

System Operations Advisory

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Channelizing Devices In Work Zones

All traffic control devices used in work zones are required to meet the requirements of Part 6 of the Michigan Manual on Uniform Traffic Control Devices (MMUTCD). The MMUTCD contains references to other manuals to be followed by both the designer of the Temporary Traffic Control Plan and the contractors who implement the plan.

Federal regulations also require that all roadside appurtenances such as channelizing devices and all other work zone hardware be compliant with NCHRP Report 350: Recommended Procedures for the Safety Performance Evaluation of Highway Features.

In addition to usage requirements contained in the MMUTCD, the following usage criteria should also be followed when determining channelizing device usage:

Cones:

May be used for all daytime operations where all traffic restrictions are removed from the site each night.

- Prohibited for use at night.
- No retro-reflectorization is required.
- Required to be a minimum of 28 inches in height for all roadways.

Exception: 18-inch cones are permitted for the protection of uncured pavement markings where no lane closure is used.

Use of other devices in lieu of cones as called for in the contract documents, such as 42-inch channelizing devices or plastic drums may be permitted at no additional cost to the contract.

Tubular Markers:

Use of Tubular Markers should only be considered for use after all other channelizing devices have been ruled out.

May be used where more permanent delineation (attached to the pavement) may be required, where the use of portable devices would not perform over long periods of time. Required to be a minimum of 36 inches in height for all roadways. Required to have a minimum diameter of two inches, with larger diameters desirable. Reflective sheeting requirements shall be two three-inch wide white bands, placed at maximum of two inches from the top with a maximum of six inches between the bands.

42-inch Channelizing Devices:

Recommended for use in Capital Preventative Maintenance (CPM) Projects that are Chip Seal, Micro-Surface and Crack Seal applications. If cones are specified in the contract, use of the 42-inch channelizing devices may be permitted at the expense of the contractor.

Recommended for use in all pavement **marking contracts where lane closures are required to** install the pavement markings:

- May be used in lieu of a standard cone for day work.
- May be used for day or night work.

Exception: Prohibited for use in taper sections at night. Spacing for night work in tangent sections shall be reduced to 50 feet, regardless of the posted speed.

May be allowed for any duration of work where the use of a plastic drum would restrict proposed lane widths to less than 11 feet, including shy distance.

Prohibited for use when the contractor requests to replace plastic drums with 42-inch channelizing devices unless changes in proposed construction will restrict the lane widths as described above.

- Prohibited for use when work operations are short term, intermediate or long term where no lane width restrictions exist as described above.
- Prohibited for use on shoulder closures.
- Prohibited for use to delineate Temporary Traffic Signal Trailers, Message Boards or Arrow Boards.
- Prohibited for use to delineate roadside materials or equipment.
- Use of lights on the device is prohibited.

Usage of 42-inch channelizing devices that does not meet the above criteria or is prohibited must receive prior approval by the Region Engineer and the Engineer of Operations.

Vertical Panels:

Prohibited from use, no exceptions.

Directional Indicator Barricades:

Prohibited from use, no exceptions.

Barricades:

Type I barricades are prohibited from use, no exceptions.

Type II barricades are prohibited from use, no exceptions.

Plastic Drums:

Recommended for use in all work zone applications where there are lane widths of 11 feet or more.

Exception: See 42-inch channelizing devices.