

4.2 Excavations Site works

To meet the requirements of the landscape design there is a requirement to complete bulk excavations, Rates used reflect the size and volume, a full geo tec investigation will be required to support the rates used. All excavated material will be utilized in the required formation of a wind break bund on the northern boundary and selected mounding requirements throughout the site.

4.3 Main Building

Due to the high thermal exposure of the site the building will be set low in the ground, this will help increase the thermal mass of the building, insulated concrete block systems will be used as the main structure to both act as retaining and insulation. Glazing will be limited to view shafts to the south and to the west.

4.4 Interior pools

Insitu Concrete system will be used in both pool and floor construction. Geotec reports will establish the requirements of in ground or on grade construction.

Tile finishes to all pool surfaces included.

The main pool fitout budget includes all items required to complete the pool to an operational standard.

4.5 Exterior Hot pools

GRP insulated fibreglass hot pools will form the finish structure of the hot pools; these will sit on site poured concrete forms.

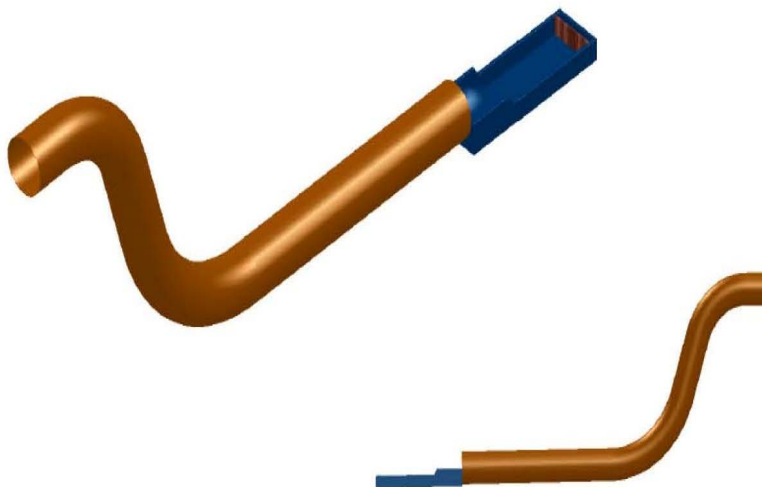
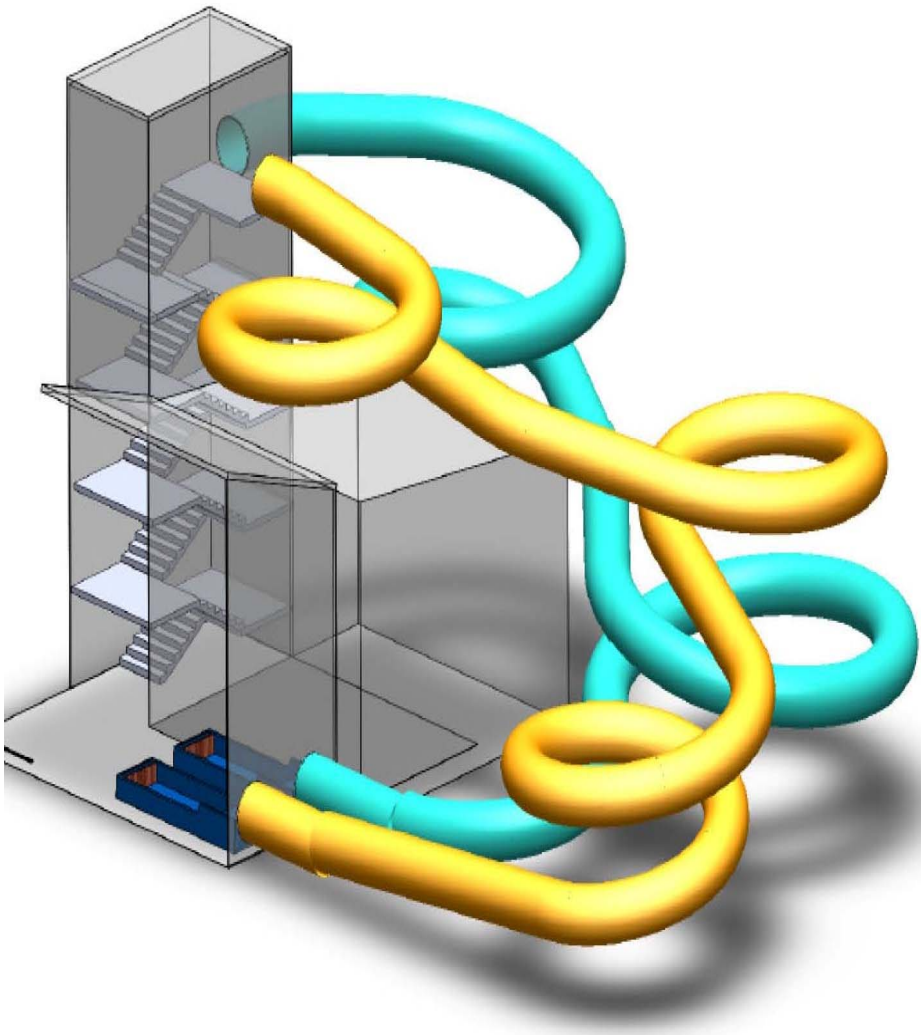
Decks and concourses will be a mixture of concrete and timber decking.

