



Australian Government

RIICWM503D Prepare civil works cost estimate

Release: 2

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Modification History

Release	Comment
1	This unit replaces RIICWM503A Prepare civil works cost estimate
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 prepare a civil works cost estimate in Civil construction.

This unit is appropriate for those working in supervisory roles or as a technical specialist.

No licensing or certification requirements apply to this unit at the time of publication.

Unit Sector

Civil construction

Elements and Performance Criteria

1. Plan to prepare civil works cost estimates	1.1 Access, interpret and apply civil works cost estimate documentation and ensure the work activity is compliant 1.2 Obtain, read, interpret, clarify and confirm work requirements 1.3 Identify and address potential risks, hazards and environmental issues, and implement control measures 1.4 Review and confirm the draft works program that details the tasks or activities to be undertaken 1.5 Confirm agreement on the draft works program
2. Confirm bills of quantities	2.1 Review and confirm the on-site labour bill of quantities 2.2 Review and confirm the materials bill of quantities 2.3 Review and confirm the sub-contractor services bill of quantities

3. Confirm the schedule of rates	3.1 Review and confirm the on-site labour schedule of rates 3.2 Review and confirm the sub-contractor schedule of rates
4. Develop and gain agreement on the estimated cost of the civil works project	4.1 Apply the appropriate confirmed schedule of rates to the confirmed bill of quantities and estimate the civil works project cost 4.2 Gain approval of the civil works cost estimate 4.3 Complete and submit the documentation of the civil works cost estimate
5. Support and review the application of the cost estimate	5.1 Provide clarification and advice to those applying the cost estimate 5.2 Review the application of the cost estimate and recommend improvements to the civil works cost estimate preparation processes

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

RIICWM503A Prepare civil works cost estimate

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 RIICWM503D Prepare civil works cost estimate

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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 preparation of civil works cost estimates including accessing, interpreting and applying:
 - legislative, organisation and site requirements and procedures
 - plans and drawings
 - specifications
 - Australian and other appropriate standards
 - engineering survey information
 - hydrological data
 - geotechnical information
 - civil works construction materials test results
 - meteorological data
 - cultural and heritage data
 - civil works options selection data
 - computer based works planning technology
 - client feedback techniques
- works effectively with others to prepare civil works cost estimate that meets all the required outcomes including:
 - organising work activities to meet all task requirements

- communicating clearly and concisely with others to receive and clarify work instructions
- communicating clearly and concisely with others to resolve coordination requirements prior to commencing and during work activities
- consulting with stakeholders
- demonstrates completion of preparing civil works cost estimate that safely, effectively and efficiently meets all of the required outcomes on more than one (1) occasion including:
 - identification of the relevant information and scope of the work required
 - identification of viable options and selects civil works cost estimates
 - consultation with the client(internal and external)
 - consultation with others within the organisation
 - consultation with relevant authorities
 - conducting a risk assessment of the existing and potential hazards
 - review and confirmation of bills of materials data
 - review and confirmation of the schedule of rates data
 - obtaining further site data including:
 - known and potential hazards, constraints and conditions
 - cultural and heritage data
 - geological data
 - survey data
 - hydrological data
 - meteorological data

Knowledge Evidence

The candidate must demonstrate knowledge in preparing a civil works cost estimate through:

- accessing, interpreting and applying legislative, organization and site requirement and procedures for:
 - risk assessment and management
 - statutory compliance
 - work health and safety
 - environmental management
 - cultural and heritage
 - quality management
 - communication
- calculating areas, volumes, labour hours, materials quantities, sub-contractor service capabilities, productivity and required hours
- maintaining cost records
- providing clarification and advice

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 using Resources and Infrastructure Industry sector specific policies, procedures, processes and operational manuals; and,
- an assessor must demonstrate the skills and knowledge of this unit through five (5) years' work experience in the Industry sector; and,
- where the assessor does not have current experience a co-assessment or partnership arrangement needs to exist between the qualified assessor and an Industry technical expert/ subject matter expert. The Industry technical expert/subject matter expert must hold the unit being assessed and be currently working in the sector with a minimum of two (2) years' of current work experience.
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