



Good reasons to speed up construction

While the Government plans to spend large amounts on roads of national significance (RONS) over the next few years, there are concerns that in the short term things are slow to move. Currently many contractors have insufficient work on their books due to the slow-down in subdivisional land development work and some local authority projects.

This creates difficulties for those who cannot afford to hold skilled staff in anticipation of work to come, and has implications for roading clients as the costs of redundancy, re-employment and training (once projects resume) will get passed on to them.

There are several good reasons why it is advantageous for clients to move projects along faster than is happening right now:

- Prices are currently pretty sharp, meaning that roading authorities can take advantage of this to keep expenditure in trim.
- Getting projects, even maintenance or smaller construction projects, underway now



The southern portal entrance to the Terrace Tunnel, Wellington. Completed in 1977, it was originally designed to have a twin. As a Road of National Significance the original plan will now be realised.

will help boost local and regional economies and shake off the effects of the recession.

It is important to prevent further redundancies in the road construction and maintenance sector.

Historically there has been a shortfall in infrastructure provision, particularly among local authorities, and this needs to be addressed.

The NZTA has certainly done its best to speed things up by providing funding to enable \$50M worth of work to be brought forward, in addition to work covered by the Government's \$140M roading stimulus package, but local authority work lags behind.

While councils are always under pressure to minimise rate increases, as well as being required to increasingly fund the depreciation of infrastructure assets, they need to be aware that underspending their NZTA subsidy funding can have serious implications.

As Transport Minister Steven Joyce made clear recently, "those local authorities that underspend their funding allocation risk losing it to other authorities who can use the money".

Given the critical state of the industry at present Roding NZ is hoping that all allocated expenditure for 2009/10 is spent.



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Bundled contracts improve productivity

Suggestions that larger contracts—and those that are 'bundled' to incorporate the consultant element and all or most work activities—reduce competition, are unfounded according to recent NZTA competition statistics.

Figures from NZTA show that the number of successful contractors in the sector has increased from 180 in 2005 to 189 in 2009, despite a massive increase in the average size of contracts.

It is also interesting to note from Statistics NZ, NZTA and other sources that between 2000/01 and 2008/09 productivity* of the roading sector rose by 23 percent.

Productivity generally increased as contracts got bigger.

There can be no doubt that bundled contracts improve productivity, for a number of reasons. First, bundled contracts reduce the overall cost of the tender process by simplifying and streamlining the tenders. Furthermore, economies of scale in labour, plant and materials provide clients with better value for money.

Bundled contracts also tend to result in better emergency management, better communications and project management due to a single point of contact, and a heightened confidence

that superior management systems will lead to improved work delivery.

Local authorities currently developing procurement strategies may wish to consider greater use of bundling, as already employed successfully by others in that sector.

Ancillary benefits

Other valuable outcomes from the significant change in procurement processes over the past 30 years have included substantial upskilling of the industry and in the engineering capabilities of contractors.

It is also significant that since 1990 the roading sector has moved away from the "lowest price conforming tender" evaluation to a more quality based evaluation, and from prescriptive to performance based specifications to improve innovation.

So while increased sector expenditure is driving larger contract sizes, competition remains strong and has recently increased.

* Productivity is defined as "output per employee" where the output represents the sector GDP as indicated by NZTA and local authority expenditure, adjusted for inflation and labour content of maintenance and construction work.

Time for critical decisions on rail network

News that the Government is to inject \$250M into upgrading the rail network is welcomed by Roothing NZ. Years of under expenditure is finally being addressed and never before has it been so important to ensure that the upgrading and maintenance of the rail network is carried out in the most cost effective manner.

Roothing NZ believes that outsourcing the maintenance of the network will lead to a substantial increase in value for money for ONTRACK.

Evidence from the early 1990s shows that Government funding should be accompanied by its requirement that KiwiRail introduce procurement policies similar to those legislated for the roading industry.

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Time for decisions on rail network

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Two years ago the Auditor-General wrote a damning report in which he slated the agency for not managing day-to-day maintenance, let alone planning for the future. The agency has declined bids from experienced major contractors to carry out the work on a performance basis.

Roading authorities learned long ago that contracting out construction and maintenance work was not only more efficient but also led to New Zealand engineers becoming some of the top asset managers in the world because they were able to focus on asset management and leave others to manage the workforce.

