

# TRAINING TALK

TRAINING NEWS FROM THE NEW ZEALAND INSTITUTE OF HIGHWAY TECHNOLOGY **AUGUST 2017**

## ROAD LIGHTING COURSE A – TO AS/NZS 1158

**1 DAY** (with optional night tour)

**PRESENTER** Graeme Culling and Geoff English

This one day course covers the series of AS/NZS 1158 Standards for Lighting for Roads and Public Spaces. The design of lighting for vehicle and pedestrian road users is covered as well as historical reasoning behind "why we light roads". It allows users to gain full advantage from the broad guidance the standards now provide.

The course will cover the elements of good road lighting design for all parts of the road network using the computer techniques specified in the standard.

## ROAD LIGHTING COURSE B – DESIGN TRAINING

**1 DAY** (with optional night tour – previous evening)

**PRESENTER** Graeme Culling

This Road Lighting Design Training course provides practical guidance for those involved in the detail of design process. Road Lighting Design is a skill that is essential for Asset owners of Road Lighting (Road Controlling Authorities, Councils and NZ Transport Agency) to have ready access to. The course concentrates of the design methodology for roads lit to both Category V and P – but also covers public space lighting, lighting of pedestrian crossings and tunnel lighting principles.

This one day design course builds on the NZIHT Road Lighting Course A. It covers the design methodology of the series of AS/NZS 1158 Lighting Standards and covers relevant material from the "right light" project.

### DATES

<b>CHRISTCHURCH</b> (confirmed)	1 August
<b>DUNEDIN</b>	5 September
<b>AUCKLAND</b>	26 September

### DATES

<b>CHRISTCHURCH</b> (confirmed)	2 August
<b>DUNEDIN</b>	6 September
<b>AUCKLAND</b>	27 September

For more information contact Jan Kivell. [jan@nziht.co.nz](mailto:jan@nziht.co.nz) 06 759 7065 ext 708.

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August – October 2017	7 - 10
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NZ Transport Agency & NZIHT

# 18<sup>th</sup> ANNUAL CONFERENCE

6<sup>th</sup> - 8<sup>th</sup> November 2017 Trinity Wharf, Tauranga

## Stand & Deliver

Making the customer the centre of thinking for the operation of New Zealand roads.

PLATINUM SPONSOR



**CIRTEX**  
GAIN MORE GROUND

We are moving towards a funding model for Maintenance and Operations for roads which places customers and stakeholders at the centre of our thinking. We are giving them certainty about the quality of the network and we are giving ourselves a robust method for assessing the quality of our roads and funding them accordingly.

In the past, much of our road work was driven by the squeaky wheels and embedded maintenance schedules. Thinking about the customer experience and placing that at the centre of our business model is a big culture shift for many, but it will ultimately lead to greater consistency in our work, and most importantly, better value and service for all New Zealanders.

To help achieve these outcomes an evidence based business case approach to investment in Maintenance and Operations of New Zealand roads is required by Road Controlling Authorities.

**REGISTER NOW** [nziht.co.nz](http://nziht.co.nz)

### FOR MORE INFORMATION CONTACT

Jill Warner, Conference Co-ordinator

☎ 06 759 7065 ext. 709 ✉ [jill@nziht.co.nz](mailto:jill@nziht.co.nz)

**NZ TRANSPORT AGENCY**  
WAKA KOTAHI



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## MICROSOFT PROJECT – TASK MANAGEMENT 1 DAY

**PRESENTER** Rodney Penney

The Task Management course provides a comprehensive introduction to Project Managers, Business Managers, or anyone responsible for scheduling tasks and resources. This course gives participants the skills necessary to develop, implement, schedule and manage a project plan.

### DATES

<b>TAURANGA</b>	3 August
<b>DUNEDIN</b>	23 August
<b>AUCKLAND</b>	30 August
<b>CHRISTCHURCH</b>	6 September

### FOR MORE INFORMATION CONTACT

**Lisa Banks.** ✉ [lisa@nziht.co.nz](mailto:lisa@nziht.co.nz) ☎ 06 759 7065 ext 705.

## MICROSOFT PROJECT – RESOURCE MANAGEMENT 1 DAY

**PRESENTER** Rodney Penney

This course is designed for advanced users who have attended Task Management. It is essential that this course has been attended, completed and the learning applied before attending this Resource Management course.

### DATES

<b>TAURANGA</b>	4 August
<b>DUNEDIN</b>	24 August
<b>AUCKLAND</b>	31 August
<b>CHRISTCHURCH</b>	7 September

### FOR MORE INFORMATION CONTACT

**Lisa Banks.** ✉ [lisa@nziht.co.nz](mailto:lisa@nziht.co.nz) ☎ 06 759 7065 ext 705.

### CONTACT INFORMATION

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[www.nziht.co.nz](http://www.nziht.co.nz)

**Conferences & Specialist Workshops**  
Jill Warner – [jill@nziht.co.nz](mailto:jill@nziht.co.nz)  
ext 709

### Short Courses

Lisa Banks – [lisa@nziht.co.nz](mailto:lisa@nziht.co.nz) ext 705  
Jan Kivell – [jan@nziht.co.nz](mailto:jan@nziht.co.nz) ext 708

### Degree & Diploma

Jill Warner – [jill@nziht.co.nz](mailto:jill@nziht.co.nz) ext 709

### The Diploma of Engineering (Civil)

Gerhard van der Westhuizen –  
[gerhard@nziht.co.nz](mailto:gerhard@nziht.co.nz)  
May Osborne – [may@nziht.co.nz](mailto:may@nziht.co.nz)

**NZ Certificate in Infrastructure Works (Level 2) + (Level 3)**  
Jan Kivell – [jan@nziht.co.nz](mailto:jan@nziht.co.nz)

*NZIHT operates as an independent company with the Western Institute of Technology at Taranaki as the sole shareholder.*

# BRIDGE AND OTHER SIGNIFICANT HIGHWAY STRUCTURES INSPECTION

2 DAY COURSE

## NEW COURSE

10 PERSON LIMIT  
GET IN QUICK!



Bridges and Other Significant Highway Structures are critical components of the New Zealand Roding Network. Failure to inspect and identify any defects correctly could potentially result in dramatic damage and/or loss of life. This new NZTA endorsed and certified 2 day course covers in depth the requirements outlined in the NZTA policy document S6 'Bridges and Other Significant Highway Structures Inspection Policy'.

