

Construction	Duration (days)	Number of Personnel	Equipment	Estimated Usage (Hours per Day or Miles per Day)	Number of Equip	CO factor	CO	NOx factor	NOx	PM10 total factor	PM10	SOx factor	SOx	VOC factor	VOC
Substation															
Grading Crew	40	6	2 Water Trucks (Gasoline)	20	2	0.016	0.638	0.023	0.928	0.000	0.017	0.000	0.001	0.002	0.098
	40		1 Truck for Soil Test Inspector (Gasoline)	20	1	0.012	0.236	0.001	0.025	0.000	0.002	0.000	0.000	0.001	0.026
	40		1 980 Loader (Diesel)	8	1	0.420	3.360	0.799	6.392	0.083	0.664	0.115	0.920	0.122	0.976
	40		1 Grader (Diesel)	8	1	0.540	4.320	1.331	10.648	0.069	0.552	0.276	2.208	0.112	0.896
	20		1 Vibratory Compactor (Diesel)	6	1	0.534	3.204	1.336	8.016	0.063	0.378	0.223	1.338	0.115	0.690
			Commute	20	5	0.012	1.180	0.001	0.125	0.000	0.008	0.000	0.001	0.001	0.128
			Fugitive dust								0.03				
			Soil hauling				1.16		5.48		0.13		0.01		0.31
Total pounds per day							14.1		31.6		1.8		4.5		3.1
Survey Crew	45	2	2 Survey Trucks (Gasoline)	20	2	0.0118	0.4719	0.0012	0.0498	0.0001	0.0032	0.0000	0.0003	0.0013	0.0511
Total pounds per day							0.5		0.0		0.0		0.0		0.1
Civil Crew	50	8	2 Crew Trucks (Gasoline/Diesel)	20	2	0.008	0.338	0.017	0.674	0.000	0.014	0.000	0.001	0.001	0.048
	50		2 Dump Trucks	20	2	0.005	0.205	0.032	1.298	0.001	0.024	0.000	0.002	0.001	0.045
	50		5-Ton Stake Bed Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
	30		Trencher	8	1	0.357	2.856	0.556	4.448	0.045	0.360	0.127	1.016	0.071	0.568
	10		Drill Rig	8	1	0.472	3.776	1.099	8.792	0.043	0.344	0.329	2.632	0.056	0.448
	50		Tractor	7	1	0.420	2.940	0.799	5.593	0.083	0.581	0.115	0.805	0.122	0.854
	50		Forklift	4	1	0.254	1.016	0.432	1.728	0.048	0.192	0.000	0.000	0.074	0.296
			Commute	20	5	0.012	1.180	0.001	0.125	0.000	0.008	0.000	0.001	0.001	0.128
Total pounds per day							12.4		23.3		1.5		4.5		2.4

