



**Australian Government**

# **RIICWM501E Implement civil construction plans**

**Release: 1**

# RIICWM501E Implement civil construction plans

## Modification History

| Release   | Comments                                                                                                 |
|-----------|----------------------------------------------------------------------------------------------------------|
| Release 1 | This version first released with RII Resources and Infrastructure Industry Training Package Version 6.0. |

## Application

This unit describes the skills and knowledge required to implement a civil construction plan, including preparing the detailed civil construction plan, acquiring resources, instructing team members, monitoring performance and reviewing task outcomes.

It applies to those working in management or technical specialist roles. They generally apply a broad range of technical and managerial skills and are responsible for the delivery of outputs that meet site requirements.

Licensing, legislative and certification requirements that apply to this unit can vary between states, territories, and industry sectors. Users must check requirements with relevant body before applying the unit.

## Unit Sector

Civil construction

## Elements and Performance Criteria

| ELEMENT                                                    | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i>           | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                     |
| 1. Plan and prepare to implement a civil construction plan | 1.1 Obtain, interpret and confirm work requirements<br>1.2 Access, interpret and apply documentation required to implement civil construction plans and confirm work activity is compliant<br>1.3 Identify hazards and environmental issues associated with work, evaluate risks and apply controls<br>1.4 Confirm availability and accuracy of project information<br>1.5 Prepare the scope of work required according to job requirements<br>1.6 Identify and schedule resources required to complete task according to job requirements |
| 2. Prepare the detailed                                    | 2.1 Identify viable available options for implementation of the civil                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |

| ELEMENT                                                                        | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|--------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| implementation plan                                                            | construction plan<br>2.2 Select preferred option and draft implementation plan in consultation with relevant team members, confirming best use of available resources<br>2.3 Identify contingency requirements to be allowed for in execution of the plan<br>2.4 Monitor and coordinate progress of other team members involved in the planning process<br>2.5 Identify key performance indicators to be used to monitor and assess project performance<br>2.6 Identify and clarify construction milestones required<br>2.7 Prepare cost estimate of execution in consultation with relevant team members<br>2.8 Gain approval of implementation plan<br>2.9 Document implementation plan according to site requirements |
| 3. Initiate civil construction implementation plans                            | 3.1 Acquire and make available required resources according to job requirements<br>3.2 Issue instructions to team members and others involved                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
| 4. Monitor, adjust and report on the implementation of civil construction plan | 4.1 Monitor civil construction implementation plan performance and confirm it achieves required outcomes according to job requirements<br>4.2 Initiate adjustments to achieve required outcomes<br>4.3 Provide ongoing clarification and advice to those applying the plan<br>4.4 Complete and submit reports according to site requirements<br>4.5 Conduct a performance review of the implementation plan<br>4.6 Recommend improvements to tasks                                                                                                                                                                                                                                                                       |

## Foundation Skills

*This section describes those language, literacy, numeracy and employment skills that are essential to performance but not explicit in the performance criteria.*

| Skill              | Description                                                                                                         |
|--------------------|---------------------------------------------------------------------------------------------------------------------|
| Oral communication | <ul style="list-style-type: none"> <li>Conveys information and requirements clearly and listens actively</li> </ul> |

## Unit Mapping Information

Supersedes and is equivalent to RIICWM501D Implement civil construction plan.

## Links

Companion Volume Implementation Guide is found on VETNet -

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

# Assessment Requirements for RIICWM501E Implement civil construction plans

## Modification History

| Release   | Comments                                                                                                 |
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## Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- implement a civil construction plan on at least two occasions, including:
  - determining viable options and selecting civil construction plans
  - confirming availability and accuracy of project information from at least one of the following sources:
    - consultation with the client
    - consultation with others within the organisation
  - obtaining further site data including:
    - geological data
    - survey data
    - hydrological data
    - meteorological data.

