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NEWSLETTER OF C.LUND & SON LTD • DECEMBER 2012

**Ready,
willing &
able to
step up
for
CHRISTCHURCH
rebuild**



C. LUND & SON LTD
Builders • Joiners • Contractors

As we come to the end of 2012 there are pockets of progress around Christchurch. Red Zoned property owners are well through a very difficult process. The Fletchers Earthquake Repair Process for the Earthquake Commission (EQC) has some momentum to it. Many homes without structural damage have now had repairs completed and claims settled. Progress on homes with structural or foundation damage has started but is slow.

Like other Canterbury employers, we are very mindful that all our staff and colleagues have had a lot more personal issues to deal with this year at home and at work.

We would like to express our appreciation to everyone but particularly to our staff for their positive, resourceful and supportive approach to life and to work. You have been outstanding. Thank you for your commitment and support. We hope you all enjoy a moment to reflect on everything you have done and dealt with this year. You should be quite proud.

C Lund & Son Ltd specialises in commercial construction, so it is very positive that we have construction on two large commercial building projects underway, one for Richard Owen and the other for DMC Properties. An extraordinary amount of work by us and our clients has gone on to get to this stage.

The effort our quantity surveyors and engineers put into pricing and different proposals goes largely unseen but it is significant. We have been working on proposals for a number of 'rebuild' clients.

It has taken considerable tenacity and determination on the part of Richard and Ashton Owen and DMC Properties to get these projects underway. It has taken all of their business and life experience, their integrity, and most of all their common sense. They make good decisions. On occasion, they even take advice from us. It would be extremely difficult to make progress at the moment without those qualities.

During the past year C Lund & Son Ltd also successfully completed two major projects that were just getting underway when February 2011 earthquakes hit. Both contracts have been varied as a result of the earthquakes, and we have carried out additional damage repairs and strengthening. The earthquakes and the redesign work caused significant delays to both projects.

Congratulations to Christchurch City Missioner Michael Gorman and his team, who now have a fantastic purpose-built City Mission. Michael is a true leader. His team includes 50 paid staff but also 170 volunteers. Every year Christchurch City Mission assists thousands of people facing difficulties in their lives. Everyone at the Mission successfully managed the delays and disruptions to their project and this deserves more than just a mention.

The other project we completed this year was the Stage 2 upgrade of the University of Canterbury's Biosciences building.

Lunds Joinery had a slow and financially difficult start to the year but a very strong finish. It is always worth a visit to our busy joinery factory to see the fantastic work the production staff produce. It is so good that it brought one client to tears of joy!

2012 been a challenging year for everyone in Canterbury but despite that a lot has been achieved by everyone at C Lund & Son Ltd. Thank you very much. We hope you are all in a good place and able to really relax and enjoy your Christmas break and family holidays. Our best wishes go out to everyone for next year.

Joanne Macgregor – C Lund & Son Ltd

Calder Stewart builders install a precast panel made by the C Lund & Son precast division.



Governor General Sir Jerry Mateparae (right) hands Missioner Michael Gorman the red ribbon he has cut to open the new City Mission

After testing times Mission accomplished

Not many buildings get the kind of opening that the new Christchurch City Mission received in November.

Along with Mayor Bob Parker and other church and community leaders, Governor General Sir Jerry Mateparae was on hand to give a speech and cut the ribbon to officially open the attractive new centre.

The Mission is a two storey complex that provides offices, a food bank, short-term residential quarters for men and women, and detoxification units.

In his talk to the gathering City Missioner Michael Gorman described the saga that had taken place to get the building completed, nearly a year later than originally planned.

"We accepted C Lund & Sons tender

to build the new mission on the third of September 2010. Of course, the next day the first of the earthquakes struck.

"We were not badly affected at that point and work began. By February 2011 we had a big hole in the ground and construction had started. Then the big earthquake struck."

Michael says once the red zone was lifted work resumed. There was additional work to do to stabilise the ground and some changes were made to the architectural plans to minimise damage from any future quakes.

As 2011 drew to a close, the project was on track to be finished by June 2012. That timetable too was knocked off course by the strong aftershocks in December 2011.

C Lund & Son site foreman John Taggart says engineers decided further repairs were required and a subcontractor was brought in to apply

carbon fibre ties as repairs to the floors.

