**SHAFT LENGTH TABLE**

<table>
<thead>
<tr>
<th>SOIL CONSISTENCY</th>
<th>Shaft Length</th>
<th>Foundation Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOFT</td>
<td>80'</td>
<td>30'-0&quot;</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>100'</td>
<td>33'-0&quot;</td>
</tr>
<tr>
<td>STEEP</td>
<td>120'</td>
<td>37'-6&quot;</td>
</tr>
<tr>
<td>VERY STEEP</td>
<td>140'</td>
<td>42'-0&quot;</td>
</tr>
<tr>
<td>HARD</td>
<td>160'</td>
<td>47'-6&quot;</td>
</tr>
</tbody>
</table>

### FOUNDATION ELEVATION

- **Shaft Diameter:** 18" (450 mm)
- **Foundation Height:** 30'-0" (9.1 m)
- **Anchor Rod Cage:** 5 (125), 36 (915) sweep Sch. 40 PVC wiring window, 2 (50) min. projection above foundation.
- **No. 4 (No. 13) Spiral:** 6 (150) pitch, (typ.)
- **No. 11 (No. 36) V-bars:** Evenly spaced
- **No. 4 (No. 13) Spiral:**
- **Anchor Rods:** Evenly spaced
- **Ground Line:** 30° Sweep.
- **PVC Wiring Window:** 2 (50) min.
- **V-Bars:** See Section A-A.

### SOIL CONSISTENCY

- **Very Loose**
  - Qu in lb/ft³ (KPa)
  - N in BLOW/FT
  - AVERAGE STRENGTH
  - Soils Dep. of Transportation

- **Loose**
  - Qu in lb/ft³ (KPa)
  - N in BLOW/FT
  - AVERAGE STRENGTH
  - Soils Dep. of Transportation

- **Medium**
  - Qu in lb/ft³ (KPa)
  - N in BLOW/FT
  - AVERAGE STRENGTH
  - Soils Dep. of Transportation

- **Stiff**
  - Qu in lb/ft³ (KPa)
  - N in BLOW/FT
  - AVERAGE STRENGTH
  - Soils Dep. of Transportation

- **Very Stiff**
  - Qu in lb/ft³ (KPa)
  - N in BLOW/FT
  - AVERAGE STRENGTH
  - Soils Dep. of Transportation

- **Hard**
  - Qu in lb/ft³ (KPa)
  - N in BLOW/FT
  - AVERAGE STRENGTH
  - Soils Dep. of Transportation

---

**SECTION A-A**

- * See Rod and Reinforcement Table.

**LIGHT TOWER FOUNDATION**

- **DATE:** 1-1-15
  - **REVISIONS:**
    - Added 8'-0" min. anchor placement.
    - Red, embankment in foundation.
    - Revised diameter of grnd. electrode sleeve.
The shaft length(s) are based on soil borings in the plans. If different soils are encountered, the engineer shall be notified to provide a revised length.

Anchor rod quantity, diameter, and length shall be determined by the tower manufacturer and approved by the engineer. Each foundation shall have a minimum of 8 anchor rods.

All foundation reinforcement steel shall be epoxy coated.

The cost of reinforcement shall be included in the cost of the foundation.

Steel anchor rod forms shall not be removed for a minimum of 3 days after concrete is poured. The tower shall not be set for a minimum of 7 days or as approved by the engineer.

Coordinate the rod circle diameter of the tower with the diameter of the anchor rod cage.

The foundation shall be poured monolithically and shall have no construction joints.

Grounding electrodes shall be installed in an access well when there is a conflict in using the method shown.

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