



**Australian Government**

# **RIICWD531E Prepare detailed design of subsurface drainage**

**Release: 1**

## RIICWD531E Prepare detailed design of subsurface drainage

### 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 prepare detailed design of subsurface drainage in civil construction, including evaluating design options, preparing and finalising designs and advising on design implementation.

It applies to those working in management or technical specialist roles. They generally apply a broad range 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 for detailed subsurface drainage design	1.1 Obtain, interpret, clarify and confirm work requirements 1.2 Access, interpret and apply documentation required for detailed subsurface drainage design and confirm work activity is compliant 1.3 Prepare design plan according to resourcing and design requirements
2. Carry out detailed subsurface drainage design	2.1 Obtain, interpret and analyse required data and identify subsurface drainage design options according to job requirements 2.2 Interpret and analyse subsurface drainage design options and recommend design option according to job requirements 2.3 Develop and complete detailed subsurface drainage design according to job requirements

<b>ELEMENT</b>	<b>PERFORMANCE CRITERIA</b>
	2.4 Prepare cost estimate for implementing subsurface drainage design 2.5 Participate in review of subsurface drainage design with required stakeholders 2.6 Complete required documentation for subsurface drainage design according to workplace requirements 2.7 Communicate and coordinate with personnel involved in design process according to workplace requirements and within scope of own role 2.8 Gain design approval from required authorities
3. Finalise subsurface drainage design processes	3.1 Confirm design records are filed according to workplace requirements 3.2 Complete design cost and reporting requirements and deliver to required stakeholders 3.3 Participate in performance review of design process according to workplace requirements 3.4 Review client feedback and contribute to design verification according to workplace requirements 3.5 Close out systems according to workplace requirements
4. Support and review subsurface drainage design implementation	4.1 Provide clarification and advice to personnel implementing design as required to meet job requirements 4.2 Contribute to design validation process as required to meet job requirements

## Foundation Skills

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

<b>Skill</b>	<b>Description</b>
Numeracy	<ul style="list-style-type: none"> <li>Calculates resourcing requirements and performs mathematical calculations</li> </ul>
Oral communication	<ul style="list-style-type: none"> <li>Presents information and provides assistance using sector-specific vocabulary</li> <li>Uses listening and questioning to clarify and confirm understanding</li> </ul>
Reading	<ul style="list-style-type: none"> <li>Identifies and interprets information from workplace procedures, documentation, legislation and regulations</li> </ul>
Writing	<ul style="list-style-type: none"> <li>Prepares and completes workplace reports using sector-specific vocabulary, grammatical structures and conventions</li> </ul>

## Unit Mapping Information

Supersedes and is equivalent to RIICWD531D Prepare detailed design of subsurface drainage.

## Links

Companion Volume Implementation Guide is found on VETNet -

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