### General Notes:

1. A sign shall be added to the front of our PP-A. It shall be 4’ X 4’, red with white lettering, and shall read “Emergency Shutoff - All EV chargers in this location can be shut down by switching off the main circuit breaker in this panel.”
2. All transformer 12 kV, finalised after procurement.
3. System engineer to provide incident energies for all new panels and 480V equipment.

### Keyed Notes:

1. PROVIDE AND INSTALL 480V 225A PANEL. FEED FROM NEW 225 kVA transformer as shown. Conduits to panel are 4-4/0 AWG in 3” conduit.
2. PROVIDE AND INSTALL SDF OR EQUIVALENT 480V DELTA PRIMARY, 120/208Y SECONDARY, 112.5 kVA, 3-PHASE, NEMA 3R, Pad Mount Transformer. Conduits to panel are 3-1/0 AWG and #6 EGC IN 1-1/2” RACEWAY. Install supply side bonding jumper #2 Cu.
3. PROVIDE AND INSTALL TEN (10) DUAL LEVEL 2 CHARGERS. TR-1 UNIT PORTS TOTAL AT 440 V PER CONDUCTOR TO BE 4-350 KCMIL AND 1-#2 AWG EGC IN 3” RACEWAY. INSTALL SUPPLY SIDE BONDING JUMPER #2 CU.
4. PROVIDE AND INSTALL 400A POWER PANEL PROVIDING 208V FEEDER. Conduits from transformer to panel to be 4-350 KCMIL and 1-#2 AWG EGC IN 3” RACEWAY.
5. PROVIDE AND INSTALL A TRANSFORMER WITH A 208/120 VOLT SECONDARY. THEN REMOVE PP-A & SIZE TR-X FOR FEEDING TR-1.

### Panel Schedules:

#### Panel Schedule 1:

<table>
<thead>
<tr>
<th>Location</th>
<th>Phase</th>
<th>Size</th>
<th>Volts</th>
<th>Amps</th>
<th>Conduit Size</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PP-A</td>
<td>225</td>
<td>A, B</td>
<td>480</td>
<td>225</td>
<td>4-4/0 AWG</td>
<td></td>
</tr>
<tr>
<td>TR-1</td>
<td>112.5</td>
<td>A, B</td>
<td>120/208Y</td>
<td>112.5</td>
<td>3-1/0 AWG</td>
<td></td>
</tr>
</tbody>
</table>

#### Panel Schedule 2:

<table>
<thead>
<tr>
<th>Location</th>
<th>Phase</th>
<th>Size</th>
<th>Volts</th>
<th>Amps</th>
<th>Conduit Size</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>PP-1</td>
<td>225</td>
<td>A, B</td>
<td>480</td>
<td>225</td>
<td>4-4/0 AWG</td>
<td></td>
</tr>
<tr>
<td>TR-1</td>
<td>112.5</td>
<td>A, B</td>
<td>120/208Y</td>
<td>112.5</td>
<td>3-1/0 AWG</td>
<td></td>
</tr>
</tbody>
</table>

### Designer Notes:

1. THIS CONFIGURATION HAS NO LEVEL 3 CHARGERS & TEN (10) DUAL LEVEL 2 CHARGERS.
2. IF NO LEVEL 3 CHARGERS ARE NEEDED, CONSIDER HAVING UTILITIES INSTALL A TRANSFORMER WITH A 208/120 VOLT SECONDARY. THEN REMOVE PP-A & SIZE TR-X FOR FEEDING TR-1.

### Engineering Standards:

ELECTRICAL VEHICLE CHARGING STATIONS
ELECTRICAL ONE-LINE DIAGRAMS

**TA-XX**

E-6002

ST-G4090-6

CHAPTER 7

Los Alamos, New Mexico 87545
PO Box 1663
Los Alamos, NM 87545-1663

**REV**

**DRAWING NO**

**BLDG**

**PROJECT ID**

**ENGINEERING STANDARDS**

**DRAWN**

**DESIGNED**

**VERIFIED**

**SUBMITTED**

**APPROVED**

**FOR RELEASE**

**REVISION DESCRIPTION**

**DATE**

**INITIAL ISSUE FOR**

**PAGE**

**FOR PRINT**

**NOTES**

**KEYED NOTES**

**GENERAL NOTES**

**DESIGNER NOTES**

**PANEL SCHEDULES**

**SCALE: NONE**