ONTRACK should seize the current opportunity with its additional funding to discover that using contractors to carry out track maintenance work will enable them to focus on becoming an efficient infrastructure manager.

KiwiRail has inherited many years of under-investment in the rail infrastructure, which has

drastically reduced rail's competitiveness. The challenge today for ONTRACK, the KiwiRail subsidiary responsible for managing renewal and maintenance of the network, is to improve the quality of its assets and services and to compete on even terms with other transport modes.

While rail has some natural advantages—moving bulky goods, linking export industries to major ports, and moving large numbers of urban commuters to and from congested cities—its infrastructure is in dire need of upgrading.

With many contracting firms under utilised but well equipped at present, the timing is right for such a change to take place.



"Productivity and the Future"

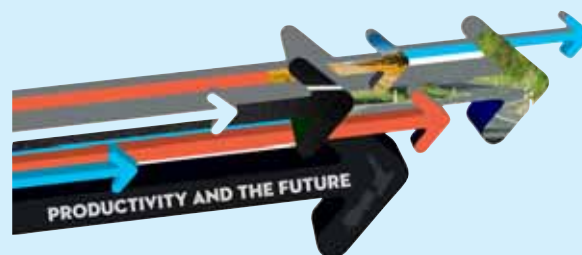
This year's Roothing New Zealand Conference will be held at the Duxton Hotel, Wellington, on Tuesday 28 September.

The theme, Productivity and the Future, will focus on just how future roading programmes, including the Government's Roads of National Significance (RONS) programme, can be delivered more productively and how they will help improve prosperity and living standards.

The 2010 Conference is being organised for Roothing NZ by the NZ Institute of

Highway Technology (NZIHT) and initial conference information can be downloaded from [here](#). You can also register online by clicking [here](#).

As well as registering to attend the Conference, companies involved in the roading sector can participate by becoming a sponsor or taking exhibition space. This provides real benefits by engaging with existing and potential clients. Around 200 or more sector delegates are expected to attend. Details of sponsorship opportunities can be downloaded by clicking [here](#).



Time for a new approach to bitumen price fluctuations



The price of bitumen in New Zealand depends on global demand. Consequently it is almost impossible to predict bitumen price movements and in the past three or four years most surfacing contractors have suffered losses because of the fluctuations in bitumen prices.

Two years ago Land Transport NZ (now NZTA) recommended that the Reseal Price Index be applied to all sealing contracts because it was impossible for contractors to get fixed bitumen prices.

Unfortunately most local authorities and even NZTA themselves, have been ignoring these recommendations and rarely provide for market fluctuations on contracts of 12 months or less.

As always, smaller contractors have found this particularly difficult because they don't have the financial backing to absorb the price fluctuations.

While the current formula for calculating bitumen price fluctuations has worked reasonably well for the past ten years, it has been problematical during recent times of large peaks and troughs in prices, and Roothing New Zealand has been

working with NZTA and the industry to refine the formula.

Having a 40% weighting for bitumen in the reseals index is no longer appropriate because of the different types of contracts used-the weighting can actually range from 5% for large contracts involving maintenance, rehabilitation and resealing to 40% or more for pure reseal contracts.

Nowhere else in the world do they have an "index" approach when calculating price adjustments over a given time period. Instead, price fluctuations are calculated by applying a price adjustment to the actual tonnage of bitumen used, i.e. the actual dollar change in the bitumen cost is applied to the tonnage of bitumen actually used.

Roothing New Zealand believes that moving to such a method of handling bitumen price fluctuation risks should be adopted here; it would remove the current risks faced by contractors and save local authorities and NZTA the cost of a risk premium fee.

New Roothing NZ Board members

Cos Bruyn (Downer EDI Works), Chairman of Roothing New Zealand's Executive Council, recently announced changes to the Council's membership.

Bill Perry, CEO of Fulton Hogan NZ, has replaced Lindsay Crossen on the Council, while Simon Everett, Managing Director of Blacktop Group has replaced Sicon's Brett Beagley.

Rob Gilmore, GHD's Global Business Leader (Roads and Highway), was appointed as the Associate Members' Representative on the Council, in recognition of the significant move over recent years towards more collaborative procurement models

and the consequent increasingly important role played by engineering consultants.

The Executive Council was keen to retain Barry Gundersen, the previous Associates' Representative on the Council, as the formal link between the Council and Roothing NZ's technical committees.

