

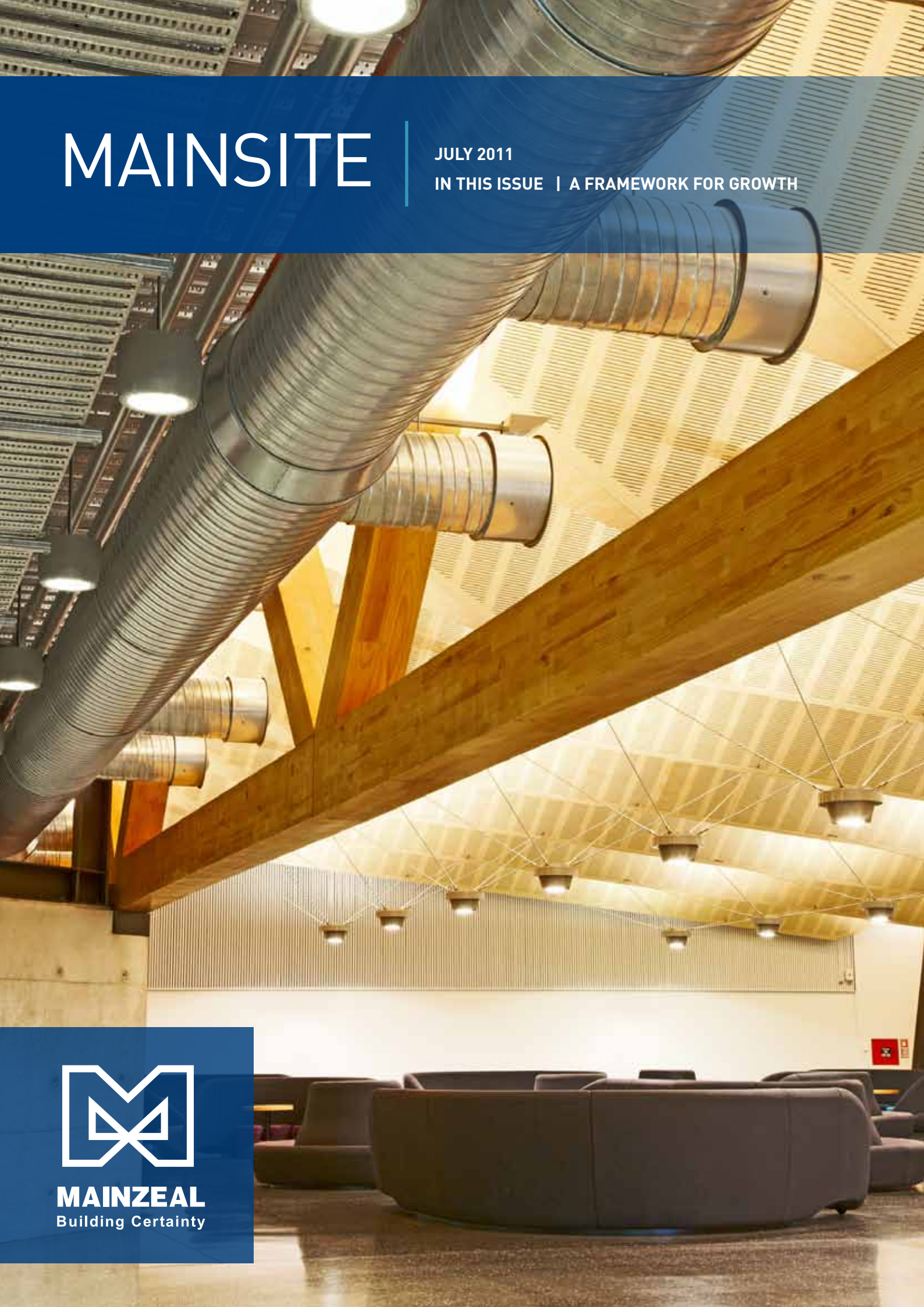
MAINSITE

JULY 2011

IN THIS ISSUE | A FRAMEWORK FOR GROWTH



MAINZEAL
Building Certainty



CEO COMMENT

Mainzeal's business continues to flourish on many fronts and there are signs that 2012 will be a growth year in demand for our services. It is my job to ensure Mainzeal's management structure gives the leadership, energy and skill level to take advantage of this market upturn.

As an example of Mainzeal's many different growth areas, our Project Management Organisation joint venture with MWH will quadruple in size and Mainzeal Infrastructure headed by Darren Mason is now in solid growth mode. Mainzeal FM is actively engaged with a number of companies determining their facilities management needs. The Project Definition team is moving through the critical stages of finalising our Design and Construct offering in the Wiri Prison PPP and Mainzeal has been short-listed for the Ministry of Education's PPP for two schools in Hobsonville.

All of these activities are in addition to Mainzeal's core business of securing and successfully delivering many construction projects throughout the year.

With this in mind we have further developed our organisation structure to effectively grow our business further.

These organisational developments have seen Paul Stewart take up the new role of General Manager Project Services. This role will take on board the ever increasing demands of our business, which is working directly with clients and consultants to

prepare solutions for repair and rehabilitation of buildings. This is a highly specialist role and Paul's credentials are a great fit for this new service offering.

To increase Mainzeal's management depth, the role of Executive General Manager Construction has been created to look after all Mainzeal's construction projects throughout New Zealand. Dave O'Donovan has accepted this position and as of 1 June, the Area and Regional Managers have been reporting directly to Dave.

John Hemi has been promoted to the position of Manager Auckland Region. John has a 17 year history with Mainzeal. His previous roles have included Auckland Construction Manager and Project Manager.

The position of General Manager Central Region is being filled by Greg McFetridge. Greg has worked in both the Central and South Island regions in his 19 year history with Mainzeal. Previous roles have included Wellington Construction Manager, Project Manager and Branch Engineer.

Please join with me in congratulating Paul, Dave, John and Greg on their new positions, all of which will provide further depth and certainty to continuing to grow Mainzeal's business successfully.

Thank you to all for your commitment to Mainzeal and I look forward to making further announcements in the not too distant future.



A handwritten signature in black ink, appearing to read 'Peter Gomm', written over a white background.

Peter Gomm
Chief Executive Officer
Mainzeal Property and
Construction

CONTENTS

| | |
|----------------------------|----|
| CEO Comment | 2 |
| Air NZ Regional Lounge | 4 |
| Top of Mind | 6 |
| Innovative Geyser | 8 |
| Inter-island Link Pole 3 | 10 |
| Mahinawa School | 12 |
| Manukau Library | 14 |
| Vogel Tower | 15 |
| S&T's Fitout | 16 |
| Wynyard Quarter Sheds | 17 |
| Buttle House | 18 |
| Meridian First Light House | 19 |
| Work in Progress | 20 |

Cover and image below:
Air New Zealand Regional
Lounge, Christchurch Airport.
Photography by Lightworkx

CHRISTCHURCH AIRPORT GETS A NEW REGIONAL LOUNGE

Mainzeal was commissioned in January 2010 to construct the Air New Zealand Regional Lounge for Christchurch Airport. This stunning gateway to Canterbury features exposed structure, natural timbers and a black polished concrete floor.

Christchurch International Airport is New Zealand's second largest airport. Not only is it the South Island's most important air connection to worldwide trade and tourism markets, the airport also has an important role as a vital domestic hub, enabling passengers to connect to the complete range of destinations throughout New Zealand.

Situated to the east of the new main terminal building, the Regional Lounge is a joint development between Christchurch International Airport and Air New Zealand. Initially it will service Air New Zealand's turbo-prop aircraft and their passengers on flights mainly throughout the South Island. In the longer-term it has the capacity to service other airlines as well.

The new Regional Lounge has a 3,500m² footprint overall. The internal space includes a large hall area of around 1,800m² that serves as the main terminal departure and arrivals hall and also contains an Air New Zealand Koru Lounge. A retail and services block is located on the eastern side of the hall and a gallery area to the west is connected to the main terminal via an upper level bridge.

The building has a number of distinct features including a 55m long by 4.5m high Pinus Radiata laminated truss which is central to the design. It is one of several main structural elements left exposed in the finished building. Particular care was taken to protect these elements during the construction phase to ensure their finishes remained in good condition.

Other highlights of the building include perforated hoop pine veneered ceiling panels which are fitted to a saw tooth profile, vertical strips of interlocking frosted glass imported from Germany and walls constructed with several different materials.

The screens surrounding the Koru Lounge consist of a series of timber and steel fins embedded in river stones.





The exterior cladding includes 10m high ribbed precast wall panels which line the north-east face. Due to the tight confines of the Regional Lounge site, particularly close attention was paid to the technical and logistical parameters surrounding the installation of the panels.

The concrete mix for the polished floor to the main departure and arrivals hall was coloured black and had white quartz aggregate speckled through it. Quality control and the ability to be consistent with the mix were very important as the project required multiple concrete pours.

The project had its share of challenges, not the least being the extremely strict security and access protocols that go with working alongside a fully operational and busy airport terminal.

On this project the constraints of an already restricted building site were made even more so because of the

volume of building works happening elsewhere around the airport. There was nowhere else that public access could be rerouted through so while constructing the Regional Lounge building, Mainzeal was required to maintain unrestricted pedestrian access through the site for the general public.

From the first day of construction, Mainzeal accommodated the public walking through the site via twin temporary container tunnels. Maintaining the access route resulted in significant staging of the project and apart from the one week when the tunnel was deconstructed, the public walkways were kept open right throughout the project.

With the completion of the Regional Lounge, Christchurch Airport now has a showcase of modern engineering and architectural design and presents a fresh new look as the gateway to the Canterbury province.

BUILD STATS

| | |
|-------------------|--|
| CLIENT: | Air New Zealand and Christchurch International Airport |
| PM: | Octa Associates |
| ARCHITECT: | BVN Architecture Jasmax Ltd |
| ENGINEER: | Buller George Turkington |
| SERVICES: | Medland Metropolis |
| PQS: | White Associates |

For Mainzeal this was an opportunity for delivering another successful high-end project and again demonstrating construction excellence and providing 'building certainty'.

TOP OF MIND

JOHN HEMI
AUCKLAND MANAGER



While our thoughts and feelings of compassion go out to those in Christchurch the shock waves from these events are only now beginning to impact on our Northern Region marketplace.

The recent period of very competitively bid and cost driven procurement is anticipated to change significantly over the coming year as rebuilding work picks up and labour and resources shortages nationally start to put inflationary pressure on the local industry.

