DATE: January 31, 2006
TO: All Assistant District Engineers
FROM: Keith Shannon, Director
       Office of Materials
PHONE: 651-779-5590
SUBJECT: Bituminous Specifications for MnDOT Projects

The Bituminous Unit has updated the bituminous specification for the 2006 construction season. The updated specification is available on the Bituminous Engineering Unit web page at http://www.mrr.dot.state.mn.us/pavement/bituminous/bituminous.asp.

Guidelines for the use of (2360) PLANT MIXED ASPHALT PAVEMENT Combined 2360/2350 (Gyratory/Marshall Design) Specification are as follows:

**Specification 2360 Gyratory Design**
Use: All traffic levels for new construction and all traffic levels for overlays.

<table>
<thead>
<tr>
<th>Mixture</th>
<th>Traffic Level</th>
<th>Traffic 20 Yr ESALs</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP</td>
<td>2</td>
<td>&lt; 1 million</td>
</tr>
<tr>
<td>SP</td>
<td>3</td>
<td>1-3 million</td>
</tr>
<tr>
<td>SP</td>
<td>4</td>
<td>3-10 million</td>
</tr>
<tr>
<td>SP</td>
<td>5</td>
<td>10-30 million</td>
</tr>
<tr>
<td>SMA*</td>
<td>6</td>
<td>&gt;10 million</td>
</tr>
</tbody>
</table>

* Consult Bituminous Office
This year’s specification requires pavement smoothness evaluation by International Roughness Index (IRI) rather than Profile Index. The designer must determine, based on the Ride Guidelines, which of the three IRI equations will be used for analysis of incentive/disincentive and include it in the Special Provisions. The decision as to which equation to use is similar to that decision process which was used for selection of Table A, B, or C under Profile Index. Ride Guidelines are available on the Bituminous Engineering Unit web page.

The PG Binder Guidelines and Design Guidelines for 2360 have been updated and are available on the Bituminous Engineering Unit web page.

The purpose of sending out this memo on a yearly basis has been to assist Materials and Design personnel in the decision of mixture design type selection i.e. Marshall or Gyratory design, as we’ve gone through transition and changes. As you can see on the previous page, Gyratory design is now the standard for all construction types and activities. Therefore, there is no longer a need to issue this memo on a yearly basis. Future memos relating to mixture design type will be issued on an as needed basis.

If you have any questions or comments regarding these guidelines, contact John Garrity (651-779-5577), Dan Boerner (651-779-5582) or myself.

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