



**Regional Asphalt Seminars
Pavement Wedge Guidelines and Specifications**

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Pavement Wedge Guidelines and Specifications

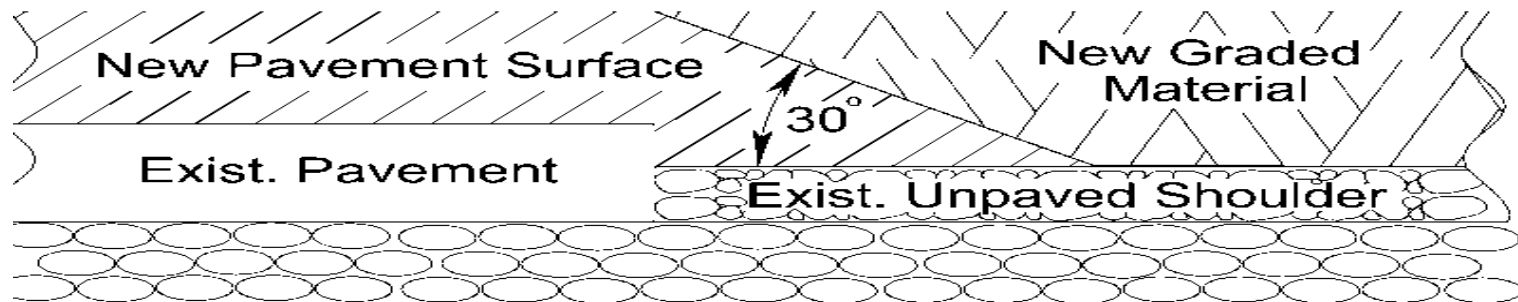
- **Pavement Wedge (also known as Safety Edge) is a strategy of the first Every Day Counts initiative launched by the FHWA in the fall of 2010.**
- **This initiative also included other techniques or programs such as warm mix asphalt use, something that VDOT and Virginia Asphalt Association members had already been engaged in.**
- **Our joint work in developing engineering , contract document guidance, and special provisions for construction began in spring of 2011 and has been ongoing with several iterations of the documents being prepared and reviewed.**
- **The latest round of comments are just wrapping up.**
- **It is the intent to move forward with use of this Pavement Wedge doctrine and technique, on applicable projects, in the development of this year's paving schedules and stand alone projects.**

Pavement Wedge Guidelines and Specifications

- Providing a pavement shoulder wedge is intended to enable drivers who drift off the highway to return to the road safely. Rather than a vertical drop-off, the wedge provides a sloped surface at the edge of pavement, providing a strong, durable transition for vehicles. Even at higher speeds, a wedge helps make it easier for a vehicle to safely return to the paved roadway.
- The pavement shoulder wedge also provides a means of strengthening and stabilizing the pavement edge to aid in reducing maintenance cost and longer term pavement performance.
- Pavement shoulder wedge shall be considered and deployed for Asphalt Concrete Pavement on all highway construction, particularly new construction projects, and reconstruction projects. It should also be used on overlay projects or trench widening that is accompanied by pavement overlay where deemed appropriate when the following conditions are met:
 - **Paved Shoulder Width 4 feet or less**
 - **Specified Final asphalt surface lift thickness greater than 2 inches**

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- The angle of the bevel is critical for the pavement shoulder wedge to function properly. Measured from level, the bevel is 30 degrees with an equivalent run to rise ratio of 10³/₈ to 6. Note: the 30 degree angle does not account for surface slope. Existing surface slopes range from 2 to 8 percent, which add an additional 1.1 to 4.6 degrees to the bevel angle when measured from level. The resultant angle is within the 30 to 35 degree recommendation from the FHWA.
- It is our expectation that paving equipment will be adapted to furnish the 30 degree bevel.



Not To Scale

General Pavement Shoulder Wedge Detail

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- **Prior to placing Asphalt Concrete Pavement Surface for overlay projects only, shoulder preparation may be required where the pavement shoulder wedge will be placed. Details for shoulder preparation work and work sequences will be clearly shown in the contract documents if, and as may be, required. The work performed, as well as measurement and payment will be generally guided by the special provision for Shoulder Rehabilitation and Restoration (7/12/2010). Other pay items that may also be required should be detailed as well.**
- **Pavement Shoulder Wedge installation will be included in the price bid for asphalt.**
- **Pavement Shoulder Wedge Preparation will be paid for using special provision items for Shoulder Rehabilitation and Restoration (7/12/2010).**

Questions?