Construction	Duration (days)	Number of Personnel	Equipment	Estimated Usage (Hours per Day or Miles per Day)	Number of Equip	CO factor	CO	NOx factor	NOx	PM10 total factor	PM10	SOx factor	SOx	VOC factor	VOC
Electrical Crew	80	10	8-Ton Stake Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
	80		2 Crew Cab Trucks (Gasoline/Diesel)	20	2	0.008	0.338	0.017	0.674	0.000	0.014	0.000	0.001	0.001	0.048
	80		2 Carryall Vehicles (Gasoline)	20	2	0.012	0.472	0.001	0.050	0.000	0.003	0.000	0.000	0.001	0.051
	80		2 Cranes	4	2	0.350	2.800	0.941	7.528	0.049	0.392	0.196	1.568	0.080	0.640
	80		Lift Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
	80		2 Pickups (Gasoline/Diesel)	20	2	0.008	0.338	0.017	0.674	0.000	0.014	0.000	0.001	0.001	0.048
	80		Forklift	6	1	0.254	1.524	0.432	2.592	0.048	0.288	0.000	0.000	0.074	0.444
	80		2 Manlifts	20	2	0.005	0.205	0.032	1.298	0.001	0.024	0.000	0.002	0.001	0.045
	80		2 Support Trucks	20	2	0.005	0.205	0.032	1.298	0.001	0.024	0.000	0.002	0.001	0.045
			Commute	20	6	0.012	1.416	0.001	0.149	0.000	0.010	0.000	0.001	0.001	0.153
Total pounds per day							7.5		15.6		0.8		1.6		1.5
Transformer Setup Crew	20	5	Carryall Vehicle (Gasoline)	20	1	0.012	0.236	0.001	0.025	0.000	0.002	0.000	0.000	0.001	0.026
	20		Crew Truck (Gasoline/Diesel)	20	1	0.008	0.169	0.017	0.337	0.000	0.007	0.000	0.001	0.001	0.024
	20		Crane	6	1	0.350	2.100	0.941	5.646	0.049	0.294	0.196	1.176	0.080	0.480
	20		Forklift	6	1	0.254	1.524	0.432	2.592	0.048	0.288	0.000	0.000	0.074	0.444
	20		Low Bed Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Commute	20	3	0.012	0.708	0.001	0.075	0.000	0.005	0.000	0.001	0.001	0.077
Total pounds per day							4.8		9.3		0.6		1.2		1.1
Test Crew	40	2	Test Truck (Gasoline/Diesel)	20	1	0.008	0.169	0.017	0.337	0.000	0.007	0.000	0.001	0.001	0.024
Total pounds per day							0.2		0.3		0.0		0.0		0.0

Construction	Duration (days)	Number of Personnel	Equipment	Estimated Usage (Hours per Day or Miles per Day)	Number of Equip	CO factor	CO	NOx factor	NOx	PM10 total factor	PM10	SOx factor	SOx	VOC factor	VOC
Paving Contractor	5	8	Foreman Truck (Gasoline/Diesel)	20	1	0.008	0.169	0.017	0.337	0.000	0.007	0.000	0.001	0.001	0.024
	5		2 Dump Trucks (Gasoline/Diesel)	20	2	0.011	0.421	0.028	1.113	0.001	0.020	0.000	0.002	0.002	0.072
	5		2 Skip Loaders	6	2	0.420	5.040	0.799	9.588	0.083	0.996	0.115	1.380	0.122	1.464
	2		Barbergreen	8	1	0.534	4.272	1.336	10.688	0.063	0.504	0.223	1.784	0.115	0.920
			Commute	20	7	0.012	1.652	0.001	0.174	0.000	0.011	0.000	0.001	0.001	0.179
Total pounds per day							11.6		21.9		1.5		3.2		2.7
Fence Contractor	7	4	Foreman Truck (Gasoline/Diesel)	20	1	0.008	0.169	0.017	0.337	0.000	0.007	0.000	0.001	0.001	0.024
	7		Crewcab (Gasoline/Diesel)	20	1	0.008	0.169	0.017	0.337	0.000	0.007	0.000	0.001	0.001	0.024
	7		Bobcat (Gasoline)	8	1	0.254	2.032	0.432	3.456	0.048	0.384	0.000	0.000	0.074	0.592
	2		3-Ton Flatbed Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Commute	20	1	0.012	0.236	0.001	0.025	0.000	0.002	0.000	0.000	0.001	0.026
Total pounds per day							2.7		4.8		0.4		0.0		0.7
Overhead Subtransmission Line Modifications															
Installation of 160 light weight steel poles and removal of wood poles	52	8	Heavy Line Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Carry-All (Gasoline)	20	1	0.012	0.236	0.001	0.025	0.000	0.002	0.000	0.000	0.001	0.026
			Light Material Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			75' Bucket Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Pickup Truck (Gasoline)	20	1	0.012	0.236	0.001	0.025	0.000	0.002	0.000	0.000	0.001	0.026
			Commute	20	4	0.012	0.944	0.001	0.100	0.000	0.006	0.000	0.001	0.001	0.102
Total pounds per day							1.7		2.1		0.0		0.0		0.2

