ACAF/FDOT 26th Annual Asphalt Conference
September 2002 Minutes

CTQP

1. Asphalt Refresher Training (How many classes left and where? Is it required?) – SCO
There are two remaining classes that still have seats:

October 23, 2002	Orlando FDOT Turnpike Headquarters
October 24, 2002	Gainesville FDOT Maintenance Facility

Contact the CTQP for registration and fees. There is also some discussion about continuing the classes into next year. Additional information will be on the CTQP web site when it is available.

2. Why the low turnout from Industry on the Asphalt Refresher Courses? – SMO
There are probably several different reasons. One reason is due to scheduling conflicts – most contractors can't afford to shut down their paving operations for a full day to send their personnel to training. Another is probably due to the low number of QC 2000 projects actually under contract at this time.

3. Is there a demand for Saturday Classes? – SCO
Been there, done that. We tried to schedule Saturday classes three times in 2001 and 2002. All three classes were cancelled three weeks out. These classes were scheduled by special request after CTQP was assured there would be enough to meet the minimum class size.

As promised at the meeting, the minimum class size will be posted in the course catalogue. However, this should only be used as a guideline since the minimum could vary from location to location. Even though we have "been there, done that", the CTQP is still open to scheduling a class when contractors or consultants request a Saturday class especially if at least 1/2 the minimum class size is assured. Please understand this commitment is for scheduling only. The "minimum" class size must still be met.

4. Asphalt Re-qualification – SCO
Level I re-qualification requirements are unknown at this time but should be firmed up in 2003. Level II and Mix Designer requirements will be a written exam similar to the refresher course exam.

5. Asphalt Testing Self Study CD -- Asphalt Paving Interactive Self-Study. – SCO
The Asphalt Testing course is available now for downloading. The Asphalt Paving course will be available in 2003.

6. We need contractor students for CMA October 27 - November 1, 2002. – SCO
Please contact CTQP for applications.

7. Why does CTQP cost so much? – CEI
We believe the CTQP is one of the best training and qualification programs in the United States. Many other states are copying the courses and administrative features of the Florida program. In comparing like courses to like programs, the $275 - $450 per day cost in Florida is in line with other States. We believe the CTQP is a good value for the money spent.

We used to have an advisory board for QC 2000. This board finished its work with the publishing of the Contractor Quality Control specifications. In 2003 an advisory board will be set up to review policy decisions for the CTQP. Course pricing will be one of the items that the board will be charged with reviewing. By making sure that both Industry and Department representatives work together to set quality goals and review pricing structures, the CTQP will continue to be known as one of the best training and qualification programs in the 50 states at a fair value.

Mix Design/Testing

8. Status of the new asphalt mix design grading system. – SMO

The scoring system is finalized and the initial grades have been established for each mix designer. These grades will be updated quarterly to reflect recent performance. The percentage of "paper verifications" has not yet been determined but hopefully the next Task Team meeting will address this and any remaining questions. It should be on-line by the end of this year.

9. When will the Mix designer scorecard take affect and how will grades be assigned? – IND

The grading system will take effect soon after the next Task Team meeting. David Webb is currently trying to schedule a meeting so that as many Task Team members as possible can attend. Grades will be assigned based on the comparison of data (G_{mb}, G_{mm}, gradation, etc), between the State Materials Office and the mix designer's laboratory. Briefly, each test is worth a certain number of points and the closer the comparison; the more points will be earned. Once everything is finalized, all of the pertinent information will be distributed to each mix designer.

10. What is the status of lowering VMA requirements on coarse graded mixes? – IND
Although lowering the VMA requirements would tend to make mixes less gap-graded, there is also a concern that a reduced VMA requirement would open the

door to lower quality materials. Any changes in the VMA requirement would have to be done in conjunction with a change in gradation requirements – otherwise we'd still end up with gap-graded mixes, just with lesser quality materials. The Florida Center for Pavement Research (FCPE) is looking into the relationship between VMA, gradation and cracking, and should have some type of answer within the next year.