Our Northern Region team has been busy with tendering for new work and our site teams are all fully engaged constructing high quality projects for our valued clients.

While we steadily grow our resource capability to match our slowly but steadily increasing workload our focus on Early Contractor Involvement (ECI) and the opportunity to add value to our

clients building project has remained our primary focus. As the complexion of our market changes the real benefits of ECI will become more pronounced and the historical dumbing down of construction documentation due to fees competition may be redressed.

We continue to widen our skill-set on top of projects like Geyser where the NZGBC 6 star Office Design building has New Zealand's first fully activated twin skin façade. On this project we have moved the bar in safety systems even further with a highly developed management system for the confined space top-down bulk excavation activity currently in progress.

It is a thrill for me to have this opportunity to share my thoughts and I know all our staff are very excited by the many challenges and massive opportunities we have developing in front of us.

DAVE O'DONOVAN
EXECUTIVE GENERAL
MANAGER CONSTRUCTION



In our last edition I pondered the productivity holy grail and reflected that strong joined up teams are producing some great results. To some large extent we make our own good fortune and it is certainly about grabbing it with both hands when it comes along. Meal time at our place was very much the quick and the dead!

One such opportunity that appeared on the horizon in mid-2010 was an enquiry from Victoria University of Wellington asking whether Mainzeal would assist with their post graduate student entry into the US Department of Energy Solar Decathlon project. We were happy to say yes but truly did not appreciate the works that would be required to assist with this compact 60m² well design, energy efficient Kiwi bach. The students,

the University and the wider industry in New Zealand have come together as a strong joined up team and delivered something pretty special. This Mainsite profiles the project and for those in the Central Region, we hope you made the worthwhile visit to Frank Kitts Park in Wellington. It is truly a stunning creation and if asked to join again we would definitely say yes again only it would be a louder and more emphatic YES.

The project has been challenging for the team but plenty of fun also. The learnings for us – amongst everything else – is to be confident in that next generation because if the passion and enthusiasm evident in the students is a reflection of the standard of students graduating from VUW architecture school then we are all in good hands.

PAUL BLACKER
SOUTHERN REGION GM



As I prepare my 'Top of Mind' it's hard not to comment on the on-going dynamics in post-earthquake Christchurch. With media attention turning to other news items it's difficult for those living outside of Christchurch to comprehend the situation that continues to impact daily on society in so many ways.

As the number of commercial buildings slated for demolition is now suggested to be in excess of 1,000 it is easy to forget that each one of them has a business of some sort attached – many of which are no longer trading – contributing to a spike in regional unemployment. Residential buildings are facing even higher numbers of demolitions, creating challenges for families and communities.

Pockets of the construction industry are busy, while others are not. The residential rebuild is struggling to gain traction and is unlikely to do so until clarity is achieved on land status. The commercial remedial/rebuild has

also slowed while detailed structural assessment is completed to many of the CBD's buildings. Many construction businesses are using this period to prepare for what will ultimately develop into a heated market when multiple work streams come online.

The face of Christchurch has changed physically as have the city's traffic patterns, eating, shopping and schooling locations to name but a few. A 'new normal' is beginning to emerge as individuals and businesses begin to recognise that there remains a significant journey ahead.

To our clients, it has been encouraging to receive your letters, emails and phone calls acknowledging our staff and the difference that they have made in your personal circumstances. We enjoy the relationships we share and our genuine desire is to continue providing certainty in a city that will arguably face a level of uncertainty going forward.

BRIAN OLSEN
HEALTH AND SAFETY



An in-depth review of the Mainzeal management system was undertaken recently. The results proved the effectiveness of the system and only minor changes have been recommended.

Reviewing safety incidents over the past ten years show a marked and steady decline in the number of lost time and medical injuries. Not only have the raw numbers of incidents reduced but the frequency rate for both lost time and medical injuries shows a significant reduction.

Being in the ACC Partnership Programme, Mainzeal is responsible for its own injury costs for Mainzeal employees. These costs have also shown a dramatic reduction and are now among the lowest for the construction industry.

This indicates that there are not only fewer injuries but the injuries that do occur are less severe and therefore have a reduced recovery time.

Our random drug screening programme was recently introduced and is now well underway in all regions. It is pleasing to note that of the 60 or so screenings conducted to date we have only had one positive result for an illicit drug.

Mainzeal's positive safety indicators such as the monthly site audits and weekly inspections have over the past ten years shown a steady increase in compliance with the Mainzeal safety standards. Careful tracking of our audit results, site specific safety plans and the issue of non-conformances indicate a marked improvement in all regions.

INNOVATIVE GEYSER IS UNDER CONSTRUCTION

Geyser is lifting the bar on office building design in New Zealand. Mainzeal's team is making the project a reality and it is full-steam-ahead on all fronts.

In May 2010, Mainzeal was selected as main contractor to construct New Zealand's first NZGBC 6 Star Office Design certified building. The 6 Star rating was awarded in late 2009 and represents 'world leadership' in the New Zealand Green Building Council's Green Star rating system.

The Geyser development is located in a prime Auckland location on Parnell Road and includes a commercial community of five individual buildings set around an

arrangement of open walkways, elevators and stairwells.

