# SVQ in Built Environment Design level 3

# **Candidate Guidance and Portfolio**

**Candidate name:** 

Publication code: Z0246

The National Occupational Standards which form the basis of this award were developed by Construction Industry Council and Construction Skills. This document is for candidate use only and should not be used as a substitute for the National Occupational Standards

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# Section 1 — General information about SVQs

# **Introducing SVQs**

The qualification you are undertaking is a Scottish Vocational Qualification (SVQ).

SVQs are work-based qualifications which assess the skills and knowledge people have and need to perform their job role effectively. The qualifications are designed using national occupational standards.

For each industry sector there is a Sector Skills Council (SSC) which is made up of representatives from the industry or profession and it is the SSC's responsibility to develop the national occupational standards.

These standards define what employees, or potential employees, must be able to do, how well and in what circumstances to show they are competent in their work.

The Sector Skills Council setting body for Built Environment Design level 3 is: Construction Industry Council and Constructions Skills.

Access to SVQs is open to all and you can be assessed either against a particular Unit(s) or against the full SVQ. There are no entry requirements, no prescribed method of delivery, no time constraints for completion or age limits.

SVQs are available at five levels of achievement which reflect the various technical and supervisory skills, knowledge, and experience which employees should have as they progress in their industry.

# Who offers SVQs?

An organisation which offers SVQs is called a centre. This may be a school, college, university, employer, training provider or a combination of these. The centre has responsibility for the quality of the qualification and is required to work within an awarding body's policies and guidelines.

The Scottish Qualifications Authority (SQA) is your awarding body for this SVQ. This means that we are an organisation approved by government to design qualifications and awards. An awarding body endorses candidates' certificates so that an employer can be sure the qualification has gone through a rigorous and effective assessment process. SQA provides qualifications throughout the world and was formed by the merger of the Scottish Examinations Board (SEB) and the Scottish Vocational Education Council (SCOTVEC).

# What is the structure of an SVQ?

All SVQs have a common structure and consist of standards which can be broken down into various parts:

Units and Elements	<b>Units</b> define the broad functions carried out in your particular job and are made up of a number of <b>Elements</b> . Each <b>Element</b> describes a specific work activity which you have to perform and may relate to skills or to the demonstration of knowledge and understanding.
Performance Criteria	The level and quality of how you should carry out these activities is determined by a number of statements called <b>Performance Criteria</b> . <b>Performance Criteria</b> are used to judge your competence.
Range/Scope statements	A <b>range statement</b> tells you in what circumstances you must be able to prove your competence and allows you to demonstrate that you can carry out tasks in different circumstances. Items included in the range statements must not be treated as optional. <b>Range statements</b> are also called <b>scope</b> in some National Occupational Standards.
Evidence Requirements	The <b>Evidence Requirements</b> specify the amount and type of evidence which you will need to provide to your assessor to show that you have met the standards specified in the Performance Criteria and in all the circumstances defined in the range statements.
Knowledge and Understanding	The section on <b>Knowledge and Understanding</b> states what you must know and understand and how this knowledge applies to your job.

If you are not yet clear about how we define standards — just remember that the standards have been developed by experts within your industry or profession and that all candidates aiming for this particular SVQ are being assessed against the same standards.

You will find an example of an SVQ element overleaf.

# An example of an SVQ Element

UNIT: (1) Working safely in an engineering environment

This is the **UNIT** title — it describes a role and task.

Element 1 Comply with statutory regulations and organisational requirements -

### **Performance Criteria**

**PERFORMANCE CRITERIA** set out the standard of performance you need to demonstrate consistently to claim competence in a particular **Element**.

- You must ensure that you:
- 1 Describe your duties and obligations (as an individual) under the Health and Safety at Work Act 1974.
- 2 Comply with Statutory Regulations at all times.
- 3 Comply with organisational safety policies and procedures at all times.

### Range

This means you need to cover:

1 Relevant sections of the Health and Safety at Work Act 1974 (eg with regard to your duties to work in a safe manner, not to interfere with remove or misuse equipment provided for the safety of yourself and others, not to endanger others by your acts or omissions).

The **RANGE** defines the various circumstances in which you must be able to prove you are competent.

You must cover all of the items in the **range** statement.

This is the **ELEMENT** title. It describes part of the main role and task.

### **Evidence Requirements**

The things you must prove that you can do:

You need to demonstrate that you understand your duties and obligations under both statutory regulations and organisational requirements and you can do this by:

- 1 Giving an adequate explanation of the duties and responsibilities of every individual as described in the Health and Safety at Work Act 1974.
- 2 Ensuring that whilst carrying out your work and/or visiting other areas of the working environment you are aware of the specific safety requirements and regulations governing your activities.

# **Knowledge and Understanding**

You must prove that you know and understand:

- 1 The roles and responsibilities of your self and others under the Health and Safety at Work Act 1974.
- 2 The general regulations that apply to you being at work.
- 3 The specific regulations which govern your work activities.

The **KNOWLEDGE AND UNDERSTANDING** Requirements state what you must know and understand and how this knowledge applies to your job.

# How are SVQs achieved?

When you consistently meet the standards described in the Elements and show that you have the required skills and knowledge across the range, you can then claim that you are *competent* in each Unit. You can claim certification for single Units or whole awards. Your centre will register your claim to competence through the awarding body. The awarding body you are registered with for this SVQ is the Scottish Qualifications Authority (SQA).

Scottish Qualifications Authority The Optima Building 58 Robertson Street Glasgow G2 8DQ

The process of gaining an SVQ is flexible and depends on your needs. At the beginning of the process your assessor will review your existing competence in relation to the standards and identify the most suitable SVQ. The level you start at will depend on the type and breadth of your current job role together with your past experience, skills and any relevant prior learning.

To achieve an SVQ, or a Unit of an SVQ, you must:

• Demonstrate you meet the requirements of the Performance Criteria by collecting appropriate evidence as specified by the Evidence Requirements. This evidence is assessed against the national standards by a qualified assessor, who will be allocated to you by your centre. This will usually be someone who knows you, such as a manager or supervisor.

Evidence may come from:

- the accreditation of prior learning where evidence relates to past experience or achievements
- **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
- a combination of these

# How are SVQs assessed?

Assessment is based on what you can do and involves you, your assessor, an internal verifier and an external verifier — see 'Who does what in SVQs' on the following page.

You will be asked to prove you are competent by providing evidence which shows:

- you can perform all the specified tasks consistently to the required standard (Performance Criteria)
- you understand why you are doing things (Knowledge and Understanding)
- you can apply the required skills in different ways (**Range**)

Assessment is flexible and you can be certificated for each Unit you successfully achieve, even if you do not complete the full SVQ. There is no set period of time in which you need to complete a Unit. However, you and your assessor should still set target dates for completing each Unit, otherwise your qualification could go on forever. Be realistic though, as there are many factors such as your previous experience, demands within your workplace and an availability of resources which will affect how quickly you are able to achieve the qualification.

# Who does what in SVQs?

A number of individuals and organisations have parts to play in SVQ assessment. Their roles have been designed to guarantee fair, accurate and consistent assessment.

	Who are they?	What is their role?
Candidates	The person who wants to achieve the SVQ — in this case, you.	Need to show they can perform to national occupational standards in order to be awarded an SVQ or Unit(s).
Assessors*	An experienced person in the same area of work as the candidate eg supervisor.	Judge the evidence of a candidate's performance, knowledge and understanding against the national occupational standards. Decide whether the candidate has demonstrated competence. Provide guidance and support to the candidate. Assist with planning assessments, giving feedback and recording candidate progress.
Internal Verifiers*	Individuals appointed by an approved centre to ensure the quality of assessment within the centre.	Advise assessors and maintain the quality of assessment in a centre. Systematically sample assessments to confirm the quality and consistency of assessment decisions.
Approved Centres	Organisations approved by awarding bodies to coordinate assessment arrangements for SVQs.	Manage assessment on a day to day basis. Must have effective assessment practices and internal verification procedures. Must meet criteria laid down by awarding bodies and be able to provide sufficiently-competent assessors and internal verifiers.
External Verifiers*	Individuals appointed by the awarding body to ensure that standards are being applied uniformly and consistently across all centres offering the SVQ.	Check the quality and consistency of assessments, both within and between centres, by systematic sampling. Make regular visits to centres to ensure they still meet the criteria to deliver SVQs.

\* Assessors and internal and external verifiers are required to have occupational expertise in the SVQs which they are assessing/verifying. They must also have, or be working towards, an appropriate qualification in assessment and verification.

# What is evidence?

To claim competence for an SVQ Unit you need to gather evidence which shows you have met the standards. It is important that your evidence is easily understood so that it can be checked against the standards, by both your assessor, your centre and the awarding body.

Evidence can take many forms including:

- direct observation of your performance by your assessor
- products of your work
- authenticated statement witness testimony
- personal statement
- outcomes from questioning
- outcomes from simulation
- ♦ case studies
- assignments or projects
- Accreditation of Prior Learning (APL) evidence from the past

It is important that your evidence is:

- **valid** it relates to the SVQ standard you are trying to prove
- **authentic** the evidence, or an identified part of it (eg, a report) was produced by *you*
- **consistent** achieved on more than one occasion
- **current** usually not more than two years old
- **sufficient** covers all the performance and knowledge requirements laid down in the standards

Your evidence may be collected through a range of sources, such as employment, voluntary work, training programmes and interests/activities which you perform outside your work. It can also be produced in various formats, eg your own reports; testimonies from colleagues, supervisors or members of the public; projects; models; audio tapes, photographs; videos.

When you first begin your SVQ, you and your assessor should identify all the Units and Elements where you can use **integration of assessment**. Further details about integration of assessment can be found on page 10.

# Demonstrating knowledge, understanding and skills

In order to meet the standards, you may also be required to prove knowledge and understanding. Each Unit contains a list summarising the knowledge, understanding and skills a candidate must possess. Evidence of how these have been achieved and applied could be included in the performance evidence as one or all of the following:

- descriptions of why a particular approach was used
- personal reports about the learning process
- reflective reports which include how a theory or principle was applied
- assessment interviews
- ♦ assessment tests
- responses to questioning

These should be included in your portfolio.

