



Attachment I
Proposed Project Budget

Electric Vehicle Charging Infrastructure Proposed Project Budget

		QTY.	UNITS	VALUE	AMOUNT	
SOFT COSTS	Design	Design and Engineering	1	UNIT	\$553,968	\$553,968
		Geotechnical Testing and Inspection	5%	%	\$2,386,776	\$119,339
		Environmental Testing and Inspections	1	%	\$54,650	\$54,650
		Special Studies	8%	%	\$2,386,776	\$190,943
		Subtotal				\$918,900
	Project Management	Project Administration	1,509.2	HRS	See 'Basis of Estimate'	\$397,347
		Labor Compliance	2%	%	\$3,374,793	\$67,496
		County Counsel	2%	%	\$2,386,776	\$47,736
		Facilities Management	100	HRS	\$106	\$10,600
		Subtotal				\$523,179
SOFT COST TOTALS					\$1,442,079	

HARD COSTS	Construction	Construction	1	UNIT	\$2,386,776	\$2,386,776
		Regulatory Contingency	10%	%	\$2,386,776	\$238,678
		Utility Relocation	3	UNIT	\$210,000	\$630,000
		Distance Factor	5%	%	\$2,386,776	\$119,339
		Subtotal				\$3,374,793
	Other	EV Charging Equipment	1	UNIT	\$1,252,000	\$1,252,000
		EV Charging Equipment Escalation Costs	10%	%	\$1,252,000	\$125,200
		Community Engagement	1	UNIT	\$100,000	\$100,000
		Subtotal				\$1,477,200
	HARD COST TOTALS					\$4,851,993

TOTAL PROPOSED PROJECT BUDGET: \$6,294,072

Use this cost breakdown to fill-in the cost table on the CIP Request form

		Current FY
Total One-Time Costs	Design/Engineering	\$918,900
	Construction Costs (includes regulatory contingency)	\$3,374,793
	PFMD Project Administration	\$523,179
	Software/Hardware	\$0
	Other Costs	\$1,477,200
	Total One-Time Costs	\$6,294,072



Project Cost Details

SOFT COSTS

Design

ID	ITEM	QTY.	U.O.M.	AMOUNT	SUBTOTAL	NOTES
1	Design & Engineering	1	UNIT	\$ 553,968.00	\$ 553,968.00	Including Plan Check
2	Geotechnical Testing and Inspections	5%	%	\$ 2,386,776.00	\$ 119,339.00	
3	Environmental	1	UNIT	\$ 54,650.00	\$ 54,650.00	NEPA Exception
4	Hazardous Material Testing and Inspections	0%	%	\$ 2,386,776.00	\$ -	
5	Design Contingency	0%	%	\$ 553,968.00	\$ -	
6	Special Studies	8%	%	\$ 2,386,776.00	\$ 190,943.00	Right of Way / Topography
SUBTOTAL						\$ 918,900.00

Project Management

ID	ITEM	QTY.	U.O.M.	AMOUNT	SUBTOTAL	NOTES
1	Supervising Project Manager	35	HRS	\$ 226.00	\$ 7,933.00	
2	Project Manager	816	HRS	\$ 218.00	\$ 177,888.00	
3	Project Development Analyst	136	HRS	\$ 190.00	\$ 25,840.00	
4	External Project Manager	0	HRS	\$ 240.00	\$ -	
5	External Construction Manager	281	HRS	\$ 315.00	\$ 88,452.00	
6	County Building Inspector	281	HRS	\$ 180.00	\$ 50,544.00	
7	County Supervising Building Inspector	70	HRS	\$ 184.00	\$ 12,917.00	
8	Project Controls Analyst (Cost)/Estimator	0	HRS	\$ 190.00	\$ -	
9	Project Controls Analyst (Schedule)/Scheduler	136	HRS	\$ 190.00	\$ 25,840.00	
10	Project Controls Supervisor	35	HRS	\$ 226.00	\$ 7,933.00	
11	County Counsel	2%	%	\$ 2,386,776.00	\$ 47,736.00	
12	Labor Compliance	2%	%	\$ 3,374,793.00	\$ 67,496.00	
13	Facilities Management Representative Allowance	100.00	HRS	\$ 106.00	\$ 10,600.00	
SUBTOTAL						\$ 523,179.00