The complex has retail on the ground floor and three upper levels totalling 5040m² of primarily office space. Five lower basement levels accommodate 165 vehicle spaces which are serviced by an automated car park stacker machine.

Obviously a 6-star building will have some outstanding features, and this one has a fully active openable double skin façade, it requires no air-conditioning and minimal heating, to name just a few.

The construction of the Geyser Building is receiving attention from multiple sectors within Mainzeal.

First and foremost is Mainzeal's on-site construction team. The eleven person

site team is operating on multiple work faces which cover the tight confined site. Construction activity is done simultaneously above and below the ground level slab. Excavation of the five level basement is underway while also we are also erecting the four level structural steel for the buildings above ground.

The site is situated in a busy street with neighbouring businesses and residential dwellings. This places additional planning and logistical challenges on the site team to ensure they operate effectively and efficiently while maintaining minimal day to day disruption.

King Façade New Zealand, our joint venture with one of the world's foremost façade engineering and manufacturing companies, is working with Patterson Associates to develop the innovative





façade for the Geyser Building. King Façade will use their specialist supply chain to procure the extensive stainless steel, low-iron and low-E glass used on this project, and they will ultimately install the complete façade.

Mainzeal's Project Definition team has expert in-house Building Information Modeling (BIM) capability. BIM takes material from all the design consultants and creates a smart combination of 3D-model and database information. By providing full BIM modeling showing the integration of the building structure with the double skin facade, Mainzeal can sort out issues early within the virtual world, which makes for a smooth and efficient construction phase.

Another area where Mainzeal is using BIM to assist with planning the build process is around the components critical to the automated car park stacker. This sophisticated piece of machinery relies

on small tolerances so sorting out any design conflicts or element clashes early makes good sense.

The on-site implementation of the designed NZGBC Green Star features is a further field where Mainzeal's in-house expertise is being applied to Geyser. There is a high administrative element to the Green Star process and getting systems in place early is crucial. Mainzeal have an on-site Green Star Accredited Professional at Geyser and our Sustainability Manager provides support to the team as required. Including Green Star in the inductions for all on-site staff also ensures everyone is on-board to deliver the Green Star rating.

As with all projects, focused, methodical and detailed planning leads to the most efficient and effective building work. The bar is being raised in terms of building performance and so too must our planning tools become more

BUILD STATS

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|-------------------|---|
| CLIENT: | Samson Corporation |
| PM: | RCP |
| ARCHITECT: | Patterson Associates |
| STRUCTURE: | Morconsult |
| SERVICES: | Medland Metropolis eCubed Building Workshop |
| PQS: | Rider Levett Bucknall |

sophisticated. Mainzeal's expanded platform of expertise is being used to benefit the work at the coalface on Geyser and will result in a more fully coordinated build process and greater surety of outcome.

Good progress is being made on site with the Geyser project which is planned to be completed in March 2012.

INTER-ISLAND LINK POLE 3 DEJA VU FOR MAINZEAL

Transpower is carrying out a project to replace Pole 1 of the inter-island HVDC link with a new pole by 2012. Mainzeal is the civil subcontractor for this project. We are contracted to Siemens who in turn is working for Transpower.

The project has an element of déjà vu to it because 20 years ago Mainzeal was on site at Haywards and Benmore building the converter stations for Pole 2.

The Benmore and Haywards converter stations form the end points of the main power transmission lines from the South Island hydro to the lower North Island. High voltage power is converted

from AC to DC at the Benmore end for transmission purposes and then re-converted at the Haywards end for distribution to the network.

The new pole (to be known as Pole 3) will be a state of the art thyristor valve unit and together with the existing Pole 2 will increase the capacity of the overall HVDC inter-island link to 1000 MW from 2012, and 1200 MW from 2014. Once Pole 3 is built, the old Pole 1 will be fully decommissioned and removed.

Mainzeal is constructing a control building of approximately 1,400 m² in footprint at both the Haywards and Benmore sites. Central to the building is the valve hall and along its side are the three transformer rooms. At one end are the support spaces including areas for the safety systems and the control room.

The buildings have been designed for a 100 year life span and to also withstand a 2,500 year earthquake event. The floating slab sits on base isolators and sliders sourced from America. The building is designed to move 750mm in all directions on the horizontal plan and return to its original position after the event.

A substantial amount of the project scope involves the below-ground works. For the Haywards building, the foundations consist of 83 piles with depths ranging from just 2.5m through to over 25m. The raft slab is 500mm thick and carries the 83 bearer plinths and inverted slider plinths. Above the raft slab is the base isolated floating slab and remaining structure to house the sensitive equipment required to convert DC-AC or AC-DC. The Benmore building is similar but it does not require the piles.





Due to the nature of the site, earthing is a significant feature of the project. Under the whole switch yard site is a copper earthing grid and all buildings and major plant are connected to it to ensure there is no difference in potential across the site. As well as there being many connections from the building structure and reinforcing within the concrete back to the earthing grid, large items of construction plant such as cranes are required to be connected to the copper earthing grid with what could be described as large jumper leads.

Understandably on the Benmore site, the cold weather and remote location have posed challenges. The issue of cold temperatures have been overcome by tenting the concrete pours with a large heated marquee. The remoteness of the site has required the establishment of a mobile concrete batching plant in nearby Otematata and the setting up of a mobile crushing/ screening plant just down the

road. All the excavated material has been recycled back to the site as hard fill.

