



MINUTES OF THE 32ND ANNUAL ASPHALT CONFERENCE



32nd Annual Asphalt Conference Agenda.

▪ Monday, September 15, 2008

12:00 Noon to 3:00 p.m. - Trade Show Setup

3:00 p.m. to 7:30 p.m. - Trade Show

5:30 p.m. to 7:30 p.m. - Reception in Trade Show Area

▪ Tuesday, September 16, 2008

7:00 a.m. to 8:15 a.m. - Buffet Breakfast

7:00 a.m. to 12 Noon - Trade Show (during meals and breaks)

8:30 a.m. to 4:30 p.m. - Asphalt Conference

12:00 Noon -1:00 p.m. - Buffet lunch

SPONSORS: *Thanks to the sponsors for this year's Annual Asphalt Conference*

**Advance Testing Company
Arrmaz Custom Chemicals
BOMAG Americas, Inc.
Dillon Transport
IIG
Marathon Petroleum Company
Titan America**

EXHIBITORS: *Thanks to all the exhibitors for this year's Annual Asphalt Conference:*

Advance Testing Company
Astec, Inc.
BOMAG Americas, Inc.
Chemtek, Inc.
CMEC
Commercial Training Solutions
Flagler Construction Equipment, LLC
G S Equipment, Inc.
Gencor Industries
Heatec, Inc.
IIG
InstroTek, Inc.
Laboratory Technical Services, Inc.
Lengemann
Linder Industrial Machinery Company
MOBA Corporation
NuStar Asphalt Refining
OSCS
Pavesmart
Roadtec
The Miller Group
Titan America
Troxler Electronic Laboratories, Inc.

Asphalt Conference Agenda

8:30 a.m. Welcome and Opening Remarks – Jim Warren, ACAF, Inc.

Recognition of the 2008 Statewide Asphalt Pavement Award Winners

A.P. BOLTON AWARD (New construction, reconstruction, or major overlay on Interstate or multi-lane primary highway with 30,000 tons minimum)

- *Anderson Columbia Company, Inc.* for their Jackson County project on I-10/SR 8 from a point east of SR 76 to a point east of SR 71.

STATEWIDE URBAN RESURFACING AWARD (may include widening but not additional lanes) on State primary highway or county highway. 10,000 tons minimum or equivalent of 5 miles of 24' roadway. Urban is defined as 51.0% or more of the project is in a curb and gutter section.

- *APAC - Southeast, Inc. First Coast Division* for their Alachua County project in Gainesville on SR 24 from SR 26 to NW 55th Place.

STATEWIDE RURAL RESURFACING AWARD (may include widening but not additional lanes). State primary highway or rural county highway. 10,000 tons minimum or equivalent of 5 miles of 24' roadway. Rural is defined as 51.0% or more of the project has paved shoulders.

- *C.W. Roberts Contracting, Inc.* for their Jefferson County Project SR 20 from Leon County line North to the Town of Waukeenah.

STATEWIDE ROADS AND STREETS – FDOT AWARD: New construction, reconstruction, or overlay with 5,000 ton minimum.

- *C.W. Roberts Contracting, Inc.* for their Okaloosa County project in Valparaiso, Florida – SR 190 from East of SR 85 to SR 397 North of Mansfield Avenue.

STATEWIDE ROADS AND STREETS – Non-FDOT AWARD: New construction, reconstruction, or overlay with 5,000 ton minimum.

- *Orlando Paving Co., A Div. of Hubbard Construction Company* for their Seminole County project on CR 427 - Seminole County: from North Street to SR 434.

SPECIAL PROJECTS AWARD: Any project of a special or unique nature requiring specialized equipment, techniques, materials, time restrictions, or operating conditions.

- *Ajax Paving Industries, Inc.* for S.W. Florida International Airport in Fort Myers
- *APAC Southeast Inc.* for their Sarasota-Bradenton Airport
- *General Asphalt Company* for their Fort Lauderdale Executive Airport Runway, and...
- *Orlando Paving Company* for their Clayton Crossing Shopping Center in Oviedo

Presentations: **NOTE: copies of available presentations can be found at <http://www.acaf.org/events.htm>**

8:45 – 9:30 a.m. Keynote – Paul Peavy – “We Want to Pump...You Up!”

9:30 – 10:00 a.m. Jay Hansen, National Asphalt Pavement Association (NAPA) –
“It's Your Job”

10:00-10:15 a.m. COFFEE BREAK

10:15 – 11:00 a.m. Buzz Powell, NCAT – “NCAT Test Track Update, High RAP
Research and Warm Mix Asphalt”.

11:00 – 11:30 a.m. Gary Fitts, Asphalt Institute – “Texas’ Experience with
Warm Mix Asphalt”

11:30 – 12:00 p.m. Greg Sholar – State Materials Office Research Update

12:00 to 1:00 p.m. Lunch

1:00 – 1:30 p.m. Jim Musselman, State Materials Office – “State of the Industry”

1:30 – 4:30 p.m. Question and Answer Session

Question and Answer Session:

Question and Answer Session: (*Answers in Blue Italics*)

Materials, Mix Design, Asphalt Specification Issues

1.What is the current status of the "Lake Belt Issue" in South Florida?

