

## **U-2925 Project Synopsis**

### **Project Description and Purpose**

Project U-2925 consists of constructing a four-lane median divided facility, with full control of access within the US 52 interchange area, from SR 4326 (Rams Drive) to SR 4325 (Martin Luther King Jr. Drive) in Winston-Salem, Forsyth County. The approximately 1.1-mile project will improve access to US 52 for the area surrounding Winston-Salem State University, Salem Academy and College, and the proposed Piedmont Triad Research Park, and improve system linkage for east-west traffic in this area of Winston-Salem.

### **Planning**

The U-2925 Environmental Assessment (EA) was approved on October 31, 2011 and the U-2925 Finding of No Significant Impacts (FONSI) is anticipated to be approved in April 2012. The Design-Build Team shall adhere to all environmental documents commitments. A copy of the EA and the FONSI will be made available to the short-listed Design-Build Teams.

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

During the project's construction, the Design-Build Team shall coordinate with the Division 9 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 Salem Creek Connector shall be designed and constructed to meet a 60 and 40 mph design speeds for urban freeway and local streets.

The project also includes the design, reconstruction and realignment of the existing interchange at US 52 as well as other surrounding -Y- improvements and connections.

### **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 Salem Creek Connector over Salem Creek
- Dual Bridges on US 52 over Salem Creek
- Dual Bridges on US 52 over Salem Creek Connector
- Bridge on Rams Drive over US 52
- Bridge on Ramp D over Salem Creek
- Bridge on Ramp A over Salem Creek

- Bridge on Winston Salem Southbound Railroad over Salem Creek Connector
- Bridge on Winston Salem Southbound Railroad Connector over US 52, Ramps B & C, and Vargrave Street.

## **Railroad Coordination**

The Design-Build Team shall be responsible for coordinating all railroad design and construction details on Winston-Salem Southbound Railroad right of way and obtaining executed agreements 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 develop a State Stormwater Management Plan.

The Design-Build Team shall obtain FEMA compliance for the regulated floodways.

The Design-Build Team will be responsible for all Culvert and Bridge Survey Reports.

## **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; and a State Stormwater Permit.

## **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.

## **Pavement Marking Scope of Work**

The Design-Build Team shall be responsible for the design and installations of all Pavement Markings.

## **Traffic Signals Scope of Work**

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

## **ITS Scope of Work**

The Design-Build Team shall be responsible for the design and installation of ITS devices and a communication cable system, including but not limited to one DMS, CCTV cameras and fiber optic cable.

## **Pavement Design Scope of Work**

Final 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.

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

The Design-Build Team shall be responsible for all right of way and easement acquisitions required by the proposed design and / or construction.

## **Lighting Scope of Work**

The Department will be responsible for the lighting design. The Design-Build Team shall be responsible for the installation of all required lighting.

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

The Department will be responsible for CEI work.

## **Alternative Technical Concepts**

It is anticipated that Alternative Technical Concepts will be permitted in this procurement.