



OPINION OF PROBABLE CONSTRUCTION COSTS

The costs presented here to construct the infrastructure necessary for the Downtown Infrastructure Study area are intended to be planning level only. They include the general costs for the overall buildout of the proposed development of the plan area using today's dollars. This estimate is not intended to be utilized for the actual costs for specific projects. The final costs for each specific project will need to be estimated separately and could be considerably different than those shown here due to the uncertainty of the order, timing and scope of the actual development to be constructed. The estimates have been developed solely to give interested parties a magnitude of the scale of the costs of improvements.

The unit costs are based on actual costs of recent development within the Downtown Sacramento, planning level costs utilized by various City departments as well as engineering judgment. Final unit costs for each specific project will depend on the actual labor and materials costs for the conditions at the time of construction. These conditions might include the scope of the development and the schedule of the completion of the project. It should be noted that costs to construct infrastructure within the Downtown Sacramento area are significantly higher than costs generally associate with development in the outlying suburban or previously undeveloped areas due to the increased costs associated with working within existing roadways with numerous existing utilities, traffic control, and limited working hours.

The estimates are generally separated into the corresponding infrastructure report chapters for the different utilities. The estimates are limited to the work within immediate the Study area boundary. Assumptions and clarifications for the costs are noted at the bottom of the individual sheets.

Right-of-way/easement acquisition has not been included in the estimates since it is expected that the improvements will be constructed within the existing road right-of-way.



CONSTRUCTION COST ESTIMATE SUMMARY

A. STREETWORK	
Alleys & Bulb-Outs	\$1,296,600
B. STORMWATER & SANITARY SEWER SYSTEM	
Basin 52 Improvements	\$3,019,100
Separated Drainage System	\$1,328,900
C. WATER DISTRIBUTION SYSTEM	\$1,665,700
D. ELECTRICAL/TELECOMMUNICATIONS	\$9,888,000
TOTAL CONSTRUCTION (A-D)	\$17,198,300



STREETWORK COSTS

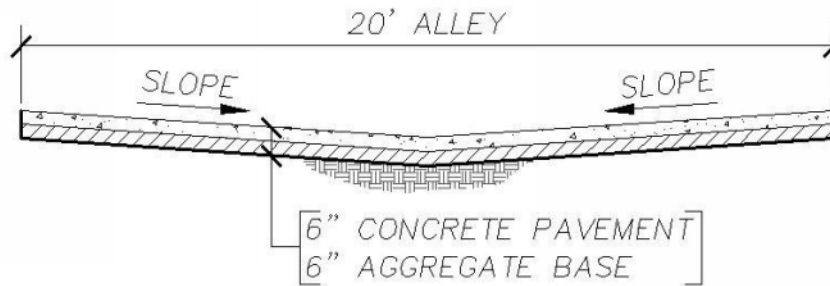
DESCRIPTION	QUANTITY	UNIT OF MEASURE	UNIT PRICE	AMOUNT
A. STREETWORK				
1. Alley Pavement Replacement ¹	2,410	LF	\$142.50	\$343,425
2. Alley Pavement Repair ²	1,280	LF	\$28.50	\$36,480
3. Bulb-Outs (Half) ³	10	EA	\$38,850.00	\$388,500
4. Bulb-Outs (Full) ⁴	0	EA	\$45,080.00	\$0
	Subtotal			\$768,405
			35% Contingency	\$268,900
			Subtotal & Contingency	<u>\$1,037,300</u>
			15% Engineering	\$155,600
			10% Construction Management	\$103,700
TOTAL STREETWORK				\$1,296,600

Notes:

1. Only the Alleys within the Downtown Infrastructure Study area boundary are included in the quantities for replacement and repair.
2. Alley repair is assumed to be 20% of the cost per LF for full replacement.
3. Only the 10 Half Bulb-Outs adjacent to projects within the Downtown Infrastructure Study area boundary are included in the quantity. There are an additional 4 Half Bulb-Outs adjacent to the Additional Projects outside the project Study area boundary that are not included in the quantity.
4. There are no Full Bulb-Outs anticipated within the Downtown Infrastructure Study area. Unit Price shown is for reference only.



