

VIRGINIA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISION FOR
RIDEABILITY

October 26, 2009

SECTION 315—ASPHALT CONCRETE PAVEMENT of the Specifications is amended as follows:

Section 315.07 Pavement Tolerances is amended to include the following:

For pavements designated in the Contract, the final ride quality acceptance will be based on the lowest average International Roughness Index (IRI) for each 0.01-mile section produced by a minimum of two test runs, using a South Dakota style road profiling device and reported for each travel lane. The device shall measure both wheelpaths with laser height sensing instruments. The Department will conduct the testing within 30 calendar days of completion of the final surface course and pavement striping over the designated section. Testing will be conducted in accordance to VTM – 106. The Department will conduct the testing as soon as possible after completion, providing the Contractor can arrange unimpeded access to the paved surface for constant highway speed test runs.

Acceptance

An IRI number in inches per mile will be established for each 0.01-mile section for each designated lane. The last 0.01-mile (52 feet) section before a bridge, the first 0.01-mile (52 feet) section after a bridge, and the beginning and end 0.01-mile (52 feet) sections of the final surface will not be subject to a pay adjustment.

Areas excluded from testing by the road profiling device will be tested using a 10-foot straightedge. The variation of the surface from the testing edge of the straightedge between any two contacts with the surface shall not be more than 1/4 inch. Humps and depressions exceeding the specified tolerance shall be subject to correction as directed by the Engineer, at no additional cost to the Department.

The following tables provide the acceptance quality of pavement based on the finished rideability for interstate and non-interstate roadways.

TABLE A - INTERSTATE SYSTEM	
IRI After Completion (Inches Per Mile)	Pay Adjustment (Percent Pavement Unit Price)
45.0 and Under	115
45.1-55.0	110
55.1-70.0	100
70.1-80.0	90
80.1-90.0	80
90.1-100.0	70
100.1-120.0	60 or Subject To Corrective Action
120.1-140.0	40 or Subject to Corrective Action
140.1-160.0	20 or Subject to Correction Action
Over 160.1	0 or Subject to Corrective Action

TABLE B - NON- INTERSTATE SYSTEM	
IRI After Completion (Inches Per Mile)	Pay Adjustment (Percent Pavement Unit Price)
55.0 and Under	115
55.1-65.0	110
65.1-80.0	100
80.1-90.0	90
90.1-100.0	80
100.1-110.0	70
110.1-130.0	60 or Subject To Corrective Action
130.1-150.0	40 or Subject to Corrective Action
150.1-170.0	20 or Subject to Corrective Action
Over 170.1	0 or Subject to Corrective Action

When the Engineer requires corrections to the pavement surface, the method of correction shall be reviewed by the Engineer and correction shall be performed at the Contractor's expense. The Engineer may require correction of any or all adjoining traffic lanes or shoulders at the Contractor's expense to assure uniform cross section. Methods of correction may include, but are not limited to diamond grinding, remove and replace, and asphalt concrete (AC) overlay.

Where corrections are made after the initial Department rideability test, the pavement will be retested by the Department to verify that corrections have produced the acceptable ride surface. Unit price disincentives or additional corrections may be required based on the retested IRI measurements as determined by the Engineer. No incentives will be provided for sections on which corrective actions have been required by the Engineer. In the event the corrective action(s) do not result in 100 percent payment, then the Contractor will be assessed the corresponding percent payment.

Single-Lift Construction

An AC layer is defined as a material lift equal to or greater than 2.5 times the maximum nominal aggregate size for the AC mix(es) specified in the Contract. A material lift less than the specified application rate or less than 2.5 times the maximum nominal aggregate size for the AC mix(es) specified in the Contract is considered a "scratch course" and not an AC layer.

Where only one AC layer shall be placed, the Department will test pavement sites subject to this special provision prior to work by the Contractor. Upon request by the Contractor, the Engineer will provide the IRI testing results. If this IRI testing is conducted more than 180 calendar days prior to the scheduled beginning of the work, the Engineer or Contractor may request new IRI testing.

Based on the average IRI (original surface and completed overlay) for each 0.1-mile length of each travel lane subject to this special provision, no corrective action will be required if the completed surface has IRI test results which indicate a 30 percent or more improvement in the ride quality. This percent improvement is based on the 0.1-mile paved section average IRI and not the individual 0.01-mile increments. When the percent improvement is achieved for a 0.1-mile section, the payments (incentives, disincentives and full payment) for the individual 0.01-mile increments will be summed. The Contractor will then be paid the greater of the total adjusted payments or 100 percent for that 0.1-mile section.

This rideability specification does not relieve the Contractor from responsibility concerning workmanship in accordance with the requirements of the Specifications, other contract requirements or as defined by the Engineer.

Incentive Only Projects

For projects designated as "incentive only", the Contractor will not be subjected to penalties on any 0.01-mile section resulting from the final rideability results. Incentive only projects will not be subject to corrective action as a result of the rideability results.

Pay adjustments will be applied to the theoretical tonnage of the surface mix asphalt material for the lane width and section length tested.

This rideability specification does not relieve the Contractor from responsibility concerning workmanship in accordance with the requirements of the Specifications, other contract requirements or as defined by the Engineer.

Payment

Pay adjustments will be applied to the theoretical tonnage of the surface mix asphalt material for the lane width and section length tested (generally 12 feet wide and 52.8 feet long) based on testing prior to any corrective action directed by the Engineer. For the section(s) where corrective action is required, pay adjustment will be based on the testing after the corrective action has been accomplished.