# Synopsis T.I.P. B-5691 & B-4950 Division 6, Cumberland County Bridge Replacement February 15, 2017

#### General

This project will replace existing bridges (structures #250052, #250171 and #250172) on SR 1006 and SR 1851/SR 1426 in Cumberland County with bridges.

The Department will prepare signed and sealed plans for all disciplines for B-4950. Unsealed plans will be provided during the procurement for B-4950 and the sealed plans will be provided as soon as possible, but no later than 30 days after the award of the contract. The difference in the unsealed and sealed plans are anticipated to be minor and reflect only changes made as part of the final plan review process. The Department has also obtained all necessary environmental permits required for B-4950 and these will be provided during the procurement.

#### Planning

The Department is currently preparing a Low Impact Project Data Sheet or a Minimum Criteria Checklist for B-5691. The Design-Build Team will be responsible for providing impact quantities to complete these environmental documents. The Department has completed a Programmatic Categorical Exclusion for B-4950.

#### Roadway

Roadway plans for B-5691 will be the responsibility of the Design-Build Team. Pavement designs will be provided by the Department.

#### Hydraulics

For B-5691, the Design-Build Team shall be responsible for all hydraulic designs and shall provide a signed and sealed Bridge Survey Report and shall be responsible for all storm drainage design, permit drawings and construction and shall obtain FEMA compliance for the regulated floodways.

The Department will provide information prior to issuance of the Final Request for Proposals to establish the type and size of bridges to be bid.

#### Permitting

The Design-Build Team shall be responsible for preparing design plan sheets and providing all data necessary for the Department to obtain the environmental permit for B-5691. These will likely include a Nationwide Permit 3 or 14 and a Water Quality Certificate.

#### Structures

The Design-Build Team will be responsible for the design and construction of the B-5691 bridge. Standard bridge plans will be made available and may be used, if the final structure type

is determined to be a cored slab or box beam bridge. However, the design for the B-5691 bridge must be signed and sealed by the Design-Build Team.

# Geotechnical

The Department will provide 2 to 4 borings to the Design-Build Teams for B-5691. The Design-Build Team shall be responsible for all geotechnical recommendations, as well as any necessary supplemental borings, roadway and structural investigations for B-5691.

#### **Traffic Management**

These bridges will be constructed using off-site detours. The Design-Build Team will be responsible for Traffic Control Plans for B-5691 as appropriate for the bridge site as will be detailed in the Requests for Proposals.

A list of parameters, such as lane closures, time restrictions and general guidelines will be provided in the Request for Proposals.

## **Erosion and Sedimentation Control**

The Design-Build Team shall be responsible for all erosion control designs for B-5691 and implementation for all bridge sites.

## Signing and Pavement Markings

Pavement marking plans will be the responsibility of the Design-Build Team for B-5691. Permanent signing on this project will be minimal and will be the responsibility of the Design-Build Team.

#### **Right-of-Way and Utilities**

In general, the Design-Build Team will be responsible for acquisition of additional right of way, as necessary, to construct the bridges.

The Design-Build Team will be responsible for the coordination of all utility relocations necessary for construction. It is anticipated that the cost of utility relocations will be paid by the utility owners or the Department.

#### Surveys

The Department will provide initial survey information pre-bid. The Design-Build Team shall be responsible for any supplemental location and construction surveys.

#### **Construction Engineering Inspection**

CEI will be performed by the Department or its agent.

#### **Provided Materials**

The Department will provide surveys, geotechnical borings, a pavement design, and low impact data sheet or minimum criteria checklist, as-built plans, and field scoping meeting minutes for B-5691 and the plans for B-4950 as noted above.

# Compensation

To reduce the amount of work necessary to be performed pre-bid by the Design-Build Teams, and to ensure to the greatest extent possible that all Design-Build Teams are bidding on similar designs, the Department will include an estimated bridge length, bridge width, and assumed geotechnical design parameters (e.g. point of fixity, embedment, bearing elevation) in the Requests for Proposals. The Design-Build Team will then bid a unit price for these high level pay item quantities. This approach will likely be used for both B-5691 and B-4950 subject to the comments from the shortlisted Design-Build Teams.

It is possible that the bridge length will change from that estimated in the contract. In such event, a supplemental agreement will be entered into for the additional (or lesser) bridge length, foundation depth, etc. from those quantities placed in the Request for Proposals.

A lump sum item will most likely be included to provide for all design work and other ancillary construction work including but not limited to minor approach work, approach slabs, supplemental investigations, drainage, erosion control, traffic control, etc.