



PAT McCRORY  
Governor

NICHOLAS J. TENNYSON  
Secretary

July 7, 2016

**Addendum No. 2**

Contract No.: C 203474  
TIP No.: B-2500B  
County: Dare  
Project Description: NC 12 - Rodanthe Breach Long Term Improvements (Phase IIb)  
  
RE: Addendum No. 2 to Final RFP

**September 20, 2016 Letting**

To Whom It May Concern:

Reference is made to the Final Request for Proposals dated June 9, 2016 recently furnished to you on the above project. We have since incorporated changes, and have attached a copy of Addendum No. 2 for your information. Please note that all revisions have been highlighted in gray and are as follows:

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

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

Page No. 40 of the *Price Adjustments for Asphalt Binder Project Special Provision* has been revised. Please void Page No. 40 in your proposal and staple the revised Page No. 40 thereto.

Page No. 66 of the *General Section* has been revised. Please void Page No. 66 in your proposal and staple the revised Page No. 66 thereto.

Page No. 70 of the *Roadway Scope of Work* has been revised. Please void Page No. 70 in your proposal and staple the revised Page No. 70 thereto.

Page No. 82 of the *Structures Scope of Work* has been revised. Please void Page No. 82 in your proposal and staple the revised Page No. 82 thereto.

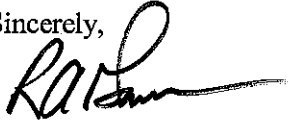
Page No. 93 of the *Geotechnical Scope of Work* has been revised. Please void Page No. 93 in your proposal and staple the revised Page No. 93 thereto.

Page No. 176 of the *Asphalt Pavements – Superpave Standard Special Provision* has been revised. Please void Page No. 176 in your proposal and staple the revised Page No. 176 thereto.



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 "R.A. Garris", with a long horizontal flourish extending to the right.

R.A. Garris, PE  
Contract Officer

RAG / dth

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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 **\$1.5593** 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.

**DRAINAGE PIPE**

(9-1-11)

DB3 R36

**Description**

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

All pipe types are 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 and Aluminized Corrugated Steel Pipe shall be selected based on fill height.

Site specific conditions may limit a particular material beyond what is identified in this 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**

(9-1-11)

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 **\$349.29** per ton.

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

Provided the Department elects to proceed to request a Best and Final Offer (BAFO), at the date and time specified, the State Contract Officer will open the Best and Final Offer Price Proposals and proceed to publicly read all Price Proposals, Technical Scores and Adjusted Prices.

### **Best and Final Offer**

In the event initial Price Proposals exceed an acceptable range of the Engineer's Estimate or if the Department feels it is necessary for any reason the Department may choose to make amendments to the details of the RFP and request a Best and Final Offer from all of the previously short-listed teams. Alternately, the Department may choose to redistribute to the short-listed Design-Build Teams another RFP for the project with no amendments to the RFP scope.

After receipt of the redistributed RFP, the Design-Build Team has the option of changing their Technical Proposal details. If the Design-Build Team changes any component of the Technical Proposal, the TRC will review those amended components of the Technical Proposal and reevaluate the scores accordingly. The Design-Build Team shall highlight the changes to bring them to the Department's attention. A revised total score will be calculated, if appropriate, based on these amendments to the Technical Proposal.

Additional oral interviews will not be held. The Design-Build Teams shall submit both a revised Price Proposal and a revised Technical Proposal (if applicable) at the time, place and date specified in the redistributed RFP. A revised Quality Credit Percentage (if required) and Adjusted Price will be determined. This will constitute the Design-Build Team's Best and Final Offer. Award of the project may be made to the Design-Build Team with the lowest Adjusted Price on this Best and Final Offer.

### **Stipend**

A stipulated fee of **\$150,000** will be awarded to each short-listed Design-Build Team that provides a responsive, but unsuccessful, Design-Build Proposal. 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. Once award is made, or a decision is made not to award, unsuccessful Design-Build Teams can apply for the stipulated fee by notifying the State Contract Officer in writing and providing an original invoice within 60 days of Award. If the Design-Build Team accepts the stipulated fee, the Department reserves the right to use any ideas or information contained in the Design-Build Proposal and / or Alternative Technical Concepts, whether incorporated into the Design-Build Proposal or not, in connection with any contract awarded for the project, or in connection with any subsequent procurement, with no obligation to pay additional compensation to the unsuccessful Design-Build Team. The stipulated fee shall be paid to eligible Design-Build Teams within ninety days after the award of the contract or the decision not to award. Unsuccessful Design-Build Teams may elect to refuse payment of the stipulated fee and retain any rights to its Design-Build Proposal and the ideas and information contained therein.

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.

incorporating a design exception into the Final Plans, the Design-Build Team must obtain prior conceptual approval from the Design-Build Unit. If conceptual approval is obtained, the Design-Build Team shall be responsible for the development and approval of all design exceptions.

