

**APPENDIX G**  
**NORTHERN PARKWAY ALTERNATIVE 3**  
**ESTIMATED PROJECT COST**

**Project Estimated Cost (2009 Dollars)**  
**6/29/2009**

<b>Segment</b>	<b>ROW</b>	<b>Design</b>	<b>Construction</b>	<b>Total</b>
Sarival Avenue	\$2,703,000	\$1,274,059	\$15,925,738	\$19,902,797
Reems Road	\$3,706,200	\$1,688,789	\$21,109,868	\$26,504,858
Bullard Avenue	\$5,734,800	\$1,325,911	\$16,573,890	\$23,634,601
BNSF Webb Spur Crossing	\$0	\$238,172	\$2,977,152	\$3,215,324
Litchfield Road	\$3,762,600	\$2,014,500	\$25,181,254	\$30,958,355
Dysart Road	\$4,840,031	\$3,338,967	\$41,737,085	\$49,916,083
El Mirage Road	\$6,355,523	\$4,790,958	\$59,886,975	\$71,033,456
115th Avenue	\$2,013,535	\$1,706,680	\$21,333,494	\$25,053,709
Glen Harbor Blvd.	\$13,690,544	\$2,582,274	\$32,278,429	\$48,551,247
New River Bridge	\$1,373,106	\$2,052,458	\$25,655,724	\$29,081,288
Loop 101	\$16,986,560	\$9,926,198	\$124,077,475	\$150,990,233
91st Avenue	\$16,747,397	\$6,364,611	\$79,557,633	\$102,669,640
83rd Avenue	\$5,075,000	\$2,949,531	\$36,869,132	\$44,893,662
75th Avenue	\$10,016,000	\$3,050,171	\$38,127,132	\$51,193,303
Grand Avenue	\$7,468,000	\$4,177,969	\$52,224,608	\$63,870,577
<b>Total Costs</b>	<b>\$100,472,296</b>	<b>\$47,481,247</b>	<b>\$593,515,588</b>	<b>\$741,469,131</b>

**Project Cost Estimate**  
**Sarival Road Grade Separated Intersection (Sta 82+00 to Sta 115+00)**  
**6/29/2009**

Description	Unit	Quantity	Unit Cost	Total
Clearing and Grubbing	LS	1	10,000.00	\$10,000
Subgrade Preparation	SY	55,742	3.00	\$167,226
Remove Existing Pavement	SY	2,191	2.00	\$4,382
New Bridge Structure	SF	29,419	97.00	\$2,853,643
Embankment (Borrow)	CY	155,000	9.00	\$1,395,000
Excavation	CY	7,136	5.00	\$35,680
Mainline (12" PCCP)	SY	40,466	45.00	\$1,820,970
Ramp/Arterial (11" PCCP)	SY	15,276	40.00	\$611,040
Mainline/Ramp/Arterial (AB)	CY	6,194	25.00	\$154,850
Concrete Curb & Gutter	LF	5,388	15.00	\$80,820
Concrete Median Curb	LF	1,031	18.00	\$18,558
Sidewalk	SF	3,258	4.50	\$14,661
ROW Fence	LF	6,633	10.00	\$66,330
Concrete Half Barrier	LF	2,180	45.00	\$98,100
Concrete Half Barrier Transition	EA	2	3,000.00	\$6,000
Concrete Median Barrier	LF	2,864	65.00	\$186,160
Attenuators	EA	2	20,000.00	\$40,000
Pavement Marking & Signing	mi	0.5	310,000.00	\$155,000
ITS Conduit and Junction Boxes	mi	0.5	100,000.00	\$50,000
Roadway Lighting	mi	0.5	250,000.00	\$125,000
Traffic Signals	EA	1	250,000.00	\$250,000
Irrigation Relocation	LS	1	713,864.00	\$713,864
Utility Relocation	LS	1	202,125.00	\$202,125
Drainage	LS	1	406,545.00	\$406,545
Landscaping	SF	215,165	1.50	\$322,748

**Total** **\$9,788,702**

Traffic Control	4.0%	\$391,548
Mobilization	8.0%	\$783,096
Misc. Items (Survey, Contractor QC, dust palliative, furnish water, SWPPP, Communications relocation, Potholing)	12.1%	\$1,184,433

**Total** **\$12,147,779**

Unidentified Items	15.0%	\$1,822,167
--------------------	-------	-------------

**Total** **\$13,969,945**

Construction Administration / Contingencies	14.0%	\$1,955,792
---	-------	-------------

**Total Construction Cost** **\$15,925,738**

Engineering and Design	8%	\$1,274,059
------------------------	----	-------------

**Total Project Cost** **\$17,199,797**

ROW	Acre	\$/acre		
	18.02	\$150,000		\$2,703,000
	Each	\$/ea		

Resident Relocations	0	\$300,000		\$0
----------------------	---	-----------	--	-----

Business Relocations	0	\$500,000		\$0
----------------------	---	-----------	--	-----

