



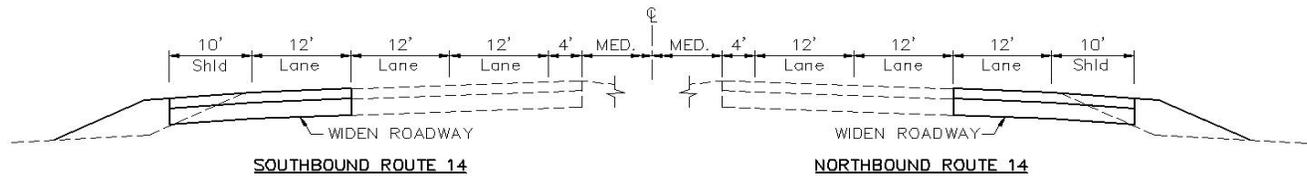
PRELIMINARY OPINION OF COST

Route 14

From the Los Angeles/Kern County Line to Rosamond Blvd

(PM 0.00 to 3.02)

TYPICAL CROSS SECTION



Right-of-Way and proposed improvements dimensions are approximate only, information shown is for cost estimating purposes only and is not accurate for determining construction limits or Right-of-Way acquisitions.

COST BREAKDOWN

PROJECT LENGTH

14,400

Item Description	Quantity	Units	Unit Cost	Total Cost
Earthwork				
Roadway Excavation	48107	CY	\$10.00	\$481,067
Existing Facilities				
Sawcut Existing Asphalt Concrete	28800	LF	\$2.25	\$64,800
Remove Metal Beam Guardrail	0	LF	\$15.00	\$0
Relocate Sign	11	EA	\$130.00	\$1,418
Structural Section				
Type A Asphalt Concrete	35640	Ton	\$55.00	\$1,960,200
Class 2 Aggregate Base	30507	CY	\$45.00	\$1,372,800
Slurry Seal	528	Ton	\$150.00	\$79,168
Signing/Striping Improvements				
Striping Imps (4 lanes)	14400	LF	\$2.90	\$41,760
Signs	5	EA	\$250.00	\$1,364
Miscellaneous				
Metal Beam Guardrailing	0	LF	\$45.00	\$0
Drainage & Utility Improvements				
Remove Headwall	6	EA	\$800.00	\$4,800
New Headwall	6	EA	\$1,800.00	\$10,800
New Culvert	131	LF	\$100.00	\$13,091
Entrance Taper	11	EA	\$230.00	\$2,509
Subtotal Construction Items				\$4,033,777
Traffic Control			5%	\$201,689
Construction and Construction Administration Contingency			30%	\$1,210,133

COST BREAKDOWN**PROJECT LENGTH****14,400**

Item Description	Quantity	Units	Unit Cost	Total Cost
Engineering and Administration Support			20%	\$806,755
Project Total		14,400	LF	\$6,252,354

-auxiliary lanes are assumed within project limits (no mainline widening through the interchange at Rosamond Blvd)

-preliminary estimate does not include right-of-way costs





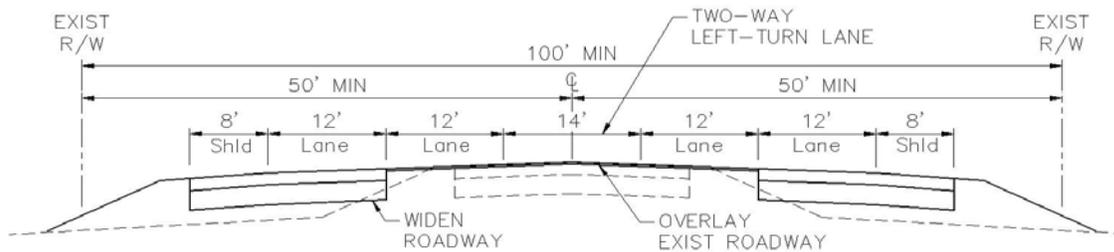
PRELIMINARY OPINION OF COST

Route 202

From the California Correctional Institute to Woodford Road

(PM 1.48 to PM 7.4)

TYPICAL CROSS SECTION



Right-of-Way and proposed improvements dimensions are approximate only, information shown is for cost estimating purposes only and is not accurate for determining construction limits or Right-of-Way acquisitions.

