

**PRESENTATION** 

Presented by

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Sign Design, Training & Verification.
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Expert witness reports



















### CONTENTS

- ✓ Induction
- ✓ Personal Protective Equipment (PPE)
- ✓ Roles and Responsibilities
- ✓ Training
- ✓ Site Work Zone Component Parts
- ✓ Site Safety
- ✓ Dairy and Record Keeping



















### CONTENTS

- ✓ Morning Toolbox Talks
- ✓ Daily Site Instruction
- ✓ Vehicle Safety Checklist
- ✓ Tools and Equipment Checklist
- ✓ PPE Inspection and Checklist
- ✓ First Aid Kit Checklist
- Emergency Numbers



















## ROADWORKS ZONE HEALTH AND SAFETY POLICY

It is a fundamental priority that all road construction companies strives to maintain healthy, safe and environmental sound working conditions which will minimise risk of injury or diseases to the individual, harm to the natural environment, and loss of property.

















## ROADWORKS ZONE HEALTH AND SAFETY POLICY

It is the responsibility of EVERY EMPLOYEE that both their own and the company's best interest are safeguarded against harm by identifying areas of risk that may have adverse consequences and taking immediate steps to eliminate such downgrading incidents or accidents.





















## TAKE SAFETY SERIOUSLY

# IT MAY BE YOUR OWN LIFE THAT YOU SAVE



















### INDUCTION

- ✓ Describe the work zone activity area
- ✓ Identify the risks on the project
- ✓ Identify the safe walkways
- ✓ Identify the Do's and Don'ts
- ✓ Provide PPE and how to use it
- ✓ Adhere to the safety signs on site



















# PERSONAL PROTECTIVE EQUIPEMENT (PPE)























## PERSONAL PROTECTIVE **EQUIPEMENT (PPE)**



Provide TESTED Equipment ONLY!!!





























Advance Warning Area – Typical First Signs

























Advance Warning Area – Speed Reductions Signs















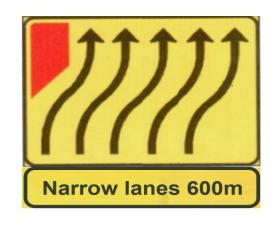














Advance Warning Area – Action Required Diagrammatic Signs





















End of Advance Warning Area - Flagger





























Transition Area –
Control and Action Required Signs

































Buffer Zone















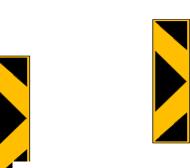










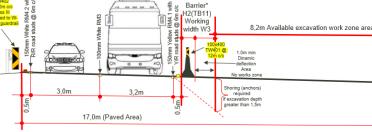












Work Zone

Typical Work Zone Cross Section X-X: 2 Narrow Lanes Configuration with New Jersey H2/W3 Barrier\* (60km/h maximum speed zone activity area) (Containment level and working width with steel connecting plates TL TB11)









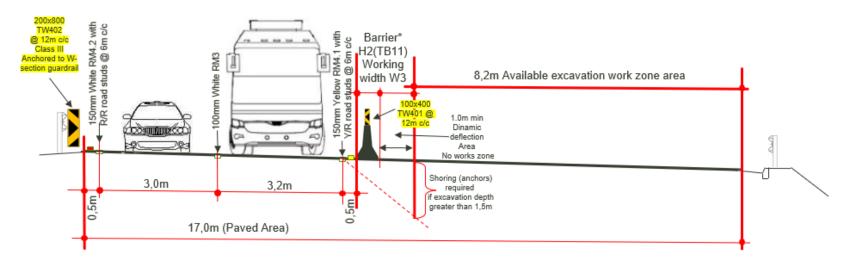












Typical Work Zone Cross Section X-X: 2 Narrow Lanes Configuration with New Jersey H2/W3 Barrier\* (60km/h maximum speed zone activity area) (Containment level and working width with steel connecting plates TL TB11)

### Work Zone – Typical Cross Section

































































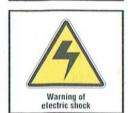














# TYPICAL SAFETY AND SYMBOLIC SIGNS























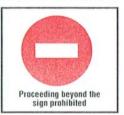


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# TYPICAL SAFETY AND SYMBOLIC SIGNS



















### **TYPICAL SAFETY RULES**

#### Do not wear:

Torn or loose clothing

#### Always wear:

- suitable protective clothing.
- approved safety shoes or boots/safe shoe
- hard hats outside offices
- gumboots when working in wet concrete





















### **TYPICAL SAFETY RULES**

Use gloves, aprons or other special clothing when handling:

- rough materials
- chemicals
- hot or cold objects and sharp edged objects

Wear ear protection whenever notices say you are in an ear protection area.



#### Wear respirators when:

- spray painting
- burning
- and dust masks in dusty areas
- there is any other toxic danger.

Use special safety equipment when required in dangerous areas you may work.

**Report** loss or damage immediately of any protective clothing or safety equipment.



















Only qualified people are allowed to use or repair tools and equipment

#### Before starting machinery:

- make sure all guards are in place
- · check for safety of other persons.



Before repairing or adjusting machinery **STOP** and lock out the machine. **DO NOT** work on a machine while it is in operation.

Regularly check all **lifting tackle**. If faulty get it repaired.

Do **not** use an **air hose** to clean clothing and do **not** point it at another person.

You must not operate any equipment or vehicles unless you are qualified and authorised to do so.

