Modification history

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| Release | Comments |
| Release 1 | This version released with AHC Agriculture, Horticulture and Conservation and Land Management Training Package Version 4.0. |

| AHCARB321 | Implement a tree protection program |
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| Application | This unit of competency describes the skills and knowledge required to identify trees in need of temporary protection and implement a protection program according to specifications.  The unit applies to individuals who work in arboriculture under broad direction and take responsibility for their own work. They use discretion and judgement in the selection, allocation and use of available resources and for solving problems.  The arboriculture industry requires that all tree protection work is undertaken according to current industry standards, including Australian Standard AS4970, and any relevant Minimum Industry Standards.  Legislation, regulations and by-laws relating to the treatment and removal of trees apply in some states and territories. |
| Prerequisite Unit | Nil |
| Unit Sector | Arboriculture (ARB) |

| Elements | Performance Criteria |
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| Elements describe the essential outcomes. | Performance criteria describe the performance needed to demonstrate achievement of the element. |
| 1. Determine implementation requirements of the tree protection program | 1.1 Receive and interpret tree protection plan and specifications  1.2 Undertake a site-specific job safety analysis (JSA), record and implement control measures according to workplace safety procedures  1.3 Confirm availability of first aid equipment and emergency procedures  1.4 Identify and access tools, equipment and materials required to implement program  1.5 Determine, schedule and allocate tasks to work team, allowing for contingencies |
| 2. Prepare site for tree protection | 2.1 Identify location of tree protection zone from site plan  2.2 Select, prepare, and carry out pre-operational and safety checks, on tools, equipment and machinery  2.3 Select, check and use personal protective equipment  2.4 Survey the tree protection zone and delineate specified boundaries according to workplace procedures  2.5 Install protective barriers and signage according to tree protection plan |
| 3. Install tree protection measures | 3.1 Identify requirements for trunk, branch and root protection from tree protection plan  3.2 Select and assemble materials and equipment required to install tree protection measures  3.3 Construct and install protection measures specified in the program  3.4 Inspect completed protection measures and take remedial action where out-of-specification |
| 4. Monitor protection program | 4.1 Monitor tree health during scheduled program period  4.2 Assess effectiveness of protection measures during the scheduled period  4.3 Implement remedial action where tree health has been compromised  4.4 Dismantle and remove protection measures and fencing at conclusion of scheduled period  4.5 Clean, maintain and store tools and equipment according to workplace procedures  4.6 Update records and report tree protection outcomes according to workplace procedures |

| 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. | |
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| Skill | Description |
| Reading | * Interpret and consolidate information from plans and specifications for design requirements to prepare for the installation of tree support systems |
| Writing | * Accurately complete organisational documents, including job safety analysis (JSA), using clear language, correct spelling and grammar, and industry terminology |
| Numeracy | * Interpret and calculate numerical information from specifications to determine the size and dimensions of materials required to construct tree protection systems |

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| Unit Mapping Information | | | |
| Code and title current version | Code and title previous version | Comments | Equivalence status |
| AHCARB321 Implement a tree protection program | AHCARB309 Implement a tree protection program | Performance criteria clarified  Foundation skills added  Assessment requirements updated | Equivalent unit |

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

| TITLE | Assessment requirements for AHCARB321 Implement a tree protection program |
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| Performance Evidence | |
| An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.  There must be evidence that the individual has demonstrated the ability to implement a tree protection program for at least two trees, including:   * received and interpreted a tree protection program and identified: * trees to be protected * protection methods to use * schedule required * equipment necessary to perform work * assessed site-specific health and safety issues and completed a job safety analysis (JSA) and ensured first aid resources and emergency procedures were available * scheduled and allocated tasks to work team * surveyed and marked out the tree protection zone * erected barriers and signage * selected materials and equipment required for tree protection measures * conducted pre-operational safety checks and post-operational maintenance of equipment and tools * installed tree protection measures following specifications in plan * inspected completed protection installations and rectified where out-of-specification * monitored tree health during protection scheduled period and implemented remedial action where protection has been compromised * dismantled and removed protection measures * maintained records and reports of tree protection outcomes.   All tree protection work is required to be performed according to current industry standards, including Australian Standard AS4970, and any relevant Minimum Industry Standards. | |

| Knowledge Evidence |
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| An individual must be able to demonstrate the knowledge required to perform the tasks outlined in the elements and performance criteria of this unit. This includes knowledge of:   * current industry standards, including Australian Standard AS4970, and any relevant Minimum Industry Standards * use and interpretation of tree protection plans and specifications, including: * tree protection systems, types and methods of protection * surveying and marking out tree protection zones (TPZ) * application of workplace health, safety and environmental controls, including job safety analysis and personal protective equipment * first aid and rescue personnel, equipment and procedures applicable to tree work * task scheduling and contingency planning for tree protection * possible damage to tree physiology, and prevention requirements on development and construction sites, including: * barriers and signage * techniques for assembling or constructing tree protection measures suitable to the requirements of tree species * protection requirements of tree species * specifications and construction methods for installing protection measures * environmental factors affecting trees on development and construction sites, including: * soil compaction and contamination * shading * impact on scaffolding * excavations and root damage * principles, regulations, codes of practice and Australian standards for the protection of trees on development and construction sites * methods used to protect trees on development sites, including: * fencing tree protection zones (TPZ) and signage * trunk and branch protection * soil within the TPZ and root zone protection * tools, equipment and materials used in tree protection, including preparation, maintenance and biosecurity procedures * record keeping and reporting procedures for tree protection. |

| Assessment Conditions |
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| Assessment of skills must take place under the following conditions:   * physical conditions: * trees growing on development and construction sites or an environment that accurately represents workplace conditions * resources, equipment and materials: * tree protection materials and equipment * tools to construct or assemble tree protection measures * personal protective equipment (PPE) * first aid and emergency response equipment * signage for tree protection zones * specifications: * workplace and manufacturer instructions for safe operation, cleaning and storage of equipment used for tree protection work * tree protection plans and specifications * current industry standards for tree protection work, including Australian Standard AS4970, and any relevant Minimum Industry Standards * relationships: * work team.   Training and assessment strategies must show evidence of the use of guidance provided in the Companion Volume: User Guide Arboriculture. Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards. In particular, assessors must have:   * arboriculture vocational competencies at least to the level being assessed * current arboriculture industry skills directly relevant to the unit of competency being assessed. |

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