"We carried on and did the work that was required to finish the structure and do the fitout. We had to cut some holes in the walls so they lay down the carbon fibre strips but we were able to carry on with other work.

"It is always nice working on a building of this quality. It has some very nice features including plywood dados, glass balustrades and timber ceilings," John says.

Michael is very pleased with the result and says the building is everything the Church hoped it would be.

"Our clients really like it and they are taking ownership of it, which is what we want. It was great working with C Lund & Son. We were fortunate to have a really good architect in Alun Wilkie who worked well with us and with them.

"We greatly appreciated senior foreman John Taggart's patience and willingness to explain things to us. He gave us access to the site when we needed to show people around and never made us feel like idiots when we asked questions."

C Lund and Son general manager Joanne Macgregor says it was a privilege to work with the City Mission to build its new facility.

"We gained some insight into Michael's world and all the things he has to deal with. We were pleased that he took personal responsibility for the project and continued to work with us and his design team without bringing in outside project managers despite the difficulties we all faced," Joanne says.

"Michael dealt with some very difficult commercial issues with competence and a steady hand. Michael, you must have some good help back there. Or should that be up there?"



After the opening: (from left) Governor General Sir Jerry Mateparae, Julian Mace, Joanne Macgregor, Andrew Macgregor, and Michael Gorman.

Jobs big and small keep Lunds Joinery on the move

It is fair to say Lunds Joinery serves a wide range of clients. In a typical year it is likely to provide joinery for varied mix that might include offices, theatres, hotels, homes, laboratories, studios, churches, schools, and airports.

The past year was no exception. Lunds Joinery manager Glenn Chittock says the year began a bit slowly with the workshop preparing the joinery for two of C Lund & Son's own big projects, the Bio Sciences building refit at Canterbury University and the Christchurch City Mission.

Glenn says the staff enjoyed putting together the joinery for the City Mission because it is such high quality.

"We made some nice counters for the Mission as well as ceiling panels, bunk beds for the overnight shelter, doors, and shelving for the offices and food bank. The bunks were pinus slats but other finishes were jarra or other hardwoods.

"The Bio Sciences work included chemical resistant bench tops, timber ceiling panels and lots of duct panels.

"Another job we had early in the year was the fit out of the offices and sound studios for Radio Network in Christchurch. We built their broadcast desks and all the joinery for their boardroom and kitchen."

Glenn says the joinery team is now building kitchens on a regular basis for McRaeaway Homes and also handled a number of smaller jobs during throughout the year. They included joinery for the Franz Josef Hotel on the West Coast, and the counters, doors and a kitchenette for Armstrong Motors in Timaru.

"We also supplied the benches, boardroom



Surveyor Mike Wilson laid out the architectural services boxes that run the length of the ceiling in Air NZ's new Koru Lounge.

joinery and wall panels for the new Landpower headquarters near Christchurch Airport, and joinery for three colleges. For Opihi College we did the joinery to refurbish admin block, for Craighead School we built the joinery to convert their gymnasium into a boarding hostel, and for Geraldine High School we provided joinery for alterations to the science block."

The biggest job Lunds Joinery had in the latter part of the year was the fitout of the Koru Lounge and staff hub at Christchurch Airport.

"The ceiling at the Koru Lounge is a technically challenging job. It consists of architectural service boxes that run the length of the ceiling with geometrically folded fabric panels filling the spaces between them.

"Our CNC machinery was vital because the ceiling boxes are not large but they carry a full range of services - sprinklers, lights, speakers,

fire alarms, and smoke detectors - so they had to be accurate to get all the penetrations correct. With our CNC machinery we can work off the architect's CAD drawings to get them exactly right."

Because Lunds Joinery has direct links with C Lund & Son builders they can call on the services of surveyor Mike Wilson. Mike laid out the ceiling service boxes in exact parallel planes, a task that was not made easier by the fact there was a temporary wall in the middle of the lounge so he could not see the full length of the room.

While the service boxes are a large part of the Koru Lounge job, the joinery team will also enjoy putting in impressive polished Hi-Mac acrylic food service counters, bathroom vanities, timber louvres, silver beech panelling and doors and office joinery for the Air NZ staff hub.

Joinery team serving up kitchens for McRaeaway Homes



Lunds Joinery built this kitchen for a high spec McRaeaway Homes house in Central Otago.

McRaeaway Homes general manager Chris Randall says he is happy to have re-established a working relationship with Lunds Joinery and looks forward to working closely with them in future.

