Supplemental Technical Specification for

Hot-Mix Asphalt Rideability

SCDOT Designation: SC-M-403 (09/11)

1. SCOPE

1.1. The Resident Construction Engineer (**RCE**) will evaluate Hot-Mix Asphalt (HMA) surfaces for a satisfactory ride. If conditions permit and unless otherwise specified in the special provisions, the Materials and Research Engineer will test the HMA surface in accordance with **SC-T-125** when requested by the **RCE**.

2. REFERENCED DOCUMENTS

2.1. **SC-T-125**, *Measurement of Pavement Rideability using the Dynatest 5051 Mark III Road Surface Profiler.*

3. REQUIREMENTS FOR TESTING

3.1. For **SC-T-125** to be used, the following conditions must be met:

- A constant speed of at least 35 miles per hour is maintainable throughout each section that measurements are made.
- The sections to be tested have a final posted speed limit of at least 45 mph.
- The project has at least 0.5 miles of pavement that may be tested without interruptions or exclusions (such as, but not limited to, bridges, stop signs, railroad crossings, speed limit below 45 mph, signalized intersections, or sharp curves posted for less than 35 mph.)

4. REQUIREMENTS FOR NEW CONSTRUCTION

4.1. On new roadway projects that include two or more uniform lifts of HMA, the maximum acceptable IRI for each nominal 0.1-mile segment of vehicle lane, when tested in accordance with **SC-T-125**, is 65 inches per mile. When initial measurements are 65 inches per mile or less, payment is based on the original contract unit price per ton of final HMA surface tested according to Table 1, Schedule for Adjusted Payment. The pay adjustments apply only to the course of HMA that will constitute the final riding surface. If the new construction is directly tied to existing pavement for widening, the highest rideability for any wheelpath will apply to all wheelpaths.

4.2. When the IRI value exceeds 65 inches per mile and the **RCE** determines that the pavement does not have an acceptably smooth ride, correct such deficient sections without additional compensation. The **RCE** may withhold payment for the HMA (or a portion thereof) until the deficiencies have been corrected, and the surface is re-tested and provides an acceptably smooth ride. Obtain written approval of the **RCE** for the method of correcting the surface deficiencies; however *under no circumstances shall the pavement be subject to an artificial heat source over 175°F*. No more than 100% of the contract unit price will be paid for sections where corrective work results in IRI values less than 56 inches per mile. If corrections are not made, then the price adjustment is based on the original contract unit price per ton of the HMA according to Table 1, Schedule for Adjusted

Payment. Deduct as a lump sum the total amount of any reduction in payment from monies due.

4.3. For each additional increment of 5 inches per mile of roughness above 80 inches per mile, reduce payment by an additional 10% from 80% based on the contract unit price of the HMA final riding surface.

4.4. Sections of roadway for which the IRI value is 80 (or 90 if Table 2 applies) inches per mile or above, as applicable, will be reviewed on an individual basis. If the **RCE** determines that the section is unacceptable, remove the material and replace or overlay it subject to the approval of the **RCE**. Should the **DCE** determine that the material may remain in place and does not require an overlay or other corrective action, a price adjustment will be assessed based on the Schedule for Adjusted Payment.

Table 1. Schedule For Adjusted Payment – New Construction and Multiple Lift Overlay on Interstate and Limited Access Segments

Segment IRI (inches/mile)	Price Adjustment – HMA Final Riding Course
Less than 46	105%
46 – 50	103%
51 – 55	101%
56 – 65	100%
66 – 70	95%
71 – 75	90%
76 – 80	80%
Greater than 80	See Paragraph 4.3

5. REQUIREMENTS FOR RESURFACING PROJECTS OVER 150 PSY

5.1. The requirements of this section apply to overlays of existing pavement with a contract application rate of greater than 150 psy. When a resurfacing project involves two or more uniform HMA lifts, the requirements for new pavement, as given in Subsection 4, apply, except the rideability requirements as shown in Table 2 apply in lieu of Table 1, except for segments that are not on interstate and limited access routes for which Table 1 applies. For single lift overlays of existing pavement with a contract application rate of greater than 150psy, all incentives and pay reductions will otherwise be assessed according to Subsection 4.

Table 2. Schedule For Adjusted Payment – Multiple Lift Overlay on Non-Limited Access Segments and Reclamation

Segment IRI (inches/mile)	Price Adjustment – HMA Final Riding Course
Less than 46	105%
46 – 50	103%
51 – 55	101%
56 – 75	100%
76 – 80	95%
81 – 85	90%
86 – 90	80%
Greater than 90	See Paragraph 4.3

5.2. Where applicable, the existing pavement will be tested by the Department in accordance with SC-T-125 or other method specified in the special provisions before any work is performed and then again on the finished surface. Payment for the final HMA riding surface course will be made based on the improvement over the initial rideability for each 0.1 mile segment as shown in Table 3, Rideability Requirements for Resurfacing.

5.3. All pay adjustments apply only to the course of HMA that will constitute the final riding surface. The HMA tonnage subject to adjustment is based on the original plan quantity for the HMA as shown on the typical section. The total amount of any reduction in payment is deducted as a lump sum from monies due. Where measurements on the finished surface exceeds the repair threshold limit for the corresponding initial roughness as given in the column titled "Repair" in Table 3, the Department, at the discretion of the **DCE**, may require corrective action or elect to apply a pay reduction to the HMA final riding surface course in lieu of correction.

