I-5719 / U-5800 / U-6044
Project Synopsis

Stipend

- A stipulated fee of **$1,180,000.00** 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 I-5719 / U-5800 / U-6044 Design-Build Project adds lanes to I-85 from US 321 (North Chester Street – Exit 17) to east of NC 273 (Beatty Drive – Exit 27), improves the NC 7 (Main Street) and US 29 / 74 (Wilkinson Boulevard) intersection in Belmont, and widens and improves SR 2200 (Cox Road) from I-85 to US 29 / 74 (East Franklin Boulevard), and improves the intersection of SR 2200 (Cox Road / Armstrong Park Road) and US 29 / 74 (East Franklin Boulevard) in Gaston County. The approximately 10.5-mile project provides an eight-lane divided facility along I-85. The project also reconstructs approximately 2.8 miles of railroad for Norfolk Southern and Piedmont and Northern Railways.

- The purpose of this project is to reduce congestion and improve mobility along I-85 and improve traffic operations and safety at the NC 7 (Main Street) / US 29 / 74 (Wilkinson Boulevard) intersection, along SR 2200 (Cox Road) from I-85 to US 29 / 74 (East Franklin Boulevard), and the SR 2200 (Cox Road / Armstrong Park Road) / US 29 / 74 (East Franklin Boulevard) intersection.

Planning

- The I-5719 / U-5800 Type III Categorical Exclusion is anticipated to be approved in March 2024.
- The U-6044 Type II-B Categorical Exclusion is anticipated to be approved in May 2024.
- The Design-Build Team shall adhere to all environmental document commitments. A copy of the environmental documents noted above will be made available to the short-listed Design-Build Teams.

Public Information

- During the project's construction, the Design-Build Team shall coordinate with the Division 12 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 26-foot median from US 321 (North Chester Street – Exit 17) to east of NC 273 (Beatty Drive – Exit 27). The Design-Build Team shall design and construct I-85 to meet a 65-mph design speed for a freeway designed to interstate standards.

- The Design-Build Team shall design and construct interchange modifications at US 321 (North Chester Street – Exit 17), NC 7 (East Ozark Avenue – Exit 19), NC 279 (North New Hope Road – Exit 20), SR 2200 (Cox Road – Exit 21), SR 2329 (South Main Street – Exit 22), NC 7 (McAdenville Road / Main Street – Exit 23), SR 2093 (Belmont Mt. Holly Road / Main Street – Exit 26) and NC 273 (Beatty Drive – Exit 27).

- The Design-Build Team shall upgrade the NC 7 (Main Street) / US 29 / 74 (Wilkinson Boulevard) intersection.

- The Design-Build Team shall widen and upgrade SR 2200 (Cox Road) from I-85 to US 29 / 74 (East Franklin Boulevard).

- The Design-Build Team shall upgrade the SR 2200 (Cox Road / Armstrong Park Road) / US 29 / 74 (East Franklin Boulevard) intersection.

- The Department will provide a Traffic Noise Report. The Design-Build Team shall develop the Final Design Noise Report based on the final roadway plans developed by the Design-Build Team.

Structures

- The Design-Build Team shall design and construct all structures necessary to complete the project, including but not limited to, structures at the following locations:

    - Bridge on US 321 (North Chester Street) over I-85 (rehabilitation only)
    - Bridge on SR 2278 (Dr M.L.K. Jr. Way) over I-85
    - Bridge on SR 2909 (Modena Street) over I-85
    - Bridge on P&R Railway (west of East Ozark Avenue) over I-85
    - Bridge on NC 7 (East Ozark Avenue) over I-85
    - Bridge on Norfolk Southern Railway (east of East Ozark Avenue) over I-85
    - Bridge on NC 279 (North New Hope Road) over I-85
    - Bridge on Aberdeen Boulevard over I-85
    - Bridge on SR 2200 (Cox Road) over I-85
    - Bridge on SR 2339 (South Church Street) over I-85
    - Bridge on SR 2329 (South Main Street) over I-85 (widening and rehabilitation)
    - Bridge on Norfolk Southern Railway (west of Groves Street) over I-85
    - Bridge on SR 2213 (Groves Street) over I-85
    - Bridge on NC 7 (McAdenville Road / Main Street) over I-85
    - Bridge on I-85 over South Fork Catawba River (widening and rehabilitation)

