



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

ROY COOPER  
GOVERNOR

JAMES H. TROGDON, III  
SECRETARY

August 15, 2018

**Addendum No. 4**

Contract No.: C204157  
TIP No.: U-2719 / U-4437  
County: Wake  
Project Description: I-440 / US 1 from south of SR 1313 (Walnut Street) to north of SR 1728 (Wade Avenue); and Grade Separations on Beryl Road, Norfolk Southern Railway / North Carolina Railroad / CSX Transportation and NC 54 (Hillsborough Street) at SR 1664 (Blue Ridge Road)

RE: Addendum No. 4 to Final RFP

**September 18, 2018 Letting**

To Whom It May Concern:

Reference is made to the Final Request for Proposals dated May 29, 2018 recently furnished to you on the above project. We have since incorporated changes, and have attached a copy of Addendum No. 4 for your information. Please note that all revisions have been highlighted in gray and are as follows:

The second and third pages of the *Table of Contents* have been revised. Please void the second and third pages in your proposal and staple the revised second and third pages thereto.

Page Nos. 240 and 244 of the *Roadway Scope of Work* have been revised. Please void Page Nos. 240 and 244 in your proposal and staple the revised Page Nos. 240 and 244 thereto.

Page No. 289 of the *Hydraulics Scope of Work* has been revised. Please void Page No. 289 in your proposal and staple the revised Page No. 289 thereto.

Page No. 388 of the *Transportation Management Scope of Work* has been revised. Please void Page No. 388 in your proposal and staple the revised Page No. 388 thereto.

Page No. 462 of the *Title VI and Nondiscrimination Standard Special Provision* has been revised. Please void Page No. 462 in your proposal and staple the revised Page No. 462 thereto.

*Mailing Address:*  
NC DEPARTMENT OF TRANSPORTATION  
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If you have any questions or need additional information, I can be reached by telephone at (919) 707-6900.

Sincerely,

A handwritten signature in black ink, appearing to read "Ronald E. Davenport, Jr.", written in a cursive style.

Ronald E. Davenport, Jr., PE  
State Contract Officer

RED/btk

cc: Ron Hancock, PE  
Joey Hopkins, PE  
Teresa Bruton, PE  
David Hering, PE  
File

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**PROPOSAL FORMS - ITEMIZED SHEET, ETC.**

- Itemized Proposal Sheet (TAN SHEET)
- Fuel Usage Factor Chart and Estimate of Quantities
- Listing of DBE Subcontractors
- Execution of Bid, Non-Collusion Affidavit, Debarment Certification and Gift Ban  
 Certification
- Signature Sheet

provided by the Department, 2) a greenway spur that connects the proposed greenway along Hillsborough Street to the existing greenway on Meredith College in proximity to Station 43+00 -Y30-, and 3) the sidewalk along SR 1012 (Western Boulevard) shown on the U2719\_WesternSidewalkExt\_Option1\_050918 Map provided by the Department. In case of conflicting design parameters, and / or ranges, in the Preliminary Roadway Plans and the aforementioned Map, the proposed design shall adhere to the most conservative values. If 1) curb and gutter replacement, excluding radius returns at Chaney Road, 2) channelization island improvements / replacements, and / or 3) milling and filling are required along SR 1012 (Western Boulevard) solely due to the sidewalk installation along SR 1012 (Western Boulevard) noted above, the associated design and construction costs will be paid for as extra work in accordance with Subarticle 104-8-(A) of the *Standard Specifications for Roads and Structures*. The Design-Build Team shall include all other design and construction costs associated with the aforementioned sidewalk installation, including but not limited to retaining wall costs, in the lump sum price bid for the entire project.