11. With the current research on coarse vs. fine suggesting minimal differences in rut resistance why isn't is the department moving towards fine Traffic level D and E mixes? – IND
FDOT is doing more research into this subject – both with the Heavy Vehicle Simulator (HVS) in Gainesville and the NCAT Test Track at Auburn University. In general it appears that there is a little less rutting with coarse mixes as compared to fine mixes. However, some data indicates that a fine graded mix can be used with a PG 76-22 binder and it will have rutting resistance as good as a coarse graded mix with an unmodified (PG 67-22) binder. Recently FDOT constructed a section on I-95 in Nassau County where a fine graded TL-D mix with a PG 76-22 binder was used. FDOT is looking for some additional trial sections of this nature. It is likely that there might be some changes in this area within the next few years.

12. Now that the department is verifying fine aggregate specific gravity during mix design, can they check the coarse gravities and use between lab tolerances to establish aggregate specific gravity during mix design? – IND
The Department does not verify the specific gravity of the individual fine aggregate components during the mix design verification process. To determine the fine aggregate angularity (FAA), the test procedure requires the determination of the specific gravity of the combination of fine aggregates (including those in the RAP). This is not a mathematical combination. Currently the Department requires that the mix designer use the target specific gravities of the component aggregates obtained from the supplier. The target is set to account for variability that naturally occurs during production. These specific gravities are then used in the calculation of VMA. An argument can be made to use the actual specific gravities of the materials at mix design. This has been addressed previously and would result in additional testing by the Department and Industry, since VMA would then have to be verified during the production process to assure that "selective" samples were not used during the mix design process.

13. Is the department looking for an alternative to T-283, and if so when can we expect an alternative test? – IND
The Department has made some changes in the specification requirements for Moisture Susceptibility using AASHTO T-283 (minimum tensile strength now 100 psi). It is our belief that the specimen conditioning needs to be "standardized". The Department has a contract with the University of Florida related to moisture damage testing. There is also a national research project to develop a

replacement conditioning procedure for T-283. These projects do not appear to be conflicting. The result of this research will be a proposed test procedure in AASHTO format. We anticipate research and test procedure adoption will take two years. Florida is actively participating in this effort. Until then, T-283 is the best we have.

14. Would the state consider changing the requirement for testing the Spot Test and Solubility Test that is currently required to be ran on every Certification, to an annual requirement or a reduced frequency requirement? These test require the use of solvents like Trichloroethylene or 1,1,1, Trichloroethane and xylene that can be hazardous to the technicians and create a disposal issue. What is the failure rate on Spot Test and Solubility Test? – IND
Solubility (AASHTO T-44) is a requirement of AASHTO M-320-02 (MP-1) Performance Graded Binder. This is a national standard that is referenced in Section 916 of the specifications. It is a rare case that solubility fails in Florida, but this test may become more significant with the increased use of modified binders and binders from refineries with which we have not had experience. Solubility testing will continue to be required. The Spot Test (AASHTO T-104) indicates compatibility of the component materials in an asphalt binder due to the crude source, combination of crude sources, or coking during the refining process. It has been shown that a positive Spot Test can lead to premature cracking. Florida periodically experiences positive Spot Test results with various sources of asphalt binder. We then work with the producer (terminal) to take actions to return to negative Spot Test material. The Spot Test will continue to be required.

15. Will the Direct Tension Test be required as part of the SHRP Binder testing in the future? – IND
The purpose of Direct Tension testing at this time is related to low temperature cracking, which is not a significant problem in Florida. There is work going on at the national level that is looking at the Direct Tension test to identify the positive effect of modifiers not currently being picked up in the high and intermediate temperature testing. At this point in time Florida will not require Direct Tension testing. If the Direct Tension test is able to identify the positive effect of modifiers, then Florida, as well as many other states, may consider its use.

16. Does the department foresee any change of the maximum binder heat loss from 0.5% to 1.0% in future specifications? – IND
No. Florida has identified a number of positive effects of having the 0.5% heat loss. Problems with high heat loss materials include high asphalt absorption during storage, and coating of baghouse bags with “light end” material.

17. What is the future of GTR in Florida? Will PG 76-22, polymer modified replace GTR? – IND
Currently, the specifications require ARB-20 for Asphalt Rubber Membrane Interlayer (ARMI), ARB-12 for FC-5, and ARB-5 for FC-12.5 and FC-9.5. For

small quantities of FC mixes (less than 500 tons), the contractor can substitute a PG 76-22. The Department's Flexible Pavement Design Manual allow the designer to specify a modified binder (PG 76-22) on the last layer of high traffic Interstate pavements, and all layers (including FC-12.5 and FC-9.5) of locations that have a history of excessive rutting (Interstate projects, intersections, weigh stations, etc). A specification change will be initiated to allow PG 76-22 as an alternate to ARB in FC mixes regardless of quantity. Research in Florida with our Heavy Vehicle Simulator (HVS) and with the laboratory rut tester has indicated significant improvements in rutting resistance when using PG 76-22 versus standard PG 67-22 and ARB binders. Nationally, there is also evidence of the benefits of using modified binders. It is anticipated that the Department's use of modified binders will increase in asphalt mixes. This has been a continuing item of discussion at the Flexible Pavement Committee, and is expected to continue.

