

APPENDIX G
NORTHERN PARKWAY ALTERNATIVE 3
ESTIMATED PROJECT COST

Alternative 3 Estimated Cost (2007 Dollars)

1/25/2008

Segment	ROW	Design	Construction	Total
Sarival Avenue	\$5,406,000	\$1,424,667	\$17,808,334	\$24,639,000
Reems Road	\$10,295,000	\$1,598,091	\$19,976,135	\$31,869,226
Bullard Avenue	\$10,442,000	\$1,122,562	\$14,032,024	\$25,596,586
BNSF Webb Spur Crossing	\$0	\$276,365	\$3,454,558	\$3,730,923
Litchfield Road	\$3,589,500	\$2,091,713	\$26,146,408	\$31,827,621
Dysart Road	\$11,844,531	\$3,258,345	\$40,729,308	\$55,832,183
El Mirage Road	\$15,876,452	\$4,850,830	\$60,635,380	\$81,362,662
115th Avenue	\$5,593,153	\$1,667,098	\$20,838,728	\$28,098,979
Glen Harbor Blvd.	\$13,690,544	\$2,566,084	\$32,076,049	\$48,332,677
New River Bridge	\$1,373,106	\$2,103,297	\$26,291,207	\$29,767,610
Loop 101	\$13,345,102	\$11,235,213	\$140,440,164	\$165,020,479
91st Avenue	\$13,136,864	\$6,365,630	\$79,570,378	\$99,072,872
83rd Avenue	\$5,075,000	\$3,001,846	\$37,523,078	\$45,599,925
75th Avenue	\$9,402,000	\$3,107,660	\$38,845,753	\$51,355,413
Grand Avenue	\$6,226,000	\$4,568,000	\$57,100,001	\$67,894,001
Total Costs	\$125,295,252	\$49,237,400	\$615,467,504	\$790,000,157

Project Cost Estimate
Dysart Road Grade Separated Intersection (1/2-mile west and east)
Alternative 3
1/25/2008

Description	Unit	Quantity	Unit Cost	Total
Clearing and Grubbing	LS	1	20,000.00	\$20,000
Subgrade Preparation	SY	129,583	2.00	\$259,166
Remove Existing Pavement	SY	27,646	2.00	\$55,292
Remove Existing Curb & Gutter	LF	0	7.00	\$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	72.00	\$985,680
Mainline, Ramp, and Arterial (AB)	CY	23,659	30.00	\$709,770
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	LS	1	20,000.00	\$20,000
Roadway Lighting	LS	1	250,000.00	\$250,000
Traffic Signals	LS	1	250,000.00	\$250,000
Irrigation Relocation	LS	1	628,243.00	\$628,243
Utility Relocation	LS	1	449,625.00	\$449,625
Drainage	LS	1	1,485,127.00	\$1,485,127
Landscaping	SF	719,048	2.00	\$1,438,096

Total **\$24,429,035**

Traffic Control	7.0%	\$1,710,032
Mobilization	5.0%	\$1,221,452
Misc. Items (Survey, QC)	5.0%	\$1,221,452
Total		\$28,581,970

Unidentified Items	25.0%	\$7,145,493
Total		\$35,727,463

Construction Administration / Contingencies	14.0%	\$5,001,845
Total Construction Cost		\$40,729,308

Engineering and Design	8%	\$3,258,345
Total Project Cost		\$43,987,652

ROW	Acre	\$/acre		
	43.78	\$250,000		\$10,944,531
	Each	\$/ea		
Resident Relocations	3	\$300,000		\$900,000
Business Relocations	0	\$500,000		\$0
Total ROW Costs				\$11,844,531

Total Project Cost Including ROW **\$55,832,183**

Project Cost Estimate
El Mirage Road Grade Separated Intersection (1/2-mile west to Station 420+00)
Alternative 3
1/25/2008

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	7.00	\$0
New Bridge Structure (Dysart Drain)	SF	22,425	110.00	\$2,466,750
New Bridge Structure (Glendale, El 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	72.00	\$936,432
Mainline, Ramp, Arterial (AB)	CY	25,271	30.00	\$758,130
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	LS	1	20,000.00	\$20,000
Roadway Lighting	LS	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	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 **\$36,368,499**

Traffic Control	7.0%	\$2,545,795
Mobilization	5.0%	\$1,818,425
Misc. Items (Survey, QC)	5.0%	\$1,818,425
Total		\$42,551,144

Unidentified Items	25.0%	\$10,637,786
Total		\$53,188,930

Construction Administration / Contingencies	14.0%	\$7,446,450
Total Construction Cost		\$60,635,380

Engineering and Design	8%	\$4,850,830
Total Project Cost		\$65,486,210

	Acre	\$/acre	
ROW	59.51	\$250,000	\$14,876,452
	Each	\$/ea	
Resident Relocations	0	\$300,000	\$0
Business Relocations	2	\$500,000	\$1,000,000
Total ROW Costs			\$15,876,452

Total Project Cost Including ROW **\$81,362,662**

Project Cost Estimate
115th Ave Segment (Station 420+00 to 455+00)
Alternative 3
1/25/2008

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	7.00	\$9,800
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	72.00	\$551,664
Mainline & Ramp (AB)	CY	13,089	30.00	\$392,670
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	LS	1	20,000.00	\$20,000
Roadway Lighting	LS	1	200,000.00	\$200,000
Traffic Signals	LS	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 **\$12,498,862**