Completion of this course will require practical inspection assessment of the course material on Day 2.

### COURSE DATES

Hamilton (confirmed)	16-17 August
Christchurch	27-28 September
Hamilton	16-17 October

For further details regarding this course please contact Jan Kivell.  
E [jan@nziht.co.nz](mailto:jan@nziht.co.nz) | P 06 759 7065 ext 708.

## INSPECTING ROADS & ESTABLISHING MAINTENANCE NEEDS 1 DAY

PRESENTER **Bill Evans**

This course provides an introduction to the methodology used to inspect and determine road maintenance needs. Employing asset management principles and utilising industry tools, the inspector must then apply skill and knowledge to identify and prioritise maintenance activities, and present cost options balanced against contract conditions and service levels.

### DATES

CHRISTCHURCH	10 August
AUCKLAND	23 August
NAPIER	30 August
HAMILTON	5 September
WELLINGTON	18 October
CHRISTCHURCH	25 October

### FOR MORE INFORMATION CONTACT

Lisa Banks. E [lisa@nziht.co.nz](mailto:lisa@nziht.co.nz)  
P 06 759 7065 ext 705.

## BRIDGE INSPECTION & MAINTENANCE PROCEDURES 2 DAYS

PRESENTER **Dave Charters**

**Bridges are valuable assets, which must be maintained and managed if they are to remain functional at optimal cost through their design life.**

Defects do occur which require attention during the life of a bridge. Some bridge components have a design life less than that of the bridge and require periodic replacement.

Natural events such as floods and earthquakes cause damage. The bridge corrosion environment can affect durability and must be recognised. These areas must be addressed and

appropriate maintenance carried out to ensure continued public safety as well as to maintain the asset and minimise repair costs.

### DATES

DUNEDIN	13-14 September
HAMILTON	18-19 October

### FOR MORE INFORMATION CONTACT

Jan Kivell. E [jan@nziht.co.nz](mailto:jan@nziht.co.nz)  
P 06 759 7065 ext 708.

## PAVEMENT SURFACING 1 DAY

PRESENTER **Glynn Holleran**

High quality pavements, along with the correct selection of pavement surfacing materials are critical to the safety, longevity and condition of New Zealand roads. This one day course will outline and identify the multiple types of surfacing currently in use, the variety of materials used in maintaining these pavements, as well as design, equipment use and surfacing type selection. Asphalt and Chipseal practices will be covered at length including cutting and preparation, along with procedures for patching both of these surfacing types. Current Health and Safety practices will also be covered in depth relating to these specific workplace environments.

### DATES

CHRISTCHURCH	9 August
AUCKLAND	1 September
PALMERSTON NORTH	22 September

### FOR MORE INFORMATION CONTACT

Jan Kivell. E [jan@nziht.co.nz](mailto:jan@nziht.co.nz)  
P 06 759 7065 ext 708.



# BITUMEN – BASIC SAFETY

## 1 DAY

Includes hands-on fire extinguisher training

**PRESENTER** Barry Gundersen

**It is absolutely essential that all those involved in any way with bituminous materials fully understand the significant hazards presented and the procedures used to ensure safety.**

This is a required awareness course for all personnel in the road surfacing industry and is presented with the aid of graphic practical demonstrations.

This popular course has practical 'hands-on' fire extinguisher training. Every person on the course gets to practice putting out a fire with an extinguisher.

It is a pre-requisite for other advanced courses for those handling, operating, maintaining, working near bitumen equipment or supervising the use of bituminous materials. This course will assist with compliance with individual and company health and safety responsibilities.

### WHO SHOULD ATTEND?

All personnel involved in any way with road surfacing, especially those working anywhere in contractor's depots, chipsealing and asphalt paving workers, as well as those supervising road surfacing operations including local authority and consulting engineering personnel.

### DATES

<b>AUCKLAND</b>	1 September
<b>HAMILTON</b>	5 September
<b>PALMERSTON NORTH</b>	8 September
<b>CHRISTCHURCH</b>	19 September

### FOR MORE INFORMATION CONTACT

Jan Kivell. ☎ jan@nziht.co.nz  
☎ 06 759 7065 ext 708.

# BITUMEN PLANT AND TANKER OPERATOR

## 1 DAY

**PRESENTER** Barry Gundersen

The operation of bitumen tankers, sprayers and bitumen storage and blending plants demands a basic knowledge of the properties of bitumen and associated products and adherence to strict safety procedures.

Production is improved if operators have the appropriate advanced knowledge and skill to accurately and safely use plant and equipment. This course is a "follow-on" from the awareness level Bitumen – Basic Safety course and is designed specifically for "hands-on" operators. It is a pre-requisite for the Bitumen Sprayer Operator course.

### DATES

<b>PALMERSTON NORTH</b>	13 September
<b>CHRISTCHURCH</b>	21 September

### FOR MORE INFORMATION CONTACT

Jan Kivell. ☎ jan@nziht.co.nz  
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# BITUMEN – MANAGING THE RISK

## 1 DAY

**PRESENTER** Barry Gundersen

**This is an essential risk awareness course targeted at managers, engineers and supervisors involved in managing businesses or operations that include the storage, transport and production of bituminous materials; and road surfacing works.**

A separate course "Bitumen – Basic Safety" is intended for all others involved in the roading industry.