4.6 Private Spas and Treatment Rooms

The main structure is insulated block. Interiors will be lined in cedar with Hot tubs and all fittings required to achieve a 5 star performance standard.

4.7 Hydro slide

Aeromarine have supplied cost and design information included in this report. The design priced is based on the following.



4.8 Services and Plant

This represents 31% of the total Development budget and 31% of the Operational expenses.

We have reviewed all preliminary information supplied by suppliers of services equipment and have adopted a conservative approach in the cost reports. Full Energy and Pool service requirements will need to be investigated further.

4.9 Pool Water Services

An estimate value of 2,000,000.00 has been used. This was established with the assistance of Ian Coombes Ltd based on their past experience in large pool requirements. We have requested testimonials from projects listed for future advancement of Ian Coombs limited if and when required.

We strongly recommend UV as an additional to chemical control, for the indoor pools, outside pools won't need UV.

The advantages are:

- Simple operation and reliable disinfection
- High yield
- Highly effective against cryptosporidae, legionella, and many others
- No by-products
- No taste or smell-Helps remove used chlorine which produces that "chlorine pool smell"
- No corrosion

Ian Coombes Ltd Experience and Track Record.

Recent Projects:

Whangarei Aquatic Centre – Stage 2 Redevelopment

This project, commissioned September 2007, was an addition to the existing swimming pool complex. It included a new 25m/Wave Pool, Hydrotherapy Pool, Tots Pool, Spa Pool, and two hydroslides.

The pool water services for this project included:

- Pumping and sand filtration for all above systems
- UV disinfection unit for Hydrotherapy Pool
- Piping for all of the above (PVC and ABS)
- Chlorine gas disinfection
- Heat exchangers
- Additional system for Dive Pool (not in original contract)
- Installation of wave machine (not in original contract)
- Overflow channel grating (not in original contract)
- Pumps, piping, valves etc. for water features (not in original contract)

Duration of pool water services was 15 months (started on site June 2006).

Original contract sum: \$919,000 + GST (includes \$50,000 PC sum for electrical)

Cromwell Swim Centre – Pool Upgrade

This project, commissioned March 2008, was an addition to the existing swimming pool complex. It included a new Combined Learners/Therapeutic Pool, Toddlers Pool and Spa Pool (Myrtha pools).

The pool water services for this project included:

- Pumping and pressure DE filtration for Combined Pool and Toddlers
- Reuse existing pump and sand filter for new Spa Pool
- Piping for all of the above (PVC)
- Disinfection equipment (sodium hypochlorite and CO₂)

Duration of pool water services was 9 months (started on site June 2007).

Original contract sum: \$221,587 + GST

Solid Energy Centre – Westport

This project, commissioned April 2009, is a new swimming pool complex. It includes a new 25m Pool, Learn to Swim Pool, and Leisure/Toddlers Pool.

The pool water services for this project include:

- Pumping and sand filtration for all above systems
- UV disinfection for all pools
- Piping for all of the above (PVC)
- Disinfection equipment (Liquid chlorine and CO₂)
- Overflow channel grating (not in original contract)

Duration of pool water services is scheduled to be 8 months (started on site June 2008).

Original contract sum: \$569,400 + GST

Regional Based Resources

Ian Coombes Ltd is based in Christchurch and with the majority of our staff at this branch (12 fulltime) and a full workshop/manufacturing facility in Riccarton we are well prepared to staff this project and provide efficient service during the defects liability period and also after. We have longstanding relationships with suppliers of filtration, pumping, disinfection equipment, pipe, fitting, valves and various other pool related equipment which will ensure we have no problem procuring any equipment required.

With our previous experience in pool water services we understand the importance of a good relationship and most importantly good communication between ourselves and other involved parties (including but not limited to: Council, engineers, architects, main contractor, HVAC contractor and our own subcontractors).

With a dedicated project manager and in house CAD facilities and draftsman we are well placed to provide any drawings required and committed management of the overall project. We ensure the quality of our product and installations by having the quality control officer (production manager for manufacturing and project manager for installation) check and sign off on all manufactured items and installed equipment.

