



December 23, 2003

TO: J. C. Lenzi, Eastern Region
Don Senn, North Central Region
Lorena Eng, Northwest Region, NB82-101
Randy Hain, Olympic Region, 47440
Don Whitehouse, South Central Region
Don Wagner, Southwest Region, S15
Dave Dye, Urban Corridors, TB85-95

FROM: Don Nelson 
DN 360-705-7801

SUBJECT: **Project Delivery Memo #03-04 - Special Warning Signs for Motorcycles**

Purpose and Direction

Background: The 2003 legislative session created the need to provide special warning signs for motorcyclists through SSB 5457. This has come as an exception to our normal philosophy and practice of signing for the **condition** of the roadway, and not for specific vehicle types. The resultant amendment to RCW 47.36.200 becomes effective January 1, 2004.

The HQ Traffic Office has responded to the legislation by adopting the motorcycle warning sign as part of the MUTCD and state amendments (WAC 468-95-315). They have developed a black on orange sign that reads "MOTORCYCLES USE EXTREME CAUTION." The new sign has been designated as W21-1701 in the Sign Fabrication Manual. Copies of the new sign detail have been sent to fabricators, and the detail will appear in the January 2004 version of the Sign Fabrication Manual. A copy of the sign detail is attached.

The Traffic Office has developed guidelines for implementing the new legislation. These guidelines will be incorporated into the next revision of the Work Zone Traffic Control Guidelines Book, M54-44. A copy of the guidelines is attached.

HQ Traffic is also developing a typical sign sequence detail, which should be available in the near future.

Types of Projects Affected: Any project where there will be grooved pavement, abrupt lane edges, steel plates, or gravel- or earth-surfaced roadways will be affected.

Direction: To be in compliance with the new legislation, the motorcycle warning signs must be incorporated, in accordance with the guidelines, while the specified road conditions exist during construction.

Value in Making the Change: The intent of the legislation is to provide additional awareness to motorcyclists of changed roadway conditions as they travel through

construction zones. Adding these signs to the traditional signs warning of unexpected roadway conditions, will minimize liability for the WSDOT and its contractors, and potentially reduce motorcycle accidents in work zones.

Action Requested

Project Development

Traffic control plans being prepared for projects under development need to include the motorcycle warning signs as appropriate. These signs will typically be considered Class B construction signs, but may be Class A if they meet the criteria outlined in Section 1-10.3(3) of the Standard Specifications. The traffic control plans may show the motorcycle warning signs in actual sequence as a note along with other warning signs that would trigger the need for motorcycle warnings such as "loose gravel," "abrupt lane edge," etc. as may be appropriate.

Contract Ad and Award

For projects currently being advertised for bids, changes to the traffic control plans, as outlined above, need to be made by addendum if it is possible to do so without impacting the scheduled bid opening. A "Notice to Contractors" should be published to remind contractors that the new state law and regulations take effect on January 1, 2004.

Construction

Projects that are under contract should incorporate this change in construction signing by change order, if it is determined there is work remaining on the contract that will create the type of roadway conditions outlined in the guidelines for use of the motorcycle warning signs.

The addition of the "MOTORCYCLES USE EXTREME CAUTION" signs to current contracts will entitle the contractor to additional compensation. These signs will typically fall into the category of Class B construction signs. It is expected that the material cost for the required number of new signs will be the limit of the compensation due the contractor. Costs for setup and takedown are normally covered by labor for traffic control payments. Any contracts that have lump-sum traffic control labor will require negotiation of the additional labor and equipment to add these signs to the sign sequence, in addition to the material costs.