5.4. If the Department elects to require correction, correct such sections without additional compensation such that the finished surface has an acceptable rideability. Obtain approval of the **RCE** for the method of correcting the surface deficiencies. *However, do not subject the pavement to an artificial heat source over 175°F under any circumstance.* When an acceptably smooth ride is not obtained as outlined herein, the **RCE** may withhold payment for the HMA (or a portion thereof) until the corrections have been made and the pavement provides an acceptably smooth ride. Final rideability is considered acceptable when the repaired segment has a rideability value less than or equal to that shown in the "Repair" column. Segments requiring repair prior to acceptance are not eligible for payment in excess of 100%, however a 5% pay reduction will be applied if the post-repair rideability is in the range shown as "95%" in Table 3.

5.5. If the Department elects to apply a pay reduction as provided in Subsection 5.3, then the payment for HMA tonnage for that segment will be made at 95% of the bid unit price minus an additional 2% for each inch per mile of roughness up to 20 inches per mile above the rideability value given in the "Repair" column of Table 3. For each additional inch of roughness per mile greater than the "Repair" value plus 20 inches per mile, an additional reduction of 4% per inch will apply. If the final rideability is 34 inches per mile or more above the repair threshold, the section would be accepted without pay for the material subject to reduction.

Example 1: A segment has an initial ride of 255 inches per mile. After overlay, the ride is 136 inches per mile, which is 1 inch per mile above the repair threshold. Payment for the section would be (95% - (2% x 1 inch)) = 93% of the bid unit price for the surface lift.
Example 2: A segment has an initial ride of 255 inches per mile. After overlay, the ride is 155 inches per mile, which is 20 inches per mile above the repair threshold. Payment for the section would be (95% - (2% x 20 inches)) = 55% of the bid unit price for the surface lift.
Example 3: A segment has an initial ride of 255 inches per mile. After overlay, the ride is 156 inches per mile, which is 21 inches per mile above the repair threshold. Payment for the section would be (95% - (2% x 20 inches) – (4% x 1 inch)) = 51% of the bid unit price for the surface lift.
Example 4: A segment has an initial ride of 255 inches per mile. After overlay, the ride is 169 inches per mile, which is 34 inches per mile above the repair threshold. The HMA final riding course for the segment would be accepted without pay.

6. REQUIREMENTS FOR RESURFACING PROJECTS OF 150 PSY OR LESS

6.1. The requirements for this section apply to overlays with a contract application rate of 150 psy or less. .

6.2. Where applicable, the existing pavement will be tested by the Department in accordance with SC-T-125 or other method specified in the special provisions before any work is performed and then again on the finished surface. Payment for the final HMA riding surface course will be made based on the change in final rideability over the initial rideability for each 0.1 mile segment.

6.3. For overlays where this subsection applies and the initial ride is 150 inches per mile or less, full payment is made if the final rideability is less than or equal to the initial rideability.

6.4. For overlays where this subsection applies and the initial ride is greater than 150 inches per mile and less than or equal to 166 inches per mile, full payment is made if the final rideability is less than or equal to 150 inches per mile.

6.5. For overlays where this subsection applies and the initial ride is greater than 166 inches per mile, full payment is made if the final rideability is less than or equal to the initial rideability time 0.9, rounded up to the nearest whole number.

6.6. The repair threshold for a segment is 1.1 times the full payment rideability value rounded up to the nearest whole number.

6.7. If the final ride for a segment is greater than the full-payment rideability, but less than or equal to the repair threshold, payment on the HMA final riding surface for that segment is made at 95% of the unit bid price.

6.8. If the final ride for a segment is greater than the repair threshold, the Department, at the discretion of the **DCE**, may elect to require repairs to correct the rideability or apply a pay reduction.

6.9. If the Department elects to require correction, correct such sections without additional compensation such that the finished surface has an acceptable rideability. Obtain approval of the **RCE** for the method of correcting the surface deficiencies. *However, do not subject the pavement to an artificial heat source over 175°F under any circumstance.* When an acceptably smooth ride is not obtained as outlined herein, the **RCE** may withhold payment for the HMA (or a portion thereof) until the corrections have been made and the pavement provides an acceptably smooth ride. Final rideability is considered acceptable when the repaired segment has a rideability value less than or equal to the repair threshold. A 5% pay reduction will be applied if the post-repair rideability is in the range given in Subsection 6.7.

6.10. If the Department elects to apply a pay reduction, then payment for HMA quantity for that segment will be made as given in Section 5.5, except that the repair threshold is determined as given in Section 6.6.

7. REQUIREMENTS FOR RECLAMATION PROJECTS

7.1. The requirements for this section apply to segments where the existing pavement has been reclaimed in accordance with Section 306 of the Standard Specifications, including any applicable Special Provisions, Supplemental Specifications, or other addenda, prior to overlay with HMA or bituminous surfacing.

7.2. If the reclamation is being overlaid with a single lift of HMA surface, ensure that the final rideability is 128 inches per mile or less. All incentive and pay reductions will follow Subsection 5 of this specification for a pre-overlay rideability of 300 inches per mile, regardless of HMA thickness of the single lift.

