

## APPENDIX C - IMPROVEMENT COST ESTIMATES

**CHESSE DRIVE IMPROVEMENTS  
PLANNING COST ESTIMATE SUMMARY (Order of Magnitude)**

**24-Apr-09**

<b>District-County-Route</b>	04-SM-92
<b>PM</b>	13.61
<b>EA</b>	
<b>Program Code</b>	

**PROJECT DESCRIPTION:**

**Limits**      Route 92 East Ramps to Hatch Drive

**Proposed Improvement (Scope)**      Chess Drive

Add one through-lane on the westbound direction of Chess Drive. Proposed construction includes:

- Install new pavement section
- Remove existing and install new pavement marking and striping
- Remove and replace median (concrete paver and landscaping)

<b>TOTAL ROADWAY ITEMS</b>		\$ <u>1,311,827</u>
<b>TOTAL STRUCTURE ITEMS</b>		\$ <u>0</u>
<b>SUBTOTAL CONSTRUCTION COSTS</b>		\$ <u>1,311,827</u>
<b>SUPPORT COSTS:</b>		
<b>PRELIMINARY ENGINEERING &amp; ENVIRONMENTAL DOCUMENT PHASE</b>		\$ <u>131,183</u>
<b>FINAL DESIGN PHASE</b>		\$ <u>157,419</u>
<b>CONSTRUCTION ADMINISTRATION</b>		\$ <u>236,129</u>
<b>RIGHT OF WAY</b>		\$ <u></u>
<b>TOTAL RIGHT-OF-WAY ITEMS</b>		\$ <u>260,000</u>
<b>TOTAL PROJECT CAPITAL OUTLAY COSTS</b>		\$ <u>2,100,000</u>

**Reviewed by Program Manager** \_\_\_\_\_ Date \_\_\_\_\_  
(Signature)

**Approved by Project Manager** \_\_\_\_\_ Date \_\_\_\_\_  
(Signature)

Phone No. \_\_\_\_\_



**CHESSE DRIVE IMPROVEMENTS  
PLANNING COST ESTIMATE SUMMARY (Order of Magnitude)**

**24-Apr-09**

<b>District-County-Route</b>	04-SM-92
<b>PM</b>	13.61
<b>EA</b>	0
<b>Program Code</b>	0.00

<b>Section 4 - Misc. Roadway and Specialty Items</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Unit Cost</b>	<b>Section Cost</b>
Curb and Gutter	42	CY	700	29,736	
Driveway	6	CY	2,000	12,222	
Handicap Ramp	3	CY	2,000	5,289	
Remove Trees	1	LS	18,000	18,000	
Relocate Electrolier	0	EA	3,000	0	
Sidewalk	73	CY	1,500 \$	110,000	
Remove Curb and Gutter	720	LF	25 \$	18,000	
Remove Miscellaneous Concrete	3,960	SF	8 \$	31,680	
Replace Landscaping and Irrigation	1	LS	15,000 \$	15,000	
Storm Water Prevention Plan	1	LS	2,000 \$	2,000	
Design Pollution Prevention BMPs (Erosion Control)	1	LS	20,000 \$	20,000	
Permanent Treatment BMPs	1	LS	20,000 \$	20,000	
Temporary Construction Site BMPs	1	LS	30,000 \$	30,000	
			<b>Subtotal Specialty Items</b>		<u>311,927</u>
					\$

**Section 5 - Traffic Items**

Lighting	0	LS	40,000 \$	0	
Traffic Delineation Items	1	LS	12,000 \$	12,000	
Traffic Signals	1	LS	135,000 \$	135,000	
Overhead Signs	0	EA	30,000 \$	0	
Roadside Signs	3	EA	2,000 \$	6,000	
Traffic Control Systems	1	LS	50,000 \$	50,000	
Temporary Pavement Delineation	1	LS	1,000 \$	1,000	
Construction Area Signs	1	LS	5,000 \$	5,000	
Transportation Management Plan (TMP) (TMP Incl. Public Info, COZEPP, TMT and CMS)	1	LS	50,000 \$	50,000	
			<b>Subtotal Traffic Items</b>		<u>259,000</u>
					\$
<b>SUBTOTAL SECTIONS 1-5</b>					<u>831,827</u>

**CHESSE DRIVE IMPROVEMENTS  
 PLANNING COST ESTIMATE SUMMARY (Order of Magnitude)**

**24-Apr-09**

<b>District-County-Route</b>	<u>04-SM-92</u>
<b>PM</b>	<u>13.61</u>
<b>EA</b>	<u>0</u>
<b>Program Code</b>	<u>0.00</u>

**Section 6 - Minor Items**

$\$ \underline{831,827} \times 5\% = \$ \underline{40,000}$   
 (Subtotal Sections 1 - 5)

**TOTAL MINOR ITEMS \$ 40,000**

**Section 7 - Roadway Mobilization**

$\$ \underline{871,827} \times 10\% = \underline{90,000}$   
 (Subtotal Sections 1 - 6)

**TOTAL ROADWAY MOBILIZATION \$ 90,000**

**Section 8 - Roadway Additions**

Supplemental Work  $\$ \underline{871,827} \times 10\% = \$ \underline{90,000}$   
 (Subtotal Sections 1 - 6)

Cost Escalation  $\$ \underline{871,827} \times 5\% = \$ \underline{40,000}$   
**(Subtotal Sections 1 - 6)**

Contingencies  $\$ \underline{871,827} \times 25\% = \$ \underline{220,000}$   
 (Subtotal Sections 1 - 6)

**Total Roadway Additions \$ \$350,000**

**TOTAL ROADWAY ITEMS \$ \$1,311,827**  
 (Subtotal of Sections 1-8)

Estimate Prepared by \_\_\_\_\_ Phone \_\_\_\_\_ Date \_\_\_\_\_  
 (Print Name)

Estimate Checked by \_\_\_\_\_ Phone \_\_\_\_\_ Date \_\_\_\_\_  
 (Print Name)



**CHESSE DRIVE IMPROVEMENTS  
 PLANNING COST ESTIMATE SUMMARY (Order of Magnitude)**

**24-Apr-09**

**District-County-Route** 04-SM-92  
**PM** 13.61  
**EA** 0  
**Program Code** 0.00

II. STRUCTURE ITEMS (continued)

	Structure No. 1	Structure No. 2	Structure No. 3	Structure No. 3
Bridge Name				
Structure Type				
Width (out to out) - ft				
Span Lengths - ft				
Total Area - (square ft)				
Cost per square ft. (incl. 10% mobilization and 25% contingency)				
Total Cost for Structure				

SUBTOTAL STRUCTURES ITEMS \$ 0  
 (Sum of Total Cost for Structures)

Railroad Related Costs:		\$
		\$
		\$

SUBTOTAL RAILROAD ITEMS \$ 0

TOTAL STRUCTURES ITEM. \$ 0  
 (Sum of Structures Items plus Railroad Items)

COMMENTS:

Estimate Prepared by \_\_\_\_\_ Phone # \_\_\_\_\_ Date \_\_\_\_\_  
 (Print Name)