18. Will any other binder modifiers, in addition to SBS and SB be approved in Florida in the future? – IND
At this point, no. Florida has generally followed the Georgia DOT (GDOT) in our specification for modified binders (PG 76-22). GDOT has had more experience with modified binder use then we have. Nationally, our current specifications for modified binders (PG 76-22) appear to be on target.

19. Will the use of hydrated lime, replacing liquid anti-strip, become a reality in Florida? – IND
At this point, there appears to be more of an effort to see if we can use liquid antistrip where lime is currently required by FDOT specifications (FC-5 w/granite).

20. Has anyone tried modifying the aggregate with hydrated lime prior to introduction to the asphalt plant – IND
An FC-5 project was constructed on I-275 in Hillsborough County in April 2002 where the granite was pre-treated with hydrated lime, stockpiled, and then used in the FC-5 mix approximately one month later. Project seemed to go well, although the verdict is still out on performance. Additional studies are anticipated for the future.

Pavement Design
21. How are other states handling base failures when they mill and resurface with Superpave? – CEI
It will depend on how extensive the problem is. For a small area, remove the weak materials and rework the base in accordance with the requirements of the specifications. For larger areas, the pavement design and the mix design of the failure section will need to be thoroughly considered in order to resolve the problem.

22. Is traffic level “D” really necessary for highways other than Interstate / Turnpike systems? – D5
Superpave traffic levels are based on forecasted truck loadings (ESALS) used for the pavement design. Traffic level D is for greater than 10 million ESALS in the design period. These higher volumes are generally on Interstate roadways, but are also applicable to some arterial roads that carry high truck volumes. It is important that the mix design be compatible with the expected truck loadings, regardless of the type of facility.

23. Is there a system in place to re-verify the need for D and E mixes on projects during design? Shouldn’t this automatically trigger a review of traffic data to ensure either D and E is needed? – IND
Since conditions can change, designs and the data used to develop them are periodically reviewed during the design process. Chapter 15 of the Plans Preparation Manual calls for a Design Update Review when plans have been on the shelf for nine months or more. Part of this review is to check current corridor conditions, as well as growth rates and patterns, to determine if the project design is still valid. This would include the truck loadings that are used to determine the asphalt mix design traffic level.

24. With the number of pavements experiencing settlement, base failure, and other problems during construction of Level D and E mixes, why doesn’t the DOT just go with fine graded mixes, and modified high traffic jobs with PG76-22? – IND
The problem needs to be handled on a case-by-case basis. We have to do the pre-construction review and study the problem in detail in order to make the best determination for the pavement design of each project.

25. How many people are having trouble with base settlement during construction? – IND
After an open discussion, several attendees addressed the problems at the Conference.

26. How does the FDOT expect to get compaction and surface smoothness / rideability on narrow widening areas designed with Superpave, especially Traffic Level D/E? – IND
Sections 330-12.3 and 334-5.1 provide for reduced straightedge requirements and approved rolling patterns in many small and/or irregular areas. Where smoothness and density is critical in a narrow mainline widening, constructibility should be carefully reviewed by design and construction during the design phase and appropriate measures considered such as polymer modification or increasing the construction width, if feasible and cost effective.

27. What would it take to build a Perpetual Pavement in Florida? – IND

The concepts of using a stiff lower layer and forcing distress to the upper layer to be easily renewed through a simple mill and overlay process are valid. Some believe the stiffness of the limerock base (used in a majority of pavement sections) provides this stiff underlying base. Given the nature of the cracking that is found (which appears to be top-down instead of classic fatigue theory bottom-up cracking), we may be achieving the spirit of a perpetual pavement with a composite system, instead of full depth asphalt. However, Industry would still like to see some trials of full depth asphalt sections be placed in the future.

