

Domain	ROAD CONSTRUCTION AND MAINTENANCE - CORE	Unit ID: 715
Unit Title:	Demonstrate knowledge of plant used in road construction and maintenance	
Level: 2		Credits: 8

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: Identify the various type of plant used in road construction and maintenance and their application, identify the operational features and major components and systems of plant used in road construction and maintenance and identify the instruments and controls used on road construction and maintenance plant.

Special Notes

1. Entry information:
 - Prerequisite
 - None.
2. Assessment evidence may be collected from a real workplace or a simulated real workplace or an appropriate simulated realistic environment in which grader operations are carried out.
3. Plant includes but is not limited to front-end-loaders, dozers, graders, compactors.
4. Major components of plant include but are not limited to engine, fuel system, hydraulic system, electrical system, braking system, transmission, cooling, torque converters, differentials and final drives.
5. Operational features include but are not limited to buckets, mouldboards, rippers, blades, sticks, booms and drums.

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. All approved unit standards, qualifications and national assessment arrangements are available on the Namibia Training Authority website www.nta.com.na.

Elements and Performance Criteria

Element 1: Identify the various type of plant used in road construction and maintenance and their application.

Performance Criteria

- 1.1 Different types of plant are identified in terms of principal function.
- 1.2 The consequences of using inappropriate plant for certain activities and in different context are described in terms of cost and product quality.

Element 2: Identify the operational features and major components and systems of plant used in road construction and maintenance.

Performance Criteria

- 2.1 The major operational features of plant and related instruments used in road construction and maintenance are identified in terms of principal function.
- 2.2 The major components and systems of plant used in road construction and maintenance are identified in terms of their function and maintenance requirements.

Element 3: Identify the instruments and controls used on road construction and maintenance plant.

Performance Criteria

- 3.1 Plant instrumentation is identified and described in terms of function.
- 3.2 Plant controls are identified and described in terms of their function.
- 3.3 Warnings shown by machine indicators and gauges are interpreted according to manufacturer's specifications.
- 3.4 Machine safety features and warning devices are identified in terms of operations.
- 3.5 The consequences of ignoring warning devices and warnings and overriding safety features are described in terms of cost and risk to personnel.

Registration Data

Subfield:	Road Construction and Maintenance
Date first registered:	12 November 2009
Date this version registered:	12 November 2009
Anticipated review:	2013
Body responsible for review:	Namibia Training Authority