It is absolutely essential that all those involved in managing or supervising bituminous operations or businesses, fully understand the significant hazards presented by the materials, related plant and equipment, the legislative requirements imposed and the due diligence procedures required to adequately manage the many risks involved.

The one day course is designed to help managers comply with Health and Safety responsibilities.

### WHO SHOULD ATTEND?

All senior management, middle management and supervisory personnel whose responsibilities are related to bitumen, hot mix, bitumen equipment or any related activities.

### WHAT IS THE DIFFERENCE BETWEEN 'BITUMEN – BASIC SAFETY' AND 'BITUMEN – MANAGING THE RISK'?

The "Bitumen – Managing the Risk" differs from the Bitumen – Basic Safety course, in that it is aimed specifically at managers and looks at the management due diligence issues associated with bitumen-related risks.

### DATES

<b>PALMERSTON NORTH</b>	11 September
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### FOR MORE INFORMATION CONTACT

Jan Kivell. ☎ jan@nziht.co.nz  
☎ 06 759 7065 ext 708.

**FINAL COURSES FOR 2017**

# BITUMEN SPRAYER OPERATOR 1 DAY

**PRESENTER** Barry Gundersen

Precise and competent operation of the bitumen sprayer is essential to successful chipsealing operations. Sprayer performance is improved if operators have detailed knowledge of the principles of the chipsealing process and the appropriate skills to accurately use the equipment. Output quality is enhanced by bitumen product knowledge, adherence to safe handling procedures and careful record keeping.

### WHO SHOULD ATTEND?

Persons with limited knowledge of sprayer operation. Also experienced operators who wish to update their skills and/or qualifications, will find this course appropriate.

### DATES

<b>PALMERSTON NORTH</b>	14 September
<b>CHRISTCHURCH</b>	22 September

### FOR MORE INFORMATION CONTACT

Jan Kivell. ☎ jan@nziht.co.nz  
☎ 06 759 7065 ext 708.



## APPLYING BITUMEN EMULSIONS AND POLYMER-MODIFIED BINDERS 2 DAYS

PRESENTER **Phillip Muir**

Bitumen emulsions for chipsealing offer some significant advantages over hot bitumen cutbacks in terms of safety, total energy use, greenhouse gas emissions and reduced risk in damp and cool environments. Polymer-modified binders (PMB's) extend the range of engineering materials available to contractors and designers to solve many of the practical road-surfacing problems that arise due to such things as cracked pavements, high surface stresses and wide temperature ranges.

### DATES

<b>CHRISTCHURCH</b>	16 August
<b>AUCKLAND</b>	30 August
<b>WELLINGTON</b>	21 September

### FOR MORE INFORMATION CONTACT

**Jan Kivell.** 📧 jan@nziht.co.nz  
☎ 06 759 7065 ext 708.

## PAVEMENT INVESTIGATION, DESIGN AND CONSTRUCTION TESTING 2 DAYS

PRESENTER **Ramiz Iskander**

**Understanding the main causes of road pavement failures and especially premature pavement failure is crucial in determining the correct design.**

Ensuring that the pavement has been properly constructed is key to performance and longevity of pavements and surfacing.

### TOPICS INCLUDE

- Best practice guidelines for pavement investigation and testing
- Pavement testing in the field and in the laboratory
- Pavement analysis using FWD back-calculation
- Pavement Failure Modes/Causes
- Pavement and surfacing design for new roads, widening and rehabilitation

- Flexible and rigid Pavement
- Pavement layers Moduli
- Construction surveillance and testing requirements

### WHO SHOULD ATTEND?

Contractors, Consultants, NZTA and local authority staff involved in roads and highways pavement investigation, design and construction

### DATES

<b>CHRISTCHURCH</b>	6-7 September
<b>AUCKLAND</b>	26-27 October
<b>WELLINGTON</b>	15-16 November

### FOR MORE INFORMATION CONTACT

**Lisa Banks** 📧 lisa@nziht.co.nz  
☎ 06 759 7065 ext 705.

## SURVEY AND SET OUT – STAGE 1 1 DAY

PRESENTER **Steve Parker**

**This is a practical course that excites and enables all field staff to read and interpret plans and assist with survey and setting out activities.**

The course gives a strong emphasis on understanding construction plans, dimensions, datums, survey marks, accuracies, elevations and layouts to enable all participants to confidently appreciate the works scope and detail. Basic measurements, offsetting and marking out for construction works are discussed and demonstrated.

### DATES

<b>HAMILTON</b>	11 August
<b>PALMERSTON NORTH (confirmed)</b>	17 August
<b>AUCKLAND</b>	15 September
<b>INVERCARGILL</b>	29 September

### FOR MORE INFORMATION CONTACT

**Lisa Banks.** 📧 lisa@nziht.co.nz  
☎ 06 759 7065 ext 705.

## CHIPSEAL DESIGN 2 DAYS

PRESENTER **Barry Gundersen**

Factors affecting the design and the field performance of chipseal surfacings are complex. Local conditions can significantly influence the way a seal is designed to get the best performance. A detailed knowledge of the materials, treatment selection, design procedures and construction processes is essential to any understanding of chipseal performance on the road. The design procedures from the textbook "Chipsealing in New Zealand" provide the basis for this course and includes a range of worked examples. A problem-solving session in syndicate workgroups also aids understanding. In addition, the practical application of the NZTA P/17 performance-based specification will be covered in detail, including worked examples.

### DATES

<b>AUCKLAND</b>	3-4 October
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### FOR MORE INFORMATION CONTACT

**Jan Kivell.** 📧 jan@nziht.co.nz  
☎ 06 759 7065 ext 708.



# UNDERSTANDING NZS3910:2013 CONDITIONS OF CONTRACT 2 DAYS

PRESENTER **Fiona Knight**

**How well do you know the contents of NZS3910, which are the 'rules' for administering and managing civil and building contracts?**

This popular course, from a practical and 'hands-on' point of view will benefit Clients, Consultants and Contractors regarding how to manage and administer contracts and to understand their obligations and liabilities in terms of these General Conditions of Contract.

