



## MONMOUTH COUNTY

### Reconstruction of Monmouth County Bridge S-17 West Front Street (CR 10) over the Swimming River Borough of Red Bank and Township of Middletown, Monmouth County, NJ

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#### PROJECT INFORMATION

##### The Project Background

Monmouth County in coordination with the North Jersey Transportation Planning Authority, New Jersey Department of Transportation, and the Federal Highway Administration has completed final construction documents for the reconstruction of Monmouth County Bridge S-17 on County Route 10, West Front Street, over Swimming River in the Township of Middletown and the Borough of Red Bank. Hubbard's Bridge was originally constructed in 1921 as a six span, simply supported, through girder, floor beam, stringer structure 339 feet - 4 inches long. The deck was a steel open grid deck. Each span was 55 feet long between bearings. The original substructure consisted of pile supported piers and wing walls. Due to extensive and severe corrosion, the superstructure required replacement in 2004. A temporary Acrow® panel truss superstructure was erected and substructures adapted to carry the trusses. The temporary installation was made to keep the crossing open to traffic while a permanent replacement structure could be designed. The trusses are the property of the County and will be removed and placed in storage for use at other sites. The bridge is load posted for 15 Tons, has an Average Daily Traffic (ADT) flow of over 17,000 vehicles at a posted speed limit of 35 mph. There is an advisory speed limit of 20 mph in the vicinity of the NJ Transit bridge at the east end of the structure where the vertical clearance is just 10 feet 11 inches.

##### The Project Design and Scope of Work

The proposed improvements include the construction of an approximately 488-foot long steel girder bridge consisting of six (6) ±80-foot spans and supported on pile bents and pile supported abutments. The improvements will include the construction of approach embankments and retaining walls, with the approach embankments confined by steel sheet pile retaining walls to minimize the impact on wetlands and adjacent properties. The bridge will provide approximately 9 feet vertical underclearance above mean high water and 72 feet horizontal clearance within the navigable channel. The footprint of the proposed bridge is to be situated outside and to the north of the existing bridge on a curved alignment. This off-line alternative will permit the maintenance of traffic on the existing bridge to the greatest extent possible, during the construction of the new bridge. A detour of County Route 10 between Hubbard and Rector/Shrewsbury Avenue can be anticipated for approximately 3 to 4 months while approach roadways to the new bridge are constructed and final drainage is tied in.

The realignment of the bridge will provide the following (in each direction):

- 12' travel lanes
- 4' shoulder
- 6' sidewalk
- Decorative parapet

## The Project Design and Scope of Work (continued)

Architectural enhancements for the bridge include features such as ornamental lights, a decorative recessed brick panel parapet with decorative ball and cap railing. Overhead wires crossing Swimming River will be removed and placed in conduits and hangers under the bridge deck to accommodate relocating the electric, cable television, telephone lines and a proposed gas main.

Roadway improvements include minor roadway widening on the bridge approaches, concrete sidewalks for both sides of the bridge will provide an ADA accessible route from Hubbard Avenue in Middletown to Rector Place/ Shrewsbury Avenue in Red Bank, storm water drainage facilities, highway lighting and new guide rail treatments. Traffic improvements include modifications to the existing signalized intersections at Hubbard Avenue and at Rector Place/Shrewsbury Avenue include pedestrian crosswalks, revised signal timings and upgrading equipment to provide ADA compliance.

Once vehicular and pedestrian traffic are using the new bridge the existing Acrow Panel Bridge System will be dismantled and transferred to Monmouth County for re-use. The existing bridge piers will be demolished and removed to below the mud line. It is anticipated it will take approximately 24 months to transfer traffic onto the new bridge and 3-4 months to dismantle and restore the area to a natural condition. The total cost for the project including final design, right of way acquisition and construction is approximately \$15.5 million.

## Anticipated Project Schedule (Major Milestones)

Public Information Center	April 2012
Final Design Review	July 2012
Final Design Completion	August 2012
Construction Advertisements	Fall 2012
Begin Bridge Construction	Summer 2013 *
Detour West Front Street Begin	Winter 2015
Detour West Front Street Completed	Spring 2015

\* NJDEP timing restriction of March 1<sup>st</sup> through June 31<sup>st</sup> is anticipated for in water construction activity.

## Contact Information

Jon Moren, P.E., *Principal Engineer, II*  
Monmouth County Engineering Department  
Hall of Records Annex, 1 East Main Street, 3<sup>rd</sup> Floor  
Freehold, NJ 07728  
732-308-2963  
jon.moren@co.monmouth.nj.us