

# Maintenance Advisory

MA 2005-01  
May 20, 2005

From Jon Reincke, Acting Engineer of Maintenance

MDOT

Maintenance Support Area  
6333 Old Lansing Road  
Lansing, MI 48917-8504  
Phone / 517-322-3300  
Fax / 517-322-3385  
[www.michigan.gov/mdot/](http://www.michigan.gov/mdot/)

For questions regarding this advisory, contact:

Dale Spencley  
Operations Support Eng.  
(517) 322-3381  
[spencleyd@michigan.gov](mailto:spencleyd@michigan.gov)

Or

Gary Mayes  
Pavement & Roadside Eng  
(517) 322-3315  
[mayesg@michigan.gov](mailto:mayesg@michigan.gov)



jwr:drs

## Work Zone Safety

Due to legislative changes, new federal regulations and the department's increased effort to promote uniformity within work zones, this premiere Maintenance Advisory is being sent to all maintenance personnel. It is intended to give guidance on the proper use of traffic control devices when working within our right-of-way. This advisory also provides information on signs that are no longer allowed, as well as, appropriate sign materials and crash worthiness standards for traffic control devices.

### **Public Act 315 of 2003, Amended Public Act 300 of 1949 (MCL 257.79d & MCL 257.320(9))**

This law went into effect April 8, 2004, and defines a work zone in the state of Michigan. Some work zones will now require additional signing in order to be in compliance with the law. All lane closures and most shoulder closures are now required to have "WORK ZONE BEGINS" and "END ROAD WORK" signs to allow for prosecution in the event that a worker is injured or killed by a motorist. Additionally, a speed limit sign is required to be posted in work zones whenever the "WORK ZONE BEGINS" and "END ROAD WORK" signs are required even if there is no reduction in speed.

### **Public Act 314 of 2003, Amended Public Act 300 of 1949 (MCL 257.601b (4))**

This law also went into effect April 8, 2004. It mandates that "Traffic Fines Doubled in Work Zones" and "Injure/Kill a Worker \$7500+ 15 Years" signs shall be placed according to the Maintenance Work Zone Traffic Control Guidelines.

### **Signs No Longer in Use**

There are several signs that have been eliminated from the current edition of the Michigan Manual of Uniform Traffic Control Devices, 1994 edition, Part 6, revised January 2001. The following signs are to be discontinued from use immediately:

"CONSTRUCTION AHEAD": This should be replaced with "ROAD", "SHOULDER" or "UTILITY WORK AHEAD" signs. This became effective in 2001.

“MEN WORKING”: This should be replaced with “ROAD”, “SHOULDER” or “UTILITY WORK AHEAD” signs. This became effective in 1981.

The worker symbol sign, W21-1A, was removed from the MMUTCD, Part 6, revised January 2001, but does appear in the new Federal Manual, which will be adopted by Michigan. This sign is only intended for use on low speed, low volume roads and will not be allowed on state trunkline roads.

“FLAGGER AHEAD” or Flagger Symbol Sign: This should be replaced with the current version of the Traffic Regulator sign, which has the silhouette of a person holding a stop/slow paddle. This became effective January 1, 2005.

### **Sign Materials**

Roll-up signs, which are sign faces made of soft materials, are allowed for daytime work operations only.

### **Bottom Heights of Temporary Signs**

MDOT requires a 5 foot (rural) or 7 foot (urban) minimum bottom height for the placement of all temporary signs used in work zones.

Additional documentation regarding these issues may be found in the following locations:

1. Michigan Department of Transportation (MDOT) Standard Specifications for Construction, Sections 812 and 922 or on the MDOT public website at:

[www.mdot.state.mi.us/specbook/](http://www.mdot.state.mi.us/specbook/)

2. Michigan Manual of Uniform Traffic Control Devices, 1994 Edition, Part 6, Revised, January 2001 or on the MDOT public website at:

[www.michigan.gov/documents/mmutcd\\_part\\_6\\_16693\\_7.pdf](http://www.michigan.gov/documents/mmutcd_part_6_16693_7.pdf)

