

DIVISION 2 – SITE WORK

SECTION 02505

PAVING BASE COURSE

PART 1 GENERAL

1.01 SECTION INCLUDES

- A. Granular Base

1.02 RELATED SECTIONS

- A. Section 02100 - Site Preparation
- B. Section 02200 - Earthwork
- C. Section 02227 - Aggregate Materials
- D. Section 02520 - Portland Cement Concrete Paving
- E. Section 02525 – Concrete Curb and Gutter and Sidewalks
- F. Construction Drawings

1.03 REFERENCES

- A. ANSI/ASTM D698 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures, Using 5.5 lb (2.49 Kg) Rammer and 12 inch (304.8 mm) Drop.
- B. ANSI/ASTM D1557 - Test Methods for Moisture-Density Relations of Soils and Soil-Aggregate Mixtures using 10 lb (4.54 Kg) Rammer and 18 inch (457 mm) Drop.
- C. ASTM D2167 - Test Method for Density and Unit Weight of Soil in-place by the Rubber Balloon Method.
- D. ASTM D1556 - Test Method for Density of Soil in-place by the Sand-Cone Method.
- E. ASTM D2922 - Test Methods for Density of Soil and Soil-Aggregate in-place by Nuclear Methods (Shallow Depth), Method B (Direct Transmission).
- F. ASTM D3017 - Test Methods for Moisture Content of Soil and Soil-Aggregate Mixtures.

PART 2 PRODUCTS

2.01 FILL MATERIALS

- A. Submit materials certificate to Owner that is signed by material producer and Contractor, certifying that materials comply with, or exceed, the requirements herein.
- B. Provide test results of cement stabilized soil mix proposed for use on job prior to delivery of any base material to site.

PART 3 EXECUTION

3.01 EXAMINATION

Contractor shall verify that the subbase has been inspected, tested and the gradients and elevations are correct, dry and properly prepared.

3.02 CONSTRUCTION

- A. Perform base course construction in a manner that will drain surface properly at all times and at the same time prevent runoff from adjacent areas from draining onto base course construction.
- B. Compact base material to not less than 98% of optimum density as determined by ASTM D 698 or 95% of optimum density, as determined by ASTM D 1557, unless otherwise indicated on the Drawings.
- C. Granular Base: Construct to thickness indicated on Drawings. Apply in lifts or layers not exceeding 8", measured loose.
- D. Cement Stabilized Base: As an alternate to the base course indicated, provide a cement stabilized base of equal thickness, in select fill, at a cement content not to exceed 8% by weight, in accordance with LDOTD requirements.

3.03 FIELD QUALITY CONTROL

- A. An Independent Testing Laboratory, selected and paid by Owner, shall be retained to perform construction testing of in-place base courses for compliance with requirements for thickness, compaction, density and tolerance. Paving base course tolerances shall be verified (by rod and level readings on not more than fifty-foot centers) to be not more than 0.05 feet above design elevation that will allow for paving thicknesses as shown in the Drawings. Contractor shall provide instruments and a suitable benchmark.
- B. The following tests shall be performed on each type of material used as base course material:
 - 1. Moisture and Density Relationship: ASTM D 698 or ASTM D 1557.
 - 2. Mechanical Analysis: AASHTO T-88.
 - 3. Plasticity Index: ASTM D-4318.
 - 4. Base material thickness: Perform one test for each 5,000 square feet of in-place base material area.
 - 5. Base material compaction: Perform one test in each lift for each 5,000 square feet of in-place base material area.
 - 6. Test each source of base material for compliance with these specifications.

END OF SECTION 02505