

Section 1016

**SECTION 1016
SELECT MATERIALS**

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1016-1 DESCRIPTION

Select material is suitable material classified by gradation and performance characteristics as shown in this section. Use select material called for on the contract.

1016-2 USES

Select material may be specified for use in:

Subgrade	Slope and shoulder embankment
Backfill in undercut	Rock embankment in open water
Core material	Material placement over fabric
Foundation conditioning	Pipe backfill

With written approval and without additional compensation, a higher class of material may be substituted than stated in the contract.

1016-3 CLASSIFICATIONS

CLASS I

Class I select material is silty or clayey soil material meeting AASHTO M 145 for soil classification A-4. Soil materials which meet AASHTO M 145 for soil classifications A-2, A-5, A-6 and A-7 are acceptable provided such materials do not have a LL greater than 50, nor a PI of less than 7 or greater than 20.

CLASS II

Type 1 Select Material

Type 1 select material is a fine aggregate material consisting of crushed stone screenings (washed or unwashed) meeting the gradation in Table 1016-1.

TABLE 1016-1 GRADATION FOR CLASS II, TYPE 1 SELECT MATERIAL	
Sieve	Percent Passing
3/8"	100
No. 4	80 - 100
No. 10	65 - 95
No. 40	25 - 55
No. 200	0 - 20
LL	≤ 30
PI	≤ 6

Type 2 Select Material

Type 2 select material is a granular soil material meeting AASHTO M 145 for soil classifications A-2-4 with a maximum PI of 6 and A-4 soil containing 45% maximum passing a No. 200 sieve and a maximum PI of 6.

When a type is not specified, either type may be used, but no additional compensation will be made.

CLASS III

Type 1 Select Material

Type 1 select material is a natural or manufactured fine aggregate material meeting the gradation requirements of standard size 2S or 2MS in Table 1005-2 as described in Sections 1005 and 1006.

1 **Type 2 Select Material**

2 Type 2 select material is a granular soil material meeting AASHTO M 145 for soil
3 classification A-1 or A-3.

4 **Type 3 Select Material**

5 Type 3 select material is a natural or manufactured fine aggregate material meeting the
6 following gradation requirements and as described in Sections 1005 and 1006.

TABLE 1016-2	
GRADATION FOR CLASS III, TYPE 3 SELECT MATERIAL	
Sieve	Percent Passing
3/8"	100
No. 4	95 - 100
No. 8	65 - 100
No. 16	35 - 95
No. 30	15 - 75
No. 50	5 - 50
No. 100	0 - 25
No. 200	0 - 8

7 When a type is not specified, Type 1, Type 2 or Type 3 may be used, but no additional
8 compensation will be made.

9 **CLASS IV**

10 Select material is a coarse aggregate material meeting the gradation requirements of standard
11 size ABC as described in Section 1010.

12 **CLASS V**

13 Select material is a coarse aggregate material meeting the gradation requirements of standard
14 size 78M in Table 1005-1 as described in Sections 1005 and 1006.

15 **CLASS VI**

16 Select material is a coarse aggregate material meeting the gradation requirements of standard
17 size 57 in Table 1005-1 as described in Sections 1005 and 1006.

18 **CLASS VII**

19 Select material is clean, unweathered durable, blasted rock material. While no specific
20 gradation is required, the below criteria will be used to evaluate the materials for visual
21 acceptance by the Engineer.

22 **(A)** At least 50% of the rock has a diameter of from 1.5 feet to 3 feet,

23 **(B)** 30% of the rock ranges in size from 2 inches to 1.5 feet in diameter, and

24 **(C)** Not more than 20% of the rock is less than 2 inches in diameter. No rippable rock will be
25 permitted.

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SECTION 1018 BORROW MATERIAL

28 **1018-1 GENERAL**

29 Borrow material is used for embankments, backfill or other intended uses. Material that
30 contains roots, root mats, stumps or other unsatisfactory material will not be acceptable.