



Australian Government

RIICTT302E Conduct impact moling, ramming and augering operations

Release: 1

RIICTT302E Conduct impact moling, ramming and augering operations

Modification History

This unit replaces RIICTT302D Conduct impact moling, ramming and augering. Minor endorseable amendments have been made to Elements, Performance Criteria, Foundation Skills, Performance Evidence and Knowledge Evidence to better reflect current industry practices and clarify training outcomes.

Application

This unit describes the skills and knowledge required to conduct impact moling, ramming and augering in civil construction.

It applies to those working in operational roles. They generally work in teams, under supervision and hold some responsibility over impact moling, ramming and augering operations.

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

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. Prepare for impact moling, ramming and augering	1.1 Obtain, interpret and confirm work requirements 1.2 Access, interpret and apply documentation required for impact moling, ramming and augering and confirm work activity is compliant 1.3 Identify environmental issues and potential hazards, and assess and address risks within scope of own role and according to workplace procedures 1.4 Select and wear personal protective equipment required for work activities 1.5 Complete induction procedures as required by workplace policies and procedures and job role requirements 1.6 Identify, obtain and implement traffic signage

ELEMENT	PERFORMANCE CRITERIA
	requirements 1.7 Select tools and equipment required for task, check for and rectify and report faults as required
2. Determine boring requirements	2.1 Determine location, alignment direction, level and grade of bore from drawings and specifications 2.2 Determine bore pathway for underground vertical and horizontal alignment using above and below ground survey instruments 2.3 Conduct visual geological investigation of alignment and determine differing soil types and groundwater conditions
3. Check and prepare equipment	3.1 Select bore head required for strata 3.2 Position and stake down boring equipment 3.3 Conduct pre-operational start-up, shutdown and communication procedures 3.4 Inspect equipment controls and functions and report faults as required 3.5 Carry out equipment maintenance
4. Drive bore hole	4.1 Prepare launch and receiving pits for bore rig and tools according to site requirements 4.2 Prepare launch and receiving pits for inserting and receiving bore head according to site requirements 4.3 Establish traverse line of bore head to receiving pit prior to launching mole 4.4 Monitor machine operations to meet site and task requirements
5. Clean up	5.1 Clear work area and dispose of, reuse and recycle materials as required 5.2 Clean, check, perform maintenance on and store plant, tools and equipment and report issues as required or address within scope of own role 5.3 Carry out housekeeping to workplace 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
Reading	Identifies and interprets information from at times complex workplace procedures, documentation, legislation and regulations

Unit Mapping Information

Supersedes and is equivalent to RIICTT302D Conduct impact moling, ramming and augering.

Links

Companion Volume implementation guides are found in VETNet -

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

Assessment Requirements for RIICTT302E Conduct impact moling, ramming and augering operations

Modification History

This unit replaces RIICTT302D Conduct impact moling, ramming and augering. Minor endorseable amendments have been made to Elements, Performance Criteria, Foundation Skills, Performance Evidence and Knowledge Evidence to better reflect current industry practices and clarify training outcomes.

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:

- conduct impact moling, ramming and augering on at least two occasions including at least 50 metres of impact moling, ramming and augering.

During the above, the candidate must:

- locate, apply and retain on site access to documentation, policies and procedures required to conduct impact moling, ramming and augering
- implement the requirements, procedures and techniques for conducting impact moling, ramming and augering operations, including:
 - conducting preoperational procedures
 - completing housekeeping activities
- work with others to conduct impact moling, ramming and augering that meets required outcomes, including:
 - organising work activities to meet task requirements
 - communicating with others to receive and clarify work instructions
 - using a range of communication techniques and systems
 - using signage to advise others of work activity and exclusion zones
- use systems to monitor task
- confirm work instructions, plans, specifications and quality requirements.

