



Australian Government

CPPSIS5044 Develop subdivision survey designs for local government approval

Release: 1

CPPSIS5044 Develop subdivision survey designs for local government approval

Modification History

Release 1.

Replaces superseded equivalent CPPSIS5044A Develop a subdivision survey design for local government approval.

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

Application

This unit of competency specifies the outcomes required to develop a subdivision survey design for local government approval using cadastral surveying methods and equipment. The unit covers analysing and researching client service requests and existing information to assess and prioritise work tasks, and conducting a survey of the land to be subdivided. The unit also covers conducting measurements and calculations; and developing plans detailing required information, including boundary dimensions and corners, subdivision lots, features, surrounds, connections and offsets. The unit requires the ability to set up, calibrate and use surveying equipment to measure, record and reduce surveying data. The unit also requires the ability to prepare, lodge and monitor a detailed design submission for local government approval which details engineering aspects, physical constraints and any environmental impacts. The unit requires knowledge of land and planning law and local government building approval processes. It requires consultation with clients and professionals to obtain advice for input into the design submission.

The unit supports those who work in a lead role in a surveying or spatial information services team, in areas such as town planning, surveying and mapping.

Licensing, legislative, regulatory or certification requirements apply to this unit in some States where cadastral surveying must be undertaken under the supervision of a registered surveyor. Relevant state and territory regulatory authorities should be consulted to confirm those requirements.

Pre-requisite Unit

Nil

Unit Sector

Surveying and spatial information services

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. Identify type of service requests.
 - 1.1. Client requirements and timelines are established in consultation with ***appropriate persons***.
 - 1.2. Client service requirements are assessed to establish if they are within the jurisdiction and ability of relevant authority and any necessity for statutory compliance.
 - 1.3. Work is prioritised and recorded, and research is conducted to gather additional information as required according to organisational requirements.
2. Conduct subdivision survey.
 - 2.1. Surveying equipment is set up, calibrated and used according to manufacturer specifications and organisational requirements.
 - 2.2. Identified components of land to be subdivided are measured and subdivision lots marked according to client service and organisational requirements.
 - 2.3. Measured surveying data is reduced according to organisational requirements.
 - 2.4. Measurements are validated and recorded according to organisational requirements.
 - 2.5. Problems are identified and resolved, and contingencies managed according to organisational requirements.
3. Develop detailed design submission for local government approval.
 - 3.1. Surveying data is used to develop plan according to client service and organisational requirements.
 - 3.2. Appropriate persons are consulted to obtain professional advice for input into subdivision submission.
 - 3.3. Availability of existing services and costs of supply, including local government and utility authority contributions, are determined.
 - 3.4. Engineering aspects in subdivision design are considered and documented according to local government requirements.
 - 3.5. Subdivision submission is prepared to incorporate

physical constraints and environmental impact of the development according to client service requirements.

- | | | | |
|----|----------------------------|------|---|
| 4. | Monitor approval process. | 4.1. | Local government approval assessment criteria are further examined and advertising and exhibition requirements observed according to organisational requirements. |
| | | 4.2. | Outcomes of subdivision submission are reviewed to identify required follow-up actions. |
| | | | |
| 5. | Advise client of outcomes. | 5.1. | Client is advised of submission outcomes in writing and verbally according to organisational requirements. |
| | | 5.2. | Rights of appeal are explained to client where appropriate, and advice is recorded according to organisational requirements. |
| | | 5.3. | Documentation is completed and records stored according to organisational requirements. |

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
Initiative and enterprise skills to:	conduct research to collect property information, including title searches.
Planning and organising skills to:	plan and prioritise work to meet submission timeframes.
Numeracy skills to:	conduct precise measurements and computations relating to length, angle, elevation, area and volume.

Oral communication skills to:

- ask questions to clarify client requirements.

Reading skills to:

- analyse graphical and technical information in photographs and drawings
- interpret legal information in land and planning laws.

Writing skills to:

- use templates to record field notes
- write field notes that can be interpreted by a third party.

Technology skills to:

- connect surveying equipment to coordinate systems.