Construction	Duration (days)	Number of Personnel	Equipment	Estimated Usage (Hours per Day or Miles per Day)	Number of Equip	CO factor	CO	NOx factor	NOx	PM10 total factor	PM10	SOx factor	SOx	VOC factor	VOC
Setting Tubular Steel Pole	1	7	60-Ton Crane	7	1	0.350	2.450	0.941	6.587	0.049	0.343	0.196	1.372	0.080	0.560
			Tractor/Trailer	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Boom Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Equipment Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Bucket Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Carry-All (Gasoline)	20	1	0.012	0.236	0.001	0.025	0.000	0.002	0.000	0.000	0.001	0.026
			Pickup Truck (Gasoline)	20	1	0.012	0.236	0.001	0.025	0.000	0.002	0.000	0.000	0.001	0.026
			Commute	20	2	0.012	0.472	0.001	0.050	0.000	0.003	0.000	0.000	0.001	0.051
Total pounds per day							3.8		9.3		0.4		1.4		0.8
Wire Replacement	75	8	Heavy Line truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Carry-All (Gasoline)	20	1	0.012	0.236	0.001	0.025	0.000	0.002	0.000	0.000	0.001	0.026
			Light material truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Pickup Truck (Gasoline)	20	1	0.012	0.236	0.001	0.025	0.000	0.002	0.000	0.000	0.001	0.026
			Commute	20	4	0.012	0.944	0.001	0.100	0.000	0.006	0.000	0.001	0.001	0.102
Total pounds per day							1.6		1.4		0.0		0.0		0.2

Construction	Duration (days)	Number of Personnel	Equipment	Estimated Usage (Hours per Day or Miles per Day)	Number of Equip	CO factor	CO	NOx factor	NOx	PM10 total factor	PM10	SOx factor	SOx	VOC factor	VOC
Underground Subtransmission Line Modifications															
Final connection of new lines	2	8	Heavy line truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Carry-All (Gasoline)	20	1	0.012	0.236	0.001	0.025	0.000	0.002	0.000	0.000	0.001	0.026
			Light Material Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Pick up truck (Gasoline)	20	1	0.012	0.236	0.001	0.025	0.000	0.002	0.000	0.000	0.001	0.026
			Commute	20	4	0.012	0.944	0.001	0.100	0.000	0.006	0.000	0.001	0.001	0.102
Total pounds per day							1.6		1.4		0.0		0.0		0.2
Construction of 66 kV Duct Bank	6	6	Backhoe	8	1	0.420	3.360	0.799	6.392	0.083	0.664	0.115	0.920	0.122	0.976
			Commute	20	1	0.012	0.236	0.001	0.025	0.000	0.002	0.000	0.000	0.001	0.026
Total pounds per day							3.6		6.4		0.7		0.9		1.0
Install 2 vaults	4		Equipment Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Dump Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Pickup Truck (Gasoline)	20	1	0.012	0.236	0.001	0.025	0.000	0.002	0.000	0.000	0.001	0.026
			6 Cement Trucks	20	6	0.005	0.614	0.032	3.893	0.001	0.072	0.000	0.006	0.001	0.136
			Commute	20	4	0.012	0.944	0.001	0.100	0.000	0.006	0.000	0.001	0.001	0.102
Total pounds per day							2.0		5.3		0.1		0.0		0.3
Cable Pulling	5	6	Cable Puller	6	1	0.534	3.204	1.336	8.016	0.063	0.378	0.223	1.338	0.115	0.690
			Commute	20	6	0.012	1.416	0.001	0.149	0.000	0.010	0.000	0.001	0.001	0.153
Total pounds per day							4.6		8.2		0.4		1.3		0.8

