

May 6, 2016

Addendum No. 3

Contract No.: TIP No.:	C203759 U-2519CA / B-5516
County: Project Description:	Cumberland Future I-295 - Fayetteville Outer Loop from south of US 401 to south of SR 1400 (Cliffdale Road); and Replacement of Bridge No. 14 on
	SR 3569 (Raeford Road) over Bones Creek (Lake Rim Runoff)

RE: Addendum Number 3 to Final RFP

June 21, 2016 Letting

To Whom It May Concern:

Reference is made to the Final Request for Proposals dated March 10, 2016 recently furnished to you on the above project. We have since incorporated changes, and have attached a copy of Addendum Number 3 for your information. Please note that all revisions have been highlighted in gray and are as follows:

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

Page No.4 of the Submittal of Quantities, Fuel Base Index Price and Opt-Out Option Project Special Provision has been revised. Please void Page No. 4 in your proposal and staple the revised Page No. 4 thereto.

Page No.13 of the *Disadvantaged Business Enterprise Project Special Provision* has been revised. Please void Page No. 13 in your proposal and staple the revised Page No. 13 thereto.

Page Nos. 46 and 47 of the *Price Adjustments for Asphalt Binder Project Special Provision* have been revised. Please void Page Nos. 46 and 47 in your proposal and staple the revised Page Nos. 46 and 47 thereto.

Page No. 100 of the *Roadway Scope of Work* has been revised. Please void Page No. 100 in your proposal and staple the revised Page No. 100 thereto.

Page No. 109 of the *Pavement Management Scope of Work* has been revised. Please void Page No. 109 in your proposal and staple the revised Page No. 109 thereto.

Page No. 123 of the *Hydraulics Scope of Work* has been revised. Please void Page No. 123 in your proposal and staple the revised Page No. 123 thereto.

Page No. 166 of the *Traffic Signals & Signal Communications Scope of Work* has been revised. Please void Page No. 166 in your proposal and staple the revised Page No. 166 thereto.

-----Nothing Compares

Addendum Number 3 to Final RFP – May 6, 2016 Page 2 of 2

Page No. 186 of the *Utilities Coordination Scope of Work* has been revised. Please void Page No. 186 in your proposal and staple the revised Page No. 186 thereto.

Page Nos. 220 and 221 of the *Final Surface Testing Standard Special Provision* have been revised. Please void Page Nos. 220 and 221 in your proposal and staple the revised Page Nos. 220 and 221 thereto.

If you have any questions or need additional information, I can be reached by telephone at (919) 707-6900.

Sincerely,

R.A. Garris, PE Contract Officer

RAG/kbc

cc: Rodger Rochelle, PE Greg Burns, PE Teresa Bruton, PE Ron McCollum, PE Karen Capps, PE File

TABLE OF CONTENTS

COVER SHEET

PROPOSAL SHEETS

PROJECT SPECIAL PROVISIONS

PAGE NO.

Contract Time and Liquidated Damages	.1
Other Liquidated Damages and Incentives	.1
Payout Schedule	.2
Mobilization	.2
Substantial Completion	
Submittal of Quantities, Fuel Base Index Price and Opt-Out Option	.3
Individual Meetings with Proposers	.5
Execution of Bid, Non-Collusion Affidavit, Debarment Certification and Gift	
Ban Certification	.5
Submission of Design-Build Proposal	
Alternative Technical Concepts and Confidential Questions	
Schedule of Estimated Completion Progress	
Disadvantaged Business Enterprise	.12
Protection of Railroad Interest – Aberdeen & Rockfish Railroad Company	
Certification for Federal-Aid Contracts	.28
Contractor's License Requirements	
U. S. Department of Transportation Hotline	.29
Resource Conversation and Environmentally Sustainable Practices	
Subsurface Information	.30
Domestic Steel	.30
Cooperation between Contractors	.30
Bid Documentation	.31
Twelve Month Guarantee	.34
Permanent Vegetation Establishment	.35
Erosion & Sediment Control / Stormwater Certification	.35
Procedure for Monitoring Borrow Pit Discharge	.41
Clearing and Grubbing	.43
Burning Restrictions	.43
Building and Appurtenance Removal / Demolition	
Pipe Installation	.44
Reinforced Concrete Pipe Design	
Drainage Pipe	
Price Adjustments for Asphalt Binder	.46
Price Adjustments - Asphalt Concrete Plant Mix	.47
Field Office	.47
Piles	.50
Drilled Piers	.51
Foundations and Anchor Rod Assembles for Metal Poles	.52

