310 Open-Graded Base

310.1 Description

(1) This section describes constructing open-graded base course using crushed stone, crushed gravel, or both.

310.2 Materials

310.2 Add via ASP-6 with November 2023 LET. Update reference for material gradation requirements to AASHTO.

(1) Furnish crushed stone or crushed gravel conforming to 301.2, except for gradation. Provide QMP for open-graded base as specified in 730. For gradation conform to the following:

SIEVE PERCENT PASSING (by weight)

1-inch 90 - 100

3/8-inch 45 - 65

No. 4 15 - 45

No. 10 0 - 20

No. 40 0 - 10

No. 200 0 - 5.0

(2) The contractor may substitute material conforming to the gradation requirements for crushed aggregate specified in Table 310-01 if that material conforms to the fracture requirements for open-graded crushed gravel specified in 301.2.4.5.

TABLE 310-01 COARSE AGGREGATE (% passing by weight)

AASHTO No. 67[1]

|  |  |
| --- | --- |
| SEIVE | COARSE AGGREGATE (% PASSING by WEIGHT) AASHTO No. 67 |
| 2-inch | - |
| 1 1/2-inch | - |
| 1-inch | 100 |
| 3/4-inch | 90 - 100 |
| 1/2-inch | - |
| 3/8-inch | 20 - 55 |
| No. 4 | 0 - 10 |
| No. 8 | 0 - 5 |
| No. 16 | - |
| No. 30 | - |
| No. 50 | - |
| No. 100 | - |
| No. 200 | <=1.5 |

[1] Size according to AASHTO M43.

(3) Do not place reclaimed asphalt, reprocessed material, or blended materials below open-graded base unless the contract specifies or the engineer allows in writing.

310.3 Construction

(1) Construct open-graded base conforming to 301.3. Use standard compaction conforming to 301.3.4.2.

(2) Compact in layers using the equipment specified in 301.3.1. If using a pneumatic roller, do not exceed a compacted thickness of 6 inches per layer. If using a vibratory roller, do not exceed a compacted thickness of 8 inches per layer.

(3) Load and carry forward, or otherwise remove, excess material produced during trimming operations to prevent contamination of the dense-graded material in the shoulder area.

310.4 Measurement

(1) The department will measure Base Aggregate Open-Graded by the ton or cubic yard acceptably completed. The department may deduct for contaminated aggregate or unrecovered aggregate deposited outside the outer shoulder limits.

310.5 Payment

(1) The department will pay for measured quantities at the contract unit price under the following bid items:

ITEM NUMBER DESCRIPTION UNIT

310.0110 Base Aggregate Open-Graded TON

310.0115 Base Aggregate Open-Graded CY

(2) Payment for Base Aggregate Open-Graded is full compensation for preparing the foundation; and for stockpiling, placing, shaping, compacting, and maintaining the base.