

Pearson Edexcel Level 2 NVQ Diploma in Sub-structure Work Occupations (Construction) (QCF)

Specification

Edexcel NVQ/competence-based qualifications (QCF)

First registration June 2013

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Qualification title covered by this specification

This specification provides the information you need to offer the Pearson Edexcel Level 2 NVQ Diploma in Sub-structure Work Occupations (Construction) (QCF):

Qualification title	Qualification Number (QN)	Accreditation start date
Pearson Edexcel Level 2 NVQ Diploma in Sub-structure Work Occupations (Construction) (QCF)	600/9095/9	10/05/13

This qualification has been accredited within the Qualifications and Credit Framework (QCF) and is eligible for public funding as determined by the Department for Education (DfE) under Section 96 of the Learning and Skills Act 2000.

The qualification title listed above features in the funding lists published annually by the DfE and the regularly updated website. The title will also appear on the Learning Aim Reference Application (LARA), where relevant.

You should use the QN when you seek public funding for your learners. Each unit in a qualification will also have a QCF unit reference number, which is stated in each unit.

The QCF qualification title and unit reference numbers will appear on learners' final certification document. Learners need to be made aware of this when they are recruited by the centre and registered with Edexcel.

This title replaces the following qualification from June 2013:

Qualification title	Qualification Number (QN)	Accreditation start date	Accreditation end date
Pearson Edexcel Level 2 NVQ Diploma in Sub-structure Work Occupations (Construction) (QCF)	600/4182/1	02/12/11	30/04/13

Key features of the Pearson Edexcel Level 2 NVQ Diploma in Sub-structure Work Occupations (Construction) (QCF)

This qualification:

- is nationally recognised
- is based on the ConstructionSkills National Occupational Standards (NOS). The NOS, assessment requirements/strategy and qualification structure(s) are owned by ConstructionSkills.

The Pearson Edexcel Level 2 NVQ Diploma in Sub-structure Work Occupations (Construction) (QCF) has been approved as a component for the ConstructionSkills Apprenticeship framework.

What is the purpose of this qualification?

This qualification is appropriate for employees in the construction and the built environment sector working across a broad range of areas. It is designed to assess occupational competence in the workplace where learners are required to demonstrate skills and knowledge to a level required in the construction industry.

Who is this qualification for?

This qualification is for learners aged 16 and above who are capable of reaching the required standards.

Edexcel's policy is that the qualification should:

- be free from any barriers that restrict access and progression
- ensure equality of opportunity for all wishing to access the qualification
- be offered to learners who have been recruited with integrity by the centre.

What are the benefits of this qualification to the learner and employer?

This qualification allows learners to demonstrate competence against National Occupational Standards which are based on the needs of the construction industry as defined by ConstructionSkills, the Sector Skills Council. As such it contributes to the development of skilled labour in the sector. The qualification may contribute towards the competence element of an Apprenticeship.

What are the potential job roles for those working towards this qualification?

- Piling Engineer, Piling Contractor, Excavator, Plant Operator.

What progression opportunities are available to learners who achieve this qualification?

This qualification allows learners to demonstrate competence in sub-structure work occupations at a level required by the construction and the built environment industry. Learners can progress across the level and size of the construction and the built environment competence and knowledge qualification and into other occupational areas such as team leading and management.

Further information is available in *Annexe A*.

What is the qualification structure for the Pearson Edexcel Level 2 NVQ Diploma in Sub-structure Work Occupations (Construction) (QCF)?

Individual units can be found in the *Units* section.

To achieve this qualification, learners must complete a minimum of 40 credits, including 10 mandatory credits from Group A and one of the pathways from Group B. Learners may choose to complete additional credits from Group C, however these will not count towards the minimum credit value for the qualification.

		Credits
Pathway 1	Pearson Edexcel Level 2 NVQ Diploma in Sub-structure Work Occupations (Underpinning Operations – Excavated Underpinning)	61
Pathway 2	Pearson Edexcel Level 2 NVQ Diploma in Sub-structure Work Occupations (Underpinning Operations – Mini Piling)	59
Pathway 3	Pearson Edexcel Level 2 NVQ Diploma in Sub-structure Work Occupations (Chemical Grouting)	56
Pathway 4	Pearson Edexcel Level 2 NVQ Diploma in Sub-structure Work Occupations (Preformed Piles)	62
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Pathway 8	Pearson Edexcel Level 2 NVQ Diploma in Sub-structure Work Occupations (Dewatering – Ejectors)	42
Pathway 9	Pearson Edexcel Level 2 NVQ Diploma in Sub-structure Work Occupations (Ground Anchors – Driven)	47
Pathway 10	Pearson Edexcel Level 2 NVQ Diploma in Sub-structure Work Occupations (Ground Anchors – Open Hole)	50
Pathway 11	Pearson Edexcel Level 2 NVQ Diploma in Sub-structure Work Occupations (Box Beam Post Tensioning)	50

		Credits
Pathway 12	Pearson Edexcel Level 2 NVQ Diploma in Sub-structure Work Occupations (Resin and Grout Injection Operations)	51
Pathway 13	Pearson Edexcel Level 2 NVQ Diploma in Sub-structure Work Occupations (Installation of Gas Membranes)	41

Pearson Edexcel Level 2 NVQ Diploma in Sub-structure Work Occupations (Construction) (QCF)

Unit no.	Unit reference number	A - Mandatory units for all pathways (credit value: 10)	Credit	Level	GLH
1	A/503/1170	Conforming to General Health, Safety and Welfare in the Workplace	2	1	7
2	J/503/1169	Conforming to Productive Working Practices in the Workplace	3	2	10
3	F/503/1171	Moving, Handling and Storing Resources in the Workplace	5	2	17

B - Pathways

Unit no.	Unit reference number	B1 – Mandatory unit for pathway 1 (credit value: 11)	Credit	Level	GLH
4	A/600/8109	Setting Out for Basic Underpinning in the Workplace	11	2	37
Unit no.	Unit reference number	O1 – Optional units for pathway 1 (credit value: 40, three units)	Credit	Level	GLH
5	M/600/8107	Erecting and Striking Formwork for Excavated Underpinning in the Workplace	18	2	60
6	T/600/8108	Installing Reinforcement Steel in the Workplace	16	2	53
7	M/600/8110	Excavating for Underpinning in the Workplace	13	2	43
8	A/600/8112	Installing Drypacking in the Workplace	14	2	47
9	Y/600/8165	Placing and Compacting Concrete in the Workplace	13	2	43

Unit no.	Unit reference number	B2 – Mandatory units for pathway 2 (credit value: 49)	Credit	Level	GLH
4	A/600/8109	Setting Out for Basic Underpinning in the Workplace	11	2	37
10	J/600/8114	Installing Mini-piles in the Workplace	30	2	100
11	J/600/7111	Carrying out Checks and/or Basic Maintenance on Plant or Machinery in the Workplace	8	2	27

Unit no.	Unit reference number	B3 – Mandatory units for pathway 3 (credit value: 46)	Credit	Level	GLH
12	T/503/9560	Establishing Work Area Protection and Safety in the Workplace	10	2	33
13	F/600/8225	Preparing for Chemical Grouting and Soil Injection in the Workplace	18	2	60
14	J/600/8226	Carrying Out Chemical Grouting and Soil Injection in the Workplace	18	2	60

Unit no.	Unit reference number	B4 – Mandatory units for pathway 4 (credit value: 52)	Credit	Level	GLH
12	T/503/9560	Establishing Work Area Protection and Safety in the Workplace	10	2	33
15	L/600/8227	Preparing to Install Preformed Piles in the Workplace	18	2	60
16	Y/600/8229	Installing Preformed Piles in the Workplace	24	2	80

Unit no.	Unit reference number	B5 – Mandatory units for pathway 5 (credit value: 22)	Credit	Level	GLH
12	T/503/9560	Establishing Work Area Protection and Safety in the Workplace	10	2	33
17	D/600/8099	Preparing and Operating Specialised Powered Tools and Equipment in the Workplace	4	2	13
18	L/600/8101	Setting Out Secondary Dimensional Work Control in the Workplace	8	2	27
Unit no.	Unit reference number	O5 – Optional units for pathway 5 (credit value: 30, one unit)	Credit	Level	GLH
19	L/600/8230	Installing Mass Gravity Retaining Structures in the Workplace	30	2	100
20	Y/600/8232	Installing Precast Concrete Retaining Structures in the Workplace	30	2	100
21	K/600/8235	Installing Reinforced Soil Retaining Structures and Slopes in the Workplace	30	2	100
22	T/600/8237	Stabilising Steep Cutting Slopes in the Workplace	30	2	100

Unit no.	Unit reference number	B6 – Mandatory units for pathway 6 (credit value: 30)	Credit	Level	GLH
23	M/600/8169	Preparing to Install Well Point Dewatering Systems in the Workplace	12	2	40
24	R/600/8178	Installing Well Point Dewatering Systems in the Workplace	18	2	60

Unit no.	Unit reference number	B7 – Mandatory units for pathway 7 (credit value: 32)	Credit	Level	GLH
25	L/600/8180	Preparing to Install Deep wells or Ejectors as Dewatering Systems in the Workplace	14	2	47
26	Y/600/8182	Installing Deep Well Dewatering Systems in the Workplace	18	2	60

Unit no.	Unit reference number	B8 – Mandatory units for pathway 8 (credit value: 32)	Credit	Level	GLH
25	L/600/8180	Preparing to Install Deep wells or Ejectors as Dewatering Systems in the Workplace	14	2	47
27	M/600/8186	Installing Ejector Dewatering Systems in the Workplace	18	2	60

Unit no.	Unit reference number	B9 – Mandatory units for pathway 9 (credit value: 37)	Credit	Level	GLH
12	T/503/9560	Establishing Work Area Protection and Safety in the Workplace	10	2	33
28	K/600/8204	Preparing to Install Ground Anchors in the Workplace	10	2	33
29	A/600/8207	Installing Mechanical Ground Anchors in the Workplace	17	2	57

Unit no.	Unit reference number	B10 – Mandatory units for pathway 10 (credit value: 40)	Credit	Level	GLH
12	T/503/9560	Establishing Work Area Protection and Safety in the Workplace	10	2	33
28	K/600/8204	Preparing to Install Ground Anchors in the Workplace	10	2	33
30	A/600/8210	Installing Open Hole Ground Anchors in the Workplace	20	2	67

Unit no.	Unit reference number	B11 – Mandatory units for pathway 11 (credit value: 40)	Credit	Level	GLH
12	T/503/9560	Establishing Work Area Protection and Safety in the Workplace	10	2	33
31	M/600/8219	Preparing to Install Post Tensioning System as Sub-structural Repair in the Workplace	14	2	47
32	T/600/8223	Installing Post Tensioning System as Sub-structural Repair in the Workplace	16	2	53

Unit no.	Unit reference number	B12 – Mandatory units for pathway 12 (credit value: 41)	Credit	Level	GLH
12	T/503/9560	Establishing Work Area Protection and Safety in the Workplace	10	2	33
33	H/601/6561	Preparing for Resin and Grout Injection Operations in the Workplace	13	2	43
34	J/601/6570	Carrying Out Resin and Grout Injection Operations in the Workplace	18	2	60

Unit no.	Unit reference number	B13 – Mandatory units for pathway 13 (credit value: 41)	Credit	Level	GLH
35	R/601/6653	Preparing to Install Gas Membranes in the Workplace	13	2	43
36	L/601/6666	Installing Gas Membranes in the Workplace	18	2	60

C – Additional units (not compulsory) (credits from this group will not count towards the minimum credit value required for the qualification)

Unit no.	Unit reference number	Additional units for pathways 1 and 2 (credit value: n/a)	Credit	Level	GLH
37	Y/600/8117	Repairing Substructure after Underpinning in the Workplace	15	2	50
38	F/600/8161	Providing Temporary Support to Deep Underpinning in the Workplace	15	2	50
39	H/600/7889	Preparing and Operating Rough Terrain Masted Forklifts to Lift and Transfer Loads in the Workplace	18	2	60
40	M/600/7894	Preparing and Operating Industrial Counterbalanced Forklifts to Lift and Transfer Loads in the Workplace	16	2	53
41	L/600/7899	Preparing and Operating Sideload Forklifts to Lift and Transfer Loads in the Workplace	16	2	53
42	A/600/7915	Preparing and Operating Telescopic Handlers to Lift and Transfer Loads in the Workplace	25	2	83

Unit no.	Unit reference number	Additional units for pathways 1 and 2 (credit value: n/a)	Credit	Level	GLH
43	J/600/7917	Preparing and Operating Reach Trucks to Lift and Transfer Loads in the Workplace	16	2	53
44	J/600/7920	Preparing and Operating Lorry Loaders or Knuckle Boom Cranes to Lift and Transfer Loads in the Workplace	30	2	100
45	L/600/7921	Preparing and Operating Skip Handlers to Lift and Transfer Loads in the Workplace	18	2	60
46	T/600/7931	Preparing and Operating 180 degree Excavators to Extract and Excavate Ground and Loose Materials in the Workplace	80	2	267
47	L/600/7935	Preparing and Operating Wheeled Loading Shovels to Extract Loose Materials in the Workplace	26	2	87
48	R/600/7936	Preparing and Operating Tracked Loading Shovels to Extract Ground and Loose Materials in the Workplace	80	2	267
49	D/600/7938	Preparing and Operating Skid Steer Loaders to Extract Loose Materials in the Workplace	20	2	67
50	J/600/7948	Preparing and Operating Motorised Scrapers to Extract, Transport and Distribute Materials in the Workplace	80	2	267
51	K/600/7957	Preparing and Operating 360 degree Excavators to Extract Ground, Face and/or Loose Materials in the Workplace	80	2	267
52	R/600/7970	Preparing and Operating 360 degree Excavators to Excavate Ground in the Workplace	80	2	267
53	Y/600/7971	Preparing and Operating Trenchers to Excavate Ground in the Workplace	50	2	167
54	T/600/7976	Preparing and Operating Truck-mounted Boom Concrete Pumps to Receive, Pump and Discharge Materials in the Workplace	70	2	233

Unit no.	Unit reference number	Additional units for pathways 1 and 2 (credit value: n/a)	Credit	Level	GLH
55	A/600/7977	Preparing and Operating Forward Tipping Dumpers to Receive, Transport and Discharge Materials in the Workplace	16	2	53
56	R/600/7998	Preparing and Operating Rear Tipping Dump Trucks to Receive, Transport and Discharge Materials in the Workplace	30	2	100
57	F/600/8001	Preparing and Operating Agricultural-based Tractors for Non-agricultural Activities in the Workplace	20	2	67
58	Y/600/8005	Preparing and Operating Trailer-mounted Concrete Pumps to Receive, Pump and Discharge Materials in the Workplace	18	2	60
59	T/600/8013	Preparing and Operating Scissor-type Mobile Elevating Work Platforms (MEWP) in the Workplace	12	2	40
60	Y/600/8019	Preparing and Operating Boom-type Mobile Elevating Work Platforms (MEWP) in the Workplace	14	2	47
61	H/600/8024	Preparing and Operating Mast Climber-type Mobile Elevating Work Platforms (MEWP) in the Workplace	12	2	40
62	H/600/8055	Preparing and Operating Soil Stabilisers to Lay and Distribute Materials in the Workplace	40	2	133
63	K/600/8073	Preparing and Operating Ride-on Rollers to Compact Materials in the Workplace	16	2	53
64	R/600/8102	Slings and Signalling the Movement of Loads (Secondary Role) in the Workplace	8	2	27
Unit no.	Unit reference number	Additional unit for pathways 9 and 10 (credit value: n/a)	Credit	Level	GLH
65	L/600/8213	Installing Self Drilling Ground Anchors in the Workplace	23	2	77

How is the qualification graded and assessed?

The overall grade for each qualification is a 'pass'. To achieve a pass for the full qualification, a learner must achieve all the required units within the specified qualification structure.

To pass a unit a learner must:

- achieve **all** the specified learning outcomes
- satisfy **all** the assessment criteria by providing sufficient and valid evidence for each criterion
- show that the evidence is their own.

The qualifications are designed to be assessed:

- in the workplace or
- in conditions resembling the workplace, as specified in the assessment requirements/strategy for the sector.

Assessment requirements/strategy

The assessment requirements/strategy for this qualification has been included in *Annexe D*. They have been developed by ConstructionSkills in partnership with employers, training providers, awarding organisations and the regulatory authorities. The assessment strategy includes details on:

- the requirements for assessment in the workplace and the circumstances where simulation is permitted
- the criteria for defining a realistic working environment, where it is permitted
- the roles and occupational competence of assessors, expert witnesses, internal verifiers and standards verifiers
- quality control of assessment
- evidence requirements.

Learners may provide evidence of occupational competence from:

- **current practice** where evidence is generated from a current job role
- a **programme of development** where evidence comes from assessment opportunities built into a learning/training programme whether at or away from the workplace
- the **Recognition of Prior Learning (RPL)** where a learner can demonstrate that they can meet the assessment criteria within a unit through knowledge, understanding or skills they already possess without undertaking a course of development. They must submit sufficient, reliable and valid evidence for assessment, internal and standards verification purposes. RPL is acceptable for accrediting a unit, several units or a whole qualification
- a **combination** of these.

It is important that the evidence provided to satisfy the unit and learning outcomes' assessment criteria is:

Valid	relevant to the standards for which competence is claimed
Authentic	produced by the learner
Current	sufficiently recent to create confidence that the same skill, understanding or knowledge persist at the time of the claim
Reliable	indicates that the learner can consistently perform at this level
Sufficient	fully meets the requirements of the standards.

Types of evidence (to be read in conjunction with the assessment strategy in Annexe D)

To successfully achieve a unit the learner must gather evidence which shows that they have met the required standard specified by the assessment criteria. Evidence can take a variety of different forms including the examples below. Centres should refer to the assessment strategy for information about which of the following are permissible.

- direct observation of the learner's performance by their assessor (O)
- outcomes from oral or written questioning (Q&A)
- products of the learner's work (P)
- personal statements and/or reflective accounts (RA)
- outcomes from simulation, where permitted by the assessment strategy (S)
- professional discussion (PD)
- assignment, project/case studies (A)
- authentic statements/witness testimony (WT)
- expert witness testimony (EPW)
- evidence of Recognition of Prior Learning (RPL).

The abbreviations may be used for cross-referencing purposes.

Learners can use one piece of evidence to prove their knowledge, skills and understanding across different assessment criteria and/or across different units. It is, therefore, not necessary for learners to have each assessment criterion assessed separately. Learners should be encouraged to cross-reference their evidence to the relevant assessment criteria.

Evidence must be made available to the assessor, internal verifier and Edexcel standards verifier. A range of recording documents is available on our website www.edexcel.com. Alternatively, centres can develop their own recording documents.

Centre recognition and approval

Centre recognition

Centres that have not previously offered Edexcel accredited qualifications need to apply for and be granted centre recognition and approval as part of the process for approval to offer individual qualifications. New centres must complete a centre recognition and approval application and a qualification approval application.

Existing centres will be given 'automatic approval' for a new qualification if they are already approved for a qualification that is being replaced by the new qualification and the conditions for automatic approval are met.

Centres already holding Edexcel approval and which have a history of good external quality assurance outcomes are able to gain qualification approval for a different level or different sector via Edexcel online.

Approvals agreement

All centres are required to enter into an approvals agreement which is a formal commitment by the head or principal of a centre to meet all the requirements of the specification and any linked codes or regulations. If centres do not comply with the agreement, Edexcel will act to protect the integrity of the awarding of qualifications. This could result in the suspension of certification or withdrawal of approval.

Quality assurance

Detailed information on Edexcel's quality assurance processes is given in *Annexe B*.

What resources are required?

Each qualification is designed to support learners working in the construction and the built environment sector. Physical resources need to support the delivery of the qualifications and the assessment of the learning outcomes and they must be of industry standard. The centre and staff involved in the delivery of a qualification must take Health and Safety requirements into account.

Where provision is made by the Sector Skills Council or Standards Setting Body for assessment to be undertaken in a Realistic Working Environment (RWE), the RWE must provide the same conditions as the normal day-to-day working environment, with a similar range of demands, pressures and requirements for cost-effective working.

Centres must meet any specific resource requirements given in *Annexe D: Assessment requirements/strategy*. Staff assessing learners must meet the requirements within the overarching assessment strategy for the sector.

Unit format

Each unit in this specification contains the following sections.

