



# Florida Department of Transportation

**CHARLIE CRIST**  
GOVERNOR

605 Suwannee Street  
Tallahassee, FL 32399-0450

**STEPHANIE KOPELOUSOS**  
SECRETARY

December 16, 2008

Monica Gourdine  
Program Operations Engineer  
Federal Highway Administration  
545 John Knox Road, Suite 200  
Tallahassee, Florida 32303

Re: Office of Design, Specifications  
Section 338  
Proposed Specification: 3380502, Value Added Asphalt Pavement

Dear Ms. Gourdine:

We are submitting, for your approval, two copies of the above referenced Supplemental Specification.

This change was proposed by David Wang of the State Construction Office to change the Design Speed on Category 1 and Category 2 pavement from 50 to 55 mph to agree with Section 330. Please review and transmit your comments, if any, within four weeks. Comments should be sent via Email to ST986RP or [rudy.powell@dot.state.fl.us](mailto:rudy.powell@dot.state.fl.us).

If you have any questions relating to this specification change, please call Rudy Powell, State Specifications Engineer at 414-4110.

Sincerely,

Rudy Powell, Jr., P.E.  
State Specifications Engineer

RP/dr

Attachment

cc: Gregory Jones, Chief Civil Litigation  
Florida Transportation Builders' Assoc.  
State Construction Engineer

**VALUE ADDED ASPHALT PAVEMENT – PAVEMENT EVALUATION AND REMEDIAL WORK.****(REV 10-07-08)**

SUBARTICLE 338-5.2 (of the Supplemental Specifications) is deleted and the following substituted:

**338-5.2 Category 1 Pavement:** For purposes of this Specification, “Category 1 Pavement” is defined as mainline roadways, access roads and frontage roads with a design speed ~~of 50~~**55** mph and greater.

Threshold values and associated remedial work for Category 1 Value Added Asphalt Pavement are specified in Table 338 -1.

TABLE 338-1 Category 1 Pavements			
Type of Distress	Type of Survey	Threshold Values for Each LOT (0.1 Mile) per Lane.	Remedial Work
Rutting <sup>(1)</sup>	Any Survey	Depth $\leq$ 0.25 inch	None required
		Depth $>$ 0.25 inch	Remove and replace the distressed LOT(s) to the full depth of all layers, and to the full lane width <sup>(2)</sup>
Ride <sup>(3)</sup>	Any Survey	RN $<$ 3.5	Remove and replace the friction course for the full length and the full lane width of the distressed LOT(s)
Settlement/Depression <sup>(3a)</sup>	Any Survey	Depth $\geq$ 1/2 inch	Propose the method of correction to the Engineer for approval prior to beginning remedial work
Cracking <sup>(4)</sup>	Any Survey	Cumulative length of cracking $>$ 30 feet for Cracks $>$ 1/8 inch <i>wide</i>	Remove and replace the distressed LOT(s) to the full depth of all layers, and to the full lane width <sup>(5)</sup>
Raveling and/or Delamination affecting the Friction Course <sup>(6)</sup>	Any Survey	Individual length $\geq$ 10 feet.	Remove and replace the distressed area(s) to the full distressed depth and the full lane width, for the full distressed length plus 50' on each end
		Individual length $<$ 10 feet.	Patch the distressed area(s) to the full distressed depth and to a minimum surface area of 150% of each distressed area, subject to performance at final survey <sup>(7)</sup>

TABLE 338-1 Category 1 Pavements			
Type of Distress	Type of Survey	Threshold Values for Each LOT (0.1 Mile) per Lane.	Remedial Work
Pot holes and Slippage Area(s) <sup>(6)</sup>	Any Survey	Observation by Engineer	Remove and replace the distressed area(s) to the full distressed depth, and to a minimum surface area of 150% of each distressed area OR temporarily patch the distressed area(s) AND, prior to the final survey, remove and replace the distressed area(s) to the full distressed depth, and to a minimum surface area of 150% of each distressed area
Bleeding <sup>(8)</sup>	Any Survey	Loss of surface texture due to excess asphalt, individual length $\geq 10$ feet and $\geq 1$ foot. in width.	Remove and replace the distressed area(s) to the full distressed depth, and to a minimum surface area of 150% of each distressed area

<sup>(1)</sup> Rutting: Rut depth to be determined by Laser Profiler in accordance with the Flexible Pavement Condition Survey Handbook. For any LOT that cannot be surveyed by Laser Profiler, rut depth to be determined manually in accordance with the Flexible Pavement Condition Survey Handbook, with the exception that the number of readings per LOT will be one every 50 feet. For a partial LOT, a minimum of three measurements not exceeding 50 feet apart will be made. When the average of the measurements by manual straightedge exceeds a 0.30 inch threshold value, the remedial work is needed.