7.3. If the reclamation is being overlaid with multiple uniform lifts of HMA, then ensure that the rideability meets the requirements for new construction as given in Subsection 4 of this specification except that the rideability requirements are as shown Table 2, instead of Table 1. All incentives and pay reductions will otherwise be assessed according to Subsection 4.

Table 3 – Rideability Requirements for Resurfacing

Initial Ride	105%	102%	100%	95%	Repair
>60	> 12	12 - 31	32 - 60	61 - 74	> 74
60	> 12	12 - 31	32 - 60	61 - 74	> 74
61	> 12	12 - 31	32 - 61	62 - 75	> 75
62	> 12	12 - 31	32 - 62	63 - 76	> 76
63	> 12	12 - 31	32 - 63	64 - 77	> 77
64	> 13	13 - 32	33 - 64	65 - 78	> 78
65	> 13	13 - 32	33 - 65	66 - 79	> 79
66	> 13	13 - 32	33 - 66	67 - 80	> 80
67	> 13	13 - 32	33 - 67	68 - 81	> 81
68	> 13	13 - 32	33 - 68	69 - 82	> 82
69	> 14	14 - 33	34 - 69	70 - 83	> 83
70	> 14	14 - 33	34 - 70	71 - 84	> 84
71	> 14	14 - 33	34 - 71	72 - 85	> 85
72	> 14	14 - 33	34 - 72	73 - 86	> 86
73	> 14	14 - 33	34 - 73	74 - 87	> 87
74	> 14	14 - 33	34 - 74	75 - 88	> 88
75	> 15	15 - 34	35 - 75	76 - 89	> 89
76	> 15	15 - 34	35 - 76	77 - 90	> 90
77	> 15	15 - 34	35 - 77	78 - 91	> 91
78	> 15	15 - 34	35 - 78	79 - 92	> 92
79	> 15	15 - 34	35 - 79	80 - 93	> 93
80	> 16	16 - 35	36 - 80	81 - 94	> 94
81	> 16	16 - 35	36 - 81	82 - 95	> 95
82	> 16	16 - 35	36 - 82	83 - 96	> 96
83	> 16	16 - 35	36 - 83	84 - 97	> 97
84	> 16	16 - 35	36 - 84	85 - 98	> 98
85	> 16	16 - 35	36 - 85	86 - 99	> 99
86	> 17	17 - 36	37 - 86	87 - 100	> 100
87	> 17	17 - 36	37 - 87	88 - 101	> 101
88	> 17	17 - 36	37 - 88	89 - 102	> 102
89	> 17	17 - 36	37 - 89	90 - 103	> 103
90	> 17	17 - 36	37 - 90	91 - 104	> 104
91	> 18	18 - 37	38 - 90	91 - 104	> 104
92	> 18	18 - 37	38 - 90	91 - 104	> 104
93	> 18	18 - 37	38 - 91	92 - 105	> 105
94	> 18	18 - 37	38 - 91	92 - 105	> 105
95	> 18	18 - 37	38 - 91	92 - 105	> 105
96	> 18	18 - 37	38 - 91	92 - 105	> 105
97	> 19	19 - 38	39 - 91	92 - 105	> 105
98	> 19	19 - 38	39 - 91	92 - 105	> 105
99	> 19	19 - 38	39 - 92	93 - 106	> 106
100	> 19	19 - 38	39 - 92	93 - 106	> 106
101	> 19	19 - 38	39 - 92	93 - 106	> 106
102	> 20	20 - 39	40 - 92	93 - 106	> 106
103	> 20	20 - 39	40 - 92	93 - 106	> 106
104	> 20	20 - 39	40 - 93	94 - 107	> 107
105	> 20	20 - 39	40 - 93	94 - 107	> 107
106	> 20	20 - 39	40 - 93	94 - 107	> 107
107	> 20	20 - 39	40 - 93	94 - 107	> 107

