

Appendix B: Cost Estimates

Project Estimate - Form A

Project Name: Nelson Arterial Study
Option A - Peak Hour Clearways

FE

Feasibility Estimate

Item	Description	Base Estimate	Contingency	Funding Risk
A	Nett Project Property Cost	180,000	36,000	59,400
B	Investigation and Reporting			
	- Consultancy Fees	530,000	106,000	174,900
	- Client Managed Costs	370,000	74,000	122,100
B	Total Investigation and Reporting	900,000	180,000	297,000
C	Design and Project Documentation			
	- Consultancy Fees	900,000	180,000	297,000
	- Client Managed Costs	575,000	115,000	189,800
C	Total Design and Project Documentation	1,475,000	295,000	486,800
D	Construction			
	MSQA			
	- Consultancy Fees	530,000	106,000	174,900
	- Client Managed Costs	370,000	74,000	122,100
	- Consent Monitoring Fees	0	0	0
	Sub Total Base MSQA	900,000	180,000	297,000
	Physical Works			
	D1 Environmental Compliance	530,000	106,000	174,900
	D2 Earthworks	866,300	259,900	433,200
	D3 Ground Improvements	145,000	29,000	47,900
	D4 Drainage	2,077,500	415,500	685,600
	D5 Pavement and Surfacing	754,800	151,000	249,100
	D6 Bridges	4,918,750	983,800	1,623,200
	D7 Retaining Walls	183,750	36,800	60,600
D8 Traffic Services	6,591,050	1,318,200	2,175,000	
D9 Service Relocations	1,068,750	213,800	352,700	
D10 Landscaping	151,200	30,200	49,900	
D11 Traffic Management and Temporary Works	1,000,000	200,000	330,000	
D12 Preliminary and General	2,150,000	430,000	709,500	
D13 Extraordinary Construction Costs	0	0	0	
Sub Total Base Physical Works	20,437,100	4,174,200	6,891,600	
D	Total Construction & MSQA	21,337,100	4,354,200	7,188,600
E	Project Base Estimate (A+B+C+D)	23,892,100		
F	Contingency (Assessed / Analysed)	(A+B+C+D)	4,865,200	
G	Project Expected Estimate (E+F)		28,757,300	
	Project Property Cost Expected Estimate		216,000	
	Investigation and Reporting Expected Estimate		1,080,000	
	Design and Project Documentation Expected Estimate		1,770,000	
	Construction Expected Estimate		25,691,300	
H	Funding Risk (Assessed / Analysed)	(A+B+C+D)		8,031,800
I	95th Percentile Project Estimate (G+H)			36,789,100
	Project Property Cost 95th Percentile Estimate			275,400
	Investigation and Reporting 95th Percentile Estimate			1,377,000
	Design and Project Documentation 95th Percentile Estimate			2,256,800
	Construction 95th Percentile Estimate			32,879,900
Base Date of Estimate		1 Jul 2010	Cost Index	
Estimate prepared by:		Adrian Gray	Signed	
Estimate internal peer review by:		Nigel Lister	Signed	

Note: (1) These estimates are exclusive of escalation and GST.

Project Estimate - Form A

Project Name: Nelson Arterial Study
Option B - Southern Arterial

FE

Feasibility Estimate

Item	Description	Base Estimate	Contingency	Funding Risk
A	Nett Project Property Cost	3,423,000	684,600	1,129,500
B	Investigation and Reporting			
	- Consultancy Fees	510,000	102,000	168,300
	- Client Managed Costs	340,000	68,000	112,200
	Total Investigation and Reporting	850,000	170,000	280,500
C	Design and Project Documentation			
	- Consultancy Fees	775,000	155,000	255,800
	- Client Managed Costs	510,000	102,000	168,300
	Total Design and Project Documentation	1,285,000	257,000	424,100
D	Construction			
	MSQA			
	- Consultancy Fees	510,000	102,000	168,300
	- Client Managed Costs	340,000	68,000	112,200
	- Consent Monitoring Fees	0	0	0
	Sub Total Base MSQA	850,000	170,000	280,500
	Physical Works			
	D1 Environmental Compliance	2,000,000	400,000	660,000
	D2 Earthworks	2,185,000	655,500	1,092,500
	D3 Ground Improvements	0	0	0
	D4 Drainage	3,525,000	705,000	1,163,300
	D5 Pavement and Surfacing	4,012,500	802,500	1,324,100
	D6 Bridges	500,000	100,000	165,000
	D7 Retaining Walls	350,000	70,000	115,500
	D8 Traffic Services	3,534,100	706,800	1,166,300
D9 Service Relocations	860,625	172,100	284,000	
D10 Landscaping	431,850	86,400	142,500	
D11 Traffic Management and Temporary Works	925,000	185,000	305,300	
D12 Preliminary and General	1,850,000	370,000	610,500	
D13 Extraordinary Construction Costs	0	0	0	
Sub Total Base Physical Works	20,174,075	4,253,300	7,029,000	
	Total Construction & MSQA	21,024,075	4,423,300	7,309,500
E	Project Base Estimate (A+B+C+D)	26,582,075		
F	Contingency (Assessed / Analysed)	(A+B+C+D)	5,534,900	
G	Project Expected Estimate	(E+F)	32,116,975	
	Project Property Cost Expected Estimate		4,107,600	
	Investigation and Reporting Expected Estimate		1,020,000	
	Design and Project Documentation Expected Estimate		1,542,000	
	Construction Expected Estimate		25,447,375	
H	Funding Risk (Assessed / Analysed)	(A+B+C+D)		9,143,600
I	95th Percentile Project Estimate	(G+H)		41,260,575
	Project Property Cost 95th Percentile Estimate			5,237,100
	Investigation and Reporting 95th Percentile Estimate			1,300,500
	Design and Project Documentation 95th Percentile Estimate			1,966,100
	Construction 95th Percentile Estimate			32,756,875
Base Date of Estimate		1 Jul 2010	Cost Index	
Estimate prepared by:		Barbara Browne	Signed	
Estimate internal peer review by:		Nigel Lister	Signed	

