

**Modification history**

| Release   | Comments                                                                                                                 |
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| Release 2 | This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 4.0. |
| Release 1 | This version released with AHC Agriculture, Horticulture, Conservation and Land Management Training Package Version 1.0. |

| AHCTRF502                | Manage sports turf renovation programs                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| <b>Application</b>       | <p>This unit of competency describes the skills and knowledge required to assess a sports turf surface and develop programs and procedures to implement renovation activities appropriate to the sport and sporting regulations.</p> <p>It applies to individuals who are responsible for the management of turf renovation programs who analyse information and exercise judgement to complete a range of advanced skilled activities and demonstrate deep knowledge in a specific technical area. They have accountability for the work of others and analyse, design and communicate solutions to a range of complex problems.</p> <p>No occupational licensing, legislative or certification requirements are known to apply to this unit at the time of publication.</p> |
| <b>Prerequisite Unit</b> | Nil                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>Unit Sector</b>       | Turf (TRF)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |

| Elements                                            | Performance Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
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| <i>Elements describe the essential outcomes.</i>    | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
| 1. Assess the turf renovation site                  | 1.1 Inspect and assess turf surface condition for the renovation site<br>1.2 Implement soil physical and chemical tests to determine soil condition and determine corrective action according to industry and workplace standards<br>1.3 Implement water quality tests to determine its effect on turf growth and development according to workplace and industry standards<br>1.4 Assess sward cover and identify over sowing requirements and turf grass species/varieties required according to workplace and industry standards<br>1.5 Identify work health, safety and environmental hazards, assess risks and specify controls for incorporation in plan according to workplace procedures                            |
| 2. Select renovation technique for sports turf site | 2.1 Investigate and evaluate renovation techniques and practices using historical and current data<br>2.2 Review renovation records to inform planned works, practices and timing<br>2.3 Determine turf renovation technique for current condition of turf and intended outcome of the program<br>2.4 Establish the timing of the renovation program according to turf species cultural requirements, renovation technique, weather conditions and sport turf usage<br>2.5 Produce a financial budget for turf renovation activity according to workplace procedures<br>2.6 Prepare a turf maintenance program for post renovation recovery<br>2.7 Document a the turf renovation program according to workplace procedures |

| Elements                                                             | Performance Criteria                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
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| <i>Elements describe the essential outcomes.</i>                     | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                                                                                                                                                                                             |
| 3. Organise staff and resources for turf renovation project          | 3.1 Determine machinery and equipment for the renovation program and check for availability, working condition and settings and adjustments for sports turf renovation<br>3.2 Calculate and order consumables required according to workplace procedures<br>3.3 Liaise with contractors and machinery hire firms and arrange contracts according to program requirements and workplace procedures<br>3.4 Determine team and contractor work requirements and specify sequence and timing of the renovation project |
| 4. Review renovation outcomes and complete associated record keeping | 4.1 Update records for soil condition and water quality tests according to workplace procedures<br>4.2 Update financial records with direct and indirect costs and review against budget according to workplace financial accounting standards<br>4.4 Record and report renovation practices and outcomes according to workplace procedures<br>4.5 Review actual against planned renovation activities and recommend improvements for future renovation work according to workplace procedures                     |

| Foundation Skills                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                |
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| <i>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.</i> |                                                                                                                                                                                                                                                                                                                                |
| Skill                                                                                                                                                                                                  | Description                                                                                                                                                                                                                                                                                                                    |
| Reading                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>Evaluate and critique ideas and information from sporting rules and regulations and synthesises into renovation programs</li> </ul>                                                                                                                                                     |
| Writing                                                                                                                                                                                                | <ul style="list-style-type: none"> <li>Generates written renovation programs, demonstrating control over a broad range of writing styles and purpose</li> </ul>                                                                                                                                                                |
| Oral communication                                                                                                                                                                                     | <ul style="list-style-type: none"> <li>Establishes and maintains complex and effective communications in a broad range of contexts with contractors and hire companies</li> </ul>                                                                                                                                              |
| Numeracy                                                                                                                                                                                               | <ul style="list-style-type: none"> <li>Analyses and synthesises highly embedded mathematical information from a broad range of tasks and texts to develop schedules and specifications</li> </ul>                                                                                                                              |
| Navigate the world of work                                                                                                                                                                             | <ul style="list-style-type: none"> <li>Develops and implements programs that ensures organisational policies, procedures and regulatory requirements are being met</li> </ul>                                                                                                                                                  |
| Interact with others                                                                                                                                                                                   | <ul style="list-style-type: none"> <li>Uses a variety of relevant communication tools and strategies in building and maintaining effective working relationships with key stakeholders</li> <li>Develops and implements communications strategies with internal and external stakeholders in order to build rapport</li> </ul> |
| Get the work done                                                                                                                                                                                      | <ul style="list-style-type: none"> <li>Plans strategic priorities and outcomes within a flexible, efficient and effective context in a diverse environment exposed to competing demands</li> </ul>                                                                                                                             |

| Unit Mapping Information                            |                                                     |                                                                                                                       |                    |
|-----------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------|--------------------|
| Code and title current version                      | Code and title previous version                     | Comments                                                                                                              | Equivalence status |
| AHCTRF502<br>Manage sports turf renovation programs | AHCTRF502<br>Manage sports turf renovation programs | Minor changes to Elements and Performance Criteria for clarity<br>Updated Performance Evidence and Knowledge Evidence | Equivalent unit    |

