

I-3802A Project Synopsis

Project Description and Purpose

- The Design-Build Project I-3802A will provide an eight-lane divided facility from north of NC 73 to Lane Street in Cabarrus County. The project will reconstruct and widen approximately 8 miles of I-85, including interchange modifications.
- The project's primary purpose is to provide relief from present and future congestion and provide a higher level of service on I-85 and the interchanges within the project limits.

Planning

- It is anticipated that the I-3802A Categorical Exclusion (CE) will be approved in July, 2013.
- 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.
- TIP Project I-3802A is following the Merger 01 Process. The Department will obtain all necessary concurrence up to, and including, Concurrence Point 4A. The Design-Build Team shall be responsible for obtaining all remaining Merger 01 Concurrence Points.

Public Involvement

- 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

- The Design-Build Team shall design and construct an eight-lane divided facility with a 22-foot median. The I-85 reconstruction and widening shall be designed and constructed to meet a 70-mph design speed for a rolling urban freeway designed to Interstate standards.
- The Design-Build Team shall design and construct interchange modifications at US 29 / US 601 (Cannon Boulevard / Concord Parkway), Dale Earnhardt Boulevard / Copperfield Boulevard and Lane Street.
- The Design-Build Team shall design and construct -Y- Lines that provide the same or better access, widening and improvements as those shown on the Public Hearing Map, Interchange Maps (Proposed Modifications) and Preliminary Plans provided by the Department.

Structures

- 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:
 - I-85 over Irish Buffalo Creek
 - Main Street / Kannapolis Highway over I-85
 - Railroad bridge over I-85
 - Railroad bridge over US 29A (Kannapolis Highway)
 - South Ridge Avenue over I-85
 - US 29 / US 601 over I-85
 - Lake Concord Road over I-85
 - I-85 over Cold Water Creek
 - Centergrove Road over I-85
 - Brantley Road over I-85
 - Lane Street over I-85

- The Design-Build Team shall be responsible for the removal and disposal of the following bridges:
 - Dual bridges on I-85 over Irish Buffalo Creek
 - Main Street / Kannapolis Highway over I-85
 - Railroad bridge over I-85
 - Railroad bridge over US 29A (Kannapolis Highway)
 - South Ridge Avenue over I-85
 - Dual bridges on US 29 / US 601 over I-85
 - Lake Concord Road over I-85
 - Dual bridges on I-85 over Cold Water Creek
 - Centergrove Road over I-85
 - Brantley Road over I-85
 - Lane Street over I-85

- The Design-Build Team shall be responsible for the replacement and / or extension of all reinforced concrete box culverts impacted by the project/s design and / or construction.

- The Design-Build Team shall be responsible for the design and construction of all required retaining walls and sound barrier walls. The Department will be responsible for the Final Design Noise Report.

Railroad Coordination

- The Design-Build Team shall be responsible for coordinating all railroad design and construction details on North Carolina Railroad and Norfolk Southern Railway right of way and obtaining executed agreements with the Railroads.

Hydraulics

- 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 Design-Build Team shall be responsible for all Culvert and Bridge Survey Reports.
- The Design-Build Team shall develop a State Stormwater Management Plan.

Geotechnical

- 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

- Thirteen underground storage tanks (UST's) and three other sites have been discovered on the project and have the potential to be contaminated. The NCDOT will complete preliminary studies on these sites and provide the results to the short-listed teams.
- The Design-Build Team shall adhere to all Right of Way Branch procedures regarding the acquisition of contaminated property and the right of way acquisition recommendations provided by the Department.
- The specific Design-Build Team and NCDOT responsibilities for geoenvironmental remediation will be outlined in the Request for Proposals.

Environmental

- 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.
- The Design-Build Team shall be responsible for completing the Merger 01 Process, including but not limited to obtaining Concurrence Points 4B and 4C.

Erosion Control

- 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.

Transportation Management

- The Design-Build Team shall be responsible for the development and implementation of the Transportation Management Plans. A list of parameters, such as lane closures, time restrictions and general guidelines will be provided in the Request for Proposals.

Pavement Markings

- The Design-Build Team shall be responsible for the development and installation of the Pavement Marking Plans.

Traffic Signals

- The Design-Build Team shall be responsible for the design and installation of all temporary and permanent traffic signals. The Design-Build Team shall be responsible for upgrading several existing traffic signals.

Pavement

- Alternate asphalt and concrete mainline pavement designs and asphalt -Y- Line 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

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

Location and Surveys

- Electronic surveys 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.

Utility Construction

- The Design-Build Team shall be responsible for the design and construction of water and sewer facilities in conflict with the project.

R/W Utilities, Conflicts and / or Construction

- 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

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

Lighting

- 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)

- The Department will be responsible for CEI work.