**CHESS DRIVE IMPROVEMENTS  
 PLANNING COST ESTIMATE SUMMARY (Order of Magnitude)**

## 24-Apr-09

District-County-Route 04-SM-92

PM 13.61  
 EA 0  
 Program Code 0.00

ITEM	Length (LF)	Width (Ft)	Depth (Ft)	Area (SF)	Volume (CY)	Mass (TON)	Each (EA)	Unit Price	Unit Cost	SAY
<b><u>CHESS DRIVE</u></b>										
<b><u>Roadway Pavement</u></b>										
Asphalt Concrete			0.6	8,900		401				<b>405</b>
Aggregate Base (CI 3)			0.9	8,900	297					<b>300</b>
Aggregate Subbase (CI 4)			1.0	8,900	330					<b>330</b>
<b><u>Roadway Excavation</u></b>										
Roadway Pavement			2.5	8,900	824					
Landscape Areas	720	15.00	2.0		800					
	<b>Subtotal Roadway Excavation</b>				<b>1,624</b>					
<b><u>Pavement Delineation</u></b>										
Traffic Stripe	2,135							\$ 3.00	\$ 6,400	
Type 3 Arrow (R&L Turn)				378		9		\$ 8.00	\$ 3,000	
Type 1 Arrow				150		6		\$ 8.00	\$ 1,200	
Limit Line	100							\$ 8.00	\$ 800	
	<b>Subtotal Pavement Delineation</b>								\$ 11,400	<b>\$ 12,000</b>
<b><u>Minor Concrete</u></b>										
Curb and Gutter	720				42			\$ 700.00	\$ 29,736	\$
Sidewalk	720	5.5	0.5		73	0		\$ 20.00	\$	\$
Driveway	60	5.5	0.5		6	0		\$	\$	\$
Handicap Ramp	17	6	0.7		3	0		\$	\$	\$
Median Paving (Textured Paving)			0.7	0	0			\$ 700.00	\$ 0	\$
<b><u>Remove Trees</u></b>										
				0		12		\$ 1,500.00	\$ 18,000	<b>\$ 18,000</b>
<b><u>Relocate Electrolier</u></b>										
				0		0		\$ 3,000.00	\$ 0	\$
<b><u>Relocate Inlet (New)</u></b>										
						1		\$ 5,000.00	\$ 5,000	<b>\$ 5,000</b>
<b><u>Traffic Signal</u></b>										
Replace Mast Arm/Signage						1		\$ 0.00	\$ 0	<b>\$ 0</b>
<b><u>Replace Landscaping and Irrigation</u></b>										
						1		\$	\$ 0	<b>\$ 15,000</b>
<b><u>Remove Curb and Gutter</u></b>										
	720					1		\$ 18.00	\$ 12,960	\$







**FOSTER CITY BLVD. IMPROVEMENTS  
 PLANNING COST ESTIMATE SUMMARY (Order of Magnitude)**

**24-Apr-09**

<b>District-County-Route</b>	04-SM-92
<b>PM</b>	13.61
<b>EA</b>	0
<b>Program Code</b>	0.00

**Section 6 - Minor Items**

$\$ \underline{92,760} \times 5\% = \$ \underline{0}$   
 (Subtotal Sections 1 - 5)  
**TOTAL MINOR ITEMS \$** 0

**Section 7 - Roadway Mobilization**

$\$ \underline{92,760} \times 10\% = \underline{10,000}$   
 (Subtotal Sections 1 - 6)  
**TOTAL ROADWAY MOBILIZATION \$** 10,000

**Section 8 - Roadway Additions**

Supplemental Work	$\$ \underline{92,760}$	x	10%	$\$ \underline{10,000}$	
	(Subtotal Sections 1 - 6)				
Cost Escalation	$\$ \underline{92,760}$	x	5%	$\$ \underline{0}$	
	(Subtotal Sections 1 - 6)				
Contingencies	$\$ \underline{92,760}$	x	25%	$\$ \underline{20,000}$	
	(Subtotal Sections 1 - 6)				
				<b>Total Roadway Additions \$</b>	<u>\$30,000</u>
				<b>TOTAL ROADWAY ITEMS \$</b>	<u>\$132,760</u>
				(Subtotal of Sections 1-8)	

Estimate Prepared by \_\_\_\_\_ Phone \_\_\_\_\_ Date \_\_\_\_\_  
 (Print Name)

Estimate Checked by \_\_\_\_\_ Phone \_\_\_\_\_ Date \_\_\_\_\_  
 (Print Name)



**FOSTER CITY BLVD. IMPROVEMENTS**  
**PLANNING COST ESTIMATE SUMMARY (Order of Magnitude)**

24-Apr-09

District-County-Route 04-SM-92  
 PM 13.61  
 EA 0  
 Program Code 0.00

II. STRUCTURE ITEMS (continued)

	Structure No. 1	Structure No. 2	Structure No. 3	Structure No. 3
Bridge Name				
Structure Type				
Width (out to out) - ft				
Span Lengths - ft				
Total Area - (square ft)				
Cost per square ft. (incl. 10% mobilization and 25% contingency)				
Total Cost for Structure				

SUBTOTAL STRUCTURES ITEMS \$ 0  
 (Sum of Total Cost for Structures)

Railroad Related Costs:		\$	
		\$	
		\$	

SUBTOTAL RAILROAD ITEMS \$ 0

TOTAL STRUCTURES ITEM. \$ 0  
 (Sum of Structures Items plus Railroad Items)

COMMENTS:

Estimate Prepared by \_\_\_\_\_ Phone # \_\_\_\_\_ Date \_\_\_\_\_  
 (Print Name)

FOSTER CITY BLVD. IMPROVEMENTS  
 PLANNING COST ESTIMATE SUMMARY (Order of Magnitude)

## 24-Apr-09

District-County-Route 04-SM-92

PM 13.61  
 EA 0  
 Program Code 0.00

ITEM	Length (LF)	Width (Ft)	Depth (Ft)	Area (SF)	Volume (CY)	Mass (TON)	Each (EA)	Unit Price	Unit Cost	SAY
<b><u>FOSTER CITY BLVD.</u></b>										
<b><u>Roadway Pavement</u></b>										
Asphalt Concrete			0.6			0				
Aggregate Base (CI 3)			0.9		0					
Aggregate Subbase (CI 4)			1.0		0					
<b><u>Roadway Excavation</u></b>										
Roadway Pavement			2.0		0					
Landscape Areas					0					
					<b>0</b>					
<b><u>Pavement Delineation</u></b>										
Traffic Stripe	1,340							\$ 3.00	\$ 4,000	
Type 3 Arrow (R&L Turn)				168		4		\$ 8.00	\$ 1,300	
Type 1 Arrow				0		0		\$ 8.00	\$ 0	
Limit Line	50							\$ 8.00	\$ 400	
								<b>\$ 5,700</b>	<b>\$ 6,000</b>	
<b><u>Minor Concrete</u></b>										
Curb and Gutter	200				12			\$ 700.00	\$ 8,260	\$
Sidewalk	0	6	0.5		0	0		\$ 20.00	\$	\$
Driveway	0	5.5	0.5		0	0		\$	\$	\$
Handicap Ramp	0	6	0.7		0	0		\$	\$	\$
Median Paving (Textured Paving)			0.7	1,750	45			\$ 700.00	\$ 31,759	\$
<b><u>Remove Trees</u></b>										
				0		0		\$ 1,500.00	\$ 0	\$ 0
<b><u>Relocate Electrolier</u></b>										
				0		0		\$ 3,000.00	\$ 0	\$
<b><u>Relocate Inlet (New)</u></b>										
						0		\$ 5,000.00	\$ 0	\$ 0
<b><u>Traffic Signal</u></b>										
Replace Mast Arm/Signage						0		\$ 0.00	\$ 0	\$ 0
<b><u>Replace Landscaping and Irrigation</u></b>										
						0		\$	\$ 0	\$ 0
<b><u>Remove Curb and Gutter</u></b>										
	200					1		\$ 18.00	\$ 3,600	\$

**FOSTER CITY BLVD. IMPROVEMENTS  
 PLANNING COST ESTIMATE SUMMARY (Order of Magnitude)**

**24-Apr-09**

<b>District-County-Route</b>	04-SM-92
<b>PM</b>	13.61
<b>EA</b>	
<b>Program Code</b>	

**PROJECT DESCRIPTION:**

**Limits** Chess Drive and Triton Drive

**Proposed Improvement (Scope)** Foster City Blvd.

Add one right lane on the northbound direction of Foster City Blvd (at Chess Dr.). Proposed construction includes:

- Remove and replace curb, gutter, and sidewalk.
- Remove existing and install new pavement marking and striping
- Remove and replace median (concrete paver)