# How will my assessor check I have the knowledge and understanding listed in the standards?

For some Units, it will be clear to your assessor that you have the required knowledge and understanding from how you carry out your work. This is often referred to as *knowledge and understanding apparent from performance*. There will be other occasions though, when your assessor will be unsure if you know why, for example, it is important to give information to clients in certain situations. This could be because your assessor has not had the opportunity to observe all the Performance Criteria and range during assessment. In these situations, your assessor may wish to assess your knowledge and understanding by asking you some questions. These questions can be given orally or in writing, but will be recorded in your portfolio as evidence.

Your assessor could also check you have the required level of knowledge and understanding by asking you to produce personal statements or to complete a project or assignment.

# What if I have previous experience and knowledge and understanding from work and other qualifications?

If you have previous work experience, skills, and knowledge and understanding which you feel is relevant to your SVQ, you should tell your assessor about it. Your assessor may ask you for more proof in the form of letters from previous employers/training providers or details about any courses you have completed.

For example, you may have achieved an HNC in a relevant subject in which case your assessor may feel that you already have some of the knowledge and understanding required for the SVQ.

The process of matching your previous experience and learning is often referred to as the Accreditation of Prior Learning (APL). The purpose of this process is to try and give you some credit towards your SVQ for things you can already do to the national standard. Your assessor judges the evidence available and matches it against the requirements of the SVQ. This means that your assessor should not have to assess you for these things all over again.

However, the success of this process depends on *you* telling *your assessor* what previous work experience or knowledge and understanding you have and how you think it is relevant to your SVQ. The more information you can supply to support your claims, the easier it should be to convince your assessor that you are competent.

# When can simulation be used?

Throughout your SVQ, the emphasis is on you being able to carry out real work activities so assessment will normally be carried out in the workplace itself.

There may be times, however, when it might not be appropriate for you to be assessed while you are working. For example your SVQ might require you to carry out emergency or contingency procedures (for safety or confidentiality reasons) or your job role may not cover all aspects of the qualification. In such instances, when you have no other means of generating evidence, **simulation** might be appropriate.

Simulation is any structured exercise involving a specific task which reproduces real-life situations. Care must be taken though to ensure that the conditions in which you are assessed *exactly* mirror the work environment ie it is a **realistic working environment**.

You and your assessor should check the assessment strategy for your SVQ carefully to find out the Sector Skills Council (SSC's) view of what constitutes a realistic working environment. Some SSC's stipulate the specific elements which are suitable for this approach.

# Integration of assessment

It is not necessary for you to have each Element assessed separately — doing so could result in assessment which takes too long and places too great a burden on you and your assessor.

There will be instances when you will be able to use one piece of evidence to prove your competence across different Elements or Performance Criteria. You may even find that evidence is relevant for different Units — this is called **integration of assessment**.

When you first begin your SVQ, you and your assessor will spend time looking at the standards, planning how much time you are both able to devote to the qualification and drawing up an action plan.

At this stage, you should identify any activities which relate to more than one Unit or outcome and arrange for the best way to collect a single piece of evidence which satisfactorily covers all the Performance Criteria.

If you are going to integrate assessments, make sure that the evidence is cross-referenced to the relevant Units. Details of how to cross reference your evidence can be found in Section 2 'How to compile your portfolio'.

# Section 2 — How to compile your portfolio (including worked examples)

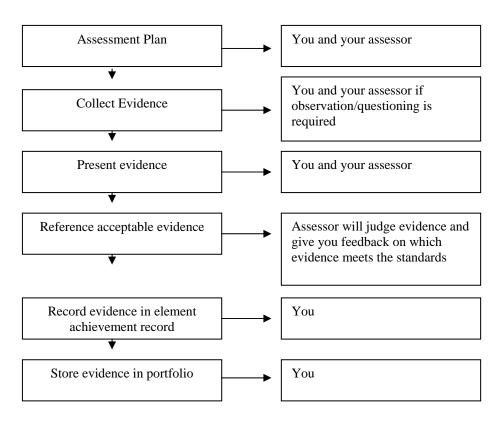
# **General information**

A portfolio, like a log book, is a way of recording evidence of your achievements. It is a collection of different items of evidence which indicates that you have the required skills, knowledge and understanding to support your claim to a qualification.

The production of a well-organised, clearly labelled portfolio which relates each piece of evidence to the relevant outcomes and Performance Criteria requires a careful methodical approach. When your assessor looks through your portfolio, they will find the task of making judgements about your competence much easier if the information in it is presented in a logical sequence.

You will need to present your evidence in a format that is easy to read and in which materials can be added or taken away. This section gives suggestions on how to lay out and present your evidence and includes worked examples. There are also forms and matrices which will assist you to chart your progress through the award.

You do not have to lay out your evidence in the way suggested but you may find it helpful to do so. Each portfolio will be different in content but all should include information about you (the candidate), the organisation where you are undertaking your qualification, the assessor and so on.



# **Evidence Collection Process**

# Planning your portfolio

Start by carefully reading through the standards and, together with your assessor, decide which Units you might like to work on first. You do not have to do the Units in order. There may be some Units that relate to tasks which you carry out on a regular basis, therefore making it easier to collect evidence right away. Alternatively, there may be activities in other Units which you only undertake now and again, these can be left until the opportunity arises for you to collect evidence.

Before you start looking for different kinds of evidence and deciding if they should be included in your portfolio, you will find it helpful to plan how you will carry out the tasks and how long they are going to take.

The plan is usually referred to as an **'assessment plan'**. It should be produced in discussion with your assessor and will set out the different stages in developing your portfolio. You will probably want to produce a plan for each Unit.

It is unlikely that you will be able to complete all of the Units straight away and you should therefore think about starting with those Units where you have a lot of experience and in which you work well. You should also remember to identify any opportunities for **integration of assessment**.

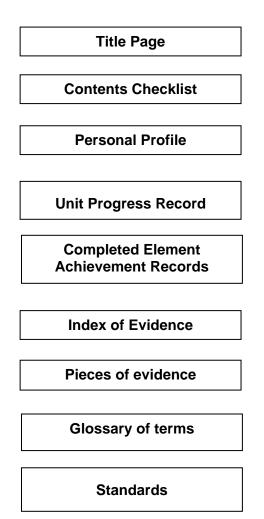
We have provided you with a '**Unit progress record'** — see Example 2. Each time you complete a Unit, your assessor should sign and date the relevant section on the form. At this stage, it might be a good idea to check that all your evidence and recording documents have been completed correctly and can easily be located. You can then circle the reference number of that Unit in the checkboxes at the top of the form so that you can see at a glance what stage you are at in your SVQ.

# Starting your portfolio

Make sure that you clearly label your portfolio (or disk if you are recording your evidence electronically) with your name together with the title and level of the award.

Your portfolio will need a *title page* and a *contents page*. You should also complete a *Personal Profile* which records details about yourself and your job as well as providing information about your employer, training provider or college. Blank samples of these forms are provided in Section 4.

We recommend that you compile your portfolio in the following order:



# **Contents checklist**

You might also find it useful to complete the following checklist as you work your way through your portfolio. This will help you to see if you have included all the relevant items. Once you have completed your portfolio, you will be able to use this checklist again as a contents page, by inserting the relevant page or section numbers in the right hand column.

		Completed?	Page/Section number
Title	page for the portfolio		
Perso	nal profile		
•	your own personal details		
٠	a brief CV or career profile		
٠	description of your job		
•	information about your employer/training provider/ college		
Unit 2	Assessment Plans		
Unit J	progress record		
Comp	bleted Element Achievement Records for each Unit		
•	signed by yourself, your assessor and the internal verifier (where relevant)		
•	Evidence reference numbers included		
		_	
	of evidence (with cross-referencing information leted)		
Evide	ence (with reference numbers)		
•	observation records		
•	details of witnesses (witness testimony sheets)		
•	personal statements		
•	products of performance		

# **Collecting your evidence**

All of the evidence which you collect and present for assessment must be relevant to your SVQ. Your assessor will help you choose which pieces of evidence you should include.

We have provided blank forms in Section 4 of this document, which you can photocopy to help you record and present your evidence. Although we have provided you with sample forms, your centre may have their own recording documents which they would prefer you to use.

Some of these forms eg, **observation records** and the **record of questions and answers**, will be completed by your assessor. Other forms (**witness testimonies**) will be used by people other than your assessor to testify that they have observed you doing your job, and there is one for you to complete called a **personal statement**.

Explanations are given below about how and when these forms should be used.

# **Observation record (Example 5)**

The observation record is used by your assessor to record what tasks you have performed and to what standard. There is also a section for your assessor to note which other Units or outcomes are covered by this evidence ('integration of assessment').

The assessor will discuss with you which Performance Criteria and range you have successfully achieved and give you feedback. This form should then be given a reference number and included in your portfolio as part of your evidence.

### Witness testimony (Example 6)

There may be occasions when your assessor is not available to observe you carrying out certain aspects of your job. In such instances, it may be appropriate for another person to comment about your performance by completing a statement called a 'witness testimony'.

Witness testimony should only be used as supporting evidence and should:

- be provided by a person, not related to you, who is in a position to make a valid comment about your performance eg, supervisor, line manager or possibly a client/customer
- contain comments which specifically relate your performance to the standards
- be authenticated by the inclusion of the witness's signature, role, address, telephone number and the date

It is unlikely that your assessor would make an assessment decision based on witness testimony alone. They would normally supplement this type of evidence with questioning.

# Record of questions and candidate's answers (Example 7)

This form is used to record any questions which your assessor may ask, to establish whether you have the required level of knowledge and understanding associated with each Unit. There is also space on the form for your answers to be noted.

# Personal statement (Example 4)

There will be times when you need to put a piece of your evidence in context for your assessor so that they can decide if it is relevant to your SVQ. You can complete personal statements to help you do this — these can relate either to the pieces of evidence or to each outcome or Unit.