Technical design challenges associated with achieving the seismic stability of the buildings and the three 20 tonne thyrester valves housed within the valve halls put significant pressure on the construction programme so Mainzeal re-planned the build phase to recover time.

Months were taken off the original build programme by changing the major spine walls and buttress walls from insitu concrete to 50 tonne precast wall sections. The main spine wall on each site is 40m long by 20m high and 300mm thick. The tower cranes were replaced with 200 tonne mobile crawler cranes to handle the heavy panels.

Prefabricated roof sections which were fully clad, lined and fitted out were another time saving construction feature Mainzeal employed to assist the

BUILD STATS

END CLIENT: Transpower
MZ CLIENT: Siemens
ARCHITECT: CCM Architects
STRUCTURE: Aurecon
SERVICES: Aurecon

Photograph above: Haywards

Photograph left: Benmore

programme. The roof sections were built on the ground and lifted into position when the main valve hall foundations and wall structures were complete. Using prefabricated roofs meant there was minimal time needed to complete the internal fitout once they were in place.

MAHINAWA SCHOOL HAS SOMETHING SPECIAL

Mainzeal has recently completed a new special purpose school which was built within the grounds of Mana College in Porirua. The new school caters for up to 40 students and has considerably more specific design requirements than that of a standard school.

Mahinawa School is a state owned, coeducational facility catering for students with intellectual, physical, emotional and behavioural disabilities.

The existing school site and buildings did not meet the requirements of the special needs students so it was determined that

a new school located on the Mana College site in Porirua was the most suitable long-term option.

Mainzeal was awarded the contract to build the school following a traditional tender process, however the project came in over budget so before any construction could begin, a value engineering review was needed. Mainzeal assisted the consultants to identify and assess cost saving options and collectively the team were able to bring the project back on track allowing the project to proceed.

The Ministry of Education's project brief included that the school should achieve a 5 star New Zealand Green Building Council rating for 'Design' and 'As built'. As main contractor, Mainzeal had significant input into achieving the desired rating. Mainzeal is one of just

a few main contractors in New Zealand whose environmental management systems are ISO 14001 certified.

The school is entirely accessible and contained in a single storey block which features a curved floor plan. It includes seven main classrooms, a therapy room, art, music, kitchen and library spaces, as well as staff resources and offices.

All classrooms have built in storage, an accessible bathroom, a kitchenette with roller shutter door and an office. The lower walls are lined with Strandboard and Autex composite panel art boards.

To accommodate wheelchair users, the kitchen classroom is fitted with adjustable sink benches that can be raised or lowered by the user with the flick of a switch.





Another special purpose feature is a ceiling mounted hoist system located in the therapy area. The system provides hoist access to a number of neighbouring rooms so the hoist rail cuts through several door frames.

A central corridor winds through the school and has high level windows providing natural light and ventilation to the internal spaces. Dealing with the curves in the building was a challenge with elements like the door and window liners all needing to be specially manufactured to suit the four different radii used in the design.

The exterior features full height glazing, precast concrete panel walls with a clear anti-graffiti finish, and vertical cedar shiplapped weatherboards. On the north face, a timber slat canopy helps control solar gain in the summer. The interior walls and roof structure are all timber framed.

Recycled aggregate was used in all the concrete work for the project and all the timber was sourced from a Forest Stewardship Council certified source.

The school is naturally ventilated and uses under floor heating. Solar panels mounted on the roof contribute to the heating of water. Lighting controls include occupancy sensors and automatic daylight dimming. A Building Management System is monitoring inputs from items such as the boiler and solar panels and takes data from the electricity, gas and water meters. The information will be used to assist with building tuning.

There was substantial landscaping work around the new Mahinawa School. Special features included a cycle track, a general playground, a sensory playground and an orchard. A stream running through the site was cleared of weeds and the banks replanted with

BUILD STATS

| | |
|-------------------|-----------------------|
| CLIENT: | Ministry of Education |
| PM: | Arrow International |
| ARCHITECT: | Opus |
| STRUCTURE: | Opus |
| SERVICES: | Opus |
| | Holmes Fire & Safety |
| | eCubed Building |
| | Workshop |
| LANDSCAPE: | Opus |
| PQS: | Davis Langdon |

Riparian plants to improve the stream's ecology. All plants in the landscaping were sourced within a 40km radius of the school, reflecting the project's focus on using sustainable resources.

THE MANUKAU COMMUNITY AND RESEARCH LIBRARY IS OPEN

The new Manukau Community and Research Library came about by combining the collections of the Manukau City Centre Library and the Research Library and then reopening at a new central location.

By combining the research centre and community library under one roof, the community has been provided with a bright and accessible one-stop-shop. In mid-2010 Mainzeal was awarded the contract to remodel the building and it was one of the first construction contracts established under the new Auckland Council.

The floors had previously been tenanted by the ANZ bank so extensive renovation

was required to transform them into the new library. The Manukau Community and Research Library is spread across two levels, with the ground floor housing the main public library and the first floor containing the research and archives library.

The design was influenced by Pacific traditions, noticeable in the patterns, textures and colours of the refurbishment. Historical images of the Manukau area feature on the transparent film that has been applied to the ground floor windows.

