APPENDIX A

Appendix A. Soils along the TRTP Project Route

The soils along the proposed route reflect the underlying rock type, the extent of weathering of the rock, the degree of slope, and the degree of human modification. The route crosses undeveloped desert and forest land, agricultural and rural residential land, light industrial and commercial areas, and suburban residential areas. The TRTP segment routes cross areas included in multiple National Resource Conservation Service (NRCS) soil surveys including the Kern County, Southeastern Part – CA670 (2/2006); Antelope Valley Area – CA675 (3/2004); and the Angeles National Forest Area – CA776 (12/2004). The STATSGO databases for California (1994 and 2006) were reviewed for areas not covered by more detailed surveys. Locations of the mapped soil units traversed by the proposed TRTP segment routes are presented in Tables A-1 through A-9.

Table A-1. Soil Units Along Segment 10 of Proposed Project Route

Starting Route Milepost[1] (S10-)	Ending Route Milepost[1] (S10-)	Soil Map Unit/Complex Name[1, 2, 3]	Soil Survey
0.0	0.06	Garlock loamy sand, 2 to 9% slopes	SSURGO, Kern County
0.06	0.26	Cajon gravelly loam sand, 0 to 9% slopes	SSURGO, Kern County
0.26	0.29	Cajon loamy sand, 0 to 5% slopes	SSURGO, Kern County
0.29	0.38	Cajon gravelly loam sand, 0 to 9% slopes	SSURGO, Kern County
0.38	1.56	Cajon loamy sand, 0 to 5% slopes	SSURGO, Kern County
1.56	2.07	Cajon gravelly loam sand, 0 to 9% slopes	SSURGO, Kern County
2.07	2.23	Cajon loamy sand, 0 to 5% slopes	SSURGO, Kern County
2.23	3.76	Garlock loamy sand, 2 to 9% slopes	SSURGO, Kern County
3.76	3.86	Cajon gravelly loam sand, 0 to 9% slopes	SSURGO, Kern County
3.86	6.44	Cajon loamy sand, 2 to 9% slopes	SSURGO, Antelope Valley Area
6.44	6.80	Adelanto loamy sand, 2 to 5% slopes	SSURGO, Antelope Valley Area
6.80	7.59	Cajon loamy sand, 2 to 9% slopes	SSURGO, Antelope Valley Area
7.59	8.25	Adelanto loamy sand, 2 to 5% slopes	SSURGO, Antelope Valley Area
8.25	8.95	Cajon loamy sand, 2 to 9% slopes	SSURGO, Antelope Valley Area
8.95	9.36	Hesperia fine sandy loam, 2 to 5% slopes	SSURGO, Antelope Valley Area
9.36	10.41	Cajon loamy sand, 2 to 9% slopes	SSURGO, Antelope Valley Area
10.41	10.73	Hanford sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
10.73	11.42	Hanford coarse sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
11.42	14.74	Hesperia fine sandy loam, 2 to 5% slopes	SSURGO, Antelope Valley Area
14.74	14.96	Cajon loamy sand, 2 to 9% slopes	SSURGO, Antelope Valley Area
14.96	15.22	Arizo gravelly loamy sand, 0 to 5% slopes	SSURGO, Antelope Valley Area
15.22	15.45	Cajon loamy sand, 2 to 9% slopes	SSURGO, Antelope Valley Area
15.45	15.79	Hesperia fine sandy loam, 2 to 5% slopes	SSURGO, Antelope Valley Area
15.79	15.85	Hesperia fine sandy loam, 2 to 5% slopes	SSURGO, Antelope Valley Area
15.79	15.97	Hesperia fine sandy loam, 2 to 5% slopes	SSURGO, Antelope Valley Area
15.97	16.72	Hesperia fine sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area
16.72	16.77	Hesperia fine sandy loam, 2 to 5% slopes	SSURGO, Antelope Valley Area

1) Information in these columns is primarily derived from Table 4.7-23 of the PEA (SCE, 2007). Project mile measurements were assumed to be accurate and not re-measured.

2) Loam soil is composed of a mixture of sand, silt, clay, and organic matter in evenly mixed particles of various sizes.

3) See Table 2-1 - Major Soil Units along the Proposed TRTP Alignments for descriptions of individual soil components of these soil units/complexes.

