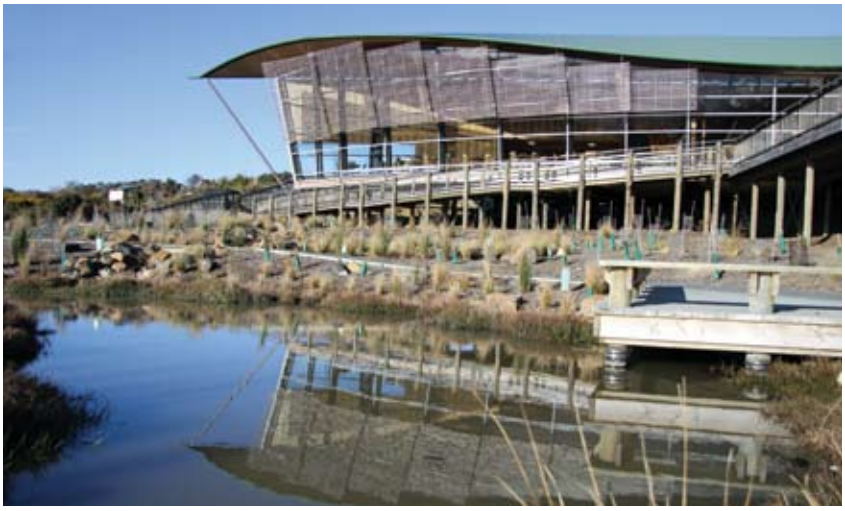
NAYLOR LOVE
CONSTRUCTION SINCE 1910

# UNDER CONSTRUCTION

Naylor Love News Issue 12 | September 2011

# A reflection of success



*Glazed over – the award-winning windows of Orokonui Ecosanctuary Visitor Centre.*

**Orokonui Ecosanctuary Visitor Centre, entered into the Window Association of New Zealand 2011 Design Flair Awards by Morlite Aluminium Ltd, won the supreme national award.**

The visitor centre, constructed by Naylor Love Dunedin, is situated on the 307-hectare ecosanctuary, twenty minutes' drive from Dunedin. Designed by Tim Heath of Architectural Ecology, the 5-Green Star building is made up of seven recycled shipping containers propped off the ground on timber poles, linked by corridors, and covered by a lightweight atrium. The main building support structure was designed with 150mm diameter CHS steel portal legs. Intermediate CHS steel supports were strategically positioned to assist in the support of the glazed mullions.

The 150mm Frontline curtain wall suite, which encloses the main building, is extremely distinctive. The aluminium joinery was designed to lean out eight degrees at the top. On plan, the building is on a faceted curve, with the head of the windows raking from a height of 6.4m at the apex to 3.5m at the end of the curve. Sloped transoms have activated opening sashes at both the top and the bottom of the windows. Morlite Aluminium said that "on

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## inside THIS ISSUE



**"Under Construction" is Naylor Love's client and industry newsletter, and has been published in this form since 2007, and for many years prior to that in a different form. You may be aware that Placemakers have this month launched a new publication also titled "Under Construction", which uses the same font and a similar look on the cover. While we recognise that imitation is the sincerest form of flattery, we are working with Placemakers to avoid future confusion around the two publications.**

# The best!

TAKING STOCK



**Don Stock**
**Chief Executive**

**Some years ago, I lived in Reno, Nevada. Nevada is the centre of the gaming industry in the USA, and of course everyone knows about Las Vegas. Far fewer people know anything about Reno, but for many years it was the second fastest growing city in the US – after Las Vegas. Therein lay the problem; how do you differentiate yourself when faced with such an overwhelming big neighbour?**

So Reno drew on its strength as a tourist destination, which had generated an amazing range of facilities, shows, events and experiences, far beyond those that any comparable city could provide. To encapsulate this concept, they branded themselves "The Biggest Little City in the World". The message is that you don't have to be the biggest to be the best.

> "We are the only construction company in New Zealand that has regularly and routinely surveyed our clients on the completion of projects."

Naylor Love is in a somewhat similar situation. We have no interest in being the biggest construction company in the industry, but we certainly do aspire to being the best. Our byline is "Measurably the Best", but borrowing from Reno, it could equally be "The Biggest Little Construction Company in the World". What we mean by that is that we intend to have all the best attributes of a large company, but to keep it to a relatively small scale, allowing us to focus on delivering great performance and providing a great client experience.

Our success will be judged by our clients and the industry at large. We want Naylor Love to be recognised, and we want our brand to stand for reliable delivery and ease of use. We want clients to prefer to use us whenever they can.

