	New Str. #	Ex. Str. #		New Str Type*	New Str. Ht.	Line Angle	MP	Twr Inst. w/ Op. #1	Twr Inst. w/ Op. #2	Pull Sec.	Aerial Ref.	Site	Comments	Construction Method	Access
MV-J	19/84 0/1	19/84	LAT TSP.	g95_lt_base_05	120 116.5	- 0	0	C	C		JM-2 JM-2	Relocate Str. New	Monta Vista-Jefferson	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Accesss via Canada Road. Access via Jefferson Substation.
SECTION#1 (17 Structures)	0/2	0/3	LAT	g95_rt_base_25	115	18	0.19	Н	Н		JM-2	New (Approx. 50' upstation from 0/3)		Hand excavate foundation. Fly in structure. Hand excavate foundation.	Air. Foot: Access using footpath, via Canada Road.
	0/3	0/4		3n_base_25	115	1	0.35	Н	Н	#	JM-3-4	Common		Fly in structure. Hand excavate foundation.	Air. Foot: Access using dirt road, via Edgewood Park service road. Air. Foot: Access from south along overhead line right-of-way, via dirt road, via Edgewood Park service road.
	0/4	0/5		4g_base_45 3n_base_30	135	-7	0.54	Н	Н		JM-3-4 JM-5	Common		Fly in structure. Hand excavate foundation. Fly in structure.	Air. Foot: Access using Edgewood Park service road.
	0/6 1/7	1/7		g95_lt_base_40 4g_base_50	131.5 140	-27 T	0.99 1.22	C C	H		JM-6-7-8 JM-6-7-8	Common Common	Ext. PCS ANT. Cable pulling site n. of site.	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access using gravel road, via Edgewood Road. Access using dirt road, via gravel road, via Edgewood Road.
	1/8	1/9	LAT	g94_lt_base_15	106.5	-27	1.35	С	Н		JM-6-7-8	Common	Cable pulling site.	Conventional (Drill Rig and Crane) Hand excavate if possible,	Access using dirt road, via gravel road, via Edgewood Road.
	1/9	1/10		3n_base_15 g94_rt_base_15	105 106.5	-6 23	1.51	H C	Н		JM-9 JM-10-11	Common	Cable pulling site nnw. of Str. Sideslope.	otherwise excavate with drill rig. Fly in structures. Conventional (Drill Rig and Crane)	Structure location is on sideslope above nearest access. Access using dirt road from south. Will require construction (cut) of a 200 ft. dirt road from existing dirt road.
	: 1710	1/11	LAI	ge4_II_base_15	100.5	23	1.70			#5	JW-10-11				Re-establish (drive on existing ground) gas pipeline dirt road. Access structure from south
	1/11	1/12	LAT	4g_base_15	105	Т	1.84	С	Н		JM-10-11	Common		Conventional (Drill Rig and Crane)	using this re-established dirt road, via existing dirt road near structure 1/9. Install temporary bridge over creek (near exposed gas pipes). Access structure from
	1/12 2/13	2/13		4g_base_30 g95_rt_base_40	120 141.5	1 69	1.96 2.16	С	Н		JM-11-12 JM-13-14	Common	Cable pulling sites north and west of str.	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	south using this bridge and re-established (drive on existing ground) dirt road. Alternate access from Canada Road. Access from west along draw from Canada Road.
	2/14	2/15	LAT	g95_lt_base_30	121.5	-52	2.30	С	Н	#3	JM-13-14	Common	Cable pulling site south of structure.	Conventional (Drill Rig and Crane) Hand excavate foundation.	Access from west along draw from Canada Road.
	2/15 2/16A	2/16 2/17	TSP.	g94_lt_base_45 230dvd334	136.5 90	-23 30	2.52 2.67	H C	H C	#4	JM-15-16A JM-15-16A	Common	Sideslope. Tree removal. Watershed Tap	Fly in structure. Conventional (Drill Rig and Crane)	No access identified from existing dirt road. Access from gravel road.
