# WAIROA DISTRICT COUNCIL

Wairoa Centennial Library
Proposed Extensions / Alterations



Graham Linwood Graham Linwood Architects Ltd 3rd November 2016

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### WAIROA DISTRICT COUNCIL

### **Extensions and Alterations to Wairoa Centennial Library**

### 1. HISTORY OF THE LIBRARY

The Wairoa Centennial Library was erected in 1960 to the design provided by Porker & Martin, Architects of Wellington. The engineers were D Bruce – Smith & Associates of Wellington. The construction was concrete block external walls, stipple coat finished, with steel portal frames supporting the roof and walls. The exterior joinery was timber.

In 1974 the Wairoa Rotary Club raised \$20,000 for an extension to house a Museum which was opened by the then Mayor on 21st December 1975.

The West wall and rear wall were reclad in 1998 and in 2003 extensive interior alterations were undertaken in 2003 to incorporate the Museum into the library space and erect a new stair to the mezzanine. The architects for this project were Graham Linwood Architect of Hastings.

A new auto opening entrance door was installed in 2009.

### 2. THE BRIEF

The objective of this project is to maximise the library to cope with the current needs of the community and allow flexibility to be able to adapt to the changing needs for a public library.

The council sees that one of the major continuing changes is in the digital world. Many local residents are now reliant on the library internet services to access online data and services and many of these people require assistance from library staff.

When combined with a need for traditional library services alongside the new digital platforms challenges are created. More space is required for small meetings and where people can quietly download information or reading material.

The main issues that have given rise to the review are:

- a. Additional storage requirements
- b. The Health and Safety Act changes have necessitated and review of temporary storage and heavy boxes of books.
- c. Poor acoustics within the library space.
- d. The unattractive appearance of the front entrance.

### 3. GENERAL CONDITION OF THE BUILDING

The library has changed little in external appearance since it was originally built in 1960 and extended in 1975 excepting for the metal cladding to the side and rear walls, which are not evident to the public. The external coating to the blockwork appears to be in reasonable condition with no indication of moisture penetration.

The high level timber windows have twisted with the time rendering the mechanical opening system unworkable. Allowance has been made in the estimate to replace these windows with aluminium sashes, as has been down the side of the mezzanine floor.

The roof has not been surveyed as part of this commission and will require adjustment at the junction with the new entrance where an internal gutter will be installed. The existing air conditioning unit on the roof will remain and the two units on the existing canopy and a new unit for the meeting room will be added to this. Allowance is made in the estimate for a proprietary platform to be added to protect the roof from foot traffic when regular maintenance of these units occurs.

### 4. EXTERNAL APPEARANCE OF THE EXISTING LIBRARY

Libraries built in the era of the Wairoa Centennial Library were generally designed as receptacles for books and were mostly rectangular structures with little in the way of design features.

This library is very much of this nature and has little in the way of street appeal. One aspect of the brief was to address this aspect of the building and to provide a more inviting entrance.

### **Photos of Exterior**





### 5. TAKING THE LIBRARY INTO THE FUTURE

The 2015/2016 Annual Plan made provision to "Review Library Building Future Requirements". The commissioning of our firm to undertake this review stems from this funding allowance.

The design of the extensions and alteration to the library has been prepared following consultations with the Librarian and council staff.

The estimates provided have been prepared on the basis that the ground conditions are reasonably good and the extent of additional cost (if any) will only be known once the engineer has undertaken appropriate ground bearing testing.

### 6. ESTIMATES OF COST

A preliminary estimate of cost have been prepared by Sharp Consulting Ltd, quantity surveyors of Havelock North and a copy of the estimate is attached as Appendix 2 to this report, the preliminary estimate of cost for the project is \$848,000.00 + GST. This preliminary estimate doesn't allow for ground remediation, partitioning and client fit out and any replacement of the main switch board, should this be required.

### 7. ELEMENTS OF THE UPGRADING

These elements are as follows:

### 7.1 New Main Entrance 1st floor Meeting Room and Deck

This new area provides an entrance with an air lock and a storage area for outdoor equipment. Above this level is an air conditioned meeting room with tea and coffee making facilities. This room opens out to a deck with a glass balustrade providing a view to the river, with a portion covered. The design of this extension features a curved double glazed wall with feature panels of coloured glass, all supported by an exposed structural steel frame.

### **7.2** Lift

A lift providing access to the first floor level, as required by The Building Act, is located on the front entry wall with access from the body of the library exiting onto the new walkway. The external sheathing is panels painted in colours to reflect the coloured glazing in the new entry.