28. Full Depth Reclamation? – NA
There has been some full-depth pavement reclamation in Florida, but generally there have been few limerock base failures that would necessitate a full depth reclamation. Some old sand bituminous road mix (SBRM) bases have been reclaimed with Portland cement added to improve the base stiffness.

Project Administration / Contracts

29. Views of Contractors on Design Builds for mill and resurface projects? – CEI
In general, most contractors are opposed to design build resurfacing mainly due to cost of developing plans for resurfacing projects. It doesn't make sense for each bidding contractor to hire an engineer to develop designs for a resurfacing project where the thickness is already specified. There are little to no opportunities to be innovative (one of the benefits of design-build), when the section is already established.

30. On non-QC 2000 projects, are we still going to staff the asphalt plants the same as in the past? –D5
Yes.

31. When will tack payment be included in asphalt tonnage pay items? – D5
The target is currently set for July 2003.

32. Could the Department place a hold on further specification changes / new concepts until we fully implement QC2000? – IND
There will be no major conceptual changes during the implementation of the QC 2000 program. Some minor changes may be needed for further specification clarification.

33. Design Build Issues – NA
Based on the open discussion, it was concluded that all the other States had experienced the same struggles as we did and we felt confident that we are proceeding in the right direction.

34. What are the Dept's plans for future D/B and especially the pavement design details in a D/B system – FHWA

The Department plans to continue using the Design/Build process. The D/B guidelines call for either the pavement design to be provided by the Department, or sufficient detail provided in the Design Criteria to ensure that a reasonable pavement design is provided by all competing D/B teams. These details are outlined in the D/B guidelines and the Pavement Design Manual, and include details such as minimum structural thickness, milling depths, use of ARMI and PG 76-22. It is also important that the technical review teams carefully review the pavement design submittals and that widening guidance in Chapter 7 of the Pavement Design Manual be followed.

QC2000

Administrative Issues

35. What does the Department see as a long-term benefit of QC 2000 (i.e. reduced inspection staff, reduced bid prices, improved quality, reduced testing time, etc?) – IND
Some of the benefits the Department sees from the implementation of QC 2000 include: 1) optimization of the CEI staff, 2) testing keeps with the pace of the Contractor's operations, 3) the potential to reward consistency in the Contractor's quality by reduced testing and 4) the potential for future reduction in verification testing. The QC 2000 program will also lay the foundation for the implementation of performance-based specifications.

36. Do any other Districts have experience with reduced staffing or have any plans to pilot reduced staffing of asphalt plants under QC 2000? District Five is piloting reduced Department staffing for one project. – D5
No.

37. When can the Department expect to see an influx of Contractor Quality Control Plans from asphalt producers? – TPK
Contractors are reminded to submit their QC Plans for review and approval as soon as possible.

38. What is the penalty for an accredited testing laboratory that puts out false test results and/or certifies products without any test results? – IND
The laboratory cannot be used for the QC/QA operations on project construction.

Quality Control Issues

39. QC Plans / QC Manuals / QC programs still confusing. – SMO
QC Manual (QCM): This manual will address items for all applicable materials (identified in Article 6-8) that would be used for various scenarios that may be encountered on a statewide basis. When accepted by the Department, the QCM can be referenced in a project specific QC Plan (QCP), thereby reducing the amount of information submitted for review and approval on a contract-by-

contract basis. The Contractor can elect to submit a QC manual to have it approved for statewide use. In the event that the Contractor has an approved QCM, the Contractor is still required to submit a contract specific QCP but can include information from the Contractor's QCM by reference. The QCM is not required, but is provided as an option to the Contractor as a vehicle to allow the majority of the QC information to be pre-approved once prior to the commencement of any contracts.

QC Plan (QCP): For each project, a QCP must be prepared in accordance with Section 105 and approved by the Department to ensure that the construction materials, whether manufactured, processed, or procured from suppliers or subcontractors, meet the requirements of the Contract.

QC Program: Contractor shall have an approved QC program in order to meet the requirements of Section 6 and Section 105 for laboratory qualifications, personnel qualifications, materials transportation, storage, placement, and other related construction operations required by the Contract.