## DATES

<b>CHRISTCHURCH</b> (confirmed)	16-17 August
<b>DUNEDIN</b>	22-23 August
<b>AUCKLAND</b> (confirmed)	23-24 August
<b>NAPIER</b>	28-29 September
<b>CHRISTCHURCH</b>	11-12 October
<b>AUCKLAND</b>	18-19 October
<b>WELLINGTON</b>	8-9 November

## FOR MORE INFORMATION CONTACT

**Lisa Banks.** 📧 [lisa@nziht.co.nz](mailto:lisa@nziht.co.nz) 📞 06 759 7065 ext 705.



# UNDERSTANDING THE NATIONAL UTILITIES CODE 2 DAYS

PRESENTER **Fiona Knight**

**How well do you know the National Utilities Code?**

Its use is compulsory for all road and rail controlling authorities and utility network operators and their contractors for access to the road and rail corridors to install and maintain utility assets.

This popular course gives an intensive look at the Code from principles to specifics, and includes discussion on the roles and needs of the different parties.

It is designed for corridor managers, utility operators, consultants and contractors and covers interpreting the Code and how to work better to comply with the requirements of the Utilities Access Act 2010.

## DATES

<b>AUCKLAND</b>	2-3 August
<b>WELLINGTON</b>	28-29 August
<b>INVERCARGILL</b>	9-10 October
<b>NAPIER</b>	26-27 October

## FOR MORE INFORMATION CONTACT

**Lisa Banks.** 📧 [lisa@nziht.co.nz](mailto:lisa@nziht.co.nz) 📞 06 759 7065 ext 705.





# TENDERING FOR PROJECTS

## UNDERSTANDING THE PROCESS

### 1 DAY

PRESENTER **Fiona Knight**

**Winning contracts and evaluating tenders is essential to the continuing viability of any contractor/client.**

It involves an understanding of the issues and requirements of the procurement stage but also the skills and ability to structure the tender not just to be successful but to increase profits as well. If you wish to learn the tendering process, then this course is a must. In addition it is essential for Clients and Consulting Engineers to understand how a tender is structured and presented to ensure competent evaluation of tenders submitted by Contractors.

#### TOPICS INCLUDE

- Types of contracts (lump sum, measure and value etc)
- Tender planning
- Material labour, plant and subcontractor unit costs
- Where to price P & G costs, overheads and profits
- Pricing strategies
- Extras and variations
- Weighting of unit rates
- Preliminary and General (P & G) cost (time related and fixed)
- Front-end loading of tenders
- Alternative tenders

- How to calculate on-site overhead and profit percentages and rate per working day

#### ON COMPLETION OF THIS COURSE PARTICIPANTS WILL HAVE THE KNOWLEDGE TO

- Understand the purposes, types and methods of tendering
- Prepare a well-balanced tender and unbalanced tender
- Learn a process to achieve consistency in tendering
- Identify where the potential for winning a job may be
- Differentiate between fixed and time related P & G
- Significance of extension of time under NZS3910:2013

#### DATES

<b>ROTORUA</b>	10 August
<b>AUCKLAND</b>	25 August
<b>CHRISTCHURCH</b>	27 September
<b>PALMERSTON NORTH</b>	25 October

#### FOR MORE INFORMATION CONTACT

**Lisa Banks.** [e lisa@nziht.co.nz](mailto:lisa@nziht.co.nz) [p 06 759 7065](tel:067597065) ext 705.

# SUCCESSFUL PROJECT MANAGEMENT

## 2 DAYS

PRESENTER **Steven Briggs**

The pace of change means that more and more inexperienced people are being asked to lead projects. The deadlines are often very close; the available resources are limited; and the stresses brought on by the pressure to succeed are intense. The conflicting demands from the day job and the project may be impossible to reconcile. Is it any surprise that 70% of projects fail to deliver in full, on time and within budget?

We've distilled the wisdom and experience of project managers into a simple six-step approach to leading a successful project. We'll help you learn it effortlessly in our highly interactive two day course. It's a practical approach that is easy to apply to any situation.

#### DATES

<b>CHRISTCHURCH</b> (confirmed)	9-10 August
<b>WELLINGTON</b>	3-4 October
<b>AUCKLAND</b>	15-16 November
<b>CHRISTCHURCH</b>	29-30 November

#### FOR MORE INFORMATION CONTACT

**Lisa Banks.** [e lisa@nziht.co.nz](mailto:lisa@nziht.co.nz) [p 06 759 7065](tel:067597065) ext 705.





# ENGINEER

## QUALIFICATIONS WHILE YOU WORK

### FEELING LIKE A CAREER CHANGE OR LOOKING TO UPSKILL YOURSELF? GAIN CIVIL ENGINEERING QUALIFICATIONS – WHILE YOU WORK!

The qualifications will be delivered in Auckland, Hamilton, Palmerston North and Christchurch – unless otherwise stated right. Learn with us in a Block Format, which involves face-to-face delivery in a classroom with a tutor, along with some self-directed study in your own time.

#### QUALIFICATIONS AVAILABLE ARE

##### **NZ DIPLOMA IN ENGINEERING (CIVIL) – Level 6**

The NZ Diploma in Engineering (Civil) – [NZDE (Civil)], administered by the NZ Board of Engineering Diplomas, is a well-established, 240 credit qualification. It is recognised by IPENZ (as fulfilling Dublin Accord requirements) and by Connexis as a pre-requisite/co-requisite for the NZDE Practice.