<b>TOTAL ROADWAY ITEMS</b>		\$ <u>418,601</u>
<b>TOTAL STRUCTURE ITEMS</b>		\$ <u>0</u>
<b>SUBTOTAL CONSTRUCTION COSTS</b>		\$ <u>418,601</u>
<b>SUPPORT COSTS:</b>		
<b>PRELIMINARY ENGINEERING &amp; ENVIRONMENTAL DOCUMENT PHASE</b>		\$ <u>41,860</u>
<b>FINAL DESIGN PHASE</b>		\$ <u>50,232</u>
<b>CONSTRUCTION ADMINISTRATION</b>		\$ <u>75,348</u>
<b>RIGHT OF WAY</b>		\$ <u>0</u>
<b>TOTAL RIGHT-OF-WAY ITEMS</b>		\$ <u>0</u>
<b>TOTAL PROJECT CAPITAL OUTLAY COSTS</b>		\$ <u>590,000</u>

**Reviewed by Program Manager** \_\_\_\_\_ Date \_\_\_\_\_  
 (Signature)

**Approved by Project Manager** \_\_\_\_\_ Date \_\_\_\_\_  
 (Signature)

Phone No. \_\_\_\_\_





**FOSTER CITY BLVD. IMPROVEMENTS  
 PLANNING COST ESTIMATE SUMMARY (Order of Magnitude)**

**24-Apr-09**

<b>District-County-Route</b>	04-SM-92
<b>PM</b>	13.61
<b>EA</b>	0
<b>Program Code</b>	0.00

**Section 6 - Minor Items**

$\$ \underline{268,601} \times 5\% = \$ \underline{10,000}$   
 (Subtotal Sections 1 - 5)  
**TOTAL MINOR ITEMS \$** 10,000

**Section 7 - Roadway Mobilization**

$\$ \underline{278,601} \times 10\% = \underline{30,000}$   
 (Subtotal Sections 1 - 6)  
**TOTAL ROADWAY MOBILIZATION \$** 30,000

**Section 8 - Roadway Additions**

Supplemental Work	$\$ \underline{278,601}$	x	10%	$\$ \underline{30,000}$	
	(Subtotal Sections 1 - 6)				
Cost Escalation	$\$ \underline{278,601}$	x	5%	$\$ \underline{10,000}$	
	(Subtotal Sections 1 - 6)				
Contingencies	$\$ \underline{278,601}$	x	25%	$\$ \underline{70,000}$	
	(Subtotal Sections 1 - 6)				
				<b>Total Roadway Additions \$</b>	<u>\$110,000</u>
				<b>TOTAL ROADWAY ITEMS \$</b>	<u>\$418,601</u>
				(Subtotal of Sections 1-8)	

Estimate Prepared by \_\_\_\_\_ Phone \_\_\_\_\_ Date \_\_\_\_\_  
 (Print Name)

Estimate Checked by \_\_\_\_\_ Phone \_\_\_\_\_ Date \_\_\_\_\_  
 (Print Name)



**FOSTER CITY BLVD. IMPROVEMENTS  
 PLANNING COST ESTIMATE SUMMARY (Order of Magnitude)**

**24-Apr-09**

**District-County-Route** 04-SM-92  
**PM** 13.61  
**EA** 0  
**Program Code** 0.00

II. STRUCTURE ITEMS (continued)

	Structure No. 1	Structure No. 2	Structure No. 3	Structure No. 3
Bridge Name				
Structure Type				
Width (out to out) - ft				
Span Lengths - ft				
Total Area - (square ft)				
Cost per square ft. (incl. 10% mobilization and 25% contingency)				
Total Cost for Structure				

SUBTOTAL STRUCTURES ITEMS \$ 0  
 (Sum of Total Cost for Structures)

Railroad Related Costs:		\$
		\$
		\$

SUBTOTAL RAILROAD ITEMS \$ 0

TOTAL STRUCTURES ITEM. \$ 0  
 (Sum of Structures Items plus Railroad Items)

COMMENTS:

Estimate Prepared by \_\_\_\_\_ Phone # \_\_\_\_\_ Date \_\_\_\_\_  
 (Print Name)

FOSTER CITY BLVD. IMPROVEMENTS  
 PLANNING COST ESTIMATE SUMMARY (Order of Magnitude)

## 24-Apr-09

District-County-Route 04-SM-92

PM 13.61  
 EA 0  
 Program Code 0.00

ITEM	Length (LF)	Width (Ft)	Depth (Ft)	Area (SF)	Volume (CY)	Mass (TON)	Each (EA)	Unit Price	Unit Cost	SAY
<b><u>FOSTER CITY BLVD.</u></b>										
<b><u>Roadway Pavement</u></b>										
Asphalt Concrete			0.6	400			18			
Aggregate Base (CI 3)			0.9	400	13					
Aggregate Subbase (CI 4)			1.0	400	15					
<b><u>Roadway Excavation</u></b>										
Roadway Pavement			2.0	400	30					
Landscape Areas					0					
			<b>Subtotal Roadway Excavation</b>		<b>30</b>					
<b><u>Pavement Delineation</u></b>										
Traffic Stripe	2,230							\$ 3.00	\$ 6,700	
Type 3 Arrow (R&L Turn)				420			10	\$ 8.00	\$ 3,400	
Type 1 Arrow				50			2	\$ 8.00	\$ 400	
Limit Line	50							\$ 8.00	\$ 400	
			<b>Subtotal Pavement Delineation</b>						\$ 10,900	\$ 12,000
<b><u>Minor Concrete</u></b>										
Curb and Gutter	615				36			\$ 700.00	\$ 25,400	\$
Sidewalk	300	6	0.5		33	0		\$ 20.00	\$	\$
Driveway	0	5.5	0.5		0	0		\$	\$	\$
Handicap Ramp	0	6	0.7		0	0		\$	\$	\$
Median Paving (Textured Paving)			0.7	0	0			\$ 700.00	\$ 0	\$
<b><u>Remove Trees</u></b>										
				0			12	\$ 1,500.00	\$ 18,000	\$ 0
<b><u>Relocate Electrolier</u></b>										
				0			0	\$ 3,000.00	\$ 0	\$
<b><u>Relocate Inlet (New)</u></b>										
							0	\$ 5,000.00	\$ 0	\$ 0
<b><u>Traffic Signal</u></b>										
Replace Mast Arm/Signage							0	\$ 0.00	\$ 0	\$ 0
<b><u>Replace Landscaping and Irrigation</u></b>										
							0	\$	\$ 0	\$ 0
<b><u>Remove Curb and Gutter</u></b>										
	615						1	\$ 18.00	\$ 11,070	\$







**ROUTE 92 FOSTER CITY BOULVEARD RAMP IMPROVEMENTS  
 PLANNING COST ESTIMATE SUMMARY - CHESS DRIVE OFF-RAMP**

**24-Apr-09**

<b>District-County-Route</b>	<u>04-SM-92</u>
<b>PM</b>	<u>13.61</u>
<b>EA</b>	<u>0</u>
<b>Program Code</b>	<u>0.00</u>

**Section 6 - Minor Items**

$\$ \underline{536,100} \times 5\% = \$ \underline{30,000}$   
 (Subtotal Sections 1 - 5)  
**TOTAL MINOR ITEMS \$ 30,000**

**Section 7 - Roadway Mobilization**

$\$ \underline{566,100} \times 10\% = \underline{60,000}$   
 (Subtotal Sections 1 - 6)  
**TOTAL ROADWAY MOBILIZATION \$ 60,000**

**Section 8 - Roadway Additions**

Supplemental Work  $\$ \underline{566,100} \times 10\% = \$ \underline{60,000}$   
 (Subtotal Sections 1 - 6)

Cost Escalation  $\$ \underline{566,100} \times 5\% = \$ \underline{30,000}$   
 (Subtotal Sections 1 - 6)

