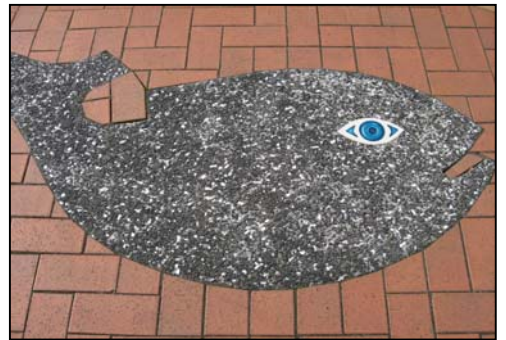


ANNUAL REPORT

July 2005 – June 2006





Chairman's Comments



In recent years, the New Zealand construction sector has seen record levels of activity, and the 2005-06 year was no exception. The strength of the commercial market and significant backlog of infrastructural

projects provides further growth opportunities for concrete. In order to realise these opportunities it is imperative that we have strong, cohesive industry representation - the role played by CCANZ.

With continuous regulatory and legislative change within the building and construction market, it has been a priority of the Board and CCANZ to develop strategies and initiatives that address the challenges set to face the industry, while also investing in further growth initiatives.

The business strategies developed for the 2005-06 year were set out in the CCANZ Integrated Business Plan (IBP), which was based on previous models with a view to "moving forward" at an operational level. The IBP aimed to strengthen CCANZ's industry leadership and relationships in the sector, to create a "united front" that could address strategic issues facing the industry, and enhance the competitive positioning of cement and concrete.

CCANZ has also worked hard to undertake initiatives with a combined industry approach. CCANZ's submissions to government agencies and its work with the Department of Building and Housing in relation to the Building Code Review demonstrate this commitment, while also ensuring that the

Government fully appreciates the importance of cement and concrete to the construction sector.

A key achievement was the revision of *NZS 3101 Concrete Structures Standard*. The Board commends all CCANZ staff involved in this project, in particular Dene Cook, for his dedication and commitment. This revised Standard will have a significant impact on Structural and Civil engineers and Building Inspectors in the future. CCANZ's *Sustainability of Concrete* project is another notable achievement that aims to unite industry associations and ensure concrete is recognised for the role it can play in achieving a sustainable built environment for New Zealand. Endeavours such as these have provided CCANZ with the opportunity to strengthen its position as a leading authority in the industry, and on behalf of the board I'd like to thank the staff at CCANZ for their work in achieving this.

During the year there have been a number of changes to the composition of the CCANZ Board and I would like to make special mention of the contributions of Ross Harper, Peter Carnahan, Chris Badger and Paul Commons. With combined Board tenure in excess of 20 years, their knowledge and experience will be greatly missed. I would also like to acknowledge the work of Chris Munn who, although having left CCANZ, I'm sure will continue to provide valuable support.

I am pleased my role as Chairman of CCANZ has been extended to the 2006-07 year and I look forward to being actively involved in continuing the sound work the Association has done over the past year.

Andrew Moss
CHAIRMAN

Chief Executive's Foreword



Over the past few years, the dynamics of our industry have continued to grow and mature. CCANZ has remained dedicated to working with the construction sector to address the issues and challenges ahead, and over the 2005-06 year has worked hard to undertake and

complete projects with a targeted strategic purpose.

The increased emphasis on the sustainability of infrastructure, economy and environment, along with ongoing legislative changes, indicates the emergence of a new Government mind-set that will hopefully stimulate the development and growth of the construction industry. In developing a report on the *Sustainability of Concrete*, CCANZ has demonstrated responsiveness and a firm commitment to the progression of New Zealand's sustainable development. The *Sustainability of Concrete* report, due for completion towards the end of 2006, will be vital to the industry communicating the attributes of concrete as New Zealand's primary sustainable building material.

Establishing new strategic relationships in the sector and working to strengthen existing ties with government bodies and associations has been a core component of CCANZ's Business Plan. Over the past year, CCANZ has worked closely with Standards New Zealand to review *NZS 3101 Concrete Structures Standard* and to run a series of seminars across the country. We have also engaged in ongoing dialogue with key government departments such as the Ministry for the Environment, Transit New Zealand and the Energy Efficiency and Conservation Authority (EECA). CCANZ has also actively engaged and communicated with

stakeholders throughout New Zealand to maintain a high profile in the sector, with some of our staff working as Executive Officers for a number of industry associations.

