STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

MICHAEL F. EASLEY
GOVERNOR

LYNDO TIPPETT
SECRETARY

May 15, 2007

MEMO TO: Don Lee, Berry Jenkins, Michael Taylor, Jay Bennett, Ed Spencer, Ron Hancock, Judith Corley-Lay, Stuart Bourne, Jonathan Bivens, Jennifer Brandenburg, Brian Webb, Dave Rankin and Daniel Lieberman

FROM: Victor Barbour, PE
State Project Services Engineer

SUBJECT: AGC/Roadway Subcommittee Meeting Minutes
April 19, 2007

The subject committee met on April 19, 2007 at 9:30 a.m. in the Riverwood Conference Room at the Century Center with the following in attendance:

Jennifer Brandonberg	Randy Garris	Ellis Powell
Victor Barbour	Chris Howard	Ted Sherrod
Jay Bennett	Dave Hurley	Kevin Siebold
Jonathan Bivens	Berry Jenkins	Norma Smith
Anna Cantrell	Don Lee	Ed Spencer
Kenneth Cantrell	Dan Lundston	Michael Taylor
		Njoroge W. Wainaina

The following items were discussed:

1. CHEMICAL STABILIZATION

The Industry discussed using lime stabilization and whether the specifications are too restrictive. They feel the cure time could be shortened. The Industry provided suggestions for changes to the standard specifications for the Department to consider. The Department has a research project regarding lime and cement stabilization. The research is looking at performance characteristics and our current specifications. One of the preliminary findings from the research is that the performance of the stabilization is more dependent on soil temperature than air temperature, which may lead to a change in our specifications. We anticipate the final report will be available in a few months. The Department is reluctant to make major modifications to our specifications since we use the structural value in this layer in determining the final pavement design. (See Handout No. 1.)

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LOCATION:
CENTURY CENTER COMPLEX
ENTRANCE B-2
1020 BIRCH RIDGE DRIVE
RALEIGH NC

2. DELETION OF CPMS ON PROJECTS

The Industry discussed the issue of the Department having a specification and pay item requiring a CPM on a project, then deleting the pay item and requesting a credit for the deletion. The Industry said that a CPM is developed on a project whether there is pay item or not and the only work that is eliminated is the narrative for the Department and the reproduction costs. Therefore, the cost saving is negligible. The Department said this would be reviewed on a project-by-project basis.

3. FUEL PRICE ADJUSTMENT

A member of the Industry asked for an explanation of the difference of payment for fuel adjustment between projects administered under the 2002 *Specifications Book* and the 2006 *Specifications Book*. The Department replied that there has been no difference in payment since 2005.

4. TRUCK MOUNTED IMPACT ATTENUATORS

The Industry asked why the Truck Mounted Impact Attenuator was incidental to other costs in projects administered by the 2006 *Specifications Book*. The reasoning for making TMIA incidental was that for moving operations such as pavement markings and markers, the use of a TMIA is required to perform this work in accordance with our standards. The Industry said they understood that but some operations, (mowing, seeding) performed near the completion of a project may require TMIAs that would not be reasonably anticipated during the bidding process. The Industry suggested making it incidental to certain items. The Department will review and report the results at the next meeting.

5. UPDATE ON GPS AND ELECTRONIC FILES

Victor Barbour and Ron Hancock will now chair the Electronic Plans committee, replacing Shannon Sweitzer. Their goal is to produce complete electronic plans. However, thousands of plans have already been started. They are created electronically but then hand-modified (such as cross-sections). The changes are never recorded in the electronic files. There was discussion as to what files the contractors would like to have for bidding purposes. At the next Electronic Plans Committee meeting, the members will identify some projects to begin this process.

6. GATING VS. NON-GATING IMPACT ATTENUATORS, TYPE 350

The Industry asked how to determine which type of Impact Attenuator, Type 350 to use, gating or non-gating impact attenuators. The Department passed out an example of a guardrail summary sheet that had a column depicting which type to use at each location. It was determined that the plans for which the question arose was an old set of plans that did not have the columns with the type to be used on the guardrail summary. (See Handout No. 2.)

8. OTHER TOPICS

The Department announced that Ron Hancock, former State Bridge Construction Engineer will be the new State Roadway Construction Engineer, replacing Shannon Sweitzer who became the Director of Construction for the Toll Road Authority.

