

Title	Install driven piles for infrastructure structural foundation works		
Level	4	Credits	15

Purpose	People credited with this unit standard are able to install driven piles for infrastructure structural foundation works.
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Classification	Infrastructure Works > Structural Foundations
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Available grade	Achieved
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Guidance Information

- 1 Learning and assessment within this unit standard must be carried out in an infrastructure works environment and in accordance with the following, as relevant to their role, and any subsequent amendments:
 - Health and Safety at Work Act 2015;
 - Resource Management Act 1991;
 - Heritage New Zealand Pouhere Taonga Act 2014;
 - Hazardous Substances and New Organisms Act 1996;
 - Excavation Safety, Good Practice Guidelines 2016, available from www.worksafe.govt.nz.

- 2 Definitions

Driven pile refers to a pre-constructed, slender column with a preformed shape and size which is installed by impact hammering, vibrating or pushing into the earth and used to resist axial and/or lateral loads. Driven piles can be steel, timber, or concrete, including H piles and steel pipe piles.

Company requirements include the policy, procedures, and methodologies of the company. They include legislative and regulatory requirements that may apply across the company or to a specific site. Requirements are documented in the company health and safety plans, traffic management plans, contract work programmes, quality assurance programmes, policies, and procedural documents.

Job specifications are instructions given to the operator prior to undertaking a job. They may include site safety instructions, contract drawings, and written memos.

Work plan refers to any job specifications or plans given to the operator prior to undertaking a job.

Outcomes and performance criteria

Outcome 1

Install driven piles for infrastructure structural foundation works.

Performance criteria

- 1.1 Advantages of using driven piles are explained in terms of suitability for the context.
- Range may include but is not limited to – site conditions, soil conditions, rock layer, stability, strength, environmental concerns, noise, access, length, capacity, pre-inspection, pile installation method.
- 1.2 A stable platform for the pile driver is prepared in accordance with company requirements.
- 1.3 Set out for driven piles is completed in terms of positioning and in accordance with the requirements of the site plan and surveyor requirements.
- Range may include but is not limited to – off set pegs, datum line, string lines, offset, secondary positioning, reduced levels (RLs).
- 1.4 Communication requirements including hand signals are determined in accordance with company requirements.
- 1.5 Pile lifting and positioning of the pile is monitored throughout the pile installation process and meets the requirements of the safety plan.
- 1.6 Installation process is monitored and any unusual vibration activity is actioned in accordance with installation guidelines in job specifications.
- 1.7 Disturbances are minimised in terms of noise and vibrations and in accordance with safety plan.
- 1.8 Loose, disturbed or softened spoil is removed using an appropriate method and in accordance with job specifications.
- 1.9 Driven pile card is completed and submitted on time to stakeholders in accordance with the work plan and job specifications.
- Range may include but is not limited to – supervisor, engineer, leading hand.
- 1.10 Issues are recorded and discussed with a supervisor in accordance with company requirements.
- Range may include but is not limited to – site conditions, unknown soil, water, changing rock levels, noise, vibrations.
- 1.11 Engineer inspections of the pile installation are completed and outcome documented in accordance with job specifications.

Planned review date	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	26 July 2018	N/A

Consent and Moderation Requirements (CMR) reference

0101

This CMR can be accessed at <http://www.nzqa.govt.nz/framework/search/index.do>.

Comments on this unit standard

Please contact Connexis Infrastructure ITO qualifications@connexis.org.nz if you wish to suggest changes to the content of this unit standard.