic flow.

## SOLUTION

Fay Southeast was awarded the contract for the three phase project. The project includes demolition of the existing bridge structure, bulkhead, and concrete apron; along with piling; construction of a temporary bridge; construction of a new bridge, and the reconstruction of associated roadway approaches to accommodate the new, wider and longer structure.

Fay Southeast reached out to Nucor Skyline for the steel sheet pile to be used both in the temporary bridge structure that will allow continued access to the area, and the new permanent bridge abutments.

The engineering for the project was handled by Moffat & Nichol Engineers, out of Norfolk, VA. Moffat & Nichol has worked with Nucor Skyline on many projects in the past. Moffat & Nichol







"Nucor Skyline supplied the steel sheet piles for our Sandbridge Road Bridge Replacement project. They assisted us in determining the most economical layout and provided a quality product in a timely manner, making them an integral part of the success of this project."

- Matt Sutton, Project Manager



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### **PROJECT PARTNERS**

<u>Owner</u>

City of Virginia Beach, Department of Public Works Virginia Beach, VA

**General Contractor** 

Fay Southeast

Virginia Beach, VA

**Engineer** 

Moffat & Nichol Norfalk, VA

**PRODUCT** 

Sheet Pile: NZ 19 sheet pile (300 tons)

**PROJECT TIME FRAME** 

March 2019 to October 2020



suggested using the sheet piling as there was very limited right of way while building the temporary bridge. The sheet piling was used to support the temporary access as the bridge was built.

Nucor Skyline provided about 300 tons of NZ 19 sheet pile that was coated with coal tar epoxy. The coating allows for additional life of the sheet piles in the harsh elements of life on the northern most tip of the outer banks.

The project began in March of 2019, and in April 2019, the temporary bridge was installed as a bypass for traffic use. The new bridge was opened on October 26, 2020. The entire project is now complete.

The new bridge is 18" higher than the existing one, which allows for more boaters to access the Back Bay from areas north of Sandbridge Road.