McRaeaway Homes is a family-owned business that builds high quality 'kitset' houses throughout the South Island. It has its headquarters in Timaru and has branches in Christchurch, Dunedin, Central Otago and the West Coast.

While it has a range of standard home packages, most McRaeaway Homes customers chose to personalise their homes by adding their own touches or features.

Lunds Joinery manager Glenn Chittock says Lunds Joinery used to provide kitchens for McRaeaway Homes but they later shifted their contract to a Christchurch joinery company.

"Earlier this year they came back on board, and now on average we are doing a kitchen a week for them. We have quite a few orders on hand that we will be filling early next year," Glenn says.

Lunds Joinery mainly builds kitchens for McRaeaway but they also provide other items such as wardrobes and vanity units. The kitchens are specified in a range of materials from melamine to lacquered and solid timber and composites and stone for bench tops.

Chris Randall says Lunds joinery is a high quality product, which suits the quality of the homes his company builds.

"My builders are happy to install it and the clients are very satisfied with it. We have an ethos of working with local firms, and Lunds is very professional and accommodating."

"They always deliver the joinery to the site on time. They pre-assemble it at the factory to make sure everything fits well together, and it comes with good instructions so our builders are more than happy to work with it," Chris says.

Among the jobs Lunds Joinery has done for McRaeaway Homes recently was to supply the kitchen for a high-end two storey house in Central Otago for the Gillespie family. The kitchen was lacquered timber in an ornate colonial style.

**CHRISTCHURCH CATHEDRAL***Praying for common sense*

On Friday December 23rd, 2011 another cluster of earthquakes struck at a time when we were all finishing work for the year and getting ready for a well-deserved break with our families.

The airport was closed, and once again structural engineers got stuck into inspecting the damage to commercial and public buildings. Many structural engineers, who had already put in the most extraordinary effort during the year, turned their cars around and came back to the city to make structural assessments so businesses could carry on and trade through the busy Christmas period.

One casualty of the December 23rd aftershocks - and a disappointment for C Lund & Son Ltd - was a contract to stabilise Christchurch Cathedral. The contract was not let and therefore the stabilisation work that was planned to begin in January, 2012 did not proceed.

By December 2011, the Anglican Church's structural engineers had developed schemes to stabilise the Cathedral that we had priced. We were well into the process of securing approval from the Canterbury Earthquake Recovery Authority (CERA) to do the work.

When the Cathedral sustained more damage on Dec 23rd, further structural engineering was required before work could start. Quite reasonably, Church Property Trustees and CERA had concerns about the greater risk to workers and the public because of the additional damage and the possibility of further significant seismic events.

Representatives for the Cathedral were also concerned about the growing commercial uncertainty associated with those risks. We believe the quakes in late 2011 played a significant part when those responsible for Christchurch Cathedral decided to pursue deconstruction, rather than stabilisation and

strengthening.

C Lund & Son Ltd is highly focused on practical ways to manage the dangers and risks that construction poses every day to our staff and to the public. We are concerned that the processes and requirements placed on the owners of heritage buildings are too ideological and uncompromising, and that this puts hurdles in the way of finding practical ways to preserve their buildings.

The media and many heritage advisers, including those at Christchurch City Council who have considerable sway, seem to us to have little understanding or sensitivity for engineering issues or techniques that need to be used to strengthen and therefore preserve old buildings and little sensitivity for the significant commercial issues owners of heritage buildings face.

Innovative seismic strengthening methods for heritage buildings have been developed in New Zealand and overseas. In recent years C Lund & Son has strengthened several unreinforced masonry Christchurch heritage buildings that have survived the earthquakes. These include the Old Government Building, Hagley High School, the Malthouse, and several historic facades.

It is clear now, however, that the minimalist approach to strengthening that was used on heritage buildings such as the Cathedral will no longer work.

Time and court cases have passed. Perhaps a new page will be turned in the new year. Perhaps a collaborative solution can be found between the Church and all those parties with an interest in the Cathedral that meets the future needs of the Church and that safely strengthens and retains as much as of the existing Cathedral building as is possible. We hope so.



Seismic upgrade adds twist to tale of Biosciences building refit

One of the things C Lund & Son ticked off the to-do list in 2012 was the redevelopment, strengthening and refurbishment of Canterbury University's Zoology building.

