

Level 2 Diploma
In
Fencing – Vehicle Safety
(NVQ)

Qualification number 500/4216/6

Fencing

Level 2

Page No.

Aims and objectives	3	
Qualification routes	3	
Certificates	3	
Entry requirements and guided learning hours	4	
Fencing Industry Skills Scheme (FISS) and Construction Skills Certificate Scheme (CSCS)	4	
Accreditation of Prior Achievement (APA)	4	
Health and safety – young people	4	
Expertise of assessors, internal verifiers and external verifiers	5	
Progression	6	
Independent assessment	6	
Guidance for Diploma NVQ/SVQ centres	9	
Useful publications	9	
Centre support	10	
Candidates with special needs	10	
Customer Service Statement	10	
Fees	10	
Key skills/core skills	10	
Languages other than English	11	
Other issues	11	
Mapping of QCF units to NVQ Structure	12	
MANDATORY UNITS – all units must be undertaken – a minimum of 59 credits		
NVQ Title Fe1	Prepare sites for fence installation	
QCF Unit Title/s	Fe1.1 Locate and identify services and obstructions and take necessary precautions	17
	Fe1.2 Establish a safe working environment	19
	Fe1.3 Manually modify ground levels	21
	Fe1.4 Establish lines and levels	23
NVQ Title Fe2	Receive, handle and store fencing materials on-site	
QCF Unit Title/s	Fe2 Receive, handle and store materials on-site	25
NVQ Title Fe7	Operate power tools and attachments	
QCF Unit Title/s	Fe7 Prepare and operate power tools and attachments	28

NVQ Title CU2	Monitor and maintain health and safety	
QCF Unit Title/s	CU2 Monitoring and maintaining health and safety	31
	Group B (Vehicle Safety)	
NVQ Title Fe4	Install Vehicle Restraint Systems	
QCF Unit Title/s	Fe4.1 Prepare and form foundations for vehicle restraint systems	34
	Fe4.2 Place and fix posts and vehicle restraint systems	38
NVQ Title Fe5	Cast reinforced concrete	42
QCF Unit Title/s	Fe5 Prepare for casting and cast concrete	
NVQ Title Fe6	Repair fencing	
QCF Unit Title/s	Fe6 Inspect and repair fencing	43

Diploma in Fencing – Vehicle Safety (NVQ)

Level 2

1 Aims and objectives

The Level 2 Diploma in Fencing – Vehicle Safety (NVQ) is based on national standards which reflect the working practices of fencing operatives. The standards were developed by a group representing employers, fencing manufacturers and contractors, training organisations, and other organisations with an interest in fencing, such as the Highways Agency and Railtrack.

The qualification aims to give candidates the opportunity to develop their skills and demonstrate competence across the full range of activities that fencing operatives need to be able to do as part of their everyday work. The qualification allows candidates to select units which apply to work in vehicle safety fencing. The unitised structure of the Qualification also enables CPD activities to be evidenced and certificated for those candidates who may not require the full Diploma. This Qualification has evolved from the Level 2 NVQ in Fencing (Vehicle Safety) and has a direct relationship to the National Occupational Standards.

2 Qualification routes

At level 2 there are two options within the Fencing Diploma, depending on the units selected – Fencing and Fencing (Vehicle Safety). These specifications include the units available for candidates who will be working in vehicle safety fencing. The specifications for candidates who will be specialising in general fencing are published in a separate booklet, also available from Lantra Awards.

A new level 3 Diploma in Fencing is also available and specifications for this Qualification can be obtained from Lantra Awards.

Level 2 Diploma in Fencing – Vehicle Safety (NVQ)

Mandatory QCF units: Candidates must achieve 59 credits

K/501/7037	Locate and identify services and obstructions taking necessary precautions
M/501/7038	Establish a safe working environment
T/501/7039	Manually modify ground levels
K/501/7040	Establish lines and levels
M/501/7041	Receive handle and store materials on- site
L/501/7046	Prepare an operate power tools and attachments
R/501/3757	Monitoring and maintaining health and safety
Y/501/7325	Prepare and form foundations for vehicle restraint systems
D/501/7326	Place and fix posts and vehicle restraint systems
R/501/7324	Prepare for casting and cast concrete
J/501/7045	Inspect and repair fencing

To be awarded the Level 2 Diploma in Fencing – Vehicle Safety -Candidates must achieve a total of 59 credits.

24 credits must be from the Mandatory Units

35 credits must be from the Optional Units (Group B)

3 Certificates

Certificates will show the qualification title as Lantra Awards Level 2 Diploma in Fencing – Vehicle Safety.

Candidates will receive unit certificates for all credits they achieved.

4 Entry requirements and guided learning hours

There are no minimum entry requirements for Level 2 Diploma in Fencing – Vehicle Safety candidates.

Because this Diploma is intended for use by candidates in the workplace, it is not possible to specify with any accuracy the guided learning hours required for delivery of the qualification. The length of time it takes to achieve the Diploma will depend on what opportunities arise to generate evidence through work activities, but in general candidates can expect to complete a level 2 competency based Diploma within six months to a year. The qualification cannot be completed in less than 10 weeks.

5 Fencing Industry Skills Scheme (FISS) and Construction Skills Certification Scheme (CSCS)

FISS and CSCS work in partnership and the joint FISS/CSCS is a requirement for all fencing operatives who want to work on Major Contractor Group sites or on Highways Agency contracts.

To achieve their green card, all operatives must complete the Lantra Awards health, safety and environmental awareness course and pass the CITB Construction Skills health and safety test.

To achieve the blue FISS/CSCS card skilled fencing operatives must achieve either the Level 2 NVQ/SVQ or Level 2 Diploma in Fencing

To achieve the gold card they must achieve the Level 3 NVQ/SVQ or Level 3 Diploma in Fencing.

To achieve the platinum card they must achieve the L4 NVQ/SVQ in Fencing.

For further information about FISS/CSCS, ask for the information leaflet, available free of charge from Lantra Awards.

6 Accreditation of Prior Achievement (APA)

The unit entitled 'Monitor and maintain health and safety' appears in most level 2 NVQ/SVQs within the land-based sector. The unit 'Assist with planting and establishing plants' appears in the level 1 NVQ/SVQs in Amenity Horticulture, Production Horticulture and Land-based Industries. Any comparable NVQ/SVQ units gained from other awarding bodies are completely transferable and will be accepted by Lantra Awards towards the NVQ/SVQ in Fencing.

Centres cannot enter candidates for qualifications simultaneously where this results in 'double funding'.

7 Health and safety – young people

This qualification can be offered to candidates in the 16-19 age groups. However, the Health and Safety at Work Act 1974 requires employers to ensure the health, safety and welfare at work of their employees and for training providers to safeguard trainees. Young people under the age of 18 can be exposed to risk when using work equipment due to immaturity, lack of experience or lack of awareness of existing or potential risks. Therefore, young people in this age group will need close supervision.

For more information about young people at work, see *The Health and Safety (Young Persons) Regulations 1997* and *Young People at Work – a guide for employers*, both obtainable from the Health and Safety Executive.

