

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.

26

27

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.

Section 1018

1 **1018-2 APPROVAL OF BORROW SOURCE**

2 The approval of borrow sources is subject to Section 230.

3 **(A) Statewide Criteria for Acceptance of Borrow Material**

4 See exceptions in Subarticle 1018-2(B).

5 Use only natural earth materials as borrow material. Any other materials are subject to
6 rejection.

TABLE 1018-1 PIEDMONT AND WESTERN AREA CRITERIA FOR ACCEPTANCE OF BORROW MATERIAL	
Soil with PI of 25 or less	Acceptable
Soil with PI of 26 through 35	Acceptable, but not to be used in top 3 ft of embankment or backfill
Soil with PI of more than 35	Not Acceptable

7 **(B) Exceptions to Statewide Criteria for Acceptance of Borrow Material**

8 (1) Soils in the Coastal Plain (area described below) will be accepted in accordance with
9 the Table 1018-2.

TABLE 1018-2 COASTAL AREA CRITERIA FOR ACCEPTANCE OF BORROW MATERIAL	
Soil with PI of 15 or less	Acceptable
Soil with PI of 16 through 20	Acceptable, but not to be used in top 3 ft of embankment or backfill
Soil with PI of more than 20	Not Acceptable

10 Areas where Table 1018-2 is applicable are as follows:

- Division 1 Entire Division except Northampton (West of I-95)
- Division 2 Entire Division
- Division 3 Entire Division
- Division 4 Edgecombe, Wayne, Johnston (East of US 301), Wilson (East of I-95), Nash (East of I-95), Halifax (East of I-95)
- Division 6 Bladen, Columbus, Robeson, Cumberland, Harnett (South of NC 27)
- Division 8 Scotland, Hoke, Moore (Southeast of US 15-501, NC 73, NC 211), Richmond (East of US 220 North and US 1 South)

11 Table 1018-2 shall be applicable to the flood plains of the Roanoke, Tar, Neuse,
12 Cape Fear and Lumber Rivers and their tributaries that are outside the above
13 described areas.

14 (2) Waste or by-products from industrial processes or mining operations are not
15 acceptable except by specific written approval.

16 (3) When tested, soils having a pH of less than 5.5 or an organic content more than 4.0%
17 may be rejected.

18 (4) When material is to be used for placing embankments or backfilling of undercut
19 areas that are excessively wet, the material shall consist of Class II, III or IV select
20 material.