



Australian Government

Department of Education, Employment and Workplace Relations

LGAWORK311A Maintain bridges

Release 2

LGAWORK311A Maintain bridges

Modification History

LGAWORK311A Release 2: Layout adjusted.

LGAWORK311A Release 1: Primary release.

Unit Descriptor

This unit covers preparing, carrying out and recording minor bridge maintenance.

Application of the Unit

This unit supports the attainment of skills and knowledge required for competent workplace performance in councils of all sizes. Knowledge of the legislation and regulations within which councils must operate is essential. The unique nature of councils, as a tier of government directed by elected members and reflecting the needs of local communities, must be appropriately reflected.

Licensing/Regulatory Information

Not applicable.

Pre-Requisites

Not applicable.

Employability Skills Information

This unit contains employability skills.

Elements and Performance Criteria Pre-Content

Elements describe the essential outcomes of a Unit of Competency

Performance criteria describe the required performance needed to demonstrate achievement of the element. Where ***bold italicised*** text is used, further information is detailed in the Range Statement. Assessment of performance is to be consistent with the Evidence Guide.

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1 Divert or drain water from the work site	1.1 Appropriate drainage is provided for diversion or containment of water from the work site to prevent damage to the environment. 1.2 Environmental protection devices are installed as required to meet environmental regulations. 1.3 Excavation is undertaken in accordance with drawings and specifications . 1.4 Excavation is secured to prevent injury of employees and the public. 1.5 Formwork/shoring is provided in accordance with drawings, <i>specifications</i> and relevant standards .
2 Set up for bridge maintenance	2.1 Levels and lines are set to drawings and specifications. 2.2 Scaffolding is assembled to drawings and in accordance with relevant standards. 2.3 Excavation, formwork and concrete reinforcement are set out in accordance with drawings and specifications.
3 Respond to bridge maintenance	3.1 Rejected or damaged timber is removed and replaced. 3.2 Damaged steelwork is repaired, or removed and replaced. 3.3 Concrete is placed and finished. 3.4 Adjustments or repairs are made to surrounding <i>fixtures</i> and features. 3.5 Coating materials are applied in accordance with best practice procedures and specifications. 3.6 Temporary repairs are affected and safety barriers and signage are put in place. 3.7 Lines are spotted and marked. 3.8 Warning signs are erected and removed when all risks have ceased.
4 Maintain records	4.1 Information is recorded in accordance with council and legislative requirements. 4.2 Details are recorded clearly, accurately and legibly. 4.3 Records are secured, made accessible and kept up to date.

Required Skills and Knowledge

This describes the essential skills and knowledge and their level, required for this unit

Required Skills

- concrete placement
- formwork and shoring
- reading and following plans and specifications
- setting out scaffolding
- operating plant and equipment
- manual lifting
- steel fixing
- excavating

Required Knowledge

- OHS regulations
- appropriate bridge maintenance and repair options

Evidence Guide

Overview of assessment requirements	A person who demonstrates competency in this unit will be able to perform the outcomes described in the Elements to the required performance level detailed in the Performance Criteria. The knowledge and skill requirements described in the Range Statement must also be demonstrated. For example, knowledge of the legislative framework and safe work practices that underpin the performance of the unit must be demonstrated.
Critical aspects of evidence to be considered	Appropriate materials are used for efficient maintenance. Plans and specifications are adhered to. Safety of work site is ensured. Australian standards are met.
Context of assessment	May be assessed: <ul style="list-style-type: none"> • on the job • simulated workplace environment • written assignment • short-answer test • oral questioning • observation • or any combination of the above
Relationship to other units (prerequisite or co-requisite units)	To enable holistic assessment this unit may be assessed with other units that form part of the job role.
Method of assessment	The following assessment methods are suggested: <ul style="list-style-type: none"> • observation of the learner performing a range of workplace tasks over sufficient time to demonstrate handling of a range of contingencies • written and/or oral questioning to assess knowledge and understanding • completion of workplace documentation • third-party reports from experienced practitioners • completion of self-paced learning materials including personal reflection and feedback from trainer, coach or supervisor
Evidence required for demonstration of consistent performance	Evidence will need to be gathered over time across a range of variables.
Resource implications	In accordance with a range of variable requirements.

Range Statement

The Range Statement relates to the Unit of Competency as a whole. It allows for different work environments and situations that may affect performance. ***Bold italicised*** wording in the Performance Criteria is detailed below.

- Bridge types*** may include:
- small timber
 - steel
 - concrete
 - stone
 - suspension
 - road or foot bridges
 - jetties
 - composite
- Plan specifications*** may include:
- works plans
 - engineers' drawing
 - contract specifications
- Fixtures*** may include:
- guardrails
 - handrails
 - kerbs
- Relevant standards*** may include:
- occupational health and safety (OHS)
 - formwork
 - scaffolding
 - AS1012
 - AS1012.1
 - AS3610
 - AS3600
 - AD3799
 - and other relevant Australian standards

Unit Sector(s)

Operational Works