Appendix B.
Estimated Temporary and Permanent Land Disturbance

Table B-1. Estimated Temporary and Permanent Land Disturbance

Project Element	Site Quantity	Disturbed Area Calculation (LxW in Feet)	Acres Temporarily Disturbed During Construction	Acres to Be Restored	Acres Permanently Disturbed
Substation					
Internal grading of substation site	1	440 x 326	3.30	0	3.30
External grading of the substation site (excluding access road)	1	Irregular shape	2.94	0	2.94
Access road to substation	1	115 x 24	0.06	0	0.06
Total Estimated for Substation			*6.30*	*0*	*6.30*
Distribution Getaways					
Vault and vents	5	22 x 10	0.005	0.002	0.003
Duct and trench	4,550'	4,550 x 30	3.09	3.09	0.0
Total Estimated for Distribution			*3.10*	*3.10*	*0.003*
Subtransmission Project Feature					
Remove existing wood pole (1)	4	150 x 75	1.03	1.03	0.00
Remove existing wood pole and install new wood pole (2)	5	150 x 75	1.29	1.24	0.00
Construct new wood pole (3)	2	150 x 75	0.52	0.50	0.02
Construct new tubular steel guy pole (3)	2	200 x 150	1.38	1.26	0.12
Construct new tubular steel pole (3 and 4)	6	200 x 150	0.00	0.00	0.00
Construct new light weight steel pole (4)	2	200 x 100	0.00	0.00	0.00
Conductor stringing setup area (5)	8	600 x 100	11.02	11.02	0.00
Material and equipment staging area (6)	1	1 acre	1.00	1.00	0.00
Total Estimated (7)			*16.24*	*16.05*	*0.14*
Telecommunications Project Location					
Banducci Substation	2	300 x 20	0.14	0.14	0.0
Cummings Substation	1	500 x 20	0.27	0.27	0.0
Pelliser Road, 1400 feet s/o Highline Road	1	100 x 20	0.05	0.05	0.0
Highway 202 at Woodford-Tehachapi Road	1	850 x 20	0.39	0.39	0.0
Fiber optic cable stringing sites	36	100 x 30	2.52	2.52	0.0
Distribution class poles to be removed/replaced	39	125 x 50 per pole	5.60	5.60	0.0
Total Estimated for Telecommunications			**8.97**	**8.97**	**0.0**
Total Estimated for Proposed Project			**34.61**	**28.12**	**6.44**

Source: Table 3.4 in SCE, 2014a.

Notes:

1 - Includes the removal of existing conductor and teardown of existing structure for wood poles north and west of Proposed Banducci Substation.
2 - Includes the transfer of existing conductor and teardown of existing structure for wood poles south of Proposed Banducci Substation and near Highline Road. Includes structure erection and conductor installation. Portion of ROW within 10' of Wood Poles to remain cleared of vegetation. The permanent disturbance is zero because the area of the new poles is within the previously disturbed area (0.05 acres) of the existing poles being removed.
3 - Includes structure assembly, erection, guy wire and/or conductor installation. The permanent area of disturbance includes that portion within 25' of a Tubular Steel Pole or 10' of a LWS or Wood Pole and would remain cleared of vegetation; permanently disturbed area is approximately 0.06 ac/TSP, 0.01 ac/LWS and Wood Pole.
4 - The temporary and permanent disturbance area calculations for these structures are zero because they are located within the substation property area and are accounted for in the substation area calculations.
5 - Based on number of circuits and route design.
6 - The disturbed acreage for the material storage area would be restored upon the completion of the Proposed Project.
7 - The disturbed acreage calculations are estimates based upon SCE's preferred area of use for the described project feature, they do not include any new access/spur road information; they are subject to revision based upon final engineering and review of the project by SCE's Construction Manager and/or Contractor awarded project.

Assumptions for Footing / Base Volume and Area Calculations:

- Average TSP depth 30 feet deep, 7 feet diameter, quantity 1 per TSP: earth removed for footing = 42.8 cu.yd.; surface area = 38.5 sq.ft.
- Average LWS depth 12 feet deep, 2.5 feet diameter, quantity 1 per LWS: earth removed for pole base = 2.2 cu.yd.; surface area = 4.9 sq.ft.
- Average Wood Pole depth 12 feet deep, 2.5 feet diameter, quantity 2 per Pole: earth removed for pole base = 4.4 cu.yd.; surface area = 9.8 sq.ft.