

Title	Install sewage pump stations		
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: determine system requirements for a sewage pump station; excavate and prepare base; install a sewage pump station; carry out backfilling and clear the chamber; work safely and with care; and demonstrate knowledge of principles underpinning the installation of sewage pump stations.</p>
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Classification	Plumbing, Gasfitting and Drainlaying > Drainlaying
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Available grade	Achieved
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Prerequisites	<p>Unit 1099, <i>Excavate and trench for plumbing, gasfitting, or drainlaying</i>; or demonstrate equivalent knowledge and skills.</p> <p>Candidates who are working within the jurisdiction of the Plumbers, Gasfitters and Drainlayers Board must hold a current drainlaying limited certificate or exemption for drainlaying under supervision as issued under the Plumbers, Gasfitters and Drainlayers Act 2006.</p>
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Guidance Information

- 1 Legislation, standards, codes, and guides applicable to this unit standard include but are not limited to:
 - Plumbers, Gasfitters, and Drainlayers Act 2006
 - Health and Safety in Employment Act 1992
 - Building Act 2004
 - Health Act 1956
 - Resource Management Act 1991
 - Plumbers, Gasfitters, and Drainlayers Regulations 2010
 - AS/NZS 1547:2000 *On-site domestic wastewater management* (available at <http://www.standards.co.nz>)
 - AS/NZS 1546.1:2008 *On-site domestic wastewater treatment units – Septic tanks* (available at <http://www.standards.co.nz>)
 - AS/NZS 3500.2:2003 *Plumbing and drainage – Sanitary plumbing and drainage* (available at <http://www.standards.co.nz>)

Approved Code of Practice for Safety in Excavation and Shafts for Foundations (Wellington: Department of Labour, 1995) (available at <http://www.osh.govt.nz/order/catalogue>)

Guide for Safety with Underground Services (Wellington: Department of Labour 2002) (available at <http://www.osh.govt.nz/order/catalogue>)

New Zealand Building Code Clause E1 Surface Water and any related compliance documents (available at <http://www.dbh.govt.nz>)

New Zealand Building Code Clause G12 Water Supplies and any related compliance documents (available at <http://www.dbh.govt.nz>)

New Zealand Building Code Clause G13 Foul Water and any related compliance documents (available at <http://www.dbh.govt.nz>).

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

2 Credit for this unit standard does not entitle the candidate to legally perform certain aspects of this work unless registered or supervised by a registered person under the provisions of the Electricity Act 1992.

3 Definitions

Job specifications, for the purposes of this unit standard, 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. 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.

Other services, for the purposes of this unit standard, refer to any existing installed services such as water, gas, electricity, or telephone network cables.

Outcomes and performance criteria

Outcome 1

Determine system requirements for a sewage pump station.

Performance criteria

1.1 Components are obtained in accordance with job specifications.

Outcome 2

Excavate and prepare base.

Performance criteria

2.1 Excavation is carried out in accordance with job specifications.

2.2 Stable sub-base is identified in accordance with visual assessment and job specifications.

- 2.3 Base material is selected, placed, and levelled in accordance with site conditions and job specifications.

Outcome 3

Install sewage pump station.

Performance criteria

- 3.1 Sewage pump station is positioned in accordance with job specifications.
- 3.2 Sewage pump, valve, fittings, and discharge pipe are sized, installed, and connected to discharge point in accordance with job specifications.
- 3.3 Alarm and monitoring system and pump switch operation are explained for the installation.
- 3.4 Sewage pump station is tested for soundness in accordance with job specification function.
- 3.5 The installation meets requirements of the Building Act 2004.

Outcome 4

Carry out backfilling and clear the chamber.

Performance criteria

- 4.1 Chamber is backfilled, with compaction as necessary, in accordance with job specifications.
- 4.2 Chamber is cleared of construction debris and working equipment.

Outcome 5

Work safely and with care.

Performance criteria

- 5.1 Practical activities are carried out avoiding harm to people and damage to property, other services, materials, tools, and equipment.

Outcome 6

Demonstrate knowledge of concepts and principles underpinning the installation of sewage pump stations.

Performance criteria

6.1 Underpinning concepts and principles are explained in terms of their application to the installation of sewage pump stations.

Range corrosion, head, hydrostatics and hydraulics, pressure.

6.2 Processes are described for jointing methods appropriate for the materials being joined.

Range two of – loose sleeve/band clamped sleeve, flange, glue/solvent cement/solvent weld, screwed thread.

Replacement information	This unit standard was replaced by unit standard 30600 and unit standard 30601.
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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

Process	Version	Date	Last Date for Assessment
Registration	1	31 January 1994	31 December 2022
Revision	2	19 June 1996	31 December 2022
Revision	3	3 April 1997	31 December 2022
Review	4	25 October 2007	31 December 2022
Review	5	15 March 2012	31 December 2022
Review	6	26 October 2017	31 December 2022

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 (CMR). 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.

This unit standard is expiring