



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

PAT MCCRORY
GOVERNOR

NICHOLAS J. TENNYSON
SECRETARY

September 1, 2015

MEMO TO: Jonathan Bivens, Stuart Bourne, Larry Brickey, John Bridge, Chris Byers, Joe Coleman, Judith Corley-Lay, Shannon Douglas, Danny Eudy, Ron Hancock, Bruce Hazle, Brandon Hill, Ryan Ilg, Berry Jenkins, Ben Lanier, Don Lee, Glenn Mumford, Mark Perkins, Ian Scott, Lamar Sylvester, Michael Taylor, Kevin Thomas, Brian Webb, Roger Worthington

FROM: R. A. Garris, PE
Contract Officer

SUBJECT: DOT-AGC Roadway Subcommittee Meeting Minutes

The subject committee met on August 20, 2015 at 9:30 a.m. in the Riverwood Conference Room at the Century Center with the following in attendance:

Jonathan Bivens	Larry Brickey	Terry Canales	Randy Garris
Bruce Hazle	Brandon Hill	Ryan Ilg	Berry Jenkins
Phillip Johnson	Steve Kite	BJ Lanier	Judith Corley-Lay
Don Lee	Mark Perkins	John Pilipchuck	Ian Scott
Lamar Sylvester	Michael Taylor	Brian Webb	

Agenda and Discussion Items:

Added Item: Work Zone Speed Limits

Steve Kite

Currently, when work zones get set up the speed limit signs are installed and then not touched again making some project speeds artificially slow. This occurs mostly in design build projects. In these instances, the main construction phase has not even started and speeds are already reduced. The Traffic Management Unit is looking at ways to adjust the speed in the construction zones as needed, as well as cover signs if there is no reason for the reduction of speed. Compliance with the speeds in construction projects is the impetus for looking at the speeds during construction.

Work Zone Performance Markings and Work Zone Traffic "Pattern Masking"

Steve Kite

These two topics were discussed together. As part of the performance marking, the Work Zone Traffic Control Section is looking at the "masking" of old pavement lines versus grinding the lines. This is especially useful in areas where there is a shifting of traffic on interstates. Masking

is using a product that will spray a black non-shrinkage polymer “paint” on the old markings. Test projects using a product supplied by Magnolia showed that the product needed some reformulation based on the old lines showing through. There is also a need to better educate the pavement marking industry who most likely will be the ones applying the product. The test runs applied the product in 1’ strips, it would be much more advantageous to do a wider spray to cover the lane and not do as many passes. Steve has been working with the pavement marking contractors on this product.

Contractors asked about looking also at emulsions for the same end result. Some aspects of the Magnolia product is that it is a non-petroleum product that carries a warranty of up to 12 months and cures to dry in 10 minutes or less.

Resurfacing with “White Lining” as a Requirement

Steve Kite

Past discussion indicated that the locators cannot get on the site to locate the sign locations due to other commitments. A recommendation by the Work Zone Traffic Control Section was to pay the sign installer an extra \$2.00 per square foot of sign to white line prior to installation in an effort to minimize delays. This amount per square foot of sign would not be an additional pay item and would have to be included in the bid.

Contractors discussed not to include a set amount in the provision (i.e. \$2.00), but to let them put an amount of their choosing in the bid submittal. Steve will go back and update the spec to reflect white lining as an item that is included in the bid amount for signs.

Work Zone “Presence” Lighting

Steve Kite

In an effort to improve work zone safety on contracts doing work at night, the Work Zone section is looking at “presence” lighting and a few test projects. Typically, speeds in construction projects are higher at night. The use of lighting may reduce the speeds to a more uniform level. The intent of presence lighting is to not light up the work area as work lights do, but to be in addition to those lights as a traffic control device. Presence lighting would be paid for separately and is to be considered supplemental to work lights, not a replacement. Such lighting is being aimed at high speed work zones (i.e. interstates) and not in areas where there is lower speed limits such as urban projects. The balloon type, anti-glare lights are being considered for presence lighting.

Work Zone High Visibility Provision

Steve Kite

In an effort to improve work zone safety through enhanced delineation, a requirement for high visibility equipment is being proposed. This would include providing new drums and signs at the start of the project and as replacement for worn devices. This spec would not be used on all projects, but may be on projects that are multi-year and have night work.

Update: Utilities – Adding Back in Fittings

Lamar Sylvester

Lamar passed out a draft Utility Standard Provision that revises the 2012 Standard Specifications in the area of utilities (Articles 1036, 1500, 1510, 1515, 1520 and 1550). He asked to look the spec over and to give him feedback.

