1. SOUTH CHRISTCHURCH LIBRARY SERVICE CENTRE AND COMMUNITY LEARNING CENTRE

Officer responsible	Author
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The purposes of this report are:

- to advise Councillors of the work carried out by the project team;
- to obtain the Council's approval of the Functional Design Brief and Budget report (tabled);
- To obtain the Council's approval to proceed to the Development Phase of the project including the preparation of tender documents and the calling of tenders;
- To obtain the Council's approval to report the development phase of the project to the Property and Major Projects Committee.

INTRODUCTION

A report recommending that a new combined Library/Service Centre/Community Learning facility be constructed on the site of the existing Beckenham Service Centre was endorsed by the Council in November 2000, subject to consultation. Consultation was subsequently carried out and the proposal adopted by the Council at its meeting on 22 February 2001.

Following adoption of the proposal, the project's pre-development phase was commenced, culminating in development of the concept design, functional design brief, and a budget report for presentation to Strategy and Resources Committee in December 2001.

BACKGROUND

At its meeting on 25 November 1999 the Council resolved:

"... that a report be sought on the provision of a combined service centre/library for the South Christchurch area, which would obviate the need for major upgrading of the St Martins and Spreydon Libraries."

An officer project group was set up in February 2000 to investigate the strategy for the delivery of library services in the south of the city in conjunction with the future of the Beckenham Service Centre. At that time, following closure of the Sydenham Primary School, the Ministry of Education and local schools were considering how best to provide enhanced facilities in South Christchurch for schools' information technology education. The project group, through liaison with the education sector, developed the concept of a combined facility, incorporating a technology-based learning centre for schools as well as wider community use.

The resulting project group report recommended that a new combined Library/Service Centre/Community Learning facility be constructed on the site of the existing Beckenham Service Centre with the Spreydon library retained at its current scale of operation.

This recommendation was adopted by the Council at its meeting on 22 February 2001.

PROJECT PROCESS

The project has been divided into two distinct phases: Pre-development and Development phases.

The **Pre-development** phase constitutes the following deliverables:

- Project Terms of Reference Document
- Concept design
- Functional Design Brief and Budget Report
- Project Delivery Methodology Report for future stages

The Functional Design Brief and Budget report, including the terms of reference, has been prepared by the project team. This document has been circulated to Committee members for consideration and approval. It includes the project organisation and a list of the consultants engaged to undertake the pre-development phase.

The **Development** phase will comprise:

- Detailed design and documentation
- Resource Consent
- Tender

- Tender evaluation and recommendation
- Construction
- Commissioning and Opening

DESIGN CONCEPT

The 2400m² proposal has the difficult task of being both a building with civic presence, while at the same time being a building of a scale appropriate to a residential area. To this end the building is single storey and has been split into four blocks to reduce the massing. Each block has a simple lean to roof structure which, combined, create a distinctive saw tooth effect visible from Colombo Street which will make the building instantly recognisable.

The building is approached from the south side to ensure that car parking areas are kept away from the park and river to the north. This also provides for possible future alteration to Hunter Terrace.

The community consultation process brought to light a desire for a light and airy non-air conditioned building with strong visual links to the river and park setting. There was also a desire for a building which incorporated local stonework to complement the Malt House building opposite. The four blocks therefore are graded from south to north. The southern blocks which front onto the car park are solid, highly insulated and clad in local volcanic stone while the northern block is highly glazed creating with strong visual links to the park and river.

The building construction is essentially honest, with its simple repetitive structure exposed and materials that require little or no surface finishes.

A presentation of the concept design will be made at the meeting

Sustainable Design/Durability

The concept design has taken into account the Council's Energy Strategy, criteria for waste minimisation and sustainable design.

It is intended to include many of the principles listed below during the detailed design phase.

Material Selection

- 1. Only sustainably sourced timber is used.
- The lowest possible wood hazard class for timber treatment allowed by the building code is used.
- The use of CCA & LOSP timber treatments is avoided and the use of more environmentally benign alternatives promoted.
- 4. Where possible the scheme should support and give preference to materials endorsed by the Ministry of Environment sponsored Environmental Choice Labelling Scheme and give preference to manufacturers who are actively engaged in improving the environmental impact of their manufacturing processes.
- 5. Where possible preference should be given to the use of materials with a recycled content (cements with a percentage of industrial waste, acoustic insulation manufactured from wool and recycled polyester, glass wool with recycled content).
- 6. The specification of materials will aim to minimise the use of materials, which are polluting in their manufacture or life. This will include minimising the use of PVC's, certain paints, polyurethanes, refrigerants, insulating materials and floor vinyls, the use of low VOC paints and polyurethanes, PVC alternatives to plumbing and drainage pipe-work and alternatives to vinyl flooring in toilet areas.
- Construction materials which are known to off-gas potentially dangerous chemicals should be avoided or minimised where possible. Low emission phenol formaldehyde bonded plywood, low formaldehyde MDF and water-based paints should be used.

8. Where relevant consideration should be given to the embodied energy content of the material selected.

Durability

The design should aim to employ where reasonable to incorporate durable materials to minimise the use of applied surface finishes (such as paints).