COST BREAKDOWN

PROJECT LENGTH

31,300

Item Description	Quantity	Units	Unit Cost	Total Cost
Earthwork				
Roadway Excavation	143,980	CY	\$10.00	\$1,439,800
Existing Facilities				
Sawcut Existing Asphalt Concrete	62,600	LF	\$2.25	\$140,850
Remove Tree	17	EA	\$500.00	\$8,428
Relocate Electrolier	3	EA	\$1,500.00	\$4,500
Remove Metal Beam Guardrail	6,100	LF	\$15.00	\$91,500
Relocate Sign	80	EA	\$130.00	\$10,400
Relocate Utility Pole	60	EA	\$5,000.00	\$300,000
Structural Section				
Type A Asphalt Concrete	79,299	Ton	\$55.00	\$4,361,420
Class 2 Aggregate Base	109,550	CY	\$45.00	\$4,929,750
Slurry Seal	1,408	Ton	\$150.00	\$211,190
Signing/Striping Improvements				
Striping Imps (4 lanes)	31,300	LF	\$2.90	\$90,770
Pavement Markings	360	SF	\$4.25	\$1,530
Signs	20	EA	\$250.00	\$5,000
Miscellaneous				
Metal Beam Guardrailing	6100	LF	\$45.00	\$274,500
Drainage & Utility Improvements				
Remove Headwall	10	EA	\$800.00	\$8,000
New Headwall	16	EA	\$1,800.00	\$28,800
New Culvert	500	LF	\$100.00	\$50,000
Entrance Taper	38	EA	\$230.00	\$8,740
Subtotal Construction Items				\$11,965,179

COST BREAKDOWN**PROJECT LENGTH****31,300**

Item Description	Quantity	Units	Unit Cost	Total Cost
Traffic Control			2%	\$239,304
Construction and Construction Administration Contingency			30%	\$3,589,554
Engineering and Administration Support			20%	\$2,393,036
Right-of-way				
Undeveloped	751,200	SF	\$5.50	\$4,131,600
Right-of-way Acquisition Support			10%	\$413,160
Project Total	31,300	LF		\$22,731,832

-preliminary estimate assumes a 12' r/w acquisition on each side





Kern Council of Governments Impact Fee Study

Prepared By:



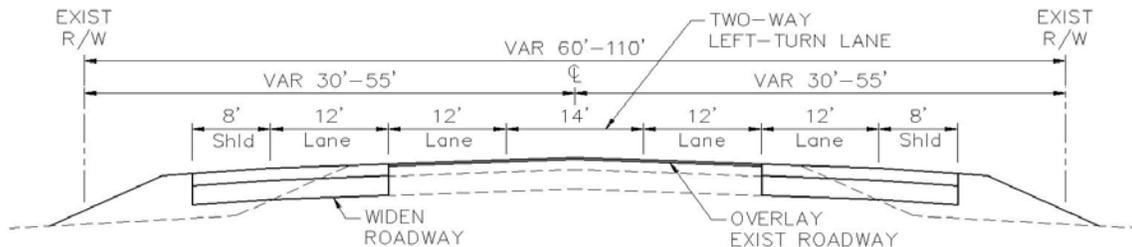
PRELIMINARY OPINION OF COST

Route 202

From Woodford Road to Tucker Road

(PM 7.30 to 8.87)

TYPICAL CROSS SECTION



Right-of-Way and proposed improvements dimensions are approximate only, information shown is for cost estimating purposes only and is not accurate for determining construction limits or Right-of-Way acquisitions.

COST BREAKDOWN		PROJECT LENGTH		8,300
Item Description	Quantity	Units	Unit Cost	Total Cost
Earthwork				
Roadway Excavation	28896	CY	\$10.00	\$288,963
Existing Facilities				
Sawcut Existing Asphalt Concrete	16600	LF	\$2.25	\$37,350
Remove Tree	20	EA	\$500.00	\$10,000
Relocate Electrolier	1	EA	\$1,500.00	\$1,500
Relocate Fence	1880	LF	\$15.00	\$28,200
Relocate Sign	40	EA	\$130.00	\$5,200
Relocate Utility Pole	32	EA	\$5,000.00	\$160,000
Structural Section				
Type A Asphalt Concrete	18961	Ton	\$55.00	\$1,042,874
Class 2 Aggregate Base	21519	CY	\$45.00	\$968,333
Slurry Seal	277	Ton	\$150.00	\$41,483
Signing/Striping Improvements				
Striping Imps (4 lanes)	8300	LF	\$2.90	\$24,070
Pavement Markings	450	SF	\$4.25	\$1,913
Signs	6	EA	\$250.00	\$1,500
Drainage & Utility Improvements				
Relocate Drainage Inlets w/ laterals	1	EA	\$3,810.00	\$3,810
Remove Headwall	4	EA	\$800.00	\$3,200
New Headwall	4	EA	\$1,800.00	\$7,200
New Culvert	265	LF	\$100.00	\$26,500
Entrance Taper	6	EA	\$230.00	\$1,446
Relocate Fire Hydrant	1	EA	\$3,120.00	\$3,120
Traffic Signal				
Traffic Signal New (low)	0	LS	\$150,700.00	\$0

