

Title	Maintain drainage systems		
Level	4	Credits	2

Purpose	<p>This unit standard is for people who work in the drainlaying industry.</p> <p>People credited with this unit standard are able to:</p> <ul style="list-style-type: none"> – maintain drains, identify and rectify faults. – repair or alter drainage systems. – maintain drainage structures, identify and rectify faults.
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Classification	Plumbing, Gasfitting and Drainlaying > Drainlaying
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Available grade	Achieved
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Guidance Information

- 1 Legislation, regulations and/or industry standards relevant to this unit standard include but are not limited to:
- Plumbers, Gasfitters, and Drainlayers Act 2006;
 Health and Safety at Work Act 2015;
 Building Act 2004;
 Resource Management Act 1991;
 Plumbers, Gasfitters, and Drainlayers Regulations 2010;
 The following standards, which are available at <http://www.standards.govt.nz>:
- AS/NZS 1547:2012 *On-site domestic wastewater management*;
 AS/NZS 1546.1:2008 *On-site domestic wastewater treatment units – Septic tanks*
 AS/NZS 2032:2006 *Installation of PVC pipe systems*;
 AS/NZS 3500.2:2021 *Plumbing and drainage, Part 2: Sanitary plumbing and drainage*;
 AS/NZS 3500.3:2021 *Plumbing and drainage, Part 3: Stormwater drainage*.

Good practice guidelines – Excavation safety, Wellington: WorkSafe New Zealand, 2016, available at <http://www.worksafe.govt.nz/worksafe>.

The following Building Code clauses, and any related Acceptable Solution and Verification Method documents, which are available at <https://www.building.govt.nz/>:

New Zealand Building Code Clause E1 Surface water;
 New Zealand Building Code Clause G13 Foul water.

Any new, amended or replacement referenced standards, codes of practice, guidelines, Building Code Acceptable Solutions and Verification Methods, or authority requirements affecting this unit standard will take precedence for assessment purposes, pending review of this unit standard.

2 Definitions

Drainage structures refers to any surface water or foul water structure that be present in a system. These may include but are not limited to – septic tanks and disposal systems, wet wells, wingwalls, oil and petrol interceptor traps, sumps, access chambers, inspection chambers, grease traps, stormwater retention, detention, and disposal systems.

Drains and drainage systems refers to any surface water or foul water drainage pipework and associated fittings.

Job specifications refer to instructions (oral, written, graphic) and may include any of the following – manufacturers' instructions; design drawing detail specifications; specifications from a specialist source such as an architect, designer, engineer, or a supervisor; and site or work specific requirements.

Other services refer to any existing installed services such as water, gas, electricity, or telephone network cables.

3 Candidates must hold a current limited certificate trainee authorisation or exemption under supervision as issued under the Plumbers, Gasfitters, and Drainlayers Act 2006.

4 Level of performance

To achieve this standard the candidate must be capable of consistently performing the requirements:

- to current and relevant legislation, standards and codes (including safety);
- in an environmentally sustainable manner;
- within an acceptable timeframe;
- in the workplace;
- in different and unfamiliar contexts.

Outcomes and performance criteria

Outcome 1

Maintain drains, identify and rectify faults.

Performance criteria

1.1 Identify causes of faults, and the appropriate means of rectification.

Range rectification may include – repair, replace, clear.

1.2 Clear pipework and commission, ensuring free flow.

Outcome 2

Repair or alter drainage systems.

Performance criteria

2.1 Repair or alter a drain by cutting in a replacement section.

2.2 Demonstrate jointing methods for jointing of two different materials.

Range may include – band clamped sleeve, plaster/epoxy mortar (epoxy resin), compression, glue/solvent cement/solvent weld, rubber ring, fusion weld (PE).

Outcome 3

Maintain drainage structures, identify and rectify faults.

Range surface water structure, foul water structure.

Performance criteria

3.1 Identify common types and causes of faults, and the appropriate means of rectification.

Range rectification may include – repair, replace, clear.

3.2 Rectify faults and commission the drainage structure, ensuring free flow.

Planned review date	31 December 2029
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	30 May 2024	N/A

Consent and Moderation Requirements (CMR) reference	0003
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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.