

**REAAA**<sup>®</sup>  
Driving Progress

ROAD ENGINEERING ASSOCIATION OF ASIA & AUSTRALASIA (NZ)

# Sharing the Knowledge

## LOW VOLUME ROADS WORKSHOP

SPONSORED BY:



22-24 July 2009  
Napier War Memorial  
Conference Centre

# REGISTRATION

Register by 15 April for  
**SUPER EARLY BIRD**  
registration fee!

Website: [www.roads.co.nz](http://www.roads.co.nz)

## INVITATION

On behalf of the New Zealand Chapter of the REAAA I would like to invite you to the 4th Low Volume Roads Workshop.

With so much current emphasis on economic resuscitation, fiscal prudence, reconsideration of larger capital infrastructure projects and keeping a national workforce gainfully employed, it may be quite easy to inadvertently shift our attention away from this critical part of our business - the part where we come together for sharing of success stories, innovative, cost-effective ideas and practical methods. The part of our business where we simply have conversations about road safety, best practice maintenance, gravel loss and other natural resources, economics and the environment. Conversations and sharing knowledge about levels of service and road user expectations, structures, funding and flooding.

So, in addition to a truly national representation of papers this year, we are delighted to also be joined by a strong international delegation, bringing ideas and innovation from South Africa, Australia, Vietnam, Cambodia and the UK. We have therefore carefully planned our keynote presentations and arranged facilitated discussions so that this workshop is focused on maximising exchanges.

As a fraternity we are all continually challenged and motivated to keeping our low volume roads operating effectively and efficiently, and these exchanges will hopefully give effect to those challenges and motives. So please feel most welcome at this workshop, please aspire to sharing and gaining knowledge and to have fun in the process.



Rob Napier  
Workshop Chair

### 2009 Organising Committee

Rob Napier, Neil Bennett, Janice Brass,  
Jim McNeill and Mark Chamberlain

## KEYNOTE PRESENTERS

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### Gerrie van Zyl



Gerrie van Zyl graduated from the University of Pretoria in South Africa during 1979 and also obtained a Masters Degree in Civil Engineering from the same institution. Following a 13-year career in a Provincial Roads Authority, he spent 5 years with the CSIR (a research organization) before joining the Consulting Engineering fraternity. He currently holds the position of Director at PD Naidoo & Associates, responsible for the Roads Division of the Company.

Although Gerrie's experience includes all aspects of road planning, design, construction, maintenance and management, he has concentrated his efforts in recent years on the lower volume roads. In this regard he is actively involved in the updating of South African National guideline documentation on gravel roads and surfacing seals.

#### BRIDGING THE ROAD QUALITY GAP

Road users throughout the world perceive a huge difference in the quality of surfaced and unsurfaced roads. This perception results in a high demand and drive towards surfacing, which is also strongly supported by environmentalists, the bitumen industry and politicians.

Road authorities, on the contrary, are increasingly under pressure to provide and maintain safe and economical roads with limited funding, finding it difficult to satisfy these demands.

Experience further indicates conflicting opinions within authorities regarding minimum and appropriate standards for low volume roads, resistance towards reduced standards and uncertainty regarding the optimization of available funding.

The focus is to stimulate discussion towards finding appropriate solutions and a balanced strategy to bridge the quality gap.

### Rob Petts



Robert qualified as a Chartered Civil, Transportation and Agricultural Engineer and has 40 years professional experience. He has worked in over 30 countries in Africa, Asia, Europe and the Pacific region. He has been principal of Intech Associates Consulting Engineers for the last 20 years; responsible for provision of advisory services in the field of transport and highway research, management and maintenance. He has worked with and coordinated associates in the fields of applied research, management consultancy, information technology, highway management, rural transport, local-resource-based technologies, workshop and equipment management, private sector development and training.

