

New Zealand Ready Mixed Concrete Association Inc.

NZRMCA Newsletter, August 2007

Issue 2/2007



MESSAGE FROM THE PRESIDENT

This is my final message as President, as I'll be passing on the mantle in September.

Planning for the joint conference is complete. I'd like to draw your attention to the NZRMCA activities on Friday, 28th September. These involve a semi-interactive self-compacting concrete demonstration, along with a visit to a geothermal site.

There has been much discussion on the joint conference. Please note that everyone will get an opportunity to have their say at our AGM, which will be held on 27th September, and promises to be a lively affair!

I'm particularly pleased to see the recent establishment of a New Zealand Concrete Pumping Association. NZRMCA supports this initiative, and the association's objectives to promote, expand, and improve the concrete pumping industry through progressive leadership, education, communication, and advocacy, with a strong emphasis on health and safety considerations.

Council has finalized its 2007/08 Business Plan and in the coming year our core themes will be growth, quality, member support and technical proficiency. We are providing support to CCANZ in the form of



project funding to help with the implementation of a sustainability campaign over the next twelve months. While we are on sustainability, try the Word Search included in this Newsletter.

Council will shortly elect a new President and Vice President and I wish them well in their new roles.

**ROB GREEN
PRESIDENT**

INSIDE THIS ISSUE

Message from the President

Obituary – Chris Badger

**Around the Regions
For the Diary**

**Project Overview –
ALPURT B2**

Did You Know?

**Sustainability Word
Search Puzzle**

NZMCPA Conference

NEWSLETTER

If you would like to receive your newsletter by email, please let Angelique know at admin@cca.org.nz.

OBITUARY

CHRIS BADGER

It is with sadness that we report the death of Chris Badger on 21st June 2007 following a long and hard fought struggle with cancer.

Over the past decade Chris Badger played a leading role in shaping the structure and growth of the cement and concrete industry from his roles within Fletcher Challenge and Fletcher Building as General Manager of Golden Bay Cement and General Manager Firth Industries.

With an astute strategic perspective Chris understood the need to shape the total industry environment in which a business would operate. This drew him to participate on industry bodies where he proactively nurtured the health of the cement and concrete industries with both drive and integrity. Amongst his many industry roles, Chris was a National Councillor with the NZRMCA for a period of eight years from 1998.

Chris was a life-long friend of the Association and will be greatly missed.



AROUND THE REGIONS

SOUTH ISLAND

The South Island has held two meetings since the last Newsletter.

In May, Bruce Taylor (President AQA) spoke on the major issues currently facing the aggregate industry, in particular difficulties associated with aggregate supply.

New Zealand uses 8.5 tonnes of aggregates per person every year. The RMA is a severe constraint to fulfilling these requirements, as access to resource is becoming more and more restricted. Quarries are being pushed further from the market, with a vast amount of aggregate being carted over 50 km to site.

Lack of access to large volumes of aggregate from a single source means that many aggregates supplied to the concrete industry are blended from multiple

sources. As such, consistency is hard to guarantee.

AQA is also looking at the use of glass as an aggregate substitute. At this stage it is used primarily in basecourse.

Recruitment difficulties are also beginning to hurt the industry. With an average age of 46 years, the New Zealand quarry workforce is rapidly aging.

The situation is compounded by the fact that Australia has identified the need for 70,000 new mining industry workers over the next 10 years, and has targeted New Zealand as a potential source of some of these.

In August, Murray Dickson, National Sales Manager for Holcim New Zealand, updated the meeting on the cement being supplied by Holcim in the Southern Area.

SOUTHERN NORTH ISLAND

The Southern North Island met at Hastings Cricket Club in May. Rob Gaimster and Rob Green updated the Region on industry matters.

CENTRAL NORTH ISLAND

The Central North Island met at Tauranga Game Fishing club in June.

Grant Holley, Manager of the Club, spoke on the history of the club from the days when it was based on Mayor Island to the present club and its facilities.

Guest Speaker, Kevin Reid Project Manager from Transit New Zealand gave a thorough presentation on the second Harbour Bridge system linking Tauranga with Mt Maunganui. This included scope of works, design,

methodology, environmental considerations and timing.

All those in attendance appreciated Kevin's in-depth knowledge and well-considered responses to their questions. The fact that the bridge system consumed 36,000+ cubic metres of concrete also went down well!

NORTHLAND

Northland region met in May. Rob Gaimster gave a presentation on the role of concrete in sustainable development.

AUCKLAND

The highlight of this well attended May meeting was Jane Henley's (Chief Executive of NZGBC) presentation on the Green Star Office Rating Tool, and the opportunities it presents for concrete.

FOR THE DIARY

Concrete Industry Conference, Wairakei, Taupo, 27-29 September 2007.

NZRMCA Region Annual General Meetings:

REGION	DATE	VENUE
South Island	To be advised.	Christchurch.
Northland	31 August 2007	Golden Bay Cement, Whangarei
Auckland	24-25 August 2007	Waitangi.
Central North Island	23 August 2007	Blue Baths, Government Buildings, Rotorua.
Southern North Island	30 August 2007	Palmerston North.

PROJECT OVERVIEW

Reinforced Concrete – The Material of Choice

Alpurt B2 is a three year project linking Orewa to Puhoi. Construction is managed by the Northern Gateway Alliance, a joint venture between Leighton and Fulton Hogan. Alpurt B2 is an extension of State Highway 1 to the north of Auckland. It is a vast civil engineering project consisting of two 400 metre long tunnels for both north and southbound traffic. There are several concrete structures, the most complex of which is the huge cantilever bridge constructed from significant precast sections.