Overhead Sign Supports	.59
Overhead and Dynamic Message Sign Foundations	
Sanitary Sewer	.68
Sound Barrier Wall	.68
Architectural Concrete Surface Treatment	.71
Iran Divestment Act	.75A
Cargo Preference Act	.75A
GENERAL	.76

SCOPES OF WORK

Roadway	95
Pavement Management	
Structures	
Railroad Coordination	115
Hydraulics	120
Geotechnical Engineering	
Transportation Management	
Signing	
Pavement Markings	160
Traffic Signals & Signal Communications	
Erosion and Sedimentation Control	169
Utilities Coordination	
Environmental Permits	192
Right of Way	199
Public Information	

STANDARD SPECIAL PROVISIONS

Railroad Grade Crossing	207
Value Engineering Proposals	
Plant and Pest Quarantines	
Gifts from Vendors and Contractors	
Liability Insurance	210
State Highway Administrator Title Change	
Subletting of Contract	
Name Change for NCDENR	
Select Granular Material	
Rock and Broken Pavement Fills	211
Bridge Approach Fills	211
Preparation of Subgrade and Base	
Class IV Aggregate Stabilization	
Aggregate Base Course	
Asphalt Pavements – Superpave	
** NOTE ** Deleted Asphalt Paver – Fixed and Mobile String Line SSP	

Asphalt Binder Content of Asphalt Plant Mixes		
Asphalt Plant Mixtures	220	
Final Surface Testing	220	
Subsurface Drainage	221	
Remove and Stockpile Existing Guardrail		
Guardrail Anchor Units, Type M-350		
Guardrail Anchor Units, Type 350 (TL-3)	222	
Impact Attenuator Units, Type 350	223	
Preformed Scour Hole with Level Spreader Apron	224	
Street Signs and Markers and Route Markers	225	
Materials	225	
Select Materials, Class III, Type 3	236	
Shoulder and Slope Borrow	237	
Grout Production and Delivery	238	
Geosynthetics	242	
Temporary Shoring	247	
Truck Mounted Changeable Message Signs	259	
Grout References for Positive Protection	259	
Grout References for Utility Manholes	260	
Micropiles	260	
On-the-Job Training		
Availability of Funds – Termination of Contracts	273	
NCDOT General Seed Specifications for Seed Quality	274	
Errata		
Award of Contract	280	
Minority and Female Employment Requirements		
Required Contract Provisions Federal - Aid Construction Contracts		
General Decision NC160103 01/08/2016 NC103		
Division One	303	

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 The Design-Build Team shall prepare an Estimate of Quantities that they anticipate incorporating into the completed project and upon which the Price Proposal was based. The quantity breakdown shall include all items of work that appear in the *Fuel Usage Factor Chart and Estimate of Quantities* sheet. Only those items of work which are specifically noted in the *Fuel Usage Factor Chart and Estimate of Quantities* sheet will be subject to fuel price adjustments.

Submittal The submittal shall be signed and dated by an officer of the Design-Build Team. The information shall be copied and submitted in a separate sealed package with the outer wrapping clearly marked "Fuel Price Adjustment" and shall be delivered at the same time and location as the Technical and Price Proposal. The original shall be submitted in the Price Proposal.

Trade Secret Information submitted on the *Fuel Usage Factor Chart and Estimate of Quantities* sheet will be considered "Trade Secret" in accordance with the requirements of G.S. 66-152(3) until such time as the Price Proposal is opened.

(B) **Base Index Price**

The Design-Build Team's Estimate of Quantities will be used on the various partial payment estimates to determine fuel price adjustments. The Design-Build Team shall submit a payment request for quantities of work completed based on the work completed for that estimate period. The quantities requested for partial payment shall be reflective of the work actually accomplished for the specified period. The Design-Build Team shall certify that the quantities are reasonable for the specified period. The base index price for DIESEL #2 FUEL is **\$1.4213** per gallon.