Problem-solving skills to:

- select appropriate validation methods to verify accuracy of data.

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:

- builder
- client
- colleague
- engineer
- local government representative
- manager
- registered or qualified surveyor
- statutory authority representative
- town planner.

Unit Mapping Information

CPPSIS5044A Develop a subdivision survey design for local government approval

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 CPPSIS5044 Develop subdivision survey designs for local government approval

Modification History

Release 1.

Replaces superseded equivalent CPPSIS5044A Develop a subdivision survey design for local government approval.

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

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 develop a subdivision survey design for local government approval in response to two different client requests.

While developing the above subdivision survey designs, the person must:

- analyse existing plans, drawings, surveying data and photographs to plan service provision
- conduct research to obtain information relating to planned subdivisions, including:
 - boundary dimensions
 - connections
 - land title information
 - local government provisions and restrictions relating to subdivision, zoning, heritage and flooding
 - services
 - subdivision plan
 - title search
 - topographic features
- accurately measure and calculate boundary dimensions and mark subdivision lots
- use industry-accepted methods to check and validate measurements and calculations
- analyse and comply with land and planning law and local government guidelines for building approvals
- communicate clearly with appropriate persons in writing and verbally, to obtain information, clarify service and survey detail, and explain and report submission processes and outcomes
- comply with organisational requirements relating to:
 - completing records and documentation, including field notes
 - prioritising service requests
 - recording, storing and filing surveying data
 - using surveying equipment
 - working safely and using personal protective equipment (PPE)

- comply with relevant legal and statutory requirements and standards to ensure accuracy of survey, field procedures, and submission information
- determine availability of existing services and costs of supply
- determine survey controls, land dimensions and corners, and locate features, boundaries, surrounds, connections and offsets
- identify physical constraints and environmental impacts of planned developments, including those relating to three of the following:
 - drainage
 - easements
 - public reserves
 - sediment control
 - sewerage control
- monitor local government approval process, including observing advertising and exhibition requirements
- perform surveying tasks using one of the following surveying equipment:
 - global navigation satellite system (GNSS)
 - total station
- prepare clear and concise subdivision survey design submission, with plans that comply with local government approval assessment criteria
- use surveying data and other relevant information to produce plans, including contours.

Knowledge Evidence

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

- accuracy and precision requirements for cadastral surveying data and subdivision survey design
- aspects of land and planning law impacting on surveying tasks, including:
 - common law and old system title
 - community title
 - crown land, alienation and native title
 - environmental protection
 - residential subdivision provisions
 - set-back requirements
 - strata title
 - Torrens title system
- data capture and set-out methodologies used in surveying
- data reduction techniques
- industry-accepted methods for validating data to identify errors and discrepancies
- industry-accepted standards relating to subdivision survey design
- land tenure systems appropriate to relevant jurisdiction
- legislative, statutory and industry requirements and standards relating to:
 - cadastral surveying

- local government building requirements
- methods for determining availability of existing services and costs of supply
- methods for setting up and calibrating surveying equipment
- organisational policies and procedures relating to:
 - completing records and documentation
 - health and safety when using the surveying equipment specified in the performance evidence
 - prioritising service requests
 - recording, storing and filing data
- possible community issues and repercussions relating to building permits
- reference and coordinate systems for surveying data, including Australian Height Datum and Map Grid of Australia
- local government approval and submission processes relating to subdivision survey design
- road alignment design and associated computations.

Assessment Conditions

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

- equipment:
 - as specified in the performance evidence, including PPE
- specifications:
 - subdivision survey specifications, including relevant surveying, construction or engineering plans and drawings
 - equipment operating manual and manufacturer specifications
 - organisational policies, procedures and documentation relating to submission process
 - relevant legislative, statutory and industry requirements and standards relating to cadastral surveying and local government building requirements for the jurisdiction
- relationships with team members and supervisor:
 - supervision by a registered surveyor or licensed land surveyor is required in some jurisdictions
- relationships with clients:
 - client consultation required.

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.

Links

Companion Volume implementation guides are found in VETNet -

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