For example, you may refer to paperwork which is often used in your organisation to help you pass on information to a colleague. It may not be clear to an assessor why you are communicating to your colleague in this way and a **brief** explanation of the paperwork and why it is relevant to a particular part of your SVQ may be required.

A personal statement might also be used to record your experience of something, such as, how you handled a specific situation. This can be documented in your personal statement and should be a description of what you did, how you did it and why you did it. It will also allow you to include the people who were present and either assisted you or witnessed your actions. This, in turn, might identify who you should approach for 'witness testimony'. In your personal statement you could also refer to product evidence that you have produced (eg, reports, notes, completed forms), these can also be included as evidence in your portfolio.

The personal statement can be a piece of evidence in itself and should therefore be included in your portfolio.

# Presenting your evidence

It is important to present all of your evidence in a clear, consistent and legible manner. Your assessor will then find it much easier to make appropriate judgements about the quality, sufficiency and currency of the materials you are putting forward for consideration.

It is not necessary to produce all of your evidence in typewritten format — some hand-written pieces of evidence, such as notes, will be perfectly acceptable.

There may also be items of evidence which you cannot physically include in your portfolio. This might be for confidentiality reasons or it could be that something which you have produced as part of your day-to-day work is normally kept in a filing cabinet or stored electronically in a PC.

In compiling your portfolio, we suggest that anything you produce as part of your day-to-day work is kept in its normal location, but those pieces of evidence which have been produced specifically for your SVQ, eg witness testimony statements or personal statements, are filed in your portfolio. However, assessors and verifiers should be able to locate and access your evidence at all times. It is, therefore, very important that you clearly reference every item of evidence.

# **Referencing your evidence**

Your assessor, as well as the internal and external verifiers, will need to find their way around your portfolio, so you should give each piece of evidence a number.

*Remember*, that where you have used 'integration of assessment', you need to give details of all the Units and elements which are linked to a specific piece of evidence. The links should be noted on the pieces of evidence themselves as well as on the index of evidence (cross-referencing).

# How to complete the Index of evidence (Example 1)

You should complete an *index of evidence* sheet and file it immediately before the actual pieces of evidence in your portfolio.

The index of evidence should be completed by:

- entering the evidence number in the first column
- giving a brief description of each piece of evidence in the second column
- explaining where the evidence can be found in the third column

You must make sure that the information contained in the evidence index is accurate when you give your portfolio to your assessor, particularly in relation to where the evidence can be located.

### **Completing the Element Achievement Records (Example 3)**

There is an Element achievement record for every Element within this portfolio. These records have been designed to allow you to record the evidence you have gathered for each Element. Each record has boxes across it which represent the Performance Criteria, Range Statement, Evidence Requirements and Knowledge and Understanding statement, these will differ from Element to Element so it is important to make sure you are using the right one. Whilst collecting your evidence you should use these grids to display the Performance Criteria, Range, Knowledge and Understanding and Evidence Requirement that piece of evidence relates to. In the first box write the evidence index number you have given to that piece of evidence. In the second box give a brief description of the evidence, then tick against the relevant Performance Criteria, Range, Evidence Requirements and Knowledge and Understanding.

# Worked examples

To give you a clearer picture of how to compile your portfolio, you will find worked examples of the various forms over the next few pages. You should ask your assessor for further advice and support if you are still unsure about how to use the forms and who should complete them.

# Index of evidence

# (Example 1)

# SVQ title and level: Using IT at level 3

Evidence number	Description of evidence	Included in portfolio (Yes/No) If no, state location	Sampled by the IV (initials and date)
1	Action plan identifying customer requirements	Yes	
2	Personal Statement	Yes	
3	Witness Testimony	Yes	
4	Record of Questions and Answers	Yes	
5	Log of configuration details and errors	Yes	
6	Observation Checklist	Yes	
7	Procedure for shutting down system	Yes	
8	Company media storage policy	No. Can be found with General Manager	

# Unit progress record

Г

# Qualification and level: Using IT at level 3

Candidate: Anne Thomas

To achieve the whole qualification, you must prove competence in **mandatory** Units and **optional** Units.

Unit Checklist —	- circle tl	Circle the reference numbers as you complete each Unit. You can then					
Mandatory	206	301)(	302)	(303)	308		easily see what stage you have
Optional	305	306	311	312	326	327	reached in your SVQ.

# **Mandatory Units**

Unit Number	Title	Ass	essor	Date
206	Ensure your own actions reduce	risks to H&S		
301	Select and enable IT for use	P.J	ones	28/4/2000
302	Maintain the Software Environm	ent P.J	ones	28/4/2000
303	Develop and maintain the effecti working environment	veness of the IT	zs	8/4/2000
308	Develop your own effectiveness This se	and professionalized		
		or to sign each time you		

<b>Optional Units</b>		successfully achieve a Unit.		
305	Design and produce doct	-		
306	Design and produce sprea	adsheets		
311	Design and use databases	3		
312	Design & produce docum	nents using graphics		
326	Design & produce presen	tations using IT		
327	Control the use of electro	nic communication		

# **Element achievement record**

# (Example 3)

Unit title: Select & enable IT for use

# Element: 301.1 Select & configure equipment for use

Evidence	Description of Evidence	Performance Criteria							Ran	ge			owled	0				
Index No													Uno	dersta	andin	g		
		а	b	c	d	e	f	g	h	1	2	3	K1	K2	K3	K4	K5	
1	Action Plan	1	1			1				1								
2	Personal Statement	1	1			1				1								
3	Copy of Legislation			1	1							✓						
5	Record of Questions & Answers	1	1	1		1				1	1	1						
6	Log of Configuration Details						1	1	1		1					<u>^</u>		
These numbers															$\geq$		F	
relate to your Evidence Index and will allow your assessor to find your evidence easily	Give a brief description of the evidence you are offering for assessment against each Performance Criteria, range and piece of knowledge and understanding					As you collect your evidence for assessment you should tick the relevant boxes. There is a box which represents each Performance Criteria and range in the element						Candidates should enter which areas of knowledge and understanding that piece of evidence covers.						
Candidate: Date:	Assessor: Date:	_						IV: Dat										

# **Personal statement**

# (Example 4)

Date	Evidence index number	Details of statement	Links to other evidence (enter numbers)	Units, elements, pcs, and range covered
4/4/00	index	Statement that I know and understand customer requirements. Names of customer and software and hardware requirements in portfolio. Statements that I understand how to set up, equipment, configure software that met customer requirements. Details of equipment and software with dates are listed in portfolio.	evidence	pcs, and range

Candidate signature: Anne Thomas

Date: 2/4/2000

# **Observation Record**

# (Example 5)

Unit/Element(s): (301) Select and Enable IT for Use

Candidate:	Anne Thomas	Date of observation:	28/4/2000
Evidence index num	ber: <u>8</u>	_	
Skills/activities obse	erved:	PCs and range covered:	
Saving and storing fi	les	Element 301.3 PCs: a-f Range: <b>materials</b> (consuma media), <b>regulations</b> (curren manufacturer's instructions procedures), <b>system</b> (applic system software).	at legislation, , organisational

Knowledge and understanding apparent from this observation:

Candidate can save and organise files. She can delete unwanted files and can shut down system according to organisation's procedures and manufacturer's instructions.

Other Units/elements to which this evidence may contribute:

302.1.b,c Range 1,3

Assessor comments and feedback to candidate:

I can confirm the candidate's performance was satisfactory.

Assessor signature:	Peter Jones	Date:	28/4/2000
Candidate signature:	Anne Thomas	Date:	28/4/2000

# Witness testimony

# (Example 6)

SVQ title and leve	el:	Using IT level 3					
Candidate name:		Anne Thomas					
Evidence index n	o:	4					
Where applicable no. to which this relates:							
Element(s):		301.2	Range:	1			
Date of evidence:	:	8/4/2000					
Witness name:		Ian Cummings					
Designation/relat candidate:	ionship to	Line manager					
Details of testime	ony:						
use of software.	I observed Anne Th She understands and nen selecting and cor	d has knowledge of	• •	-			
I can confirm the c	candidate's evidence i	is authentic and accu	ırate.				
Witness signature:	Ian Cummings						
Name:	Ian Cumminas						

Ian Cummings
8/4/2000
-

Please tick the appropriate box:



A1/A2 or D32/D33 Award



Familiar with the SVQ standards to which the candidate is working

# Record of questions and candidate's answers (Example 7)

Unit	: 301 Select & enable IT for use	Element(s): 1
Evid	ence index number: 5	
As po their	r knowledge and skills. Anne Thomas was in	are regularly interviewed and asked about terviewed on the 21 March 2000 and below is a er knowledge of resources and problem solving.
List o	f questions and candidate's responses:	
Q:	If a member of staff asked you for a particular p follow?	iece of equipment, would procedures would you
A:		has been filled out with the rational for needing such eral managers. If approved, next step would be to ask the c 301.1.a,b,e Range 1,2,3
Q:	You discover that a member of staff has installe you do?	d a piece of software on their workstation PC. What do
A:	If they installed it themselves then this is a serie the IT manager. I would then remove the softwa	bus breach of company regulations and I would inform are. Pc 301.1.c, Range 2,3
	ssor's signature: Davinder Singh idate's signature: Anne Thomas	Date: 21/3/2000 Date: 21/3/2000

# Section 3 — The Units and recording documents for your SVQ

# **Unit Progress Record**

# **Qualification and level: Built Environment Design level 3**

# Candidate:

To achieve the whole qualification, you must prove competence in **two mandatory** Units plus any **four optional** Units.

Please note the table below shows the SSC identification codes listed alongside the corresponding SQA Unit numbers. It is important that the SQA Unit numbers are used in all your recording documentation and when your results are communicated to SQA. SSC identification codes are **not valid** in these instances.

Unit Checklist — circle the reference number of each Unit as you complete it.