- For all parcels, the Design-Build Team shall locate and install concrete right of way markers that delineate all proposed right of way within the project limits. The Design-Build Team shall replace all existing right of way markers / monuments damaged and / or relocated during construction.
- For all parcels, the Design-Build Team shall locate and install iron pins and metal caps with fiberglass markers that delineate all proposed permanent easements within the project limits. The Design-Build Team shall replace all existing permanent easement markers / monuments damaged and / or relocated during construction. In accordance with NCDOT Policy, the Department will furnish the metal caps with fiberglass markers.
- As shown on the Bonner Bridge Replacement Project Phase IIb 2014B Revised Bridge on New Location Alternative Map provided by the Department, the Design-Build Team shall remove, and dispose of, the existing NC 12 pavement structure between the southern Pea Island National Wildlife Refuge boundary with Rodanthe and the northern bridge terminus. Within the aforementioned limits, the Design-Build Team shall also 1) remove, and dispose of, any sandbags; 2) re-grade the existing roadbed, including but not limited to, the pavement area, embankments, and / or roadway ditches; and 3) return the area to a condition similar to its surroundings.
- In accordance with the February 2016 Parking Lot Location Detail provided by the Department, the Design-Build Team shall design and construct a new parking lot near the northern project limits. In accordance with the aforementioned detail and the National Park Service *VIS and Wayside Hardware Specification Manual* provided by the Department, the Design-Build Team shall purchase and install an Upright Inline 3 (double-sided) Visitor Information Sign (VIS), with six 3-foot by 4-foot graphic panels, in the parking lot. The VIS shall be oriented perpendicular to NC 12 and be constructed of painted aluminum. Prior to ordering any VIS material, the Design-Build Team shall coordinate the required paint color and graphics with the US Fish and Wildlife Service. The Design-Build Team will not be required to provide landscaping for the parking lot. However, the Design-Build Team shall return the area within the Temporary Construction Easement surrounding the parking lot to a condition similar to its surroundings. Upon receipt of all required environmental permits and Special Use Permits, and acquisition of all associated Temporary Construction Easement, the US Fish and Wildlife Services has indicated that the Design-Build Team may use the parking lot area for staging operations. (Reference B-2500B - Phase IIb Record of Decision Project Commitments to be provided by the Department and the Environmental Permits Scope of Work found elsewhere in this RFP)
- The Department is interested in preserving and enhancing access to water recreational activities within the Pamlico Sound. To this aim, within the Technical Proposal, the Design-Build Team shall briefly describe or illustrate two or three concepts that could provide non-motorized water sports access to the portion of the Pamlico Sound west of the proposed bridge. The concepts shall be located outside the Pea Island National Wildlife Refuge boundary and avoid to the greatest extent practicable, increased impact to the cemetery, other cultural and historical resources, and jurisdictional resources. The concepts should address parking, access, and launch area for a variety of water sports, including kite boarding.

These concepts will not be included in the evaluation of the Technical Proposal; however failure to include at least two concepts in the Technical Proposal may result in the Technical Proposal being deemed nonresponsive. The Department reserves the right to incorporate any of the concepts provided by unsuccessful Design-Build Teams into the final project design without any compensation to the unsuccessful Design-Build Team regardless of that Team's decision with respect to the stipulated fee. The Design-Build Team should not include any costs for design or construction of the concepts in their lump sum bid. If the Department chooses to have the Design-Build Team design and construct the aforementioned access, it will be paid for as extra work in accordance with Subarticle 104-(8)A of the *2012 Standard Specifications for Roads and Structures*.



The Design-Build Team shall use one type of expansion joint throughout the main bridge. Expansion joint seals shall have a maximum four-inch joint opening and a minimum ¾" opening. Creep and shrinkage movement may be excluded from the total movement calculations. Foam joint seals will only be allowed in the transition sections, and between the transition sections and the main bridge. The Department prefers that the number of bridge expansion joints be minimized. The Design-Build Team shall indicate the type and number of bridge expansion joints in the Technical Proposal.

### **Substructure – Vessel Impact**

Unless otherwise noted, the Design-Build Team shall design all main bridge substructure units in accordance with AASHTO LRFD Bridge Design Specifications - 3.14. In lieu of the design vessel or empty hopper barge, the Design-Build Team shall use a 200 kip vessel collision force applied horizontally along each bent control line at an elevation three feet above mean high water using the full Final Design Scour Elevation, as defined in the Geotechnical Scope of Work found elsewhere in this RFP. The 200 kip vessel collision force shall be considered an extreme event applied simultaneously with scour. Dynamic analysis techniques that take into account force-deformation, or other dynamic interaction between vessel and bridge during collision, will not be permitted.

No reduction on design loads via pier protection by “island” construction or fender systems will be allowed.

### **Substructure – Vessel Collision and Scour Limit States and Design Criteria**

In addition to the requirements of AASHTO LRFD Bridge Design Specifications, design the substructure units in accordance with the following Limit States:

- Limit State 1 (Always required – Scour may be “0”) Conventional LRFD loadings (using load factor combination groups as specified in LRFD Table 3.4.1-1), but utilizing the most severe case of scour up to and including that from a 100-year hurricane storm event.
- Limit State 2 (Applies when vessel collision force is specified) Extreme Event of Vessel Impact (using load factor combination groups as specified in the LRFD) utilizing scour depth described above for Vessel Collision with Scour.
- Limit State 3 (Applies only if scour is predicted) Stability Check during the superflood (most severe case of scour up to and including that from the Final Design Scour Elevation, as defined in the Geotechnical Scope of Work found elsewhere in this RFP) event.