Following is combined info from the Miami Herald [THE EVERGLADES: Judge urged to restore ban on rock mining](#)

CURTIS MORGAN, cmorgan@MiamiHerald.com Published on 2008-08-22, Page B5, Miami Herald, The (FL)

On July 1, 2008 the 11th Circuit Court of Appeals, Atlanta, lifted the injunction prohibiting mining and allowed the mines that were shut down at three locations to come back on stream. The Appeals Court sent the case back to the same Federal District Court Judge Hoeveler saying “Again, we offer no opinion as to whether the Corps complied with NEPA (National Environmental Policy Act) or the CWA (Clean

Water Act) during the permitting process. We instead remand to the district court to answer those questions in the first instance, applying the proper standard of review”.

The three mines that account for about 30% of the Lake Belt production are:

- *Titan America*
- *Florida Rock*
- *White Rock Quarries South (lime rock base only, not White Rock’s larger mine farther north of the well field)*

On August 22, 2008 Judge Hoeveler issued a statement saying he would decide how to proceed in a month, alluding to his impatience with the United States Army Corps of Engineers. Norman Rave Jr., a Justice Department attorney, advised Hoeveler to first let the Corps complete a new review of environmental impacts the judge previously ordered, a Supplemental Environmental Impact Statement (SEIS). That review, months behind the Corps’ original timeline, is now expected sometime in December.

It is the Department’s opinion that the Judge’s review will cover only those same three mines for which he created a “Protective Zone” for the Miami-Dade County municipal well field. The time frame for a final decision is unpredictable, as is the whether the Judge will hold new hearings for arguments.”

2. Status of the Hybrid Binder Research?

Hybrid binders are an engineered blend of ground tire rubber and polymer. The Hybrid Binder research project is being conducted in a joint effort with FDOT and UF. The project is scheduled to be completed at the end of 2008. Six binders are being evaluated: three hybrid binders, PG 76-22, ARB-5 and ARB-12. For the asphalt mixtures, two aggregate sources will be evaluated (limestone and granite) and two mixture types (dense and open graded) will be evaluated for their cracking potential using the energy ratio concept.

3. Has there been any more consideration of using fewer binder types for recycle mixes, i.e. using RA 1000, RA 1500, PG 64-22, and PG 67-22?

FDOT will continue to specify some RA grades that have a lower viscosity. RAP material properties dictate the binder grade and with the economic situation forcing contractors to find ways to incorporate more RAP in their mixtures, the need for these lower viscosity RA grades may be even greater than it is now. Gale Page and David Webb compiled a listing of all RA’s used on previous mix designs to determine the frequency of use for each grade. Four target RA grades were identified based on this information: RA 500, RA 725, RA 1050, and RA 1500. The viscosity of an RA grade must be within ± 20 percent of the target. These four targets were chosen to prevent any gaps in the viscosity ranges. The corresponding viscosity values identified as dividing lines between the target RA grades are: 650,

850, 1200, and 1700. This proposal will be discussed with binder suppliers before any specification change is implemented.

4. Status of study of friction number on mixes with Florida aggregates.

Recently there has been a concern with performance related to roadway friction on some projects in the south Florida area. For the past few years, the Department has been monitoring frictional performance statewide in a database with a focus on the following items: mix design number, Contractor, roadway sections, traffic counts, aggregate type, and mix design gradation. Currently the Department is closely reviewing the frictional characteristics of the oolitic limestone aggregate. Samples have been obtained of oolitic limestone aggregate from 10 different Contracts / Plants from the south Florida area to determine an actual "as delivered" baseline acid insolubility number for several different sized aggregates. Initial results indicate that all aggregate samples met the minimum acid insolubility requirements of 12%. The Department is currently developing a research plan to conduct a more detailed investigation of oolitic aggregates at the aggregate mine, asphalt plant and on the roadway.

5. Vulcan aggregate contract update.

FDOT continues with the use of the Vulcan Construction Materials aggregate vendor contract on the contracts that it identified when the contract was being developed. Have added/deleted some projects and moved some in the letting schedules. There has been approximately a half dozen projects so far that have used the aggregate vendor contract for about 105,000 tons. Since April 2007, there have been 14 mix designs approved by the SMO that included the specified 30% of aggregate from the Vulcan Construction Materials source.

6. Use of microwave oven for reheating samples – has a method been finalized? Is this acceptable to use?

No formal test method has been written for use of the microwave oven in reheating samples. Currently, only District 5 Materials Office personnel are using it for reheating IV samples. There was a lot of interest initially, but there were cases of sample boxes igniting, which made some users lose interest. Since then, the use of Pyrex bowls has solved the problem of boxes igniting, but there still has been no interest from FDOT or Contractor personnel to use the microwave. Research at the State Materials Office and District 5 has shown the microwave oven to be highly effective at heating samples in as little as 10 to 15 minutes, without changing the properties of the mixture. A memo was sent out to all of the District Bituminous Engineers allowing the use but again there was no interest other than District 5.