Like many assignments, C Lund & Son has carried out over the past two years, the scope of the work on the project changed dramatically after the earthquakes.

Initially C Lund & Son's builders and joiners were to modernise the 50 year-old building for the Biological Sciences Department. The work included new offices, post graduate spaces, laboratories and workshops designed to meet higher building and safety standards.

After the quakes, engineers reassessed the building and also ordered that it be strengthened to so the building complied in all respects with current NZ building codes.

C Lund & Son builders had to strip out some of the framing, linings and doors they had built so that shear walls could be added to the existing structure. In some areas carpet that had been laid had to be removed so that cracks in the floor could be repaired.

The need to do the extra work added six months to the original timeframe for the project. Subcontractors who were scheduled to do their portion were interrupted or delayed.

Site foreman Shane Gwynne says work was well underway on levels two to four of the building when the earthquakes hit, and much of it had to be removed so subcontractor Technosol could fix the floors.



C Lund & Son has put in considerable time to devise ways to stabilise the Christchurch Cathedral so it could safely be restored.

To reinforce the shear walls of the Zoology Building concrete was pumped down from the floor above.



Seismic upgrade adds twist to tale of Biosciences building refit

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"It took longer than we expected to repair the floors. First we had to find the cracks and then expose them. Then the engineers had to check them and they also checked them again after they were filled.

"The Technosol guys injected epoxy resin into the cracks, and that also takes time. They insert nozzles into the cracks 15cm apart and then syringes are connected to them to inject the resin. All the syringes are activated at the same time and it takes eight or nine guys to do it.

"Most of the floors had cracks in them though only the cracks in the first bays out from the shear walls were repaired. Apparently floors repaired with epoxy resin are stronger than the concrete originals," Shane says.

Holes had to be cut in floors so the C Lund & Son concrete team could install shutters and pour 150mm shear walls to strengthen five floors of the building.

"Craneage was not available and Jim Wells and his guys built shutters with 6x2 and sheets of ply that they had to disassemble and hump between floors by hand," Shane says. "Concrete for each shear wall was pumped down from the floor above."

Once the seismic upgrade was 80 percent complete, the betterment began and the refit work resumed.

Lunds Joinery supplied the joinery for the refit, which included chemical resistant lab benches, timber ceiling panels, timber veneer service duct panels, and doors.

Pioneering seismic technology adds challenge to rebuild

Anyone who remembers driving through the heart of Christchurch along Montreal Street before the earthquakes will recall the elegant St Elmo Courts building in its distinctive salmon pink colour. Built in 1930 as apartments, St Elmo Courts was later converted into offices.

The first major quake in September 2010 seriously compromised the building but owner Richard Owen made a serious effort to see if there was a way to restore it. The big aftershocks of February 2011 put an end to that, however, and St Elmo Courts was one of the first of the city's buildings to be demolished.

Now beginning to emerge in its place is a new six storey building that will make use some of the latest technology to protect against damage in future earthquakes.

The 1062m² site will be occupied by a new office building that will include a basement carpark for 28 cars. The basement will cover virtually the entire site area. Above it will sit a ground floor retail and outdoor café area, and five floors of offices that will provide around 4000m² of floor area.

C Lund & Son general manager Andrew Macgregor says the new building will be unique in that it is probably the first structure to combine two seismic strengthening technologies: 1) a base isolation system and 2) a post-tensioned frame structure made up of precast concrete columns, structural laminated veneer lumber (LVL) beams, structural steel secondary beams and in-situ concrete floors.

Grant Wilkinson from structural engineering firm Ruamoko Solutions says the base isolation system is proven technology that allows the building's upper structure to move independently from its foundation and the ground.

"The new building will have 16 'bearings' made of lead and rubber mounted on in situ concrete basement columns. In an earthquake the bearings can absorb a huge amount of energy so it is not transmitted to the superstructure. They will allow the building to move up to 400mm in any direction," Grant says.

Andrew says the bearings are designed to be replaced. "The St Elmo Courts building can be jacked up enough to remove a bearing and put a

new one in its place. New Zealand engineers took a leading role in the development of lead rubber bearings in the 1970s and they are now widely used in base isolated structures around the world."

In 2004 C Lund & Son constructed the structure for the first base isolated building in Christchurch, the Women's Hospital building.

Using LVL beams in multi-storey structures is new technology currently being developed at the University of Canterbury's School of Engineering.

