

# 1110 - AGGREGATES FOR SUBGRADE MODIFICATION OR RECONSTRUCTION

## SECTION 1110

### AGGREGATES FOR SUBGRADE MODIFICATION OR RECONSTRUCTION

#### 1110.1 DESCRIPTION

This specification covers the required types of aggregates for use in subgrade modification or reconstruction operations as shown in the Contract Documents.

#### 1110.2 REQUIREMENTS

**a. Composition.** Provide one of the types of aggregate for subgrade modification or reconstruction as shown in **TABLE 1110-1**.

**b. Quality<sup>1</sup>.**

- Soundness<sup>2</sup>, minimum (KTMR-21) ..... 0.85
- Wear<sup>3</sup>, maximum (AASHTO T 96) ..... 50%

<sup>1</sup>Crushed aggregates with less than 10% material retained on the No. 4 sieve (excluding mineral filler supplements) must be produced from a source complying with the official quality requirements of this Section prior to crushing.

<sup>2</sup>The above requirements for soundness do not apply for aggregates having less than 10% material retained on the No. 4 sieve.

<sup>3</sup>The above requirements for wear do not apply to aggregates having less than 10% material retained on the No. 8 sieve.

**c. Product Control.**

(1) Size and Plasticity. Provide aggregate that complies with **TABLE 1110-1**. Determine the grading factor in accordance with the procedures listed in Part V, Section 5.10.5-Fineness Modulus of Aggregates (Gradation Factor).

| <b>TABLE 1110-1: GRADING AND PLASTICITY REQUIREMENTS</b> |                                       |  |      |     |      |        |        |        |         |                               |
|--|---------------------------------------|--|------|-----|------|--------|--------|--------|---------|-------------------------------|
| Type   | Material                              | Percent Retained-Square Mesh Sieves <sup>1</sup> |      |     |      |        |        |        |         | Plasticity Index <sup>2</sup> |
|  |                                       | 1 ½"   | 1"   | ¾"  | 3/8" | No. 4  | No. 16 | No. 50 | No. 200 |                               |
| SR-1   | Crushed Stone                         | 0  | 0-15 |     |      | 35-100 |        | 85-100 | 85-100  | 0-6                           |
| SR-3   | Crushed Stone Screenings <sup>3</sup> | 0  |      |     | 0-5  |        |        |        | 85-100  | 0-5                           |
| SR-4   | Sand-Gravel <sup>4</sup>              |  | 0    | 0-5 | 0-20 |        |        |        | 85-100  | 0-6                           |
| SR-7   | Sand-Gravel                           | 0  |      |     |      |        | 5-50   | 85-100 | 85-100  | 0-6                           |

<sup>1</sup>After removal of all deleterious substances.

<sup>2</sup>This requirement does not apply if there is more than 70% retained on the No. 30 sieve.

<sup>3</sup>Do not exceed 7% of moisture contained in the aggregate when delivered to the road.

<sup>4</sup>Grading Factor is between 4.00-5.00.

(2) Deleterious Substances. Do not exceed the following percentages of deleterious substances by weight:  
For crushed stone and sand-gravel:

- Shale or shale-like material (KT-8) ..... 3.0
- Clay lumps & friable material (KT-7) ..... 3.0
- Sticks (wet) (KT-35) ..... 1.0

**d. Stockpiling.** Stockpile and handle aggregates in such a manner to prevent detrimental degradation and segregation, the incorporation of appreciable amounts of foreign material, and the intermingling of stockpiled materials.

#### 1110.3 TEST METHODS

Test aggregates according to the applicable provisions of **SECTION 1115**.

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### **1110.4 PREQUALIFICATION**

Prequalify aggregate sources according to **subsection 1101.4**.

### **1110.5 BASIS OF ACCEPTANCE**

Aggregates covered by this subsection are accepted based on the procedures described in **subsection 1101.5**.