7. Update on VAAP failures statewide.

There continue to be very few that make it to level of requiring a Statewide Dispute Review Board (SWDRB) to hear issues of responsibility. There have been a few that have gone to the SWDRB for determination of responsibility for the failure. Only about 5 projects come to mind over the last 4 years that went to SWDRB. There have been projects that the district and contractor met and the contractor corrected without going to DRB. Approximate number of projects statewide that have had VAAP issues that required some action by the contractor is 2 dozen. Discussion with audience about requirements and responsibilities associated with VAAP. Reviewed language in the specification section 338.

8. Discussion on the recent specification change where LOTs are terminated after 20 calendar days after the start of the LOT.

This recent specification change effective July 2008 is as follows: "LOTs will be terminated 20 calendar days after the start of the LOT. (Time periods other than 20 days may be used if agreed to by both the Engineer and the Contractor.)" This change was developed with Industry through the Flexible Pavement Committee in response to a concern that on CQC Projects where there is a large break in production that the mix design properties could be different from the start to the finish of a LOT. This could affect the PWL values on this mix design and result in lower pay factors. As a result of discussion at the asphalt conference the Department will internally review this specification and work with Industry if a change in the timeline for LOT termination is required.

9. Discuss deleterious materials visible in pavement. What is the limit?

There is not a specific limit in the specification. Each case would have to be evaluated. Specification 330-12.2 addresses generalities about texture of the finished surface. The Department is willing to work with Industry to try to develop a specification that addresses this. Risk with this is that it can become a "black/white, pass/fail" type of response.

10. RAP in Friction Course: I know the change will take effect in the January workbook but why can't the department make this change effective now? A materials memo allowing a zero dollar change would be most helpful in the tough economic times.

It is the Department's intention to move slowly at first with this to develop a history with these mixes. If FDOT were to have intended to roll it out prior to Spec workbook implementation, it would have issued a DCE memorandum to allow

approval for jobs. Contractors can submit mix designs now with RAP to get them approved in anticipation of the January 09 lettings.

11. Update on changes to FM 1-T 166.

FM 1-T 166 was modified to standardize the order of the steps in which Gmb is determined for roadway cores. The following sequence is to be used by all testers (QC, VT, RT and IV): water weight, SSD weight, and dry weight. Cores must be fan dried a minimum of four hours prior to determining the dry weight. Additionally, a precision statement was included for laboratory pills (0.011 allowable differences between two pills by the same operator using the same equipment and 0.022 allowable differences between the average of two pills between two labs using different operators and different equipment). An allowable tolerance of 0.022 was provided for determining the Gmb of a roadway core by two different operators. Note that this value is a place holder. In 2009, the value will change to 0.018 for coarse mixtures and 0.015 for fine mixtures.

12. Get feedback from Industry on their interest in using Warm Mix.

There have been a number of projects successfully built to date and there are a number of contractors who are buying equipment and experimenting with various processes. Industry is supportive of Warm mix as it can allow for same quality of mix while improving the working environment, decreasing emissions, saving energy. Industry encouraged the Department to allow the use of Warm mix as a transparent specification change.

13. Status of shingle specification for asphalt?

Florida DOT as well as other state DOT's have been looking at the use of recycled shingles in hot mix asphalt. In this discussion, recycled shingle products need to be distinguished as being: 1) post manufacture (manufacture waste) or 2) post consumer (re-roofing tear-offs). Florida's experience dates back to the 1980's with both products. With both products, the first big issue has been processing the raw recycled shingle material. The Florida DOT is currently working with a hot mix asphalt contractor and post manufacture shingle processor to develop a specification for use of this product in hot mix asphalt for the Florida DOT. The specification is still in draft form and not yet finalized.

14. What is the procedure to utilize Warm Mix Asphalt on a project?

In order to use warm mix asphalt on a project, go through the Project Administrator, who will get input from the District and Central Office. To date, the previous projects that used warm mix did not require a specification change, since the only significant

change was that the mix was run at a lower temperature. The State Materials Office will develop specification language (probably one paragraph) for using warm mix in the near future.

15. Discuss new FDOT asphalt binder terminal inspections.

Since FDOT specifications are the basis for acceptance for asphalt binders, asphalt rubber, and ground tire rubber, an inspection program is being implemented to ensure that these producers are adhering to the specification requirements. The plan is for State Materials Office personnel to visit each location at least every three months to perform these inspections as well as obtaining split samples for testing.

16. Discuss supply of Polymer Binders - Is this creating any issues?

A presentation on the supply and availability of butadiene was given by Ron Corun representing NuStar. Butadiene is a chemical that is used to make SBS polymers which are used to modify asphalt binders. Butadiene is generated during the production of ethylene, provided that the feedstock used to make the ethylene is naphtha. If natural gas is used as the feedstock, butadiene is not produced. The market dictates which feedstock is used, and right now the economics are in favor of natural gas. Consequently the supply and availability of butadiene is limited in the United States. It has yet to become a problem in Florida, however.

