



THE

Borchardt Library

REDEVELOPMENT

The redevelopment of the Borchardt Library has provided a new learning environment to meet the changing needs of clients.

The Borchardt Library provides resources and services for approximately 13,000 students and 3,000 staff at the Bundoora Campus.

It is the only library on the largest campus of the University and is the main library of the La Trobe University Library system. Some 6,000 to 8,000 people enter and leave the building each day. The Library also complements other campus libraries of the University by providing services to students and staff of all campuses, both in person and remotely.

The Library redevelopment has been planned in phases, phase 2 of which was undertaken in 1999. The project was required in order to accommodate the pressures resulting from the closures of two university campuses at Abbotsford and Carlton, and the resulting increase in library use at Bundoora. The redevelopment also takes into account important trends in library service delivery:

- The preference for flexible multi-purpose computer workstations, local demand for which is expected to increase dramatically in the next 5 years
- The need for network access and power points for clients wishing to use their own laptop computers in the Library
- The trend toward student centred learning, requiring the Library to provide more group study facilities
- The need for additional learning facilities, equipped with appropriate technology, in the Library
- The reliance on computer based work methods for staff.





FROM THE

Library

PROJECT COORDINATOR...

The refurbished floor has maintained its spaciousness, successfully blending the old with the new, while introducing a dynamic colour scheme to the library.

In late 1998, the library was given approval to proceed with the refurbishment of Level 2, the replacement of the air-conditioning in stages 1 and 2 of the building, and an upgrade of the air-conditioning in stage 3 at a total cost of \$5.1 million.

Initially, it had been proposed that the work be done during the summer vacation of 1998/99. However, as completion of the work could not be guaranteed before the start of first semester, and to ensure that there was no disruption to students and staff during a very busy time, it was agreed to delay the commencement of work until the inter-semester break in June.

Starting any construction work in the middle of the academic year could be considered a brave move, but to be moving collections, staff offices, and service points was definitely audacious. Our staff and clientele proved to be both flexible and forgiving.

By working closely with the architects, the consulting engineers, and representatives from the construction company, the staging of the project was finalized to minimize disruption. The work was divided into four stages. External work only was done during the first stage; the remaining work was internal with approximately one third of the floor unavailable at any one time during the project. A temporary extension on the west side of the building enabled relocation of the reference collection, the photocopiers, and other services as the stages progressed. The simple solutions to problems proved to be the most successful. One brilliant suggestion from a member of staff was to use coloured tape on the carpet to guide people to the relocated collections or service points.

A key element in the interior design was the layout and design of the electronic information workstations. Because it was crucial to 'get it right', two prototypes were built before the final design was agreed. The architects were challenged by our request for mouse sensitive surfaces for the workstations. The electronic information workstations are a result of a successful collaboration between the architect and library staff.

The refurbished floor has maintained its spaciousness, successfully blending the old with the new, while introducing a dynamic colour scheme to the library. In response to many suggestions from clients, and the trend towards student-centred learning, new study areas for group work have been integrated into the redeveloped space on the second floor. Our students and staff now have a more accessible Reserve Collection, more queuing space at service points, and more flexible study areas.



Jackie Saunders LA TROBE UNIVERSITY LIBRARY

FROM THE

Architects ...

To provide a successful design solution for a client, an architect must base the design on a philosophy which incorporates an understanding of the client's requirements. This implies the provision of a thorough brief, and an integrated team of participants.



A decision was taken by the University to replan the interior of the Borchardt Library to improve the function and performance, and Eggleston Macdonald Designinc, Architects, were commissioned to review existing space planning.

Based on a brief prepared by the Library and in close consultation with Library staff, options for planning to meet medium term requirements for Level Two were considered and matched to budget requirements. 'A better learning environment in which current operational problems are resolved and in which flexibility for future change is incorporated', might summarise the brief.

Further, the brief noted that "the outcome of the design process will facilitate a change in the concept of Level 2 from a focus on quiet study areas (in addition to the service points) to a learning environment that makes provision for quiet conversation and students working in groups".

In outline, existing conditions included general space limitations, restricted loans and reserve desk access and queuing space, confused entry and exit arrangements, cramped administration areas and unsatisfactory electronic information provision in a generally tired learning or study environment. Lighting was poor, and mechanical and electrical services required upgrading to provide the necessary flexibility.

