



Australian Government

Department of Education, Employment and Workplace Relations

RTF2020A Assist with turf construction

Release: 1

RTF2020A Assist with turf construction

Modification History

Not applicable.

Unit Descriptor

This competency standard covers the process of support a worker provides to others in a team who are constructing soil profiles for the establishment of turf.

Construction work is likely to be under routine supervision with intermittent checking.

Competency is demonstrated by the application of knowledge and skills to a range of soil profile construction tasks. Installation of irrigation and drainage systems is covered in other units at packaged at AQF 3. The work is usually within established routines, methods and procedures.

Application of the Unit

Not applicable.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

Not applicable.

Elements and Performance Criteria Pre-Content

Not applicable.

Elements and Performance Criteria

Elements and Performance Criteria

Element	Performance Criteria
1 Prepare for soil profile construction	1.1 Services are located using site and construction plans and in consultation with the supervisor. 1.2 OHS hazards are identified, risks assessed and reported to the supervisor. 1.3 Suitable safety equipment is selected for the soil profile construction program. 1.4 The construction site is prepared according to enterprise work procedures and the construction plan.
2 Prepare equipment for soil profile construction	2.1 Construction tools, equipment and machinery are selected that are appropriate to the task being undertaken. 2.2 Pre-operational and safety checks are carried out on tools, equipment and machinery according to manufacturers specifications and enterprise work procedures. 2.3 Suitable personal protective equipment (PPE) is selected, used and maintained.
3 Undertake soil profile construction	3.1 The base is graded to the specified level and on a consistent slope, and is consolidated to achieve uniform compaction over the entire site, according to enterprise work procedures. 3.2 Trench lines are dug to the specified depth, width and fall, with all superfluous material evacuated and stored safely according to the construction plan and enterprise work procedures. 3.3 Construction of the soil profile is undertaken according to OHS requirements.

- 4 Restore the site after drainage and irrigation installation
- 4.1 Trenches are back-filled with specified construction materials, consolidated and levelled according to the construction plan and enterprise work procedures.
 - 4.2 The construction site is levelled to visual satisfaction as each layer of the soil profile is installed.
 - 4.3 The construction site is hand watered thoroughly on completion according to enterprise work procedures.
 - 4.4 **Waste material** is removed from the construction site and disposed of in an environmentally aware and safe manner according to enterprise work procedures.
 - 4.5 Tools, equipment and machinery are cleaned, maintained and stored according to enterprise work procedures.
 - 4.6 A **clean and safe area** is maintained throughout and upon completion of work according to enterprise work procedures.
 - 4.7 Work outcomes are recorded or reported to the supervisor according to enterprise work procedures.

Required Skills and Knowledge

Not applicable.

Evidence Guide

What evidence is required to demonstrate competence for this standard as a whole?

Competence in supporting the construction of soil profiles for turf establishment requires evidence that a person using construction equipment and materials can effectively assist other workers in the required work procedures.

The skills and knowledge required to construct a soil profile for turf establishment must be **transferable** to a different work environment. For example, the excavation of trenches, backfilling techniques and practical knowledge of the constructed soil profiles for a range of turf surfaces are also applicable when establishing, monitoring and maintaining a wide range of turf surfaces.

What specific knowledge is needed to achieve the performance criteria?

Knowledge and understanding are essential to apply this standard in the workplace, to transfer the skills to other contexts, and to deal with unplanned events. The knowledge requirements for this competency standard are listed below:

1. awareness of irrigation and/or drainage installation procedures and the care needed in laying soil profiles to accommodate and work around these installations
2. awareness of the structural relationship between a well-constructed soil profile and the achievement of enterprise standards for the quality and appearance of the turf to be established on the profile, particularly in relation to the end use of the turf surface
3. awareness of the environmental implications associated with disturbing and installing soil profiles, such as disturbance level noise, dust and water run-off, and the exacerbation or prevention of the contamination of ground water, salination, erosion and interruption to existing native ecosystems
4. awareness of the potential public nature of soil profile construction activities and the hazards and responsibilities associated with working in a publicly accessible situation
5. the effect of adverse outdoor climatic conditions (e.g., rain, hail, days of extreme heat and/or wind, or very high ultraviolet radiation), which may prevent or impede

construction programs, or influence the selection of tools, machinery and safety equipment to reduce the hazards presented.

What specific skills are needed to achieve the performance criteria?

To achieve the performance criteria, appropriate literacy and numeracy levels as well as some complementary skills are required. These include the ability to:

6. participate in teams and contribute to team objectives
7. communicate effectively with team members and supervisors
8. read, understand and interpret written instructions and work procedures
9. measure distances and calculate depth, area, volume and capacity accurately
10. minimise noise, dust, high activity vehicle traffic and water run-off to prevent nuisance-level environmental disturbance.

What processes should be applied to this competency standard?