17. Discuss the FDOT's philosophy for using High RAP mixes.

The Department is in favor of using high RAP mixes provided there is not a drop-off in material quality. Some contractors have found RAP fractionation a way of increasing their RAP contents; while others have certain blends of materials that work without fractionation. There is an NCHRP research project on the design and usage of high RAP mixes and the Department is monitoring the progress of that project very closely.

Pavement Design Issues

18. Proposed Alternate Pavement Bids process – What projects? When will these projects be out for bid?

There are two upcoming Alternate Pavement Bid projects. SR 80 in Hendry County (194201-2) scheduled for letting Feb 2009 and SR 79 in Washington County (220773-1) scheduled for letting May 2009. A Life Cycle Cost Factor (LCCF) will be added for low bid determination only to the alternate with the higher future rehab costs. The calculations to determine of the LCCF will follow FDOT procedures and will be presented to representatives of the Asphalt and Concrete industries prior to the lettings.

19. Bonded Friction Course – What is the status of the pilot projects?

Two additional pilot bonded friction course projects are scheduled. A 17 lane mile project (420253-1) is being bid in Sept 2008 on I-75 in Manatee County. An 11 lane mile project (419570-1) is scheduled for letting in Dec 2008 on the Turnpike in Orange County.

20. Asphalt open-graded crack relief layer – future projects?

An open-graded crack relief layer section is planned to be included as a test section on a project (411695-1) planned on US 90 in Gadsden County with a letting of Feb 2010. A section was previously constructed on 409025-1 on US 27 in Leon County.

21. We are seeing more and more projects requiring an asphalt curb pad in conjunction with asphalt base. Some projects have more quantity than others. However, how the current specification is written there is no bituminous adjustment for the asphalt curb pad. It doesn't make sense to get a bit adjustment on the asphalt base and not the curb pad when they are placed in the same operation. How can these quantities be combined?

This is not included for bituminous adjustment since the payment for the asphalt curb pad is included in the payment for the curb & gutter. Using design standards and the Plans Preparation Manual, you'll see that the change in asphalt price per 1000 LF of curb is \$390. This assumes average curb pad thickness of 3", width of 28", and 100 lbs/yd²-in. Assumed asphalt content is 6.25%. Also uses jobs let in Jan 08 and work done in June 08 for AC price change of \$0.6867/gal. For the same time period last year, there would have been a price reduction of (\$120). For 2006, change would have been +\$330, 2005 change would have been (\$10). This translates to \$0.39/LF, -\$0.12/LF, \$0.33/LF, and -\$0.01/LF change, respectively. FDOT can look at the possibility of including the asphalt used for the curb pad as part of the asphalt base course but have not to this point.

22. After receiving the drawings that are issued to us I have noticed that there are a lot of stations that are missing on the plan sheets. Is there a reason for this?

Some projects that do not have a lot of variability are only surveyed on 500 foot intervals on tangent sections to reduce surveying costs. If this is not adequate, feedback should be directed through construction to the district design office.

23. Why have almost all the projects being let out in District 1 been lump sum? I have also seen a scale of 100 and 200 on the drawings. Could we get a smaller scale please? Maybe a 40 scale? Thanks.

Use of Lump sum bidding is a district project level decision. It should only be used on straight forward projects where quantities are not likely to vary. District 1

currently has a lot of projects that meet the criteria and they feel that it reduces cost and time overruns.

Guidelines are provided for plan scales, but the decision is made by the designer. The plans should be legible and feedback through construction to district design should be provided when that is not the case.

Contract Administration Issues

24. Does the DOT see having to cut projects in 2008 or 2009 due to the increased costs of construction and decreasing revenues? In the event of a cut in projects what type projects do you see cut first or delayed first i.e. bridges, new construction, or resurfacing?

The determination of this will be made after the Fall Revenue Estimating Conference meeting on November 21st. With regard to cost increases, FDOT has seen bids coming in significantly lower than FDOT estimates due to increased competition. Emphasis of projects would be to maintaining and rehabilitating the system as shown in Jim Musselman's presentation since there is a statutory requirement for maintaining the performance level of FDOT roadways.

25. What is the projected tonnage of mixes and projects for the next year 2008-2009?

The Department has a consultant under contract to monitor issues related to materials costs and availability, and they are also tracking projected FDOT HMA demand over the next five years. Their analysis will be posted on the FDOT website when it is completed. Based on current statewide resurfacing targets, a reasonable quantity is from 5 to 6 million tons of HMA over the next year.

Web link to future resurfacing funding:

<http://www.dot.state.fl.us/financialplanning/praprogram%20and%20resource%20plan.pdf>

26. What is the estimated Polymer Modified Asphalt tonnage for FDOT for 2008-2009?

Polymer modified asphalt tonnage is expected to be about 20 to 25% of FDOT hot mix to be let in FY 2009, or around 1.25 million tons of hot mix.