(C) Opt Out of Fuel Price Adjustment

If the Design-Build Team elects not to pursue reimbursement for Fuel Price Adjustments, a quantity of zero shall be entered for all quantities in the *Fuel Usage Factor Chart and Estimate of Quantities* sheet and the declination box shall be checked. Failure to complete this form will mean that the Design-Build Team is declining the Fuel Price Adjustments for this project.

(D) Change Option

The proposer will not be permitted to change the option after the Price Proposal and the copy of the *Fuel Usage Factor Chart and Estimate of Quantities* sheet are submitted.

(E) **Failure to Submit**

Failure to submit the completed *Fuel Usage Factor Chart and Estimate of Quantities* sheet separately and in the Price Proposal will result in the Technical and Price Proposal being considered irregular by the Department and the Technical and Price Proposal may be rejected.

recipients of USDOT funds in the state and not limited to the Department of Transportation only. The Certification Program is in accordance with 49 CFR Part 26.

United States Department of Transportation (USDOT) - Federal agency responsible for issuing regulations (49 CFR Part 26) and official guidance for the DBE program.

Forms and Websites Referenced in this Provision

DBE Payment Tracking System - On-line system in which the Design-Build Team enters the payments made to DBE subcontractors who have performed work on the project.

https://apps.dot.state.nc.us/Vendor/PaymentTracking/

DBE-IS *Subcontractor Payment Information* - Form for reporting the payments made to all DBE firms working on the project.

http://www.ncdot.org/doh/forms/files/DBE-IS.xls

RF-1 DBE Replacement Request Form - Form for replacing a committed DBE.

http://connect.ncdot.gov/projects/construction/Construction%20Forms/DBE%20MBE%20 WBE%20Replacement%20Request%20Form.pdf

SAF Subcontract Approval Form - Form required for approval to sublet the contract.

http://connect.ncdot.gov/projects/construction/Construction%20Forms/Subcontract%20 Approval%20Form%20Rev.%202012.zip

JC-1 *Joint Check Notification Form* - Form and procedures for joint check notification. The form acts as a written joint check agreement among the parties providing full and prompt disclosure of the expected use of joint checks.

http://connect.ncdot.gov/projects/construction/Construction%20Forms/Joint%20Check% 20Notification%20Form.pdf

** NOTE ** Deleted reference to invalid hyperlink

Letter of Intent - Form signed by the Contractor and the DBE subcontractor, manufacturer or regular dealer that affirms that a portion of said contract is going to be performed by the signed DBE for the amount listed at the time of bid.

http://connect.ncdot.gov/letting/LetCentral/Letter%20of%20Intent%20to%20Perform% 20as%20a%20Subcontractor.pdf

Listing of DBE Subcontractors Form - Form for entering DBE subcontractors on a project that will meet this DBE goal contained elsewhere in this RFP.

http://connect.ncdot.gov/municipalities/Bid%20Proposals%20for%20LGA%20Content/ 08%20DBE%20Subcontractors%20(Federal).doc

purpose of handling and placement. Submit details of handling devices or holes for approval and do not cast any concrete until approval is granted. Remove all handling devices flush with concrete surfaces as directed. Fill holes in a neat and workmanlike manner with an approved non-metallic non-shrink grout, concrete or plug.

DRAINAGE PIPE

(9-1-11)

(9-1-11)

Description

Where shown in the plans developed by the Design-Build Team, the Contractor shall use Reinforced Concrete Pipe, Corrugated Aluminum Alloy Pipe, Corrugated Polyethylene Pipe (HDPE Pipe) or Polyvinyl-Chloride Pipe (PVC Pipe) in accordance with the following requirements:

- All pipe types shall be subject to the maximum and minimum fill height requirements as found on Roadway Standard Drawing No. 300.01 Sheet 3 of 3. The appropriate Reinforced Concrete Pipe class and the appropriate gage thickness for Corrugated Aluminum Alloy Pipe shall be selected based on fill height.
- Site specific conditions may limit a particular material beyond what is identified in this Project Special Provision. These conditions include, but are not limited to, abrasion, environmental, soil resistivity and pH, high ground water and special loading conditions. The Design-Build Team shall determine if additional restrictions are necessary.
- Slope drains shall be Corrugated Aluminum Alloy Pipe, Corrugated Polyethylene Pipe (HDPE Pipe) or Polyvinyl-Chloride Pipe (PVC Pipe).
- Transverse median drains, storm drainage system pipes, and open-ended cross drains shall be Reinforced Concrete Pipe unless the pipe slope is greater than 10%, in which case the pipe shall be Corrugated Aluminum Alloy Pipe.

