



Australian Government

RIIMPO402D Apply the principles of earthworks construction

Release: 4

RIIMPO402D Apply the principles of earthworks construction

Modification History

Release	Comment
1	This unit replaces RIIMPO402A Apply the principles of earthworks construction.
2	Amended Knowledge Evidence; amend reference to Licensing requirements in Unit Application; editorial corrections.
3	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.
4	Editorial corrections.

Application

This unit develops a participant's skills and knowledge required to apply the principles of earthworks construction in Civil construction.

This unit is appropriate for those working in supervisory or technical specialist 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 for earthworks construction	1.1 Access, interpret and apply earthworks construction documentation and ensure the work activity is compliant 1.2 Access, interpret and clarify the specific task information and requirements to undertake earthworks construction task 1.3 Ensure job plan is available which makes best use of the available resources and meets task requirements
2. Implement the job plan	2.1 Confirm necessary resources are available 2.2 Issue and clarify job plan

	2.3 Ensure clear, concise and timely instructions are communicated 2.4 Set out and allocate tasks to others
3. Oversee the execution of tasks	3.1 Monitor task performance and ensure it achieves the required outcomes 3.2 Identify adjustments to address non-achievement of outcomes if required 3.3 Implement adjustments to work practice or job plan 3.4 Ensure plant equipment and tools maintenance requirements are carried out and recorded
4. Report on the execution of tasks	4.1 Complete and submit reports 4.2 Make reasoned recommendations to improve the safety, efficiency and effectiveness of the execution of tasks

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

RIIMPO402A Apply the principles of earthworks construction

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 RIIMPO402D Apply the principles of earthworks construction

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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 relevant legislation, documentation, policies and procedures
- implements appropriate procedures and techniques for the safe, effective and efficient application of principles of civil earthworks construction including:
 - developing and implementing the job plan
 - interpreting project site soil/rock and geological data
 - identifying and addressing drainage issues
 - implementing performance monitoring skills
 - applying set out requirements and procedures
 - identifying training requirements
 - application of required tools and devices
 - contributing to the continual improvement of systems
 - providing team leadership
- works effectively with others to plan, prepare and apply the principles of civil earthworks construction including:
 - using a range of communications techniques and equipment to convey information to others

- maintaining clear and legible written records and the reporting systems
- managing workplace and relationships
- managing client relationships
- preparing for and conducting briefings, toolbox and site meetings
- demonstrates completion of applying the principles of earthwork construction that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - successful completion of earthworks construction project/ tasks:
 - issuing and clarifying job plan
 - setting out and allocating tasks
 - monitoring task performance and implementing adjustments if required outcomes are not being achieved
 - identifying and recommending changes to improve the safety, efficiency and effectiveness of the execution of tasks

Knowledge Evidence

The candidate must demonstrate knowledge of the following when applying the principles of earthworks construction:

- managing civil construction plant and equipment capabilities and application
- monitoring of plant, equipment and tools maintenance
- execution of civil construction tasks
- identifying and allocating task resource requirements
- ensuring work plans are understood and implemented effectively
- implementing work monitoring and continual improvement methods
- using engineering survey principles
- applying estimating principles
- implementing civil works construction sequencing
- using earthworks and related activities' terminology
- managing set out requirements and procedures
- identifying ground surface treatment requirements and procedures e.g. proof rolling
- interpreting project site hydrological data
- interpreting project engineering survey information
- interpret project plans and drawings
- interpreting project specifications
- establishing construction offsets
- implementing inspection system
- calculating quantities for the execution of tasks, including:
 - volumes
 - grades
 - percentages

- areas
- resource consumption and supply rates
- interpreting earthworks construction materials properties and test results, including:
 - compaction test results
 - soil density/moisture relationship
 - plasticity index
 - particle size distribution

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	3-6	5 Years

Construction		
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 AQF level

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