CONCRETE FOUNDATION DETAILS

TYPE A
FOR GROUND MOUNTED CONTROLLER CABINET
AND UPS BATTERY CABINET

TYPE C
FOR GROUND MOUNTED CONTROLLER CABINET

TYPE D
FOR GROUND MOUNTED CONTROLLER CABINET

All dimensions are in inches (millimeters) unless otherwise shown.

Illiinois Department of Transportation

January 1, 2021
APPROVED
ENGINEER OF DESIGN AND ENVIRONMENT

1-1-15 (Sheet 1 of 2)

DATE	REVISIONS
1-1-21	Revised anchor rod end in
Type E detail
1-1-11	Revised TYPE E detail.

STANDARD 878001-11
For a revised design if other conditions are encountered.

The Bureau of Bridges & Structures should be contacted for boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted if revised design or other conditions are encountered.

Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by

<table>
<thead>
<tr>
<th>Mast Arm Length</th>
<th>Foundation Depth</th>
<th>Foundation Diameter</th>
<th>Spiral Diameter</th>
<th>Quantity of Rebars</th>
<th>Size of Rebars</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 30' (9.1 m)</td>
<td>20'-0&quot; (6.0 m)</td>
<td>30 (750)</td>
<td>24 (600)</td>
<td>8</td>
<td>6 (12)</td>
</tr>
<tr>
<td>Greater than or equal to 30' (9.1 m) and less than 40' (12.2 m)</td>
<td>23'-0&quot; (6.9 m)</td>
<td>30 (750)</td>
<td>24 (600)</td>
<td>8</td>
<td>6 (12)</td>
</tr>
<tr>
<td>Greater than or equal to 40' (12.2 m) and less than 50' (15.2 m)</td>
<td>33'-0&quot; (10.0 m)</td>
<td>36 (900)</td>
<td>30 (750)</td>
<td>12</td>
<td>7 (22)</td>
</tr>
<tr>
<td>Greater than or equal to 50' (15.2 m) and up to 55' (16.8 m)</td>
<td>35'-0&quot; (10.7 m)</td>
<td>36 (900)</td>
<td>30 (750)</td>
<td>12</td>
<td>7 (22)</td>
</tr>
<tr>
<td>Greater than or equal to 55' (16.8 m) and less than 65' (19.8 m)</td>
<td>62'-0&quot; (18.9 m)</td>
<td>42 (1060)</td>
<td>36 (900)</td>
<td>16</td>
<td>8 (25)</td>
</tr>
<tr>
<td>Greater than or equal to 65' (19.8 m) and up to 75' (22.9 m)</td>
<td>75'-0&quot; (22.9 m)</td>
<td>42 (1060)</td>
<td>36 (900)</td>
<td>16</td>
<td>8 (25)</td>
</tr>
</tbody>
</table>

For standard and combination mast arm assemblies, Foundation depths for standard dual mast arms with the longest arm length up to and including 55' (16.8 m) shall be increased by 1' (0.3 m) of that shown in the table, based on the longer of the two arms.

These foundation depths are for sites which have cohesive soils (clayey silt, sandy clay, etc.) along the length of the shaft, with an average Unconfined Compressive Strength (Qu) > 1.0 tsf (100 kpa). This strength shall be verified by boring data prior to construction or with testing by the Engineer during foundation drilling. The Bureau of Bridges & Structures should be contacted for a revised design if other conditions are encountered.