Construction	Duration (days)	Number of Personnel	Equipment	Estimated Usage (Hours per Day or Miles per Day)	Number of Equip	CO factor	CO	NOx factor	NOx	PM10 total factor	PM10	SOx factor	SOx	VOC factor	VOC
Cable Splicing/ Terminating	5		60-Ton Crane	5	1	0.350	1.750	0.941	4.705	0.049	0.245	0.196	0.980	0.080	0.400
			Light Material Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Man lift Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Tractor with Trailer	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Pickup Truck (Gasoline)	20	1	0.012	0.236	0.001	0.025	0.000	0.002	0.000	0.000	0.001	0.026
			Carry-All (Gasoline)	20	1	0.012	0.236	0.001	0.025	0.000	0.002	0.000	0.000	0.001	0.026
			Commute	20	2	0.012	0.472	0.001	0.050	0.000	0.003	0.000	0.000	0.001	0.051
Total pounds per day							3.0		6.8		0.3		1.0		0.6
Telecommunications															
Substation	24	2	2 Vans (Gasoline)	20	2	0.012	0.472	0.001	0.050	0.000	0.003	0.000	0.000	0.001	0.051
Total pounds per day							0.5		0.0		0.0		0.0		0.1
Overhead	24	4	Bucket Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Reel Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Commute	20	2	0.012	0.472	0.001	0.050	0.000	0.003	0.000	0.000	0.001	0.051
Total pounds per day							0.7		1.3		0.0		0.0		0.1
Trenching Crew	7	3	Flatbed Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Backhoe	8	1	0.420	3.360	0.799	6.392	0.083	0.664	0.115	0.920	0.122	0.976
			Stakebed Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Crew Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
Total pounds per day							3.7		8.3		0.7		0.9		1.0

Construction	Duration (days)	Number of Personnel	Equipment	Estimated Usage (Hours per Day or Miles per Day)	Number of Equip	CO factor	CO	NOx factor	NOx	PM10 total factor	PM10	SOx factor	SOx	VOC factor	VOC
Boring Crew	5	3	Flatbed Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Boring Machine	8	1	0.472	3.776	1.099	8.792	0.043	0.344	0.329	2.632	0.056	0.448
			Stakebed Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Crew Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
Total pounds per day							4.1		10.7		0.4		2.6		0.5
Cable Installation Crew	6	4	Bucket Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Reel Truck	20	1	0.005	0.102	0.032	0.649	0.001	0.012	0.000	0.001	0.001	0.023
			Commute	20	2	0.012	0.472	0.001	0.050	0.000	0.003	0.000	0.000	0.001	0.051
Total pounds per day							0.7		1.3		0.0		0.0		0.1

Note: Equipment emissions factors taken from South Coast Air Quality Management District CEQA Handbook, 2006.