COST BREAKDOWN**PROJECT LENGTH****8,300**

Item Description	Quantity	Units	Unit Cost	Total Cost
Traffic Signal New (high)	2	LS	\$190,100.00	\$380,200
Special Items				
Adjust Utility Cover to Grade	5	EA	\$600.00	\$3,000
Relocate Standpipe	2	EA	\$1,500.00	\$3,000
Relocate Bollard	4	EA	\$300.00	\$1,200
Subtotal Construction Items				\$3,044,063
Traffic Control			5%	\$152,203
Construction and Construction Administration Contingency			30%	\$913,219
Engineering and Administration Support			20%	\$608,813
Right-of-way				
Developed (landscaped)	166,000	SF	\$10.00	\$1,660,000
Right-of-way Acquisition Support			10%	\$166,000
Project Total	8,300	LF		\$6,544,297

-preliminary estimate assumes a 10' r/w acquisition on each side

-preliminary estimate does not include potential relocations of underground gas and electric lines



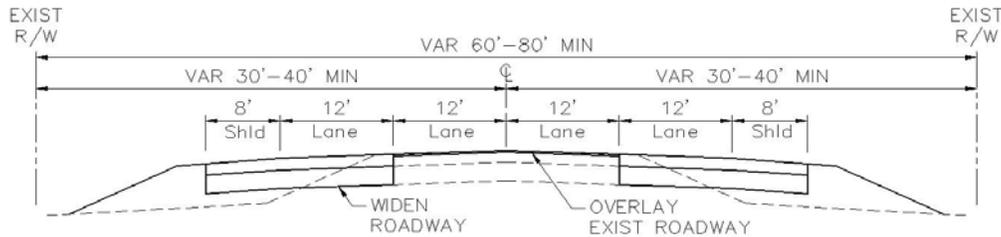


PRELIMINARY OPINION OF COST

Tehachapi-Willow Springs Road

From Backus Road to Highline Road

TYPICAL CROSS SECTION



Right-of-Way and proposed improvements dimensions are approximate only, information shown is for cost estimating purposes only and is not accurate for determining construction limits or Right-of-Way acquisitions.

COST BREAKDOWN

PROJECT LENGTH

72,900

Item Description	Quantity	Units	Unit Cost	Total Cost
Earthwork				
Roadway Excavation	221,400	CY	\$10.00	\$2,214,000
Existing Facilities				
Sawcut Existing Asphalt Concrete	145,800	LF	\$2.25	\$328,050
Remove Tree	54	EA	\$500.00	\$27,000
Relocate Electrolier	4	EA	\$1,500.00	\$6,000
Remove Metal Beam Guardrail	250	LF	\$15.00	\$3,750
Relocate Sign	9	EA	\$130.00	\$1,170
Relocate Utility Pole	60	EA	\$5,000.00	\$300,000
Structural Section				
Type A Asphalt Concrete	131,657	Ton	\$55.00	\$7,241,157
Class 2 Aggregate Base	167,400	CY	\$45.00	\$7,533,000
Slurry Seal	2,429	Ton	\$150.00	\$364,354
Signing/Striping Improvements				
Striping Imps (4 lanes)	72,900	LF	\$2.90	\$211,410
Pavement Markings	1350	SF	\$4.25	\$5,738
Signs	14	EA	\$250.00	\$3,500
Miscellaneous				
Metal Beam Guardrailing	500	LF	\$45.00	\$22,500
Drainage & Utility Improvements				
Remove Headwall	29	EA	\$800.00	\$23,200
New Headwall	29	EA	\$1,800.00	\$52,200
New Culvert	435	LF	\$100.00	\$43,500
Entrance Taper	18	EA	\$230.00	\$4,234
Traffic Signal				
Traffic Signal New (low)	2	LS	\$150,700.00	\$301,400

