

Civil / Structural / Transportation Engineers

Construction Inspectors/Managers

Bridge Condition Inspectors

> New Jersey New York Pennsylvania

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Route 295/42/76 Direct Connection in South Jersey

Contract No. 026113000

New Jersey

PROJECT TYPE

Design

CONTRACT AMOUNT

\$772,000 fee

ROLE

Subconsultant to Dewberry
Bridge Engineering, Structural Engineering
Construction Support Services

PROJECT OWNER/CLIENT

New Jersey Department of Transportation

START & END DATES

1/2011 - 2/2015

REFERENCE

Bryan Garbasz, Dewberry (973) 780-9256

LEADING INFRASTRUCTURE PROJECT AWARD 2014, NJ ALLIANCE FOR ACTION

PROJECT DESCRIPTION

The NJDOT began construction on the \$900 million federally funded Direct Connection project to provide a seamless route for I-295 motorists traveling through the interchange of I-295, Route 42 and I-76 in Bellmawr, Mt. Ephraim and Gloucester City. Approximately 250,000 vehicles travel through the Route 295/42/76 interchange each weekday to and from Camden, Philadelphia and other destinations. The configuration required I-295 motorists to exit the interstate and weave across other congested highway lanes to return to I-295. The project eliminates dangerous merge conditions by building a viaduct that carries I-295 traffic over Route 42 and I-76.

As part of Contract 1 of this multi-year project, SJH was responsible for the design and construction support services of two replacement bridges – Bell Road (CR 658) over I-295 and Creek Road (CR 753) over Route 42. The existing Bell Road Bridge is a 3-span simply supported, steel girder structure with a total span length of about 198 feet. It is replaced by a 2-span continuous steel girder bridge with a center pier, stub abutments and an increased total span length of 251 feet to allow for the widening of I-295. The existing Creek Road Bridge was a 2-span simply supported, steel girder structure with a total span length of 175 feet. It is replaced by a 2-span continuous steel girder bridge with a center pier, and stub abutments wrapped with MSE retaining walls, and an increased total span length of 208 feet to allow for the widening of Route 42. Both bridges are replaced in-line by staged construction. Construction activities on these bridges involved extensive utility relocations including water main, gas main, telephone/CATV and electric conduits. In addition, a temporary prefabricated truss panel pedestrian bridge is provided at 100 feet north of the Creek Road Bridge to accommodate the heavy pedestrian volume currently using the bridge.



SJH Engineering, P.C.