Memorandum

To: e-Distribution
   See Below

From: Lesly Tribelhorn, P.E.
       Highways Engineer

Date: February 19, 2016

Subject: Taper Rates for Transitioning Shoulder Widths

This memo is intended to provide guidance for transitioning shoulder widths on MDT projects. In the absence of guidance specific to shoulder width transitions, designers have typically used lane taper rates that are intended for the movement of traffic. These rates are considered unnecessarily long for shoulders, and often result in extended distances of narrowed shoulders into and out of width restrictions (i.e. narrow structure). Conversely, having no, or very short, transition lengths is undesirable as well.

In General, the following taper rates should be used for shoulder width transitions:

- For design speeds of 45 mph or greater, 25:1
- For design speeds less than 45 mph, 8:1

Adjustments to the rates provided may be appropriate to fit site constraints, or reduce the number of typical sections on projects with multiple changes occurring over short distances. The Road Design Manual will be updated to reflect this new guidance.

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