COST BREAKDOWN

PROJECT LENGTH

72,900

Item Description	Quantity	Units	Unit Cost	Total Cost
Traffic Signal New (high)	0	LS	\$190,100.00	\$0
Special Items				
Canal X-ing Over L.A. Aqueduct	2400	SF	\$70.00	\$168,000
Subtotal Construction Items				\$18,854,163
Traffic Control			2%	\$377,083
Construction and Construction Administration Contingency			30%	\$5,656,249
Engineering and Administration Support			20%	\$3,770,833
Project Total				
		72,900	LF	\$28,658,327

-preliminary estimate does not include right-of-way costs



**Kern COG Impact Fee Study
Unit Cost Data Spreadsheet**

05/14/04

No.	Description	Units	Unit Cost *
Earthwork			
1	Roadway Excavation (developed)	CY	\$18.50
2	Roadway Excavation (undeveloped)	CY	\$10.00
3	Imported Borrow	CY	\$15.00
Existing Facilities			
4	Sawcut Existing Asphalt Concrete	LF	\$2.25
5	Remove Stripe	LF	\$1.00
6	Remove Pavement Marking	SF	\$2.75
7	Remove Tree	EA	\$500.00
8	Relocate Electrolier	EA	\$1,500.00
9	Remove Metal Beam Guardrail	LF	\$15.00
10	Remove Concrete Barrier	LF	\$12.00
11	Relocate Fence	LF	\$15.00
12	Relocate Sign	EA	\$130.00
13	Relocate Utility Pole	EA	\$5,000.00
Structural Section			
14	Type A Asphalt Concrete	Ton	\$55.00
15	Class 2 Aggregate Base	CY	\$45.00
16	Slurry Seal	Ton	\$150.00
Concrete Items			
17	Concrete Sidewalk	SF	\$3.00
18	Curb and Gutter	LF	\$18.00
19	Median Island Curb	LF	\$15.00
20	Median Island Flatwork	SF	\$4.00
21	Driveway	EA	\$1,500.00
22	Sidewalk Ramp	EA	\$1,150.00
23	Concrete Barrier	LF	\$50.00
Signing/Striping Improvements			
24	Striping Imps (6 lanes)	LF	\$4.00
25	Striping Imps (4 lanes)	LF	\$2.90
26	Striping	LF	\$1.00
27	Pavement Markings	SF	\$4.25
28	Signs	EA	\$250.00
Miscellaneous			
29	Small Retaining Wall (0 to 5')	LF	\$200.00
30	Medium Retaining Wall (6 to 10')	LF	\$400.00
31	Large Retaining Wall (11' & up)	LF	\$510.00
32	Soundwall	LF	\$143.00
33	Metal Beam Guardrail	LF	\$45.00
Drainage & Utility Improvements			
34	Relocate Drainage Inlets w/ laterals	EA	\$3,810.00
35	New Drainage Inlets w/ laterals	EA	\$4,980.00
36	Storm Drain Mainline w/ Manholes	LF	\$95.00
37	Remove Headwall	EA	\$800.00
38	New Headwall	EA	\$1,800.00
39	New Culvert	LF	\$100.00
40	Entrance Taper	EA	\$230.00
41	Relocate Fire Hydrant	EA	\$3,120.00
42	Street Lights and Pull Boxes	EA	\$2,170.00
43	Street Lights Conduit System	LF	\$18.00
Traffic Signals			
44	Traffic Signal Modification (low)	LS	\$50,400.00
45	Traffic Signal Modification (high)	LS	\$170,700.00
46	Traffic Signal New (low)	LS	\$150,700.00
47	Traffic Signal New (high)	LS	\$190,100.00
Railroad Crossings			
48	Railroad Crossing Imp (Type 1)	EA	\$500,000.00
49	Railroad Crossing Imp (Type 2)	EA	\$650,000.00
50	Railroad Crossing Imp (Type 3)	EA	\$800,000.00
Right of Way			
51	Developed (parking)	Stall	\$2,500.00
52	Developed (landscaped)	SF	\$10.00
53	Developed (Building)	SF	\$150.00
54	Undeveloped	SF	\$5.50
Additional Items			
55	Canal Xing	SF	\$70.00
56	Pipe Irrigation Canal w/ 2 ea 84"RCP	LF	\$450.00
57	Bridge Xing (Road or River)	SF	\$170.00
58	Adjust Utility Cover to Grade	EA	\$600.00
59	Relocate Standpipe	EA	\$1,500.00
60	Relocate Bollard	EA	\$300.00