The achievements secured by CCANZ during the year are of undoubted benefit to the entire industry, and could not have occurred without our dedicated staff. I would personally like to thank our current and former frontline staff Dene, Alan and Chris, together with the support team of Cathy, Angelique and Adam.

I am pleased to announce that the funding members of CCANZ have increased the level of funding for the Association for 2006-07. This is great news for CCANZ and demonstrates our primary funders understand and appreciate the value of the work the Association has completed over the past year. Looking towards the future, CCANZ will aim to grow the concrete sector, particularly in infrastructure, and in commercial and residential development. We will also be looking to push the sustainability project and other industry issues such as environmental risks and standardisation. Education and training will also play an important part in building on the skills of those in our industry and their professional development.

CCANZ is currently aligning its business model to reflect New Zealand Business Excellence Foundation criteria. This will ensure a higher level of transparency, and provide a best practice framework, and a methodology for measuring efficiency and effectiveness.

CCANZ is the face of the cement and concrete industry and a key influencer in the construction sector. I am proud to lead such an organisation and look forward to the challenges we will face in 2006-07.

Patrick V McGuire
CHIEF EXECUTIVE



Industry Leadership

As a period of unprecedented change within the construction industry continues, CCANZ's leadership role is increasingly important in ensuring concrete remains competitively positioned relative to other building materials. A co-ordinated and committed industry approach is essential for the development and implementation of strategies that will maintain and develop concrete's market share.

The CCANZ business direction for the 2005-06 period was again guided by an Integrated Business Plan, which was informed and endorsed by important industry sector associations at the Association Principals' Planning Workshop in early 2005. This annual forum which comprises the New Zealand Portland Cement Association, The New Zealand Concrete Society, The New Zealand Master Concrete Placers Association, Precast New Zealand, the New Zealand Concrete Masonry Association, and the New Zealand Ready Mixed Concrete Association, is an effective way of identifying and prioritising pan-industry matters. Two CCANZ staff also act as Executive Officers for the New Zealand Concrete Masonry Association and the New Zealand Ready Mixed Concrete Association.

CCANZ remains tireless in performing its function as the principal industry representative with respect to external organisations such as the Institution of Professional Engineers (IPENZ), Standards New Zealand (SNZ) and the Building and Construction Industry Training Organisation (BCITO).

Facilitating open communication with central Government and its various ministries, departments, agencies and select committees, also remains pivotal to the successful implementation of the industry's collective view, and is a task made more effective through CCANZ's involvement with the Construction Industry Council (CIC). With the current legislative and regulatory changes, the importance of CCANZ's relationship with

other Government organisations such as Transit New Zealand, the Energy Efficiency & Conservation Authority (EECA), the Environmental Risk Management Authority (ERMA), and in particular the Department of Building and Housing (DBH), cannot be overstated.

Government Relations

Throughout the year, CCANZ has monitored proposed legislative changes and proactively engaged with government to develop appropriate strategies to advance the industry. Of particular note is CCANZ's ongoing involvement with DBH in relation to the building practitioners licensing scheme.

Following the *Licensing of Building Practitioners* submission in November 2004 and the *Categorisation of Buildings for the Licensing of Building Practitioners* submission in April 2005, CCANZ has continued to work closely with DBH in order to arrive at a positive and workable solution that safeguards the interests of consumers.

CCANZ's submissions, including those summarised below, are available on the website: www.cca.org.nz.

Building Product Certification – Consultation Feedback

CCANZ broadly supports the concept of product certification, subject to DBH setting the performance and testing criteria, and the clarification of liability in the event of failure, and the terms *building product(s)* and *system(s)*. The establishment of a JAS-NZ funding model and criteria for the certification of a product or method is also recommended.

Construction Products Group Standard – Consultation Feedback

CCANZ does not endorse the base on which the classification for cement and concrete is being proposed. Representations and a

submission to ERMA urge that the proposals for the handling, transportation and storage of cement and concrete, which have the potential to be extremely disruptive for New Zealand construction projects, be significantly amended to better reflect the products' impact on the community.