So how are we going? Generally I think we are going very well in meeting these goals, particularly around the client experience aspect. We are the only construction company in New Zealand that has regularly and routinely surveyed our clients on the completion of projects, to find out exactly what they thought about the process and the outcomes. We use a benchmarking process introduced to NZ in 2004 and intended to be an industry-wide tool. Unfortunately, it appears Naylor Love is the only company that values client views sufficiently to have kept it going. Regardless, this gives us a greater understanding of what our clients think and want, and provides the opportunity for us to keep improving.

In general, our benchmarking scores have steadily improved over the years. Even so, we typically get blunt feedback on a range of items for even our best projects, and this is really helpful in determining where to focus our efforts on improvement. I also must concede that we don't always "nail it". Where we do fall short, however, I feel we still differentiate ourselves by doing everything we reasonably can to put it right and provide the best client outcome we can.

Another way to measure our progress is to look at industry recognition. I believe that our reputation is spreading, and even our larger competitors will grudgingly concede that we are becoming a force to reckon with.

Our position in Christchurch in assisting with earthquake recovery and ultimately in reconstruction illustrates our growing influence. There, we have been called on to work on many of the highest profile projects, and it is hard to drive around Christchurch without seeing a Naylor Love project. Many of you will have seen the heavily damaged Christchurch Basilica on television, most recently showing the removal of the iconic copper dome from the roof. That is a very tricky ongoing Naylor Love project, undertaken in conjunction with engineering support from Opus. An article on the project is included separately in this newsletter. We have also undertaken all work at Christ's College, and to demonstrate complete impartiality between the major religions of Anglican, Catholic and Shopping, we are undertaking the reconstruction of major shopping malls such as The Palms, Harvey Norman Centre and South City Mall. We are a registered demolition contractor with CERA for larger buildings, have been appointed to undertake all repairs at the Burwood Hospital campus, and have numerous other projects on the go.

Our position in Christchurch has even generated some unusual backhanded compliments from our competitors. A couple of months ago, Fletchers ran full-page colour ads in the newspapers in Christchurch and Auckland recruiting for staff. It was a dramatic ad, with just a few words saying "do your bit for the garden city" and a massive photo of the best project they could find. Ironically, that best

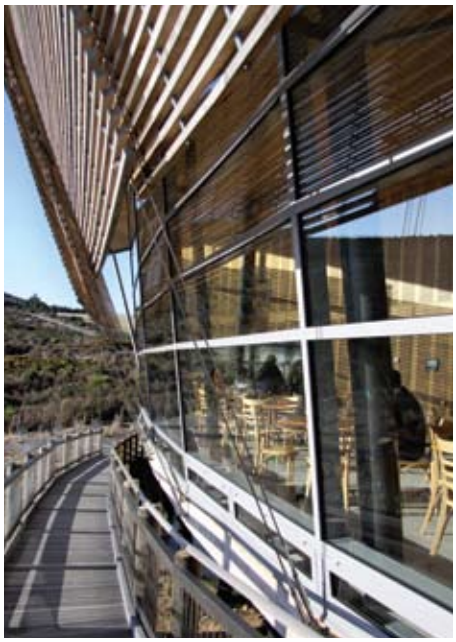
project was a Naylor Love project, the Christchurch Basilica deconstruction!

I was initially a bit offended that they had co-opted our project to be the face of their recruitment drive, and annoyed that the photo had been carefully set up to avoid any of the numerous Naylor Love banners around the site, but then I realised that I should see it as a compliment. Clearly they felt that they did not have any projects as good as ours, and if it helps get Christchurch back together, we won't complain. Ironically, it is not only Fletchers using our projects to bolster their reputation; I note that the Basilica is one of the featured photos on the home page of Hawkins' website. Go figure.

The bottom line is that Naylor Love is on the move. We intend to be the best, and while we recognise we have plenty to work on, I think we are making good progress.

*Cover background – Inside the "bow" of Orokonui Ecosanctuary Visitor Centre.*

>>> *Continued from cover story*



occasions, the challenges tested their resolve and resources to the limit."

Once the aluminium joinery had been manufactured, the 6.4m x 3m units had to be transported 20km to the site and installed in a fully scaffolded building. "Their installation was as demanding as the design and manufacture."

At the opening of the visitor centre, ecologist Dr Ralph Allan stated that the intricacy, attention to detail and selection of the aluminium joinery were paramount to the overall success of this project.

Dave Hanning, Naylor Love project manager: "The project was very special because it required close collaboration between designers, builders and contractors. The design of the building was technically complex, the atrium was extremely challenging conceptually, and the practical fabrication, transport and construction were similarly difficult. The result highlights the attention to detail that was required, and the pride that the craftsmen involved took in undertaking tough challenges."