PDA tested piles shall match pile wait times used for restrike PDAs within that bent. Pile installation procedures for piles without PDA tests shall be consistent with those used on PDA test piles within that bent.

### **Resistance Factors**

For dynamic pile analysis, the Design-Build Team may use a resistance factor of 0.8, for all load cases, for driven piles within 1,000.00 feet of a static load test pile tested and accepted in accordance with this Scope of Work. For piles further than 1,000.00 feet from an accepted static load test, the Design-Build Team shall use resistance factors as outlined in the NCDOT *LRFD Driven Pile Foundation Design Policy*, except that a dynamic resistance factor higher than 0.75 shall not be used for any load case.

For drilled piers, the Design-Build Team may use a resistance factor of 0.7, for all load cases, for piers within 1,000.00 feet of a static load test drilled pier tested and accepted in accordance with this Scope of Work. For drilled piers further than 1,000.00 feet from an accepted static load test, the Design-Build Team shall design drilled piers in accordance with the procedures and resistance factors for piers without load testing as described in the latest version of AASHTO LRFD Bridge Design Specifications, except that resistance factors higher than those in Table 10.5.5.2.4-1 shall not be used for any load case.

### **Pile Driving Stresses and Equipment**

Limit pile driving compressive stresses for prestressed concrete piles with solid pile heads in accordance AASHTO *LRFD Bridge Design Specifications* for all stages of pile driving.

For all stages of pile driving, limit pile driving compressive stresses for prestressed concrete cylinder piles or square prestressed concrete piles with voided pile heads to:

$$\sigma_{dr} = \phi_{da}(0.66f'_c - f_{pe})$$

Where:

$\sigma_{dr}$  = driving stress in concrete (ksi)

$\phi_{da}$  = 1.00 (AASHTO LRFD 5.5.4.2 and Table 10.5.5.2.3-1)

$f'_c$  = compressive strength of the concrete (ksi)

$f_{pe}$  = effective prestressing stress in concrete (ksi)

For all prestressed concrete piles, limit tensile driving stress during all stages of pile driving in accordance with AASHTO *LRFD Bridge Design Specifications* and NCDOT *LRFD Driven Pile Foundation Design Policy* for Severe Corrosive Environments.

Use pile cushions that match the pile head cross-section shape. Do not cover pile head voids with pile cushions. To prevent damaging water or air pressure from

**Page 6-26, Article 610-8, SPREADING AND FINISHING, line 34**, add the following new paragraph:

As referenced in Section 9.6.3 of the *HMA / QMS Manual*, use the automatic screed controls on the paver to control the longitudinal profile. Where approved by the Engineer, the Design-Build Team has the option to use either a fixed or mobile string line.

**Page 6-26, Article 610-8, SPREADING AND FINISHING**, replace the fourth paragraph with the following:

Use a Materials Transfer Vehicle (MTV) when placing asphalt concrete plant mix pavements for full width travel lanes, including shoulders and turn lanes, unless otherwise approved by the engineer.

**Page 6-29, Article 610-13, FINAL SURFACE TESTING AND ACCEPTANCE, line 39**, add the following after the first sentence in the first paragraph:

Smoothness acceptance testing using the inertial profiler is not required on ramps and turn lanes that are less than 1000 feet and all loops.

**Page 6-30, Subarticle 610-13(A), Option 1 – Inertial Profiler, lines 15-16**, replace the fourth sentence of the fourth paragraph with the following:

The interval at which relative profile elevations are reported shall be 2”.

**Page 6-30, Subarticle 610-13(A), Option 1 – Inertial Profiler, lines 25-28**, replace the ninth paragraph with the following:

Operate the profiler at any speed, as per the manufacturer’s recommendations, to collect valid data.

**Page 6-30, Subarticle 610-13(A), Option 1 – Inertial Profiler, lines 30-31**, delete the third sentence of the tenth paragraph.

**Page 6-31, Subarticle 610-13(A), Option 1 – Inertial Profiler, lines 11-13**, replace the first sentence of the third paragraph with the following:

After testing, transfer the profile data from the profiler portable computer’s hard drive to a write once storage media (Flash drive, USB, DVD-R or CD-R) or electronic media approved by the Engineer.

**Page 6-31, Subarticle 610-13(A), Option 1 – Inertial Profiler, lines 17-18**, replace the first sentence of the fourth paragraph with the following:

Submit a report with the documentation and electronic data of the evaluation for each section to the Engineer within ten days after completion of the smoothness testing. The report shall be in the tabular format for each 0.10 segment, or a portion thereof, with a summary of the MRI values and the localized roughness areas including corresponding project station numbers or acceptable reference points. Calculate the pay adjustments for all segments in accordance with the formulas in Sections (1) and (2) shown below. The Engineer shall review and approve all pay adjustments unless corrective action is required.