* per Caltrans 2002 Cost Data Book

Kern COG Impact Fee Study
Unit Cost Data Back up - Traffic Signals

Low Cost Signal Modification (4 Lanes)

Description	Units	Cost	Quantity	Total
Large Signal Poles	EA	\$7,500		\$0
Small Signal Poles (1-A)	EA	\$2,500		\$0
Signal Heads	EA	\$1,000		\$0
Pedestrian Heads	EA	\$750		\$0
EVP	Detector	\$1,200		\$0
Signal Controller	EA	\$20,000		\$0
Signal Service Cabinet	EA	\$3,500		\$0
Loop Detectors (Type A)	EA	\$400	56	\$22,400
Conduits and Wires	LF	\$20		\$0
Wiring (Existing Conduits)	LF	\$15	1200	\$18,000
Misc. Wiring (major)	EA	\$10,000	1	\$10,000
Misc. Wiring (minor)	EA	\$5,000		\$0
Remove Signal System (major)	EA	\$20,000		\$0
Remove Signal System (minor)	EA	\$10,000		\$0
				\$50,400
			Cost per Leg	\$12,600

High Cost Signal Modification (4 Lanes)

Description	Units	Cost	Quantity	Total
Large Signal Poles	EA	\$7,500	4	\$30,000
Small Signal Poles (1-A)	EA	\$2,500	4	\$10,000
Signal Heads	EA	\$1,000	20	\$20,000
Pedestrian Heads	EA	\$750	8	\$6,000
EVP	Detector	\$1,200	4	\$4,800
Signal Controller	EA	\$20,000	1	\$20,000
Signal Service Cabinet	EA	\$3,500	1	\$3,500
Loop Detectors (Type A)	EA	\$400	56	\$22,400
Conduits and Wires	LF	\$20	1200	\$24,000
Wiring (Existing Conduits)	LF	\$10		\$0
Misc. Wiring (major)	EA	\$10,000	1	\$10,000
Misc. Wiring (minor)	EA	\$5,000		\$0
Remove Signal System (major)	EA	\$20,000	1	\$20,000
Remove Signal System (minor)	EA	\$10,000		\$0
				\$170,700
			Cost per Leg	\$42,675

Low Cost Signal Modification (6 Lanes)

Description	Units	Cost	Quantity	Total
Large Signal Poles	EA	\$13,000		\$0
Small Signal Poles (1-A)	EA	\$2,500		\$0
Signal Heads	EA	\$1,000		\$0
Pedestrian Heads	EA	\$750		\$0
EVP	Detector	\$1,200		\$0
Signal Controller	EA	\$20,000		\$0
Signal Service Cabinet	EA	\$3,500		\$0
Loop Detectors (Type A)	EA	\$400	72	\$28,800
Conduits and Wires	LF	\$20		\$0
Wiring (Existing Conduits)	LF	\$15	1750	\$26,250
Misc. Wiring (major)	EA	\$10,000	1	\$10,000
Misc. Wiring (minor)	EA	\$5,000		\$0
Remove Signal System (major)	EA	\$20,000		\$0
Remove Signal System (minor)	EA	\$10,000		\$0
				\$65,050
			Cost per Leg	\$16,263

High Cost Signal Modification (6 Lanes)

Description	Units	Cost	Quantity	Total
Large Signal Poles	EA	\$13,000	4	\$52,000
Small Signal Poles (1-A)	EA	\$2,500	4	\$10,000
Signal Heads	EA	\$1,000	20	\$20,000
Pedestrian Heads	EA	\$750	8	\$6,000
EVP	Detector	\$1,200	4	\$4,800
Signal Controller	EA	\$20,000	1	\$20,000
Signal Service Cabinet	EA	\$3,500	1	\$3,500
Loop Detectors (Type A)	EA	\$400	72	\$28,800
Conduits and Wires	LF	\$20	1750	\$35,000
Wiring (Existing Conduits)	LF	\$10		\$0
Misc. Wiring (major)	EA	\$10,000	1	\$10,000
Misc. Wiring (minor)	EA	\$5,000		\$0
Remove Signal System (major)	EA	\$20,000	1	\$20,000
Remove Signal System (minor)	EA	\$10,000		\$0
				\$210,100
			Cost per Leg	\$52,525

