

Title	Install and maintain stormwater handling systems		
Level	4	Credits	4

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"> – determine position for the installation of stormwater handling systems; – select, install, and complete surface water handling systems; and – maintain stormwater handling systems.
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Classification	Plumbing, Gasfitting and Drainlaying > Drainlaying
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Available grade	Achieved
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Guidance Information

- 1 References

Building Act 2004;
 Health and Safety at Work Act 2015;
 Plumbers, Gasfitters, and Drainlayers Act 2006;
 Plumbers, Gasfitters, and Drainlayers Regulations 2010;
 Resource Management Act 1991;
 AS/NZS 3500.3:2015 *Plumbing and drainage – stormwater*, available at <http://www.standards.govt.nz>;
 The following guides, which are available at <http://www.worksafe.govt.nz/worksafe>:
Good practice guidelines – Excavation safety, Wellington: WorkSafe New Zealand, 2016
Guide for Safety with Underground Services, Wellington: Department of Labour, 2002;
 The following clause, current version, and any related compliance documents, which are available at <https://www.building.govt.nz>:
 New Zealand Building Code Clause E1 Surface Water;
 and all subsequent amendments and replacements.
- 2 This unit standard requires the application of theory as included in the Plumbers, Gasfitters, and Drainlayers Regulations 2010.
- 3 Definitions

Job specifications – instructions (oral, written, graphic) and may include any of the following: manufacturer 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. Where job specifications are in

conflict with applicable legislation, standards, and/or codes, such legislation, standards, and/or codes shall take precedence for the purpose of assessment.

Stormwater handling systems – drainage systems for the disposal of stormwater that will be constructed to convey surface water to an appropriate fall, using gravity flow where possible, and include:

surface water intake and outfall structures – pre-cast and in-situ;

surface water collection systems – pre-cast concrete, in-situ, open drains, kerbs, and channels;

sub-soil systems – to capture and redirect subsurface water;

sumps – which include silt traps.

- 4 This unit standard requires a drainage installation including a minimum of four different fittings.
- 5 Candidates must hold a current limited certificate or exemption under supervision as issued under the Plumbers, Gasfitters, and Drainlayers Act 2006.
- 6 All practical activities are to be carried out in a way that avoids harm to people and damage to property, environment, existing installed services, materials, tools, and equipment.

Outcomes and performance criteria

Outcome 1

Determine position for the installation of stormwater handling systems.

Performance criteria

- 1.1 Establish line and gradient to measurements in accordance with job specifications.
- 1.2 Position stormwater elements to measurements in accordance with job specifications and relevant legislation and codes.

Outcome 2

Select, install, and complete surface water handling systems.

Range includes – appropriate components and fittings, bedding material, jointing methods, and materials.

Performance criteria

- 2.1 Select and install surface water intake and outfall structures in accordance with job specifications.

Range evidence of one structure (intake or outfall) is required.

- 2.2 Complete surface water intake and outfall structures in accordance with job specifications.
- Range may include but is not limited to – intake grills, outfall baffles, keying in.
- 2.3 Select and install surface water collection systems in accordance with job specifications.
- 2.4 Complete surface water collection systems in accordance with job specifications.
- 2.5 Select and install sub-soil drainage in accordance with job specifications.
- Range field tiles, slotted drains, perforated pipes.
- 2.6 Complete sub-soil drainage in accordance with job specifications.
- 2.7 Select and install sumps in accordance with job specifications.
- Range trapped, untrapped.
- 2.8 Complete sumps in accordance with job specifications.

Outcome 3

Maintain stormwater handling systems.

Performance criteria

- 3.1 Identify system faults in terms of causes and means of rectification.
- 3.2 Rectify faults in accordance with maintenance requirements and job specifications.

Replacement information	This unit standard, unit standard 30577, and unit standard 30579 replaced unit standard 1100, unit standard 1104, unit standard 1108, and unit standard 1109.
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Planned review date	31 December 2022
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	28 September 2017	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>.

Please note

Providers must be granted consent to assess against standards (accredited) by NZQA, before they can report credits from assessment against unit standards or deliver courses of study leading to that assessment.

Industry Training Organisations must be granted consent to assess against standards by NZQA before they can register credits from assessment against unit standards.

Providers and Industry Training Organisations, which have been granted consent and which are assessing against unit standards must engage with the moderation system that applies to those standards.

Requirements for consent to assess and an outline of the moderation system that applies to this standard are outlined in the Consent and Moderation Requirements (CMRs). The CMR also includes useful information about special requirements for organisations wishing to develop education and training programmes, such as minimum qualifications for tutors and assessors, and special resource requirements.

Comments on this unit standard

Please contact The Skills Organisation reviewcomments@skills.org.nz if you wish to suggest changes to the content of this unit standard.