**Total ROW Costs** **\$2,703,000**

**Total Project Cost Including ROW** **\$19,902,797**

**Project Cost Estimate**  
**Reems Road Grade Separated Intersection (Sta 115+00 to 1/2-mile east)**  
**6/29/2009**

Description	Unit	Quantity	Unit Cost	Total
Clearing and Grubbing	LS	1	10,000.00	\$10,000
Subgrade Preparation	SY	79,628	3.00	\$238,884
Remove Existing Pavement	SY	2,179	2.00	\$4,358
New Bridge Structure	SF	24,092	103.00	\$2,481,476
Embankment (Borrow)	CY	247,958	9.00	\$2,231,622
Excavation	CY	23,741	5.00	\$118,705
Mainline (12" PCCP)	SY	56,541	45.00	\$2,544,345
Ramp/Arterial (11" PCCP)	SY	23,086	40.00	\$923,440
Mainline, Ramp, and Arterial (AB)	CY	8,848	25.00	\$221,200
Concrete Curb & Gutter	LF	9,178	15.00	\$137,670
Concrete Median Curb	LF	807	18.00	\$14,526
Sidewalk	SF	5,519	4.50	\$24,836
ROW Fence	LF	11,291	10.00	\$112,910
Concrete Half Barrier	LF	2,563	45.00	\$115,335
Concrete Half Barrier Transition	EA	2	3,000.00	\$6,000
Concrete Median Barrier	LF	4,044	65.00	\$262,860
Attenuators	EA	2	20,000.00	\$40,000
Pavement Marking & Signing	mi	1	310,000.00	\$310,000
ITS Conduit and Junction Boxes	mi	1.0	100,000.00	\$100,000
Roadway Lighting	mi	1	250,000.00	\$250,000
Traffic Signals	EA	1	250,000.00	\$250,000
Irrigation Relocation	LS	1	228,103.00	\$228,103
Utility Relocation	LS	1	143,325.00	\$143,325
Drainage	LS	1	1,247,350.00	\$1,247,350
Landscaping	SF	638,777	1.50	\$958,166

**Total** **\$12,975,110**

Traffic Control	4.0%	\$519,004
Mobilization	8.0%	\$1,038,009
Misc. Items (Survey, Contractor QC, dust palliative, furnish water, SWPPP, Communications relocation, Potholing)	12.1%	\$1,569,988

**Total** **\$16,102,112**

Unidentified Items	15.0%	\$2,415,317
--------------------	-------	-------------

**Total** **\$18,517,428**

Construction Administration / Contingencies	14.0%	\$2,592,440
---	-------	-------------

**Total Construction Cost** **\$21,109,868**

Engineering and Design	8%	\$1,688,789
------------------------	----	-------------

**Total Project Cost** **\$22,798,658**

ROW	Acre	\$/acre	
	41.18	\$90,000	\$3,706,200
	Each	\$/ea	

Resident Relocations	0	\$300,000	\$0
Business Relocations	0	\$500,000	\$0

**Total ROW Costs** **\$3,706,200**

**Total Project Cost Including ROW** **\$26,504,858**

**Project Cost Estimate**  
**Bullard Road Segment (1/2-mile west and east)**  
**6/29/2009**

Description	Unit	Quantity	Unit Cost	Total
Clearing and Grubbing	LS	1	10,000.00	\$10,000
Subgrade Preparation	SY	68,664	3.00	\$205,992
Embankment (Borrow)	CY	0	9.00	\$0
Excavation	CY	42,974	5.00	\$214,870
Excavation - Drainage Basin	CY	431,000	5.00	\$2,155,000
Mainline (12" PCCP)	SY	68,664	45.00	\$3,089,880
Mainline AB	CY	7,506	25.00	\$187,650
ROW Fence	LF	12,897	10.00	\$128,970
Concrete Half Barrier	LF	2,172	45.00	\$97,740
Concrete Half Barrier Transition	EA	1	3,000.00	\$3,000
Concrete Median Barrier	LF	5,231	65.00	\$340,015
Attenuators	EA	1	20,000.00	\$20,000
Pavement Marking & Signing	mi	1	110,000.00	\$110,000
ITS Conduit and Junction Boxes	mi	1.0	100,000.00	\$100,000
Roadway Lighting	mi	1	250,000.00	\$250,000
Irrigation Relocation	LS	1	657,098.00	\$657,098
Utility Relocation	LS	1	0.00	\$0
Drainage	LS	1	1,639,144.00	\$1,639,144
Landscaping	SF	763,061	1.50	\$1,144,592

**Total** **\$10,353,951**

Traffic Control	2.0%	\$207,079
Mobilization	8.0%	\$828,316
Misc. Items (Survey, Contractor QC, dust palliative, furnish water, SWPPP, Communications relocation, Potholing)	12.1%	\$1,252,828

**Total** **\$12,642,174**

Unidentified Items	15.0%	\$1,896,326
--------------------	-------	-------------

**Total** **\$14,538,500**

Construction Administration / Contingencies	14.0%	\$2,035,390
---	-------	-------------

**Total Construction Cost** **\$16,573,890**

Engineering and Design	8%	\$1,325,911
------------------------	----	-------------

**Total Project Cost** **\$17,899,801**

	Acre	\$/acre	
ROW	32.36	\$90,000	\$2,912,400
ROW (Drainage Basin in Luke APZ 1)	47.04	\$60,000	\$2,822,400
	Each	\$/ea	
Resident Relocations	0	\$300,000	\$0
Business Relocations	0	\$500,000	\$0

**Total ROW Costs** **\$5,734,800**

**Total Project Cost Including ROW** **\$23,634,601**

**Additional Project Cost Estimate**  
**BNSF Webb Spur Crossing - Parkway Elevated, 3:1 Embankment Slope**  
**6/29/2009**

Description	Unit	Quantity	Unit Cost	Total
New Bridge Structure	SF	8,704	180.00	\$1,566,720
Retaining Wall (MSE)	SF	5,330	55.00	\$293,150
				\$0

**Total** **\$1,859,870**

Traffic Control 2.0% \$37,197  
Mobilization 8.0% \$148,790  
Misc. Items (Survey, Contractor QC, dust palliative,  
furnish water, SWPPP, Communications relocation,  
Potholing) 12.1% \$225,044