Note: (1) These estimates are exclusive of escalation and GST.

Project Estimate - Form A

Project Name: Nelson Arterial Study
Option H - SH6 Four-Laning

FE

Feasibility Estimate

Item	Description	Base Estimate	Contingency	Funding Risk	
A	Nett Project Property Cost	13,500,000	2,700,000	4,455,000	
B	Investigation and Reporting				
	- Consultancy Fees	1,400,000	280,000	462,000	
	- Client Managed Costs	975,000	195,000	321,800	
	Total Investigation and Reporting	2,375,000	475,000	783,800	
C	Design and Project Documentation				
	- Consultancy Fees	2,225,000	445,000	734,300	
	- Client Managed Costs	1,475,000	295,000	486,800	
	Total Design and Project Documentation	3,700,000	740,000	1,221,100	
D	Construction				
	MSQA				
	- Consultancy Fees	1,400,000	280,000	462,000	
	- Client Managed Costs	975,000	195,000	321,800	
	- Consent Monitoring Fees	0	0	0	
		Sub Total Base MSQA	2,375,000	475,000	783,800
	Physical Works				
	D1 Environmental Compliance	1,200,000	240,000	396,000	
	D2 Earthworks	6,675,000	2,002,500	3,337,500	
	D3 Ground Improvements	0	0	0	
	D4 Drainage	3,696,000	739,200	1,219,700	
	D5 Pavement and Surfacing	3,480,000	696,000	1,148,400	
	D6 Bridges	4,918,750	1,475,600	2,459,400	
	D7 Retaining Walls	23,000,000	6,900,000	11,500,000	
D8 Traffic Services	3,930,750	786,200	1,297,100		
D9 Service Relocations	2,812,500	562,500	928,100		
D10 Landscaping	616,400	123,300	203,400		
D11 Traffic Management and Temporary Works	2,500,000	500,000	825,000		
D12 Preliminary and General	5,000,000	1,000,000	1,650,000		
D13 Extraordinary Construction Costs	0	0	0		
	Sub Total Base Physical Works	57,829,400	15,025,300	24,964,600	
	Total Construction & MSQA	60,204,400	15,500,300	25,748,400	
E	Project Base Estimate (A+B+C+D)	79,779,400			
F	Contingency (Assessed / Analysed)	(A+B+C+D)	19,415,300		
G	Project Expected Estimate (E+F)		99,194,700		
	Project Property Cost Expected Estimate		16,200,000		
	Investigation and Reporting Expected Estimate		2,850,000		
	Design and Project Documentation Expected Estimate		4,440,000		
	Construction Expected Estimate		75,704,700		
H	Funding Risk (Assessed / Analysed)	(A+B+C+D)		32,208,300	
I	95th Percentile Project Estimate (G+H)			131,403,000	
	Project Property Cost 95th Percentile Estimate			20,655,000	
	Investigation and Reporting 95th Percentile Estimate			3,633,800	
	Design and Project Documentation 95th Percentile Estimate			5,661,100	
	Construction 95th Percentile Estimate			101,453,100	
Base Date of Estimate		1 Jul 2010	Cost Index		
Estimate prepared by:		Andrew Stevenson	Signed		
Estimate internal peer review by:		Nigel Lister	Signed		

Note: (1) These estimates are exclusive of escalation and GST.