Appendix D

Short List Comparative Cost Estimates

Short Listed Site Stage	<mark>2 - Gibbs</mark> 1 - 1500n		Unrestricted e	xisting turboprop opera	tions	Short Listed Site Stage	<mark>2 - Gibbs</mark> 2 - 1800n		uture 90 seat+	turboprop operatio	ns and Code C jet operations
Item	Unit	Quantity	Rate	Amount	Comment	Item	Unit	Quantity	Rate	Amount	Comment
ite Preparation						Site Preparation					
Earthworks - Cut to fill	m3	720,000		00 \$ 2,880,0		Earthworks - Cut to fill	m3	800,000			000 Allowance for bouldery soil
Earthworks - Fill	m3	720,000		00 \$ 2,880,0	00	Earthworks - Fill	m3	800,000			000 Allowance for bouldery soil
Earthworks - Stabilisation	m3			35 \$ -		Earthworks - Stabilisation	m3			\$	-
Drainage - Channel Diversion	LS	1			00	Drainage - Channel Diversion	LS	1			
Drainage - Culverts	LS	1	\$ 1,000,0	0,000,0	00	Drainage - Culverts	LS	1	\$ 1,000,000	\$ 1,000	000
irside Pavements						Airside Pavements					
Runway 1500 x 30 (Code 3C)	m2	45,000	\$ 2	0,000,0	00 100 mm A/C runway	Runway 1800 x 45 (Code 4C)	m2	81,000	\$ 200	\$ 16,200	000 100 mm A/C runway
Runway Shoulders	m2	-	\$ 1	20 \$ -	Not required for Code C runway	Runway Shoulders	m2	- 1	\$ 120	\$	 Not required for Code C runway
Taxiway 15m (Code C)	m2	4,000	\$ 2	0,008 \$ 00	00 100 mm A/C taxiway	Taxiway 15m (Code C) x 2 x 133	m2	4,000	\$ 200	\$ 800	000 100 mm A/C taxiway
Taxiway Shoulders 5.0m each side	m2	3,600	\$ 1	20 \$ 432,0	00 50 mm A/C shoulders	Taxiway Shoulders 5.0m each side	m2	2,660	\$ 120	\$ 319	200 50 mm A/C shoulders
Apron (165m x 74m)	m2	12,400	\$ 3	00 \$ 3,720,0	00 100mm A/C Apron, 400mm PCC hardstand	Apron (228m x 74m)	m2	16,900	\$ 300	\$ 5,070	000 100mm A/C Apron, 400mm PCC hards
erminal and Landside Pavements					•	Terminal and Landside Pavements					• •
Terminal Building	m2	2.000	\$ 4.2	0.400.0	00	Terminal Building	m2	3.500	\$ 4.200	\$ 14,700	.000
Carpark pavements and landscaping	m2	23,000	\$ 1	20 \$ 2,760.0	00	Carpark pavements and landscaping	m2	30.000	\$ 120	\$ 3,600	.000
Services	LS	1	\$ 500,0	00 \$ 500.0	00	Services	LS	1	\$ 500,000	\$ 500	000
andside Connections			,-			Landside Connections			,		
Approach roading and intersections	LS			\$ 15,132.0	00 See separate spreadsheet for calc	Approach roading and intersections	LS			\$ 15,132	.000 See separate spreadsheet for calc
Bridges/Culverts incl in above	LS			\$ -	NZ1-14440263	Bridges/Culverts incl in above	LS			\$	- NZ1-14440263
upport Infrastructure				•	1121 11110200	Support Infrastructure	20			•	1121 11110200
Airfield Lighting	LS	1	\$ 800.0	0.008 800.0	10	Airfield Lighting	LS	1	\$ 800.000	\$ 800	000
Navaids	LS	1				Navaids	LS	1			
Fuel infrastructure (tank farm)	LS	1			00 Assume Tanker Re-fuelling	Fuel infrastructure (tank farm)	LS	1			
Fence	m	5.000		50 \$ 750.0		Fence	m		\$ 750,000 \$ 150		
Obstacle Removal (Power Lines)	LS	-,	\$ 500.0		,,,	Obstacle Removal (Power Lines)	LS	.,	\$ 500.000		- Not required
Subtota			\$ 500,0	\$ 51.304.0	20	Subtota			φ 500,000	\$ 67.521	
Subtota			% Allowance	\$ 51,304,0	10	Subtota	11		6 Allowance	\$ 67,521	200
Allowance for Environmental Compli			% Allowance 2%	\$ 1.026.0	00	Allowance for Environmental Compl		,	2%	\$ 1.350	404
Allowance for Environmental Compil			2% 6%	\$ 1,026,00 \$ 3.078.20		Allowance for Temporary Works and					
		inagement	6%					magement	6%		
Subtota	ı			\$ 55,408,3		Subtota	11			\$ 72,922	
MSQA Fees and costs			6%	\$ 3,324,4		MSQA Fees and costs			6%	\$ 4,375	
D&PD Fees and costs			6%	\$ 3,324,4		D&PD Fees and costs			6%	\$ 4,375	
Subtota	l		/	\$ 62,057,3		Subtota	l			\$ 81,673	
Contingency			30%	\$ 18,617,1		Contingency			30%	\$ 24,502	
TOTAL				\$ 80,674,513.	02	TOTAL	•			\$ 106,175,73	6.58
						TOTAL Stage 2 - Stage 1 Build Cost	 Excludes 	escalation		\$ 25.501.22	2.66