**Total** \$2,270,901

Unidentified Items 15.0% \$340,635

**Total** **\$2,611,536**

Construction Administration / Contingencies 14.0% \$365,615

**Total Construction Cost** **\$2,977,152**

Engineering and Design 8% \$238,172

**Total Project Cost** **\$3,215,324**

	Acre	\$/acre	
ROW	0.00	\$90,000	\$0
ROW	0.00	\$60,000	\$0

	Each	\$/ea	
Resident Relocations	0	\$300,000	\$0
Business Relocations	0	\$500,000	\$0

**Total ROW Costs** **\$0**

**Additional Project Cost Including ROW** **\$3,215,324**

**Project Cost Estimate**  
**Litchfield Road Grade Separated Intersection (1/2-mile west and east)**  
**6/29/2009**

Description	Unit	Quantity	Unit Cost	Total
Clearing and Grubbing	LS	1	10,000.00	\$10,000
Subgrade Preparation	SY	131,285	3.00	\$393,855
Remove Existing Pavement	SY	7,796	2.00	\$15,592
New Bridge Structure	SF	26,214	120.00	\$3,145,680
Embankment (Borrow)	CY	0	9.00	\$0
Excavation	CY	148,496	5.00	\$742,480
Mainline (12" PCCP)	SY	81,549	45.00	\$3,669,705
Ramp (11" PCCP)	SY	17,945	40.00	\$717,800
Arterial (AC)	TONS	10,443	63.00	\$657,909
Mainline, Ramp, and Arterial (AB)	CY	19,886	25.00	\$497,150
Concrete Curb & Gutter	LF	15,212	15.00	\$228,180
Concrete Median Curb	LF	4,968	18.00	\$89,424
Sidewalk	SF	5,977	4.50	\$26,897
ROW Fence	LF	12,113	10.00	\$121,130
Concrete Half Barrier	LF	1,159	45.00	\$52,155
Concrete Half Barrier Transition	EA	3	3,000.00	\$9,000
Concrete Median Barrier	LF	5,658	65.00	\$367,770
Attenuators	EA	3	20,000.00	\$60,000
Pavement Marking & Signing	mi	1	310,000.00	\$310,000
ITS Conduit and Junction Boxes	mi	1.0	100,000.00	\$100,000
Roadway Lighting	mi	1	250,000.00	\$250,000
Traffic Signals	EA	1	250,000.00	\$250,000
Irrigation Relocation	LS	1	913,800.00	\$913,800
Utility Relocation	LS	1	112,725.00	\$112,725
Drainage	LS	1	1,325,640.00	\$1,325,640
Landscaping	SF	940,455	1.50	\$1,410,683

**Total** **\$15,477,574**

Traffic Control 4.0% \$619,103  
Mobilization 8.0% \$1,238,206  
Misc. Items (Survey, Contractor QC, dust palliative,  
furnish water, SWPPP, Communications relocation,  
Potholing) 12.1% \$1,872,786

**Total** **\$19,207,669**

Unidentified Items 15.0% \$2,881,150

**Total** **\$22,088,820**

Construction Administration / Contingencies 14.0% \$3,092,435

**Total Construction Cost** **\$25,181,254**

Engineering and Design 8% \$2,014,500

**Total Project Cost** **\$27,195,755**

ROW	Acre	\$/acre	
	52.71	\$60,000	\$3,162,600

Resident Relocations	Each	\$/ea	
	2	\$300,000	\$600,000

Business Relocations			\$0
----------------------	--	--	-----

**Total ROW Costs** **\$3,762,600**

**Total Project Cost Including ROW** **\$30,958,355**

**Project Cost Estimate**  
**Dysart Road Grade Separated Intersection (1/2-mile west and east)**  
**Alternative 3**  
**6/29/2009**

Description	Unit	Quantity	Unit Cost	Total
Clearing and Grubbing	LS	1	20,000.00	\$20,000
Subgrade Preparation	SY	129,583	3.00	\$388,749
Remove Existing Pavement	SY	27,646	2.00	\$55,292
Remove Existing Curb & Gutter	LF	0	6.00	\$0
New Bridge Structure	SF	30,708	110.00	\$3,377,880
Embankment (Borrow)	CY	433,905	9.00	\$3,905,145
Excavation	CY	30,349	5.00	\$151,745
Mainline & Ramp (PCCP)	SY	87,910	45.00	\$3,955,950
Arterial (AC)	TONS	13,690	63.00	\$862,470
Mainline, Ramp, and Arterial (AB)	CY	23,659	25.00	\$591,475
Concrete Curb & Gutter	LF	20,792	15.00	\$311,880
Concrete Median Curb	LF	2,937	18.00	\$52,866
Sidewalk	SF	40,771	4.50	\$183,470
ROW Fence	LF	8,500	10.00	\$85,000
Retaining Wall	SF	94,230	55.00	\$5,182,650
Concrete Half Barrier	LF	5,888	45.00	\$264,960
Concrete Half Barrier Transition	EA	2	3,000.00	\$6,000
Concrete Median Barrier	LF	5,546	65.00	\$360,490
Attenuators	EA	2	20,000.00	\$40,000
Pavement Marking & Signing	mi	1	310,000.00	\$310,000
ITS Conduit and Junction Boxes	mi	1.0	100,000.00	\$100,000
Roadway Lighting	mi	1	250,000.00	\$250,000
Traffic Signals	EA	1	250,000.00	\$250,000
Irrigation Relocation	LS	1	1,028,243.00	\$1,028,243
Utility Relocation	LS	1	449,625.00	\$449,625
Drainage	LS	1	1,826,510.00	\$1,826,510
Landscaping	SF	719,048	2.00	\$1,438,096

