

Field Engineering and Technology

Review of *Structural Foundations* unit standards

Subfield	Domain	ID
Infrastructure Works	Structural Foundations	30808, 30809, 30912-30915, 31246-31249

Waihanga Ara Rau Construction and Infrastructure Workforce Development Council (WDC) has completed the review of the unit standards listed above.

Date new versions published

July 2023

Planned review date

December 2028

Summary

Waihanga Ara Rau WDC, the New Zealand Federation of Piling Specialists (NZFPS), and representatives from the construction and infrastructure industries have reviewed the unit standards listed above. The review addressed feedback from the recent review of the New Zealand Certificate in Infrastructure (Piling) (Level 4) [Ref: 3966] to widen the scope of practice to cover both construction and infrastructure industries and to update the unit standards in line with current industry practice.

Consultation with industry representatives and providers occurred from November 2022 to March 2023. Feedback was received and decisions were made in consultation with NZFPS, providers, and the industry technical advisory group resulting in the changes below.

Main changes

- Guidance information, performance criteria, and range statements were amended in line with current construction and infrastructure industry practice and unit standard template requirements.
- Standard setting details were updated to reflect the change of standard setting body to Waihanga Aro Rau Construction and Infrastructure Workforce Development Council from 4 October 2021.
- The titles and content of unit standards 30808, 30809, 31246, 31247, 31248, and 31249 were amended to allow for assessment in both construction and infrastructure contexts.
- Unit standard 30914 title was updated, and two new performance criteria 2.8 and 2.9 were added to include environmental skills and knowledge. Credits were amended to reflect the change.
- Unit standard 30915 title and outcome 2 were updated to include skills and knowledge relating to task analysis, and the credits were amended to reflect the change.
- Six new unit standards were developed by industry technical advisers to address skills and knowledge gaps for different pile construction contexts, assessing ground conditions, and for plant operation.

The last date for assessment of superseded versions of Category B unit standards is December 2026

Detailed list of unit standards – classification, title, level, and credits

All changes are in **bold**.

Key to review category	
A	Dates changed, but no other changes are made - the new version of the standard carries the same ID and a new version number
B	Changes made, but the overall outcome remains the same - the new version of the standard carries the same ID and a new version number
C	Major changes that necessitate the registration of a replacement standard with a new ID
D	Standard will expire and not be replaced

Engineering and Technology > Infrastructure Works > Structural Foundations

ID	Title	Level	Credit	Review Category
30808	Prepare and operate plant and confirm post operational procedures in an infrastructure works environment Prepare and operate plant and confirm post operational procedures	3	20	B
30809	Support and mentor an infrastructure works team onsite Support and mentor a team on a worksite	4	10	B
30912	Prepare for and complete procedures for onsite piling and deep foundation works	4	20	B
30913	Implement work plans for onsite piling and deep foundation works	4	20	B
30914	Coordinate site personnel and monitor onsite piling and deep foundation works Confirm and monitor onsite piling and deep foundation works	4	24 25	B
30915	Explain, operate, monitor, and review piling equipment operations for piling and deep foundation works Explain, monitor, and review piling equipment operations for onsite piling and deep foundation works	4	24 25	B
31246	Install bored piles for infrastructure structural foundation works Install bored piles for onsite piling and deep foundation works	4	15	B
31247	Install driven piles for infrastructure structural foundation works Install driven piles for onsite piling and deep foundation works	4	15	B
31248	Demonstrate knowledge of and carry out structural foundation site operations for infrastructure works Demonstrate knowledge of and carry out structural foundation site operations	3	15	B
31249	Demonstrate knowledge of soil properties for infrastructure structural foundation works Describe soil properties for structural foundation works	3	3	B
33278	Prepare for and install anchors for onsite piling and deep foundation works	4	15	New
33279	Prepare for and install sheet piles for onsite piling and deep foundation works	4	15	New
33280	Prepare for and install continuous flight auger piles for onsite piling and deep foundation works	4	15	New
33281	Assess and monitor ground conditions for onsite piling and deep foundation works	4	10	New
33282	Prepare, use, and carry out maintenance on a fixed mast drill rig for onsite piling and deep foundation works	4	20	New

ID	Title	Level	Credit	Review Category
33283	Prepare, use, and carry out maintenance on a pendulum drill rig for onsite piling and deep foundation works	4	20	New