Bill Perry



Rob Gilmore



Simon Everett



What contractors really think

Roothing New Zealand regularly makes submissions on behalf of its members in respect of legislation, contract conditions, or other issues likely to affect them. Recent submissions have included the following.

NZTA proposal for contract insurance

NZTA has proposed that it should arrange contractor all-risk and public liability insurance for its contractors. We pointed out that Roothing NZ members have a number of concerns. The track record of principal arranged insurance in New Zealand is not good and members may not have sufficient confidence that the scheme would protect them adequately.

Restoring contractor confidence may be difficult because of the track record of insurance companies not paying out on previous contractor claims for insurance arranged by principals.

It is felt that claims are always an area of potential conflict because the insurer acting for the principal often treats the other insured parties as though the policy doesn't really belong to them.

Contractors concerned over utilities code

The Government has recently passed into law the Infrastructure Bill which deals with the issue of utility companies carrying out work in the road corridor. The new legislation seeks to address the age old problems of the lack of co-ordination between utility work and roadworks, cost sharing between utility companies and road owners, and reasonable reinstatement conditions on utility work carried out in the road reserve.

This new legislation contains some very good and positive initiatives to address these issues. One of those is a Code of Practice for Working in the Road. Generally speaking this Code of Practice is a useful document. There are, however, a number of issues of concern for contractors in the Code that we feel need to be addressed. It's fortunate that the newly passed Infrastructure Act requires consultation on this Code before it becomes a requirement.

In summary there are three concerns for contractors. The first is the two year

warranty period for utility work; the second is the lack of accountability for "As Built" plans by utility companies; the third is the inappropriate risk transfer and procurement process associated with making the contractor responsible for locating underground services from inaccurate "As Built" plans.

In response to these issues Roothing New Zealand will be seeking to:

- have the warranty period reduced to a maximum of one year for contractors
- have utility companies made responsible for the accuracy of their "As Built" plans to within 1.5m
- have included in the Code a reference to best practice in procurement where contracts should adequately compensate contractors for the work they do.

There are important reasons for seeking these changes.

Whenever warranties are provided for in the manufacturing sector they exclude circumstances beyond the manufacturer's control. They also set the time period for warranties consistent with the time required for defects to appear.

Research in the 1980s clearly indicated poorly reinstated trenches usually showed defects within the first six months of the work being completed.

Further, warranty periods longer than 6 to 12 months expose contractors' work to other external factors that cannot be controlled by the contractor. On balance we believe that a one year warranty period is the best balance of risk between the time required for defects to show and the effect of external factors on the work.

Utility companies have no incentives at present to ensure the accuracy of "As Built" plans, hence the quality of these plans is poor. This is clearly shown by the fact that utility companies "As Built" plans always have a disclaimer on them regarding their accuracy.

Some years ago a Labour Department inspector requested a power company to remove this disclaimer from the plans for health and safety reasons. It was

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What contractors really think

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interesting to see that before the contractor got back on site the power company had already located all its services.

Making people accountable *does* change behaviour. Requiring "As Built" to be accurate to within 1.5m will drive utility companies to have more accurate plans.

Roothing New Zealand and its members believe that it is wrong to set up a contract in such a way that it requires contractors to bear the risk premium of locating underground services in positions other than those shown on "As Built" plans. Contractors have no control over the accuracy of these plans so it's inappropriate to make them responsible for locating underground services in positions different from those shown on plans. Roothing NZ believes that the cost of locating underground services should be a provisional item removed from the tender price to ensure contractors are compensated for any work they do to locate services. Better still would be a collaborative type contract to manage this risk.

All in all the Infrastructure Act is a good Act, but it could be even better.

Towards a National Infrastructure Plan

The National Infrastructure Unit of Treasury recently produced a document titled *Infrastructure: Facts and Issues* that sought to outline the key parameters towards development of a National Infrastructure Plan.

While this document made a good start on the task, there were a number of important issues omitted that Roothing New Zealand believes are critical to ensuring development of a sound plan.

Some of the more serious flaws included:

- The lack of linkages between projects listed in the document and its strategic direction or policy context, resulting in there being no rationale or business case for setting appropriate levels of funding investment.
- A severe lack of information on setting asset management levels for Government infrastructure. A mere half page on this topic proposed asset

management expenditure of around \$5 million p.a., comparable to a similar figure for their annual capital expenditure.