8 Expertise of assessors, internal verifiers and external verifiers

Assessors

As well as holding or working towards units A1 and A2 (or D32/D33), assessors must:

- Be occupationally competent, capable of carrying out the functions covered by the units, or aspects of units, to the standard described within them, according to current industry practice. They will have gained the occupational competence by having a proven track record working in a practical role within the industry for at least five years (for example as a lead installer, foreman, supervisor, operations manager etc).
- It is possible for candidates to have more than one assessor, each assessing different units or aspects of those units. In exceptional circumstances, assessors may be approved with less than five years experience. Centres in this situation should contact Lantra Awards for advice.
- Be familiar with the national occupational standards for fencing and must be able to interpret and make judgements on current working practices and technologies within the area of work
- Have sufficient time to carry out the role within QCA's NVQ Criteria and Code of Practice and the relevant sections of SQA's SVQ Criteria and Guidance for Awarding Bodies. For guidance on the role, please refer to the Lantra Awards publication 'Guidance to NVQ/SVQ Centres'
- Receive an appropriate induction to the Diplomas that they are assessing
- Actively engage in relevant, industry specific continuing professional development activities to keep up-to-date with developments relating to the Diploma in Fencing and changes taking place in the industry.

Information on the induction and continuing professional development of assessors must be made available to the external verifier. The external verifier will expect to see evidence, such as relevant qualifications, recent performance appraisal records, testimonials or references, attendance certificates or details of relevant events or activities.

Lantra Awards holds meetings for centres at least once each year and, wherever possible, these will be combined with continuing professional development activities such as sessions given by fencing manufacturers.

Internal verifiers

As well as holding or working towards unit V1 (or D34), internal verifiers must:

- Be occupationally competent, capable of carrying out the functions covered by the units, or aspects of units, to the standard described within them, according to current industry practice. They will have gained the occupational competence by having a proven track record working in a practical role within the industry for at least five years (for example as a lead installer, foreman, supervisor, operations manager etc). In exceptional circumstances, assessors may be approved with less than five years. Centres in this situation should contact Lantra Awards for advice.
- Have sufficient knowledge of the work activities and assessment process to be able to offer credible advice on the interpretation of the standards, moderate assessments and resolve any differences and conflicts
- Be fully conversant with the national occupational standards for fencing and must be able to assist assessors with interpretation and the making of assessment judgements. They must be able to make judgements about the assessment process being applied by assessors.

- Occupy a position in the organisation that gives them authority and resources to co-ordinate the work of assessors, provide authoritative advice, call meetings as appropriate, visit and observe assessments and carry out all the other important roles of an internal verifier. For guidance on the role, please refer to the Lantra Awards publication 'Guidance to NVQ/SVQ Centres'
- Receive an appropriate induction to the units of the Qualification that they are verifying
- Actively engage in relevant, industry specific continuing professional development activities, offered by the fencing industry, Lantra Awards, Lantra Sector Skills Council through the Lantra Professional Register or other relevant providers in the sector to keep up-to-date with developments relating to the Fencing Diplomas and changes taking place in the industry.

Internal verifiers should also hold A1 and A2 (or D32/D33).

Information on the induction and continuing professional development of assessors must be made available to the external verifier. The external verifier will expect to see evidence, such as relevant qualifications, recent performance appraisal records, testimonials or references, attendance certificates or details of relevant events or activities.

Lantra Awards holds meetings for centres at least once each year and, wherever possible, these will be combined with continuing professional development activities such as sessions given by fencing manufacturers.

External verifiers

As well as holding or working towards V2 (or D35), external verifiers must:

- Understand the national occupational standards, and their correct interpretation and application, have an in-depth knowledge of the area covered by the Diplomas and the NVQ/SVQs themselves
- Have gained their knowledge working with the fencing industry
- Receive an appropriate induction to the Qualifications they are verifying
- Actively engage in relevant, industry specific continuing professional development activities to keep up-to-date with developments relating to the Fencing Diplomas and changes taking place in the industry.

9 Progression

The Level 2 Diploma in Fencing – Vehicle Safety provides progression to the Level 3 Diploma in Fencing and could also provide progression to other level 3 qualifications in the construction sector.

The Level 2 Diploma in Fencing Vehicle Safety provides an opportunity for progression to employment as a fence installer on Major Contractor Group sites or on Highways Agency contracts. Contact Lantra Awards for an information leaflet on the FISS/CSCS cards which are required by the Major Contractors Group and the Highways Agency.

The Fencing Qualifications are included in the Modern Apprenticeship frameworks for the fencing industry. For further details on Modern Apprenticeships, please contact Lantra Sector Skills Council.

10 Independent assessment

Awarding bodies are required to provide external quality control for assessment over and above that provided by external verifiers. The method of independent assessment varies between different Qualifications. For the Diplomas in Fencing it has been agreed that independent assessment is not an appropriate method of external quality control.

Instead, the monitoring and standardisation of assessment decisions will be achieved by a robust and strengthened assessment and external verification system, which will be implemented by Lantra Awards. The key points are:

External verification

All new centres, or existing centres wishing to extend their provision to include Fencing Diplomas will be visited by an external verifier prior to centre approval being granted to ensure that all regulatory and assessment strategy requirements are met. Where new or existing centres are experiencing difficulty, Lantra Awards will provide additional support, either through more frequent external verifier visits (for which a charge will usually be made) or through other means such as training and development.

External verifiers will be rotated every 2-5 years to increase the independence of verification in centres.

External verifiers (not the centre) will determine the assessments, candidates and assessors to be sampled. Sampling will take place during the development of a candidate's portfolio, and not only at the point of signing off.

External verifiers will sample at least 20% of candidates or candidates' work at each centre. The size of the sample will be recorded on the sampling report form completed by the external verifier during the visit.

Internal verification

All candidate portfolios should be internally verified by the internal verifier

Internal verifiers should be able to demonstrate how the internal verification sampling strategy ensures that:

- Portfolios are sampled during their development stage
- Portfolios are sampled on completion
- All types of evidence are sampled
- All assessors are sampled, including those based at different sites
- The work of different assessors is compared, where possible across the same unit(s)
- The full range of units delivered is assessed

Internal verifiers should observe assessors conducting candidate assessments at least once every six months. The reliability, validity and authenticity of evidence must be checked during these observations.

Risk rating

Levels of external verification, monitoring control and support may vary according to the centre's level of risk (eg those under commercial pressures or where any bias may exist because of relationships between candidates, assessors, internal verifiers or external verifiers). Depending on risk rating the following actions may be taken the external verifier or Lantra Awards:

- Conduct a spot visit at short notice
- Meet and/or observe each candidate or a larger sample of the candidates at the centre in question
- Increase frequency of verification visits (for which a charge will normally be made)

- Conduct candidate and/or employer interviews, as required, over the telephone
- Other action appropriate to risk (eg suspension of direct claims status)

Centres may wish to refer to the NVQ Code of Practice which is available on the QCA website (www.qca.org.uk). The Code of Practice includes sanctions which awarding bodies must impose in the event of non-compliance with the approved centre criteria.

Workplace assessment and simulation

All assessments of a candidate's performance must take place in a real working environment. This will apply to all units, or aspects of units, except those for which simulation has been deemed acceptable (see below). In order to ensure that the evidence used to assess candidates against the NVQ/SVQ specifications is valid, all centres must demonstrate that the candidates have access to the types of resources commonly in use in the industry and that the pressures and constraints of the workplace are reflected.

