

- (d) **Quality Control Technician.** The Quality Control Technician may be approved if certified from at least one of the following:
- (1) The National Precast Concrete Association.
  - (2) The Precast/Prestressed Concrete Institute Plant Certification Program.
  - (3) American Concrete Institute.
  - (4) Taking the Maryland Certified Concrete Technician course given by the Administration and passing the test.
- (e) **Test Equipment and Facilities.** The producer shall supply all necessary test equipment. In addition, the producer shall provide Administration approved facilities suitable for conducting the various tests required. Off site test facilities shall require approval of the Engineer.

#### **915.05.02 Responsibilities of the Administration.**

- (a) Comprehensive Inspection.
- (b) Verification Testing.
  - (1) Verification of certification will be performed at the discretion of the Administration a minimum of once per year.
  - (2) The Administration reserves the right to discontinue acceptance of precast units if its verification indicates that materials or test procedures do not conform to the Contract Documents.

## **SECTION 916 — SOIL AND SOIL-AGGREGATE BORROW**

**916.01 BORROW EXCAVATION.** All borrow excavation shall be a soil or soil aggregate mixture and shall conform to the following:

Maximum dry density and optimum moisture content of the material shall be determined as specified in T 180, Method C unless the material has more than 35 percent retained on the No. 4 sieve, in which case Method D shall be used. Material with a maximum dry density of less than 100 lb/ft<sup>3</sup> is unsatisfactory and shall not be used in embankments

unless otherwise specified in the Contract Documents. Potentially expansive materials, such as steel slag, shall not be used.

Recycled portland cement concrete or recycled HMA pavement may be used as select borrow, capping borrow, and modified borrow with the written approval of the Engineer. Recycled portland cement concrete, recycled HMA pavement, and processed contaminated soil shall not be used within 1 ft of the surface in any area to be vegetated. All recycled or rehandled materials shall conform to Section TC-6.10.

**916.01.01 Select Borrow.** Select borrow shall conform to A-2, A-3, or A-2-4 material as specified in the Contract Documents. The maximum dry density shall be a minimum of 105 lb/ft<sup>3</sup>.

**916.01.02 Capping Borrow.** Capping borrow shall conform to the select borrow requirements except when A-3 material has less than 10 percent retained on the No. 10 sieve, at least 15 percent shall pass the No. 200 sieve. Sieve analysis shall be determined in conformance with MSMT 302.

**916.01.03 Modified Borrow.** Modified borrow shall have a minimum of 50 percent retained on the No. 4 sieve, a maximum liquid limit of 30 when tested as specified in T 89, and a maximum plasticity index of 9 when tested as specified in T 90. The maximum dry density shall not be less than 125 lb/ft<sup>3</sup>. A-5 material, as defined in the Contract Documents shall not be used.

**916.01.04 Common Borrow.** Common borrow shall have a maximum dry density of not less than 100 lb/ft<sup>3</sup>.

## SECTION 917 — EPOXY PROTECTIVE COATINGS

**917.01 EPOXY PROTECTIVE COATINGS FOR CONCRETE.** The protective coatings shall be two component epoxy systems for use in conjunction with concrete. One component shall be a clear or pigmented condensation product of the reaction of epichlorohydrin with bisphenol A, the resin of which shall be composed of 100 percent reactive constituents. The other component shall be a clear polyamide hardener.

The producer shall submit a sample of each component for laboratory analysis. The sample shall be coded as the original sample. The original and all subsequent samples shall conform to the following: