



Australian Government

RIICWM601E Establish civil construction plans

Release: 1

RIICWM601E Establish 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 establish civil construction plans, including planning for, initiating, monitoring and reporting on the establishment of civil construction plans.

It applies to those working in management or technical specialist roles. They generally perform complex, non-routine tasks involving strategic and planning activities and are responsible for establishing and maintaining operational systems and plans.

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. Prepare to establish civil construction plans	1.1 Obtain, interpret and confirm work requirements 1.2 Access, interpret and apply documentation required to establish civil construction plans and confirm work activity is compliant 1.3 Confirm availability and accuracy of project information required for completion of civil construction plan 1.4 Prepare scope of work required for project completion
2. Conduct the civil construction planning process	2.1 Identify viable options for the construction program 2.2 Select preferred option and draft construction program in consultation with relevant team members and according to job requirements

ELEMENT	PERFORMANCE CRITERIA
	2.3 Identify and allow for contingency requirements 2.4 Monitor and coordinate progress and involvement of other team members 2.5 Identify and schedule resources required for execution of the construction program 2.6 Identify key performance indicators to be used 2.7 Gain client agreement on construction milestones 2.8 Prepare a cost estimate of plan execution in consultation with relevant team members and according to job requirements 2.9 Gain approval of plan 2.10 Document the civil construction plan according to site procedures
3. Initiate civil construction plans	3.1 Acquire and make available required resources according to job requirements 3.2 Issue instructions to team members and others
4. Monitor, adjust and report on the execution of civil construction plans	4.1 Monitor civil construction plan performance according to job requirements 4.2 Initiate adjustments to civil construction plan according to job requirements 4.3 Provide ongoing clarification and advice to those applying the plan 4.4 Confirm reports are complete and submitted according to site requirements 4.5 Conduct a performance review of construction plan 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
Numeracy	Applies basic mathematics to calculate resourcing requirements and cost estimates
Oral communication	Presents workplace procedures and technical instructions to a group using sector-specific vocabulary

Unit Mapping Information

Supersedes and is equivalent to RIICWM601D Establish civil construction plans.

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 RIICWM601E Establish civil construction plans

Modification History

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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:

- establish civil construction plans on at least two occasions, including:
 - identifying relevant information and scope of work to meet required outcomes
 - identifying viable program options and selecting programs that best meet required outcomes, including:
 - identifying contingency requirements
 - gaining client agreement on milestones
 - monitoring and coordinating progress of team members involved
 - identifying and scheduling required resources
 - identifying and monitoring key performance indicators
 - preparing cost estimates
 - gaining approval
 - documenting construction plan.

During the above, the candidate must:

- locate and apply required legislation, documentation, policies and procedures
- implement procedures and techniques for establishing civil construction plans, including accessing, interpreting and applying:
 - project plans, drawings and specifications
 - project construction briefs
 - project engineering survey information
 - project hydrological, meteorological and geotechnical data
 - innovative solutions and new technology
 - consultative processes
 - project scheduling and resource management technology
 - negotiation techniques

- feedback techniques
- work with others to establish civil construction plans that meets required outcomes, including:
 - providing clarification and advice
 - providing instruction and supervision to those involved using communication techniques and equipment
 - preparing for and conducting briefings, toolbox and site meetings
 - complying with 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 establish civil construction plans
- policies, procedures and documentation required to establish civil construction plans, including those relating to:
 - risk assessment and management
 - statutory compliance
 - work, health and safety
 - emergency response
 - communication techniques and equipment
 - environmental management
 - quality management
 - inspection and testing requirements and procedures
 - verbal and written communication, including:
 - briefings
 - toolbox meetings
 - site meetings
 - consultation and community relations
 - traffic management
 - staff training
 - construction plan review
 - construction plan documentation
 - construction plan reporting
 - construction plan approval
 - construction plan records filing
 - performance review
 - cost management
 - client liaison
 - scheduling

- production rates
- principles and techniques for establishing civil construction plans, including those related to:
 - team leadership and coordination
 - road user behaviour
 - civil works construction projects
 - cost estimation
 - construction plan development and implementation
 - civil construction works options
 - execution of civil works projects
 - use of innovation and new technology, including sourcing of information
 - selection of preferred construction program
- types, characteristics, technical capabilities and limitations of materials, plant and equipment required for establishing civil construction plans.

Assessment Conditions

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

- include access to:
 - personal protective equipment
 - equipment required to establish 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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