GENERAL NOTES
1. The size, slope and type of end section, whether parallel or cross-drainage, shall be shown on the plans.
2. A longitudinal bar is required for cross-drainage sections when the span (W) is greater than 30°. Additional longitudinal bars shall be required if sloping exceeds 30° on larger end sections.
3. Safety and longitudinal bars are not required on 30° and smaller cross-drainage sections.
   - Top of Sloped End Section
   - These Sizes Are Not Normally Used for Curves by ADOT
   - Headwalls Are Normally Required for Pipe Sizes 48° and Larger

---|---|---|---

CROSS-DRAINAGE TYPE END SECTION

PARALLEL-DRAINAGE TYPE END SECTION

SIDE VIEW-CROSS DRAINAGE TYPE

SIDE VIEW-PARALLEL DRAINAGE TYPE

LONGITUDINAL BAR DETAIL

SPECIAL BAR DETAIL

FRONT VIEW-ARCHED PIPE

CORRUGATION SIZED TO FIT PIPES

SECTION B-B

METAL END SECTION FOR ARCHVED PIPES

<table>
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<tr>
<th>Equivalent Diameter (in)</th>
<th>Minimum Thickness (in)</th>
<th>Dimensions (in)</th>
<th>L Dimensions (in)</th>
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<td>8</td>
<td>0.040</td>
<td>12</td>
<td>9</td>
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</table>

For All Concrete Pipes TYPE 3 CONNECTION

For 30° Diameter and Larger Circular Pipes, and All Rounded Pipes TYPE 2 CONNECTION

Tapered Sleeve Shell Be 12 Gauge Smooth Galvanized Steel

Edge of Sidewall Sheet Rolled Tight Against Rod

Minimum ¾" Diameter Galvanized Steel Rod or 4x4 Galvanized Wood

Kenneth A. Cooper

Arizona Department of Transportation

Roadway Design Plan Detail

J. C. Cooper

TRAC NO. __ OF __

11/14/2006