Stop/Slow Paddles must be fluorescent.

Precast Box Update - There have been two meetings and there are plans to bring some ideas to this committee at the June meeting.

There was a suggestion to develop a user-friendly DBE submittal form (certifying that the DBEs have been paid) that can be printed, signed and given to the RE. There was also discussion on a user-friendly Letter of Intent.

There was a request to explain what would happen if the bidder did not check either box on the fuel adjustment clause of Expedite. The answer is that the bidder would receive the fuel adjustment. Due to the setup of Expedite, there cannot be only one box to check.

It was announced that Infotech is offering software for subcontractors; (Bidrunner™ sends and retrieves bids in less time than it takes to fax just one.) There is no contract required and can be paid for on a monthly basis.

There is a new pay item for Stilling Basin Dewatering Pit to be paid in cubic yards.

9. MEETING DATES FOR 2007

June 7 August 23 October 18 December 20

Note: All meetings will begin at 9:30 a.m. You may want to reserve all day for the meeting in case it runs long, or there is a need to make a field trip in the afternoon.

cc:

Art McMillan, PE	Chris Howard
Scott Blevins, PE	Dave Hurley
Randy Garris, PE	Dan Lundston
Tommy Cozart, PE	Kevin Siebold
Ellis Powell, PE	Njoroge Wainaina, PE
Ted Sherrod, PE	Anna Cantrell
Norma Smith	Kenneth Cantrell

Handout No. 1

Pozzolanic Contracting & Supply Co., Inc.
Knoxville, TN
April 19, 2007

Respectfully request the following changes be made to the current Section 501 Lime-Treated Soil

501-8 Application of Lime
(A) General
Current: Mix the lime into the soil within **2** hours after application.

Proposed Change: Mix the lime into the soil within **4** hours after application.

(B) Slurry Method
Current: Do not add lime slurry to the soil when the moisture content exceeds **2%** above optimum moisture. Areate soil having a moisture content higher than **2%** above optimum or allow to dry naturally until it contains no more than this percentage of moisture.

Proposed Change: Do not add lime slurry to the soil when the moisture content exceeds **4%** above optimum moisture. Aerate soils having a moisture content higher than **4%** above optimum or allow to dry naturally until it contains no more than this percentage of moisture.

(C) Quicklime
Current: Do not add dry quicklime to soil when the moisture content exceeds **4%** above optimum moisture. Aerate soil having a moisture content higher than **4%** above optimum or allow to dry naturally until it contains no more than this percentage of moisture.

Proposed Change: Do not add dry quicklime to the soil when the moisture content exceeds **8%** above optimum moisture. Aerate soil having a moisture content higher than **8%** above optimum or allow to dry naturally until it contains no more than this percentage of moisture.

501-9 Mixing
(B) Preliminary Curing
Current: Following primary mixing operations, cure the stabilized layer for **1 to 4** days. . .
Mix, compact, shape, and finish the stabilized layer no later than **4** days after primary mixing.

Proposed Change: Following primary operations cure the stabilized layer for **2 to 4** days. . .
.Mix, compact, shape, and finish the stabilized layer no later than **7** days after primary mixing.

501-10 Compacting, Shaping, and Finishing
Current: Aerate or moisten the mixture as necessary during compaction operations to maintain the moisture between optimum and optimum plus **2%**.

Proposed Change: Aerate or moisten the mixture as necessary during compaction operations to maintain the moisture between optimum and optimum plus **3%**.

Current: Complete shaping, final mixing, compacting and finishing on the same day upon completion of the preliminary work.

This work is to be completed no later than **4** days after primary mixing and done during daylight hours, unless otherwise provided in the contract.

Proposed Change: Complete shaping, final mixing, and compacting on the same day. Complete finish grading operation no later than 24 hours after final mixing and compacting.

This work is to be completed no later than **7** days after primary mixing and done during daylight hours, unless otherwise provided in the contract. If work is delayed by rain, then add one day for each rain day up to 3 extra days to complete work.

Current: If the above work is not completed as specified, rip up the entire section and add additional lime, as directed, at no additional cost to the Department.