40. Status of QC Plan approvals/lab qualifications, etc. for upcoming QC 2000 projects. – SMO
The Contractor has 21 calendar days after the award of the Contract to submit a QC Plan to the Project Engineer for approval in accordance with Section 105 of the Specifications. The testing laboratory must be qualified first in accordance with the requirements of Article 6-9. After the above qualification, the laboratory must obtain the final check and approval from the District Materials Office. The application is available from the Department's web site as specified in Article 6-9.

41. QC 2000 Quality Control Plans – general discussion / how to get them approved – NA
The Construction Project Administration Manual (CPAM) Section 3.3 describes the procedures for QC Plan approval. Contractors can use the Model QC Plans provided on the ACA Website as a guide in preparing their QC Plans.

42. What percentage of asphalt contractors intend to do their own testing/inspection reporting under Contractor Quality Control Specifications? – TPK
The majority of asphalt contractors will most likely do their own asphalt inspection/testing, and some will most likely subcontract testing/inspection for earthwork and concrete.

43. What percentage intends to out-source these functions? – TPK
The rest.

44. Can we eliminate random numbers for QC plant testing on "Contractor Quality Control" (QC 2000) projects? – D5
No.

Verification Testing Issues

45. Reduction / removal of VT at the plant. It is reported by project people that D5 has now dictated that the VT is to be limited to 3 hours per day on any one project. – SMO
Once more feedback is obtained from the implementation of the QC 2000 program, it is possible that FDOT might optimize our inspection staff by reducing the frequency of the VT testing and shifting the operation from testing to construction inspection.

46. Describe the role of the Department's inspector in the Asphalt plant with the new "Contractor Quality Control" Specifications (QC2000). Will they still be expected to observe, on a daily basis, contractor QC procedure? How many hours of plant time do we anticipate? – D5
Yes, we have to work on a daily basis based on the "trust and verify" concept. There are many activities specified in the specifications that need to be inspected and verified (verification inspection). (See also Item No. 45).

47. What role with the Department's QC Inspectors have on the roadway? Will inspectors have ability / authority to enforce specifications and contractor's QC plan? – D5
The Department's Roadway Inspector is responsible for the inspection of paving operations and other related activities as well as the verification of the Contractor's QC operations at the job site. FDOT always has the authority to enforce the specifications and Contractor's QC Plan.

48. How is the custody of Verification samples to be determined? Are contractors aware of the ramifications of lost/missing Verification samples? – TPK
It is essential under the new QC 2000 specifications that no samples be lost, damaged, etc. (Please see Subarticle 334-5.3.2 – Lost or Missing Verification/Resolution Samples).

Resolution Testing / Independent Assurance Issues

49. Section 5.5 (IA system) still mysterious. I think this is too early because this is still under review. – SMO
The new Independent Assurance system (Section 5.5 of the Materials Manual) is set up to evaluate the performance of qualified testing personnel. In asphalt, the IA program evaluates personnel qualified as a CTQP Asphalt Plant Level I Technician. The IA evaluation is typically conducted through a proficiency sample where the test results are statistically analyzed. In the event the test results are outside the acceptable tolerance (defined as +/- two standard

deviations from the mean), the District Materials Office will follow up either with an observation of the testing or else have the technician test a split sample. In the event that three consecutive evaluations indicate a "problem", then the Technician's qualification may be suspended.

50. Section 334-4.6 Independent Sample Verification Testing, the last sentence says to "Evaluate any material represented by the failing test results in accordance with 334-9.4." How do quantify how much material this failing IV test represents? – D5
The Engineer and Contractor can determine the extent of the questionable material based on any available QC test result or other test data. In the event that they cannot make a clear determination as to the extent of the questionable material, then they will evaluate all the material placed, going back to the last passing Independent Verification test result.

51. District proficiency samples – how does this work? How are samples taken? –2 IND
Proficiency samples are "mass sampled" by CMEC, and distributed through each District Materials Office to the qualified technician. Each technician then performs the required tests, and submits the test results to the State Materials Office for analysis. Acceptable results have to fall within two standard deviations from the average of all of the test results for the property in question.