Table A-2. Soil Units Along Segment 4 of Proposed Project Route

Starting Route Milepost[1] (S4-)	Ending Route Milepost[1] (S4-)	Soil Map Unit/Complex Name[1, 2, 3]	Soil Survey
0.00	0.59	Terrace escarpments	SSURGO, Antelope Valley Area
0.59	1.40	Ramona coarse sandy loam, 2 to 5% slopes	SSURGO, Antelope Valley Area
1.40	1.62	Ramona coarse sandy loam, 9 to 15% slopes	SSURGO, Antelope Valley Area
1.62	2.25	Dune land	SSURGO, Antelope Valley Area
2.25	2.40	Ramona sandy loam, 9 to 30% slopes, eroded	SSURGO, Antelope Valley Area
2.40	3.04	Cajon loamy sand, 2 to 9% slopes	SSURGO, Antelope Valley Area
3.04	3.75	Hesperia fine sandy loam, 2 to 5% slopes	SSURGO, Antelope Valley Area
3.75	4.35	Rosamond loam	SSURGO, Antelope Valley Area
4.35	4.57	Rosamond fine sandy loam	SSURGO, Antelope Valley Area
4.57	4.66	Hesperia fine sandy loam, 2 to 5% slopes	SSURGO, Antelope Valley Area
4.66	5.12	Hesperia fine sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area
5.12	5.49	Rosamond fine sandy loam	SSURGO, Antelope Valley Area
5.49	5.65	Rosamond loamy fine sand, hummocky	SSURGO, Antelope Valley Area
5.65	5.75	Rosamond loamy fine sand	SSURGO, Antelope Valley Area
5.75	6.12	Rosamond fine sandy loam	SSURGO, Antelope Valley Area
6.12	6.25	Rosamond loamy fine sand	SSURGO, Antelope Valley Area
6.25	6.39	Rosamond fine sandy loam	SSURGO, Antelope Valley Area
6.39	6.69	Rosamond loamy fine sand	SSURGO, Antelope Valley Area
6.69	7.27	Rosamond fine sandy loam	SSURGO, Antelope Valley Area
7.27	7.44	Rosamond loam	SSURGO, Antelope Valley Area
7.44	7.75	Rosamond silty clay loam	SSURGO, Antelope Valley Area
7.75	7.90	Rosamond fine sandy loam	SSURGO, Antelope Valley Area
7.90	7.92	Rosamond silty clay loam	SSURGO, Antelope Valley Area
7.92	8.15	Rosamond loam	SSURGO, Antelope Valley Area
8.15	8.34	Rosamond silty clay loam	SSURGO, Antelope Valley Area
8.34	8.48	Rosamond loam	SSURGO, Antelope Valley Area
8.48	8.78	Rosamond fine sandy loam	SSURGO, Antelope Valley Area
8.78	8.80	Hanford coarse sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
8.80	9.11	Hesperia fine sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area
9.11	9.19	Hanford coarse sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area
9.19	9.22	Hanford sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area
9.22	9.41	Rosamond fine sandy loam	SSURGO, Antelope Valley Area
9.41	9.76	Hanford sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area
9.76	9.99	Ramona coarse sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area
9.99	10.02	Hanford coarse sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area
10.02	10.46	Ramona coarse sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area
10.46	10.56	Greenfield sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area
10.56	10.60	Greenfield sandy loam, 2 to 9% slopes, eroded	SSURGO, Antelope Valley Area
10.60	10.85	Greenfield sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
10.85	10.94	Hanford coarse sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area
10.94	11.31	Greenfield sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area
11.31	11.39	Greenfield sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
11.39	11.49	Hanford coarse sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area
11.49	11.92	Greenfield sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
11.92	12.05	Vista coarse sandy loam, 9 to 15% slopes, eroded	SSURGO, Antelope Valley Area
12.05	12.38	Vista coarse sandy loam, 15 to 30% slopes, eroded	SSURGO, Antelope Valley Area
12.38	12.49	Vista coarse sandy loam, 9 to 15% slopes, eroded	SSURGO, Antelope Valley Area
12.49	12.89	Greenfield sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
12.89	13.03	Greenfield sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area

Table A-2. Soil Units Along Segment 4 of Proposed Project Route

Starting Route Milepost[1] (S4-)	Ending Route Milepost[1] (S4-)	Soil Map Unit/Complex Name[1, 2, 3]	Soil Survey
13.03	13.21	Hanford coarse sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area
13.21	13.21	Ramona coarse sandy loam, 2 to 5% slopes	SSURGO, Antelope Valley Area
13.21	13.43	Greenfield sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area
13.43	13.75	Greenfield sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
13.75	13.83	Greenfield sandy loam, 2 to 9% slopes, eroded	SSURGO, Antelope Valley Area
13.83	15.14	Greenfield sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
15.14	15.24	Hanford coarse sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area
15.24	15.48	Ramona coarse sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area
15.48	15.51	Hanford sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area
15.51	15.61	Ramona coarse sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area
15.61	15.65	Greenfield sandy loam, 2 to 9% slopes, eroded	SSURGO, Antelope Valley Area
15.65	16.08	Greenfield sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
16.08	16.76	Greenfield sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area
16.76	17.02	Ramona coarse sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area
17.02	19.63	Greenfield sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area

1) Information in these columns is primarily derived from Table 4.7-23 of the PEA (SCE, 2007). Project mile measurements were assumed to be accurate and not re-measured.

2) Loam soil is composed of a mixture of sand, silt, clay, and organic matter in evenly mixed particles of various sizes.

3) See Table 2-1 - Major Soil Units along the Proposed TRTP Alignments for descriptions of individual soil components of these soil units/complexes.