##### **GRADUATE DIPLOMA IN ENGINEERING (HIGHWAYS) – Level 7** *(Delivered in Hamilton only)*

The Graduate Diploma in Engineering (Highways), one year (full time equivalent), 120 credit qualification designed to provide holders of civil engineering qualifications an opportunity to acquire technical knowledge of applied management.

##### **CERTIFICATE IN ENGINEERING TECHNOLOGY – Level 4**

60 credit certificate providing a choice of three areas to study:

- Core Engineering
- Highway Engineering
- Civil Engineering

This is a good foundation for further engineering studies at higher levels:

- NZ Diploma in Engineering (Civil) and
- NZ Diploma in Engineering (Electronics)

##### **NZ CERTIFICATE IN INFRASTRUCTURE WORKS (Level 2)**

This is a \*\*fee free 41 credit programme delivered over 20 weeks. This involves five blocks of classroom training (total 7 days).

##### **NZ CERTIFICATE IN INFRASTRUCTURE WORKS (Level 3)**

This is a \*\*fee free 56 credit programme delivered over 20 weeks. This involves five blocks of classroom training (total 9 days).

For further information please contact the Programme & Office Co-ordinator

**EMAIL.** [admin@nziht.co.nz](mailto:admin@nziht.co.nz) **HAMILTON OFFICE.** (07) 850 8330 **NEW PLYMOUTH OFFICE.** (06) 759 7065

**Make it Happen.**

new zealand  
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institute of highway technology



## AUGUST – OCTOBER 2017

**Aggregates for Pavement Construction**  
(1 day)

This course identifies the properties and characteristics of aggregates and systems for quarrying, storage, selection and handling, so that these properties are not altered and their quality remains consistent until placements in the pavement.

22 August	Dunedin
12 September	Palmerston North
19 September	Hamilton
Cost (excl GST)	\$450

**An Introduction to Materials used for Chipseals** (half day)

This course provides a basic introduction to the materials used in chipseals and asphalt in NZ and is intended for those who have not previously had formal training in this subject from other courses such as an appropriate degree or diploma. It is essential knowledge for those supervising road surfacing operations and is intended to give a good understanding of the properties and specifications of the component materials – bituminous binders and mineral aggregates. Knowledge of the subject matter in this course is essential for those wishing to attend the NZIHT "Chipseal Design" course.

2 October	Auckland
Cost (excl GST)	\$480

**Applying Bitumen Emulsions and Polymer-Modified Binders** (1 day)

Refer to page 5.

16 August	Christchurch
30 August	Auckland
21 September	Wellington
Cost (excl GST)	\$495

**Bitumen – Basic Safety**  
(1 day)

Refer to page 4.

1 September	Auckland
5 September	Hamilton
8 September	Palmerston North
19 September	Christchurch
Cost (excl GST)	\$520

**Bitumen – Managing the Risk** (1 day)

Refer to page 4.

11 September	Palmerston North
Cost (excl GST)	\$520

**Bitumen Plant and Tanker Operator**  
(1 day)

Refer to page 4.

13 September	Palmerston North
21 September	Christchurch
Cost (excl GST)	\$520

**Bitumen Sprayer Operator**  
(1 day)

Refer to page 4.

14 September	Palmerston North
22 September	Christchurch
Cost (excl GST)	\$520

**Bitumen Rheology & Performance**  
(1 day)

Bitumen is the primary sealing material used in New Zealand roads which comes in various grades and may be modified with polymers or other materials. Before 2016 bitumen was graded according to empirical consistency measures with no reference to traffic, shear or climate. Modified Binders too have been classified by empirical tests. This course introduces the concepts of rheology and shows how they relate to performance in asphalt and seals. This is related to the design of asphalt and selection of sealing grades. The new asphalt specification is discussed and how the testing is done, reported and controlled.

8 August	Auckland
Cost (excl GST)	\$520

**Bridge Inspection and Maintenance Procedures** (2 days)

Refer to page 3.

13-14 September	Dunedin
18-19 October	Hamilton
Cost (excl GST)	\$795

**Bridge and Other Significant Highway Structures** (2 days)

Refer to page 3.

16-17 August	Hamilton
27-28 September	Christchurch
16-17 October	Hamilton
Cost (excl GST)	\$1,050

**Chipseal Design** (2 days)

Refer to page 5.

3-4 October	Auckland
Cost (excl GST)	\$795

**Compaction – Advanced Knowledge**  
(half day)

This interactive classroom based course is a considerable leap above the Compaction – Operator Knowledge course. This is aimed at technical staff such as contracts engineers, graduate engineers etc. The aim of this course is to give the candidate confidence, especially when engaging with other technical staff. We have an in-depth look at materials and their properties, lab and field testing (and in particular, what the numbers mean, and how best to interpret them), soil mechanics, and how to apply all of this to a typical roading contract.

15 August	Wellington
29 August	Auckland
7 September	Christchurch
20 September	Whangarei
27 September	Palmerston North
4 October	Hamilton
11 October	Dunedin
Cost (excl GST)	\$395

**Compaction – Operator Knowledge**  
(half day)

This interactive classroom based course is now seen as a benchmark course in the industry and is often referred to simply as

## CALENDAR KEY

- Confirmed courses, but spaces still available.
- Potential courses still require numbers to run.
- Course is full.

'the compaction course'. This course is more than what it seems. With decent information on materials (and how to fix up bad materials), compaction gear, gear selection, knowing when to stop, plus a good swag of tricks of the trade to make life easier for your field staff.

15 August	Wellington
29 August	Auckland
7 September	Christchurch
20 September	Whangarei
27 September	Palmerston North
4 October	Hamilton
11 October	Dunedin
Cost (excl GST)	\$395

**Competent Pipeline Rehabilitation**  
(1 day)

Lining of ruptured underground drains and ducts provides a cost effective, less disruptive method for rehabilitation of the service. This course will provide an insight into the range of drains and service ducts that may be suitable for rehabilitation by relining. We will also be covering surveying, cleaning and assessment of failed drains and ducts, selection of rehabilitation methods and materials. Key safety aspects of materials use and installation.