Table 3 – Rideability Requirements for Resurfacing

Initial Ride	105%	102%	100%	95%	Repair
108	> 21	21 - 40	41 - 93	94 - 107	> 107
109	> 21	21 - 40	41 - 93	94 - 107	> 107
110	> 21	21 - 40	41 - 94	95 - 108	> 108
111	> 21	21 - 40	41 - 94	95 - 108	> 108
112	> 21	21 - 40	41 - 94	95 - 108	> 108
113	> 22	22 - 41	42 - 94	95 - 108	> 108
114	> 22	22 - 41	42 - 94	95 - 108	> 108
115	> 22	22 - 41	42 - 95	96 - 109	> 109
116	> 22	22 - 41	42 - 95	96 - 109	> 109
117	> 22	22 - 41	42 - 95	96 - 109	> 109
118	> 22	22 - 41	42 - 95	96 - 109	> 109
119	> 23	23 - 42	43 - 95	96 - 109	> 109
120	> 23	23 - 42	43 - 95	96 - 109	> 109
121	> 23	23 - 42	43 - 96	97 - 110	> 110
122	> 23	23 - 42	43 - 96	97 - 110	> 110
123	> 23	23 - 42	43 - 96	97 - 110	> 110
124	> 24	24 - 43	44 - 96	97 - 110	> 110
125	> 24	24 - 43	44 - 96	97 - 110	> 110
126	> 24	24 - 43	44 - 97	98 - 111	> 111
127	> 24	24 - 43	44 - 97	98 - 111	> 111
128	> 24	24 - 43	44 - 97	98 - 111	> 111
129	> 24	24 - 43	44 - 97	98 - 111	> 111
130	> 25	25 - 44	45 - 97	98 - 111	> 111
131	> 25	25 - 44	45 - 97	98 - 111	> 111
132	> 25	25 - 44	45 - 98	99 - 112	> 112
133	> 25	25 - 44	45 - 98	99 - 112	> 112
134	> 25	25 - 44	45 - 98	99 - 112	> 112
135	> 26	26 - 45	46 - 98	99 - 112	> 112
136	> 26	26 - 45	46 - 98	99 - 112	> 112
137	> 26	26 - 45	46 - 99	100 - 113	> 113
138	> 26	26 - 45	46 - 99	100 - 113	> 113
139	> 26	26 - 45	46 - 99	100 - 113	> 113
140	> 26	26 - 45	46 - 99	100 - 113	> 113
141	> 27	27 - 46	47 - 99	100 - 113	> 113
142	> 27	27 - 46	47 - 99	100 - 113	> 113
143	> 27	27 - 46	47 - 100	101 - 114	> 114
144	> 27	27 - 46	47 - 100	101 - 114	> 114
145	> 27	27 - 46	47 - 100	101 - 114	> 114
146	> 28	28 - 47	48 - 100	101 - 114	> 114
147	> 28	28 - 47	48 - 100	101 - 114	> 114
148	> 28	28 - 47	48 - 101	102 - 115	> 115
149	> 28	28 - 47	48 - 101	102 - 115	> 115
150	> 28	28 - 47	48 - 101	102 - 115	> 115
151	> 28	28 - 47	48 - 101	102 - 115	> 115
152	> 29	29 - 48	49 - 101	102 - 115	> 115
153	> 29	29 - 48	49 - 101	102 - 115	> 115
154	> 29	29 - 48	49 - 102	103 - 116	> 116
155	> 29	29 - 48	49 - 102	103 - 116	> 116
156	> 29	29 - 48	49 - 102	103 - 116	> 116
157	> 30	30 - 49	50 - 102	103 - 116	> 116
158	> 30	30 - 49	50 - 102	103 - 116	> 116

Table 3 – Rideability Requirements for Resurfacing

Initial Ride	105%	102%	100%	95%	Repair
159	> 30	30 - 49	50 - 103	104 - 117	> 117
160	> 30	30 - 49	50 - 103	104 - 117	> 117
161	> 30	30 - 49	50 - 103	104 - 117	> 117
162	> 30	30 - 49	50 - 103	104 - 117	> 117
163	> 31	31 - 50	51 - 103	104 - 117	> 117
164	> 31	31 - 50	51 - 103	104 - 117	> 117
165	> 31	31 - 50	51 - 104	105 - 118	> 118
166	> 31	31 - 50	51 - 104	105 - 118	> 118
167	> 31	31 - 50	51 - 104	105 - 118	> 118
168	> 32	32 - 51	52 - 104	105 - 118	> 118
169	> 32	32 - 51	52 - 104	105 - 118	> 118
170	> 32	32 - 51	52 - 105	106 - 119	> 119
171	> 32	32 - 51	52 - 105	106 - 119	> 119
172	> 32	32 - 51	52 - 105	106 - 119	> 119
173	> 32	32 - 51	52 - 105	106 - 119	> 119
174	> 33	33 - 52	53 - 105	106 - 119	> 119
175	> 33	33 - 52	53 - 105	106 - 119	> 119
176	> 33	33 - 52	53 - 106	107 - 120	> 120
177	> 33	33 - 52	53 - 106	107 - 120	> 120
178	> 33	33 - 52	53 - 106	107 - 120	> 120
179	> 34	34 - 53	54 - 106	107 - 120	> 120
180	> 34	34 - 53	54 - 106	107 - 120	> 120
181	> 34	34 - 53	54 - 107	108 - 121	> 121
182	> 34	34 - 53	54 - 107	108 - 121	> 121
183	> 34	34 - 53	54 - 107	108 - 121	> 121
184	> 34	34 - 53	54 - 107	108 - 121	> 121
185	> 35	35 - 54	55 - 107	108 - 121	> 121
186	> 35	35 - 54	55 - 107	108 - 121	> 121
187	> 35	35 - 54	55 - 108	109 - 122	> 122
188	> 35	35 - 54	55 - 108	109 - 122	> 122
189	> 35	35 - 54	55 - 108	109 - 122	> 122
190	> 36	36 - 55	56 - 108	109 - 122	> 122
191	> 36	36 - 55	56 - 108	109 - 122	> 122
192	> 36	36 - 55	56 - 109	110 - 123	> 123
193	> 36	36 - 55	56 - 109	110 - 123	> 123
194	> 36	36 - 55	56 - 109	110 - 123	> 123
195	> 36	36 - 55	56 - 109	110 - 123	> 123
196	> 37	37 - 56	57 - 109	110 - 123	> 123
197	> 37	37 - 56	57 - 109	110 - 123	> 123
198	> 37	37 - 56	57 - 110	111 - 124	> 124
199	> 37	37 - 56	57 - 110	111 - 124	> 124
200	> 37	37 - 56	57 - 110	111 - 124	> 124
201	> 38	38 - 57	58 - 110	111 - 124	> 124
202	> 38	38 - 57	58 - 110	111 - 124	> 124
203	> 38	38 - 57	58 - 111	112 - 125	> 125
204	> 38	38 - 57	58 - 111	112 - 125	> 125
205	> 38	38 - 57	58 - 111	112 - 125	> 125
206	> 38	38 - 57	58 - 111	112 - 125	> 125
207	> 39	39 - 58	59 - 111	112 - 125	> 125
208	> 39	39 - 58	59 - 111	112 - 125	> 125
209	> 39	39 - 58	59 - 112	113 - 126	> 126