NZS 4541 Auto Fire Sprinkler System - Submission to Government

CCANZ holds concerns regarding the current fire design principles and the reliance on sprinkler technology. The revision of NZS 4541 does not adequately address the security of water supply following a significant seismic event. The expectation that the Fire Service will respond to calls following an extreme event is also unrealistic. Both are serious issues that impact directly upon the fire design philosophy for sprinkler protected structures.

Review of Industry-Led Regulation – Submission to Government

The concrete industry has a long established track record of setting up and running several industry based quality assurance schemes – Ready Mixed Concrete Association Plant Audit Scheme and the Masonry Trades Registration Board. Both these schemes have been incorporated into New Zealand Standards and are an integral part of the building landscape.

Research & Development

CCANZ's primary objectives are to provide technical and advisory support to the industry, while maintaining concrete's competitive position within the construction sector. This is achieved through a number of means - the knowledge and practical expertise of its staff, targeted communication of concrete's attributes and the thorough and robust research of development projects. Selected CCANZ projects progressed during the past year are outlined below:

The Sustainability of Concrete

With a shift in emphasis towards the principles of sustainable development in New Zealand's built environment, it was apparent to the industry that focused information on the contribution that concrete products make to sustainability required collation. The *Sustainability of Concrete* project aims to provide sound and robust technical information on the sustainability of concrete. This report will form the basis of a communications strategy to promote this information, as new building regulations are introduced over the next two to three years. The final project report will be completed by the end of 2006.

Competitive Construction Systems – Concrete Bridges

This pilot project investigated the work required to protect the concrete industry's share of the bridging market. The project report (completed in February 2006) presents a series of potential strategies available to combat the increasingly significant threats facing the concrete industry within this area of publicly funded construction.

Current Trends in Cement Stabilisation in New Zealand Roads

This project provides background into the current use of cement stabilisation in New Zealand. It also presents an overview of New Zealand and Australia research and associated drivers, as well as highlighting studies conducted by agencies that could benefit from CCANZ support. The project report was completed in February 2006.

NZS 3101 – Concrete Structures Standard

This major project, including the provision of a successful seminar series, was concluded in 2006. The revised NZS 3101 focuses on three key work streams:



- The Standard has been made compatible with the seismic design philosophy outlined in the recently released loading Standard (*NZS 1170.5:2004, Structural Design Actions - Earthquake Actions*).
- The latest technological developments have been incorporated to ensure currency.
- The layout of the Standard has been redesigned to facilitate ease of use.

International Contacts

CCANZ continues to maintain close and productive ties with international cement and concrete associations. Communication and regular contact with associations in Australia, Canada, South Africa, the United Kingdom and the United States contributes to a better understanding of global industry issues, as well as the formulation of appropriate strategies to deal with them.

Attendance at international conferences is seen as beneficial for the organisation. Co-operative knowledge sharing and participation in global information networks is essential for the effectiveness of specialised industry associations like CCANZ.

The *Global Construction: Ultimate Concrete Opportunities Conference*, held in Dundee in July 2005 provided invaluable information on current issues facing the international industry, as did the *2nd fib Congress* held in Naples in June 2006.

Former CCANZ Architecture Fellow and Senior Lecturer at Victoria University of Wellington, Morten Gjerde, was among the list of presenters at the *fib Congress* with his paper *Concrete in Modernist Housing in New Zealand 1930s-1970s*.

CCANZ has also been instrumental in organising international study tours throughout the year. In late 2005, an industry group attended the *Self Compacting Concrete (SCC)*

Conference in Chicago, USA, and also visited state-of-the-art production facilities to witness SCC application.

Standards

The CCANZ team has been involved with the review or amendment of the following standards this year:

- NZS 3101 - Concrete Structures Standard
- NZS 3404 - Steel Structures Standard
- NZS 3603 - Timber Structures Standard
- NZS 3604 - Timber Framed Buildings
- AS/NZS 1170 - Structural Design Actions
- NZS 4214 - Methods of Determining the Total Thermal Resistance of Parts of Buildings
- NZS 4229 - Concrete Masonry Buildings Not Requiring Specific Engineering Design
- NZS 4230 - Design of Reinforced Concrete Masonry Structures
- NZS 4541 - Automatic Fire Sprinkler Systems

Education and Training

Concrete Technicians' Course

This concrete testing course was held on three separate occasions during the year, all in Christchurch. Approximately forty attendees completed the course, which carries New Zealand Qualification Authority credits towards the National Certificate in Concrete Production. In November 2006 the existing three-day format will be replaced by three one-day courses covering an introduction to the

concrete industry, concrete testing and concrete technology respectively.