Short Listed Site Stage	6 - Hodge R 1 - 1500m R		Unrestrict	ted existing t	urboprop operatior	is	Short Listed Site Stage	6 - Hodge Re 2 - 1800m Re		Future 90 seat+	turboprop operat	ons and Code C jet operations	
Item	Unit	Quantity	Rat	te	Amount	Comment	Item	Unit	Quantity	Rate	Amount	Comm	nent
ite Preparation							Site Preparation						
Earthworks - Cut to fill	m3	2,100,000	\$	3.00 \$	6,300,000	No saving as cut required	Earthworks - Cut to fill	m3	2,100,000	\$ 3.00	\$ 6,30	0,000 Volcanic soil	
Earthworks - Fill	m3	2,100,000	\$	3.00 \$	6,300,000	No saving as cut required	Earthworks - Fill	m3	2,100,000	\$ 3.00	\$ 6,30	0,000 Volcanic soil	
Earthworks - Stabilisation	m3		\$	35 \$	-		Earthworks - Stabilisation	m3		\$ 35	\$	-	
Drainage - Channel Diversion	LS	1	\$ 50	00,000 \$	500,000		Drainage - Channel Diversion	LS	1	\$ 500,000	\$ 50	0,000	
Drainage - Culverts	LS	1	\$ 50	00,000 \$	500,000		Drainage - Culverts	LS	1	\$ 500,000) \$ 50	0,000	
irside Pavements							Airside Pavements						
Runway 1500 x 30 (Code 3C)	m2	45,000	\$	200 \$	9,000,000	100 mm A/C runway	Runway 1800 x 45 (Code 4C)	m2	81,000	\$ 200	\$ 16,20	0,000 100 mm A/C runway	
Runway Shoulders	m2	-		120 \$		Not required for Code C runway	Runway Shoulders	m2			\$	 Not required for Code C 	runway
Taxiway 15m (Code C)	m2	4,000		200 \$		100 mm A/C taxiway	Taxiway 15m (Code C) x 2 x 133	m2	4,000			0,000 100 mm A/C taxiway	
Taxiway Shoulders 5.0m each side	m2	3,600		120 \$		50 mm A/C shoulders	Taxiway Shoulders 5.0m each side	m2	2,660			9,200 50 mm A/C shoulders	
Apron	m2	12,400	\$	300 \$	3,720,000	100mm A/C Apron, 400mm PCC hardstand	Apron (228m x 74m)	m2	16,900	\$ 300	\$ 5,07	0,000 100mm A/C Apron, 400i	mm PCC hardstand
erminal and Landside Pavements							Terminal and Landside Pavements						
Terminal Building	m2	2,000		4,200 \$	8,400,000		Terminal Building	m2	3,500			0,000	
Carpark pavements and landscaping	m2	23,000		120 \$	2,760,000		Carpark pavements and landscaping	m2	30,000			0,000	
Services	LS	1	\$ 50	00,000 \$	500,000		Services	LS	1	\$ 500,000) \$ 50	0,000	
andside Connections				_			Landside Connections						
Approach roading and intersections	LS			\$		See separate spreadsheet for calc	Approach roading and intersections	LS				5,000 See separate spreadshe	eet for calc
Bridges/Culverts incl in above	LS			\$	-	NZ1-14440263	Bridges/Culverts incl in above	LS			\$	- NZ1-14440263	
upport Infrastructure				00 000 0	200 200		Support Infrastructure					0.000	
Airfield Lighting	LS	1		00,000 \$	800,000		Airfield Lighting	LS		\$ 800,000		0,000	
Navaids	LS	1		00,000 \$	500,000	A	Navaids	LS		\$ 500,000		0,000	
Fuel infrastructure (tank farm) Fence	LS	1		50,000 \$		Assume Tanker Re-fuelling	Fuel infrastructure (tank farm) Fence	LS m	1			0,000	
	m LS	5,000		150 \$	750,000	T0		m LS	5,000 1			0,000	
Obstacle Removal Subtota		1	\$ 20	00,000 \$	200,000 46.707.000	Trees?	Obstacle Removal		1	\$ 200,000		0,000 Trees? 4.200	
Subtota	•		% Allowa	, p	46,707,000		Subtota			% Allowance	\$ 62,20	4,200	
Allowance for Environmental Compli	0000		% Allowa		934.140		Allowance for Environmental Compli	ianaa		% Allowance 2%	\$ 124	5.684	
Allowance for Temporary Works and		gomont	6%		2.802.420		Allowance for Temporary Works and		nomont	6%		7.052	
Subtota		gement	0 /0		50,443,560	ĺ	Subtota		gement	0 /8		6,936	
MSQA Fees and costs	•		6%	/ S	3,026,614		MSQA Fees and costs	•		6%		6.016	
D&PD Fees and costs			6%		3,026,614		D&PD Fees and costs			6%		6,016	
Subtota			0 /6		56.496.787	1	Subtota			0 /0		8.968	
Contingency	•		30%	% \$	16.949.036	l	Contingency	•		30%		1.690	
TOTAL			30 /	/0 ¥	73,445,823.36	Ī	TOTAL			JU /8	\$ 97,940,6		