27. Can you please discuss the latest on the Department's efforts to obtain property for asphalt plants?

Last year a consultant completed Phase I of this project, which involved locating several sites in Districts 1 & 2 currently owned by FDOT that have the potential to

be used as an asphalt plant site. Phase IIA of this project (which identified the necessary permitting and associated costs, etc.) has now been completed in District 2 and is on-going in District 1. FDOT Management will be consulted prior to initiating Phase IIB, which will involve actually getting the sites permitted. These sites, if permitted, would be made available to contractors bidding on select FDOT projects in the area. This effort was initiated to increase competition and lower construction costs.

28. What is the status of the new Asphalt Roadway Report? There were several issues getting resolved (i.e. tack, temperatures, etc.).

This new electronic QC Roadway Asphalt Report was developed by District 5 / Turnpike. The initial meeting with the District, State Construction, and State Materials Office to review the new roadway report indicated the need to add the Record of Bituminous Materials (tack spread rate information) to the new roadway report. District 5 / Turnpike personnel have recently updated the new roadway report to include the Record of Bituminous Material. Currently, we are scheduling a Statewide Forms Committee meeting with Industry to review updates to this new roadway report and move forward with trial projects in each District to provide feedback / comments on the new roadway report. Once completed, we will move forward with implementation statewide.

29. What is the process for implementing the January 2009 workbook specs on existing projects?

This is a similar issue to number 10 of these questions. If it is an issue that FDOT wants to move on quickly, SCO will issue a DCE memorandum giving authorization to the Districts to execute the contract change. For other workbook specs, the Department can consider this on existing projects when it makes sense. The process is that the contractor could request to the project personnel to add to an existing contract a specification that will be coming out in a later specification workbook. This will require a look at potential cost impacts and/or potential savings to the Department. If the Department agrees to make the spec change, it would be done with a Supplemental Agreement or Work Order.

30. When the contractor bids a FDOT job in the month that it is due and it has a special start date 10 months later, is this job protected with fuel and bituminous in sections 9-2.1.1 AND 9-2.1.2 of the standard specifications for road and bridge if it does not meet the requirements of this section? If not then why would the department put the notice to bid out so soon?

Only as allowed by the specifications. If the project is one that has small quantities that don't trip the thresholds for adjustments, they would not. The contractor would have to account for that risk in their bid. Reasons for letting a project with a long lead in time – commitment to locals to let/start a project at a particular date; utility

relocations; materials/product procurements; avoiding starting projects during a holiday period; community seasonal restrictions. Question asked if this response still holds true for a project delayed for other reasons beyond the contract. Response is Yes.

Contractor Quality Control

31. As a reputable paving contractor, we continue to be concerned with the trust and relationship we have established as a company with the Department and its material office thru open communication, constructive interaction, high level of ethics, and high quality work. However, that relationship can very well be affected by the impact of a trend of new paving contractors in the South Florida area. ...With the slow down in the private paving market, more and more site work contractors are being forced into the public arena and are actually buying equipment and using their own personnel to do public paving work, including FDOT paving work. Although open competition is what has made this country what it is today and I by no mean intend to discourage it, I can't help to be concerned about the quality of paving work being performed by companies that are just learning the intricacies of the FDOT specifications and the quality control aspect of this business. How can the ACAF help to ensure that the inexperience and possible bad business habits from some of the newcomers will not cause a negative effect on the progress made and trust gained by reputable paving contractors with the FDOT?

The Industry understands that companies will continue to enter and leave the market. The Industry has worked long and hard to develop quality systems, labs, and people to meet the specification and wants to ensure that anyone else entering the market must be treated consistently and fairly, but also held to the same standards as anyone else. That ensures an equal opportunity at the bidding table.

32. Is there a practical limit (minimum tonnage) where daily Process Control should be not apply? (i.e. less than 1 load?) What about coring very small quantities for QC?

In the current Specifications there is no practical limit or minimum tonnage identified for process control testing. As part of the Contractor's process control test requirements at the asphalt plant, a minimum of one process control test should be run per day. As a result of this discussion at the asphalt conference, the Department will internally review this specification and work with Industry to develop a specification change if determined necessary. Also, for roadway QC cores there is no exception on the main-line roadway where roadway cores do not have to be sampled / tested for density. All roadway areas where roadway density is required should have a minimum of 3 cores per subplot at random locations identified by the Engineer.

33. Will the FDOT reconsider taking responsibility for the roadway report? Seems we continue to have to commit a full time QC Tech to maintain roadway report to the satisfaction of the PA only to have to go back and make corrections and another tech to do QC. One QC technician could be better used doing quality control if the VT would record what is required of his PA. Also, consider the VT to collect QC reports at the plant complete lot package with verification and input to LIMS. This again would allow the QC technician time to do quality control instead of spending time getting and maintaining LIMS access and inputting data to the FDOT system.

No. We have not seen a value in taking this responsibility back. The contractor is sampling and taking the QC testing so it makes sense for the Contractor to be the one completing the reporting.