Contingencies  $\$ \underline{566,100} \times 25\% = \$ \underline{140,000}$   
 (Subtotal Sections 1 - 6)

**Total Roadway Additions \$ \$230,000**

**TOTAL ROADWAY ITEMS \$ \$856,100**  
 (Subtotal of Sections 1-8)

Estimate Prepared by \_\_\_\_\_ Phone \_\_\_\_\_ Date \_\_\_\_\_  
 (Print Name)

Estimate Checked by \_\_\_\_\_ Phone \_\_\_\_\_ Date \_\_\_\_\_  
 (Print Name)





**ROUTE 92 FOSTER CITY BOULEVARD RAMP IMPROVEMENTS  
 PLANNING COST ESTIMATE SUMMARY - CHESS DRIVE ON-RAMP**

**24-Apr-09**

<b>District-County-Route</b>	04-SM-92
<b>PM</b>	13.61
<b>EA</b>	
<b>Program Code</b>	

**PROJECT DESCRIPTION:**

**Limits**      State Route 92 at Foster City Boulevard OC

**Proposed Improvement (Scope)**      Chess Drive On-Ramp

Widen westbound Route 92 on-ramp from Chess Drive for addinal lane. Proposed construction includes:

- Install new pavement section
- Remove existing and install new pavement marking and striping
- Replace landscape areas

<b>TOTAL ROADWAY ITEMS</b>		\$ <u>887,500</u>
<b>TOTAL STRUCTURE ITEMS</b>		\$ <u>0</u>
<b>SUBTOTAL CONSTRUCTION COSTS</b>		\$ <u>887,500</u>
<b>SUPPORT COSTS:</b>		
<b>PRELIMINARY ENGINEERING &amp; ENVIRONMENTAL DOCUMENT PHASE</b>		\$ <u>88,750</u>
<b>FINAL DESIGN PHASE</b>		\$ <u>106,500</u>
<b>CONSTRUCTION ADMINISTRATION</b>		\$ <u>159,750</u>
<b>RIGHT OF WAY</b>		\$ <u>0</u>
<b>TOTAL RIGHT-OF-WAY ITEMS</b>		\$ <u>0</u>
<b>TOTAL PROJECT CAPITAL OUTLAY COSTS</b>		\$ <u>1,240,000</u>

**Reviewed by Program Manager** \_\_\_\_\_ **Date** \_\_\_\_\_  
 (Signature)

**Approved by Project Manager** \_\_\_\_\_ **Date** \_\_\_\_\_  
 (Signature)

Phone No. \_\_\_\_\_



**ROUTE 92 FOSTER CITY BOULEVARD RAMP IMPROVEMENTS  
 PLANNING COST ESTIMATE SUMMARY - CHESS DRIVE ON-RAMP**

**24-Apr-09**

<b>District-County-Route</b>	04-SM-92
<b>PM</b>	13.61
<b>EA</b>	0
<b>Program Code</b>	0.00

<b>Section 4 - Misc. Roadway and Specialty Items</b>	<b>Quantity</b>	<b>Unit</b>	<b>Unit Price</b>	<b>Unit Cost</b>	<b>Section Cost</b>
Replacement Planting	1	LS	\$ 15,000	15,000	
Irrigation Modification	1	LS	5,000	5,000	
Water Pollution Control	1	LS	\$ 1,000	\$ 1,000	
Modular Space (Resident Engineer)	1	LS	\$ 9,000	\$ 9,000	
Storm Water Prevention Plan	1	LS	\$ 2,000	\$ 2,000	
Design Pollution Prevention BMPs (Erosion Control)	1	LS	\$ 25,000	\$ 25,000	
Permanent Treatment BMPs	1	LS	\$ 37,500	\$ 38,000	
Temporary Construction Site BMPs	1	LS	\$ 50,000	\$ 50,000	
<b>Subtotal Specialty Items</b>					<b>145,000</b>
					\$

**Section 5 - Traffic Items**

Lighting	0	LS	\$ 40,000	\$ 0	
Traffic Delineation Items	1	LS	\$ 10,000	\$ 10,000	
Traffic Signals	0	EA	\$ 60,000	\$ 0	
Overhead Signs	0	EA	\$ 30,000	\$ 0	
Roadside Signs	1	EA	\$ 2,000	\$ 2,000	
Traffic Control Systems	1	LS	\$ 50,000	\$ 50,000	
Temporary Pavement Delineation	1	LS	\$ 1,000	\$ 1,000	
Construction Area Signs	1	LS	\$ 5,000	\$ 5,000	
Transportation Management Plan (TMP) (TMP Incl. Public Info, COZEPP, TMT and CMS)	1	LS	\$ 50,000	\$ 50,000	
<b>Subtotal Traffic Items</b>					<b>118,000</b>
					\$

**SUBTOTAL SECTIONS 1-5**

**557,500**

**ROUTE 92 FOSTER CITY BOULVEARD RAMP IMPROVEMENTS  
 PLANNING COST ESTIMATE SUMMARY - CHESS DRIVE ON-RAMP**

**24-Apr-09**

<b>District-County-Route</b>	04-SM-92
<b>PM</b>	13.61
<b>EA</b>	0
<b>Program Code</b>	0.00

**Section 6 - Minor Items**

$\$ \underline{557,500} \times 5\% = \$ \underline{30,000}$   
 (Subtotal Sections 1 - 5)  
**TOTAL MINOR ITEMS \$ 30,000**

**Section 7 - Roadway Mobilization**

$\$ \underline{587,500} \times 10\% = \underline{60,000}$   
 (Subtotal Sections 1 - 6)  
**TOTAL ROADWAY MOBILIZATION \$ 60,000**

**Section 8 - Roadway Additions**

Supplemental Work	$\$ \underline{587,500} \times 10\% = \$ \underline{60,000}$ (Subtotal Sections 1 - 6)	
Cost Escalation	$\$ \underline{587,500} \times 5\% = \$ \underline{30,000}$ <b>(Subtotal Sections 1 - 6)</b>	
Contingencies	$\$ \underline{587,500} \times 25\% = \$ \underline{150,000}$ (Subtotal Sections 1 - 6)	
	<b>Total Roadway Additions \$ <u>\$240,000</u></b>	
	<b>TOTAL ROADWAY ITEMS \$ <u>\$887,500</u></b>	
	(Subtotal of Sections 1-8)	

Estimate Prepared by \_\_\_\_\_ Phone \_\_\_\_\_ Date \_\_\_\_\_  
 (Print Name)

Estimate Checked by \_\_\_\_\_ Phone \_\_\_\_\_ Date \_\_\_\_\_  
 (Print Name)

**ROUTE 92 FOSTER CITY BOULEVARD RAMP IMPROVEMENTS  
 PLANNING COST ESTIMATE SUMMARY - CHESS DRIVE ON-RAMP**

**24-Apr-09**

<b>District-County-Route</b>	<u>04-SM-92</u>
<b>PM</b>	<u>13.61</u>
<b>EA</b>	<u>0</u>
<b>Program Code</b>	<u>0.00</u>

**III. RIGHT OF WAY**

	Escalated Values
A. Acquisition, including excess lands, damages to remainder(s), and Goodwill.	\$ _____
B. Utility Relocation	\$ _____
C. Relocation assistance	\$ _____ -
D. Clearance/Demolition	\$ _____ -
E. Title and Escrow Fees	\$ _____ -

TOTAL RIGHT OF WAY ITEMS \$ 0  
 (Escalated Value)

Anticipated Date of Right of Way Certification November 2012  
 (Date to which Values are Escalated)

**F. Construction Contract Work**

Brief Description of Work:	
Cost Estimate for Work	\$ <u>0</u>

**COMMENTS:**

Estimate Prepared by \_\_\_\_\_ Phone # \_\_\_\_\_ Date \_\_\_\_\_  
 (Print Name)

