

I-5110 / R-2413A / R-2413B Project Synopsis

Stipend

- A stipulated fee of **\$100,000** will be awarded to each short-listed Design-Build Team that provides a responsive, but unsuccessful, Design-Build Proposal in response to the final RFP and all associated addenda. If a contract award is not made, all short-listed Design-Build Teams that provide a responsive Design-Build Proposal shall receive the stipulated fee.

Project Description and Purpose

- The proposed Design-Build Project will combine TIP Project Nos. I-5110, R-2413A, and R-2413B.
- The project may include TIP Project No. U-2524BC. Reference the Request for Qualifications (RFQ) for further detail.
- TIP Project Nos. I-5110, R-2413A, and R-2413B provide a multilane divided facility, primarily on new location, that will serve as the future I-73 interstate. The project limits are from the existing interchange of Joseph M. Bryan Boulevard (SR 2085) and Airport Parkway, running west to existing NC 68 and then northeast toward US 220 where it will tie into TIP Project No. R-2413C/R-2309 which is currently under construction.
- The project purpose is to enhance north-south mobility and interstate connectivity through North Carolina and the Piedmont Triad region.

Planning

- The I-5110 Environmental Assessment (EA) was completed in February 2012 and the Finding of No Significant Impact (FONSI) was completed in September 2012.
- The R-2413 State Environmental Assessment (EA) was completed in September 1993 and the State Finding of No Significant Impact (FONSI) was completed in March 1995. A Re-evaluation for this project was completed in August 2009.
- The Categorical Exclusion for the proposed taxiway bridge was completed February 2013.
- The Design-Build Team shall adhere to all environmental document commitments. A copy of the completed documents will be made available to the short-listed Design-Build Teams.

Public Involvement

- During the project's construction, the Design-Build Team shall coordinate with the Division 7 Office and the Construction Unit to inform the public of lane closures, construction progress, etc.

Roadway

- The Design-Build Team shall be responsible for the design and construction of a four-lane divided interstate with a median that varies from 46 feet to 70 feet from the existing interchange at Joseph M. Bryan Boulevard (SR 2085) and Airport Parkway to the tie in at TIP Project No. R-2413C/R-2309 south of US 220 near the Haw River. The proposed interstate shall be designed and constructed to meet a 70 mph design speed.
- The Design-Build Team shall be responsible for the design and construction to tie back into designated –Y- lines and all designated service roads.
- The project includes the design and construction of new interchanges at the following locations:
 - NC 68 and Joseph M. Bryan Boulevard (Future I-73) near the Piedmont Triad International Airport
 - NC 68 between Edgefield Road (SR 2011) and Leabourne Road (SR 2016).
 - NC 150 (Oak Ridge Road)

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 at the following anticipated locations:
 - Taxiway Bridge for future connection from Piedmont International Airport (PTI) to proposed airport development over the –L- Line.
 - Dual Bridges on the –L- Line over NC 68 at Pleasant Ridge Road (SR 2133)
 - Flyover Bridge on –L- Line over NC 68
 - Dual Bridges on the –L- Line over NC 68 between Edgefield Road (SR 2011) and Leabourne Road (SR 2016)
 - Bridge on Ramp RP1B over Pleasant Ridge Road (SR 2133)
 - Grade separation at Alcorn Road (SR 2269) and the –L- Line
 - Grade separation at Bunch Road (SR 2128) and the –L- Line
 - Dual Bridges on the –L- Line over Reedy Fork Creek
 - Grade separation at Brookbank Road (SR 2127) and –L- Line
 - Grade separation at Oak Ridge Road (NC 150) and the –L- Line
 - Grade separation at Deboe Road (SR 2155) and the –L- Line
- It is anticipated that a minimum of five (5) reinforced concrete box culverts will be required. Two (2) of the reinforced concrete box culverts will be pedestrian culverts. Signed and sealed culvert plans will be provided by the Department.

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 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.

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

- The specific Design-build team and NCDOT responsibilities for geoenvironmental remediation will be outlined in the Request for Proposals.

Environmental

- The Department will obtain the necessary permits for R-2413A and R-2413B by September 2013.
- The Design-Build Team shall be responsible for preparing all documents necessary for the Department to obtain the environmental permits for I-5110.
- 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 to obtain Concurrence Point 4B and 4C for I-5110.

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.

Traffic Management

- The Design-Build Team shall be responsible for the development and implementation of 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

- The Design-Build Team shall be responsible for developing the Pavement marking Plans, and installing all required temporary and permanent pavement markings and markers.

Traffic Signals

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

ITS

- The Design-Build Team shall be responsible for the design and installation of all Intelligent Traffic Systems (ITS) including any required Digital Message Systems (DMS).

Pavement Design

- Alternate asphalt and 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

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

Location and Surveys

- 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

- 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 Department has begun the right of way acquisition process for R-2413A AND R-2413B. The Design-Build Team shall be responsible for all right of way and easement acquisitions not finalized prior to award of the contract for R-2413A AND R-2413B.
- The Design-Build Team shall be responsible for all right of way and easement acquisitions for I-5110.
- 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 the Department has completed the right of way acquisition process.

Construction Engineering Inspection (CEI)

- The Department will be responsible for CEI work.

U-2524BC

TIP Project No. U-2524BC will provide an additional lane on the ramp from eastbound Joseph M. Bryan Boulevard to southbound I-840 (Greensboro Western Loop) and on the ramp from northbound I-840 to westbound Joseph M. Bryan Boulevard. These ramps currently have one lane each. The project will also include the replacement of Bridge No. 743, Inman Road (SR 2140) over Joseph M. Bryan Blvd.

TIP Project No. U-2524BC will be processed using a Programmatic Categorical Exclusion (PCE) that will be completed by September 2013.