- Bridge on SR 2000 (Hickory Grove Road) over I-85
- Bridge on SR 2093 (Belmont Mt. Holly Road / Main Street) over I-85
- Bridge on P&R Railway (east of Belmont Mt. Holly Road) over I-85
- Bridge on NC 273 (Beaty Drive) over I-85 (rehabilitation only)

- The Design-Build Team shall design and construct all reinforced concrete box culverts, including but not limited to extending, supplementing / replacing existing reinforced concrete box culverts impacted by the project's design and / or construction.

- The Design-Build Team shall design and construct all required sound barrier walls and retaining walls.

Environmental

- The Design-Build Team shall prepare all documents necessary for the Department to obtain the environmental permits. The anticipated required environmental 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.

- Project I-5719 / U-5800 is in the Merger Process used by the environmental agencies and the Department to obtain environmental permits. The Design-Build Team shall complete the Merger Process, including but not limited to obtaining Concurrence Point 4B and Concurrence Point 4C.

- Project U-6044 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 used by the environmental agencies and the Department to obtain environmental permits.

Erosion Control

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

- The Design-Build Team shall develop a 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 Department has identified 23 sites of concern within the proposed project study area.

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

Hydraulics

- The Design-Build Team shall design and construct all storm drainage.

- The Design-Build Team shall obtain FEMA compliance for the regulated stream crossing.

- The Design-Build Team shall develop all Bridge and Culvert Survey Reports.

ITS

- The Design-Build Team shall design and install ITS infrastructure, including but not limited to conduit, fiber optic communications cable, and components for a future high-speed fiber optic communications cable.

- The Design-Build Team shall design, install and integrate ITS communication equipment, including but not limited to Local Area Network Equipment, Dynamic Message Signs and Closed-Circuit Television Cameras.

Lighting

- The Department will provide signed and sealed Lighting Plans

- The Design-Build Team shall install all Lighting.

- The Design-Build Team shall design, provide, and install a lighting system in the interior barrier between the railway and greenway to aid visibility of pedestrians using the greenway during nighttime hours.

- The Design-Build Team shall design, provide, and install a complete conduit system for future lighting on all Y-line bridges located within the limits of the project.

Location and Surveys

- The Department will provide electronic surveys. 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 by the Department. The Design-Build Team shall be responsible for all supplemental SUE work.

- The Design-Build Team shall be responsible for all structure surveys.

Pavement Markings

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

Pavement Design

- Alternate asphalt and concrete mainline pavement designs will be provided in the Request for Proposals.

- Asphalt -Y- Line 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.

Railroad Coordination and Construction

- The Design-Build Team shall coordinate all construction details on Norfolk Southern Railway's and NCDOT Rail Division's right of way / easement and obtain an executed agreement(s) with the railroad(s).

- Design and construction will include but not be limited to Norfolk Southern Railway drainage and grading of mainline and rail yard, Norfolk Southern Railway bridges, NCDOT Rail Division / Piedmont and Northern Railway drainage, grading and track work of mainline and spur line, and NCDOT Rail Division / Piedmont and Northern Railway bridges.

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.

Right of Way

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

Signing

- The Design-Build Team shall design, fabricate and install all roadway signs.

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.

Utility Construction

- For all water and sewer facilities in conflict with the project, the Design-Build Team shall design and construct the required relocations.

Aesthetics

- The Design-Build Team shall design and construct aesthetic components for the project, including but not limited to aesthetic treatments on bridges, retaining walls and sound barrier walls. The specific aesthetic treatment requirements will be outlined in the Request for Proposals.

Cost-Loaded Critical Path Method Project Schedule (CPM Schedule)

- The Design-Build Team will be required to provide a Cost-Loaded Critical Path Method Project Schedule.

Construction Engineering Inspection (CEI) Scope of Work

- The Department will be responsible for CEI work.