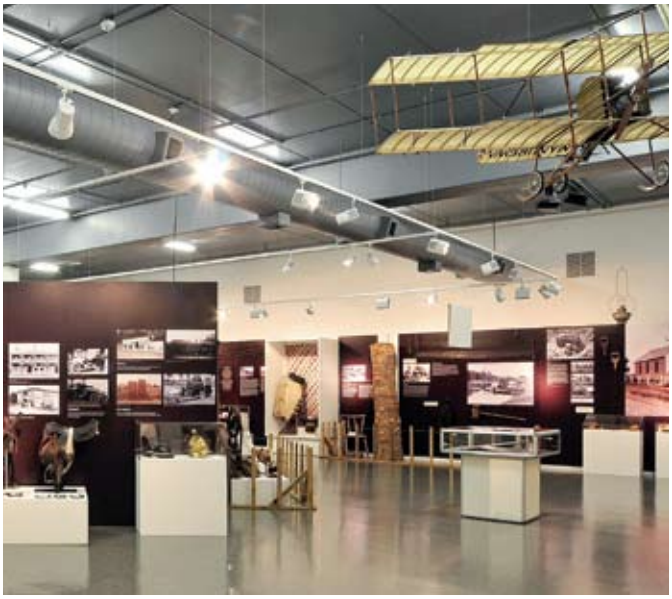
Naylor Love has worked with Brent Griffin and his team at Morlite Aluminium on a number of challenging projects, not least this one, and congratulates them for their award.

# Parting shot

## The Hub, Wellington Zoo

Photo courtesy of Assembly Architects Limited.

*Te Kura Ranui*



*Sir Edmund Hillary Museum*

# Regional RMB Commercial Project Awards 2011

**Congratulations to Naylor Love Auckland, Wellington, Central and Dunedin who all won regional Registered Master Builder Project Awards in 2011.**

**Auckland**

**Te Kura Kaupapa Māori o te Kotuku Ranui,** the Māori immersion school in Waitakere, won a Silver in the Education category. Naylor Love was appointed as the single line of accountability provider for the design, construction and delivery of the school where Māori culture and tradition underpin its teaching, learning and operation.

The collaborative design approach, involving iwi and whanau, the board of trustees, the wider Ranui community, the city council and the Ministry of Education, led to an energy-efficient and sustainable design. As well as educational benefits for students, the impact on the environment across the whole life cycle of the facility was considered. Building uses and spaces can be changed, if required, in the future. Designed to facilitate full delivery of the curriculum and promote use of the outdoors, culturally appropriate meeting spaces were also accommodated.

The school was recently awarded a 5-Green Star NZ – Education Design PILOT Certified Rating, which represents NZ Excellence.

The **Papakura Library** and **Sir Edmund Hillary Museum** won a Silver in the Tourism and Leisure category with the exciting upgrade of their facilities. The new premises were constructed on the third floor of an existing four-storey building in Papakura. They now have direct street access off Great South Road.

Project methodology was focused to allow the public to use the fourth floor of the building (where the library was still operating) while construction works continued on the third floor. Naylor Love managed the site works to accommodate requests from the building users and general public. Minimising risks of material deliveries, design changes, subcontractors and client/tenant changes were all handled and controlled by the Naylor Love site team.

**Wellington**

**Pipitea House**, which won a gold in the Retail and Business category, is a new nine-storey office block purpose-built for the Government Communications Security Bureau. It consists of open-plan office space, technician space, secure storage, gymnasium and child care facilities. Design of the fast-track building was concurrent with construction delivery. Tenant variations meant substantial structural redesign, including significant changes to the building services requirements, after the start of construction.

The roughly triangular shape of the building used most of the site. Because the footprint of nearly every floor was different, the façade elevations and planes required very good survey and dimensional control. The building was comprehensively modelled in a 3D documentation process so that complex geometric coordination could be done prior to manufacture of building elements.

The project was awarded a 5-Green Star rating under the office design assessment by the New Zealand Green

Building Council. Its many features of environmentally sustainable design and construction included innovative use of precast cladding panels; flat warm/green roof construction; sophisticated building services controlled by a BMS; and rainwater collection and recycling. More than eighty percent of construction waste was re-used or recycled.

**The Hub**, at Wellington Zoo, which won a silver award in the Tourism and Leisure category, is a multipurpose facility comprised of a marquee serving as an events centre, exhibit cases, a coffee shop, an impressive playground with animal sculptures, open seating areas, and toilet facilities. The design retained the iconic elephant house façade, which includes two feature roof domes. Built on a narrow, sloping site and adjacent to live visitor areas, construction was a challenge. The building, moulded into the contours, has six changes in level. Careful planning allowed a steady construction programme, working from the lower northern end of the site out towards the top.

The barrel vault marquee, a honeycomb structure, is very strong but lightweight. Fabricated from marine grade aluminium sheet and rod, the structure is 100% recyclable. The curved panels were punched out using a 20 tonne turret punch and formed with a custom built tool. The precast panels at either end of the marquee were manufactured with curved heads to mirror the radius of the main structure. The structure required extensive design and used the latest in 3D modelling technology to produce a minimal amount of waste material.

