Supplemental Specification 901-S-423-1 Ground-In Rumble Strips

OFFICE OF STATE AID ROAD CONSTRUCTION MISSISSIPPI DEPARTMENT OF TRANSPORTATION

DATE: July 01, 2005

SUBJECT: **GROUND-IN RUMBLE STRIPS**

The MISSISSIPPI STANDARD SPECIFICATIONS FOR STATE AID ROAD AND BRIDGE CONSTRUCTION 2004 EDITION is hereby amended as follows: At the bottom of page 4-75 change "Sections S-414 thru S-499 Blank." to "Sections S-414 thru S-422 Blank." And add the following:

SECTION 901-S-423 - GROUND-IN RUMBLE STRIPS

901-S-423.01--Description. This work consists of grinding rumble strips at the locations indicated on the plan, in accordance with the details on the plans, and the requirements set out herein.

901-S-423.02--Blank.

901-S-423.03--Construction Requirements.

901-S-423.03.1--Equipment. The equipment shall consist of a rotary type cutting head capable of cutting rumble strips to the dimensions shown on the plans. The cutting head shall have the cutting tips arranged in such pattern as to provide a relatively smooth cut of approximately 1/8 of an inch between peaks and valleys. The cutting head(s) shall be on its own independent suspension from that of the power unit to allow the tool to self align with the slope of the shoulder and/or any irregularities in the shoulder surface.

The finished rumble strips shall be cut to the dimensions as shown on the plans within the allowable tolerance and be perpendicular to the direction of travel. The rumble strips shall be placed in relation to the roadway according to the patterns shown on the plans.

Adequate back-up equipment such as mechanical sweeper/vacuum, water truck, etc. and personnel shall be provided to remove all grindings from the shoulder.

901-S-423.03.2--Construction Details. The cutting tool shall be equipped with guides to provide a consistent alignment of each cut in relation to the edge line and to provide uniformity and consistency throughout the project. The alignment of the cuts shall not deviate from the path of the edge line.

When the contract requires shoulder paving, the rumble strips shall be cut into the finished shoulder after the final course has been placed, otherwise, rumble strips shall be cut into the existing shoulder material. debris/grindings generated from the cutting shall be picked up and removed on a daily basis by use of a sweeper/vacuum or other method approved by the Engineer. The shoulder shall be cleaned prior to opening the adjacent lane to traffic. Any other method of cleaning debris from the shoulder or roadway other than picking up shall be approved by the Engineer prior to beginning construction.

The Contractor shall demonstrate to the Engineer the ability to achieve the desired surface inside each depression without tearing or snagging the asphalt prior to beginning the work. Areas damaged by the Contractor's operations shall be corrected and/or repaired as directed by the Engineer at no additional cost to the Project.

When placed on concrete shoulders, the Contractor shall adjust the spacing of the rumble strips to ensure that the depressions are not cut across a concrete shoulder joint.

This construction operation will encroach on the lane adjacent to the shoulder receiving the rumble strips. Therefore, construction on roadways under traffic will either require a lane closure or be considered as a moving operation. Traffic control shall be handled in accordance with the appropriate standard drawings shown in the plans or contract documents.

<u>901-S-423.04--Method of Measurement</u>. Rumble strips, ground-in, completed in accordance with the plans and specifications, will be measured by the mile, which price shall be full compensation for all materials, equipment, tools, disposal of grinding debris, any associated traffic control, and all incidentals necessary to complete the work. Length of measurement will start at the beginning of a continuous series of rumble strips and will terminate at the end of the continuous series. The length used to measure rumble strips will be the horizontal length computed along the stationed control line. Each shoulder on which rumble strips have been ground will be measured separately with the measurements from each shoulder combined to obtain the pay length for rumble strips.

<u>901-S-423.05--Basis of Payment</u>. Rumble strips, measured as prescribed above, will be paid for at the contract unit price per mile, which price shall be full compensation for completing the work.

The price for rumble strips shall include the cost of any required maintenance of traffic and protective services.

Payment will be made under:

901-S-423-A: Rumble Strips, Ground-In

- per mile

Sections S-424 thru S-499 Blank