<table>
<thead>
<tr>
<th>Title</th>
<th>Plan and organise construction activities as a chipseal surfacing supervisor</th>
</tr>
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<tbody>
<tr>
<td>Level</td>
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<td>Credits</td>
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**Purpose**

This unit standard is designed for people working, in the pavement surfacing industry, towards recognition of competency in the role of a chipseal surfing supervisor.

People credited with this unit standard are able to: identify constraints affecting the chipseal construction process; confirm chipseal work requirements as a chipseal surfing supervisor; describe the supervision of performance-based chipseal contracts; plan for chipseal construction as a chipseal surfing supervisor; programme resources for chipseal construction as a chipseal surfing supervisor; confirm team, plant, equipment, material resources requirements as a chipseal surfing supervisor; plan and organise the control of health and safety hazards and adverse effects on the environment as a chipseal surfing supervisor; and organise job and support activities prior to commencing chipseal construction as a chipseal surfing supervisor.

**Classification**

Pavement Surfacing > Chipseal Surfacing

**Available grade**

Achieved

**Recommended entry information**

Unit 8021, *Demonstrate knowledge of chipseal construction plant*; Unit 20454, *Demonstrate knowledge of materials used in chipseal surfacing*; Unit 20461, *Demonstrate knowledge of bitumen gangbar sprayers*; and Unit 1507, *Demonstrate knowledge of, and supervise, construction activities as a chipseal supervisor*.

**Guidance Information**

1. The following legislation and requirements apply to this unit standard, and must be complied with:
   - Hazardous Substances and New Organisms Act 1996 (HSNO);
   - Health and Safety (Hazardous Substances) Regulations 2017;
   - Resource Management Act 1991;
   - Land Transport Act 1998;
   - Health and Safety in Employment Regulations 1995;
   - Traffic Regulations 1976;
The Safe Handling of Bituminous Materials Used in Roading – Code of Practice RNZ 9904.2006, Roading New Zealand, available for purchase at https://civilcontractors.co.nz/resources/industry-information/order-resources/;
NZTA P3: Specification for First Coat Sealing;
NZTA P4: Specification for Resealing;
NZTA P4 Notes: Notes for Resealing;
NZTA P17: Performance Based Specification for Bituminous Reseals;
NZTA Q1: Specification for Quality Assurance for Chipsealing;
Contract specifications;
Site safety plans and company quality plan;
Company procedures for chipsealing operations.

Any legislation or other requirements superseding any of the above will apply, pending the review of this unit standard.

2 Assessment against this unit standard must be based on evidence from a workplace context.

3 Evidence is required of at least three types of binder, at least ten job sites, a first coat seal, a reseal, and a two coat seal, a racked in seal and a drylock seal in any combination.

4 Definitions
Chipseal surfacing supervisor refers to a person who works in the chipseal surfacing industry with site responsibility for large, complex jobs, and/or oversight of several smaller jobs at a number of locations simultaneously. The chipseal surfacing supervisor has practical knowledge of contract law and contractual issues; detailed understanding of chipseal surfacing construction, contract documents and specifications; and, in a chipseal surfacing context, has defined responsibilities for planning and organising construction work, managing site safety, issuing instructions to forepersons and suppliers, team performance and productivity, contract documentation, and quality assurance, with authority to manage operations and make decisions relating to chipseal surfacing works.
Company procedures refers to all documented policies, procedures, and methodologies of the candidate’s employer at the time of training including but not limited to those relating to health, safety, environment, quality, and operations.
Job requirements take account of site conditions to meet contract specifications, and accord with procedures and work instructions written in quality manuals.

Outcomes and performance criteria

Outcome 1
Identify constraints affecting the chipseal construction process.
Performance criteria

1.1 Site constraints are inspected to determine any impacts on the selection of equipment and the construction process.

Range constraints may include but are not limited to – chipseal design, contract documents, climate, pavement shape, geometric constraints, materials and equipment available, clearances, live load limitations, vibration.

1.2 Contract specifications that are incompatible with site constraints or other considerations are identified in accordance with company procedures.

Range other considerations may include but are not limited to – traffic, restricted working hours.

Outcome 2

Confirm chipseal work requirements as a chipseal surfacing supervisor.

Performance criteria

2.1 Contract specifications (both method- and performance-based) are interpreted in terms of supervisor's duties regarding the conditions of contract, the technical section, the performance criteria, the schedule of quantities, the measurement, the payment, and the maintenance requirements.

2.2 Specific requirements for performance-based contracts are confirmed in accordance with the contract specifications.

2.3 Site surface pretreatments are inspected in accordance with job requirements and, if required, arrangements are made to have additional repairs carried out in accordance with company procedures.

2.4 Chipsealing requirements are confirmed in accordance with contract specifications and company procedures.

2.5 Location and limits of sealing are determined in accordance with contract specifications.

2.6 Chipseal plant and materials are checked in terms of certification, availability, and compliance with contract specifications.

Outcome 3

Describe the supervision of performance-based chipseal contracts.
Performance criteria

3.1 Preseal site inspections, and requirements for confirmation that site conditions are in accordance with company procedures and contract requirements are described in accordance with the contract specifications.

3.2 Requirements for liaison with the maintenance contractor to determine the type, extent, and programming of preseal repairs are described in accordance with the contract specifications.

3.3 Requirements for agreement between the engineer and project manager includes site acceptability, treatment selection, and the seal performance criteria are described in accordance with the contract specifications.

3.4 Stages that need project manager’s and/or engineer’s agreement to proceed, including timing, site acceptability, treatment selection, repairs, and performance criteria specified in contracts, are described in accordance with the contract specifications.