Table 3 – Rideability Requirements for Resurfacing

Initial Ride	105%	102%	100%	95%	Repair
210	> 39	39 - 58	59 - 112	113 - 126	> 126
211	> 39	39 - 58	59 - 112	113 - 126	> 126
212	> 40	40 - 59	60 - 112	113 - 126	> 126
213	> 40	40 - 59	60 - 112	113 - 126	> 126
214	> 40	40 - 59	60 - 113	114 - 127	> 127
215	> 40	40 - 59	60 - 113	114 - 127	> 127
216	> 40	40 - 59	60 - 113	114 - 127	> 127
217	> 40	40 - 59	60 - 113	114 - 127	> 127
218	> 41	41 - 60	61 - 113	114 - 127	> 127
219	> 41	41 - 60	61 - 113	114 - 127	> 127
220	> 41	41 - 60	61 - 114	115 - 128	> 128
221	> 41	41 - 60	61 - 114	115 - 128	> 128
222	> 41	41 - 60	61 - 114	115 - 128	> 128
223	> 42	42 - 61	62 - 114	115 - 128	> 128
224	> 42	42 - 61	62 - 114	115 - 128	> 128
225	> 42	42 - 61	62 - 115	116 - 129	> 129
226	> 42	42 - 61	62 - 115	116 - 129	> 129
227	> 42	42 - 61	62 - 115	116 - 129	> 129
228	> 42	42 - 61	62 - 115	116 - 129	> 129
229	> 43	43 - 62	63 - 115	116 - 129	> 129
230	> 43	43 - 62	63 - 115	116 - 129	> 129
231	> 43	43 - 62	63 - 116	117 - 130	> 130
232	> 43	43 - 62	63 - 116	117 - 130	> 130
233	> 43	43 - 62	63 - 116	117 - 130	> 130
234	> 44	44 - 63	64 - 116	117 - 130	> 130
235	> 44	44 - 63	64 - 116	117 - 130	> 130
236	> 44	44 - 63	64 - 117	118 - 131	> 131
237	> 44	44 - 63	64 - 117	118 - 131	> 131
238	> 44	44 - 63	64 - 117	118 - 131	> 131
239	> 44	44 - 63	64 - 117	118 - 131	> 131
240	> 45	45 - 64	65 - 117	118 - 131	> 131
241	> 45	45 - 64	65 - 117	118 - 131	> 131
242	> 45	45 - 64	65 - 118	119 - 132	> 132
243	> 45	45 - 64	65 - 118	119 - 132	> 132
244	> 45	45 - 64	65 - 118	119 - 132	> 132
245	> 46	46 - 65	66 - 118	119 - 132	> 132
246	> 46	46 - 65	66 - 118	119 - 132	> 132
247	> 46	46 - 65	66 - 119	120 - 133	> 133
248	> 46	46 - 65	66 - 119	120 - 133	> 133
249	> 46	46 - 65	66 - 119	120 - 133	> 133
250	> 47	47 - 66	67 - 119	120 - 133	> 133
251	> 47	47 - 66	67 - 119	120 - 133	> 133
252	> 47	47 - 66	67 - 119	120 - 133	> 133
253	> 47	47 - 66	67 - 120	121 - 134	> 134
254	> 47	47 - 66	67 - 120	121 - 134	> 134
255	> 47	47 - 66	67 - 120	121 - 134	> 134
256	> 48	48 - 67	68 - 120	121 - 134	> 134
257	> 48	48 - 67	68 - 120	121 - 134	> 134
258	> 48	48 - 67	68 - 121	122 - 135	> 135
259	> 48	48 - 67	68 - 121	122 - 135	> 135
260	> 48	48 - 67	68 - 121	122 - 135	> 135