**Total** **\$25,448,496**

Traffic Control	5.0%	\$1,272,425
Mobilization	8.0%	\$2,035,880
Misc. Items (Survey, Contractor QC, dust palliative, furnish water, SWPPP, Communications relocation, Potholing)	12.1%	\$3,079,268

**Total** **\$31,836,068**

Unidentified Items 15.0% \$4,775,410

**Total** **\$36,611,478**

Construction Administration / Contingencies 14.0% \$5,125,607

**Total Construction Cost** **\$41,737,085**

Engineering and Design 8% \$3,338,967

**Total Project Cost** **\$45,076,052**

ROW	Acre	\$/acre	
	43.78	\$90,000	\$3,940,031
	Each	\$/ea	

Resident Relocations 3 \$300,000 \$900,000

Business Relocations 0 \$500,000 \$0

**Total ROW Costs** **\$4,840,031**

**Total Project Cost Including ROW** **\$49,916,083**

**Project Cost Estimate**  
**EI Mirage Road Grade Separated Intersection (1/2-mile west to Station 420+00)**  
**Alternative 3**  
**6/29/2009**

Description	Unit	Quantity	Unit Cost	Total
Clearing and Grubbing	LS	1	20,000.00	\$20,000
Subgrade Preparation	SY	148,257	3.00	\$444,771
Remove Existing Pavement	SY	27,182	2.00	\$54,364
Remove Existing Curb & Gutter	LF	0	6.00	\$0
New Bridge Structure (Dysart Drain)	SF	22,425	110.00	\$2,466,750
New Bridge Structure (Glendale, EI Mirage)	SF	39,364	110.00	\$4,330,040
New Bridge Structure (Agua Fria River)	SF	135,247	95.00	\$12,848,465
Embankment (Borrow)	CY	456,711	9.00	\$4,110,399
Excavation	CY	0	5.00	\$0
Mainline & Ramp (PCCP)	SY	108,665	45.00	\$4,889,925
Arterial (AC)	TONS	13,006	63.00	\$819,378
Mainline, Ramp, Arterial (AB)	CY	25,271	25.00	\$631,775
Concrete Curb & Gutter	LF	23,004	15.00	\$345,060
Concrete Median Curb	LF	0	18.00	\$0
Sidewalk	SF	59,244	4.50	\$266,598
ROW Fence	LF	11,536	10.00	\$115,360
Retaining Wall	SF	23,160	55.00	\$1,273,800
Concrete Half Barrier	LF	4,203	45.00	\$189,135
Concrete Half Barrier Transition	EA	3	3,000.00	\$9,000
Concrete Median Barrier	LF	8,933	65.00	\$580,645
Attenuators	EA	3	20,000.00	\$60,000
Pavement Marking & Signing	mi	1	310,000.00	\$310,000
ITS Conduit and Junction Boxes	mi	1.0	100,000.00	\$100,000
Roadway Lighting	mi	1	250,000.00	\$250,000
Traffic Signals	EA	1	250,000.00	\$250,000
Irrigation Relocation	LS	1	0.00	\$0
Utility Relocation	LS	1	149,625.00	\$149,625
Drainage	LS	1	1,000,000.00	\$1,000,000
Landscaping	LS	1	1,000,000.00	\$1,000,000

**Total** **\$36,515,090**

Traffic Control	5.0%	\$1,825,755
Mobilization	8.0%	\$2,921,207
Misc. Items (Survey, Contractor QC, dust palliative, furnish water, SWPPP, Communications relocation, Potholing)	12.1%	\$4,418,326

**Total** **\$45,680,378**

Unidentified Items	15.0%	\$6,852,057
--------------------	-------	-------------

**Total** **\$52,532,434**

Construction Administration / Contingencies	14.0%	\$7,354,541
---	-------	-------------

**Total Construction Cost** **\$59,886,975**

Engineering and Design	8%	\$4,790,958
------------------------	----	-------------

**Total Project Cost** **\$64,677,933**

ROW	Acre	\$/acre	
	59.51	\$90,000	\$5,355,523
Resident Relocations	Each	\$/ea	
	0	\$300,000	\$0
Business Relocations	2	\$500,000	\$1,000,000

**Total ROW Costs** **\$6,355,523**

**Total Project Cost Including ROW** **\$71,033,456**

**Project Cost Estimate**  
**115th Ave Segment (Station 420+00 to 455+00)**  
**Alternative 3**  
**6/29/2009**

Description	Unit	Quantity	Unit Cost	Total
Clearing and Grubbing	LS	1	10,000.00	\$10,000
Subgrade Preparation	SY	71,156	3.00	\$213,468
Remove Existing Pavement	SY	13,222	2.00	\$26,444
Remove Existing Curb & Gutter	LF	1,400	6.00	\$8,400
New Bridge Structure	SF	22,194	120.00	\$2,663,280
Embankment (Borrow)	CY	292,431	9.00	\$2,631,879
Excavation	CY	0	5.00	\$0
Mainline & Ramp (PCCP)	SY	47,832	45.00	\$2,152,440
Arterial (AC)	TONS	7,662	63.00	\$482,706
Mainline & Ramp (AB)	CY	13,089	25.00	\$327,225
Concrete Curb & Gutter	LF	14,106	15.00	\$211,590
Concrete Median Curb	LF	0	18.00	\$0
Sidewalk	SF	41,916	4.50	\$188,622
ROW Fence	LF	0	10.00	\$0
Retaining Wall	SF	4,800	55.00	\$264,000
Concrete Half Barrier	LF	789	45.00	\$35,505
Concrete Half Barrier Transition	EA	0	3,000.00	\$0
Concrete Median Barrier	LF	3,500	65.00	\$227,500
Attenuators	EA	0	20,000.00	\$0
Pavement Marking & Signing	mi	1	310,000.00	\$310,000
ITS Conduit and Junction Boxes	mi	1.0	100,000.00	\$100,000
Roadway Lighting	mi	1	250,000.00	\$250,000
Traffic Signals	EA	1	200,000.00	\$200,000
Irrigation Relocation	LS	1	0.00	\$0
Utility Relocation	LS	1	500,000.00	\$500,000
Drainage	LS	1	1,000,000.00	\$1,000,000
Landscaping	LS	1	1,000,000.00	\$1,000,000