- To accommodate the sidewalk along SR 1012 (Western Boulevard) noted above, the Design-Build Team shall design and construct improvements to Chaney Road, including but not limited to providing ADA compliant crosswalks and all required retaining walls.
- Unless noted otherwise elsewhere in this RFP, all berm widths shall be a minimum of ten feet wide or the width of the associated sidewalk plus two feet, whichever is greater.
- At the southeast corner of the Beryl Road bridge over SR 1664 (Blue Ridge Road), the Design-Build Team shall design and construct a minimum ten-foot wide ADA compliant pedestrian access facility that connects the sidewalk located along the south side of Beryl Road to the sidewalk located along the east side of SR 1664 (Blue Ridge Road).
- Due to right of way constraints, the Design-Build Team will be allowed to design and construct minimum ditch widths for the facility functional classification.
- Unless noted otherwise elsewhere in this RFP, all bridge rail offsets shall be the greater of 1) the bridge rail offset as indicated in the NCDOT *Roadway Design Manual*, 2) the approach roadway paved shoulder width, or 3) the offset required to achieve stopping sight distance (maximum 12-foot). Narrower bridge rail offsets based on bridge length will not be allowed. The Design-Build Team will not be required to widen existing bridges solely to provide the aforementioned minimum bridge rail offsets.
- The Design-Build Team shall design and construct all -Y- Lines such that the through movement is not required to change lanes throughout the project limits.
- The Design-Build Team shall design and construct at-grade intersections with the lane configurations as noted in the February 2018 Year 2040 No-Build and Build Traffic Operations Technical Memorandum for U-2719 Project and the March 2012 STIP U-4437 (Blue Ridge Road) Final Traffic Analysis Technical Memorandum provided by the Department.
- At all intersections impacted by the Design-Build Team's design and / or construction, excluding resurfacing, the Design-Build Team shall design and construct turn lanes that adhere to the greater of the following:
  - All turn lane lengths shall adhere to the NCDOT minimum turn lane lengths as defined in the NCDOT *Roadway Design Manual* (Reference Section 9-1, Figure 4).
  - All lengths for the turn lanes required by the aforementioned February 2018 Year 2040 No-Build and Build Traffic Operations Technical Memorandum for U-2719 Project and the March 2012 STIP U-4437 (Blue Ridge Road) Final Traffic Analysis Technical Memorandum provided by the Department shall adhere to the NCDOT Recommended Treatment for Turn Lanes. These lengths shall be determined by adding the storage length defined in the aforementioned memorandums and the minimum deceleration

- Unless noted otherwise elsewhere in this RFP, for both divided and undivided facilities, the Design-Build Team shall resurface all lanes and shoulders within the outermost construction limits of all proposed widening and construction, including any gaps along the facility where construction activities are not required. The Design-Build Team will not be required to resurface the sections noted below solely to adhere to the requirements to resurface gaps along a facility where construction activities are not required or to resurface to the outermost construction limits:
  - SR 1664 (Blue Ridge Road) – From SR 1012 (Western Boulevard) to Pylon Drive
  - Beryl Road – From SR 3007 (Hillsboro Street) to Pylon Drive
  - Western Boulevard – From the eastern limits of the mainline / Western Boulevard interchange improvements to Chaney Road
  - Ligon Street and Western Boulevard – Areas that consist solely of sidewalk construction
  - Capital Center Drive – Only if Capital Center Drive is not used for hauling (If Capital Center Drive is used for hauling, the Design-Build Team shall resurface Capital Center Drive.)
- The Design-Build Team shall design and construct greenways / multiuse paths in accordance with the 2012 AASHTO Guide for the Development of Bicycle Facilities, except those sections of greenways / multiuse paths that are steeper than five percent shall be designed and constructed in accordance with the FHWA Designing Sidewalks and Trails for Access. All greenways / multiuse paths typical sections shall consist of a minimum ten-foot paved facility with two-foot turf shoulders. (Reference the Pavement Management Scope of Work found elsewhere in this RFP)
- Excluding the modifications required herein, the Design-Build Team shall inform the Design-Build Unit, in writing, of all proposed design revisions, including but not limited to the following:
  - The Design-Build Team shall note in the Technical Proposal any proposed deviations to the preliminary design shown on the Preliminary Roadway Plans provided by the Department. The Design-Build Team shall be responsible for all activities, as deemed necessary by the Department or the FHWA, resulting from changes to the NCDOT preliminary design, including but not limited to, public involvement, NEPA re-evaluation and / or coordination with other stakeholders. The Department shall not honor any requests for additional contract time or compensation for completion of the required activities resulting from changes to the NCDOT preliminary design.
  - After the contract has been Awarded, the Design-Build Team shall inform the Design-Build Unit, in writing, of all proposed changes to the design shown in the Technical Proposal.
  - After the Department has reviewed and accepted the Design-Build Team's design submittals, the Design-Build Team shall inform the Design-Build Unit, in writing, of any changes to previously reviewed submittals.