He is currently the Rural Transport Theme Champion for the Global Transport Knowledge Partnership: [www.gtgp.com](http://www.gtgp.com)

#### ECO-ROADS AND RURAL ROAD SURFACING SOLUTIONS

Rural road engineering has traditionally relied on the technology of gravel surfacing and low cost bitumen seals. Recent research has demonstrated a wide range of low cost, local resource-based alternatives with attractive environmental and sustainability credentials.

There are substantial environmental disadvantages from the production of the currently used binders-sealers which are mainly fossil fuel or cement based. These involve energy intensive production and long transport distances from large scale production facilities to the point of application. It is believed that a significant proportion of these imported raw materials could be substituted with locally sourced alternatives. These could arise from local agricultural and manufacturing operations, and waste streams from industrial activities and power generation.

# PROGRAMME

## WEDNESDAY 22 JULY

12.30pm **Technical Tour**

4.30pm Registration  
5.00 pm Welcome Drinks  
6.00 pm Free evening

## THURSDAY 23 JULY

**8.30am Registration and Coffee**

9.30 am Welcome  
9.45 am **Gerrie van Zyl: Bridging the Road Quality Gap**

**10.30 am Morning Tea**

11.00 am **Road Safety**

- **Improving Safety on Unsealed Roads**  
*George Giummarra, ARRB Group Ltd*
- **Providing New Knowledge on the Accident Benefits of Sealing Unsealed Roads**  
*Peter Bradshaw, BECA*
- **The Holy Grail of Road User Behaviour Change – how we do it in Selwyn!**  
*Lee Wright, Selwyn District Council*
- **Appropriate Standards for Rural Roads**  
*Dr John Rolt, TRL Ltd, UK and Dr Jasper Cook, OtB Engineering, UK*

**12.20 pm Lunch**

1.00 pm **Unsealed Roads – Maintenance – Best Practice**

- **Waste AC to Rehab Unsealed Road**  
*Brendon Walker, Fulton Hogan*
- **Gravel Road Maintenance Issues and Sustainable Solutions**  
*David Edge, Hurunui DC, Ken Avant, Waimak DC and Carl Grabowski, MWH*
- **Gravel Loss Monitoring Project**  
*Craig Thew, MWH*
- **LVR research in Vietnam on unsealed and sealed roads (based on SEACAP research projects)**  
*Dr Jasper Cook, OtB Engineering*

2.40 pm **Funding**

- **Project Development using Community Transport Funds**  
*Andrew McDonald, MWH*

**3.05 pm Afternoon Tea**

3.35 pm **Table Topics**

This new format for 2009 introduces a series of 15 minute presentations on a variety of topics, each facilitated by a well-informed person for an interactive style presentation in small groups.

5.00 pm Close

6.00 pm Coaches depart Te Pania and Masonic Hotels  
6.30 pm Workshop Dinner

## FRIDAY 24 JULY

8.30 am **Reflections on Yesterday**  
*George Giummarra, Gerrie van Zyl and Dave Hutchison*

8.45 am **Eco-Roads and Rural Road Surfacing Solutions**  
*Rob Petts, Intech Associates, UK and Robert Lennox, UK*

9.30 am **Far North Flood Damage – Local Roads Perspective**  
*Craig Connelly, GHD*

**10.00 am Morning Tea**

10.30 am **Road User Expectations and Establishing Levels of Service**

- **Delivering What Customers Want, Painlessly and Cost Effectively**  
*Patrick Keenan, Fulton Hogan and Julie Muir, CODC*
- **Assessing the Effectiveness of Unsealed Road Key Performance Measures**  
*David McDougall, In3Roads*

11.10 am **Smart Practices/Innovation**

- **The Wairoa Experience – Value for Money by Making the Best of What's Available**  
*Aram Goes, Opus, Neil Cook, Wairoa District Council and Anthony O'Sullivan, Quality Roading and Services*
- **Utilising Repeated Load Triaxial Testing in the Assessment of Local Materials on Taihape Napier Road Seal Extension**  
*Greg Arnold, Pavespec and Carey Morris, GHD*
- **Development Rules for Constructing a Low Volume High Country Road**  
*Scott Hockly, Downer EDI Works*

