

**SECTION 230
LIMEROCK STABILIZED BASE**

230-1 Description.

Construct a base course composed of roadbed soil stabilized with limerock.

230-2 Materials.

Meet the limerock material requirements as specified in Section 911.

230-3 Equipment.

230-3.1 For Mixing: For mixing in the roadway, provide a heavy-duty rotary tiller or other equipment approved by the Engineer as equally effective for this work.

230-3.2 For Compaction: Select the equipment for compacting the stabilized material, except that for the final finish use a steel-wheeled roller.

230-4 Preparation of Roadbed.

Complete the area to be stabilized to the lines shown in the plans and to a grade parallel to the finished elevation of the stabilized base, before adding the stabilizing material. Ensure that the elevation of the roadbed is such that the base will conform to the typical cross-section upon completing the work. Dispose of any surplus excavated materials resulting from this work, as specified in 120-5.

230-5 Incorporation of Stabilizing Material and Mixing-In.

230-5.1 Spreading and Mixing: Place the limerock on the areas to be stabilized, and spread it uniformly to the loose depth shown in the plans or ordered by the Engineer. Then, thoroughly mix the limerock with the soil. Perform mixing as soon as practicable but no later than one week after placing the limerock on the road. Do not spread more limerock in advance of the mixing operations than can be mixed-in with the soil within one week.

230-5.2 Further Mixing Operations: Repeat the mixing operations as often as may be necessary to distribute the limerock uniformly throughout the soil, as determined by the Engineer. Further manipulate the material to uniformly distribute the limerock throughout the width and depth of the base course.

230-5.3 Plant Mixing: The Contractor may mix the soil, limerock, and water using the central plant-mix method in lieu of mixing in place, provided he obtains a uniform mixture with the proper amount of water.

230-5.4 Shaping Surface: After mixing, shape the surface so it conforms to the grade and typical cross-section shown in the plans after compacting.

230-5.5 Depth of Mixing Stabilizing Material: Ensure that the depth of mixing of the stabilizing material is in accordance with the following table:

NON SI UNITS		
Specified Base Thickness (inches)	Required Mixing Depth (inches)	
	Minimum	Maximum
6	5 1/2	7 1/2
8	7 1/4	9 3/4
10	9	12

SI UNITS		
Specified Base Thickness (mm)	Required Mixing Depth (mm)	
	Minimum	Maximum
150	140	190
200	185	245
250	225	300

In the event that the measured depth of mixing is less than the minimum specified above, remix the base course, as directed by the Engineer, until the stabilizing material is distributed to the required depth throughout the base course.

Where the measured depth of mixing exceeds the maximum limits specified in the table, add 1 inch [25 mm], loose measure, of stabilizing material for each 1 inch [25 mm] of mixing depth in excess of the allowable depth (but in no case less than 1 inch [25 mm] of material, for any excess depth), and mix the added material in the top 6 inches [150 mm] of the base as specified in 230-5.1 and 230-5.2, at no expense to the Department. The Department will not include the volume of stabilizing material, which is added to compensate for excess mixing depth, in the pay quantity, and will not allow any additional compensation for the extra mixing required.

230-6 Compacting and Finishing Base.

Meet the requirements of 200-6.

230-7 Testing Surface.

Test the surface in accordance with the requirements of 200-7.

230-8 Priming and Maintaining.

Meet the requirements of 200-8.

230-9 Method of Measurement.

230-9.1 General: The quantities to be paid for will be the plan quantity, in square yards [square meters], completed and accepted.

230-9.2 Quantity of Limerock: The quantity to be paid for will be as specified in 210-8.2.

230-10 Basis of Payment.

Prices and payments will be full compensation for all work specified in this Section, including furnishing, hauling, placing, spreading, mixing, compacting, and finishing all limerock stabilizing material; any necessary excavating below the finished grade of the base to provide for placing the stabilizing material; and disposing of all surplus excavation resulting from this work.

Where extra limerock material is placed at locations of culverts, etc., as detailed in the plans, the volume of such material, determined as provided above, will be included in the quantity of Limerock Material to be paid for, but no adjustment will be made in the area of base to be paid for.

Prime coat will be paid for under Section 300.

Payment will be made under:

- Item No. 230- 1- Limerock Stabilized Base - per square yard.
- Item No. 2230- 1- Limerock Stabilized Base - per square meter.
- Item No. 230- 2- Limerock Material - per cubic yard.
- Item No. 2230- 2- Limerock Material - per cubic meter.