Table A-3. Soil Units Along Segment 5 of Proposed Project Route

Starting Route Milepost[1] (S5-)	Ending Route Milepost[1] (S5-)	Soil Map Unit/Complex Name[1, 2, 3]	Soil Survey
0.00	1.13	Greenfield sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
1.13	1.22	Hanford coarse sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
1.22	1.57	Greenfield sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
1.57	1.66	Hanford sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
1.66	1.99	Hanford coarse sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
1.99	2.25	Greenfield sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
2.25	2.53	Hanford coarse sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
2.53	2.56	Greenfield sandy loam, 2 to 9% slopes, eroded	SSURGO, Antelope Valley Area
2.56	3.24	Hanford coarse sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
3.24	3.35	Greenfield sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
3.35	3.40	Hanford coarse sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
3.40	3.92	Hanford coarse sandy loam, 9 to 15% slopes	SSURGO, Antelope Valley Area
3.92	4.03	Greenfield sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
4.03	4.06	Hanford coarse sandy loam, 9 to 15% slopes	SSURGO, Antelope Valley Area
4.06	4.10	Terrace escarpments	SSURGO, Antelope Valley Area
4.10	4.15	Hanford coarse sandy loam, 9 to 15% slopes	SSURGO, Antelope Valley Area
4.15	4.19	Terrace escarpments	SSURGO, Antelope Valley Area
4.19	4.23	Hanford coarse sandy loam, 9 to 15% slopes	SSURGO, Antelope Valley Area
4.23	4.27	Terrace escarpments	SSURGO, Antelope Valley Area
4.27	4.40	Hanford coarse sandy loam, 9 to 15% slopes	SSURGO, Antelope Valley Area
4.40	4.44	Terrace escarpments	SSURGO, Antelope Valley Area
4.44	4.48	Greenfield sandy loam, 2 to 9% slopes, eroded	SSURGO, Antelope Valley Area

Table A-3. Soil Units Along Segment 5 of Proposed Project Route

Starting Route Milepost[1] (S5-)	Ending Route Milepost[1] (S5-)	Soil Map Unit/Complex Name[1, 2, 3]	Soil Survey
4.48	5.43	Vista coarse sandy loam, 30 to 50% slopes, eroded	SSURGO, Antelope Valley Area
5.43	6.39	Vista coarse sandy loam, 30 to 50% slopes	SSURGO, Antelope Valley Area
6.39	6.46	Hanford sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
6.46	6.86	Amargosa rocky coarse sandy loam, 9 to 55% slopes, eroded	SSURGO, Antelope Valley Area
6.86	7.49	Godde rocky loam, 30 to 50% slopes	SSURGO, Antelope Valley Area
7.49	7.53	Hanford coarse sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
7.53	7.58	Godde rocky loam, 30 to 50% slopes	SSURGO, Antelope Valley Area
7.58	7.88	Hanford coarse sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
7.88	8.48	Godde loam, 15 to 30% slopes	SSURGO, Antelope Valley Area
8.48	8.55	Godde rocky loam, 30 to 50% slopes	SSURGO, Antelope Valley Area
8.55	8.56	Godde loam, 15 to 30% slopes	SSURGO, Antelope Valley Area
8.56	8.75	Wyman gravelly loam, 9 to 15% slopes	SSURGO, Antelope Valley Area
8.75	8.95	Godde loam, 15 to 30% slopes	SSURGO, Antelope Valley Area
8.95	9.13	Hanford coarse sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
9.13	9.26	Godde loam, 15 to 30% slopes	SSURGO, Antelope Valley Area
9.26	9.30	Hanford sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
9.30	9.43	Godde loam, 15 to 30% slopes	SSURGO, Antelope Valley Area
9.43	9.50	Hanford coarse sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
9.50	9.63	Godde loam, 15 to 30% slopes	SSURGO, Antelope Valley Area
9.63	9.83	Hanford sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
9.83	9.86	Hanford coarse sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
9.86	10.03	Hanford sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
10.03	10.16	Hanford coarse sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
10.16	10.19	Godde loam, 15 to 30% slopes	SSURGO, Antelope Valley Area
10.19	10.32	Hanford coarse sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
10.32	10.49	Godde loam, 15 to 30% slopes	SSURGO, Antelope Valley Area
10.49	10.91	Godde rocky loam, 30 to 50% slopes	SSURGO, Antelope Valley Area
10.91	11.30	Anaverde rocky loam, 30 to 50% slopes	SSURGO, Antelope Valley Area
11.30	11.45	Vista coarse sandy loam, 30 to 50% slopes	SSURGO, Antelope Valley Area
11.45	11.81	Terrace escarpments	SSURGO, Antelope Valley Area
11.81	11.85	Hanford coarse sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
11.85	12.27	Godde rocky loam, 30 to 50% slopes	SSURGO, Antelope Valley Area
12.27	12.84	Vista coarse sandy loam, 30 to 50% slopes	SSURGO, Antelope Valley Area
12.84	12.85	Hanford coarse sandy loam, 9 to 15% slopes	SSURGO, Antelope Valley Area
12.85	12.96	Vista coarse sandy loam, 30 to 50% slopes	SSURGO, Antelope Valley Area
12.96	13.03	Hanford coarse sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
13.03	14.42	Vista coarse sandy loam, 30 to 50% slopes	SSURGO, Antelope Valley Area
14.42	14.83	Las Posas-Toomes rocky loams, 30 to 50% slopes	SSURGO, Antelope Valley Area
14.83	14.90	Ramona coarse sandy loam, 5 to 9% slopes	SSURGO, Antelope Valley Area
14.90	14.97	Hanford sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
14.97	15.05	Ramona sandy loam, 9 to 30% slopes, eroded	SSURGO, Antelope Valley Area
15.05	15.15	Hanford sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
15.15	15.21	Las Posas loam, 9 to 30% slopes	SSURGO, Antelope Valley Area
15.21	15.46	Vista coarse sandy loam, 30 to 50% slopes	SSURGO, Antelope Valley Area
15.46	15.51	Wyman gravelly loam, 9 to 15% slopes	SSURGO, Antelope Valley Area
15.51	15.65	Vista coarse sandy loam, 30 to 50% slopes	SSURGO, Antelope Valley Area
15.65	15.94	Wyman gravelly loam, 9 to 15% slopes	SSURGO, Antelope Valley Area
15.94	16.16	Hanford coarse sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
16.16	16.72	Wyman gravelly loam, 2 to 9% slopes	SSURGO, Antelope Valley Area