Kern COG Impact Fee Study

Unit Cost Data Back up - Miscellaneous

STRIPPING IMPROVEMENTS

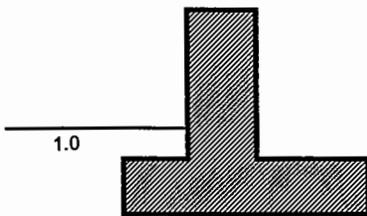
Cost item data is from the "2001 Contract Cost Data" as supplied by the State of California, Business, Transportation and Housing Agency, Department of Transportation

		DETAIL 26 LEFT EDGE LINE		DETAIL 14 LANE LINE		DETAIL 39 BIKE LANE LINE	DETAIL 27B RIGHT FOG LINE
		QTY	DISTANCE	QTY	DISTANCE	QTY	QTY
ONE WAY YELLOW REFLECTIVE MARKER	\$ 6.00	1	48				
ONE WAY CLEAR REFLECTIVE MARKER	\$ 6.00			1	48		
NON-REFLECTIVE MARKER	\$ 5.25			4	48		
6" PAINTED STRIPE	\$ 0.45					1	
4" PAINTED STRIPE	\$ 0.30						1

	QTY	COST	QTY	COST	QTY	COST	TOTAL COST
CLASS B or C EXPRESSWAY							
6 LANES	2	\$ 0.25	4	\$ 2.25	2	\$ 1.50	\$ 4.00
4 LANES	2	\$ 0.25	2	\$ 1.13	2	\$ 1.50	\$ 2.90
PRINCIPAL ARTERIAL							
6 LANES	2	\$ 0.25	4	\$ 2.25	2	\$ 1.50	\$ 4.00
MINOR ARTERIAL							
4 LANES	2	\$ 0.25	2	\$ 1.13	2	\$ 1.50	\$ 2.90

RETAINING WALL COST

Cost item data is from the "2001 Contract Cost Data" as supplied by the State of California, Business, Transportation and Housing Agency, Department of Transportation



- 5 5' WALL
- 10 10' WALL
- 12 12' WALL

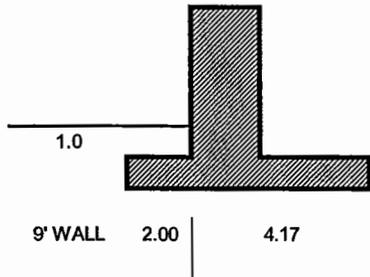
5' WALL	1.17	2.5
10' WALL	2.00	4.17
12' WALL	2.33	4.83

		STRUCTURAL EXCAVATION UNIT COST (pg 75)	STRUCTURAL BACKFILL UNIT COST (pg 78)	CONCRETE VOLUME per STD PLAN D84	CLASS 2 CONCRETE UNIT COST (pg 153)	REBAR WEIGHT per STD PLAN D84	BAR REINFORCING STEEL UNIT COST (pg 173)	TOTAL COST
		\$ 11.50	\$ 46.00		\$ 350.00		\$ 1.00	
5' WALL	Volume =	0.745	\$ 8.57	0.38	\$ 133.00	16	\$ 16.00	\$ 191.83
10' WALL	Volume =	1.964	\$ 22.59	0.67	\$ 234.50	49	\$ 49.00	\$ 396.44
12' WALL	Volume =	2.623	\$ 30.16	0.79	\$ 276.50	76	\$ 76.00	\$ 503.30

5' WALL TOTALS	=	\$ 200.00
10' WALL TOTALS	=	\$ 400.00
12' WALL TOTALS	=	\$ 510.00

Kern COG Impact Fee Study
Unit Cost Data Back up - Miscellaneous

SOUND WALL COST



9 9' Masonry Block Wall (1' buried)

Footing Volume = 0.27 CY

	STRUCTURAL EXCAVATION UNIT COST (pg 75)	STRUCTURAL BACKFILL UNIT COST (pg 78)	MASONRY BLOCK WALL (pg 167) (sf)				TOTAL COST (LF)
9' High Sound Wall	\$ 11.50	\$ 27.00	\$ 14.87				
	\$ 3.07	\$ 6.17	\$ 133.83				\$ 143