For the St Elmo rebuild 62mm-thick sheets of plywood are glued together to make hollow LVL beams up to 8.7m long, 650mm deep and 550mm wide. The void in the middle of the beams allows post tensioning cable to pass through. The detailing of the beams includes specialist screws up to 450mm long, coach bolts, and metalwork fittings to provide for connections to other elements.

Grant Wilkinson says LVL beams and LVL columns have been used to build one and two storey building but what is unique about this job is that they are being used in combination with precast concrete columns in a multi-storey structure.

"The columns will be installed in two bites. The lower columns are three storeys high and on top of them will be another set of columns two storeys high. Once the LVL beams are in place the steel tendons are fed through them from one end of the building to the other.

"They are then tensioned so that they apply upward force at the points where floor secondary beams connect and they also give clamping strength at points where the beams connect to the columns to give added strength in case of an earthquake."

Grant says the combination of a base isolation system and post-tensioned superstructure will give the new St Elmo Courts building the ability to withstand a once-in-500 year earthquake.

New seismic technology is not the only challenge C Lund & Son faces with this project.

Site foreman Mick Leonard says it is a very restricted site, with no parking to speak of. Montreal Street is a busy thoroughfare and the crane for the project will be set up on Hereford Street.

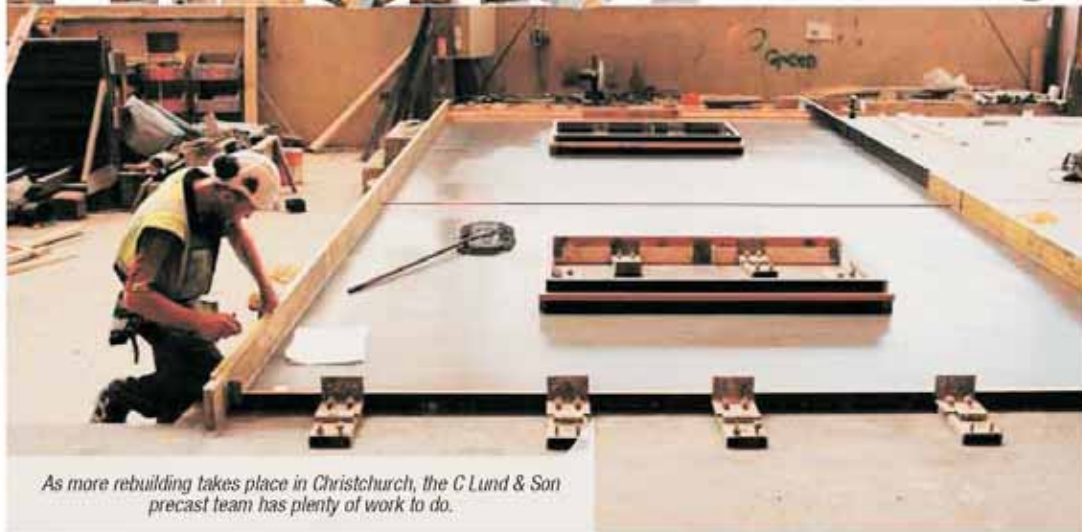
The site is right next door to the Christchurch City Council and 50 metres from the central city police station so there will be plenty of scrutiny!

Mick says the insitu basement concrete pours carry a lot of reinforcing steel, some of it 32mm diameter. The floors will be poured in 16 sections.

The water table is also quite high at the site. Pumps were going constantly to drain the site so the basement could be excavated, and when it is complete the basement will include a weir system so that if the water table rises, it will flood the basement rather than risk floating the building.



PRECAST team gears up as rebuild gathers pace



As more rebuilding takes place in Christchurch, the C Lund & Son precast team has plenty of work to do.

A phrase commonly heard around Christchurch after the earthquakes, is 'the new normal'.

Though what is 'normal' keeps changing as the city enters its rebuild phase, for C Lund & Son's precast division it is now normal to add much more reinforcing to the panels, columns and other concrete features it produces.

Precast foreman Phil Brook says it is now common to pour panels with double mats of confinement steel.

"The time it takes to make a panel with really heavy reinforcing is about double what it takes to make a standard panel. Some

panels are now taking 120 hours to tie and pour whereas it would normally take 40 to 60 hours."

Phil says he now two or even three men tying steel whereas in the past he only had one.