- To the maximum extent practicable, on-site stormwater control measures shall be employed to minimize water quality impacts.
- Underground detention will not be allowed. No additional right of way will be acquired solely for stormwater management.
- In accordance with the *Guidelines for Drainage Studies and Hydraulics Design*, including all addenda, memos and revisions, the Design-Build Team shall prepare Outlet Analyses for the increases in discharge due to the proposed project and take appropriate action to ensure that any increases are appropriately mitigated.
- There are seven (7) existing Stormwater Control Measures (SCM) located within the project limits. Two (2) SCMs are located in the I-40 / mainline interchange. Five (5) SCMs are located in the SR 1728 (Wade Avenue) / mainline interchange. The Design-Build Team shall provide SCMs that treat the same or greater amount of runoff from the impervious surface that is treated by the existing SCMs.

### Drainage Structures

Throughout this RFP, the term *drainage structures* shall include box culverts, cross pipes and storm drainage systems.

- The Design-Build Team will not be required to replace the existing 24" RCP that extends from Quadrant A to Quadrant D and crosses the mainline at approximately Station 218+30 -L1-. In accordance with the *Drainage Pipe Project Special Provision* found elsewhere in this RFP, the Design-Build Team shall replace **all other existing pipes** within the existing / proposed right of way of the mainline pavement reconstruction limits, including the mainline, all collector distributor roads, ramps, loops and interchange quadrants (excluding the mainline / I-40 interchange quadrants) with the appropriate pipe type. (Reference the Pavement Management Scope of Work found elsewhere in this RFP)
- Excluding areas where the existing concrete pavement is to be retained, the Design-Build Team shall replace **all existing metal pipes** within the existing / proposed right of way of the project limits with the appropriate pipe type, in accordance with the *Drainage Pipe Project Special Provision* found elsewhere in this RFP.
- Excluding drainage structures with a hydraulic conveyance greater than a single 72-inch diameter pipe, the Design-Build Team shall develop discharges for all drainage structures based upon the future build-out land use projections. The Design-Build Team shall not include the effects of storage when computing discharges for hydraulic design and analysis for areas less than 50% impervious and / or areas without storm drainage systems. For drainage areas where impervious surfaces are greater than 50% and / or areas with storm drainage systems, routing will be allowed. EPA SWMM, USACE HMS, Win TR-20, HydroCADD or equivalent are acceptable programs for routing. A storm drainage duration of 24 hours shall be used in developing the hydrograph.
- The Design-Build Team shall develop discharges for all drainage structures with a hydraulic conveyance greater than a single 72-inch diameter pipe based upon the following basin studies:

- When barrier is placed on a roadway shoulder, the Design-Build Team shall install shoulder closure signs and devices in advance of the barrier in accordance with the NCDOT Roadway Standard Drawings.
- The Design-Build Team shall not place temporary barrier in the gore area. In accordance with ICT #8 – ICT #12, the Design Build Team shall temporarily close the ramp or loop if the work cannot be safely performed without placing temporary barrier in the gore area.

Excluding median crossovers, the design speed for temporary alignments of Interstate, US, and NC routes shall not be lower than the current posted speed limit. The minimum allowable design speed for temporary alignments on secondary roads shall be the higher of 10 mph below the posted speed limit or 35 mph.