Used SCAQMD offroadEF07_25.xls yr 2008 for offroad equipment CO2

Construction	Duration (days)	Number of Personnel	Equipment	Estimated Usage (Hours per Day or Miles per Day)	Number of Equip	CO2 factor	CO2	Duration CO2 (lbs)	CO factor	CO	NOx factor	NOx	PM10 total factor	PM10	SOx factor	SOx	VOC factor	VOC
Substation																		
Grading Crew	40		6 2 Water Trucks (Gasoline)	20	2	2.72	109	4352	0.016	0.638	0.023	0.928	0	0.017	0	0.001	0.002	0.098
	40		1 Truck for Soil Test Inspector (Gasoline)	20	1	1.10	22	880	0.012	0.236	0.001	0.025	0	0.002	0	0	0.001	0.026
	40		1 980 Loader (Diesel)	8	1	31.15	249	9968	0.42	3.36	0.799	6.392	0.083	0.664	0.115	0.92	0.122	0.976
	40		1 Grader (Diesel)	8	1	74.96	600	23989	0.54	4.32	1.331	10.648	0.069	0.552	0.276	2.208	0.112	0.896
	20		1 Vibratory Compactor (Diesel)	6	1	69.20	415	8304	0.534	3.204	1.336	8.016	0.063	0.378	0.223	1.338	0.115	0.69
			Commute	20	5	1.10	110	4400	0.012	1.18	0.001	0.125	0	0.008	0	0.001	0.001	0.128
			Fugitive dust											0.03				
			Soil hauling							1.16		5.48		0.13		0.01		0.31
Total pounds per day							1505	51892		14.1		31.6		1.8		4.5		3.1
Survey Crew	45		2 2 Survey Trucks (Gasoline)	20	2	1.10	44	1760	0.0118	0.4719	0.0012	0.0498	0.0001	0.0032	0	0.0003	0.0013	0.0511
Total pounds per day							44	1760		0.5		0		0		0		0.1
Civil Crew	50		8 2 Crew Trucks (Gasoline/Diesel)	20	2	1.10	44	2200	0.008	0.338	0.017	0.674	0	0.014	0	0.001	0.001	0.048
	50		2 Dump Trucks	20	2	2.72	109	5440	0.005	0.205	0.032	1.298	0.001	0.024	0	0.002	0.001	0.045
	50		5-Ton Stake Bed Truck	20	1	2.72	54	2720	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
	30		Trencher	8	1	32.92	263	7900	0.357	2.856	0.556	4.448	0.045	0.36	0.127	1.016	0.071	0.568
	10		Drill Rig	8	1	62.04	496	4963	0.472	3.776	1.099	8.792	0.043	0.344	0.329	2.632	0.056	0.448
	50		Tractor	7	1	171.74	1202	60108	0.42	2.94	0.799	5.593	0.083	0.581	0.115	0.805	0.122	0.854
	50		Forklift	4	1	31.22	125	6245	0.254	1.016	0.432	1.728	0.048	0.192	0	0	0.074	0.296
			Commute	20	5	1.10	110	5500	0.012	1.18	0.001	0.125	0	0.008	0	0.001	0.001	0.128
Total pounds per day							2404	95076		12.4		23.3		1.5		4.5		2.4

Total CO2 148728

Construction	Duration (days)	Number of Personnel	Equipment	Estimated Usage (Hours per Day or Miles per Day)	Number of Equip	CO2 factor	CO2	Duration CO2 (lbs)	CO factor	CO	NOx factor	NOx	PM10 total factor	PM10	SOx factor	SOx	VOC factor	VOC
Electrical Crew	80	10	8-Ton Stake Truck	20	1	2.72	54	4352	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
	80		2 Crew Cab Trucks (Gasoline/Diesel)	20	2	1.10	44	3520	0.008	0.338	0.017	0.674	0	0.014	0	0.001	0.001	0.048
	80		2 Carryall Vehicles (Gasoline)	20	2	2.72	109	8704	0.012	0.472	0.001	0.05	0	0.003	0	0	0.001	0.051
	80		2 Cranes	4	2	50.15	401	32095	0.35	2.8	0.941	7.528	0.049	0.392	0.196	1.568	0.08	0.64
	80		Lift Truck	20	1	2.72	54	4352	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
	80		2 Pickups (Gasoline/Diesel)	20	2	1.10	44	3520	0.008	0.338	0.017	0.674	0	0.014	0	0.001	0.001	0.048
	80		Forklift	6	1	31.22	187	14988	0.254	1.524	0.432	2.592	0.048	0.288	0	0	0.074	0.444
	80		2 Manlifts	20	2	2.72	109	8704	0.005	0.205	0.032	1.298	0.001	0.024	0	0.002	0.001	0.045
	80		2 Support Trucks	20	2	2.72	109	8704	0.005	0.205	0.032	1.298	0.001	0.024	0	0.002	0.001	0.045
			Commute	20	6	1.10	132	0	0.012	1.416	0.001	0.149	0	0.01	0	0.001	0.001	0.153
Total pounds per day							1244	88939		7.5		15.6		0.8		1.6		1.5
Transformer Setup	20	5	Carryall Vehicle (Gasoline)	20	1	2.72	54	1088	0.012	0.236	0.001	0.025	0	0.002	0	0	0.001	0.026
	20		Crew Truck (Gasoline/Diesel)	20	1	1.10	22	440	0.008	0.169	0.017	0.337	0	0.007	0	0.001	0.001	0.024
	20		Crane	6	1	50.15	301	6018	0.35	2.1	0.941	5.646	0.049	0.294	0.196	1.176	0.08	0.48
	20		Forklift	6	1	31.22	187	3747	0.254	1.524	0.432	2.592	0.048	0.288	0	0	0.074	0.444
	20		Low Bed Truck	20	1	2.72	54	1088	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
			Commute	20	3	1.10	66	1320	0.012	0.708	0.001	0.075	0	0.005	0	0.001	0.001	0.077
Total pounds per day							685	13701		4.8		9.3		0.6		1.2		1.1
Test Crew	40	2	Test Truck (Gasoline/Diesel)	20	1	2.72	54	1088	0.008	0.169	0.017	0.337	0	0.007	0	0.001	0.001	0.024
Total pounds per day							54	1088		0.2		0.3		0		0		0