ALLEY PAVEMENT REPLACEMENT



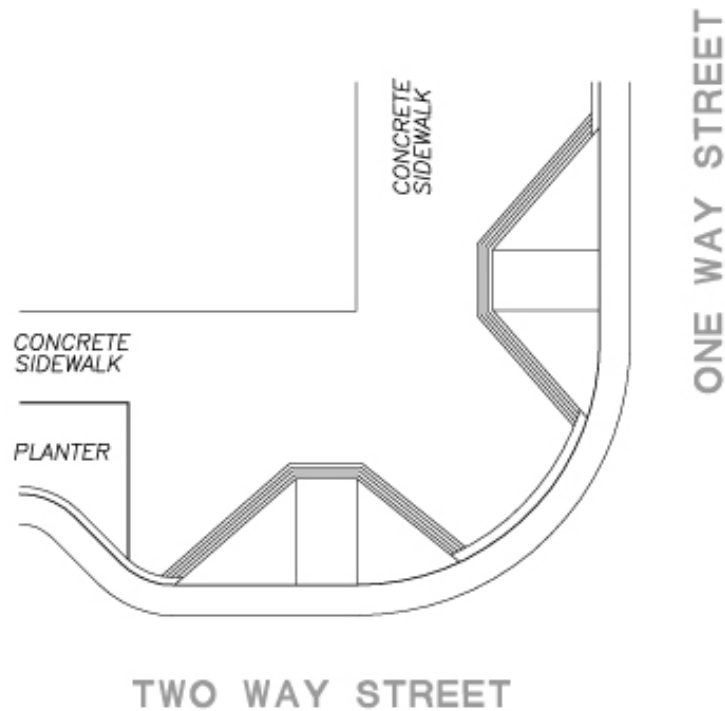
DESCRIPTION	QUANTITY	UNIT OF MEASURE	UNIT PRICE	AMOUNT
1. Alley Pavement Replacement				
a. Earthwork	0.75	CY	\$30.00	\$22.50
b. 6" Concrete Pavement	20	SF	\$5.00	\$100.00
c. 6" Aggregate Base	20	SF	\$1.00	\$20.00
TOTAL STREET COSTS PER LF				\$142.50

Assumptions:

1. One foot depth of earthwork over entire cross section.
2. "V" Gutter to be placed on center of alley.



HALF BULB-OUT



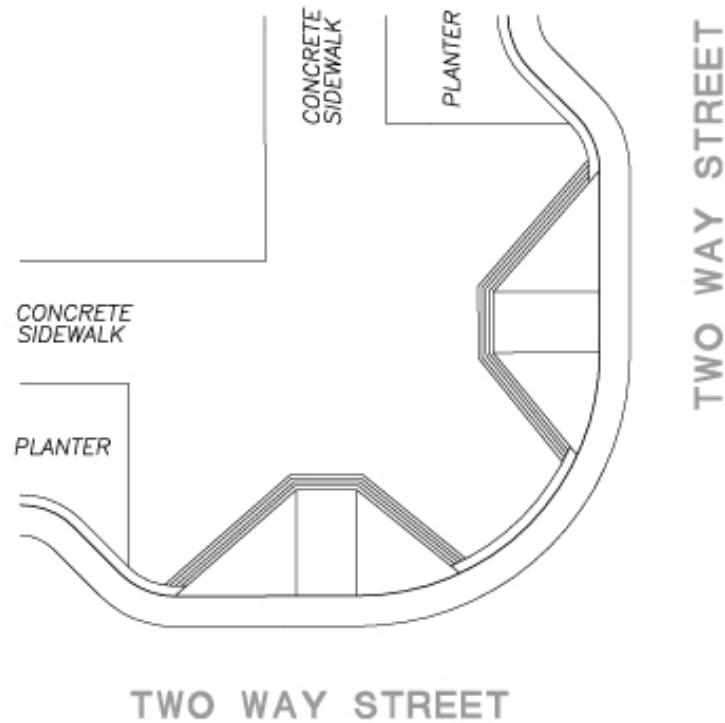
DESCRIPTION	QUANTITY	UNIT OF MEASURE	UNIT PRICE	AMOUNT
3. Bulb-Outs (Half)				
a. Demolition/Pavement Removal	1283	SF	\$2.00	\$2,566.00
b. Pavement Sawcut	74	LF	\$1.50	\$111.00
c. Earthwork	95	CY	\$28.00	\$2,660.00
d. 4" Asphalt Concrete	216	SF	\$3.50	\$756.00
e. 12" Aggregate Base	216	SF	\$2.00	\$432.00
f. Curb and Gutter No. 4	66	LF	\$35.00	\$2,310.00
g. Sidewalk	823	SF	\$12.00	\$9,876.00
h. Street Light	1	EA	\$6,000.00	\$6,000.00
i. Traffic Signal Adjustment	1	EA	\$5,000.00	\$5,000.00
j. Landscaping	64	SF	\$10.00	\$640.00
k. Modification of Existing Drainage	1	EA	\$8,500.00	\$8,500.00
TOTAL STREET COSTS PER LF				\$38,850

Assumptions:

1. Two feet depth of earthwork over modified portion of the street and sidewalk.
2. 1 DI, 25 feet of pipe, and a manhole required to modify existing drainage.