- Simulation should only be used where it is difficult to collect evidence through a real work situation, the real work environment or within an acceptable time frame.
- Simulations will usually deal with contingencies such as unexpected problems, emergencies or other incidents which will not necessarily occur frequently. Such instances are specified and should only be used where prescribed in these specifications
- All simulations must be planned, developed and documented by the centre in a way that ensures the simulation correctly reflects what the specifications seek to assess
- All simulations should follow these documented plans
- The physical environment for the simulation must be as realistic as possible and draw on real resources that would be used in the industry
- Where simulations are used they must be based in a realistic work environment and must be based on current working practice
- Simulations can only be used to supplement real work activities and should not be the only source of evidence used to indicate competence
- The use of simulation will be monitored by the external verifier to ensure that where simulations are used, they are based in a realistic work environment.

Assessment of knowledge and understanding can take place in a different environment which is not the immediate workplace. However, the assessment of this knowledge and understanding should be linked directly to workplace performance.

Witness testimony

For the assessment of workplace performance to be as natural and efficient as possible, the use of witness testimony should be encouraged and has a crucial role in the collection of evidence.

Witnesses must be fully briefed and clear about the purpose and use of the testimony. Any relationship between the witness and candidate should be declared and noted by the assessor. Witnesses must be able to demonstrate that they have the necessary expertise in the area for which they are providing testimony. This information should be noted by the assessor.

Networking opportunities

Lantra Awards holds centre meetings at least once a year for all those involved in the assessment and verification process to share good practice and keep up to date with the latest requirements of the industry.

11 Guidance for Centres

Detailed guidance on centre approval, the implementation of Diploma (NVQ/SVQ) programmes, roles and responsibilities, record keeping and administration are provided in the Lantra Awards booklet 'Guidance to NVQ/SVQ Centres'. Copies are available from Lantra Awards, free of charge.

12 Useful publications

There may be a charge for some of the publications mentioned below. Details of cost can be obtained from the relevant organisation.

Available from Lantra Awards, Lantra House, Stoneleigh Park, Coventry CV8 2LG (tel 024 7641 9703)

Information leaflet – Fencing NVQ/SVQs

Provides a summary of the contents of the NVQ/ SVQ and information about becoming a centre (free).

Information leaflet – Fencing Industry Skills Scheme

Describes the FISS/CSCS card scheme and the routes for achieving the various cards available depending on the skills and experience of the operative. Also includes information on card costs.

Guidance for NVQ/SVQ Centres

Information about how to apply for centre approval, the key roles, assessment and internal verification, external verification and sample documentation (free).

Available from Qualifications and Curriculum Authority, 83 Piccadilly, London W1J 8QA Tel: 0207 509 555 or www.qca.org.uk

NVQ Code of Practice

Provides the framework against which QCA monitors awarding bodies, and awarding bodies monitor their centres. Whilst it does not apply to SVQ centres, Lantra Awards operates both NVQs and SVQs in accordance with the NVQ Code of Practice and all centres are strongly recommended to familiarise themselves with its content.

Internal verification: a guide for internal verifiers

External verification: a guide for external verifiers

The booklets highlight the principals of quality assurance and internal/external verification and give examples of good practice.

Assessing NVQs

Essential reading for all NVQ (and SVQ) centres.

Available from the Department for Education and Skills (www.dfes.gov.uk/nvq/new.shtml)

Joint Awarding Body Guidance on Internal Verification of NVQs

The internal verifier is at the heart of quality assurance in NVQ/SVQs. This booklet provides clear guidance on good practice for internal verification, focussing on verifying assessment, developing and supporting assessors and managing quality of NVQ/SVQ delivery. Useful for anyone working towards the V1 unit.

Available from SQA, The Optima Building, 58 Robertson House, Glasgow G2 8DQ Tel: 0141 242 2214 or www.sqa.org.uk

SQA Awarding Body Criteria 2007

The Scottish equivalent to the Common Accord.

SVQ: Guidance on Learning and SVQs

A guide for assessors about how to put learning into practice in the SVQ context and suggesting ways to deal with problems.

Case Studies on Best Practice in External Verification

Contains six case studies highlighting best practice external verification over a range of external verification activities.

13 Centre support

To help centres assess knowledge and understanding, Lantra Awards has produced a question bank, which includes questions that are relevant to each element. The question bank and answers will be issued following centre approval, on disk, free of charge. The materials may be photocopied. Questions may be asked and answered in writing or orally.

We welcome suggestions from centres about other support materials which you would find useful.

14 Candidates with special needs

Our Equal Opportunities policy is set out in the Lantra Awards Customer Service Statement and includes details of the arrangements which can be made for candidates with special needs. The Customer Service Statement is available from Lantra Awards, free of charge.

15 Customer Service Statement

Our procedures for dealing with appeals, complaints and cases of malpractice are set out in our Customer Service Statement. It also includes details of our quality strategy and monitoring policy and our customer service policy, target turnaround times for registrations and certificates and how we monitor and improve our service. This booklet is issued to all approved centres, but extra copies are available from Lantra Awards.

16 Fees

Centre evaluation visit (new centres only)	£300.00 (+VAT)
Registration for the Diploma (4 or more units)	£100.00 (+VAT)
Registration for 3 or fewer units	£ 60.00* (+VAT)

These fees include:

- A certificate for the full Diploma and a certificate of unit credit stating the units achieved. Candidates who did not achieve the full Diploma will receive a unit certificate of credits achieved.
- Two visits each year from the external verifier. A visit charge of £250 will be made for visits to centres where fewer than 10 candidates are registered at the time of the visit. Where more than two visits are required in a year, a charge of £250 will normally be made.

*Candidates who registered initially for 3 or fewer units and who then want to add on further units will be charged an additional registration fee of £50.

For information about the cost of FISS/CSCS cards, please contact Lantra Awards for an information leaflet.

Fees are reviewed annually and changes will take effect from 1 April.

17 Key skills/core skills

To compliment the environmental and land-based sectors suite of National Occupational Standards, guidance has been produced to demonstrate how candidates may demonstrate their competence against core skills. This process of signposting is based upon the concept of a standard/typical portfolio. Because of this it is not possible to state that the signposting will be an exact match for all candidates

and candidates would not be expected to achieve the signposted skills through the identified opportunities alone. A full copy of the Core Skills Mapping Document is available from Lantra Awards.

18 Languages other than English

This qualification is available throughout the UK. Centres requiring materials in the medium of Welsh or Gaelic/Irish should contact Lantra Awards. Wherever possible, we will accommodate such requests. Centres may wish to refer to the Qualifications, Curriculum and Assessment Authority for Wales (Awdurdod Cymwysterau, Cwricwlwm ac Asesu Cymru (ACCAC)) website (www.accac.org.uk).

19 Other issues

QCA regulations oblige awarding bodies to identify the ways in which this qualification can contribute to:

- An understanding of spiritual, moral, ethical, social and cultural issues
- Awareness of environmental issues, health and safety considerations, and European developments, consistent with relevant international agreements.

This qualification does not contribute to an understanding of spiritual, moral, ethical, social and cultural issues however the specifications do include opportunities to develop awareness of environmental issues and health and safety considerations as shown in the table below: The Diploma is underpinned by the recognition that good practice includes an awareness of the needs of oneself, one's colleagues and the environment.