Table A-3. Soil Units Along Segment 5 of Proposed Project Route

Starting Route Milepost[1] (S5-)	Ending Route Milepost[1] (S5-)	Soil Map Unit/Complex Name[1, 2, 3]	Soil Survey
16.72	17.02	Hanford coarse sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
17.02	17.06	Hanford sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
17.06	17.25	Vista coarse sandy loam, 30 to 50% slopes	SSURGO, Antelope Valley Area
17.25	17.27	Terrace escarpments	SSURGO, Antelope Valley Area
17.27	17.35	Hanford coarse sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
17.35	17.38	Terrace escarpments	SSURGO, Antelope Valley Area
17.38	17.59	Hanford sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
17.59	17.75	Terrace escarpments	SSURGO, Antelope Valley Area

1) Information in these columns is primarily derived from Table 4.7-23 of the PEA (SCE, 2007). Project mile measurements were assumed to be accurate and not re-measured.

2) Loam soil is composed of a mixture of sand, silt, clay, and organic matter in evenly mixed particles of various sizes.

3) See Table 2-1 - Major Soil Units along the Proposed TRTP Alignments for descriptions of individual soil components of these soil units/complexes.

Table A-4. Soil Units Along Segment 6 of Proposed Project Route

Starting Route Milepost[1] (S6-)	Ending Route Milepost[1] (S6-)	Soil Map Unit/Complex Name[1, 2, 3]	Soil Survey
0.00	0.02	Hanford sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
0.02	0.06	Terrace escarpments	SSURGO, Antelope Valley Area
0.06	0.19	Hanford coarse sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area
0.19	0.25	Terrace escarpments	SSURGO, Antelope Valley Area
0.25	0.44	Vista coarse sandy loam, 30 to 50% slopes	SSURGO, Antelope Valley Area
0.44	0.56	Hanford coarse sandy loam, 9 to 15% slopes	SSURGO, Antelope Valley Area
0.56	0.63	Vista coarse sandy loam, 30 to 50% slopes	SSURGO, Antelope Valley Area
0.63	0.74	Hanford coarse sandy loam, 9 to 15% slopes	SSURGO, Antelope Valley Area
0.74	0.86	Vista coarse sandy loam, 30 to 50% slopes	SSURGO, Antelope Valley Area
0.86	1.07	Hanford coarse sandy loam, 9 to 15% slopes	SSURGO, Antelope Valley Area
1.07	1.15	Greenfield sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
1.15	1.21	Terrace escarpments	SSURGO, Antelope Valley Area
1.21	1.44	Greenfield sandy loam, 2 to 9% slopes	SSURGO, Antelope Valley Area
1.44	1.62	Hanford family, 3 to 25% slopes	SSURGO, Angeles National Forest Area
1.62	1.69	Pismo-Trigo, dry-Exchequer, dry families complex, 30 to 70% slopes	SSURGO, Angeles National Forest Area
1.69	1.93	Hanford family, 3 to 25% slopes	SSURGO, Angeles National Forest Area
1.93	2.14	Pismo-Trigo, dry-Exchequer, dry families complex, 30 to 70% slopes	SSURGO, Angeles National Forest Area
2.14	3.43	Hanford family, 3 to 25% slopes	SSURGO, Angeles National Forest Area
3.43	6.27	Pismo-Trigo, dry-Exchequer, dry families complex, 30 to 70% slopes	SSURGO, Angeles National Forest Area
6.27	6.37	Tujunga-Capistrano families association, 2 to 20% slopes	SSURGO, Angeles National Forest Area
6.37	7.18	Pacifico family-Xerothents complex, 50 to 90% slopes	SSURGO, Angeles National Forest Area
7.18	7.62	Pacifico-Preston families complex, 15 to 50% slopes	SSURGO, Angeles National Forest Area