Concrete Structures – Seminar Series

Dene Cook, Project Manager at CCANZ, presented seminars designed to assist with understanding the key changes to NZS 3101 Concrete Structures Standard. The seminars aimed to clarify the new layout of the Standard, identify key revisions, and explain the integration of the new loading standard. Changes to the design, seismic design, wall, fire and durability sections were also summarised.

Specifying Concrete Ground Floors - Seminar Series

Seminars highlighting the importance of technical specification in achieving fit-for-purpose concrete ground floor slabs took place during the year. This seminar series was well attended and discussed the changes to NZS 3104 and NZS 3109 and their impact on specification. It also discussed the suggested specification clauses designed to manage the risk associated with construction of a concrete floor.

University Fellow

James Mackechnie's CCANZ fellowship at Canterbury University has been extended for an additional twelve months. James is now well established in Christchurch and is providing undergraduate and postgraduate students with the benefit of his significant knowledge and research skills in concrete technology.

Information Services

Objective technical support, both within the industry and to designers and specifiers, forms a major component of CCANZ's role and is the foundation upon which the Association's credibility is built. Approximately 700 enquiries were handled within the past year - an increasing percentage of which were fielded

via our website. Enquiries typically included a wide range of concrete applications including residential, construction, commercial and industrial slabs and precast applications.

Communications

CCANZ's communications strategy involves the use of hard copy, electronic media and our website.

'concrete'

CCANZ's quarterly hard copy publication is distributed to over 4,600 recipients. It covers notable New Zealand projects, international news, technical items and news from industry associations.

'grey matters'

A monthly e-newsletter providing a one page onscreen update on current issues, events and projects is distributed to over 1,700 recipients.

Both 'concrete' and 'grey matters' are available on the CCANZ website: www.cca.org.nz.

Website

Updated on a regular basis, the website contains a wide range of information on concrete applications, including guides, technical reports and information bulletins. This media continues to grow in popularity, averaging over 6,000 hits per month, and has experienced steady growth since its inception.

Publications

CCANZ is seen as a leading source of authoritative information on cement and concrete and has continued to expand and revise its range of publications. The following is a summary of the publications either commissioned or revised this year:



Screed

This bimonthly online publication of recent selected extracts on cement and concrete technology and related products can be located on the CCANZ website. There are more than fifty extracts per issue, comprising items that have recently been acquired by the CCANZ library.

IB82 - Slender Concrete Walls (Draft)

Guidelines on the design of slender reinforced concrete walls, typically found in warehouses. This bulletin focuses on the structural and fire design of slender walls and their connections.

IBo8 - Repairs to Concrete

Discusses the methods and materials for repairing common concrete defects, as well as selecting the most appropriate repair for a given application.

IB84 - Health & Safety

An overview of the recommended health & safety procedures that should be adopted when working with two of the most widely used construction materials in the world – cement or concrete.

IB35 - Lightweight Concrete

Covers the applications and numerous benefits of lightweight concrete, along with the relevant standards and specifications. It also covers lightweight aggregates (natural and manufactured), the mix design and general properties of structural lightweight concrete,

along with cellular concrete.

Other Publications

CCANZ was involved in writing the following publications for other associations:

- Technical Note – The Use of Washwater (for the NZRMCA)
- Onsite Management of Concrete Washwater (for the NZRMCA)
- Ready Mixed Concrete Driver Responsibilities for the Onsite Management of Concrete Washwater (for the NZRMCA)
- Redesigned NZRMCA website: www.nzrmca.org.nz.

Staff Changes

In November 2005 Nancy Bakker, Information and Communications Manager at CCANZ resigned. Adam Leach, formerly of the Hutt City Council, took up the position in January 2006. Chris Munn, a Project Manager with CCANZ for five years, left the organisation in June 2006.

CCANZ would like to acknowledge the invaluable contribution and dedication to the Association shown by both Nancy and Chris.

We look forward to Rob Gaimster, an engineer from the United Kingdom with a background in concrete technology, joining the team as a Project Manager in November 2006.