4.10 Energy Plant Pool Heating

Energy usage represents 31 % (\$400,000.00) of the total operation budget.

We have preliminary reviewed two systems.

Wood Chip fired Boilers

Gas Fired Boilers.

Wood Chip Fired Boiler

The indicative heating loadings of 383kW for the indoor pools and 540kW for the outdoor suggests that

In the budget we should allow for a total \$600k budget for a bivalent heating solution comprising a 540kW wood boiler complemented with a 400kW diesel or gas-fired peak load/backup boiler. This figure includes all investment associated with the heat source all the way up to the heat exchanger transferring heat to the pool water and has provision for:

- modern 540kW base load wood chip or pellet fired boiler, including fuel handling system (wood-fired boilers reward their owners with optimal efficiencies when worked hard most of the time);
- 400kW diesel or gas fired boiler to provide peak load support and backup;
- buffer tank to act as low loss header for the bivalent boiler configuration;
- flue and flue connections;
- fuel store construction for wood chips; and
- Mechanical installation (pipe work, insulation etc.) and commissioning.

In addition to the required gas usage we have allowed for annually around 2,500 cubic metres of seasoned wood chip.

This represents just over 500 tonnes of seasonal logs To put this in perspective, a 1 hectare stand of mature Douglas fir trees generates around 750 tonnes of merchantable wood.

We have reviewed the costs and supply requirements and due to the work required to model this system completely we have selected not to include this system in our feasibility at this stage.

It must be stated that this system is proving to be very successful in other regions and believe further investigation is required.



We deliver turn-key wood heating solutions for business

Who hasn't seen the prices of gas, diesel and LPG rise dramatically in recent years, with no end in sight? The Emissions Trading Scheme will further push up the prices of fossil fuel from the middle of 2010, adding to the pain of significant price rises in recent years.

Ultra-efficient biomass boiler technology is now available to dramatically lower your heating outgoings, readily comply with local emissions regulations and send a strong signal to your stakeholders that you mean business when it comes to the environment.

Designed to combust a range of wood fuels using highly automated fuel handling systems our systems will leave you in charge when it comes to sourcing your fuel.

Spark Energy's is New Zealand's leading biomass heating specialist to the commercial market, with modern plant operating in a range of applications throughout the country. We deliver projects for our clients from start to finish and provide fixed price path wood fuel supply arrangements with contract terms of up to 10 years.

Talk us about how you can dramatically lower your energy bills by embracing innovative boiler technology, honed in thousands of applications worldwide.

Spark Energy, your partner in efficient wood heating solutions for business.



Superior technology fuels lowest outgoings

Our modular biomass boiler technology is designed to combust a full range of wood fuels efficiently and cleanly. Attractive payback periods of less than 2 years are now feasible for selected heat now using LPG, diesel or natural gas.



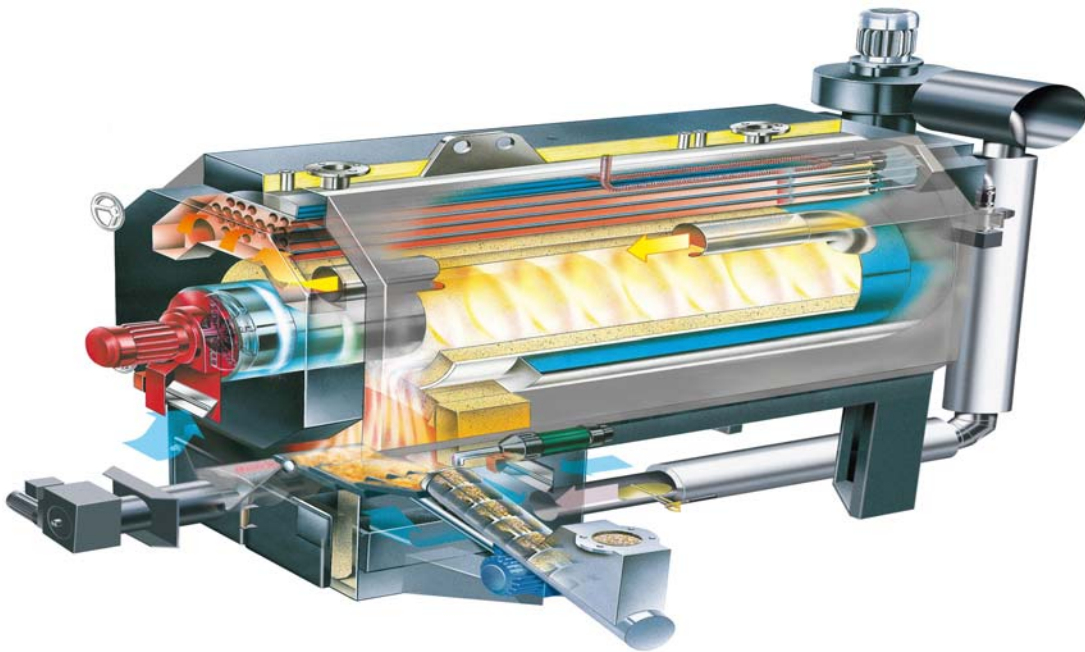
Tailored solutions backed by decades of expertise