Fencing

Qualification Structure for NVQ/SVQ Level 2

The Fencing NVQ/SVQ can be achieved by one of two occupational routes – Fencing and Fencing (Vehicle Safety)

The candidate must achieve all of the four mandatory units plus the number of 'optional' units specified for a chosen occupational route.

The certificate will display the occupational route chosen i.e. 'Fencing' or 'Fencing (Vehicle Safety)'

Mandatory Units

Unit Fe1	Prepare sites for fence installation
Unit Fe2	Receive, handle and store fencing material on-site
Unit Fe7	Operate power tools and attachments
Unit CU2	Monitor and maintain health and safety

Optional Units

Group A – Fencing

The candidate must achieve Unit Fe3 plus one of the other optional units listed for Group A

Unit Fe3	Install fencing
Unit Fe5	Cast reinforced concrete
Unit Fe6	Repair fencing
Unit CU61	Assist with planting and establishing plants

Group B – Fencing (Vehicle Safety)

The candidate must achieve all three of the optional units listed for Group B

Unit Fe4	Install vehicle restraint systems
Unit Fe5	Cast reinforced concrete
Unit Fe6	Repair fencing

QCF QUALIFICATION STRUCTURE FOR LANTRA AWARDS FENCING QUALIFICATIONS

This mapping identifies the QCF units; their credit level and value and how they directly relate to the approved S/NVQ Structure for the level 2 Fencing Qualification.

Level Two Diploma in Fencing – including Vehicle Safety

S/NVQ Unit Number and Title	QCF Unit Title	QCF Credit Level	QCF Credit Value
Mandatory Units			24
Fe1 Prepare sites for fence installation	Locate and identify services and obstructions taking necessary precautions (Fe1.1)	2	3
	Establish a safe working environment (Fe1.2)	2	3
	Manually modify ground levels (Fe1.3)	2	3
	Establish lines and levels (Fe1.4)	2	4
Fe2 Receive, Handle and Store Fencing Materials on-site	Receive, handle and store materials on-site (Fe2)	2	4
Fe7 Operate Power Tools and Attachments	Prepare and operate power tools and attachments (Fe7)	2	4
CU2 Monitor and Maintain Health and Safety	Monitoring and maintaining health and safety (CU2)	2	3

Total number of credits required from Mandatory units = 24 credits @ Level Two

S/NVQ Unit Number and Title	QCF Unit Title	QCF Credit Level	QCF Credit Value
Optional Units – Group A Fencing Candidates must achieve Unit Fe3 plus one other optional unit.	Candidate must achieve Fe 3.1, 3.2, and 3.3 (18 credits) plus – at least 4 other credits		
Fe3 Install Fencing	Excavate and form foundations for fencing (Fe3.1)	2	3
	Place and fix posts (Fe3.2)	2	3
	Place and fix fencing components(Fe3.3)	2	12
Fe5 Cast Reinforced Concrete	Prepare for casting and cast concrete(Fe5)	2	10
Fe6 Repair Fencing	Inspect and repair fencing (Fe6)	2	10

S/NVQ Unit Number and Title	QCF Unit Title	QCF Credit Level	QCF Credit Value
CU61/L2/2 Assist with planting and establishing plants	Establishing plants and seeds in soil	2	4
Optional Units – Group B Fencing (Vehicle Safety)	Candidate must achieve all four units from Group B. Candidate must achieve 35 credits from Group B		
Fe4 Install Vehicle Restraint Systems	Prepare and form foundations for vehicle restraint systems(Fe4.1)	2	5
	Place and fix posts and vehicle restraint systems(Fe4.2)	2	10
Fe5 Cast Reinforced Concrete	Prepare for casting and cast concrete(Fe5)	2	10
Fe6 Repair Fencing	Inspect and repair fencing (Fe6)	2	10

To be awarded the Level 2 Diploma in Fencing - Candidates must achieve a minimum of 46 credits. 24 credits must be from the Mandatory Units; 18 credits from Fe3 and at least 4 credits must be from the Optional Units (Group A)

To be awarded the Level 2 Diploma in Fencing – Vehicle Safety -Candidates must achieve a total of 59 credits.
24 credits must be from the Mandatory Units
35 credits must be from the Optional Units (Group B)

MANDATORY QCF UNITS

This page is intentionally blank

UNIT Fe1.1 **Locate and identify services and obstructions taking necessary precautions**

TITLE	Locate and identify services and obstructions taking necessary precautions
LEVEL	2
CREDIT VALUE	3

Learner Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Work safely in line with legislation and codes of practice	1.1 Work safely in line with health and safety requirements
2. Be able to locate and identify services and obstructions both above and underground.	2.1 Identify services and obstructions from plans and instructions
	2.2 Use detection devices to identify services
	2.3 Establish clear and comprehensive warnings to identify the presence of services and obstructions
3. Be able to deal with difficulties	3.1 Deal with difficulties experienced during work within levels of responsibility
4. Know the relevant legislation and codes of practice	4.1 Outline the health and safety, legislation and codes of practice requirements associated with site preparation
	4.2 Outline the importance of permit-to-work procedures
5. Know the common services and substructures	5.1 Name common services and substructures likely to be encountered including: utility systems, drainage systems and foundations.
6. Know how to locate and identify services and substructures	6.1 Outline how to obtain data on the location of services
	6.2 Outline the procedures to follow when uncharted services or substructures are located
	6.3 Outline how to excavate to locate services and obstructions
7. Understand the procedures and safeguards for services	7.1 Explain the procedures to follow if three different types of services are damaged
	7.2 Explain how and why safeguards should be established to protect services

8. Know the precautions and hazards when excavating	8.1 Outline the precautions to take when shafts or hidden substructures are located
	8.2 Name the hazards that can occur when excavating

Additional information about the unit	
Unit purpose and aim(s)	The aim of this unit is to provide the learner with the knowledge, understanding and skills required to enable learners to locate and identify services and obstructions under minimal direction or guidance
Unit expiry date	31 December 2010
Details of the relationship between the unit and relevant national occupational standards or other professional standards or curricula (if appropriate)	FE1.1
Assessment requirements or guidance specified by a sector or regulatory body (if appropriate)	Assessment to be based on naturally occurring evidence of realistic working environment
Support for the unit from a SSC or other appropriate body (if required)	Not applicable
Location of the unit within the subject/sector classification system	
Name of the organisation submitting the unit	Lantra – The Sector Skills Council for Land-based and Environmental Industries
Availability for use	Open
Unit available from	April 2008
Unit guided learning hours	30

Fe1.2 Establish a safe working environment

TITLE	Establish a safe working environment
LEVEL	2
CREDIT VALUE	3

Learner Outcomes	Assessment Criteria
The learner will:	The learner can:
1 Be able to establish a safe working environment for self, colleagues and members of the public	1.1 Work in a way which promotes health and safety, is consistent with relevant legislation and codes of practice
	1.2 Use and set-up signs and barriers to protect people and create a safe working environment
	1.3 Monitor and maintain signs and protective barriers in good working order, according to level of responsibility
	1.4 Identify failures and report those which fall outside the level of responsibility
	1.5 Safely remove and store signs and protective barriers after use
2 Know how to establish a safe working environment	2.1 List the reasons for traffic management when working adjacent to highways and other transport systems
	2.2 Name the types of signs and protective barriers appropriate to the activities
	2.3 Outline the storage requirements of signs and protective barriers
3 Know the relevant legislation and codes of practice	3.1 Outline the health and safety requirements associated with sign and barrier installation including permits to work schemes

