



Temporary Portable Rumble Strips – One Array

Wisconsin Department of Transportation / Bureau of Traffic Operations

In 2017, to enhance the safety of highway workers and motorists, the Wisconsin Department of Transportation (WisDOT) implemented the use of temporary portable rumble strips (TPRS) on all static flagging operations that are in place for longer than two hours. The rumble strips provide an audible and vibratory warning to motorists entering a construction zone and have helped to reduce speeds in Wisconsin.

The policy developed in 2017 was based off a study completed by WisDOT that looked at several flagging operations to determine the effectiveness of the strips. Based on the results, the policy required TPRS be used during all static flagging operations where they were working for 2 hours or more. Advanced signs alert motorists of the upcoming work zone and presence of the temporary rumble strips. This policy required six rumble strips (2 arrays consisting of 3 strips each) to be placed at each end of the work zone which has since been updated. A standardized special provision was also developed, 643-020.

During the last year, WisDOT heard several concerns from internal staff as well as external partners with regards to the TPRS policy. Below is a list of some of those concerns:

1. Interpretation of what a static flagging operation is and what a moving operation is.
2. Difficulty in determining how a contractor would complete the work, whether static or moving, which then made it difficult to determine when to include TPRS in the contract.
3. Difference between two arrays and one array (6 TPRS or 3 TPRS).
4. Placement of arrays in advance of the flagger.

Based on these concerns, WisDOT decided to update the policy and make TPRS required for all flagging operations, static or moving, to eliminate any issues with determining when to use them. The department also decided to revise the requirement from two arrays to one array at each end of the flagging operation. This change in array requirement is based on information mentioning there is no significant difference in speeds between the number of arrays used. Since there is not a significant difference between one array and two arrays, the department decided to update the policy to require one array to get better compliance and consistency with the use of the TPRS for all flagging operations.

Effective with the December 2019 letting, this policy will be in place for improvement projects. **This policy will be implemented for county work starting in January 2020.** A revised standard detail drawing was published and can be found at the link below that shows one array as well as the new placement locations.

<https://wisconsindot.gov/rdwy/sdd/sd-15c12.pdf#sd15c12>