Unit title:					The unit title is accredited on the QCF and this form of words will appear on the learner's Notification of Performance (NOP).
Unit code:					This is the unit owner's reference number for the specified unit.
Unit reference number:					This code is a unique reference number for the unit.
QCF level:					All units and qualifications within the QCF have a level assigned to them, which represents the level of achievement. There are nine levels of achievement, from Entry level to level 8. The level of the unit has been informed by the QCF level descriptors and, where appropriate, the NOS and/or other sector/professional.
Credit value:					All units have a credit value. The minimum credit value is one, and credits can only be awarded in whole numbers. Learners will be awarded credits when they achieve the unit.
Guided learning hours:					A notional measure of the substance of a qualification. It includes an estimate of the time that might be allocated to direct teaching or instruction, together with other structured learning time, such as directed assignments, assessments on the job or supported individual study and practice. It excludes learner-initiated private study.
Unit summary:					This provides a summary of the purpose of the unit.
Assessment requirements/evidence requirements:					The assessment/evidence requirements are determined by the SSC. Learners must provide evidence for each of the requirements stated in this section.
Assessment methodology:					This provides a summary of the assessment methodology to be used for the unit.
Learning outcomes:	Assessment criteria:	Evidence type:	Portfolio reference:	Date:	
			The learner should use this box to indicate where the evidence can be obtained eg portfolio page number.	The learner should give the date when the evidence has been provided.	
Learning outcomes state exactly what a learner should know, understand or be able to do as a result of completing a unit.		The assessment criteria of a unit specify the standard a learner is expected to meet to demonstrate that a learning outcome, or a set of learning outcomes, has been achieved.		Learners must reference the type of evidence they have and where it is available for quality assurance purposes. The learner can enter the relevant key and a reference. Alternatively, the learner and/or centre can devise their own referencing system.	

Units

Unit reference number:	A/503/1170
QCF level:	1
Credit value:	2
Guided learning hours:	7

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in conforming to general health, safety and welfare in the workplace within the relevant sector of industry.

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Comply with all workplace health, safety and welfare legislation requirements	1.1 Comply with information from workplace inductions and any health, safety and welfare briefings attended relevant to the occupational area 1.2 Use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements 1.3 Comply with statutory requirements, safety notices and warning notices displayed within the workplace and/or on equipment 1.4 State why and when health and safety control equipment, identified by the principles of protection, should be used relating to types, purpose and limitations of each type, the work situation, occupational use and the general work environment, in relation to: - collective protective measures - personal protective equipment (PPE) - respiratory protective equipment (RPE) - local exhaust ventilation (LEV) 1.5 State how the health and safety control equipment relevant to the work should be used in accordance with the given instructions			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	1.6 State which types of health, safety and welfare legislation, notices and warning signs are relevant to the occupational area and associated equipment 1.7 State why health, safety and welfare legislation, notices and warning signs are relevant to the occupational area 1.8 State how to comply with control measures that have been identified by risk assessments and safe systems of work			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Recognise hazards associated with the workplace that have not been previously controlled and report them in accordance with organisational procedures	2.1 Report any hazards created by changing circumstances within the workplace in accordance with organisational procedures 2.2 List typical hazards associated with the work environment and occupational area in relation to resources, substances, asbestos, equipment, obstructions, storage, services and work activities 2.3 List the current Health and Safety Executive top ten safety risks 2.4 List the current Health and Safety Executive top five health risks 2.5 State how changing circumstances within the workplace could cause hazards 2.6 State the methods used for reporting changed circumstances, hazards and incidents in the workplace			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Comply with organisational policies and procedures to contribute to health, safety and welfare	3.1 Interpret and comply with given instructions to maintain safe systems of work and quality working practices 3.2 Contribute to discussions by offering/providing feedback relating to health, safety and welfare 3.3 Contribute to the maintenance of workplace welfare facilities in accordance with workplace welfare procedures 3.4 Safely store health and safety control equipment in accordance with given instructions 3.5 Dispose of waste and/or consumable items in accordance with legislation 3.6 State the organisational policies and procedures for health, safety and welfare, in relation to: - dealing with accidents and emergencies associated with the work and environment - methods of receiving or sourcing information - reporting - stopping work - evacuation - fire risks and safe exit procedures - consultation and feedback			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	3.7 State the appropriate types of fire extinguishers relevant to the work 3.8 State how and when the different types of fire extinguishers are used in accordance with legislation and official guidance			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Work responsibly to contribute to workplace health, safety and welfare whilst carrying out work in the relevant occupational area	4.1 Demonstrate behaviour which shows personal responsibility for general workplace health, safety and welfare 4.2 State how personal behaviour demonstrates responsibility for general workplace health, safety and welfare, in relation to: - recognising when to stop work in the face of serious and imminent danger to self and/or others - contributing to discussions and providing feedback - reporting changed circumstances and incidents in the workplace - complying with the environmental requirements of the workplace 4.3 Give examples of how the behaviour and actions of individuals could affect others within the workplace			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Comply with and support all organisational security arrangements and approved procedures	5.1 Provide appropriate support for security arrangements in accordance with approved procedures: - during the working day - on completion of the day's work - for unauthorised personnel (other operatives and the general public) - for theft 5.2 State how security arrangements are implemented in relation to the workplace, the general public, site personnel and resources			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Unit 2: **Conforming to Productive Working Practices in the Workplace**

Unit reference number: J/503/1169

QCF level: 2

Credit value: 3

Guided learning hours: 10

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in conforming to productive working practices in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Communicate with others to establish productive work practices	1.1 Communicate in an appropriate manner with line management, colleagues and/or customers to ensure that work is carried out productively 1.2 Describe the different methods of communicating with line management, colleagues and customers 1.3 Describe how to use different methods of communication to ensure that the work carried out is productive			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Follow organisational procedures to plan the sequence of work	2.1 Interpret relevant information from organisational procedures in order to plan the sequence of work 2.2 Plan the sequence of work, using appropriate resources, in accordance with organisational procedures to ensure work is completed productively 2.3 Describe how organisational procedures are applied to ensure work is planned and carried out productively, in relation to: - using resources for own and other's work requirements - allocating appropriate work to employees - organising the work sequence - reducing carbon emissions 2.4 Describe how to contribute to zero/low carbon work outcomes within the built environment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Maintain relevant records in accordance with the organisational procedures	3.1 Complete relevant documentation according to the occupation as required by the organisation 3.2 Describe how to complete and maintain documentation in accordance with organisational procedures, in relation to: - job cards - worksheets - material/resource lists - time sheets 3.3 Explain the reasons for ensuring documentation is completed clearly and within given timescales			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Maintain good working relationships when conforming to productive working practices	4.1 Carry out work productively, to the agreed specification, in conjunction with line management, colleagues, customers and/or other relevant people involved in the work to maintain good working relationships 4.2 Apply the principles of equality and diversity and respect the needs of individuals when communicating and working with others 4.3 Describe how to maintain good working relationships, in relation to: – individuals – customer and operative – operative and line management – own and other occupations 4.4 Describe why it is important to work effectively with line management, colleagues and customers 4.5 Describe how working relationships could have an effect on productive working 4.6 Describe how to apply principles of equality and diversity when communicating and working with others			

Learner name: _____
Learner signature: _____
Assessor signature: _____
Internal verifier signature: _____
(if sampled)

Date: _____
Date: _____
Date: _____
Date: _____

Unit 3: Moving, Handling and Storing Resources in the Workplace

Unit reference number: F/503/1171

QCF level: 2

Credit value: 5

Guided learning hours: 17

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in moving, handling and storing resources in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Comply with given information when moving, handling and/or storing resources	1.1 Interpret the given information relating to moving, handling and/or storing resources, relevant to the given occupation 1.2 Interpret the given information relating to the use and storage of lifting aids and equipment 1.3 Describe the different types of technical, product and regulatory information, their source and how they are interpreted 1.4 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.5 Describe how to obtain information relating to using and storing lifting aids and equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Know how to comply with relevant legislation and official guidance when moving, handling and/or storing resources	2.1 Describe their responsibilities under current legislation and official guidance whilst working: - in the workplace, in confined spaces, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 Explain what the accident reporting procedures are and who is responsible for making the reports 2.4 State the appropriate types of fire extinguishers relevant to the work 2.5 Describe how and when the different types of fire extinguishers, relevant to the given occupation, are used in accordance with legislation and official guidance			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Maintain safe working practices when moving, handling and/or storing resources	3.1 Use health and safety control equipment safely to carry out the activity in accordance with legislation and organisational requirements when moving, handling and/or storing resources 3.2 Use lifting aids safely as appropriate to the work 3.3 Protect the environment in accordance with safe working practices as appropriate to the work 3.4 Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to moving, handling and/or storing resources, and the types, purpose and limitations of each type, the work situation, occupational use and the general work environment, in relation to: - collective protective measures - personal protective equipment (PPE) - respiratory protective equipment (RPE) - local exhaust ventilation (LEV) 3.5 Describe how the health and safety control equipment relevant to the work should be used in accordance with the given instructions 3.6 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to move, handle and/or store occupational resources	4.1 Select the relevant resources to be moved, handled and/or stored, associated with own work 4.2 Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the occupational resources in relation to: - lifting and handling aids - container(s) - fixing, holding and securing systems 4.3 Describe how the resources should be handled and how any problems associated with the resources are reported 4.4 Explain why the organisational procedures have been developed and how they are used for the selection of required resources 4.5 Describe any potential hazards associated with the resources and methods of work			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Prevent the risk of damage to occupational resources and surrounding environment when moving, handling and/or storing resources	5.1 Protect occupational resources and their surrounding area from damage in accordance with safe working practices and organisational procedures 5.2 Dispose of waste and packaging in accordance with legislation 5.3 Maintain a clean work space when moving, handling or storing resources 5.4 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.5 Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Complete the work within the allocated time when moving, handling and/or storing resources	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: - progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given occupational resource information to move, handle and/or store resources to the required guidance	7.1 Demonstrate the following work skills when moving, handling and/or storing occupational resources: - moving, positioning, storing, securing and/or using lifting aids and kinetic lifting techniques 7.2 Move, handle and/or store occupational resources to meet product information and organisational requirements relating to three of the following: - sheet material - loose material - bagged or wrapped material - fragile material - tools and equipment - components - liquids 7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them when moving, handling and/or storing occupational resources 7.4 Describe the needs of other occupations when moving, handling and/or storing resources			

Learner name: _____
Learner signature: _____
Assessor signature: _____
Internal verifier signature: _____
(if sampled)

Date: _____
Date: _____
Date: _____
Date: _____

Unit 4: Setting Out for Basic Underpinning in the Workplace

Unit reference number: A/600/8109

OCF level: 2

Credit value: 11

Guided learning hours: 37

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in setting out for basic underpinning in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (OCF) title and SVOs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of setting out for basic underpinning to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against one of the following endorsements:

- Excavated underpinning
- Mini piling

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when setting out for basic underpinning	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules - manufacturers' information and regulations governing buildings			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Know how to comply with relevant legislation and official guidance when setting out for basic underpinning	2.1 Describe their responsibilities under current legislation and official guidance whilst working: - in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Maintain safe working practices when setting out for basic underpinning	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when setting out for basic underpinning 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to setting out for basic underpinning, and the types, purpose and limitations of each type 3.3 Install appropriate signing and guarding, and ensure there is secure access/egress when setting out for basic underpinning 3.4 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to set out for basic underpinning	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - timber, fixings - hand tools and equipment - setting out equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment and setting out equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe the methods of calculation associated with the method/procedure to set out for basic underpinning			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when setting out for basic underpinning	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when setting out for basic underpinning	6.1 Demonstrate completion of the work within the allocated time 6.2. State the purpose of the work programme and explain why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times. - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to set out for basic underpinning to the required specification	7.1 Demonstrate the following work skills when setting out for basic underpinning: – measuring, marking out, levelling, positioning and securing 7.2 Set out from base line and transfer levels to contractor's working instructions for at least two of the following: – excavations – ground beams – jacks and stools – piles 7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: – set out from base line for underpinning excavations, ground beams, jacks and stools, piles – transfer levels by non-optical methods – use hand tools and equipment – use setting out equipment and materials 7.4 Safely use and store hand tools, setting out and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.5 State the needs of other occupations and how to communicate within a team when setting out for basic underpinning			
	7.6 Describe how to maintain the tools and equipment used when setting out for basic underpinning			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Unit 5: Erecting and Striking Formwork for Excavated Underpinning in the Workplace

Unit reference number: M/600/8107

QCF level: 2

Credit value: 18

Guided learning hours: 60

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in erecting and striking formwork for excavated underpinning in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of erecting and striking formwork for excavated underpinning to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when erecting and striking formwork	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules and manufacturers' information			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Know how to comply with relevant legislation and official guidance when erecting and striking formwork	2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			
3 Maintain safe working practices when erecting and striking formwork	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when erecting and striking formwork 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to erecting and striking formwork, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to erect and strike formwork	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: – formwork, timber, timber and non-timber based sheet material, tie systems, proprietary soldiers and walings, release agents, fixings, fittings, associated items – hand and/or powered tools and equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to erect and strike formwork			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when erecting and striking formwork	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when erecting and striking formwork	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to erect and strike formwork to the required specification	7.1 Demonstrate the following work skills when erecting and striking formwork: - measuring, marking out, fitting, finishing, removing, positioning and securing 7.2 Erect and strike formwork at, above or below ground level, to contractor's working instructions for two or more of the following: - walls - columns - beams (ground or suspended) - suspended floor slabs or roofs			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - erect and strike formwork for columns, walls, beams, floor slabs, kickers, stop ends, pre-cast units - attach and remove soldiers and walings - position and strike box-outs and bolt boxes, grout checks, level controls, angle fillets and features - position and remove tie systems - apply release agents - use hand tools, power tools and equipment 7.4 Safely use and store hand tools, portable power tools and ancillary equipment 7.5 State the needs of other occupations and how to communicate within a team when erecting and striking formwork 7.6 Describe how to maintain the tools and equipment used when erecting and striking formwork			

Learner name: _____
Learner signature: _____
Assessor signature: _____
Internal verifier signature: _____
(if sampled)

Date: _____
Date: _____
Date: _____
Date: _____

Unit 6: Installing Reinforcement Steel in the Workplace

Unit reference number: T/600/8108

QCF level: 2

Credit value: 16

Guided learning hours: 53

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in installing reinforcement steel in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of installing reinforcement steel to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsements:

- Own occupational area of work

Plus one of the following:

- In-situ – ground level
- In-situ – above ground level
- In-situ – below ground level
- Prefabricated – ground level
- Prefabricated – above ground level
- Prefabricated – below ground level

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when installing reinforcement steel	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, shape codes, manufacturers' information, oral and written instructions and specific industrial guidance relating to steelfixing			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Know how to comply with relevant legislation and official guidance when installing reinforcement steel	2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			
3 Maintain safe working practices when installing reinforcement steel	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when installing reinforcement steel 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to installing reinforcement steel, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to install reinforcement steel	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - prefabricated cages, wire mesh, reinforcement steel, tie wire, ancillary steelfixing components - hand and/or powered tools and equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length and area associated with the method/procedure to install reinforcement steel			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when installing reinforcement steel	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when installing reinforcement steel	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: – organisational procedures for reporting circumstances which will affect progress and the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to install reinforcement steel to the required specification	7.1 Demonstrate the following work skills when installing reinforcement steel: - sorting, measuring, marking out, cutting, fitting, positioning and securing 7.2 Install in-situ and/or prefabricated reinforcement steel to contractor's working instructions in at least one of the following areas: - below ground level - at ground level - above ground level 7.3 Incorporate at least two of the following: - mesh - steel bar - spacers - cover blocks - ties			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.4 Form at least one of the following to contractor's working instructions: - beams - bases - columns - piers - slabs - steps - walls 7.5 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - prepare mesh and steel bar reinforcement - position and support mesh and steel bar reinforcement (e.g. chairs, cover blocks) - form associated wire ties to: - tie and secure mesh and steel bar reinforcement - tie and secure cover blocks and spacers - use hand tools, power tools and equipment 7.6 Safely use and store hand tools, portable power tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.7 State the needs of other occupations and how to communicate within a team when installing reinforcement steel			
	7.8 Describe how to maintain the tools and equipment used when installing reinforcement steel			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 7: Excavating for Underpinning in the Workplace

Unit reference number: M/600/8110

QCF level: 2

Credit value: 13

Guided learning hours: 43

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in excavating for underpinning in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of excavating for underpinning to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when excavating for underpinning	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules and manufacturers' information			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when excavating for underpinning	2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports		
3	Maintain safe working practices when excavating for underpinning	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when excavating for underpinning 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to excavating for underpinning, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards		

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to excavate for underpinning	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - excavation support, fixings, fittings - hand and/or powered tools and equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length and area associated with the method/procedure to excavate for underpinning			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when excavating for underpinning	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Install appropriate signing and guarding 5.5 Dispose of waste in accordance with legislation 5.6 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when excavating for underpinning	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to excavate for underpinning to the required specification	7.1 Demonstrate the following work skills when excavating for underpinning: - measuring, marking out, excavating, positioning and securing 7.2 Excavate and support pits and trenches for underpinning to contractor's working instructions 7.3 Locate, mark and protect services 7.4 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - excavate pits and trenches for underpinning - support excavations - locate, mark and protect services - remove ground water - use hand tools, power tools and equipment 7.5 Safely use and store hand tools, portable power tools and ancillary equipment 7.6 State the needs of other occupations and how to communicate within a team when excavating for underpinning 7.7 Describe how to maintain the tools and equipment used when excavating for underpinning			

Learner name: _____
Learner signature: _____
Assessor signature: _____
Internal verifier signature: _____
(if sampled)

Date: _____
Date: _____
Date: _____
Date: _____

Unit 8: Installing Drypacking in the Workplace

Unit reference number: A/600/8112

QCF level: 2

Credit value: 14

Guided learning hours: 47

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in installing drypacking in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of installing drypacking to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when installing drypacking	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information and regulations governing buildings			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when installing drypacking	2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports		
3	Maintain safe working practices when installing drypacking	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when installing drypacking 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to installing drypacking, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards		

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to install drypacking	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - jacks, stools, footing pads, grouts, shims, packings, cement, aggregates, admixtures - hand and/or powered tools and equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to install drypacking			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when installing drypacking	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when installing drypacking	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to install drypacking to the required specification	7.1 Demonstrate the following work skills when installing drypacking: - measuring, marking out, removing, mixing, placing, positioning and securing 7.2 Prepare and install temporary or permanent support to contractor's working instructions: - cut pockets - jacks/stools position - formation/foundations - structural members - dry pack 7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - form pockets to position jacks/stools - prepare formation/foundations and structural members - place and compact dry pack - cure dry pack - use hand tools, power tools and equipment 7.4 Safely use and store hand tools, portable power tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.5 State the needs of other occupations and how to communicate within a team when installing drypacking 7.6 Describe how to maintain the tools and equipment used when installing drypacking			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Guided learning hours: 43

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when placing and compacting concrete	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information, oral and written instructions			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when placing and compacting concrete	2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports		
3	Maintain safe working practices when placing and compacting concrete	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when placing and compacting concrete 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to placing and compacting concrete, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards		

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to place and compact concrete	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - aggregates, cements, concrete, reinforcement, membranes, release agents, anti-heave materials, moulds - hand and/or powered tools, slump test equipment, skips, poker vibrator, tampers, floats and trowels 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity and wastage associated with the method/procedure to place and compact concrete			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when placing and compacting concrete	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when placing and compacting concrete	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to place and compact concrete to the required specification	7.1 Demonstrate the following work skills when placing and compacting concrete: - receiving, handling, transporting, placing, compacting, finishing and curing 7.2 Transport, place and compact structural and/or non-structural concrete to contractor's working instructions, placed in at least one of the following locations: - below ground level - at ground level - above ground level 7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - handle and test concrete - transport and place concrete - compact and finish concrete - cure and protect concrete - use hand tools, power tools and equipment 7.4 Safely use and store hand tools, portable power tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.5 State the needs of other occupations and how to communicate within a team when placing and compacting concrete 7.6 Describe how to maintain the tools and equipment used when placing and compacting concrete			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Unit 10: Installing Mini-piles in the Workplace

