NOTES

GENERAL: Longitudinal joints shall be used when specified on the project plans and shall be constructed as shown on this drawing in Items 451 and 452 Pavement and Item 305 Base.

The joint shall be on the centerline of the pavement unless otherwise shown on the plans. Where the pavement width exceeds 16', an additional longitudinal joint shall be introduced into the jointing details as directed by the engineer.

Tie bars shall be #5 deformed bars. A satisfactory device shall be used to hold the tie bars in proper positions or they may be installed by a mechanical installing device. Tie bars shall be centered on the longitudinal joint as nearly as practical.

BUTT JOINT: The longitudinal joint between adjoining slabs poured in separate operations shall be butt joint with hook bolts or tie bars, unless otherwise shown on the plans. Bent tie bars shall not be permitted.

TYPE D (DRILLED TIED LONGITUDINAL) JOINT: Type D joints shall be constructed in accordance with CMS 255.05. The nylon or plastic retention disc shall be clear or opaque white in color. Grout shall meet the requirements of CMS 255.02. Expansion anchors, if used, may be used in lieu of the #5 x 24" deformed bar and shall be installed according to the manufacturer's recommendations.

The use of self drilling expansion shield anchors, when used, shall not be permitted.

See sheet 2/2 for additional details.

ACCEPTABLE METHOD OF FORMING JOINT

SAWED JOINT

TYPE D (DRILLED TIED LONGITUDINAL) JOINT

BUTT JOINT w/ HOOK BOLT

BUTT JOINT w/ TIE BAR
TIE BAR OR HOOK BOLT SPACING

TABLE A

<table>
<thead>
<tr>
<th>Transverse Joint spacing</th>
<th>Number of Tie Bars per Slab</th>
<th>Max. spacing between Tie Bars</th>
<th>Minimum Offset to Transverse Joint</th>
</tr>
</thead>
<tbody>
<tr>
<td>15'</td>
<td>6</td>
<td>30&quot;</td>
<td>15&quot;</td>
</tr>
<tr>
<td>21'</td>
<td>8</td>
<td>30&quot;</td>
<td>21&quot;</td>
</tr>
</tbody>
</table>

EDGING: Edge butt joints with a thin metal edger having a radius of 1/2". Finish the free edges of the pavement with a thin metal edger having a radius of 1/8". Any impression left in the surface of the pavement by the flat part of the edging tool shall be eliminated.

HOOK BOLTS: Threaded hook bolts and alternates shall be turned to a tight fit when installed in couplings. Ensure the coupling is located on the same side of the joint as the shorter (6" +/- 1/2") hook bolt.

METAL STRENGTH: Tie bars, hook bolts assemblies, and the hook bolt alternate shall have a minimum yield strength of 40,000 psi.

SPACING: Tie bars shall not be located within 15" of any transverse joint.

Steel coupling to provide 40,000 psi yield strength.