



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

PAT MCCRORY  
GOVERNOR

ANTHONY J. TATA  
SECRETARY

February 12, 2014

**Addendum No. 1**

RE: Contract ID C203357

WBS # 41188.3.FS1

F. A. # IMS-085-1(106)3

**Gaston County (I-4928)**

I-85 NBL Weigh Station From SR-1302 (Crowders Mountain Road)

To SR-1307 (Edgewood Road)

**February 18, 2014 Letting**

To Whom It May Concern:

Reference is made to the proposal furnished to you on this project.

The following revisions have been made to the proposal:

On Page No. 280 the first paragraph and the first, second and third sentences of the second paragraph of Section 27.2(B)(1) DMS Enclosure of the project special provision entitled "Dynamic Message Sign (DMS)" has been deleted. Please void Page No. 280 in your proposal and staple the revise Page No. 280 thereto.

On Page No. 296 the last sentence of Section 27.3(C) Operator Control of the project special provision entitled "Dynamic Message Sign (DMS)" has been deleted. Please void Page No. 296 in your proposal and staple the revised Page No. 296 thereto.

Sincerely,

A handwritten signature in black ink, appearing to read "R. A. Garris".

R. A. Garris, PE  
Contract Officer

RAG/jag  
Attachments

cc: Mr. Ron Hancock, PE  
Mr. Reuben Chandler, PE (Acting)  
Ms. D. M. Barbour, PE  
Mr. Rodger Rochelle, PE  
Mr. R.E. Davenport, PE  
Project File (2)

Mr. Ray Arnold, PE  
Ms. Natalie Roskam, PE  
Mr. Greg Fuller, PE  
Mr. Ronnie Higgins  
Ms. Marsha Sample  
Ms. Lori Strickland

**(1) DMS Enclosure**

Construct the enclosure of welded aluminum type 6061-T6, 5052-H38, 5052-H34, or of an Engineer approved alternate at least 1/8-inch thick. Perform all welding of aluminum and aluminum alloys in accordance with the latest edition of AWS D1.2, Structural Welding Code - Aluminum. Continuously weld the seams using Gas Metal Arc Welding (GMAW).

Provide all exterior and interior DMS enclosure surfaces with natural, mill-finish aluminum. Remove all grind marks and discoloration from the surfaces.

Provide corrosion resistant nuts, bolts, washers, and other mounting and bonding parts and components used on the exterior of the DMS enclosure and ensure they are sealed against water intrusion.

Provide one front access door for each 10-15 pixel wide section of the sign enclosure. Vertically hinge the doors and design to swing out from the face to provide access to the enclosure interior. Extend each door the full height of the display matrix. Provide a retaining latch mechanism for each door to hold the door open at a 90-degree angle. Each door will form the face panel for a section of the sign. Mount the LED modules to the door such that they can be removed from the door when in the open position. Other sign components can be located inside the sign enclosure and be accessible through the door opening. Provide for each door a minimum of two (2) screw-type captive latches to lock them in the closed position and pull the door tight and compress a gasket located around the perimeter of each door. Install the gasket around the doors to prevent water from entering the cabinet.

Furnish the sign face, excluding the front panel with a flat black, UV treated, colorfast material. Prepare all surfaces for application according to the sheeting manufacturer's recommendations prior to applying the sheeting. Furnish DMS with UV-treated, colorfast border with a minimum width of 12 inches.

Do not place a manufacturer name, logo, or other information on the front face of the DMS or shield visible to the motorist.

Provide power supply monitoring circuitry to detect power failure in the DMS and to automatically report this fault to the Control Software. This requirement is in addition to reporting power failure at the controller cabinet.

Do not paint the stainless steel bolts on the Z-bar assemblies used for mounting the enclosure.

**(2) DMS Interior Environment Control for Front Access Enclosures**

Install a minimum of one (1) temperature sensor that is mounted near the top of the DMS interior. The sensor(s) will measure the temperature of the air in the enclosure over a minimum range of -40°F to +176°F. Ensure the DMS controller will continuously monitor the internal temperature sensor output and report to the DMS control software upon request.

Color-code all conductors per the NEC. Use approved marking tape, paint, sleeves or continuous colored conductors for No.8 AWG and larger. Do not mark a white conductor in a cable assemblies any other color.

Bury underground circuits at the depth shown in the Plans and surround it with at least 3 inches of sand or earth back-fill free of rocks and debris. Compact backfill in 6-inch layers. Do not splice underground circuits unless specifically noted in the Plans.

**(F) Equipment and Cabinet Mounting**

Mount equipment securely at the locations shown in the Plans, in conformance with the dimensions shown. Install fasteners as recommended by the manufacturer and space them evenly. Use all mounting holes and attachment points for attaching DMS enclosures and controller cabinets to the structures.

Drill holes for expansion anchors of the size recommended by the manufacturer of the anchors and thoroughly clean them of all debris.

Provide one key-operated, pin tumbler, dead bolt padlock, with brass or bronze shackle and case, conforming to Military Specification MIL-P-17802E (Grade I, Class 2, Size 2, Style A) for each electrical panel and switch on the project. Key all padlocks alike, and provide 10 keys to the Engineer.

Provide cabinets with all mounting plates, anchor bolts, and any other necessary mounting hardware in accordance with these Project Special Provisions and the Plans.

Seal all unused conduit installed in cabinets at both ends to prevent water and dirt from entering the conduit and cabinet with approved sealing material.

Install a ground bushing attached inside the cabinet on all metal conduits entering the cabinet. Connect these ground bushings to the cabinet ground bus.

**(C) Operator Control**

Install the rotary manual switch in the DMS cabinet for a technician to select the “inspection”, “containment” “off”, or “parking” messages. Provide in the scale house a manual switch for the operator or officer to select each message described above.

**(G) Work Site Clean-Up**

Clean the site of all debris, excess excavation, waste packing material, wire, etc. Clean and clear the work site at the end of each workday. Do not throw waste material in storm drains or sewers.

**27.4. MEASUREMENT AND PAYMENT**

DMS will be measured and paid as the actual number of DMS furnished, installed, and accepted. Each DMS consists of a LED Dynamic Message Sign, communications equipment, strapping hardware, controller, UPS, controller cabinet, conduit, fittings, couplings, sweeps, conduit bodies, wire, flexible conduit, feeder conductors and communications cable between the controller cabinet and the DMS enclosure, DMS operator control panel in the scale house, connectors, circuit protection equipment, photo-electric sensors, tools, materials, all related testing, cost of labor, cost of transportation, incidentals, and all other equipment necessary to furnish and install the DMS system.