



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE
GOVERNOR

EUGENE A. CONTI, JR.
SECRETARY

June 24, 2011

Addendum No. 4

Contract No.: C 202185
TIP No.: B-2500
County: Dare
Project Description: NC – 12 Replacement of Herbert C. Bonner Bridge across Oregon Inlet
from Bodie Island to Hatteras Island

RE: Addendum No. 4 to Final RFP

July 19, 2011 Letting

To Whom It May Concern:

Reference is made to the Final Request for Proposals Including Addendum #1 and Addendum #2 dated June 7, 2011 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 page of the Table of Contents has been revised. Please void the second page in your proposal and staple the revised second page thereto.

Page No. 95 of the *Post Tensioning Project Special Provision* has been revised. Please void Page No. 95 in your proposal and staple the revised Page No. 95 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", written over a white background.

R.A. Garris, PE
State Contract Officer

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CENTURY CENTER COMPLEX
ENTRANCE B-1
1020 BIRCH RIDGE DRIVE
RALEIGH NC

TIP B-2500
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RAG/dth

cc: Mr. Victor Barbour, PE
Mr. Rodger Rochelle, PE
Ms. Teresa Bruton, PE
Mr. Jerry Jennings, PE
Mr. Timothy McFadden
File

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plugs will be rated for a minimum pressure rating of 150 psi. Use inlets and outlets with a minimum inside diameter of 3/4 inch for strand and 3/8 inch for single bar tendons and four-strand duct. Provide dual mechanical shutoff valves when performing vertical grouting. Specifically designate temporary items, not part of the permanent structure, on the PT System drawings. Temporary items may be made of any suitable material.

(4) Permanent Grout Caps

Use permanent grout caps made from approved polymer or ASTM A240 Type 316L stainless steel. The approved resins used in the polymer shall be nylon, Acrylonitrile Butadiene Styrene (ABS) or polyester. For products made from nylon, the cell class of the nylon according to ASTM D5989 shall be S-PA0141 (weather resistant), S-PA0231 or S-PA0401 (ultimate strength not less than 10,000 psi with UV stabilizer added). Seal the cap with "O" ring seals or precision fitted flat gaskets placed against the bearing plate. Place a grout vent on the top of the cap. Grout caps shall be rated for a minimum pressure rating of 150 psi. Use ASTM A240 Type 316L stainless steel bolts to attach the cap to the anchorage. When stainless steel grout caps are supplied, provide certified test reports documenting the chemical analysis of the steel.

(5) Duct and Pipe

(a) General: Use only plastic duct, steel pipe or a combination of plastic duct and steel pipe. Ensure that all connectors, connections and components of post-tensioning system hardware are air and water tight and pass the pressure test requirements herein. Use smooth plastic duct in all post-tensioning systems used for external tendons. Use corrugated plastic duct in all post-tensioning systems used for all internal tendons except where steel pipe is required.

(b) Duct or Pipe Minimum Diameter: For prestressing bars, provide duct with a minimum internal diameter of at least 1/2 inch larger than the outside diameter, measured across the deformations. For prestressing bars with couplers, size the duct to be 1/2 inch larger than the diameter of the bar and/or coupler.

For multi-strand tendons, provide ducts with a minimum cross sectional area 2 1/2 times the cross-sectional area of the prestressing steel.

(c) Connection Tolerance between Pipe and Duct: Steel pipe and plastic duct may be connected directly to each other when the outside diameters do not vary more than ± 0.08 inch. Use a reducer when the diameters of the steel pipe and the plastic duct are outside of this tolerance.

(d) Steel Pipes: Use galvanized Schedule 40 steel pipes where shown in the plans and in all deviation blocks and diaphragms. **Diabolos shall not be permitted.**