

**3340000 SUPERPAVE ASPHALT CONCRETE
COMMENTS FROM INTERNAL/INDUSTRY REVIEW**

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Comment: (12-26-12)
Section 3340000

1. 334-1.4.3 Additional Requirements

Overbuild was addressed as placing at zero thickness as long as the plans called out 1 ½” of asphalt placed coverage. This brings up the question of when we allow the Contractor to place the overbuild and structural in one operation, should we have this added to the spec to allow them to do this or not do this in light of this spec change.

Response: Sent to Rich Hewitt for his response.

(Rich Hewitt) No. I'd prefer the decision whether to allow paving overbuild and structural in one operation be left to the Engineer after consideration of the project specifics and evaluating any impacts to the new pavement. No Change Made.

2. 334-5.7.2 Roadway

334-5.7.2 Roadway: Obtain five 6 inch diameter roadway cores within 24 hours of placement, as directed by the Engineer, for Independent Verification testing. In situations where it is impractical to cut five cores per subplot, obtain a minimum of three cores per subplot at random locations, as identified by the Engineer. These independent cores will be obtained from the same LOTs and sublots as the Independent Verification Plant samples, or as directed by the Engineer. The density of these cores will be obtained as described in 334-5.1.1. **If the average of the results for the subplot does not meet** the requirements of Table 334-5 for density, *then a comparison of the Independent Verification Gmm test results and the Contractor's Gmm test results, if available, will be made.* **If the comparison meets the precision values of Table 334-6, cease production** of the asphalt mixture until the problem is adequately resolved (to the satisfaction of the Engineer), unless it can be demonstrated to the satisfaction of the Engineer that the problem can immediately be (or already has been) resolved. Address any material represented by the failing test results in accordance with 334-5.9.5.

If the comparison values meet why would you cease production?

Response: The comparison of the Gmm tests is to provide validation that Gmm is not the issue, but instead the Gmb (density) is the issue. If the Department's and Contractor's Gmm values compare, then the focus of the failure can be on Gmb and production would cease. If the Gmm's do not compare, then that is not automatically saying the Department's test results are incorrect, but that is one more item that should be investigated prior to automatic shutdown. Since the Gmm test has many sources of error, the Department should review their test results and run their split sample (same as for an air void failure). No Change Made.

Howie Moseley
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Comments: (12-26-12)

Based on surplus of RAP material at most asphalt plants and successful placement on SR 200 in Nassau County, I recommend allowing up to 20% RAP in mixes with PG 82-22 binder.

Response: The SMO agrees with this comment. The specification will be changed to allow 20% RAP with PG 82-22 binders. Change Made.

Section 334-5.7.2 - If the results do not compare, then the IV resolution process should be initiated and if verified, the Contractor should still have to cease production and address the failure.

Response: The SMO agrees with this comment and had this intent. The specification wording will be changed to make this clearer. Change Made.

D4

Comments: (1-1-13)

D4 Const has the following comments. 4. Use RAP from a Department approved stockpile or millings from a Department project. The new text "or millings from a Detartment project" does not have an approval method attached as in the next section of the spec. (stockpiles). Suggest language be added to explain how we approve the material for use.

Response: Good question. We recently held a statewide District Bituminous Engineers' teleconference in which stockpile approval was discussed. The following direction was settled on:

1. For crushed RAP piles, the Districts will continue to inspect the RAP pile, review test data, and issue an approval letter.
2. For millings from FDOT projects, the Districts will inspect the RAP pile and review the test data. No approval letter will be provided.

Therefore, millings from a Department project do not have a formal approval like a crushed RAP pile does. No Change Made.

Jerry Stewart
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Comment: (11-29-12) Section 334-1.4.3 (4) they added a statement about zeroing the taper on over build, but limit it to 1 1/2" minimum overlays. Why not down to 1" minimum overlays?

Overbuild isn't considered structural asphalt, so by design it has no structural value. Leaving a 1/2" taper on 1" overlays will continue to cause construction problems.

Response: This is being done to ensure there aren't any issues with having a layer tapered to zero very near the surface. Having at least a 1-1/2" dense-graded layer on top should eliminate such issues. The thinner the dense-graded layer above the "overbuild tapered to zero" gets, the more of concern the performance of that overbuild tapered to zero becomes. (State Construction Office). No Change Made.

Section 334-2.3.1 (2) No RAP in 82-10 mixes. Why not? We're running RAP in a coarse graded 12.5 with 82-10 binder to Disney and we can meet volumetric's and achieve density.

Response: The SMO agrees with this comment. The specification will be changed to allow 20% RAP with PG 82-22 binders. Change Made.

Section 334-2.3.1 (4) Use RAP from a DOT approved stockpile or millings from a DOT project. If the RAP material comes from a DOT project it's pre-approved. If it comes from a non-DOT project, you have to go through the approval process (submit 7 test results, a recovered viscosity, and a visual inspection) before you can use it. Same basic spec as before they just changed the wording from "FDOT furnished Pavement Composition..." to "Department project".

Response: That is correct. We are eliminating the Pavement Composition Report and will only provide the Pavement Coring Report, which will provide the layer thicknesses and material type. Regarding the RAP stockpiles, we recently held a statewide District Bituminous Engineers' teleconference in which stockpile approval was discussed. The following direction was settled on:

1. For crushed RAP piles, the Districts will continue to inspect the RAP pile, review test data, and issue an approval letter.
2. For millings from FDOT projects, the Districts will inspect the RAP pile and review the test data. No approval letter will be provided.

Therefore, millings from a Department project do not have a formal approval like a crushed RAP pile does. No Change Made.

Section 334-5.7.2 states the action to take place if the IV GMM results compare with the QC GMM results, but it doesn't state what action(s) take place if they don't compare.

Response: Good comment. The specification wording will be changed to make this clearer. Change Made.

Emmanuel Uwaibi, P.E

Comment: (12-6-12) Under 334-1.4.3:
Note #4. The requirement of a minimum of 1-1/2 of structural asphalt over an overbuild layer even when the overbuild layer has been feathered to zero thickness is an unnecessary restriction

that can result in expensive flexible pavement design overlays during rehabilitation. There should valid data before implementation of these types of expensive material restrictions on pavement designs.

Response: The Spec language states the overbuild can be tapered to zero provided there is a minimum of 1-1/2" of dense-graded mix on top of it. As such, the requirement of 1-1/2" of dense-graded mix on top is only required when the overbuild is tapered to zero. The reasoning is that since we wouldn't taper an asphalt layer to zero at the surface (because it would soon ravel away), it stands to reason we'd want an overbuild layer tapered to zero to be placed with adequate dense-graded asphalt above it. At this point, we felt 1-1/2" of dense-graded asphalt above overbuild tapered to zero was as thin as we wanted to go. (State Construction Office) No Change Made.

Under 334-2.3.1:

Notes #3 and #4 under this section looks contradictory. My suggestion is that note #4 should be deleted since the contractor assumes full responsibility for RAP under note #3. I have no comments on specs. 320, 330, 336, 916 and 919

Response: Good comment, but the Department still wishes to have some minor oversight on the RAP material used, similar to virgin aggregates, especially since RAP is often a significant portion of the mixture. Regarding RAP stockpiles, we recently held a statewide District Bituminous Engineers' teleconference in which stockpile approval was discussed. The following direction was settled on:

1. For crushed RAP piles, the Districts will continue to inspect the RAP pile, review test data, and issue an approval letter.
2. For millings from FDOT projects, the Districts will inspect the RAP pile and review the test data. No approval letter will be provided. No Change Made.