PRICE ADJUSTMENTS FOR ASPHALT BINDER

DB6 R25

Price adjustments for asphalt binder for plant mix will be made in accordance with Section 620 of the 2012 *Standard Specifications for Roads and Structures*.

When it is determined that the monthly selling price of asphalt binder on the first business day of the calendar month during which the last day of the partial payment period occurs varies either upward or downward from the Base Price Index, the partial payment for that period will be adjusted. The partial payment will be adjusted by adding the difference (+ or -) of the base price index subtracted from the monthly selling price multiplied by the total theoretical quantity of asphalt binder authorized for use in the plant mix placed during the partial payment period involved.

The base price index for asphalt binder for plant mix is **\$323.21** per ton.

DB3 R36

Cumberland County

This base price index represents an average of F.O.B. selling prices of asphalt binder at supplier's terminals on May 1, 2016.

PRICE ADJUSTMENTS - ASPHALT CONCRETE PLANT MIX

(9-1-11) (Rev. 3-13-13)

Revise the 2012 Standard Specifications for Roads and Structures as follows:

Page 6-18, Article 609-11 and Page 6-35, Article 610-14

Add the following paragraph before the first paragraph:

The "Asphalt Price" used to calculate any price adjustments set forth in this section shall be \$40 per theoretical ton. This price shall apply for all mix types.

FIELD OFFICE

(6-1-07) (Rev. 8-3-15)

Description

This work consists of furnishing, erecting, equipping, and maintaining a field office for the exclusive use of Department Engineers and Inspectors at a location on the project approved by the Engineer. Provide a field office that complies with the current A.D.A. Design and Accessibility Standards, the National Electric Code, local, state, and federal regulations, and the following:

Procedures

The field office and equipment shall remain the property of the Design-Build Team upon completion of the contract. The field office must be separated from buildings and trailers used by the Design-Build Team and shall be erected and functional as an initial operation. Failure to have the field office functional when work first begins on the project will result in withholding payment of the Design-Build Team's monthly progress estimate. The field office must be operational throughout the duration of the project and be removed upon completion and final acceptance of the project.

Provide a field office that is weatherproof, tightly floored and roofed, constructed with an air space above the ceiling for ventilation, supported above the ground, has a width of at least ten feet, and the floor-to-ceiling height that is at least 7 feet 6 inches. Provide inside walls and a ceiling that are constructed of plywood, fiber board, gypsum board, or other suitable materials. Have the exterior walls, ceiling, and floor insulated.

DB6 R26

DB 08-01

- The Design-Build Team shall install all missing control of access fence, matching the adjacent fence type.
- Except as required elsewhere in this RFP and / or to eliminate a design exception, the Design-Build Team shall not further impact any cultural, historical or otherwise protected landmark or topographic feature beyond that shown on the U-2519CA Preliminary Roadway Plans provided by the Department. Excluding the two exceptions for additional easements on the NC Wildlife Resources Commission Pechman Fishing Education Center property noted below, the Design-Build Team shall not acquire right of way or easements from the aforementioned features unless shown on the U-2519CA Preliminary Roadway Plans provided by the Department:
 - The Design-Build Team will be allowed to acquire permanent utility easement required solely for relocating the existing 30" sanitary sewer line located on the NC Wildlife Resources Commission – Pechman Fishing Education Center property.
 - IF approved by the NC Wildlife Resources Commission Pechman Fishing Education Center, the Design-Build Team will be allowed to acquire temporary construction easement required solely for the temporary relocation of existing aerial utilities.

The Department will design and plant the landscaping required for the Shaw Gillis Historic District.