Each of the systems can be tailored to your site's heating and regulatory requirements and we solely work with specialist heating contractors to deliver projects nationwide.



Unparalleled after-sales and support service

All of our commercial biomass boilers are fitted with remote access control software to monitor performance and provide support from afar. Local service agents deliver scheduled servicing and primary care support.



4.11 Gas Fired Heating

We have also looked at a complete gas fired options.

The volumes shown are for the complete complex to be operating at full capacity all year.

- Volume at around 300 tonnes of LPG p.a. equals 565,500 litres.
- To supply requires a storage facility and vaporiser capacity costing in the region of \$400k - I'd like to think this is on the high side but until we know water supply, ground conditions, whether above or below ground is required, it's a fairly safe figure.
- Delivered Gas cost is in the region of \$0.75 per litre so around \$425k per year.

We are also working with the Commercial Solutions Manager at Vector who is preparing a commercial package that will include a mixture of Solar and Wind energy to complement the gas system. This study is not ready to be included in this report.

4.12 Development Estimated Budgets

Kaikoura Pool Complex CONCEPT INDICATIVE COSTING	Excluding GST
Total Proposed Complex	Totals
Main Complex Structure and Pools	\$ 3,444,272
Main Complex Services and Plant	\$ 3,557,001
Finishing Main Building	\$ 641,483
Main Complex Interior Fitout	\$ 232,043
Structure Hot Pools	\$ 1,596,370
Hot Pool Services and Plant	\$ 950,295
Treatment and Private Spas	\$ 1,305,524
Civil and Carpark works	\$ 1,882,210
Hydro slides	\$ 803,966
	<u>\$14,413,164</u>

**Kaikoura Pool Complex
CONCEPT INDICATIVE COSTING**

Excluding GST



Main Complex Structure and Pools

	Quant	Unit	Rate	Cost	Totals
Land					20,000
Portion of overall acquisition 5020	0	m ²	1500	0	
Topographical survey, identification of feature vegetation etc	1	No		20,000	
Main Building (Common) Site works					44,957
Excavation Included in Civil Works	5568	m3	0	0	
Pool Excavation	999	m3	45	44,957	
Main Building Retaining walls					205,884
Foundations 600x1400	95.76	m3	1500	143,640	
Block Retaining Walls 3.5 High	399	m2	156	62,244	
Main Building Block Walls Interior					121,478
Foundations 600x1200	63.936	m3	1250	79,920	
Block Walls 3. High	266	m2	156	41,558	
Main Building Block Walls Exterior					154,584
Foundations 600x1200	81.36	m3	1250	101,700	
Block Walls 3. High	339	m2	156	52,884	
Main Pool					349,463
Insitui Conc. Wall 200 including Formwork Walls	157.5	m2	480	75,600	
Insitui Conc. floor Floor	500	m2	200	100,000	
Steel Work Main Pool Walls	157.5	m2	50	7,875	
Bottom	500	m2	50	25,000	
Hard fill and drainage	500	m2	65	32,500	
Plaster Finish /tiles	657.5	m2	165	108,488	
Youth Pool					128,538
Insitui Conc. Wall 200 including Formwork Walls	42.3	m2	480	20,304	
Insitui Conc. floor Floor	199	m2	200	39,800	
Steel Work Main Pool Walls	42.3	m2	50	2,115	
Bottom	199	m2	50	9,950	
Hard fill and drainage	199	m2	65	12,935	
Plaster Finish /tiles	241.3	m2	180	43,434	
Concrete Floors					134,489
Wet Deck	46	m2	105	4,830	
Concourse	201.808	m2	105	21,190	
Admin	31.5	m2	105	3,308	
Life Guard	37.72	m2	105	3,961	
Concourse	86.72	m2	105	9,106	
Under Setting	71.25	m2	105	7,481	
Concourse Youth pools	118.22	m2	105	12,413	
Amenities	522.93	m2	105	54,908	
Store Rooms	21.84	m2	105	2,293	
Concrete Steps	60	m2	250	15,000	
Roof Structure Main Roof					589,437