There are a number of processes that are learnt throughout work and life, which are required in all jobs. They are fundamental processes and generally transferable to other work functions. Some of these are covered by the **key competencies**, although others may be added. The questions below highlight how these processes are applied in this competency standard. Following each question a number in brackets indicates the level to which the key competency needs to be demonstrated where 0 = not required, 1 = perform the process, 2 = perform and administer the process and 3 = perform, administer and design the process.

1. How can **communication of ideas and information (1)** be applied?

Ideas and information relating to soil profile construction activities and problems encountered should be discussed with other members of the work team and the supervisor.

2. How can **information be collected, analysed and organised (1)**?

The construction site and surrounding area should be inspected visually and the information gained discussed with the work team and the supervisor.

Enterprise work procedures and site and construction plans should be consulted, interpreted and applied to co-ordinate soil profile construction activities, with further clarification sought from the supervisor where necessary.

3. How are **activities planned and organised (1)**?

Equipment, materials and work procedures for construction activities will need to be arranged before and between work periods and there will be some responsibility for co-ordinating work with others.

4. How can **team work (1)** be applied?

The soil profile construction program will involve working with other members of a team to complete the program.

5. How can the use of **mathematical ideas and techniques (1)** be applied?

Measuring distance, calculating areas and volumes, calibrating machinery, estimating quantities of materials and marking out will require mathematical application.

6. How can **problem-solving skills (1)** be applied?

Problems relating to the site and environmental conditions, construction techniques, processes, workplace safety and other team members may arise during the construction of soil profiles for turf establishment.

7. How can the **use of technology (1)** be applied?

Technology may be applied in the preparation, use and maintenance of construction tools, equipment and machinery.

Are there other competency standards that could be assessed with this one?

This competency standard **could** be assessed on its own or in combination with other competencies relevant to the job function.

There is essential information about **assessing this competency standard for consistent performance and where and how it may be assessed**, in the Assessment Guidelines for this Training Package. All users of these competency standards must have **access** to the **Assessment Guidelines**. Further advice may also be sought from the relevant **sector booklet**.

Range Statement

Range of Variables

The Range of Variables explains the contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in particular training and assessment requirements may depend on the work situations available

What services may need to be located?	Services may include water supply, gas, power (electricity), telecommunications, irrigation, stormwater and drainage.
How may OHS hazards be identified?	Hazards may be identified through visual inspection of the area, understanding of site and construction plans, and enterprise work procedures.
What OHS hazards may be associated with supporting the construction of soil profiles?	Hazards may include disturbance or interruption of services, solar radiation, dust, noise, soil and water-borne micro-organisms, chemicals and hazardous substances, manual handling, moving machinery and machinery parts, uneven surfaces and flying and falling objects.
What safety equipment may be required?	Safety equipment may include signage and barriers.
What tasks may preparation of the construction site include?	Tasks may include supporting surveying, area measurement, marking out, peg placement and erection of signage and safety barriers.
What enterprise work procedures may apply to this standard?	Work procedures will be based on sound horticultural principles and practices and may include supervisors oral or written instructions, soil profile construction program, enterprise standard operating procedures (SOPs), specifications, routine maintenance schedules, work notes; product labels and Material Safety Data Sheets (MSDS); manufacturers service specifications and operators manuals; waste disposal, recycling and re-use guidelines; and OHS procedures.
What tools, equipment and machinery may be required?	Tools, equipment and machinery may include hand tools such as rakes, shovels, spades, rollers, wheelbarrows, hoses and hose fittings, drag mats, level frames, bunker

rakes, and machinery such as bobcats, ditch witches, backhoes, front-end loaders, graders, mechanical rollers, trucks, hydraulic trailers, and tractors and 3-point linkage equipment.

What **personal protective equipment (PPE)** may be required to support the construction of soil profiles? Personal protective equipment may include hat, boots, overalls, gloves, goggles, respirator or face mask, face guard, hearing protection, sunscreen lotion and hardhat.

What **OHS requirements** may be relevant to this standard? OHS requirements may include identifying hazards, assessing and reporting risks, cleaning, maintaining and storing tools, equipment and machinery; appropriate use of personal protective equipment including sun protection, drinking to avoid dehydration, safe operation of tools, equipment and machinery, safe handling, use and storage of chemicals and hazardous substances, correct manual handling, basic first aid, personal hygiene and reporting problems to supervisors.

What **waste material** may be relevant to this standard? Waste material may include unused construction and excavated materials, and plant debris, litter and broken components.

Plant-based material may be mulched or composted, plastic, metal, paper-based materials may be recycled, re-used, returned to the manufacturer or disposed of according to enterprise work procedures.

What tasks may be undertaken to maintain a **clean and safe area**? Tasks may include keeping public access paths clear of debris, waste material, tools, equipment and machinery, disabling equipment and machinery after use, using signage and safety barriers during and removing after construction activities are completed, and swiftly and efficiently removing debris and waste from the work area.

For more information on contexts, environmental implications and variables for training and assessment, refer to the Sector Booklet.

Unit Sector(s)

Not applicable.