Short Listed Site Stage	9 - Ruata 1 - 1500n	ngata n Runway	Unres	stricted existing	turboprop operation	ns	Short Listed Site Stage	9 - Ruatar 2 - 1800m	0	Future	e 90 seat+ ti	urboprop operatio	ns and Code C jet operations
Item	Unit	Quantity		Rate	Amount	Comment	Item	Unit	Quantity		Rate	Amount	Comment
Site Preparation							Site Preparation						
Earthworks - Cut to fill	m3	3,900,000	\$	3.00 \$	11,700,000	Fill required so no saving	Earthworks - Cut to fill	m3	3,900,000	\$	3.00	\$ 11,700	0,000 Cut to fill from adjacent site, volcanic soil
Earthworks - Fill	m3	3,900,000	\$	3.00 \$	11,700,000	Fill required so no saving	Earthworks - Fill	m3	3,900,000	\$	3.00	\$ 11,700	0,000 Cut to fill from adjacent site, volcanic soil
Earthworks - Stabilisation	m3		\$	35 \$	-	· -	Earthworks - Stabilisation	m3		\$	35	\$	-
Drainage - Channel Diversion	LS	1	\$	1,000,000 \$	1,000,000		Drainage - Channel Diversion	LS	1	\$	1,000,000	\$ 1,000	0,000
Drainage - Culverts	LS	1	\$	1,000,000 \$	1,000,000		Drainage - Culverts	LS	1	\$	1,000,000	\$ 1,000	0,000
Airside Pavements							Airside Pavements						
Runway 1500 x 30 (Code 3C)	m2	45.000	\$	200 \$	9.000.000	100 mm A/C runway	Runway 1800 x 45 (Code 4C)	m2	81.000	\$	200	\$ 16.200	0,000 100 mm A/C runway
Runway Shoulders	m2	-		120 \$		Not required for Code C runway	Runway Shoulders	m2		\$	120		Not required for Code C runway
Taxiway 15m (Code C)	m2	4.000		200 \$		100 mm A/C taxiway	Taxiway 15m (Code C) x 2 x 133	m2	4.000		200		0.000 100 mm A/C taxiway
Taxiway Shoulders 5.0m each side	m2	3,600		120 \$		50 mm A/C shoulders	Taxiway Shoulders 5.0m each side	m2	2.660		120		0.200 50 mm A/C shoulders
Apron	m2	12,400		300 \$		100mm A/C Apron, 400mm PCC hardstand	Apron (228m x 74m)	m2	16,900		300		0,000 100mm A/C Apron, 400mm PCC hardsta
erminal and Landside Pavements	1112	12,400	Ψ	300 ¥	3,720,000	Toomin A'C Apron, 400mm CC hardstand	Terminal and Landside Pavements	1112	10,300	Ψ	300	ÿ 5,070	,,000 Tooliilii A'C Apioli, 400liilii T CC lialusta
Terminal Building	m2	2.000	•	4.200 \$	8.400.000		Terminal Building	m2	3.500		4.200	\$ 14,700	000
Carpark pavements and landscaping	m2			120 \$				m2	30,000		120		
	LS	23,000					Carpark pavements and landscaping	LS					
Services	LS	1	\$	500,000 \$	500,000		Services	LS	1	\$	500,000	\$ 500	0,000
andside Connections							Landside Connections						.=
Approach roading and intersections	LS			\$	-,,	See separate spreadsheet for calc	Approach roading and intersections	LS					7,763 See separate spreadsheet for calc
Bridges/Culverts incl in above	LS			\$	-	NZ1-14440263	Bridges/Culverts incl in above	LS				\$	- NZ1-14440263
Support Infrastructure							Support Infrastructure						
Airfield Lighting	LS		\$	800,000 \$			Airfield Lighting	LS		\$	800,000		0,000
Navaids	LS	1	\$	500,000 \$			Navaids	LS		\$	500,000		0,000
Fuel infrastructure (tank farm)	LS	1	\$	750,000 \$	750,000	Assume Tanker Re-fuelling	Fuel infrastructure (tank farm)	LS	1	\$	750,000	\$ 750	0,000
Fence	m	5,000	\$	150 \$	750,000		Fence	m	5,000	\$	150	\$ 750	0,000
Obstacle Removal	LS	1	\$	200,000 \$	200,000	Trees	Obstacle Removal	LS	1	\$	200,000	\$ 200	0,000 Trees
Subtota	ıl			\$	57,089,763		Subtota	al				\$ 72,666	5,963
			% All	lowance		=				% All	owance		
Allowance for Environmental Compli	ance			2% \$	1.141.795		Allowance for Environmental Compli	iance			2%	\$ 1.453	3.339
Allowance for Temporary Works and	Traffic Ma	nagement		6% \$	3,425,386		Allowance for Temporary Works and	Traffic Man	agement		6%	\$ 4,360	0.018
Subtota				S	61,656,944	7	Subtota					\$ 78,480	
MSQA Fees and costs				6% \$			MSQA Fees and costs	-			6%	\$ 4,708	
D&PD Fees and costs				6% \$	3,699,417		D&PD Fees and costs				6%	\$ 4,708	
Subtota	ıl			-/0 	69,055,777		Subtota	al			- /0	\$ 87.897	
Contingency				30% \$	20,716,733		Contingency	uı			30%	\$ 26.369	
TOTAL				JU/0 \$	89,772,510.52		TOTAL				JU /0	\$ 26,365	