8 August	Tauranga
17 August	Invercargill
Cost (excl GST)	\$450

**Conflict Management Skills**  
(2 days)

This course will help you improve productivity and engagement. It will result in better collaboration and trust throughout teams, clients, contractors and the wider organisation. Gain effective skills to support better communications, projects and improve your working relationships.

7-8 August	Dunedin
29-30 August	Auckland
6-7 September	Palmerston North
24-25 October	Christchurch
Cost (excl GST)	\$750

**Construction and Maintenance of Road Drainage Systems** (1 day)

Competent supervision skills are essential in producing a final product that meets all design and specification requirements. High levels of productivity can be achieved through the effective and efficient use construction techniques, gained through a combination of knowledge, good planning and organisation skills which best utilises the resources available to the supervisor.

9 August	Tauranga
18 August	Invercargill
Cost (excl GST)	\$450

**Creating a Health and Safety Culture**  
(1 day)

How well are you doing in creating a health and safety culture? The Health and Safety legislation puts responsibility for managing

Calendar continued on next page >

risks and potentially hazardous situations on people at all levels in workplaces, from the Board Chair to the cleaner. Many people complain: "It's not based on common sense, so how can we apply it?" Do you know what your health and safety responsibilities are?

14 August	Napier
21 August	Dunedin
31 August	Wellington
Cost (excl GST)	\$450

### Effective Leadership (2 days)

The most common reason employees give for leaving their job is their leader / manager. Failing to inspire or engage with the team results in poor performance and all the issues that generate as a result.

This course will help you learn how to lead yourself and your team, focus on the important things and develop strategies for dealing with everyday events. We appreciate the time pressure that everyone works under and so we give insights into effective processes that will yield results quickly, rather than theories that are difficult to put into practice.

15-16 August	Christchurch
12-13 September	Palmerston North
21-22 September	Tauranga
10-11 October	Wellington
17-18 October	Auckland
Cost (excl GST)	\$995

### Environmental Risks of Construction (1 day)

*'Preparing you with the on-site essentials'*

Do you know the environmental risks and obligations of the construction projects?

This course provides participants with a practical understanding of the environmental aspects of civil construction. Providing you the know-how to understand your legal obligations, raise environmental awareness and find workable solutions too many of the common risks on construction sites.

The course is designed for anyone involved in the construction industry, including contractors, project managers, regulators and consultants.

11 October	Wellington
18 October	Auckland
Cost (excl GST)	\$595

### Geomechanics for NZ Rooding (1 day)

This course draws together the necessary soil investigation and geotechnical procedures for roading construction and maintenance. The course provides an up-to-date overview of investigative techniques and analysis.

28 August	Whangarei
13 September	Palmerston North
20 September	Auckland
28 September	Invercargill
Cost (excl GST)	\$450

### Geometric Design for Roads (2 days)

This course covers geometric design principles specifically for the design of New Zealand roads. The aim of this course is to develop an understanding of the principles of geometric design, and apply these to design safe, functional and aesthetic road alignments in accordance with the requirements of the 2009 Austroads guidelines.

9-10 August	Palmerston North
23-24 August	Christchurch
Cost (excl GST)	\$750

### Identify, Locate and Protect Services (1 day)

Civil construction sites are inherently dangerous places of work. Where excavations are present or where the work requires ground penetration, particularly by metal pegs, rods, stakes and the like, there is an immediate opportunity for potential conflict with existing utility services located underground.

9 August	Wellington
24 August	Hamilton
11 October	Auckland
18 October	Christchurch
27 October	Palmerston North
Cost (excl GST)	\$450

### Inspecting Roads and Establishing Maintenance Needs (1 day)

Refer to page 3.

10 August	Christchurch
23 August	Auckland
30 August	Napier
5 September	Hamilton
18 October	Wellington
25 October	Christchurch
Cost (excl GST)	\$450

### Leading High Performing Teams (1 day)

This course is an operator's manual for people. It gives you step by step instructions on how to get the best performance out of each person. Work smarter with people and get more done. Learn how to do this in one day.

22 August	Wellington
29 August	Invercargill
19 September	Tauranga
Cost (excl GST)	\$595

### Level 1 Basic Traffic Controller (TC) (1 day)

This is the NZ Transport Agency (NZTA) Level 1 Basic Traffic Controller (TC), which covers the standards and operating procedures required by the Code of Practice for Temporary Traffic Management (COP/TTM).

1 August	Dunedin
8 August	Hamilton
15 August	Rotorua
17 August	Palmerston North

### CALENDAR KEY

- Confirmed courses, but spaces still available.
- Potential courses still require numbers to run.
- Course is full.

22 August	Christchurch
23 August	New Plymouth
30 August	Auckland
7 September	New Plymouth
12 September	Taupo
14 September	Wanganui
19 September	Christchurch
21 September	Lower Hutt
25 September	Auckland
3 October	Palmerston North
5 October	Hamilton
11 October	New Plymouth
12 October	Nelson
16 October	Napier
18 October	Christchurch
25 October	Auckland
25 October	Lower Hutt
Cost (excl GST)	\$345
plus NZTA Registration	\$40

### Level 1 Site Traffic Management Supervisor (STMS) (2 days)

This two-day course provides training to the requirements of the NZTA Code of Practice for Temporary Traffic Management, and covers the new standards and operating procedures for NZTA and Local Authority roads.

