

## **200 ROCK BASE.**

**(REV 11-14-13) (FA 12-3-13) (7-14)**

ARTICLE 200-2 is deleted and the following substituted:

### **200-2 Materials.**

**200-2.1 General:** Meet the requirements of either Section 911, 913, 913A or 915 for the particular type of base to be constructed. The Contractor may use more than one source of base rock on a single Contract provided that a single source is used throughout the entire width and depth of a section of base. Obtain approval from the Engineer before placing material from more than one source. Place material to ensure total thickness single source integrity at any station location of the base. Intermittent placement or “blending” of sources is not permitted. Base rock may be referred to hereinafter as “rock”.

The reuse of existing base may be considered provided it meets the requirements of this Section. Submit as a Cost Savings Initiative Proposal in accordance with Section 4.

**200-2.2 Existing Rock:** Meet the following requirements for use of existing rock on the same project:

1. Notify the Engineer in writing prior to excavating existing rock.
2. Submit a process control plan, herein referred to as “Plan” consisting of the following:
  - a. Locations where existing rock will be removed from the roadway.
  - b. Locations where existing rock will be used for new construction.
  - c. Method of excavation, transport, and placement to ensure excavated rock will be kept separate from other approved stockpiles. Excavation methods that may result in damage to the rock rendering it unfit to be used as base will not be approved.
  - d. Proposed measures to prevent contamination and segregation.
  - e. Proposed locations and methods for constructing stockpiles for sampling and testing.
  - f. Method for sampling and reporting test results.
3. The Engineer will coordinate the review of the “Plan” with the District Materials Office.
4. Upon the Engineer’s review of the “Plan”, build a preliminary stockpile, not to exceed 1,000 cubic yards.
5. Collect and test a minimum of three samples from the preliminary stockpile. Once the stockpile has been sampled, do not add any additional material to the stockpile. Determine compliance with 200-2.1, with the exception of carbonate contents. Reject any stockpile if the Limerock Bearing Ratio (LBR) is less than 100. The District Materials Office will sample and test the preliminary stockpile to verify compliance with this Section.
6. If all test results meet the requirements of this Section, the Engineer will notify the Contractor in writing of the approved status of the preliminary stockpile based on the analysis of test data performed by the District Materials Office.
7. If the use of existing rock is approved, continue to produce additional stockpiles not exceeding 1,000 cubic yards. Ensure the rock meets the requirements of this Section by sampling and testing each new stockpile at a minimum frequency of one sample per 400 cubic yards. Once a stockpile has been sampled, do not add additional material to that

stockpile. The District Materials Office may also perform sampling and testing. Materials will be accepted if test results meet the requirements of this Section.

8. After 10 consecutive quality control LBR test results meet the requirements of the Section and no individual LBR test is less than 120, the sampling and testing frequency may be reduced to a minimum frequency of one sample per 800 cubic yards for each stockpile. Notify the Engineer in writing prior to reducing testing frequency. If any quality control LBR test result falls below 120 or a stockpile is rejected, revert to original sampling frequency of one sample per 400 cubic yards.

9. Construct a new preliminary stockpile if there is a change in material, conditions not addressed in the “Plan” are encountered, or if production varies from the approved “Plan”.

SUBARTICLE 200-6.1 is deleted and the following substituted:

**200-6.1 General:** Construct mainline pavement lanes, turn lanes, ramps, parking lots, concrete box culverts and retaining wall systems meeting the requirements of 120-8.1, except replace “embankment” with “base”.

Construct shoulder-only areas, shared use paths, and sidewalks. Meet the requirements of 120-8.1 except replace “embankment” with “base” meeting the acceptance criteria of 200-7.2. Shoulders compacted separately shall be considered separate LOTs.

**200-6.1.1 Single Course Base:** After spreading, scarify the entire surface, then shape the base to produce the required grade and cross-section, free of scabs and laminations, after compaction.

**200-6.1.2 Multiple Course Base:** Clean the first course of foreign material, then blade and bring it to a surface cross-section approximately parallel to the finished base. Before spreading any material for the upper courses, allow the Engineer to make density tests for the lower courses to determine that the required compaction has been obtained. After spreading the material for the top course, scarify finish and shape its surface to produce the required grade and cross-section, free of scabs and laminations, after compaction.

SUBARTICLE 200-7.2 is deleted and the following substituted:

**200-7.2 Acceptance Criteria:**

**200-7.2.1 Density:** Within the entire limits of the width and depth of the base, obtain a minimum density in any LOT of 98% of modified Proctor maximum density as determined by FM 1-T 180, Method D. For shoulder only areas and shared use paths, obtain a minimum density of 95% of the modified Proctor maximum density as determined by FM 1-T 180, Method D.

**200-7.2.2 Frequency:** Conduct QC sampling and testing at a minimum frequency listed in the table below. The Engineer will perform Verification sampling and tests at a minimum frequency listed in the table below.

Mainline Pavement Lanes, Turn Lanes, Ramps, Parking Lots, Concrete Box Culverts and Retaining Wall Systems		
Test Name	Quality Control	Verification

Modified Proctor Maximum Density	One per eight consecutive LOTS	One per 16 consecutive LOTS
Density	One per LOT	One per four LOTS
Roadway Surface	Ten per LOT	Witness
Roadway Thickness	Three per LOT	Witness

Shoulder-Only, Shared Use Path and Sidewalk Construction		
Test Name	Quality Control	Verification
Modified Proctor Maximum Density	One per two LOTS	One per four LOTS
Density	One per LOT	One per two LOTS
Surface	Five per 500 feet	Witness
Thickness	Three per 1000 consecutive feet	Witness

ARTICLE 200-11 is deleted and the following substituted:

**200-11 Basis of Payment.**

Price and payment will be full compensation for all the work specified in this Section, including correcting all defective surface and deficient thickness, removing cracks and checks as provided in 200-6.4.2, the prime coat application as directed in 300-8, and the additional rock required for crack elimination.

Payment shall be made under:

Item No. 285- 7- Optional Base - per square yard.