Short Listed Site Stage	<mark>22 - Ros</mark> y 1 - 1500n	ythe Road n Runway	Unrestricted (existing t	urboprop operatior	s	Short Listed Site Stage	22 - Rosy 2 - 1800m		uture 90 seat+ t	urboprop operat	ions and Code C jet operations
Item	Unit	Quantity	Rate		Amount	Comment	Item	Unit	Quantity	Rate	Amount	Comment
Site Preparation							Site Preparation					
Earthworks - Cut to fill	m3	450,000	\$ 7	.50 \$		50% Imported (local) rock fill (ripped)	Earthworks - Cut to fill	m3	500,000 \$	7.50	\$ 3,75	50,000 50% Imported (local) rock fill (rippe
Earthworks - Fill	m3	450,000	\$ 7	.50 \$	3,375,000	50% Imported (local) rock fill (ripped)	Earthworks - Fill	m3	500,000 \$	7.50	\$ 3,75	50,000 50% Imported (local) rock fill (rippe
Earthworks - Stabilisation	m3	450,000	\$	15 \$	6,750,000	Peat undercut	Earthworks - Stabilisation	m3	500,000 \$	15	\$ 7,50	00,000 Peat undercut
Drainage - Channel Diversion	LS	1	\$ 500,0	000 \$	500,000		Drainage - Channel Diversion	LS	1 \$	500,000	\$ 50	00,000
Drainage - Culverts	LS	1	\$ 500,0	000 \$	500,000		Drainage - Culverts	LS	1 \$	500,000	\$ 50	00,000
Airside Pavements							Airside Pavements					
Runway 1500 x 30 (Code 3C)	m2	45,000	\$ 2	200 \$	9,000,000	100 mm A/C runway	Runway 1800 x 45 (Code 4C)	m2	81,000 \$	200	\$ 16,20	00,000 100 mm A/C runway
Runway Shoulders	m2	· -	\$ 1	120 \$	· · · · · · -	Not required for Code C runway	Runway Shoulders	m2	- 9	120	\$	Not required for Code C runway
Taxiway 15m (Code C)	m2	4.000	\$ 2	200 \$	800.000	100 mm A/C taxiway	Taxiway 15m (Code C) x 2 x 133	m2	4.000 \$	200	\$ 80	00.000 100 mm A/C taxiway
Taxiway Shoulders 5.0m each side	m2	3,600	\$ 1	120 \$	432,000	50 mm A/C shoulders	Taxiway Shoulders 5.0m each side	m2	2,660 \$	120	\$ 3	19.200 50 mm A/C shoulders
Apron	m2	12,400		300 \$		100mm A/C Apron, 400mm PCC hardstand	Apron (228m x 74m)	m2	16.900			70,000 100mm A/C Apron, 400mm PCC h
erminal and Landside Pavements		,	•		-,,	, , , , , , , , , , , , , , , , , , ,	Terminal and Landside Pavements		,		* -,	
Terminal Building	m2	2.000	\$ 4.2	200 \$	8.400.000		Terminal Building	m2	3.500 \$	4.200	\$ 14.70	00,000
Carpark pavements and landscaping	m2	23,000		120 \$	2.760.000		Carpark pavements and landscaping	m2	30,000			00,000
Services	LS	1		000 \$	500.000		Services	LS	1 9			00,000
andside Connections			,		,		Landside Connections			,		,
Approach roading and intersections	LS			\$	7 290 000	See separate spreadsheet for calc	Approach roading and intersections	LS			\$ 7.29	90.000 See separate spreadsheet for calc
Bridges/Culverts incl in above	LS			\$		NZ1-14440263	Bridges/Culverts incl in above	LS			\$	- NZ1-14440263
Support Infrastructure	20			•		11211110200	Support Infrastructure				*	1121 11110200
Airfield Lighting	LS	1	\$ 800.0	000 \$	800,000		Airfield Lighting	LS	1 \$	800.000	\$ 80	00.000
Navaids	LS	1		000 \$	500,000		Navaids	LS	1 \$			00,000
Fuel infrastructure (tank farm)	LS	1	,-	000 \$		Assume Tanker Re-fuelling	Fuel infrastructure (tank farm)	LS	1 \$			50.000
Fence	m	5,000		150 \$	750,000	Addute ranker re-racing	Fence	m	5,000			50.000
Obstacle Removal (Power Lines)	LS	1		000 \$	500,000	Trees	Obstacle Removal (Power Lines)	LS	1 \$			0.000 Trees
Subtota		!	ψ 500,c	000 \$	50,702,000	11ccs	Subtota		1 4	500,000		79,200
Subtota			% Allowance	, 1	50,702,000		Subiola	'	0/	Allowance	\$ 61,11	79,200
Allowance for Environmental Compl	ionoo		% Allowance	\$	1.014.040		Allowance for Environmental Compli	0000	76	2%	¢ 12	55.584
Allowance for Temporary Works and		nagament	6%	\$	3.042.120		Allowance for Temporary Works and		nagament	6%		66.752
Subtota		magement	0 76	\$	54,758,160		Subtota		nagement	0 /6		01,536
MSQA Fees and costs			6%	\$	3,285,490		MSQA Fees and costs			6%	\$ 4,39	92,092
D&PD Fees and costs			6%	\$	3,285,490		D&PD Fees and costs			6%	\$ 4,39	92,092
Subtota	ıl			\$	61,329,139		Subtota	ı			\$ 81,98	35,720
Contingency			30%	\$	18,398,742		Contingency			30%	\$ 24,59	95,716
TOTAL	_			\$	79,727,880.96		TOTAL				\$ 106.581.4	

