



Australian Government

CPPSIS5049 Plan and implement surveying projects

Release: 1

CPPSIS5049 Plan and implement surveying projects

Modification History

Release 1.

Replaces superseded equivalent CPPSIS5049A Conduct an engineering surveying project.

This version first released with CPP Property Services Training Package Version 3.

Application

This unit of competency specifies the outcomes required to plan, monitor and finalise surveying projects to ensure that they meet client requirements and specifications. The unit covers organising resources and planning project tasks to manage risks and contingencies. It also covers project management tasks relating to stakeholder consultation, scheduling, measuring, recording and monitoring work progress. The unit requires knowledge of surveying techniques.

The unit supports those who work under limited supervision in a surveying team.

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

Pre-requisite Unit

Nil

Unit Sector

Surveying and spatial information service

Elements and Performance Criteria

Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the range of conditions.						
1. Plan surveying project tasks.	<table><tr><td>1.1.</td><td>Project, client and organisational requirements and associated activities are identified and clarified with <i>appropriate persons</i>.</td></tr><tr><td>1.2.</td><td>Characteristics of operating environment, and special equipment and resource requirements are identified according to organisational requirements.</td></tr><tr><td>1.3.</td><td>Higher authorities are obtained to ensure resources and equipment operation comply with project and</td></tr></table>	1.1.	Project, client and organisational requirements and associated activities are identified and clarified with <i>appropriate persons</i> .	1.2.	Characteristics of operating environment, and special equipment and resource requirements are identified according to organisational requirements.	1.3.	Higher authorities are obtained to ensure resources and equipment operation comply with project and
1.1.	Project, client and organisational requirements and associated activities are identified and clarified with <i>appropriate persons</i> .						
1.2.	Characteristics of operating environment, and special equipment and resource requirements are identified according to organisational requirements.						
1.3.	Higher authorities are obtained to ensure resources and equipment operation comply with project and						

organisational requirements.

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| | 1.4. | Survey design is interpreted to identify components to be measured and monitored, and constraints are identified according to project specifications. |
| | 1.5. | Risk management strategies are planned and followed to ensure project complies with legal and statutory standards and organisational requirements. |
| | 1.6. | Project activities and timelines are scheduled according to available resources, project and organisational requirements. |
| 2. | Monitor surveying project. | <p>2.1. Agreed communication processes between client and other appropriate persons are implemented and maintained.</p> <p>2.2. Project management mechanisms are implemented to schedule, measure, record, monitor and report work progress according to organisational requirements.</p> <p>2.3. Problems are identified and resolved, and contingencies managed according to organisational requirements.</p> |
| 3. | Finalise surveying project. | <p>3.1. Project is finalised and checked for compliance with specifications and organisational requirements.</p> <p>3.2. Appropriate persons are notified of project results according to organisational requirements.</p> <p>3.3. Documentation is completed and data archived according to project and organisational requirements.</p> |

Foundation Skills

This section describes the language, literacy, numeracy and employment skills essential to performance in this unit but not explicit in the performance criteria.

Skill	Performance feature
Planning and organising skills to:	plan and prioritise work to meet survey timeframes and resource constraints.

- Numeracy skills to:
- estimate time required for project duration.
- Oral communication skills to:
- ask questions to clarify client requirements
 - inform clients and other stakeholders of project progress.
- Reading skills to:
- analyse graphical and technical information in engineering plans
 - interpret consultant reports in project specifications.
- Writing skills to:
- prepare project reports
 - record technical information in organisational documentation.
- Technology skills to:
- use a computer and software to document reports.
- Problem-solving skills to:
- apply risk control and contingency strategies to anticipated and identified problems.

Range of Conditions

This section specifies work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included. Bold italicised wording, if used in the performance criteria, is detailed below.

- Appropriate persons*** must include at least two of the following:
- client
 - colleague
 - end user
 - engineer
 - manager
 - registered or qualified surveyor
 - stakeholder.

Unit Mapping Information

CPPSIS5049A Conduct an engineering surveying project

Links

Companion Volume implementation guides are found in VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=6f3f9672-30e8-4835-b348-205dfcf13d9b>

Assessment Requirements for CPPSIS5049 Plan and implement surveying projects

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Performance Evidence

A person demonstrating competency in this unit must satisfy the requirements of the elements, performance criteria, foundation skills and range of conditions of this unit. The person must also plan and implement two different surveying projects.

While planning and implementing the above surveying projects, the person must:

- analyse standards, specifications and information, including plans and drawings to determine project requirements, including necessary equipment and resources
- analyse the operating environment to ensure adequate equipment and resources
- communicate clearly with clients and stakeholders to clarify and report project information
- comply with organisational and legal requirements for:
 - completing records and documentation
 - recording, storing and filing data
- identify and manage project constraints and problems
- plan and implement risk management and contingency strategies
- prepare and document project reports
- use project management techniques to monitor projects to ensure they are completed within required timeframes and comply with specifications and standards.

Knowledge Evidence

A person demonstrating competency in this unit must demonstrate knowledge of:

- accuracy and precision requirements for surveying data
- data reduction and manipulation techniques
- industry-accepted methods for identifying errors and discrepancies in surveying data
- legislative, statutory and industry requirements and standards relating to work tasks
- methodologies for surveying data capture and data set-out
- organisational policies and procedures relating to:
 - client and stakeholder consultation processes
 - health and safety relating to surveying activities
 - reporting and documentation

- using and allocating resources
- project management techniques for scheduling, measuring and monitoring work progress and planning for risks and contingencies
- spatial data reference systems used for surveying
- surveying techniques.

Assessment Conditions

The following must be present and available to learners during assessment activities:

- equipment:
 - computer, software and ancillary hardware necessary to prepare surveying project reports
- specifications:
 - organisational policies, procedures and documentation relating to work health and safety
 - specifications for a surveying project, including relevant plans and drawings
- relationships with team members and supervisor:
 - working in a team.

Timeframe:

- as specified by project requirements.

Assessor requirements

As a minimum, assessors must satisfy the assessor requirements in the Standards for Registered Training Organisations (RTOs) current at the time of assessment.

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