

Jefferson-Martin 230 kV Transmission Project - Description of EMF Mitigation

Shaded Cells show the magnetic field applicable to each segment.

Map Sheet (22 map series; available upon request)	Street	Specific Addresses or Locations & Landmarks	Segment Length (feet)	Plan & Profile Drawing Numbers	Adjacent Land Use	School(s) or Other Non-Residential Sensitive Uses	EMF Mitigation					Comments/Explanation
							Burial Depth				Strategic Placement	
							Base Case (mG @ ROW)	5 Foot Lower Trench (mG @ ROW)	Reduction in Magnetic Field (@ ROW)	Trench to be Deeper?	Line > 34 feet from Edge Building	
22, 21, 20, 19, 18	Canada Rd.	Jefferson Substation to Hwy 92	29,450	394028 to 394053	Unpopulated		N/A	N/A	N/A	No	No Buildings	No mitigation considered
18	Hwy 92	Canada Rd. to Skyline Blvd.	3,230	394053 to 394056	Unpopulated		N/A	N/A	N/A	No	No Buildings	No mitigation considered
18, 17, 16, 15	Skyline Blvd.	Hwy 92 to Hayne Rd.	16,100	394056 to 394073	Unpopulated		N/A	N/A	N/A	No	No Buildings	No mitigation considered
15, 14	Skyline Blvd	Hayne Rd to Rowan Tree Ln.	5,800	394074 to 394079	Residential		3.7	3.3	11.6%	No	Yes	Strategic line placement
14	Skyline Blvd	Rowan Tree Ln. to Butternut Dr.	1,000	394079 to 394080	School and Residential	Nueva School	2.7	2.5	8.9%	No	Yes	Strategic line placement
14	Skyline Blvd	Butternut Dr. to Summit Dr.	2,500	394080 to 394083	Residential		2.9	2.6	9.4%	No	Yes	Strategic line placement
14	Skyline Blvd	6255 Summit Dr. to Kip Ln.	1,000	394083 to 394084	Residential		8.4	6.4	22.9%	Yes	Yes	Achieves at least 15% reduction
14, 13	Skyline Blvd	Kip Ln. to Trousdale Dr.	5,800	394084 to 394089	Residential		4.6	4.0	14.1%	No	Yes	Strategic line placement
13, 12, 11, 10	SFPUC	access road [OVERHEAD SEGMENT]	536	394090	Unpopulated		N/A	N/A	N/A	No	No Buildings	No mitigation considered
9	Glenview Dr.	714 Glenview Dr. to 760 Glenview Dr.	624	394093	Residential		4.3	3.7	13.1%	No	Yes	Strategic line placement
9	Glenview Dr.	760 Glenview Dr. to San Bruno Ave.	550	394093 to 394094	Commercial Industrial		N/A	N/A	N/A	No	Yes	Strategic line placement
9, 8	San Bruno Ave.	Glenview Dr. to Green Ave.	9,300	394094 to 394103	Residential		4.6	4.0	14.1%	No	Yes	Strategic line placement
8	San Bruno Ave.	Green Ave. to Huntington Ave.	800	394103 to 394104	Residential & Commercial		4.3	3.7	13.1%	No	No	Line closer than 34 feet to building (see Note 1 below table)