Short Listed Site Stage		e Tree Point/West n Runway	Unrestric	cted existing	g turboprop operation	is	Short Listed Site Stage	24a - One 2 - 1800m	Tree Point/West Runway	Future	e 90 seat+ tu	boprop operations ar	nd Code C jet operations
Item	Unit	Quantity	Rat	ite	Amount	Comment	Item	Unit	Quantity		Rate	Amount	Comment
ite Preparation							Site Preparation						
Earthworks - Cut to fill	m3	180,000	\$	2.50 \$			Earthworks - Cut to fill	m3	200,000	\$	2.50	\$ 500,000	
Earthworks - Fill	m3	180,000	\$	2.50 \$			Earthworks - Fill	m3	200,000	\$	2.50	\$ 500,000	
Earthworks - Imported rock fill	m3	180,000	\$	20 \$	3,600,000	Assumes imported rock fill	Earthworks - Imported rock fill	m3	200,000	\$	20	\$ 4,000,000	Assumes imported rock fill
Earthworks - peat cut and backfill	m3	145,000	\$	18 \$	2,610,000		Earthworks - peat cut and backfill	m3	160,000	\$	18	\$ 2,880,000	
Drainage - Channel Diversion	LS	1	\$ 5	500,000 \$	500,000		Drainage - Channel Diversion	LS	1	\$	500,000	\$ 500,000	
Drainage - Culverts	LS	1	\$ 5	500,000 \$	500,000		Drainage - Culverts	LS	1	\$	500,000	500,000	
irside Pavements							Airside Pavements						
Runway 1500 x 30 (Code 3C)	m2	45,000	\$	200 \$	9,000,000	100 mm A/C runway	Runway 1800 x 45 (Code 4C)	m2	81,000	\$	200	\$ 16,200,000	100 mm A/C runway
Runway Shoulders	m2		\$	120 \$	· · · · ·	Not required for Code C runway	Runway Shoulders	m2	-	\$	120	· -	Not required for Code C runway
Taxiway 15m (Code C)	m2	4,000	\$	200 \$	800,000	100 mm A/C taxiway	Taxiway 15m (Code C) x 2 x 133	m2	4,000	\$	200	800,000	100 mm A/C taxiway
Taxiway Shoulders 5.0m each side	m2	3,600	\$	120 \$	432,000	50 mm A/C shoulders	Taxiway Shoulders 5.0m each side	m2	2,660	\$	120	319.200	50 mm A/C shoulders
Apron	m2	12.400		300 \$	3.720.000	100mm A/C Apron, 400mm PCC hardstand	Apron (228m x 74m)	m2	16,900	Ś	300		100mm A/C Apron, 400mm PCC hardstand
erminal and Landside Pavements						. , , , , , , , , , , , , , , , , , , ,	Terminal and Landside Pavements						
Terminal Building	m2	2.000	\$	4.200 \$	8.400.000		Terminal Building	m2	3,500	\$	4.200	\$ 14,700,000	
Carpark pavements and landscaping	m2	23.000	\$	120 \$	2,760,000		Carpark pavements and landscaping	m2	30.000	Ś	120	3,600,000	
Services	LS	1	\$ 5	500,000 \$	500.000		Services	LS	1	\$	500,000	500,000	
andside Connections					,		Landside Connections						
Approach roading and intersections	LS			s	7.050.000	See separate spreadsheet for calc	Approach roading and intersections	LS				\$ 7.050.000	See separate spreadsheet for calc
Bridges/Culverts incl in above	LS			s	-	NZ1-14440263	Bridges/Culverts incl in above	LS				š -	NZ1-14440263
ipport Infrastrucuture				•			Support Infrastrucuture					•	
Airfield Lighting	LS	1	\$ 8	300.000 \$	800.000		Airfield Lighting	LS	1	s	800.000	\$ 800,000	
Navaids	LS	1		500.000 \$			Navaids	LS	1	\$	500.000		
Fuel infrastructure (tank farm)	LS	i		750,000 \$		Assume Tanker Re-fuelling	Fuel infrastructure (tank farm)	LS		Š	750.000		Assume Tanker Re-fuelling
Fence	m	5.000		150 \$		Accounts Farmer the facility	Fence	m	5.000		150		7 locality raility residenting
Obstacle Removal (Power Lines)	LS	1		200,000 \$			Obstacle Removal (Power Lines)	LS	1	s	200,000		
Subtotal	LO		Ψ 2	-00,000 0	43,772,000		Subtota			Ψ	200,000	60,119,200	
ountotu.			% Allowa	ance	10,112,000		- Castota			% AII	owance	00,110,200	
Allowance for Environmental Complia	100		29		875.440		Allowance for Environmental Compl	ianco		/0 AII	2%	1,202,384	
Allowance for Temporary Works and		nagement	69		2.626.320		Allowance for Temporary Works and		nagement		6%		
Subtotal	i di ii c	magement	• ,	ν̈́ Ē	47,273,760		Subtota		nagement		U/0	64.928.736	
MSQA Fees and costs			6%	· ·	2.836.426		MSQA Fees and costs				6%	3.895.724	
D&PD Fees and costs			6%		2,836,426		D&PD Fees and costs				6%	3,895,724	
Subtotal			0,	/0 \$	52.946.611	ĺ	Subtota				0 /8	\$ 72.720.184	1
Contingency			309	10/. S	15.883.983		Contingency				30%	21.816.055	I
TOTAL			30	70 3	68,830,594.56	1	TOTAL				30 /6	94,536,239.62	1