Construction Issues

34. Can you give us an update of all of the latest DCE/DME memos related to asphalt?

Currently there are three DCE memos, four Joint DCE Memo/Materials Bulletins, one Joint Construction Training Memo/Materials Bulletin – eight total.

October 9, 2007 – DCE memo 18-07, Materials Bulletin 09-07: deleted standard spec and substituted new requirements for 285-6.1 as shown below (part of reduced restrictions effort by SMO):

285-6.1 Measurements: For non-asphalt bases, meet the requirements of 200-7.3.1.2.

For subbases, meet the thickness requirements of 290-4.

The Engineer will determine the thickness of asphalt base courses in accordance with 234-8.1.

January 16, 2008 – DCE memo 01-08: adopted recommendations from the Asphalt Smoothness Committee regarding Smoothness Specification 330.

(1) Define partial LOT (330-12.6.3) – For bridge approaches, departures, and the beginning and end of the project, when the segment being tested is less than 0.1 mile, the segment will be called partial LOT.

(2) Report of Ride Number (RN)(330-12.6.3) – The RN of each LOT/partial LOT will be reported to one decimal place in lieu of two decimal places.

(3) Revisions on Note 1 and Note 2 (Table 330-3) – These revisions will simplify the straightedge operations and pavement smoothness acceptance.

March 13, 2008 – Construction Training Memo 001-08, Materials Bulletin 03-08: extended CTQP Aggregate qualifications to June 30, 2008 to allow for rescheduling of new courses.

SUBJECT: QUALIFICATION CHANGES FOR AGGREGATE TECHNICIAN TRAINING

In response to the January 1, 2008 change in the American Concrete Institute’s (ACI) Aggregate Technician certification training program, the Department is implementing the following changes effective immediately to the Construction Training Qualification Manual:

1. Existing Qualifications -

All existing CTQP Aggregate qualifications will be extended to a June 30, 2008 expiration date to allow time for rescheduling of new courses. All other existing qualifications that are valid beyond June 30, 2008 will expire on the current stated date of the qualification. A technician will be permitted to do any test covered under the qualification held.

2. New Qualifications with existing Qualifications or existing Certifications -

Holders of the current Construction Training Qualification Program (CTQP) Aggregate Field Testing Technician (requires ACI certification) are eligible to take the CTQP LBR course and get qualified. This is the only scenario where a current CTQP qualification can be carried forward.

3. New Qualifications for New Technicians -

There will be two new CTQP qualifications corresponding to the ACI Certifications:

	CTQP Qualification	Required ACI Certification
1	Aggregate Base Testing Technician	Aggregate Base Testing Technician
2	Aggregate Testing Technician	Aggregate Testing Technician - Level I

The FDOT Qualified Sampler remains as is.

The FDOT LBR course will be taught with reference only to FM 5-515, Limerock Bearing Ratio (LBR).

March 20, 2008 – DCE memo 07-08, Materials Bulletin 04-08: Lowered density requirement in Section 334 for static mode or all one-inch thick lifts to 92.00 +/- 3%

SUBJECT: MODIFIED DENSITY AND COMPACTION REQUIREMENTS FOR ONE INCH THICK LIFTS OF SP-9.5 AND FC-9.5 SUPERPAVE MIXTURES

This memorandum is issued to allow the immediate use on current projects of the modified density and compaction requirements for one-inch thick lifts of SP-9.5 and FC-9.5 Superpave mixtures. In Section 334, the note in the Table of “Specification Limits” for density for fine graded mixtures shall be modified as follows: *“Note (1): If the Engineer (or contract documents) limits compaction to the static mode only or for all one-inch thick lifts of SP-9.5mm and FC-9.5mm mixtures, compaction shall be in the static mode and the specification limits are as follows: 92.00 + 3.00, -1.20 percent of Gmm. No additional compensation, cost or time, shall be made.”*

In addition, in Section 334, the notes in the “Small Quantity Pay Table” shall be modified as follows: *“(1) Each density test result is the average of five cores. The target density for coarse mixes is 94.50 percent of Gmm. The target density for fine mixes is 93.00 percent of Gmm (92.00 percent when compaction is limited to the static mode or for layers specified to be one inch thick).”*

This memorandum serves as a blanket approval to process a no-cost specification change for on-going projects and should be attached to the Work Order or Supplemental Agreement accomplishing this task.

March 20, 2008 – DCE memo 08-08, Materials Bulletin 05-08: expanded availability for aggregates by including the use of Palm Beach Aggregates in FC-5:

SUBJECT: USE OF PALM BEACH AGGREGATES IN FC-5 MIXTURES

The availability of aggregates for use in FC-5, particularly in South Florida, can be expanded by using Palm Beach Aggregates; Pit No. 93-406, based on recent studies that show one of their products provides acceptable performance in FC-5. This memorandum is issued to allow the immediate use on current projects of Palm Beach Aggregates; Pit No. 93-406, for use in FC-5 mixtures. Three requirements must be met:

1. A specification change must be made.
2. A credit should be issued to the Department for material and hauling costs savings.
3. Section 338, "Value Added Asphalt Pavement," requirements shall be applied to the pavement if not already part of the contract.