In the area of fittings, the Construction and Utilities Units are considering adding fittings back into the pay items as a per each item not a weight, and are trying to determine how to quantify. This would include items like 6" lines that would require 6" fittings, etc.

Contractor feedback was that per each is hard and weight may be the best option. There are standard weights that vary very little from year to year and that standard could be referenced in the spec. Going by the pound would also mean that there would be no need to specify the size of the fitting.

Lamar said that he would work with Roger Worthington, Mark Perkins and Brandon Hill to put together some thoughts.

Update: Trenchless Installation of Drainage Pipe

Lamar Sylvester

Lamar stated that he is doing some research on the different ways to do trenchless installation and no solution has been reached yet. He is talking to different units, including Geotech. Contractor statement was to make sure that whatever goes into the plans is practical.

Update: Using Trench Borrow for Backfilling Pipes on Smaller Projects

Lamar Sylvester

Lamar met with Ed Eatmon in Division 2 to see what they did on the project referenced in the April 2015 meeting. He is looking to see if they can get a pay item for trench borrow on projects with lump sum grading to address the concern of having nothing to capture the cost for backfilling from the pipe up. Lamar will be meeting with Roadway soon to draft up a provision.

Update: Projects with Lump Sum Grading with Undercut

Lamar Sylvester

The problem continues that there is no borrow line item with lump sum grading with undercuts. Borrow is incidental to lump sum grading and there is no way to know when "select" material will be required. It is a gamble as to whether the contractor will get paid if select is not needed for undercuts. Lamar will continue to look into it.

Other Topics of Discussion

- Berry Jenkins asked about having the contractor post their name at the beginning and end of the projects like other states do. In the past NCDOT has not been supportive of this initiative. The signs would be standardized and contain the name of the company doing the work and a phone number. Other states have had the cost of the project and it was discussed to also put on the sign if the project was state funded. Lamar Sylvester is to check with FHWA, and Steve Kite will check with other areas including CAPA.
- Michael Taylor brought up the holiday and time restrictions in contracts. Sometimes the best time to work may be after a holiday when the schools are closed and everyone is out of town. An example may be in urban areas where the offices and stores are closed or on -Y- lines where there is not a lot of holiday traffic like the interstates. Currently the time and holiday restrictions apply to "all" roads in the contract.

Steve Kite said that he would look at the restrictions and see if there is any flexibility. It was understood that if there was flexibility in the contract that the decision to work or not work was still up to the Engineer.

Berry Jenkins also mentioned that the Legislature and citizens of North Carolina want to see activity on the projects.

- Michael Taylor brought up the payment of sound/noise walls. Currently the special provision says that payment will be made only on the panel area. In this situation, wide concrete posts are not included in the payment and a 21,000 sf area wall may only come to 18,000 sf of panels for payment. Lamar said that this change has already been discussed and will be reflected in the special provisions to include the full square footage of the wall, not just the panels.
- Don Lee informed the committee of NCDENR's annual audits. They will be looking at more projects for a longer duration. One item they will be looking for is if any sediment was moved off the project. If there is, a NOV will be issued. Also there has been recent agency discussion on revisiting the turbidity standards..

Next Meeting

The next meeting is scheduled for October 22, 2015 in the Riverwood Conference Room at Century Center B.



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August 17, 2015

MEMO TO: Jonathan Bivens, Stuart Bourne, Larry Brickey, John Bridge, Chris Byers, Joe Coleman, Judith Corley-Lay, Shannon Douglas, Danny Eudy, Ron Hancock, Bruce Hazle, Brandon Hill, Ryan Ilg, Berry Jenkins, Ben Lanier, Don Lee, Glenn Mumford, Mark Perkins, Ian Scott, Lamar Sylvester, Michael Taylor, Kevin Thomas, Brian Webb, Roger Worthington

FROM: R. A. Garris, PE
Contract Officer

SUBJECT: DOT-AGC Roadway Subcommittee Meeting 8/20/15 Agenda

The following is a list of items scheduled for discussion:

1. WZ Performance Markings (Steve Kite)
2. WZ Traffic "Pattern Masking" (Steve Kite)
3. Resurfacing with "white lining" as a Requirement (Steve Kite)
4. WZ "Presence" Lighting (Steve Kite)
5. WZ High Visibility Provision (Steve Kite)
6. Utilities – Adding Back in Fittings - UPDATE (Lamar Sylvester)
7. Trenchless Installation of Drainage Pipe - UPDATE (Lamar Sylvester)
8. Using Trench Borrow for Backfilling Pipes on Smaller Projects - UPDATE (Lamar Sylvester)
9. Projects with Lump Sum Grading with Undercut - UPDATE (Lamar Sylvester)

1 **Utility Standard Provisions**

USP-1

2 (8/11/15) effective with the ____ 2016 letting

3 **Revise the 2012 Standard Specifications as follows:**

4 **Page 10-58, Sub-article 1036-1 General**

5 Add the following sentence

6 All materials in contact with potable water shall be in conformance with Section 1417 of
7 the Safe Drinking Water Act.