Nine rammed earth panels were constructed on site, using soil from the old giraffe enclosure. Other environmentally friendly features include salvaged rainwater harvesting; gutters and downpipes; Forestry Stewardship Council certified timber; plywood linings screwed into place to allow removal and possible reuse elsewhere at the zoo in the future; and recycled timber boarding used as formwork. All waste was segregated to ensure maximum recycling and minimum use of local landfill facilities.

*Justin Wright (Assembly Architects) at left, and Russell Burley (Naylor Love) in centre, are presented with their award.*

**Central**

For the second year running, Naylor Love Central has won the much-coveted RMB Commercial Project of the Year. **Remarkables Primary School** in Frankton won this award as well as Gold in the Education category.

The 460-pupil school was built to provide impressive panoramic views for children and teaching staff. Judges said the building was energy efficient, offering shade in the summer and allowing natural light to shine within the winter. “The architect and builder have created a functional and pleasant environment for the children to learn in.”

At the heart of the school vision was environmentally sustainable design principles using natural daylight, and a design form that responded to, and was fully integrated with, the landscape. External claddings are robust and well detailed to ensure minimal maintenance. A strong design theme was developed by using contrast and colour to create enthusiastic, energetic and creative spaces.

Built on a 1.6ha green-fields site, construction included geotechnical survey work, roading services, all landscaping and ancillary site works, and a new early childcare centre on the same site. Significant reshaping, cutting and benching were required to create playground terraces as well as the main building platform. Because of the presence of weak soils (silts), the main structure pads and beams were large and deeply buried. Two old gully zones also contained fill material which had to be excavated and removed from site. Because the site was so exposed to prevailing winds, suppression of dust was a constant battle. Silt fences and cut-off drains were put in place to prevent any silt contamination of Lake Wakatipu.

**Dunedin**

Dunedin division took out the Gold in the Education category with its **William James Building**, a new six-level building for the Department of Psychology at the University of Otago. The new building, which interconnects at different levels with earlier buildings, gives the Psychology Department a front door on the Dunedin campus. It was designed to a 5-Green Star standard. Selecting the appropriate building systems, materials and the people to put it all together was a task not only for the university, but also for Naylor Love.

The Psychology Department placed particular emphasis on a generic use of spaces. They recognised that for public uses the building had to be people-friendly, rather than institutional. They had a preference for natural lighting and ventilation, views out for visitor orientation, and the use of ‘warm’ and sustainably sourced materials. Other green features include timber screen shading devices, rain water harvesting and re-use, water-saving plumbing and low energy light fittings. The green roof increases the biodiversity of the site, filters rainwater and is a highly effective research area for the Botany Department. Construction waste minimisation was handled throughout the project.

# Swimming in the deep end

**By anyone's standards, Tom Glover, a junior foreman with Naylor Love Central, has lived a colourful life. When he was 11 years old, however, his horizons were restricted to a hospital bed. After being diagnosed with acute myeloid leukaemia in 1984, Tom underwent chemotherapy until March 1985. It was then decided to attempt a bone marrow transplant, with Tom's sister, Rochelle, as the donor. Tom received the first successful bone marrow transplant at Wellington Hospital.**

Twenty-six years ago the procedure was a groundbreaking operation. Tom was first given two massive doses of chemotherapy which, if they had stayed in his body for more than 45 minutes, would have started to eat through his veins to kill all his blood cells. Next, his whole body was irradiated for eight hours and his sister's bone marrow was dripped in overnight. He remained in isolation in hospital for four months then in isolation at home for a further seven months, until his immune system was robust enough to resist infection.

Tom grew up on a dairy farm in Kahutara, a little farming area in the Wairarapa. After leaving school, he went to varsity for a year, but decided studying psychology was not for him. He then spent several years doing all sorts of things. After working on a couple of dairy farms, he was a security guard for two years before heading overseas.

First stop was Australia. By the time Tom reached Cairns, he had only a couple of dollars left in his pocket and was fairly desperate for work. Fortunately for him, he approached a Cairns restaurant the day the bar manager had abruptly left. With no experience, and a two-hour trial, he was managing the bar! As he remarked, "Nothing like learning to swim in the deep end."

Then the outdoors beckoned. Tom took four months to drive from Cairns, through the Cape of Carpentaria to Darwin, and down the coast to Perth. "We had our moments in the 4x4. We blew the suspension to bits one day; collapsed the battery and had to push start for about a week; and after shoring through the front brake lines, had to drive 1500 kilometres to find a town where we could have them fixed."