Table 3 – Rideability Requirements for Resurfacing

Initial Ride	105%	102%	100%	95%	Repair
261	> 49	49 - 68	69 - 121	122 - 135	> 135
262	> 49	49 - 68	69 - 121	122 - 135	> 135
263	> 49	49 - 68	69 - 121	122 - 135	> 135
264	> 49	49 - 68	69 - 122	123 - 136	> 136
265	> 49	49 - 68	69 - 122	123 - 136	> 136
266	> 49	49 - 68	69 - 122	123 - 136	> 136
267	> 50	50 - 69	70 - 122	123 - 136	> 136
268	> 50	50 - 69	70 - 122	123 - 136	> 136
269	> 50	50 - 69	70 - 123	124 - 137	> 137
270	> 50	50 - 69	70 - 123	124 - 137	> 137
271	> 50	50 - 69	70 - 123	124 - 137	> 137
272	> 51	51 - 70	71 - 123	124 - 137	> 137
273	> 51	51 - 70	71 - 123	124 - 137	> 137
274	> 51	51 - 70	71 - 123	124 - 137	> 137
275	> 51	51 - 70	71 - 124	125 - 138	> 138
276	> 51	51 - 70	71 - 124	125 - 138	> 138
277	> 51	51 - 70	71 - 124	125 - 138	> 138
278	> 52	52 - 71	72 - 124	125 - 138	> 138
279	> 52	52 - 71	72 - 124	125 - 138	> 138
280	> 52	52 - 71	72 - 125	126 - 139	> 139
281	> 52	52 - 71	72 - 125	126 - 139	> 139
282	> 52	52 - 71	72 - 125	126 - 139	> 139
283	> 53	53 - 72	73 - 125	126 - 139	> 139
284	> 53	53 - 72	73 - 125	126 - 139	> 139
285	> 53	53 - 72	73 - 125	126 - 139	> 139
286	> 53	53 - 72	73 - 126	127 - 140	> 140
287	> 53	53 - 72	73 - 126	127 - 140	> 140
288	> 53	53 - 72	73 - 126	127 - 140	> 140
289	> 54	54 - 73	74 - 126	127 - 140	> 140
290	> 54	54 - 73	74 - 126	127 - 140	> 140
291	> 54	54 - 73	74 - 127	128 - 141	> 141
292	> 54	54 - 73	74 - 127	128 - 141	> 141
293	> 54	54 - 73	74 - 127	128 - 141	> 141
294	> 55	55 - 74	75 - 127	128 - 141	> 141
295	> 55	55 - 74	75 - 127	128 - 141	> 141
296	> 55	55 - 74	75 - 127	128 - 141	> 141
297	> 55	55 - 74	75 - 128	129 - 142	> 142
298	> 55	55 - 74	75 - 128	129 - 142	> 142
299	> 55	55 - 74	75 - 128	129 - 142	> 142
300	> 56	56 - 75	76 - 128	129 - 142	> 142
301	> 56	56 - 75	76 - 128	129 - 142	> 142
302	> 56	56 - 75	76 - 129	130 - 143	> 143
303	> 56	56 - 75	76 - 129	130 - 143	> 143
304	> 56	56 - 75	76 - 129	130 - 143	> 143
305	> 57	57 - 76	77 - 129	130 - 143	> 143
306	> 57	57 - 76	77 - 129	130 - 143	> 143
307	> 57	57 - 76	77 - 129	130 - 143	> 143
308	> 57	57 - 76	77 - 130	131 - 144	> 144
309	> 57	57 - 76	77 - 130	131 - 144	> 144
310	> 57	57 - 76	77 - 130	131 - 144	> 144
311	> 58	58 - 77	78 - 130	131 - 144	> 144

Table 3 – Rideability Requirements for Resurfacing

Initial Ride	105%	102%	100%	95%	Repair
312	> 58	58 - 77	78 - 130	131 - 144	> 144
313	> 58	58 - 77	78 - 131	132 - 145	> 145
314	> 58	58 - 77	78 - 131	132 - 145	> 145
315	> 58	58 - 77	78 - 131	132 - 145	> 145
316	> 59	59 - 78	79 - 131	132 - 145	> 145
317	> 59	59 - 78	79 - 131	132 - 145	> 145
318	> 59	59 - 78	79 - 131	132 - 145	> 145
319	> 59	59 - 78	79 - 132	133 - 146	> 146
320	> 59	59 - 78	79 - 132	133 - 146	> 146
321	> 59	59 - 78	79 - 132	133 - 146	> 146
322	> 60	60 - 79	80 - 132	133 - 146	> 146
323	> 60	60 - 79	80 - 132	133 - 146	> 146
324	> 60	60 - 79	80 - 133	134 - 147	> 147
325	> 60	60 - 79	80 - 133	134 - 147	> 147
326	> 60	60 - 79	80 - 133	134 - 147	> 147
327	> 61	61 - 80	81 - 133	134 - 147	> 147
328	> 61	61 - 80	81 - 133	134 - 147	> 147
329	> 61	61 - 80	81 - 133	134 - 147	> 147
330	> 61	61 - 80	81 - 134	135 - 148	> 148
331	> 61	61 - 80	81 - 134	135 - 148	> 148
332	> 61	61 - 80	81 - 134	135 - 148	> 148
333	> 62	62 - 81	82 - 134	135 - 148	> 148
334	> 62	62 - 81	82 - 134	135 - 148	> 148
335	> 62	62 - 81	82 - 135	136 - 149	> 149
336	> 62	62 - 81	82 - 135	136 - 149	> 149
337	> 62	62 - 81	82 - 135	136 - 149	> 149
338	> 63	63 - 82	83 - 135	136 - 149	> 149
339	> 63	63 - 82	83 - 135	136 - 149	> 149
340	> 63	63 - 82	83 - 136	137 - 150	> 150
341	> 63	63 - 82	83 - 136	137 - 150	> 150
342	> 63	63 - 82	83 - 136	137 - 150	> 150
343	> 63	63 - 82	83 - 136	137 - 150	> 150
344	> 64	64 - 83	84 - 136	137 - 150	> 150
345	> 64	64 - 83	84 - 136	137 - 150	> 150
346	> 64	64 - 83	84 - 137	138 - 151	> 151
347	> 64	64 - 83	84 - 137	138 - 151	> 151
348	> 64	64 - 83	84 - 137	138 - 151	> 151
349	> 65	65 - 84	85 - 137	138 - 151	> 151
350	> 65	65 - 84	85 - 137	138 - 151	> 151
351	> 65	65 - 84	85 - 138	139 - 152	> 152
352	> 65	65 - 84	85 - 138	139 - 152	> 152
353	> 65	65 - 84	85 - 138	139 - 152	> 152
354	> 65	65 - 84	85 - 138	139 - 152	> 152
355	> 66	66 - 85	86 - 138	139 - 152	> 152
356	> 66	66 - 85	86 - 138	139 - 152	> 152
357	> 66	66 - 85	86 - 139	140 - 153	> 153
358	> 66	66 - 85	86 - 139	140 - 153	> 153
359	> 66	66 - 85	86 - 139	140 - 153	> 153
360	> 67	67 - 86	87 - 139	140 - 153	> 153
361	> 67	67 - 86	87 - 139	140 - 153	> 153
362	> 67	67 - 86	87 - 140	141 - 154	> 154

