

I-3819B / U-6039 Project Synopsis

Stipend

- A stipulated fee of **\$75,000** will be awarded to each short-listed Design-Build Team that provides a responsive, but unsuccessful, Design-Build Proposal in response to the Final Request for Proposals 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. In the event that the Department suspends or discontinues the procurement process prior to the Design-Build Proposal submittal date current at the time of the suspension, no stipulated fee will be paid.

Project Description and Purpose

- The Design-Build Project I-3819B / U-6039 will provide the ultimate I-40 / I-77 interchange improvements and access management solutions on SR 2321 (East Broad Street) from Vine Street to SR 2422 (Signal Hill Drive). The project will also 1) provide I-40 collector-distributor roadways between the US 21 and I-77 interchanges, 2) modify the I-40 / Old Mocksville Road interchange, 3) modify the I-77 / East Broad Street interchange, and 4) widen I-77 to eight lanes.
- The primary purpose of this project is to improve traffic flow along the I-40 and I-77 corridors; and improve regional connectivity between Iredell County and points east, west, north, and south within North Carolina and across the Interstate system.

Planning

- The I-3819 Environmental Assessment (EA) was approved on November 29, 2006.
- The I-3819 Finding of No Significant Impact (FONSI) was approved on August 5, 2008.
- The U-6039 Categorical Exclusion Type I-A (CE-1A) is anticipated to be approved in March 2018

Public Information

- During the project's construction, the Design-Build Team shall coordinate with NCDOT, the Division 12 Office, the Construction Unit, and other local municipalities to inform the public of lane closures, construction progress, etc.

Roadway

- The Design-Build Team shall design and construct the ultimate I-40 / I-77 interchange improvements not completed as part of the I-3819A project.
- The Design-Build Team shall design and construct modifications to the I-77 / East Broad Street interchange.

- The Design-Build Team shall design and construct modifications to the I-40 / Old Mocksville Road interchange.
- The Design-Build Team shall design and construct roadway and access management improvements along -Y9- (East Broad Street).
- The I-40 and I-77 improvements shall be designed and constructed to meet a 60 mph design speed for a rolling freeway designed to interstate standards.

Structures

- The Design-Build Team shall design and construct all structures necessary to complete the project, including but not limited to new structures at the following anticipated locations:
 - Flyover on -YRPCA- over I-40 / I-77 Interchange
 - Flyover on -YRPAC- over I-40 / I-77 Interchange
 - Bridge on -YRPC-
 - Bridge on -YRPAC- over unnamed creek
 - Bridge on -L- (I-40) over unnamed creek
 - Bridge on -Y- (I-77) over Fourth Creek and Museum Greenway path
- The Design-Build Team shall design and construct bridge widening for the mainline (I-40) dual bridges over -YRPBD-
- The Design-Build Team shall replace the following structures:
 - Dual bridges on -Y- (I-77) over -L- (I-40)
 - Bridge on -Y9- over -Y- (I-77)
 - Bridge on Single on -Y10- over -Y- (I-77)
- The Design-Build Team shall extend all reinforced concrete box culverts impacted by the project's design and / or construction. It is anticipated that three reinforced concrete box culverts will require extensions.
- The Design-Build Team shall design and construct all required retaining walls and sound barrier walls. The Design-Build Team shall develop the Design Noise Report (DNR).

Pavement

- Final asphalt pavement designs will be provided in the Request for Proposals.
- The Design-Build Team shall design all temporary pavements and evaluate existing shoulders and roadways regarding their suitability for carrying traffic during construction, if necessary.

Hydraulics

- The Design-Build Team shall design and construct all storm drainage.
- The Design-Build Team shall obtain FEMA compliance for the regulated stream crossings.
- The Design-Build Team shall be responsible for all Bridge Survey Reports and Culvert 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 design and construct all foundations, embankments, slopes, retaining walls and temporary structures.

Geoenvironmental

- The specific Design-Build Team and NCDOT geoenvironmental remediation responsibilities, if any, will be outlined in the Request for Proposals.

Transportation Management

- The Design-Build Team shall develop and implement 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.

Signing

- The Design-Build Team shall design, fabricate and install all standard signs required to appropriately sign the mainline and all -Y- Lines.

Pavement Markings

- The Design-Build Team shall develop the Pavement Marking Plans and install all required temporary and permanent pavement markings and markers.

Traffic Signals

- The Design-Build Team shall design and install all temporary and permanent traffic signals.
- The Design-Build Team shall install two new traffic signals and upgrade an existing traffic signal.

ITS

- The Design-Build Team shall design and install all Intelligent Traffic Systems (ITS) infrastructure and devices, including, but not limited to, fiber-optic communications cable and conduit, CCTV cameras, travel information Dynamic Message Signs (DMS), gate control systems, and related hardware.

Environmental

- The Design-Build Team shall prepare all documents necessary for the Department to obtain the environmental permits for this project. The anticipated required permits include a US Army Corps of Engineers (USACE) Individual Section 404 Permit and a NC Department of Environment and Natural Resources (DENR) Division of Water Resources (DWR) Individual Section 401 Water Quality Certification.
- Project I-3819B / U-6039 is not in the Merger Process used by the environmental agencies and the Department to obtain environmental permits. The Design-Build Team shall participate and present information for an interagency hydraulic design review meeting and an interagency permit impacts meeting. These meetings shall adhere to the Concurrence Point 4B and Concurrence Point 4C requirements of the Merger Process.

Erosion Control

- The Design-Build Team shall be responsible for all erosion control designs and implementation.

Utility Construction

- The Design-Build Team shall design and construct the relocation of all 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 coordinate the construction / relocation of private utilities with the appropriate owners.

Location and Surveys

- Electronic surveys will be provided to the short-listed teams. The Design-Build Team shall be responsible for all 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.

Right of Way

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

Lighting

- The Department will provide signed and sealed Lighting Plans.
- The Design-Build Team shall install all lighting.

Construction Engineering Inspection (CEI)

- The Department will be responsible for CEI work.