Table A-4. Soil Units Along Segment 6 of Proposed Project Route

Starting Route Milepost[1] (S6-)	Ending Route Milepost[1] (S6-)	Soil Map Unit/Complex Name[1, 2, 3]	Soil Survey
7.62	7.90	Olete-Kilburn-Etsel families complex, 50 to 80% slopes	SSURGO, Angeles National Forest Area
7.90	8.22	Chilao family, 20 to 60% slopes	SSURGO, Angeles National Forest Area
8.22	8.71	Pacifico-Preston families complex, 15 to 50% slopes	SSURGO, Angeles National Forest Area
8.71	8.83	Vista family, 5 to 30% slopes	SSURGO, Angeles National Forest Area
8.83	8.94	Pacifico family-Xerothents complex, 50 to 90% slopes	SSURGO, Angeles National Forest Area
8.94	9.12	Chilao family, 20 to 60% slopes	SSURGO, Angeles National Forest Area
9.12	9.30	Pacifico family-Xerothents complex, 50 to 90% slopes	SSURGO, Angeles National Forest Area
9.30	9.74	Vista family, 5 to 30% slopes	SSURGO, Angeles National Forest Area
9.74	9.90	Pacifico family-Xerothents complex, 50 to 90% slopes	SSURGO, Angeles National Forest Area
9.90	10.71	Pismo-Chilao-Shortcut families complex, 45 to 80% slopes	SSURGO, Angeles National Forest Area
10.71	11.29	Pacifico family-Xerothents complex, 50 to 90% slopes	SSURGO, Angeles National Forest Area
11.29	12.23	Pismo-Chilao-Shortcut families complex, 45 to 80% slopes	SSURGO, Angeles National Forest Area
12.23	12.68	Pacifico family-Xerothents complex, 50 to 90% slopes	SSURGO, Angeles National Forest Area
12.68	12.84	Chilao family, 20 to 60% slopes	SSURGO, Angeles National Forest Area
12.84	13.50	Trigo, granitic substratum-Modjeska families association, 5 to 60% slopes	SSURGO, Angeles National Forest Area
13.50	13.73	Green Bluff-Hohmann families-Xerorthents complex, 15 to 60% slopes	SSURGO, Angeles National Forest Area
13.73	15.66	Chilao family, 20 to 60% slopes	SSURGO, Angeles National Forest Area
15.66	16.07	Trigo, granitic substratum-Modjeska families association, 5 to 60% slopes	SSURGO, Angeles National Forest Area
16.07	16.34	Pismo-Chilao-Shortcut families complex, 45 to 80% slopes	SSURGO, Angeles National Forest Area
16.34	16.79	Trigo, granitic substratum-Green Bluff-Supan families association, 15 to 60% slopes	SSURGO, Angeles National Forest Area
16.79	18.78	Caperton-Trigo, granitic substratum-Lodo families complex, 50 to 85% slopes	SSURGO, Angeles National Forest Area
18.78	19.76	Stukel-Sur-Winthrop families complex, 60 to 100% slopes	SSURGO, Angeles National Forest Area
19.76	20.07	Typic Xerorthents, warm, 55 to 90% slopes	SSURGO, Angeles National Forest Area
20.07	20.58	Olete-Kilburn-Etsel families complex, 50 to 80% slopes	SSURGO, Angeles National Forest Area
20.58	21.46	Stukel-Olete families association, 50 to 100% slopes	SSURGO, Angeles National Forest Area
21.46	21.47	Typic Xerorthents, warm, 55 to 90% slopes	SSURGO, Angeles National Forest Area

Table A-4. Soil Units Along Segment 6 of Proposed Project Route

Starting Route Milepost[1] (S6-)	Ending Route Milepost[1] (S6-)	Soil Map Unit/Complex Name[1, 2, 3]	Soil Survey
21.47	21.74	Stukel-Sur-Winthrop families complex, 60 to 100% slopes	SSURGO, Angeles National Forest Area
21.74	21.93	Stukel-Olete families association, 50 to 100% slopes	SSURGO, Angeles National Forest Area
21.93	22.03	Typic Xerorthents, warm, 55 to 90% slopes	SSURGO, Angeles National Forest Area
22.03	22.61	Stukel-Olete families association, 50 to 100% slopes	SSURGO, Angeles National Forest Area
22.61	22.86	Olete-Kilburn-Etsel families complex, 50 to 80% slopes	SSURGO, Angeles National Forest Area
22.86	22.97	Stukel-Olete families association, 50 to 100% slopes	SSURGO, Angeles National Forest Area
22.97	23.14	Olete-Kilburn-Etsel families complex, 50 to 80% slopes	SSURGO, Angeles National Forest Area
23.14	23.60	Trigo, granitic substratum-Exchequer families-Rock outcrop complex, 60 to 100% slopes	SSURGO, Angeles National Forest Area
23.60	23.73	Stukel-Sur-Winthrop families complex, 60 to 100% slopes	SSURGO, Angeles National Forest Area
23.73	24.40	Trigo, granitic substratum-Exchequer families-Rock outcrop complex, 60 to 100% slopes	SSURGO, Angeles National Forest Area
24.40	25.21	Stukel-Olete families association, 50 to 100% slopes	SSURGO, Angeles National Forest Area
25.21	25.61	Olete-Kilburn-Etsel families complex, 50 to 80% slopes	SSURGO, Angeles National Forest Area
25.61	26.74	Trigo family, granitic substratum, 60 to 90% slopes	SSURGO, Angeles National Forest Area
26.74	26.89	Vista-Trigo, granitic substratum-Modesto families complex, 40 to 70% slopes	SSURGO, Angeles National Forest Area

1) Information in these columns is primarily derived from Table 4.7-23 of the PEA (SCE, 2007). Project mile measurements were assumed to be accurate and not re-measured.

2) Loam soil is composed of a mixture of sand, silt, clay, and organic matter in evenly mixed particles of various sizes.

3) See Table 2-1 - Major Soil Units along the Proposed TRTP Alignments for descriptions of individual soil components of these soil units/complexes.