On the way, he visited all the national parks – Kakadu, Katherine, Litchfield. In Kakadu National Park he and his mates, with a guide, visited Twin Falls, about two kilometres up a canyon. In those days, the only way to get there was swimming against the current through the gorge. On reaching the falls, they climbed out onto some rocks to get some sun and have a breather, and there, in the water they had just left, they saw a large crocodile. The guide assured them it was only a freshwater crocodile and therefore relatively harmless, but "that was still some of the fastest swimming I have done, leaving there."

In Perth, Tom had the dubious distinction of managing the Langford Tavern for a year – dubious because this was known as the second most broken-into place in Western Australia. "The entire bar was like a jail, with fold-down grills over the bar area for when things got out of hand. The cops would only turn up when they had two cars available."

Moving to London in the late 1990s, Tom worked as a roady in the rock'n'roll industry, setting up for concerts and some of Europe's largest festivals. These included Glastonbury, a three-day concert which was attended by 120,000 people. Tom was one of 20,000 staff! As he said, "It was a completely crazy lifestyle change for this little country boy."

He settled down a bit, touring with a symphony orchestra every summer for a few years. During winter he would look around different countries – the USA, and in Africa, Eastern Europe and South America. Tom took his folks on a trip to Venice, who absolutely loved sightseeing around this amazing city.

Tom returned to New Zealand in 2005 with his wife Bridget, whom he had met in London. They went to Queenstown on holiday, and never left. It was there he began his building apprenticeship with Naylor Love. He recently ran the major extension at Queenstown International Airport, and is now working on the Heywood house, installing the hardwood posts and beams which encircle it.

Tom's family gives him the excuse to act like a kid again. He and Bridget go hunting, fishing and camping with their two children, Tommo aged four and Jessie aged two-and-a-half.

And no doubt they feast on the exciting stories which Tom has to tell.

# How safe are we anyway?

Ian Alsweiler

HEALTH & SAFETY

**For the past couple of years, we have been pestering subcontractors to provide us with details of the hours their staff have spent on our sites. The reason for the gathering of this data is to calculate a lost time injury rate across all of the people on all our sites. Our success at extracting this information from our subcontractor friends could best be described as 'patchy'.**

It is simple for us to calculate the lost time injury rate for our own staff, but we believe that measuring this across the whole site provides a far better measure of our safety performance to clients.

Now, with input from Rawlinsons, we have devised a much simpler method of determining the hours each trade spends on our site, and we will have infinitely more accurate data with which to do our LTI calculation. The benefits of this new process are manifold. For us, we save the time previously spent cajoling subcontractors to provide the information. For subcontractors there is a saving in time trying to avoid us, and for clients we are confident that the LTI information will be as near to completely accurate as we can make it.

It will take a little time for the new process to gather enough information for the LTI rate to be meaningful, but we believe that within six months we will have an accurate overall figure for each division and for the company overall.

**Our drug and alcohol programme was launched in early 2008. At that time there was no random testing and the policy covered only Naylor Love staff.**

The policy was amended in 2009 to incorporate random testing. At the same time we also included the staff of subcontractors. The present programme therefore covers everyone on our sites. We test Naylor Love pre-employment, and everyone post-incident, where reasonable cause exists and randomly. Over this period, our random testing has found that about 10% fail to pass the on-site testing.

However the programme doesn't exist to catch people; rather it is there to provide a disincentive for people with alcohol or drug habits to work on our site in the first place. We have had a couple of instances where people on our sites have told us they stopped using drugs because they knew Naylor Love had a drug and alcohol programme. To me this is the true success of the programme.

Things change – one lot of legal party highs go and another arrives. So we are reviewing the technical part of our programme to keep the testing as current as possible. We are also running further briefing sessions for all Naylor Love staff and, because of the number of new supervisors since the launch of the programme, we are undertaking some extra training of these people. If any subcontractor or client would like to attend one of these sessions, please contact Ian Alsweiler for further details.


## UNDER CONSTRUCTION CONTACT INFORMATION

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Naylor Love's *Under Construction* is printed on Cocoon 140gsm paper, manufactured using 100% recycled post-consumer FSC-certified waste and a chlorine-free process (PCF). The wrap is 100% recyclable ecoWrap.

# Te awa nui

## Auckland

### New Zealand's largest shopping centre

**A significant milestone was the completion on 4 August of the Te Awa Mall at The Base Retail Park in Hamilton. Naylor Love has been the main contractor at The Base since the first sod was turned in 2004. The mall was started three years ago.**

It was an exhilarating journey working collaboratively with Tainui Group Holdings and its professional service providers. Together we have built New Zealand's largest and most spectacular shopping centre, with 170 stores, over 76,000 sq.m of retail space and parking for more than 2,500 cars. The shops attract over five million visitors each year.

