

# Construction and Civil Engineering Services: Highway Maintenance Level 2

Awarded by the **Scottish Qualifications Authority and the  
Construction Industry Training Board**  
Accredited from 20 July 2000 to 31 July 2005  
Group award number: G5K3 22

## Standards

This SVQ is based on standards developed by Construction Industry NTO. Construction Industry NTO represents a wide variety of people working in a broad range of occupations within the Construction Industry.

**The standards for this SVQ can be obtained from Scottish Qualifications Authority on 0141 242 2477.**

## Structure of the SVQ

The way the SVQ is made up is shown below. The unit title appears in bold and the elements that make up each unit are listed under the unit title.

### Mandatory units

Candidates must complete all of these units:

#### **D2R7 04**

##### **Contribute to Health and Safety in the Workplace**

- 1 Operate safely in the workplace
- 2 Respond to emergencies
- 3 Assist in the security of the workplace

#### **D1WD 04**

##### **Operate Powered Tools and Equipment for Routine and Predictable Requirements**

- 1 Prepare powered tool and equipment for use
- 2 Run and operate powered tools and equipment
- 3 Shut down and carry out post-stop checks on powered tools and equipment

#### **D2RA 04**

##### **Contribute to an Efficient and Effective Work Environment**

- 1 Contribute to efficiency in the workplace
- 2 Develop and maintain effective working relationships
- 3 Organise own work and maintain standards

## **Optional units**

Candidates are required to complete **one** of the following Groups of units:

### **Group 1 - General Highway Operations**

#### **D3DJ 04**

##### **Prepare Resources and Segregate the Area for Highway Works**

- 1 Determine site and resource requirements for the highways work
- 2 Install signs, lights and guarding requirements for working on the highway

#### **D3DK 04**

##### **Locate and Avoid Service Apparatus and Sub-structures**

- 1 Identify, mark and confirm location of service apparatus and sub-structures
- 2 Maintain the safety and integrity of service apparatus and sub-structures

#### **D3DL 04**

##### **Excavate Holes and Trenches in Ground and Pavement Structures**

- 1 Excavate on site to requirements
- 2 Maintain the integrity of the excavation

#### **D3DM 04**

##### **Reinstate Excavation and Pavement Surfaces**

- 1 Prepare for reinstatement of excavation and pavement surface
- 2 Carry out reinstatement of excavation and pavement surface

### **Group 2 - Modular Pavement Construction**

#### **D3DJ 04**

##### **Prepare Resources and Segregate the Area for Highway Works**

- 1 Determine site and resource requirement for the highways work
- 2 Install signs, lights and guarding requirements for working on the highway

#### **D3D6 04**

##### **Install Street Ironwork Fixtures**

- 1 Prepare to fit and install ironwork fixtures
- 2 Fit and install ironwork fixtures

#### **D3D7 04**

##### **Carry Out Modular Pavement Construction (Flags, Blocks, Sets, etc)**

- 1 Prepare for construction of modular pavement
- 2 Construct modular pavement to requirements

#### **D2RH 04**

##### **Work to the Dimensional Control of the Work Programme (Secondary)**

- 1 Interpret information and instructions for measuring and setting out for the work activity
- 2 Transfer and set out the dimensional control requirements for the work activity
- 3 Determine measurements and estimates of the work and site quantities

### **Group 3 - Flexible Pavement Construction**

#### **D3DJ 04**

##### **Prepare Resources and Segregate the Area for Highway Works**

- 1 Determine site and resource requirement for the highways work
- 2 Install signs, lights and guarding requirements for working on the highway

**D3D6 04****Install Street Ironwork Fixtures**

- 1 Prepare to fit and install ironwork fixtures
- 2 Fit and install ironwork fixtures

**D3DN 04****Carry Out Flexible Pavement Construction (Bituminous Type Materials)**

- 1 Prepare for construction of flexible pavement
- 2 Construct flexible pavement to requirements

**D2RH 04****Work to the Dimensional Control of the Work Programme (Secondary)**

- 1 Interpret information and instructions for measuring and setting out for the work activity
- 2 Transfer and set out the dimensional control requirements for the work activity
- 3 Determine measurements and estimates of the work and site quantities

**Group 4 - Laying Kerbs and Channels****D3DJ 04****Prepare Resources and Segregate the Area for Highway Works**

- 1 Determine site and resource requirement for the highways work
- 2 Install signs, lights and guarding requirements for working on the highway

**D3D9 04****Lay and Align Kerbs and Channels**

- 1 Determine requirements for kerbs and channels
- 2 Laying and aligning kerb and channel components