Table A-5. Soil Units Along Segment 7 of Proposed Project Route

Starting Route Milepost (S7-)	Ending Route Milepost (S7-)	Soil Map Unit/Complex Name[1, 2]	Soil Survey
0	0.75	Cieneba-Exchequer-Sobrante	STATSGO, California
0.75	1.6	Urban Land-Ramona-Zamora	STATSGO, California
1.6	15.8	Urban Land-Hanford-Sorrento	STATSGO, California

1) Urban Land consists of areas disturbed by human activity, i.e. roads, houses, etc…

2) See Table 2-1 - Major Soil Units along the Proposed TRTP Alignments for descriptions of individual soil components of these soil units/complexes.

Table A-6. Soil Units Along Segment 11 of Proposed Project Route

Starting Route Milepost[1] (S11-)	Ending Route Milepost[1] (S11-)	Soil Map Unit/Complex Name[1, 2, 3, 4]	Soil Survey
0.00	0.06	Terrace escarpments	SSURGO, Antelope Valley Area
0.06	0.30	Hanford coarse sandy loam, 0 to 2% slopes	SSURGO, Antelope Valley Area
0.30	0.37	Terrace escarpments	SSURGO, Antelope Valley Area
0.37	1.49	Vista coarse sandy loam, 30 to 50% slopes	SSURGO, Antelope Valley Area
1.49	2.26	Pismo-Trigo, dry-Exchequer, dry families complex, 30 to 70% slopes	SSURGO, Angeles National Forest Area
2.26	2.73	Hanford family, 3 to 25% slopes	SSURGO, Angeles National Forest Area
2.73	3.46	Pismo-Trigo, dry-Exchequer, dry families complex, 30 to 70% slopes	SSURGO, Angeles National Forest Area
3.46	3.94	Hanford family, 3 to 25% slopes	SSURGO, Angeles National Forest Area
3.94	6.66	Pismo-Trigo, dry-Exchequer, dry families complex, 30 to 70% slopes	SSURGO, Angeles National Forest Area
6.66	6.91	Tollhouse-Stukel-Wrentham families complex, 60 to 90% slopes	SSURGO, Angeles National Forest Area
6.91	7.90	Tollhouse-Knutsen-Stukel families complex, 30 to 70% slopes	SSURGO, Angeles National Forest Area
7.90	12.52	Pismo-Chilao-Shortcut families complex, 45 to 80% slopes	SSURGO, Angeles National Forest Area
12.52	13.11	Rock outcrop-Chilao family-Haploxerolls, warm association, 15 to 120% slopes	SSURGO, Angeles National Forest Area
13.11	13.18	Water	SSURGO, Angeles National Forest Area
13.18	14.13	Typic Xerorthents, warm, 55 to 90% slopes	SSURGO, Angeles National Forest Area
14.13	14.20	Olete-Kilburn-Etsel families complex, 50 to 80% slopes	SSURGO, Angeles National Forest Area
14.20	14.50	Rock outcrop-Chilao family-Haploxerolls, warm association, 15 to 120% slopes	SSURGO, Angeles National Forest Area
14.50	14.63	Olete-Kilburn-Etsel families complex, 50 to 80% slopes	SSURGO, Angeles National Forest Area
14.63	14.68	Trigo, granitic substratum-Modjeska families association, 5 to 60% slopes	SSURGO, Angeles National Forest Area
14.68	15.07	Stukel-Sur-Winthrop families complex, 60 to 100% slopes	SSURGO, Angeles National Forest Area
15.07	15.52	Tollhouse-Stukel-Wrentham families complex, 60 to 90% slopes	SSURGO, Angeles National Forest Area
15.52	16.69	Chilao-Trigo, granitic substratum-Lodo families complex, 55 to 85% slopes	SSURGO, Angeles National Forest Area
16.69	17.28	Typic Xerorthents, warm, 55 to 90% slopes	SSURGO, Angeles National Forest Area
17.28	18.44	Chilao-Trigo, granitic substratum-Lodo families complex, 55 to 85% slopes	SSURGO, Angeles National Forest Area
18.44	19.32	Mollic Haploxeralfs, 2 to 50% slopes	SSURGO, Angeles National Forest Area
19.32	20.08	Typic Xerorthents, warm, 55 to 90% slopes	SSURGO, Angeles National Forest Area
20.08	20.62	Trigo family, granitic substratum, 60 to 90% slopes	SSURGO, Angeles National Forest Area
20.62	21.32	Mollic Haploxeralfs, 2 to 50% slopes	SSURGO, Angeles National Forest Area

Table A-6. Soil Units Along Segment 11 of Proposed Project Route

Starting Route Milepost[1] (S11-)	Ending Route Milepost[1] (S11-)	Soil Map Unit/Complex Name[1, 2, 3, 4]	Soil Survey
21.32	22.28	Caperton-Trigo, granitic substratum-Lodo families complex, 50 to 85% slopes	SSURGO, Angeles National Forest Area
22.28	22.6	Typic Xerorthents, warm, 55 to 90% slopes	SSURGO, Angeles National Forest Area
22.6	23.04	Cieneba-Exchequer-Sobrante	STATSGO, California
23.04	24.1	Trigo family, granitic substratum, 60 to 90% slopes	SSURGO, Angeles National Forest Area
24.1	24.33	Cieneba-Exchequer-Sobrante	STATSGO, California
24.33	24.54	Trigo family, granitic substratum, 60 to 90% slopes	SSURGO, Angeles National Forest Area
24.54	25.15	Cieneba-Exchequer-Sobrante	STATSGO, California
25.15	29.25	Urban Land-Ramona-Zamora	STATSGO, California
29.25	31.5	Urban Land-Hanford-Sorrento	STATSGO, California
31.5	36.3	Urban Land-Ramona-Zamora	STATSGO, California

1) Information in these columns from MP 0 to MP 22.6 is primarily derived from Table 4.7-23 of the PEA (SCE, 2007). Project mile measurements were assumed to be accurate for this information and not re-measured.