*Te Awa (The River)*

Inside the Te Awa Mall is the new Hoyts Cinema which hosted the 'world premiere' of *Billy T: Te Movie* on 15 August. The cinema has 1,400 seats and a 450 seat Xstremescreen, Waikato's largest theatre screen, with the most up-to-date digital technology in the world.

As well as the usual difficulties with a project of this size and complexity, the staged opening of the mall meant that Naylor Love had to impose tight controls on methodology and logistics to ensure the safety of the shopping public. They also had to carefully liaise with The Base management who were operating a live retail centre and, after the handover of the first stage, a live mall.

All stages of Te Awa were opened on or ahead of time. The most recent opening was particularly noteworthy, because whilst the team was attempting to close out the final roading and civil activities, there was 140mm of rain in the preceding ten days. This was at a time when an unprecedented high volume of last minute design changes were required both inside and outside the project.

Nevertheless, code of compliance was granted and the last of the retail units, the new Foundation Bar, was opened on time. Clients, consultants and contractors were in the queue to ensure a well deserved inaugural pint and pizza in the brand new bar.

The Te Awa building project has provided a massive economic boost to the Waikato community, with 530 construction jobs managed by Naylor Love in the past two-and-a-half years alone. More than one hundred subcontractors were involved in the construction of the Te Awa Mall. Naylor Love's commitment to fair dealing and the team environment that evolved in Hamilton, has resulted in most of the supply chain members arriving and leaving 'through the gate' with a friendly handshake and an equitable agreement.

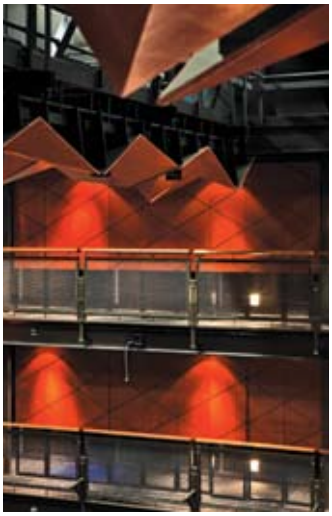
The client's project manager, Shane Davis for Greenstone, commented, "Your commitment to getting 3b project across the line for the client is to be commended. The completion of a world class mall is a credit to you all." Bruno Goedeke, Naylor Love Auckland's divisional manager, added "a massive thank you to everyone … for the incredible effort put into getting stages 3 and 4 over the line", and further thanked all the staff and supply chain for their hard work and constructive team efforts in closing out this significant milestone.

### Auckland's unique new theatre

**Q Theatre, Auckland newest performing arts theatre, was officially opened on August 26 by Mayor Len Brown. The Q complex provides a long-awaited centre for the city's performing arts. Situated partly in a heritage building at 305 Queen Street and partly in a new purpose-built venue alongside, the theatre is the result of many years of determination and hard work that arose from the demolition of the Watershed Theatre back in 1996.**

Q director Carla Theunissen says the venue is unique and the one of the most advanced of its kind in the world. Q offers two completely flexible performance spaces. Rangatira, the main 450-seat auditorium, can be configured in at least five different ways or have no seating at all; and the 120-seat Loft upstairs, which incorporates features of the original building and can be hired for private events as well as more intimate performances. "These spaces are unlike anything many audiences will have seen before and our programme will reflect that by offering vibrant, stimulating, world-class entertainment." A third room, Vault, operates as a rehearsal and performance space for about 80 people.

Designed by award-winning architect Pip Cheshire, Q's spaces also include Citizen Q (recalling the old building's previous life as a Citizens' Advice Bureau) and Lounge, with a full menu café operating during the day and a cocktail bar.



Photos courtesy of Simon Devitt.

On Sunday August 28, Q Open Day gave more than one thousand people their first glimpse of the stunning venue, from dressing rooms to centre stage. Visitors were led on a walking tour through the building with vignette performances and unexpected encounters at every turn. Market stalls sold food and drink, and performances were given by local musicians.

*Raising the Titanics* opened at Q on September 1, and the theatre is booked up for the rest of the year.

# Wellington

### Exciting new addition for school

**The new Pipitea Block for Wellington Girls' College was officially opened on 2 June. The new steel and glass hi-tech building is connected to the school's older classroom blocks. Replacing ten old prefabricated classrooms, the $6.2 million building has a new reception area, classrooms on three levels and administrative offices. Two atriums, the height of the building, provide a focus for the school, where students can socialise, and to allow more interaction between students and staff.**

Breaking from the traditional school mould of corridors and fixed classrooms, space is flexible. Each of the three levels of the building has one large room to be used as a teaching space, with two large rooms at one end. Two classes can be held in the large space at any one time, allowing team teaching with two teachers. These spaces can also be used for showing films, IT or discussion groups.

