

2012 ASBI Convention Bridge Tour – Palmetto Expressway Project

The Florida Department of Transportation – District 6 initiated efforts to improve mobility on the Palmetto and the Dolphin Expressway Interchanges through this \$558 million design-build-finance project. The **Palmetto Section 5 project** is the largest project funded through the American Recovery and Reinvestment Act of 2009 (ARRA) in the State of Florida. The project, which many participants say is the biggest and most complex of their careers, is the last and largest of the 12-section reconstruction of the Palmetto Expressway.

The project involves the construction of an Interchange between SR 826 and SR

836, two limited access facilities, as well as the reconstruction of SR 826 at Flagler Street and SR 836 at NW 72nd Avenue interchanges. Capacity improvements include the reconstruction and widening along both SR 826 and SR 836, and the construction of 46 bridges. The project will provide new direct connector ramps for major improvements and collector-distributor ramps to eliminate existing geometric and operational deficiencies.

Section 5 entails the construction of a four-level interchange at SR 826 and SR 836, as well as the reconstruction and modification of two existing

interchanges. This section carries great regional importance because the Dolphin Expressway is a major route to Miami International Airport. More than 430,000 motorists use the interchange daily. Four complex precast segmental bridge ramps – bridges 9, 11, 15 and 19 – will traverse the core of the interchange. These four bridges are 46 feet wide and range in length from 1,100 feet to 2,450 feet. Total deck area is 360,718 square feet, with 7,764 linear feet of bridge. The longest span is 266 feet, the tallest pier is 81 feet and there are 775 total segments.

Owner: Florida Department of Transportation

Prime Design Consultant: BCC Engineering, Inc.

Segmental Bridge Design and Construction Engineer: **FINLEY Engineering Group, Inc.**

Contractor: Community Asphalt Corporation, **Condotte America, Inc.**,
the De Moya Group, Inc., JV, LLP

Overhead Gantry and Casting Machines: **Deal**

Bearings and Expansion Joints: **The D.S. Brown Company**

Casting and Erecting Segments: **Rizzani de Eccher**

(Photos Courtesy of ASBI)