- The Design-Build Team shall design and construct all retaining walls a minimum of ten-foot inside the right of way.
- The Design-Build Team shall provide milled rumble strips along the mainline outside and median paved shoulders, including ramp and loop terminals, and acceleration, deceleration and auxiliary lanes, in accordance with the NCDOT *Roadway Standard Drawings*.
- For all bridges over roadways and railroads, the Design-Build Team shall submit vertical and horizontal clearance design calculations at all critical points. The Design-Build Team shall submit post construction survey points for the aforementioned critical points that verify construction adhered to the vertical and horizontal clearances accepted by the Department. The Design-Build Team shall be responsible for all costs associated with correcting vertical and horizontal clearances resulting from any construction variation from the design accepted by the Department.
- In accordance with the NCDOT Right of Way Manual, the Design-Build Team shall develop Service Road Studies for all land-locked parcels and / or as required by variations to the Department's design. If the aforementioned Service Road Studies indicate that service roads are required that are not shown on the Preliminary Roadway Plans provided by the Department, the design and construction costs of the additional service roads shall be as follows:
 - If the Design-Build Team demonstrates to the Department's satisfaction that the additional service road(s) are required for the Department's preliminary design, the service road(s) design and construction, including all associated NEPA requirements, will be paid for as extra work in accordance with Subarticle 104-8-(A) of the NCDOT Standard Specifications for Roads and Structures.
 - If variations to the Department's proposed design and / or construction methods require additional service road(s), the service road(s) design and construction, as well as all associated NEPA requirements, shall be included in the Design-Build Team's lump sum bid for the entire project.

thickness of the asphalt base course, used as a substitute for the ABC layer, shall be equal to half of the proposed ABC thickness specified for the roadway.

For the -Y- Lines, ramps, loops and service road pavement designs noted in the table above, the Design-Build Team may substitute an ABC layer for an asphalt base course layer. If such an alternative is proposed, the thickness of the ABC layer, used as a substitute for the asphalt base course layer, shall be equal to twice the proposed asphalt base course layer thickness specified for the roadway. If an asphalt surface course is placed directly on the ABC layer, the Design-Build Team shall apply prime coat.

The Design-Build Team shall maintain the same pavement design throughout the -Y- Line, ramps, loops, and service road construction limits. In the Technical Proposal, the Design-Build Team shall specify the base option chosen (ABC or asphalt) for all -Y- Lines, ramps, loops, and service roads. The Design-Build Team may substitute an asphalt base course layer for an ABC layer, as described above, for tie-ins and narrow widening.

For all -Y- Lines, the Design-Build Team shall resurface the existing pavement with a minimum pavement depth that equals the full thickness of the surface course as provided in the table above (Reference the Roadway Scope of Work found elsewhere in this RFP).

On all ramps and loops, the adjacent through lane pavement design shall extend to the back of the gore (12-foot width).

Longitudinal joints of all surface course layers shall not be located in the final traffic pattern wheel path. If applicable, the Design-Build Team shall indicate in the Technical Proposal where all underlying longitudinal joints will be located and demonstrate how the underlying longitudinal joint location will minimize reflective cracking.

Unless noted otherwise elsewhere in this RFP, the minimum narrow widened width shall be six feet. The minimum narrow widened width may be reduced to four feet only if the Design-Build Team demonstrates that their equipment properly compacts narrow widening and obtains prior Department approval. Tapers that tie proposed pavement to existing pavement are excluded from the narrow widening requirements noted above.

In areas where the existing paved shoulders are proposed to be incorporated into a permanent travel lane, the Design-Build Team shall be responsible for evaluating the existing paved shoulder regarding its suitability for carrying the projected traffic volumes. In the event that the existing paved shoulder is found to be inadequate, the Design-Build Team shall be responsible for upgrading the existing paved shoulder to an acceptable level or replacing the existing paved shoulder. The Design-Build Team shall submit their evaluation and proposed use of existing paved shoulders to the Design-Build Unit for review and acceptance or rejection.

Unless noted otherwise elsewhere in this RFP, the Design-Build Team shall pave from 1) the edge of all paved shoulders to the face of all single face barrier / guardrail, excluding median locations that the NCDOT Roadway Standard Drawings do not require paving to the face of guardrail 2) from the edge of all paved shoulders to the edge of all expressway / shoulder berm gutter and 3) from the edge