3.5 The timing of, and requirements for, confirmation with engineer, including site acceptability, treatment selection and design, last minute repair requirements, and other contract requirements, are described in accordance with the contract specifications.

3.6 The activities required during the maintenance period to ensure the achievement of the seal performance criteria and accords with company procedures and contract requirements are described in accordance with the contract specifications.

Range site inspections, data collection, performance monitoring, repair work.

Outcome 4

Plan for chipseal construction as a chipseal surfacing supervisor.

Performance criteria

4.1 Contract specification requirements that are incompatible with site constraints or other considerations are resolved and/or provided for in accordance with company procedures.

Range other considerations may include but are not limited to – availability of resources, traffic, restricted working hours.
4.2 Peripheral activities associated with chipseal construction are identified and provided for in accordance with the contract specifications and job requirements.

Range peripheral activities include but are not limited to – surface preparation, preseal repairs, adjustment of service covers, roadmarking, application of materials, worksite control, environmental issues, public safety, access, measurement and quantities of work, quality assurance.

4.3 Support activities are determined in accordance with job requirements and take account of site constraints, timescale, cost, extent of work, and company procedures.

Range site constraints include but are not limited to – work space, stockpile sites; support activities include but are not limited to – supply and delivery of sealing chip, delivery of binder, traffic control, removal of surplus chip, roadmarking.

4.4 Work programmes are planned and site activities are scheduled in accordance with contract specifications and job requirements.

Range a one-day operation, a contract involving multiple site visits, a contract involving subcontractors.

4.5 The work programme is reviewed in accordance with contract specifications.

4.6 The work programme for a contract of more than one day is submitted to the project manager or consultant in accordance with contract specifications and job requirements.

Outcome 5
Programme resources for chipseal construction as a chipseal surfacing supervisor.

Performance criteria

5.1 Resource requirements are identified in accordance with contract specifications and job requirements.

Range includes but is not limited to – chip, binder, plant, labour.

5.2 Work sequences and reporting requirements are planned and programmed in accordance with contract specifications, job requirements, and company procedures.

Range sequences include – hazard identification, scope of work, breakdown of activities, prioritising; reporting includes – costing data, work programme, traffic management plan, quality assurance, work progress, hazard, accident and/or incident.
5.3 The programme of work activities is carried out in accordance with contract specifications and company procedures.

Range scope, timescale, productivity, quality.

Outcome 6

Confirm team, plant, equipment, material resources requirements as a chipseal surfacing supervisor.

Performance criteria

6.1 Team numbers, positions, and duties are confirmed in accordance company procedures.

Range may include but is not limited to – arranging training and supervision to meet contract specifications.

6.2 Training and supervision are arranged for team to meet contract specifications in accordance with company procedures.

6.3 Plant and equipment requirements are confirmed in accordance with contract specifications, company procedures, accessibility and constraints.

6.4 Material resources are confirmed with supplier(s) in accordance with company procedures.

6.5 Programme requirements are confirmed with subcontractors in accordance with company procedures.

6.6 Site instructions are prepared and issued in accordance with company procedures.

Outcome 7

Plan and organise the control of health and safety hazards and adverse effects on the environment as a chipseal surfacing supervisor.

Performance criteria

7.1 Health hazards are identified and assessed and the procedures and equipment for controlling them are planned in accordance with Code of Practice RNZ 9904:2006, company procedures and legislation.

7.2 Safety hazards are identified and assessed and the procedures and equipment for controlling them are planned in accordance with Code of Practice RNZ 9904:2006, company procedures and legislation.

7.3 Adverse effects on the environment are identified and assessed and the procedures and equipment for controlling them are planned in accordance with Code of Practice RNZ 9904:2006, company procedures and legislation.
7.4 The control and monitoring of worksite health and safety hazards are organised in accordance with company procedures and legislation.

Range at least two chipseal construction sites; includes but is not limited to – noise, hazardous materials, obstructions, people in the vicinity, personal injury, spills.

7.5 The control and monitoring of adverse effects on the environment are organised in accordance with company procedures and legislation.

Range at least two chipseal construction sites; includes but is not limited to – noise, hazardous materials, spills.

7.6 Site safety plans are developed in accordance with company procedures, legislation, and client requirements.

Range at least two; evidence is required of plans that require traffic management.

7.7 Selection of suitable sites for transferring bitumen in the field, stockpiling chip, loading and unloading plant, and disposal of waste materials is made with consideration for public safety and in accordance with Code of Practice RNZ 9904:2006, company procedures and legislation.

7.8 Health and Safety and environmental information is communicated to field staff through site instructions in accordance with company procedures.

**Outcome 8**

Organise job and support activities prior to commencing chipseal construction as a chipseal surfacing supervisor.

**Performance criteria**

8.1 Support activities are organised in accordance with work programme and contract specifications.

Range supply and delivery of chip, delivery of binder, traffic control, removal of surplus chip, roadmarking.

8.2 Job activities are organised in accordance with work programme and contract specifications.

8.3 Traffic control is arranged in accordance with contract specifications and traffic management plan.

8.4 Reporting procedures are organised in accordance with contract specifications and company procedures.
This unit standard is expiring. Assessment against the standard must take place by the last date for assessment set out below.

### Status information and last date for assessment for superseded versions

<table>
<thead>
<tr>
<th>Process</th>
<th>Version</th>
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<td>Registration</td>
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<td>27 October 2005</td>
<td>31 December 2013</td>
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<td>2</td>
<td>25 May 2007</td>
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<td>3</td>
<td>15 March 2012</td>
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<td>4</td>
<td>24 January 2019</td>
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### Consent and Moderation Requirements (CMR) reference

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