	2/16B 2/17	3/18	LAT	115dvd3sw20 4g_base_05	75 95	2	2.67 2.86	C	C H		- JM-17-18	New Common	3-way switch. Offset 30' RT. Cable pulling site north of structure.	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access from gravel road. Access from north using dirt road.
#2	3/18	3/19	LAT	3n_base_30 g94_lt_base_40	120 131.5	-5 -9	3.06	C	H	9#	JM-17-18 JM-19-20	Common Common	Cable pulling site south of structure.	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access from north or south using dirt road. Access from north or south using dirt road. Access from north or south using dirt road.
	3/20	3/21		4g_base_35 3n_base_50	125	T 6	3.49	С	Н		JM-19-20 JM-21-22	Common	Tree removal required. Sideslope.	Conventional (Drill Rig and Crane)	Create (blade and leveling may be required) access from south, via existing dirt road.
		4/23		g95_lt_base_45	136.5	-40	4.01	С	Н		JM-21-22	Common	Heavy brush clearing required	Conventional (Drill Rig and Crane)	Re-establish (drive on existing ground) abandoned dirt road. Access using this re established dirt road, via Canada Road.
SECTION #2	4/23	4/24	LAT	g95_rt_base_35	136.5	49	4.27	С	н	9#	JM-23-24	Common	Heavy brush clearing req'd. Cable pulling site NW and SE of Str. And on ridge top between 4/23 and 4/24.	Conventional (Drill Rig and Crane)	Re-establish (drive on existing ground) abandoned dirt road. Access using this re- established dirt road, via Canada Road.
S 545	4/24	4/24A		g95_rt_base_35	136.5	25	4.46	С	н	<i>L</i> #	JM-23-24	Common	Heavy brush clearing required. Cable pulling site south of Structure.	Conventional (Drill Rig and Crane)	Re-establish abandoned dirt road. Access using this dirt road, via Canada Road.
	4/25	4/25	LAT	g95_lt_base_40	131.5	-35	4.66	С	н	8#	JM-25	Common	Cable pulling site NE of structure.	Conventional (Drill Rig and Crane)	Construct (cut and fill may be required) dirt road from gas pipeline facility south west to structure. Benching near structure for equipment is required. Access using this new dirt road, via existing dirt road, via Hwy, 92.
	4/26	4/25		3n_base_25	115	1	4.95	С	С	64	JM-26-27	New (Approx. 130' upstation from existing 4/25)	Cable pulling site.	Conventional (Drill Rig and Crane)	Access from south using dirt road, via Tower Road.
	5/27	5/27	LAT	g95_rt_base_20	111.5	Т	5.14	С	С	*	JM-26-27	New (Approx. 290' upstation from existing 5/27)	Ralston Substation. Cable pulling site So. of Str. Two-pole Str. Tap. Arms No. & So.	Conventional (Drill Rig and Crane)	Access from north using dirt road, via Tower Road. Access from south using dirt road, via tower Road or from North on dirt road, via Bunker
	5/28	5/28		4g_base_15	105 110	T	5.27	С	С		JM-28-29-30	Common		Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Drive. Access from south using dirt road, via tower Road or from North on dirt road, via Bunker Drive.
	5/29	5/29		4g_base_20 g94_lt_base_30	121.5	-16	5.40	С	С		JM-28-29-30 JM-28-29-30	Common		Conventional (Drill Rig and Crane)	Access from south using dirt road, via tower Road or from North on dirt road, via Bunker Drive.
ION #3	5/31	5/31	LAT	4g_base_35	125	Т	5.73	С	С	110	JM-31-32	Common		Conventional (Drill Rig and Crane)	Access from south using dirt road, via tower Road or from North on dirt road, via Bunker Drive. Access from south using dirt road, via tower Road or from North on dirt road, via Bunker
SECTION		5/32		3n_base_35	125	7 T	5.90 6.07	С	С	46	JM-31-32	Common		Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Drive. Access from south using dirt road, via tower Road or from North on dirt road, via Bunker Drive.