"The extra steel definitely makes it more difficult to get the other fixings into the panel and to vibrate the concrete when you pour. You have much less flexibility. When there is less reinforcing you can tweak things to get them into place but when there is lots of it, you have to untie everything to make any adjustments.

"Some panels have more reinforcing than others. It depends

on what they are trying to achieve with the panel and how the engineer interprets the rules and regulations," Phil says.

C Lund & Son quantity surveyor Wayne Radburn says traditionally panels carried 60 to 80 kg of steel per cubic metre but now some are being specified with 240 to 280 kg per cubic metre.

Some of the most densely reinforced panels the precast team has made been for other builders. They include panels ranging from six tonne to 17 tonne for a new boarding house Mainzeal is building at St Andrews College and panels for a commercial building Calder

Stewart is building at 70 Moorhouse Avenue.

While the precast team was working stop and start at the beginning of the year, in the second half they have been flat out pouring from both C Lund & Son projects and other builders.

They will make a total of 137 panels for the DMC building, many of them weighing around 20 tonne and up to 30 tonne, and they will also prepare precast concrete columns and balconies for the St Elmo Courts rebuild.

Among the other assignments the precast division has carried out this year for other construction companies were beams for the rebuild of the Aranui Library, panels for a new Briscoes building in Hornby, and panels for the rebuilt Briscoes in the city centre. They are just starting to make the panels for a new Gen-I warehouse at Christchurch airport.

Wayne says in the past C Lund & Son has done all of the shop drawings for its precast panels in-house but with so many projects on the go now some of this work has been outsourced to other draftsmen.

It looks like the new normal for the pre-cast team is busy.

Scales building hits stormy seas

C Lund & Son Ltd has had a long association with Scales Corporation through Scales majority shareholder Allan Hubbard.

Over the years as the dairy industry has grown, we have constructed a number of coolstores and freezers for Scales subsidiary Polarcold in Christchurch and Timaru.

Scales is an interesting business that has been based in Christchurch since 1987 but began trading as farmer-owned corporation in the early 20th century. Scales had a long history in the shipping industry but under Allan Hubbard's leadership it diversified into a number of fields

including cold storage, fishing, apples and pet food.

The Scales Corporation building in Montreal Street sustained damage in the major September and February earthquakes. For a number of months C Lund & Son worked through construction methodologies with Scales engineer Gordon Lindsay to carry out temporary and long-term strengthening and repairs on the building.

One of the most interesting developments that came out of those discussions was that we agreed to take into our care the 2.0m-long timber scale model of



The 2.0m long model of the Clan Forbes ship was salvaged from the Scales Corporation building.

the Clan Forbes ship. The Clan Forbes is likely one of the ships Scales Corporation leased in its early years, and the model is an exceptional example of traditional craftsmanship.

It currently presides in our meeting room and we show it off to anyone who is interested.

Even though Scales Corporation has now decided it is uneconomic to repair their building, they still have this wonderful link to their past. They will be able to proudly display it once they have worked through the options to replace their Montreal Street building.

BIG MONEY RIGHT SPOT

Almost two years since Christchurch was devastated by the February 22nd 2011 earthquake progress can be seen with the first of a number of larger post-quake buildings under construction.

C Lund & Son has been contracted to replace the collapsed Smiths City car parking building and link it into the existing buildings on either side. The existing structures date from 2004 with Pak'n'Save and Henrys open and trading and the office building on the other side fully occupied.

The result is that a narrow space about 25 metres wide and 100 metres long remains available for construction.

The new four storey building will be made up of precast panel walls with pre-

stressed 'double T' units, insitu beams and concrete floor topping on level one, and a structural steel structure supporting high-bond steel sheeting with insitu poured concrete topping slabs on the upper levels.

The precast panels are at the larger end of the scale C Lund & Son's precast team generally work with. They include one 30 tonne panel that will support the car ramp and a number of panels in the 20 tonne range to make up the walls for the bottom storeys.

Site foreman Jim Wells says the job entails building and integrating three main elements:

1) a new carpark building and ramping system that will give cars access to parking spaces on the upper floors of both the new and existing carpark buildings;

2) Configuring the ground floor for the neighbouring Pak'n'Save inwards goods store and truck drive thru that is currently off limits and reinstating a large opening in the east wall that will link the new building to the supermarket and give staff and produce internal access directly into the shop; and

3) New office space to fill a third of the floor area on levels two and three of the new building to reinstate what was destroyed.