Unit reference number: J/600/8114

QCF level: 2

Credit value: 30

Guided learning hours: 100

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in installing mini-piles in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of installing mini-piles to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when installing mini-piles	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information and regulations governing buildings			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Know how to comply with relevant legislation and official guidance when installing mini-piles	2.1 Describe their responsibilities under current legislation and official guidance whilst working: - in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			
3 Maintain safe working practices when installing mini-piles	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when installing mini-piles 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to installing mini-piles, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to install mini-piles	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - mini-piles, casings, linings, reinforcement steel, concrete - hand tools and ancillary equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to install mini-piles			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when installing mini-piles	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when installing mini-piles	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to install mini-piles to the required specification	7.1 Demonstrate the following work skills when installing mini-piles: - measuring, fitting, positioning, securing and operating 7.2 Install mini-pile underpinning to contractor's working instructions by two from the following: - open auger - hollow stem auger - down-hole hammer - in-hole support drilling - drop hammer - jacked down piling - pneumatic displacement piling - proprietary micro piling systems			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - install, operate and dismantle mini-piling rigs - install piles by means of: open auger, hollow stem auger, down-hole hammer, in-hole support drilling, drop hammer, jacked down piling, pneumatic displacement piling, proprietary micro- piling systems - complete piling documentation - use hand tools and ancillary equipment 7.4 Safely use and store hand tools and ancillary equipment 7.5 State the needs of other occupations and how to communicate within a team when installing mini-piles 7.6 Describe how to maintain the tools and equipment used when installing mini-piles			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Unit 11: Carrying out Checks and/or Basic Maintenance on Plant or Machinery in the Workplace

Unit reference number: J/600/7111

QCF level: 2

Credit value: 8

Guided learning hours: 27

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in carrying out checks and/or basic maintenance on plant or machinery in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of carrying out checks and/or basic maintenance on plant or machinery to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsement:

- Own occupational area of work

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Work safely at all times when carrying out checks and/or basic maintenance on plant or machinery	1.1 Comply with current legislation, Approved Codes of Practice and organisational procedures 1.2 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when carrying out checks and/or basic maintenance on plant or machinery 1.3 Explain why and when personal protective equipment (PPE) should be used, relating to the carrying out of checks and/or basic maintenance on plant or machinery, and the types, purpose and limitations of each type 1.4 Safely use, store and secure hand tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Know how to comply with relevant health and safety legislation and official guidance when carrying out checks and/or basic maintenance on plant or machinery	2.1 Describe their responsibilities under current legislation and official guidance whilst working: - in the workplace, below ground level, at height, with tools, plant or machinery and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the reasons for devising and complying with risk and COSHH assessments and how this can encourage safe working practices 2.3 Describe the organisational security procedures for tools, equipment and personal belongings 2.4 State what the accident reporting procedures are and who is responsible for making reports 2.5 State how hazards and emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Follow the relevant maintenance schedules for the required work when carrying out checks and/or basic maintenance on plant or machinery	3.1 Interpret and extract information from specifications, schedules, organisational procedures and manufacturers' information relating to the work being carried out 3.2 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 3.3 Describe different types of checks and maintenance information, their source and how they are interpreted in relation to: - specifications, schedules, manufacturers' information and organisational procedures 3.4 Describe the organisational procedures to solve problems with the information and why it is important they are followed			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Carry out checks and/or basic maintenance activities within the limits of their personal authority in the specified sequence and agreed time scale	4.1 Demonstrate the following work skills when carrying out checks and/or basic maintenance on plant or machinery: - replenishing, replacing, applying, lubricating, cleaning and securing 4.2 Carry out operator checks and/or basic maintenance tasks on standard or specialised plant or machinery to given working instructions as directed by the employer/ supervisor or authorised person			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	4.3 Describe how to follow maintenance authorisation, apply safe work practices, follow procedures, report problems and establish the authority and responsibility needed to: - clean and prepare areas and components for maintenance - replenish fuels, lubricants, fluids and coolants - replace parts - recycle components - fit fastening systems, pins, bolts, nuts, washers and consumable items - complete functional checks in accordance with equipment operating and care and control procedures - complete reports and records - use hand tools and ancillary equipment 4.4 Complete the checks and/or basic maintenance activities within the estimated allocated time and to the required standards and accuracy 4.5 State the needs of other occupations and how to communicate within a team when carrying out checks and/or basic maintenance on plant or machinery			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	4.6 Describe how maintain the tools and equipment used when carrying out checks and/or basic maintenance on plant or machinery			
5	Report any instances where the maintenance activities cannot be fully met or where there are identified defects outside the planned schedule when carrying out checks and/or basic maintenance on plant or machinery 5.1 Report problems and defects beyond their area of responsibility 5.2 Describe the different ways that problems with maintenance procedures and problems associated with resources can be reported			
6	Complete relevant maintenance records accurately and pass them on to the appropriate person when carrying out checks and/or basic maintenance on plant or machinery 6.1 Record and report maintenance tasks in accordance with organisational procedures and manufacturer's requirements 6.2 State the procedure to complete checks and maintenance records and what the reporting lines and procedures are within the organisation			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Dispose of waste materials in accordance with safe working practices and approved procedures when carrying out checks and/or basic maintenance on plant or machinery	7.1 Protect the work and its surrounding area from damage 7.2 Minimise damage and maintain a clean work space 7.3 Dispose of waste in accordance with legislation 7.4 Describe what the waste disposal procedures are, and how and why the disposal of waste should be carried out safely and how it is achieved			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Unit 12: Establishing Work Area Protection and Safety in the Workplace

Unit reference number: T/503/9560

QCF level: 2

Credit value: 10

Guided learning hours: 33

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in establishing work area protection and safety in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against the following endorsement:

- Own occupational area of work

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when establishing work area protection and safety	1.1 Interpret and extract relevant information from drawings, plans, risk assessments, method statements, specifications, schedules, site inspections and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 Describe the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, plans, risk assessments, method statements, specifications, schedules, site inspection reports, manufacturers' information, regulations and official guidance associated with protecting work areas			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Know how to comply with relevant legislation and official guidance when establishing work area protection and safety	2.1 Describe their responsibilities regarding potential accidents and health hazards, whilst working: - in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 Explain what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Maintain safe and healthy working practices when establishing work area protection and safety	3.1 Use health and safety control equipment and access equipment safely to carry out the activity in accordance with current legislation and organisational requirements when establishing work area protection and safety 3.2 Comply with information relating to specific risks to health when establishing work area protection and safety 3.3 Explain why and when health and safety control equipment, identified by the principles of protection, should be used, relating to establishing work area protection and safety, and the types, purpose and limitations of each type, the work situation and general work environment, in relation to: - collective protective measures - personal protective equipment (PPE) - respiratory protective equipment (RPE) - local exhaust ventilation (LEV) 3.4 Describe how the relevant health and safety control equipment should be used in accordance with the given instructions 3.5 Describe how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to establish work area protection and safety	4.1 Select resources associated with own work in relation to materials, components and fixings, and tools and equipment 4.2 Describe the characteristics, quality, uses, sustainability, limitations and defects associated with the resources in relation to: - safety and security barriers - protection and safety notices - temporary structures - signs and lighting - hand and/or powered tools and equipment 4.3 Describe how the resources should be used correctly and how problems associated with the resources are reported 4.4 Explain why the organisational procedures have been developed and how they are used for the selection of required resources 4.5 Describe any potential hazards associated with the resources and methods of work 4.6 Describe how to calculate quantity, length and area associated with the method/procedure to establish work area protection and safety			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when establishing work area protection and safety	5.1 Protect the work and its surrounding area from damage in accordance with safe working practices and organisational procedures 5.2 Minimise damage and maintain a clean work space 5.3 Dispose of waste in accordance with current legislation 5.4 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.5 Explain why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
6 Complete the work within the allocated time when establishing work area protection and safety	6.1 Demonstrate completion of the work within the allocated time 6.2 Describe the purpose of the work programme and explain why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to establish work area protection and safety to the required specification	7.1 Demonstrate the following work skills when establishing work area protection and safety: - measuring, setting out, positioning, assembling, constructing, securing and dismantling 7.2 Install, maintain and remove temporary protection and safety arrangements for the work area, to given working instructions, relating to barriers/temporary structures and one of the following: - protection and safety notices - safety lighting 7.3 Safely use materials, hand tools, portable power tools and ancillary equipment 7.4 Safely store the materials, tools and equipment used when establishing work area protection and safety			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.5 Describe how to apply safe and healthy work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - plan for the protection and the safety of the work and surrounding environment - install, check and maintain the protection and safety equipment - dismantle and remove protection and safety equipment - install safety notices - install lighting systems - use hand tools, power tools and equipment - work at height - use access equipment 7.6 Describe the needs of other occupations and how to effectively communicate within a team when establishing work area protection and safety 7.7 Describe how to maintain the tools and equipment used when establishing work area protection and safety			

Learner name: _____
Learner signature: _____
Assessor signature: _____
Internal verifier signature: _____
(if sampled)

Date: _____
Date: _____
Date: _____
Date: _____

Guided learning hours: 60

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when preparing for chemical grouting and soil injection	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information and regulations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Know how to comply with relevant legislation and official guidance when preparing for chemical grouting and soil injection	2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			
3 Maintain safe working practices when preparing for chemical grouting and soil injection	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when preparing for chemical grouting and soil injection 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to preparing for chemical grouting and soil injection, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to prepare for chemical grouting and soil injection	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - protection materials - drill and drill bits - lances and connectors - horizontal laser and targets - drain protection gear - grouting plant - hand and/or powered tools and equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to prepare for chemical grouting and soil injection			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when preparing for chemical grouting and soil injection	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when preparing for chemical grouting and soil injection	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to prepare for chemical grouting and soil injection to the required specification	7.1 Demonstrate the following work skills when preparing for chemical grouting and soil injection: - measuring, setting out and driving 7.2 Prepare to carry out chemical grouting and soil injection to given working instructions: - locate and protect services - drive pilot lances - establish a vertical movement monitoring system 7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - set out injection positions - locate, expose and protect services - prepare safety observation locations - drive lances to depth - set up laser and secure targets - locate and protect drains - use hand tools, power tools and equipment 7.4 Safely use and store materials, hand tools, portable power tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.5 State the needs of other occupations and how to communicate within a team when preparing for chemical grouting and soil injection 7.6 Describe how to maintain the tools and equipment used when preparing for chemical grouting and soil injection			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____

Date: _____

(if sampled)

Unit 14: Carrying Out Chemical Grouting and Soil Injection in the Workplace

Unit reference number: J/600/8226

QCF level: 2

Credit value: 18

Guided learning hours: 60

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in carrying out chemical grouting and soil injection in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of carrying out chemical grouting and soil injection to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when carrying out chemical grouting and soil injection	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information and regulations governing buildings			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when carrying out chemical grouting and soil injection 2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			
3	Maintain safe working practices when carrying out chemical grouting and soil injection 3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when carrying out chemical grouting and soil injection 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to carrying out chemical grouting and soil injection, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to carry out chemical grouting and soil injection	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - horizontal lasers and targets/levelling equipment - lances and chemical grout - grouting plant for mixing, heating, measuring and pumping chemicals - hand and/or powered tools and equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to carry out chemical grouting and soil injection			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when carrying out chemical grouting and soil injection	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when carrying out chemical grouting and soil injection	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to carry out chemical grouting and soil injection to the required specification	7.1 Demonstrate the following work skills when carrying out chemical grouting and soil injection: - checking, securing and mixing 7.2 Carry out chemical grouting and soil injection to given working instructions: - pump/inject chemical grout - monitor vertical movement of structure - record injection parameters - dispose of hazardous materials - reinstate original conditions 7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - set up horizontal laser and targets - use grouting plant to mix, heat and pump/inject grout as necessary - monitor movement of surfaces and structure - grout to termination - record details - reinstate original conditions and dispose of hazardous material correctly - use hand tools, power tools and equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.4 Safely use and store materials, hand tools, portable power tools and ancillary equipment 7.5 State the needs of other occupations and how to communicate within a team when carrying out chemical grouting and soil injection 7.6 Describe how to maintain the tools and equipment used when carrying out chemical grouting and soil injection			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 15: Preparing to Install Preformed Piles in the Workplace

Unit reference number: L/600/8227

QCF level: 2

Credit value: 18

Guided learning hours: 60

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing to install preformed piles in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing to install preformed piles to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when preparing to install preformed piles	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information and regulations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when preparing to install preformed piles 2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			
3	Maintain safe working practices when preparing to install preformed piles 3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when preparing to install preformed piles 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to preparing to install preformed piles, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to prepare to install preformed piles	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - support and protection materials - setting out ancillaries - hand and/or powered tools and equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to prepare to install preformed piles			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when preparing to install preformed piles	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when preparing to install preformed piles	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to prepare to install preformed piles to the required specification	7.1 Demonstrate the following work skills when preparing to install preformed piles: - measuring, marking out, locating, protecting and excavating 7.2 Prepare to install preformed piles to given working instructions for at least one of the following: - bored - driven 7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - set out the work - locate and protect services - excavate and support trenches if applicable - set out pile positions - dispose of arisings - use hand tools, power tools and equipment 7.4 Safely use and store materials, hand tools, portable power tools and ancillary equipment 7.5 State the needs of other occupations and how to communicate within a team when preparing to install preformed piles			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.6 Describe how to maintain the tools and equipment used when preparing to install preformed piles			

Learner name: _____
 Learner signature: _____
 Assessor signature: _____
 Internal verifier signature: _____
(if sampled)

Date: _____
 Date: _____
 Date: _____
 Date: _____

Unit reference number:	Y/600/8229
QCF level:	2
Credit value:	24
Guided learning hours:	80

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in installing preformed piles in the workplace within the relevant sector of industry.

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVOs.

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of installing preformed piles to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against one of the following endorsements:

- Bored
- Driven

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when installing preformed piles	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information and regulations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Know how to comply with relevant legislation and official guidance when installing preformed piles	2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			
3 Maintain safe working practices when installing preformed piles	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when installing preformed piles 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to installing preformed piles, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to installing preformed piles	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - driving gear/plant/rig - pile sections and connectors - pile caps/plates/adaptors - hand and/or powered tools and equipment including driving equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to install preformed piles			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when installing preformed piles	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when installing preformed piles	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to install preformed piles to the required specification	7.1 Demonstrate the following work skills when installing preformed piles: - measuring, setting out, driving, boring, monitoring, recording and securing 7.2 Install preformed piles to given working instructions, for one of the following: - bored - driven 7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - set out pile caps and pile locations - prepare pile sections prior to driving/boring - prepare plant for installation - drive/bore pile sections with connectors to depth/set - monitor and record depth/ground condition/design criteria - confirm alignment and level - prepare pile cap/transfer plate/threaded adaptors/termination beams as applicable - make good the work area - use hand tools, power tools and equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.4 Safely use and store materials, hand tools, portable power tools and ancillary equipment 7.5 State the needs of other occupations and how to communicate within a team when installing preformed piles 7.6 Describe how to maintain the tools and equipment used when installing preformed piles			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____

Date: _____

(if sampled)

Unit 17: Preparing and Operating Specialised Powered Tools and Equipment in the Workplace

Unit reference number: D/600/8099

QCF level: 2

Credit value: 4

Guided learning hours: 13

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating specialised powered tools and equipment in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against one of the following endorsements:

- Generators
- Pumps
- Pedestrian operated plant or machinery
- Mixers
- Compressors
- Self-powered tools

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the preparation and use of powered tools and/or equipment	1.1 Interpret and extract information from drawings, specifications, risk assessments, method statements, legislation, codes of practice, operating instructions and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, risk assessments, method statements, legislation, codes of practice, manufacturers' information and instructions applicable to powered tool operations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance to prepare and use powered tools and/or equipment 2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			
3	Maintain safe working practices when preparing for and using powered tools and/or equipment 3.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements when using powered tools and/or equipment 3.2 Explain why and when personal protective equipment (PPE) should be used, when using powered tools and/or equipment, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4	Request and select the required quantity and quality of resources to prepare for sustain powered tools and/or equipment	4.1 Request and select resources associated with the type of work in relation to fuel, power source, lubricants and consumables 4.2 Outline the organisational procedures for requisitioning consumables and other resources and why they have been developed and how they are used 4.3 Outline potential hazards associated with the resources and method of work and how they are overcome		
5	Minimise the risk of damage to the work and surrounding area when using powered tools and/or equipment	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out safely in relation to the work		

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Carry out-pre-use preparation inspections on powered tools and/or equipment in accordance with given procedures	6.1 Demonstrate the following work skills when preparing for and using powered tools and/or equipment for the work: - measuring, aligning, assembling, fitting, levelling, positioning, checking, securing, connecting and adjusting 6.2 Prepare power unit tool(s) and/or ancillary equipment in the workplace to given working instructions 6.3 Use and maintain power units, tools and ancillary equipment applicable to the work 6.4 Describe the method of work for pre-use checks needed and the preparation required before using and operating powered tools and/or equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Operate powered tools and/or equipment in accordance with safe working practices to achieve the working outcome	7.1 Demonstrate the following work skills when using powered tools and/or equipment: - measuring, aligning, assembling, fitting, levelling, positioning, checking, securing, connecting and adjusting 7.2 Operate and monitor power unit tool(s) and associated equipment in the workplace to given working instructions relating to continual running, closing down and cleaning 7.3 Return powered tools and/or equipment to a safe operational condition on completion of work 7.4 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - prepare, position and set up for work - secure accessories and tool attachments - carry out pre-use checks to manufacturers and suppliers information/procedures - operate, use and control - monitor and maintain - close down and secure - disassemble - transport and/or secure			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.5 State the needs of other occupations and how to communicate within a team when preparing for and using powered tools and/or equipment 7.6 Disassemble power units, tools and ancillary equipment following completion of work			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Unit 18: Setting Out Secondary Dimensional Work Control in the Workplace

Unit reference number: L/600/8101

QCF level: 2

Credit value: 8

Guided learning hours: 27

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in setting out secondary dimensional work control in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of setting out secondary dimensional work control to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to setting out dimensional control of the work	1.1 Interpret and extract information from drawings, method statements, specifications, schedules manufacturers' information and reference point 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, method statements, manufacturers' information, reference points and regulations governing buildings and construction work			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance to set out dimensional control of the work 2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			
3	Maintain safe working practices when setting out dimensional control of the work 3.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during setting out dimensional control of the work 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to setting out dimensional control of the work, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources to set out dimensional control of the work	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - measuring tools and equipment - marking equipment - level and alignment tools 4.2 Select resources associated with the work in relation to measuring tools and instruments, marking materials/components and tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity of resources associated with the work methods			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when setting out dimensional control of the work	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out safely in relation to the work			
6 Complete the work within the allocated time when setting out dimensional control of the work	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the lifting operation			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to set out dimensional control of the work to the required specification	7.1 Demonstrate the following work skills when setting out dimensional control of the work: - transferring, transposing, levelling, measuring, marking, positioning, fixing and securing 7.2 Setting out dimensional control for the work to contractor's working instructions for any three of the following: - line - level - depth - area - height - angle			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - measure and set out secondary dimensional control for the work - measure, align and level to dimensional control requirements - transfer and set out line, angles and levels to dimensional control requirements - use hand tools and measuring and marking equipment - work at height - use access equipment 7.4 Describe how to calculate height, depth, angle, length and area associated with the method/procedures to set out dimensional control of the work 7.5 Safely use and store hand tools and ancillary equipment 7.6 State the needs of other occupations and how to communicate within a team when setting out dimensional control of the work 7.7 Describe how to maintain the tools and equipment used to set out dimensional control of the work			

Learner name: _____
Learner signature: _____
Assessor signature: _____
Internal verifier signature: _____
(if sampled)

Date: _____
Date: _____
Date: _____
Date: _____

Unit 19: Installing Mass Gravity Retaining Structures in the Workplace

Unit reference number: L/600/8230

QCF level: 2

Credit value: 30

Guided learning hours: 100

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in installing mass gravity retaining structures in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of installing mass gravity retaining structures to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against one of the following endorsements:

- Gabions
- Crib walls
- Dry laid segmental blocks

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when installing mass gravity retaining structures	1.1 Interpret and extract information from drawings, method statements, specifications and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, method statements, specifications, manufacturers' information and site specific safety rules			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Know how to comply with relevant legislation and official guidance when installing mass gravity retaining structures	2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, at height, below cut slope level, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			
3 Maintain safe working practices when installing mass gravity retaining structures	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when installing mass gravity retaining structures 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to installing mass gravity retaining structures, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to install mass gravity retaining structures	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - proprietary retaining units (PRU) - foundation and drainage materials and infill and backfill materials - geotextiles/geogrids - sleeves, barriers and ancillaries - erosion protection materials/vegetation - hand and/or powered tools and ancillary equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to install mass gravity retaining structures			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when installing mass gravity retaining structures	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when installing mass gravity retaining structures	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to install mass gravity retaining structures to the required specification	7.1 Demonstrate the following work skills when installing mass gravity retaining structures: - measuring, trimming , levelling, compacting, draining, laying, spreading, assembling, securing, applying and disposing 7.2 Install mass gravity retaining structures to given working instructions: - excavate to line and level and form base/levelling pad - construct mass gravity structure to include gabions and/or crib walls and/or dry laid segmental blocks - install safety, protection and erosion measures if applicable			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.2 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - store and prepare equipment/materials - locate and protect services - excavate and dispose of soil - set out base or foundation - trim to line and level - form base/levelling pad - install drainage and outfall - assemble, position and secure proprietary retaining units (PRU) to include gabions, crib walls or dry laid segmental blocks - place infill in layers to specification - place and compact backfill in layers to specification - secure soil separation mats if required - install sleeves, barriers and erosion protection - complete work and make good - use hand tools, power tools and equipment - work at height			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.4 Safely use and store materials, hand tools, portable power tools and ancillary equipment 7.5 State the needs of other occupations and how to communicate within a team when installing mass gravity retaining structures 7.6 Describe how to maintain the tools and equipment used when installing mass gravity retaining structures			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 20: Installing Precast Concrete Retaining Structures in the Workplace

Unit reference number: Y/600/8232

QCF level: 2

Credit value: 30

Guided learning hours: 100

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in installing precast concrete retaining structures in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of installing precast concrete retaining structures to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when installing precast concrete retaining structures	1.1 Interpret and extract information from drawings, method statements, specifications and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, method statements, specifications, manufacturers' information and site specific safety rules			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when installing precast concrete retaining structures	2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, at height, below cut slope level, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports		
3	Maintain safe working practices when installing precast concrete retaining structures	3.1 Use personal protective equipment (PPE) and access equipment safely to carry out the activity in accordance with legislation and organisational requirements when installing precast concrete retaining structures 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to installing precast concrete retaining structures, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards		

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to install precast concrete retaining structures	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - concrete and precast concrete units, props - drainage materials - joint sealants to include dry pack, mastic and membranes - backfill materials - drills, mechanical/chemical anchors and fixings - torque/tensioning equipment and lifting accessories - sleeves, barriers and ancillaries - hand and/or powered tools and ancillary equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to install precast concrete retaining structures			
5	Minimise the risk of damage to the work and surrounding area when installing precast concrete retaining structures 5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6	Complete the work within the allocated time when installing precast concrete retaining structures 6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to install precast concrete retaining structures to the required specification	7.1 Demonstrate the following work skills when installing precast concrete retaining structures: - measuring, setting out, trimming, levelling, compacting, fixing, securing, tensioning, placing and curing 7.2 Install reinforced concrete retaining structures to given working instructions: - excavate to line and level - construct concrete base - locate and secure precast units - backfill and compact in layers - install safety and protection measures			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - store and prepare equipment/materials - locate and protect services - excavate and set aside/dispose of soil - set out for base and precast units - trim formation to line and level - construct concrete base - install drainage and outfall/weep holes - drill and prepare concrete base - install anchor bolts/mechanical/chemical fixings, cure and apply torque - secure and seal joints - position, locate, prop and secure precast retaining units - backfill and compact in layers - secure soil separation mats if required - install sleeves and barriers - complete work and make good - use hand tools, power tools and equipment - work at height - use access equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.4 Safely use and store materials, hand tools, portable power tools, torque/tensioning equipment and lifting accessories and ancillary equipment 7.5 State the needs of other occupations and how to communicate within a team when installing precast concrete retaining structures 7.6 Describe how to maintain the tools and equipment used when installing precast concrete retaining structures			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Unit 21: Installing Reinforced Soil Retaining Structures and Slopes in the Workplace

Unit reference number: K/600/8235

QCF level: 2

Credit value: 30

Guided learning hours: 100

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in installing reinforced soil retaining structures and slopes in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of installing reinforced soil retaining structures and slopes to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against one of the following endorsements:

- Structures
- Slopes

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when installing reinforced soil retaining structures and slopes	1.1 Interpret and extract information from drawings, method statements, specifications and manufacturers' information. 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, method statements, specifications, manufacturers' information and site specific safety rules			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when installing reinforced soil retaining structures and slopes	2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, at height, below cut slope level, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports		
3	Maintain safe working practices when installing reinforced soil retaining structures and slopes	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when installing reinforced soil retaining structures and slopes 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to installing reinforced soil retaining structures and slopes, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards		

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to install reinforced soil retaining structures and slopes	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - concrete - supports/restraints and temporary formwork - drainage materials to include pipes, junctions, inspection chambers, mats and aggregate - proprietary retaining facing units - soil reinforcement grids/strips/geotextiles/ filter cloths, bearing pads and fixings - granular backfill - sleeves, barriers, copings and ancillaries - erosion protection materials - hand and/or powered tools and equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to install reinforced soil retaining structures and slopes			
5	Minimise the risk of damage to the work and surrounding area when installing reinforced soil retaining structures and slopes 5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6	Complete the work within the allocated time when installing reinforced soil retaining structures and slopes 6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: – types of progress charts, timetables and estimated times – organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to install reinforced soil retaining structures and slopes to the required specification	7.1 Demonstrate the following work skills when installing reinforced soil retaining structures and slopes: - measuring, setting out, spreading, compacting, laying, securing and trimming 7.2 Install reinforced soil retaining structures or slopes to given working instructions: - excavate to line and level and construct levelling pad/base - locate and secure proprietary retaining units/slope ancillaries - place and compact soils and soil reinforcement - install safety, protection and erosion measures			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - store and prepare equipment/materials - locate and protect services - excavate and dispose/set aside soils - set out for base/foundation - trim formation to line and level - compact formation - construct levelling pad/base - install drainage and outfall - assemble, position and secure proprietary retaining facing units (PRFU) - secure and seal joints - place and secure external formwork for slopes, if applicable - place and secure lining materials for slopes - handle and place in layers, granular drainage zone if applicable - place and compact backfill in layers - locate and secure soil reinforcement to specification - secure coping if required			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	- secure soil separation mat if required - install sleeves, barriers and erosion protection - complete work and make good - use hand tools, power tools and equipment - work at height 7.4 Safely use and store materials, hand tools and/or portable power tools and ancillary equipment 7.5 State the needs of other occupations and how to communicate within a team when installing reinforced soil retaining structures and slopes 7.6 Describe how to maintain the tools and equipment used when installing reinforced soil retaining structures and slopes			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Unit 22: Stabilising Steep Cutting Slopes in the Workplace

Unit reference number: T/600/8237

QCF level: 2

Credit value: 30

Guided learning hours: 100

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in stabilising steep cutting slopes in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (OCF) title and SVOs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of stabilising steep cutting slopes to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when stabilising steep cutting slopes	1.1 Interpret and extract information from drawings, method statements, specifications and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, method statements, specifications, manufacturers' information and site specific safety rules			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when stabilising steep cutting slopes	2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, at height, below cut slope level, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports		
3	Maintain safe working practices when stabilising steep cutting slopes	3.1 Use personal protective equipment (PPE) and access equipment safely to carry out the activity in accordance with legislation and organisational requirements when stabilising steep cutting slopes 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to stabilising steep cutting slopes, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards		

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to stabilise steep cutting slopes	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - soil nails, grout and grouting equipment - plates, nuts and proprietary facing units - mats, barriers and ancillaries - erosion protection materials - hand and/or powered tools and equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to stabilise steep cutting slopes			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when stabilising steep cutting slopes	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when stabilising steep cutting slopes	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to stabilise steep cutting slopes to the required specification	7.1 Demonstrate the following work skills when stabilising steep cutting slopes: - measuring, setting out, trimming, grouting, securing and placing 7.2 Stabilise steep cutting slopes as a retaining structure to given working instructions: - carry out earthworks - install soil nails in drilled holes - align and secure facing - install safety, protection and erosion measures			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - store and prepare equipment and materials - locate and protect services - excavate to line and level in stages and dispose of materials - set out for slope and soil nails - install soil nails into drilled holes and grout - assemble and position proprietary facing units (PFU) - fix head plates to soil nails - align and secure completed facing - secure soil separation mat if required - install barriers and erosion protection - complete work and make good - use hand tools, power tools and equipment - work at height - use access equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.4 Safely use and store materials, hand tools, portable power tools and ancillary equipment 7.5 State the needs of other occupations and how to communicate within a team when stabilising steep cutting slopes 7.6 Describe how to maintain the tools and equipment used when stabilising steep cutting slopes			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Unit 23: Preparing to Install Well Point Dewatering Systems in the Workplace

Unit reference number: M/600/8169

QCF level: 2

Credit value: 12

Guided learning hours: 40

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing to install well point dewatering systems in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing to install well point dewatering systems to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when preparing to install well point dewatering systems	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information and regulations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when preparing to install well point dewatering systems 2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			
3	Maintain safe working practices when preparing to install well point dewatering systems 3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when preparing to install well point dewatering systems 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to preparing to install well point dewatering systems, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to prepare to install well point dewatering systems	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - sand, well screen and riser pipes - power and water source - excavator, pumps, hoses, connectors and tanks - jetting and lifting ancillaries - hand and/or powered tools and equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length and area associated with the method/procedure to prepare to install well point dewatering systems			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when preparing to install well point dewatering systems	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when preparing to install well point dewatering systems	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: – types of progress charts, timetables and estimated times – organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to prepare to install well point dewatering systems to the required specification	7.1 Demonstrate the following work skills when preparing to install well point dewatering systems: - measuring, setting out, protecting, laying, locating and securing 7.2 Prepare to install well point dewatering to given working instructions: - establish services and delivery and discharge systems - set up jetting equipment 7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - set out well points to line and level - locate and protect services - set up pumping system, delivery and discharge systems - establish water and power sources - identify and check lifting gear - position lifting appliance - locate and secure placing tube ready for jetting - use hand tools, power tools and equipment 7.4 Safely use and store materials, hand tools, portable power tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.5 State the needs of other occupations and how to communicate within a team when preparing to install well point dewatering systems 7.6 Describe how to maintain the tools and equipment used when preparing to install well point dewatering systems			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____

Date: _____

(if sampled)

Unit 24: Installing Well Point Dewatering Systems in the Workplace

Unit reference number: R/600/8178

QCF level: 2

Credit value: 18

Guided learning hours: 60

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in installing well point dewatering systems in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of when installing well point dewatering systems to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated except for the following item from assessment criteria 7.2:

- decommission the system

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when installing well point dewatering systems	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information and regulations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2 Know how to comply with relevant legislation and official guidance when installing well point dewatering systems	2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting			
	2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative			
	2.3 State what the accident reporting procedures are and who is responsible for making reports			
3 Maintain safe working practices when installing well point dewatering systems	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when installing well point dewatering systems			
	3.2 Explain why and when personal protective equipment (PPE) should be used, relating to installing well point dewatering systems, and the types, purpose and limitations of each type			
	3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to install well point dewatering systems	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - well points, screens, sand and riser pipe - header pipe, hoses and valves - pumps, compressors, tanks and gauges - jetting, pumping, discharge, delivery and measuring equipment - hand and/or powered tools 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length and area associated with the method/procedure to install well point dewatering systems			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when installing well point dewatering systems	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when installing well point dewatering systems	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to install well point dewatering systems to the required specification	7.1 Demonstrate the following work skills when installing well point dewatering systems: - measuring, maintaining and monitoring 7.2 Install well points as a dewatering system to given working instructions: - set up pumping systems - commission and monitor the system - decommission the system			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - connect jetting system - install well points to depth using placing tube - set up vacuum system including header pipe, pumps and tanks - connect well points - commission system - trim system - maintain and monitor the system - dismantle the system and remove from site - use hand tools, power tools and equipment 7.4 Safely use and store hand tools, portable power tools and ancillary equipment 7.5 State the needs of other occupations and how to communicate within a team when installing well point dewatering systems			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.6 Describe how to maintain the tools and equipment used when installing well point dewatering systems			

Learner name: _____
 Learner signature: _____
 Assessor signature: _____
 Internal verifier signature: _____
(if sampled)

Date: _____
 Date: _____
 Date: _____
 Date: _____

Guided learning hours: 47

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when preparing to install deep wells or ejectors as dewatering systems	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information and regulations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when preparing to install deep wells or ejectors as dewatering systems	2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports		
3	Maintain safe working practices when preparing to install deep wells or ejectors as dewatering systems	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when preparing to install deep wells or ejectors as dewatering systems 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to preparing to install deep wells or ejectors as dewatering systems, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards		

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to prepare to install deep wells or ejectors as dewatering systems	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - well screens, casings, filter material, seals - compressor and air hoses - water level and flow measurement equipment - discharge pipework - hand and/or powered tools and equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length and area associated with the method/procedure to prepare to install deep wells or ejectors as dewatering systems			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when preparing to install deep wells or ejectors as dewatering systems	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when preparing to install deep wells or ejectors as dewatering systems	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to prepare to install deep wells or ejectors as dewatering systems to the required specification	7.1 Demonstrate the following work skills when preparing to install deep wells or ejectors as dewatering systems: - measuring and assessing 7.2 Prepare to install deep wells or ejectors to given working instructions: - monitor well installation - record well parameters - develop wells - monitor well parameters 7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - monitor well drilling and insertion of liner - measure and record well depth and water levels in the well - develop wells to ensure clear flow - monitor wells and assess quality and quantity of flow - use hand tools, power tools and equipment 7.4 Safely use and store hand tools, portable power tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.5 State the needs of other occupations and how to communicate within a team when preparing to install deep wells or ejectors as dewatering systems 7.6 Describe how to maintain the materials, tools and equipment used when preparing to install deep wells or ejectors as dewatering systems			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 26: Installing Deep Well Dewatering Systems in the Workplace

Unit reference number: Y/600/8182

QCF level: 2

Credit value: 18

Guided learning hours: 60

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in installing deep well dewatering systems in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of installing deep well dewatering systems to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated except for the following item from assessment criteria 7.2:

- decommission the system

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when installing deep well dewatering systems	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information and regulations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
2	Know how to comply with relevant legislation and official guidance when installing deep well dewatering systems	2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports		
3	Maintain safe working practices when installing deep well dewatering systems	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when installing deep well dewatering systems 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to installing deep well dewatering systems, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards		

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to install deep well dewatering systems	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - pumps and cabling - risers, clamps, flexible hose, connectors - power source and ancillaries - flow meter, dip meter - settlement tanks - pumping, measuring, testing and monitoring equipment - hand and/or powered tools 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length and area associated with the method/procedure to install deep well dewatering systems			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when installing deep well dewatering systems	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when installing deep well dewatering systems	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: – types of progress charts, timetables and estimated times – organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to install deep well dewatering systems and the required specification	7.1 Demonstrate the following work skills when installing deep well dewatering systems: - measuring, securing, establishing, testing, assessing and regulating 7.2 Install deep well dewatering systems to given working instructions: - locate and install submersible pumps and pipe network - test pumps - commission and monitor the system - monitor well parameters - decommission the system			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - locate and secure submersible pumps in deep wells with riser pipes, supports, headworks and flexible hose - establish pipe network including valves and tanks - establish electric cabling and control gear - test pumps and assess flow and water quality - commission the system - measure drawdown - regulate flow - monitor the system - dismantle the system and recover system parts - use hand tools, power tools and equipment 7.4 Safely use and store materials, hand tools, portable power tools and ancillary equipment 7.5 State the needs of other occupations and how to communicate within a team when installing deep well dewatering systems			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.6 Describe how to maintain the tools and equipment used when installing deep well dewatering systems			

Learner name: _____
 Learner signature: _____
 Assessor signature: _____
 Internal verifier signature: _____
(if sampled)

Date: _____
 Date: _____
 Date: _____
 Date: _____

Unit 27: Installing Ejector Dewatering Systems in the Workplace

Unit reference number: M/600/8186

QCF level: 2

Credit value: 18

Guided learning hours: 60

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in installing ejector dewatering systems in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of installing ejector dewatering systems to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated except for the following item from assessment criteria 7.2:

- decommission the system

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when installing ejector dewatering systems	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: – drawings, specifications, schedules, manufacturers' information and regulations			
2 Know how to comply with relevant legislation and official guidance when installing ejector dewatering systems	2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Maintain safe working practices when installing ejector dewatering systems	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when installing ejector dewatering systems 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to installing ejector dewatering systems, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to install ejector dewatering systems	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - ejectors - riser pipes, hoses and headworks - pipe network including pump, reservoir and discharge tanks - valves and gauges - control gear - pumps, testing and measuring equipment - hand and/or powered tools 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length and area associated with the method/procedure to install ejector dewatering systems			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when installing ejector dewatering systems	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when installing ejector dewatering systems	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to install ejector dewatering systems to the required specification	7.1 Demonstrate the following work skills when installing ejector dewatering systems: - measuring, assembling and establishing 7.2 Install ejectors as dewatering system to given working instructions: - test wells - commission and monitor the system - regulate flow - decommission the system 7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - assemble ejector equipment to include twin risers, headworks, flexible pipe connectors, pipework, tanks and pump - establish power source - establish water supply - locate ejectors in wells, including connection to pump and tank - commission the system - test wells - monitor and regulate flow - monitor and maintain water levels, discharge volumes and ejector flow rates - dismantle the system and recover system parts - use hand tools, power tools and equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.4 Safely use and store materials, hand tools, portable power tools and ancillary equipment			
	7.5 State the needs of other occupations and how to communicate within a team when installing ejector dewatering systems			
	7.6 Describe how to maintain the tools and equipment used when installing ejector dewatering systems			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Unit 28: Preparing to Install Ground Anchors in the Workplace

Unit reference number: K/600/8204

QCF level: 2

Credit value: 10

Guided learning hours: 33

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing to install ground anchors in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVOs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing to install ground anchors to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against one of the following endorsements:

- Mechanical
- Self drilling
- Open hole

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when preparing to install ground anchors	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information and current regulations			
2 Know how to comply with relevant legislation and official guidance when preparing to install ground anchors	2.1 Describe their responsibilities under current legislation and official guidance whilst working: - in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Maintain safe working practices when preparing to install ground anchors	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when preparing to install ground anchors 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to preparing to install ground anchors, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to prepare to install ground anchors	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - protection materials - hard standing materials - installation equipment and materials - hand and/or powered tools 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to prepare to install ground anchors			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when preparing to install ground anchors	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when preparing to install ground anchors	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to prepare to install ground anchors to the required specification	7.1 Demonstrate the following work skills when preparing to install ground anchors: - measuring, marking out, locating, protecting, constructing, excavating, supporting and setting-up 7.2 Segregate the area to install mechanical and/or self-drilling and/or open hole ground anchors to given working instructions, relating to: - location and protection of services - suitability of access and working area - preparing installation equipment 7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - confirm scope of works - locate and protect services - carry out ground works as necessary - establish working area - offload resources and secure - locate anchor positions - use hand tools, power tools and equipment - work at height - use access equipment 7.4 Safely use and store materials, hand tools, portable power tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.5 State the needs of other occupations and how to communicate within a team when preparing to install ground anchors			
	7.6 Describe how to maintain the tools and equipment used when preparing to install ground anchors			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 29: Installing Mechanical Ground Anchors in the Workplace

Unit reference number: A/600/8207

QCF level: 2

Credit value: 17

Guided learning hours: 57

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in installing mechanical ground anchors in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of installing mechanical ground anchors to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when installing mechanical ground anchors	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information and current regulations			
2 Know how to comply with relevant legislation and official guidance when installing mechanical ground anchors	2.1 Describe their responsibilities under current legislation and official guidance whilst working: - in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Maintain safe working practices when installing mechanical ground anchors	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when installing mechanical ground anchors 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to installing mechanical ground anchors, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to install mechanical ground anchors	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - installation equipment - anchors, drill rods, fittings, couplings, adaptors - tensioning equipment - hand and/or powered tools and equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to install mechanical ground anchors			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when installing mechanical ground anchors	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when installing mechanical ground anchors	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to install mechanical ground anchors to the required specification	7.1 Demonstrate the following work skills when installing mechanical ground anchors: - measuring, marking out, setting up, pre-starting checking and recording 7.2 Install driven ground anchors to given working instructions: - assemble installation equipment - install anchors to line, angle and depth - tension tendons and lock off - remove and disassemble equipment and make good			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - locate anchor positions - assemble installation equipment - carry out pre-start checks - set up and install to line and angle - install anchors to depth - recover drive rods - load anchors and record extensions - lock off - trim tendons and make good - remove and disassemble equipment - use hand tools, power tools and equipment - work at height - use access equipment 7.4 Safely use and store materials, hand tools, portable power tools and ancillary equipment 7.5 State the needs of other occupations and how to communicate within a team when installing mechanical ground anchors 7.6 Describe how to maintain the tools and equipment used when installing mechanical ground anchors			

Learner name: _____
Learner signature: _____
Assessor signature: _____
Internal verifier signature: _____
(if sampled)

Date: _____
Date: _____
Date: _____
Date: _____

Unit 30: Installing Open Hole Ground Anchors in the Workplace

Unit reference number: A/600/8210

QCF level: 2

Credit value: 20

Guided learning hours: 67

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in installing open hole ground anchors in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (OCF) title and SVOs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of installing open hole ground anchors to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when installing open hole ground anchors	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: – drawings, specifications, schedules, manufacturers' information and current regulations			
2 Know how to comply with relevant legislation and official guidance when installing open hole ground anchors	2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Maintain safe working practices when installing open hole ground anchors	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when installing open hole ground anchors 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to installing open hole ground anchors, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to install open hole ground anchors	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - grouting and water supply - tendons, fittings, couplings, adaptors - cement/grout - hand and/or powered tools and equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to install open hole ground anchors			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when installing open hole ground anchors	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when installing open hole ground anchors	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to install open hole ground anchors to the required specification	7.1 Demonstrate the following work skills when installing open hole ground anchors: – measuring, marking out, setting up, locating and protecting 7.2 Install open hole ground anchors to given working instructions: – prepare equipment and carry out pre-start checks – confirm hole parameters (depth) – mix grout and grout tendons – protect anchors			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - prepare grouting equipment and water supply - locate anchor positions - carry out pre-start checks - prepare anchors to specification - confirm hole depth - flush out and locate tendons if appropriate - mix grout and grout hole, recording and sampling as specified - withdraw tremie and flush back as specified - centralise tendons ensuring sufficient protrusion - protect anchors to allow curing - use hand tools, power tools and equipment - work at height - use access equipment 7.4 Safely use and store materials, hand tools, portable power tools and ancillary equipment 7.5 State the needs of other occupations and how to communicate within a team when installing open hole ground anchors 7.6 Describe how to maintain the tools and equipment used when installing open hole ground anchors			

Learner name: _____
Learner signature: _____
Assessor signature: _____
Internal verifier signature: _____
(if sampled)

Date: _____
Date: _____
Date: _____
Date: _____

Unit 31:

Preparing to Install Post Tensioning System as Substructural Repair in the Workplace

QCF level:

2

14

47

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing to install post tensioning system as sub-structural repair in the workplace within the relevant sector of industry.