	Portal Frames (glulam)		1396.118	m2	145	202,437		
	Foundations and Fixings		26	each	2500	65,000		
	Purlins		2800	m	28	78,400		
	Roofing		1680	m2	145	243,600		
Roof Structure Flat Roof							80,574	
	Frames (glulam)		523	m	22	11,495		
	Purlins		1027	m	25	25,153		
	Roofing	Aluminium	522.93	m2	84	43,926		
Glazing							376,800	
	South facing	2m High	75	m2	800	60,000		
	South facing	3.6 High	63	m2	800	50,400		
	North facing	1.6m High	67.2	m2	800	53,760		
	North facing	3.6m High	64.8	m2	800	51,840		
	East facing	3.6m High	25.2	m2	800	20,160		
	West facing	3.6m High	100.8	m2	800	80,640		
	Entrance doors		4		15000	60,000		
First Floor Administration Common Area Block							372,321	
	Mid Floor Conc. System		562.6	m2	185	104,081		
	Glazing	Roof	200		800	160,000		
		Walls	36		800	28,800		
		Interior wall	42		800	33,600		
		Entrance doors	2		15000	30,000		
	Interior Walls		96		165	15,840		
First Floor Gym Changing Rooms (conc. Soil roof)							35,925	
	Mid Floor Conc. System		50	m2	185	9,250		
		Roof	65		185	12,025		
		Walls	45		200	9,000		
		Entrance doors	2		350	700		
	Interior Walls		30		165	4,950		
Fees							396,621	
	Architectural main building & service areas	design and planning	5.00%	on building		128,923		
	Structural main building & service areas	design and planning	3.00%	on building		76,753		
	Fire	report				25,000		
	Resource Management					65,000		
	Project Management		2.00%	on all costs		51,171		
	Quantity Surveying		0.75%	on all costs		19,189		
	Valuers					5,000		
	Consents and fees		1.00%			25,585		
Contingency & On-costs							433,201	
	Contingency		8.00%	on all costs		240,886		
	P and G	Estimated	8.00%	on construction cost only		192,315		
Main Complex Structure and Pools							\$3,444,272	

Finishing Main Building			Quant	Unit	Rate	Cost	Totals
Main Building Retaining walls							31,920
	Block Retaining Walls	Plaster and Paint	399	m2	80	31,920	
Main Building Block Walls							134,640
	Block Walls	Plaster and Paint	266	m2	80	21,312	
	Block Walls	Tile	266	m2	120	31,968	
	Block Walls	Exterior	678	m2	120	81,360	
Concrete Floors Finishing							120,088
	Wet Deck		46	m2	95	4,370	
	Concourse		201.808	m2	95	19,172	
	Concourse		86.72	m2	95	8,238	
	Under Setting		71.25	m2	95	6,769	
	Concourse Youth pools		118.22	m2	95	11,231	
	Amenities		522.93	m2	120	62,752	
	Store Rooms		21.84	m2	85	1,856	
	Concrete Steps		60	m2	95	5,700	
	0						
Roof ceiling							109,200
	Noise Ceiling System		1680	m2	65	109,200	
First Floor Administration Common Area Block (15 x30)							49,049
	Carpet		562.6	m2	65	36,569	
	Interior Walls	stopping painting	192		65	12,480	
First Floor Gym Changing							7,150
	Carpet		50	m2	65	3,250	
	Interior Walls	stopping painting	60		65	3,900	
Joinery Hardware							99,200
	Fire Doors		10	each	3500	35,000	
	Doors and joinery		15	each	1500	22,500	
	Changing Room Bench's		15	each	480	7,200	
	Ramp and Stair Handrails		1	each	9500	9,500	
	Signage		1	each	25000	25,000	
Fees							42,719
	Architectural Inter Design	design and planning	5.00%	on building		27,559	
	Project Management		2.00%	on all costs		11,025	
	Quantity Surveying		0.75%	on all costs		4,134	
Contingency & On-costs							47,517
	Contingency		8.00%	on all costs		47,517	
	Finance costs, rates and insurance	Estimated				0	
Finishing Main Building							641,483

