



Australian Government

RIICWD601D Manage the civil works design process

Release: 2

RIICWD601D Manage the civil works design process

Modification History

Release	Comment
1	This unit replaces RIICWD601A Manage the civil works design process.
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 manage the civil works design process in Civil construction.

This unit is appropriate for those working in management roles.

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

Unit Sector

Civil construction

Elements and Performance Criteria

1. Interpret and scope civil works design requirements	<p>1.1 Access, interpret and apply Civil works design documentation and ensure the work activity is compliant</p> <p>1.2 Obtain, read, interpret, clarify and confirm work requirements</p> <p>1.3 Advise the client on the implications for sustainability and options for an improved environmental outcome in the project</p> <p>1.4 Analyse the client requirements for the design criteria to ensure all appropriate specifications are included</p> <p>1.5 Confirm that all development and implementation factors are accounted for</p> <p>1.6 Prepare functional specifications applying engineering standards and the design specifications</p>
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	1.7 Document and obtain the client's agreement on the criteria
2. Identify civil works project design options and determine the preferred design option	<p>2.1 Identify innovative approaches to the development of the design concept</p> <p>2.2 Investigate and analyse the possible design concepts capable of achieving the design requirements</p> <p>2.3 Seek advice from appropriate personnel and sources where the concept proposal has nonstandard engineering requirements or where new technology may apply</p> <p>2.4 Collaborate with the client to adapt the design concept to improve the outcomes and overcome problems</p> <p>2.5 Advise the client of the likely impacts on the community</p>
3. Initiate, monitor and support the design of civil works	<p>3.1 Analyse and select resources, processes and systems to develop the design</p> <p>3.2 Arrange design tasks to meet the agreed outcomes and cost structure</p> <p>3.3 Develop and check the design solution using the engineering specification</p> <p>3.4 Create (when appropriate) a demonstration model of the design</p>
4. Prepare and maintain documentation during the civil works design process	<p>4.1 Establish the documentation management process</p> <p>4.2 Ensure that the supporting documentation required to implement the design is accurate, concise, complete and clear</p> <p>4.3 Ensure that the designed item is identified by agreed design documentation and records</p> <p>4.4 Apply the agreed documentation control process when making changes to design</p> <p>4.5 Ensure that the documentation for the design remains accurate and current during the design development</p>
5. Review civil works design to achieve acceptance	<p>5.1 Review the design to ensure that the client's requirements are met</p> <p>5.2 Inform the user of the likely impact on the user's lifestyle</p> <p>5.3 Incorporate corrections and make improvements to the design ensuring social responsibilities, such as sustainability are met</p> <p>5.4 Review the design with the client to gain documented acceptance</p>
6. Support the application of civil	6.1 Prepare and implement plans to verify that completed physical work meets client's requirements

works designs	<p>6.2 Develop periodic test schedules to monitor performance and enable others to take any corrective action necessary</p> <p>6.3 Seek feedback from the commissioning process to facilitate corrective actions or improvements</p> <p>6.4 Evaluate the performance of the design outcomes in the user's environment using appropriate tools</p> <p>6.5 Evaluate community reaction to the design outcome</p>
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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

RIICWD601A Manager the civil works design process

Links

Companion Volume implementation guides are found in VETNet -

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