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when preparing to install post tensioning system as sub-structural repair	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: – drawings, specifications, schedules, manufacturers' information and regulations governing buildings			
2 Know how to comply with relevant legislation and official guidance when preparing to install post tensioning system as sub-structural repair	2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Maintain safe working practices when preparing to install post tensioning system as sub-structural repair	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when preparing to install post tensioning system as sub-structural repair 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to preparing to install post tensioning system as sub-structural repair, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to prepare to install post tensioning system as sub-structural repair	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - service pipes, trench supports, repair-mortar, timber, steel reinforcement - tendons and anchors - hand and/or powered tools and equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to prepare to install post tensioning system as sub-structural repair			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when preparing to install post tensioning system as sub-structural repair	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when preparing to install post tensioning system as sub-structural repair	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: – types of progress charts, timetables and estimated times – organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to prepare to install post tensioning system as sub-structural repair to the required specification	7.1 Demonstrate the following work skills when preparing to install post tensioning system as sub-structural repair: - measuring, marking out, constructing and erecting, tying and securing 7.2 Prepare to install post tensioning as sub-structural repair to given working instructions: - locate and protect services - carry out earthworks - locate reinforcement steel and post tensioning system - repair and prepare foundations - form and reinforce ground beams 7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - set out for excavations and beams - locate, protect and relay services if necessary - excavate trenches and support if necessary - dispose of arisings - inspect and repair foundations - construct forms and erect formwork - tie and secure steel reinforcement - position and secure post tensioning accessories in reinforced concrete beam - use hand tools, power tools and equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.4 Safely use and store materials, hand tools and/or portable power tools and ancillary equipment			
	7.5 State the needs of other occupations and how to communicate within a team when preparing to install post tensioning system as sub-structural repair			
	7.6 Describe how to maintain the tools and equipment used when preparing to install post tensioning system as sub-structural repair			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Guided learning hours: 53

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when installing post tensioning system as sub-structural repair	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: – drawings, specifications, schedules, manufacturers' information and regulations governing buildings			
2 Know how to comply with relevant legislation and official guidance when installing post tensioning system as sub-structural repair	2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Maintain safe working practices when installing post tensioning system as sub-structural repair	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when installing post tensioning system as sub-structural repair 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to installing post tensioning system as sub-structural repair, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to install post tensioning system as sub-structural repair	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - live end and dead end accessories and fittings - structural concrete - anti-corrosion materials - hydraulic jacks and tensioning ancillaries - finishing and reinstatement materials - testing and tensioning equipment - hand and/or powered tools and equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to install post tensioning system as sub-structural repair			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when installing post tensioning system as sub-structural repair	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when installing post tensioning system as sub-structural repair	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to install post tensioning system as sub-structural repair to the required specification	7.1 Demonstrate the following work skills when installing post tensioning system as sub-structural repair: - measuring, setting out, handling, compacting, curing and striking 7.2 Install post tensioning system as sub-structural repair to given working instructions: - place concrete to ground beams - tension beams and record details - reinstate original conditions 7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - handle, place, compact, test and cure concrete - prepare for tensioning of beams - record detail and make good live and dead ends - apply anti-corrosion measures - strike formwork and make good - reinstate as necessary - use hand tools, power tools and equipment 7.4 Safely use and store materials, hand tools, portable power tools, testing/tensioning and ancillary equipment 7.5 State the needs of other occupations and how to communicate within a team when installing post tensioning system as sub-structural repair			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.6 Describe how to maintain the tools and equipment used when installing post tensioning system as sub-structural repair			

Learner name: _____
 Learner signature: _____
 Assessor signature: _____
 Internal verifier signature: _____
 (if sampled)

Date: _____
 Date: _____
 Date: _____
 Date: _____

Guided learning hours: 43

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when preparing for resin and grout injection operations	1.1 Interpretation of drawings, specifications, method statements, manufacturers' information and site specific safety rules 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, method statements, manufacturers' information and site specific safety rules			
2 Know how to comply with relevant legislation and official guidance when preparing for resin and grout injection operations	2.1 Describe their responsibilities under current legislation and official guidance whilst working: - in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Maintain safe working practices when preparing for resin and grout injection operations	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements 3.2 Explain why, when and how personal protective equipment (PPE) should be used, relating to preparing for resin and grout injection operations, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to prepare for resin and grout injection operations	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - tracer dye - packers, ports - mortar, cement, additives - plugging/sealing products and compounds - pressure relief valve/tap - injection equipment - hand and/or powered tools and ancillary equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to prepare for resin and grout injection operations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when preparing for resin and grout injection operations	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
6 Complete the work within the allocated time when preparing for resin and grout injection operations	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: – types of progress charts, timetables and estimated times – organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to prepare for resin and grout injection operations to the required specification	7.1 Demonstrate the following work skills when preparing for resin and grout injection operations: – locating, protecting, agreeing, preparing and drilling 7.2 Prepare the area, set up equipment and establish injection points for resin and grout injection operations, to given working instructions, relating to: – leakage control – structural repair			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - store and prepare equipment/materials - check suitability of work environment - confirm location of services - protect services as appropriate - reference areas of leakage or repair - confirm work procedure - establish injection points and sequence for injection - prepare area for injection and install packers/ports as appropriate - set up injection equipment - control water flow as appropriate - record and report information as required - use hand tools, power tools and equipment 7.4 Safely use and store materials, hand tools, portable power tools and ancillary equipment 7.5 State the needs of other occupations and how to communicate within a team when preparing for resin and grout injection operations 7.6 Describe how to maintain the tools and equipment used when preparing for resin and grout injection operations			

Learner name: _____
Learner signature: _____
Assessor signature: _____
Internal verifier signature: _____
(if sampled)

Date: _____
Date: _____
Date: _____
Date: _____

Unit 34: Carrying Out Resin and Grout Injection Operations in the Workplace

Unit reference number: J/601/6570

QCF level: 2

Credit value: 18

Guided learning hours: 60

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in carrying out resin and grout injection operations in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of carrying out resin and grout injection operations to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when carrying out resin and grout injection operations	1.1 Interpretation of drawings, specifications, method statements, manufacturers' information and site specific safety rules 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, method statements, manufacturers' information and site specific safety rules			
2 Know how to comply with relevant legislation and official guidance when carrying out resin and grout injection operations	2.1 Describe their responsibilities under current legislation and official guidance whilst working: - in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Maintain safe working practices when carrying out resin and grout injection operations	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when carrying out resin and grout injection operations 3.2 Explain why, when and how personal protective equipment (PPE) should be used, relating to carrying out resin and grout injection operations, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to carry out resin and grout injection operations	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - injection materials - packers, ports, connectors, hoses - injection equipment - hand and/or powered tools and ancillary equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to carry out resin and grout injection operations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when carrying out resin and grout injection operations	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
6 Complete the work within the allocated time when carrying out resin and grout injection operations	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: – types of progress charts, timetables and estimated times – organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to carry out resin and grout injection operations to the required specification	7.1 Demonstrate the following work skills when carrying out resin and grout injection operations: - securing, sealing, connecting, mixing, pumping and repairing 7.2 Carry out resin and grout injection operations for leakage control and structural repair to given works specification/methodology 7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - check and secure packers/ports as appropriate - control areas of water leakage as appropriate - connect injection equipment to packers/ports - prepare and mix injection materials as specified - pump injection materials to appropriate sequence and pressure - continue injection to sequence - repeat process as required - allow injection material to react - remove/break off packers/ports - remove excess injection material, if necessary - make good the repaired area as specified - complete site documentation - use hand tools, power tools and equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.4 Safely use and store materials, hand tools, portable power tools, injection equipment and ancillary equipment			
	7.5 State the needs of other occupations and how to communicate within a team when carrying out resin and grout injection operations			
	7.6 Describe how to maintain the tools and equipment used when carrying out resin and grout injection operations			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Unit 35: Preparing to Install Gas Membranes in the Workplace

Unit reference number: R/601/6653

QCF level: 2

Credit value: 13

Guided learning hours: 43

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing to install gas membranes in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVOs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing to install gas membranes to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when preparing to install gas membranes	1.1 Interpretation of drawings, specifications, method statements, manufacturers' information and site specific safety rules 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: – drawings, specifications, method statements, manufacturers' information and site specific safety rules			
2 Know how to comply with relevant legislation and official guidance when preparing to install gas membranes	2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Maintain safe working practices when preparing to install gas membranes	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when preparing to install gas membranes 3.2 Explain why, when and how personal protective equipment (PPE) should be used, relating to preparing to install gas membranes, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to prepare to install gas membranes	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - primers - venting media - venting outlets - periscope vents - termination battens, fixings and protection materials - hand and/or powered tools and ancillary equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to prepare to install gas membranes			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when preparing to install gas membranes	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
6 Complete the work within the allocated time when preparing to install gas membranes	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: – types of progress charts, timetables and estimated times – organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to prepare to install gas membranes to the required specification	7.1 Demonstrate the following work skills when preparing to install gas membranes: – protecting, laying, taping, welding, assembling, securing and maintaining 7.2 Install and connect venting media, in preparation of gas membrane installation to unit oversite, to given working instructions 7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: – confirm suitability of formation and detail – locate and protect services – identify penetration points – lay venting strip and/or continuous venting media – fix and secure venting media to formation, including penetration points and collector system if required – connect venting media to connection and/or vent outlets – use hand tools, power tools and equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.4 Safely use and store materials, hand tools, portable power tools and ancillary equipment			
	7.5 State the needs of other occupations and how to communicate within a team when preparing to install gas membranes			
	7.6 Describe how to maintain the tools and equipment used when preparing to install gas membranes			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 36: Installing Gas Membranes in the Workplace

Unit reference number: L/601/6666

QCF level: 2

Credit value: 18

Guided learning hours: 60

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in installing gas membranes in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of installing gas membranes to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when installing gas membranes	1.1 Interpretation of drawings, specifications, method statements, manufacturers' information and site specific safety rules 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: – drawings, specifications, method statements, manufacturers' information and site specific safety rules			
2 Know how to comply with relevant legislation and official guidance when installing gas membranes	2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Maintain safe working practices when installing gas membranes	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when installing gas membranes in the workplace 3.2 Explain why, when and how personal protective equipment (PPE) should be used, relating to installing gas membranes in the workplace, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to install gas membranes	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - membranes, primers, tape, self-adhesive membrane - pre-formed units, top hats - cavity vents, periscope vents - protection media - hand and/or powered tools and equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to install gas membranes in the workplace			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when installing gas membranes	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out safely in accordance with environmental responsibilities, organisational procedures, manufacturers' information, statutory regulations and official guidance			
6 Complete the work within the allocated time when installing gas membranes	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: – types of progress charts, timetables and estimated times – organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to install gas membranes to the required specification	7.1 Demonstrate the following work skills when installing gas membranes in the workplace: - measuring, setting-out, cutting, laying, taping, welding, assembling, fitting, applying, sealing, securing, inspecting, repairing and protecting 7.2 Install gas membranes to unit oversites to given working instructions			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - set out for membrane and determine the direction for laying - lay out membrane ensuring specified overlap - cut, form and position membrane to formation and detail, including lift pits and shafts, large scale pre-formers, preformed corners and batten as appropriate - cut and form internal and external corners, including pre-formed corners - join sheets and corners by taping and/or welding using either hand, automatic hot air, wedge, or extrusion welder - apply self-adhesive gas membrane/flashing to detail work - locate and protect penetration points - seal pop ups/penetration points - carry out visual checks and pick test - protect gas membrane as appropriate - carry out repairs to membrane (taped, welded and self-adhesive) - use hand tools, power tools and equipment 7.4 Safely use and store materials, hand tools, portable power tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.5 State the needs of other occupations and how to communicate within a team when installing gas membranes in the workplace			
	7.6 Describe how to maintain the tools and equipment used when installing gas membranes in the workplace			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 37: Repairing Substructure after Underpinning in the Workplace

Unit reference number: Y/600/8117

OCF level: 2

Credit value: 15

Guided learning hours: 50

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in repairing substructure after underpinning in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of repairing sub-structure after underpinning to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when repairing sub-structure after underpinning	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: – drawings, specifications, schedules, manufacturers' information and regulations governing buildings			
2 Know how to comply with relevant legislation and official guidance when repairing sub-structure after underpinning	2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Maintain safe working practices when repairing sub-structure after underpinning	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when repairing sub-structure after underpinning 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to repairing sub-structure after underpinning, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to repair sub-structure after underpinning	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - bricks, blocks, timber, stone, concrete, aggregates, cements, additives, fixings and fittings - hand and/or powered tools and equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to repair sub-structure after underpinning			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when repairing sub-structure after underpinning	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when repairing sub-structure after underpinning	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to repair sub-structure after underpinning to the required specification	7.1 Demonstrate the following work skills when repairing sub-structure after underpinning: – mixing, placing, positioning and securing 7.2 Repair existing sub-structure to contractor's working instructions for at least two of the following: – brickwork and/or blockwork – concrete – timber – facings/linings – waterproofing systems 7.3 Provide temporary support as necessary 7.4 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: – repair existing brick, block, timber, facing/linings and concrete sub-structures – apply waterproofing – install temporary support – use hand tools, power tools and equipment 7.5 Safely use and store hand tools, portable power tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.6 State the needs of other occupations and how to communicate within a team when repairing sub-structure after underpinning			
	7.7 Describe how to maintain the tools and equipment used when repairing sub-structure after underpinning			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 38: Providing Temporary Support to Deep Underpinning in the Workplace

Unit reference number: F/600/8161

QCF level: 2

Credit value: 15

Guided learning hours: 50

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in providing temporary support to deep underpinning in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of providing temporary support to deep underpinning to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when providing temporary support to deep underpinning	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: – drawings, specifications, schedules, manufacturers' information and regulations governing buildings			
2 Know how to comply with relevant legislation and official guidance when providing temporary support to deep underpinning	2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Maintain safe working practices when providing temporary support to deep underpinning	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when providing temporary support to deep underpinning 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to providing temporary support to deep underpinning, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to provide temporary support to deep underpinning	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - timber, proprietary supports, trench sheets, fixings, fittings - hand and/or powered tools and equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to provide temporary support to deep underpinning			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when providing temporary support to deep underpinning	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when providing temporary support to deep underpinning	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: – types of progress charts, timetables and estimated times – organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to provide temporary support to deep underpinning to the required specification	7.1 Demonstrate the following work skills when providing temporary support to deep underpinning: – measuring, marking out, excavating, positioning and securing 7.2 Excavate and support deep pits and trenches for underpinning with timber, trench sheets and/or proprietary support systems to contractor's working instructions 7.3 Locate, mark and protect services 7.4 Remove ground water as necessary 7.5 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: – excavate deep pits and trenches for underpinning – support excavations with timber, trench sheets and/or proprietary support systems – locate, mark and protect services – remove ground water – work in confined spaces – use hand tools, power tools and equipment 7.6 Safely use and store hand tools, portable power tools and ancillary equipment 7.7 State the needs of other occupations and how to communicate within a team when providing temporary support to deep underpinning			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.8 Describe how to maintain the tools and equipment used when providing temporary support to deep underpinning			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 39:

Preparing and Operating Rough Terrain Masted Forklifts to Lift and Transfer Loads in the Workplace

OCF level: 2

Credit value: 18

Guided learning hours: 60

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating rough terrain masted forklifts to lift and transfer loads in the workplace within the relevant sector of industry.

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating rough terrain masted forklifts to lift and transfer loads to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of rough terrain masted forklifts to lift, transfer and place loads	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to rough terrain masted forklift operations			
2 Organise with others the sequence and operation in which rough terrain masted forklift operations are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during forklift operations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance when carrying out lifting and transferring loads with rough terrain masted forklifts	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out forklift operations with rough terrain masted types	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during rough terrain masted forklift operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to rough terrain masted forklift use, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out forklift operations with rough terrain masted types	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments and lifting aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with rough terrain masted forklifts in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate weight, bearing pressure, length and area associated with the method/procedures to lift and transfer loads using rough terrain masted forklifts			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when lifting and transferring loads	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and lifting and transferring loads	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure rough terrain masted forklifts 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the lifting operation			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8 Comply with the given contract information to lift, transfer and place loads using rough terrain masted forklifts to the required specification	8.1 Demonstrate the following work skills when preparing for, lifting, transferring and placing loads using rough terrain masted forklifts: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, lifting, transferring and setting down 8.2 Prepare and operate rough terrain masted forklift to lift, transfer and place a variety of loads in the workplace, to given working instructions			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the machine for the forklift operation - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - operate and move the rough terrain masted forklift - identify characteristics, type, weight and positioning of loads for lifting and transferring - secure and balance loads for lifting - lift, remove and transfer loads - position, place and set down loads - confirm load stability and security - shut down the rough terrain masted forklift - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.5 State the needs of other occupations and how to communicate within a team when preparing for and lifting and transferring loads			
	8.6 Describe how to maintain the plant, tools and equipment used to lift and transfer loads			

Learner name: _____ Date: _____
 Learner signature: _____ Date: _____
 Assessor signature: _____ Date: _____
 Internal verifier signature: _____ Date: _____
 (if sampled)

Unit 40:

QCF level: 2

Credit value: 16

Guided learning hours: 53

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating industrial counterbalanced forklifts to lift and transfer loads in the workplace within the relevant sector of industry.