2) Loam soil is composed of a mixture of sand, silt, clay, and organic matter in evenly mixed particles of various sizes.

3) See Table 2-1 - Major Soil Units along the Proposed TRTP Alignments for descriptions of individual soil components of these soil units/complexes.

4) Urban Land consists of areas disturbed by human activity, i.e. roads, houses, etc…

Table A-7. Soil Units Along Segment 8A of Proposed Project Route

Starting Route Milepost[1] (S8A-)	Ending Route Milepost[1] (S8A-)	Soil Map Unit/Complex Name[1, 2, 3]	Soil Survey
0	2.0	Urban Land-Ramona-Zamora	STATSGO, California
2.0	4.4	Urban Land-Hanford-Sorrento	STATSGO, California
4.4	20.64	Anaheim-Soper-Fontana	STATSGO, California
20.64	20.66	Fontana clay loam, 15 to 30% slopes	SSURGO, San Bernardino County
20.66	20.99	Gaviota-rock outcrop complex	SSURGO, San Bernardino County
20.99	21.40	Fontana clay loam, 15 to 30% slopes	SSURGO, San Bernardino County
21.40	21.43	Fontana clay loam, 30 to 50% slopes	SSURGO, San Bernardino County
21.43	21.70	Gaviota-rock outcrop complex	SSURGO, San Bernardino County
21.70	22.15	Fontana clay loam, 30 to 50% slopes	SSURGO, San Bernardino County
22.15	22.21	Chualar clay loam, 2 to 9% slopes	SSURGO, San Bernardino County
22.21	22.26	Fontana clay loam, 30 to 50% slopes	SSURGO, San Bernardino County
22.26	22.36	Chualar clay loam, 2 to 9% slopes	SSURGO, San Bernardino County
22.36	22.39	Fontana clay loam, 15 to 30% slopes	SSURGO, San Bernardino County
22.39	22.57	Fontana clay loam, 30 to 50% slopes	SSURGO, San Bernardino County
22.57	22.63	Fontana clay loam, 15 to 30% slopes	SSURGO, San Bernardino County
22.63	22.75	Chualar clay loam, 9 to 15% slopes	SSURGO, San Bernardino County
22.75	22.92	Fontana clay loam, 15 to 30% slopes	SSURGO, San Bernardino County
22.92	23.17	Chualar clay loam, 9 to 15% slopes	SSURGO, San Bernardino County
23.17	23.37	Fontana clay loam, 15 to 30% slopes	SSURGO, San Bernardino County
23.37	23.76	Fontana clay loam, 30 to 50% slopes	SSURGO, San Bernardino County
23.76	23.81	Fontana clay loam, 15 to 30% slopes	SSURGO, San Bernardino County
23.81	23.84	Sorrento clay loam, 0 to 2% slopes	SSURGO, San Bernardino County
23.84	23.96	Chualar clay loam, 2 to 9% slopes	SSURGO, San Bernardino County
23.96	24.13	Fontana clay loam, 15 to 30% slopes	SSURGO, San Bernardino County

Table A-7. Soil Units Along Segment 8A of Proposed Project Route

Starting Route Milepost[1] (S8A-)	Ending Route Milepost[1] (S8A-)	Soil Map Unit/Complex Name[1, 2, 3]	Soil Survey
24.13	24.32	Chualar clay loam, 2 to 9% slopes	SSURGO, San Bernardino County
24.32	24.44	Fontana clay loam, 15 to 30% slopes	SSURGO, San Bernardino County
24.44	24.52	Fontana clay loam, 30 to 50% slopes	SSURGO, San Bernardino County
24.52	24.58	Chualar clay loam, 2 to 9% slopes	SSURGO, San Bernardino County
24.58	24.73	Sorrento clay loam, 0 to 2% slopes	SSURGO, San Bernardino County
24.73	24.94	Chualar clay loam, 2 to 9% slopes	SSURGO, San Bernardino County
24.94	25.03	Sorrento clay loam, 0 to 2% slopes	SSURGO, San Bernardino County
25.03	25.08	Chualar clay loam, 2 to 9% slopes	SSURGO, San Bernardino County
25.08	25.68	Sorrento clay loam, 0 to 2% slopes	SSURGO, San Bernardino County
25.68	25.96	Chino silt loam	SSURGO, San Bernardino County
25.96	26.06	Grangeville fine sandy loam	SSURGO, San Bernardino County
26.06	26.75	Chino silt loam	SSURGO, San Bernardino County
26.75	28.04	Merrill silt loam	SSURGO, San Bernardino County
28.04	29.30	Chino silt loam	SSURGO, San Bernardino County
29.30	29.82	Grangeville fine sandy loam	SSURGO, San Bernardino County
29.82	30.37	Hilmar loamy fine sand	SSURGO, San Bernardino County
30.37	30.69	Tujunga loamy sand, 0 to 5% slopes	SSURGO, San Bernardino County
30.69	31.01	Hilmar loamy fine sand	SSURGO, San Bernardino County
31.01	31.22	Tujunga loamy sand, 0 to 5% slopes	SSURGO, San Bernardino County
31.22	31.34	Hilmar loamy fine sand	SSURGO, San Bernardino County
31.34	31.89	Delhi fine sand	SSURGO, San Bernardino County
31.89	32.15	Hilmar loamy fine sand	SSURGO, San Bernardino County
32.15	33.13	Delhi fine sand	SSURGO, San Bernardino County
33.13	33.74	Hilmar loamy fine sand	SSURGO, San Bernardino County
33.74	34.77	Delhi fine sand	SSURGO, San Bernardino County
34.77	34.82	Hanford coarse sandy loam, 2 to 9% slopes	SSURGO, San Bernardino County
34.82	35.21	Delhi fine sand	SSURGO, San Bernardino County

