

From Kristin Schuster, Engineer of Design

MDOT
Design Division
PO Box 30050
Lansing, MI 48909
Phone/517-335-4421
Fax/517-241-4619
www.michigan.gov/mdot

Index: Road Standard Plan
R-112-J, Road Design
Manual Section 6.05.11,
FUSP 20SP-822A, PASP
20TM822(A315)

*This advisory is superseded
by any subsequent revisions
to the references listed in
this index.*

Questions regarding this
Design Advisory should be
directed to:

Mary Bramble
Pavement Markings
517-335-2837
BrambleMI@michigan.gov

Better
by DESIGN

Sinusoidal Corrugations

Sinusoidal corrugations (mumble strips) are an alternative to traditional rumble strips that generate less exterior noise. They are a continuous sinewave pattern milled and slightly recessed into the pavement that adequately alert drivers through noise and vibrations.

Sinusoidal corrugations are now standard for non-freeway shoulders.

- Requires Frequently Used Special Provision 20SP-822A
- See Special Detail/Standard Plan R-112-J
- Optional layout for centerlines, edgelines, and freeway shoulders
 - Guidance on use have been added to Section 6.05.11 of the Road Design Manual
 - Requires Previously Approved Special Provision 20TM822(A315)

Implementation is effective immediately.

References:

- [Road Standard Plan R-112-J](#)
- [Road Design Manual Section 6.05.11](#)
- [FUSP 20SP-822A](#)
- [PASP 20TM822\(A315\)](#)