Additional information about the unit	
Unit purpose and aim(s)	The aim of this unit is to provide the learner with the knowledge, understanding and skills required to establish a safe working environment for self, colleagues and members of the public under minimal direction or guidance
Unit expiry date	31 December 2010
Details of the relationship between the unit and relevant national occupational standards or other professional standards or curricula (if appropriate)	FE1.2
Assessment requirements or guidance specified by a sector or regulatory body (if appropriate)	Assessment to be based on naturally occurring evidence of realistic working environment
Support for the unit from a SSC or other appropriate body (if required)	Not applicable
Location of the unit within the subject/sector classification system	
Name of the organisation submitting the unit	Lantra – The Sector Skills Council for Land-based and Environmental Industries
Availability for use	Open
Unit available from	April 2008
Unit guided learning hours	30

Fe1.3 Manually modify ground levels

TITLE	Manually modify ground levels
LEVEL	2
CREDIT VALUE	3

Learner Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Work safely in line with legislation and codes of practice	1.1 Work safely in line with health and safety requirements
	1.2 Complete work in a way which causes minimal disturbance to the environment
	1.3 Dispose of waste and excess materials safely according to specification
2. Be able to select, use and maintain tools and equipment	2.1 Select and prepare hand tools, equipment and resources ready for use
	2.2 Maintain tools, equipment and resources in a clean and serviceable condition throughout ground preparation work
3. Be able to manually modify ground levels	3.1 Obtain and work to specification
	3.2 Use recommended working practices to modify ground levels by excavating, filling, levelling and grading
4. Be able to deal with difficulties	4.1 Deal with difficulties experienced during ground work according to levels of responsibility
5. Know the relevant legislation and codes of practice	5.1 Outline the health and safety, legislation and codes of practice associated with manual ground works
	5.2 Describe the legal requirements controlling the disposal of waste
6. Know how to manually modify ground levels.	6.1 Outline the techniques used to modify ground levels to conform to specification
	6.2 Identify different ground type characteristics
	6.3 Outline the methods used to reinstate ground characteristics

Additional information about the unit	
Unit purpose and aim(s)	The aim of this unit is to provide the learner with the knowledge, understanding and skills required to manually modify ground levels by: excavating, filling, levelling and grading under minimal direction or guidance
Unit expiry date	31 December 2010
Details of the relationship between the unit and relevant national occupational standards or other professional standards or curricula (if appropriate)	FE1.3
Assessment requirements or guidance specified by a sector or regulatory body (if appropriate)	Assessment to be based on naturally occurring evidence of realistic working environment
Support for the unit from a SSC or other appropriate body (if required)	Not applicable
Location of the unit within the subject/sector classification system	
Name of the organisation submitting the unit	Lantra – The Sector Skills Council for Land-based and Environmental Industries
Availability for use	Open
Unit available from	April 2008
Unit guided learning hours	30

Fe1.4 Establish lines and levels

TITLE	Establish lines and levels
LEVEL	2
CREDIT VALUE	4

Learner Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Work safely in line with legislation and codes of practice	1.1 Work safely in line with health and safety requirements
2. Be able to select and prepare tools and equipment	2.1 Select and prepare tools, equipment and resources ready for use
3. Be able to establish lines and levels	3.1 Obtain and work to specification
	3.2 Identify and report any significant variations between specified and actual site dimensions
	3.3 Use string lines, profiles, reference point, tape and spirit level to establish lines and levels to form straight lines, right angles and simple curves according to specifications
	3.4 Establish protection for lines and levels
4. Be able to deal with difficulties	4.1 Deal with difficulties experienced during work within level of responsibility
5. Know how to establish lines and levels.	5.1 Outline the reasons for and methods of establishing reference points
	5.2 Outline the methods of transferring levels
	5.3 Identify the possible causes of variations between specified and actual site dimensions
	5.4 Outline the methods used for marking out using lines, pegs and markers
	5.5 Outline the methods used for marking and setting profiles and pegs
	5.6 Outline the methods used for establishing angles
	5.7 Outline how to form simple curves using the radius of a circle

	5.8 Outline the methods used for protecting reference points from movement
6. Know the relevant legislation and codes of practice	6.1 Outline the health and safety, legislation and codes of practice associated with the establishment of lines and levels
	6.2 State the legal implications associated with establishing lines and levels e.g. relating to footpaths, old fence lines etc.

Additional information about the unit	
Unit purpose and aim(s)	The aim of this unit is to provide the learner with the knowledge, understanding and skills required to establish lines and levels using string lines, profiles, reference points, tapes and spirit levels and visual sightings to form straight lines, right angles and simple curves under minimal direction or guidance
Unit expiry date	31 December 2010
Details of the relationship between the unit and relevant national occupational standards or other professional standards or curricula (if appropriate)	FE1.4
Assessment requirements or guidance specified by a sector or regulatory body (if appropriate)	Assessment to be based on naturally occurring evidence of realistic working environment
Support for the unit from a SSC or other appropriate body (if required)	Not applicable
Location of the unit within the subject/sector classification system	
Name of the organisation submitting the unit	Lantra – The Sector Skills Council for Land-based and Environmental Industries
Availability for use	Open
Unit available from	April 2008
Unit guided learning hours	40

Fe2 Receive, handle and store materials on-site

TITLE	Receive, handle and store materials on-site
LEVEL	2
CREDIT VALUE	4

Learner Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Work safely in line with legislation and codes of practice	1.1 Work safely in line with health and safety requirements
	1.2 Use recognised manual handling techniques
2. Be able to receive materials on-site	2.1 Obtain information to be able to receive and store any three of the following materials on-site: <ul style="list-style-type: none"> • loose, • packaged, • palletted; and • coiled
	2.2 Check type, quality and quantity of delivered materials against specification
	2.3 Deal with identified discrepancies and non-conforming product
3. Be able to handle and store materials on-site	3.1 Handle materials according to their characteristics
	3.2 Store materials safely in designated area according to material requirements
	3.3 Establish protection for materials to prevent loss, environmental and physical damage
	3.4 Maintain condition and cleanliness of work area throughout
4. Be able to deal with difficulties	4.1 Deal with difficulties experienced during work within levels of responsibility
	4.2 Request advice on how to deal with difficulties outside level of own responsibility
5. Know the legislation and codes of practice for receiving, handling and storing materials	5.1 Outline the health and safety and legislative requirements associated with material handling and storage
	5.2 Outline the safeguards to take when handling hazardous materials

	5.3 Name the types of personal protective clothing required when handling materials
	5.4 Outline the manual (kinetic) handling procedures for personal safety
6 Know how to receive, handle and store materials on-site	6.1 List the types and purposes of information sources relating to receiving and storing materials
	6.2 Outline the purpose and correct use of spacer battens during storage
	6.3 Outline the importance of stock rotation procedures related to shelf life
	6.4 Outline the effects of weather on materials and describe the preventative actions to be taken to limit these effects