The refurbishment included an extensive upgrade to the building services, including new plumbing, electrical, data, fire, security and air conditioning. Many of the building services are connected to a Building Management System, allowing remote independent monitoring.

The refurbishment was completed in an occupied working building and handed over to the Council on time and under budget – thus concluding a successful project for both the Auckland Council and Mainzeal. The library was officially opened by Mayor Len Brown in April.

BUILD STATS

| | |
|------------|--------------------|
| CLIENT: | Auckland Council |
| PM: | Davis Langdon |
| ARCHITECT: | Creative Spaces |
| ENGINEER: | Medland Metropolis |
| SERVICES: | Medland Metropolis |
| PQS: | Davis Langdon |

Photography by Sean McCabe





VOGEL TOWER AS GOOD AS NEW

The refurbishment of the Vogel Tower is the final stage in the Vogel Campus development. The total project has been carried out as a Mainzeal Design and Build contract.

The Vogel Campus development commenced with the construction of a new seven-level 17,660m² podium building. The new building wraps around two faces of the Vogel Tower and there is a six-storey atrium linking the new to the old through a series of bridges.

The Vogel Tower was a typical 1960's built Ministry of Works designed building. The upgrade and refurbishment has transformed the tower into a smart modern office tower.

The tower floor plates have been extended on all sides by a concrete strip supported by new structural steel. The main tower has been completely reclad in a curtain wall system which features white and charcoal Alpolac panels.

The building features new ceilings and floor finishes throughout and the lift cores, toilets and building services have all been upgraded.

BUILD STATS

| | |
|------------|---|
| CLIENT: | AMP Capital Investors (New Zealand) Ltd |
| PM: | Mallard Cooke |
| ARCHITECT: | CCM Architects |
| ENGINEER: | Aurecon |
| SERVICES: | Beca |
| PQS: | Rider Levett Bucknall |

The refurbishment was staged to accommodate the existing tenants. The building is now fully let and Mainzeal Interiors is currently completing fitouts on the upper floors.

STEPHENSON & TURNER'S GREEN STAR FITOUT

Stephenson & Turner's Wellington crew have moved into new offices in Victoria Street and Mainzeal Interiors delivered the fitout. Wanting a 6 star NZGBC Interiors certification for the project meant there was no compromise when it came to sustainability.

It was important for Stephenson and Turner that they showed their commitment to sustainable design through their own fitout and also showed that it didn't have to necessarily mean a lot of increased cost.

The new 440m² of office is on the 2nd floor of a building that dates back to 1899. It features tongue and groove flooring

and red brick exterior walls with double hung windows. The office space had been difficult to lease because access was only by stair. A clever solution was found by cutting a hole in the wall through to the neighbouring Feltex House and utilising their means of egress. The entrance through Feltex House means the office now has an improved building entry point and dual lift access.

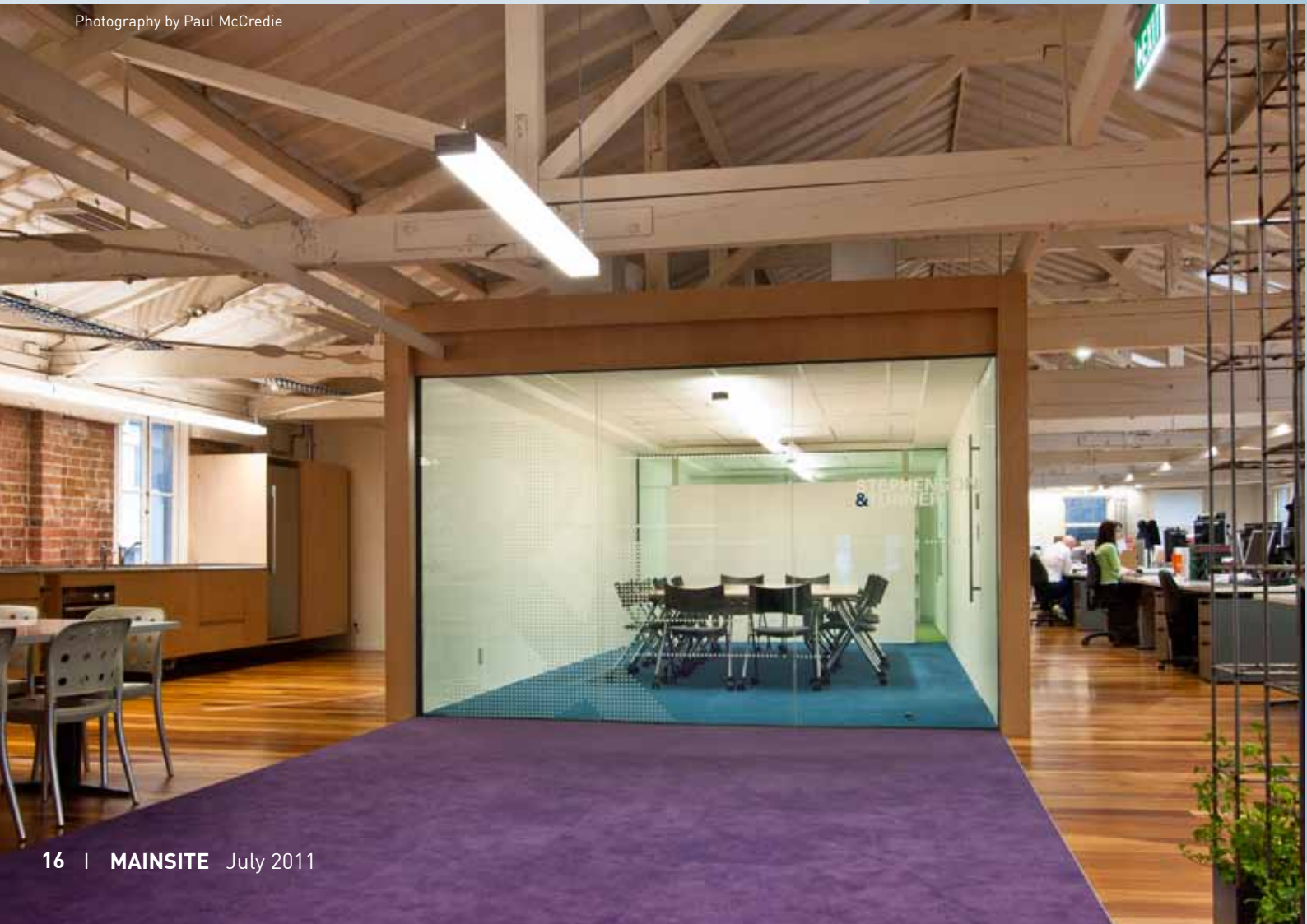
The new fitout includes an open plan design studio, three meeting rooms and related service rooms. Additional insulation was added to the roof to improve thermal and acoustic performance and skylights were installed to increase the natural lighting. Other green features include using only recycled or FSC certified timber and all applied coatings are low VOC. The office is naturally ventilated and energy efficient appliances were chosen.

