NOTES:

1. MINIMUM COVER HEIGHTS ARE BASED ON LIVE LOADING
   CALCULATIONS PER AASHTO LRFD SECTION 12. VEHICLE
   LOADS ARE BASED UPON DRIVING OVER THE PIPE WHILE NOT
   PERFORMING OPERATIONAL TASKS.

2. COVER HEIGHTS DO NOT TAKE INTO CONSIDERATION
   POTENTIAL RUTTING OF DRIVE SURFACE. BACKFILL MATERIAL
   IS ASSUMED FULLY COMPACTED TO SURFACE.

3. IF MINIMUM COVER CANNOT BE ACHIEVED, IT IS
   RECOMMENDED TO PERFORM PERIODIC DEFLECTION
   EVALUATIONS TO ENSURE PIPE ROUNDNESS. THE USE OF
   STEEL PLATES, MOUNDING, OR TEMPORARY FILL MAY BE
   REQUIRED TO DISTRIBUTE VEHICLE LOADING.

4. CONTACT YOUR LOCAL ADS REPRESENTATIVE WHEN
   VEHICLES ENCOUNTERED IN THE FIELD EXCEED THE
   MAXIMUM LOADINGS INCLUDED IN THE TABLE. VEHICLES
   LISTED IN THE TABLE ARE FOR REFERENCE AND
   COMPARISON PURPOSES.

5. REFER TO STANDARD STD-101 & STD-101B FOR
   RECOMMENDED INSTALLATION PRACTICES.

<table>
<thead>
<tr>
<th>VEHICLE</th>
<th>VEHICLE DESCRIPTION</th>
<th>MINIMUM TIRE</th>
<th>TANDEM AXLE LOAD lbs.</th>
<th>PIPE DIAMETER</th>
<th>TEMPORARY MINIMUM COVER HEIGHTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>BOBCAT S650</td>
<td>SKID-STEER</td>
<td>14-17.5</td>
<td>10,237 (4643kg)</td>
<td>12&quot;-48&quot;*</td>
<td>3&quot; (76mm)</td>
</tr>
<tr>
<td>ECONOLINE MG6117E</td>
<td>6-TON TRAILER (GVWR)</td>
<td>235R80-16</td>
<td>13,800 (6260kg)</td>
<td>12&quot;-48&quot;*</td>
<td>6&quot; (152mm)</td>
</tr>
<tr>
<td>KOMASTU GD655-6</td>
<td>GRADER</td>
<td>17.5-R25</td>
<td>30,468 (13620kg)</td>
<td>12&quot;-48&quot;*</td>
<td>9&quot; (229mm)</td>
</tr>
<tr>
<td>CAT 16M3</td>
<td>GRADER</td>
<td>23.5-R25</td>
<td>58,753 (26650kg)</td>
<td>12&quot;-60&quot;*</td>
<td>12&quot; (305mm)</td>
</tr>
<tr>
<td>CAT 730C</td>
<td>ARTICULATED TRUCK</td>
<td>23.5-R-25</td>
<td>74,538 (33810kg)</td>
<td>12&quot;-60&quot;*</td>
<td>15&quot; (381mm)</td>
</tr>
<tr>
<td>KOMATSU HM400-5</td>
<td>ARTICULATED TRUCK</td>
<td>29.5-R-25</td>
<td>115,288 (52294kg)</td>
<td>18&quot;-60&quot;*</td>
<td>21&quot; (533mm)</td>
</tr>
</tbody>
</table>

* COVER OVER 60" (1500mm) PIPE SHOULD BE NO LESS THAN 6" (152mm)