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8, 7	Huntington Ave.	San Bruno Ave. to Sneath Ln.	3,600	394105 to 394109	Residential & Commercial		2.6	2.4	8.2%	No	Yes	Strategic line placement
7	Bart ROW	Sneath Ln. to S. Spruce St.	2,900	394110 to 394112	Commercial Industrial		N/A	N/A	N/A	No	Yes	Strategic line placement
7	Bart ROW	S. Spruce St. to Ramona Ave.	900	394112	Residential & Utility		14.2	9.4	33.5%	Yes	Yes	Achieves at least 15% reduction
7	Bart ROW	Ramona Ave. to Sycamore Ave.	1,300	394113	School, Residential, & Utility	South S. F. High School	14.2	9.4	33.5%	Yes	Yes	Achieves at least 15% reduction
7, 6	Bart ROW	Sycamore Ave. to Orange Ave.	300	394114	School, Residential, & Utility	Los Cerritos Elementary School	14.2	9.4	33.5%	Yes	Yes	Achieves at least 15% reduction
6	Bart ROW	Orange Ave. to the end of Memorial Dr.	1,100	394115	Residential & Utility	Boys & Girls Club	20.3	11.8	41.9%	Yes	No	Achieves at least 15% reduction Line closer than 34 feet to building (see Note 2 below table)
6	Bart ROW	The end of Memorial Dr. to Chestnut Ave.	1,200	394116 to 394117	Residential & Utility		14.2	9.4	33.5%	Yes	Yes	Achieves at least 15% reduction
6	Bart ROW	Chestnut Ave. to Oak Ave.	1,900	394117 to 394118	Commercial Industrial & Utility		N/A	N/A	N/A	No	Yes	Strategic line placement
6	Bart ROW	Oak Ave. to Sequoia Ave.	1,300	394119 to 394120	Residential & Utility		14.2	9.4	33.5%	Yes	Yes	Achieves at least 15% reduction
6, 5	Bart ROW	Sequoia Ave to Bart Driveway	700	394120 to 394121	Commercial Industrial		N/A	N/A	N/A	No	Yes	Strategic line placement
5	Mission Rd.	Bart Driveway to Lawndale Blvd	1,000	394121 to 394122	School	El Camino High School	14.2	9.4	33.5%	Yes	Yes	Achieves at least 15% reduction
5	Lawndale Blvd	Mission Rd. to Hillside Blvd	3,300	394122 to 394125	School and Residential	El Camino High School	2.0	1.8	6.6%	No	Yes	Strategic line placement

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5, 4	Hillside Blvd	Lawndale Blvd to Hoffman St.	8,100	394126 to 394134	Commercial Industrial		N/A	N/A	N/A	No	Yes	Strategic line placement
4	Hillside Blvd	Hoffman St. to Linden St.	500	394134 to 394135	Residential		2.6	2.4	8.2%	No	Yes	Strategic line placement
4	Hillside Blvd	Linden St. to Villa St.	400	394135	Residential		4.6	4.0	14.1%	No	No	Line closer than 34 feet to building (see Note 3 below table)
4, 3	Hillside Blvd	Lisbon St. to East Market St.	165	394136	School and Residential	Colma Elementary & Pollicita Middle Schools	6.9	5.6	19.9%	Yes	No	Achieves at least 15% reduction Line closer than 34 feet to building (See Note 4 below table)
3	East Market St.	Hillside Blvd to Wyandotte St.	260	394136 to 394137	School and Residential		3.5	3.1	10.9%	No	No	Line closer than 34 feet to building (See Note 5 below table)
3	East Market St.	Wyandotte St. to Florence St.	810	394137 to 394138	School and Residential		3.1	2.8	9.8%	No	No	Line closer than 34 feet to building (See Note 5 below table)
3	East Market St.	Florence St. to Price St.	1,500	394138 to 394139	Residential		3.1	2.8	9.8%	No	Yes	Strategic line placement
3	Guadalupe Canyon Pkwy	Price St. to 500 feet East of Price	500	394139	School	John F Kennedy Elementary School	3.1	2.8	9.8%	No	Yes	Strategic line placement
3, 2, 1	Guadalupe Canyon Pkwy	500 feet East of Price to Mission Blue Dr.	17,000	394139 to 394157	Unpopulated		N/A	N/A	N/A	No	No Buildings	No mitigation considered
1	Guadalupe Canyon Pkwy	Mission Blue Dr. to Bayshore Blvd	1,700	394157 to 394158	Commercial Industrial		N/A	N/A	N/A	No	Yes	Strategic line placement
1	Bayshore Blvd	Guadalupe Canyon Pkwy to Industrail Wy.	3,400	394158 to 394162	Commercial Industrial		N/A	N/A	N/A	No	Yes	Strategic line placement

Notes: Where line could not be installed >34 feet from a building, reasons are as follows:

- Note 1: San Bruno Avenue has multiple existing underground utilities (high pressure gas, sewer, water, telephone, electric distribution) that restrict line placement options
- Note 2: BART facilities require installation of the transmission line along western edge of ROW
- Note 3: Hillside Blvd near the corner of East Market Street has multiple existing underground utilities (water, sewer, storm drain, gas, telephone, electric distribution) that restrict placement options
- Note 4: In order for the underground transmission line to make the turn from Hillside Blvd onto East Market Street without exceeding the cable bending limit, the cable is placed closer to the edge of the right of way
- Note 5: East Market Street has multiple existing underground utilities (sewer, water, gas, storm drains) that leave only one space for the transmission line to be installed