### 7.3 Rear Store Extension

One of the major deficiencies of the library is the lack of storage and this extension is designed to alleviate this issue. The existing rear canopy will be removed and reinstated over the relocated doorway as part of this work.



### 7.4 Workshop

The existing storage area/workshop will become a dedicated workshop for staff purposes and for holiday programme use. A glazed wall will be erected above the existing handrail level to provide separation from what will be a quiet space. The glazing will allow visibility to the body of the library and provide natural light to the workshop space.



### 7.5 Quiet Space and Walkway

The existing reading areas will have a new floor installed above at the same level as the existing first floor to provide an additional quiet space and to provide access via a walkway to the lift and meeting room.

These areas have been designed with acoustic measures to ensure a minimum of noise transmission when the spaces are used. These measures will also assist in reducing reverberation within the library space.

### 7.6 Staff Area

A level of separation is being provided to the staff area adjacent to the disabled toilet which is, at the moment, part of the body of the library under the mezzanine floor.

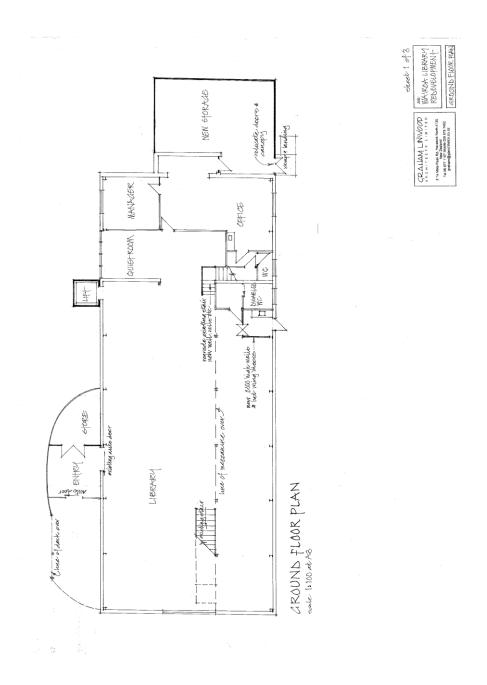
### 7.6 Acoustic Dampening

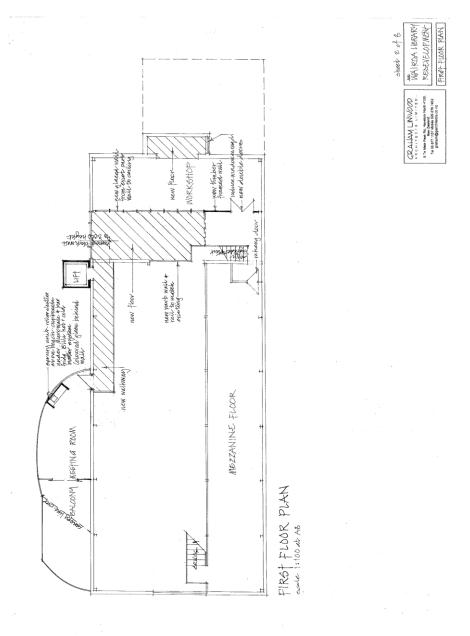
A major component of the brief was to reduce the noise levels within the library. Acoustic panels will be inserted into the existing ceiling linings in an effort to reduce the noise levels in the library.

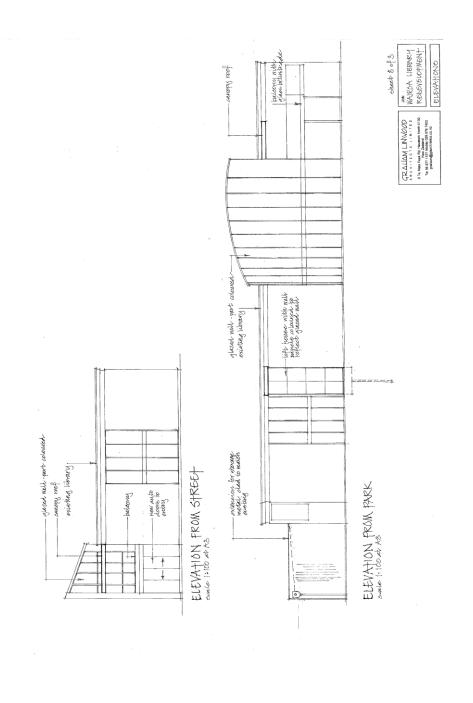
Photo of library interior showing ceiling



