

R-2823 Project Synopsis

October 15, 2007

Project Description and Purpose:

- The Design-Build Project, R-2823, is the Rocky Mount Northern Outer Loop in Nash County. The project extends from Hunter Hill Road (SR 1604) to US 301 on new location. The total project length is approximately 4.6 miles. The proposed improvements consist of a four-lane divided facility with partial control of access.
- The purpose of this project is to improve system linkage and reduce travel time between existing residential areas in western Rocky Mount and existing industrial areas in northern Rocky Mount.

Planning:

- An Environmental Assessment (EA) / Draft Section 4(f) Evaluation was approved on October 4, 2006. It is anticipated that the Finding of No Significant Impact (FONSI) will be approved in October 2007. The Design-Build Team shall adhere to all commitments stated in the environmental documents. Copies of these documents will be made available to the short-listed Design-Build Teams.
- As detailed in the FONSI, Alternative H, the avoidance alternative, was selected as the preferred alternative.

Public Involvement Scope of Work:

- During the project's construction, the Design-Build Team shall coordinate with the Division 4 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 a four-lane divided facility with a 30-foot median. The Rocky Mount Northern Outer Loop will be designed and constructed to meet a 60-mph design speed for a flat urban minor arterial.
- The Design-Build Team shall design and construct at-grade intersections with the Rocky Mount Northern Outer Loop, providing adequate storage for all turning movements at the following locations:
 - Hunter Hill Road (SR 1604)
 - Woodruff Road (SR 1613)
 - NC 43 / Benvenue Road
 - Peele Road (SR 1535)
 - NC 48 / Gold Rock Road
 - Fenner Road (SR 1538)
 - Bishop Road (SR 1545)
 - US 301

- The Design-Build Team shall design and construct -Y- Lines providing access, widening and improvements as indicated on the Design Public Hearing Map.

Structure Scope of Work:

- 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 locations that adhere to the AASHTO LRFD Bridge Design Specifications:
 - Rocky Mount Northern Outer Loop over Compass Creek - Dual Structures
 - Rocky Mount Northern Outer Loop over Hornbeam Branch - Dual Structures
- It is anticipated that reinforced concrete box culverts will be required at the following locations:
 - Goose Branch
 - Tributary to Compass Creek
- The Design-Build Team shall be responsible for the design and construction of all required noise walls. The Department will be responsible for the Final Noise Report. It is anticipated that two noise walls will be required along the Rocky Mount Outer Loop. One wall is anticipated west of NC 48 and the other wall is anticipated east of Bishop Road.

Hydraulic Scope of Work:

- The Design-Build Team shall be responsible for all storm drainage design and construction.
- The Design-Build Team shall be responsible for all bridge survey reports and culvert survey reports.
- The Design-Build Team shall be responsible for compiling all FEMA CLOMR and LOMR forms, letters and mapping for NCDOT submittal for Compass Creek and Hornbeam Creek.

Geotechnical Investigation Scope of Work:

- Roadway and structural 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:

- Three known underground storage tank (UST) facilities and one unregulated home / farm heating UST have been discovered on the project and have the potential to be contaminated. The NCDOT will complete preliminary environmental studies on these sites and provide the results to the short-listed Design-Build 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.
- If any additional contaminated sites are discovered within the right of way, it shall be the Design-Build Team's responsibility to contact the Geotechnical Unit.
- The Design-Build Team and NCDOT responsibilities for geoenvironmental remediations will be outlined in the Request for Proposals (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. Permits will be needed for the following: US Army Corps of Engineers Section 404 Individual Permit, the NC Department of Natural Resources, Division of Water Quality (DWQ) Section 401 Water Quality Certification, Stream Buffer Permit (Tar-Pamlico).
- Two potential on-site mitigation sites are located within the project's corridor. The Design-Build Team and NCDOT responsibilities for on-site mitigation will be outlined in the RFP.

Erosion Control Scope of Work:

- All erosion control designs and implementation shall be the responsibility of the Design-Build Team.
- The Design-Build Team shall have a certified erosion control inspector on the project at all times during construction.

Traffic Control and Pavement Marking Scope of Work:

- The Design-Build Team shall be responsible for development and installation of the Traffic Control and Pavement Marking Plans.
- A list of parameters, such as lane closures, time restrictions and general guidelines will be provided in the RFP.

Pavement Design Scope of Work:

- Final asphalt pavement designs will be provided in the RFP.
- 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 and installation of roadway signs shall be the responsibility of the Design-Build Team.

Signal Scope of Work:

- The Design-Build Team shall be responsible for the design and installation of new traffic signals at the following intersections:
 - Rocky Mount Outer Loop / NC 43 (Benvenue Road)
 - Rocky Mount Outer Loop / NC 48
 - Rocky Mount Outer Loop / US 301 (Wesleyan Boulevard)
 - Rocky Mount Outer Loop / Fenner Road (SR 1538) - Tentative
- The Design-Build Team shall be responsible for the design and construction associated with required modifications to the existing traffic signal located at the Rocky Mount Outer Loop / Hunter Hill Road (SR 1604) intersection.
- The Design-Build Team shall be responsible for removal of the existing traffic signal at the Winstead Avenue Extension (SR 1613) / NC 43 (Benvenue Road) intersection.
- The Design-Build Team shall be responsible for the design and installation of traffic cameras (CCTV) at the Winstead Avenue / Hunter Hill Road and the US 301 / Fenner Road intersections

Right of Way Acquisition Scope of Work:

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

Location & Surveys Scope of Work:

- Electronic surveys are completed and will be provided to the short-listed teams. Supplemental surveys shall be the responsibility of the Design-Build Team.
- Known existing utilities have been located and will be included with the survey data. All supplemental SUE work shall be the responsibility of the Design-Build Team.
- All structure surveys shall be the Design-Build Team's responsibility.

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 preparations and/or obtaining any and all necessary utility agreements.
- The Design-Build Team shall be responsible for coordinating the construction / relocation of private utilities with the appropriate owners.

Construction Engineering Inspection (CEI) Scope of Work:

- The Division Office will be responsible for CEI work.