Mandatory	C01	C02								
Optional	O03	O04	O05	O06	O07	O08	O09	O10	011	012

### Mandatory Units (all Units should be completed)

SQA	SSC		Assessor	Internal	Date
Unit	Unit	Title		Verifier	
Number	Number				
F50H 04	BED3/C01	Produce and Recommend			
		Detailed Design Solutions			
F50J 04	BED3/C02	Maintain Professional			
		Relationships and Practice			
Optional	Units <sup>.</sup>				
-		e four of the following Units:			
F50K 04	BED3/O03	Investigate Factors Affecting			
1001101	2220,000	Project Development			
F50L 04	BED3/004	Plan, Carry Out and Present			
		Measured Surveys			
F50M	BED3/005	Carry Out and Present			
04		Condition Surveys			
F50N 04	BED3/006	Carry Out Tests and Present			
		Reports			
F50R 04	BED3/007	Report on and Prepare			
		Applications to Secure			
		Consents			
F50S 04	BED3/008	Prepare Drawings and			
		Schedules			
F50T 04	BED3/009	Collate Project Information			
		and Prepare Specifications			
F50W	BED3/O10	Obtain and Assess Tenders			
04					

SQA Unit Number	SSC Unit Number	Title	Assessor	Internal Verifier	Date
F50Y 04	BED3/011	Prepare Tenders			
F510 04	BED3/012	Monitor Projects			

This Unit has the following Elements:

Element 1 (BED3/C01.1)	Confirm the purpose, methods and techniques for preparing detailed designs
Element 2 (BED3/C01.2)	Confirm and select materials, components and systems
Element 3 (BED3/C01.3)	Produce detailed design solutions
Element 4 (BED3/C01.4)	Recommend detailed design solutions
Element 5 (BED3/C01.5)	Identify and assess health and safety hazards
Element 6 (BED3/C01.6)	Make design choices to minimise health and safety risks

### **Unit Summary**

This Core Unit recognises, in addition to your technical competence as a designer, the paramount importance of health, safety and welfare requirements and environmental sustainability issues. These key issues are embedded into all the relevant Units in this award, and Unit 1 deals in depth with safety and risk in the design processes.

Element 1.1 is about ensuring that all aspects of the design are integrated. You must understand the overall design approach, and be able to apply agreed techniques that will produce a holistic design that is coherent and consistent.

Element 1.2 is about deciding what materials, components and systems will make up the finished product. In order to provide the necessary evidence for this Element, you must have a sound knowledge of the available options, and be able to make informed choices. This Element will challenge your technical competence.

Element 1.3 is about producing the details of the design. It follows on from Element 1.1, and is about your technical competence. You must be able to justify the design decisions that you make.

Element 1.4 is about agreeing with stakeholders what you have done so far. You must be able to report on progress to date, justify the decisions that you have taken, and gain the trust and support of stakeholders for the next phase of the work.

Elements 1.5 and 1.6 are about identifying the hazards arising from the design, eliminating them where possible, and minimising the risks arising from the residual hazards. For the purposes of this Unit, a hazard is something with the potential to cause harm, and a risk is the likelihood of harm being caused, and the degree of its severity. The strategy for managing risk uses a hierarchy of eliminate/reduce/inform/control. You must be able to identify hazards associated with the design, eliminate them where possible, and inform people about the residual risks.

# Element 1 (BED3/C01.1) Confirm the purpose, methods and techniques for preparing detailed designs

### **Performance Criteria**

### This involves:

- (a) Confirming the purpose of detailed design information and the **format** to be used.
- (b) Identifying and confirming the **aspects of the overall project design** which interact with each other and which require detailed design.
- (c) **Maintaining coherence and consistency** between the detailed design solutions and the overall design concept.
- (d) Applying agreed **techniques** for investigating, calculating, testing, developing and specifying detailed design solutions.

### Range

### 1 Format

- (a) in writing
- (b) graphically
- (c) electronically

### 2 Aspects of the overall project design

- (a) location and size
- (b) assembly and construction
- (c) components and systems

### 3 Maintain coherence and consistency

- (a) visual and spatial
- (b) functional performance
- (c) technical performance
- (d) requirements of relevant legislation and codes
- (e) cost
- (f) health and safety
- (g) environmental quality and sustainability
- (h) buildability
- (i) value management
- (j) concurrent design and construction

# 4 Techniques

- (a) data research
- (b) conformity with regulations
- (c) specialist guidance and good practice
- (d) relevant previous solutions and feedback
- (e) modelling
- (f) calculation

# Element 1 (BED3/C01.1) Confirm the purpose, methods and techniques for preparing detailed designs

### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How and why do you confirm the purpose or detailed design information? (evaluation) (a) (1)
- (2) How and why do you confirm the **format** for the detailed design information? (evaluation) (a) (1,2)
- (3) Which **aspects** of the **overall project design** do you identify as requiring detailed design? (understanding) (b) (2)
- (4) Which **aspects of the overall project design** do you identify as interacting with each other? (understanding) (b) (2)
- (5) How and why do you maintain coherence and consistency between the detailed design solutions and the overall design concept? (synthesis)
   (c) (3)
- (6) How and why do you agree techniques for investigating, calculating, testing, developing and specifying detailed design solutions?
   (evaluation) (d) (4)

# **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the performance criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

# **Evidence Requirements (cont)**

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

### **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Records of identified parts of the overall project which require detailed design and which maintain coherence and consistency between all aspects of the detailed design (a,b,c,d) (1) (2) (3)
- (2) Records of procedure(s) which have been set up to maintain coherence and consistency between the detailed design solutions and the overall design concept (c) (4)
- (3) Record(s) of agreed techniques used for developing detailed design solutions and detailed designs (f, d) (4)

Simulations are not considered to be acceptable for producing evidence for this Element

### **Process Evidence**

None applicable

# Element 1 (BED3/C01.1) Confirm the purpose, methods and techniques for preparing detailed designs

		Perfo	orman	ce Cri	teria	Ran	ige														
No	Description of Evidence	a	a b c d la		1b	1c	2a	2b	2c	3a	3b	3c	3d	3e	3f	3g	3h	3i	3j		

# Element 1 (BED3/C01.1) Confirm the purpose, methods and techniques for preparing detailed designs

		Knowledge	and Understa	Evidence Requirements									
No	Description of Evidence	1	2	3	4	5	6	1	2	3			

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	 Date:	

# Element 2 (BED3/C01.2) Confirm and select materials, components and systems

### **Performance Criteria**

### This involves:

- (a) Investigating the **construction and installation requirements** which are significant to the overall design.
- (b) Confirming the priorities for the **construction and installation** requirements of the agreed design.
- (c) Assessing whether existing design solutions which contain similar **construction and installation requirements** might be relevant.
- (d) Selecting materials, components and systems which meet the identified **construction and installation requirements** and **standards**.
- (e) Agreeing the solutions which best meet the significant **construction and installation requirements**, and keeping records of them for the project team.

### Range

### 1 Construction and installation requirements

- (a) client and user context
- (b) project type
- (c) purpose
- (d) site and location
- (e) legal and regulatory constraints
- (f) flexibility and adaptability
- (g) environmental sustainability
- (h) specified technical performance standards
- (i) health and safety
- (j) construction technology and buildability
- (k) quality
- (l) cost
- (m) scheduling
- (n) security
- (o) structural forms
- (p) heating and cooling
- (q) energy use
- (r) fire protection
- 2 Standards
  - (a) British Standards and Codes of Practice
  - (b) BBA certificates
  - (c) EU Standards
  - (d) trade advisory guidance publications
  - (e) BRE publications
  - (f) CIRIA publications
  - (g) client standards

# Element 2 (BED3/C01.2) Confirm and select materials, components and systems

### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How and why do you investigate the construction and installation requirements which are significant to the overall design? (analysis) (a) (1)
- (2) How and why do you confirm the priorities of the **construction and installation requirements**? (evaluation) (b) (1)
- (3) How and why do you assess whether existing design solutions might be relevant? (analysis) (c) (1,2)
- (4) How and why do you agree the solutions which best meet the significant **construction and installation requirements**? (analysis) (e) (1)
- (5) How and why do you select materials, components and systems which meet the identified construction and requirements and standards? (evaluation) (d) (1,2)

# **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

### **Evidence Requirements (cont)**

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

### **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Record(s) of investigations of the construction and installation requirements which are significant to the overall design (a) (1)
- (2) Records of the priorities for the construction and installation requirements (b) (1)
- (3) Assessment(s) of existing design solutions and evaluations of chosen solutions (c, e) (1, 2)
- (4) Record(s) of selected materials, components and systems (d) (1, 2)

Simulations are not considered to be acceptable for producing evidence for this Element.

### **Process Evidence**

None applicable

# Element 2 (BED3/C01.2) Confirm and select materials, components and systems

		Per Cr	Performance R Criteria																												
No	Description of Evidence	a	b	c	d	e	1a	1b	1c	1d	1e	1f	1g	1h	1i	1j	1k	11	1m	1n	10	1p	1q	1r	2a	2b	2c	2d	2e	2f	2g

Element 2 (BED3/C01.2) Confirm and select materials, components and systems

		Knowledge	and Understa	nding			Evidence Re	quirements		
No	Description of Evidence	1	2	3	4	5	1	2	3	4

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:		Date:	
Assessor:		Date:	
Internal Verifier:	Date:		

## Element 3 (BED3/C01.3) Produce detailed design solutions

#### **Performance Criteria**

#### This involves:

- (a) Identifying, and confirming the **factors** and **data** which will influence the detailed design solutions, and seeking guidance where required.
- (b) Agreeing criteria for selecting and producing detailed design solutions.
- (c) Producing detailed design solutions by applying agreed criteria.
- (d) Recording the **data** from **calculations**, **investigations** and analyses and passing them on for checking.
- (e) Checking the detailed design solutions against relevant factors.
- (f) **Justifying** the features and benefits of the recommended detailed design solution.
- (g) Providing decision makers with relevant and accurate information at the right time and agreeing a detailed design.
- (h) Maintaining records of detailed design solutions.