The first floor, housing English and media studies, has a sound booth and green room for filming. The second floor holds the social studies and history departments, and the third floor is divided in two, one half for Latin and classics, and the other for technology classes. The building has followed the latest Ministry of Education specifications with wireless internet and masses of data points. Each floor also has a workspace for staff, and resource rooms with kitchens for student use.

The building's steel frame design allowed the block to be built in less than twelve months. The new roof, constructed partially of glass, provides a lot of light. The building is fitted with underfloor heating. Ventilation in the educational spaces is both natural and mechanical. Cedar stairs are a highlight.

Designgroup Stapleton Elliott, the architects, softened the appearance of other parts of the school, particularly the bunker-like 1970s block. Because the school is on an important corner at the junction of Pipitea and Murphy streets, the design needed to reflect the urban surroundings. A forecourt doubles as an urban plaza for use by the public as well as the school.

# Central

### Health care in Wanaka

**During the 1980s, Wanaka's designation as a 'special health area' meant that it was a remote rural area in need of a doctor but which didn't have the population to support one financially. By the early 2000s, because Wanaka's population had grown so rapidly, and visitor numbers had soared because of the establishment of four ski areas, a health care centre became viable.**

A new multimillion-dollar family integrated healthcare centre was opened on June 20, thirteen months after construction began by Naylor Love and, in the words of one of the construction team, "just in time for the onslaught of snowboarding injuries". The centre is owned and operated by Wanacare Ltd which has three partners, Wanaka Medical Centre, Aspiring Medical Centre and Wanaka Physiotherapy.

A private venture into building a medical centre is unusual, and therefore the centre has generated a lot of interest both at regional and national level. The building will be a one-stop shop in health care, with tenants including Otago Radiology, a pharmacist, an optometrist, a chiropractor, a podiatrist, an audiologist, an acupuncturist, a psychologist, a counsellor and a massage therapist. It is a far cry from the days when Wanaka residents and visitors had to travel considerable distances for some of these services.

A key aspect in planning the 1983 sq.m centre was patient flow. Architect Colin Corsbie of Opus Architecture, Christchurch, designed a simple building of four blocks, in which a communal main entrance foyer links the three main medical practices, the communal consulting rooms and the subtenant occupancies.

Because the building is close to the adjacent retirement village and neighbouring residential properties, the visual impact of the building was lessened through the use of a lowered building platform partially excavated into the natural landscape. The roof form of each block was designed to follow the original land contour, which allows the building to sit more comfortably in its surrounds. Extensive planting around the perimeter also helped to lessen the impact of its size.

Within the tight budget, cedar cladding was used – but only at the building entrances and main facades – to soften the building and provide a warm, welcoming feel. At the rear, more cost-effective contrasting metal claddings and stained plywood linings were incorporated.

Solar glare inside the centre is reduced with generous roof overhangs. These also serve to anchor the building to the land, as do the downpipe supports which reach from the overhangs to the ground. The eaves also focus views from the interior to the stunning exterior landscapes, including the Criffel Range, which surround the building.

Large windows at each end of the internal corridors, which provide natural light in the core of the building, also provide fantastic views. Other sustainable design features include approved green-build materials and energy-efficient services. Extensive exterior landscaping is integral to the design.

The ambulance bay and service areas of the centre are all positioned on the south side, out of public view. The mechanical services plant is roof-mounted and concealed as much as possible by the roof forms.


# Christchurch

### Removing the dome

**The Catholic Cathedral of the Blessed Sacrament, Christchurch, designed by architect F W Petre, was a magnificent concrete and Oamaru stone-clad building, and regarded as one of the finest examples of church architecture in Australasia. It was often referred to as The Basilica because its style is based on that of the old Roman basilicas.**

Sadly, the cathedral was severely damaged during the devastating earthquakes of September 4, 2010 and February 22, 2011. It was hoped, however, that the huge 11m-diameter copper dome, which sat 30m above the ground, could be saved. Exterior inspection by engineers showed that the dome was forcing weight-bearing structures outwards and presenting a severe hazard to the surrounding area. Murray Flett, senior site manager, describes the challenge: "A couple of big aftershocks on June 13 really knocked the church around and caused a lot more cracking. The dome swayed around and wobbled like jelly before returning to where it had started from."

It was then apparent that the dome could not be lifted off the church in one piece because it was too dangerous to work alongside the bottom of the dome. Naylor Love and consultant engineers came up with another plan, which was to cut the dome in half horizontally, and take it down in pieces. On 6 July, *The Press* reported "that the copper dome that once stood proud on the city's Catholic Cathedral has been saved".

The large cross which sat on top of the dome was lifted down by crane, and the copper and wooden beams (some up to 500mm wide) were stripped off. Catholic Cathedral spokesman Lance Ryder said that "contractors have assured us that at this stage, the dome will possibly be able to be rebuilt in its current form". Naylor Love was also able to save the four bells hanging precariously in the badly damaged bell tower. In the meantime, the fate of the whole building is still up in the air.