**Total** **\$12,803,059**

Traffic Control 7.0% \$896,214  
Mobilization 8.0% \$1,024,245  
Misc. Items (Survey, Contractor QC, dust palliative,  
furnish water, SWPPP, Communications relocation,  
Potholing) 12.1% \$1,549,170

**Total** **\$16,272,688**

Unidentified Items 15.0% \$2,440,903

**Total** **\$18,713,591**

Construction Administration / Contingencies 14.0% \$2,619,903

**Total Construction Cost** **\$21,333,494**

Engineering and Design 8% \$1,706,680

**Total Project Cost** **\$23,040,173**

ROW	Acre	\$/acre	
	22.37	\$90,000	\$2,013,535
	Each	\$/ea	

Resident Relocations 0 \$300,000 \$0

Business Relocations 0 \$500,000 \$0

**Total ROW Costs** **\$2,013,535**

**Total Project Cost Including ROW** **\$25,053,709**

**Project Cost Estimate**  
**Glen Harbor Blvd. (Station 455+00 to New River Bridge West Abutment)**  
**Alternative 3**  
**6/29/2009**

Description	Unit	Quantity	Unit Cost	Total
Clearing and Grubbing	LS	1	10,000.00	\$10,000
Subgrade Preparation	SY	122,035	3.00	\$366,105
Remove Existing Pavement	SY	27,616	2.00	\$55,232
Remove Existing Curb & Gutter	LF	4,330	6.00	\$25,980
New Bridge Structure (Glen Harbor)	SF	18,606	120.00	\$2,232,720
New Bridge Structure (Glendale Ave)	SF	12,831	135.00	\$1,732,185
Embankment (Borrow)	CY	116,383	9.00	\$1,047,447
Excavation	CY	601,855	5.00	\$3,009,275
Mainline & Ramp (PCCP)	SY	76,499	45.00	\$3,442,455
Arterial (AC)	TONS	14,959	63.00	\$942,417
Mainline, Ramp, and Arterial (AB)	CY	23,679	25.00	\$591,975
Concrete Curb & Gutter	LF	23,848	15.00	\$357,720
Concrete Median Curb	LF	0	18.00	\$0
Sidewalk	SF	42,492	4.50	\$191,214
ROW Fence	LF	4,550	10.00	\$45,500
Retaining Wall	SF	26,840	55.00	\$1,476,200
Concrete Half Barrier	LF	1,420	45.00	\$63,900
Concrete Half Barrier Transition	EA	0	3,000.00	\$0
Concrete Median Barrier	LF	5,711	65.00	\$371,215
Attenuators	EA	0	20,000.00	\$0
Pavement Marking & Signing	mi	1	310,000.00	\$310,000
ITS Conduit and Junction Boxes	mi	1.0	100,000.00	\$100,000
Roadway Lighting	mi	1	250,000.00	\$250,000
Traffic Signals	EA	1	250,000.00	\$250,000
Irrigation Relocation	LS	1	0.00	\$0
Utility Relocation	LS	1	500,000.00	\$500,000
Drainage	LS	1	1,000,000.00	\$1,000,000
Landscaping	LS	1	1,000,000.00	\$1,000,000

**Total** **\$19,371,540**

Traffic Control	7.0%	\$1,356,008
Mobilization	8.0%	\$1,549,723
Misc. Items (Survey, Contractor QC, dust palliative, furnish water, SWPPP, Communications relocation, Potholing)	12.1%	\$2,343,956

**Total** **\$24,621,227**

Unidentified Items	15.0%	\$3,693,184
--------------------	-------	-------------

**Total** **\$28,314,411**

Construction Administration / Contingencies	14.0%	\$3,964,018
---	-------	-------------

**Total Construction Cost** **\$32,278,429**

Engineering and Design	8%	\$2,582,274
------------------------	----	-------------

**Total Project Cost** **\$34,860,703**

ROW	Acre	\$/acre	
	41.64	\$300,000	\$12,490,544
Resident Relocations	Each	\$/ea	
	4	\$300,000	\$1,200,000
Business Relocations	0	\$500,000	\$0

**Total ROW Costs** **\$13,690,544**

**Total Project Cost Including ROW** **\$48,551,247**

**Project Cost Estimate  
New River Bridge  
Alternative 3  
6/29/2009**

Description	Unit	Quantity	Unit Cost	Total
New Bridge Structure	SF	165,539	95.00	\$15,726,205
Pavement Marking & Signing	LS	1	3,000.00	\$3,000
Roadway Lighting	LS	1	40,000.00	\$40,000

**Total** **\$15,769,205**

Traffic Control 4.0% \$630,768

Mobilization 8.0% \$1,261,536

Misc. Items (Survey, Contractor QC, dust palliative, 12.1% \$1,908,074  
furnish water, SWPPP, Communications relocation,  
Potholing)

**Total** **\$19,569,583**

Unidentified Items 15.0% \$2,935,438

**Total** **\$22,505,021**

Construction Administration / Contingencies 14.0% \$3,150,703

**Total Construction Cost** **\$25,655,724**

Engineering and Design 8% \$2,052,458

**Total Project Cost** **\$27,708,182**

	Acre	\$/acre	
ROW	4.58	\$300,000	\$1,373,106

	Each	\$/ea	
Resident Relocations	0	\$300,000	\$0
Business Relocations	0	\$500,000	\$0