### Range

### 1 Factors

- (a) external (eg, ground, water)
- (b) technical (eg, materials and construction technology)
- (c) environmental sustainability
- (d) cost
- (e) time
- (f) health and safety
- (g) regulations, standards and codes of practice

## 2 Data

- (a) identified construction criteria
- (b) existing detailed design solutions

## 3 Criteria

- (a) function and appearance
- (b) physical
- (c) fit and tolerances
- (d) practicality and buildability
- (e) health and safety
- (f) maintenance
- (g) cost factors
- (h) materials availability and capability
- (i) environmental sustainability
- (j) technical
- (k) access (including disability)

## 4 Calculations

- (a) manual
- (b) computer aided

Element 3 (BED3/C01.3) Produce detailed design solutions

### Range (cont)

### 5 Investigations

- (a) data research
- (b) conformity with regulations
- (c) guidance and good practice
- (d) previous solutions and feedback
- (e) computer aided analysis

### 6 Justifying by using

- (a) sketches
- (b) drawings
- (c) physical models
- (d) computer generated data
- (e) diagrams
- (f) mathematical modelling
- (g) written reports
- (h) cost
- (i) programming
- (j) outline approvals from regulatory authorities

## Element 3 (BED3/C01.3) Produce detailed design solutions

#### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) What do you identify as relevant **factors** and **data** which will influence the detailed design solution? (understanding) (a) (1,2,3)
- (2) How do you agree **criteria** for selecting detailed design solutions? (application) (b) (3)
- (3) How and why do you agree **criteria** for producing detailed design solution? (evaluation) (b) (3)
- (4) How and why do you produce detailed design solutions? (evaluation) (c)(4)
- (5) How do you record and pass on the **data** from **calculations**, **investigations** and analyses? (application) (d) (4,5,6)
- (6) How and why do you check the detailed design solutions against relevant **factors**? (application) (e) (1,2)
- (7) How do you justify the features and benefits of the recommended detailed design solutions (application) (f) (6)
- (8) How do you **provide relevant and accurate information to decision makers**? (application) (g) (6)
- (9) How do you maintain records of detailed design solutions (h) (2)

## **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

### **Evidence Requirements (cont)**

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

## **Product Evidence:**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Record(s) of agreed criteria for selecting detailed design solutions which include identified and confirmed factors (a,b,c) (1,2,3,4)
- (2) Record(s) of data from calculations, investigations and analyses including checks (d, e, f, g) (2,5,6)
- (3) Record(s) of detailed design solutions (h) (4, 6)

Simulations are not considered to be acceptable for producing evidence for this Element

### **Process Evidence:**

(1) Presentation(s) of relevant and accurate information (g) (6)

Element 3 (BED3/C01.3) Produce detailed design solutions

		Pe	rfor	man	ice (	Crite	ria			R	ange	•																			
No	Description of Evidence	а	b	c	d	e	f	g	h	1a	1b	1c	1d	1e	1f	1g	2a	2b	3a	3b	3c	3d	3e	3f	3g	3h	3i	3j	3k	4a	4b
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Element 3 (BED3/C01.3) Produce detailed design solutions

		Range	(cont)													
No	Description of Evidence	5a	5b	5c	5d	5e	ба	бb	6с	6d	6e	6f	6g	бh	6i	6j

## Element 3 (BED3/C01.3) Produce detailed design solutions

		Knowled	lge and U	nderstand	ling						Evidence	Requirem	ents
No	Description of Evidence	1	2	3	4	5	6	7	8	9	1	2	3

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	Date:	
Assessor:	Date:	
Internal Verifier:	Date:	

## Element 4 (BED3/C01.4) Recommend detailed design solutions

#### **Performance Criteria**

### This involves:

- (a) Providing **stakeholders** with relevant and accurate information at the right time to agree a detailed design.
- (b) Assessing and **justifying** the features and benefits of the recommended detailed **project design solution.**
- (c) Comparing the recommended detailed **project design solution** with the requirements of the design brief and **justifying** its selection.
- (d) Contributing to an agreement on the **project design solution** which is acceptable to the **stakeholders** and which allows the project to progress to its next stage.

#### Range

## 1 Stakeholders

- (a) the client
- (b) the client's financial advisers
- (c) consultants
- (d) potential contractors and suppliers
- (e) potential investors
- (f) partners in the development programme
- (g) potential occupiers
- (h) public interest organisations
- (i) local authorities
- (j) government agencies
- (k) internal

## 2 Justifying by using

- (a) sketches
- (b) drawings
- (c) physical models
- (d) computer generated data
- (e) diagrams
- (f) mathematical modelling
- (g) written reports
- (h) cost
- (i) programming
- (j) outline approvals from regulatory authorities

Element 4 (BED3/C01.4) Recommend detailed design solutions

#### Range (cont)

- 3 **Project design solution consists of** 
  - (a) sketches
  - (b) drawings
  - (c) physical models
  - (d) computer generated data
  - (e) diagrams
  - (f) mathematical modelling
  - (g) written reports
  - (h) cost estimates
  - (i) programming
  - (j) outline approvals from regulatory authorities

### Element 4 (BED3/C01.4) Recommend detailed design solutions

#### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How do you provide the project **stakeholders** with enough relevant and accurate information to agree a detailed design? (application) (a) (1)
- (2) How and why do you **justify** the selection of recommended **project design solution**? (evaluation) (c) (2, 3)
- (3) How and why do you assess the features and benefits of the recommended **project design solution**? (analysis) (b) (3)
- (4) How and why do you compare the recommended **project design solution** with the requirements of the design brief? (synthesis) (c) (3)
- (5) How and why do you **justify** the features and benefits of the recommended **project design solution**? (evaluation) (b) (3)
- (6) How and why do you contribute to an agreement on the project design solution which is acceptable to the stakeholders and which allows the project to progress to its next stage? (evaluation) (d) (3)

## **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

### **Evidence Requirements (cont)**

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

### **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Information provided to project stakeholders (a) (1)
- (2) Records of assessment(s) and justification(s) of the recommended design solutions (b,c) (1, 2, 3)
- (3) Agreement(s) to move to the next stage of the project (d) (1)

Simulations are not considered to be acceptable for producing evidence for this Element.

### **Process Evidence**

None applicable

Element 4 (BED3/C01.4) Recommend detailed design solutions

			form teria		e	Rar	nge																			
No	Description of Evidence	a	b	с	d	1a	1b	1c	1d	1e	1f	1g	1h	1i	1j	1k	2a	2b	2c	2d	2e	2f	2g	2h	2i	2j

Element 4 (BED3/C01.4) Recommend detailed design solutions

		Range (con	t)								
No	Description of Evidence	3a	3b	3c	3d	3e	3f	3g	3h	3i	3ј

Element 4 (BED3/C01.4) Recommend detailed design solutions

		Knowledge	and Understa	anding		Evidence Re	quirements			
No	Description of Evidence	1	2	3	4	5	6	1	2	3

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	Date:	
Assessor:	Date:	
Internal Verifier:	Date:	

## Element 5 (BED3/C01.5) Identify and assess health and safety hazards

### **Performance Criteria**

### This involves:

- (a) Collaborating with **interested parties** to ensure the compliance of designs with **relevant health and safety regulations and legal framework**.
- (b) Identifying **operations and individual activities** that may give rise to h**azards**.
- (c) Identifying and prioritising the **hazards** arising from **operations and individual activities**.
- (d) Obtaining accurate information on any **potential consequences** resulting from the **hazards**.
- (e) **Assessing** the **hazards** to identify **risks** on an iterative basis throughout the development process.

### Range

### 1 Interested parties

- (a) planning supervisor/co-ordinator
- (b) other designers
- (c) specialist advisors
- (d) clients
- (e) construction and construction managers
- (f) contractors and specialist contractors

## 2 Relevant health and safety regulations and legal framework

- (a) CDM regulations and Approved Codes of Practice
- (b) current health, safety and welfare regulations
- (c) Construction and Building Regulations

## 3 **Operations and individual activities**

- (a) constructing (infrastructure, structure, building fabric, finishes, services and equipment, landscape)
- (b) using
- (c) cleaning
- (d) maintaining
- (e) altering
- (f) demolition
- (g) commissioning and decommissioning

Element 5 (BED3/C01.5) Identify and assess health and safety hazards

#### Range (cont)

4

Haz	ards	7	Risl	<b>KS</b>
(a)	falls from height		(a)	high
(b)	slips, trips and falls		(b)	medium
(c)	hit by falling or moving objects		(c)	low
(d)	manual handling			
(e)	health issues			
(f)	power sources			
(g)	hazardous substances			

- (h) trapped by something collapsing or overturning
- (i) confined spaces
- (j) fire
- (k) obstructions
- (l) moving vehicles

#### 5 **Potential consequences**

- (a) injuring people
- (b) causing ill health
- (c) damaging property
- (d) adversely affecting the natural and built environment
- (e) contravening legislative requirements
- (f) litigation and prosecution
- (g) working conditions and circumstances, buildability

### 6 Assessing

- (a) likelihood of occurrence
- (b) severity of harm incurred

## Element 5 (BED3/C01.5) Identify and assess health and safety hazards

### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How do you collaborate with **interested parties** to ensure the compliance of designs with **relevant health and safety regulations and legal framework**? (application) (a) (1,2)
- (2) What do you identify as **operations and individual activities** that may give rise to **hazards**? (understanding) (a) (3,4)
- (3) What do identify as **hazards** arising from **operations and individual activities**? (understanding) (c) (4, 5))
- (4) How and why do you prioritise the **hazards** arising from **operations and individual activities**? (analysis) (c) (4, 5)
- (5) How and why do you obtain accurate information on any **potential consequences** resulting from the **hazards**? (application) (d) (4, 5)
- (6) How and why do you **assess** the **hazards** to identify **risks** on an iterative basis? (analysis) (e) (4, 5, 6, 7)

## **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg(a), and range, eg(1), to which they apply.

## **Evidence Requirements (cont)**

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

## **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Records of checks with interested parties (a) (1, 2)
- (2) Iterative hazard assessments, that include collaboration with interested parties and identified risks (b,c,d,e) (2,3,4,5,6,7)

Simulations are not considered to be acceptable for producing evidence for this Element.