Traffic Control	7.0%	\$874,920
Mobilization	5.0%	\$624,943
Misc. Items (Survey, QC)	5.0%	\$624,943
Total		\$14,623,669

Unidentified Items	25.0%	\$3,655,917
Total		\$18,279,586

Construction Administration / Contingencies	14.0%	\$2,559,142
Total Construction Cost		\$20,838,728

Engineering and Design	8%	\$1,667,098
Total Project Cost		\$22,505,826

	Acre	\$/acre	
ROW	22.37	\$250,000	\$5,593,153
	Each	\$/ea	
Resident Relocations	0	\$300,000	\$0
Business Relocations	0	\$500,000	\$0
Total ROW Costs			\$5,593,153

Total Project Cost Including ROW **\$28,098,979**

Project Cost Estimate
Glen Harbor Blvd. (Station 455+00 to New River Bridge West Abutment)
Alternative 3
1/25/2008

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	7.00	\$30,310
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	72.00	\$1,077,048
Mainline, Ramp, and Arterial (AB)	CY	23,679	30.00	\$710,370
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	LS	1	20,000.00	\$20,000
Roadway Lighting	LS	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	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 **\$19,238,896**

Traffic Control	7.0%	\$1,346,723
Mobilization	5.0%	\$961,945
Misc. Items (Survey, QC)	5.0%	\$961,945
Total		\$22,509,508

Unidentified Items	25.0%	\$5,627,377
Total		\$28,136,885

Construction Administration / Contingencies	14.0%	\$3,939,164
Total Construction Cost		\$32,076,049

Engineering and Design	8%	\$2,566,084
Total Project Cost		\$34,642,133

ROW	Acre	\$/acre	
	41.64	\$300,000	\$12,490,544
	Each	\$/ea	
Resident Relocations	4	\$300,000	\$1,200,000
Business Relocations	0	\$500,000	\$0
Total ROW Costs			\$13,690,544

Total Project Cost Including ROW **\$48,332,677**

**Project Cost Estimate
New River Bridge
Alternative 3
1/25/2008**

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	7.0%	\$1,103,844
Mobilization	5.0%	\$788,460
Misc. Items (Survey, QC)	5.0%	\$788,460
Total		\$18,449,970

Unidentified Items	25.0%	\$4,612,492
Total		\$23,062,462

Construction Administration / Contingencies	14.0%	\$3,228,745
Total Construction Cost		\$26,291,207

Engineering and Design	8%	\$2,103,297
Total Project Cost		\$28,394,504

ROW	Acre	\$/acre	
	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 **\$29,767,610**

Project Cost Estimate
Loop 101 Segment (New River Bridge East Abutment to Sta 555+00)

Alternative 3

1/25/2008

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	7.00	\$0
New Bridge Structures	SF	336,834	150.00	\$50,525,100
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	72.00	\$0
Arterial (AC)	TONS	0	72.00	\$0
Mainline & Ramp & Arterial (AB)	CY	11,176	30.00	\$335,280
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	LS	1	20,000.00	\$20,000
Roadway Lighting	LS	1	250,000.00	\$250,000
Traffic Signals (103rd, 99th, Loop 101 W & E)	LS	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

\$84,234,616

Total

Traffic Control	7.0%	\$5,896,423
Mobilization	5.0%	\$4,211,731
Misc. Items (Survey, QC)	5.0%	\$4,211,731
Total		\$98,554,501

Unidentified Items	25.0%	\$24,638,625
Total		\$123,193,126

Construction Administration / Contingencies	14.0%	\$17,247,038
Total Construction Cost		\$140,440,164

Engineering and Design	8%	\$11,235,213
Total Project Cost		\$151,675,377

ROW	Acre	\$/acre	
	36.41	\$350,000	\$12,745,102
	Each	\$/ea	
Resident Relocations	2	\$300,000	\$600,000
Business Relocations	0	\$500,000	\$0
Total ROW Costs			\$13,345,102

Total Project Cost Including ROW **\$165,020,479**

Project Cost Estimate
91st Avenue (Loop 101 to 87th Ave)
(Includes Hayward Ave Connection)
Alternative 3
1/25/2008

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	7.00	\$96,530
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	72.00	\$1,591,560
Connector Rd AC (Hayward Ave.)	TONS	999	72.00	\$71,928
Mainline & Ramp & Arterial AB	CY	31,432	30.00	\$942,960
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	LS	1	20,000.00	\$20,000
Roadway Lighting	LS	1	250,000.00	\$250,000
Traffic Signals (93rd, 91st)	LS	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 **\$47,725,523**

Traffic Control	7.0%	\$3,340,787
Mobilization	5.0%	\$2,386,276
Misc. Items (Survey, QC)	5.0%	\$2,386,276
Total		\$55,838,862

Unidentified Items	25.0%	\$13,959,715
Total		\$69,798,577

Construction Administration / Contingencies	14.0%	\$9,771,801
Total Construction Cost		\$79,570,378

Engineering and Design	8%	\$6,365,630
Total Project Cost		\$85,936,008

ROW	Acre	\$/acre		
	36.11	\$350,000		\$12,636,864
	Each	\$/ea		
Resident Relocations	0	\$300,000		\$0
Business Relocations	1	\$500,000		\$500,000
Total ROW Costs				\$13,136,864

Total Project Cost Including ROW **\$99,072,872**