- The Design-Build Team shall provide permit drawings, calculations and impact sheets for the USACE 404 Permit, and the NCDWR Section 401 Certification.
- For all FEMA regulated streams impacted by the Design-Build Team's design and / or construction the Design-Build Team shall adhere to the Hydraulic Guidelines noted below and the following requirements:
 - The Design-Build Team shall prepare a CLOMR or MOA package for the Department's submittal to the North Carolina Floodplain Mapping Program (NCFMP). The Design-Build Team shall obtain NCFMP approval prior to performing any construction activity in a FEMAregulated floodplain.
 - The Design-Build Team shall notify the Design Build Unit, in writing, of all structures that may require purchase due to an increase in the 100-year water surface elevation. The Department will be responsible for all surveys to ascertain applicable structures within the impacted area of the floodplain(s). The Design-Build Team shall discuss the extent and limits of the increase in water surface elevation in the floodplain(s), identify potentially impacted structures, specify areas anticipated to require additional surveys and estimate the anticipated additional right of way impacts outside the project construction limits in the Technical Proposal. (Reference the Right of Way Scope of Work found elsewhere in this RFP.)
 - > The Department will be responsible for all fees associated with the CLOMR(s) and / or MOA(s).
 - The Design-Build Team shall ensure that all construction and / or removal of all structures in FEMA regulated floodplains adhere to the approved CLOMR(s) and / or MOA(s). Within three months of completion of work in a FEMA-regulated floodplain, the Design-Build Team shall provide 1) a sealed bridge general drawing and / or a sealed set of culvert plans with associated roadway profile sheet and 2) a completed As-Built Certification Review Form that verifies all construction adheres to the approved CLOMR(s) and / or MOA(s). At a minimum, the aforementioned sealed bridge general drawing and / or sealed set of culvert plans with associated roadway profile sheet shall provide the As-Built information shown in the As-Built Plan Certification Checklist for FEMA-Regulated Stream Crossings located on the NCDOT Hydraulic Unit's website noted below:

https://connect.ncdot.gov/resources/hydro/Pages/FEMA-Interagency-Design.aspx

The Design-Build Team shall prepare a new FEMA model and / or package and be responsible for all associated costs resulting from any construction variation from the approved CLOMR(s) and / or MOA(s).

- The Department will allow no direct contact between the Design-Build Team and the NCFMP representatives. No contact between the Design-Build Team, the NCFMP and / or personnel under contract with NCFMP shall be allowed by phone, e-mail, or in person, without Department representatives present. A representative from the Design Build Unit shall be included on all correspondence.
- Raised median island cuts will not be allowed.
- At a minimum, the Design-Build Team shall install traffic bearing drop inlets with steel frames and flat steel grates at the following locations:
 - ➢ Within a temporary and / or permanent travel lane

C203759 (U-2519CA / B-5516) Traffic Signals & Signal Communications Scope of Work Cumberland County

device along with a fiber optic modem or Ethernet switch that is compatible with the Fayetteville Signal System.

A. Fiber Optic Communications System

As part of the communications design the Design-Build Team shall design and install an underground splice enclosure in the existing fiber link, and install a drop fiber to the new signal along with a fiber optic modem or Ethernet switch that shall be compatible with the Fayetteville Signal System.

1. CLIFFDALE ROAD SYSTEM

Signal Inventory Number	Location Description	Comments
		The existing fiber cable has 12 strands.
PROPOSED SIGNAL - 06-1331	SR 1400 (Cliffdale Road) at Future I-295 (Fayetteville Outer loop) NB Ramps	Install new 12 fiber cable from the existing junction box located on the north side of Cliffdale Road in proximity to the northbound ramp (northwest quadrant) to the proposed cabinet (06-1331).

Design-Build Team and shall be included in the lump sum bid for the project. The Design-Build Team shall develop designs; prepare all plans for needed agreements and permits; submit permits directly to the agencies and obtain approval from the agencies. The Design-Build Team shall be responsible for all permit fees.

Designs shall be coordinated with the NCDOT Utilities Unit and the utility owners or their representatives. The Design-Build Team shall submit five (5) sets of 11×17 utility construction drawings to the State Utilities Manager, via the Design-Build Unit, for further handling. Each set shall include a title sheet, plan sheets, profiles and special provisions, if required. Once accepted by the State Utilities Manager, the plans, with the appropriate agreement, will be sent to the utility owner for review and concurrence.