Interiors manager, Peter Clark says, "Mainzeal was very keen to work with Stephenson & Turner on this project. Mainzeal has done the hard yards getting ISO 14001 certification and lots of our staff have received NZGBC training. Having the opportunity of supporting Stephenson & Turner on their project is something we are very proud of. There was a big celebration when the final tick came through."

BUILD STATS

| | |
|------------|---------------------|
| CLIENT: | Stephenson & Turner |
| ARCHITECT: | Stephenson & Turner |
| SERVICES: | Stephenson & Turner |

Photography by Paul McCredie





WYNYARD QUARTER RED SHEDS

Mainzeal's involvement in the Wynyard Quarter includes the construction of three new buildings and the refurbishment of the old Cargo Shed. The buildings are an integral part of the area's regeneration.

Work on the 1930's Cargo Shed included temporary support of the existing timber structure whilst new foundations were excavated and formed within the building. A new structural steel frame provided lateral stiffness whilst the buildings

vertical dead load was carried through the existing timber frame to the new foundations. A new concrete slab was then cast inside the Shed.

A feature of the Shed was its large red timber doors. Refurbishment work included removal of all rotten timber and replacement with new TG&V cut to the original profile. Our carpenters also built matching new doors for the gable ends.

The new single storey buildings have lightweight structural steel frames on pad foundations overlain by a floating rib-raft slab. To relate back to the Cargo Shed, they feature blade walls clad with

BUILD STATS

| | |
|------------|---|
| CLIENT: | Auckland Waterfront Development Agency |
| ARCHITECT: | Fearon Hay |
| ENGINEER: | Buller George Turkington |
| SERVICES: | Medland Metropolis |
| PQS: | Maltby's |

the same red painted TG&V as the Cargo Shed doors, with 4m high steel framed doors and windows. A profiled metal roof with large cantilever overhangs will provide ample shelter for outside dining.

Hospitality fitouts are now underway so the buildings will be ready before the start of the Rugby World Cup.

BUTTLE HOUSE IS GRACEFULLY REFURBISHED

Dingwall Trust provides a wide range of services to children and families in need in the community. Mainzeal undertook the refurbishment of heritage listed Buttle House which was officially opened in May.

Buttle House is located in Papetoetoe and was originally built in the 1920's as an orphanage. It was later converted into office space.

Mainzeal's scope of work was to transform the building's current office spaces back to their original purpose, creating twelve accommodation rooms for children, two amenity rooms, two kitchens and dining areas and two staff living quarters.

Apart from the existing plastered double brick veneer internal walls, all walls were demolished and replaced with pre-cut pre-nail frame walls. Concrete pedestals supported structural steel beams which in turn held up the new LVL beams. This new structure helped to brace the clay tiled roof and the new walls.

Joinery work included returning all the old double hung windows to good working order, requiring new sash chords and realignment.

The terracotta roof was extended on both sides, keeping the same roof lines as those existing. The two chimneys were strengthened using spiral insert ties and reinforced concrete centrally placed.

Finding new bricks to match the existing ones proved challenging, however after two months of searching the team finally

found a source from a brickworks that was closing down in the Waikato.

New building services included central heating, security, video, audio and electrical. The existing drainage and plumbing were also upgraded.

Completion of the project was achieved in early April 2011.

BUILD STATS

| | |
|------------|-----------------------------|
| CLIENT: | Dingwall Trust |
| ARCHITECT: | de Lisle Jenkins Architects |
| ENGINEER: | BCD Group |

Photography by Sean McCabe





MERIDIAN FIRST LIGHT HOUSE IS PACKING ITS BAGS

Mainzeal is a major sponsor of the Meridian First Light House and has been on hand throughout the build.