### Appendix 1 Drawings









# Preliminary Estimate Wairoa Library Redevelopment

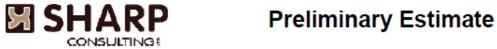
26/09/2016



# Wairoa Library Redevelopment

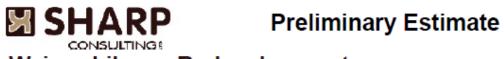
### **Project Summary**

Budget Estimate for Wairoa Library	
Construction - Main Entrance Extension and Library Alterations	
Deconstruction	26,632.00
Excavation	9,186.00
Concrete Work and Reinforcing Steel	15,956.00
Structural Steel	45,902.00
External Windows and Doors	45,907.00
Curtain Walls	95,000.00
Internal Joinery	11,250.00
Carpentry	55,450.40
Roofing	10,360.00
Lift	85,000.00
Electrical Work	9,610.00
Mechnical Services	8,000.00
Monkey-toe system	9,000.00
Painting & Specialist Finishes	12,496.00
Floor Covering	18,890.00
Glazing	5,400.00
External Work	12,380.00
Rounding	580.60
Preliminary and General (7%)	34,000.00
Builders Margin (8%)	41,000.00
Contingency (10%)	56,000.00
Escalation (3%)	19,000.00
Construction Estimate, excl. GST	627,000.00
Construction - Rear Store Extension	
Deconstruction	5,330.00
Excavation	5,538.00
Concrete Work	16,141.20
External Windows and Doors	2,876.00
Carpentry	15,559.30
Steel Cladding	6,930.00
Roofing	5,530.00
Electrical Work	3,435.00
Fire Protection	500.00
Painting & Specialist Finishes	2,160.00
External Work	10,120.00
Rounding	880.50
Preliminary and General (7%)	6,000.00
Builders Margin (8%)	7,000.00
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Contingency (10%)	9.000.00
Escalation (3%)	3,000.00
Construction Estimate, excl. GST	100,000.00
Local Authority Fees	10.000.00
Professional Fees (15%)	111,000.00
Project Estimate (excluding GST)	848,000.00
Exclusions	
Ground remediation	
Partitions and tenant fitout	
Replacement of the existing master switchboard	

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Deconstruction			
Demolition			
External Demolition			
Demolish existing paving for new entrance	106	m²	2,968.00
Remove trees and plants for construction at entry area	1	sum	1,000.00
Services			
Remove outdoor heat pump unit and relocate to suitable area	2	no	1,180.00
Entry			
Remove Canopy	1	sum	360.00
Carpentry			
Remove ceiling panels	81	m²	1,701.00
Staircase			
Demolish walls and door	2	m²	480.00
Demolish staircase beyond the door for new landing	1	sum	360.00
Block Walls			
Cut block walls to create new pass in walkway		m	455.00
Cut block walls for lift doors	12	m	780.00
Break and remove blockwork to new opening, including temp propping.	1	sum	1,640.00
Water Tanks			
Internal Doors and Joinery			
Remove door at Mezzanine Floor and make good	-	no	200.00
Remove balustrade for reuse	10	m	340.00
Miscellaneous			
Craneage		sum	1,500.00
Access equipment hire	-	sum	2,000.00
Waste Removal	_	sum	5,360.00
Protect existing floor coverings	332	m-	6,308.00
			26,632.00

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cav	

Excavation			
Excavate for slab at the entrance	46	m²	2,438.00
Excavate for lift pits	7	m³	665.00
Excavate for lift caisson	1	sum	500.00
Backfill lift pits	2	m³	190.00
Excavate for retaining walls	30	m	1,440.00
Excavate for column pads at entry	14	no	1,330.00
Compacted hardfill for new paving and ramps	15	m³	1,622.50
Cart away spoil	40	m³	1,000.00
Subtotal			9,185.50

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Concrete Work and Reinforcing Steel

Concrete Work			
Concrete to column pads	14	no	1,470.00
Lift pit slab	4	m²	1,480.00
Lift pit - block walls	8	m²	2,240.00
Tanking / Waterproofing to pits	1	sum	800.00
Concrete Pumping	1	sum	2,300.00
100mm thick concrete porch slab, including reinforcing steel, mesh and	23	m²	2,829.00
100mm thick concrete Slab on DPM including reinforcing steel,mesh and	23	m²	3,220.00
Concrete stall board to entry walls, including formwork, reinforcing steel,	11	m	1,617.00
Subtotal			15,956.00