The relocation of all water and sewer facilities shall be done in accordance with the NCDOT policies and standards, as well as the latest Fayetteville PWC water and sewer design requirements / specifications. The location of all water and sewer facilities shall also adhere to the following:

- 1) Existing and proposed water and / or sanitary sewer facilities shall not be located within the limits of retaining walls (e.g. facilities shall not be beneath retaining walls in a parallel or crossing alignment).
- 2) All existing and proposed water and / or sanitary sewer facilities beneath Future I-295 and / or US 401 shall be encased and the encasement pipe material shall be steel. Thirty four-inch steel encasement pipe shall be used to encase all 24-inch water and / or sanitary sewer facilities.

In the event of conflicting design parameters in the requirements noted above, the proposed design shall adhere to the most conservative values. The materials and appurtenances proposed by the Design-Build Team shall require approval by both NCDOT and the aforementioned appropriate utility owner prior to installation.

NCDOT has approved an Encroachment Request from Fayetteville PWC to install a 24-inch steel casing with a 12-inch ductile iron sanitary sewer main carrier pipe on the south side of the Unnamed Tributary to Lake Rim (Bones Creek). The installation of the aforementioned casing and sewer main is anticipated to be complete by the end of May 2016. The Design-Build Team shall maintain a minimum ten-foot horizontal clearance between the aforementioned 24-inch steel casing and any part of a proposed bridge foundation. If any portion of a proposed bridge foundation is located horizontally between 10 feet and 25 feet from the aforementioned 24-inch steel casing, the Design-Build Team shall video inspect the sanitary sewer main before beginning, and after completion, of bridge foundation construction activities. It is the intent of NCDOT to **avoid** relocating this sanitary sewer once it is installed. If the Design-Build Team's design and / or construction methods damage the sanitary sewer main and / or require the relocation of the sanitary sewer main, all costs associated with the required repairs and / or relocation shall be borne by the Design-Build Team.

Utility Relocation Plans

In the event of a utility conflict, other than water and sewer, the Design-Build Team shall request that the utility owner submit relocation plans (Highway Construction Plans to be provided by the Design-Build Team to utility owners) that show existing utilities and proposed utility relocations for approval by the NCDOT.

The Design-Build Team shall submit (3) three copies of the Utility Relocation Plans to the NCDOT State Utilities Manager, via the Design-Build Unit, for review and approval prior to

ASPHALT PLANT MIXTURES

(07-01-95)

Place asphalt concrete base course material in trench sections with asphalt pavement spreaders made for the purpose or with other equipment approved by the Engineer.

FINAL SURFACE TESTING

(4-26-16)

On all mainline travel lanes, including but not limited to auxiliary lanes, and -Y- Line travel lanes with 1) two or more layers of asphalt, 2) one mile or greater in length, and 3) a posted speed limit of 45 mph or greater, perform smoothness acceptance testing of the longitudinal profile of the finished pavement surface using an Inertial Profiler in accordance with Article 610-13 of the 2012 *Standard Specifications for Roads and Structures* and the *Asphalt Pavements - Superpave* Standard Special Provision found elsewhere in this RFP. The North Carolina Hearne Straightedge will not be permitted.

DB6 R20

DB6 R45

220

SUBSURFACE DRAINAGE

(9-1-11)

Revise the 2012 Standard Specifications for Roads and Structures as follows:

Page 8-11, Article 815-1, Delete the first sentence and replace with the following:

The Design-Build Team shall construct subsurface drains, underdrains, blind drains and other types of drains where groundwater is within six feet of subgrade.

REMOVE AND STOCKPILE EXISTING GUARDRAIL

(7-1-95) (Rev. 7-18-06)

Carefully dismantle and remove existing guardrail and all components, concrete anchors included, at locations indicated in the plans and neatly stockpile it on the right of way, with the small parts stored in sturdy containers, for removal by State Forces. Dispose of the concrete anchors.

GUARDRAIL ANCHOR UNITS, TYPE M-350

(9-1-11) (Rev. 7-21-15)

Description

Furnish and install guardrail anchor units in accordance with the details in the plans developed by the Design-Build Team, the applicable requirements of Section 862 of the 2012 *Standard Specifications for Roads and Structures*, and at locations shown in the plans developed by the Design-Build Team.

Materials

The Design Build Team shall furnish guardrail anchor units listed on the NCDOT Approved Products List at https://apps.dot.state.nc.us/vendor/approvedproducts/ or approved equal.

DB8 R05

DB8 R60

DB8 R55