Main Complex Interior Fitout				Quant	Unit	Rate	Cost	Totals
Main Pool								49,272
	Life Guard Stands			2	each	2500	5,000	
	Rescue Safety			1	each	8500	8,500	
	Racing Lanes			8	each	434	3,472	
	Lane Storage reel			2	each	1200	2,400	
	Starting Blocks			8	each	1550	12,400	
	Pace Clocks			2	each	400	800	
	Pool entrance Ramp			1	each	5000	5,000	
	Entrance ladder			2	each	3000	6,000	
	Pool entrance Ramp			1	each	5000	5,000	
	Pool entrance wheel chair			1	each	700	700	
Youth Pool								30,000
	Slides and Play Equipment			1	pc	30000	30,000	
Joinery Hardware								122,000
	Reception Desk			1	each	15000	15,000	
	Lockers			250	each	300	75,000	
	Café Joinery and Fitout			1	each	32000	32,000	
Fees								13,583
	Architectural Inter Design	design and planning		4.00%	on building		8,048	
	Project Management			2.00%	on all costs		4,025	
	Quantity Surveying			0.75%	on all costs		1,510	
Contingency & On-costs								17,188
	Contingency			8.00%	on all costs		17,188	
	Finance costs, rates and insurance	Estimated					0	
Main Complex Interior Fitout								232,043

Main Complex Services and Plant						
	Quant	Unit	Rate	Cost	Totals	
Pool Treatment and piping work						
Pumps, UV filtration , Storage tanks	1	each	950,000	950,000	995,000	
Builders work	1	each	45,000	45,000		
Pool Heating System						
Wood Chip Boiler/Gas Boilers	1	each	600,000	600,000	665,000	
Compound	1	each	65,000	65,000		
Storm Water Sanitary Systems						
Rainwater Storage and reuse system	1396.118	m2	50	69,806	366,131	
Bellow Slab SS Drainage	1396.118	m2	45	62,825		
Showers	18	each	2,800	50,400		
WC	20	each	3,600	72,000		
Urinals	6	each	4,650	27,900		
Basins	26	each	3,200	83,200		
Sanitary Systems Gym Area						
Bellow Slab SS Drainage	50	m2	45	2,250		61,950
Showers	6	each	2,800	16,800		
WC	4	each	3,600	14,400		
Urinals	2	each	4,650	9,300		
Basins	6	each	3,200	19,200		
Hot and Cold water installations						
Water Supply	1919.048	m2	8	15,352	57,395	
Hot Water Services	1919.048	m2	18	34,543		
Cold water drinking Points	5		1,500	7,500		
Air Treatment and Ventilation						
Air Con Service areas	612.6	m2	85	52,071	436,003	
Hot water Heat Exchangers	1396.118	m2	25	34,903		
Ventilation Installation	1396.118	m2	250	349,030		

Electrical Installation					229,743
HV/LV mains connection; switchgear; mains switchboard	1396.118	m2	15	20,942	
Sub mains cabling; containment; switchgear; distribution boards	1396.118	m2	25	34,903	
Power to mechanical services and lifts	1396.118	m2	5	6,981	
Lighting installation and luminaries	1396.118	m2	45	62,825	
Emergency lighting; exit signs; luminaries	1396.118	m2	15	20,942	
Light switching; control system; presence detectors	1396.118	m2	10	13,961	
Scene lighting control	1	each	25,000	25,000	
Allowance for external feature lighting	1	each	35,000	35,000	
Small power	612.6	m2	15	9,189	
Communication installations					92,309
Fire alarm and smoke detector installation	1919.048	m2	15	28,786	
Public address system	1396.118	m2	10	13,961	
Telephone and data containment	1396.118	m2	8	11,169	
CCTV installation; wiring, containment; equipment	1396.118	m2	15	20,942	
Access control security system; intruder alarm	1396.118	m2	13	17,451	
Lift installations					125,000
13-person lift	1	each	125,000	125,000	
Fees					264,988
Hydraulic Engineer main building & service areas	design and planning	2.00%	on building	60,568	
Energy Engineer	design and planning	1.50%	on building	45,425	
Electrical main building & services areas	design and planning	1.50%	on building	45,425	
Project Management		2.00%	on all costs	60,571	
Quantity Surveying		0.75%	on all costs	22,714	
Consents and fees		1.00%		30,285	
Contingency & On-costs					263,482
Contingency		8.00%	on all costs	263,482	
Finance costs, rates and insurance	Estimated			0	
Main Complex Services and Plant					3,557,001

Structure Hot Pools				Quant	Unit	Rate	Cost	Totals
Land								0
Portion of overall acquisition	5020			2612	m ²	0	0	
Topographical survey, identification of feature vegetation etc				1	No		0	
Hot pools Site works								25,725
Excavation		incl in Civils		5224	m3	0	0	
Pool Excavation				735	m3	35	25,725	
Main Building Retaining walls								109,107
		Foundations	600x1100	31.35	m3	1200	37,620	
		Block Retaining Walls	2 High to 3 high	282	m2	156	43,992	
		Fill	2 High	423	m3	65	27,495	
Pool Construction								290,268
				-				
		Deck Pool	26	32				
		Deck Pool	28	22				
		Pool A	63	79				
		Pool B	70	81				
		Pool C	69	84				
		Pool D	53	53				
		Pool E	42	38				
		Pool F	105	101				
			456	490				
				-				
		Site Concrete	Walls	364.8	m2	85	31,008	
			Bottom	490	m2	85	41,650	
		Hard fill and drainage		490	m2	65	31,850	
		GRP Hot Pools	fibreglass	490	m2	300	147,000	
		Edge Treatments		456	m2	85	38,760	
Concrete Floors								458,770
		Wet Deck		1162	m2	110	127,820	
		Concourse		156	m2	110	17,160	
		Timber Decking		1450	m2	185	268,250	
		Timber Steps		276	lm	165	45,540	
Services								950,295
		Pre Cast Conc. Service Duct		160	m	250	40,000	
		Pumps, , Storage tanks		5	each	15,000	850,000	
		Electrical		161	m	95	15,295	

