



Australian Government

RIICTC302E Line tunnels

Release: 1

RIICTC302E Line tunnels

Modification History

Release	Comments
Release 1	This version first released with RII Resources and Infrastructure Industry Training Package Version 6.0.

Application

This unit describes the skills and knowledge required to line tunnels in civil construction, including drilling and installing rock bolts, applying reinforcing mesh and shotcreting the tunnel face.

It applies to those working in operational roles. They generally work under minimal supervision to undertake a broad range of tasks in varied work contexts, using some discretion and judgement in selecting equipment, services or contingency measures.

Licensing, legislative and certification requirements that apply to this unit can vary between states, territories, and industry sectors. Users must check requirements with relevant body before applying the unit.

Unit Sector

Civil construction

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. Plan and prepare to line tunnel	1.1 Obtain, interpret, clarify and confirm work instructions 1.2 Access, interpret and apply documentation required to line tunnels and confirm work activity is compliant 1.3 Confirm and identify requirements for complying with environmental protection, safety and traffic management signage requirements 1.4 Select equipment and tools required for work activities and check for faults 1.5 Select and wear personal protective equipment according to site requirements

ELEMENT	PERFORMANCE CRITERIA
	1.6 Identify and address potential risks, hazards and environmental issues, and implement control measures within scope of own role 1.7 Obtain and interpret emergency procedures and identify steps required to respond to emergencies
2. Prepare tunnel face for shotcrete	2.1 Install rock anchors and bolts as required to designed locations 2.2 Prepare reinforcing mesh according to tunnel shape and designed lining, where specified 2.3 Locate and secure reinforcing mesh in place according to job requirements 2.4 Fix dowels to wall face to provide depth gauge to thickness of concrete or shotcrete 2.5 Install drainage to the tunnel roof and walls according to job requirements
3. Shotcrete tunnel face	3.1 Set up pump, pipelines and spray equipment and confirm serviceability and operation 3.2 Prepare and control shotcrete mix according to job requirements 3.3 Operate pump according to job requirements 3.4 Prepare formwork and set to specifications 3.5 Provide support to shotcreter in monitoring supply and assist with elevated platform and allied equipment 3.6 Apply shotcrete according to job requirements
4. Conduct clean-up activities	4.1 Clear work area and dispose of or recycle materials according to site requirements 4.2 Clean, check, perform maintenance on and store plant, tools and equipment according to manufacturer specifications and site requirements 4.3 Carry out housekeeping activities according to site requirements

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
Numeracy	Calculates basic measurements including mass and dimensions
Self-management	Monitors and minimises own exposure to worksite risks and hazards during work activities

Skill	Description
Writing	Completes documentation using sector specific vocabulary, grammatical structures and conventions

Unit Mapping Information

Supersedes and is equivalent to RIICTC302D Line tunnel.

Links

Companion Volume Implementation Guide is found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=88a61002-9a21-4386-aaf8-69c76e675272>