

**MISSISSIPPI
STANDARD SPECIFICATIONS
FOR
ROAD AND BRIDGE
CONSTRUCTION**



**MISSISSIPPI
DEPARTMENT OF TRANSPORTATION
JACKSON**

2017 EDITION

abutment walls, grout, tie rods, nuts, washers, bearing pads and other appurtenances will not be measured for separate payment.

804.05--Basis of Payment. Concrete will be paid for at the contract unit price per cubic yard for the class or classes specified, complete in place. Prestressed concrete beams and plank will be paid for at the contract unit per linear foot of specified size and type.

Prestressed concrete voided slab units and precast caps will be paid for at the contract unit price per each for the specified types and sizes, complete in place and accepted, which price shall be full compensation for furnishing, hauling and erecting the members, including all prestressing reinforcement and other reinforcement in the members. Payment at the contract unit price shall be full compensation for furnishing all materials, equipment, tools, labor and incidentals necessary to complete the work.

Payment will be made under:

804-A: Bridge Concrete, Class ____	- per cubic yard
804-B: Box Bridge Concrete, Class ____	- per cubic yard
804-C: <u>Length</u> Prestressed Concrete Beam, Type ____	- per linear foot
804-D: <u>Length</u> Prestressed Concrete Plank	- per linear foot
804-E: <u>Length</u> Prestressed Concrete Voids Slab, <u>Size</u> Interior	- per each
804-F: <u>Length</u> Prestressed Concrete Voids Slab, <u>Size</u> Exterior	- per each
804-G: <u>Length</u> Precast Concrete Caps, End Unit with Wall	- per each
804-H: <u>Length</u> Precast Concrete Caps, Intermediate Unit	- per each

SECTION 805 - REINFORCEMENT

805.01--Description. This work consists of furnishing and placing steel reinforcement for bridges in accordance with these specifications and in reasonably close conformity with the dimensions, bending, spacing, and other requirements shown on the plans.

805.02--Materials. Materials used shall conform to the requirements of Section 711.

Supports for bar reinforcement shall meet the requirements of Subsection 711.02.7.

805.02.1--Order Lists. Before ordering reinforcement, all order lists and bending diagrams shall be furnished by the Contractor for the approval of the Engineer, and no materials shall be ordered until the lists and bending diagrams have been approved. All expense incident to the revision of material furnished in accordance with such lists and diagrams to make it comply with the design drawings shall be borne by the Contractor.

805.03--Construction Requirements.

805.03.1--Protection of Material. Steel reinforcement shall be protected at all times from damage. Damaged material will not be approved for use in the work. When placed in the work and immediately prior to placing the concrete, the reinforcement shall be free from dirt, oil, paint, grease, and other foreign substances and shall be free of loose or thick rust or millscale that could impair bond of the steel with the concrete.

805.03.2--Fabrication. Bent bar reinforcement shall be cold bent to the shapes shown on the plans, and unless otherwise provided on the plans or by authorization, bends shall be made in accordance with Subsection 711.02. Bars partially embedded in concrete shall not be field bent except as shown on the plans or permitted.

Bar reinforcement shall be bundled, tagged and marked in accordance with Code of Standard Practice of the Concrete Reinforcing Steel Institute.

805.03.3--Placing and Fastening. Reinforcement shall be accurately placed in the positions shown on the plans and firmly held during the placing and setting of concrete. Bars shall be tied at all intersections. Where spacing is less than one foot in each direction, alternate intersections shall be tied.

Distances from the forms shall be maintained by means of stays, blocks, ties, hangers, or other approved supports. Blocks for holding reinforcement from contact with the forms shall be precast mortar blocks of approved shape and dimensions or metal chairs, reference Subsection 711.02.7. Layers of bars shall be separated by precast mortar blocks or by other equally suitable devices. The use of pebbles, pieces of broken stone or brick, metal pipe, and wooden blocks will not be permitted. The clear distance between parallel bars, except in columns and between multiple layers of bars in beams, shall not be less than the nominal diameter of the bars, $1 \frac{1}{3}$ times the maximum size of the coarse aggregate, nor one inch.

Where reinforcement in beams or girders is placed in two or more layers, the clear distance between layers shall not be less than one inch, and the bars in the upper layers shall be placed directly above those in the bottom layer.

In spirally reinforced and in tied columns, the clear distance between longitudinal bars shall not be less than $1 \frac{1}{2}$ times the bar diameter, $1 \frac{1}{2}$ times the maximum size of the coarse aggregate, nor $1 \frac{1}{2}$ inches.

The clear distance between bars shall also apply to the clear distance between a contact splice and adjacent splices or bars.

Reinforcement in any member shall be inspected and approved by the Engineer before the placing of concrete begins. Concrete placed in violation of this provision may be rejected and removal and replacement of concrete and reinforcement required.

If fabric reinforcement is shipped in rolls, it shall be straightened into flat sheets before being placed.

805.03.4--Splicing of Bars. All reinforcement shall be furnished in the full lengths indicated on the plans. Except when shown on the plans, Splicing of bars will not be