

SECTION 31 22 10

SUBGRADE

PART 1 - GENERAL

- 1.01 Preparation of the subgrade shall include compacting to the required density and shaping to conform to the lines, grades, and cross sections. All work shall be completed in accordance with the applicable provisions of these specifications.
- 1.02 Owner shall employ and pay for services of an independent testing laboratory to perform specified inspection and testing.
- 1.03 Employment of testing laboratory shall in no way relieve contractor of obligation to perform work in accordance with requirements of contract documents.
- 1.04 General Contractor (GC) shall deliver to laboratory at designated location adequate samples of the materials proposed to be used that require testing together with proposed mix designs.
- 1.05 General Contractor (GC) to cooperate with laboratory personnel, and provide access to work and to manufacturers' facilities, as applicable.
- 1.06 General Contractor (GC) to provide incidental labor and facilities, access to work to be tested, to obtain and handle samples at the site or at source of product to be tested, to facilitate tests and inspections, and for storage and curing of test samples.
- 1.07 General Contractor (GC) to notify Architect/Engineer and laboratory 24 hours prior to expected time for operations requiring inspection and testing services.

PART 2 - PRODUCTS (Not Used)

PART 3 - EXECUTION

- 3.01 Before starting the construction of the base course, pavement, or surface, prepare the subgrade to the full width of the widest course plus 1 foot of additional width beyond each edge, unless otherwise shown on the drawings.
- 3.02 Shape the subgrade to conform to the lines, grades, and cross sections indicated on the drawings or established by the A/E. Remove all high areas of the site by scarifying when necessary and fill all low areas with material approved by the A/E and compact. Do not disturb the site below the subgrade elevation except when necessary to comply with requirements specified herein.
- 3.03 Compact the subgrade to a density that is, as nearly as practicable, uniform throughout. The subgrade shall be compacted to a density of at least 95% of the maximum dry density as determined by ASTM D698 (Standard Proctor) or as indicated in the geotechnical report, whichever is more stringent. Should the subgrade, after being compacted to the required density during construction of the grade, subsequently lose its density due to exposure to severe weather conditions, recompact it to the required density. See Part 4, Testing.
- 3.04 Excavate areas of yielding or unstable material, and backfill with approved material as directed by the A/E. Do not undercut any material without prior written consent from the geotechnical engineer and the A/E. An estimate of the quantity of undercut shall be approved by the A/E prior to the work being performed.

- 3.05 When the material in place is either too dry or too wet for proper compaction to be obtained, increase or reduce the moisture content and then compact the material. Scarifying of the subgrades may be required.
- 3.06 When using a sheepsfoot roller, finish the compaction with either a 3-wheel roller or a multiple wheel, pneumatic-tired roller heavy enough to smooth out and compact the indentions made by the sheepsfoot roller.
- 3.07 When excess dust is present on the subgrade, either wet it or completely remove and replace with suitable material before placing any aggregate on the subgrade. This will be done at no additional cost to the owner.
- 3.08 Operate a grading machine over all subgrades necessary to maintain a uniform cross section that is free from irregularities. Prepare all subgrades far enough ahead of the base course or pavement construction to permit the necessary testing and checking of the subgrade before any aggregate is placed. Contractor is to furnish templates and the labor required for checking the subgrade.
- 3.09 All subgrades shall be proof rolled using a pneumatic-tired, fully loaded dump truck. Any areas of soft or yielding material shall be repaired at no additional cost to the owner.
- 3.10 All subgrades being prepared for base or surface courses shall show no deviations greater than ½ inch from the specified grade and shall be constructed uniformly so that subsequent base and/or surface courses can be constructed within their specified tolerances.
- 3.11 Equipment used for hauling materials over the completed subgrade shall be equipped with pneumatic tires. Do not operate any equipment over the subgrade that is of such weight as to cause rutting.
- 3.12 No storage or stockpiling of material will be permitted on a complete subgrade.
- 3.13 Do not place surfacing materials on a frozen, muddy, soft, or yielding subgrade.

PART 4 -TESTING

4.01 SELECTION AND PAYMENT

- A. Owner shall employ and pay for services of an independent testing laboratory to perform specified inspection and testing.
- B. Employment of testing laboratory by owner shall in no way relieve contractor of obligation to perform work in accordance with requirements of contract documents.

4.02 CONTRACTOR RESPONSIBILITIES

- A. Deliver to laboratory at designated location adequate samples of the materials proposed to be used that require testing together with proposed mix designs.
- B. Cooperate with laboratory personnel, and provide access to work and to manufacturers' facilities, as applicable.
- C. Provide incidental labor and facilities to provide access to work to be tested, to obtain and handle samples at the site or at source of product to be tested, to facilitate tests and inspections, and for storage and curing of test samples.

**FRANKLIN CO.
ANIMAL CONTROL FACILITY**

WINCHESTER, TN

- D. Notify Architect/Engineer and laboratory 24 hours prior to expected time for operations requiring inspection and testing services.

END OF SECTION