

Red Bug Lake Road Flyover

Casselberry, Florida



PROJECT PARTNERS

Owner

Florida Department of Transportation – Tallahassee, FL

General Contractor

Middlesex Corporation – Orlando, FL

Subcontractor

Geotechnical Foundation Services – Apopka, FL

PRODUCTS

H-Piles: HP12 x 84, 11,000 linear feet.

PROJECT TIME FRAME

January 2012

HISTORY

The Florida Department of Transportation (FDOT) has taken on the enormous task of upgrading the roadways, bridges, and interchanges in the Central Florida region. One of those interchange sites, at Route 436 and Red Bug Lake Road in Casselberry, is getting a makeover in the form of a new flyover.

The \$24.5 million construction project began in 2011. Once completed, it will speed the flow of traffic and alleviate congestion at the intersection, which is used by more than 65,000 motorists each day. The flyover will allow for left turns at the intersection without blocking through traffic.

PROBLEM

Working within city limits poses many problems, especially when it comes to road and bridge construction. Normal traffic patterns must remain mostly unaffected and the local businesses need to stay open. For this very busy intersection at Route 436 and Red Bug Lake Road, these issues were front and center. In addition, overhead power lines interfered with construction throughout the intersection.

SOLUTION

Nucor Skyline partnered with Geotechnical Foundation Systems to use lightweight steel H-piles for the project. Some of the advantages include ease of transportation and handling,

improved splicing for longer lengths, excellent drivability characteristics, and rapid installation in a crowded urban environment. These features gave H-piles the edge over other types of piles.

The H-piles saved the contractor a lot of time and money because splicing them to produce the required production pile lengths was much easier than other pile types. Other production piles take several weeks to produce after test piles are driven. The H-piles were on site in less than a week. Nucor Skyline transported all the H-piles to the site to be stored in advance, allowing the project to continue uninterrupted and on schedule.