

<b>Domain</b>	<b>ROAD CONSTRUCTION AND MAINTENANCE - CORE</b>	<b>Unit ID: 710</b>
<b>Title:</b>	<b>Undertake road construction and maintenance work using power tools and equipment</b>	
<b>Level: 2</b>		<b>Credits: 8</b>

### Purpose

This unit standard is intended for those who work in road construction and maintenance operations. People holding credit for this unit standard are able to: Plan and prepare for work, select, use power tools and equipment and clean area.

### Special Notes

1. Entry information:
  - Prerequisite
    - Unit 712 - *Comply with health, safety and environmental rules and regulations in road construction and maintenance work operations.*
2. Assessment evidence may be collected from a real workplace, a simulated real workplace or an appropriate simulated realistic environment.
3. This unit standard is to be assessed in the context of road construction and maintenance operations and should be assessed in conjunction with other relevant technical unit standards selected from this subfield.
4. Safe operating procedures are to include but are not limited to recognizing and preventing hazards associated with overhead service lines, dangerous materials, restricted access barriers, traffic control, working in proximity to others, worksite visitors and the public.
5. Power tools refer to in this unit standard mean hand tools such as grinders, drills, chain saws, jack hammers, spray guns and circular saws. For assessment the candidate must be able to use at least two types of power tools.
6. Equipment refers to in this unit standard mean hand operated items such as: plate compactors, duplex rollers, compressors, concrete mixers, generators, water pumps, concrete vibrators. For assessment the candidate must be able to use at least two items of equipment.
7. All inspection, operation and maintenance procedures associated with the use of tools and equipment shall comply with manufacturers' guidelines and instructions.
8. '*Specifications*' refers to any, or all of the following: manufacturers' specifications and recommendations, site and workplace specific requirements.
9. Regulations and legislation relevant to this unit standard include the following:
  - Labour Act, No. 11 of 2007 as amended

- Occupational Health and Safety Regulations No. 18, 1997
- Road Traffic and Transport Regulations No. 52, 1999 and Government Notice No 53 Road Traffic and Transport Regulations.
- Road Ordinance 1972 and other relevant legislations.

### **Quality Assurance Requirements**

This unit standard and others within this subfield may be awarded by institutions which meet the accreditation requirements set by the Namibia Qualifications Authority and the Namibia Training Authority and which comply with the national assessment and moderation requirements. Details of specific accreditation requirements and the national assessment arrangements are available from the Namibia Qualifications Authority and the Namibia Training Authority on [www.nta.com.na](http://www.nta.com.na)

### **Elements and Performance Criteria**

#### **Element 1: Plan and prepare for work.**

##### **Range**

Planning and preparation may include but is not limited to workplace inspection, equipment defect identification, assessment of conditions and hazards and determination of work requirements.

Environmental requirements include but are not limited to waste materials, storm water protection and clean-up management.

##### **Performance Criteria**

- 1.1 Work instructions, including plans, specifications, quality requirements and operational details are obtained, confirmed and applied for the allocated task.
- 1.2 Safety requirements are obtained from the site safety plan and workplace policies and procedures, confirmed and applied for the allotted task.
- 1.3 Signage requirements are identified and obtained from the project traffic management plan and implemented.
- 1.4 Tools and equipment, and any accessories, selected to carry out tasks are consistent with the requirements of the job, checked for usability and any faults rectified or reported prior to commencement.
- 1.5 Power, fuels, gas, lubricants and water are verified as being available as required by the equipment types and the work.
- 1.6 Environmental protection requirements are identified from the project environmental management plan confirmed and applied for the allotted task.

## **Element 2: Select and use power tools and equipment.**

### **Performance Criteria**

- 2.1 Power tools and equipment, and any accessories, are selected according to job requirements and in line with standard work practice.
- 2.2 Power tools and equipment, and any accessories (including leads, pipes and hoses) are visually checked for usability and safety in accordance with the site safety plan and manufacturer's specifications and faults reported.
- 2.3 Required electrical power leads are routed and connected free of hazards in line with worksite requirements and manufacturer's specifications.
- 2.4 Required hoses are routed and connected free of trip hazards in line with worksite requirements and manufacturer's specifications.
- 2.5 Power tools and equipment are safely and effectively used in accordance with manufacturer's specifications.
- 2.6 Power tools and equipment are safely located and stored when not in use.
- 2.7 Power tools and equipment are regularly checked, and service carried out and/or arranged to ensure usability and comply with manufacturer's specifications.
- 2.8 Items requiring maintenance or repair are reported in accordance with worksite requirements.

## **Element 3: Clean up the work area.**

### **Performance Criteria**

- 3.1 Work area is cleared and materials disposed of, reused or recycled in accordance with legislation, regulations and job specifications.
- 3.2 Tools and equipment are cleaned, checked and stored in accordance with manufacturers' recommendations and standard work practices.
- 3.3 Items requiring maintenance or repair are reported in accordance with worksite requirements.
- 3.4 Unused materials are safely stored, stacked for future use and recorded in accordance with workplace procedures.

## **Registration Data**

<b>Subfield:</b>	Road Construction and Maintenance
<b>Date first registered:</b>	12 November 2009
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<b>Body responsible for review:</b>	Namibia Training Authority