



Higher National Unit specification

General information for centres

Unit title: Landscape Industry: Specification and Estimation

Unit code: F1MN 34

Unit purpose: This Unit aims to develop candidate skills in the processes and practices of managing projects, writing specifications and estimating the timescales and costs involved in landscaping industry contracts. Candidates will be made aware that the processes involved in managing landscape industry projects are based upon measurements of time taken, cost incurred and quality achieved against pre-set criteria in all three of these aspects.

On completion of the Unit the candidate should be able to:

- 1 Describe the management of a project in the landscaping industry.
- 2 Prepare written specifications for a range of landscape features.
- 3 Estimate time and costs for a landscape project.

Credit points and level: 1 HN credit at SCQF level 7: (8 SCQF credit points at SCQF level 7*)

**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.*

Recommended prior knowledge and skills: Access to this Unit is at the discretion of the delivering centre, however, it may be beneficial for candidates to have had work experience in an appropriate discipline related to garden or landscape construction project.

Core Skills: There may be opportunities to develop the Core Skills of Communication, Numeracy and Problem Solving at SCQF level 6 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

Context for delivery: If this Unit is delivered as part of a Group Award, it is recommended that it should be taught and assessed within the subject area of the Group Award to which it contributes.

Assessment: The assessment of this Unit can reflect the teaching approach taken by a particular centre. Outcomes 1, 2 and 3 could be assessed together, for example in a written report. This could be based upon a landscape project case study. A range of case studies suitable for Garden Design, Amenity Horticulture and Landscape Management candidates should be available.

Higher National Unit specification: statement of standards

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The sections of the Unit stating the Outcomes, Knowledge and/or Skills, and Evidence Requirements are mandatory.

Where evidence for Outcomes is assessed on a sample basis, the whole of the content listed in the Knowledge and/or Skills section must be taught and available for assessment. Candidates should not know in advance the items on which they will be assessed and different items should be sampled on each assessment occasion.

Outcome 1

Describe the management of a project in the landscaping industry

Knowledge and/or skills

- ◆ Professional organisations in landscaping projects
- ◆ Chartered professionals
- ◆ The roles of professionals in a project team
- ◆ Types of contracts
- ◆ Site organisation and set-up
- ◆ Suppliers of manpower, materials, mechanical plant
- ◆ Suppliers of plants
- ◆ Quality control of plants and construction materials on arrival
- ◆ On-site storage and care of project resources, including plants, trees and shrubs

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ identify appropriate professional consultants
- ◆ describe and justify an appropriate type of contract
- ◆ describe the process of selecting suppliers
- ◆ describe how the quality of delivered materials is managed

Assessment guidelines

This Outcome could be assessed by the production of a report of approximately 1,000 words or equivalent. This Outcome could be assessed as part of a staged submission meeting the requirements of all three Outcomes.

Higher National Unit specification: statement of standards (cont)

Unit title: Landscape Industry: Specification and Estimation

Outcome 2

Prepare written specifications for a range of landscape features

Knowledge and/or skills

- ◆ Writing technical descriptions for landscaping projects
- ◆ Complementing project drawings
- ◆ Specification clause writing skills, clarity and buildability
- ◆ NBS Landscape
- ◆ Performance specifications
- ◆ Prescriptive specifications
- ◆ Specification terminology for plants
- ◆ Requirements of a standard tender document for plants

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ prepare appropriate specification clauses for hard and soft landscaping features
- ◆ prepare a tender document for the supply of planting materials

Assessment guidelines

This Outcome could be assessed by an assignment to produce the documentation detailed in the Evidence Requirements based upon the requirements of a case study. This Outcome could be assessed as part of a staged submission meeting the requirements of all three Outcomes.

Outcome 3

Estimate time and costs for a landscape project

Knowledge and/or skills

- ◆ Estimating time to complete tasks in a landscaping project
- ◆ Bill of quantities
- ◆ Hard landscaping materials pricing
- ◆ Soft landscaping materials pricing
- ◆ All-in rate for skilled and un-skilled labour
- ◆ Hiring rates for mechanical plant and other construction tools and equipment
- ◆ Cost of buying mechanical plant and other construction tools and equipment

Higher National Unit specification: statement of standards (cont)

Unit title: Landscape Industry: Specification and Estimation

Evidence Requirements

Candidates will need to provide evidence to demonstrate their Knowledge and/or Skills by showing that they can:

- ◆ estimate the timescale of a landscape project
- ◆ estimate the costs of a landscape project

Assessment guidelines

This Outcome could be assessed by the production of a report based on a case study. This Outcome could be assessed as part of a staged submission meeting the requirements of all three Outcomes.

Administrative Information

Unit code:	F1MN 34
Unit title:	Landscape Industry: Specification and Estimation
Superclass category:	TC
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Higher National Unit specification: support notes

Unit title: Landscape Industry: Specification and Estimation

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 aims to develop candidate skills in the processes and practices of managing landscaping projects, writing the associated specifications and estimating the timescales and costs involved. Candidates should be made aware that the skills involved in managing landscape industry projects are based upon measurements of time taken, cost incurred and quality achieved against pre-set criteria in all three of these aspects. That is, finishing on time, within budget and to the level of quality expected by a demanding client group.

