

Title	Work safely using pilot vehicles for roadmarking on Level 1 roads		
Level	2	Credits	8

Purpose	<p>This unit standard is designed for roadmarkers working on Level 1 roads as classified by the road controlling authority.</p> <p>People credited with this unit standard are able to: demonstrate knowledge of mobile roadmarking operations on Level 1 roads; prepare for piloting mobile roadmarking operations; pilot roadmarking operations on Level 1 roads; describe protection of roadmarkings; and work safely during semi-static closures and inspection activities on Level 1 roads.</p>
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Classification	Infrastructure Works > Roadmarking
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Available grade	Achieved
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Guidance Information

- Evidence presented for assessment against this unit standard must be consistent with safe working practices and be in accordance with relevant industry requirements.
- Legislation and standards relevant to this unit standard include:
 - Employment Relations Act 2000;
 - Health and Safety at Work Act 2015;
 - Health and Safety in Employment Regulations 1995;
 - Accident Compensation Act 2001;
 - Resource Management Act 1991;
 - Traffic Regulations 1976;
 available at www.legislation.govt.nz/.
- The requirements within the following codes of practice and guidelines applying to roadmarking operations must be complied with as appropriate for the context of assessment against this unit standard:
 - Codes of practice and checklists published by the New Zealand Roadmarkers Federation, available at www.nzrf.co.nz/technical-documents/.
 - Waka Kotahi New Zealand Transport Agency's principal external manuals, manual amendments, specific examples include: Code of Practice for Temporary Traffic Management (COPTTM), www.nzta.govt.nz/resources/code-temp-traffic-management/copttm.html.
 - Approved codes of practice and guidelines relevant to specific work activities, an example includes: Approved Code of Practice for the Management of Substances Hazardous to Health in the Place of Work (MOSHH), available from Worksafe New Zealand at <https://www.nzta.govt.nz/copttm>.

- 4 This unit standard may be assessed in a workplace or a provider environment.
- 5 **Definitions**
Company requirements include the policy, procedures, and methodologies of the company. They include requirements in company and site health, safety and environmental plans, quality assurance documents, job plans, contract work documents and reporting documents.
Level 1 roads are roads with a low to moderate (500-10,000 vehicles per day) traffic volume.
Manufacturer's instructions may include specifications, installation, handling, and maintenance instructions use and Safety Data Sheets.
Road Controlling Authority (RCA) in relation to a road, refers to the Minister of Transport, Crown entities, State enterprises, or territorial authorities that control the road.
Traffic Management Plan (TMP) is a document describing the design, implementation, maintenance, and removal of temporary traffic management.
- 6 This unit standard is restricted to the requirements of piloting operations on Level 1 roads. It does not fulfil all the requirements for certification as a Traffic Controller or a Site Traffic Management Supervisor.
- 7 Candidates must hold a driver licence of the appropriate class for the gross vehicle mass of the vehicle being driven.

Outcomes and performance criteria

Outcome 1

Demonstrate knowledge of mobile roadmarking operations on Level 1 roads.

Performance criteria

- 1.1 Mobile operations are defined in accordance with RCA requirements.
- Range closures – mobile, semi-static.
- 1.2 The function of pilot vehicles and when they are required is described in accordance with RCA requirements.
- Range includes but is not limited to – lead pilot, tail pilot, above 65kph, below 65kph, divided roads.
- 1.3 The movement of vehicles in mobile operations is described in accordance with RCA requirements.
- Range lead pilot, working, shadow, tail pilot.

- 1.4 Restrictions on the movement and activity of personnel are described in accordance with RCA requirements for general works, semi-static closures, and live lanes.
- Range includes but is not limited to – all members of team, shadow vehicles, live lanes, machine adjustments and breakdowns.
- 1.5 The safety zone is described in accordance with RCA requirements and the TMP.
- 1.6 Requirements of vehicle-mounted traffic signs for roadmarking operations and when vehicle is not working are described in accordance with RCA requirements.
- Range types, construction, placement.
- 1.7 Reasons for stopping work or increasing the number of pilot vehicles are described in accordance with RCA requirements.
- 1.8 Responsibility to site traffic management supervisor is described in accordance with RCA and company requirements.
- 1.9 Mobile traffic management equipment is identified and described in accordance with company requirements for its use.
- 1.10 Pilot vehicle compliance is described in accordance with RCA requirements.
- Range registration, wheels, task.