- Without knowing the drivers of economic growth from infrastructure development, it is impossible to identify what additional investment would help New Zealand increase its rate of economic growth. Roothing NZ believes that one of the most beneficial elements of the National Infrastructure Plan would be the identification of the drivers of economic growth and how each sector contributes to these drivers.
- The Plan needs to refer to best practice in procurement in order to ensure that all sectors, private and Government, are up to speed with best practice.
- Roothing New Zealand believes that key performance indicators (KPIs) need to be developed for the Government's goals of economic growth and productivity. These KPIs need to reflect the drivers of the respective goals and objectives, and appropriate levels of service should be established for each one.

To download and read the whole submission just [click here](#).

Auckland Super City

Roothing NZ supports the establishment of the Auckland Super City and has made a number of submissions to the Select Committee and Auckland Transition Authority officials. We believe that the Super City will make a huge improvement to the development of Auckland's infrastructure and we support the establishment of the Council Controlled Organisation (CCO) model.

Perhaps the biggest benefits from the Super City establishment for contractors will be a common procurement strategy and harmonisation of engineering standards. We believe that key personnel from the respective CCOs should meet with industry to progress these initiatives now that the Auckland Regional Contracts Group will no longer exist.

To discuss details of these or any other submissions by Roothing New Zealand email Chris Olsen (RNZ Chief Executive) by [clicking here](#).

Asphalt quality gets a boost

The substantial increase in asphalt use over recent years has brought an increasing focus by Roading New Zealand's Asphalt Committee on the need to update and improve asphalt technology in order to keep pace with the demands of today's specifiers.

A number of different initiatives undertaken recently are set to result in significantly improved quality and mix consistency from New Zealand's asphalt plants.

APAS

One of these initiatives is the Asphalt Plant Accreditation Scheme (APAS). This is an internal process control system for asphalt producers that sets rules for controlling and assessing the quality of asphalt manufactured in New Zealand. The APAS scheme requires asphalt producers to formally

register their plants with Roading NZ in order to apply for accreditation under the scheme.

In some ways this is similar to the accreditation scheme used for concrete production.

The scheme was developed by the Asphalt Committee. It does not dictate how plants undertake their process control, but how well they comply with their mix design formula. The aim of the scheme is to improve the consistency of production from asphalt plants and to signify that purchasing from APAS certified plants ensures consistency of mix manufacture and assurance that the asphalt conforms to mix requirements and standards.

The Asphalt Committee has been monitoring levels of adherence to the APAS Operating Criteria and reports that two thirds of registered plants have achieved and/or are maintaining their accredited status. The committee plans to publish the names of accredited plants for the information of asphalt purchasers.

Specifications

In parallel with the work on the Asphalt Plant Accreditation Scheme, Roading NZ has been working in conjunction with NZTA

to update the asphalt specifications. Currently, a New Zealand version of AAPA's National Asphalt Specification (NAS), affectionately referred to as Kiwi-NAS, is often now the specification of choice for asphalt in New Zealand rather than the more traditionally used NZTA M/10 specification.

The current work being undertaken will see the amalgamation of the industry developed specification ('Kiwi-NAS') and M/10 documents into a single National Asphalt Specification for New Zealand that will cover all types of asphalt requirements apart from the specialised area of open graded porous asphalt.

Treatment selection guidance

In addition to the work on asphalt specifications, a separate working group has been developing guideline information to assist with the decision making process for asphalt surfacings being applied to different pavement and loading conditions. This work is yet to be finalised, but when available will be complementary to the new asphalt specification while providing much needed advice to specifiers and clients alike.

Roading New Zealand's Asphalt Committee is confident that its work on these various initiatives will ensure that asphalt paving technology keeps abreast of the changing demands in the same way that chipsealing technology has done over the past 70 years.

For more information on any aspect of asphalt technology contact Alan Stevens by [clicking here](#).

Blending and hotmix plant



New Health & Safety body coming soon

Roading New Zealand launched the Operate Safe health and safety system in 2003 and it has become the standard for industry self governance (ISG) in health and safety in the civil construction sector.

Operate Safe's card scheme recognises members' training achievements, and results have shown that the majority of its member organisations have shown measurable improvement in H&S statistics following introduction of the system.

Since then, the sector has been faced with new challenges—huge increases in the roading programme and a greater focus on safety issues. Industry self-governance has never been more important.

