



Australian Government

**CPCLOC3002 Interpret plans and apply
markings for underground services on a
locate site**

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Modification History

Release	Comments
1	This unit of competency was first released in CPC Construction, Plumbing and Services Training Package Release 11.0.

Application

This unit describes the skills and knowledge required to interpret plans, identify symbols and apply markings for underground services on a locate site.

It applies to those working in operational roles in utility location work. They generally work under supervision and hold some responsibility for interpreting plans, identifying symbols and applying markings to locate and protect underground services.

Licensing, legislative and certification requirements that apply to this unit can vary between states, territories and utility operators. It is a requirement to check with the relevant body before applying this unit.

Licensing/Regulatory Information

A White Card must be attained when working on a construction site.

Pre-requisite unit(s)

No pre-requisite units

Competency field(s)

Utility Locating

Unit sector(s)

Construction

Elements and Performance Criteria

Elements	Performance Criteria
<i>Elements describe the essential outcomes.</i>	<i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>

1. Identify and access regulatory underground utility information.	1.1 Obtain, interpret and confirm work requirements with appropriate authority or relevant person. 1.2 Access and interpret different quality levels (QL) when marking services in accordance with regulations and codes of practice. 1.3 Identify Australian standard QL marking service requirements. 1.4 Identify Australian standard colour codes for the different utilities. 1.5 Identify and apply environmental protection requirements for task in accordance with Australian standards. 1.6 Obtain service and utility location details and identify specific requirements of service and utility owner/operators.
2. Access the plans.	2.1 Identify the process to access the plan formats from the utility owner/operators or supporting organisations. 2.2 Determine plan format requirements in accordance with the work. 2.3 Determine the utility providers' information and Duty of Care requirements. 2.4 Identify symbols on the utility plan in accordance with the map legend.
3. Identify scope and assets in the field.	3.1 Determine worksite and scope of works from plan to actual locate site. 3.2 Identify different asset objects from plan to actual locate site. 3.3 Identify unknown or unregistered assets in the locate site area. 3.4 Identify various cable and pipe types in the field.
4. Apply regulatory underground utility information.	4.1 Identify work health and safety (WHS) requirements as they relate to the worksite and underground services. 4.2 Identify risks and hazards and report to appropriate person in accordance with workplace requirements. 4.3 Select, use and fit suitable personal protective equipment (PPE) correctly. 4.4 Use appropriate equipment to mark out area on map for locate worksite.

	4.5 Apply different colour codes for the different utilities and mark site conditions in accordance with the Australian standards. 4.6 Apply the QL on the worksite in accordance with the Australian standards.
5. Conduct housekeeping activities.	5.1 Clear work area and dispose of and recycle materials in accordance with worksite procedures. 5.2 Clean, check and maintain condition of equipment, and report issues as required or address within scope of own role. 5.3 Manage and report hazards in accordance with worksite procedures. 5.4 Finalise documentation as required according to workplace procedures.

Foundation skills

Skill	Description
Numeracy	Adjusts activities given tolerances of plan details and equipment.
Oral communication	Acquires details and reports problems and/or hazards to a supervisor or service and/or asset owner/operator.
Reading	Identifies, interprets and implements requirements from at times complex workplace procedures, documentation, legislation and regulations.
Writing	Records information relating to underground utility.

Range of conditions

N/A

Assessment Requirements for CPCLOC3002 Interpret plans and apply markings for underground services on a locate site

Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- access, interpret and apply markings for underground services on two occasions for two sites with different marking opportunities and conditions.

During the above, the candidate must:

- access, apply and retain underground utility standards and site documentation
- access plans and identify scope and assets in the field
- implement the requirements, procedures and techniques to apply markings for underground services, including:
 - selecting and using required equipment
 - complying with Australian standard quality level (QL) marking service requirements
 - complying with Duty of Care requirements
 - communicating to clarify instructions and information
 - completing housekeeping activities
- work with others to identify, apply markings for underground services that meets required outcomes, including:
 - using a range of communication techniques and equipment
 - identifying risks and hazards
 - complying with written and verbal reporting requirements and procedures
- employ required techniques, and equipment to search for services and utilities
- identify services and owner/operators of that service.

Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- safety features of personal protective equipment (PPE), and when and how it should be used
- key indicators of work quality and accuracy, including:
 - different asset pits and connection
 - the difference in quality levels (QL)

- different symbols and colour codes based on current Australian standards
 - identification of cable or pipes types from plans
- processes for planning and organising underground service work activities
- equipment including:
 - marking equipment
 - tools
 - locating equipment
- authority reporting requirements
- Duty of Care requirements
- job safety analysis (JSAs), job safety environmental analysis (JSEAs), and safe work method statements (SWMSs)
- key risks relating to underground utility services, including those associated with:
 - traffic
 - asbestos
 - contaminated waste
 - confined spaces
 - falls
 - locating near other works in progress
 - manual handling
 - environmental protection
- key standards, policies and procedures, legislation and established requirements for identifying, locating and protecting underground services
- housekeeping activities, including:
 - disposal of and recycle materials
 - cleaning, checking and maintaining condition of equipment
 - communicating with relevant personnel and owner/operators
 - reporting risks hazards and issues as required
 - completing documentation
- key factors affecting work activities described, including:
 - types of services, utilities and providers
 - working in a road reserve
 - equipment types, characteristics, technical capabilities and limitations
 - asset specific clearance distances
 - awareness of overhead utility assets

- non-destructive excavation methods for exposing underground services.

Assessment Conditions

Assessors are responsible for ensuring that the candidate demonstrating competency has access to:

- relevant Australian Standards
- underground utility standards
- appropriate site, documents, equipment and personal protective equipment (PPE) currently used in industry
- requirements of workplace policies, procedures and plans.

Mandatory Workplace Requirements

Assessment of performance evidence may be in a workplace setting or an environment that accurately represents a real workplace.

Unit Mapping Information

Previous Code and Title	Equivalence	Comments
	Newly created	This unit has been created to address a skill or task required by industry that is not covered by an existing unit of competency

Links

Companion volumes, including implementation guides, are found on the national training register - <https://training.gov.au/training/details/CPC>.