# I-5338 / I-5311 Project Synopsis

## **Project Description and Purpose**

- Project I-5338 / I-5311 consists of the I-40 / US 64 pavement reconstruction from SR 1319 (Jones Franklin Road) to I-440 / US 64 (Exit 301) and the I-440 / US 64 pavement reconstruction from I-40 / US 64 (Exit 301) to north of US 64 / US 264 (Knightdale Bypass) in Wake County. The project is approximately 11.1 miles long.
- The primary purpose of the project is to replace the pavement structure that has served its useful life.

## Planning

- The I-5338 Categorical Exclusion (CE) is anticipated to be approved in September 2012.
- The I-5311 Programmatic Categorical Exclusion (PCE) was approved on February 24, 2012.
- The Design-Build Team shall adhere to all environmental document commitments. A copy of the CE and PCE will be made available to the short-listed Design-Build Teams.
- Neither TIP Project I-5338 nor I-5311 is a candidate to follow the Merger 01 Process.

## **Public Involvement**

• During the project's construction, the Design-Build Team shall coordinate with the Division 5 Office and the Construction Unit to inform the public of lane closures, construction progress, etc.

## Roadway

- The Design-Build Team shall design and construct I-40 / US 64 and I-440 / US 64 to meet a 70 mph design speed for a level freeway to interstate standards.
- The Design-Build Team shall design and construct auxiliary lanes between the US 1 / US 64 and Gorman Street interchanges and the Gorman Street and Lake Wheeler Road interchanges.
- The Design-Build Team shall design and construct concrete median barrier from Lake Wheeler Road to the I-40 / I-440 split.

## Structures

• The Design-Build Team shall widen all structures necessary to complete the project.

- The Design-Build Team shall rehabilitate the following structures:
  - Bridge No. 276 (I-40 EBL over Gorman Street)
  - Bridge No. 281 (I-40 WBL over Gorman Street)
  - Bridge No. 571 (I-40 over South Saunders Street)
  - Bridge No. 293 (I-40 over South Wilmington Street)
  - Bridge No. 572 (I-40 over Hammond Road)
  - Bridge No. 298 (I-40 over Norfolk Southern Railroad and North Carolina Railroad)
  - Bridge No. 574 (Ramp D over Norfolk Southern Railroad and North Carolina Railroad)
  - Bridge No. 573 (Ramp A over Norfolk Southern Railroad and North Carolina Railroad)
  - Bridge No. 308 (I-40 over Garner Road)
  - Bridge No. 309 (I-40 over Hadley Street)
  - Bridge No. 313 (I-40 over South State Street)
  - Bridge No. 8 (I-440 over Sunnybrook Road)
  - Bridge No. 62 (I-440 NBL over Norfolk Southern Railroad and Crabtree Creek)
  - Bridge No. 66 (I-440 SBL over Norfolk Southern Railroad and Crabtree Creek)

# **Railroad Coordination**

• The Design-Build Team shall be responsible for coordinating all design and construction details on Norfolk Southern Railroad / North Carolina Railroad 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 prepare all required culvert survey reports.
- The Design-Build Team shall develop a State Stormwater Management Plan.
- The Design-Build Team shall complete all drainage maintenance work as outlined in the RFP.

# 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.

## 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 Section 404 Nationwide Permit(s).

## **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.

## Pavement

- Alternate asphalt and concrete pavement designs will be provided in the Request for Proposals.
- The Design-Build Team shall be responsible for all temporary pavement designs and the evaluation of existing shoulders and roadways regarding their suitability for carrying traffic during construction.

#### 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.

## **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 any right of way, easement and control of access acquisitions required by the proposed design and / or construction.

#### ITS

• The Design-Build Team shall be responsible for design and construction of ITS work as outlined in the RFP

## Lighting

• The Design-Build Team shall be responsible for the installation of all lighting.

## **Construction Engineering Inspection (CEI)**

• The Department will be responsible for CEI work.