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating industrial counterbalanced forklifts to lift and transfer loads to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of industrial counterbalanced forklifts to lift, transfer and place loads	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to industrial counterbalanced forklift operations			
2 Organise with others the sequence and operation in which industrial counterbalanced forklift operations are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during forklift operations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3	Know how to comply with relevant legislation and official guidance when lifting and transferring loads with industrial counterbalanced forklifts	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports		
4	Maintain safe working practices when preparing for and carrying out forklift operations with industrial counterbalanced types	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during industrial counterbalanced forklift operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to industrial counterbalanced forklift use, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards		

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out forklift operations with industrial counterbalanced types	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments and lifting aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with industrial counterbalanced forklifts in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate weight, length and area associated with the method/procedures to lift and transfer loads using industrial counterbalanced forklifts			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when lifting and transferring loads	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and lifting and transferring loads	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure industrial counterbalanced forklifts 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the lifting operation			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8	Comply with the given contract information to lift, transfer and place loads using industrial counterbalanced forklifts to the required specification 8.1 Demonstrate the following work skills when preparing for, lifting, transferring and placing loads with industrial counterbalanced forklifts: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, lifting, transferring and setting down 8.2 Prepare and operate industrial counterbalanced forklift to lift, transfer and place a variety of loads in the workplace, to given working instructions			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the machine for the forklift operation - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - operate and move the industrial counterbalanced forklift - identify characteristics, type, weight and positioning of loads for lifting and transferring - secure and balance loads for lifting - lift, remove and transfer loads - position, place and set down loads - confirm load stability and security - shut down the industrial counterbalanced forklift - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.5 State the needs of other occupations and how to communicate within a team when preparing for and lifting and transferring load			
	8.6 Describe how to maintain the plant, tools and equipment used to lift and transfer loads			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Guided learning hours: 53

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of sideloaders to lift, transfer and place loads	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to sideloader operations			
2 Organise with others the sequence and operation in which sideloader operations are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during forklift operations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance when lifting and transferring loads with sideloaders	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out forklift operations with sideloader types	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during sideloader operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to rough terrain masted forklift use, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out forklift operations with sideloader types	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments and lifting aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with sideloader forklifts in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate weight, length and area associated with the method/procedures to lift and transfer loads using sideloaders			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when lifting and transferring loads	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and lifting and transferring loads	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure sideloaders 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the lifting operation			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8 Comply with the given contract information to lift, transfer and place loads using sideloaders to the required specification	8.1 Demonstrate the following work skills when preparing for, lifting, transferring and placing loads using sideloaders: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, lifting, transferring and setting down 8.2 Prepare and operate sideloaders to lift, transfer and place a variety of loads in the workplace, to given working instructions			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the machine for the forklift operation - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - operate and move the sideloader - identify characteristics, type, weight and positioning of loads for lifting and transferring - secure and balance loads for lifting - lift, remove and transfer loads - position, place and set down loads - confirm load stability and security - shut down the sideloader - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment 8.5 State the needs of other occupations and how to communicate within a team when preparing for and lifting and transferring loads			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.6 Describe how to maintain the plant, tools and equipment used to lift and transfer loads			

Learner name: _____
 Learner signature: _____
 Assessor signature: _____
 Internal verifier signature: _____
(if sampled)

Date: _____
 Date: _____
 Date: _____
 Date: _____

Guided learning hours: 83

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of telescopic handlers to lift, transfer and place loads	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to telescopic handler operations			
2 Organise with others the sequence and operation in which telescopic handlers operations are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during telescopic handler operations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance when lifting and transferring loads	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out telescopic handler operations	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during telescopic handler operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to telescopic handler use, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out telescopic handler operations	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments and lifting aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with telescopic handlers in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate weight, length and area associated with the method/procedures to lift and transfer loads using telescopic handlers			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when lifting and transferring loads	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and lifting and transferring loads	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure telescopic handlers 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the lifting operation			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8 Comply with the given contract information to lift, transfer and place loads using telescopic handlers to the required specification	8.1 Demonstrate the following work skills when preparing for, lifting, transferring and placing loads using telescopic handlers: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, lifting, transferring and setting down 8.2 Prepare, set up and operate telescopic handlers to lift, transfer and place a variety of loads in the workplace, to given working instructions			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the telescopic handler for the lifting operation - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - operate and move the tele-handler - identify characteristics, type, weight and positioning of loads for lifting and transferring - secure and balance loads for lifting - lift, remove and transfer loads - position, place and set down loads - confirm load stability and security - shut down the tele-handler - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.5 State the needs of other occupations and how to communicate within a team when preparing for and lifting and transferring loads			
	8.6 Describe how to maintain the plant, tools and equipment used to lift and transfer loads			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Unit 43: Preparing and Operating Reach Trucks to Lift and Transfer Loads in the Workplace

Unit reference number: J/600/7917

QCF level: 2

Credit value: 16

Guided learning hours: 53

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating reach trucks to lift and transfer loads in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating reach trucks to lift and transfer loads to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of reach trucks to lift, transfer and place loads	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to reach truck operations			
2 Organise with others the sequence and operation in which reach truck operations are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during forklift truck operations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance when lifting and transferring loads with reach trucks	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out forklift operations with mast reach types	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during reach trucks operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to reach truck use, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out forklift operations with mast/d reach types	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments and lifting aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with reach trucks in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate weight, length and area associated with the method/procedures to carry, lift and transfer loads using reach trucks			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when lifting and transferring loads	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and lifting and transferring loads	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure reach trucks 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the lifting operation			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8 Comply with the given contract information to lift, transfer and place loads using reach trucks to the required specification	8.1 Demonstrate the following work skills when preparing for, lifting, transferring and placing loads using reach trucks: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, lifting, transferring and setting down 8.2 Prepare, set up and operate reach trucks to lift, transfer and place a variety of loads in the workplace, to given working instructions			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the reach truck for the forklift operation - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - operate and move the reach truck - identify characteristics, type, weight and positioning of loads for lifting and transferring - secure and balance loads for lifting and moving - lift, remove and transfer loads - position, place and set down loads - confirm load stability and security - shut down the reach truck - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.5 State the needs of other occupations and how to communicate within a team when preparing for and lifting and transferring loads			
	8.6 Describe how to maintain the plant, tools and equipment used to lift and transfer loads			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Unit 44: Preparing and Operating Lorry Loaders or Knuckle Boom Cranes to Lift and Transfer Loads in the Workplace

Unit reference number: J/600/7920

QCF level: 2

Credit value: 30

Guided learning hours: 100

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating lorry loaders or knuckle boom cranes to lift and transfer loads in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVOs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating lorry loaders/knuckle boom cranes to lift and transfer loads to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of lorry loaders/knuckle boom cranes to lift, transfer and place loads	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to lorry loader/knuckle boom crane operations			
2 Organise with others the sequence and operation in which lifting operations using lorry loaders/knuckle boom cranes are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during lifting operations with lorry loaders/knuckle boom cranes			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance when carrying out lifting operations	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out lifting operations using lorry loaders/knuckle boom cranes	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during lifting operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to lorry loader/knuckle boom crane use, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out lifting operations using lorry loaders/knuckle boom cranes	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments and lifting aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with lorry loaders/knuckle boom cranes in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate weight, bearing pressure, length and area associated with the method/procedures to carry out lifting operations with lorry loaders/knuckle boom cranes			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when lifting and transferring loads	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and lifting and transferring loads	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure lorry loader/knuckle boom crane 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the lifting operation			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8 Comply with the given contract information to lift, transfer and place loads using lorry loaders/knuckle boom cranes to the required specification	8.1 Demonstrate the following work skills when preparing for, lifting, transferring and placing loads using lorry loaders/knuckle boom cranes: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, lifting, transferring and setting down 8.2 Prepare, set up and operate lorry loaders/knuckle boom cranes to lift, transfer and place a variety of loads in the workplace, to given working instructions			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the crane for the lifting operation - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - operate and move (where applicable) the crane - identify characteristics, type, weight and positioning of loads for lifting and transferring - secure and balance loads for lifting - lift, remove and transfer loads - position, place and set down loads - confirm load stability and security - shut down the crane - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.5 State the needs of other occupations and how to communicate within a team when preparing for and lifting and transferring loads			
	8.6 Describe how to maintain the plant, tools and equipment used to lift and transfer loads			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Unit 45: Preparing and Operating Skip Handlers to Lift and Transfer Loads in the Workplace

Unit reference number: L/600/7921

QCF level: 2

Credit value: 18

Guided learning hours: 60

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating skip handlers to lift and transfer loads in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating skip handlers to lift and transfer loads to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of skip handlers to lift, transfer and place loads	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: – drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to skip handler operations			
2 Organise with others the sequence and operation in which lifting operations using skip handlers are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during lifting operations with skip handlers			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance when carrying out lifting operations	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out lifting operations using skip handlers	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during lifting operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to skip handler use, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out lifting operations using skip handlers	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments and lifting aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with skip handlers in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate weight, bearing pressure, length and area associated with the method/procedures to carry out lifting operations with skip handlers			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when lifting and transferring loads	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and lifting and transferring loads	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure skip handlers 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the lifting operation			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8	Comply with the given contract information to lift, transfer and place loads using skip handlers to the required specification 8.1 Demonstrate the following work skills when preparing for, lifting, transferring and placing loads using skip handlers: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, lifting, transferring and setting down 8.2 Prepare, set up and operate skip handlers to lift, transfer and place a variety of loads in the workplace, to given working instructions			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the skip handler for the lifting operation - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - operate and move (where applicable) the skip handler - identify characteristics, type, weight and positioning of loads for lifting and transferring - secure and balance loads for lifting - lift, remove and transfer loads - position, place and set down loads - confirm load stability and security - shut down the skip handler - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.5 State the needs of other occupations and how to communicate within a team when preparing for and lifting and transferring loads			
	8.6 Describe how to maintain the plant, tools and equipment used to lift and transfer loads			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Unit 46: Preparing and Operating 180 degree Excavators to Extract and Excavate Ground and Loose Materials in the Workplace

Unit reference number: T/600/7931

QCF level: 2

Credit value: 80

Guided learning hours: 267

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating 180 degree excavators to extract and excavate ground and loose materials in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating 180 degree excavators to extract and excavate materials to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit can be assessed against one of the following endorsements:

- Quarry operations – up to 6 tonne
- Quarry operations – over 6 tonne

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of 180 degree excavators to carry out extracting and excavating operations	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to extracting and excavating operations			
2 Organise with others the sequence and operation in which extracting and excavating operations using 180 degree excavators are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during extracting and excavating operations using 180 degree excavators			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance to carry out extracting and excavating operations with 180 degree excavators	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out extracting and excavating operations using 180 degree excavators	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during extracting and excavating operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to extracting and excavating operations, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out extracting and excavating operations using 180 degree excavators	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments and extraction/excavation aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with 180 degree excavators in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out extracting and excavating operations using 180 degree excavators			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when extracting and excavating materials using 180 degree excavators	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and extracting and excavating materials using 180 degree excavators	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure 180 degree excavators 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8 Comply with the given contract information to extract and excavate materials using 180 degree excavators to the required specification	8.1 Demonstrate the following work skills when preparing for and extracting and excavating loose materials and ground using 180 degree excavators: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, extracting, excavating, forming, measuring, removing and loading 8.2 Prepare, position, set up and operate 180 degree excavators to given working instructions: - extract loose materials and/or different types of ground - load and/or stockpile loose materials and ground - excavate different types of ground			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the 180 degree excavator used for extraction and excavation work - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - identify the area to be extracted and excavated - check to avoid damage to structures and utilities service apparatus - extract, excavate, remove and load materials safely and securely - form stockpiles - shut down and secure 180 degree excavators - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.5 State the needs of other occupations and how to communicate within a team when preparing to and carrying out extracting and excavating operations			
	8.6 Describe how to maintain the plant, tools and equipment used to extract and excavate materials			

Learner name: _____
 Learner signature: _____
 Assessor signature: _____
 Internal verifier signature: _____
 (if sampled)

Date: _____
 Date: _____
 Date: _____
 Date: _____

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of wheeled loading shovels to carry out extracting operations	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: – drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to loading shovel extracting operations			
2 Organise with others the sequence and operation in which extracting operations using wheeled loading shovels are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during extracting operations using wheeled loading shovels			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance to carry out extracting operations with wheeled loading shovels	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out extracting operations using wheeled loading shovels	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during extracting operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to extracting operations, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out extracting operations using wheeled loading shovels	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments and extraction aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with wheeled loading shovels in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out extracting operations using wheeled loading shovels			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when extracting materials using wheeled loading shovels	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and extracting materials using wheeled loading shovels	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure wheeled loading shovels 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8 Comply with the given contract information to extract materials using wheeled loading shovels to the required specification	8.1 Demonstrate the following work skills when preparing for and extracting loose materials using wheeled loading shovels: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, extracting, forming, removing and loading 8.2 Prepare, position, set up and operate wheeled loading shovels to given working instructions: - extract loose materials - load and/or stockpile loose materials			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the wheeled loading shovel used for extraction work - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - identify the area to be extracted - check to avoid damage to structures and utilities service apparatus - extract, remove and load materials safely and securely - form stockpiles - shut down and secure wheeled loading shovels - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.5 State the needs of other occupations and how to communicate within a team when preparing to and carrying out extracting operations			
	8.6 Describe how to maintain the plant, tools and equipment used to extract materials			

Learner name: _____

Learner signature: _____

Assessor signature: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Date: _____

Date: _____

Date: _____

Unit 48: Preparing and Operating Tracked Loading Shovels to Extract Ground and Loose Materials in the Workplace

Unit reference number: R/600/7936

QCF level: 2

Credit value: 80

Guided learning hours: 267

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating tracked loading shovels to extract ground and loose materials in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating tracked loading shovels to extract materials to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of tracked loading shovels to carry out extracting operations	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: – drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to extracting operations			
2 Organise with others the sequence and operation in which extracting operations using tracked loading shovels are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during extracting operations using tracked loading shovels			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance to carry out extracting operations with tracked loading shovels	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out extracting operations using tracked loading shovels	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during extracting operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to extracting operations, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out extracting operations using tracked loading shovels	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments and extraction aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with tracked loading shovels in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out extracting operations using tracked loading shovels			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when extracting materials using tracked loading shovels	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and extracting materials using tracked loading shovels	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure tracked loading shovels 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8 Comply with the given contract information to extract materials using tracked loading shovels to the required specification	8.1 Demonstrate the following work skills when preparing for and extracting loose materials and ground using tracked loading shovels: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, extracting, forming, removing and loading 8.2 Prepare, position, set up and operate tracked loading shovels to given working instructions: - extract ground, face and/or loose materials - load and/or stockpile loose materials			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the tracked loading shovels used for extraction work - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - identify the area to be extracted - check to avoid damage to structures and utilities service apparatus - extract, remove and load materials safely and securely - form stockpiles - shut down and secure tracked loading shovels - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.5 State the needs of other occupations and how to communicate within a team when preparing to and carrying out extracting operations			
	8.6 Describe how to maintain the plant, tools and equipment used to extract materials			

Learner name: _____
 Learner signature: _____
 Assessor signature: _____
 Internal verifier signature: _____
 (if sampled)

Date: _____
 Date: _____
 Date: _____
 Date: _____

Guided learning hours: 67

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of skid steer loaders to carry out extracting operations	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to extracting operations			
2 Organise with others the sequence and operation in which extracting operations using skid steer loaders are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during extracting operations using skid steer loaders			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance to carry out extracting operations with skid steer loaders	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out extracting operations using skid steer loaders	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during extracting operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to extracting operations, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out extracting operations using skid steer loaders	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments and extraction aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with skid steer loaders in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out extracting operations using skid steer loaders			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when extracting materials using skid steer loaders	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and extracting materials using skid steer loaders	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure skid steer loaders 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8 Comply with the given contract information to extract materials using skid steer loaders to the required specification	8.1 Demonstrate the following work skills when preparing for and extracting loose materials using skid steer loaders: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, extracting, forming, removing and loading 8.2 Prepare, position, set up and operate skid steer loaders to given working instructions: - extract loose materials - load and/or stockpile loose materials			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the skid steer loader used for the extraction work - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - identify the area to be extracted - check to avoid damage to structures and utilities service apparatus - extract, remove and load materials safely and securely - form stockpiles - shut down and secure skid steer loader - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.5 State the needs of other occupations and how to communicate within a team when preparing to and carrying out extracting operations			
	8.6 Describe how to maintain the plant, tools and equipment used to extract materials			

Learner name: _____
 Learner signature: _____
 Assessor signature: _____
 Internal verifier signature: _____
 (if sampled)

Date: _____
 Date: _____
 Date: _____
 Date: _____

Unit 50: Preparing and Operating Motorised Scrapers to Extract, Transport and Distribute Materials in the Workplace

Unit reference number: J/600/7948

QCF level: 2

Credit value: 80

Guided learning hours: 267

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating motorised scrapers to extract, transport and distribute materials in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVOs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating motorised scrapers to extract, transport and distribute materials to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit can be assessed against one of the following endorsements:

- Quarry operations
- Landfill operations

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of motorised scrapers to carry out extracting and distributing operations	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to motorised scraper extracting and distributing operations			
2 Organise with others the sequence and operation in which extracting and distributing operations using motorised scrapers are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during extracting and distributing operations using motorised scrapers			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance to carry out extracting and distributing operations with motorised scrapers	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out extracting and distributing operations using motorised scrapers	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during extracting and distributing operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to extracting and distributing operations, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out extracting and distributing operations using motorised scrapers	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments and extraction/excavation aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with motorised scrapers in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out extracting and distributing operations using motorised scrapers			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when extracting and distributing materials using motorised scrapers	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and extracting and distributing materials using motorised scrapers	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure motorised scrapers 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8 Comply with the given contract information to extract and distribute materials using motorised scrapers to the required specification	8.1 Demonstrate the following work skills when preparing for and extracting and distributing loose materials or ground using motorised scrapers: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, extracting, laying, distributing, forming, removing and loading 8.2 Prepare, position, set up and operate motorised scrapers to given working instructions: - extract, load and transport different types of ground - lay, distribute and/or stockpile extracted materials			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the motorised scrapers used for the extraction and distribution work - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - identify the area to be extracted - check to avoid damage to structures and utilities service apparatus - extract, load, transport and lay materials safely and securely - form stockpiles - shut down and secure motorised scrapers - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.5 State the needs of other occupations and how to communicate within a team when preparing to and carrying out extracting and distributing operations			
	8.6 Describe how to maintain the plant, tools and equipment used to extract and distribute materials			

Learner name: _____ Date: _____

Learner signature: _____ Date: _____

Assessor signature: _____ Date: _____

Internal verifier signature: _____ Date: _____
(if sampled)

Guided learning hours: 267

- Quarry Operations - 360 degree Excavator – up to 30 tonne – standard reach
- Quarry Operations - 360 degree Excavator – up to 30 tonne – long reach (over 6.1m)
- Quarry Operations - 360 degree Excavator – up to 30 tonne – face shovel
- Quarry Operations - 360 degree Excavator – 31 to 60 tonne – standard reach
- Quarry Operations - 360 degree Excavator – 31 to 60 tonne – long reach (over 6.1m)
- Quarry Operations - 360 degree Excavator – 31 to 60 tonne – face shovel
- Quarry Operations - 360 degree Excavator – 61 to 100 tonne – standard reach
- Quarry Operations - 360 degree Excavator – 61 to 100 tonne – long reach (over 6.1m)
- Quarry Operations - 360 degree Excavator – 61 to 100 tonne – face shovel
- Quarry Operations - 360 degree Excavator – above 100 tonne – standard reach
- Quarry Operations - 360 degree Excavator – above 100 tonne – long reach (over 6.1m)
- Quarry Operations - 360 degree Excavator – above 100 tonne – face shovel

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of 360 degree excavators to carry out extracting operations	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to extracting operations			
2 Organise with others the sequence and operation in which extracting operations using 360 degree excavators are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during extracting operations using 360 degree excavators			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance to carry out extracting operations with 360 degree excavators	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out extracting operations using 360 degree excavators	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during extracting operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to extracting operations, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out extracting operations using 360 degree excavators	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments and extraction/excavation aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with 360 degree excavators in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out extracting operations using 360 degree excavators			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when extracting materials using 360 degree excavators	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and extracting materials using 360 degree excavators	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure 360 degree excavators 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8 Comply with the given contract information to extract materials using 360 degree excavators to the required specification	8.1 Demonstrate the following work skills when preparing for and extracting loose materials, face or ground using 360 degree excavators: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, extracting, forming, removing and loading 8.2 Prepare, position, set up and operate 360 degree excavators to given working instructions: - extract from a face, loose materials and/or ground - load extracted loose materials and/or stockpile loose materials			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the 360 degree excavators used for the extraction work - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - identify the area to be extracted - check to avoid damage to structures and utilities service apparatus - extract, remove and load materials safely and securely - form stockpiles - shut down and secure 360 degree excavators - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.5 State the needs of other occupations and how to communicate within a team when preparing to and carrying out extracting operations			
	8.6 Describe how to maintain the plant, tools and equipment used to extract materials			