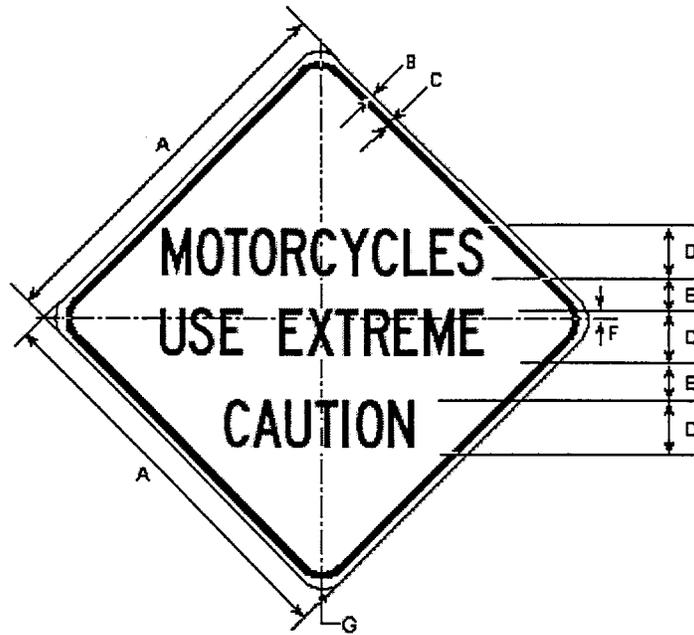
This memo is HQ Construction approval to execute this change by the Region, although this type of change would generally be within the Region authority to approve and execute.

DN:cd
KJD/HJP/JRS
Attachments

| | | |
|---------|-------------------------|--------------------------------------|
| cc/att: | John Conrad, 47316 | Region Construction Engineers |
| | Tom Baker, 47365 | Region Construction Trainers |
| | Kevin Dayton, 47354 | Region Project Development Engineers |
| | Harold Peterfeso, 47329 | Region Materials Engineers |
| | Ed Lagergren, 47344 | Region Traffic Engineers |
| | Toby Rickman, 47344 | |

W21-1701

5.03



| DIMENSIONS (MILLIMETERS) | | | | | | |
|--------------------------|----|----|------|-----|----|----|
| A | B | C | D | E | F | G |
| 900 | 16 | 22 | 125C | 75 | 25 | 56 |
| 1200 | 19 | 31 | 150C | 100 | 38 | 75 |

| DIMENSIONS (INCHES) | | | | | | |
|---------------------|-----|-------|----|---|-------|-------|
| A | B | C | D | E | F | G |
| 36 | 5/8 | 7/8 | 5C | 3 | 1 | 2 1/4 |
| 48 | 3/4 | 1 1/4 | 6C | 4 | 1 1/2 | 3 |

COLORS

LEGEND—BLACK (NON-REFL)

BACKGROUND—ORANGE

Special Warning Signs for Motorcycles (see attached detail)

The Washington State Legislature has determined that special warning signs must be provided (RCW 47.36.200) at work zones in addition to standard warning signs, to warn motorcyclists at work zone locations that are potentially hazardous to motorcycles. The following roadway conditions require the placement of sign, W21-1701 “MOTORCYCLES USE EXTREME CAUTION”:

Roadway Condition(s)

- Grooved pavement (generally during pavement planning removal)
- Abrupt lane edges (during paving & pavement removal)
- Steel plates (usually temporary utility work, may not affect WSDOT too often)
- Gravel or Earth (many operations on the roadway or off could leave this type of loose material on the roadway surface)

Standard warning signs must also be used to warn of the actual roadway condition. Some applicable standard warning signs may be:

- W21-801 “ABRUPT LANE EDGE”
- W8-7 “LOOSE GRAVEL”
- W8-2001 “GROOVED PAVEMENT”
- W21-2 “FRESH OIL”
- W8-8 “ROUGH ROAD”
- W8-1 “BUMP”

Sign W21-1701 should be installed at 1 mile spacing, throughout the work zone where the condition(s) exist, as part of a sequence of other appropriate standard warning signs (above examples) also, on 1 mile spacing.

Sign W21-1701 is not required for short duration* (up to 1 hour) work zones, emergencies or incident response operations. Other operations that have no direct impact on the roadway condition, such as:

- Mowing
- Shoulder work
- Snow & ice removal
- Debris removal

Care must be exercised during all work zone operations to not inadvertently create one or more of the above roadway conditions that may be hazardous for motorcycles.

Additional roadway cleaning may be needed to remove gravel, earth or other debris that may have been stockpiled, spilled or tracked onto the roadway surface.

* Assumes that the short duration work zone does not leave the roadway surface in one of the four conditions listed above.