# Special Provision to Item 302 Aggregates for Surface Treatments



Item 302, "Aggregates for Surface Treatments" of the Standard Specifications is amended with respect to the clauses cited below. No other clauses or requirements of this Item are waived or changed.

Section 2.1., "Aggregate." Tables 2 and 3 are voided and replaced by the following.

Table 2											
Aggregate Gradation Requirements (Cumulative % Retained <sup>1</sup> )											
	Grade										
Sieve	1	2	3S <sup>2</sup>	3		4S <sup>2</sup>	4	5S <sup>2</sup>	5		
				Non- Lightweight	Lightweight						
1"	-	-	-	-	-	-	-	-	-		
7/8"	0–2	0	-	-	-	-	-	-	-		
3/4"	20–35	0–2	0	0	0	-	-	-	-		
5/8"	85–100	20-40	0–5	0–5	0–2	0	0	-	-		
1/2"	-	80-100	55–85	20-40	10–25	0–5	0–5	0	0		
3/8"	95–100	95–100	95–100	80–100	60-80	60–85	20-40	0–5	0–5		
1/4"	-	-	-	95–100	95–100	-	-	65–85	-		
#4	-	-	-	-	-	95–100	95–100	95–100	50-80		
#8	99–100	99–100	99–100	98-100	98-100	98–100	98–100	98–100	98–100		

1. Round test results to the nearest whole number.

2. Single-size gradation.

Drawarta	To at Mathead	Requirement <sup>1</sup>							
Property	lest method	Minimum	Maximum						
SAC	AQMP	As shown on the plans							
Deleterious Material <sup>2</sup> , %	<u>Tex-217-F</u> , Part I	-	2.0						
Decantation, %	<u>Tex-406-A</u>	-	1.5						
Flakiness Index, %	<u>Tex-224-F</u>	-	17						
Gradation	<u>Tex-200-F</u> , Part I	Table 2 R	e 2 Requirements						
Los Angeles Abrasion, %	<u>Tex-410-A</u>	-	35						
Magnesium Sulfate Soundness, 5 Cycle, %	<u>Tex-411-A</u>	-	25						
Micro-Deval Abrasion, %	<u>Tex-461-A</u>	Note 3							
Coarse Aggregate Angularity <sup>4</sup> , 2 Crushed Faces, %	<u>Tex-460-A</u> , Part I	85	-						
Additional Requirements for Lightweight Aggregate									
Dry Loose Unit Wt., Ib./cu. ft.	<u>Tex-404-A</u>	35	60						
Pressure Slaking, %	<u>Tex-431-A</u>	-	6.0						
Freeze-Thaw Loss, %	<u>Tex-432-A</u>	-	10.0						
Water Absorption, 24hr., %	<u>Tex-433-A</u>	-	12.0						

#### Table 3 Aggregate Quality Requirements

1. Material requirements are listed below, unless otherwise shown on the plans.

2. Not required for lightweight aggregate.

3. Used to estimate the magnesium sulfate soundness loss in accordance with Section 2.1.1.

4. Only required for crushed gravel.

Section 2.1.1., "Micro-Deval Abrasion," is added.

The Engineer will perform a minimum of one Micro-Deval abrasion test in accordance with <u>Tex-461-A</u> for each coarse aggregate source per project that has a Rated Source Soundness Magnesium (RSSM) loss value greater than 15 as listed in the BRSQC. The Engineer may waive all Micro-Deval testing based on a satisfactory test history of the same aggregate source.

The Engineer will estimate the magnesium sulfate soundness loss for each coarse aggregate source, when tested, using the following formula.

*Mg*<sub>est.</sub> = (*RSSM*)(*MD*<sub>act.</sub>/*RSMD*)

where: *Mg*<sub>est</sub> = magnesium sulfate soundness loss *MD*<sub>act</sub> = actual Micro-Deval percent loss *RSMD* = Rated Source Micro-Deval

When the estimated magnesium sulfate soundness loss is greater than the maximum magnesium sulfate soundness loss specified, the coarse aggregate source will not be allowed for use unless otherwise approved by the Engineer. The Engineer may require additional testing before granting approval.

Section 2.2., "Precoating." The third paragraph is voided and replaced by the following.

The Engineer retains the right to remove precoat material from aggregate samples in accordance with <u>Tex-210-F</u>, or as recommended by the Construction Division, and test the aggregate to verify compliance with Table 2 and Table 3 requirements. Gradation testing may be performed with precoat intact.

Section 2.3., "Sampling," is added.

Personnel who conduct sampling and witnessing of sampling must be certified by the Department-approved certification program. Supply the Engineer with a list of certified personnel and copies of their current certificates before beginning construction and when personnel changes are made. At any time during the project, the Engineer may perform production tests as deemed necessary in accordance with Item 5, "Control of the Work."

The Engineer will sample aggregate from stockpiles located at the production site, intermediate distribution site, or project location in accordance with <u>Tex-221-F</u>, Section 3.2.3. The Engineer will split each sample into 2 equal portions in accordance with <u>Tex-200-F</u>, Section 3.3, and label these portions "Engineer" and "Contractor" or "Supplier." Witness the sampling and splitting, and take immediate possession of the samples labeled "Contractor" or "Supplier".

Section 2.4., "Reporting and Responsibilities," is added.

The Engineer will provide test results to the Contractor and Supplier within 10 working days from the date the stockpile was sampled for sources listed on the Department's Bituminous Rated Source Quality Catalog (BRSQC), unless otherwise directed. The Engineer will provide test results for the LA Abrasion (Tex-410-A) and Magnesium Sulfate Soundness (Tex-411-A) tests within 30 calendar days for sources not listed on the BRSQC, or for sources not meeting the requirements of Section 2.1.1., "Micro-Deval Abrasion." The Engineer will report to the other party within 24 hours when any test result does not meet the requirements listed in Table 2 or Table 3.

Section 3. "Equipment." The following paragraph is added.

3.1. Aggregate Haul Trucks. Unless otherwise approved, use trucks of uniform capacity to deliver the aggregate. Provide documentation showing measurements and calculation in cubic yards. Clearly mark the calibrated level. Truck size may be limited when shown on the plans.

Section 4. "Construction." The following paragraph is added.

# 4.1. **Temporary Aggregate Stockpiles**. The Engineer will approve the location of temporary aggregate stockpiles on the right of way before delivery. Place stockpiles in a manner that will not:

- obstruct traffic or sight distance,
- interfere with the access from abutting property, or
- interfere with roadway drainage.

Locate stockpiles a minimum of 30 ft. from roadway when possible.

Section 5. "Measurement and Payment." Is void and replaced by the following:

#### 5. MEASUREMENT

5.1. **Aggregate**. Aggregate will be measured by the cubic yard in the trucks. Strike off the loaded aggregate for accurate measurement when directed.

### 6. PAYMENT

The work performed and materials furnished in accordance with this Item and measured as provided under "Measurement and Payment" will be paid for at the unit prices bid for "Aggregate," and of the types-grades specified on the plans. These prices are full compensation for furnishing, preparing, hauling, equipment, labor, tools, and incidentals.