**12.10 pm Lunch**

12.50 pm **Structures**

- **Breathing Life into Hardwood Bridge Trusses: A Marriage of Steel and Timber**  
*David Hutchison, Downer EDI Works and Ian Taylor, Downer EDI Works*
- **Low Cost Structures Manual – developing economies, including masonry, brick timber as well as conventional concrete small bridges, culverts and drifts**  
*Paul Larcher, UK*

1.30 pm **Maintenance/Best Practice**

- **What does a Good Road Look Like**  
*Julie Muir, CODC*
- **Bio-Engineering: An Old System Developed with New Technology**  
*Robert Coulson, RST Environmental Solutions Ltd*
- **Low Cost Slope Stabilisation**  
*Tim Hunt, Thailand*
- **Optimising Gravel Road Maintenance Strategies**  
*Gerrie van Zyl*

2.50 pm Wrap Up

3.00 pm Close

The conference programme was accurate at time of print however the Conference Organising Committee reserves the right to amend any component as necessary. Every effort will be made to communicate any significant changes. In the event of any disruption or event leading to losses or added expenses being incurred by delegates, there shall be no liability attached to REAAA, the Organising Committee, Napier War Memorial Conference Centre, Mission Winery or The Conference Team. Registration will indicate acceptance of these conditions by the delegate.

# SOCIAL PROGRAMME

## Welcome Drinks

**When:** Wednesday, 22 July 2009  
**Venue:** Exhibition Hall and Gallery, Napier War Memorial Conference Centre  
**Times:** 5.00 pm – 6.00 pm  
**Inclusions:** Beverages (beer, wine and soft drinks) and canapés  
**Cost:** Included in registration fee

## Workshop Dinner

**Sponsored by Gold Sponsors:**



**When:** Thursday, 23 July 2009  
**Venue:** Mission Winery  
**Times:** 6.00 pm – Coach departs Te Pania and Masonic Hotels  
6.30 pm – Predinner Drinks  
7.15 pm – Dinner  
**Inclusions:** Beverages (beer, wine and soft drinks), dinner, entertainment, return transfers from Te Pania and Masonic Hotels  
**Cost:** Included in registration fee  
**Dress:** Smart Casual  
**Partners:** Most welcome. Tickets are available at \$85. Please book and pay with registration.

## LVR Technical Tour

**When:** Wednesday, 22 July  
**Departs:** 12.30pm (lunch own arrangements)  
**Cost:** Included in registration fee  
**Inclusions:** Coach, tour leader, afternoon tea

Enjoy an afternoon out in the Kaweka Ranges. Due to the success of the technical tours at the previous Low Volume Roads workshops, we are again organising a tour around points of interest in regard to Low Volume Roads in the Hawke's Bay area.

See a recently developed rural lifestyle subdivision, seal widening, rehabilitation and minor safety improvement projects, an aggregate quarry and some seal extension works. The route will also include an excursion onto unsealed pavements. All while taking in the fine panoramic views of the Kaweka Ranges and country side.

Afternoon tea at the good ole 'Puketapu country pub' then a quick look up the Taihape road and the surrounding wine country terrain, arriving back in Napier around 5pm.



## REGISTRATION FEES & GENERAL INFORMATION

### REGISTRATION FEES

	Super Early Bird To 15 April	Early Bird To 22 June	Standard After 22 June
<b>REAAA Members</b>	\$445	\$489	\$534
<b>Non Members</b>	\$478	\$523	\$568

All prices are inclusive GST

The Registration Fee includes all components detailed in the programme, morning and afternoon teas, lunches, technical tour, happy hour and dinner. Additional dinner tickets are available for \$85 (includes pre dinner drinks, canapés, dinner, beverages (beer, wine and soft drinks), entertainment, return transfers to Te Pania and Masonic Hotel).

### WHERE

Napier War Memorial Conference Centre, 48 Marine Parade, Napier. Registration will be available prior to the Welcome drinks Wednesday and from 8.30am Thursday.