**ROUTE 92 FOSTER CITY BOULEVARD RAMP IMPROVEMENTS  
 PLANNING COST ESTIMATE SUMMARY - CHESS DRIVE ON-RAMP**

24-Apr-09

District-County-Route	<u>04-SM-92</u>
PM	<u>13.61</u>
EA	<u>0</u>
Program Code	<u>0.00</u>

II. STRUCTURE ITEMS (continued)

	Structure No. 1	Structure No. 2	Structure No. 3	Structure No. 3
Bridge Name				
Structure Type				
Width (out to out) - ft				
Span Lengths - ft				
Total Area - (square ft)				
Cost per square ft. (incl. 10% mobilization and 25% contingency)				
Total Cost for Structure				

SUBTOTAL STRUCTURES ITEMS \$ 0  
 (Sum of Total Cost for Structures)

Railroad Related Costs:		\$	<u>          </u>
		\$	<u>          </u>
		\$	<u>          </u>

SUBTOTAL RAILROAD ITEMS \$ 0

TOTAL STRUCTURES ITEM. \$ 0  
 (Sum of Structures Items plus Railroad Items)

COMMENTS:

Estimate Prepared by \_\_\_\_\_ Phone # \_\_\_\_\_ Date \_\_\_\_\_  
 (Print Name)

**ROUTE 92 FOSTER CITY BOULVEARD RAMP IMPROVEMENTS  
 PLANNING COST ESTIMATE SUMMARY - CHESS DRIVE ON-RAMP**

24-Apr-09

District-County-Route 04-SM-92

PM 13.61  
 EA 0  
 Program Code 0.00

ITEM	Length (LF)	Width (Ft)	Depth (Ft)	Area (SF)	Volume (CY)	Mass (TON)	Each (EA)	Unit Price	Unit Cost	SAY
<b><u>Roadway Pavement</u></b>										
Asphalt Concrete			0.6	14,200		639				640
Aggregate Base (Cl 3)			0.9	14,200	473					500
Aggregate Subbase (Cl 4)			1.0	14,200	526					550
<b><u>Roadway Excavation</u></b>										
Roadway Pavement			2.5	14,200	1,315					
"V" Gutter	350	6.00	2.0	2,100	156					
	<b><u>Subtotal Roadway Excavation</u></b>				<b>1,470</b>					<b>1,500</b>
<b><u>Pavement Delineation</u></b>										
Traffic Stripe	2,290.00							\$ 3.00	\$ 6,900	
Pavement Marker (Detail 13)	1,432.00						179.00	\$ 8.00	\$ 1,400	
	<b><u>Subtotal Pavement Delineation</u></b>							\$	\$ 8,300	<b>10,000</b>
<b><u>Relocate Sign (4X4 Post)</u></b>							1.00	\$	\$	<b>2,000</b>
<b><u>Clear and Grub</u></b>	900.00	35		31,500				\$ 0.50	\$ 15,750	<b>10,000</b>








**METRO CENTER AND TRITON DRIVE IMPROVEMENTS (METRO CENTER ONLY)  
 PLANNING COST ESTIMATE SUMMARY (Order of Magnitude)**

**24-Apr-09**

<b>District-County-Route</b>	04-SM-92
<b>PM</b>	13.61
<b>EA</b>	0
<b>Program Code</b>	0.00

**Section 6 - Minor Items**

$\$ \underline{348,861} \times 5\% = \$ \underline{20,000}$   
 (Subtotal Sections 1 - 5)  
**TOTAL MINOR ITEMS \$** 20,000

**Section 7 - Roadway Mobilization**

$\$ \underline{368,861} \times 10\% = \underline{40,000}$   
 (Subtotal Sections 1 - 6)  
**TOTAL ROADWAY MOBILIZATION \$** 40,000

**Section 8 - Roadway Additions**

Supplemental Work  $\$ \underline{368,861} \times 10\% = \$ \underline{40,000}$   
 (Subtotal Sections 1 - 6)

Cost Escalation  $\$ \underline{368,861} \times 5\% = \$ \underline{20,000}$   
**(Subtotal Sections 1 - 6)**

Contingencies  $\$ \underline{368,861} \times 25\% = \$ \underline{90,000}$   
 (Subtotal Sections 1 - 6)

**Total Roadway Additions \$** \$150,000

**TOTAL ROADWAY ITEMS \$** \$558,861  
 (Subtotal of Sections 1-8)

Estimate Prepared by \_\_\_\_\_ Phone \_\_\_\_\_ Date \_\_\_\_\_  
 (Print Name)

Estimate Checked by \_\_\_\_\_ Phone \_\_\_\_\_ Date \_\_\_\_\_  
 (Print Name)

**METRO CENTER AND TRITON DRIVE IMPROVEMENTS (METRO CENTER ONLY)  
 PLANNING COST ESTIMATE SUMMARY (Order of Magnitude)**

**24-Apr-09**

<b>District-County-Route</b>	<u>04-SM-92</u>
<b>PM</b>	<u>13.61</u>
<b>EA</b>	<u>0</u>
<b>Program Code</b>	<u>0.00</u>

**III. RIGHT OF WAY**

	Escalated Values
<b>A.</b> Acquisition, including excess lands, damages to remainder(s), and Goodwill	\$ _____
<b>B.</b> Utility Relocation	\$ _____
<b>C.</b> Relocation assistance	\$ _____ -
<b>D.</b> Clearance/Demolition	\$ _____ -
<b>E.</b> Title and Escrow Fees	\$ _____ -

TOTAL RIGHT OF WAY ITEMS \$                     0  
 (Escalated Value)

Anticipated Date of Right of Way Certification November 2012  
 (Date to which Values are Escalated)

**F. Construction Contract Work**

Brief Description of Work: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Cost Estimate for Work \$                     0

**COMMENTS:**

Estimate Prepared by \_\_\_\_\_ Phone # \_\_\_\_\_ Date \_\_\_\_\_  
 (Print Name)

**METRO CENTER AND TRITON DRIVE IMPROVEMENTS (METRO CENTER ONLY)**  
**PLANNING COST ESTIMATE SUMMARY (Order of Magnitude)**

24-Apr-09

District-County-Route 04-SM-92  
 PM 13.61  
 EA 0  
 Program Code 0.00

II. STRUCTURE ITEMS (continued)

	Structure No. 1	Structure No. 2	Structure No. 3	Structure No. 3
Bridge Name				
Structure Type				
Width (out to out) - ft				
Span Lengths - ft				
Total Area - (square ft)				
Cost per square ft. (incl. 10% mobilization and 25% contingency)				
Total Cost for Structure				

SUBTOTAL STRUCTURES ITEMS \$ 0  
 (Sum of Total Cost for Structures)

Railroad Related Costs:		\$	
		\$	
		\$	

SUBTOTAL RAILROAD ITEMS \$ 0

TOTAL STRUCTURES ITEM. \$ 0  
 (Sum of Structures Items plus Railroad Items)

COMMENTS:

Estimate Prepared by \_\_\_\_\_ Phone # \_\_\_\_\_ Date \_\_\_\_\_  
 (Print Name)

METRO CENTER AND TRITON DRIVE IMPROVEMENTS (METRO CENTER ONLY)  
 PLANNING COST ESTIMATE SUMMARY (Order of Magnitude)