<sup>(2)</sup> Remedial Work for Rutting: The Contractor may propose removal and replacement of less than the full depth of all layers by preparation and submittal of a signed and sealed engineering analysis report, demonstrating the actual extent of the distressed area(s). Remedial work must be performed in accordance with Table 338-1 unless the Engineer approves the proposal.

<sup>(3)</sup> Ride: Ride Number (RN) to be established by Laser Profiler in accordance with FM 5-549. As a condition of project final acceptance in accordance with 5-11, correct all deficiencies in accordance with acceptance criteria for pavement smoothness in accordance with 330-12.6.

<sup>(3a)</sup> Settlement/Depression: Depth of the settlement/depression to be determined by a 6 foot manual straightedge.

<sup>(4)</sup> Cracking: Beginning and ending of 1/8 inch cracking will be determined as the average of three measurements taken at one foot intervals. The longitudinal construction joint at the lane line will not be considered as a crack.

<sup>(5)</sup> Remedial Work for Cracking: The Contractor may propose removal and replacement of less than the full depth of all layers by preparation and submittal of a signed and sealed engineering analysis report, demonstrating the actual extent of the distressed area(s). Remedial work must be performed in accordance with Table 338-1 unless the Engineer approves the proposal.

<sup>(6)</sup> Raveling, Delamination, Pot holes, Slippage: As defined and determined by the Engineer in accordance with the examples displayed at the following URL: [www2.dot.state.fl.us/specificationsestimates/pavement.aspx](http://www2.dot.state.fl.us/specificationsestimates/pavement.aspx)

<sup>(7)</sup> Patched Areas: At the time of final survey, patched areas must be performing to the satisfaction of the Engineer. If the Engineer determines patched areas are not performing satisfactorily, remove and replace the distressed area(s) to the full distressed depth, and to a minimum surface area of 150% of each distressed area.

<sup>(8)</sup> Bleeding: Bleeding to be determined as defined and determined by the Engineer in accordance with the examples displayed at the following URL: [www2.dot.state.fl.us/specificationsestimates/pavement.aspx](http://www2.dot.state.fl.us/specificationsestimates/pavement.aspx)

SUBARTICLE 338-5.3 (of the Supplemental Specifications) is deleted and the following substituted:

**338-5.3 Category 2 Pavement:** For purposes of this Specification, "Category 2 Pavement" is defined as mainline roadways, access roads and frontage roads with a design speed less than ~~50~~55 mph; approach transition and merge areas at toll booths; ramps; acceleration and deceleration lanes (including tapers); and turn lanes, parking areas; rest areas; weigh stations; and agricultural inspection stations.

Threshold values and associated remedial work for Category 2 Value Added Asphalt Pavement are specified in Table 338-2.

Type of Distress	Type of Survey	Threshold Values	Remedial Work
Rutting	Automated Measurement	See Table 338-1	See Table 338-1
	Manual Measurement <sup>(1)</sup>	Depth > 0.4 inch	Remove and replace 1.5 inch the full lane width for the area plus 50 feet with rutting equal to or greater than 0.4 inch.
Cracking	Any Survey	Cumulative length of cracking > 300 feet for Cracks > 1/8 inch	See Table 338-1
Surface Deterioration <sup>(2)</sup>	Any Survey	See Table 338-1	See Table 338-1
Settlement/Depression <sup>(3)</sup>	Any Survey	Depth $\geq$ 1/2 inch	Propose the method of correction to the Engineer for approval prior to beginning remedial work

<sup>(1)</sup> Rutting: Rut depth to be determined manually in accordance with the Flexible Pavement Condition Survey Handbook. For any LOT that cannot be surveyed by the Laser Profiler, the rut depth will be determined manually in accordance with the Flexible Pavement Condition Survey Handbook, with the exception that the number of readings per LOT will be one every 20 feet. For partial LOT, minimum of three measurements not exceeding 20 feet apart will be checked. When the average of the measurements by manual straightedge exceeds 0.6 inch, the remedial work is needed. When any individual measurement exceeds 0.6 inch, the remedial work is needed.

<sup>(2)</sup> Surface Deterioration: As used in Table 338-2, Surface Deterioration includes Raveling and/or Delamination affecting the Friction Course, Pot holes, Slippage Area(s), Segregated Area(s) and Bleeding; all as defined and footnoted in Table 338-1.

<sup>(3)</sup> Settlement/Depression: Depth of the settlement/depression to be determined by a 6 foot manual straightedge.

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Threshold values and associated remedial work for Category 1 Value Added Asphalt Pavement are specified in Table 338 -1.

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Rutting <sup>(1)</sup>	Any Survey	Depth $\leq$ 0.25 inch	None required
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Cracking <sup>(4)</sup>	Any Survey	Cumulative length of cracking $>$ 30 feet for Cracks $>$ 1/8 inch wide	Remove and replace the distressed LOT(s) to the full depth of all layers, and to the full lane width <sup>(5)</sup>
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