



Australian Government

Department of Education, Employment and Workplace Relations

RIICRC405A Carry out pavement condition measurement

Release: 1

RIICRC405A Carry out pavement condition measurement

Modification History

Not applicable.

Unit Descriptor

This unit covers the carrying out of pavement condition measurement in Civil Construction. It includes the requirements for planning, preparing, initiating, monitoring, adjusting and reporting of pavement condition measurement.

Application of the Unit

This unit is appropriate for those working in a supervisory role or as a technical specialist, the carrying out of pavement condition measurement within:

- Civil Construction

Licensing/Regulatory Information

Refer to Unit Descriptor.

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 performance needed to demonstrate achievement of the element. Where bold italicised text is used, further information is detailed in the required skills and knowledge section and the range statement. Assessment of performance is to be consistent with the evidence guide.
---	--

Elements and Performance Criteria

ELEMENT	PERFORMANCE CRITERIA
1. Plan and prepare for pavement condition measurement	1.1. Access, interpret and apply compliance documentation relevant to the work activity 1.2. Access and share with team members the specific task information and requirements relevant to undertaking pavement condition measurement 1.3. Ensure that the pavement condition measurement equipment is prepared for the task 1.4. Prepare a job plan , in conjunction with relevant team members , which makes best use of the available resources
2. Initiate and undertake the measurement of pavement condition	2.1. Acquire and make available the necessary resources for the safe, effective and efficient conduct of the task 2.2. Issue clear and timely instructions to team members and others involved in the task 2.3. Complete the measurement of pavement condition
3. Complete pavement condition measurement post-operational requirements	3.1. Validate reading recorded by the pavement condition measurement equipment 3.2. Ensure plant equipment and tools maintenance requirements are carried out and recorded 3.3. Complete and submit reports as required 3.4. Recommend changes to improve the safety, efficiency and effectiveness of pavement condition measurement.

Required Skills and Knowledge

This section describes the skills and knowledge required for this unit.

Required skills

Specific skills are required to achieve the performance criteria in this unit, particularly for the application in the various circumstances in which this unit may be applied. This includes the ability to carry out the following as required to carry out of pavement condition measurement:

- apply legislative, organisation and site requirements and procedures
- interpret client requirements and procedures
- interpret project engineering survey information
- interpret project specifications
- choose appropriate operational techniques for the execution of pavement condition measurement
- choose and assigning appropriate plant and equipment for the execution of pavement condition measurement
- calculate quantities for the execution of pavement condition measurement
- calibration of pavement condition measurement equipment
- validate of pavement condition measuring equipment readings
- determine task resource requirements
- schedule activities and materials delivery
- draft and administering job plans
- implement work zone traffic management plans
- prepare for and conducting of briefings, toolbox and site meeting
- prepare short messages
- prepare and presenting job reports
- prepare and maintaining log books and diaries
- provide team leadership
- assessment of individuals performances
- interpret pavement condition measurement test results
- provide recommendations for the improvement of the safe, effective and efficient execution of pavement condition measurement task

Required knowledge

Specific knowledge is required to achieve the Performance Criteria of this unit, particularly its application in a variety of circumstances in which the unit may be used. This includes knowledge of the following, as required to carry out of pavement condition measurement:

- statutory compliance requirements and procedures
- occupational health and safety requirements and procedures
- environmental management requirements and procedures

- quality management requirements and procedures
- work zone traffic management requirements and procedures
- contract management requirements and procedures
- communication requirements and procedures
- administrative requirements and procedures
- procurement requirements and procedures
- plant, equipment and tools maintenance requirements and procedures
- reporting requirements and procedures
- employment requirements and procedures
- workplace relationship requirements and procedures
- organisational and site operational requirements
- relationship between various areas of civil works
- operational techniques required for the execution of pavement condition measurement construction tasks
- pavement condition measurement plant and equipment capabilities
- team leadership techniques
- works planning techniques
- pavement condition measurement monitoring methods

Evidence Guide

The evidence guide provides advice on assessment and must be read in conjunction with the performance criteria, required skills and knowledge, range statement and the Assessment Guidelines for the Training Package.

