



Australian Government

Department of Education, Employment and Workplace Relations

RTF3221A Implement a retaining wall project

Release: 1

RTF3221A Implement a retaining wall project

Modification History

Not applicable.

Unit Descriptor

This competency standard covers the process of implementing a retaining wall project. The work is likely to be under limited supervision, with checking only related to overall progress. It requires the application of knowledge of landscape materials and retaining wall construction techniques. The work is usually done within routines, methods and procedures where some discretion and judgement is required in the selection of equipment, work organisation, services, actions, and achieving outcomes within time constraints.

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 retaining wall project | <p>1.1 Requirements of the retaining wall project are clarified with client/supervisor and enterprise guidelines.</p> <p>1.2 Equipment and material resource requirements are identified according to the scope of the construction work and supervisors instructions.</p> <p>1.3 The environmental implications of the proposed work are identified.</p> <p>1.4 OHS hazards are identified, risks assessed and reported to the supervisor.</p> <p>1.5 Personal protective equipment (PPE) is selected, used, maintained and stored.</p> <p>1.6 Delivery of materials to site is organised according to workplace priorities.</p> |
| 2 Mark out site for retaining wall | <p>2.1 Site bunting is erected and safety signage is placed where appropriate.</p> <p>2.2 Services are determined and located from site plans.</p> <p>2.3 The position of the retaining wall is marked out according to site and construction plans.</p> <p>2.4 The location and depth of excavations are determined from site and construction plans.</p> <p>2.5 Profiles are established to conform to the tolerances designated by the construction plans.</p> <p>2.6 Survey benchmarks are established.</p> |
| 3 Co-ordinate retaining wall construction | <p>3.1 Retaining wall components are assembled/installed according to plan.</p> <p>3.2 Appropriate drainage is installed according to plan.</p> <p>3.3 Tools, equipment and machinery are used safely in</p> |

- accordance with enterprise safe operating procedures and OHS requirements.
- 4 Check quality of work and clean up site
- 4.1 Quality of finished works is inspected to ensure the standard of the finished project is in accordance with design drawings and specifications.
 - 4.2 The work site is cleaned down in an environmentally safe and sensitive manner.
 - 4.3 Tools and equipment are cleaned and stored according to enterprise guidelines.

Required Skills and Knowledge

Not applicable.

Evidence Guide

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

Competence in implementing a retaining wall project requires evidence that a person can prepare a project site, set out a retaining wall project, build a retaining wall, and complete a project according to design parameters.

The skills and knowledge required to implement a retaining wall project must be **transferable** to a different work environment. For example, this could include different retaining situations, different retaining wall materials, and different job complexities.

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:

landscape retaining wall materials

landscape retaining wall construction techniques

set out techniques

work schedule programming

possible causes of disruption to work activities and their effect on quality and time schedules

methods and practices for maintaining and repairing retaining walls

the range, use and availability of materials, equipment and machinery that may be required for the project

OHS issues, legislative requirements and codes of practice.

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:

read and interpret documentation associated with retaining wall projects

calculate material and resource requirements

co-ordinate a team to achieve optimum performance
 communicate with personnel at all levels
 document results clearly and concisely
 perform an OHS risk assessment.

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 (2) be applied? | Ideas and information may need to be communicated with the client/supervisor, such as regular reporting. |
| 2. How can information be collected, analysed and organised (2) ? | Information on retaining wall project may need to be collected, analysed and organised according to the scope of work required. |
| 3. How are activities planned and organised (2) ? | Activities may need to be planned and organised to ensure that the project meets timelines. |
| 4. How can team work (2) be applied? | Team work may be applied to ensure that retaining wall project is undertaken according to schedule. |
| 5. How can the use of mathematical ideas and techniques (2) be applied? | Mathematical ideas and techniques may be applied when organising, calculating materials, determining falls and setting out site. |
| 6. How can problem-solving skills (2) be applied? | Site contingencies, personnel difficulties, timeline failures, assessing hazards and identifying controls, may require problem-solving skills. |
| 7. How can the use of technology (2) be applied? | Technology may be used to set out and level site. |

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 range of contexts within which the performance and knowledge requirements of this standard may be assessed. The scope of variables chosen in training and assessment may depend on the work contexts

| | |
|--|---|
| <p>What retaining wall projects are covered by this unit?</p> | <p>Retaining wall projects include all modular concrete, timber, brick, dry stone and mortared block.</p> |
| <p>What resource requirements are likely to be identified?</p> | <p>Resource requirements may include base materials, sub-surface drainage materials, retaining wall components, levelling equipment and powered tools, and other equipment associated with construction.</p> |
| <p>What might be the environmental implications of proposed work site activities?</p> | <p>Environmental implications may include risk of contamination of soils, water, or adjoining property through fuels flowing into drains and water sources, or changes to drainage patterns. Compliance with local, State/Territory, and Commonwealth environmental legislation is required.</p> |
| <p>What OHS hazards may apply to work site activities?</p> | <p>Hazards may include disturbance of services, solar radiation, dust, noise, through traffic, uneven surfaces and holes, moving machinery and machinery parts, powered equipment and hand tools, hazards from use of hired equipment (untrained staff), and overhead hazards including powerlines.</p> |
| <p>What PPE is likely to be selected?</p> | <p>PPE will be determined by the type of activity being undertaken and may include work boots, gloves, overalls, sun hat, sunscreen lotion, and hearing or eye protection.</p> |
| <p>What services are likely to be located on site?</p> | <p>Services may include power, gas, water, stormwater, sewerage or septic connections, phone and optical cables.</p> |
| <p>What drainage systems are likely to be installed?</p> | <p>Drainage systems may include sumps, agricultural drains, storm water pipes and slotted pipes.</p> |

For more information on contexts, environment and variables for training and assessment

refer to the Sector Booklet.

Unit Sector(s)

Not applicable.