



Australian Government

RIICFW305D Conduct cast in-situ pilings operations

Release: 2

RIICFW305D Conduct cast in-situ pilings operations

Modification History

Release	Comment
1	This unit replaces RIICFW305A Conduct cast in-situ pilings operations
2	Required frequency and volume of evidence amended in Performance evidence. Substantial amendments made in Assessment Conditions field, including: references to Industry Sectors, assessor and subject matter expert experience requirements, how assessment should be conducted and what it should confirm.

Application

This unit describes a participant's skills and knowledge required to conduct cast in-situ pilings operations in Civil Construction.

This unit is appropriate for those working in operational roles.

Licensing, legislative, regulatory and certification requirements that apply to this unit can vary between states, territories, and Industry sectors. Relevant information must be sourced prior to application of the unit.

Unit Sector

Civil construction

Elements and Performance Criteria

1. Plan and prepare to conduct in-situ pilings operations	1.1 Access, interpret and apply documentation to boring of cast in-situ piles and ensure the work activity is compliant 1.2 Obtain, interpret, clarify and confirm work instructions before proceeding 1.3 Confirm and apply environmental protection and safety requirements 1.4 Obtain, interpret and implement traffic management signage 1.5 Select plant, tools and equipment and check for faults to carry out tasks 1.6 Select and wear correct personal protective equipment appropriate for work activities 1.7 Identify, address and report environmental issues, potential
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	hazards and risks 1.8 Obtain and interpret emergency procedures, and be prepared for fire/accident/emergency
2. Locate and prepare pile positions	2.1 Establish location for piles from reference points and set out 2.2 Position and check plant and related equipment for operation 2.3 Bore hole 2.4 Check caisson for conformity with specification 2.5 Install caisson in the bored hole 2.6 Prepare caisson to receive concrete
3. Place concrete	3.1 Place concrete into caisson 3.2 Vibrate concrete, removing voids and air pockets
4. Remove boring rig	4.1 Relocate boring rig to next point of installation operation 4.2 Remove boring rig from site on completion of work
5. Clean up	5.1 Clear work area and dispose of or recycle materials 5.2 Clean, check, maintain and store plant, tools and equipment

Foundation Skills

Foundation skills essential to performance are explicit in the performance criteria of this unit. Further information is available in the Resources and Infrastructure Industry Training Package Companion Volume.

Unit Mapping Information

RIICFW305A Conduct cast in-situ pilings operations

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>

Assessment Requirements for RIICFW305D Conduct cast in-situ pilings operations

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Performance Evidence

Evidence is required to be collected that demonstrates a candidate's competency in this unit. Evidence must be relevant to the roles within this sector's work operations and satisfy all of the requirements of the performance criteria of this unit and include evidence that the candidate:

- locates and applies applicable legislation, documentation, policies and procedures
- works effectively with others to undertake and complete cast in-situ pilings operations that meets all required outcomes including:
 - communicating clearly and concisely with others to receive and clarify work instructions
 - using a range of communication technique and systems such as signage to advise others of work activity and exclusion zones
- demonstrates completion of cast in-situ piling operations that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - establishing locations for piles
 - positioning and checking plant and related equipment
 - boring a hole to install a minimum of one (1) caisson, including reinforcement construction and placing concrete to that caisson
 - setting up, relocating and removing boring rig

Knowledge Evidence

The candidate must demonstrate knowledge of conducting cast in-situ pilings operations through:

- applying legislative, organisation and site requirements and procedures for:
 - site equipment and safety requirements

- foundation work
- construction principles
- water erosion
- project quality requirements
- civil construction terminology
- selecting and using relevant tools and equipment safely
- identifying and reporting hazards related to the worksite and work activity
- describing bored cast in-situ piles and their installation techniques
- describing scaffolding and work platform installation
- interpreting engineering drawings
- identifying soil, sand, rock, clay, shale, gravel and silt types and characteristics
- applying processes for installing piles in water
- identifying equipment types, characteristics, technical capabilities and limitations
- applying and monitoring operational, maintenance and basic diagnostic procedures
- applying site isolation and traffic control responsibilities and authorities
- interpreting and complying with safety data sheets and materials handling methods
- preparing and/or implementing JSA/JSEA/safe work method statements

Assessment Conditions

- An assessor of this unit must satisfy the requirements of the NVR/AQTF or their successors; and Industry regulations for certification and licensing; and,
- this unit must be assessed in the context of this sector's work environment; and,
- this unit must be assessed in compliance with relevant legislation/regulation and using policies, procedures, processes and operational manuals directly related to the industry sector for which it is being assessed; and,
- assessment may be conducted in conjunction with the assessment of other Units of Competency; and,
- assessment must confirm consistent performance can be applied in a range of relevant workplace circumstances; and,
- assessors must demonstrate the performance evidence, and knowledge evidence as outlined in this Unit of Competency, and through the minimum years of current* work experience specified below in an Industry sector relevant to the outcomes of the unit; or,
- where the assessor does not meet experience requirements a co-assessment or partnership arrangement must exist between the qualified assessor and an Industry subject matter expert. The Industry subject matter expert should hold the unit being assessed (or an equivalent unit) and/or demonstrate equivalence of skills and knowledge at the unit level. An Industry technical expert must also demonstrate skills and knowledge from the minimum years of current work experience specified below in the Industry sector, including time spent in roles related to the unit being assessed; and,
- assessor and Industry subject matter expert requirements differ depending on the Australian Qualifications Framework Level (AQF) of the qualification being assessed and/or Industry Sector as follows:

Industry sector	AQF** Level	Required assessor or Industry subject matter expert experience
Drilling, Metalliferous Mining, Coal Mining, Extractive (Quarrying) and Civil Construction	1	1 Year
	2	2 Years
Drilling, Coal Mining and Extractive (Quarrying)	3-6	3 Years
Metalliferous Mining and Civil Construction	3-6	5 Years
Other sectors	Where this Unit is being assessed outside of the Resources and Infrastructure Sectors assessor and/or Industry subject matter expert experience should be in-line with industry standards for the sector in which it is being assessed and where no Industry standard is specified should comply with any relevant regulation.	

*Assessors can demonstrate current work experience through employment within Industry in a role relevant to the outcomes of the Unit; or, for external assessors this can be demonstrated through exposure to Industry by conducting frequent site assessments across various locations.

**Where a unit is being delivered outside of a Qualification the first numeric character in the Unit code should be considered to indicate the AQFC level

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