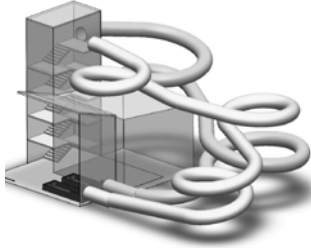

	Builders work		1	each		45,000		
Landscaping							250,600	
	Rock Feature walls	3m High	188	m2	150	28,200		
	Planting		2336	m2	25	58,400		
	Features		1	each	25000	25,000		
	Lighting		2	each	32000	64,000		
	Seating Etc		6	each	12500	75,000		
Fees							273,259	
	Landscape Design	design and planning	2.50%	on building		52,116		
	Pool Engineer & service areas	design and planning	3.50%	on building		72,964		
	Resource Management					65,000		
	Project Management		2.00%	on all costs		41,695		
	Quantity Surveying		0.75%	on all costs		15,636		
	Valuers					5,000		
	Consents and fees		1.00%			20,848		
Contingency & On-costs							188,642	
	Contingency		8.00%	on all costs		188,642		
	Finance costs, rates and insurance	Estimated				0		
	Structure Hot Pools						2,546,665	

Treatment and Private Spas				Quant	Unit	Rate	Cost	Totals
Main Building Retaining walls								104,748
	Foundations	600x1400		48.72	m3	1500	73,080	
	Block Retaining Walls	2.4 High		203	m2	156	31,668	
Main Building Block Walls Interior								99,490
	Foundations	600x1200		67.68	m3	950	64,296	
	Block Walls	2.4. High		226	m2	156	35,194	
Main Building Block Walls Exterior								88,178
	Foundations	600x1200		37.152	m3	950	35,294	
	Block Walls	2.4		339	m2	156	52,884	
Concrete Floors								64,843
	Floor Conc. System	Managers Office		40	m2	110	4,400	
		Treatment		211	m2	110	23,210	
		Concourse		80		122	9,760	
		Concourse Deck		69		122	8,418	
		Stairs		103		185	19,055	
Roof Structure Flat Roof								75,255
	Frames (glulam)			375	m	45	16,875	
	Purlins			840	m	25	20,580	
	Roofing	Aluminium		450	m2	84	37,800	
Glazing								95,380
	South facing	2m High		76	m2	800	60,800	
	Glazed balustrade	1.4		53.2	m2	650	34,580	
Sanitary Systems Gym Area								42,975
	Bellow Slab SS Drainage			251	m2	45	11,295	
	Showers			9	each	1,575	14,175	
	WC			9	each	1,630	14,670	
	Basins			9	each	315	2,835	
Air Treatment and Ventilation								55,220
	Air Con Service areas			251	m2	85	21,335	
	Hot water Heat Exchangers			251	m2	135	33,885	
	Ventilation Installation			0	m2	120	0	
Electrical Installation								66,375
	HV/LV mains connection; switchgear; mains switchboard			331	m2	15	4,965	
	Sub mains cabling; containment; switchgear; distribution boards			331	m2	25	8,275	
	Power to mechanical services and lifts			0	m2	5	0	
	Lighting installation and luminaries			331	m2		14,895	