### AIRPORT TRANSFERS

These are your own responsibility. Taxis to the workshop venue are approx \$30.

### CANCELLATION AND REFUND POLICY

All cancellations must be made in writing to the workshop organiser. If, following your registration, you are unable to attend please notify the organiser as soon as possible to arrange a transfer of registration or a partial refund. Notification received by 22 June 2009 incurs a \$90 cancellation fee. For cancellations notified after 22 June 2009, refunds will be made at the discretion of the organising committee and paid after the workshop.

### INSURANCE

All insurance is the responsibility of the registrants. The workshop Organising Committee, The Conference Team, Napier War Memorial Conference Centre and Mission Winery accept no liability for death or illness or injury / accident to or financial loss by any person attending the workshop, whatever the cause. Registration of the delegate will indicate acceptance of these terms.

### WORKSHOP ORGANISERS

The Conference Team

P O Box 20 051

Christchurch 8543

Phone 03 359 2614, Fax 03 359 2602, Email [marg@conferenceteam.co.nz](mailto:marg@conferenceteam.co.nz)

THE CONFERENCE TEAM

### ACCOMMODATION

The Conference Team has confirmed block bookings at Te Pania Hotel and Masonic Hotel (both opposite the conference venue). To obtain these you need to book via the Organiser using the Registration Form and prepay a minimum of one night's accommodation as deposit. Space is on a first-come first-served basis. Costs quoted are per single, twin or double room, per night and include GST. Cancellations or amendments within 30 days may incur a cancellation fee of one night.

#### Te Pania Hotel

Marine Parade, Napier

Rating: First Class

Rate: Standard Room \$168.75

Four star accommodation on the water front. Room facilities include Sky TV, mini bar, tea and coffee facilities, high speed internet access. Hotel offers room service, car parking, laundry, wireless internet services, restaurant and bar.

#### Masonic Hotel

Cnr Tennyson Street

and Marine Parade, Napier

Rating: Standard

Rate: Double or Twin Room \$110

Napier's original Art Deco Hotel located on the water front. Room facilities include Sky TV, tea and coffee facilities. Hotel offers room service, laundry, cafes and bars.

First Name (for name badge):.....Family Name.....  
 Company Name.....  
 Postal Address.....  
 Business Phone.....Mobile Phone.....  
 E mail Address:.....  
 Special dietary requirements or disabilities.....

**REGISTRATION**

	to 15 April	to 22 June	after 22 June	
<input type="checkbox"/> REAAA Members	\$445	\$489	\$534	\$ _____
<input type="checkbox"/> Non Members	\$478	\$523	\$568	\$ _____

**ACTIVITIES**

Technical Tour – Wednesday 22 July (included in registration fee)       Yes       No  
 Additional Dinner Tickets      No required: \_\_\_\_\_ @ \$85 = \$ \_\_\_\_\_

**ACCOMMODATION – TE PANIA OR MASONIC** (tick preference)

TE PANIA HOTEL Standard Room – \$168.75       MASONIC HOTEL Standard Room – \$110.00  
 Room Configuration:     Double room     Twin bedded room  
 Arrival Date:..... Departure Date:..... Total Nights:.....  
 Special Requirements:.....

To guarantee your booking, prepayment of a minimum of one nights stay is required. Balance paid at checkout.

One night deposit     Prepay all nights in full      Accommodation deposit = \$ \_\_\_\_\_

**PAYMENT DETAILS – GST No. 69 757 642**

**TOTAL PAYABLE = \$ \_\_\_\_\_**

Order No: \_\_\_\_\_       Cheque (payable to The Conference Team enclosed)       Visa       Mastercard  
 Cardholders Name: \_\_\_\_\_      Card Number:                  
 Signature: \_\_\_\_\_      Expiry Date: \_\_\_\_\_

The Privacy Act 1993 requires that, before your name and address details can be published in the list of delegates either for distribution to fellow delegates or any other party, you must give your consent. If you DO NOT wish your name and details to be included in the list of delegates please tick.