

R-2248E Project Synopsis

November 16, 2009

Project Description and Purpose

- The Design-Build Project R-2248E consists of constructing a fully controlled access freeway on new alignment from West of NC115 to West of I-85 in Mecklenburg County. The approximately 5.1-mile project will extend the urban loop around Charlotte, NC. The primary purpose of this project is to improve traffic capacity deficiencies and increase mobility within the region.

Planning

- The R-2248B Final Environmental Impact Statement (FEIS) was approved on January 29, 1992 and the R-2248B Record of Decision (ROD) was approved on October 15, 1992. The R-2248E Categorical Exclusion for the I-485 and Prosperity Church Road Interchange was approved on May 10, 2006. A Right of Way Environmental Consultation was approved on June 4, 2009.
- The Design-Build Team shall adhere to all environmental documents commitments. A copy of the above listed documents will be made available to the short-listed Design-Build Teams.
- TIP Project R-2248E is following the Merger 01 Process. The Concurrence Point 4B Hydraulic Design Review Meeting was held on August 25, 2007.

Public Involvement Scope of Work

- During the project's construction, the Design-Build Team shall coordinate with the Division 10 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 an eight-lane divided facility with a variable width median. The Charlotte Outer Loop shall be designed and constructed to meet a 70 mph design speed for a rolling urban freeway designed to Interstate standards.
- The project includes the design and construction of the remainder of the interchange with NC115, a new split diamond interchange with Prosperity Church Road, and a new Single Point Urban Interchange (SPUI) with Mallard Creek Road.

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(s) at Alexanderana Rd and Norfolk Southern Railroad
 - Bridge(s) on -L- line at Norfolk Southern Railroad
 - Bridge on -CDWBL- at Norfolk Southern Railroad
 - Bridge(s) on -L- line at Eastfield Road
 - Bridge at Browne Road and -L- line
 - Bridge at Prosperity Church Road and -L- line

- Bridge at Loganville Drive and -L- line
 - Bridge at Prosperity Ridge Road and -L- line
 - Bridge(s) on -L- line over Future road
 - Bridge(s) on -L- line at Tributary to Stony Creek
 - Bridge on -RPCY22- at Tributary to Stony Creek
 - Bridge at Odell School Rd / Mallard Creek Rd on -L- line
 - Bridge at -Y20- and -Y22-
 - Bridge(s) at -Y22- and Tributary to Stony Creek
- It is anticipated that a minimum of five reinforced concrete box culverts will be required.
 - It is anticipated that sound barriers will be required on this project.

Railroad Coordination

- The Design-Build Team shall be responsible for coordinating all railroad design and construction details on Norfolk Southern 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.

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 and a NC Department of Environment and Natural Resources, Division of Water Quality (DWQ) Section 401 Water Quality Certification. The Design-Build Team shall be responsible for completing the Merger process, including 4C Concurrence.

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.

GeoEnvironmental Scope of Work

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

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 concrete 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.

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.

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

- The Design-Build Team shall be responsible for all right of way and easement acquisitions.
- The Design-Build Team shall be responsible for any additional right of way and easement acquisitions required by the proposed design and / or construction for those parcels that are not impacted by the Department's preliminary design.

Construction Engineering Inspection (CEI) Scope of Work

- The Department will be responsible for CEI work.