

R-4902 Project Synopsis

Project Description and Purpose

- Project R-4902 consists of widening existing I-485 (Charlotte Outer Loop) from four to six lanes, from I-77 to US 521 (Johnston Road) in Mecklenburg County. The project is approximately 6.8 miles long. An additional inside lane is to be added in each direction and will be constructed within existing right of way. The project also includes a new flyover from US 521 North to I-485 West, construction of an auxiliary lane to the outside shoulder of westbound I-485 and the widening of existing bridges. The project's primary purpose is to increase system capacity and improve efficiency on I-485 for local and regional traffic

Planning

- The R-4902 Categorical Exclusion (CE) was approved on June 29, 2011. The Design-Build Team shall adhere to all environmental documents commitments. A copy of the CE will be made available to the short-listed Design-Build Teams. A public hearing is scheduled to be held on September 15, 2011.

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 widening on I-485, consisting of one lane in each direction, to make I-485 a six-lane divided facility. Existing lanes will be resurfaced.
- The project also includes the design and construction of a new flyover from US 521 North to I-485 West and the construction of an auxiliary lane to the outside shoulder of westbound I-485 between US 521 and NC 51 (Pineville-Matthews 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, including but not limited to bridge widening at:
 - I-485 Westbound / Eastbound at Sugar Creek
 - I-485 Westbound / Eastbound at Westinghouse Blvd.
 - I-485 Westbound / Eastbound at Little Sugar Creek
 - I-485 Westbound / Eastbound at NC 51
 - I-485 Eastbound / Westbound at McMullen Creek
 - I-485 Eastbound / Westbound at McAlpine Creek
- The Design-Build Team shall be responsible for the design and construction of a flyover structure at I-485 / US 521 (Johnston Road)

- It is anticipated two retaining walls and one sound barrier wall will be required.

Railroad Coordination

- The Design-Build Team shall be responsible for coordinating all railroad design and construction details under 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 develop a State Stormwater Management Plan.
- The Design-Build Team shall provide Bridge Survey Reports as well as FEMA compliance documents (CLOMR, MOA) as necessary.

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, if any, 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 Permit and a NC Department of Environment and Natural Resources, Division of Water Quality (DWQ) Section 401 Water Quality Certification.

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 Management 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.

ITS Scope of Work

- The Design-Build Team shall be responsible for the installation of DMS and Travel Information Devices (IT Cameras) and Appurtenances.

Pavement Marking Scope of Work

- The Design-Build Team shall be responsible for the development and installation of 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, fabrication 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.
- The Design-Build Team shall be responsible for all structure 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.

Construction Engineering Inspection (CEI) Scope of Work

- The Department will be responsible for CEI work.