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Structural Steel			
Structural Steel			
Shop drawings	1	sum	5,000.00
Steel columns 125 x 75 RHS at entry	922	kg	10,142.00
Steel columns 75 x 75 SHS at entry	62	kg	682.00
180 PFC	607	kg	6,677.00
Lintel to entry auto door	75	kg	825.00
Lintel to Meeting room Sliding door	75	kg	825.00
Dummy Column to end of the walkway	1	sum	750.00
200 x 100 RHS	105	kg	1,155.00
75 x 75 RHS posts	36	kg	396.00
Stainless Steel hand rails	9	m	5,850.00
Steel hand rails	16	m	5,600.00
Side welding including gussets etc.	1	sum	8,000.00

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External Windows and Doors		
External Window and Doors		
Auto entry door	1 no	11,480.00
New pair of sliding doors at meeting room	1 no	6,360.00
New window to meeting room	12 m²	6,120.00
Alumium Joinery		
Double glaze windows at existing entry	40 m²	16,000.00
Glazed walls to work shop	10 m²	5,000.00
Misc		
Tape	28 m	148.40
Flashings	28 m	672.00
Sealant	28 m	126.00
Subtotal		45,906.40

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# Wairoa Library Redevelopment

Curtain Walls

Curtain Walls and Alum.Joinery Curtain walls to entry

EV for coloured glass behind servery unit

80 m<sup>2</sup> 1 sum 92,000.00

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Internal Doors		
Rimu veneer door to meeting room	1 no	1,040.00
Single door to new work room at rear	1 no	540.00
Double door to store room / work shop	2 no	2,220.00
Bat wing door to rear entry	1 no	690.00
Joinery		
Servery unit including; roller shutter, bench, cupboard, hot/cold water system	1 sum	5,160.00
Staircase and landing including balustrade and make good to existing	1 sum	1,600.00

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Carpentry			
Carpentry			
Floor Framing			
Walkway - suspended timber floor system including 200 x 50 joists and	38	m²	9,082.00
Timber floor system including 200 x 50 joists and blocking with 19mm	6	m²	1,452.00
Diaphragm floor system to meeting room	23	m²	5,566.00
Balcony deck framing	23	m²	6,302.00
Wall Framing			
Timber framed lift shaft	67	m²	5,963.00
Internal Wall Framing	29	m²	997.60
Wall Framing to Balustrade	19	m²	676.40
Roof Framing			
Inspect and repair exisitng roof	1	sum	440.00
New Diaphragm Roof framing trusses, purlins etc	32	m²	3,840.00
Roof framing to lift	4	m²	720.00
Ceilings Framing			
Rondo Quiet clip system to new walkway	38	m²	1,307.20
Rando Quiet clip system to infill floor	6	m²	206.40
New perimeter plate and battens to entry	23	m²	874.00
External Cladding			
Fibre cement to lift walls	28	m²	2,436.00
Enternal Trim			
Villa board to soffit	32	m²	1,600.00
Internal Linings			
Walls			
10mm Standard GIB to walls	57	m²	1,379.40
Ply to internal lift shaft	37	m²	1,435.60
GIB to Balustrade	37	m²	895.40
Level 4 fix and stop	94	m²	1,222.00
Ceilings			
12mm Fyreline to new walkway	60	m²	2,016.00
Acoustic GIB to ceilings	81	m²	4,406.40
Level 4 Fix and stop	141	m²	1,833.00
Misc			
Door hardware	1	sum	800.00

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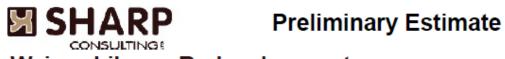


Roofing	
Roof	
Tray decking	34 m²
2 layers of Torch-on system to balcony	23 m²
Rainwater	

12 m 12 m 27 m Internal Box gutter 1,800.00 780.00 Spouting Downpipes 1,215.00

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3,230.00 3,335.00



Lift

Lift

Provisional sum for lift 1 no 85,000.00

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Services			
Reconnect Electrical Services	1	sum	600.00
Power to lift	1	sum	1,800.00
Power to Mechanical services	1	sum	800.00
Light Fittings			
Light fitting and circuits	2	no	300.00
LED Downlights	12	no	1,800.00
Fluorescent Lighting	13	no	2,600.00
Flood light	4	no	1,200.00
Power			
Power outlets	6	no	510.00
Subtotal			9,610.00

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Mechnical Services AC unit to meeting room

8,000.00 1 sum

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Monkey-toe system Monkey-toe system to roof (3.no)

3 sum 9,000.00

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Painting	ደ	Sne	rialiet	Finishes
Painung	Ot.	Spe	ผสแรเ	rimsnes