Learner name: _____
 Learner signature: _____
 Assessor signature: _____
 Internal verifier signature: _____
 (if sampled)

Date: _____
 Date: _____
 Date: _____
 Date: _____

Guided learning hours: 267

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of 360 degree excavators to carry out excavating operations	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to excavating operations			
2 Organise with others the sequence and operation in which excavating operations using 360 degree excavators are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during excavating operations using 360 degree excavators			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance to carry out excavating operations with 360 degree excavators	3.1 Describe their responsibilities under current legislation and official guidance whilst working: - in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out excavating operations using 360 degree excavators	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during excavating operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to excavating operations, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out excavating operations using 360 degree excavators	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments and excavation aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with 360 degree excavators in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out excavating operations using 360 degree excavators			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when excavating materials using 360 degree excavators	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and excavating materials using 360 degree excavators	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure 360 degree excavators 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8 Comply with the given contract information to excavate materials using 360 degree excavators to the required specification	8.1 Demonstrate the following work skills when preparing for and excavating ground using 360 degree excavators: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, excavating, forming, removing and loading 8.2 Prepare, position, set up and operate 360 degree excavators to given working instructions: - excavate a variety of ground - load and/or stockpile excavated loose materials			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the 360 degree excavators used for the excavation work - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - identify the area to be excavated - check to avoid damage to structures and utilities service apparatus - excavate, remove and load materials safely and securely - form stockpiles - shut down and secure 360 degree excavator - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.5 State the needs of other occupations and how to communicate within a team when preparing to and carrying out excavating operations			
	8.6 Describe how to maintain the plant, tools and equipment used to excavate materials			

Learner name: _____

Learner signature: _____

Assessor signature: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Date: _____

Date: _____

Date: _____

Unit 53: Preparing and Operating Trenchers to Excavate Ground in the Workplace

Unit reference number: Y/600/7971

QCF level: 2

Credit value: 50

Guided learning hours: 167

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating trenchers to excavate ground in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating trenchers to excavate materials to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of trenchers to carry out excavating operations	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to trencher excavating operations			
2 Organise with others the sequence and operation in which excavating operations using trenchers are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during excavating operations using trenchers			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance to carry out excavating operations with trenchers	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out excavating operations using trenchers	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during excavating operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to excavating operations, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out excavating operations using trenchers	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments and excavation aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with trenchers in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out excavating operations using trenchers			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when excavating materials using trenchers	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and excavating materials using trenchers	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure trenchers 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the lifting operation			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8 Comply with the given contract information to excavate materials using trenchers to the required specification	8.1 Demonstrate the following work skills when preparing for and excavating ground using trenchers: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, excavating, measuring and removing 8.2 Prepare, position, set up and operate trenchers to excavate a variety of ground and form trenches to given working instructions			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the trenchers used for the excavation work - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - identify the area to be excavated - check to avoid damage to structures and utilities service apparatus - excavate materials safely and securely - shut down and secure trenchers - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment 8.5 State the needs of other occupations and how to communicate within a team when preparing to and carrying out excavating operations 8.6 Describe how to maintain the plant, tools and equipment used to excavate materials			

Learner name: _____
Learner signature: _____
Assessor signature: _____
Internal verifier signature: _____
(if sampled)

Date: _____
Date: _____
Date: _____
Date: _____

Unit 54: Preparing and Operating Truck-mounted Boom Concrete Pumps to Receive, Pump and Discharge Materials in the Workplace

Unit reference number: T/600/7976

QCF level: 2

Credit value: 70

Guided learning hours: 233

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating truck-mounted boom concrete pumps to receive, pump and discharge materials in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating truck-mounted boom concrete pumps to pump and discharge materials to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of concrete pumps to carry out pumping and discharging operations	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to concrete pumping operations			
2 Organise with others the sequence and operation in which pumping and discharging operations using concrete pumps are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during concrete pumping operations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance to carry out pumping operations with concrete pumps	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out pumping operations using concrete pumps	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during concrete pumping operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to concrete pumping operations, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out pumping operations using concrete pumps	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments, pumping and discharging aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with concrete pumps in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out concrete pumping operations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when pumping materials using concrete pumps	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and pumping and discharging materials using concrete pumps	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure concrete pumps 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8 Comply with the given contract information to receive, pump and discharge materials using concrete pumps to the required specification	8.1 Demonstrate the following work skills when preparing for and pumping and discharging materials using concrete pumps: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, receiving, pumping, discharging and cleaning 8.2 Prepare, position, set up and operate truck-mounted boom concrete pumps to receive, pump and discharge materials, at various locations, to given working instructions			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the concrete pumps used for pumping and discharging work - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - identify the area for pumping - check to avoid damage to structures and utilities service apparatus - receive and pump materials safely and securely - shut down and secure concrete pumps - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment 8.5 State the needs of other occupations and how to communicate within a team when preparing to and carrying out pumping and discharging operations 8.6 Describe how to maintain the plant, tools and equipment used to pump materials			

Learner name: _____
Learner signature: _____
Assessor signature: _____
Internal verifier signature: _____
(if sampled)

Date: _____
Date: _____
Date: _____
Date: _____

Unit 55: Preparing and Operating Forward Tipping Dumpers to Receive, Transport and Discharge Materials in the Workplace

Unit reference number: A/600/7977

QCF level: 2

Credit value: 16

Guided learning hours: 53

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating forward tipping dumpers to receive, transport and discharge materials in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVOs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating forward tipping dumpers to transport and discharge materials to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated..

This unit must be assessed against one of the following endorsements:

- Forward tipping dumper – wheeled
- Forward tipping dumper – tracked

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of forward tipping dumpers to carry out transporting and discharging operations	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: – drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to transporting and discharging operations			
2 Organise with others the sequence and operation in which transporting and discharging operations using forward tipping dumpers are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during transporting and discharging operations using forward tipping dumpers			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance to carry out transporting and discharging operations with forward tipping dumpers	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out transporting and discharging operations using forward tipping dumpers	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during transporting and discharging operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to transporting and discharging operations, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out transporting and discharging operations using forward tipping dumpers	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments, transporting and discharging aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with forward tipping dumpers in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out transporting and discharging operations using forward tipping dumpers			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when transporting and discharging materials using forward tipping dumpers	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and transporting and discharging materials using forward tipping dumpers	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure forward tipping dumpers 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8 Comply with the given contract information to receive, transport and discharge materials using forward tipping dumpers to the required specification	8.1 Demonstrate the following work skills when preparing for and transporting and discharging loose materials using forward tipping dumpers: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, receiving, transporting and depositing 8.2 Prepare, position, set up and operate forward tipping dumpers to receive, transport and discharge loads to given working instructions			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the forward tipping dumper used for transporting and discharging work - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - identify the area for discharging - check to avoid damage to structures and utilities service apparatus - receive, transport and discharge materials safely and securely - shut down and secure forward tipping dumper - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.5 State the needs of other occupations and how to communicate within a team when preparing to and carrying out transporting and discharging operations			
	8.6 Describe how to maintain the plant, tools and equipment used to transport and discharge materials			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 56: Preparing and Operating Rear Tipping Dump Trucks to Receive, Transport and Discharge Materials in the Workplace

Unit reference number: R/600/7998

QCF level: 2

Credit value: 30

Guided learning hours: 100

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating rear tipping dump trucks to receive, transport and discharge materials in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating rear tipping dump trucks to transport and discharge materials to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against one of the following endorsements:

- Dump truck – articulated chassis – up to 15 tonnes
- Dump truck – articulated chassis – all sizes
- Dump truck – rigid chassis – up to 15 tonnes
- Dump truck – rigid chassis – up to 50 tonne
- Dump truck – rigid chassis – above 50 tonnes
- Dump truck – rigid chassis – above 100 tonne

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of rear tipping dump trucks to carry out transporting and discharging operations	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: – drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to dump trucks transporting and discharging operations			
2 Organise with others the sequence and operation in which transporting and discharging operations using rear tipping dump trucks are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during transporting and discharging operations using rear tipping dump trucks			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance to carry out transporting and discharging operations with rear tipping dump trucks	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out transporting and discharging operations using rear tipping dump trucks	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during transporting and discharging operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to transporting and discharging operations, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out transporting and discharging operations using rear tipping dump trucks	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments and transport and discharging aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with rear tipping dump trucks in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out transporting and discharging operations using rear tipping dump trucks			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when transporting and discharging materials using rear tipping dump trucks	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and transporting and discharging materials using rear tipping dump trucks	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure rear tipping dump trucks 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8	Comply with the given contract information to receive, transport and discharge materials using rear tipping dump trucks to the required specification 8.1 Demonstrate the following work skills when preparing for and transporting and discharging materials using rear tipping dump trucks: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, receiving, transporting and discharging 8.2 Prepare, position, set up and operate rear tipping dump trucks to receive, transport and discharge materials to given working instructions			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the rear tipping dump truck used for transporting and discharging work - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - identify the area for discharging - check to avoid damage to structures and utilities service apparatus - receive, transport and discharge materials safely and securely - shut down and secure rear tipping dump trucks - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.5 State the needs of other occupations and how to communicate within a team when preparing to and carrying out transporting and discharging operations			
	8.6 Describe how to maintain the plant, tools and equipment used to transport and discharge materials			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____
(if sampled)

Date: _____

Unit 57: Preparing and Operating Agricultural-based Tractors for Non-agricultural Activities in the Workplace

Unit reference number: F/600/8001

QCF level: 2

Credit value: 20

Guided learning hours: 67

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating agricultural-based tractors for non-agricultural activities in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVOs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating agricultural-based tractors for non-agricultural activities to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of agricultural-based tractors to carry out non-agricultural activities	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to non-agricultural activities using agricultural-based tractors			
2 Organise with others the sequence and operation in which non-agricultural activities using agricultural-based tractors are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during non-agricultural activities using agricultural-based tractors			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance to carry out non-agricultural activities with agricultural-based tractors	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out non-agricultural activities using agricultural-based tractors	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during non-agricultural activities 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to non-agricultural activities, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out non-agricultural activities using agricultural-based tractors	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments and non-agricultural activity aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with agricultural-based tractors in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out non-agricultural activities using agricultural-based tractors			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when undertaking non-agricultural activities using agricultural-based tractors	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and undertaking non-agricultural activities using agricultural-based tractors	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure agricultural-based tractors 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8 Comply with the given contract information to carry out non-agricultural activities using agricultural-based tractors to the required specification	8.1 Demonstrate the following work skills when preparing for and undertaking non-agricultural activities using agricultural-based tractors: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring and positioning 8.2 Prepare, position, set up and operate agricultural-based tractors to undertake non-agricultural activities to given working instructions			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the agricultural-based tractors used for non-agricultural activities - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - identify the area of work - check to avoid damage to structures and utilities service apparatus - undertake non-agricultural activities safely and securely - shut down and secure agricultural-based tractors - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.5 State the needs of other occupations and how to communicate within a team when preparing to and carrying out non-agricultural activities			
	8.6 Describe how to maintain the plant, tools and equipment used to undertake non-agricultural activities			

Learner name: _____ Date: _____
 Learner signature: _____ Date: _____
 Assessor signature: _____ Date: _____
 Internal verifier signature: _____ Date: _____
 (if sampled)

Guided learning hours: 60

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of concrete pumps to carry out pumping and discharging operations	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: – drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to concrete pumping operations			
2 Organise with others the sequence and operation in which concrete pumping operations using concrete pumps are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during concrete pumping operations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance to carry out concrete pumping operations with concrete pumps	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out pumping operations using concrete pumps	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during concrete pumping operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to concrete pumping operations, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out pumping operations using concrete pumps	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments, pumping and discharging aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with concrete pumps in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out concrete pumping operations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when pumping materials using concrete pumps	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and pumping and discharging materials using concrete pumps	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure trailer-mounted concrete pumps 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8 Comply with the given contract information to receive, pump and discharge materials using concrete pumps to the required specification	8.1 Demonstrate the following work skills when preparing for and pumping and discharging materials using concrete pumps: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, receiving, pumping, discharging and cleaning 8.2 Prepare, position, set up, check the positioning of and operate trailer-mounted concrete pumps to receive, pump and discharge materials, at various locations, to given working instructions			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the concrete pumps used for pumping and discharging work - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - identify the area for pumping - check to avoid damage to structures and utilities service apparatus - receive and pump materials safely and securely - shut down and secure concrete pumps - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment 8.5 State the needs of other occupations and how to communicate within a team when preparing to and carrying out pumping and discharging operations 8.6 Describe how to maintain the plant, tools and equipment used to pump and discharge materials			

Learner name: _____
Learner signature: _____
Assessor signature: _____
Internal verifier signature: _____
(if sampled)

Date: _____
Date: _____
Date: _____
Date: _____

Unit 59: Preparing and Operating Scissor-type Mobile Elevating Work Platforms (MEWP) in the Workplace

Unit reference number: T/600/8013

QCF level: 2

Credit value: 12

Guided learning hours: 40

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating scissor-type mobile elevating work platforms (MEWP) in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of scissor-type MEWPs to access areas to carry out the work	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to accessing operations			
2 Organise with others the sequence and operation in which accessing operations using scissor-type MEWPs are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during accessing operations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance to carry out accessing operations with scissor-type MEWPs	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out accessing operations using scissor-type MEWPs	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during accessing operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to accessing operations, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out accessing operations using scissor-type MEWPs	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments and accessing discharging aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with scissor-type MEWPs in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out accessing operations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when accessing work areas using scissor-type MEWPs	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and accessing work areas using scissor-type MEWPs	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure scissor-type MEWPs 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8 Comply with the given contract information to access areas to carry out work using scissor-type MEWPs to the required specification	8.1 Demonstrate the following work skills when preparing for and accessing work areas using scissor-type MEWPs: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, accessing and setting down 8.2 Prepare, position, set up and operate scissor-type MEWPs to access working areas, at various locations, to given working instructions			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the scissor-type MEWP used for accessing work - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - identify the area for accessing - check to avoid damage to structures and utilities service apparatus - access working areas safely and securely - shut down and secure the scissor-type MEWP - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment 8.5 State the needs of other occupations and how to communicate within a team when preparing to and carrying out accessing operations 8.6 Describe how to maintain the plant, tools and equipment used to access working areas			

Learner name: _____ Date: _____
Learner signature: _____ Date: _____
Assessor signature: _____ Date: _____
Internal verifier signature: _____ Date: _____
(if sampled)

Unit 60: Preparing and Operating Boom-type Mobile Elevating Work Platforms (MEWP) in the Workplace

Unit reference number: Y/600/8019

QCF level: 2

Credit value: 14

Guided learning hours: 47

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating boom-type mobile elevating work platforms (MEWP) in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

This unit must be assessed against one of the following endorsements:

- Mobile elevating work platforms – boom self propelled
- Mobile elevating work platforms – boom vehicle mounted

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of boom-type MEWPs to access areas to carry out the work	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to accessing operations			
2 Organise with others the sequence and operation in which accessing operations using boom-type MEWPs are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during accessing operations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance to carry out accessing operations with boom-type MEWPs	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out accessing operations using boom-type MEWPs	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during accessing operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to accessing operations, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out accessing operations using boom-type MEWPs	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments and accessing discharging aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with boom-type MEWPs in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out accessing operations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when accessing work areas using boom-type MEWPs	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and accessing work areas using boom-type MEWPs	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure boom-type MEWPs 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8 Comply with the given contract information to accessing areas to carry out work using boom-type MEWPs to the required specification	8.1 Demonstrate the following work skills when preparing for and accessing work areas using boom-type MEWPs: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, accessing and setting down 8.2 Prepare, position, set up and operate boom-type MEWPs to access working areas, at various locations, to given working instructions			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the boom-type MEWP used for accessing work - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - identify the area for accessing - check to avoid damage to structures and utilities service apparatus - access working areas safely and securely - shut down and secure the boom-type MEWP - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment 8.5 State the needs of other occupations and how to communicate within a team when preparing to and carrying out accessing operations 8.6 Describe how to maintain the plant, tools and equipment used to access working areas			

Learner name: _____ Date: _____
Learner signature: _____ Date: _____
Assessor signature: _____ Date: _____
Internal verifier signature: _____ Date: _____
(if sampled)

Unit 61: Preparing and Operating Mast Climber-type Mobile Elevating Work Platforms (MEWP) in the Workplace

Unit reference number: H/600/8024

QCF level: 2

Credit value: 12

Guided learning hours: 40

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating mast climber-type mobile elevating work platforms (MEWP) in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of mast climber-type MEWPs to access areas to carry out the work	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to accessing operations			
2 Organise with others the sequence and operation in which accessing operations using mast climber-type MEWPs are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during accessing operations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance to carry out accessing operations with mast climber-type MEWPs	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out accessing operations using mast climber-type MEWPs	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during accessing operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to accessing operations, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out accessing operations using mast climber-type MEWPs	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments and accessing discharging aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with mast climber-type MEWPs in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out accessing operations			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when accessing work areas using mast climber-type MEWPs	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and accessing work areas using mast climber-type MEWPs	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure mast climber-type MEWPs 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8	Comply with the given contract information to accessing areas to carry out work using mast climber-type MEWPs to the required specification 8.1 Demonstrate the following work skills when preparing for and accessing work areas using mast climber-type MEWPs: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, accessing and setting down 8.2 Prepare, position, set up and operate mast climber-type MEWPs to access working areas, at various locations, to given working instructions			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the mast climber-type MEWP used for accessing work - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - identify the area for accessing - check to avoid damage to structures and utilities service apparatus - access working areas safely and securely - shut down and secure the mast climber-type MEWP - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment 8.5 State the needs of other occupations and how to communicate within a team when preparing to and carrying out accessing operations 8.6 Describe how to maintain the plant, tools and equipment used to access working areas			

Learner name:	_____	Date:	_____
Learner signature:	_____	Date:	_____
Assessor signature:	_____	Date:	_____
Internal verifier signature:	_____	Date:	_____
(if sampled)			

Guided learning hours: 133

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of soil stabilisers to carry out laying and distributing operations	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to laying and distributing operations			
2 Organise with others the sequence and operation in which laying and distributing operations using soil stabilisers are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during laying and distributing operations using soil stabilisers			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance to carry out laying and distributing operations with soil stabilisers	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out laying and distributing operations using soil stabilisers	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during laying and distributing operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to laying and distributing operations, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out laying and distributing operations using soil stabilisers	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments and laying and distributing aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with soil stabilisers in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out laying and distributing operations using soil stabilisers			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when laying and distributing materials using soil stabilisers	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and laying and distributing materials using soil stabilisers	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure soil stabilisers 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8 Comply with the given contract information to lay and distribute materials using soil stabilisers to the required specification	8.1 Demonstrate the following work skills when preparing for and laying and distributing materials using soil stabilisers: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning, mixing, laying, distributing and compacting 8.2 Prepare, position, set up and operate soil stabilisers to mix, lay and distribute a variety of appropriate materials, in a variety of locations, to given working instructions			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the soil stabiliser used for laying and distributing work - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - identify the area for laying and distributing - check to avoid damage to structures and utilities service apparatus - mix, lay and distribute materials safely and securely - shut down and secure soil stabiliser - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment 8.5 State the needs of other occupations and how to communicate within a team when preparing to and carrying out laying and distributing operations 8.6 Describe how to maintain the plant, tools and equipment used to lay and distribute materials			

Learner name: _____
Learner signature: _____
Assessor signature: _____
Internal verifier signature: _____
(if sampled)

Date: _____
Date: _____
Date: _____
Date: _____

Unit 63: Preparing and Operating Ride-on Rollers to Compact Materials in the Workplace

Unit reference number: K/600/8073

QCF level: 2

Credit value: 16

Guided learning hours: 53

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in preparing and operating ride-on rollers to compact materials in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of preparing and operating ride-on rollers to compact materials to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

This unit can be assessed against one of the following endorsements:

- Roadbuilding operations – deadweight
- Roadbuilding operations – vibratory
- Roadbuilding operations – pneumatic tyred
- Roadbuilding operations – pedestrian operated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the use of ride-on rollers to carry out compacting operations	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: – drawings, specifications, schedules, manufacturers' information, method statements and regulations and guidance applicable to compacting operations			
2 Organise with others the sequence and operation in which compacting operations using ride-on rollers are to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and during compacting operations using ride-on rollers			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance to carry out compacting operations with ride-on rollers	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, in confined spaces, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and carrying out compacting operations using ride-on rollers	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements during compacting operations 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to compacting operations, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Request and select the required quantity and quality of resources to prepare for and carry out compacting operations using ride-on rollers	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - consumables, lubricants and fuels - attachments and compacting operational aids - hand tools, ancillary equipment and/or accessories 5.2 Request and select resources associated with ride-on rollers in relation to consumables, materials, attachments, tools, accessories and/or ancillary equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate quantity, weight, length and area associated with the method/procedures to carry out compacting operations using ride-on rollers			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when compacting materials using ride-on rollers	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and compacting materials using ride-on rollers	7.1 Demonstrate completion of the work within the allocated time 7.2 Shut down and secure ride-on rollers 7.3 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8 Comply with the given contract information to compact materials using ride-on rollers to the required specification	8.1 Demonstrate the following work skills when preparing for and compacting materials using ride-on rollers: - fitting, attaching, setting up, securing, adjusting, checking, removing, communicating, operating, manoeuvring, positioning and compacting			
	8.2 Prepare, position, set up and operate ride-on rollers to compact a variety of materials, in various locations, to given working instructions			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - identify the characteristics of the ride-on roller used for compacting work - carry out performance checks - prepare, set up and adjust for operational requirements - complete functional checks - carry out pre-operational checks for obstructions, stability, safety and security of the work and surrounding area - identify the area for compacting - check to avoid damage to structures and utilities service apparatus - compact materials safely and securely - shut down and secure ride-on roller - use hand tools, ancillary equipment and accessories 8.4 Safely use and store hand tools and ancillary equipment 8.5 State the needs of other occupations and how to communicate within a team when preparing to and carrying out compacting operations 8.6 Describe how to maintain the plant, tools and equipment used to compact materials			

Learner name: _____
Learner signature: _____
Assessor signature: _____
Internal verifier signature: _____
(if sampled)

Date: _____
Date: _____
Date: _____
Date: _____

Unit 64: **Slinging and Signalling the Movement of Loads (Secondary Role) in the Workplace**

Unit reference number: R/600/8102

QCF level: 2

Credit value: 8

Guided learning hours: 27

Unit summary

The aim of this unit is to illustrate the skills, knowledge and understanding required to confirm competence in slinging and signalling the movement of loads (secondary role) in the workplace within the relevant sector of industry.