During the above, the candidate must:

- locate and apply required legislation, documentation, policies and procedures
- implement procedures and techniques for the implementation of civil construction plans, including:
  - project plans and drawings, specifications and construction briefs
- work with others to implement a civil construction plan that meets required outcomes, including:
  - providing instruction and supervision using communication techniques and equipment
  - preparing for and conducting briefings, toolbox and site meetings
  - maintaining written records and reporting systems
  - consulting with stakeholders.
  -

## Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- legislation required to implement civil construction plans
- policies, procedures and documentation required to implement civil construction plans, including those relating to:
  - risk assessment and management
  - statutory compliance
  - development of a construction implementation plan
  - work health and safety
  - emergency response
  - environmental management
  - quality management
  - contract management
  - communication techniques and equipment
  - cost estimation
  - community relations
  - organisational and site operational obligations
  - materials quality and delivery requirements
  - reporting requirements, including
    - task specifications
    - job plan
    - task drawings
    - activity scheduling
    - unit costs
    - overall task costs
- types, characteristics, technical capabilities and limitations of materials, plant and equipment required for implementing civil construction plans
- principles and techniques for implementing civil construction plans, including those relating to:
  - civil construction works, including:
    - land clearing
    - bulk earthworks
    - surface drainage
    - water storage and tailings dams
    - topsoil management
    - rehabilitation
    - road works preparation
    - pavement construction
    - underground services construction

- tunnelling
- dredging
- implementation of plan components
- confirmation methods, including consultations
- evaluating potential site hazards, constraints and conditions
- team leadership
- obtaining and interpreting task specific data, including:
  - site geological, hydrological, meteorological and survey data
- road user behaviours
- sources of information on innovation and new technology.
- 

## Assessment Conditions

Mandatory conditions for assessment of this unit are stipulated below. The assessment must:

- include access to:
  - personal protective equipment
  - equipment required to implement civil construction plans
- be conducted in a safe environment; and,
- be assessed in the context of this sector's work environment; and,
- be assessed in compliance with relevant legislation/regulation and using policies, procedures and processes directly related to the industry sector for which it is being assessed; and,
- confirm consistent performance can be applied in a range of relevant workplace circumstances.

Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated work environment\* provided it is realistic and sufficiently rigorous to cover all aspects of this sector's workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.

### • Assessor requirements

Assessors must be able to clearly demonstrate current and relevant industry knowledge and experience to satisfy the mandatory regulatory standards as set out in the Standards for Registered Training Organisations 2015/Australian Quality Training Framework mandatory requirements for assessors current at the time of assessment and any relevant licensing and certification requirements. This includes:

- vocational competencies at least to the level being delivered and assessed
- current industry skills directly relevant to the training and assessment being provided
- current knowledge and skills in vocational training and learning that informs their training and assessment
- formal relevant qualifications in training and assessment
- having knowledge of and/or experience using the latest techniques and processes
- possessing the required level of RII training product knowledge

- having an understanding and knowledge of legislation and regulations relevant to the industry and to employment and workplaces
- demonstrating the performance evidence, and knowledge evidence outlined in this unit of competency, and
- the minimum years of current\*\* work experience after competency has been obtained as specified below in an industry sector relevant to the outcomes of the unit.

It is also acceptable for the appropriately qualified assessor to work with an industry expert to conduct assessment together and for the industry expert to be involved in the assessment judgement. The industry expert must have current industry skills directly relevant to the training and assessment being provided. This means the industry subject matter expert must demonstrate skills and knowledge from the minimum years of current work experience after competency has been obtained as specified below, including time spent in roles related to the unit being assessed:

| Industry sector                                                                              | AQF indicator level***                                                                                                                                                                                                                                                                                                         | Required assessor or industry subject matter expert experience |
|----------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|
| Drilling, Metalliferous Mining, Coal Mining, Extractive (Quarrying) and Civil Infrastructure | 1                                                                                                                                                                                                                                                                                                                              | 1 year                                                         |
|                                                                                              | 2                                                                                                                                                                                                                                                                                                                              | 2 years                                                        |
| Drilling, Coal Mining, Extractive (Quarrying), Metalliferous Mining and Civil Infrastructure | 3-6                                                                                                                                                                                                                                                                                                                            | 3 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. |                                                                |

\*Guidance on simulated environments has been stipulated in the Companion Volume Implementation Guide located on VETNet.

\*\*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 a minimum number of site assessments as determined by the relevant industry sector, across various locations.

\*\*\* While a unit of competency does not have an AQF level, where a unit is being delivered outside of a qualification the first numeric character in the unit code should be considered as the AQF indicator level for assessment purposes.

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