Total CO2 103727

Construction	Duration (days)	Number of Personnel	Equipment	Estimated Usage (Hours per Day or Miles per Day)	Number of Equipment	CO2 factor	CO2	Duration CO2 (lbs)	CO factor	CO	NOx factor	NOx	PM10 total factor	PM10	SOx factor	SOx	VOC factor	VOC
Underground Subtransmission Line Modifications																		
Final connection of 2			8 Heavy line truck	20	1	2.72	54	109	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
			Carry-All (Gasoline)	20	1	2.72	54	109	0.012	0.236	0.001	0.025	0	0.002	0	0	0.001	0.026
			Light Material Truck	20	1	1.10	22	44	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
			Pick up truck (Gasoline)	20	1	1.10	22	44	0.012	0.236	0.001	0.025	0	0.002	0	0	0.001	0.026
			Commute	20	4	1.10	88	176	0.012	0.944	0.001	0.1	0	0.006	0	0.001	0.001	0.102
Total pounds per day							241	482		1.6		1.4		0		0		0.2
Construction of 66			6 Backhoe	8	1	171.74	1374	8243	0.42	3.36	0.799	6.392	0.083	0.664	0.115	0.92	0.122	0.976
			Commute	20	1	1.10	22	132	0.012	0.236	0.001	0.025	0	0.002	0	0	0.001	0.026
Total pounds per day							1396	8375		3.6		6.4		0.7		0.9		1
Install 2 vaults			Equipment Truck	20	1	2.72	54	218	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
			Dump Truck	20	1	2.72	54	218	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
			Pickup Truck (Gasoline)	20	1	1.10	22	88	0.012	0.236	0.001	0.025	0	0.002	0	0	0.001	0.026
			6 Cement Trucks	20	6	2.72	326	1306	0.005	0.614	0.032	3.893	0.001	0.072	0	0.006	0.001	0.136
			Commute	20	4	1.10	88	352	0.012	0.944	0.001	0.1	0	0.006	0	0.001	0.001	0.102
Total pounds per day							545	2181		2		5.3		0.1		0		0.3
Cable Pulling			6 Cable Puffer	6	1	101.02	606	3031	0.534	3.204	1.336	8.016	0.063	0.378	0.223	1.338	0.115	0.69
			Commute	20	6	1.10	132	660	0.012	1.416	0.001	0.149	0	0.01	0	0.001	0.001	0.153
Total pounds per day							738	3691		4.6		8.2		0.4		1.3		0.8