Additional information about the unit	
Unit purpose and aim(s)	The aim of this unit is to provide the learner with the knowledge, understanding and skills required to enable learners to receive, handle and store materials on-site under minimal direction or guidance
Unit expiry date	31 December 2010
Details of the relationship between the unit and relevant national occupational standards or other professional standards or curricula (if appropriate)	FE2.1
Assessment requirements or guidance specified by a sector or regulatory body (if appropriate)	<p>Assessment to be based on naturally occurring evidence of realistic working environment</p> <p>Where lifting equipment is used to facilitate the unloading of equipment, it must only be used by individuals who have attained the relevant legal certification. Achievement of this unit does not represent a legal certificate covering the operation of lifting equipment.</p>
Support for the unit from a SSC or other appropriate body (if required)	Not applicable
Location of the unit within the subject/sector classification system	
Name of the organisation submitting the unit	Lantra – The Sector Skills Council for Land-based and Environmental Industries
Availability for use	Open
Unit available from	April 2008
Unit guided learning hours	40

Fe7 Prepare and operate power tools and attachments

TITLE	Prepare and operate power tools and attachments.
LEVEL	2
CREDIT VALUE	4

Learner Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Be able to work safely and in-line with requirements	1.1 Carry out work safely in line with health and safety requirements and codes of practice
	1.2 Select and prepare personal protective equipment according to hazards presented by power tool, attachments and selected task
2. Prepare power tools and attachments for use	2.1 Carry out pre-start checks in accordance with manufactures' procedures and practices for cleanliness, lubricates, fuels and coolants and safety features
3. Use power tools and attachments safely to achieve specified work requirement	3.1 Establish a safe working area for tool usage
	3.2 Carry out start and stop procedures to confirm functions are in accordance with safe control and the manufacturer's operating instructions
	3.3 Modify work activities to take account of changes to prevailing weather conditions
	3.4 Work using methods and activities which minimise disturbance and damage to the environment
	3.5 Identify and report any defects in performance
	3.6 Deal with defects within level of responsibility
	3.7 Report defects which fall outside own level of responsibility
	3.8 Use corrective actions in response to problems with power tool and attachment
4. Be able to carry out post-stop checks and store tools	4.1 Complete post-stop checks in accordance with manufacturer's instructions for cleanliness, lubricates, fuels and coolants

	4.2 Clean and store tools and attachments securely, in accordance with manufacturer's recommendations.
5. Know the relevant legislation and codes of practice	5.1 Outline the health and safety requirements associated with power tools and equipment
	5.2 State the types, purpose and uses of personal protective equipment
	5.3 Outline the hazards associated with the use of different types of power tools and attachments
	5.4 State responsibilities with regard to power tool operating regulations and instructions
	5.5 Outline the environmental impact/disturbance which can be caused by inappropriate use of power tools
6. Understand the use of power tools	6.1 Explain the types, purpose, uses and limitations of power tools and attachments
	6.2 Explain the types of performance defects associated with power tools and their attachments
	6.3 Describe common defects found with power tools and their attachments
7 Know how to prepare and use power tools and attachments	7.1 State the importance of completing pre-start and post-stop checks
	7.2 Outline reasons for the correct methods of storage
	7.3 Outline the corrective actions to take in response to identified problems when using power tools
	7.4 Outline why it is necessary to modify work activities to take account of changes in the prevailing weather

Additional information about the unit	
Unit purpose and aim(s)	The aim of this unit is to provide the learner with the knowledge, understanding and skills required to operate power tools and equipment under minimal direction or guidance. It relates to the safe operation of power tools. This unit is aimed at fence installers who use power tools and attachments as a part of their job role. Power tools such as: grinders, saws, compactors etc can be used.
Unit expiry date	31 December 2010
Details of the relationship between the unit and relevant national occupational standards or other professional standards or curricula (if appropriate)	Fe 7.1,2
Assessment requirements or guidance specified by a sector or regulatory body (if appropriate)	Assessment to be based on naturally occurring evidence of realistic working environment This unit does not provide a licence to practice and the relevant training and certification must be achieved for each piece of equipment
Support for the unit from a SSC or other appropriate body (if required)	Not applicable
Location of the unit within the subject/sector classification system	
Name of the organisation submitting the unit	Lantra – The Sector Skills Council for Land-based and Environmental Industries
Availability for use	Open
Unit available from	Lantra SSC
Unit guided learning hours	40

CU2 Monitoring and maintaining health and safety

TITLE	Monitoring and maintaining health and safety
LEVEL	2
CREDIT VALUE	3

Learner Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Be able to maintain health, safety and security in the workplace.	1.1 Identify health and safety risks in relation to the workplace covering the following: <ul style="list-style-type: none"> • people • equipment & materials • the work area
	1.2 Carry out specified measures to control risks and keep the appropriate people fully informed.
	1.3 Seek guidance on measures to control unfamiliar risks arising from non-routine work situations
	1.4 Relay health and safety information to others in a manner likely to be understood
	1.5 Take the appropriate action without delay as soon as an emergency is suspected
	1.6 Dispose of hazardous and non-hazardous waste safely and appropriately
	1.7 Maintain the security of the workplace in accordance with organisational requirements
2. Be able to use equipment and materials safely	2.1 Use equipment and materials in accordance with manufacturers' instructions and any organisational training
	2.2 Transport any equipment and materials safely and store them correctly at an approved location when not in use
3. Know the systems and procedures for maintaining health, safety and security.	3.1 State the organisational requirements with regard to ensuring the security of the workplace
	3.2 Describe the roles and responsibilities for health and safety in the workplace under organisational policy and legislation
	3.3 State why inadequate measures to control risks should be reported.

	3.4 Describe procedures for different types of emergencies appropriate to the relevant industry
	3.5 Explain how the procedures for specific emergencies may be affected by location
	3.6 Identify different types of fire extinguishers and their use, relevant to the work area
	3.7 Describe the different forms of waste and appropriate methods of disposal
	3.8 Explain the relationship between security and safety within the workplace
	3.9 List any specific risks relevant to child safety in the workplace
	3.10 State who and why accidents should be reported
4. Understand why equipment is transported and stored safely.	4.1 Explain how to transport and store equipment and materials safely
5. Know the reason for following manufacturers' guidance	5.1 State the importance of following manufacturers' and organisational instructions and the potential consequences and risks of not doing so
6. Maintain good standards of health and safety for self and for others	6.1 Supply the necessary personal medical information in accordance with organisational requirements
	6.2 Use and care for the correct personal protective equipment and clothing necessary for work
	6.3 Use approved methods of handling when moving and lifting items
	6.4 Use the appropriate personal and workplace hygiene at all times
	6.5 Provide accurate information about location so that contact can be made if necessary
	6.6 Work in a way which minimises risk to self, others and the environmental.
	6.7 Take appropriate action where incidents affect the health and safety of workers
	6.8 Report incidents without delay and complete records accurately, legibly and completely
7. Understand how to maintain the health and safety of self and others	7.1 Explain the roles in maintaining health and safety
	7.2 Explain the reasons for leaving information about location when working in isolation or in remote locations