1) Information in these columns from MP 20.6 to MP 35.2 is primarily derived from Table 4.7-23 of the PEA (SCE, 2007). Project mile measurements were assumed to be accurate for this information and not re-measured.

2) Loam soil is composed of a mixture of sand, silt, clay, and organic matter in evenly mixed particles of various sizes.

3) See Table 2-1 - Major Soil Units along the Proposed TRTP Alignments for descriptions of individual soil components of these soil units/complexes.

4) Urban Land consists of areas disturbed by human activity, i.e. roads, houses, etc…

Table A-8. Soil Units Along Segment 8B of Proposed Project Route

Starting Route Milepost[1] (S8B-)	Ending Route Milepost[1] (S8B-)	Soil Map Unit/Complex Name[1, 2, 3]	Soil Survey
0.00	0.82	Chino silt loam	SSURGO, San Bernardino County
0.82	1.35	Grangeville fine sandy loam	SSURGO, San Bernardino County
1.35	1.76	Hilmar loamy fine sand	SSURGO, San Bernardino County
1.76	2.11	Tujunga loamy sand, 0 to 5% slopes	SSURGO, San Bernardino County
2.11	2.47	Hilmar loamy fine sand	SSURGO, San Bernardino County
2.47	3.53	Delhi fine sand	SSURGO, San Bernardino County
3.53	3.93	Hilmar loamy fine sand	SSURGO, San Bernardino County
3.93	4.98	Delhi fine sand	SSURGO, San Bernardino County
4.98	5.28	Hilmar loamy fine sand	SSURGO, San Bernardino County
5.28	6.79	Delhi fine sand	SSURGO, San Bernardino County
0.00	0.82	Chino silt loam	SSURGO, San Bernardino County
0.82	1.35	Grangeville fine sandy loam	SSURGO, San Bernardino County
1.35	1.76	Hilmar loamy fine sand	SSURGO, San Bernardino County
1.76	2.11	Tujunga loamy sand, 0 to 5% slopes	SSURGO, San Bernardino County
2.11	2.47	Hilmar loamy fine sand	SSURGO, San Bernardino County
2.47	3.53	Delhi fine sand	SSURGO, San Bernardino County

1) Information in these columns is primarily derived from Table 4.7-23 of the PEA (SCE, 2007). Project mile measurements were assumed to be accurate and not re-measured.

2) Loam soil is composed of a mixture of sand, silt, clay, and organic matter in evenly mixed particles of various sizes.

3) See Table 2-1 - Major Soil Units along the Proposed TRTP Alignments for descriptions of individual soil components of these soil units/complexes.

Table A-9. Soil Units Along Segment 8C of Proposed Project Route

Starting Route Milepost[1] (S8C-)	Ending Route Milepost[1] (S8C-)	Soil Map Unit/Complex Name[1, 2, 3]	Soil Survey
0.00	0.87	Chino silt loam	SSURGO, San Bernardino County
0.87	1.39	Grangeville fine sandy loam	SSURGO, San Bernardino County
1.39	1.93	Hilmar loamy fine sand	SSURGO, San Bernardino County
1.93	2.25	Tujunga loamy sand, 0 to 5% slopes	SSURGO, San Bernardino County
2.25	2.58	Hilmar loamy fine sand	SSURGO, San Bernardino County
2.58	2.78	Tujunga loamy sand, 0 to 5% slopes	SSURGO, San Bernardino County
2.78	2.91	Hilmar loamy fine sand	SSURGO, San Bernardino County
2.91	3.46	Delhi fine sand	SSURGO, San Bernardino County
3.46	3.71	Hilmar loamy fine sand	SSURGO, San Bernardino County
3.71	4.70	Delhi fine sand	SSURGO, San Bernardino County
4.70	5.30	Hilmar loamy fine sand	SSURGO, San Bernardino County
5.30	5.69	Delhi fine sand	SSURGO, San Bernardino County
5.69	6.35	Delhi fine sand	SSURGO, San Bernardino County

1) Information in these columns is primarily derived from Table 4.7-23 of the PEA (SCE, 2007). Project mile measurements were assumed to be accurate and not re-measured.

2) Loam soil is composed of a mixture of sand, silt, clay, and organic matter in evenly mixed particles of various sizes.

3) See Table 2-1 - Major Soil Units along the Proposed TRTP Alignments for descriptions of individual soil components of these soil units/complexes.