## 24-Apr-09

District-County-Route 04-SM-92

PM 13.61  
 EA 0  
 Program Code 0.00

ITEM	Length (LF)	Width (Ft)	Depth (Ft)	Area (SF)	Volume (CY)	Mass (TON)	Each (EA)	Unit Price	Unit Cost	SAY
<b><u>METRO CENTER</u></b>										
<b><u>Roadway Pavement</u></b>										
Asphalt Concrete			0.6	2,500		113				<b>640</b>
Aggregate Base (CI 3)			0.9	2,500	83					<b>500</b>
Aggregate Subbase (CI 4)			1.0	2,500	93					<b>550</b>
<b><u>Roadway Excavation</u></b>										
Roadway Pavement			2.5	2,500	231					
Proposed Median			2.0	2,300	170					
			<b>Subtotal Roadway Excavation</b>		<b>402</b>					
<b><u>Pavement Delineation</u></b>										
Traffic Stripe	1,855							\$ 3.00	\$ 5,600	
Type 3 Arrow (R&L Turn)				420		10		\$ 8.00	\$ 3,400	
Type 1 Arrow				200		8		\$ 8.00	\$ 1,600	
Limit Line	150							\$ 8.00	\$ 1,200	
			<b>Subtotal Pavement Delineation</b>						\$ 11,800	<b>\$ 15,000</b>
<b><u>Minor Concrete</u></b>										
Curb and Gutter	520				31			\$ 700.00	\$ 21,476	\$
Sidewalk					0	0		\$ 20.00	\$	\$
Driveway					0	0		\$	\$	\$
Handicap Ramp	17	6	0.7		3	0		\$	\$	\$
Median Paving (Textured Paving)			0.7	2,000	52			\$ 700.00	\$ 36,296	\$
<b><u>Remove Trees</u></b>										
				0		3		\$ 1,500.00	\$ 4,500	<b>\$ 5,000</b>
<b><u>Relocate Electrolier</u></b>										
				0		2		\$ 3,000.00	\$ 6,000	\$
<b><u>Relocate Inlet (New)</u></b>										
						1		\$ 5,000.00	\$ 5,000	<b>\$ 5,000</b>
<b><u>Traffic Signal</u></b>										
Replace Mast Arm/Signage						1		\$ 0.00	\$ 0	<b>\$ 0</b>
<b><u>Replace Landscaping and Irrigation</u></b>										
						1		\$	\$ 0	<b>\$ 10,000</b>
<b><u>Remove Curb and Gutter</u></b>										
	530					1		\$ 18.00	\$ 9,540	\$





**METRO CENTER AND TRITON DRIVE IMPROVEMENTS (TRITON DRIVE ONLY)  
 PLANNING COST ESTIMATE SUMMARY (Order of Magnitude)**

**24-Apr-09**

<b>District-County-Route</b>	04-SM-92
<b>PM</b>	13.61
<b>EA</b>	0
<b>Program Code</b>	0.00

<u>Section 4 - Misc. Roadway and Specialty Items</u>	<u>Quantity</u>	<u>Unit</u>	<u>Unit Price</u>	<u>Unit Cost</u>	<u>Section Cost</u>
Curb and Gutter	28	CY	700	19,824	
Driveway	11	CY	2,000	21,389	
Handicap Ramp	5	CY	2,000	10,578	
Median Paving (Textured Paving)	0	CY	700	0	
Remove Trees	1	LS	5,000	5,000	
Relocate Electrolier	0	EA	3,000	0	
Relocate Carl's Jr. Sign	1	LS	10,000	10,000	
Sidewalk	49	CY	\$ 1,800	\$ 88,000	
Remove Curb and Gutter	480	LF	\$ 20	\$ 9,600	
Remove Miscellaneous Concrete	2,640	SF	\$ 8	\$ 21,120	
Replace Landscaping and Irrigation	1	LS	\$ 20,000	20,000	
Storm Water Prevention Plan	1	LS	\$ 2,000	\$ 2,000	
Design Pollution Prevention BMPs (Erosion Control)	1	LS	\$ 20,000	\$ 20,000	
Permanent Treatment BMPs	1	LS	\$ 20,000	\$ 20,000	
Temporary Construction Site BMPs	1	LS	\$ 20,000	\$ 20,000	
				<b>Subtotal Specialty Items</b>	<u>267,511</u>
					\$

**Section 5 - Traffic Items**

Lighting	0	LS	\$ 40,000	\$ 0	
Traffic Delineation Items	1	LS	\$ 8,500	\$ 9,000	
Traffic Signals	1	LS	\$ 52,500	\$ 52,500	
Overhead Signs	0	EA	\$ 15,000	\$ 0	
Roadside Signs	2	EA	\$ 2,000	\$ 4,000	
Traffic Control Systems	1	LS	\$ 25,000	\$ 25,000	
Temporary Pavement Delineation	1	LS	\$ 500	\$ 500	
Construction Area Signs	1	LS	\$ 2,500	\$ 2,500	
Transportation Management Plan (TMP) (TMP Incl. Public Info, COZEPP, TMT and CMS)	1	LS	\$ 25,000	\$ 25,000	
				<b>Subtotal Traffic Items</b>	<u>118,500</u>
					\$

**SUBTOTAL SECTIONS 1-5**

547,511

**METRO CENTER AND TRITON DRIVE IMPROVEMENTS (TRITON DRIVE ONLY)  
 PLANNING COST ESTIMATE SUMMARY (Order of Magnitude)**

**24-Apr-09**

<b>District-County-Route</b>	<u>04-SM-92</u>
<b>PM</b>	<u>13.61</u>
<b>EA</b>	<u>0</u>
<b>Program Code</b>	<u>0.00</u>

**Section 6 - Minor Items**

$\$ \underline{547,511} \times 5\% = \$ \underline{30,000}$   
 (Subtotal Sections 1 - 5)  
**TOTAL MINOR ITEMS \$ 30,000**

**Section 7 - Roadway Mobilization**

$\$ \underline{577,511} \times 10\% = \underline{60,000}$   
 (Subtotal Sections 1 - 6)  
**TOTAL ROADWAY MOBILIZATION \$ 60,000**

**Section 8 - Roadway Additions**

Supplemental Work	$\$ \underline{577,511} \times 10\% = \$ \underline{60,000}$ (Subtotal Sections 1 - 6)	
Cost Escalation	$\$ \underline{577,511} \times 5\% = \$ \underline{30,000}$ <b>(Subtotal Sections 1 - 6)</b>	
Contingencies	$\$ \underline{577,511} \times 25\% = \$ \underline{140,000}$ (Subtotal Sections 1 - 6)	
		<b>Total Roadway Additions \$ <u>\$230,000</u></b>
		<b>TOTAL ROADWAY ITEMS \$ <u>\$867,511</u></b> (Subtotal of Sections 1-8)

Estimate Prepared by \_\_\_\_\_ Phone \_\_\_\_\_ Date \_\_\_\_\_  
 (Print Name)

Estimate Checked by \_\_\_\_\_ Phone \_\_\_\_\_ Date \_\_\_\_\_  
 (Print Name)

**METRO CENTER AND TRITON DRIVE IMPROVEMENTS (TRITON DRIVE ONLY)  
 PLANNING COST ESTIMATE SUMMARY (Order of Magnitude)**

**24-Apr-09**

<b>District-County-Route</b>	<u>04-SM-92</u>
<b>PM</b>	<u>13.61</u>
<b>EA</b>	<u>0</u>
<b>Program Code</b>	<u>0.00</u>

**III. RIGHT OF WAY**

	Escalated Values
A. Acquisition, including excess lands, damages to remainder(s), and Goodwill (Take=4,200 SF)	\$ <u>235,284</u>
B. Utility Relocation	\$ _____
C. Relocation assistance	\$ <u>-</u>
D. Clearance/Demolition	\$ <u>-</u>
E. Title and Escrow Fees	\$ <u>-</u>
<b>TOTAL RIGHT OF WAY ITEMS</b>	<b>\$ <u>240,000</u></b>
	(Escalated Value)

Anticipated Date of Right of Way Certification November 2012  
 (Date to which Values are Escalated)

**F. Construction Contract Work**

Brief Description of Work:	_____
_____	_____
_____	_____
_____	_____
Cost Estimate for Work	<b>\$ <u>240,000</u></b>

**COMMENTS:**

Estimate Prepared by \_\_\_\_\_ Phone # \_\_\_\_\_ Date \_\_\_\_\_  
 (Print Name)