FULL BULB-OUT



DESCRIPTION	QUANTITY	UNIT OF MEASURE	UNIT PRICE	AMOUNT
4. Bulb-Outs (Full)				
a. Demolition/Pavement Removal	1465	SF	\$2.00	\$2,930.00
b. Pavement Sawcut	81	LF	\$1.50	\$121.50
c. Earthwork	108.5	CY	\$28.00	\$3,038.00
d. 4" Asphalt Concrete	237	SF	\$3.50	\$829.50
e. 12" Aggregate Base	237	SF	\$2.00	\$474.00
f. Curb and Gutter No. 4	74	LF	\$35.00	\$2,590.00
g. Sidewalk	901	SF	\$12.00	\$10,812.00
h. Street Light	1	EA	\$6,000.00	\$6,000.00
i. Traffic Signal Adjustment	1	EA	\$5,000.00	\$5,000.00
j. Landscaping	128	SF	\$10.00	\$1,280.00
k. Modification of Existing Drainage	1	EA	\$12,000.00	\$12,000.00
TOTAL STREET COSTS PER LF				\$45,075

Assumptions:

1. Two feet depth of earthwork over modified portion of the street and sidewalk.
2. 2 DI's, 50 feet of pipe, and a manhole required to modify existing drainage.



DRAINAGE SYSTEM COSTS

DESCRIPTION	QUANTITY	UNIT OF MEASURE	UNIT PRICE	AMOUNT
B. STORMWATER & SANITARY SEWER				
1. 1 Basin 52 Improvements ¹				
a. Storm Drain Manhole	5	EA	\$10,500.00	\$52,500
b. Storm Drain Pipe, 15"	1,016	LF	\$150.00	\$152,400
c. Storm Drain Pipe, 42"	2,042	LF	\$500.00	\$1,021,000
d. Storm Drain Pipe, 48"	1,024	LF	\$550.00	\$563,200
		Subtotal		\$1,789,100
		35% Contingency		\$626,200
		Subtotal & Contingency		<u>\$2,415,300</u>
		15% Engineering		\$362,300
		10% Construction Management		\$241,500
		TOTAL BASIN 52 IMPROVEMENTS		\$3,019,100
2. 2 Separated Drainage System				
a. Storm Drain Manhole ²	13	EA	\$10,000.00	\$130,000
b. Storm Drain Pipe, 18"	3,400	LF	\$180.00	\$612,000
c. Inlets ³	13	EA	\$3,500.00	\$45,500
		Subtotal		\$787,500
		35% Contingency		\$275,600
		Subtotal & Contingency		<u>\$1,063,100</u>
		15% Engineering		\$159,500
		10% Construction Management		\$106,300
		TOTAL SEPARATED DRAINAGE SYSTEM		\$1,328,900

Notes:

1. Only the portion of the Basin 52 Master Plan drainage system within the Downtown Infrastructure Study area boundary is included in this estimate.
2. Assume 1 new manhole at each end of an alley section in the street.
3. Assume 1 new inlet per alley section. Existing street inlets to be saved in place and connected to the new separated system.



WATER DISTRIBUTION SYSTEM COSTS

DESCRIPTION	QUANTITY	UNIT OF MEASURE	UNIT PRICE	AMOUNT
C. WATER DISTRIBUTION SYSTEM				
1. Water, 12" (Including Fittings)	7,050	LF	\$140.00	\$987,000
	Subtotal			\$987,000
	35% Contingency			\$345,450
	Subtotal & Contingency			<u>\$1,332,450</u>
	15% Engineering			\$199,900
	10% Construction Management			\$133,300
TOTAL WATER DISTRIBUTION SYSTEM				\$1,665,700



ELECTRICAL/TELECOMMUNICATIONS COSTS

DESCRIPTION	QUANTITY	UNIT OF MEASURE	UNIT PRICE	AMOUNT
D. ELECTRICAL/TELECOMMUNICATIONS				
1. Proposed 2012 21kV Joint Trench	1,400	LF	\$400	\$560,000
2. Proposed 2012 Large Vault (9' X 20')	2	EA	\$50,000	\$100,000
3. Proposed 2012 Standard Vault (4' X 6')	7	EA	\$25,000	\$175,000
4. Future 21kV Joint Trench	9,550	LF	\$400	\$3,820,000
5. Future 21kV Large Vault (9' X 20')	8	EA	\$50,000	\$400,000
6. Future 21kV Standard Vault (4' X 6')	45	EA	\$25,000	\$1,125,000
	Subtotal			\$6,180,000
			35% Contingency	\$2,163,000
			Subtotal & Contingency	<u>\$8,343,000</u>
			15% Engineering	\$927,000
			10% Construction Management	\$618,000
			TOTAL ELECTRICAL/TELECOMMUNICATIONS	<u>\$9,888,000</u>

Assumptions:

1. Proposed 2012 Joint Trench is assumed to have minimum of 2 - 6" & 2 - 4" electrical conduits, 4 - 4" telecommunications conduits and 4 - 2" cable conduits.
2. Future Joint Trench is assumed to have a minimum of 2 - 6" & 2 - 4" electrical conduits, 4 - 4" telecommunications conduits and 4 - 2" cable conduits.
3. Large vaults are assumed to be one every other block along the alignment.
4. Standard vaults are assumed to be 2 per block along the alignment.