

1 **Amend Section 702 – BITUMINOUS MATERIALS to read as follows:**

2
3 **SECTION 702 – BITUMINOUS MATERIALS**

4
5 **“702.01 Asphalt Cement.**

6
7 **702.01A PG 64-16** Performance-graded asphalt binder shall conform to
8 AASHTO M 320.

9
10 **702.01B PG 64E-22** Performance Graded (PG) Binder. Performance graded
11 binder shall conform to Performance Graded Asphalt Binder Specifications,
12 AASHTO M 332 and meet the following additional requirement:

13
14 AASHTO T 315 Determining the Rheological Properties of Asphalt Binder Using a
15 Dynamic Shear Rheometer (DSR). Phase angle on original binder shall be less
16 than 77 degrees.

17
18 **702.01C Submittals.** Submit, before usage, a Certificate of Compliance,
19 accompanied by substantiating test data, showing conformance with Performance
20 Graded Asphalt Binder Specification. The Engineer will not accept the PG binder
21 without adequate documentation.

22
23 **702.02 (Unassigned)**

24
25 **702.03 Liquid Asphalt.** Liquid asphalt shall conform to AASHTO M 82 for
26 medium curing type.

27
28 **702.04 Emulsified Asphalt.** Anionic emulsified asphalt shall conform to
29 AASHTO M 140, except penetration on residue for Type SS-1 and Type RS-1 shall
30 be 50-120.

31
32 Cationic emulsified asphalt shall conform to AASHTO M 208, except penetration
33 on residue for Type CSS-1 and Type CRS-1 shall be 50-150.

34
35 **702.05 Application Temperatures.** Bituminous materials shall be applied
36 in accordance with Table 702.05-1 - Application Temperatures.

37

TABLE 702.05-1 – APPLICATION TEMPERATURES		
Bituminous Material	Spraying Temperatures (degrees F)	Mixing Temperatures (degrees F)
Liquid Asphalt (MC)		
Grade 30	50 – 120	--
Grade 70	100 – 170	--
Grade 250	140 – 220	135 – 175
Grade 800	175 – 250	170 – 200
Grade 3000	215 – 280	200 – 240
Emulsified Asphalt	75 – 130	75 – 130

Asphalt Cement	350 Maximum	By Temperature / Viscosity Graph
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702.06 Warm Mix Asphalt Additive. The Contractor may use WMA processes in the production of HMA. Submit to the Engineer for acceptance, the proposed process and how it will be used in the manufacture of HMA. The process submittal shall include the temperature range of the WMA.

702.07 Asphalt Filler. Asphalt for use as filler between pipes and manhole walls shall conform to ASTM D 449, Type III.”

END OF SECTION 702