8 **Page 15-2, Sub-article 1500-9 Placing Pipelines into Service**

9 Add the following sentence:

10 Obtain approval from the NCDENR-Public Water Supply Section prior to placing a new
11 water line into service. Use backflow prevention assemblies for temporary connections
12 to isolate new water lines from existing water line.

13 **Page 15-6, Sub-article 1510-3 (B), Testing and Sterilization**

14 change the allowable leakage formula to:

$$W = LD\sqrt{P} - 148,000$$

15 **Page 15-6, Sub-article 1510-3 (B), Testing and Sterilization, sixth paragraph:**

16 Replace the paragraph with the following:

17 Sterilize water lines in accordance with Section 1003 of The Rules Governing Public
18 Water supply and AWWA C651 Section 4.4.3, the Continuous Feed Method. Provide a
19 chlorine solution with between 50 parts per million and 100 parts per million in the initial
20 feed. If the chlorine level drops below 10 parts per million during a 24 hour period, then
21 flush, refill with fresh chlorine solution, and repeat for 24 hours. Provide certified
22 bacteriological and contaminant test results from a state-approved or state-certified
23 laboratory. Operate all valves and controls to assure thorough sterilization.

24 **Page 15-6, Sub-article 1510-3 (B), Testing and Sterilization, seventh paragraph:**

25 Delete the words "may be performed concurrently or consecutively."
26 and replace with "shall be performed consecutively."

27 **Page 15-7, sub-article 1510-4 Measurement and Payment**

28 Replace the 2nd sentence in the first paragraph with the following:

29 Water piping or tubing 2" or smaller will be measured as water service line without
30 differentiation of size.. Pipe, six or eight inch diameter, for fire hydrants will be
31 measured as fire hydrant leg without differentiation of size.

1 Include the following pay items:

2 Water Service LineLinear Foot
3 Fire Hydrant Leg.....Linear Foot

4 **Page 15-7, sub-article 1515-2 Materials,**

5 Replace paragraph beginning “Double check valves...” with the following:

6 Double Check valves (DCV) and Reduced Pressure Zone principal (RPZ) backflow
7 prevention assemblies shall be listed on the University of Southern California Foundation
8 for Cross-Connection Control and Hydraulic Research list of approved backflow devices.

9 **Page 15-9, sub-article 1515-4 Measurement and Payment**

10 Delete the word “piping,” from the second sentence of the eighth paragraph.

11 **Page 15-11, Sub-article 1520-3(A)(2) Testing, line 5,**

12 Replace the second paragraph with the following:

13 Test all 24" and smaller gravity sewer lines for leakage using infiltration, exfiltration, or
14 air test. Perform visual inspection on gravity sewer lines larger than 24". Perform line
15 and grade testing and deflection testing on all gravity sewer lines.

16 **Page 15-13, sub-article 1520-4 Measurement and Payment**

17 Replace the second sentence of the second paragraph

18 Piping of any size from the gravity sewer main to the clean-out, between clean-outs or
19 from a clean-out to a connection to existing piping will be measured as “Gravity Sewer
20 Service Line.”

21 Include the following pay item:

22 Gravity Sewer Service Line.....Linear Foot

23 **Page 15-22, sub-article 1550-6 Measurement and Payment**

24 Add the following at the beginning of the sub-article

25 Trenchless Installation of Water Service Line, Fire Hydrant Leg, or Gravity Sewer
26 Service Line will be measured and paid in linear feet without regard to “In Soil” or “Not
27 in Soil” conditions. Measurement will be made horizontally to the nearest tenth of a
28 linear foot.

29 **Page 15-22 sub-article 1550-6 Measurement and Payment**

30 Add the following at the end of the sub-article.

31 Trenchless Installation of Water Service Line.....Linear Foot
32 Trenchless Installation of Fire Hydrant LegLinear Foot
33 Trenchless Installation of Gravity Sewer Service LineLinear Foot

AGC/DOT Roadway Subcommittee Sign In

August 20, 2015, Riverwood Conference Room, Century Center B

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AGC/DOT Roadway Subcommittee Sign In

August 20, 2015, Riverwood Conference Room, Century Center B

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