**Total ROW Costs** **\$1,373,106**

**Total Project Cost Including ROW** **\$29,081,288**

**Project Cost Estimate**  
**Loop 101 Segment (New River Bridge East Abutment to Sta 555+00)**  
**Alternative 3**  
**6/29/2009**

Description	Unit	Quantity	Unit Cost	Total
Clearing and Grubbing	LS	1	20,000.00	\$20,000
Subgrade Preparation	SY	100,580	3.00	\$301,740
Remove Existing Pavement	SY	0	2.00	\$0
Remove Existing Curb & Gutter	LF	0	6.00	\$0
New Bridge Structures	SF	336,834	120.00	\$40,420,080
Embankment (Borrow)	CY	749,294	9.00	\$6,743,646
Excavation	CY	0	5.00	\$0
PCCP	SY	100,580	45.00	\$4,526,100
Mainline & Ramp (AC)	TONS	0	63.00	\$0
Arterial (AC)	TONS	0	63.00	\$0
Mainline & Ramp & Arterial (AB)	CY	11,176	25.00	\$279,400
Concrete Curb & Gutter	LF	0	15.00	\$0
Concrete Median Curb	LF	0	18.00	\$0
Sidewalk	SF	0	4.50	\$0
ROW Fence	LF	10,253	10.00	\$102,530
Retaining Wall	SF	322,240	55.00	\$17,723,200
Concrete Half Barrier	LF	20,231	45.00	\$910,395
Concrete Half Barrier Transition	EA	8	3,000.00	\$24,000
Concrete Median Barrier	LF	1,425	65.00	\$92,625
Attenuators	EA	8	20,000.00	\$160,000
Pavement Marking & Signing	mi	1	310,000.00	\$310,000
ITS Conduit and Junction Boxes	mi	1.0	100,000.00	\$100,000
Roadway Lighting	mi	1	250,000.00	\$250,000
Traffic Signals (103rd, 99th, Loop 101 W & E)	EA	0	187,500.00	\$0
Irrigation Relocation	LS	0	0.00	\$0
Utility Relocation	LS	1	500,000.00	\$500,000
Drainage	LS	1	1,000,000.00	\$1,000,000
Landscaping	LS	1	1,000,000.00	\$1,000,000

**Total** **\$74,463,716**

Traffic Control	7.0%	\$5,212,460
Mobilization	8.0%	\$5,957,097
Misc. Items (Survey, Contractor QC, dust palliative, furnish water, SWPPP, Communications relocation, Potholing)	12.1%	\$9,010,110

**Total** **\$94,643,383**

Unidentified Items	15.0%	\$14,196,507
--------------------	-------	--------------

**Total** **\$108,839,890**

Construction Administration / Contingencies	14.0%	\$15,237,585
---	-------	--------------

**Total Construction Cost** **\$124,077,475**

Engineering and Design	8%	\$9,926,198
------------------------	----	-------------

**Total Project Cost** **\$134,003,673**

ROW	Acre	\$/acre	
	36.41	\$450,000	\$16,386,560

Resident Relocations	Each	\$/ea	
	2	\$300,000	\$600,000
Business Relocations	0	\$500,000	\$0

**Total ROW Costs** **\$16,986,560**

**Total Project Cost Including ROW** **\$150,990,233**

**Project Cost Estimate  
91st Avenue (Loop 101 to 87th Ave)  
(Includes Hayward Ave Connection)**

**Alternative 3  
6/29/2009**

Description	Unit	Quantity	Unit Cost	Total
Clearing and Grubbing	LS	1	10,000.00	\$10,000
Subgrade Preparation	SY	154,394	3.00	\$463,182
Remove Existing Pavement	SY	52,096	2.00	\$104,192
Remove Existing Curb & Gutter	LF	13,790	6.00	\$82,740
New Bridge Structures	SF	77,686	120.00	\$9,322,320
Embankment (Borrow)	CY	536,822	9.00	\$4,831,398
Excavation	CY	0	5.00	\$0
PCCP	SY	81,021	45.00	\$3,645,945
Arterial AC	TONS	22,105	63.00	\$1,392,615
Connector Rd AC (Hayward Ave.)	TONS	999	72.00	\$71,928
Mainline & Ramp & Arterial AB	CY	31,432	25.00	\$785,800
Connector Rd AB (Hayward Ave)	CY	1,014	30.00	\$30,420
Concrete Curb & Gutter	LF	19,684	15.00	\$295,260
Concrete Median Curb	LF	5,680	18.00	\$102,240
Sidewalk	SF	87,882	4.50	\$395,469
Retaining Wall	SF	318,970	55.00	\$17,543,350
Noise Wall (B13-B15)	LS	1	1,090,040.00	\$1,090,040
Concrete Half Barrier	LF	13,964	45.00	\$628,380
Concrete Half Barrier Transition	EA	1	3,000.00	\$3,000
Concrete Median Barrier	LF	7,278	65.00	\$473,070
Attenuators	EA	1	20,000.00	\$20,000
Pavement Marking & Signing	mi	1	310,000.00	\$310,000
ITS Conduit and Junction Boxes	mi	1.0	100,000.00	\$100,000
Roadway Lighting	mi	1	250,000.00	\$250,000
Traffic Signals (93rd, 91st)	EA	2	250,000.00	\$500,000
Irrigation Relocation	LS	0	0.00	\$0
Utility Relocation	LS	1	3,432,968.88	\$3,432,969
Drainage	LS	1	861,310.00	\$861,310
Landscaping	LS	1	1,000,000.00	\$1,000,000