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:

- engineering drawing, plans and specifications
- civil construction terminology relevant to impact moling, ramming and augering operations
- materials safety data sheets and materials handling methods
- key risks relating to conducting impact moling, ramming and augering, including those associated with:

- traffic
- live electrical services
- confined spaces
- falls
- locating near other works in progress
- manual handling
- gas
- key policies and procedures, legislation and established requirements for conducting impact moling, ramming and augering, including those for:
 - workplace health and safety
 - equipment safety
 - manual handling
 - operating and maintaining equipment
 - site isolation and traffic control
 - launch and receiving pits
 - waste disposal and recycling
 - housekeeping
- key factors affecting work activities described in performance evidence above, including:
 - categories of horizontal directional drilling
 - equipment types, characteristics, technical capabilities and limitations
 - types of implements and other attachments
 - stabilising equipment and methods
 - procedures for drilling fluids
 - procedures for electronic cable locating devices
 - procedures for laser control equipment
 - slinging procedures
 - working in a road reserve
 - soil types
 - groundwater conditions.

Assessment Conditions

Mandatory conditions for assessment of this unit are stipulated below. The assessment must:

- include access to:
 - equipment required to conduct impact moling, ramming and augering operations
 - personal protective equipment
- be conducted in a safe environment; and,
- be assessed in context of this sector's work environment; and,
- be assessed in compliance with relevant legislation/regulation and using policies, procedures, processes and operational manuals directly related to the industry sector for which it is being assessed; and,

- confirm consistent performance can be applied in a range of relevant workplace circumstances.

Where personal safety or environmental damage are limiting factors, assessment may occur in a simulated work environment* provided it is realistic and sufficiently rigorous to cover all aspects of this sectors workplace performance, including environment, task skills, task management skills, contingency management skills and job role environment skills.

Assessor Requirements

Assessors must be able to clearly demonstrate current and relevant industry knowledge and experience to satisfy the mandatory competency standards as set out in the Standards for Registered Training Organisations (RTOs) 2015/AQTF mandatory requirements for assessors current at the time of assessment and any relevant licensing and certification requirements. This includes:

- vocational competencies at least to the level being delivered and assessed
- current industry skills directly relevant to the training and assessment being provided
- current knowledge and skills in vocational training and learning that informs their training and assessment
- formal relevant qualifications in training and assessment
- having knowledge of and/or experience using the latest techniques and processes
- possessing a high level of RII training product knowledge
- having an understanding and knowledge of legislations and regulations relevant to the industry and to employment and workplaces
- demonstrating the performance evidence, and knowledge evidence as outlined in this Unit of Competency, and
- the minimum years of current** work experience after competency has been obtained as specified below in an industry sector relevant to the outcomes of the unit.

It is also acceptable for the appropriately qualified assessor to work with an industry expert to conduct assessment together and for the industry expert to be involved in the assessment judgement. The industry expert must hold the relevant vocational competencies and have current industry skills directly relevant to the training and assessment being provided and must work alongside a trainer and/or assessor to conduct the assessment. This means the industry subject matter expert should hold the unit being assessed (or an equivalent unit), and must also demonstrate skills and knowledge from the minimum years of current work experience after competency has been obtained as specified below, including time spent in roles related to the unit being assessed:

Industry sector	AQF** Level	Required assessor or industry subject matter expert experience
Drilling, Metalliferous Mining, Coal Mining, Extractive (Quarrying) and Civil Construction	1	1 Year
	2	2 Years

Drilling, Coal Mining and Extractive (Quarrying)	3-6	3 Years
Metalliferous Mining and Civil Construction	3-6	5 Years
Other sectors	Where this unit of competency is being assessed outside of the resources and infrastructure sectors assessor and/or industry subject matter expert experience should be in line with industry standards for the sector in which it is being assessed and where no industry standard is specified should comply with any relevant regulation.	

*Guidance on simulated environments has been stipulated in the RII Companion Volume Implementation Guide located on VETNet.

**Assessors can demonstrate current work experience through employment within industry in a role relevant to the outcomes of the unit; or, for external assessors this can be demonstrated through exposure to industry by conducting a minimum number of site assessments as determined by the relevant industry sector, across various locations.

*** While a unit of competency does not have an AQF level, where a unit is being delivered outside of a qualification the first numeric character in the unit code should be considered as the AQF indicator level for assessment purposes.

Links

Companion Volume implementation guides are found in VETNet -

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