



Australian Government

Department of Education, Employment and Workplace Relations

AHCARB502A Identify, select and specify trees

Release: 1

AHCARB502A Identify, select and specify trees

Modification History

Not Applicable

Unit Descriptor

Unit descriptor	This unit covers the process of identifying, selecting and specifying trees and defines the standard required to: inspect and identify an extensive range of trees; determine the suitability of a tree for a purpose; evaluate and document the selection of trees; specification of replacement tree plantings; monitor and record quality control of selections; document a report of the identification, evaluation and specification process.
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Application of the Unit

Application of the unit	This unit applies to a wide range of applications in urban and regional areas and in local government and legal contexts in the specification of replacement trees in residential, commercial public open spaces and amenity areas.
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Licensing/Regulatory Information

Not Applicable

Pre-Requisites

Prerequisite units		

Employability Skills Information

Employability skills	This unit contains employability skills.
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Elements and Performance Criteria Pre-Content

Not Applicable

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA

ELEMENT	PERFORMANCE CRITERIA
1. Identify a tree	1.1. Client is consulted and a brief developed and agreed. 1.2. Trees are identified for the purpose of the project/client brief.
2. Determine the suitability of a tree for a purpose	2.1. Site inspection is undertaken according to the client brief and legislative and regulatory requirements. 2.2. Planting area dimensions are estimated for the tree species or cultivar. 2.3. Species and cultivar selection is appropriate to the available dimensions of the aspect and the site. 2.4. Soil volume is proportioned to the size of tree in consideration. 2.5. Environmental conditions are considered and applied to the functional characteristics of the tree. 2.6. The existing soil is appraised for suitability as a growth medium appropriate to the tree species or cultivar. 2.7. Functional life expectancy of site and plantings is determined. 2.8. The selection of the tree is evaluated and the rationale for tree selection is documented.
3. Select trees	3.1. Trees are selected as per the client brief and their suitability for the intended purpose. 3.2. Tree function is determined for the precise location within the plan. 3.3. Recommendations are made for soil improvements in accordance with the tree species selected. 3.4. Species and cultivars are matched appropriately to the determined selection criteria for species specific characteristics. 3.5. Tree species or cultivars for replacement or new plantings are recommended. 3.6. Tree selections, selection criteria and notes on quality expectations are documented as specifications.
4. Specify trees	4.1. Criteria determined for size of stock selection are incorporated to the specifications. 4.2. Selection criteria for mature trees are evaluated against capability for transplanted trees. 4.3. Final selections are assessed against the specified soil, site location and client brief and confirmed. 4.4. Selected plants are monitored for quality and

ELEMENT	PERFORMANCE CRITERIA
	quantities according to the specifications. 4.5. Materials, soils and growing media are monitored for quality according to the specifications. 4.6. Records of quality checks on delivered plants and product are documented.
5. Correlate and present a report	5.1. A report of the process is documented and the correlated records are incorporated. 5.2. The client or organisation is presented with the report.

Required Skills and Knowledge

REQUIRED SKILLS AND KNOWLEDGE

This section describes the skills and knowledge required for this unit.

Required skills

- identify and select an extensive range of trees common to the region
- select and appraise a wide range of soils and growing media
- conduct site inspections and site assessments
- evaluate tree selections
- use comparative techniques
- research multiple sources of reference material and taxonomic keys
- compile a database of tree specimens and characteristics
- monitor quality
- apply quality controls
- use literacy skills to fulfil job roles as required by the organisation. The level of skill may range from reading and understanding documentation to completion of written reports
- use oral communication skills/language competence to fulfil the job role as specified by the organisation including questioning, active listening, asking for clarification, negotiating solutions and responding to a range of views
- use numeracy skills to estimate, calculate and record complex workplace measures
- use interpersonal skills to work with others and relate to people from a range of cultural, social and religious backgrounds and with a range of physical and mental abilities.

Required knowledge

- tree identification techniques

REQUIRED SKILLS AND KNOWLEDGE

- ethnobotany, plant morphology, physiology, taxonomy and nomenclature
- soil characteristics particularly in relation to the local region
- soils appraisal techniques
- methods of data capture
- surface hydrology
- problem-solving techniques
- methods of quality control
- symptoms of tree pests and diseases
- basic physiology and life cycle of pests and diseases
- AS4419-2003 and AS4454-2003
- specific legislation and regulations for arboriculture and development relevant Occupational Health and Safety (OHS)
- legislation and regulations.

Evidence Guide

EVIDENCE GUIDE	
The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.	
Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	The evidence required to demonstrate competency in this unit must be relevant to workplace operations and satisfy holistically all of the requirements of the performance criteria and required skills and knowledge and include achievement of the following: • inspect and identify an extensive range of trees • determine the suitability of a tree for a purpose • evaluate and document the selection of trees • specification of replacement tree plantings • monitor and record quality control of selections • document a report of the identification, evaluation and specification process.
Context of and specific resources for assessment	Competency requires the application of work practices under work conditions. Selection and use of resources for some worksites may differ due to the regional or enterprise circumstances.

Range Statement

RANGE STATEMENT	
The range statement relates to the unit of competency as a whole.	
Trees may include:	• the range of all tree species and cultivars.
Sources of knowledge may include:	• reference books • photo collections • field guides • networking • internet • identified specimens • software programs • collaboration

RANGE STATEMENT

	• electronic storage • taxonomic keys • drawings • herbarium collections • colleagues • botanical gardens and other readily available sources.
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Unit Sector(s)

Unit sector	Arboriculture
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Co-requisite units

Co-requisite units		

Competency field

Competency field	
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