Internal Painting			
Internal Doors			
Single Doors	2	no	300.00
Double Door	2	no	600.00
Batwing Door	1	no	300.00
Walls			
Internal Wall Framing	57	m²	855.00
Walls to balustrade	37	m²	555.00
Ceilings			
Overall ceiling area	487	m²	8,766.00
External Painting			
Paint to lift shaft	28	m²	1,120.00

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Floor Covering

Floor Covering

2		
Tiles	14 m²	2,800.00
Carpet tiles	67 m²	4,690.00
Jacobsens sound dampening underlay	67 m²	3,350.00
Raised paving to deck	23 m²	8,050.00
		18,890.00

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Glazing

Glazing

Glass balustrade to deck 9 m 5,400.00

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### Wairoa Library Redevelopment

External Work

Paving

Concrete Paving 58 m<sup>2</sup> 6,380.00

Retaining walls

Retaining walls around entry 30 m 3,600.00

Surface water drainage

Strip drain 1 sum 2,400.00

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Rear	Entry

Rear Entry			
Remove Window	1	sum	120.00
Remove canopy for reuse	1	no	240.00
Demolish ramp at the entry	1	sum	360.00
Remove doors at rear entry	2	no	360.00
Strip external cladding at lower floor	35	m²	630.00
Remove external lights for reuse	2	no	60.00
Soft lanscaping			
Remove trees	2	no	2,000.00
Miscellaneous			
Protection to downpipes during construction	1	sum	320.00
Waste Removal	1	sum	1,240.00
			5,330.00

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Ex			

Clear Site		
Clear site for Debris	68 m²	544.00
Excavation		
Excavate for new slab	46 m²	1,817.00
Excavate for ramp and landing	3 m²	262.50
Excavate for retaining walls	24 m	1,152.00
Compacted hardfill for new paving and ramps	12 m³	1,212.00
Cart away spoil	22 m³	550.00
Subtotal		5,537.50

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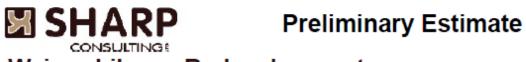


Concrete Work

Concrete

100mm thick concrete slab on DPM and insulation, including reinforcing 44 m<sup>2</sup> 14,851.20 1,290.00 Concrete ramp and landing to rear entry 3 m<sup>2</sup>

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	and Doors

External Windows and Doors			
New aluminium external window	1	no	740.00
New External Door	1	no	1,290.00
Miscellaneous			
Repair and install canopy to new entry	1	no	170.00
Tape	20	m	106.00
Flashings	20	m	480.00
Sealant	20	m	90.00
Subtotal			2,876.00

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77 m²	3,542.00
1 sum	220.00
46 m <sup>2</sup>	5,520.00
46 m <sup>2</sup>	1,748.00
77 m²	1,593.90
77 m <sup>2</sup>	1,001.00
46 m²	1,076.40
46 m²	598.00
1 sum	260.00
	1 sum 46 m² 46 m² 77 m² 77 m² 46 m² 46 m² 46 m²

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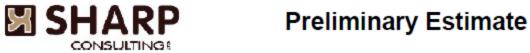
# Wairoa Library Redevelopment

Steel Cladding External Cladding Steel cladding to match the exist

77 m<sup>2</sup>

6,930.00 6,930.00

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Roofing

Roof		
Tray decking	46 m²	3,680.00
Rainwater		
Rainwater head	1 no	500.00
Internal gutter	9 m	1,350.00

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3 no

255.00

# Wairoa Library Redevelopment

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Power outlets

Electrical		
Submain and distribution board	1 sum	600.00
Light Fittings		
Fluorescent Lighting	8 no	1,600.00
Flood light	3 no	900.00
Reinstall External lighting	1 no	80.00
Power		

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# Wairoa Library Redevelopment

Fire Protection
Fire Protection
Provisional Sum for Fire Protection
Subtotal

1 sum 500.00

500.00

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# Wairoa Library Redevelopment

Painting & Specialist Finishes

Internal Painting

 Plasterboard walls
 77 m²
 1,155.00

 Plasterboard ceilings
 46 m²
 828.00

 Paint doors
 1 no
 175.00

 Subtotal
 2,158.00

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# Wairoa Library Redevelopment

External Work

| Paving | Paving | Concrete Paving | 44 m² | 4,840.00 | Retaining walls | Retaining walls around entry | 24 m | 2,880.00 | Surface water drainage | Strip drain | 1 sum | 2,400.00 |

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