**Notes:**
- Provide one water bowl or $W_A$ length of water trough for every 25 - 30 animals.
- Provide minimum 3" water depth at animal drinking location.
- Provide minimum 3 - 5 gallons per minute water supply delivery to each water location.
- Supply each water location with a separate supply pipe (1" minimum) and shut-off valve.
- Install water meter to allow monitoring of intake for each production group.
- Allow easy quick drainage for cleaning of water vessel.
- Clean water vessel daily.
### Suggested Water Source Access Dimensions for Dairy Calves and Heifers

<table>
<thead>
<tr>
<th>Weight (lbs)</th>
<th>Vessel Rim Height ($H_R$) (in)</th>
<th>Width of Minimum Standing Space per Animal ($W_A$) (in)</th>
<th>Length of Minimum Standing Space per Animal ($L_A$) (in)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Weaned calves</td>
<td>18 - 20</td>
<td>13</td>
<td>48</td>
</tr>
<tr>
<td>300 - 500</td>
<td>22 - 24</td>
<td>15</td>
<td>48</td>
</tr>
<tr>
<td>500 - 700</td>
<td>25 - 27</td>
<td>17</td>
<td>54</td>
</tr>
<tr>
<td>700 - 900</td>
<td>27 - 29</td>
<td>19</td>
<td>66</td>
</tr>
<tr>
<td>900 - 1100</td>
<td>28 - 30</td>
<td>22</td>
<td>72</td>
</tr>
<tr>
<td>1100 - 1300</td>
<td>30 - 32</td>
<td>24</td>
<td>84</td>
</tr>
</tbody>
</table>

Note:
1. Increasing the distance between the lip and water level can discourage birds from perching to drink. Be sure animals can still drink conveniently.

WATER STATIONS FOR DAIRY HEIFERS

Graves, Tyson, McFarland, Wilson
Date: 02/27/01
Sheet #4 of 4

No. DIP 842
Note:
1. Increasing the distance between the lip and water level can discourage birds from perching to drink. Be sure animals can still drink conveniently.
Water Stations with Barrier

Plan View

Notes:
① Water stations in bedded pack and weaning calf shelters are placed at the edge of the resting area. Plywood, sheet metal, mesh or close rail fences are placed on three sides to allow access from the scrape alley only. This aids in maintaining clean animals, a clean resting space and reduces bedding usage.

② The height of the water vessel rim and set back from the feed alley must be coordinated to allow the smallest animal in the pen convenient access to water. As set back increases $H_R$ must decrease.

③ When water vessels are shared between two groups the length of the unit and height and set back must accommodate animal access from both sides of the divider gate and gate post.

④ Pack divider gates that only need to swing in one direction can be mounted on a corner post of the barrier assembly.

⑤ To allow pack divider gate to swing 180° an additional post is placed to allow the gate to clear both corner posts.