

CITY OF ODESSA
STANDARD SPECIFICATIONS

ITEM 39
AGGREGATE FOR SURFACE TREATMENTS

39.1 DESCRIPTION

This item establishes the requirements for aggregates to be used in the construction of surface treatments.

39.2 MATERIALS

Aggregates shall be composed of sound and durable particles of crushed gravel, broken stone, crushed slag or natural limestone rock asphalt. These materials shall be free from dust, organic matter, clays, loam or pebbles coated therewith and shall contain not more than three percent (3%) of slate, shale, schist or soft particles of sandstone. Samples of the material shall be tested by immersing in water for a period of twenty-four (24) hours and then washed over a forty (40) mesh sieve. That portion washed through the forty (40) mesh sieve shall not exceed three percent (3%) of the dry weight of the sample. The various types and grades of aggregate are identified as follows:

39.3 TYPES

Type A aggregate shall consist of crushed gravel, broken stone, crushed slag, or natural limestone rock asphalt.

Type B aggregate shall consist of crushed stone precoated with asphalt of the type as shown on the plans or as determined by the Engineer. The asphalt used shall meet the requirements of Item 38 "Asphalts, Oils, and Emulsions" of these specifications. The precoating to be applied by running the aggregate through and approved hot mix asphaltic concrete plant with controlled heat or other methods as approved by the Engineer. Application of the asphalt coating shall be not less than one-fourth percent (¼%) or more than one percent (1%) by weight. The rate to be determined by the Engineer within these limits.

Type C aggregate shall consist of local crushed limestone washed or scrubbed to remove excessive dust.

Crushed gravel shall have a minimum of eighty-five percent (85%) fragments with at least one crushed face.

Natural limestone rock asphalt shall contain four percent (4%) to eight percent (8%) of asphalt and ninety-two percent (92%) to ninety-six percent (96%) of limestone practically free from sulfates, iron pyrites, alumina or other objectionable matter and shall be uniform as to quality and asphalt content.

The percent of wear, as determined by the Los Angeles abrasion test of coarse aggregate, A.A.S.H.O. designation T-96 with subsequent revisions, for each of the materials shall not exceed the following:

<u>MATERIAL</u>	<u>MAX. PERCENT OF WEAR</u>
Gravel	35
Crushed Gravel	35
Broken Stone	35
Crushed Slag	40
Natural Limestone Rock Asphalt	45

39.4 GRADES

Based on the usual dry screening process, the gradation requirements for the several grades of aggregates shall be as follows:

GRADE 1

Retained on 1" screen	0%
Retained on 3/4" screen	15 to 45%
Retained on 1/2" screen	85 to 100%
Retained on 1/4" screen	95 to 100%
Retained on 10 mesh sieve	97 to 100%
Retained on 40 mesh sieve	99 to 100%

GRADE 2

Retained on 3/4" screen	0%
Retained on 1/2" screen	30 to 70%
Retained on 1/4" screen	80 to 100%
Retained on 10 mesh sieve	97 to 100%
Retained on 40 mesh sieve	99 to 100%

GRADE 3

Retained on 3/4" screen	0%
Retained on 1/2" screen	25 to 50%
Retained on 10 mesh sieve	97 to 100%
Retained on 40 mesh sieve	99 to 100%

GRADE 4

Retained on 3/4" screen	0%
Retained on 1/2" screen	5 to 20%
Retained on 10 mesh sieve	97 to 100%
Retained on 40 mesh sieve	99 to 100%

GRADE 5

Retained on 5/8" screen	0%
Retained on 1/2" screen	0 to 10%
Retained on 1/4" screen	60 to 100%
Retained on 10 mesh sieve	97 to 100%
Retained on 40 mesh sieve	99 to 100%

GRADE 6

Retained on 5/8" screen	0%
Retained on 1/2" screen	0 to 10%
Retained on 1/4" screen	35 to 60%
Retained on 10 mesh sieve	97 to 100%
Retained on 40 mesh sieve	99 to 100%

GRADE 7

Retained on 1/2" screen	0%
Retained on 3/8" screen	5 to 20%
Retained on 10 mesh sieve	97 to 100%
Retained on 40 mesh sieve	99 to 100%

GRADE 8

Retained on 1/2" screen	0%
Retained on 3/8" screen	0 to 10%
Retained on 10 mesh sieve	97 to 100%
Retained on 40 mesh sieve	99 to 100%

GRADE 9

Retained on 1/2" screen	0%
Retained on 1/4" screen	5 to 35%
Retained on 10 mesh sieve	70 to 100%
Retained on 20 mesh sieve	98 to 100%
Retained on 40 mesh sieve	99 to 100%

GRADE 10

Retained on 3/8" screen	0%
Retained on 1/4" screen	2 to 20%
Retained on 10 mesh sieve	70 to 100%
Retained on 20 mesh sieve	98 to 100%
Retained on 40 mesh sieve	99 to 100%

39.5 MEASUREMENT AND PAYMENT

Aggregates will be measured and paid for in accordance with the governing specifications for the items of construction in which these materials are used.