**METRO CENTER AND TRITON DRIVE IMPROVEMENTS (TRITON DRIVE ONLY)**  
**PLANNING COST ESTIMATE SUMMARY (Order of Magnitude)**

24-Apr-09

District-County-Route 04-SM-92  
 PM 13.61  
 EA 0  
 Program Code 0.00

II. STRUCTURE ITEMS (continued)

	Structure No. 1	Structure No. 2	Structure No. 3	Structure No. 3
Bridge Name				
Structure Type				
Width (out to out) - ft				
Span Lengths - ft				
Total Area - (square ft)				
Cost per square ft. (incl. 10% mobilization and 25% contingency)				
Total Cost for Structure				

SUBTOTAL STRUCTURES ITEMS \$ 0  
 (Sum of Total Cost for Structures)

Railroad Related Costs:		\$	
		\$	
		\$	

SUBTOTAL RAILROAD ITEMS \$ 0

TOTAL STRUCTURES ITEM. \$ 0  
 (Sum of Structures Items plus Railroad Items)

COMMENTS:

Estimate Prepared by \_\_\_\_\_ Phone # \_\_\_\_\_ Date \_\_\_\_\_  
 (Print Name)

METRO CENTER AND TRITON DRIVE IMPROVEMENTS (TRITON DRIVE ONLY)  
 PLANNING COST ESTIMATE SUMMARY (Order of Magnitude)

## 24-Apr-09

District-County-Route 04-SM-92

PM 13.61  
 EA 0  
 Program Code 0.00

ITEM	Length (LF)	Width (Ft)	Depth (Ft)	Area (SF)	Volume (CY)	Mass (TON)	Each (EA)	Unit Price	Unit Cost	SAY
<b><u>METRO CENTER</u></b>										
<b><u>Roadway Pavement</u></b>										
Asphalt Concrete										
Aggregate Base (C1.3)										
Aggregate Subbase (C1.4)										
<b><u>Roadway Excavation</u></b>										
Roadway Pavement										
Proposed Median										
<b>Subtotal Roadway Excavation</b>					<b>0</b>					
<b><u>Pavement Delineation</u></b>										
Traffic Stripe										
Type 3 Arrow (R&L Turn)										
Type 1 Arrow										
Limit Line										
<b>Subtotal Pavement Delineation</b>									<b>\$ 0</b>	<b>\$</b>
<b><u>Minor Concrete</u></b>										
Curb and Gutter										
Sidewalk										
Driveway										
Handicap Ramp										
Median Paving (Textured Paving)										
<b><u>Remove Trees</u></b>										
<b><u>Relocate Electrolier</u></b>										
<b><u>Relocate Inlet (New)</u></b>										
<b><u>Traffic Signal</u></b>										
Replace Mast Arm/Signage										
<b><u>Replace Landscaping and Irrigation</u></b>										
<b><u>Remove Curb and Gutter</u></b>										

## Electrical Estimate

<b>Dist-EA:</b>	Foster City Boulevard
<b>CO-RT-KP(PM):</b>	Marlin Avenue
<b>Work Description:</b>	Signal and Lighting
<b>Estimated By:</b>	F&P

<b>Work to be performed during:</b>	Day & Night
<b>Work location is:</b>	Urban
<b>Job size is:</b>	Medium (MinorA)
<b>Today's Date:</b>	April 21, 2009

Item #	Description	Quantity	Unit	Unit Man Hour	Total Man Hour	Unit Mat Cost	Total Mat Cost
<b>Total Estimate Breakdown:</b>							
	RAW MAN HOUR			707			
	TOTAL ADJUSTMENTS			80			
	AVERAGE LABOR RATE			\$50			
	1 TOTAL LABOR COST			\$39,336			
	0.75						
	1 MATERIAL COST			\$92,986			
	MATERIAL MARKUP			\$697			
	SALES TAX (7.75%)			\$7,260			
	TOTAL MATERIAL COST			\$100,944			
	JOB SHACK & STORAGE			\$1,403			
	TOOLS & EQUIPMENT			\$9,834			
	INSURANCE & BONDS			\$17,962			
	OVERHEAD & PROFIT			\$33,896			
<b>Total Lump-Sum and Contract Bid Items</b>				<b>\$203,373</b>			
<b>Total Supplemental and State-Furnished</b>				<b>\$5,453</b>			
<b>TOTAL PROJECT COST ESTIMATE</b>				<b>\$208,826</b>			
<b>Lump-Sum and Contract Bid Items:</b>							
000003	12" trench & backfill in dirt (by machine)	180	lf	0.084	15.120	\$0.00	\$0.00
000004	12" trench & backfill in street (by machine)	220	lf	0.141	31.020	\$0.00	\$0.00
000018	2"C pvc conduit in trench	125	lf	0.056	7.000	\$2.29	\$286.25
000026	3"C pvc conduit in trench	325	lf	0.082	26.650	\$3.30	\$1,072.50
000043	#14 solid copper conductor	7800	lf	0.005	39.000	\$0.08	\$624.00
000045	#10 solid copper conductor	1900	lf	0.012	22.800	\$0.15	\$285.00
000047	#6 stranded copper conductor	50	lf	0.028	1.400	\$0.35	\$17.50
000065	#5 pull box w/ standard cover	9	ea	4.280	38.520	\$184.00	\$1,656.00
000068	#6 pull box w/ standard cover	2	ea	5.130	10.260	\$347.00	\$694.00
000078	install controller cabinet (sf)	1	ea	10.300	10.300	\$231.00	\$231.00
000079	foundation for controller cabinet (incl. ground rod)	1	ea	22.200	22.200	\$1,210.00	\$1,210.00
000081	install model 170 controller unit (sf) in controller cabinet	1	ea	0.855	0.855	\$158.00	\$158.00
000082	install battery backup system (sf) for controller cabinet	1	ea	2.570	2.570	\$273.00	\$273.00
000105	type III-a service cabinet (incl. Items 1 thru 8)	1	ea	5.130	5.130	\$1,840.00	\$1,840.00
000106	foundation for type III-a service cabinet (incl. ground rod)	1	ea	10.300	10.300	\$1,370.00	\$1,370.00
000201	type 1 standard (complete w/ flange & bolts)	4	ea	3.420	13.680	\$303.00	\$1,212.00
000202	foundation for type 1 standard	4	ea	5.130	20.520	\$73.70	\$294.80
000219	type 19-3-100 standard w/ 30' sa & 12' la	2	ea	12.000	24.000	\$3,660.00	\$7,320.00
000222	foundation for type 16/17/18/19/19a/23-3-100 standard	2	ea	23.900	47.800	\$4,200.00	\$8,400.00
000236	type 26-4-100 standard w/ 40' sa & 12' la	2	ea	15.400	30.800	\$4,580.00	\$9,160.00
000239	foundation for type 24a/26/26a/27-4-100 standard	2	ea	23.900	47.800	\$5,460.00	\$10,920.00
000250	type mas/mat signal mount	6	ea	2.250	13.500	\$66.00	\$396.00
000254	type sv-1/sv-1-t signal mount	4	ea	2.570	10.280	\$154.00	\$616.00
000258	type tv-1/tv-1-t signal mount	2	ea	3.420	6.840	\$160.00	\$320.00
000259	type tv-2/tv-2-t signal mount	2	ea	4.280	8.560	\$270.00	\$540.00
000264	3-12" signal backplate	16	ea	0.684	10.944	\$82.50	\$1,320.00
000271	3-12" signal head	16	ea	1.710	27.360	\$633.00	\$10,128.00
000283	8' internally illuminated street name sign (IISNS)	4	ea	13.700	54.800	\$698.00	\$2,792.00
000290	type sp-1/sp-1-t ped signal mount	8	ea	3.420	27.360	\$259.00	\$2,072.00
000294	ped signal head	8	ea	1.710	13.680	\$214.00	\$1,712.00
000295	ppb and sign	8	ea	3.420	27.360	\$188.00	\$1,504.00
000344	4-camera video detection system (complete system)	1	ls	49.400	49.400	\$17,900.00	\$17,900.00
	Remove Luminaire	2	ea	5.000	10.000	\$600.00	\$1,200.00
	Regulatory Sign on Signal Mast Arm	2	ea	2.000	4.000	\$900.00	\$1,800.00
	EVP Cable	550	lf	0.017	9.350	\$0.84	\$462.00
	EVP Detector	4	ea	1.500	6.000	\$800.00	\$3,200.00
<b>Supplemental Work and State-Furnished Materials:</b>							
000014	battery backup system	1	ea			\$963.00	\$963.00
000015	battery backup system cabinet	1	ea			\$544.00	\$544.00
000022	model 170 controller	1	ea			\$960.00	\$960.00
000035	model 332a cabinet for 170 controller	1	ea			\$2,986.00	\$2,986.00