		e Tree Point/East	Unrestricted	evieting	turboprop operation	e e	Short Listed Site Stage	24b - One 2 - 1800m	Tree Point/East	iture 90 seat+ t	urbonron operations	and Code C jet operations
Stage	1 - 150011	•	Officatificted	CAISHING	turboprop operation	is	Stage			iture 30 seatr i	urboprop operations	and code c jet operations
Item	Unit	Quantity	Rate		Amount	Comment	Item	Unit	Quantity	Rate	Amount	Comment
ite Preparation							Site Preparation					
Earthworks - Cut to fill	m3	270,000	\$ 2	2.50 \$	675,000		Earthworks - Cut to fill	m3	300,000 \$	2.50	\$ 750,00	0
Earthworks - Fill	m3	270,000	\$ 2	2.50 \$	675,000		Earthworks - Fill	m3	300,000 \$			0
Earthworks - Imported rock fill	m3	450,000	\$	20 \$	9,000,000		Earthworks - Imported rock fill	m3	500,000 \$	20	\$ 10,000,00	0
Earthworks - peat cut and backfill	m3	160,000	\$	18 \$	2,880,000		Earthworks - peat cut and backfill	m3	160,000 \$	18	\$ 2,880,00	0
Drainage - Channel Diversion	LS	1	\$ 500.	000 \$	500,000		Drainage - Channel Diversion	LS	1 \$	500,000	\$ 500,00	0
Drainage - Culverts	LS	1	\$ 500,	000 \$	500,000		Drainage - Culverts	LS	1 \$	500,000	\$ 500,00	0
irside Pavements							Airside Pavements					
Runway 1500 x 30 (Code 3C)	m2	45,000	\$	200 \$	9,000,000	100 mm A/C runway	Runway 1800 x 45 (Code 4C)	m2	81,000 \$	200	\$ 16,200,00	0 100 mm A/C runway
Runway Shoulders	m2	· -	\$	120 \$		Not required for Code C runway	Runway Shoulders	m2	- \$	120	\$ -	Not required for Code C runway
Taxiway 15m (Code C)	m2	4,000	\$	200 \$	800,000	100 mm A/C taxiway	Taxiway 15m (Code C) x 2 x 133	m2	4,000 \$	200	\$ 800,00	0 100 mm A/C taxiway
Taxiway Shoulders 5.0m each side	m2	3,600	\$	120 \$	432.000	50 mm A/C shoulders	Taxiway Shoulders 5.0m each side	m2	2.660 \$	120	\$ 319.20	0 50 mm A/C shoulders
Apron	m2	12,400		300 \$		100mm A/C Apron, 400mm PCC hardstand	Apron (228m x 74m)	m2	16.900 \$			0 100mm A/C Apron, 400mm PCC hardstan
erminal and Landside Pavements						. , , , , , , , , , , , , , , , , , , ,	Terminal and Landside Pavements					
Terminal Building	m2	2.000	\$ 4.	200 \$	8,400,000		Terminal Building	m2	3.500 \$	4.200	\$ 14,700,00	0
Carpark pavements and landscaping	m2	23.000		120 \$			Carpark pavements and landscaping	m2	30.000 \$			
Services	LS			000 \$			Services	LS	1 \$			
andside Connections		·	ψ σσσ,	000 Q	000,000		Landside Connections	20	. •	000,000	ψ 000,00	
Approach roading and intersections	LS			s	7 825 000	See separate spreadsheet for calc	Approach roading and intersections	LS			\$ 7.825.00	See separate spreadsheet for calc
Bridges/Culverts incl in above	LS			s		NZ1-14440263	Bridges/Culverts incl in above	LS				NZ1-14440263
upport Infrastructure	LO			Ų		1421-14440200	Support Infrastructure	LO			Ψ	1421-144-0200
Airfield Lighting	LS	1	900	000 \$	800.000		Airfield Lighting	LS	1 S	300.000	\$ 300.00	0
Navaids	LS	1		000 \$			Navaids	LS	1 \$,		
Fuel infrastructure (tank farm)	LS	1		000 \$		Assume Tanker Re-fuelling	Fuel infrastructure (tank farm)	LS	1 \$			0 Assume Tanker Re-fuelling
Fence	m	5.000		150 \$		Assume ranker ite-identity	Fence	m	5.000 \$			
Obstacle Removal (Power Lines)	LS		\$ 10,000,			For dual low pylons - \$20M to underground	Obstacle Removal (Power Lines)	LS		10,000,000		0 For dual low pylons - \$20M to undergroun
Subtotal	LO	'	\$ 10,000,	\$ S		For dual low pyloris - \$2000 to dilderground	Subtota		1 3	10,000,000	\$ 76,694,20	
Subtotal			% Allowanc	-	00,407,000		Subtota	11	0/	Allowance	φ 10,034,20	<u> </u>
Allowance for Environmental Complia	200		% Allowalic	\$	1.209.340		Allowance for Environmental Compl	ionoo	/0	2%	\$ 1.533.88	4
Allowance for Temporary Works and		nagament	6%	\$	3.628.020		Allowance for Temporary Works and		nagament	2% 6%	\$ 1,533,66 \$ 4.601.65	
	i ramic ivia	inagement	6%	3	65.304.360				magement	6%		
Subtotal			00/	*			Subtota	11		00/	\$ 82,829,73	
MSQA Fees and costs			6%	,	3,918,262 3,918,262		MSQA Fees and costs			6% 6%	\$ 4,969,78	
D&PD Fees and costs			6%	*			D&PD Fees and costs			6%	\$ 4,969,78	
Subtotal				\$	73,140,883		Subtota	11			\$ 92,769,30	
Contingency			30%	\$	21,942,265 95,083,148.16	1	Contingency TOTAL			30%	\$ 27,830,79 \$ 120,600,095.6	