**Kern COG Impact Fee Study
Unit Cost Data Back up**

DRAINAGE & UTILITY IMPROVEMENTS

Cost item data is from the "2001 Contract Cost Data" as supplied by the State of California, Business, Transportation and Housing Agency, Department of Transportation

RELOCATE DRAINAGE INLETS W/ LATERALS

- REMOVE EXISTING DRAINAGE INLET
- REMOVE EXISTING PIPE
- INSTALL DRAINAGE INLET
- INSTALL 12" RCP PIPE

QTY	UNIT COST	TOTAL COST
1	\$ 500.00	\$ 500.00
3	\$ 18.75	\$ 56.25
1	\$ 2,500.00	\$ 2,500.00
10	\$ 75.00	\$ 750.00
		\$ 3,810.00

page 30
page 31
page 244
page 196

NEW DRAINAGE INLETS W/ LATERALS

- INSTALL DRAINAGE INLET
- INSTALL 12" RCP PIPE

QTY	UNIT COST	TOTAL COST
1	\$ 2,500.00	\$ 2,500.00
33	\$ 75.00	\$ 2,475.00
		\$ 4,980.00

page 244
page 196

STORM DRAIN MAINLINE W/ MANHOLES

- INSTALL STORM DRAIN MANHOLE
- INSTALL 24" RCP PIPE

300

QTY	UNIT COST	TOTAL COST
1	\$ 3,000.00	\$ 10.00
1	\$ 85.00	\$ 85.00
		\$ 95.00

page 244
page 197
per linear foot

RELOCATE FIRE HYDRAUNT

- REMOVE EXISTING FIRE HYDRANT
- REMOVE EXISTING GATE VALVE
- INSTALL FIRE HYDRANT
- INSTALL 6" GATE VALVE
- INSTALL 6" DIP PIPE

QTY	UNIT COST	TOTAL COST
1	\$ 500.00	\$ 250.00
1	\$ 18.75	\$ 150.00
1	\$ 2,500.00	\$ 1,500.00
1	\$ 1,000.00	\$ 800.00
10	\$ 42.00	\$ 420.00
		\$ 3,120.00

Kern COG Impact Fee Study

Unit Cost Data Back up - Medians

Median Treatment - Paved with Barrier

Est. Cost Per Square foot

Roadway Exc. = $22'(.25+1.45)/27 = 1.38 \text{ CY/LF} = 0.0627 \text{ CY/SF}$

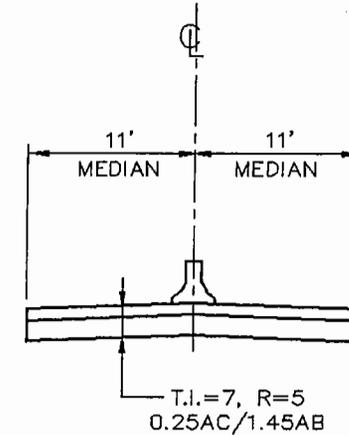
Asphalt Concrete = $22'(.25')(.075 \text{ ton/CF})/22 = 0.01875 \text{ Tons/SF}$

Aggregate Base = $22'(1.45')/27 = 1.185 \text{ CY/LF} = 0.0537 \text{ CY/SF}$

Barrier Rail = $1 \text{ LF}/22 \text{ SF/LF} = 0.04545$

Item	Quantity	Unit	Unit Cost	Total
Roadway Excavation (undeveloped)	0.0627	CY	\$ 10.00	\$ 0.63
Type A Asphalt Concrete	0.01875	Ton	\$ 55.00	\$ 1.03
Class 2 Aggregate Base	0.0537	CY	\$ 45.00	\$ 2.42
Median Barrier	0.04545	LF	\$ 20.00	\$ 0.91

