

## **R-2633AA & AB Project Synopsis**

**(Formerly R-2633A)**

**September 15, 2009**

### **Project Description and Purpose**

- The Design-Build Project R-2633AA & AB consists of constructing a fully controlled access freeway on new alignment from NC 87 to US 74 / US 76 in Brunswick County. The project was formerly designated as R-2633A and is the future I-140. The approximately 6.1-mile project will provide a continuation of an urban loop around Wilmington, NC. The primary purpose of this project is to improve traffic capacity deficiencies, increase mobility within the region and facilitate hurricane evacuation.

### **Planning**

- The R-2633A/B Final Environmental Impact Statement (FEIS) was approved on April 17, 2007 and the R-2633A/B Record of Decision (ROD) was approved on October 18, 2007. The Design-Build Team shall adhere to all environmental documents commitments. A copy of the FEIS and ROD will be made available to the short-listed Design-Build Teams.
- TIP Project R-2633AA & AB is following the Merger 01 Process. The Concurrence Point 4B Hydraulic Design Review Meeting was held on August 22, 2007.

### **Public Involvement Scope of Work**

- During the project's construction, the Design-Build Team shall coordinate with the Division 3 Office and the Construction Unit to inform the public of lane closures, construction progress, etc.

### **Roadway Scope of Work**

- The Design-Build Team shall design and construct a four-lane divided facility with a variable width median. The Wilmington Bypass shall be designed and constructed to meet a 70 mph design speed for a level urban freeway.
- The project includes the design and construction of a new interchange with US 17 and US 74 / US 76, construction of service roads, and realignment of NC 87.

### **Structure Scope of Work**

- The Design-Build Team shall be responsible for the design and construction of all structures necessary to complete the project. The Design-Build Team shall design and construct bridges that adhere to the AASHTO LRFD Bridge Design Specifications at the following anticipated locations:
  - Bridge on NC 87 over Bishop Branch
  - Bridge on - L - over US 17
  - Dual Bridges on - L - over first Tributary to Morgan Branch
  - Dual Bridges on - L - over second Tributary to Morgan Branch
  - Dual Bridges on - L - over third Tributary to Morgan Branch
  - Dual Bridges on - L - for first wildlife crossing
  - Dual Bridges on - L - for second wildlife crossing
  - Dual Bridges over CSX RR and US 74 / US 76
- It is anticipated that a minimum of three reinforced concrete box culverts will be required.

## **Railroad Coordination**

- The Design-Build Team shall be responsible for coordinating all railroad design and construction details on CSX Railroad right of way and obtaining an executed agreement with the Railroad.

## **Hydraulic Scope of Work**

- The Design-Build Team shall be responsible for all storm drainage design and construction.
- The Design-Build Team shall obtain FEMA compliance for the regulated stream crossings.
- The Department will provide signed and sealed Bridge Survey Reports and Culvert Survey Reports. If required by the Design-Build Team's design and / or construction methods, the Design-Build Team shall be responsible for all required report modifications.
- The Design-Build Team shall develop a State Stormwater Management Plan.

## **Geotechnical Scope of Work**

- Roadway and structure subsurface investigations will be provided to the short-listed Design-Build Teams. The Design-Build Team shall be responsible for all recommendations, as well as supplemental roadway and structural investigations.
- The Design-Build Team shall be responsible for the design and construction of all foundations, embankments, slopes, retaining walls and temporary structures.

## **Geoenvironmental Scope of Work**

- The Design-Build Team and NCDOT responsibilities for geoenvironmental remediation will be outlined in the RFP.

## **Environmental Scope of Work**

- The Design-Build Team shall be responsible for preparing all documents necessary for the Department to obtain the environmental permits for this project. The anticipated project permits include a US Army Corps of Engineers Section 404 Individual Permit; a NC Department of Environment and Natural Resources, Division of Water Quality (DWQ) Section 401 Water Quality Certification; a State Stormwater Permit; and a Coastal Area Management Act (CAMA) Major Development Permit.
- The Design-Build Team shall be responsible for completing the Merger process, including 4C Concurrence and a possible revisit of 4B Concurrence.
- The Department will provide a Feasibility Study for a potential on-site mitigation site. The Design-Build Team shall investigate this potential site and, if feasible, be responsible for the plan, design and successful construction of the on-site mitigation.

## **Erosion Control Scope of Work**

- The Design-Build Team shall be responsible for all erosion control designs and implementation. The Design-Build Team shall have a certified erosion control inspector on the project at all times during construction.

### **Traffic Control Scope of Work**

- The Design-Build Team shall be responsible for developing the Traffic Control Plans. A list of parameters, such as lane closures, time restrictions and general guidelines will be provided in the Request for Proposals.
- The Design-Build Team shall be responsible for developing the Pavement Marking Plans.

### **Traffic Signals Scope of Work**

- The Design-Build Team shall be responsible for the design and installation of all traffic signals.

### **Pavement Design Scope of Work**

- Final asphalt pavement designs will be provided in the Request for Proposals.
- The Design-Build Team shall be responsible for the design of all temporary pavements and the evaluation of existing shoulders and roadways regarding their suitability for carrying traffic during construction, if necessary. If required, the Design-Build Team shall be responsible for strengthening existing facilities prior to routing traffic on them.

### **Signing Scope of Work**

- The Design-Build Team shall be responsible for the design and installation of all roadway signs.

### **Location and Surveys Scope of Work**

- Electronic surveys are completed and will be provided to the short-listed teams. The Design-Build Team shall be responsible for supplemental surveys. Known existing utilities have been located and will be included with the survey data provided to the short-listed teams. The Design-Build Team shall be responsible for all supplemental SUE work.

### **R/W Utilities, Conflicts and / or Construction Scope of Work**

- The Design-Build Team shall be responsible for all utility conflicts / relocations and utility construction plans. Coordination shall include, but not be limited to, preparations and / or obtaining all necessary utility agreements. The Design-Build Team shall be responsible for coordinating the construction / relocation of private utilities with the appropriate owners.

### **Right of Way Scope of Work**

- With the exception of Permanent Utility Easements, it is anticipated that the Department will have acquired all right of way and easements necessary to construct this project prior to the opening of Price Proposals. The Design-Build Team shall be responsible for all Permanent Utility Easements, as well as all additional right of way and easements that may be required for their design and construction.

### **Construction Engineering Inspection (CEI) Scope of Work**

- The Department will be responsible for CEI work.