3-4 August	Napier
10-11 August	Lower Hutt
14-15 August	Nelson
21-22 August	New Plymouth
24-25 August	Christchurch
28-29 August	Auckland
4-5 September	Dunedin
11-12 September	Hamilton
14-15 September	Rotorua
19-20 September	Palmerston North
27-28 September	Christchurch
9-10 October	New Plymouth
12-13 October	Taupo
18-19 October	Wanganui
26-27 October	Lower Hutt
26-27 October	Auckland
Cost (excl GST)	\$545
plus NZTA Registration	\$40

### Maintenance & Safe Use of Small Plant & Machinery (1 day)

Power tools, generators, rollers, screeds and other small machines are basic equipment used in the everyday operation of any roading or civil contracting company.

11 August	Christchurch
24 August	Auckland
31 August	Napier
6 September	Hamilton
19 October	Wellington
26 October	Christchurch
Cost (excl GST)	\$450

Calendar continued on next page >



**Managing Infrastructure Affected by Rivers**  
(1 day)

The effective maintenance of a roading network is very dependent on managing the risks associated with erosion and inundation from rivers and streams. This workshop will provide an overview of river and stream processes, hydrological and hydraulic analysis tools, risk management techniques and an outline of protection options.

17 August	Christchurch
26 September	Palmerston North
26 October	Auckland
Cost (excl GST)	\$695

**Microsoft Excel**

(1 day)

This workshop will hone your skills. Move from the basics to the many advanced Excel functions, make Excel work for you. Learn how analysis your data with functions, filters, Pivot tables, charting, navigate large spread sheets, save time, and become a confident Excel user.

1 August	Tauranga
8 September	Christchurch
20 September	Auckland
19 October	Palmerston North
Cost (excl GST)	\$520

**Microsoft Project – Resource Management**

(1 day)

Refer to page 2.

4 August	Tauranga
24 August	Dunedin
31 August	Auckland
7 September	Christchurch
Cost (excl GST)	\$520

**Microsoft Project – Task Management**

(1 day)

Refer to page 2.

3 August	Tauranga
23 August	Dunedin
30 August	Auckland
6 September	Christchurch
Cost (excl GST)	\$520

**Microsoft Word – Documents**

(1 day)

*'Preparing you to create better documents'*

This course is designed for Word users from basic to intermediate who need to be efficient with creating documents for tenders, health and safety, contracts, business proposals. This course will develop Word documents to an advanced level using many automation aspects of Word. Win more tenders, contacts with consistent, clear and well formatted files.

2 August	Tauranga
25 August	Dunedin
5 September	Christchurch
13 September	Palmerston North
21 September	Auckland
18 October	Wellington
Cost (excl GST)	\$520

**Nuclear Density Meter (NDM) – License Course** (half day)

This interactive classroom based course is designed for anyone who wishes to obtain a license to own radioactive material, such as NDM's. This is an easy to follow course with plenty of backup support around some other issues with owning NDM's. For example; free Radiation Safety Plan (RSP) templates to those who require them. Plus contacts within the industry around personal monitoring and wipe testing.

16 August	Wellington
28 August	Auckland
8 September	Christchurch
19 September	Whangarei
26 September	Palmerston North
3 October	Hamilton
10 October	Dunedin
Cost (excl GST)	\$395

**Nuclear Density Meter (NDM) – What You Need To Know** (half day)

This interactive classroom based course is aimed at anyone who is using the Nuclear Density Metre (NDM), or whose work may be affected by the NDM. In this half day course we cover all you need to know about the NDM. You will also learn some handy tricks about best practice use, storage and transportation.

16 August ●	Wellington
28 August	Auckland
8 September	Christchurch
19 September	Whangarei
26 September	Palmerston North
3 October	Hamilton
10 October	Dunedin
Cost (excl GST)	\$395

**Pavement Investigation, Design and Construction Testing** (2 days)

Refer to page 5.

6-7 September	Christchurch
26-27 October	Auckland
Cost (excl GST)	\$995

**Pavement and Rehabilitation Design** (2 days)

Since the adoption of the Austroads Pavement Design guide in NZ, pavement and rehabilitation design requires an understanding of mechanistic analysis procedures and the use of the computer program CIRCLY. This course covers pavement design and rehabilitation design in accordance with the latest version of the Austroads Pavement Design Guide and the associated NZ Supplement and contains hands-on applications of CIRCLY.

18-19 October	Auckland
Cost (excl GST)	\$995

**Pavement Surfacing** (1 day)

Refer to page 3.

9 August	Christchurch
1 September	Auckland

**CALENDAR KEY**

- Confirmed courses, but spaces still available.
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- Course is full.

22 September	Palmerston North
Cost (excl GST)	\$520

**Reinstatement of Service Trenches**

(1 day)

Avoid costly rework to suburban service trenches. Rough surfaces increase road user costs. Over recent years many roading authorities have reported instances of poor trench reinstatement that gave rise to road surfacing problems.

19 October	Christchurch
20 October	Auckland
Cost (excl GST)	\$450

**Refresher – Level 1 STMS**

(1 day)

Registration for Level 1 Site Traffic Management Supervisor (STMS) expires at the end of three years, at which time you will need to attend a one-day refresher course to regain this qualification.

2 August	Dunedin
9 August	Hamilton
16 August	Rotorua
18 August	Palmerston North
23 August	Christchurch
24 August	New Plymouth
31 August	Auckland
8 September	New Plymouth
13 September	Taupo
15 September	Wanganui
20 September	Christchurch
22 September	Lower Hutt
26 September	Auckland
4 October	Palmerston North
6 October	Hamilton
12 October	New Plymouth
17 October	Napier
19 October	Christchurch
Cost (excl GST)	\$345
plus NZTA Registration	\$40

**Road Lighting Course A – to AS/NZS 1158**

(1 day)

Refer to page 1.

1 August ●	Christchurch
5 September	Dunedin
26 September	Auckland
Cost (excl GST)	\$450

**Road Lighting Course B – Design Training**

(1 day)

Refer to page 1.

