

ASSESSMENT GUIDELINES

Unit 22211

Describe and design water features for
landscape work.

Level 4, Credit 5, Version 1

Describe and design water features for landscape work.

Unit standard 22211

Level 4, Credit 5, Version 1

Level of performance required for this unit standard

This is a level 4 unit standard. At this level trainees are expected to demonstrate the following abilities when completing assessment tasks:

- To work under broad guidance, independently; with complete responsibility for the standards of the outcome achieved.
- To apply technical skills, knowledge, and innovation to complete the task to the specified standard, in a variety of familiar and unfamiliar contexts.
- To analyse and interpret information, and make an informed judgment.

Workplace assessment:

For guidelines on Workplace Assessment, please refer to the NZHITO Workplace Assessors Manual, and for further information, please contact: NZHITO, P O Box 8638, Christchurch.
Ph 03 9644 735, Fax 03 9644 737, Website www.hortito.org.nz

Special notes:

1. *Workplace procedures* refer to verbal or written instructions to staff on procedures for the worksite and equipment.
2. The New Zealand Standards covering architectural drawing applicable to this unit standard are: NZS/AS 1100.101:1992 *Technical drawing – General principles*, and NZS/AS 1100.301:1985 *Technical drawing – Architectural drawing*, available from <http://www.standards.co.nz>.
3. *Landscape design* covers the development of design solutions for simple, single occupier residential sites.
4. *Design enterprise standards and/or procedures* may include but are not limited to quality assurance, documentation, security, communication, health and safety, ethics, interpersonal behaviour and design. An acceptable standard would be comparable to ISO9000 certified enterprises and /or organisations, and those standards set by an incorporated professional or trade body such as Landscape Industries Association of New Zealand or New Zealand Institute of Landscape Architects.
5. Legislation relevant to the client's needs and requirements may include but is not limited to the Health and Safety in Employment Act 1992, Building Act 2004, Consumer Guarantees Act 1993, Fair Trading Act 1986, Privacy Act 1993, and the Resource Management Act 1991.
6. Design work requiring certification will be undertaken by a registered engineer.

**Unit 22211: Describe and design water features for landscape work.
(Apprentice copy)**

ELEMENT	Competent	Range of evidence an assessor should consider
<p>Element 1 Describe water movement and how it can affect landscape features.</p>	Yes/No	<ul style="list-style-type: none"> ▪ Describe water surface tension in terms of its effects on landscape features. ▪ Describe the effects of water movement in terms of the characteristics that landscape features must have to create them. Range: sheet fall, flow forms. ▪ Define the effects of pipe diameter, length, and fall in terms of water pressure and flow rates.
<p>Element 2 Describe types and characteristics of water features.</p>	Yes/No	<ul style="list-style-type: none"> ▪ Define types of still water features used in landscape in terms of the characteristics of each type. Range: ponds, pools, lakes, bog gardens. ▪ Define types of flowing water features used in landscape in terms of the characteristics of each type. Range: streams, weirs, waterfalls, fountains, mechanical constructions or art pieces. ▪ Describe water circulation systems in terms of the functions and limitations of components. Range: pumps, pipework, control systems, distribution components.
<p>Element 3 Identify design characteristics and requirements for water used in landscape features.</p>	Yes/No	<ul style="list-style-type: none"> ▪ Describe the design features of water used in landscape water features in terms of the range characteristics. Range: flow, colour, translucence, reflection, sound. ▪ Describe the strategies used to change or enhance design characteristics of water in terms of their effects. Range: damming, spilling, ponding, channelling, spraying. ▪ Describe the design requirements that need to be addressed when using water in landscape features, in terms of their influence on the design solution. Range: source and related approvals, flow characteristics, volume, pressure, reticulation, supply, retention, recycling, disposal; prevailing climatic conditions. ▪ Identify and describe the requirements to be considered when planning water features in localities where water resources are limited. Range: requirements may include but are not limited to – impact on water supplies, ethics of use of a scarce resource.

<p>Element 4 Sketch and label construction details for water features. Range: two or more still water features selected from – concrete, masonry, rock, sprayed concrete, fibreglass or plastic, or flexible liner construction; two or more flowing water features selected from – streams, weirs, waterfalls, fountains, mechanical constructions or art pieces; symbols and labelling dimensions.</p>	<p>Yes/No</p>	<ul style="list-style-type: none"> ▪ Draw freehand cross sections of water features to show; formwork, reinforcing, concrete, and other components in place, ensuring that you identify each component using symbols and labelling. ▪ Draw freehand drawings of finishes of water features and identify features using symbols and labelling. Range: fixings for other work, drainage, waterproof membranes, surface finish, surrounds. ▪ ▪ Describe maintenance requirements needed in order to keep water feature up to an industry standard. Range: may include but is not limited to – water clarity, weed, algae and wild life.
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_____ (Name of Apprentice)

is **Competent / Not yet competent** in Unit Standard 22211, version 1

Signed (Assessor): _____

WPA Registration Number: _____ Date: _____

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(Assessor copy)**

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Please send this page to your NZHITO Regional Manager, who will forward it to National Office to register the credits on your NZQA Record of Learning.

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(Name of Apprentice)

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