	7.3 Explain why accidents should be reported without delay and recorded in the appropriate document
	7.4 Explain the methods of minimizing environmental damage during work
8. Know the safe lifting techniques	8.1 Describe the safe methods for moving and lifting items
9. Know how to maintain health and safety	9.1 Describe the reasons for maintaining good personal and workplace hygiene
	9.2 State own ability to deal with health and safety emergencies (e.g. not carrying out actions beyond capabilities).
	9.3 Describe how to administer basic emergency first aid procedures
	9.4 Identify the types of personal protective equipment and clothing needed for work and how they must be used, cleaned, stored, inspected and replaced

Additional information about the unit	
Unit purpose and aim(s)	The aim of this unit is to provide the learner with the knowledge, understanding and skills required to maintain a healthy and safe working environment under minimal guidance or direction. Learners should be familiar with the health and safety policy and understand their responsibilities under the policy.
Unit expiry date	31 December 2010
Details of the relationship between the unit and relevant national occupational standards or other professional standards or curricula (if appropriate)	CU 2.1, 2.2
Assessment requirements or guidance specified by a sector or regulatory body (if appropriate)	Assessment to be based on naturally occurring evidence of realistic working environment
Support for the unit from a SSC or other appropriate body (if required)	Not applicable
Location of the unit within the subject/sector classification system	
Name of the organisation submitting the unit	Lantra – The Sector Skills Council for Landbased and Environmental Industries
Availability for use	Open
Unit available from	Lantra SSC
Unit guided learning hours	30

Fe4.1 Prepare and form foundations for vehicle restraint systems

TITLE	Prepare and form foundations for vehicle restraint systems
LEVEL	2
CREDIT VALUE	5

Learner Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Be able to work safely in line with of legislation and codes practice	1.1 Work safely in line with health and safety requirements
	1.2 Dispose of waste and excess materials safely according to specification
	1.3 Complete work in a manner which causes minimal disturbance to the environment
2. Be able to select, use and maintain tools	2.1 Select and prepare tools, equipment and resources ready for use
	2.2 Use and maintain tools, equipment and resources in a clean and serviceable condition.
3. Prepare foundations for vehicle restraint systems	3.1 Obtain and confirm understanding of fencing specification
	3.2 Use recommended working practices to excavate ground to conform with required specification
	3.3 Deal with difficulties experienced during work within level of responsibility
4. Form foundations for vehicle restraint systems	4.1 Use recommended methods to place concrete and compact to form for foundation strength, size, profile and finish
	4.2 Establish provision to support the future installation of posts
5. Know how to prepare foundations for vehicle restraint systems	5.1 Outline how to obtain drawing specifications for systems to be installed
	5.2 Name the types of equipment used for excavating post hole and strip trenches

	5.3 Describe how and when temporary supports should be used to support excavations
6. Know how to form foundations for vehicle restraint systems	6.1 Outline the materials and ratios used in concrete
	6.2 Outline the methods used for mixing, placing, compacting, finishing and curing concrete
	6.3 Outline the methods used for forming pockets in concrete for future fixing
	6.4 Outline the techniques used for casting-in fixing items
	6.5 Outline the relevant standards and specifications
7. Know the relevant legislation and codes of practice	7.1 Outline the health and safety requirements associated with excavation work including the legal restrictions on power tool use
	7.2 Describe the environmental issues associated with the disposal of waste and surplus concrete

Additional information about the unit	
Unit purpose and aim(s)	The aim of this unit is to provide the learner with the knowledge, skills and understanding required for preparing and forming foundations for vehicle restraint systems. This unit is aimed at those who work in fencing in association with vehicle safety work. The learner will be working under minimal direction or guidance
Unit expiry date	31 December 2010
Details of the relationship between the unit and relevant national occupational standards or other professional standards or curricula (if appropriate)	FE4.1
Assessment requirements or guidance specified by a sector or regulatory body (if appropriate)	Assessment to be based on naturally occurring evidence of realistic working environment Specification - List of required characteristics including: type of fence, height, materials to be used etc.
Support for the unit from a SSC or other appropriate body (if required)	Not applicable
Location of the unit within the subject/sector classification system	5.2
Name of the organisation submitting the unit	Lantra – The Sector Skills Council for Landbased and Environmental Industries
Availability for use	Open
Unit available from	April 2008
Unit guided learning hours	50

Fe4.2 Place and fix posts and vehicle restraint systems

TITLE	Place and fix posts and vehicle restraint systems
LEVEL	2
CREDIT VALUE	10

Learner Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Be able to work safely in line with legislation and codes of practice	1.1 Work safely in line with health and safety requirements
	1.2 Complete work in a manner which causes minimal disturbance to the environment
	1.3 Dispose of waste and excess materials safely to minimise environmental risk, according to legal requirements
2. Be able to use and maintain tools and equipment	2.1 Select and prepare tools, equipment and resources ready for use
	2.2 Use and maintain tools, equipment and resources in a clean and serviceable condition throughout
3. Place and fix post systems	3.1 Obtain fencing materials of specified type, material, quality and grade
	3.2 Use three of the following methods to position and fix posts at specified line, level and angle: (i) driving (ii) bolting (iii) casting (iv) socketing (v) backfilling and consolidating
	3.3 Use recommended working practices to position and securely fix the following components and anchor points to specification: (i) posts (ii) surface mounted anchors (iii) post extensions (iv) reinforcement rings (v) fastening

4. Place and fix vehicle restraint systems	4.1 Use three of the following methods to assemble and fix components to meet specification: (i) positioning preformed beams to posts (ii) jointing (iii) fastenings (iv) positioning wire rope to posts
	4.2 Use recommended working practices to position, tension and securely fix assembled components at specified line and level
	4.3 Outline the methods used for handling and positioning posts
	4.4 Maintain the integrity of protective finishes during fixing
5. Be able to deal with difficulties	5.1 Deal with difficulties experienced during work within level of responsibility
6. Know the relevant legislation and codes of practice	6.1 Outline the health and safety, legislation and codes of practice requirements associated placing and fixing fencing components
	6.2 Outline the safeguards to be taken during fixing of fencing materials
7. Know how to place and fix posts	7.1 Describe the methods used for aligning and levelling posts
	7.2 Outline the factors that affect the positioning and the method of fixing posts and components
	7.3 Outline the methods used for providing temporary supports to posts set in concrete
	7.4 State the reasons for, and methods of, setting posts to allow for tensioning
	7.5 Name the types of backfill and methods of consolidation
8. Know how to fix vehicle restraint systems.	8.1 Identify the components used in association with vehicle safety fencing including their use

	8.2 Outline the precautions to take to avoid distortion during tensioning process to fencing / fencing materials (if relevant)
	8.3 Outline the relevant standards and specifications for vehicle restrain systems
	8.4 Describe the methods used for assembling fencing and fencing components
	8.5 Describe the methods used for fixing fence materials to posts
	8.6 Outline the reasons for, and methods of, tensioning fencing materials
9. Know the types of fencing	9.1 Outline the different types and application of fencing materials
	9.2 State the different types and construction of vehicle safety fencing systems
10. Understand the purpose of protective finishes	10.1 Explain the reasons for and methods of, maintaining integrity of protective finishes