Proposed Change: If the above work is not completed as specified, rip up the entire section and add up to 20% additional lime, as directed, at no additional cost to the Department.

COMPUTED BY: W. H. Garrett DATE: 09-24-03
CHECKED BY: R. C. Blount DATE: 10-07-03

"N" = DISTANCE FROM EDGE OF LANE TO FACE OF GUARDRAIL.
TOTAL SHOULDER WIDTH = DISTANCE FROM EDGE OF TRAVEL LANE TO SHOULDER BREAK POINT.
FLARE LENGTH = DISTANCE FROM LAST SECTION OF PARALLEL GUARDRAIL TO END OF GUARDRAIL.
W = TOTAL WIDTH OF FLARE FROM BEGINNING OF TAPER TO END OF GUARDRAIL.
G = GATING IMPACT ATTENUATOR TYPE 350
NG = NON-GATING IMPACT ATTENUATOR TYPE 350

STATE OF NORTH CAROLINA
DIVISION OF HIGHWAYS

GUARDRAIL SUMMARY

METRIC

PROJECT REFERENCE NO. R-1030E | SHEET NO. 3-B

*SEE SHT. S-0 FOR DETAIL OF G.A.U. TYPE B-77

I.A.U. - IMPACT ATTENUATOR UNIT
S.F.C.B. - SINGLE FACE CONCRETE BARRIER

BEG. STA.	END STA.	LOCATION	LENGTH		WARRANT POINT		"N" DIST. FROM EOL (Meters)	SHOULDER WIDTH (Meters)	FLARE LENGTH		W		I.A.U. TYPE 350			ANCHORS					S.F.C.B. (m)	TERM. END SECT.	REMARKS
			STRAIGHT (Meters)	SHOP CURVED (Meters)	APPROACH END	TRAILING END			APPROACH END (m)	TRAILING END (m)	APPROACH END (m)	TRAILING END (m)	EA.	G	NG	GRAU 350	M-350	CAT-1	B-77*	III			
-L- 69+26.040	-L- 70+61.295	RT.	135.255				3.6	4.6	15.24		0.3					1		1					
-L- 69+90.520	-L- 70+87.680	LT.	97.155				3.6	4.6	15.24		0.3					1		1					
-L- 76+88.215	-L- 80+74.930	LT.	386.715				3.6	4.6	15.24		0.3					1		1					
-L- 77+02.480	-L- 81+19.680	RT.	417.195				3.6	4.6	15.24		0.3					1		1					
-L- 81+93.138	-L- 82+38.462	MEDIAN	45.320		82+09.199	82+24.394							2	X	X				4		30.48		
-L- 93+84.872	-L- 94+28.701	MEDIAN	43.830		94+01.319	94+12.086							2	X	X				4		22.86		
-L- 100+03.174	-L- 100+89.046	RT	85.872				3.6	4.6	15.24		0.3					1		1					
-L- 101+23.555	-L- 108+55.075	LT.	731.520			BRIDGE	3.0	4.6				0.6						1	1				
-L- 104+06.914	-L- 108+54.589	RT	447.675		BRIDGE		3.0	4.6	15.24		0.6					1			1				
-L- 107+84.320	-L- 108+54.805	MEDIAN RT	70.485		BRIDGE		1.2	1.8	64.77		4.45						1		1				
-L- 108+82.209	-L- 109+45.074	MEDIAN LT	62.865		BRIDGE		1.2	1.8	57.15		4.45						1		1				
-L- 108+82.425	-L- 109+83.240	LT.	97.155		BRIDGE		3.0	4.6	15.24		0.6					1			1				
-L- 108+81.939	-L- 109+73.379	RT	91.440			BRIDGE	3.0	4.6				0.6						1	1				
-L- 113+49.868	-L- 115+34.653	LT.	184.785				3.6	4.6	15.24		0.3					1		1					
-L- 113+45.985	-L- 114+92.670	RT	146.685				3.6	4.6	15.24		0.3					1		1					
-L- 120+59.821	-L- 123+05.566	RT	245.745				3.6	4.6	15.24		0.3					1		1					
-L- 121+27.000	-L- 123+57.505	LT.	230.505				3.6	4.6	15.24		0.3					1		1					
