

NEW JERSEY TURNPIKE AUTHORITY DESIGN SERVICES FOR CONTRACT T100.638 (OPS T3898) DECK REHABILITATION OF NEWARK BAY-HUDSON COUNTY EXTENSION BRIDGES ZONES 2 AND 3

PROJECT OVERVIEW

SCOPE OF WORK – Contract T100.638 involves rehabilitation of bridges throughout the limits of the New Jersey Turnpike's Newark Bay-Hudson County Extension (NB-HCE) Zones 2 and 3 in Jersey City, New Jersey. Zone 2 extends between Interchanges 14A and 14C, and Zone 3 extends from Interchange 14C to the eastern terminus approaching the Holland Tunnel. The project's scope includes bridge deck reconstruction of one ramp bridge in Zone 2 and three adjoining bridges in the eastbound direction in Zone 3; hydrodemolition and partial depth overlay of one bridge in Zone 2; and deck repairs and resurfacing of 5 bridges in Zone 2. Steel repairs and bearing replacements will also be performed throughout the bridges in both zones.

Since its original construction, the NB-HCE has experienced numerous deck repairs in isolated areas. This methodology of maintaining the bridge decks was successful for many years; however, the increased rate of deterioration, traffic impacts, and the rising costs associated with this method of repair/maintenance, requires that full reconstruction of the bridge decks be initiated to bring the decks into a state of good repair until the bridges are ultimately replaced under the Capital Improvements Program.

Contract T100.638 serves as the third phase in reconstructing the bridge deck of the viaduct and ramp structures in the NB-HCE Zone 3. The first phase was addressed under Contract T100.125 which reconstructed the bridge decks of viaduct and ramp bridges in the westbound roadway and was completed in 2017. The second phase was addressed under Contract T100.321 which reconstructed the bridge deck of the Columbus Drive Exit Ramp and the eastbound roadway of the viaduct between Interchange 14C and the Columbus Drive Exit Ramp which was completed in 2021. The bridges within NB-HCE Zone 2 have not undergone any extensive reconstruction or rehabilitation since their original construction.

The primary focus of Contract T100.638 is to rehabilitate the bridge decks within the limits of NB-HCE Zones 2 and 3. Additional work includes parapet and median barrier replacement, deck joint replacement, structural steel repairs, bearing replacements, drainage and lighting improvements and substructure spall repairs.

In order to complete the deck reconstruction of the bridges in NB-HCE Zone 3, the eastbound roadway will be reduced to one lane for a series of construction stages for a total duration of 10 months. Greenman-Pedersen, Inc. (GPI), the consultant performing final design of Contract T100.638 are also responsible for development of a regional traffic model and simulation. The traffic modeling and simulation is a focus of the design services so the Authority can predict what impacts may occur to their facility and the local streets; what Maintenance and Protection of Traffic scenarios are feasible; and what coordination efforts (and mitigation measures) are necessary with other projects in the Region.

NJTA performed a demonstration lane closing in October 2023 to test the validity of the model and determine if the modeling/simulation provides favorable results. The results of the demonstration lane closure validated the model as the traffic conditions observed closely resembled the traffic model results. No significant traffic diversions and minor traffic delays occurred as a result of the lane closure. Therefore, it can be confidently stated that no major impacts to traffic will be anticipated due to the lane reduction.

SCHEDULE –

The Contract is scheduled to be Advertised on May 9, 2024 and Awarded on July 23, 2024. Construction is anticipated to begin in September 2024 with an estimated completion date of December 2027.

COORDINATION EFFORTS — The Authority and GPI have met with representatives from Jersey City, Hudson County, NJ Department of Transportation, and Port Authority of NJ and NJ to introduce the project, provide an overview of the project scope and describe the proposed construction staging. Coordination packages containing excerpts form the contract documents (plans specifications) were delivered to all stakeholders for their review and comment. A virtual Public Information Center will be posted on the NJ Turnpike Authority's website for public viewing with the opportunity to provide comments to the Authority and GPI.