March 21, 2007

MEMORANDUM

TO: All District Engineers/Managers
    All Division Directors

FROM: Marvin G. Murphy, P. E., P. L. S.
      State Highway Engineer

SUBJECT: PAVED SHOULDERS GUIDELINES

Effective immediately ALL PROJECTS for new construction, widening and resurfacing will include Hot Mix Asphalt (HMA) paved shoulders as outlined below.

1. The paved shoulder width for new construction on Freeways and Divided Arterials will be in accordance with the project plans.

2. Paved shoulders will be provided on all two lane Arterial, Collector and Local Road construction and resurfacing projects.

3. Paved shoulders should not be confused with road or pavement widening. It is essential that edge line striping be placed at the previous pavement edge.

4. The maximum paved shoulder width is to be 8 ft. It is not intended to remove and reset guardrail to achieve the maximum width. Variable widths are to be considered where predominately narrow shoulders have wide sections 500 ft. or greater in length. The width transition should be achieved at a taper rate based on average driving speed for the area (speed:1). Any remaining shoulder width, outside the 8 ft. paved width, is to be stabilized and existing shoulder aggregate can be used for this purpose.

5. Narrow shoulders are to be paved in accordance with the TYPICAL SECTIONS AND RELATED DETAILS, dated 2000, page 11, Resurfacing Roadway With Narrow Shoulders.
6. The HMA thickness for paved shoulders is to be 4" minimum including leveling course and overlays for resurfacing projects.

7. The pavement cross slope is to be maintained across shoulders 4 ft. and less. Shoulders wider than 4 ft. should be constructed with a 0.04 slope in tangent sections and a cross slope matching the lane slope in superelevated sections. A 0.04 breakover should be provided at the edge of lane, high side of superelevation.

8. Paved shoulders are to be provided for roads less than 16 ft.; however, the total maximum width, including paved shoulders, will be no greater than 15.5 ft.

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