The 2018 *Roadway Standard Drawing* No. 1101.11 shall be used to calculate the length of temporary merges for lane closures and temporary traffic shifts. For temporary traffic patterns that will remain in place for a period longer than three days, including but not limited to traffic shifts, merges, and temporary alignments, breaks in the superelevation and / or breaks in a normal crown section will not be allowed within the shifting taper. Excluding the aforementioned temporary traffic patterns, breaks in the super elevation and / or crown breaks in a normal crown section shall only occur on a lane line or lane midpoint, and shall not exceed 0.04.

Temporary traffic shifts that are not covered by a standard or require vertical grades shall be considered a temporary alignment. All temporary alignments shall adhere to the NCDOT *Roadway Design Manual*, including all revisions, 2011 AASHTO, *A Policy on Geometric Design of Highways and Streets* and the most current Transportation Research Board *Highway Capacity Manual*.

Maintain access to all residences, schools, bus stops, mass transit facilities (park and ride lots), emergency services and businesses at all times. Prior to incorporation, obtain written approval from the Engineer on method to maintain access. Access to all existing transit stop locations shall be maintained during construction or alternative locations that are accepted by NCDOT shall be provided and specified within the TMP. The Design-Build Team shall coordinate with the Triangle Transit System and other Transit Agencies for all traffic control phasing that will affect existing transit stops or transit routes.

In accordance with the Department's Policy on *Evaluating Temporary Accommodations for Pedestrians during Construction*, found on the website noted below, the Design-Build Team shall maintain pedestrian accommodations in all areas:

**<https://connect.ncdot.gov/projects/WZTC/Documents/AccomPedinWZProc.pdf>**

Through traffic traveling in the same direction shall not be split. (i.e. separation by any type of barrier, bridge piers, existing or proposed median, etc.).



(d) Information and Reports

The contractor shall provide all information and reports required by the Acts, the Regulations, and directives issued pursuant thereto and shall permit access to its books, records, accounts, other sources of information, and its facilities as may be determined by the Recipient or the FHWA to be pertinent to ascertain compliance with such Acts, Regulations, and instructions. Where any information required of a contractor is in the exclusive possession of another who fails or refuses to furnish the information, the contractor shall so certify to the Recipient or the FHWA, as appropriate, and shall set forth what efforts it has made to obtain the information.

(e) Sanctions for Noncompliance:

In the event of a contractor's noncompliance with the Nondiscrimination provisions of this contract, the Recipient will impose such contract sanctions as it and / or the FHWA may determine to be appropriate, including, but not limited to:

- (i) Withholding payments to the contractor under the contract until the contractor complies; and / or
- (ii) Cancelling, terminating, or suspending a contract, in whole or in part.

(f) Incorporation of Provisions

The contractor shall include the provisions of paragraphs (a) through (f) in every subcontract, including procurements of materials and leases of equipment, unless exempt by the Acts, the Regulations and directives issued pursuant thereto. The contractor shall take action with respect to any subcontract or procurement as the Recipient or the FHWA may direct as a means of enforcing such provisions including sanctions for noncompliance. Provided, that if the contractor becomes involved in, or is threatened with litigation by a subcontractor, or supplier because of such direction, the contractor may request the Recipient to enter into any litigation to protect the interests of the Recipient. In addition, the contractor may request the United States to enter into the litigation to protect the interests of the United States.

**(2) Title VI Nondiscrimination Program (23 CFR 200.5(p))**

The North Carolina Department of Transportation (NCDOT) has assured the USDOT that, as a condition to receiving federal financial assistance, NCDOT will comply with Title VI of the Civil Rights Act of 1964 and all requirements imposed by Title 49 CFR Part 21 and related nondiscrimination authorities to ensure that no person shall, on the ground of race, color, national origin, limited English proficiency, sex, age, or disability (including religion / creed or income-level, where applicable), be excluded from participation in, be denied the benefits of, or be subjected to discrimination under any programs, activities, or services conducted or funded by NCDOT. Contractors and other organizations under contract or agreement with NCDOT must also comply with Title VI and related authorities, therefore:

- (a) During the performance of this contract or agreement, contractors (e.g. subcontractors, consultants, vendors, prime contractors) shall be responsible for