

Title	Prepare for and complete procedures for onsite piling and deep foundation works		
Level	4	Credits	20

Purpose	People credited with this standard are able to prepare for and complete procedures for onsite piling and deep foundation works.
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Classification	Infrastructure Works > Structural Foundations
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Available grade	Achieved
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Guidance Information

- Learning and assessment within this unit standard must be carried out in a construction or infrastructure works environment in accordance with industry requirements and the following legislation, as relevant to the 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;
 - Traffic Regulations 1976;
 - Land Transport Rule: Vehicle Dimensions and Mass 2016;
 - Land Transport Rule: Heavy Vehicles 2004;
 - *Structural Engineering Society New Zealand (SESOC), New Zealand Geotechnical Society (NZGS) Construction Specification Bored and Driven Piles 2022*, available from www.nzgs.org;
 - *Excavation Safety: Good Practice Guidelines 2016*, available from Worksafe www.worksafe.govt.nz;
 - *Operator Safety Manual for Earthmoving Machinery 2017*, available from Civil Contractors New Zealand <https://civilcontractors.co.nz/>.

- Definitions

Industry requirements may refer to but are not limited to relevant policies, processes, methodologies, industry codes of practice, site specific health and safety plans, standard operating procedures, site safety plans, quality plans, work plans, traffic management plans, contract work programmes, job safety analysis, safe work method statements, job instructions, manufacturer's requirements, contract specifications, manuals, procedural documents.

Quality plan refers to any contract specific policy, processes, procedures, testing or certification requirements.

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

Outcomes and performance criteria

Outcome 1

Prepare for onsite piling and deep foundation works.

Performance criteria

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| 1.1 | Onsite piling and deep foundation works are explained in terms of the context.

Range soil types, hard rock layer, critical local geology. |
| 1.2 | Onsite conditions are explained.

Range type of foundation, type of pile, type of piling equipment, ground stabilisation method. |
| 1.3 | Levels of delegated authority of the onsite team are explained in terms of role, responsibilities, skills, and any certifications required.

Range spotter, groundsman, dogman, operator, foreman, leading hand, site engineer. |
| 1.4 | Industry standards and codes of practice are explained in terms of the relevance for onsite piling and deep foundation works. |
| 1.5 | Layout onsite is determined in terms of site traffic, site markings, equipment required, storage areas, and manoeuvrability issues in accordance with the layout plan. |
| 1.6 | Permits to work are implemented and any modifications to work requirements are confirmed with a supervisor before the start up in accordance with work plans. |
| 1.7 | Contractual requirements are implemented, and the person to notify is confirmed, in terms of compliance, industry standards, codes of practice and work plans. |
| 1.8 | Equipment is checked and is appropriate for the geology and onsite conditions. |
| 1.9 | Personal protective equipment, shelter, and safety resources are selected. |
| 1.10 | Requirements of the quality plan are confirmed in accordance with work plans. |

Outcome 2

Complete procedures for onsite piling and deep foundation works.

Performance criteria

- 2.1 Site safety procedures are completed in terms of temporary traffic management plan in place, work platforms, access routes and sign in procedures.
- 2.2 Emergency response procedures are confirmed, the locations for storage of chemicals and safety data sheets are identified, and recording and reporting procedures completed in accordance with own role.
- 2.3 Daily site safety briefings are attended, information is recorded, and communicated to the team.
- 2.4 Dangerous goods, where used, are appropriately contained.
- 2.5 Environmental controls are actioned and environmental requirements for the site are completed.

Range erosion, sediment control, protection of flora and fauna, waste management.

Planned review date	31 December 2028
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Status information and last date for assessment for superseded versions

Process	Version	Date	Last Date for Assessment
Registration	1	25 January 2018	31 December 2026
Rollover	2	29 September 2022	31 December 2026
Review	3	27 July 2023	N/A

Consent and Moderation Requirements (CMR) reference	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 Waihangara Ara Rau Construction and Infrastructure Workforce Development Council at qualifications@WaihangaraAraRau.nz if you wish to suggest changes to the content of this unit standard.