

ASPHALT PAVEMENTS - HOT IN-PLACE RECYCLING:

3-20-07

SPI

Revise the 2006 Standard Specifications as follows:

Page 6-84, Article 663-1 Description

Third paragraph, last sentence, delete the word *herein* and substitute the words *elsewhere in the contract*.

Page 6-84, Article 663-2(A) Hot Mix Asphalt Admixture

First paragraph, add the following two sentences after the third sentence in this paragraph:

Unless otherwise approved, the asphalt binder PG Grade in the admixture shall be PG 64-22, regardless of the grade required for the HIR Mix Type by Table 663-2. In addition, use at least 0.25% anti-strip additive in asphalt binder used in admixtures.

Page 6-88, Article 663-3

Delete Table 663-2 and substitute the following Table 663-2:

TABLE 663-2 HIR MIX DESIGN CRITERIA

	Design	Binder	Compaction Levels		Volumetric Properties (b)			
Mix	ESALs	PG			AASHTO R 35 Modified			
Type	millions	Target Grade	No. Gyration @		VMA	VTM	VFA	%G _{mm}
	(a)	(c)	N _{ini}	N _{des}	% Min.	%	Min. - Max.	@ N _{ini}
SF-9.5A	<0.3	64 -22	6	50	16.0	3.0 - 5.0	70 - 80	≤ 91.5
S-9.5A	<0.3	64 -22	6	50	16.0	3.0 - 5.0	70 - 80	≤ 91.5
S-9.5B	0.3 - 3	64 -22	7	75	15.0	3.0 - 5.0	65 - 80	≤ 90.5
S-9.5C	3 - 30	70 -22	8	100	15.0	3.0 - 5.0	65 - 76	≤ 90.0
S-12.5B	3 - 30	70 -22	7	75	14.0	3.0 - 5.0	65 - 78	≤ 90.0
S-12.5C	3 - 30	70 -22	8	100	14.0	3.0 - 5.0	65 - 75	≤ 90.0
I-19.0B	< 3	64 -22	7	75	13.0	3.0 - 5.0	65 - 78	≤90.5
I-19.0C	3 - 30	64 -22	8	100	13.0	3.0 - 5.0	65 - 75	≤ 90.0
	Design Parameter				Design Criteria			
All Mix Types	Penetration(AASHTO T 49) from Absom Recovery(AASHTO T 170)				40 -80			

- Notes:**
- (a) Based on 20 year design traffic.
 - (b) Volumetric Properties based on specimens compacted to N_{des} as modified by the Department. Mix Design Criteria may be modified subject to the approval of the Engineer.
 - (c) This is the binder grade target of the combined asphalt binder to be incorporated into the HIR mix, including asphalt binder in the existing pavement, binder in

admixture, if required, and rejuvenating agent, if required. All admixtures will be produced using PG 64-22 unless otherwise approved.

Page 6-88, Article 663-3(C) Job Mix Formula

Second Paragraph, second sentence, delete the words *Superpave Version*.

Page 6-91, Article 663-5 Construction Requirements

Delete the first paragraph on this page and substitute the following:

The HIR layer thickness specified in the plans or contract shall be the compacted in-place thickness of the rejuvenated mixture layer, including any admixture, if required. The average thickness of the compacted HIR layer shall be within +/- ¼ inch of the thickness shown on the typical section. The average thickness shall be determined in accordance with the provision Quality Management System for Asphalt Pavements (Hot In-Place Recycled Asphalt Concrete) included herein.

Page 6-91, Article 663-6 Measurement and Payment

Second paragraph, delete the word *Emulsified*.

Delete the fourth paragraph and substitute the following:

Asphalt Binder for Admixture, Grade PG 64-22 will be paid for as the theoretical number of tons of asphalt binder required by the applicable job mix formula based on the actual number of tons of admixture used and accepted on the job.

Page 6-92, Article 663-6 Measurement and Payment

Add the following Pay Item and Pay Unit.

Pay Item

Asphalt Binder for Plant Mix, Grade PG 64-22

Pay Unit

Ton