



## SECTION 205

### MODIFIED SUBGRADE

**205.1 Description.** This work shall consist of modifying a subgrade to improve stability. This work shall be performed as specified in the contract, at the contractor's option with concurrence from the engineer or at the direction of the engineer.

**205.2 Material.** All material shall be in accordance with Division 1000, Material Details, and specifically as follows.

**205.2.1** The modifying material shall be hydrated lime or other chemical material, a geogrid, a geotextile, or other material approved by the engineer.

**205.2.1.1** If hydrated lime is used, the contractor shall furnish or require the supplier to furnish with each load certification that the product is in accordance with AASHTO M 216.

**205.2.1.2** If chemical modifying material other than hydrated lime is used, the material and application plan shall be approved by the engineer prior to use.

**205.2.2** If a geogrid or geotextile is used the product type and layout plan shall be approved by the engineer prior to use.

### **205.3 Construction Requirements.**

#### **205.3.1 Application.**

**205.3.1.1** If not directed by the engineer or specified in the contract, the contractor may determine the locations, amount of modifying material and depth of application, within the limits of this specification and subject to concurrence from the engineer.

**205.3.1.2** Where performed, subgrade modification shall be done to all areas uniformly and laterally between outside shoulder points plus 18 inches on each side. When the chemically modified areas are stopped and started, there shall be a longitudinal transition zone at the rate of 30 feet per 6 inches of modified depth. The transition may be made by reducing modifying material or by mixing depth.

**205.3.1.3** Chemical modifying material shall be spread in uniform and regular patterns. No material shall be applied if the material is being blown from the work area.

**205.3.1.4** The application rate of the chemical modifying material shall be approved by the engineer.

**205.3.2 Compaction.** When chemically modified, the subgrade shall be uniformly mixed with the modifying material. Mixing and compaction shall continue until the subgrade is shown to have suitable compaction as demonstrated by the roller equipment. Density and moisture testing will ordinarily be waived for subgrade chemically modified under this specification, except that should compaction not be demonstrated to the engineer's satisfaction, the engineer reserves the right to run such tests as necessary to ensure density. When stabilized

with a geogrid or geotextile, the subgrade will require recompaction to the specified density and moisture content only if it is disturbed by the geogrid or geotextile placement.

**205.4 Method of Measurement.** Measurement of modified subgrade will be made to the nearest square yard, including transition areas. Subgrade meeting all other requirements, suitable for the placing of base material and having modifying material incorporated as specified herein, will be paid for at the contract unit price per square yard except as noted herein.

**205.5 Basis of Payment.**

**205.5.1** If included in the contract, payment for modified subgrade will be made per square yard of modified subgrade at the contract unit price. No direct payment will be made for the required modifying material.

**205.5.2** If performed at the option of the contractor, payment for modified subgrade will be made at the invoiced material cost from the supplier, and no reimbursement will be made for incorporation or for processing.

**205.5.3** If modified subgrade is not included in the contract and is directed by the engineer, payment will be made in accordance with [Sec 104.3](#).

**205.5.4** Reimbursement for transition areas will be made at the contract unit price per square yard for 1/2 the area of the transition.

**205.5.5** Reimbursement will be limited to modified areas, the width of the pavement and shoulders, plus 18 inches on each side.

**205.5.6** Only one payment for modified subgrade will be made for any area, regardless of the depth of stabilized material, number of applications or other circumstances.