

PIL312A Plan organic garden and orchard systems

This competency standard covers the process of planning organic garden and orchard systems.

The planning of organic garden and orchard systems requires the application of horticultural and permaculture knowledge including permaculture principles, plant types, condition and requirements to establish plants for optimum production. The work is normally done using established routines, methods and procedures. Discretion and judgement is required in the selection of equipment, work organisation, services, actions and achieving outcomes within time constraints.

Element	Performance Criteria
1. Assess site for planting	<p>1.1 Planting site is inspected for environmental and physical attributes</p> <p>1.2 Site characteristics are researched through available sources</p> <p>1.3 Site constraints and opportunities are identified</p> <p>1.4 Location of existing structures and services is defined</p> <p>1.5 Base plan of site is prepared with information collected on site visit</p> <p>1.6 Zone plan is prepared with information collected on site visit</p> <p>1.7 Sector plan is prepared with information collected on site visit</p>
2. Select plants	<p>2.1 Plant varieties and types suitable to the site and which comply with enterprise specifications are selected</p> <p>2.2 Preferred type of plant materials for planting is determined</p> <p>2.3 Number and size of plants/plant materials determined</p>

3	Develop planting plan	3.1	Zone and sector details are identified on the site plan
		3.2	Plants to be installed in garden and orchard areas are identified on plan.
		3.3	Actions, timelines and specific information are noted on the plan
		3.4	Availability of plants, materials and services for planting are investigated
		3.4	Plan is presented to supervisor or client for implementation

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 training and assessment requirements may depend on the work situations available.

What environmental and physical attributes should be taken into account?	Environmental and physical attributes may include zone and sector attributes, light, air, humidity, soils, water, access to site, pest problems or threats.
What available sources may be associated with site assessment?	Local knowledge, books, magazines, articles, Internet.
What OHS hazards may be associated with the preparation of organic garden and orchard systems?	Hazards may include interference with services, manual handling, moving machinery and machinery parts, solar radiation.
What does a planting plan include?	A display plan may include action required, planting location, plants/plant materials required, materials, who is responsible, planting schedules and time lines, assistance required, maintenance requirements, zone and sector information, access available.
What plant materials may apply to this standard?	Containerised plants, bare-rooted plants, stem or root cuttings, divisions, seedlings, seeds, bulbs, corms, rhizomes, tubers and marcots.

Evidence Guide

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

Competence in this unit requires evidence that organic garden and orchard systems can be planned to a standard which satisfies client needs and that appropriate plants varieties are selected and properly located on a planting plan.

The skills and knowledge required to prepare the display must be **transferable** to a different work environment. For example, this could different properties, plant types, and climatic regions.

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:

- Permaculture principles and ethics
- Zone and sector planning
- Basic design process.
- Aim and purpose of building organic garden and orchard systems.
- Design principles for organic garden and orchard systems.
- Features and characteristics of a range of plants used in organic garden and orchard systems.
- Growing requirements of a range of plants used in organic garden and orchard systems.

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:

- Assess site for planting
- Select plants
- Develop planting plan
- Identify zones and sectors of site

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?	Written, oral and tele-communication of ideas and information relating to suitability and availability of stock and materials, and problems encountered will be required with the supervisor, work group, suppliers or clients.
2. How can information be collected, analysed and organised (2) ?	Enterprise work procedures, customer impact criteria and planting plan should be consulted, interpreted and incorporated into plan. Information on enterprise and plant environmental requirements may need to be collected to ensure suitable plants are chosen.
3. How are activities planned and organised (2) ?	Planning is required in the selection and location of plants, identification of zone and sector information.
4. How can team work (2) be applied?	Teamwork may involve working cooperatively to complete planting plan on time. Discussion of design and plant suitability may need to be carried out with supervisors or others in the workplace.
5. How can the use of mathematical ideas and techniques (2) be applied?	Mathematical concepts may be used to calculate design requirements such as space, and stock requirements.
6. How can problem solving skills (2) be applied?	Plant selection, environmental variation, client intervention, personnel difficulties and timeline failures may require problem-solving techniques.
7. How can the use of technology (2) be applied?	Technological understanding may be required to access information about suitable plants and design ideas, communicate and keep records.

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 critical 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 both

the **Assessment Guidelines** and the relevant **Sector Booklet**