Additional information about the unit	
Unit purpose and aim(s)	The aim of this units is to provide the learner with the knowledge, understanding and skills required to install vehicle restraint systems. This unit is aimed at those who work in fencing in association with vehicle safety work. The learner will be working under minimal direction or guidance.
Unit expiry date	31 December 2010
Details of the relationship between the unit and relevant national occupational standards or other professional standards or curricula (if appropriate)	FE4.2,3
Assessment requirements or guidance specified by a sector or regulatory body (if appropriate)	Assessment to be based on naturally occurring evidence of realistic working environment Specification - List of required characteristics including: type of fence, height, materials to be used etc.
Support for the unit from a SSC or other appropriate body (if required)	Not applicable
Location of the unit within the subject/sector classification system	5.2
Name of the organisation submitting the unit	Lantra – The Sector Skills Council for Landbased and Environmental Industries
Availability for use	Open
Unit available from	April 2008
Unit guided learning hours	100

Fe5 Prepare for casting and cast concrete

TITLE	Prepare for casting and cast concrete
LEVEL	2
CREDIT VALUE	10

Learner Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Work safely in line with legislation and codes of practice	1.1 Work safely in line with health and safety requirements
	1.2 Dispose of waste and excess materials safely according to specification
	1.3 Complete work in a manner which causes minimal disturbance to the environment
2. Be able to select, prepare and maintain tools and equipment	2.1. Select and prepare tools, equipment and resources ready for use
	2.2 Use and maintain tools, equipment and resources in a clean and serviceable condition throughout
3. Be able to deal with difficulties	3.1 Deal with difficulties experienced during work within level of responsibility
4. Prepare for casting	4.1 Obtain and confirm understanding of fencing specification
	4.2 Prepare and fix formwork to specification made by self and others, made from rod and mesh
	4.3 Position and secure reinforcement to specification
5. Cast concrete	5.1 Select concrete of specified type, material, quality and grade
	5.2 Place and compact concrete to form components of specified strength, shape and finish, both above and below ground

	5.3 Monitor setting process and identify when concrete is set
	5.4 Strike formwork without damaging concrete
	5.5 Establish protection for newly cast concrete
6 Know the relevant legislation and codes of practice	6.1 Outline the health and safety requirements and legislation associated with the preparations and casting concrete
	6.2 Describe the hazards and safety requirements associated with release agents
	6.3 Outline the environmental issues associated with the disposal of waste, materials and excess concrete
7 Know how to prepare for casting	7.1 Outline the types of equipment and materials used to create formwork
	7.2 Outline why concrete is reinforced and name the types of materials which are used as reinforcement
	7.3 Describe how and why release agents are used to prepare formwork
8 Know how to cast concrete	8.1 State the materials and ratios used in concrete
	8.2 Describe the methods used for mixing, placing, compacting, finishing and curing concrete
	8.3 Outline the methods used for providing temporary supports to items set in concrete
	8.4 Outline how to compact concrete
	8.5 Outline how to identify when concrete is set
	8.6 Outline how environmental conditions can affect the concrete curing process

	8.7 State why it is important to establish protection for newly set concrete
	8.8 Describe the common faults associated with reinforced concrete and how these can be avoided

Additional information about the unit	
Unit purpose and aim(s)	The aim of this unit is to provide the learner with the knowledge, understanding and skills required to enable learners to prepare for casting and cast reinforced concrete as part of fence construction under minimal direction or guidance
Unit expiry date	31 December 2010
Details of the relationship between the unit and relevant national occupational standards or other professional standards or curricula (if appropriate)	FE 5.1, 5.2
Assessment requirements or guidance specified by a sector or regulatory body (if appropriate)	Assessment to be based on naturally occurring evidence of realistic working environment
Support for the unit from a SSC or other appropriate body (if required)	Not applicable
Location of the unit within the subject/sector classification system	5.2
Name of the organisation submitting the unit	Lantra – The Sector Skills Council for Landbased and Environmental Industries
Availability for use	Open
Unit available from	April 2008
Unit guided learning hours	100

Fe6 Inspect and repair fencing

TITLE	Inspect and repair fencing
LEVEL	2
CREDIT VALUE	10

Learner Outcomes	Assessment Criteria
The learner will:	The learner can:
1. Work safely and in line with requirements	1.1 Work safely in line with health and safety requirements
	1.2 Establish safeguards to protect people and the surrounding environment according to legal requirements
	1.3 Dispose of waste and excess materials safely according to specification
2. Be able to deal with difficulties	2.1 Deal with difficulties experienced during work within levels of responsibility
3. Select, prepare and maintain tools	3.1 Select and prepare tools, equipment and resources ready for use
	3.2 Maintain tools, equipment and resources in a clean and serviceable condition throughout
4. Inspect fencing to identify defects	4.1 Identify fencing specifications
	4.2 Visually inspect fencing to identify defects for three of the following: <ul style="list-style-type: none"> • damaged components • damaged supports • defective preservation • ground or surface movements
	4.3 Measure the dimensions of fencing and fencing components using equipment as appropriate
	4.4 Record defects accurately
5. Suggest and agree repair options	5.1 Suggest repair options for restoration of the integrity of the fence and its fitness for purpose
	5.2 Select and agree the repair option and resources to meet specification and to meet given resource availability
6. Reinststate defective fencing	6.1 Obtain fencing materials of specified type, material, quality and grade
	6.2 Remove defective fencing components limiting damage to surrounding components and the environment

	6.3 Use recommended working practices to reinstate fencing to conform with specification for two of the following methods: <ul style="list-style-type: none"> • component replacement • post replacement • application of protective finishes • ground modifications
	6.4 Maintain the integrity of protective finishes during fixing
7. Know the relevant legislation and codes of practice	7.1 Outline the health and safety requirements associated with fence inspection
	7.2 Describe methods of disposing of surplus waste and surplus spoil
	7.3 Outline safeguards to be taken when clearing sites
	7.4 Describe the hazards and risks involved in fence installation carried out at heights.
	7.5 Identify security precautions required when clearing sites
	7.6 Identify the safeguards to be taken during fixing of fencing materials
8. Know how to inspect fences	8.1 List the factors to be considered during inspection
	8.2 Describe how to recognise component sizes and dimensions
	8.3 Explain the advantages and disadvantages of component replacement, or repair
	8.4 Outline how resource limitations can impact on repair options
	8.5 List common defects associated with different fence types, the condition of materials and changes in ground condition
9. Know the different types of fencing materials and methods used to reinstate fences	9.1 Suggest different types of fencing materials
	9.2 Identify different types and construction of fencing
	9.3 Describe the methods used for assembling fencing and fencing components
	9.4 Describe the methods used for fixing fence materials to posts
	9.5 List the reasons for and methods of, maintaining integrity of protective finishes

Additional information about the unit	
Unit purpose and aim(s)	The aim of this unit is to provide the learner with the knowledge, understanding and skills required to enable learners to inspect, recommend and agree repair options and carry out repairs under minimal direction or guidance
Unit expiry date	31 December 2010
Details of the relationship between the unit and relevant national occupational standards or other professional standards or curricula (if appropriate)	FE6.1,2
Assessment requirements or guidance specified by a sector or regulatory body (if appropriate)	Assessment to be based on naturally occurring evidence of realistic working environment
Support for the unit from a SSC or other appropriate body (if required)	Not applicable
Location of the unit within the subject/sector classification system	
Name of the organisation submitting the unit	Lantra – The Sector Skills Council for Land-based and Environmental Industries
Availability for use	Open
Unit available from	April 2008
Unit guided learning hours	100

This page is intentionally blank