1. **Scope**: This Guideline provides installation details for residential metering equipment that does not require current transformers. These requirements are not typically applied to temporary services.

2. **Underground service conductors** shall be in either Schedule 40 PVC conduit or galvanized rigid steel conduit as shown in the illustrations below. Direct buried conductors are not allowed. All Steel conduit and steel elbows shall be completely buried or concrete encased.

3. All **horizontal bends** shall be rigid steel.

4. The conduit bend under the meter base may be PVC Schedule 40 if the SCL Electric Service Representative determines that the SCL service lateral conductor will be fed from under the meter base, otherwise the bend shall be rigid galvanized steel.

5. See U7-10/NDK-70 and U7-10.1/NDK-80 for **pole riser** requirements.

6. **Manual bypass meter sockets** are encouraged but not required. If a manual bypass is installed, the bypass section shall be accessible to City Light.

7. **320 class meter sockets** may be used for services over 200 amperes and up to and including 400 amperes.

8. **Approved meter sockets** shall be installed on all residences in an accessible location either on an outside wall or on a free-standing pedestal, in accordance with the City Light publication *Requirements for Electrical Service Connection*.

9. For aid in determining the **proper type of meter socket and location**, contact your City Light Customer Service Representative at (206) 615-0600 north of Denny Way and (206) 386-4200 south of Denny Way.

Figure 1, Wall Mount
10. The supply (line side) conductors to the meter socket shall be connected to the top terminals, and the load conductors shall be connected to the bottom terminals. For 200 A class sockets, the supply (line side) conduit shall enter through the right or left knockout of the bottom of the meter socket. Load side wires shall enter through the side opposite to the line side and shall not block the path of line side conductors. For 320 A class sockets, the supply conduit may enter any knockout on the bottom of the meter socket.

11. The customer is responsible for ensuring against entry of water into buildings, into or through service equipment, or other locations where the entry of water could be considered a problem. See the Seattle City Light Requirements for Electrical Service Connection manual for details.

12. **SCL Material Specifications**

<table>
<thead>
<tr>
<th>Conduit and Fittings</th>
<th>Material Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>PVC Schedule 40</td>
<td>7015.05</td>
</tr>
<tr>
<td>zinc-coated steel</td>
<td>7050.05</td>
</tr>
</tbody>
</table>

13. **Conduit Requirements**: Conduit size shall be selected according to Table 13. Requirements are based on meeting both Condition #1 and Condition #2.

<table>
<thead>
<tr>
<th>Condition #1</th>
<th>Condition #2</th>
<th>Requirement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Conduit Run Length, ft</td>
<td>Number of Conduit Bends</td>
<td>Conduit Size, in</td>
</tr>
<tr>
<td>less than 150</td>
<td>less than 3</td>
<td>2-1/2 or 3</td>
</tr>
<tr>
<td>150 - 200</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>greater than 200</td>
<td>greater than 3</td>
<td>see note 13.3</td>
</tr>
</tbody>
</table>

**Table 13 Notes:**

13.1 All 3-inch conduit shall have 36-inch radius bends.

13.2 All 2-1/2-inch conduit shall have 24-inch radius bends.

13.3 Add pulling handhole to reduce length of conduit run to 200 feet or less, or reduce the number of conduit bends to three or less.

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**Figure 2, 200 A Single Phase Pedestal Mount**
Figure 3, 320 A Single Phase Pedestal Mount

14. References:

7015.05, “Schedule 40 PVC Conduit and Fittings”; Material Standard; SCL
7050.05, “Zinc-Coated Steel Conduit and Fittings”; Material Standard; SCL

Detter, Chris; SCL Standards Engineer, subject matter expert and originator of U12-1.3/NMT-10 (chris.detter@seattle.gov)

“EUSERC Drawing 300”; Electric Utility Service Equipment Requirements Committee (EUSERC); 2007

Requirements for Electrical Service Connection; SCL; January 26, 2007

U7-10/NDK-70, “Conduit Risers on Poles”; Construction Guideline; SCL
U7-10.1/NDK-80, Conduit Riser – 600 Volts Pole Base Detail”; Construction Guideline; SCL
U12-1.4/NDK-60, “Installation Details for Underground Services Nonmetallic and Rigid Steel Conduit on Private Property”; Construction Guideline; SCL
U12-5/NMT-20, “Meter Socket Connections and Conductor Identification, 200 Ampere Maximum”; Construction Guideline; SCL