Overriding all these matters was a requirement of the Library for continuing operation during construction, with minimum disruption to normal student activities - a difficult task to resolve for everybody involved.

With these considerations in mind, the design solution implemented incorporated:

- Expansion of space into the East side concourse
- An improved sense of arrival and entry
- Incorporation of the existing stained glass screen into the entrance design
- Development of the loans desk around the main stair to accommodate queuing space away from the main North-South aisle exit zone
- Expansion into the North-South aisle to achieve more efficient planning
- Temporary space provision in the West side concourse to assist staging
- Coloured suspended ceilings to define entry and use of space, and to direct traffic involvement.

The design appears to be successful, and it is anticipated that in use, adjustments will be made from time to time to suit changing requirements. In the final analysis, students, staff and other users will draw conclusions on suitability and quality.

Trevor Keetley, Architect EGGLESTON MACDONALD DESIGNINC PTY LTD

FROM THE

Builders ...

To have the construction manager involved in the design, development and planning of a project of this nature allowed for valuable input at the documentation stage.

ADCO Constructions Pty Ltd was selected to tender for the provision of construction management consultant services for the redevelopment of the Borchardt Library. This ultimately resulted in the awarding of a fixed price contract to complete the works within 15 weeks.

To have the construction manager involved in the design, development and planning of a project of this nature showed considerable forethought by the client and architect. It allowed for some of the services to be provided in the documentation stage, such as budgetary advice, early works to enable access to confined spaces, design alternatives, assistance with procuring materials, staging, and public safety considerations.

A number of very specific considerations were critical to the process. Thousands of people use the many services provided by the Library on a daily basis. It was imperative that all services were maintained throughout the building programme. Temporary structures were constructed with their own lighting and mechanical ventilation. Into these areas were relocated thousands of reference books and the Library's substantial photocopying facility. Electronic information workstations were relocated to new areas. A temporary new entry was created complete with automatic security doors and book return chutes. Staff work areas and offices were created and loans and reserve desks were shifted and reconnected to power, data and security. Fire protection, mechanical ventilation, existing lighting, emergency lighting and escape access all had to be reviewed, reworked and ultimately retained. All this and construction had yet to begin on the actual new works.

The Library required that major works be completed prior to the busy second semester exam period. An enormous amount of planning and commitment from all parties was needed to achieve this within the extremely tight time frame involved. Architects, subcontractors, consultants and clients alike, all needed to work together closely to ensure the project remained on track. Subcontractors are critical to ensuring deadlines are met, and they were selected based on their ability to provide the resources to deliver on time, regardless of the hour at which they were required to work. Planning meetings were held to review programmes, to ensure that all contractors had a clear understanding of their roles and responsibilities, and to ensure also that the product designed by the architect was in fact the one produced.

The project comprised four main stages with three critical activities at each stage. Initially each service within the space provided had to relocate to a temporary area. Construction, including mechanical and electrical work, joinery, plastering and carpet laying, was then undertaken. Finally each service, new or relocated, was brought back on line and made available for use.

ADCO Constructions has enjoyed the challenge of this difficult and extensive project.

Mark Dower, Project Manager ADCO CONSTRUCTIONS PTY LTD



ADCO
Constructions Pty Limited



FROM THE

Air-conditioning

CONTRACTORS...

Under direction from ADCO Constructions, we along with all sub-contractors had the enormous and at times troublesome task of refurbishing all three levels of the building within an extremely tight timeframe.

Under direction from ADCO Constructions, we along with all sub-contractors had the enormous and at times troublesome task of refurbishing all three levels of the building within an extremely tight timeframe. O.P. Industries were awarded the contract for Mechanical Services installation in the Borchardt Library.

The refurbishment of each level was staged to fit in with the Library's staff, its students, and their exams.