*The Basilica before September 4 2010*

*The dome being dismantled piece by piece*

# Dunedin

## University Plaza meets stadium

**Otago University Plaza building 1, an integral part of the new Forsyth Barr Stadium, shares one wall in common with the stadium, providing the 'backbone' for the west stand. The building will house academic and recreational facilities.**

The exterior of the building had to be finished by the Rugby World Cup matches in Dunedin. In mid-August the exterior was completed on programme and handed over. The combined roof and exterior shout to celebrate this milestone, held on site, was attended by nearly 200, including university staff and the architects. It was a great night! Finishing the exterior gave the project a real lift, especially when the scaffolding to the north was removed to reveal the building in its full glory.

The project has been extremely intense. Within one year of starting on site, including eight weeks in the ground doing the foundations, the exterior is complete, and the internal fit-out and finishing trades are well under way. Currently at a peak of 130 trades staff on site, the average is 70. Nearly 155,000 man-hours of work have been delivered so far.

The scaffolding was removed from the first gymnasium by the time of the Rugby World Cup matches, allowing the start of the sprung timber floor. Completion of the whole building is due in December. The north end of the building requires only the finishing trades and commissioning.

The new Oamaru-stone clad building is looking really sharp, and everyone associated with this project is proud of it. The support, commitment and hard work of everyone are really appreciated.

## Another top apprentice

On September 2, Ryan Keogh – a final year apprentice with Naylor Love Dunedin – was announced the overall winner of the Otago/Southland Registered Master Builders Apprentice of the Year, in association with Carters. Congratulations to Ryan and everyone who helped trained him.


## Fuchsia Gully Track

Naylor Love's relationship with Orokonui Ecosanctuary has continued with our sponsorship of the Fuchsia Gully (Te Ara Kotukutuku) Track. Ian McKie is pictured beside the sign leading to the 20-minute track. We are pleased and proud to be associated with this world-class sanctuary, which is well worth a visit. The 307-hectare ecosanctuary is the only area of native forest in mainland South Island where indigenous plants and animals can live in the wild without threat from most introduced pests.

*Ewan Oats, Paul Stevenson, winning apprentice Ryan Keogh and Jason Tutty.*

# Queenstown Airport baggage handling unit

**Client survey results**

| | |
|---|---|
| **Value:** | $3.7 million |
| **Client:** | Queenstown Airport Limited |
| **Project manager:** | Robin Bashford |
| **Foreman:** | Rob Kerr |

**Project background**

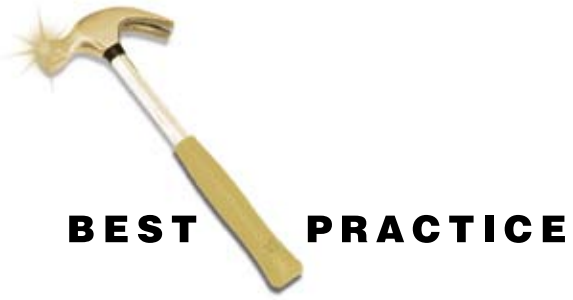
Expansion of the baggage handling area was needed to accommodate increased passenger numbers, Jet Star's entry into the Queenstown market, and future anticipated growth at the airport. Naylor Love was on site in October 2010, handing over the operational unit two months later, on budget and a week early, on 7 December.

Naylor Love was awarded the project ahead of four other contractors, in part because of its excellent construction record with Queenstown Airport and its confidence that the company could achieve the deadline. The client commented that he knew that Naylor Love would be proactive in their dealings and that the relationship would be a constructive one.

**Client's comments**

Overall, the client was impressed by the project team's planning and efficient management of the construction process, and its "fantastic delivery of programme". The client was very satisfied with the quality of workmanship and level of experience shown. "Naylor Love was great, they don't walk away from the job, everything was ticked off."

The client said it was hard to fault Naylor Love. "We were very happy with the whole process and final outcome."




The project management company felt it was very important that Naylor Love took part in the problem-solving to deal with issues. "They made our job so much easier, they think ahead and become part of the solution. Problem-solving with us speeds up the whole process."

**Learnings**

- Take the successful learnings from this project to apply to other projects.
- Share the philosophies and actions of this project around the group.

**By the numbers**

| | |
|---|---|
| Client satisfaction with the finished product | 100% |
| Client satisfaction with the overall service from Naylor Love | 100% |
| Impact of defects to client at handover* | 90% |
| Use Naylor Love again | 100% |

* 100% = defect-free; 80% = a few defects with no significant impact; 50-60% = some defects with some impact on clients; 10% = totally defective.