Outcome 2

Prepare for piloting mobile roadmarking operations.

Performance criteria

- 2.1 Personal protective equipment is fitted and worn in accordance with the manufacturer's instructions and company requirements.
- 2.2 Hazards are identified in accordance with the approved TMP.
- Range includes but is not limited to – road widths and geometry, vehicle count, variety of traffic flows, vehicle types.
- 2.3 Dry or curing time of marking material is identified and consideration is given to its impact on piloting requirements in accordance with company requirements.

Outcome 3

Pilot roadmarking operations on Level 1 roads.

Range operations include – application of roadmarkings.
operations may include – line removal, inspections, raised pavement markers (RPM) installation.

Performance criteria

3.1 Operational requirements on Level 1 roads are met for vehicle-mounted traffic signs in accordance with RCA requirements.

Range vehicle – lead, tail, shadow, working.
includes but is not limited to – travelling to site, establishment, operational requirements, and completion of work.

3.2 Clear, concise, and continuous communication is maintained with all other vehicles in movement during operations in accordance with the TMP and company requirements.

Range operations – mobile, semi-static.
emergencies – team members.

3.3 Visibility is maintained during mobile operations on Level 1 roads in accordance with RCA requirements.

Range distance, time.
includes but is not limited to – gradients, sharp left-hand curves, sharp right-hand curves.

3.4 Safety zone is maintained during operations in accordance with RCA requirements.

Range includes but is not limited to – gradients, sharp left-hand curves, sharp right-hand curves.

3.5 Pilot vehicle is positioned during centre line and edge line operations above 65kph and below 65kph in accordance with RCA requirements.

Range pilot – lead, tail.
includes but is not limited to – divided roads, intersection, road width, day and night operations, traffic count, visibility on hills, visibility at corners.

3.6 Piloting is conducted in compliance with the mobile operational requirements of RCA.

Range pilot – lead, tail, shadow.

3.7 Flashing beacons, arrow boards, and variable message boards are operated in accordance with RCA and company requirements.

3.8 Pilot vehicle is positioned and driven in accordance with site conditions.

Range conditions include but are not limited to – road width, left or right lane occupation, traffic count, day and night operation, on/off ramps.

Outcome 4

Describe protection of roadmarkings.

Performance criteria

4.1 Protection time for marking material is described in accordance with job plan.

Range includes – the marking materials currently being used by roadmarking company.

4.2 Protective device placement is described in accordance with the TMP and RCA requirements.

Range tapers, straights, curves.

4.3 Protective device retrieval is described in accordance with company requirements.

Outcome 5

Work safely during semi-static closures and inspection activities on Level 1 roads.

Performance criteria

5.1 Semi-static closure is confirmed as established for activities taking between five minutes and one hour in accordance with RCA requirements.

Range includes but is not limited to – machine adjustments, inspections, protective devices.

5.2 Personnel access to a live lane on Level 1 road is ensured in accordance with RCA requirements.

Range may include – mechanical adjustment, quality control check, measurement, testing.

5.3 Lookout role is performed for activities taking less than 10 minutes during semi-static closure in accordance with company and RCA requirements.

Replacement information	This unit standard replaced unit standard 15923.
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Planned review date	31 December 2028
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	13 February 2001	31 December 2018
Review	2	22 September 2005	31 December 2018
Review	3	20 April 2017	31 December 2025
Review	4	29 June 2023	N/A

Consent and Moderation Requirements (CMR) reference	0101
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This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Waihanga Ara Rau Construction and Infrastructure Workforce Development Council qualifications@waihangaararau.nz if you wish to suggest changes to the content of this unit standard.