Waste

- 1. During the construction programme construction waste should be minimised. The contractor will be required to have a site specific waste management plan.
- The design should allow for the provision of space for the collection and storage of recyclable material.
- Consideration should be given to the use of an on-site wormery or other composting facilities for vegetable scraps.
- 4. The building should incorporate two composting toilets for educational/demonstration purposes. This issue has been highlighted for specific Council approval.

Water Use

- 1. Provision will be allowed for the collection and storage or rainwater to reduce overall water use and to reduce stormwater run off. This water will be used for irrigation and use within the moat.
- Grey water storage and recycling may be adopted to further reduce water use. This issue has been highlighted for specific Council approval.
- 3. Throughout the project low water use plumbing fittings will be specified. These will include time-controlled taps, dual flush toilet cisterns, low flow showerheads and waterless urinals.
- 4. Due to the small demand for hot water in the building it is likely that solar water heating will have a long pay-back periods. However as solar water heating is a simple concept easily understood and copied by the public we believe it is important educationally to promote solar water heating. This issue has been highlighted for specific Council approval.

Landscaping

- 1. The existing deciduous trees along Hunter Terrace and Colombo St will be retained and used for seasonal solar shading.
- 2. The landscaping included in the proposal is limited to the to the car park and associated pedestrian areas and a small amount of planting adjacent to the car parking.
- Permeable surfaces should be used in car parking areas to reduce storm water run-off and help to filter oil residues and other pollutants. This issue has been highlighted for specific Council approval.
- 4. During the construction process ditches and silt filters should be used to reduce silt run off into the Heathcote River should the site contours make this necessary.

SEEKING COMMUNITY VIEWS

A commitment to seeking community views, and to keeping the community informed throughout the project, resulted in the development of a communications plan which identified project milestones, key stakeholders, both internal and external, and appropriate means of consultation. These include press releases, internal newsletters, public meetings, charettes or roadshows and a website http://library.christchurch.org.nz/south.

Important customer groups to be consulted have been identified as:

- The general public
- CCC staff groups
- Senior citizens
- Youth and children
- Local schools
- Councillors and Community Board members
- The Beckenham and Cashmere Junior Voluntary Library Committees
- Maori
- The Pacific Island Community

Ideas and issues gathered from the community and through the Library and Service Centre briefs have been used to inform the architects concept plan. Information gathered throughout the consultation process has been collated and is available on the website.

PROJECT BUDGET

The Council's 5 year capital expenditure programme provides \$4,505,529 for the project.

	2001/02	2002/03	
Property	\$2,846,703	\$1,315,042	
Libraries	\$185,684	\$158,100	
		Total	\$4.505.529

The current cost estimate carried out by the cost consultants, Shipston Davies Ltd, in November 2001 based on the concept design and since subjected to value management workshop and assessment against The Natural Step principles indicates the budget required for the project to be \$5,650,000.

This is broken down as follows:

Building Construction	\$4,050,000
Car Parking and Landscaping	\$300,000
Professional fees	\$550,000
Library fitout	\$350,000
Service Centre fitout	\$100,000
Communications/advertising	\$5,000
Miscellaneous expenses	\$10,000
Notified resource consent and building consent fees	\$35,000
Project contingency	\$250,000
Total Required	\$5,650,000

Excluded from these costs are:

- Library Stock
- Computers
- Community Learning Centre fitout
- Temporary accommodation and relocation costs
- Surveying and rearrangement of property titles
- Financing and legal costs
- GST

The estimate of costs prepared by the project team reporting on Library and Council Service in South Christchurch during 2000 was based on the most recent building of this type, the then recently completed Fendalton Library and Service Centre. While at the time that seemed a reasonable basis, there are several reasons for increases in construction costs since the Fendalton building was tendered in May 1999.

Shipston Davies Ltd advise that considerable inflation and difficult market conditions have increased costs by more than 10% over the intervening period. The budget was based on 30 car parks and the current design includes for 70 car parks. The South Christchurch Library and Service Centre differs from The Fendalton Library and Service Centre in that the Fendalton building is 'conventional' using air conditioning, it is of concrete tilt slab construction and was tendered during a period of market competitiveness.

The South Christchurch building and incorporates more glass for greater linkage with the park like environment, input from the community and the sustainable design features (encompassing principles of "The Natural Step") identified earlier in this report.

Many of the features include in the building demonstrate potential savings in operational costs over the life of the building. Savings in energy use from using ground water sourced underfloor heating rather than air conditioning are likely to be approximately \$11,000 per year. Savings from not painting the external walls are likely to be \$6,000 per year. Thus for these two items over a 10 year period the Council is likely to save \$175,000 in operational costs.

Other features have potential paybacks which cannot be quantified. These include educational potential of demonstrating sustainable design features in a public building and the stimulation of local markets for sustainable materials and products.

ADDITIONAL FUNDING SOURCES

The project team has identified sources of funding for the shortfall between the current budget (November 2000) and the current estimate of cost (November 2001).