**Total** **\$47,745,628**

Traffic Control 7.0% \$3,342,194  
 Mobilization 8.0% \$3,819,650  
 Misc. Items (Survey, Contractor QC, dust palliative,  
 furnish water, SWPPP, Communications relocation,  
 Potholing) 12.1% \$5,777,221

**Total** **\$60,684,693**

Unidentified Items 15.0% \$9,102,704  
**Total** **\$69,787,397**

Construction Administration / Contingencies 14.0% \$9,770,236  
**Total Construction Cost** **\$79,557,633**

Engineering and Design 8% \$6,364,611  
**Total Project Cost** **\$85,922,243**

ROW	Acre	\$/acre	
	36.11	\$450,000	\$16,247,397
Resident Relocations	Each	\$/ea	
	0	\$300,000	\$0
Business Relocations	1	\$500,000	\$500,000
<b>Total ROW Costs</b>			<b>\$16,747,397</b>

**Total Project Cost Including ROW** **\$102,669,640**

**Project Cost Estimate**  
**83rd Ave Grade Separated Intersection (87th Ave to 79th Ave)**  
**6/29/2009**

Description	Unit	Quantity	Unit Cost	Total
Clearing and Grubbing	LS	1	10,000.00	\$10,000
Subgrade Preparation	SY	94,183	3.00	\$282,549
Remove Existing Pavement	SY	18,827	2.00	\$37,654
Remove Existing Curb & Gutter	LF	10,000	6.00	\$60,000
New Bridge Structure	SF	20,910	115.00	\$2,404,650
Embankment (Borrow)	CY	56,957	9.00	\$512,613
Excavation	CY	62,988	5.00	\$314,940
Mainline (11" AC)	TONS	31,838	63.00	\$2,005,794
Arterial/Ramp (9" AC)	TONS	14,776	63.00	\$930,888
Connector Rd (3" AC)	TONS	1,861	72.00	\$133,992
Asphalt Rubber Surface Course (1")	TONS	2,894	115.00	\$332,810
Mainline (10" AB)	CY	14,685	25.00	\$367,125
Arterial/Ramp (9" AB)	CY	7,496	25.00	\$187,400
Connector Rd (6" AB)	CY	1,889	30.00	\$56,670
Concrete Curb & Gutter	LF	21,329	15.00	\$319,935
Concrete Median Curb	LF	7,357	18.00	\$132,426
Sidewalk	SF	64,586	4.50	\$290,637
Retaining Wall (MSE)	SF	42,772	55.00	\$2,352,460
Noise Wall (B16)	LS	1	974,400.00	\$974,400
Concrete Half Barrier	LF	3,911	45.00	\$175,995
Concrete Half Barrier Transition	EA	2	3,000.00	\$6,000
Concrete Median Barrier	LF	1,746	65.00	\$113,490
Attenuators	EA	2	20,000.00	\$40,000
Pavement Marking & Signing	mi	1	110,000.00	\$110,000
ITS Conduit and Junction Boxes	mi	1.0	100,000.00	\$100,000
Roadway Lighting	mi	1	250,000.00	\$250,000
Traffic Signals	LS	1	250,000.00	\$250,000
Irrigation Relocation	LS	1	0.00	\$0
Utility Relocation	LS	1	6,601,756.00	\$6,601,756
Drainage	LS	1	1,921,690.00	\$1,921,690
Landscaping	LF	283,575	3.00	\$850,725

**Total** **\$22,126,599**

Traffic Control	7.0%	\$1,548,862
Mobilization	8.0%	\$1,770,128
Misc. Items (Survey, Contractor QC, dust palliative, furnish water, SWPPP, Communications relocation, Potholing)	12.1%	\$2,677,318

**Total** **\$28,122,907**

Unidentified Items	15.0%	\$4,218,436
--------------------	-------	-------------

**Total** **\$32,341,343**

Construction Administration / Contingencies	14.0%	\$4,527,788
---	-------	-------------

**Total Construction Cost** **\$36,869,132**

Engineering and Design	8%	\$2,949,531
------------------------	----	-------------

**Total Project Cost** **\$39,818,662**

ROW	Acre	\$/acre	
	16.70	\$250,000	\$4,175,000
	Each	\$/ea	
Resident Relocations	3	\$300,000	\$900,000
Business Relocations	0	\$500,000	\$0

**Total ROW Costs** **\$5,075,000**

**Total Project Cost Including ROW** **\$44,893,662**

**Project Cost Estimate**  
**75th Ave Grade Separated Intersection (79th Ave to 71st Ave)**  
**(Includes SRP Roadway)**  
**6/29/2009**