HARD COSTS

Construction

ID	ITEM	QTY.	U.O.M.	AMOUNT	SUBTOTAL	NOTES
1	Construction Base Costs	1.00	UNIT	\$ 2,386,776.00	\$ 2,386,776.00	
2	Demolition Cost	0.00	HRS	\$ -	\$ -	Included in Construction Base Cost
3	Construction Regulatory Contingency	10%	UNIT	\$ 2,386,776.00	\$ 238,678.00	
4	Distance Factor	5%	%	\$ 2,386,776.00	\$ 119,339.00	
5	Special Demolition	0.00	UNIT	\$ -	\$ -	Included in Construction Base Cost
6	Asset Protection	0.00	UNIT	\$ -	\$ -	Included in Construction Base Cost
7	Temporary Fence	0.00	UNIT	\$ -	\$ -	Included in Construction Base Cost
8	Signage	0.00	UNIT	\$ -	\$ -	Included in Construction Base Cost
9	Traffic Control	0.00	UNIT	\$ -	\$ -	Included in Construction Base Cost
10	Utility Relocation	3.00	UNIT	\$ 210,000.00	\$ 630,000.00	
SUBTOTAL						\$ 3,374,793.00

Other

ID	ITEM	QTY.	U.O.M.	AMOUNT	SUBTOTAL	NOTES
1	EV Charging Equipment Cost	1.00	UNIT	\$ 1,252,000.00	\$ 1,252,000.00	
2	EV Charging Equipment Escalation Costs	10%	%	\$ 1,252,000.00	\$ 125,200.00	
3	Fleet Services, Move Management, and Relocation Cost	0.00	UNIT	\$ -	\$ -	
4	Furniture, Fixtures, and Equipment (FF&E)	0.00	UNIT	\$ -	\$ -	
5	Owner Furnished Specialty Items	0.00	UNIT	\$ -	\$ -	
6	Temporary Storage	0.00	UNIT	\$ -	\$ -	
7	Community Engagement	1.00	UNIT	\$ 100,000.00	\$ 100,000.00	Allowance for community engagement
SUBTOTAL						\$ 1,477,200.00

Budget Information - Grant Breakdown Requirement

	Cost Classification	a. Total Cost	b. Cost Not Allowable for Participation	c. Total Allowable Cost (Columns a-b)
1	Administrative and legal expenses	\$ 459,718.00		\$ 459,718.00
2	Land, structures, rights-of-way, appraisals, etc.	\$ 190,943.00		\$ 190,943.00
3	Relocation expenses and payments			\$ -
4	Architectural and engineering fees	\$ 553,968.00		\$ 553,968.00
5	Other architectural and engineering fees	\$ 173,989.00		\$ 173,989.00
6	Project inspection fees	\$ 63,461.00		\$ 63,461.00
7	Site work			\$ -
8	Demolition and removal			\$ -
9	Construction	\$ 3,016,776.00		\$ 3,016,776.00
10	Equipment	\$ 1,252,000.00		\$ 1,252,000.00
11	Miscellaneous	\$ 219,339.00		\$ 219,339.00
12	SUBTOTAL (sum of lines 1-11)	\$ 5,930,194.00		\$ 5,930,194.00
13	Contingencies	\$ 363,878.00		\$ 363,878.00
14	SUBTOTAL	\$ 6,294,072.00		\$ 6,294,072.00
15	Project (program) income			\$ -
16	TOTAL PROJECT COSTS (subtract #15 from #14)	\$ 6,294,072.00		\$ 6,294,072.00
Federal Funding				
17	Federal assistance requested, calculate as follows: (Consult Federal agency for Federal percentage share.)	Enter Eligible Cost from line 16c Multiply X	80%	\$ 5,035,257.60
	Enter the resulting Federal share.			

