



Australian Government

AHCSAW504 Design control measures and structures

Release: 1

AHCSAW504 Design control measures and structures

Modification History

Release	Comments
Release 1	This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 6.0.

Application

This unit of competency describes the skills and knowledge required to design erosion and sediment control measures and structures.

The unit applies to individuals who work in soil and water conservation and who analyse information and exercise judgement to complete design and development activities, demonstrating a deep understanding of the technical areas within soil and water conservation. They have accountability for the work of others and analyse, design and communicate solutions to complex problems.

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

Pre-requisite Unit

Nil

Unit Sector

Soil and Water Conservation (SAW)

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
1. Identify measures or structures to be designed	1.1 Review erosion and sediment control plan for technical accuracy and environmental impact 1.2 Confirm adherence to regulations and legislation, and record on works plans 1.3 Confirm budget constraints for project with management or client

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>
	1.4 Apply design criteria according to industry standards
2. Apply design procedures	2.1 Calculate catchment characteristics to required accuracy 2.2 Determine design specifications for project 2.3 Use a computer aided design (CAD) program to develop draft design according to budgetary constraints and erosion and sediment control plan 2.4 Verify design against plans, budget and industry best practice with stakeholders 2.5 Review and recommend changes to the design to comply with design procedures and accepted industry practices and environmentally sustainable practices
3. Prepare specification schedule	3.1 Prepare documentation and specifications for design 3.2 Verify design and documentation complies with industry standards 3.3 Confirm suitability of design and specifications for the category of work and legislative requirements

Foundation Skills

This section describes those language, literacy, numeracy and employment skills that are essential for performance in this unit of competency but are not explicit in the performance criteria.

Skill	Description
Reading	Organise, assess and critique data and information from legislation and regulations and plans for incorporation into design
Writing	Select appropriate conventions and stylistic devices to express precise meaning in design documentation and specifications
Numeracy	Use highly developed numeracy skills to interpret design criteria from catchment characteristics and costs, and perform calculations to translate into dimensions and structural design of control measure

Unit Mapping Information

Code and title current version	Code and title previous version	Comments	Equivalence status
AHCSAW504 Design control measures and structures	AHCSAW501 Design control measures and structures	Minor changes to Application and Performance Criteria for clarity Updated Foundation Skills, Performance Evidence, Knowledge Evidence and Assessment Conditions	Equivalent

Links

Companion Volumes, including Implementation Guides, are available at VETNet: -
<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72>