Total/SF \$ 4.98



Median Treatment—Paved w/Barrier

Median Treatment - Landscaped

Est. Cost Per Square foot

Roadway Exc. = $6'(.25+1.45)/27 = 0.38 \text{ CY/LF} = 0.01717 \text{ CY/SF}$

Asphalt Concrete = $2'(.25')(.075 \text{ ton/CF})/22 = 0.00170 \text{ Tons/SF}$

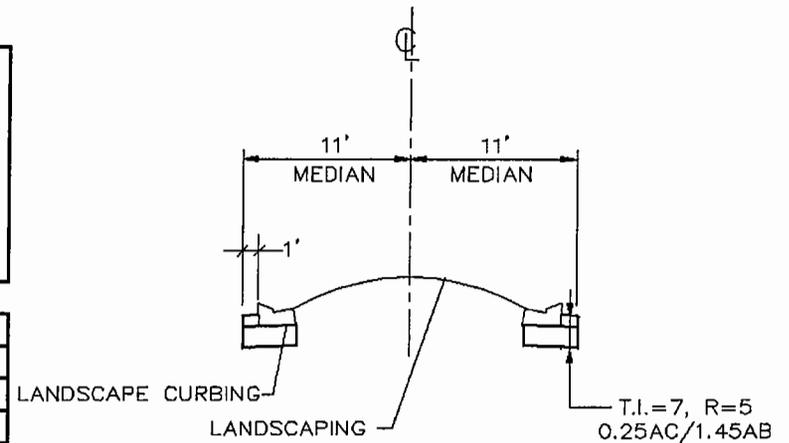
Aggregate Base = $6'(1.45')/27 = 0.3222 \text{ CY/LF} = 0.01465 \text{ CY/SF}$

Landscape Curbing = $2 \text{ LF}/22 \text{ SF} = .09091$

Landscape Planting/Irrigation = $16 \text{ SF/LF} \times 1 \text{ LF}/22 \text{ SF} = 0.72727$

Item	Quantity	Unit	Unit Cost	Total
Roadway Excavation (undeveloped)	0.01717	CY	\$ 10.00	\$ 0.17
Type A Asphalt Concrete	0.0017	Ton	\$ 55.00	\$ 0.09
Class 2 Aggregate Base	0.01465	CY	\$ 45.00	\$ 0.66
Landscape Curbing	0.09091	LF	\$ 18.00	\$ 1.64
Landscape Planting/Irrigation	0.72727	SF	\$ 3.00	\$ 2.18

Total/SF \$ 4.74



Median Treatment—Landscaped

Kern COG Impact Fee Study
Unit Cost Data Back up - Medians
Concrete Barrier - Caltrans Cost Data (2001)

Item	Material	Quantity	Unit	Cost	Rate	Cost
833080 CONCRETE BARRIER (TYPE K)						
	M	04	8	12,715.0	43.9261	558,520.00
	M	06	1	4,980.0	86.0000	398,400.00
	M	07	3	599.7	69.1179	41,450.00
	M	08	1	6,065.5	13.1234	79,600.00
	M	11	4	19,950.0	76.5965	1,528,100.00
	M	12	1	280.0	70.0000	19,600.00
UNIT TOTAL	M		18	44,590.2*	58.8845	
					\$/M	\$/LF
					33544.7	2147670 64.024123 19.51711007

Kern COG Impact Fee Study

Support Costs and Contingencies

		Percentage Applied to Subtotal of Construction Cost
Construction Contingency:		
	Includes any construction related item not specifically identified elsewhere. Items could include; mobilization, erosion control, unforeseen utility relocations, adjusting utility boxes, valves and manholes to grade, unsuitable material, import and export of material, demolition, increase in quantities or unit costs; right-of-way costs such as providing access, relocating signage, repairs to adjacent property, etc.	20%
Construction Administration:		
	Inspection and Resident Engineer	5%
	Soils and Material Testing	1%
	Construction Staking	2%
	City Administration	2%
	Subtotal Construction Administration:	10%
	Total Construction Contingency and Construction Admin Phase	30%
Engineering and Administration Support and Contingency		
	Pre-design studies (PSR and PSR equivalents)	2%
	Environmental Studies/Reports/Permits	2%
	Topographic Surveys	1%
	Geotechnical Testing and Report(s)	1%
	Engineering Design	8%
	City Administration of Consultants	1%
	Subtotal Project Development Costs	15%
	Scope Definition Contingency	5%
	Total Project Development and Design Phase Contingency	20%
Right-of-way Acquisition Support		
	Appraisals and Title Reports	1.5%
	Phase I and II Report & hazardous material testing	1.5%
	Title Insurance and escrow fees	1%
	Property Agent, legal description, staff support, legal support	6%
		10%