-L- 134+96.518	-L- 138+39.418	LT.	342.900			BRIDGE	3.0	4.6				0.6						1	1				
-L- 134+79.386	-L- 138+20.381	RT	340.995		BRIDGE		3.0	4.6	15.24		0.6					1			1				
-L- 137+67.914	-L- 138+28.779	MEDIAN RT	62.865		BRIDGE		1.2	1.8	57.15		4.45						1		1				
-L- 138+55.481	-L- 140+53.601	RT	198.120			BRIDGE	3.0	4.6				0.6						1	1				
-L- 138+66.121	-L- 139+36.606	MEDIAN LT	70.485		BRIDGE		1.2	1.8	64.77		4.45						1		1				
-L- 138+74.518	-L- 140+40.253	LT.	165.735		BRIDGE		3.0	4.6	15.24		0.6					1			1				
-L- 150+35.849	-L- 151+10.144	RT	74.295				3.6	4.6	15.24		0.3					1		1					
-L- 161+01.890	-L- 162+20.000	RT	118.110				3.6	4.6	15.24		0.3					1							EQUALITY (LB) R1030AB
-L- 16+220.000	-L- 16+260.005	RT	40.005				3.6	4.6										1					EQUALITY (LA) R1030BA
-RPB- 0+341.406	-RPB- 0+423.321	RT	81.915				3.0	4.6										1					
-RPB- 0+341.406	-RPB- 0+423.321	LT.	81.915				3.0	4.6										1					
-RPC- 0+299.065	-RPC- 0+398.125	RT	99.060				3.0	4.6	15.24		0.3					1							
-RPC- 0+299.065	-RPC- 0+398.125	LT.	99.060				3.0	4.6	15.24		0.3					1							
-L- 16+861.566	-L- 16+911.796	MEDIAN	49.530		16+877.369	16+894.545							2	X	X				4		38.10		
-RPA- 0+279.843	-RPA- 0+417.003	RT	137.160				3.0	4.6	15.24		0.3					1							
-RPA- 0+279.987	-RPA- 0+417.147	LT.	137.160				3.0	4.6	15.24		0.3					1							
-RPD- 0+361.567	-RPD- 0+424.432	RT	62.865				3.0	4.6										1					
-RPD- 0+342.521	-RPD- 0+424.436	LT.	81.915				3.0	4.6										1					
-LREV- 17+578.230	-LREV- 17+694.435	LT.	116.205				3.6	4.6	15.24		0.3					1		1					
-LREV- 17+993.913	-LREV- 18+247.278	LT.	253.365				3.6	4.6	15.24		0.3					1		1					
-LREV- 18+024.702	-LREV- 18+239.967	RT	215.265				3.6	4.6	15.24		0.3					1		1					
-L- 19+018.953	-L- 19+278.033	LT.	259.080				3.0	4.6				0.6						1	1				
-L- 19+129.092	-L- 19+271.967	RT	142.875		BRIDGE	BRIDGE	3.0	4.6	15.24		0.6					1			1				
-L- 19+211.218	-L- 19+274.083	MEDIAN RT	62.865		BRIDGE		1.2	1.8	57.15		4.45						1		1				
-L- 19+442.931	-L- 19+572.471	RT	129.540			BRIDGE	3.0	4.6				0.6						1	1				
-L- 19+446.927	-L- 19+517.412	MEDIAN LT	70.485		BRIDGE		1.2	1.8	64.77		4.45						1		1				
-L- 19+449.081	-L- 19+614.816	LT.	165.735		BRIDGE		3.0	4.6	15.24		0.6					1			1				
-L- 20+799.010	-L- 20+844.667	MEDIAN	60.960		20+816.450	20+827.239							2	X	X				4		22.86		
		SUBTOTAL	7,240.667										8			24	6	24	34		114.30		

LESS ANCHOR DEDUCTIONS		
GRAU-350	24 @ 15.24 m	365.760
M-350	6 @ 11.43 m	68.580
CAT-1	24 @ 1.905 m	45.720
B-77	34 @ 5.715 m	194.310
TOTAL DEDUCTIONS:		(-) 674.370

PROJECT TOTAL	6,566.297
SAY	6,568.440
ADDITIONAL GUARDRAIL POSTS	10 EA.

17-APR-2007 8:04
...\GRAIL SUM.DGN