## **Process Evidence**

### None applicable

Element 5 (BED3/C01.5) Identify and assess health and safety hazards

		Perf	orma	nce C	riteri	a	Ran	ge														
No	Description of Evidence	а	b	c	d	e	1a	1b	1c	1d	1e	1f	2a	2b	2c	3a	3b	3c	3d	3e	3f	3g
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																						ļ
																						<u> </u>

## Element 5 (BED3/C01.5) Identify and assess health and safety hazards

		Ran	ge (ce	ont)																					
No	Description of Evidence	4a	4b	4c	4d	4e	4f	4g	4h	4i	4j	4k	41	5a	5b	5c	5d	5e	5f	5g	6a	6b	7a	7b	7c
																									İ

Element 5 (BED3/C01.5) Identify and assess health and safety hazards

		Knowledge an	nd Understandi	ing				<b>Evidence Req</b>	uirements
No	Description of Evidence	1	2	3	4	5	6	1	2

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	Date:	
Assessor:	Date:	
Internal Verifier:	Date:	

## Element 6 (BED3/C01.6) Make design choices to minimise health and safety risks

### **Performance Criteria**

### This involves:

- (a) Eliminating identified **hazards** whilst **developing and modifying** detailed designs.
- (b) Reducing identified levels of **risk** arising from **hazards** that are not eliminated when **developing and modifying** detailed designs.
- (c) Identifying collective and individual **measures** for reducing levels of **risk**.
- (d) Recording in **design documentation** any information needed by **other people involved** so that they can comply with their duties under **relevant health and safety regulations**.

### Range

- 1 Hazards
  - (a) falls from height
  - (b) slips, trips and falls
  - (c) hit by falling or moving objects
  - (d) manual handling
  - (e) health issues
  - (f) power sources
  - (g) hazardous substances
  - (h) trapped by something collapsing or overturning
  - (i) confined spaces
  - (j) fire
  - (k) obstructions
  - (l) moving vehicles

## 2 Developing and modifying

- (a) analysis
- (b) identifying interactions
- (c) calculation
- (d) testing
- (e) selecting materials, components and systems
- (f) detailing and specifying
- (g) consideration of costs and benefits (including whole life costing)

## 3 Measures

- (a) eliminate
- (b) reduce
- (c) inform
- (d) control

Element 6 (BED3/C01.6) Make design choices to minimise health and safety risks

#### Range (cont)

#### 4 Risks

- (a) high
- (b) medium
- (c) low

#### 5 **Design documentation**

- (a) drawings
- (b) specifications
- (c) models
- (d) calculations
- (e) Health and Safety plans and files

### 6 **Other involved people**

- (a) contractors
- (b) maintainers
- (c) owners
- (d) users

## 7 Relevant health and safety regulations

- (a) CDM regulations and Approved Codes of Practice
- (b) current health, safety and welfare regulations
- (c) Construction and Building Regulations

## Element 6 (BED3/C01.6) Make design choices to minimise health and safety risks

### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How do you eliminate identified **hazards** whilst **developing and modifying designs**? (application) (a) (1,2,3)
- How and why do you reduce identified risks arising from hazards that are not eliminated when developing and modifying designs?
   (evaluation) (b) (1,2,3,4)
- (3) How and why do you identify collective and individual **measures** for reducing **risks**? (understanding) (c) (4,5)
- (4) How do you record in **design documentation** any information needed by **other people involved**? (application) (d) (6,7)

## **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg(a), and range, eg(1), to which they apply.

### **Evidence Requirements (cont)**

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

## **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Records of eliminated hazards (a) (1,2)
- (2) Records of risk reduction measures and their implementation (b,c) (1,2,4,5,6)
- (3) Design information needed by others (d) (6,7)

Simulations are not considered to be acceptable for producing evidence for this Element.

### **Process Evidence**

None applicable

## Element 6 (BED3/C01.6) Make design choices to minimise health and safety risks

		Per Cri	forn teria	ance	e	Ra	nge																					
No	Description of Evidence	a	b	с	d	1a	1b	1c	1d	1e	1f	1g	1h	1i	1j	1k	11	2a	2b	2c	2d	2e	2f	2g	3a	3b	3c	3d

## Element 6 (BED3/C01.6) Make design choices to minimise health and safety risks

		Range	(cont)													
No	Description of Evidence	4a	4b	4c	5a	5b	5c	5d	5e	6а	6b	6c	6d	7a	7b	7c

Element 6 (BED3/C01.6) Make design choices to minimise health and safety risks

		Knowledge and	Understanding			Evidence Requir	rements	
No	Description of Evidence	1	2	3	4	1	2	3

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	Date:	<u> </u>

This Unit has the following Elements:

Element 1 (BED3/C02.1)	Maintain relationships with other people
Element 2 (BED3/C02.2)	Exchange information and present advice on technical issues
Element 3 (BED3/C02.3)	Operate within an ethical framework
Element 4 (BED3/C02.4)	Participate in meetings
Element 5 (BED3/C02.5)	Undertake personal development

#### **Unit Summary**

This Core Unit is concerned with the integration of your personal and professional competence.

Element 2.1 is about getting the best from your relationships with other people. This is about 'emotional competence' — being confident about your own control of yourself, and there relationships with the project team, so that you can deal with the concerns of others in a constructive way.

Element 2.2 links with 2.1, and is about communicating technical information to other people, and ensuring that they understand it. You must be able to 'talk their language', and maintain their trust in you and their support for your work.

Element 2.3 is about practising ethically. You must be able to demonstrate how you achieved the Performance Criteria with examples from your work.

Element 2.4 is about taking part in meetings. This means getting involved with the business of the meeting and making appropriate contributions.

Element 2.5 is about your Continuing Professional Development (CPD) and reviewing your development needs, deciding how to meet them, carrying out your development plan and evaluating its success. This will lead on to an update of your need's review, and the process becomes ongoing. In order to provide the necessary evidence for this Element, you must be able to produce and explain your CPD plans and records.

### Element 1 (BED3/C02.1) Maintain relationships with other people

#### **Performance Criteria**

#### This involves:

- (a) Maintaining working relationships with **people** which promote goodwill and trust.
- (b) **Informing people** about **work activities** in an appropriate level of detail and with an appropriate degree of urgency.
- (c) **Offering advice** and help to **people** about **work activities** with sensitivity and encouraging questions, requests for clarification and comments.
- (d) **Clarifying** with **people** objections to proposals and resolving conflicts and differences of opinion in ways which minimise offence, and maintain goodwill, trust and respect.

#### Range

#### 1 **People**

- (a) those to whom you report
- (b) other professional colleagues
- (c) those affected by your work

### 2 Informing, offering advice, presenting and clarifying

- (a) orally
- (b) in writing
- (c) using graphics
- (d) electronically

## 3 Work activities

- (a) progress
- (b) results
- (c) achievements
- (d) emerging threats
- (e) risks
- (f) opportunities

## Element 1 (BED3/C02.1) Maintain relationships with other people

#### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How do you maintain working relationships with **people** which promote goodwill and trust? (application) (a) (1,2,3)
- (2) How do you inform people about work activities in an appropriate level of detail and with an appropriate degree of urgency? (application) (b) (2)
- (3) How and why do you **offer advice** and help to **people** about **work activities**? (synthesis) (c) (2,3)
- (4) How do you clarify with people objections to proposals? (application)(d) (1,2)
- (5) How and why do you resolve conflicts and differences of opinion in ways which minimise offence, and maintain goodwill, trust and respect? (synthesis) (d) (2)

## **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

### **Evidence Requirements (cont)**

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

### **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Information and advice provided about work activities (a,b,c,d) (all)
- (2) Proposal(s) presented, including clarification and alternatives offered (a,d) (1,2,3)

Simulations are not considered to be acceptable for producing evidence for this Element.

### **Process Evidence**

(1) Information and advice (all) (all)

Element 1 (BED3/C02.1) Maintain relationships with other people

		Performa	nce Criter	ria		Rang	ge											
No	<b>Description of Evidence</b>	a	b	с	d	1a	1b	1c	2a	2b	2c	2d	3a	3b	3c	3d	3e	3f
																		<b> </b>

Element 1 (BED3/C02.1) Maintain relationships with other people

		Knowledge an	nd Understand	ing			Evidence Requireme	ents
No	Description of Evidence	1	2	3	4	5	1	2

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	Date:	

### Element 2 (BED3/C02.2) Exchange information and present advice on technical issues

#### **Performance Criteria**

#### This involves:

- (a) Obtaining information which is sufficiently detailed for the **purpose**.
- (b) **Presenting** technical information and advice which is complete, summarised accurately and relevant to technical issues.
- (c) **Presenting** technical recommendations which are clear, accurate and valid, and which represent the best advice possible given the information and resources available.
- (d) Giving technical instructions and guidance which are likely to be understood by the people who will follow them.
- (e) **Presenting** technical information and advice using a style of communication which is appropriate to the **people receiving information and advice**.
- (f) Adapting and modifying technical information where people are having difficulties in understanding it.

#### Range

#### 1 Purpose

- (a) sharing experience
- (b) issuing instructions
- (c) making decisions
- (d) increasing understanding
- (e) implementing a solution
- (f) dealing with confrontation
- (g) negotiation

#### 2 **Presenting**

- (a) orally
- (b) in writing
- (c) graphically
- (d) electronically

### **3** People receiving information and advice

- (a) same and other related occupations
- (b) clients and customers
- (c) technical and non-technical team members
- (d) craftspeople and operatives
- (e) senior and junior colleagues
- (f) members of the public
- (g) people with individual needs

## Element 2 (BED3/C02.2) Exchange information and present advice on technical issues

### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How do you obtain information which is sufficiently detailed for the purpose? (application) (a) (1)
- (2) How and why do you present technical information and advice?(application) (b) (2)
- (3) How and why do you present technical information and advice in a style appropriate to the people receiving information and advice? (application) (e) (2,3)
- (4) How and why do you give technical instructions and guidance? (application) (d) (3)
- (5) How do you adapt and modify technical information where people are having difficulties in understanding it? (application) (f) (3)
- (6) How do you **present** technical recommendations? (application) (c) (3)

## **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg(a), and range, eg(1), to which they apply.

### **Evidence Requirements (cont)**

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

### **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Technical information and advice presented, including technical information obtained in significant detail which has been modified and adapted (a,b,c,e,f) (1,2,3)
- (2) Record(s) of technical instructions and guidance (d) (3)
- (3) Record(s) technical recommendations (e) (2,3)

Simulations are not considered to be acceptable for producing evidence for this Element.