Don't be the cause of a fire!

Obey "No Smoking" signs.



Know where the nearest fire extinguishers are and how to use them.



















#### When carrying something make sure that:

- you bend your knees and keep your back nearly straight when lifting
- you get help with heavy or bulky materials (maximum half of your body weight)
- there is only one person giving orders when a team is lifting big loads
- there is a clear path to where you want to go before starting the lift.

#### When using a ladder:

- use both hands when climbing
- use shoulder bag or material hoist to lift loads or tools
- make sure the ladder is sturdy and the right length
- make sure the ladder is secure on top and bottom.

#### When using hand or power tools, make sure that:

- you are using the right tool for the job
- handles are not split
- cutting tools are sharp
- chisels do not have "mushroom" heads
- power tools are not being overloaded.





















- When offloading any reagents always follow the correct procedures. Do not take short cuts.
- When offloading liquid chemicals have a hose of running water available to use in an emergency.

Do not work on electrical equipment until it has been made safe by a qualified person.

**Do not** use electrical power tools or equipment while **standing in water.** 



- regularly sweeping up shavings, dust, scraps or oil spills
- · putting refuse in the bins provided

#### Keep access ways safe by:

- not blocking fire exit or traffic lanes with tools or equipment
- · keeping loose material off stairs and walkways.

#### Get to know your working area. In particular:

- warning signs
- locations of fire fighting appliances
- exit.

#### Be aware of other work near you. In particular

 do not walk under suspended loads of person working above you.



















Do not put fuel into a hot or running engine.

Store **flammable liquids** only in small amounts and in approved safety cans.

#### When using oily rags:

- store them after use in covered metal bins or dispose of them safely
- keep oily rags away from oxygen cylinders.

Keep **portable heating equipment** in buildings away from combustible materials.

#### Handling poisonous chemicals

When you come into contact or have to handle chemical reagents there are a few basic rules that you must apply:

- Personal Protective Equipment must be worn at all times when handling reagents.
- Arrange to have a second person, wearing the correct safety clothing, on standby to assist you should an emergency arise.
- Report your intended actions to your supervisor or control room so that immediate assistance can be arranged, if required.
- Report all instances of injury, no matter how minor the injury seems to be, to the medical centre or your supervisor for attention.



















 watch out for vehicles and mobile equipment

Use the proper roads and walkways.

Do not take short cuts

Make sure the cords of electrical tools are in good condition



**Do not** place yourself or any part of any machinery you are working on any closer than **3.5 metres** from overhead lines.

If your machinery can come close to the lines, **Stop!** 

**Do not** attempt to climb any poles, or interfere with any power boxes on poles.

If you have to work near any overhead lines, contact your supervisor for help. **Do not** proceed without advice from your supervisor.



















Do not ride on mobile equipment or construction vehicles.



All operators/drivers must have a valid licence, medical and Competency Certificate.

Get treatment immediately, even for minor injuries and make sure all injuries are reported.

You must **not** light fires anywhere on the Site.



Only **drink** from water points in ablution blocks or where marked "Drinking Water"

#### When welding or cutting:

- remove or shield nearby combustibles
- make sure fire extinguishers are available
- check hoses and fittings for leaks
- use all protection equipment and clothing.

Do not tamper with safety equipment!



















Scaffolds may only be erected, altered or taken down under the strict personal supervision of a competent person appointed in writing by the contractor.

Loose or non-rigid scaffolds must **not** be used and defects must be rectified or reported to the responsible person.

Empty drums, crates or bricks shall **not** used to prop, support or anchor scaffolding

No working platform is to be erected on another platform.

Access to incompletely built scaffolds to carry out work is prohibited. If scaffolding is unavoidably in an unsafe condition, it shall be suitably fenced off and provided with warning notices.

Scaffolding shall not be altered whilst work is in progress.

No person shall be permitted on scaffolding during hazardous weather conditions.

If there are no handrails on a scaffold or you are working at any height over 2 metres, you must wear a safety belt or harness.

"Safe for use" and "Unsafe for use" scaffold signs must be displayed on all scaffolds.



















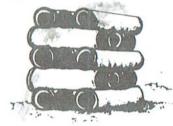
### When working in trenches or excavations more than 1.5 metres deep, always ensure that:

- loose earth and materials are not within 1 metre of the edge
- you do not work under an overhang or cracked and loose sides



- sides are correctly propped or battered back
- open edges must be barricaded

Always ensure that stacks are secure and steady.



The base of a stack must be three times the height.

All staircases must have handrails.



Keep edges of decks clear of loose materials and tools.





















#### While on the Construction Site you must NOT:

bring in alcoholic drinks, or drugs (unless prescribed and inform your supervisor)



**consume alcohol** or partake of prohibited substances

make practical jokes, horseplay or fight

bring in firearms



use abusive language

assault or intimidate any person

hold meetings without authority from your supervisor

distribute leaflets or newspapers



















#### While on the Construction Site you must NOT:

bring in **bottles**, **drink cans** or **prepare meals** except in designated areas



commit a criminal offence

damage property

bring in animals

bring in unauthorised persons

brew liquor

bring in **vehicles** without permission from your supervisor

























## **QUESTIONS???**





















## TRAINING

# SAFETY FIRST!

SAVE A
LIFE!!





















### CONCLUSION

## Design and Train for SAFETY!!

























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