Table 3 – Rideability Requirements for Resurfacing

Initial Ride	105%	102%	100%	95%	Repair
363	> 67	67 - 86	87 - 140	141 - 154	> 154
364	> 67	67 - 86	87 - 140	141 - 154	> 154
365	> 67	67 - 86	87 - 140	141 - 154	> 154
366	> 68	68 - 87	88 - 140	141 - 154	> 154
367	> 68	68 - 87	88 - 140	141 - 154	> 154
368	> 68	68 - 87	88 - 141	142 - 155	> 155
369	> 68	68 - 87	88 - 141	142 - 155	> 155
370	> 68	68 - 87	88 - 141	142 - 155	> 155
371	> 69	69 - 88	89 - 141	142 - 155	> 155
372	> 69	69 - 88	89 - 141	142 - 155	> 155
373	> 69	69 - 88	89 - 142	143 - 156	> 156
374	> 69	69 - 88	89 - 142	143 - 156	> 156
375	> 69	69 - 88	89 - 142	143 - 156	> 156
376	> 69	69 - 88	89 - 142	143 - 156	> 156
377	> 70	70 - 89	90 - 142	143 - 156	> 156
378	> 70	70 - 89	90 - 142	143 - 156	> 156
379	> 70	70 - 89	90 - 143	144 - 157	> 157
380	> 70	70 - 89	90 - 143	144 - 157	> 157
381	> 70	70 - 89	90 - 143	144 - 157	> 157
382	> 71	71 - 90	91 - 143	144 - 157	> 157
383	> 71	71 - 90	91 - 143	144 - 157	> 157
384	> 71	71 - 90	91 - 144	145 - 158	> 158
385	> 71	71 - 90	91 - 144	145 - 158	> 158
386	> 71	71 - 90	91 - 144	145 - 158	> 158
387	> 71	71 - 90	91 - 144	145 - 158	> 158
388	> 72	72 - 91	92 - 144	145 - 158	> 158
389	> 72	72 - 91	92 - 144	145 - 158	> 158
390	> 72	72 - 91	92 - 145	146 - 159	> 159
391	> 72	72 - 91	92 - 145	146 - 159	> 159
392	> 72	72 - 91	92 - 145	146 - 159	> 159
393	> 73	73 - 92	93 - 145	146 - 159	> 159
394	> 73	73 - 92	93 - 145	146 - 159	> 159
395	> 73	73 - 92	93 - 146	147 - 160	> 160
396	> 73	73 - 92	93 - 146	147 - 160	> 160
397	> 73	73 - 92	93 - 146	147 - 160	> 160
398	> 73	73 - 92	93 - 146	147 - 160	> 160
399	> 74	74 - 93	94 - 146	147 - 160	> 160
400	> 74	74 - 93	94 - 146	147 - 160	> 160
401	> 74	74 - 93	94 - 147	148 - 161	> 161
402	> 74	74 - 93	94 - 147	148 - 161	> 161
403	> 74	74 - 93	94 - 147	148 - 161	> 161
404	> 75	75 - 94	95 - 147	148 - 161	> 161
405	> 75	75 - 94	95 - 147	148 - 161	> 161
406	> 75	75 - 94	95 - 148	149 - 162	> 162
407	> 75	75 - 94	95 - 148	149 - 162	> 162
408	> 75	75 - 94	95 - 148	149 - 162	> 162
409	> 75	75 - 94	95 - 148	149 - 162	> 162
410	> 76	76 - 95	96 - 148	149 - 162	> 162
411	> 76	76 - 95	96 - 148	149 - 162	> 162
412	> 76	76 - 95	96 - 149	150 - 163	> 163
413	> 76	76 - 95	96 - 149	150 - 163	> 163