Continued use of this aggregate source on a project will be contingent upon the ability of the Contractor to place the mixture without crushing the aggregate while achieving a satisfactory texture, as determined by the Engineer.

This memorandum serves as a blanket approval to process a specification change for on-going projects and should be attached to the Work Order or Supplemental Agreement accomplishing this task.

March 20, 2008 – DCE memo 11-08: addressed requests for time based on Lake Belt impacts:

The Department will consider non-compensable time extensions provided the following conditions are met:

1. Contractor must provide schedule detailing how the Lake Belt Mining issues impacted the critical path of the project.
2. Contractor must provide evidence that it made attempts to obtain replacement materials from all reasonably available sources.
3. Contractor must provide a detailed narrative on the steps it has taken to mitigate the impacts to the project.
4. Contractor must identify other projects of similar work mix that it has been working on while impacted on the subject project on which time is being requested.
5. An Officer of the contractor must certify to the Department that it has been impacted by the Lake Belt Mining legal actions and that the above submitted information is true and accurate.

If these conditions are met, the Department will consider a non-compensable time extension. Prior to approval, the District Construction Engineer will coordinate such requests with the Director, Office of Construction.

The Department will not consider a cost adjustment to the bid prices of the contract for any increases in materials that were or may become affected by the Lake Belt Mining legal actions.

April 21, 2008 – DCE memo 12-08: issued to provide guidance regarding handling of Idle Asphalt Plants:

This memo is issued to provide guidance on non-dedicated idle asphalt plants on projects with regard to delay costs. The following language will be added into the Construction Project Administration Manual (CPAM) Chapter 7.3 in the next revision.

Idle asphalt plants should only be compensable for delays if the plant is dedicated to the project. If the asphalt plant provides asphalt to multiple projects or sells commercially and not dedicated to the project, it would not be compensable for delays.

If a claim includes costs for a non-dedicated idle asphalt plant, the costs should be removed from the subject claim.

July 17, 2008 – DCE memo 10-08, Materials Bulletin 08-08: Issued guidelines for changing the asphalt binder from asphalt rubber to polymer modified:

There have been requests by Contractors and District personnel to change the binder type in friction course mixtures on projects from asphalt rubber (ARB-5 / ARB-12) to polymer modified (PG76-22). Department policy is to use asphalt rubber when called for in the contract documents unless there is a justifiable reason to change. All changes are to be approved by the Chief Engineer. Following is a list of potential conditions, in which one or more would justify a change from asphalt rubber to polymer modified:

- There is a history of severe rutting at the project location.
- The structural layer contains polymer modified binder.

The following steps are outlined as the process to be followed for obtaining approval to change from asphalt rubber modified (ARB-5/ARB-12) to polymer modified (PG 76-22):

1. The Contractor shall provide a letter to the Project Administrator with the appropriate justification for the substitution of polymer instead of asphalt rubber. The letter needs to include specific engineering justification as to the need for the change. In the event that the Department initiates the request, the Project Administrator shall write-up the appropriate justification for the change.
2. The Project Administrator will forward the request (via email) to the District Materials Office and the District Construction Office.
3. The District Materials Office shall:
 - a. Review the proposed change and approve / disapprove as appropriate.
 - b. Coordinate approval (via email) of the proposed change with the State Materials Office.
 - c. Forward approval (via email) of the proposal to the District Construction Office.
4. The District Construction Office, upon receiving approval from the District Materials Office, shall:
 - a. Review the proposed change and approve / disapprove as appropriate.
 - b. Forward approval (via email) of the proposal to the State Construction Office.
5. The State Construction Office shall:
 - a. Review the proposed change and approve/disapprove as appropriate.
 - b. Forward approval (via email) of the proposal to the Chief Engineer.
6. In the event that the proposal is rejected, the proposal shall be returned to the Project Administrator.

No additional compensation will be provided should the change be approved.

35. Can you give us an update on changes to the smoothness specification?

The major changes to the smoothness specifications are summarized as follows:

(1) Increased emphasis on the QC operations for pavement smoothness.

330-12.4.5.1 General: Straightedge the final Type SP structural layer and friction course layer in accordance with 330-12.4.2 (Test Method FM5-509), regardless of whether the method of acceptance is by straightedge or laser profiler.

330-12.4.5.5 Friction Course Layer: Straightedge the friction course layer in accordance with 330-12.4.2, either behind the final roller of the paving train or as a separate operation upon completion of all paving operations. Notify the Engineer of the location and time of straightedge testing a minimum of 48 hours before beginning testing. The Engineer will verify the straightedge testing by observing the Quality Control straightedging operations. Address all deficiencies in excess of 3/16 inch in accordance with 330-12.5. For laser acceptance, corrections may be made either before or after laser acceptance testing.

