



**Australian Government**

# **ICTCBL253 Construct underground telecommunications infrastructure**

**Release: 1**

# ICTCBL253 Construct underground telecommunications infrastructure

## Modification History

| Release   | Comments                                                                                               |
|-----------|--------------------------------------------------------------------------------------------------------|
| Release 1 | This version released with ICT Information and Communications Technology Training Package Version 5.0. |

## Application

This unit describes the skills and knowledge required to construct underground telecommunications infrastructure, made up of conduits and enclosures, for cabling provisioning.

It applies to individuals in technical roles in civil construction who install pits and pre-built enclosures with connecting pipes for underground telecommunications infrastructure, predominantly in greenfield sites.

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

## Unit Sector

Telecommunications – cabling

## Elements and Performance Criteria

| ELEMENT                                          | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                                                                                                                                                                                                                                                                                                                 |
| 1. Prepare to construct underground work         | <p>1.1 Obtain construction design plan from appropriate personnel to scope work and arrange for site access</p> <p>1.2 Notify appropriate personnel of identified safety hazards and other services that will need to be considered</p> <p>1.3 Obtain plant, tools and safety equipment to perform tasks safely and efficiently</p> <p>1.4 Determine type of underground pit/manhole required for project as specified in construction design plan</p> |

| ELEMENT                          | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2. Install enclosure             | <p>2.1 Use tools according to enterprise guidelines and work health and safety (WHS) regulations</p> <p>2.2 Determine excavation meets specification of design plan</p> <p>2.3 Place foundation of suitable material to provide safe and stable footing prior to installing underground enclosure in excavation</p> <p>2.4 Place recognised barrier over construction where enclosure is to be installed over power cables according to enterprise requirements or agreements with other authorities</p> <p>2.5 Install earth mat facility under enclosure as required by enterprise</p> <p>2.6 Install enclosure specified in construction design plan according to manufacturer specifications using specified materials</p> |
| 3. Install connecting pipe works | <p>3.1 Install conduit in trench to enterprise specifications</p> <p>3.2 Connect conduit to enclosure according to manufacturer specifications and industry practice</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| 4. Complete project              | <p>4.1 Complete reports and record alterations to plans using appropriate symbols, according to enterprise policy</p> <p>4.2 Complete all labelling requirements according to industry standard</p> <p>4.3 Recover obsolete materials and equipment, and return to appropriate point for disposal</p> <p>4.4 Restore site according to enterprise or approving authority requirements and to customer satisfaction</p> <p>4.5 Notify appropriate personnel of job completion and obtain sign-off</p>                                                                                                                                                                                                                           |

## Foundation Skills

*This section describes those language, literacy, numeracy and employment skills that are essential to performance, but not explicit in the performance criteria.*

| Skill    | Description                                                                                                                                                            |
|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reading  | <ul style="list-style-type: none"><li>Interprets information from technical sources to identify relevant and key information</li></ul>                                 |
| Writing  | <ul style="list-style-type: none"><li>Documents outcomes and changes to plans using industry relevant terminology and recognised plan symbols</li></ul>                |
| Numeracy | <ul style="list-style-type: none"><li>Interprets scales and ratios on plans</li><li>Performs basic calculations appropriate to measuring and estimating size</li></ul> |

| Skill                      | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Navigate the world of work | <ul style="list-style-type: none"><li>• Takes personal responsibility for adherence to legal and regulatory responsibilities relevant to own work context, and draws attention to any issues that may affect self or others</li></ul>                                                                                                                                                                                                                                           |
| Interact with others       | <ul style="list-style-type: none"><li>• Identifies and follows accepted communication practices and protocols when liaising with clients, internal and external personnel on technical and operational matters</li></ul>                                                                                                                                                                                                                                                        |
| Get the work done          | <ul style="list-style-type: none"><li>• Determines job sequence and works logically and systematically to undertake clearly defined tasks</li><li>• Analyses task requirements to decide on appropriate equipment and practices</li><li>• Implements actions as per plan, making slight adjustments if necessary, and addressing some unexpected issues</li><li>• Automatically implements standard procedures for routine decisions in response to familiar problems</li></ul> |

## Unit Mapping Information

ICTCBL253 Construct underground telecommunications infrastructure supersedes and is equivalent to ICTCBL213 Construct underground telecommunications infrastructure.

## Links

Companion Volume Implementation Guides are available from VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a53af4e4-b400-484e-b778-71c9e9d6aff2>