Assessment requirements/evidence requirements

This unit must be assessed in a work environment, in accordance with:

- the Additional Requirements for Qualifications using the title NVQ in the QCF
- the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment – Craft, Supervisory, Technical, Managerial and Professional Units and Qualifications with NVQ in the Qualification and Credit Framework (QCF) title and SVQs.

Assessors for this unit must use a combination of the following assessment methods:

- observation of normal work activities within the workplace that clearly confirms the required skills
- questioning the learner on knowledge criteria that clearly confirms the required understanding
- review other forms of evidence that can clearly confirm industry required skills, knowledge and understanding.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of occupational expertise and knowledge of slinging and signalling the movement of loads to be effective and reliable when confirming a learner's competence.

Workplace evidence of skills cannot be simulated.

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the preparation for and the slinging and signalling of loads	1.1 Interpret and extract information from drawings, specifications, schedules, method statements and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statements 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: - drawings, specifications, schedules, method statements, manufacturers' information, approved procedures and Codes of Practice			
2 Organise with others the sequence and operation in which the slinging and signalling of loads is to be carried out	2.1 Organise the work according to given information or instructions 2.2 Describe how to communicate ideas between team members 2.3 Organise and communicate with team members and other associated occupations 2.4 State how to organise resources prior to and when slinging and signalling of loads			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Know how to comply with relevant legislation and official guidance to carry out slinging and signalling of loads	3.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 3.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 3.3 State what the accident reporting procedures are and who is responsible for making reports			
4 Maintain safe working practices when preparing for and slinging and signalling loads	4.1 Use personal protective equipment (PPE) to safely carry out the activity in accordance with legislation and organisational requirements when slinging and signalling of loads 4.2 Explain why and when personal protective equipment (PPE) should be used, relating to slinging and signalling of loads, and the types, purpose and limitations of each type 4.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Select the required quantity and quality of resources to prepare for and when slinging and signalling loads	5.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources, and how they should be used correctly, relating to: - lifting accessories - signalling and communication equipment - hand tools and ancillary equipment 5.2 Select resources associated with slinging/signalling in relation to hand tools, attachments, slinging equipment, lifting aids/accessories, signalling and communication equipment 5.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 5.4 Outline potential hazards associated with the resources and method of work 5.5 Describe how to calculate weight, bearing pressure, quantity, length and area associated with the method/procedures to carry out slinging/signalling			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
6 Minimise the risk of damage to the work and surrounding area when slinging and signalling loads	6.1 Protect the work and its surrounding area from damage 6.2 Minimise damage and maintain a clean work space 6.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 6.4 Dispose of waste in accordance with legislation 6.5 State why the disposal of waste should be carried out safely in relation to the work			
7 Complete the work within the allocated time when preparing to and slinging and signalling loads	7.1 Demonstrate completion of the work within the allocated time 7.2 State the purpose of the work programme and describe why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the lifting operation			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
8 Comply with the given contract information to prepare to and sling and signal loads for movement to the required specification	8.1 Demonstrate the following work skills when preparing to and slinging and signalling loads: - measuring, gauging, estimating, fitting, fixing, testing, balancing, interpreting, judging, explaining, preparing, indicating, informing, instructing, signing, positioning, adjusting, configuring, moving, securing, signalling, relaying and removing 8.2 Prepare to and attach loads to lifting equipment, and guide loads using signals to the required destination to given working instructions using appropriate load securing methods and lifting accessories 8.3 Describe how to apply safe work practices, follow procedures, report problems and establish authority needed to rectify, to: - confirm method of communication - determine the method of slinging - select and use suitable slinging equipment/lifting accessories - sling loads securely and balance within correct weight distribution following agreed/recognised operational procedures - position loads safely and securely - remove and store lifting accessories - use hand tools, ancillary equipment and accessories			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	8.4 Safely use and store hand tools and slinging, signalling, communication and ancillary equipment			
	8.5 State the needs of other occupations and how to communicate within a team when preparing to and slinging and signalling loads			
	8.6 Describe how to maintain the tools and equipment used to sling and signal loads			

Learner name: _____

Date: _____

Learner signature: _____

Date: _____

Assessor signature: _____

Date: _____

Internal verifier signature: _____

Date: _____

(if sampled)

Guided learning hours: 77

Assessment methodology

Evidence of achievement of this unit should be drawn from the workplace, except where ConstructionSkills makes provision for evidence to be produced through simulation, as specified in the ConstructionSkills overarching assessment strategy.

An assessment record must be created that identifies the assessment criteria that have been met and cross-references these to the evidence provided. The assessment record should include details of the type of evidence and the date of assessment.

The unit specification or suitable centre documentation could be used to form an assessment record.

Learning outcomes and assessment criteria

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
1 Interpret the given information relating to the work and resources when installing self drilling ground anchors	1.1 Interpret and extract information from drawings, specifications, schedules and manufacturers' information 1.2 Comply with information and/or instructions derived from risk assessments and method statement 1.3 State the organisational procedures developed to report and rectify inappropriate information and unsuitable resources and how they are implemented 1.4 Describe different types of information, their source and how they are interpreted in relation to: – drawings, specifications, schedules, manufacturers' information and current regulations			
2 Know how to comply with relevant legislation and official guidance when installing self drilling ground anchors	2.1 Describe their responsibilities under current legislation and official guidance whilst working: – in the workplace, below ground level, in confined spaces, at height, with tools and equipment, with materials and substances, with movement/storage of materials and by manual handling and mechanical lifting 2.2 Describe the organisational security procedures for tools, equipment and personal belongings in relation to site, workplace, company and operative 2.3 State what the accident reporting procedures are and who is responsible for making reports			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
3 Maintain safe working practices when installing self drilling ground anchors	3.1 Use personal protective equipment (PPE) safely to carry out the activity in accordance with legislation and organisational requirements when installing self drilling ground anchors 3.2 Explain why and when personal protective equipment (PPE) should be used, relating to installing self drilling ground anchors, and the types, purpose and limitations of each type 3.3 State how emergencies should be responded to in accordance with organisational authorisation and personal skills when involved with fires, spillages, injuries and other task-related hazards			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
4 Select the required quantity and quality of resources for the methods of work to install self drilling ground anchors	4.1 Describe the characteristics, quality, uses, limitations and defects associated with the resources in relation to: - top drive rotary percussive rig - grouting equipment, compressor and water supply - drill bits, rods, debonding tube, adaptors, fittings - cement - hand and/or powered tools and detection equipment 4.2 Select resources associated with own work in relation to materials, components, fixings, tools and equipment 4.3 State how the resources should be used correctly, how problems associated with the resources are reported and how the organisational procedures are used 4.4 Outline potential hazards associated with the resources and method of work 4.5 Describe how to calculate quantity, length, area and wastage associated with the method/procedure to install self drilling ground anchors			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
5 Minimise the risk of damage to the work and surrounding area when installing self drilling ground anchors	5.1 Protect the work and its surrounding area from damage 5.2 Minimise damage and maintain a clean work space 5.3 Describe how to protect work from damage and the purpose of protection in relation to general workplace activities, other occupations and adverse weather conditions 5.4 Dispose of waste in accordance with legislation 5.5 State why the disposal of waste should be carried out in relation to the work			
6 Complete the work within the allocated time when installing self drilling ground anchors	6.1 Demonstrate completion of the work within the allocated time 6.2 State the purpose of the work programme and explain why deadlines should be kept in relation to: - types of progress charts, timetables and estimated times - organisational procedures for reporting circumstances which will affect the work programme			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
7 Comply with the given contract information to install self drilling ground anchors to the required specification	7.1 Demonstrate the following work skills when installing self drilling ground anchors: - measuring, marking out, locating, protecting, pre-start checking and grouting 7.2 Install self drilling ground anchors to given working instructions: - set up equipment for self drill ground anchors - drill and grout ground anchors to line, angle and design depth - clean down rig and make good			

Learning outcomes	Assessment criteria	Evidence type	Portfolio reference	Date
	7.3 Describe how to apply safe work practices, follow procedures, report problems and establish the authority needed to rectify them, to: - prepare rig, grout pan, compressor and water supply - locate anchor positions - carry out pre-start checks - position rig for drilling to line, angle and depth - assemble drill bits and centraliser - drill and grout to line, angle and depth - install debonding tube as necessary for anchors - complete grouting – ensure bond length and free length are as specified - release flushing head and clean down equipment - use hand tools, power tools and equipment - work at height - use access equipment 7.4 Safely use and store materials, hand tools, portable power tools and ancillary equipment 7.5 State the needs of other occupations and how to communicate within a team when installing self drilling ground anchors 7.6 Describe how to maintain the tools and equipment used when installing self drilling ground anchors			

Learner name: _____ Date: _____
Learner signature: _____ Date: _____
Assessor signature: _____ Date: _____
Internal verifier signature: _____ Date: _____
(if sampled)

Further information

For information on our qualifications, please contact our Customer Services team on the following number:

Customer Services: 0844 463 2535

Calls may be recorded for quality training purposes. Our telephone lines are open between 8 a.m. and 5.30 p.m., Monday to Friday.

Useful publications

Related information and publications include:

- *Edexcel NVQs, SVQs and Competence-based Qualifications Delivery Requirements and Quality Assurance Guidance* published annually
- *Centre Handbook for Edexcel QCF NVQs and Competence-based Qualifications* published annually
- Functional Skills publications – specifications, tutor support materials and question papers
- *Regulatory Arrangements for the Qualification and Credit Framework* (published by Ofqual, August 2008)
- the current Edexcel publications catalogue and update catalogue.

Edexcel publications concerning the Quality Assurance System and the internal and standards verification of vocationally related programmes can be found on our website, www.edexcel.com.

NB: Some of our publications are priced. There is also a charge for postage and packing. Please check the cost when you order.

How to obtain National Occupational Standards

To obtain the National Occupational Standards for the qualifications in this specification, please visit: www.ukstandards.co.uk

Professional development and training

Edexcel supports UK and international customers with training related to NVQ and BTEC qualifications. This support is available through a choice of training options offered in our published training directory or through customised training at your centre.

The support we offer focuses on a range of issues, including:

- planning for the delivery of a new programme
- planning for assessment and grading
- developing effective assignments
- building your team and teamwork skills
- developing student-centred learning and teaching approaches
- building Functional Skills into your programme
- building effective and efficient quality assurance systems.

The national programme of training we offer can be viewed on our website (www.edexcel.com/training). You can request customised training through the website or by contacting one of our advisers in the Training from Edexcel team via our Customer Services team to discuss your training needs.

The training we provide:

- is active
- is designed to be supportive and thought provoking
- builds on best practice
- may be suitable for those seeking evidence for their continuing professional development.

Annexe A: Progression pathways

The Edexcel qualification framework for the construction and built environment sector

Level	General qualifications	Diplomas	BTEC vocationally-related qualifications	BTEC specialist / professional qualification	NVQ/competence
7					Edexcel Level 7 NVQ Diploma in Built Environment Design and Consultancy Practice. Edexcel Level 7 NVQ Diploma in Construction Senior Management (QCF).

Level	General qualifications	Diplomas	BTEC vocationally-related qualifications	BTEC specialist / professional qualification	NVQ/ competence
6					Edexcel Level 6 NVQ Diploma in Built Environment Design Management. Edexcel Level 6 NVQ Diploma in Construction Contracting Operations Management. Edexcel Level 6 NVQ Diploma in Construction Site Management. Edexcel Level 6 NVQ Diploma in Senior Site Inspection.
5			Edexcel BTEC Level 5 HN Diploma in Construction		
4			Edexcel BTEC Level 4 HN Certificate in Construction		

Level	General qualifications	Diplomas	BTEC vocationally-related qualifications	BTEC specialist / professional qualification	NVQ/competence
3		Edexcel Level 3 Diploma in Construction and the Built Environment	Edexcel BTEC Level 3 Certificate, Subsidiary Diploma, Diploma in Construction and the Built Environment	Edexcel BTEC Level 3 Award, Extended Certificate and Diploma in Construction and the Built Environment	We have too many qualifications to list in this space. Please refer to www.edexcel.com for further information.
2		Edexcel Level 2 Diploma in Construction and the Built Environment	Edexcel BTEC Level 2 Certificate, Extended Certificate and Diploma in Construction	Edexcel BTEC Level 2 Award, Certificate and Extended Certificate in Construction and the Built Environment (Craft) and Construction and the Built Environment (Technician)	We have too many qualifications to list in this space. Please refer to www.edexcel.com for further information.
1		Edexcel Level 1 Diploma in Construction and the Built Environment	Edexcel BTEC Level 1 Award, Certificate, Diploma in Construction (QCF)	Edexcel BTEC Level 1 Award, Certificate, Extended Certificate in Construction and the Built Environment	We have too many qualifications to list in this space. Please refer to www.edexcel.com for further information.
Entry			Edexcel Entry Level BTEC Award in Construction (Entry 3) (QCF)		

Annexe B: Quality assurance

Key principles of quality assurance

- A centre delivering Edexcel qualifications must be an Edexcel recognised and approved centre and must have approval for the individual qualifications that it is offering.
- The centre agrees, as part of gaining recognition and centre approval, to abide by specific terms and conditions relating to the effective delivery and quality assurance of assessment. The centre must abide by these conditions throughout the period of delivery.
- Edexcel makes available to centres a range of materials and opportunities to exemplify the processes required for effective assessment and to provide examples of effective standards. Approved centres must use the guidance on assessment to ensure that staff who are delivering Edexcel accredited qualifications are applying consistent standards.
- An approved centre must follow agreed protocols for: standardisation of assessors; planning, monitoring and recording of assessment processes; internal verification and recording of internal verification processes and dealing with special circumstances, appeals and malpractice.

Quality assurance processes

The approach to quality assured assessment is made through a partnership between a recognised and approved centre and Edexcel. Edexcel is committed to ensuring that it follows best practice and uses appropriate technology to support quality assurance processes where practicable. The specific arrangements for working with centres will vary. Edexcel seeks to ensure that the quality-assurance processes it uses do not inflict undue bureaucracy on centres, and works to support them in providing robust internal quality-assurance processes.

The learning outcomes and assessment criteria in each unit set out the standard to be achieved by each learner in order to gain each unit and, through satisfying the rules of combination, the whole qualification. Edexcel operates a quality-assurance process, designed to ensure that these standards are maintained by all assessors and verifiers.

For the purposes of quality assurance, all individual qualifications and units are considered as a whole. Centres offering these qualifications must be committed to ensuring the quality of the units and qualifications they offer, through effective standardisation of assessors and internal verification of assessor decisions. Centre quality assurance and assessment processes are monitored by Edexcel.

Edexcel quality-assurance processes will involve:

- gaining centre recognition and approval - if a centre is not currently approved to offer Edexcel qualifications - and qualification approval through satisfying the Edexcel approved centre criteria
- visits to centres, conducted by occupationally competent and qualified Edexcel Standards Verifiers for sampling of internal verification and assessment processes, and assessor decisions for the occupational sector. The minimum frequency of Standards Verifiers' visits to centres

is usually two per year (a total of two days per year). The exact frequency and duration of Standards Verifier visits must reflect a centre's performance, taking account of the number:

- of assessment sites
- and throughput of candidates
- and turnover of assessors
- and turnover of internal verifiers.
- the provision of support, advice and guidance towards the achievement of National Occupational Standards.

Centres are required to declare their commitment to ensuring quality and to providing appropriate opportunities for learners that lead to valid and accurate assessment outcomes.

Annexe C: Registration and certification

Registration

Details of the process for registration of learners for the qualification in this specification are provided in the *Edexcel Information Manual*, published annually.

Centres must register learners promptly on their chosen qualification and by the registration deadlines given in the *Edexcel Information Manual*.

What are the access arrangements and special considerations for the qualifications in this specification?

Centres are required to recruit learners to Edexcel qualifications with integrity.

Appropriate steps should be taken to assess each applicant's potential and a professional judgement should be made about their ability to successfully complete the programme of study and achieve the qualification. This assessment will need to take account of the support available to the learner within the centre during their programme of study and any specific support that might be necessary to allow the learner to access the assessment for the qualification. Centres should consult Edexcel's policy on learners with particular requirements.

Edexcel's policy on access arrangements and special considerations for Edexcel qualifications aims to enhance access to the qualifications for learners with disabilities and other difficulties (as defined by the Equality Act 2010) without compromising the assessment of skills, knowledge, understanding or competence. For details, please refer to *Access Arrangements and Special Considerations for BTEC and Edexcel NVQ Qualifications*, available on our website: www.edexcel.com.

Certification

Details of the process for reporting learners' success to Edexcel and for claiming certification are given in the *Edexcel Information Manual*, published annually.

Certificates are issued weekly according to the schedule of dates published in the *Edexcel Information Manual*.

Results should be reported only if the centre has clearance to certificate through reports from Standards Verifiers. Subject to this, results must be reported immediately following programme completion so that certificates can be issued as soon as possible.

Edexcel Standards Verifiers will provide support, advice and guidance to centres to achieve Direct Claim Status (DCS). Edexcel will maintain the integrity of Edexcel QCF NVQs, SVQs and competence qualifications through ensuring that the awarding of these qualifications is secure. Where there are quality issues identified in the delivery of programmes, Edexcel will exercise the right to:

- direct centres to take action
- limit or suspend certification

- suspend registration.

Edexcel's approach in such circumstances is to work with the centre to overcome the problems identified. If additional training is required, Edexcel will aim to secure the appropriate expertise to provide this.

Annexe D: Assessment requirements/strategy

The ConstructionSkills Assessment Strategy is available on the Edexcel website, alongside this full specification on the Construction NVQ/Competence page.