Description	Unit	Quantity	Unit Cost	Total
Clearing and Grubbing	LS	1	10,000.00	\$10,000
Subgrade Preparation	SY	100,522	3.00	\$301,566
Remove Existing Pavement	SY	42,455	2.00	\$84,910
Remove Existing Curb & Gutter	LF	10,000	6.00	\$60,000
New Bridge Structure	SF	20,910	115.00	\$2,404,650
Embankment (Borrow)	CY	88,601	9.00	\$797,409
Excavation	CY	35,134	5.00	\$175,670
Mainline (11" AC)	TONS	32,895	63.00	\$2,072,385
Arterial/Ramp (9" AC)	TONS	14,835	63.00	\$934,605
Arterial (6" AC)	TONS	4,132	63.00	\$260,316
Connector Rd (3" AC)	TONS	512	72.00	\$36,864
Mainline & Arterial (10" AB)	CY	18,666	25.00	\$466,650
Ramp (9" AB)	CY	7,527	25.00	\$188,175
Connector Rd (AB)	CY	536	30.00	\$16,080
Concrete Curb & Gutter	LF	18,983	15.00	\$284,745
Concrete Median Curb	LF	8,655	18.00	\$155,790
Sidewalk	SF	74,024	4.50	\$333,108
Retaining Wall (MSE)	SF	52,059	55.00	\$2,863,245
Noise Wall (B17-B18)	LS	1	1,958,600.00	\$1,958,600
Concrete Half Barrier	LF	4,360	45.00	\$196,200
Concrete Half Barrier Transition	EA	2	3,000.00	\$6,000
Concrete Median Barrier	LF	2,837	65.00	\$184,405
Attenuators	EA	2	20,000.00	\$40,000
Pavement Marking & Signing	mi	1	110,000.00	\$110,000
ITS Conduit and Junction Boxes	mi	1.0	100,000.00	\$100,000
Roadway Lighting	mi	1	250,000.00	\$250,000
Traffic Signals	EA	1	250,000.00	\$250,000
Irrigation Relocation	LS	1	0.00	\$0
Utility Relocation	LS	1	5,978,141.13	\$5,978,141
Drainage	LS	1	1,371,670.00	\$1,371,670
Landscaping	LF	330,130	3.00	\$990,390

**Total** **\$22,881,574**

Traffic Control	7.0%	\$1,601,710
Mobilization	8.0%	\$1,830,526
Misc. Items (Survey, Contractor QC, dust palliative, furnish water, SWPPP, Communications relocation, Potholing)	12.1%	\$2,768,670

**Total** **\$29,082,481**

Unidentified Items	15.0%	\$4,362,372
--------------------	-------	-------------

**Total** **\$33,444,853**

Construction Administration / Contingencies	14.0%	\$4,682,279
---	-------	-------------

**Total Construction Cost** **\$38,127,132**

Engineering and Design	8%	\$3,050,171
------------------------	----	-------------

**Total Project Cost** **\$41,177,303**

ROW	Acre	\$/acre	
	15.29	\$400,000	\$6,116,000
Resident Relocations	Each	\$/ea	
	13	\$300,000	\$3,900,000
Business Relocations	0	\$500,000	\$0

**Total ROW Costs** **\$10,016,000**

**Total Project Cost Including ROW** **\$51,193,303**

**Project Cost Estimate**  
**Grand Ave Segment (71st Ave to 65th Ave, Grand Ave, Connector Improvements)**  
**6/29/2009**

Description	Unit	Quantity	Unit Cost	Total
Clearing and Grubbing	LS	1	10,000.00	\$10,000
Subgrade Preparation	SY	86,189	3.00	\$258,567
Remove Existing Pavement	SY	35,114	2.00	\$70,228
Remove Existing Curb & Gutter	LF	18,074	6.00	\$108,444
New Bridge Structure	SF	118,399	141.00	\$16,694,259
Embankment (Borrow)	CY	35,601	9.00	\$320,409
Excavation	CY	34,517	5.00	\$172,585
Flyover PCCP (11.5")	SY	11,073	40.00	\$442,920
Northern Avenue (9" AC)	TONS	25,745	63.00	\$1,621,935
Grand (9" AC)	TONS	11,269	63.00	\$709,947
Flyover (4" AB)	CY	1,230	25.00	\$30,750
Northern/Grand (AB)	CY	19,414	25.00	\$485,350
Concrete Curb & Gutter	LF	17,865	15.00	\$267,975
Concrete Median Curb	LF	10,484	18.00	\$188,712
Sidewalk	SF	74,927	4.50	\$337,172
Retaining Wall	SF	50,948	55.00	\$2,802,140
Concrete Half Barrier	LF	3,644	45.00	\$163,980
Concrete Half Barrier Transition	EA	2	3,000.00	\$6,000
Concrete Median Barrier	LF	2,024	65.00	\$131,560
Attenuators	EA	2	20,000.00	\$40,000
Pavement Marking & Signing	mi	1	310,000.00	\$310,000
ITS Conduit and Junction Boxes	mi	1.0	100,000.00	\$100,000
Roadway Lighting	mi	1	250,000.00	\$250,000
Traffic Signals (Grand, Connector A2)	LS	2	200,000.00	\$400,000
Irrigation Relocation	LS	1	0.00	\$0
Utility Relocation	LS	1	3,019,570.00	\$3,019,570
Drainage	LS	1	689,645.00	\$689,645
RR Crossing	LF	200	1,300.00	\$260,000
Landscaping	LF	483,290	3.00	\$1,449,870

**Total** **\$31,342,018**

Traffic Control	7.0%	\$2,193,941
Mobilization	8.0%	\$2,507,361
Misc. Items (Survey, Contractor QC, dust palliative, furnish water, SWPPP, Communications relocation, Potholing)	12.1%	\$3,792,384
<b>Total</b>		<b>\$39,835,704</b>

Unidentified Items	15.0%	\$5,975,356
<b>Total</b>		<b>\$45,811,060</b>

Construction Administration / Contingencies	14.0%	\$6,413,548
<b>Total Construction Cost</b>		<b>\$52,224,608</b>

Engineering and Design	8%	\$4,177,969
<b>Total Project Cost</b>		<b>\$56,402,577</b>

ROW	Acre	\$/acre		
	12.42	\$400,000		\$4,968,000
	Each	\$/ea		
Resident Relocations	0	\$300,000		\$0
Business Relocations	5	\$500,000		\$2,500,000
<b>Total ROW Costs</b>				<b>\$7,468,000</b>

**Total Project Cost Including ROW** **\$63,870,577**