## Electrical Estimate

<b>Dist-EA:</b>	Chess Drive
<b>CO-RT-KP(PM):</b>	SF08-0382
<b>Work Description:</b>	Signal and Lighting
<b>Estimated By:</b>	0

<b>Work to be performed during:</b>	Day & Night
<b>Work location is:</b>	Urban
<b>Job size is:</b>	Medium (MinorA)
<b>Today's Date:</b>	May 15, 2009

Item #	Description	Quantity	Unit	Unit Man Hour	Total Man Hour	Unit Mat Cost	Total Mat Cost
<b>Total Estimate Breakdown:</b>							
	RAW MAN HOUR			634			
	TOTAL ADJUSTMENTS			71			
	AVERAGE LABOR RATE			\$50			
	1 TOTAL LABOR COST			\$35,270			
	0.75						
	1 MATERIAL COST			\$17,453			
	MATERIAL MARKUP			\$131			
	SALES TAX (7.75%)			\$1,363			
	TOTAL MATERIAL COST			\$18,947			
	JOB SHACK & STORAGE			\$542			
	TOOLS & EQUIPMENT			\$8,818			
	INSURANCE & BONDS			\$8,949			
	OVERHEAD & PROFIT			\$14,505			
	<b>Total Lump-Sum and Contract Bid Items</b>			<b>\$87,030</b>			
	<b>Total Supplemental and State-Furnished</b>			<b>\$0</b>			
	<b>TOTAL PROJECT COST ESTIMATE</b>			<b>\$87,030</b>			
<b>Lump-Sum and Contract Bid Items:</b>							
000003	12" trench & backfill in dirt (by machine)	300	lf	0.084	25.200	\$0.00	\$0.00
000004	12" trench & backfill in street (by machine)	200	lf	0.141	28.200	\$0.00	\$0.00
000008	3"C jack / bore (complete per 100' or per location)	1	ea	75.200	75.200	\$1,850.00	\$1,850.00
000026	3"C pvc conduit in trench	1150	lf	0.082	94.300	\$3.30	\$3,795.00
000040	install conduit in exist pull box (cb)	2	ea	3.420	6.840	\$0.00	\$0.00
000043	#14 solid copper conductor	25100	lf	0.005	125.500	\$0.08	\$2,008.00
000045	#10 solid copper conductor	4200	lf	0.012	50.400	\$0.15	\$630.00
000046	#8 stranded copper conductor	1500	lf	0.017	25.500	\$0.28	\$420.00
000058	splice conductors (sc)	11	ea	0.855	9.405	\$22.00	\$242.00
000061	remove conductors	1500	lf	0.010	15.000	\$0.00	\$0.00
000068	#6 pull box w/ standard cover	6	ea	5.130	30.780	\$347.00	\$2,082.00
000077	remove pull box	3	ea	0.599	1.797	\$0.00	\$0.00
000080	remove controller cabinet and foundation	1	ea	10.300	10.300	\$305.00	\$305.00
000092	detector lead-in cable (dlc)	2150	lf	0.017	36.550	\$0.84	\$1,806.00
000104	remove concrete foundation pad	100	ft3	0.411	41.100	\$0.00	\$0.00
000107	remove type III-a service and foundation	1	ea	10.300	10.300	\$1,890.00	\$1,890.00
000312	camera coaxial cable rg-6/u (tvc)	1300	lf	0.021	27.300	\$1.09	\$1,417.00
	EVP Cable	1200	lf	0.017	20.400	\$0.84	\$1,008.00

## Electrical Estimate

<b>Dist-EA:</b>	Metro Center
<b>CO-RT-KP(PM):</b>	SF08-0382
<b>Work Description:</b>	Signal and Lighting
<b>Estimated By:</b>	0

<b>Work to be performed during:</b>	Day & Night
<b>Work location is:</b>	Urban
<b>Job size is:</b>	Medium (MinorA)
<b>Today's Date:</b>	May 15, 2009

Item #	Description	Quantity	Unit	Unit Man Hour	Total Man Hour	Unit Mat Cost	Total Mat Cost
<b>Total Estimate Breakdown:</b>							
	RAW MAN HOUR			881			
	TOTAL ADJUSTMENTS			99			
	AVERAGE LABOR RATE			\$50			
	1 TOTAL LABOR COST			\$49,014			
	0.75						
	1 MATERIAL COST			\$26,953			
	MATERIAL MARKUP			\$202			
	SALES TAX (7.75%)			\$2,105			
	TOTAL MATERIAL COST			\$29,260			
	JOB SHACK & STORAGE			\$783			
	TOOLS & EQUIPMENT			\$12,254			
	INSURANCE & BONDS			\$12,729			
	OVERHEAD & PROFIT			\$20,808			
	<b>Total Lump-Sum and Contract Bid Items</b>			<b>\$124,847</b>			
	<b>Total Supplemental and State-Furnished</b>			<b>\$0</b>			
	<b>TOTAL PROJECT COST ESTIMATE</b>			<b>\$124,847</b>			
<b>Lump-Sum and Contract Bid Items:</b>							
000003	12" trench & backfill in dirt (by machine)	400	lf	0.084	33.600	\$0.00	\$0.00
000004	12" trench & backfill in street (by machine)	150	lf	0.141	21.150	\$0.00	\$0.00
000008	3"C jack / bore (complete per 100' or per location)	2	ea	75.200	150.400	\$1,850.00	\$3,700.00
000026	3"C pvc conduit in trench	1200	lf	0.082	98.400	\$3.30	\$3,960.00
000040	install conduit in exist pull box (cb)	3	ea	3.420	10.260	\$0.00	\$0.00
000043	#14 solid copper conductor	24800	lf	0.005	124.000	\$0.08	\$1,984.00
000045	#10 solid copper conductor	5650	lf	0.012	67.800	\$0.15	\$847.50
000046	#8 stranded copper conductor	1520	lf	0.017	25.840	\$0.28	\$425.60
000058	splice conductors (sc)	11	ea	0.855	9.405	\$22.00	\$242.00
000061	remove conductors	1500	lf	0.010	15.000	\$0.00	\$0.00
000068	#6 pull box w/ standard cover	5	ea	5.130	25.650	\$347.00	\$1,735.00
000077	remove pull box	1	ea	0.599	0.599	\$0.00	\$0.00
000080	remove controller cabinet and foundation	1	ea	10.300	10.300	\$305.00	\$305.00
000092	detector lead-in cable (dlc)	8150	lf	0.017	138.550	\$0.84	\$6,846.00
000104	remove concrete foundation pad	100	ft3	0.411	41.100	\$0.00	\$0.00
000107	remove type III-a service and foundation	1	ea	10.300	10.300	\$1,890.00	\$1,890.00
000312	camera coaxial cable rg-6/u (tvc)	2600	lf	0.021	54.600	\$1.09	\$2,834.00
	EVP Cable	2600	lf	0.017	44.200	\$0.84	\$2,184.00