	6/33	6/33		4g_base_45 4g_base_45	135	т	6.27	С	Н		JM-33-34 JM-33-34	Common	Cable pulling site south of structure.	Conventional (Drill Rig and Crane)	Drive.
	6/35 6/35A	6/35		g95_rt_base_25 115dvd330	116.5 75	32 T	6.46 6.48	C C	H C		JM-35-36-37 JM-35-36-37		Tap to Hillsdale. Tap structure. LSP	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access from south using dirt road. Access from south using dirt road.
N #4	6/36	6/36 6/37	LAT	4g_base_15 g95_lt_base_15	105 106.5	-16	6.55 6.67	С	H	#11	JM-35-36-37 JM-35-36-37	Common Common	Cable pulling site south of structure.	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access from south using dirt road. Access from south using dirt road.
SECTION	6/38	6/38		g95_rt_base_15 3n_base_50	106.5	-7	7.14	С	С	#12	JM-38 JM-39-40	Common	Sideslope. Tree removal. Tap to Crystal Springs. New TSP. Cable pulling site north of structure.	Hand dig foundation. Fly in structure. Conventional (Drill Rig and Crane)	Air. Foot: Access from east through residential property, via Berryessa Way. Access from north using dirt road, via rest area entrance.
1#5	7/40 7/41	7/39 7/40 7/41	LAT	g94_rt_base_60 v2sg16	151.5	9 T	7.35	C	H		JM-39-40 JM-41-42-43	Common	Staging area south of structure. LSP	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access from north using dirt road, via rest area entrance. Access from north using dirt road, via rest area entrance.
	7/42	7/42 7/43	TSP.	v2sg16 v2sg16	100	T	7.65 7.74	C C	C	#13	JM-41-42-43 JM-41-42-43	Common Common	LSP	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access from south using dirt road, via rest area entrance. Access from south using dirt road, via rest area entrance.
	7/44	7/44	LAT	g95_lt_base_25 v2sg16	116.5	-36 -2	7.89 8.00	C C	C		JM-44-45-46 JM-44-45-46	Common Common	Cable pulling site n. and s. of str. LSP	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access from north using dirt road, via gate to Wedgewood Road. Access from south using dirt road, via gate to Wedgewood Road.
SECTION:	8/46	7/46	TSP.	v2sg16	110	-2	8.12	C	С		JM-44-45-46	Common	LSP	Conventional (Drill Rig and Crane)	Access from south using dirt road, via gate to Wedgewood Road.
8 5	8/48	8/47	LAT	v2sg16 4g_base_40	110	T T 9	8.23 8.38 8.58	C C	C H H	#14	JM-47-48 JM-47-48	Common Common	LSP	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access from south using dirt road, via gate to Wedgewood Road / Black Mountain Road. Access from Skyline Road. Access from Skyline Road.
	8/49 8/50	8/49 8/50		g94_rt_base_40 3n_base_15	131.5 105	6	8.69	С	Н		JM-49-50-51 JM-49-50-51	Common	Carolands Substation. Cable pulling site. Tree	Conventional (Drill Rig and Crane)	Access from Skyline Road.
-	8/51 8/52	8/51 8/52		g95_rt_base_15 g94_lt_base_25	106.5 116.5	3 -18	8.77 8.86	C	C		JM-49-50-51 JM-52-53	Common Common	removal from Str. 8/51 to 200 ft. south.	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access from Skyline Road. Access off Skyline Blvd.
	8/53 9/54	8/53 9/54	LAT TSP.	g94_rt_base_35	126.5 121.5	-13	9.02 9.18	C	C		JM-52-53 JM-54-55-56	Common Common	Cable pulling site north of structure.	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access off Golf Course Road. Access off Golf Course Road.