3. Maintenance Work Zone Traffic Control Guidelines or on the MDOT public website at:

[http://www.michigan.gov/documents/zonecontrol\\_112912\\_7.pdf](http://www.michigan.gov/documents/zonecontrol_112912_7.pdf) (Annual Permits)

[http://www.mdot.state.mi.us/tands/Details\\_Web/mtpdfe.pdf](http://www.mdot.state.mi.us/tands/Details_Web/mtpdfe.pdf) (Individual Permits)

4. Portable Sign and Type III Barricade Design: Search Road Standard Plans R-125-C. or on the MDOT public website at:

[www.mdot.state.mi.us/design/englishstandardplans/index.htm](http://www.mdot.state.mi.us/design/englishstandardplans/index.htm)

5. Information on new work zone laws, go to:

[www.michiganlegislature.org](http://www.michiganlegislature.org)

6. Information on the National Cooperative Highway Research Program, Report 350, go to:

[http://safety.fhwa.dot.gov/roadway\\_dept/road\\_hardware/nchrp\\_350.htm](http://safety.fhwa.dot.gov/roadway_dept/road_hardware/nchrp_350.htm)

### **Crashworthy Work Zone Traffic Control Devices**

All traffic control devices in work zones must be crashworthy. This includes temporary signs, cones, drums with or without lights and Type III barricades. The requirements and criteria can be found in the National Cooperative Highway Research Program (NCHRP), Report 350. This report is intended to identify and improve safety features of traffic control devices used in the highway environment.

If there is uncertainty in the crashworthiness of the traffic control devices (i.e.: portable signs, cones, drums with or without lights and Type III barricades) in a work zone then a letter should be obtained from the supplier certifying that the devices are crashworthy and meet the NCHRP 350 requirements. If any of these devices have been built by maintenance personnel and have not been crash tested, then the device must be replaced as soon as possible by existing crashworthy designs that meet the NCHRP 350 standard.

### **Work Zone Speed Limit**

The speed limit in all MDOT work zones, where barrels or cones delineate the work zone, must be posted at 45 mph. The effective date for compliance was May 4, 2005. This change will in most cases result in the addition of at least four speed regulatory signs to our work zones. Please note that on shoulder closures where channelizing devices are used, the work zone speed limit shall be posted at 45mph. All speed limit reductions where no lanes are closed, a Traffic Control Order (TCO) is required to establish a legal speed limit. A temporary blanket TCO has been attached and is valid through 12/30/2005.

Please share this information with others in your area that are involved with maintenance of facilities and features within MDOT right-of-way. For specific questions regarding traffic control plans and requirements, please contact the local Transportation Service Center (TSC).

Sincerely,

Jon W. Reincke, P.E.  
Acting Engineer of Maintenance  
Michigan Department of Transportation

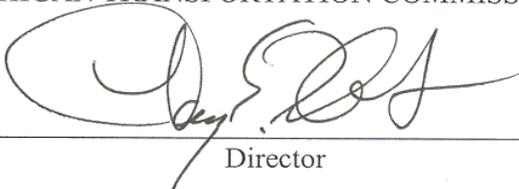
**TRAFFIC CONTROL ORDER**  
(Temporary)  
SP-T 00-03-05

By virtue of the authority vested in the Michigan Transportation Commission by 1931 PA 328, MCLA 750.497, Section 497 of the Michigan Penal Code, we hereby order the maximum speed limit in highway maintenance areas on state trunkline highways be lowered to a speed limit of forty-five (45) miles per hour, in increments of no more than 10 miles per hour whenever barrels or cones are used to delineate the work activity. The limits of this order are from a point one mile in advance of the beginning of the maintenance activity to the end of the maintenance activity.

And, that all police agencies having jurisdiction therein shall enforce said regulation only when official traffic control signs conforming to the mandate of this order have been erected.

This temporary traffic control order is effective from the start of the maintenance activity through the end of the maintenance activity. It is necessary for safe and efficient movement of vehicular and pedestrian traffic during the maintenance period of the state trunkline highway. This temporary Traffic Control Order expires December 31, 2005, and applies only to those roadways with a speed limit of fifty (50) miles per hour or higher prior to the start of maintenance.

MICHIGAN TRANSPORTATION COMMISSION

By:   
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Director

Date: 5/18/05