### **Process Evidence**

(1) Presenting technical information, advice recommendations and guidance (b,c,d,f) (2,3)

## Element 2 (BED3/C02.2) Exchange information and present advice on technical issues

		Per	form	ance	Crite	eria		Rar	nge																
No	Description of Evidence	a	b	c	d	e	f	1a	1b	1c	1d	1e	1f	1g	2a	2b	2c	2d	3a	3b	3c	3d	3e	3f	3g

## Element 2 (BED3/C02.2) Exchange information and present advice on technical issues

		Knowledge and Understanding						Evidence Requirements		
No	Description of Evidence	1	2	3	4	5	6	1	2	3

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	 Date:	

## Element 3 (BED3/C02.3) Operate within an ethical framework

#### **Performance Criteria**

#### This involves:

- (a) Identifying the limits of your professional expertise and working within them.
- (b) Taking clear and unequivocal personal responsibility for personal decisions.
- (c) Confirming the terms of reference and the expectations of the people involved in contracts.
- (d) Refusing offers which are illegal and which may generate **conflicts of interest**.

#### Range

#### 1 **Conflicts of interest**

- (a) offers which may result in adverse conditions to other individuals or the community
- (b) offers which involve the financial interest of the practitioner
- (c) giving unfair advantage to the practitioners family or friends

## Element 3 (BED3/C02.3) Operate within an ethical framework

#### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How do you identify the limits of your professional expertise and work within them? (understanding) (a) (1).
- (2) How and why do you take personal responsibility for personal decisions? (evaluation) (b) (1)
- (3) How and why do you confirm the terms of reference and the expectations of the people involved in contracts? (evaluation) (c) (1)
- (4) How do you avoid conflict of interest by refusing illegal offers?(synthesis) (d) (1)

### **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

### **Evidence Requirements (cont)**

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

### **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Record(s) of contract(s) agreement(s) and terms of reference (a,b,c) (1)
- (2) Record(s) of balanced judgments, advice and personal decisions (d) (1)

Simulations are not considered to be acceptable for producing evidence for this Element.

#### **Process Evidence**

None applicable

Element 3 (BED3/C02.3) Operate within an ethical framework

		Performance C	riteria			Range						
No	Description of Evidence	a	b	с	d	1a	1b	1c				

Element 3 (BED3/C02.3) Operate within an ethical framework

		Knowledge and U	J <b>nderstanding</b>			Evidence Requireme	ents
No	Description of Evidence	1	2	3	4	1	2

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	 Date:	

### Element 4 (BED3/C02.4) Participate in meetings

#### **Performance Criteria**

#### This involves:

- (a) Preparing for the **meeting** sufficiently to enable you to participate effectively.
- (b) Consulting with the **people** you are representing sufficiently to allow you to present their views effectively.
- (c) Making your contributions to the **meeting** clear, concise and relevant.
- (d) Making contributions to the **meeting** which help clarifying problems and identifying and assessing possible solutions.
- (e) Acknowledging and discussing the contributions and viewpoints of others in a constructive manner.
- (f) Giving clear, accurate and concise information about decisions made at the **meeting**, promptly to those who need it.

#### Range

- 1 Meetings
  - (a) involving people from within your organisation
  - (b) involving people outside your organisation
- 2 **People** 
  - (a) individuals
  - (b) groups

Element 4 (BED3/C02.4) Participate in meetings

#### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element, or professional review. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

#### (1) Communication

(1.1) The information concerning the decisions and recommendations of the meeting which need to be conveyed to others and how to ensure that this has been done effectively.

#### (2) Meetings

- (2.1) How to prepare for **meetings** according to different roles and responsibilities which you may have in relation to the meeting.
- (2.2) The importance of consulting in advance with those you are representing and how to do so.
- (2.3) The importance of making clear, concise and relevant contributions to meetings and how to ensure your contributions meet these criteria.
- (2.4) How to identify and analyse the problems discussed in **meetings** and make contributions capable of clarifying and resolving these.
- (2.5) Working relationships.
- (2.6) The importance of constructively acknowledging the contributions and viewpoints of others and how to do so.

#### **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

#### **Evidence Requirements (cont)**

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

#### **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) You must show evidence of contributing to both types of meetings (a,c,d,f) (1)
- (2) You must prove that you participate in meetings to the National Standard of competence (all) (all)
- (3) You must show evidence of representing both types of people (b) (2)
- (4) Your evidence must be the result of real work activities undertaken by yourself. Evidence from simulated activities is not acceptable for this element.

Simulations are not considered to be acceptable for producing evidence for this Element.

### **Process Evidence**

#### None applicable

### Element 4 (BED3/C02.4) Participate in meetings

		Performan	ce Criteria					Range						
No	Description of Evidence	a	b	с	d	e	f	1a	1b	2a	2b			

### Element 4 (BED3/C02.4) Participate in meetings

		Knowledg	ge and Uno	lerstandin	g		Evidence Requirements							
No	Description of Evidence	1.1	2.1	2.2	2.3	2.4	2.5	2.6	1	2	3	4		

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	 Date:	

#### Element 5 (BED3/C02.5) Undertake personal development

#### **Performance Criteria**

#### This involves:

- (a) Identifying your **aims and objectives** for undertaking **personal development**.
- (b) Identifying and contacting **sources of support and guidance** for undertaking **personal development**.
- (c) Agreeing relevant **standards of competence** against which **personal development** can be measured.
- (d) Analysing your current personal level of performance and identifying your **personal development** needs.
- (e) Preparing **a development plan** for achieving identified development needs.
- (f) Undertaking **development activities** in accordance with the **development plan**, recording them and reviewing their effectiveness.
- (g) Reviewing, revising and updating **aims and objectives** to suit changing circumstances.

#### Range

#### 1 Aims and objectives

- (a) preparation for new jobs
- (b) intellectual challenge
- (c) need for updating
- (d) need to provide evidence of professional competence
- (e) compliance with employer and professional requirements
- (f) promotion or job change

### 2 Personal development

- (a) maintenance of existing competence
- (b) improvements to existing competence
- (c) development of new competence
- (d) commitment to professional excellence

#### 3 Sources of support and guidance

- (a) national/industry bodies
- (b) Professional Institutions
- (c) education and training providers
- (d) in house

#### 4 Standards of competence

- (a) employer requirements
- (b) professional institution requirements
- (c) industry national occupational standards

#### Element 5 (BED3/C02.5) Undertake personal development

#### Range (cont)

### 5 **Development plan includes**

- (a) priorities
- (b) target dates
- (c) development activities

#### 6 **Development activities**

- (a) formal courses
- (b) research
- (c) work experience
- (d) personal study

### Element 5 (BED3/C02.5) Undertake personal development

#### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How do you review and update **aims and objectives** to suit changing circumstances? (application) (g) (1,2).
- (2) How and why do you identify your **aims and objectives** for undertaking **personal development**? (understanding) (a) (1,2).
- (3) What do you identify as **sources of support and guidance** for undertaking **personal development**? (understanding) (b) (2,3).
- (4) How do you contact **sources of support and guidance** for undertaking **personal development**? (application) (b) (2,3).
- (5) What do you identify as relevant **standards of competence** against which **personal development** can be measured? (understanding) (c) (2,4).
- (6) How and why do you analyse your current personal level of performance against the identified personal development needs? (analysis) (d) (2).
- (7) How and why do you prepare a development plan? (synthesis) (e) (5).
- (8) How do you record progress and the effectiveness of the **development activities**? (application) (f) (6).
- (9) How and why do you review progress and the effectiveness of the **development activities**? (analysis) (f) (6).
- (10) How and why do you undertake **development activities**? (application) (f) (6).

#### **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

### **Evidence Requirements (cont)**

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

#### **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Record(s) of personal development aims and objectives which include sources of support and guidance and selected standards of competence and reviews and updating (a,b,c)
- (2) Profile(s) of present competence identified against standards of competence (d) (4)
- (3) Personal development plan(s) which include identified development needs (e) (5)
- (4) Record(s) of developed progress achievement and evidence of competence identified against standards of competence (f,g) (4,6)

Simulations are not considered to be acceptable for producing evidence for this Element.

### **Process Evidence**

#### None applicable

### Element 5 (BED3/C02.5) Undertake personal development

	Pe	rfor																													
Description of Evidence	a	b	c	d	e	f	g	1a	1b	1c	1d	1e	1f	2a	2b	2c	2d	3a	3b	3c	3d	4a	4b	4c	5a	5b	5c	6a	6b	6c	6d
																														-	
			-		-																										
	Description of Evidence							Performance Criteria         Description of Evidence       a       b       c       d       e       f       g         I </td <td></td>																							

### Element 5 (BED3/C02.5) Undertake personal development

		Knowle	edge and	Unders	tanding							Eviden	ce Requi	rements	
No	Description of Evidence	1	2	3	4	5	6	7	8	9	10	1	2	3	4
															<u> </u>
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Element 5 (BED3/C02.5) Undertake personal development

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	 Date:	

This Unit has the following Elements:

Element 1 (BED3/O03.1) Identify investigation requirements Element 2 (BED3/O03.2) Investigate data and present findings

#### **Unit Summary**

This Optional Unit is concerned with gathering all the information that you will need for your work on design projects.

Element 3.1 is about deciding what information you need, and how it will be collected, analysed and presented. You must be able to identify the parameters of the project, the data that you need to collect, where it will come from, and how you obtain it.

Element 3.2 is about collating and evaluating the information that you have gathered. You must be able to assemble all this information, and present the findings of your research to colleagues.