Whangarei District Council - Airport Locations Option Study -Prefeasibility (no concept design undertaken) Rough Order Cost Estimate - Accuracy approximately +/- 30% Total % increase **Construction Costs Total Cost** Ranking Increase in cost **Short Listed Site Land Capital Value** 1500m Runway 1800m Runway Stage 1 S1 S2 Stage 1 Stage 1 Stage 2 Stage 2 Stage 2 Stage 1 Stage 2 \$ 9,100,000 \$ 80,674,514 \$ 25,501,223 \$ 89,774,514 \$ 115,275,737 3 5,443,919 \$ 5,239,497 - Gibbs Road 3 6.5% 4.8% 73,445,823 \$ 4,015,229 \$ 2,804,419 - Hodge Road \$ 14,900,000 \$ 24,494,835 \$ 88,345,823 \$ 112,840,659 2 \$ 2.5% 2 4.8% 89,772,511 \$ 24,494,835 \$ 5 \$ 13,241,916 | \$ 12,031,106 9 - Ruatangata \$ 7,800,000 \$ 97,572,511 \$ 122,067,346 15.7% 10.9% 22 - Rosythe Road \$ 12,100,000 \$ 79,727,881 \$ 26,853,555 \$ 91,827,881 \$ 118,681,436 \$ 7,497,286 \$ 8,645,197 8.9% 7.9% 15,500,000 \$ 68,830,595 \$ 25,705,645 \$ 84,330,595 \$ 110,036,240 24a - One Tree Point/West 0.0% 0.0% 24b - One Tree Point/East \$ 30.000.000 | \$ 95.083.148 \$ 25,516,947 \$ 125,083,148 \$ 150,600,096 6 \$ 40,752,554 | \$ 40,563,856 48.3% 36.9% Total S1+S2 Total incl land 2 - Gibbs Road \$ 106,175,737 \$ 115,275,737 2.2% 6 - Hodge Road 97,940,659 \$ 112,840,659 0.0% 9 - Ruatangata 114,267,346 \$ 122,067,346 **8.2%** 22 - Rosythe Road 106.581.436 \$ 118,681,436 24a - One Tree Point/West 94.536.240 \$ 110.036.240 \$ 24b - One Tree Point/East \$ 120,600,096 \$ 150,600,096

