Replace AASHTO T 308 at each occurrence in Section 39-2 with:

AASHTO T 308 (Modified)

Add to the table in the 5th paragraph of section 39-2.01A(1):

| AASHTO T 30 | 2019 |
|-------------|------|

Add after the 2nd paragraph of section 39-2.01A(4)(a):

AASHTOT 308 (Modified) is AASHTO T 308 with the following parameters:

- 1. Batch samples down to No.8 sieve.
- 2. Replace No. 40 sieve with No.100 sieve.
- 3. Replace Section A2.9.2 with: Determine the average difference for the two values. The aggregate correction factors (equal to the resultant average differences) for all sieves must be applied to all acceptance gradation test results determined by T 30, prior to final rounding and reporting.

Replace AASHTO T 27 in the 5th paragraph of section 39-2.01A(4)(h)(i) with:

AASHTO T 30.

Replace AASHTO T 27 in the 9th paragraph of section 39-2.01A(4)(i)(i) with:

AASHTO T 30

Replace the 1st paragraph of section 39-2.01B(4)(b) with:

Test for aggregate gradation under AASHTO T 30.

Replace the table in the 1st paragraph of section 39-2.02A(4)(b)(ii) with:

Aggregate Testing Frequencies

| 9994 | | | | |
|--------------------------------|--------------|--|--|--|
| Quality characteristic | Test method | Minimum testing frequency | | |
| Gradation | AASHTO T 30 | | | |
| Sand equivalent ^{a,b} | AASHTO T 176 | 1 per 750 tons and any remaining part | | |
| Moisture content ^c | AASHTO T 255 | | | |
| Crushed particles | AASHTO T 335 | 1 per 10,000 tons or 2 per project whichever is greater | | |
| Los Angeles Rattler | AASHTO T 96 | | | |
| Flat and elongated particles | ASTM D4791 | | | |
| Fine aggregate angularity | AASHTO T 304 | | | |
| | Method A | | | |

^aReported value must be the average of 3 tests from a single sample.

^bUse of a sand reading indicator is required as shown in AASHTO T 176, Figure 1. Sections 4.7,

[&]quot;Manual Shaker," 7.1.2, "Alternate Method No. 2," and 8.4.3, "Hand Method," do not apply. Prepare the stock solution as specified in section 4.8.1, "Stock solution with formaldehyde," except omit the addition of formaldehyde.

^cTest at continuous mixing plants only. If RAP is used, test the RAP moisture content at continuous mixing plant and batch mixing plant.

Replace the 3rd paragraph of section 39-2.02A(4)(b)(iii) with:

During Type A HMA production, sample RAP twice daily and perform QC testing for moisture content at least once a day.

Replace the table in item 1 in the list in the paragraph of section 39-2.02A(4)(e) with:

Aggregate Quality

| Quality characteristic | Test method | Requirement |
|---|------------------------|-----------------|
| Aggregate gradation | AASHTO T 30 | JMF ± Tolerance |
| Percent of crushed particles Coarse aggregate (min, %) One-fractured face Two-fractured faces Fine aggregate (min, %) (Passing no. 4 sieve and retained on no. 8 sieve) | AASHTO T 335 | 95 90 |
| One-fractured face | | 70 |
| Los Angeles Rattler (max, %) Loss at 100 rev Loss at 500 rev | AASHTO T 96 | 12 40 |
| Sand equivalent (min) ^{a,b} | AASHTO T 176 | 47 |
| Flat and elongated particles (max, % by weight at 5:1) | ASTM D4791 | 10 |
| Fine aggregate angularity (min, %)° | AASHTO T 304, Method A | 45 |

^aReported value must be the average of 3 tests from a single sample.

Replace AASHTO T 27 in the row for Aggregate gradation in the table in the 1st paragraph of section 39-2.03A(4)(c)(iii) with:

AASHTO T 30

Replace AASHTO T 27 in the row for Aggregate gradation in the table in item 1 in the list in the paragraph of section 39-2.03A(4)(e)(i) with:

AASHTO T 30

Replace AASHTO T 27 in the row for Gradation in the table in the 1st paragraph of section 39-2.04A(4)(b)(iii) with:

AASHTO T 30

Replace AASHTO T 27 in the row for Aggregate gradation in the table in item 1 in the list in the paragraph of section 39-2.04A(4)(c)(i) with:

AASHTO T 30

^bUse of a sand reading indicator is required as shown in AASHTO T 176, Figure 1. Sections 4.7, "Manual Shaker," 7.1.2, "Alternate Method No. 2," and 8.4.3, "Hand Method," do not apply. Prepare the stock solution as specified in section 4.8.1, "Stock solution with formaldehyde," except omit the addition of formaldehyde.

^cThe Engineer waives this specification if HMA contains 10 percent or less of nonmanufactured sand by weight of total aggregate. Manufactured sand is fine aggregate produced by crushing rock or gravel.