**D2RH 04****Work to the Dimensional Control of the Work Programme (Secondary)**

- 1 Interpret information and instructions for measuring and setting out for the work activity
- 2 Transfer and set out the dimensional control requirements for the work activity
- 3 Determine measurements and estimates of the work and site quantities

**Group 5 - Shallow Drainage and Ducting Installation****D3DJ 04****Prepare Resources and Segregate the Area for Highway Works**

- 1 Determine site and resource requirement for the highways work
- 2 Install signs, lights and guarding requirements for working on the highway

**D3D6 04****Install Street Ironwork Fixtures**

- 1 Prepare to fit and install ironwork fixtures
- 2 Fit and install ironwork fixtures

**D3DE 04****Install Small Pipework Drainage**

- 1 Prepare for installing pipework drainage
- 2 Install components of the pipework drainage

**Group 6 - Drainage Construction****D3DJ 04****Prepare Resources and Segregate the Area for Highway Works**

- 1 Determine site and resource requirement for the highways work
- 2 Install signs, lights and guarding requirements for working on the highway

**D3DA 04****Install and Construct Large Pipework Drainage Systems**

- 1 Prepare for the construction of the pipework drainage system
- 2 Install components of the pipework drainage system
- 3 Construct pre-cast structures of the drainage system

**D3D6 04****Install Street Ironwork Fixtures**

- 1 Prepare to fit and install ironwork fixtures
- 2 Fit and install ironwork fixtures

**D3DB 04****Erect and Dismantle Temporary Structural Support to Excavations**

- 1 Determine and prepare excavation support requirements
- 2 Construct temporary support structures
- 3 Maintain the integrity and safety of the excavation support
- 4 Remove temporary structural supports

**Group 7 - Concrete Operations****D3DJ 04****Prepare Resources and Segregate the Area for Highway Works**

- 1 Determine site and resource requirement for the highways work
- 2 Install signs, lights and guarding requirements for working on the highway

**D3DF 04****Carry Out General Concreting Operations (Minor Works)**

- 1 Determine requirements for concreting
- 2 Construct concrete to requirements

**D3DD 04****Erect and Dismantle Basic Working Platforms**

- 1 Determine requirement for access platforms
- 2 Erect and dismantle access equipment

**Group 8 - Vehicle Safety Fencing****D3DJ 04****Prepare Resources and Segregate the Area for Highway Works**

- 1 Determine site and resource requirement for the highways work
- 2 Install signs, lights and guarding requirements for working on the highway

**B4S1 04****Prepare Sites for Fencing Erection Works**

- 1 Locate and identify services and substructures and take necessary precautions
- 2 Provide temporary signs and barriers
- 3 Manually modify ground levels
- 4 Establish lines and levels

**B4S7 04****Erect Fencing (Vehicle Safety)**

- 1 Excavate and provide foundations for fencing
- 2 Place and fix posts
- 3 Place and fix fencing components
- 4 Cast concrete to shape

## **Additional units**

Candidates may also undertake any of the following units, which do not form part of the qualification:

### **D3DR 04**

#### **Operate and Control Powered Plant and Machinery**

- 1 Prepare and set up plant and machinery
- 2 Operate plant and machinery to meet work requirements
- 3 Shut down and secure plant and machinery

### **D3DS 04**

#### **Establish Pavement Markings**

- 1 Interpret requirements for pavement markings
- 2 Prepare for pavement markings activity
- 3 Carry out pavement markings activity
- 4 Co-ordinate progress and completion of activity

### **D3D5 04**

#### **Provide for and Maintain the Security of the Work and Surrounding Environment**

- 1 Interpret requirements for protection and safety of the work and surrounding environment
- 2 Establish and maintain the protection and safety of the work and surrounding environment
- 3 Dismantle and remove protection and safety arrangements from the work and surrounding environment

### **B5GN 04**

#### **Implementing Temporary Traffic Management on High Speed Roads**

- 1 Prepare for temporary traffic control requirement
- 2 Set out temporary traffic control system
- 3 Monitor and maintain temporary traffic control system
- 4 Remove temporary traffic control system

### **D3DC 04**

#### **Place and Finish Structural Concrete**

- 1 Prepare for placing the structural concrete
- 2 Carry out placement and distribution of the structural concrete
- 3 Consolidate and finish the structural concrete

### **D2RJ 04**

#### **Carry Out Slinging and Signalling for the Movement of Loads**

- 1 Prepare and sling loads for lifting
- 2 Direct and control the movement and placing of loads

### **D2Y6 04**

#### **Contribute to the Specified Work Programme**

- 1 Interpret the work programme
- 2 Make preparation for the specified work activity
- 3 Implement and maintain the specified work activity to requirements

There may be publications available to support this SVQ. For more information, please contact:

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