Victoria University has been selected as one of 20 university teams to compete in the U.S. Department of Energy Solar Decathlon 2011 and is the only entry, ever, from the southern hemisphere.

The competition challenges teams, through a series of ten contests, to demonstrate inventive clean-energy solutions by building solar-powered houses that feature cost-effective,

energy-efficient construction and incorporate energy-saving appliances and renewable energy systems.

Mainzeal has supported the project by assisting with the management exercise of getting the house built, deconstructed, and shipped over to the US ready for the competition which starts in September.

Mainzeal has helped with material and process selection, assisted by bringing subtrades to the team and by facilitating their inputs. Mainzeal was on site during the build to ensure the process came together smoothly and to oversee the health and safety management.

Regional Manager, Dave O'Donovan said, "We saw it as an opportunity of extending our relationship with Victoria by assisting the students with the project."

The Meridian First Light House has been on display at Frank Kitts Park in Wellington and regularly had long queues waiting to take the tour. The house is now being packed up ready to be shipped to the U.S. for the competition.

Keep up with the competition at www.firstlight.ac.nz
Photo above L-R Mainzeal's Steve Ryder with students Lizzie Earl, Anna Farrow, Ben Jagersma, and Eli Nuttall.

WORK IN PROGRESS

AUCKLAND CONSTRUCTION

Client: Air New Zealand
Hangar 3
Client: Northland District Health Board
Whangarei Hospital Redevelopment Stage 1A –
Mental Health Inpatient Unit
Client: Samson Corporation Ltd
Geyser Building
Client: Massey High School BOT
Performing Arts and Administration Block
Client: Auckland District Health Board
Auckland City Car Park
Client: Victory Christian Church Property Trust
Victory Christian Church Reinstatement
Client: Fisher & Paykel Healthcare
Building 3
Client: New Zealand Police
Otahuhu Police Station

AUCKLAND INTERIORS

Client: Counties Manukau District Health Board
Fixed Facility Dental Clinics
Client: Auckland Tourism Events and Economic
Development
Levels 7 – 9 Fitout
Client: AMP NZ Office
Goodman Property Services Base-build & Fitout
ANZ Level 13 Base-build Refurbishment
Client: Department of Corrections
Auckland Prison East Division A Block Yards
Client: Auckland International Airport
Schools Acoustic Upgrade
Client: Inland Revenue Department
Levels 6 and 7 Fitout
Client: New Zealand Police
Pukekohe Police Station
Manurewa Police Station
Client: Auckland District Health Board
Greenlane CSSD Level 2
Dialysis Unit Greenlane Clinical Centre
Client: Neil Group
8 On Nugent Level 4 Base Build

WAIKATO/BAY OF PLENTY

Client: Hamilton District Court
Hamilton District Court AVL Facility
Client: Lakes District Health Board
Lakes Health Service Improvement Project –
Rotorua Hospital
Client: Braemar Hospital
Braemar Stage 2 Demolition Works

CENTRAL

Client: Ministry of Social Development
Youth Justice Lower North Redevelopment Project
Client: New Zealand Defence Force
Ohakea MSS Building
Client: Awapuni Four Square
Awapuni Four Square Extension

WELLINGTON CONSTRUCTION

Client: AMP Capital Investors
Vogel Campus Stage 2
Client: National Library of New Zealand
National Library of New Zealand Building
Redevelopment
Client: Victoria University of Wellington
The Hub
Client: Siemens/Transpower
NZ Inter Island HVDC Pole 3 Project – Haywards
Client: Wakefield Health Ltd
The Bowen Theatres
Client: Wellington City Council
Wellington Indoor Community Sports Centre
Client: Ministry of Education
Seatoun School Reclad
Client: Wellington Tunnels Alliance
WTA South Control Building

WELLINGTON INTERIORS

Client: Nostra Properties Ltd
Willbank House Ground Floor Refurbishment
Client: Accident Compensation Corporation
ACC Fitout, Vogel Building
Client: Rabobank New Zealand
Rabobank Fitout
Client: Southern Cross Hospital
Southern Cross Hospital Cath Lab

SOUTHERN REGION

Client: Tinline Properties (Canterbury)
Barrington Mall
Client: St Andrew's College Board of Governors
St Andrew's College – All Weather Field
Client: Christchurch District Health Board
Boiler House Seismic Strengthening
Client: Christchurch City Council/vbase
Conservation and Refurbishment of the
Christchurch Town Hall for Performing Arts
Christchurch Convention Centre Earthquake
Enabling Works
Client: Christchurch City Council
Park Terrace Apartments Building Stability Works
Client: Siemens/ Transpower
NZ Inter Island HVDC Pole 3 Project – Benmore
Client: Mt Pleasant Board of Trustees
Mt Pleasant Primary School – CBUS Classroom
and Hall Re-leveling Works
Client: New Zealand Defense Force
Burnham Helicopter Tower
Client: CIAL and Air New Zealand
Air NZ Christchurch Regional Lounge
Client: Air New Zealand
Air Nelson Hangar 2 Refurbishment
Client: Renwick Construction
EBP Unit 18 Fitout/ New Build
Client: Bridgewater Body Corporate/ Harcourts
Bridgewater Earthquake Assessment Works

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