Costs from the Electric Vehicle Charging Program Final Report

Table 2 – ROM Cost Breakdown by Cost Category

#	Priority Location (A – Z)	Design/ Plan Check	Electrical Infrastructure	Civil Improvements	EV Charging Equipment	Construction Contingency (20%)	Subtotal
1	County Government Center - Hesperia	\$34,623	\$58,944	\$98,107	\$48,000	\$31,410	\$271,084
2	Rancho Cucamonga Courthouse (Public Lot)	\$34,623	\$88,931	\$82,043	\$180,000	\$34,195	\$419,792
3	Kessler Park (Jurupa Lot)	\$34,623	\$32,680	\$55,380	\$24,000	\$17,612	\$164,295
4	Yucaipa Regional Park (Lot 3A)	\$34,623	\$57,417	\$87,617	\$102,000	\$29,007	\$310,664
5	222/268 Hospitality Lane	\$34,623	\$117,011	\$192,111	\$112,000	\$61,824	\$517,569
6	Cucamonga-Guasti Regional Park	\$34,623	\$79,937	\$96,053	\$56,000	\$35,198	\$301,811
7	Twin Peaks Sheriff Station	\$34,623	\$31,184	\$61,837	\$16,000	\$18,604	\$162,248
8	County Government Center - Joshua Tree	\$34,623	\$56,472	\$81,796	\$102,000	\$27,654	\$302,545
9	Glen Helen Regional Park (Pool)	\$34,623	\$128,009	\$113,119	\$56,000	\$48,226	\$379,977
10	Lake Gregory Regional Park	\$34,623	\$38,507	\$110,620	\$32,000	\$29,825	\$245,575
11	Calico Ghost Town	\$34,623	\$127,327	\$118,948	\$420,000	\$49,255	\$750,153
12	8575 Haven Avenue	\$34,623	\$24,928	\$50,062	\$16,000	\$14,998	\$140,611
13	Phelan Memorial Library	\$34,623	\$16,557	\$35,171	\$16,000	\$10,346	\$112,697
13	Prado Regional Park (Lots 5&6)	\$34,623	\$40,936	\$81,879	\$24,000	\$24,563	\$206,001
15	Chino Airport (Kimball Lot)	\$34,623	\$60,291	\$62,893	\$32,000	\$24,637	\$214,444
16	Needles Sheriff Station	\$34,623	\$32,073	\$67,936	\$16,000	\$20,002	\$170,634
	TOTAL	\$553,968	\$991,204	\$1,395,572	\$1,252,000	\$477,355	\$4,670,099
	AVERAGE % OF PROJECT COST	12%	21%	30%	27%	10%	

White the results in Table 2 above present the distribution of expenses by cost criteria category, they do not indicate the relative expense of each project to the next. To present a comparative cost or cost efficiency, we analyze the Cost per kW of charger power (\$/kW). We use \$/kW in lieu of \$/charge port since several designs include a combination of higher power DC chargers and lower power Level 2 chargers; since DC chargers are more expensive but provide a higher level of operation and different level of service, evaluating on a \$/charge port unfairly penalizes projects using this equipment. Table 3 below shows which projects most efficiently leverage capital across the required infrastructure.

Table 3 – Cost per kW of Charger Power

Rank	Priority Location	Port Quantity (L2 6.7kW)	Port Quantity (L3 50kW)	Charger kW	Cost Subtotal	Cost per kW
1	County Government Center - Hesperia	12		79.87	\$271,084	\$3,394
2	Rancho Cucamonga Courthouse (Public Lot)	10	4	266.56	\$419,792	\$1,575
3	Kessler Park (Jurupa Lot)	6		39.94	\$164,295	\$4,114
4	Yucaipa Regional Park (Lot 3A)	8	2	153.25	\$310,664	\$2,027
5	222/268 Hospitality Lane	28		186.37	\$517,569	\$2,777
6	Cucamonga-Guasti Regional Park	14		93.18	\$301,811	\$3,239
7	Twin Peaks Sheriff Station	4		26.62	\$162,248	\$6,094
8	County Government Center - Joshua Tree	8	2	153.25	\$302,545	\$1,974
9	Glen Helen Regional Park (Pool)	14		93.18	\$379,977	\$4,078
10	Lake Gregory Regional Park	8		53.25	\$245,575	\$4,612
11	Calico Ghost Town	12		600.00	\$750,153	\$1,250
12	8575 Haven Avenue	4		26.62	\$140,611	\$5,281
13	Phelan Memorial Library	4		30.72	\$112,697	\$3,669
14	Prado Regional Park (Lots 5&6)	6		39.94	\$206,001	\$5,158
15	Chino Airport (Kimball Lot)	8		53.25	\$214,444	\$4,027
16	Needles Sheriff Station	4		26.62	\$170,634	\$6,409
	TOTAL	150	8	1922.62	\$4,670,099	
	WEIGHTED AVERAGE COST PER KW CHARGER POWER					\$2,429