



**Australian Government**

# **AHCTRF311 Renovate sports turf**

**Release: 1**

# AHCTRF311 Renovate sports turf

## Modification History

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

## Application

This unit of competency describes the skills and knowledge required to implement renovation or remediation of a sports turf area for minor projects and seasonal renovations in the turf industry.

The unit applies to individuals who renovate sports turf under general 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.

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

## Pre-requisite Unit

Nil

## Unit Sector

Turf (TRF)

## 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. Prepare to renovate turf                      | 1.1 Assess the turf renovation site and determine extent of works according to renovation program<br>1.2 Identify turf grass species, materials and resources and calculate quantities required for renovation program<br>1.3 Collect soil samples and conduct or arrange tests to establish physical and chemical condition of the soil according to industry standards |

| 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 Identify, select and check hand tools, equipment and materials required for renovation work<br>1.5 Identify workplace health, safety and environmental hazards, assess their risks and implement controls<br>1.6 Prepare a schedule of works according to site assessment and soil conditions                          |
| 2. Prepare renovation equipment                  | 2.1 Select, check, use and maintain safety and personal protective equipment<br>2.2 Carry out pre-operational and safety checks on tools, equipment and machinery and rectify, report or tag faults<br>2.3 Calibrate and adjust tools, equipment and machinery for turf renovation                                         |
| 3. Implement sports turf renovation              | 3.1 Operate turf renovation tools, equipment and machinery safely and effectively to renovate turf surface<br>3.2 Assess and review renovation activities against scheduled works and undertake remedial action where out-of-specification<br>3.3 Maintain a clean and safe work area throughout and on completion of work |
| 4. Complete renovation activities                | 4.1 Collect and dispose of waste material according to workplace and environmental procedures<br>4.2 Clean, maintain and store tools, equipment and machinery<br>4.3 Record and report work 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.*

| Skill   | Description                                                                                                                                                                |
|---------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reading | <ul style="list-style-type: none"> <li>Interpret symbols and text on plans</li> <li>Interpret soil test procedures and test results for establishing turf grass</li> </ul> |

| Skill    | Description                                                                                                                                                                                               |
|----------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Writing  | <ul style="list-style-type: none"><li>Complete workplace documentation using industry terminology and required format</li></ul>                                                                           |
| Numeracy | <ul style="list-style-type: none"><li>Estimate and calculate distance, area, volume, percentage, time, temperature and ratio</li><li>Apply numerical information to determine application rates</li></ul> |

## Unit Mapping Information

| Code and title current version    | Code and title previous version   | Comments                                                                                                                                | Equivalence status |
|-----------------------------------|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------|--------------------|
| AHCTRF311<br>Renovate sports turf | AHCTRF305<br>Renovate sports turf | Performance criteria clarified<br>Foundation skill added<br>Performance evidence, knowledge evidence and assessment conditions expanded | Equivalent unit    |

## Links

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

# Assessment Requirements for AHCTRF311 Renovate sports turf

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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, on at least one occasion, renovated a sports turf surface, including:

- assessed the site and renovation program to determine the extent of works and required renovation activities
- identified turf grass, materials and resources and calculated quantities required
- collected and tested soil samples and established the soil condition for renovation site
- prepared a schedule of works for renovation activities
- identified hazards and risks, and implemented control measures for personal and site-specific safety
- selected and prepared materials, equipment, machinery and turf propagation materials ready for renovation works
- performed turf renovation activities safely using equipment, machinery and materials according to renovation schedule and workplace procedures, including:
  - coring or spiking
  - top dressing
  - scarifying or grooming
  - shaving or turf cutting or plugging
  - fertilising or adding amendments
- cleaned site and collected waste from renovation works and disposed of
- cleaned, maintained and stored turf renovation machinery and equipment
- assessed renovation activities against schedule of works and implemented remedial action where out-of-specification
- recorded and reported turf renovation activities, faults and issues.

## Knowledge Evidence

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:

- principles and practices of turf renovation, including:
  - turf renovation programs and their function in maintaining playable surfaces
  - developing a schedule of works for sports turf renovation
- calculations required to determine the quantities required for the renovation program, including:
  - amendments
  - fertiliser
  - seed
  - soil, sand and other growing media
- techniques for conducting field tests for soils, including:
  - pH
  - electrical conductivity
  - infiltration rate
  - organic matter
  - firmness and compaction of the surface
  - traction
  - surface smoothness
- planting, care and renovation scheduling requirements of grass species and cultivars, including:
  - specialist turf renovation practices to achieve high performance turf
  - national and international standards for turf surface appearance and quality
  - turf sward height
- structure of a sports turf soil profile, including:
  - soils and soil preparation for renovation
  - soil aeration and compaction, including, core, solid tyne and water injection
  - impact of soil compaction and thatch on irrigation and infiltration rate
  - levelling turf surfaces
- turf grass species and effect on mat, thatch and dethatching techniques, including:
  - turf grass improvements using top dressing, dusting, shaving, scarifying and grooming
  - effect of adverse weather conditions on renovation activities
- effective and safe use of tools, machinery and equipment commonly used for sports turf renovation programs, including:
  - scarifier
  - sod cutter
  - corer
  - slicer
  - shaver
  - top-dresser
  - drag-mat
  - fertiliser spreader

- transporter
- loader, bobcat or similar
- hand tools, tynes, shovels, spades, level lawns and wheelbarrows
- factors for consideration in the selection of tools, machinery and safety equipment
- common pre-operational and post-operational checks of equipment
- adjustments and settings for renovation equipment
- assessment of safety hazards and risks when renovating turf areas, including:
  - public safety
  - barriers and exclusions zones
  - signage
  - personal protection and equipment
  - manual handling techniques for lifting or moving heavy loads and materials
- chemical amendments for renovations, including:
  - fertilisers
  - ameliorants
  - growth regulators
- turf repairs and regeneration procedures, including:
  - over sowing
  - plugging
  - sprigging
  - rolled turf and turf replacement
  - divot replacement
  - top dressing materials and procedures
- waste materials handling and disposal, including environmental considerations
- record keeping and reporting procedures and requirements.

## Assessment Conditions

Assessment of skills must take place under the following conditions:

- physical conditions:
  - a sports turf facility or an environment that accurately represents workplace conditions
- resources, equipment and materials:
  - turf renovation machinery and equipment
  - turf renovation hand tools
  - fertiliser, ameliorants and top dressing material
  - turf propagation materials, including seed, sprigs and rolled turf
- specifications:
  - turf renovation program
  - workplace procedures and instructions related to turf renovation.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

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