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| <b>Links</b> | Companion Volumes, including Implementation Guides, are available at VETNet:<br><a href="https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72">https://vetnet.education.gov.au/Pages/TrainingDocs.aspx?q=c6399549-9c62-4a5e-bf1a-524b2322cf72</a> |
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| <b>TITLE</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | <b>Assessment requirements for AHCTRF502 Manage sports turf renovation programs</b> |
| <b>Performance Evidence</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                     |
| <p>An individual demonstrating competency must satisfy all of the elements and performance criteria in this unit.</p> <p>There must be evidence that the individual has managed sports turf surfaces on at least three of the following turf surfaces:</p> <ul style="list-style-type: none"> <li>• a single hole for golf course including tee and surrounds, rough, fairways and green</li> <li>• bowling green</li> <li>• cricket including renovation of wicket surface and outfield</li> <li>• ball sport (football, soccer or rugby)</li> <li>• horse race track</li> <li>• one other sport turf surface selected from:             <ul style="list-style-type: none"> <li>• lawn tennis</li> <li>• lacrosse</li> <li>• hockey</li> <li>• polo</li> <li>• croquette.</li> </ul> </li> </ul> <p>There must also be evidence that the individual has:</p> <ul style="list-style-type: none"> <li>• inspected, implemented tests and assessed the turf renovation site for turf condition, soil properties, and water quality</li> <li>• reviewed historical records and practices and determined a turf renovation technique for current conditions and outcomes</li> <li>• identified work health, safety and environmental hazards, assess risks and identified control measure to include in plan</li> <li>• documented a turf renovation plan and schedule of works according to workplace procedures</li> <li>• produced and reviewed a costing budget for the project</li> <li>• determined availability and operational status of machinery and equipment and specified settings and adjustments</li> <li>• identified and liaised with team and contractor for expected works</li> <li>• prepared a schedule of works according to workplace procedures</li> <li>• calculated materials and ordered goods, services and contractors required for the renovation according to workplace finance procedures</li> <li>• prepared a post renovation turf recovery maintenance program</li> <li>• updated records and reported outcomes for renovation program</li> <li>• reviewed program outcomes against plan and recommended future adjustments.</li> </ul> |                                                                                     |
| <b>Knowledge Evidence</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |                                                                                     |
| <p>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:</p> <ul style="list-style-type: none"> <li>• comparative health, safety and environmental implications of renovation activities, turf and soil treatments and waste disposal procedures/issues and legislation</li> <li>• enterprise and industry standards for turf surface appearance and quality</li> <li>• field measurement techniques including infiltration rate, organic fines, hardness, traction, surface smoothness</li> <li>• impact of climatic conditions and soil temperature on turf recovery</li> <li>• planting, care and renovation scheduling requirements of turf grass species and cultivars</li> <li>• requirements of the turf's intended use including intensity and scheduling</li> <li>• soil physical and chemical properties for imported and existing soils</li> <li>• specialist turf renovation principles and practices             <ul style="list-style-type: none"> <li>• aeration</li> <li>• thatch removal</li> <li>• topdressing/dusting</li> <li>• over sowing</li> <li>• application of soil ameliorants</li> <li>• removal of over sown species</li> </ul> </li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                     |

### Knowledge Evidence

- turf nutrition and plant growth regulators
- scheduling and program management and the use of time management tools (e.g. gantt charts)
- developing and managing budgets including:
  - direct costs (e.g. contractors, materials and consumables)
  - indirect costs (e.g. labour, administration, services)
  - fixed or variable costs
- report writing and correct referencing
- enterprise, national and international industry standards for sports turf surfaces, appearance, performance and quality
- safe work practices and procedures applicable to renovation planned activities including:
  - safe materials handling
  - equipment and operation
  - public and turf area users
- methods and purpose of field measurement tests to be performed including:
  - infiltration rate
  - organic fines
  - hardness
  - traction
  - surface smoothness
  - turf sward height
- identification and cultural requirements of turf grass species and cultivars including:
  - planting/
  - propagating
  - care and maintenance
  - renovation scheduling requirements
- specialist turf renovation practices to achieve high performance turf
  - dethatching
  - top dressing
  - aerating and
  - de-compaction
  - over sowing
  - fertilising and soil conditioning
  - adjusting drainage and water holding
- establishing and estimating resource and material requirements for turf grass renovation program including
  - financial and budgetary constraints
  - consumables (fertilisers, ameliorants, chemicals)
  - labour and contractor requirements and scheduling
- equipment and machinery used in turf renovation including:
  - log books and operation status
  - adjustments and settings (tyne/blade types, depths, spacing's)
  - types of equipment and their purpose
  - effective and safe use of tools and machinery
  - need a short list of common renovation tools and equipment
  - influences on the selection of tools, machinery and safety equipment
  - common pre and post operational checks of equipment
- managing staff and working with contractors including:
  - communicating with staff
  - organising and directing labour
- preparation of renovation plans, recording and reporting renovation activities.

### Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:

| <b>Assessment Conditions</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
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| <ul style="list-style-type: none"><li>• skills must be demonstrated in a sports turf facility or an environment that accurately represents workplace conditions with access to at least three sites suitable for sports turf surface renovation stipulated in the performance evidence</li><li>• resources, equipment and materials:<ul style="list-style-type: none"><li>• computer software for documenting plans and preparing schedules</li><li>• reports, results and testing equipment for soil and plant tissue</li></ul></li><li>• specifications:<ul style="list-style-type: none"><li>• workplace procedures and site plans for sports turf renovation</li><li>• local, national and international standards for sports turf grass conditions</li></ul></li><li>• relationships<ul style="list-style-type: none"><li>• work team and contractor.</li></ul></li></ul> <p>Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.</p> |

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