However, as these challenges have grown, so too has a duplication of different qualification related cards and systems. Faced with this duplication, discussions have been taking place for over a year

between Roding New Zealand and the Master Builders Federation, Site Safe New Zealand, Certified Builders Association, NZ Specialist Trades Contractors Federation and NZ Contractors Federation to establish a new body whose members will work together to rationalise H&S qualifications and training.

Representatives of these groups have agreed in principle that the new body will effectively be a Construction Industry Health & Safety Council (CIHSC) and a strategic plan has been drawn up.

The new body, when launched, will set industry-wide standards that provide a degree of flexibility on how to achieve minimum health and safety standards in each specific industry sector. It is hoped that agreement will be reached between all parties in the coming months.

Technical committees busy



Roding New Zealand's technical committees are where some of the industry's most important work takes place.

A number of New Zealand Standards (NZS) relevant to the roading industry are up for review and Roding NZ has taken a lead role in initiating an industry-wide review of the NZS 4407 suite of Standards, relating mainly to aggregate test methods. A steering group has been formed, with representation from the Civil Engineering Testing Association of New Zealand (CETANZ) and the Aggregates and Quarry Association (AQA).

Another issue concerning industry standards has involved the Bitumen Committee in ongoing discussions with ERMA and industry stakeholders regarding the development of a tank wagon inspection regime that meets legislative requirements and industry needs, while trying to minimise cost and inconvenience impacts. Roding NZ's proposition aims to

eliminate the involvement of third party test certifiers that do not have an intimate knowledge of our industry. We want to make sure certifiers understand what they are certifying.

The Asphalt Committee has made good progress with the amalgamation of the "Kiwi-NAS" and M/10 Specifications (see separate article in this issue) and aims to complete this work soon. The APAS programme will be promoted to the industry at the same time, along with asphalt treatment selection material.

Discussions have taken place with NZTA to facilitate the development of an improved first coat chip seal specification. This work will be carried out in conjunction with the Canterbury Accelerated Pavement Testing Indoor Facility (CAPTIF) study on the ingress of water in new seals. NZTA has expressed a wish that an industry-wide working group model is used to conduct this work, with the aim of completion before the next sealing season.

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Technical committees

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Roading NZ continues to maintain appropriate involvement with the review of the NZTA CoPTTM documents.

A comprehensive review of all the pavement surfacing unit standards is about to be announced by InfraTrain. Their intended time line is to start this project towards the end of June and this work will require involvement of all the Roding New Zealand technical committees.

For more details about any committee activities [click here](#) to email Alan Stevens.

Website traffic increasing

Roding New Zealand's website, launched in its new format last year, has been receiving significantly increasing 'hits' recently.

Traffic to the site has increased by over 300 percent compared with our former website, and members in particular are finding it useful to visit regularly in order to keep up with news, submissions and other important information.

Content on the members-only section of the site is gradually increasing, and includes the recent addition of valuable information on environmental management practices. Roding New Zealand members who have not yet been allocated a password to access this section should contact Lyn Kuchenbecker by [clicking here](#).

The most popular pages on the website are News items, highlighted and accessed directly from the homepage, and contributions by Chief Executive Chris Olsen to industry publications such as Contractor, Construction News and Local Government magazines.

For members, the publication of important technical guidelines is one of the site's key benefits.

www.roadingnz.org.nz



New category in 2010 Roding Excellence Awards

Roding New Zealand has added a new category to its 2010 Roding Excellence Awards, for which entries opened in May—the Goughs Excellence Award for a Medium Road Project, which will be awarded for a project valued at between \$5 million and \$25 million.

The Excellence Award for a Minor Project (in conjunction with GeoSystems) will this year be awarded for a project of less than \$5 million in value, while the Greenstone Energy Award for a Major Road Project is for a project valued at more than \$25 million.

The InfraTrain New Zealand Industry Best Practice Awards will again be given for three categories—People; Procurement; and Environmental Sustainability.

The Roding Excellence Awards promote leadership, excellence and best practice within the industry, as well as encouraging collaboration and the transfer of innovation.

The Awards are open to all organisations that administer roads, e.g. New Zealand Transport Agency (NZTA) or local authorities, as well as contractors and consultants.

Eligible projects are those completed in New Zealand between 10 July 2008 and 14 July 2010. Joint entries are encouraged for the Road Project categories as the criteria covers planning through to construction and include collaboration, co-operation, and relationship building.

Full details of the Awards and an Entry Kit can be downloaded by [clicking here](#).