

<b>Title</b>	<b>Operate a hydro-excavator on an infrastructure works site</b>		
<b>Level</b>	<b>3</b>	<b>Credits</b>	<b>8</b>

<b>Purpose</b>	People credited with this unit standard are able to: demonstrate knowledge of hydro-excavators; prepare for hydro excavator operations; operate a hydro-excavator for infrastructure works; and complete post-operational procedures for a hydro-excavator.
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<b>Classification</b>	Infrastructure Works > Civil Plant Operation
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<b>Available grade</b>	Achieved
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<b>Prerequisites</b>	Class of driver licence required for the vehicle being driven.
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### Guidance Information

- 1 Legislation relevant to this unit standard includes: Health and Safety at Work Act 2015 and Health and Safety in Employment Regulations 1995.
- 2 Assessment against this unit standard must take place in a workplace environment, and the candidate must be familiar with the type and weight of plant to be used for assessment. Assessment parameters will depend on company and site-specific equipment, procedures, and practices. Practices must reflect industry best practice and comply with legislative requirements.
- 3 This unit standard assesses the operation of the hydro-excavator and does not assess the driving of the truck which carries the excavator.
- 4 Definitions  
*Company requirements* include the policy, procedures, and methodologies of the company. They include legislative and regulatory requirements applicable to the company or a specific site. Requirements are documented in the company's health and safety plans, traffic management plans, contract work programmes, quality assurance programmes, policies, and procedural documents.  
*Job instructions* are those given to the operator before undertaking a job. They may include site safety instructions, contract drawings, and written memos.

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## Outcomes and performance criteria

### Outcome 1

Demonstrate knowledge of hydro-excavators.

#### Performance criteria

- 1.1 Hydro-excavators and their attachments and controls are described in terms of purpose and function, and correct operation.
- 1.2 Types and capacities of hydro-excavator are described in terms of their capabilities and limitations, and suitability for specific infrastructure works tasks.
- 1.3 Hydro-excavators are described in terms of their safety features and requirements for safe use.

### Outcome 2

Prepare for hydro-excavator operations.

#### Performance criteria

- 2.1 Job instructions are confirmed in accordance with company requirements.
- 2.2 Area to be excavated is checked and location of underground services is verified in accordance with company requirements.
- 2.3 Pre-start check of machine is carried out prior to starting work and any required action is taken in accordance with company requirements.  
  
Range            machine operation, damage, wear and tear.
- 2.4 A hazard check of site and machine is carried out, and any identified hazards are eliminated or minimised in accordance with company requirements.
- 2.5 Site communication protocols are confirmed in accordance with company requirements

### Outcome 3

Operate a hydro-excavator for infrastructure works.

#### Performance criteria

- 3.1 Water tank is filled in accordance with company procedures and regulatory requirements.
- 3.2 Hydro-excavator is operated, and hydro-excavation task is completed in accordance with job instructions, and company requirements.
- 3.3 Waste from vehicle is emptied in accordance with company requirements.

3.4 Holding tank is cleaned in accordance with company requirements.

#### Outcome 4

Complete post-operational procedures for a hydro-excavator.

#### Performance criteria

4.1 Hydro-excavator is parked, shut down safely and secured, and daily maintenance is carried out, in accordance with company requirements.

4.2 Hydro-excavator is inspected, and any faults are reported in accordance with company requirements.

<b>Planned review date</b>	31 December 2023
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#### Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	19 February 2015	31 December 2021
Review	2	27 September 2018	N/A

<b>Consent and Moderation Requirements (CMR) reference</b>	0101
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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 the Infrastructure ITO [qualifications@connexis.org.nz](mailto:qualifications@connexis.org.nz) if you wish to suggest changes to the content of this unit standard.