		Roading up	grades and ne	w roading infr	astructure				
m No.	Site 2 - Gibbs Road	Itome to be seeted	Longth of Read /metro-1	Pote	\$Cook	Comments / Assumptions			
	Item	Items to be costed	Length of Road (metres)	Rate	\$Cost	Comments / Assumptions			
1	Significant upgrade of intersection Puhipuhi Road/SH1	Major intersection upgrade with roundabout with SH1	1	\$5M	\$5,000,000	Assume large roundabout (Beca cost) \$5M			
2	Upgrade of Puhipuhi Road (between SH1 and Mine Road)	Upgrade of rural road from unsealed to sealed with shoulders	4,200	\$446	\$1,872,000	WDC estimate - excludes drainage and lighting			
3	Upgrade of Mine Road (between Puhipuhi Road and start of realignment)	Upgrade of rural road from unsealed to sealed with shoulders	500	\$400	\$200,000	WDC estimate - excludes drainage and lighting			
4	Realignment of Mine Road around airport footprint	New rural road	1,600	\$4,000	\$6,400,000	Beca Estimate - 2 lane Rural Rd, 8m width			
5	Culvert or bridge upgrade	He words of social and decree	3	\$500,000	\$1,500,000	WDC Estimate for single bridge upgrade			
6	Upgrade Mine Rd from realignment to airport enterance	Upgrade of rural road from unsealed to sealed with	400	\$400	\$160,000	Based on WDC values			
	anport enterance	shoulders			\$15,132,000				
					\$13,132,000				
em No.	Site 6 - Hodge Road Element	Items to be costed	Length of Road (metres)	Rate	\$Cost	Comments / Assumptions			
1	Intersection upgrade of SH1 Kamo Bypass/Great North Road.	Major intersection upgrade with roundabout (SH1).	1	\$5M	\$1,700,000	Assume large roundabout (beca cost) \$5M split ways between developer, NZTA, WDC			
2	Road upgrade of Pipiwai from Great North Rd to Three Mile Bush	Road upgrade	8,435	\$148	\$1,247,763	WDC Estimate. Refer to Site 9 below. Rate is averaged			
3	Road upgrade of Pipiwai from Three Mile Bush Rd to airport entrance (bend north of Ruatangata township)	Road upgrade	4,000		\$1,548,000	Based on WDC cost			
					\$4,495,763	ı			
m No.	Site 9 - Ruatangata Road	Manua da ba asadad	Length of Road (metres)	Rate	\$Cost	Comments / Assumptions			
1	Element Intersection upgrade of SH1 Kamo Bypass/Great North Road.	Major intersection upgrade with roundabout (SH1).	N/A	\$5M	\$1,700,000	Assume large roundabout (beca cost) \$5M split ways between developer, NZTA, WDC			
2	Pipiwai Rd between Great North Rd and Dip Road	Road upgrade	1,675	\$128	\$215,563	WDC Estimate.			
3	Pipiwai Rd between Crane and Matarau	Road upgrade	3,760	\$170	\$639,200	WDC Estimate \$61,200 Bend in rd before Crane to Crane 360m \$575K for 3.400 km Crane to Matarau = \$170/m			
4	Pipiwai Rd between Matarau to Three Mile Bush Rd. Pipiwai Road from Three Mile Bush Rd to	Road upgrade	1,900	\$130	\$250,000	WDC Estimate.			
6	Kokopu. Kokopu Road from Pipiwai Rd to airport	Road upgrade Road upgrade	1,000	\$130 \$130	\$143,000 \$130,000	WDC Estimate. Based on WDC Estimate for previous sectoin of			
	enterance				\$3,077,763				
n No.	Site 22 - Rosythe Road								
1	Element Signficant upgrade to intersection of SH1 / Mountfield Road and any upgrade would need to incorporate the existing Uretiti campground access.	Large roundabout	Length of Road (metres)	Rate 1	\$Cost \$6,000,000	Comments / Assumptions Large as per Beca costs			
2	Southern end of Rosythe Road will be reconfigured as a cul-de-sac x 2	Cul-de-sac	2	\$15,000	\$30,000	Assume cul-de-sac/minor cost to project			
3	Upgrade (widening of Mountfield Road)	Widening of rural road with shoulders	900	\$400	\$360,000	WDC estimate. Length between SH1 and Rosyt Road. Old road 20+ years needs widening also			
4	Upgrade (widening of Rosythe Road) Minor upgrade of Mountfield Road /	Widening of rural road with shoulders	1,500	\$400	\$600,000	Based on WCC Rates. Length between Mountfie and proposed airport access.			
5	Rosythe Road Intersection	Minor upgrade of intersection		1	\$300,000 \$7,290,000				
m No.	Site 24 (a) - One Tree Point West								
	Element	Items to be costed	Length of Road (metres)	Rate	\$Cost	Comments / Assumptions			
1	Possible intersection upgrade SH15/One Tree Point Road	Intersection upgrade		\$3,000,000	\$1,000,000	Assume semi-urban roundabout (Beca cost) \$3 split 3 ways between developers, NZTA, WDC			
2	Possible link road One Tree Point residential area to SH15 (links McEwan and Rauri Rd extension)	New road	1,500	\$3,500	\$5,250,000	Beca Estimate - 8 - 9 m wide 2 land paved rura road section = \$500/m			
4	New link road at Rauriri extension and McEwan Rd/Link Rd Extension of Rauiri Drive to Pyle Road	Two intersections New road	1,300	\$400,000 \$0	\$800,000 \$0				
	East	<u> </u>	<u> </u>		\$7,050,000				
m No.	Site 24 (b) - One Tree Point East								
1	Element Possible intersection upgrade SH15/One Tree Point Road	Items to be costed Intersection upgrade	Length of Road (metres)	Rate \$3,000,000	\$Cost \$1,000,000	Comments / Assumptions Assume semi-urban roundabout (Beca cost) \$3 split 3 ways between developers, NZTA, WDC			
2	New link road between One Tree Point Road and Pyle Road East.	New road	550	\$3,500	\$1,925,000	Assumption is that proposed extension of Rauir to Pyle Rd east is delivered by others and is not costed			

3

Exclusions
Not costing airport access / driveways into airport from roads

Realignment of One Tree Point Road around airport footprint

Three intresection on relaigned road

Capital costs of roading infrastructure - excludes geo tech etc Cul de sac of existing roads Cross sections from WDC Environmental Engineering Standards - Rural road details April 2010 WDC Costs based on data provided by Whangarei District Council email dated 10/07/17

New road

1.400

\$3,500

\$4.900.000

Around airport/Resa to connect into Takahiwai