Table 3 – Rideability Requirements for Resurfacing

Initial Ride	105%	102%	100%	95%	Repair
414	> 76	76 - 95	96 - 149	150 - 163	> 163
415	> 77	77 - 96	97 - 149	150 - 163	> 163
416	> 77	77 - 96	97 - 149	150 - 163	> 163
417	> 77	77 - 96	97 - 150	151 - 164	> 164
418	> 77	77 - 96	97 - 150	151 - 164	> 164
419	> 77	77 - 96	97 - 150	151 - 164	> 164
420	> 77	77 - 96	97 - 150	151 - 164	> 164
421	> 78	78 - 97	98 - 150	151 - 164	> 164
422	> 78	78 - 97	98 - 150	151 - 164	> 164
423	> 78	78 - 97	98 - 151	152 - 165	> 165
424	> 78	78 - 97	98 - 151	152 - 165	> 165
425	> 78	78 - 97	98 - 151	152 - 165	> 165
426	> 79	79 - 98	99 - 151	152 - 165	> 165
427	> 79	79 - 98	99 - 151	152 - 165	> 165
428	> 79	79 - 98	99 - 152	153 - 166	> 166
429	> 79	79 - 98	99 - 152	153 - 166	> 166
430	> 79	79 - 98	99 - 152	153 - 166	> 166
431	> 79	79 - 98	99 - 152	153 - 166	> 166
432	> 80	80 - 99	100 - 152	153 - 166	> 166
433	> 80	80 - 99	100 - 152	153 - 166	> 166
434	> 80	80 - 99	100 - 153	154 - 167	> 167
435	> 80	80 - 99	100 - 153	154 - 167	> 167
436	> 80	80 - 99	100 - 153	154 - 167	> 167
437	> 81	81 - 100	101 - 153	154 - 167	> 167
438	> 81	81 - 100	101 - 153	154 - 167	> 167
439	> 81	81 - 100	101 - 154	155 - 168	> 168
440	> 81	81 - 100	101 - 154	155 - 168	> 168
441	> 81	81 - 100	101 - 154	155 - 168	> 168
442	> 81	81 - 100	101 - 154	155 - 168	> 168
443	> 82	82 - 101	102 - 154	155 - 168	> 168
444	> 82	82 - 101	102 - 154	155 - 168	> 168
445	> 82	82 - 101	102 - 155	156 - 169	> 169
446	> 82	82 - 101	102 - 155	156 - 169	> 169
447	> 82	82 - 101	102 - 155	156 - 169	> 169
448	> 83	83 - 102	103 - 155	156 - 169	> 169
449	> 83	83 - 102	103 - 155	156 - 169	> 169
450	> 83	83 - 102	103 - 156	157 - 170	> 170
451	> 83	83 - 102	103 - 156	157 - 170	> 170
452	> 83	83 - 102	103 - 156	157 - 170	> 170
453	> 83	83 - 102	103 - 156	157 - 170	> 170
454	> 84	84 - 103	104 - 156	157 - 170	> 170
455	> 84	84 - 103	104 - 156	157 - 170	> 170
456	> 84	84 - 103	104 - 157	158 - 170	> 170
457	> 84	84 - 103	104 - 157	158 - 170	> 170
458	> 84	84 - 103	104 - 157	158 - 170	> 170
459	> 85	85 - 104	105 - 157	158 - 170	> 170
460	> 85	85 - 104	105 - 157	158 - 170	> 170
461	> 85	85 - 104	105 - 157	158 - 170	> 170
462	> 85	85 - 104	105 - 157	158 - 170	> 170
463	> 85	85 - 104	105 - 157	158 - 170	> 170
464	> 85	85 - 104	105 - 157	158 - 170	> 170

Table 3 – Rideability Requirements for Resurfacing

Initial Ride	105%	102%	100%	95%	Repair
465	> 86	86 - 105	106 - 157	158 - 170	> 170
466	> 86	86 - 105	106 - 157	158 - 170	> 170
467	> 86	86 - 105	106 - 157	158 - 170	> 170
468	> 86	86 - 105	106 - 157	158 - 170	> 170
469	> 86	86 - 105	106 - 157	158 - 170	> 170
470	> 87	87 - 106	107 - 157	158 - 170	> 170
471	> 87	87 - 106	107 - 157	158 - 170	> 170
472	> 87	87 - 106	107 - 157	158 - 170	> 170
473	> 87	87 - 106	107 - 157	158 - 170	> 170
474	> 87	87 - 106	107 - 157	158 - 170	> 170
475	> 87	87 - 106	107 - 157	158 - 170	> 170
476	> 88	88 - 107	108 - 157	158 - 170	> 170
477	> 88	88 - 107	108 - 157	158 - 170	> 170
478	> 88	88 - 107	108 - 157	158 - 170	> 170
479	> 88	88 - 107	108 - 157	158 - 170	> 170
480	> 88	88 - 107	108 - 157	158 - 170	> 170
481	> 89	89 - 108	109 - 157	158 - 170	> 170
482	> 89	89 - 108	109 - 157	158 - 170	> 170
483	> 89	89 - 108	109 - 157	158 - 170	> 170
484	> 89	89 - 108	109 - 157	158 - 170	> 170
485	> 89	89 - 108	109 - 157	158 - 170	> 170
486	> 89	89 - 108	109 - 157	158 - 170	> 170
487	> 90	90 - 109	110 - 157	158 - 170	> 170
488	> 90	90 - 109	110 - 157	158 - 170	> 170
489	> 90	90 - 109	110 - 157	158 - 170	> 170
490	> 90	90 - 109	110 - 157	158 - 170	> 170
491	> 90	90 - 109	110 - 157	158 - 170	> 170
492	> 91	91 - 110	111 - 157	158 - 170	> 170
493	> 91	91 - 110	111 - 157	158 - 170	> 170
494	> 91	91 - 110	111 - 157	158 - 170	> 170
495	> 91	91 - 110	111 - 157	158 - 170	> 170
496	> 91	91 - 110	111 - 157	158 - 170	> 170
497	> 91	91 - 110	111 - 157	158 - 170	> 170
>497	> 92	92 - 111	112 - 157	158 - 170	> 170