Allied Concrete, from their Albany and Silverdale plants, is supplying the concrete. A range of mixes from 20 MPa through to 60 MPa have been supplied, employing greywacke and basalt aggregates supplied by Holcim and Wharehine quarries.

50 MPa concrete was supplied for the shotcrete used in a temporary support lining for the tunnels. The concrete contained steel fibres for enhanced toughness and an accelerator that was added at the nozzle of the robotic spraying arm.

For the 80,000m³ of concrete for the precast segments, Allied Concrete had to carefully balance the stringent requirements of high early strength, high workability and low shrinkage. Temperature match curing has also been employed to evaluate strength development of this concrete.

Information courtesy of Trevor Smith from Allied Concrete. Images courtesy of Maurie Hooper.

If you'd like your project included in the December edition please email Rob Gaimster at rob@cca.org.nz

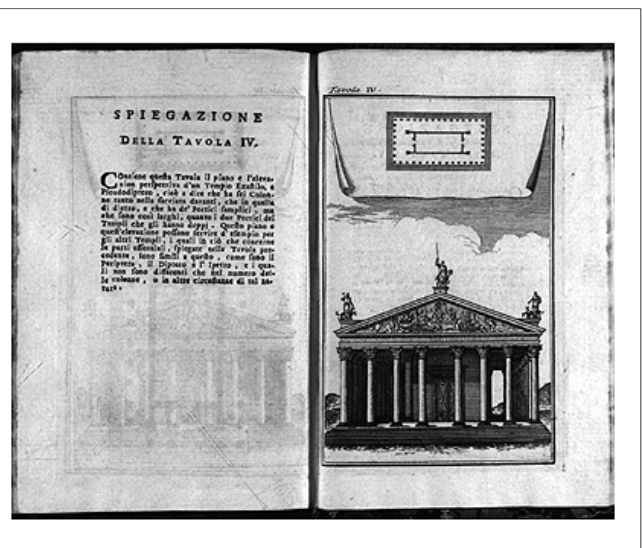


DID YOU KNOW?

The famous Roman architect Vitruvius was a true pioneer in his field. Roman architects practised a wide variety of disciplines; in modern terms, they could be described as being engineers, architects, landscape architects, artists and craftsmen combined. Etymologically the word architect derives from Greek words meaning 'master' and 'builder'.

Vitruvius is most famous for asserting in his book *De architectura* that a structure must exhibit the three qualities of *firmitas*, *utilitas*, *venustas* - that is, it must be strong or durable, useful, and beautiful. *De architectura* could be seen as the Building Code of its day.

Visit the Wikipedia section on roman architecture for more information:
http://en.wikipedia.org/wiki/Roman_architecture.



SUSTAINABILITY WORD SEARCH PUZZLE

Have a go at the sustainability word search puzzle. The first person to send in a completed puzzle will receive a \$25 book token. Completed entries to Angelique Van Schaik, CCANZ, PO Box 448, Wellington 6140.

U S A L G O R E T Y W E R T H H U J H T H	Concrete
U S Y B M B V D E R T T Y U W F R T N R T	Thermal Mass
F I R P E R F O M A N C E C C O N E T R E	Fire Performance
H C O N C R I T E T E R C N O C M L K T E	Durability
I E S U D T A D A N S I C O N E R E T P E	Rotproof (sic)
C R R D D Q W U D F T S R Y G E R T E D F	Stormwater Management
W O U N S D S R S R R T L A Y T U R Y J J	Strength
C T D F A C O A F F E A N S U S F S U S T	Recarbonation
V P C O N C R B D F N A R S D O A R C H B	Sustainability
F R F A D F H I J K M K V L R G H E J Y E	Recycled Aggregates
I O C O N C R L C R O N C E A S M A S M Y	Acoustic Performance
R O S U S T A I E S U S C S U S T A I B T	
E F E R T S U T A S D A O I T A N O B R I	
P A S D D A A Y D F R F F Y G H E R C O L	
E S J K W W M B V B C C B B T H E R M S I	
R A T M M F I R O E R F O G M I S D F S B	
F T R R S R T N E R M A N R S Y L F F A A	
O O O A D U A A B I L E R S F H H I F M N	
R T A C O T S T I N R G F S U T A I B L I	
S W E R I R T Y U T F I R P E R F O Y A A	
A S D O J K L L S W E R T R Q R T Y U M T	
N L N M A T R C H A N G E U Y T E E R R S	
F I R E P E R F O R M A N C E F P E F E U	
E D E R T Y U I B F F F R T E E W W V H S	
F O N C R E R T S E S T A I N A B I K T T	
I S S E T A G E R G G A D E L C Y C E R R	
R C I C Y C L E D A G G R A G A T E S E S	
W M A R S N A G G R E G A E T A G G G H A	
E W E C N A M R O F R E P C I T S U O C A	

NZMCPA CONFERENCE

In late July the New Zealand Master Concrete Placers Association (NZMCPA) held their annual conference in Christchurch. The event was well attended, and can be considered a great

success. The programme featured a mix of educational and industry updates, along with a series of social events that included a fancy dress night at the races. The lively debate, chaired by Gary

McCormick, featured prominent members of the ready mixed concrete industry against the placers.

The placers somewhat dubiously won the day

despite a strong defense by our boys on why “our concrete is never late”.

The NZMCPA have launched their new website – www.mcpa.org.nz