52. Is there a problem(s) with "proficiency" samples? The answer lies in how samples are "put up". Shoveled into boxes or batched? In conjunction with what are the parameters that determine whether results are "acceptable" or not? +/- 1s?, +/- 2s? How do you determine that both equipment and operator are worthless by the testing of boxes put up somehow and compared to some parameter? I would submit the answer to the original question is yes, when you consider that the worthless technicians and equipment are yielding results within the confines of what is considered acceptable variation by the Department, coupled with the fact that these same technicians may have just been observed and found to be qualified to perform tests by the CTQP process. Oh, and the same technicians and equipment have been comparing for years, and currently, within one standard deviation on these same tests in the AMRL program. – IND
The proficiency samples are bulk sampled and boxed up. If the test results do not fall within the acceptable range (two standard deviations from the average of all of the results), then that would indicate that there is a problem with either the way the procedure is being performed or else a problem with the equipment. That's why the next step in the evaluation is a follow-up visit by an IA inspector from the District Materials Office. It's important to note that the criteria of two standard deviations from the average is the same – whether the sampled are bulk sampled or batched up in a lab.

53. Will someone please explain the three strikes rule to us again (proficiency samples)? – IND

This was verbally reviewed at the meeting. For those that did not attend, it is recommend that you get a copy of the Construction Training and Qualification Manual, Chapter 1, Section 1.9.11. If after reading this passage and you still have questions, contact Douglas Townes at: douglas.townes@dot.state.fl.us.

Paperwork Records / Final Estimates

54. Final estimates / payment still continue to be an issue, different offices wanting different things. – SMO
The State Final Estimates Preparation and Documentation Manual addresses the minimum requirements for documenting asphalt payment and soon will address the minimum requirements for QC 2000 documentation. Each district may require additional documentation.

55. Different pay item numbers within the same lot. – SMO
The tonnage has to be kept separate in order to properly document payment for each asphalt pay item.

56. Who is responsible for sampling, C-22 cards, and shipping viscosity samples of hot mix? – IND
For viscosity samples, the Contractor's QC person is responsible for obtaining the sample. It is then the Verification Technician's responsibility to complete the sample transmittal (C-22) card, input the sample into the CQR 06 screen, and see that the samples are sent to the State Materials Office for testing.

57. Who completes roadway reports for misc., maintain of traffic, curb mix temp, asphalt? – IND
The Contractor is responsible for the Daily QC Reports for miscellaneous asphalt, MOT, curb mix and temporary asphalt.

58. When will the contractor be responsible for certifying quantities, and what methods will be used? – IND
A mandatory specifications change for Lump Sum projects requires the Contractor to certify tonnage placed and accepted for a bituminous adjustment was February 2001. Also the Contractor is required to certify tonnage for Design/Build projects for the same reason. Beginning January 2003, the Contractor will have to certify gallons of prime or tack coat placed on all projects. A proposed specification change is in the works requiring the Contractor to certify all tonnage (individual pay items) and the target date is July 2003. Also beginning in July 2003, the tack or prime coat applied will be included in the price of the asphalt or base item. The method to be used to certify these quantities will be on a form provided by the Department.

59. Waiting for final approval of quantities on QC reports, the Contractor missed the Monthly Estimate deadline – how can we speed up the process? – IND

Communication is the key. Prepare the Monthly Estimate promptly. Do not wait for the last minute.

60. Forms: Are we making any headway on how to enter data into a spreadsheet (one spreadsheet) and be "done with it'? The transferring of the same numbers from one to another to another greatly increases the risk of error by the time it gets onto the Daily Report Plant, for entry into CQR. The time wasted is bothersome, both the transferring and the checking. Waiting on LIMS isn't the answer. We NEED something in between. Maurice's wonder sheet has all but all the info needed on the Daily. – IND
Currently, roadway and plant personnel are still required to complete the Asphalt Reports and then input the required information into the Construction Quality Reporting (CQR) system for project certification. This process will continue with the initial implementation of the Laboratory Information Management System (LIMS). Long-term implementation of LIMS will include the use of laptop computers or PDA's for the roadway and plant personnel that would allow for the direct input of the project data into LIMS and eliminate the need to transfer data from the Asphalt Reports.

61. Paperwork assistance will be handled by?; project personnel, the TAC teams? Where can assistance be found? – FHWA
Contact the TAC team in your District.

Other

62. We need a discussion on the JMF's before and after the July 2002 letting. Will the "OLD" mixes really work with QC2K spec? We need to make everyone aware, or re-emphasize that the qc2k spec w/ PWL is a whole new ball game. – FHWA
Contractors need to be aware that with the new QC 2000 specifications, mixes that met the "old" specification requirement of minimum density and minimum air voids, will not necessarily meet the new PWL requirements. In addition, there are new aggregate requirements for FC-9.5 and FC-12.5 mixes.