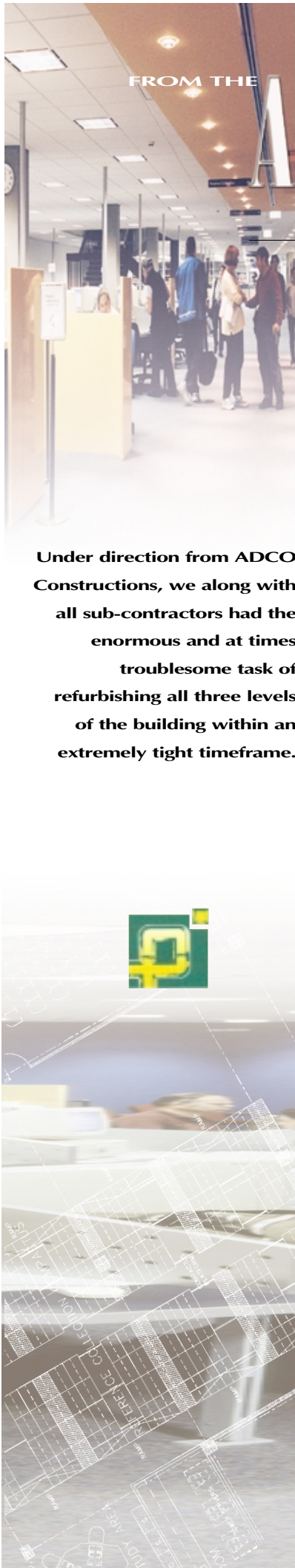
The air-conditioning system is fed from three main plant room zones, North, South and Central, each one separate from the others. The three plants were shut down according to the program, allowing crews to dismantle existing solid ductwork in ceiling spaces and replace it with new ductwork.

During this period, substantial work was done on the pipes in the plant areas of the building. This refurbishment of pipework was necessary for the delivery of constant air temperatures to all three floors of the building. The work went ahead in double shifts in accordance with the floor fit-out time frames, and the compressed project schedule.

Other complications arose due to the fact that the base building control system had to remain functional while additional air-conditioning wiring and points were added to the existing system.

Thanks to the endeavour and commitment of all the contractors involved in this project, all targets were achieved within the time frame, making the challenge an enjoyable one for O.P. Industries.

Dale Moxon, Project Manager O.P. INDUSTRIES (MELBOURNE) PTY LTD



FROM THE
Clients

New wine in an old bottle may be an irreverent way to describe the refurbishment of the Borchardt Library yet it captures the ingenuity of housing state-of-the-art year 2000 technology in a traditional 1960's building.

The ultra modern open plan of the Loans, Reserve and Information desks maximises the sense of space with skillful use of lighting and colour. A more collegial approach to learning is acknowledged in the group study facilities in the Audio-Visual Services area where students can work together on projects.

Cliff Picton

Associate Dean (International)
FACULTY OF HEALTH SCIENCES

The inviting new look for the library has a flowing sense of space, and the layout and seating for the terminals are comfortable. Most importantly, access to services has improved and the Information Desk is easy to find.

Julianne East

Language and Academic Skills
Advisor (English as a Second
Language)

The Borchardt Library Building...

1967 - 2000

The present Library building was constructed in three stages over 20 years...

1967 January - *Stage I completed*

Architect: Roy Simpson of Yuncken Freeman Pty Ltd. Library confined to Level 3, sharing the building with Science staff, laboratories and animal houses. Allen David's glass screen was part of the original concept.



Stage I from the Agora

1970 August - *Stage II completed*

Architect: Roy Simpson of Yuncken Freeman Pty Ltd.



Stage I from the North

1986 January - *Stage III completed*

Architect: Ken Atkins of John F. Scarborough and Partners Pty Ltd.



Reference - Stage II

The Library's redevelopment a decade later comprised two distinct phases...

1997 July - *Phase 1 completed*

Project included the reorganisation and remodeling of some staff areas on Levels 1 and 2, and construction of a computer equipped Training Room on Level 1.



Installing the Chiller

1999 November - *Phase 2 completed*

Architects: Eggleston Macdonald Designinc Pty Ltd.
Engineering Consultants: Umow Lai & Assoc.
Quantity Surveyors: WT Partnership. Construction: ADCO Constructions Pty Ltd. Air-conditioning services: OP Industries (Melb.) Pty Ltd.
Redevelopment of service points, public access areas and collections on Level 2, replacement of air-conditioning in stages 1 and 2, and upgrading of air-conditioning in stage 3.



Loans and Entrance



Open Reserve