	9/55 9/56	9/55 9/56	TSP.	v2sg16 v2sg16	100 110	-1	9.27 9.37	C	C		JM-54-55-56	Common Common	LSP	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access off Golf Course Road. Access off Golf Course Road.
	9/57 9/58	9/57 9/58	TSP.	v2sg16 v2sg16	110 110	T	9.51 9.60	С	C		JM-57-58-59-60 JM-57-58-59-60	Common Common	LSP LSP	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access off Golf Course Road. Access off Golf Course Road.
	9/59 9/60	9/59 9/60	TSP.	v2sg16 v2sg16	90	-1 -23	9.71	C	C	2	JM-57-58-59-60 JM-57-58-59-60	Common Common	LSP LSP Cable pulling site north of structure.	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access off Golf Course Road. Access off Golf Course Road. Access off Golf Course Road.
	9/61 9/62 10/63	9/61 9/62 9/63	LAT	g94_lt_base_05 g94_rt_base_15 v2sg16	96.5 106.5 110	-23 18 T	9.88 9.96 10.09	C C	C C	#15	JM-61-62-63 JM-61-62-63 JM-61-62-63	Common Common	Cable pulling site north of structure. Cable pulling site south of structure. Cable pulling site north of structure. LSP.	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane) Conventional foundation installation.	Access off Golf Course Road. Access form north using dirt road, via water dept, storage yard.
#6 res)	10/64	9/63 10/64 10/65	TSP.	v2sg16 v2sg16 3n_base_05	110 100 95	T 6	10.09 10.22 10.31	C	C		JM-61-62-63 JM-64-65-66-67 JM-64-65-66-67	Common Common	LSP	Conventional foundation installation. Conventional foundation installation.	Access from south using dirt road, via water dept. storage yard. Access from south using dirt road, via water dept. storage yard. Access from south using dirt road, via water dept. storage yard.
SECTION:	10/66	10/65		v2sg16	110	T	10.46	С	С		JM-64-65-66-67	Common	LSP.	Conventional foundation installation. Conventional foundation installation.	Access from south using dirt road, via water dept. storage yard.
S. (27)	10/67	10/67 10/68		4g_base_15 g94_lt_base_40	105 131.5	T -15	10.56 10.73	C C	H C		JM-64-65-66-67 JM-68	Common Common	Cable pulling site south of structure.	Fly in structures. Conventional foundation installation.	Access from south using dirt road, via water dept. storage yard. Access from south using dirt road, via water dept. storage yard.
	10/69	10/69		g95_rt_base_45 g94_lt_base_05	136.5 96.5	34	11.00	С	С		JM-69-70 JM-69-70	New (NW of existing structure) Common	Cable pulling site NW and NE of str. Trim/remove trees for wire clearance. Cable pulling site south of structure.	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access from north using dirt road. Access off gravel road.
	11/70	11/71		g94_it_base_05 3n_base_05	95.5	-22 -3	11.12	Н	Н		JM-69-70 JM-71-72	Common		Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane) Conventional foundation installation.	Access from south using dirt road.
	11/72 11/73	11/72 11/73		g94_rt_base_05 g94_lt_base_15	96.5 106.5	26 -21	11.46 11.65	C C	H C	#16	JM-71-72 JM-73-74	Common Common		Fly in structures. Conventional (Drill Rig and Crane)	Need to construct (cut and fill) new access road from south. Access from east using dirt road.
	11/74 11/75	11/74 11/75	LAT	g94_lt_base_20 g95_rt_base_15	111.5 106.5	-22 46	11.81 11.91	C	C C		JM-73-74 JM-75-76-77	Common Common	Cable pulling site north and south of structure. Cable pulling site northeast of structure.	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access from Sawer Camp Trail. Access from Sawer Camp Trail.