63. Do initial production requirements (334-4.3) apply to new mixes, or new jobs? – IND
Initial Production LOT sizes of 2000 tons apply to all mixes on all projects unless the Engineer waives the requirement. A reason for waiving the Initial Production LOT size requirement would include a using mix that was recently placed on another project where production and placement went smoothly and performance was good. The Project Engineer should consult with the District Bituminous Engineer on this type of issue.

64. After initial 2000 ton lot, can the Contractor start a new 4000 ton lot prior to all results being obtained? It is impossible to have core results on the last sublot prior to completion. – IND

Not unless there is a shutdown right at 2000 tons. Realistically, the first two LOTs will be at a LOT size of 2000 tons since the testing will not be completed on the first LOT before the second LOT begins. The first LOT at 4000 tons will probably be the third LOT.

65. Which Engineer (District, Bituminous, Project) can waive the initial production Lot? – IND
The Project Engineer, with input from the District Bituminous Engineer.

66. We need a statement / way to handle small, small quantity asphalt items under the new spec. Those that say get a total of 210 tons of a type of mix that has to be placed in 21 ton increments over the coarse of ten days or nights, etc. Did I hear "visual inspection"? The Department could do it then “Why oh why can't I”? – IND
The possibility of “visual inspection only” for projects with a total amount of mix less than 500 tons will be discussed at the next District Bituminous Engineers meeting.

67. Asphalt Plant Laboratory Qualification – status statewide – NA
To become qualified, a laboratory first must get accredited by either CMEC or AASHTO. The next step is for the lab to complete a Laboratory Qualification Application and send it along with a copy of the accreditation certificate to the District Materials Office. The DMO will then perform a limited inspection of the laboratory. If the lab checks out okay, and the paperwork is complete, then the lab gets qualified. For additional information, go to the following web site: http://materials.dot.state.fl.us/smo/Administration/programs/qc2000.htm

Research

68. What's new on the FDOT Research horizon? – SMO
Greg Sholar of the State Materials Office presented an overview of current FDOT research activities in the area of flexible pavements. For more information, visit the State Materials Office web site at:
http://www11.myflorida.com/statematerialsoffice/

69. Is FDOT going to try SMA on a project? Why or why not? – IND
Currently our focus is the implementation of Contractor Quality Control Specifications (QC 2000). Guideline specifications for SMA require the use of very low LA loss aggregate (30). Florida is not blessed with these types of aggregate sources, as Maryland and Georgia are. Florida may be initiating a research project on SMA under FCPE. It was previously proposed but was not funded last year. The project will focus on using aggregates of higher LA loss than suggested by the SMA Guidelines.

Smoothness

70. Acceptance Testing for Pavement Smoothness by Laser Profiler. – SCO
A specification was developed to establish an acceptance procedure for pavement smoothness by Laser Profiler on limited access or high-speed roadways. The test specification has been tried on several projects. Based on the performance results of the test projects, the test specification was revised by the Smoothness Committee and submitted to FHWA for approval. By using this specification, the 15' rolling straightedge for friction course smoothness acceptance can be eliminated and the speed and safety of the smoothness acceptance operations will be greatly improved at the job site.

71. Some projects are built in a piece-meal fashion, either in segments, or with major grade changes, or re-alignment. Obviously, the smoothness spec was meant for straight long stretches of highway where the paver electronics can really help the ride. Shouldn't there be a different spec on these other projects? – IND
For the sections built in a piece-meal fashion, or with major grade changes or re-alignment, the provisions specified in Subarticle 330-12.3.1 could be applied to perform the acceptance testing by a 15 foot rolling straightedge and the Contractor must correct any individual surface irregularity in these areas that deviates from plan grade in excess of 3/8 inch.

72. Should FDOT sponsor an annual award for the smoothest job of a specific category? – NA
This had been suggested many years ago when Florida was using the Mays Ride meter for Ride measurement for the Pavement Condition Survey and was an optional specification for Construction acceptance. It never got off the ground here although Georgia did something similar. It is certainly a possibility. We could use the initial Pavement Condition Survey Ride Number for that purpose. In that way all new construction could compete, not just ones where the Laser Profiler was used for acceptance. We will discuss this further at the next Flexible Pavement Committee meeting.

