September 8, 2004

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Don Senn, North Central Region  
Lorena Eng, Northwest Region, NB82-101  
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Don Whitehouse, South Central Region  
Don Wagner, Southwest Region, S15  
Dave Dye, Northwest Region, TB85-95

FROM: Don Nelson  
360-705-7101

SUBJECT: Project Delivery Memo #04-06 – Pavement Markings

Purpose and Direction

Background: It has been determined that in western Washington during periods of inclement weather, paint used for pavement markings becomes ineffective quite quickly. In the interest of providing the most visible delineation of highway pavement markings, the decision has been made to use profiled methyl methacrylate (MMA). This decision is effective immediately as outlined below. Appropriate changes to the Design Manual will be made in the next manual revision.

The purpose of this memo is to change the design standard for pavement markings in western Washington on the Interstate and selected sections of major arterial highways. The change specifies that MMA be used on all lane lines, wide lines used for delineation at ramp connections, and drop lane lines; and MMA Flat Type D be used for all symbol markings. In non-continuously illuminated sections, the profiled MMA will continue to be supplemented with Type 2 raised pavement markings (RPMs). RPMs will still be used in ramp connection areas and along highway skip line striping. The Region striping policies list the selected sections of major arterial highways where MMA will be used.

Types of Projects Affected: All projects in western Washington on the Interstate System, including I-90 to Issaquah, and selected sections of major arterial highways that will require the replacement of pavement markings.

Action Requested

Program Management
For projects that have been identified for MMA and are funded by the 2003 Transportation Funding (Nickel) Package, the cost of incorporating MMA shall be incorporated within the established budget for that project. If the inclusion of MMA does result in an overall increase to the project that will exceed the established budget, a Project Control Form can be submitted through Program Management and will be considered on a case-by-case basis.
Project Development
Incorporate MMA in contract plans for projects on the Interstate System and selected arterials in western Washington that will require the replacement of pavement markings.

Contract Ad and Award
For contracts currently being advertised for bids and that fit the description of affected projects, evaluate the ad schedule and, if appropriate, add a special provision and plan details that incorporate MMA in the contract by addendum.

Construction
Projects that are currently under contract and fit the description of affected projects should be evaluated on a case-by-case basis to determine if the change to MMA is appropriate. The evaluation should consider the potential for time extensions due to the 3 to 4 week pavement cure requirements for application of MMA. Make the substitution by change order. This memo constitutes Headquarters Construction approval of the change.

DN: cd
KJD/HJP
Attachment: Figure 830-1, Pavement Marking Material Guide, Modified

cc/att: Assistant State Design Engineers          Tom Baker
       Design Trainers                          Chris Christopher
       Region Construction Engineers            Kevin Dayton
       Region Construction Trainers             Harold Peterfeso
       Region Materials Engineers               Bill Prill
       Region Project Development Engineers     Toby Rickman
       Region Traffic Engineers                 Greg Selstead
       John Conrad                               Megan White
### Ice Chisel Snow Removal Areas

<table>
<thead>
<tr>
<th>Roadway Classification</th>
<th>Marking Type</th>
<th>Center Lines</th>
<th>Lane Lines</th>
<th>Edge Lines</th>
<th>Wide Lines</th>
<th>Special Markings</th>
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</thead>
<tbody>
<tr>
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### Steel Blade Snow Removal Areas

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<tr>
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### Rubber Blade Snow Removal Areas

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**Notes**

1. Insets are grooves ground into the pavement and filled with material, usually methyl methacrylate.
2. Plastic refers to methyl methacrylate, thermoplastic, or preformed tape.
4. See Standard Plan H-3 and H-3a for RPM applications with paint or plastic.
5. Special Markings include arrows, symbols, letters, channelizing lines, and transverse markings.
6. RRPMs refers to RPMs installed in a groove ground into the pavement.
7. Type 2 RPMs are not required with painted or plastic center or lane line in continuously illuminated sections. See Section 830.03(2).
8. MMA refers to profiled methyl methacrylate.
9. Consult Region striping policy. Figure 830-1
10. MMA refers to flat methyl methacrylate.