Total CO2 14728

Construction	Duration (days)	Number of Personnel	Equipment	Estimated Usage (Hours per Day or Miles per Day)	Number of Equip	CO2 factor	CO2	Duration CO2 (lbs)	CO factor	CO	NOx factor	NOx	PM10 total factor	PM10	SOx factor	SOx	VOC factor	VOC
Setting Tubular St	1	7	60-Ton Crane	7	1	50.15	351	351	0.35	2.45	0.941	6.587	0.049	0.343	0.196	1.372	0.08	0.56
			Tractor/Trailer	20	1	2.72	54	54	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
			Boom Truck	20	1	2.72	54	54	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
			Equipment Truck	20	1	2.72	54	54	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
			Bucket Truck	20	1	2.72	54	54	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
			Carry-Air (Gasoline)	20	1	2.72	54	54	0.012	0.236	0.001	0.025	0	0.002	0	0	0.001	0.026
			Pickup truck (Gasoline)	20	1	1.10	22	22	0.012	0.236	0.001	0.025	0	0.002	0	0	0.001	0.026
			Commute	20	2	1.10	44	44	0.012	0.472	0.001	0.05	0	0.003	0	0	0.001	0.051
Total pounds per day							689	689		3.8		9.3		0.4		1.4		0.8
Replacement	75	8	Heavy Line truck	20	1	2.72	54	4080	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
			Carry-Air (Gasoline)	20	1	2.72	54	4080	0.012	0.236	0.001	0.025	0	0.002	0	0	0.001	0.026
			Eight wheel dump truck	20	1	1.10	22	1650	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
			Pickup truck (Gasoline)	20	1	1.10	22	1650	0.012	0.236	0.001	0.025	0	0.002	0	0	0.001	0.026
			Commute	20	4	1.10	88	6600	0.012	0.944	0.001	0.1	0	0.006	0	0.001	0.001	0.102
Total pounds per day							241	18060		1.6		1.4		0		0		0.2

Total CO2 18749

Construction	Duration (days)	Number of Personnel	Equipment	Estimated Usage (Hours per Day or Miles per Day)	Number of Equip	CO2 factor	CO2	Duration CO2 (lbs)	CO factor	CO	NOx factor	NOx	PM10 total factor	PM10	SOx factor	SOx	VOC factor	VOC	
Paving Contractor	5	8	Foreman Truck (Gasoline/Diesel)	20	1	1.10	22	110	0.008	0.169	0.017	0.337	0	0.007	0	0.001	0.001	0.024	
	5		2 Dump Trucks (Gasoline/Diesel)	20	2	2.72	109	544	0.011	0.421	0.028	1.113	0.001	0.02	0	0.002	0.002	0.072	
	5		2 Skip Loaders	6	2	31.15	374	1869	0.42	5.04	0.799	9.588	0.083	0.996	0.115	1.38	0.122	1.464	
	2		Barbargreen	8	1	101.02	808	1616	0.534	4.272	1.336	10.688	0.063	0.504	0.223	1.784	0.115	0.92	
			Commute	20	7	1.10	154	770	0.012	1.652	0.001	0.174	0	0.011	0	0.001	0.001	0.179	
Total pounds per day							1467	4909		11.6		21.9		1.5		3.2		2.7	
Fence Contractor	7	4	Foreman Truck (Gasoline/Diesel)	20	1	1.10	22	154	0.008	0.169	0.017	0.337	0	0.007	0	0.001	0.001	0.024	
	7		Crewcab (Gasoline/Diesel)	20	1	1.10	22	154	0.008	0.169	0.017	0.337	0	0.007	0	0.001	0.001	0.024	
	7		Bobcat (Gasoline)	8	1	31.22	250	1749	0.254	2.032	0.432	3.456	0.048	0.384	0	0	0.074	0.592	
	2		3-Ton Flatbed Truck	20	1	2.72	54	109	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023	
			Commute	20	1	1.10	22	154	0.012	0.236	0.001	0.025	0	0.002	0	0	0.001	0.026	
Total pounds per day							370	2319		2.7		4.8		0.4		0		0.7	
Overhead Subtransmission Line Modifications																			
Installation of 160	52	8	Heavy Line Truck	20	1	2.72	54	2829	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023	
			Carry-All (Gasoline)	20	1	2.72	54	2829	0.012	0.236	0.001	0.025	0	0.002	0	0	0.001	0.026	
			Light Material Truck	20	1	1.10	22	1144	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023	
			75' Bucket Truck	20	1	2.72	54	2829	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023	
			Pickup Truck (Gasoline)	20	1	1.10	22	1144	0.012	0.236	0.001	0.025	0	0.002	0	0	0.001	0.026	
			Commute	20	4	1.10	88	4576	0.012	0.944	0.001	0.1	0	0.006	0	0.001	0.001	0.102	
Total pounds per day							295	15350		1.7		2.1		0		0		0.2	