Superpave

73. Do you expect to see any modified SHRP grades other than 76-22? – IND
No.

74. Update on aggregate specifications for Superpave? – CEI
A couple of new issues are on the AASHTO horizon – elimination of the Restricted Zone and the development of a new 4.75 mm mix. Both of these will be balloted by AASHTO in the next few months and would go on-line nationally by July 2003. Once they are adopted by AASHTO, FDOT will evaluate the feasibility of these changes in Florida.

75. What is the Department's position on the overall performance of Superpave to date (plus or minus)? – IND
The performance of Superpave has generally been very good so far and the incidence of premature rutting is much less.

76. What have results been when Department utilized "Static rolling only" specifications? – D5
The static compaction specification (which lowers the target density a little and offers a bonus for meeting the original density target) has only been used on a few projects but it seems to have worked very well. It is also included in the new QC 2000 specifications. It only applies to fine graded mixes, however.

77. Any new Superpave Specification Changes coming? – NA
Both Musselman and Page are active nationally in various Superpave and Hot Mix Asphalt activities. The only items that we are aware of that would impact FDOT specifications are the elimination of the "Restricted Zone" with re-definition of coarse versus fine mixes that would use a point or points that would vary dependent of the maximum aggregate size of the mix, and secondly, allowing the use of the Dynamic Angle Verification (DAV) device to check the angle calibration of Gyratory compactors under load. We anticipate that once these changes are approved by AASHTO, Florida will reference them in our specifications. This should not have a significant impact on the way we are currently doing business.

78. Why do the Superpave specifications limit the substitution of Type SP mix to only one traffic level higher? The Interstates and Turnpikes are being designed with Traffic Level D/E travel lanes and TL B shoulders. Why can't we have the option of matching the shoulder pavement mix with the travel lane in order to avoid switching mixes back and forth and to better match consistent lift thicknesses? –IND
The traffic level for shoulders 5 foot or less in width should be designed to match the mainline traffic level and should be paved in the same pass. For wider shoulders that are paved in a separate pass, the mix is designed for the lower traffic loadings that are anticipated on the shoulder. This can provide for savings in mix costs as well as provide a more optimally designed mix for better durability, considering the density requirements and anticipated traffic compaction that will be experienced.

Warranties/CGAP

79. Contractor Guaranteed Asphalt Pavement (CGAP) Test Specification. – SCO
The purpose of the CGAP specification is to provide additional assurance to the public that the pavement will provide reasonable performance, and to transfer more of the responsibility for quality assurance of the pavement performance from FDOT inspectors to the Contractor's. Basically, the Contractor is responsible for the mix design (except FC-5), QC, production, construction and

inspection of all guaranteed asphalt mixtures and the maintenance responsibility for a period of 5 years after final acceptance of the project. Threshold values of pavement distresses and associated remedial work for the CGAP are also specified. The Department will perform the pavement condition surveys and determine the extent and magnitude of the pavement distresses occurring on the project. If a measured distress value indicates remedial action is required per the specification, the Contractor must complete the remedial work at no cost to the Department. Should the Contractor fail to satisfactorily perform any remedial work, the Department will suspend, revoke or deny the Contractor's certification of qualification for a minimum of 6 months or until the work is performed, whichever is longer. The Project Dispute Review Board will decide all disputes involving administration and enforcement of the specification.

80. Update on the Department's plans for CGAP. D5
Currently, nine Design/Build projects were selected as pilot projects and are underway. The Asphalt Warranty Core Group will perform the construction process review on those CGAP projects to collect information and feedback for the evaluation of the CGAP specification performance. The Group will have a meeting on October 1, 2002 to discuss the future plans on the CGAP specification in order to expand the specification for adding more test projects.

81. What are the concerns of the contracting industry with "guaranteeing" their pavements for more than five years? –TPK
Contractors are willing to stand behind their work and industry has offered a Materials and Workmanship program for up to 3 years. The biggest issue has to deal with the number of changes the asphalt specifications that have been continuously made over the last 5 years and the lack of any long-term performance data with Superpave.

82. Pavement warranty issues in Florida? – CEI
See Items No. 79 and No. 80.

83. What are the Department's plans for future warranty jobs? - FHWA
See Item No. 80.

PLEASE MARK YOUR CALENDAR FOR SEPTEMBER 8-9, 2003 FOR THE 27TH ANNUAL ASPHALT CONFERENCE IN TAMPA.