	12/76 12/77	11/76	LAT	g94_lt_base_10 g94_rt_base_15	101.5	-33 14	12.08 12.20	С	С	#17	JM-75-76-77 JM-75-76-77	Common Common	Cable pulling site SW and N of str. Cable pulling site south of structure.	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access from Sawer Camp Trail. Access from Sawer Camp Trail.
47	12/78	12/78	LAT	g95_lt_base_25 3n_base_15	116.5 105	-15 5	12.36 12.56	C	C		JM-78-79-80 JM-78-79-80	Common Common	Tap to Milbrae	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access from gravel road. Access from gravel road. Access from dirt road
SECTION (4 Str.)	12/80	12/80		3n_base_15 3n_base_05	105 95	-5	12.70 12.85	С	С	#18	JM-80-81 JM-80-81	Common	Tap to San Andreas. Cable pulling site north of str.	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access from airt road Access from gravel road.
SECTION#8 SECTION#8 (12 Sfructures)	12/82 13/83	12/81A 12/82		v2dg50 g94_lt_base_15	100 106.5	T -11	12.96 13.07	C C	C C	6	JM-82-83-84 JM-82-83-84	Common Common	Existing TSP. Cable pulling site N and S of str.	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access from gravel road. Access from gravel road.
	13/84 13/85	12/83 13/84	TSP.	v2dg50.120 v2sg16.120	120 120	16 -2	13.22 13.38	C	C	#19	JM-82-83-84 JM-85-86	Common Common		Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access from gravel road. Access from gravel road.
	13/86	13/85	LAT	4g_base_40 3n_base_35	135 125	1 5	13.57	С	0 0		JM-85-86 JM-87-88	Common Common	LCD	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access from gravel road. Access from dirt road
		13/87 13/88 14/89	LSP	4g_base_40 v2sq16	130 100 100	-7 T	13.93 14.04 14.14	C C	C C			Common Common	LSP LSP	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access from dirt road Access from dirt road Access from dirt road
	14/90	14/89		v2sg16 v2sg16	100	T	14.14	С	С	#20	JM-89-90-91-92 JM-89-90-91-92	New (Approx. 120' upstation from existing 14/90)		Conventional (Drill Rig and Crane)	Access from dirt road Access from dirt road
	14/92	14/91		v2sg16	100	Т	14.32	С	С		JM-89-90-91-92	New (Approx. 240' upstation from existing 14/91)	Tap (69kV Tap to San Bruno).	Conventional (Drill Rig and Crane)	Access from dirt road
	14/93A 14/93B	14/93		230dvd334 115dvd3sw20	90 75	T C	14.41 14.41	C	C		JM-93A-94-95 JM-93A-94-95	Common New	Cable pulling site N and S of str. LSP Tap / 3-way switch	Conventional (Drill Rig and Crane) Conventional (Drill Rig and Crane)	Access from dirt road Access from dirt road
	14/94	14/94		v2sg16.120	120	Т	14.52	С	С		JM-93A-94-95	New (Approx. 340' upstation from existing 14/94)	230kV Tap to San Bruno Transition Station.	Conventional (Drill Rig and Crane)	Access from dirt road
0# N		4 4 7		2cktdvd350.120			14.63	С	С	Σ.	JM-93A-94-95	New (Approx. 340' upstation from existing 14/95)	Cable pulling site N and 5 of str. LSP	Conventional (Drill Rig and Crane)	Access from dirt road
SECTION #9	14/95	14/95 14/97	TSP.	2011474000.120	120 75	T	14.79	-	-	#21	JM-93A-94-95	Not to be replaced.	Possible Structure Height Extensions. LSP Sneath Substation. Possible structure height		

*TSP: Tubular Steel Pole LAT: Lattice Steel Tower LSP: Lattice Steel Pole

Tower Installation Options

Option #1 Assumes that standard constriction is used where possible, otherwise structures are installed by helicopter.

Option #2 Assumes that all possible structures are installed by helicopter. (Except the Milbrae-Sneath Section)