					45			
Emergency lighting; exit signs; luminaries	331	m2	15			4,965		
Light switching; control system; presence detectors	331	m2	10			3,310		
Scene lighting control	1	each	25,000			25,000		
Allowance for external feature lighting	0	each	35,000			0		
Small power	331	m2	15			4,965		
Communication installations							20,026	
Fire alarm and smoke detector installation	331	m2	15			4,965		
Public address system	331	m2	10			3,310		
Telephone and data containment	331	m2	8			2,648		
CCTV installation; wiring, containment; equipment	331	m2	15			4,965		
Access control security system; intruder alarm	331	m2	13			4,138		
Ceiling and Wall Finishes							232,840	
T &G Timber	331	m2	250			82,750		
Ceiling	451	m2	250			112,800		
Interior Walls	339	m2	110			37,290		
Plastered Walls								
Floor Finishes							47,000	
Carpet	80	m2	65			5,200		
Concourse	211	m2	140			29,540		
Timber Treatment	40	m2	65			2,600		
Carpet	69	m2	140			9,660		
Managers Office								
Tiles								
Concourse Deck								
Joinery Hardware							42,320	
Fire Doors	9	each	2500			22,500		
Doors and joinery	0	each	1500			0		
Changing Room Bench's	9	each	480			4,320		
Ramp and Stair Handrails	0.5	each	22000			11,000		
Signage	1	each	4500			4,500		
Hot Tubes							85,500	
T &G Timber	9	each	9500			85,500		
Tubs								
Fees							88,669	
Architectural main building & service areas	4.00%	on building				41,383		
design and planning								
Structural main building & service areas	2.00%	on building				11,414		
design and planning								
Project Management	2.00%	on all costs				22,403		
Quantity Surveying	0.75%	on all costs				7,760		
Consents and fees	1.00%					5,709		
Contingency & On-costs							96,705	
Contingency	8.00%	on all costs				96,705		
Finance costs, rates and insurance						0		
Estimated								
Treatment and Private							\$1,305,524	

Civil and Carpark works						Quant	Unit	Rate	Cost	Totals
District plan would call 500 parks , Suggest amount allowable for this Study 350										248,216
Excavation Pool Building						5568	m3	18	100,224	
Excavation Hot Pool Site						5224	m3	18	94,032	
Bund Construction 4.5 m High						10792	m3	5	53,960	
Main Carpark Area (Common) Site works										487,686
Roading incl Base works						532	m ²	48	25,536	
Parking fell, Hardfill and asphalt seal						10250	m ²	39	399,750	
Pavement to common areas						520	m ²	120	62,400	
Main Site Services										343,954
Water main on road						320	m	75	24,000	
Water main hydrant point						6	No	1500	9,000	
Foul water drains main drains						320	m	160	51,200	
Storm water drainage main buildings						568	m	128	72,704	
Storm water drainage Carpark sump and drain						12	No	2700	32,400	
Storm water drainage culverts under roadway to preserve natural drainage						2	No	950	1,900	
Power incoming mains to central switchboard						320	m	250	80,000	
Roadway lighting lighting bollard (1 per 4m + Carpark)						242.5	No	300	72,750	
Landscaping										507,400
Reform and Prepare						15000	m ²	3	45,000	
Planting Small						9600	m ²	15	144,000	
Planting large						5400	m ²	56	302,400	
Planting to perimeter						320	m ²	50	16,000	
Fees										155,531
Geotechnical investigate									6,500	
Civil and Survey design									18,000	
Civil Management design and supervision						4.00%	on all costs		43,194	
Topographical survey, identification of feature vegetation etc									10,000	
Traffic Report									15,000	
Project Management						1.25%	on all costs		16,738	
Quantity Surveying						0.75%	on all costs		8,099	
Landscape architecture						3.00%	on site works		38,000	
Contingency & On-costs										139,423
Contingency						8.00%	on all costs		139,423	
Finance and holding costs, rates and insurance									excluded	
Civil and Carpark works										\$ 1,882,210

Hydro slides

		Quant	Unit	Rate	Cost	Totals
Hydrosides Aeromarine Industries						380,500
Three 1350mm diameter seamless Hydrosides One with fall of 1/8 One with fall of 1/10 Slides starting 7.5m above landing chutes Includes steel support structures						
 						
	Total Estimate	1	esti		365,000	
Builders Works		1	off	15500	15,500	
Main Access Tower						231,017
	Aeromarine	1	esti		200,000	
Handrails					12,456	
Builders Works		1	off	18561	18,561	
Concrete Floors						31,860
	Wet Deck	110	m2	135	14,850	
	Concourse	126	m2	135	17,010	
Services						38,500
	Pre Cast Conc. Service Duct	30	m	250	7,500	
	Lighting				15,000	
	Electrical	50	m	95	4,750	
	Builders work	0.25	each	45,000	11,250	
Landscaping						18,750
	Planting	250	m2	25	6,250	
	Features	1	each	10000	10,000	
	Seating Etc	1	each	2500	2,500	
Fees						43,786
Pool Engineer & service areas	design and planning	2.50%	on building		17,513	
Project Management		2.00%	on all costs		14,013	
Quantity Surveying		0.75%	on all costs		5,255	
Consents and fees		1.00%			7,006	
Contingency & On-costs						59,553
Contingency		8.00%	on all costs		59,553	
Finance costs, rates and insurance	Estimated				0	
Hydro slides						\$ 803,966