Regional Engineers

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Special Provision for Coarse Aggregate Quality for Micro-Surfacing and Cape Seals

September 28, 2018

This special provision was developed to clarify the quality standards for the coarse aggregates used in micro-surfacing. The gradations do not currently support the Los Angeles Abrasion, ITP 96 or the count of soft and unsound fragments in the deleterious materials count.

This special provision should be included in all projects involving the application of micro-surfacing and cape seals (which include micro-surfacing as part of the treatment).

The districts should include the BDE Check Sheet marked with the applicable special provisions for the January 18, 2019 and subsequent lettings. The Project Development and Implementation Section will include a copy in the contract.

This special provision will be available on the transfer directory   
September 28, 2018.

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# Coarse aggregate Quality FOR MICRO-SURFACING AND CAPE SEALS (bde)

Effective: January 1, 2019

Revise the Class B quality standards in the coarse aggregate quality table and its associated footnotes of Article 1004.01(b) of the Supplemental Specifications to read:

|  |  |
| --- | --- |
| “COARSE AGGREGATE QUALITY | |
| QUALITY TEST | CLASS |
| B |
| Na2SO4 Soundness 5 Cycle,  ITP 104 1/, % Loss max. | 15 |
| Los Angeles Abrasion,  ITP 96 11/,% Loss max. | 40 4/ |
| Minus No. 200 (75 µm) Sieve Material,  ITP 11 | --- |
| Deleterious Materials 10/ |  |
| Shale, % max. | 2.0 |
| Clay Lumps, % max. | 0.5 |
| Coal & Lignite, % max. | --- |
| Soft & Unsound Fragments, % max. | 6.012/ |
| Other Deleterious, % max. | 2.0 |
| Total Deleterious, % max. | 6.0 |
| Oil-Stained Aggregate 10/, % max | --- |

1/ Does not apply to crushed concrete.

2/ For aggregate surface course and aggregate shoulders, the maximum percent loss shall be 30.

3/ For portland cement concrete, the maximum percent loss shall be 45.

4/ Does not apply to crushed slag or crushed steel slag. This is waived for material used in micro-surfacing mixtures.

5/ For hot-mix asphalt (HMA) binder mixtures, except when used as surface course, the maximum percent loss shall be 45.

6/ For crushed aggregate, if the material finer than the No. 200 (75 µm) sieve consists of the dust from fracture, essentially free from clay or silt, this percentage may be increased to 2.5.

7/ Does not apply to aggregates for HMA binder mixtures.

8/ Does not apply to Class A seal and cover coats.

9/ Includes deleterious chert. In gravel and crushed gravel aggregate, deleterious chert shall be the lightweight fraction separated in a 2.35 heavy media separation. In crushed stone aggregate, deleterious chert shall be the lightweight fraction separated in a 2.55 heavy media separation. Tests shall be run according to ITP 113.

10/ Test shall be run according to ITP 203.

11/ Does not apply to crushed slag.

12/ This is waived for material used in micro-surfacing mixtures.”

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