ITEM 351
FLEXIBLE PAVEMENT STRUCTURE REPAIR

351.1. Description. Repair localized sections of flexible pavement structure including subgrade, base, and surfacing as shown on the plans.

351.2. Materials. Furnish materials unless otherwise shown on the plans. Provide materials of the type and grade as shown on the plans and in accordance with:
- Item 132, “Embankment”
- Item 204, “Sprinkling”
- Item 247, “Flexible Base”
- Item 260, “Lime Treatment (Road Mixed)”
- Item 263, “Lime Treatment (Plant Mixed)”
- Item 275, “Cement Treatment (Road Mixed)”
- Item 276, “Cement Treatment (Plant Mixed)”
- Item 292, “Asphalt Treatment (Plant Mix)”
- Item 310, “Prime Coat”
- Item 316, “Surface Treatments”
- Item 330, “Limestone Rock Asphalt Pavement”
- Item 334, “Hot-Mix Cold-laid Asphalt Concrete Pavement”
- Item 340, “Hot Mix Asphalt.”

For asphalt concrete materials, Contractor testing and bonus and penalty provisions will be waived unless otherwise shown on the plans.

351.3. Equipment. Furnish equipment in accordance with pertinent Items. Use of a motor grader will be permitted for asphalt concrete pavement unless otherwise shown on the plans.

351.4. Work Methods. Repair using one or more of the following operations as shown on the plans. For Contracts with callout work, begin physical repair within 24 hr. of notification, unless otherwise shown on the plans. Cut neat vertical faces around the perimeter of the work area when removing pavement structure layers. Removed materials are the property of the Contractor unless otherwise shown on the plans. Dispose of removed material in accordance with federal, state, and local regulations. Provide a smooth line and grade conforming to the adjacent pavement.

A. Removing Pavement Structure. If necessary, remove adjacent soil and vegetation to prevent contamination of the repair area, and place it in a windrow. Do not damage adjacent pavement structure during repair operations. If subgrade work is required, remove flexible pavement structure layers from work area.

B. Preparing Subgrade. Fill holes, ruts, and depressions with approved material. If required, thoroughly wet, reshape, and compact the subgrade as directed.

Where subgrade has failed, remove unstable subgrade material to the depth directed and replace with an approved material.
C. **Mixing and Placing Base Material.** Place, spread, and compact material in accordance with the applicable Item to the required or directed depth. When bituminous material is to remain in pavement structure, pulverize to a maximum dimension of 2-1/2 in. and uniformly mix with existing base to the depth shown on the plans.

1. **Flexible Base.** Use existing base and add new flexible base as required in accordance with Item 247, “Flexible Base,” and details shown on the plans to achieve required section.

2. **Lime-Stabilized Base.** Use existing base, add new flexible base, and stabilize with a minimum lime content of 3% by weight of the total mixture. Construct in accordance with Item 260, “Lime Treatment (Road Mixed),” and Item 263, “Lime Treatment (Plant Mixed),” and details shown on the plans to achieve required section.

3. **Cement-Stabilized Base.** Use existing base, add flexible base, and stabilize with a minimum cement content of 4% by weight of the total mixture. Construct in accordance with details shown on the plans and Item 275, “Cement Treatment (Road Mixed),” or Item 276, “Cement Treatment (Plant Mixed),” to achieve required section.

4. **Asphalt-Stabilized Base.** Place asphalt-stabilized base in accordance with details shown on the plans and Item 292, “Asphalt Treatment (Plant Mix),”or Item 340, “Hot Mix Asphalt,” to achieve required section.

5. **Limestone Rock Asphalt.** Place in accordance with Item 330, “Limestone Rock Asphalt Pavement,” and details shown on the plans to achieve required section.

D. **Curing Base.** Cure in accordance with the appropriate Item unless otherwise directed or approved. Maintain completed base sections until surfacing.

E. **Surfacing.** Apply surfacing with materials as shown on the plans to the completed base section.

1. **Prime Coat.** Protect the compacted, finished, and cured flexible, lime-stabilized, or cement-stabilized base mixtures with a prime coat of the type and grade shown on the plans. Apply the prime coat at the rate shown on the plans.

2. **Surface Treatments.** Apply surface treatment with the type and grade of asphalt and aggregate as shown on the plans in accordance with Item 316, “Surface Treatments.”

3. **Asphalt Concrete Pavement.** Apply tack coat of the type and grade and at the rate shown on the plans unless otherwise directed. Construct in accordance with Item 330, “Limestone Rock Asphalt Pavement,” Item 334, “Hot-Mix Cold-laid Asphalt Concrete Pavement,” or Item 340, “Hot Mix Asphalt,” to achieve required section.

F. **Finishing.** Regrade and compact disturbed topsoil. Clean roadway surface after repair operations.

351.5. **Measurement.** This Item will be measured by the square yard. In areas where material is excavated, as directed, to depths greater than those specified on the plans, measurement will be made by dividing the actual depth of such area by the plan depth.
and then multiplying this figure by the area in square yards of work performed. Calculations for each repaired area will be rounded up to the nearest 1/10 sq. yd. At each repair location, the minimum area for payment purposes will be 1 sq. yd.

For Contracts with callout work, the minimum quantity per callout is 5 sq. yd., unless otherwise shown on the plans.

351.6. **Payment.** The work performed and materials furnished in accordance with this Item and measured as provided under “Measurement” will be paid for at the unit price bid for “Flexible Pavement Structure Repair” of the specified depth. This price is full compensation for scarifying, removing, hauling, spreading, disposing of, and stockpiling existing pavement structure; removing objectionable or unstable material; furnishing and placing materials; maintaining completed section before surfacing; applying tack or prime coat; hauling, sprinkling, spreading, and compacting; and equipment, labor, tools, and incidentals.