Outcome 1 should introduce the general skills involved in managing a landscape project. The professionals involved in designing, specifying, building hard landscape features and installing plants should become known early in the Unit teaching and learning process. In addition, candidates should consider the types of contractual arrangements that are prevalent in the landscaping industry and why certain forms of contract are appropriate. For example, project circumstances will dictate whether a fixed-price-fixed-deadline arrangement between parties is better than one based upon an hourly-rate for contractors. In addition, the need for site control of materials is important with the aims of reducing waste, preventing damage and protecting the project budget. Finally, with regard to Outcome 1, co-ordinating deliveries ties in with effective programming of the works, making sure that the right equipment for materials handling is there when it is needed and that appropriate storage and security provisions are in place.

In Outcome 2 candidates will study the specification for a contract. This is one of the main pieces of information that describe the work to be done. Others are the design drawings and the bill of quantities. An important thing about a specification is that its clauses describe the quality expected in the contract. That is, the components, their sizes and other details. But, it does not say how a feature is to be built (that's assumed to be known by an appointed contractor).

In Outcome 3 candidates will consider the costs and timescale associated with a project. It will be important to develop an understanding of how to estimate the project cost for materials and manpower. Materials are usually priced to include the supply price, manpower working time and the profit and overheads of a contractor. This calculation is repeated for all elements of a project into a bill of quantities, drawn up by a quantity surveyor. A contractor, will check the specification detail, each element price and sum the figures in the final column of a bill of quantities to get an estimated project cost. Manpower rates are built up from an amalgamation of wage agreements for the Building and Allied Trades Joint Industry Council (BATJIC). The assumptions that have been made for overtime, bonuses and insurances are built into hourly rates for a craftsman and a labourer. Estimating the costs for mechanical plant and other tools and equipment is also important and comparing the cost of hiring or buying equipment is an appropriate and useful skill to develop.

Higher National Unit specification: support notes (cont)

Unit title: Landscape Industry: Specification and Estimation

Guidance on the delivery and assessment of this Unit

It is recommended that this Unit be taught through a series of lectures, which could be supplemented by practical classes. Practical classes could include visits to landscape construction sites or to materials suppliers. Alternatively, these could be in the form of talks by practising quantity surveyors specialising in landscape contracts, landscape contractors or nursery professionals.

For the teaching of the Soft landscaping elements of the Unit the following references are recommended:

- ◆ Horticultural Trades Association National Plant Specification (August 2002). Helios Plant Selector Software will provide this information in electronic form. Including;
- ◆ HTA Contractor Certification Scheme — CCS
- ◆ HTA Nursery Certification Scheme — NCS
- ◆ Joint Council For Landscape Industries/Committee On Plant Supply And Establishment: Standard form of Tender for the Supply and Delivery of Plants (7th edition, July 1992)
- ◆ CPSE (Committee for Plant Supply and Establishment): Plant Handling Guidelines (July 1985).
- ◆ Bellwood Trees Hardy Nursery Stock Technical Manual

Suitable approaches to generating evidence may include supplementing a student-centred written assignment with an oral explanation by the candidate.

Opportunities for developing Core Skills

There may be opportunities to develop the Core Skills of Communication, Numeracy and Problem Solving at SCQF level 6 in this Unit, although there is no automatic certification of Core Skills or Core Skills components.

Open learning

Elements of this Unit could be delivered by distance or flexible learning. Although it would be beneficial for the candidate to attend the centre for supervised assessment, this could be done in off-centre locations with appropriate arrangement.

For information on open learning arrangements please refer to the SQA guide *Assessment and Quality Assurance for Open and Distance Learning* (SQA, 2000)

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).

General information for candidates

Unit title: Landscape Industry: Specification and Estimation

This Unit is intended to develop your knowledge and skills in the processes and practices of managing landscaping projects, writing the associated specifications and estimating the timescales and costs involved. The main message to keep in your future career is that projects should finish on time, within budget and to the level of quality expected by a demanding client group.

Outcome 1 introduces the general skills involved in managing a landscape project. The professionals involved in designing, specifying, building hard landscape features and installing plants. The types of contracts appropriate to landscaping work are also discussed. The latter parts of the teaching time will look at the need for site control of materials, co-ordinating deliveries to a site and, finally, appropriate storage and security provisions for delivered project materials.

In Outcome 2 you will look at the contract specification. This is one of the main pieces of information that describe project works. The others are design drawings and the bill of quantities. A specification describes what is to be built or planted in the written form and its expected quality.

In Outcome 3 you will consider the costs and timescale associated with a project. It will be important to develop and understanding of how to estimate the project cost for materials, manpower and for mechanical plant and other tools and equipment.

On completion of this Unit you should be able to:

- 1 Describe the management of a project in the landscaping industry.
- 2 Prepare written specifications for a range of landscape features.
- 3 Estimate time and costs for a landscape project.