(2) Revision to the rolling straightedge exceptions.

330-12.4.5.2 Rolling Straightedge Exceptions: Testing with the rolling straightedge will not be required in the following areas: shoulders, intersections, tapers, crossovers, parking lots and similar areas, or in the following areas when they are less than 250 feet in length: turn lanes, acceleration/deceleration lanes and side streets.

The Engineer may waive straightedge requirements for transverse joints at the beginning and end of the project, and at the beginning and end of bridge structures, if the deficiencies are caused by factors beyond the control of the Contractor, as determined by the Engineer.

(3) Revisions to FM 5-509.

The Florida Test Method for the 15 foot rolling straightedge (FM 5-509) is revised to include the testing procedures for transverse joints at the beginning and end of the project, and at the beginning and end of bridge structures.

(4) Revision to the minimum design speed for laser acceptance.

330-12.4.6.2 Laser Acceptance: For areas of high speed roadways where the design speed is equal to or greater than 55 miles per hour, acceptance testing for pavement smoothness of the friction course (for mainline traffic lanes only) will be based on the Laser Profiler. Ramps, acceleration and deceleration lanes, and other areas not suitable for testing with the Laser Profiler will be tested and accepted with the straightedge in accordance with 330-12.4.5.5 and 330-12.4.6.1.

(5) Guidelines for the limitation on the use of the Laser profiler for acceptance are included in the revised CPAM Section 11.2.

(6) QC straightedge testing data in both wheel paths of friction course verified by the VT for laser profiler acceptance.

330-12.4.6.2 Laser Acceptance:If approved by the Engineer, this straightedging may be completed (in both wheel paths) as part of the Quality Control straightedging operations described in 330-12.4.5.5, prior to testing with the laser profiler. Notify the Engineer of the location and time of straightedge testing a minimum of 48 hours before beginning testing. The Engineer will verify the straightedge testing by observing the Quality Control straightedging operations. Address all deficiencies in excess of 3/16 inch in accordance with 330-12.5.

36. Smoothness Specification; one mill and resurface one lift jobs same specifications apply. It does not seem reasonable that one spec fits all. Is the smoothness committee considering different specifications?

This topic has been addressed a number of times by the Pavement Smoothness Committee and based on the research initiated by the State Pavement Management Office, it was found that there is no statistical relationship on pavement smoothness between one-mill-one-lift resurfacing and mill-multiple-lift resurface projects. However, the Smoothness Committee will revisit this issue again at the next meeting.

37. What was the result of the research on comparing the spot laser to the wide spot laser?

FDOT borrowed a wide spot (WS) laser in an effort to assess the differences between the single spot (SS) and WS lasers for the ride evaluation of OGFCs. For this study, three oolitic limestone FC-5 projects were evaluated (Districts 1, 5 and 6). The wide spot laser RN results averaged 0.2 higher (smoother) than the SS laser. In terms of the current smoothness specifications, the current 4.0 with a SS laser would be equivalent to a 4.2 with a WS laser. The repeatability of the WS was found to be equivalent to the SS laser. Since upgrading the Department's PCS vehicles would cost on the order of \$40,000 for each unit, at this time there is no consideration of changing the current systems from SS to WS lasers.

Several dense graded friction course mixes were also tested. The WS results were slightly smoother than the SS results, but the difference was less than 0.1 RN, which is within the repeatability range of the equipment.

Additionally, two projects originally designed for friction studies were also evaluated for smoothness. Originally constructed to assess the friction resistance difference between oolitic limestone and granite, the friction courses were designed with varying ranges of limestone and granite. The ride comparison between the limestone and granite sections was very close – within 0.2 RN – with the limestone sections running slightly smoother. If additional projects of this type can be found, further limestone/granite comparisons will be made.

38. Discuss construction of super-elevated curves, tolerances and design requirements.

The need for superelevation correction is determined by a design survey and the correction locations, curve data and quantities are shown in the plans.

39. Discuss use of material transfer vehicle on all friction courses.

Contractors are free to use it anytime they want to. The Department has no plans to specify it as mandatory requirement.

CTQP

40. CTQP Update: When will Courses be updated?

The University of Florida has a contract to update the five CTQP Asphalt Courses to the most current specifications (January 2009 Workbook) and the work is currently underway. The Asphalt Plant 2 and Asphalt Paving 2 courses will be updated first, followed by the Paving 1 and Plant 1 courses and finally the Mix Design courses. The contract will be completed by mid 2009 and the updated courses will come online as they are finished.

41. Are there enough courses being offered statewide to meet everyone's needs?

Yes. We are in the process of making courses more convenient for the districts by preparing a Training Bulletin that will now allow providers to hold CTQP courses in our district offices.

Closing Comments: Jim Warren

*Please make plans to attend the **33rd Annual Asphalt Conference** tentatively scheduled for **September 7-8, 2009**. Location to be announced.*

Thanks again to our Sponsors, Exhibitors, Speakers, and Registrants in our 32nd Annual Asphalt Conference. See you next year!

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