- A sum of \$463,000 is available from the Libraries Endowment Fund, which was established from the recent sale of some assets by external trustees of a very old endowment in favour of the city libraries. The Director of Finance advises that this may be applied to the South Christchurch Library and Service Centre project.
- The project manager responsible for completion of the Fendalton Library and Service Centre (previously the Major Projects Co-ordinator) advises that the sum of \$100,000 is available from the remaining project contingency from that project.
- The Property Asset Manager advises that the sum of \$300,000 can be made available from the Property Unit contingency provisions in 2002/03 and a further \$200,000 in 2003/04 which will fund the construction contract retention.
- The Council Energy Manager has advised that funding provision of up to \$100,000 can be made for specific energy enhancement features, subject to a suitable economic case being made for each feature. Preliminary assessment of the cost and benefit of a ground water source heat pump for the new building indicate that it is reasonable to anticipate the sum of \$50,471 from that fund to balance the project shortfall.

These sources are summarised in the following table:

	2002/03	2003/04	
	\$463,000		
sion of	\$31,000		
	\$300,000	\$200,000	
orward	\$100,000		
	\$50,471	Total	\$1,144,471
			. , ,
al required	\$5,650,000		
	ion of orward	sion of \$31,000 \$300,000 \$100,000 \$50,471 \$4,505,529 \$1,144,471	\$463,000 \$31,000 sorward \$300,000 \$100,000 \$50,471 Total \$4,505,529 \$1,144,471

The following list of energy saving and sustainability options could be incorporated into the project with the provision of specific funding or through cost savings identified further on in the project development phase. These items are identified for information only and are not incorporated in the funding stream identified above.

Inert gas to double glazed windows	\$3,000
Motorised roller blinds for north windows	\$79,000
Composting tank for two toilets	\$4,000
Grey water recycling	\$10,000
Solar panels for boosting water heating	\$10,000
Copper and arsenic free deck treatment	\$14,000
Permeable pacing adjacent to building	\$32,000
Permeable pacing for rest of drive and car park	\$48,000

CONCLUSIONS

The design of the building has been the subject of significant community input. Liaison with staff, the community and Councillors has assisted with development of a concept responding to the location and which is well received by these stakeholders. A value management workshop has been utilised to test and adjust the cost estimate on which this report is based. A workshop introducing the project team to The Natural Step process has enabled sustainable principles to be tested and incorporated into the design.

The current cost estimate has identified a shortfall from the original budget due to changes in market conditions and the inclusion of energy efficient measures, sustainable principles and community input. These measures influence the construction cost but do generate long term operating savings.

The process to date has been solely related to the pre-development phase for this project and no detailed design work has been initiated.

PRESENTATIONS

The design concept was presented to the meeting by Andrew Barclay of Architecture Warren and Mahoney. Graham Finlay then briefed the Committee on the sustainable design features of the proposal.

Ross Davidson of Shipston Davies Ltd spoke to the project budget and identified the reasons for the cost increases. In brief, three factors had contributed, in almost equal proportions, to the additional cost of the project, namely:

- Inflation/additional car parks
- Community/Concept Issues, including:

Secure Play Area
Covered Way
External Decks/Screens
Stone Cladding
Cafe Fitout
Acoustic Metal/Timber Ceilings

Sustainability/Energy Savings Features, including:

Roof Overhangs
High Level Windows
Auto Window Openers
Tiled Floors
R5.0 Insulation
Duracem Recycled Industrial Waste
Water Storage Tank
Polydrain (non-PVC) Drainage
High Building Volume

In considering the proposal the Committee noted that, in line with current Council policy, substitutions had been identified to cover the additional cost of the project. It was also noted that the Property and Major Projects Committee will have the opportunity to identify further cost savings without compromising the design, during the development phase of the project

Recommendation:

- 1. That the Council adopt the functional design brief and budget report, including the concept design.
- 2. That the Council agree to proceed to the development phase for the project, including the preparation of tender documentation and the calling of tenders.
- 3. That the Council agree to the transfer funding of \$300,000 in the 2002/03 financial year and \$200,000 in the 2003/04 financial year from the Property Unit contingency provision and \$100,000 from the Fendalton Library Service Centre contingency to the South Christchurch Library and Service Centre Project.
- 4. That the Council agree to the use of the City Libraries Endowment Fund of \$463,000 for this project.
- 5. That the Council approve the retention for the development phase of the consultants used for the pre-development phase, subject to project control group reaching agreement with them on an acceptable fee for their work.
- 6. That the development phase of the project be reported to the Property and Major Projects Committee.
- 7. That the Property and Major Projects Committee be requested to identify savings of \$107,000 to enable the following energy savings and sustainability options to be incorporated into the project:

Inert gas to double glazed windows	\$3,000
Solar panels for boosting water heating	\$10,000
Copper and arsenic free deck treatment	\$14,000
Permeable pacing adjacent to building	\$32,000
Permeable pacing for rest of drive and car park	\$48,000

8. That, in the event of funds being available from the contingency sum at the conclusion of the project, they be made available for a statue of Dame Ngaio Marsh.