



National Unit Specification: general information

UNIT Roads Maintenance: An Introduction to Installing Road Drainage (SCQF level 5)

CODE F55R 11

SUMMARY

This Unit covers essential knowledge and practical experience relating to installing road drainage in the Roads and Highways Maintenance environment. The Unit is suitable for candidates who have had little or no experience to date in the Roads Maintenance environment and who want to gain and apply knowledge and understanding of road drainage installation in the workplace environment. Candidates will safely prepare for and install drainage components whilst complying with all relevant legislation.

OUTCOMES

- 1 Prepare for installing road drainage.
- 2 Install drainage components to line and levels required.

RECOMMENDED ENTRY

Entry to this Unit is at the discretion of the centre. This Unit is suitable for inexperienced or entry level candidates.

CREDIT VALUE

1 credit at SCQF level 5 (6 SCQF credit points at SCQF level 5*).

**SCQF credit points are used to allocate credit to qualifications in the Scottish Credit and Qualifications Framework (SCQF). Each qualification in the Framework is allocated a number of SCQF credit points at an SCQF level. There are 12 SCQF levels, ranging from Access 1 to Doctorates.*

Administrative Information

Superclass: TK

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National Unit Specification: general information (cont)

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CORE SKILLS

There is no automatic certification of Core Skills in this Unit.

This Unit provides opportunities to develop aspects of the following Core Skills:

- ◆ Communication at SCQF level 3
- ◆ Numeracy at SCQF level 3
- ◆ Working with Others at SCQF level 3

National Unit Specification: statement of standards

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Acceptable performance in this Unit will be the satisfactory achievement of the standards set out in this part of the Unit Specification. All sections of the statement of standards are mandatory and cannot be altered without reference to SQA.

OUTCOME 1

Prepare for installing road drainage.

Performance Criteria

- (a) Accurately interpret the given drawings, and specification for the related work.
- (b) Accurately measure and calculate the amount of drainage and materials required to meet the works specification of not less than 20 linear meters.
- (c) Select appropriate drainage components and materials to meet the specification.
- (d) Identify and select the correct tools and equipment needed to carry out the work.
- (e) Select appropriate PPE equipment for a given task, in accordance with organisational requirements.

OUTCOME 2

Install drainage components to line and levels required.

Performance Criteria

- (a) Correctly identify and mark off the work area.
- (b) Prepare the ground correctly to receive drainage components, maintaining levels and alignment as required.
- (c) Accurately lay drainage components to required alignment and levels.
- (d) Correctly reinstate the work area as required.
- (e) Demonstrate the correct adherence to statutory requirements and or safety notices and warning signs displayed in the workplace.
- (f) Dispose of waste in accordance with legislation requirements.

National Unit Specification: statement of standards (cont)

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EVIDENCE REQUIREMENTS FOR THIS UNIT

Candidates must carry out a risk assessment before any practical activity.

Evidence is required to demonstrate that candidates have achieved all Outcomes and Performance Criteria. The specific Evidence Requirements for each Outcome are outlined below.

Written and/or oral evidence is required to demonstrate that the candidates have achieved Outcome 1. The evidence will be produced under open-book supervised conditions within a time limit of 30 minutes.

Performance evidence supplemented with an assessor observation checklist is required to demonstrate that candidates have achieved the Performance Criteria in Outcomes 1 and 2. The evidence will be produced under supervised conditions at appropriate points in the Unit once candidates have developed the necessary knowledge and skills.

These Evidence Requirements will be met by the completion of the Assessment Support Pack (ASP) that provides detailed assessment material for this Unit. Centres wishing to develop their own assessments should refer to the ASP to ensure a comparable standard.

National Unit Specification: support notes

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This part of the Unit Specification is offered as guidance. The support notes are not mandatory.

While the exact time allocated to this Unit is at the discretion of the centre, the notional design length is 40 hours.

GUIDANCE ON THE CONTENT AND CONTEXT FOR THIS UNIT

This Unit is an optional Unit in the NPA in Roads Maintenance at SCQF level 5 but can also be taken as a free-standing Unit.

The content and context of this Unit is aimed at candidates who are interested in pursuing a career in roads and highways maintenance. Candidates will be introduced to installing road drainage and will gain practical experience of that activity.

Installing road drainage is integral and key to the Roads Maintenance Industry therefore throughout the Unit emphasis will be placed on the application of Safe Working Practices in line with current safety codes of practice and policies and regulations.

Centres may find opportunities to integrate this Unit with others in the Roads Maintenance NPA at SCQF level 5 eg some parts of this Unit could be combined with *Roads Maintenance: An Introduction to Efficient Working Practices* at SCQF level 5 and *Roads Maintenance: An Introduction to Repair and Reinstatement of Excavations and Pavement Surfaces* at SCQF level 5.

Site conditions should reflect as near as possible realistic working conditions.

GUIDANCE ON LEARNING AND TEACHING APPROACHES FOR THIS UNIT

The learning environment for this Unit will be a combination of classroom and workshop based learning where the candidate will be involved in group activities and discussions. The knowledge element of this Unit would be taught in a classroom environment and put into practice in conjunction with the practical Outcomes.

Candidates could work in pairs or groups on the practical activity, although they will need to meet all Evidence Requirements individually.

OPPORTUNITIES FOR CORE SKILL DEVELOPMENT

Opportunities may arise in this Unit for candidates to develop aspects of the following Core Skills:

- ◆ Communication at SCQF level 3 by reading and interpreting drawings and work instructions
- ◆ Numeracy at SCQF level 3 by measuring and calculating
- ◆ Working with Others at SCQF level 3 by working in groups

National Unit Specification: support notes (cont)

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GUIDANCE ON APPROACHES TO ASSESSMENT FOR THIS UNIT

Centres may use the instruments of Assessment which they consider to be most appropriate but are encouraged to use the Assessment Support Pack (ASP) developed centrally by SQA. It is expected that candidates will be given as much practise as possible in the methods of safe working practice and risk assessment methods etc, prior to being set the assessment tasks.

For Outcome 1 a suitable method for assessing candidate knowledge and understanding of installing road drainage could be through a set of multiple choice questions.

For Outcomes 1 and 2, to allow candidates to generate the Performance Evidence centres should set a series of practical assignments which accurately reflect the Unit content.

Opportunities for the use of e-assessment

E-assessment may be appropriate for some assessments in this Unit. By e-assessment we mean assessment which is supported by information and communications technology (ICT), such as e-testing or the use of e-portfolios or e-checklists. Centres which wish to use e-assessment must ensure that the national standard is applied to all candidate evidence and that conditions of assessment as specified in the Evidence Requirements are met, regardless of the mode of gathering evidence. Further advice is available in *SQA Guidelines on Online Assessment for Further Education (AA1641, March 2003)*, *SQA Guidelines on e-assessment for Schools (BD2625, June 2005)*.

CANDIDATES WITH DISABILITIES AND/OR ADDITIONAL SUPPORT NEEDS

The additional support needs of individual candidates should be taken into account when planning learning experiences, selecting assessment instruments, or considering alternative Outcomes for Units. Further advice can be found in the SQA document *Guidance on Assessment Arrangements for Candidates with Disabilities and/or Additional Support Needs (www.sqa.org.uk)*.