2 August ●	Christchurch
6 September	Dunedin
27 September	Auckland
Cost (excl GST)	\$450

**Safety in Trenches** (1 day)

This course covers the safety aspects of working in and around trenches within the civil industry and covers drainage work from small pipe, small scale excavations to large storm water and deep excavations.

Calendar continued on next page &gt;

- Confirmed courses, but spaces still available.
- Potential courses still require numbers to run.
- Course is full.

30 August	Auckland
20 September	Wellington
27 September	Christchurch
10 October	Tauranga
17 October	Invercargill
26 October	Palmerston North
Cost (excl GST)	\$450

#### **Slinging, Lifting, Moving and Placing, with and Excavator or Loader (1 day)**

When on the job, there will be times where you need to move or place equipment and there is a right way and a wrong way to do this. The information that is presented to you on course will give you the industry standard on the step you will need to do to get the job done efficiently and safely.

10 August	Wellington
22 August	Hamilton
12 October	Auckland
25 October	Napier
Cost (excl GST)	\$450

#### **Stabilisation of Road Pavements (1 day)**

Stabilisation can provide major benefits for roading projects of all sizes, and significantly offer acceptable cost effective alternatives to the use of premium sources of aggregates. This workshop provides an overview of the main issues involved with the design and construction of sealed and unsealed pavements using stabilisation.

31 August	Whangarei
14 September	Palmerston North
26 September	Tauranga
29 September	Invercargill
Cost (excl GST)	\$450

#### **Stress Free Processes (2 days)**

The demands of the job often mean late nights "fixing" issues or correcting other people's work so that the customer gets the right result. Sometimes mistakes get through and that leads to even more stress! Effective people fix the problem and avoid having to fix the errors. To others, fixing problems can seem "too hard". On this course you'll be guided through the simple 5 step approach in our highly interactive two day course.

17-18 August	Christchurch
14-15 September	Palmerston North
19-20 September	Auckland
12-13 October	Wellington
26-27 October	Tauranga
Cost (excl GST)	\$995

#### **Successful Project Management (2 days)**

Refer to page 7.

9-10 August ●	Christchurch
3-4 October	Wellington
Cost (excl GST)	\$995

#### **Supercharged Supervisors Toolkit (1 day)**

Get the job done, on time, to specifications and to budget. This requires Supercharged Supervisory skills. This highly interactive one

day course will address four essentials to the supervisor.

- What you have to BE
- What you have to KNOW
- What you have to DO
- What you have to LEARN

9 August	New Plymouth
Cost (excl GST)	\$595

#### **Survey & Set Out (1 day)**

Refer to page 5.

11 August ●	Hamilton
17 August ●	Palmerston North
15 September	Auckland
29 September	Invercargill
Cost (excl GST)	\$595

#### **Tendering for Projects (1 day)**

Refer to page 7.

10 August	Rotorua
25 August ●	Auckland
27 September	Christchurch
25 October	Palmerston North
Cost (excl GST)	\$520

#### **The Fundamentals of Asphalt Mix (2 days)**

This course provides an overview of asphalt mix design and includes the latest design methods from America and Australia. The methods will include Austroads Selection and Design of Asphalt Mixes and SHRP Superpave Mix Design. It has also been updated to include the draft specification for dense graded, stone mastic and fine graded asphalt paving mixtures NZTA M/10. This will assist engineers and supervisors in their understanding of the design process and specifications.

21-22 August	Christchurch
Cost (excl GST)	\$750

#### **Time Management (1 day)**

Stop working hard – work smarter and get more done. Learn how to do all this in one day. You have as much time in a day as everyone else does. So what happens to it? Are you using it the way you want? Have you the capacity to work on your business as well as in it? This very powerful seminar has participants construct their own personalised Time Management Plan according to their style and work environment.

16 August	Palmerston North
14 September	Whangarei
18 September	Tauranga
27 September	Dunedin
Cost (excl GST)	\$595

#### **The National Utilities Code – What Staff On-Site Should Know (1 day)**

This course is designed specifically for contractors and utility network staff who install or maintain utility assets in the road and rail corridors to give an overview of the National Utilities' Code.

11 August	Palmerston North
18 August	Christchurch
Cost (excl GST)	\$495

#### **Transforming Your Leadership**

(1 day)

Being a leader in your business or field can be tough. Managing people, making hard decisions and maintaining an effective work/life/family balance can be challenging. We can teach you many things about leadership, culture and teams. We can train you in conflict management, team building, and creative organisational solutions.

11 August	Tauranga
17 August	Palmerston North
30 August	Invercargill
20 September	Auckland
Cost (excl GST)	\$595

#### **Understanding NZS3910:2013 Conditions of Contract (2 days)**

Refer to page 6.

16-17 August ●	Christchurch
22-23 August	Dunedin
23-24 August ●	Auckland
28-29 September	Napier
11-12 October	Christchurch
18-19 October	Auckland
Cost (excl GST)	\$750

#### **Understanding Quality Pavement Construction (2 days)**

The current trend towards performance based specifications for roading and civil construction projects increases the need for contracting firms to understand the issues involved with pavement construction, especially material compaction. This course provides an overview of theory and practice to assist team leaders and supervisors/forepersons to manage construction in the field.

9-10 August	Auckland
17-18 August	Napier
23-24 August	Invercargill
29-30 August	Whangarei
Cost (excl GST)	\$750

#### **Understanding the National Utilities Code (2 days)**

Refer to page 6.

2-3 August ●	Auckland
28-29 August ●	Wellington
9-10 October	Invercargill
26-27 October	Napier
Cost (excl GST)	\$750

#### **Working with Concrete – Basic Skills (1 day)**

This course aims to give workers basic knowledge relating to preparing, placing and finishing minor concrete works and the equipment needed to produce quality results.

8 August	Wellington
23 August	Hamilton
28 September	Christchurch
Cost (excl GST)	\$450