Total CO2 22579

Construction	Duration (days)	Number of Personnel	Equipment	Estimated Usage (Hours per Day or Miles per Day)	Number of Equipment	CO2 factor	CO2	Duration CO2 (lbs)	CO factor	CO	NOx factor	NOx	PM10 total factor	PM10	SOx factor	SOx	VOC factor	VOC
Boring Crew	5	3	Flatbed Truck	20	1	2.72	54	272	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
			Boring Machine	8	1	77.12	617	3085	0.472	3.776	1.099	8.792	0.043	0.344	0.329	2.632	0.056	0.448
			Stakebed Truck	20	1	2.72	54	272	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
			Crew Truck	20	1	1.10	22	110	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
Total pounds per day							748	3739		4.1		10.7		0.4		2.6		0.5
Cable Installation	6	4	Bucket Truck	20	1	2.72	54	326	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
			Reel Truck	20	1	2.72	54	326	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
			Commute	20	2	1.10	44	264	0.012	0.472	0.001	0.05	0	0.003	0	0	0.001	0.051
Total pounds per day							153	917		0.7		1.3		0		0		0.1

Total CO2 4656

Construction	Duration (days)	Number of Personnel	Equipment	Estimated Usage (Hours per Day or Miles per Day)	Number of Equip	CO2 factor	CO2	Duration CO2 (lbs)	CO factor	CO	NOx factor	NOx	PM10 total factor	PM10	SOx factor	SOx	VOC factor	VOC
Cable Splicing/ Termination	5		60-Ton Crane	5	1	50.15	251	1254	0.35	1.75	0.941	4.705	0.049	0.245	0.196	0.98	0.08	0.4
			Light Material Truck	20	1	1.10	22	110	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
			Man lift Truck	20	1	2.72	54	272	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
			Tractor with Trailer	20	1	2.72	54	272	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
			Pickup Truck (Gasoline)	20	1	1.10	22	110	0.012	0.236	0.001	0.025	0	0.002	0	0	0.001	0.026
			Carry-All (Gasoline)	20	1	2.72	54	272	0.012	0.236	0.001	0.025	0	0.002	0	0	0.001	0.026
			Commute	20	2	1.10	44	220	0.012	0.472	0.001	0.05	0	0.003	0	0	0.001	0.051
Total pounds per day							502	2510		3		6.8		0.3		1		0.6
Telecommunications																		
Substation	24	2	2 Vans (Gasoline)	20	2	1.10	44	1056	0.012	0.472	0.001	0.05	0	0.003	0	0	0.001	0.051
Total pounds per day							44	1056		0.5		0		0		0		0.1
Overhead	24	4	Bucket Truck	20	1	2.72	54	1306	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
			Reel Truck	20	1	2.72	54	1306	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
			Commute	20	2	1.10	44	1056	0.012	0.472	0.001	0.05	0	0.003	0	0	0.001	0.051
Total pounds per day							153	3667		0.7		1.3		0		0		0.1
Trenching Crew	7	3	Flatbed Truck	20	1	2.72	54	381	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
			Backhoe	8	1	171.74	1374	9617	0.42	3.36	0.799	6.392	0.083	0.664	0.115	0.92	0.122	0.976
			Stakebed Truck	20	1	2.72	54	381	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
			Crew Truck	20	1	1.10	22	154	0.005	0.102	0.032	0.649	0.001	0.012	0	0.001	0.001	0.023
Total pounds per day							1505	10533		3.7		8.3		0.7		0.9		1

Total CO2 17766