Overview of assessment	
Critical aspects for assessment and evidence required to demonstrate competency in this unit	The evidence required to demonstrate competency in this unit must be relevant to worksite operations and satisfy all of the requirements of the performance criteria, required skills and knowledge and the range statement of this unit and include evidence of the following: • knowledge of the requirements, procedures and instructions for the carrying out of pavement condition measurement • implementation of appropriate procedures and techniques for the safe, effective and efficient carrying out of pavement condition measurement • working with others to plan, prepare and conduct the carrying out of pavement condition measurement • provision of clear and timely instruction and supervision by the individual of those involved in the carrying out of pavement condition measurement • evidence of the consistent successful carrying out of pavement condition measurement
Context of and specific resources for assessment	• This unit must be assessed in the context of the work environment. Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated environment provided it is realistic and sufficiently rigorous to cover all aspects of workplace performance, including task skills, task management skills, contingency management skills and job role environment skills. • Evidence for assessment is best gathered using the outcomes of products and processes in the workplace. • The assessment environment should not disadvantage the participant. For example, language, literacy and numeracy demands of assessment should not be greater than those

	required on the job. • Customisation of assessment and delivery environment to sensitively accommodate cultural diversity. • Aboriginal people and other people from a non English speaking background may have second language issues. • Assessment of this competency requires typical resources normally used in a resources and infrastructure sector environment. Selection and use of resources for particular worksites may differ due to the site circumstances. • Where applicable, physical resources should include equipment modified for people with disabilities. • Access must be provided to appropriate learning and/or assessment support when required.
Method of assessment	This unit may be assessed in a holistic way with other units of competency. The assessment strategy for this unit must verify required knowledge and skill and practical application using more than one of the following assessment methods: • written and/or oral assessment of the candidate's required knowledge • observed, documented and/or first hand testimonial evidence of the candidate's: • implementation of appropriate procedures and techniques for the safe, effective and efficient achievement of the required outcomes • consistently achieving the required outcomes • first hand testimonial evidence of the candidate's: • working with others to plan, prepare and conduct pavement condition measurement • provision of clear and timely instruction and supervision by the individual of those involved in the conduct of pavement condition measurement
Guidance information for assessment	Consult the SkillsDMC User Guide for further information on assessment including access and

	equity issues.
--	----------------

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, if used in the performance criteria, is detailed below. Essential operating conditions that may be present with training and assessment (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) may also be included.

Relevant compliance documentation may include:	• legislative, organisational and site requirements and procedures • manufacturer's guidelines and specifications • Australian standards • code of practice • Employment and workplace relations legislation • Equal Employment Opportunity and Disability Discrimination legislation
Specific task information and requirements may include:	• site meteorological data • known and potential site hazards, constraints and conditions • site cultural and heritage information • task specifications • task drawings • other company and contractors involved in the task or related tasks • coordination, timing and budgeting requirements
Pavement condition measurement may include:	• roads • busways
Job plan may include:	• human resource requirements • plant and machinery requirements • construction materials requirements • sub-contractor support requirements • waste disposal requirements • coordination requirements • activity scheduling • materials delivery scheduling • risk assessment and management requirements • occupational health and safety requirements • quality management requirements, including testing scheduling requirements

	• traffic management requirements • environmental requirements • task monitoring requirements • task performance monitoring requirements • communication requirements • reporting requirements
Team members may include:	• other members of the organisation's management team • experienced members of the team directly involved in the task sub-contractors representatives • supervisors or managers of other organisations who are involved in related tasks • experienced members of the team directly involved in the task
Resources may include:	• labour • plant, equipment and tools • highway vehicles • sub-contractor services
Instructions may include:	• briefings • handovers • work orders • toolbox meetings • site meetings

Unit Sector(s)

Road and Pavements Construction and Maintenance (General)

Competency field

Refer to Unit Sector(s).

Co-requisite units

Not applicable.