Jim says the effects of the earthquakes and the constrained nature of the site

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have created a few issues for his crew to work through.

"Before we laid the foundation walls for the new building we had to strengthen the foundation of the carpark building that survived the quake so it would not slump into our site. We carried out an underpinning exercise that involved digging under the foundation of the other building and pouring cubic metre blocks of concrete to support it."

The long, skinny shape of the site and the fact that it is hemmed in by existing buildings have also created some tricky issues.

"It is much easier when we can have the crane outside the footprint of the building so we can move it around to put up the precast panels. In this case the 150 tonne crawler crane has to be inside the footprint.

"Rather than pour the whole floor and put up all the precast panels on the ground level, we basically have to build two four storey buildings. We will put up both levels of panels and infrastructure at the northern half of the site and then we will move the crane back to build the second half of the building," Jim says.

Jim says surveyor Mike Wilson played a key role in the job. Initially he found that the new building plans did not tie in accurately to the existing structures so this had to be corrected before any work could commence. Mike was also responsible for siting the panel starters for the precast panels. When working with panels of such a large size they have to be in exactly the right position.



A team of C Lund & Son builders pour foundations for the new DMC Building.



C. LUND & SON LTD "Building is our Strength"

Skilled veteran one of the best

The praise flew at Bruce Cole's retirement party in May. For nearly 42 years Bruce worked for C Lund & Son, and over that time he developed an extensive range of skills 'doing the tricky stuff'.

As a crane operator Bruce drove everything from the early 10 tonne cranes right through to the modern hydraulic mobile cranes. Over the years he thought through and carried out some of the trickiest crane lifts that C Lund & Son has handled.

Bruce managed many building relocations, few of which would be considered conventional. He also turned his hand to plant procurement and maintenance, project management, carpentry and concrete site work, truck driving, structural steel fabrication and a host of other necessary tasks when the need arose.

Among the unusual building relocations Bruce organised was the 2002 job to uplift a 1100m² Transit Shed building at the port in Timaru. The big shed's columns were unbolted at ground level, it was lifted by cranes and lowered on to trucks with containers mounted on them, and transported to its new location. The columns were extended by around 1.5m, and then the shed was lowered into place.

In 1998 Bruce played a big part in the work to disassemble the redundant but substantially constructed Ministry of Works penstock fabricating shed in Twizel and relocate it to C Lund & Son's yard in Christchurch, where it began its new life as our precast manufacturing facility.

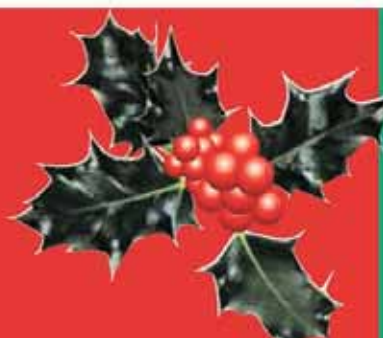


After decades working together Bruce Coles (right) and Bruce Lund have few stories to tell.

Bruce initiated and had the skills to carry out many of our successful 'build-the-roof-on-the-ground' operations before this was common practice. Over the years these projects included large petrol station forecourt roofs, a complex school technology block atrium roof, claddings and guttering, and numerous coolstore and warehouse roofs.

Bruce drove C Lund & Son cranes on many 'live line' operations for electrical contractors working in live switchyards and remote transmission lines. In these situations the contractors place huge trust in the crane operator and they would regularly request his services exclusively and waited to do the job when Bruce was available.

At his retirement party the stories that were told focused on some of the adventures and 'cock-ups' he was involved in. These included the time a strong nor'wester blew a building he was transporting off the back the truck into the Rakaia River while he was driving along the Highway One bridge. Another time he and Bruce Lund were using a crane to lift a big water tank into place over a railway line when a train unexpectedly showed up, stopping just in time to avoid disaster.



Social Networks

As life returned to normal in Christchurch, so did social life at C Lund & Son. The Social Club took in the All Black-Ireland test match and went to the relocated Court Theatre to see the comedy play The Motor Camp. The end of the year Christmas party was held at The Old Vicarage in Halswell, which explains why everyone was on their best behaviour.



C. Lund & Son
wishes all its
staff and
colleagues in the
building industry
a happy
Christmas and
New Year.



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