Element 1 (BED3/O03.1) Identify investigation requirements

#### **Performance Criteria**

#### This involves:

- (a) Collecting information about the **requirements** for the project and identifying any gaps and uncertainties.
- (b) Identifying the **factors for investigation** that may be significant for the planned development.
- (c) Analysing and assessing how accurate, up-to-date and complete the existing information is, and deciding what additional information is needed.
- (d) Identifying what data is needed, its **source**, how accurate the data needs to be and what information is required from **investigation**.

#### Range

#### 1 **Requirements**

- (a) functional requirement
- (b) performance requirements
- (c) cost
- (d) time

#### 2 Factors

- (a) historical
- (b) conservation
- (c) social
- (d) visual and spatial
- (e) ecological and environmental
- (f) construction

#### 3 Analysing and assessing

- (a) comparison with similar projects
- (b) standard checklists
- (c) reference to relevant comparative research

Element 1 (BED3/O03.1) Identify investigation requirements

#### Range (cont)

- 4 Sources
  - (a) client records
  - (b) tenants
  - (c) site owners
  - (d) site managers
  - (e) previous owners
  - (f) local authorities
  - (g) statutory authorities
  - (h) public utilities
  - (i) government departments
  - (j) public and specialist libraries and archives
  - (k) internet

#### Element 1 (BED3/O03.1) Identify investigation requirements

#### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) What do you identify as data that is needed, how accurate the data needs to be and what information is required from the **investigation**? (understanding) (d) (1,2)
- (2) How and why do you **analyse and assess** how accurate, up to date and complete the existing information is? (analysis) (c) (4)
- (3) How and why do you decide what additional information is needed? (evaluation) (c) (3,4)
- (4) What do you identify as **factors** for investigation that may be significant for the planned development? (understanding) (b) (2)
- (5) How and why do you collect information about the **requirements** for the project? (analysis) (a) (4)

#### **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

#### **Evidence Requirements (cont)**

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

#### **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

(1) Record(s) of factors for investigation which identify the data requirements and an assessment of existing information and needs (all) (all)

Simulations are not considered to be acceptable for producing evidence for this Element.

#### **Process Evidence**

#### None applicable

Element 1 (BED3/O03.1) Identify investigation requirements

		Perfo	ormanc	e Crit	eria	Range												
No	Description of Evidence	а	b	с	d	1a	1b	1c	1d	2a	2b	2c	2d	2e	2f	3a	3b	3c

### Element 1 (BED3/O03.1) Identify investigation requirements

	Range (co														
Description of Evidence	4a	4b	4c	4d	4e	4f	4g	4h	4i	4j	4k				
	Description of Evidence		Range (cont)           Description of Evidence         4a         4b           Image (cont)         Image (cont)           Image (cont)         Image (cont)												

### Element 1 (BED3/O03.1) Identify investigation requirements

		Knowledge an	nd Understand	ing		Evidence Requirements	
No	Description of Evidence	1	2	3	4	5	1

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	Date:	

### Element 2 (BED3/O03.2) Investigate data and present findings

#### **Performance Criteria**

#### This involves:

- (a) Choosing **methods and techniques** for the investigation which are valid, reliable and consistent with legal requirements.
- (b) Collecting and collating relevant data from identified **sources** of information.
- (c) Accurately analysing and evaluating the investigation data which has been collected about all of the significant trends and **factors** affecting the project development.
- (d) Identifying and accurately recording the **opportunities and constraints** for project development options.
- (e) Identifying and assessing previous solutions which are similar to the current circumstances to see whether they are relevant and useful.
- (f) **Presenting** accurate findings which are unambiguous, which clearly describe all the important **factors**, and which detail the implications for the project brief.
- (g) Assembling any supporting data which is relevant to the study, but which is not included in the report, storing it safely and indexing it clearly for future reference.

#### Range

- 1 Methods and techniques
  - (a) comparison with similar projects
  - (b) standard checklists
  - (c) reference to relevant comparative research

#### 2 Sources

- (a) client records
- (b) tenants
- (c) site owners
- (d) site managers
- (e) previous owners
- (f) local authorities
- (g) statutory authorities
- (h) public utilities
- (i) government departments
- (j) public and specialist libraries and archives

#### 3 Factors

- (a) historical
- (b) conservation
- (c) social
- (d) visual and spatial
- (e) ecological and environmental
- (f) construction
- (g) infrastructure

Element 2 (BED3/O03.2) Investigate data and present findings

#### Range

### 4 **Opportunities and constraints**

- (a) use/function
- (b) durability
- (c) legal and regulatory constraints
- (d) physical and technical constraints
- (e) health and safety
- (f) anticipated development timetable
- (g) environmental quality and sustainability
- (h) standardisation

#### 5 **Presenting**

- (a) orally
- (b) in writing
- (c) graphically
- (d) electronically

### Element 2 (BED3/O03.2) Investigate data and present findings

#### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How do you choose **methods and techniques** for the investigation? (evaluation) (a) (1)
- (2) What do you identify as investigation **sources**? (understanding) (b) (2,3)
- (3) How do you collect and collate relevant data? (application) (b) (2,3)
- (4) How and why do you analyse the investigation data which has been collected about all of the significant trends and factors affecting the project development? (analysis) (c) (3,4)
- (5) How and why do you evaluate the investigation **data** which has been collected about all of the significant trends and **factors** affecting the project development? (evaluation) (c) (3,4)
- (6) How do you assemble, store and index any supporting data which is relevant to the study, but which is not included in the report? (application) (g) (1,3)
- (7) What do you identify as **opportunities and constraints** for project development options? (understanding) (d) (4)
- (8) What do you identify as previous solutions? (understanding) (e) (4)
- (9) How do you record the **opportunities and constraints** for project development options? (application) (d) (4)
- (10) How and why do you assess previous solutions which may be relevant to the current circumstances to see whether they are relevant and useful? (analysis) (e) (4)
- (11) How do you **present** findings? (application) (f) (3,4,5)

#### **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

#### **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Evaluation(s) of investigation data (a,b,c) (1,2,3,4)
- (2) Findings from investigations which include: opportunities and constraints for project development options; previous solutions; factors; implications for each development option; supporting data (d,e,f,g) (3,4,5)

Simulations are not considered to be acceptable for producing evidence for this Element.

### **Process Evidence**

(1) Presentation(s) of the evaluation report (f) (2,4,5)

### Element 2 (BED3/O03.2) Investigate data and present findings

		Pe	rfor	ma	nce	Cri	teria	eria Range																				
No	<b>Description of Evidence</b>	a	b	c	d	e	f	g	1a	1b	1c	2a	2b	2c	2d	2e	2f	2g	2h	2i	2j	3a	3b	3c	3d	3e	3f	3g
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				-	-																							
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### Element 2 (BED3/003.2) Investigate data and present findings

		Range (cont)												
No	Description of Evidence	4a	4b	4c	4d	4e	4f	4g	4h	5a	5b	5c	5d	

### Element 2 (BED3/O03.2) Investigate data and present findings

		Knowle	edge and	Unders	nowledge and Understanding											
No	Description of Evidence	1	2	3	4	5	6	7	8	9	10	11	1	2		

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	Date:	

This Unit has the following Elements:

Element 1 (BED3/O04.1)	Prepare for measured surveys
Element 2 (BED3/004.2)	Carry out measured surveys
Element 3 (BED3/O04.3)	Analyse and present measured surveys

#### **Unit Summary**

This Optional Unit is concerned with carrying out measured surveys. This Unit will test your mathematical knowledge and your competence with surveying instruments.

Element 4.1 is about making the preparations — finding out what needs to be surveyed, obtaining the suitable equipment and the spares, and briefing affected parties beforehand about the work. You must know what the survey consists of, what equipment you will need, and who will need the results.

Element 4.2 is about doing the survey work — accurately recording and calculating observations and measurements. You will need to produce clear and accurate records of your work, and of the time you spent doing it.

Element 4.3 is about checking your survey records, and collating and presenting them to those who need them. You must be able to analyse your field surveys, and present a report to those who need it.

### Element 1 (BED3/004.1) Prepare for measured surveys

#### **Performance Criteria**

#### This involves:

- (a) Confirming the extent of the measured survey and the survey **method** before starting work.
- (b) Arranging for suitable **equipment**, and enough spares for on site maintenance, to be brought to the site and kept safely and securely.
- (c) Checking and adjusting **equipment** so that it is accurate before it is used for taking measurements.
- (d) Briefing the people who will be involved in the survey about the survey arrangements and the safety arrangements.
- (e) Contacting people and organisations who will be affected by the survey, providing them with clear and accurate information and asking for their cooperation.
- (f) Checking and confirming that signs, **arrangements** for personal **safety**, **equipment** and site access conform to good practice, legislation and regulation.

#### Range

3

- 1 Method
  - (a) approximate measured
  - (b) detailed measurement of all specified features
- 2 Equipment
  - (a) mechanical
  - (b) optical
  - (c) electronic

#### Survey arrangements

- (a) survey responsibilities
- (b) details of the survey method
- (c) the site
- (d) the equipment
- (e) calibration certificates
- 4 Safety
  - (a) personal safety
  - (b) equipment and clothing
  - (c) safe use of access equipment
  - (d) health and safety practice and regulations
  - (e) industry codes of practice
  - (f) regulations applying to the survey site

### Element 1 (BED3/004.1) Prepare for measured surveys

#### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How do you confirm the extent of the measured survey and the survey **method** before starting the work? (application) (a) (1,2)
- (2) How do you contact people and organisations who will be affected by the survey, provide them with clear and accurate information and ask for their cooperation? (application) (e) (1,2,3)
- (3) How do you brief the people who will be involved in the survey about survey arrangements and the safety arrangements? (application) (d) (3,4)
- (4) How do you arrange for suitable equipment, and enough spares for on site maintenance, to be brought to the site and kept safely and securely? (application) (b) (2)
- (5) How do you check and adjust **equipment**? (application) (c) (2)
- (6) How do you check and confirm that signs, **arrangements** for personal **safety**, **equipment** and site access conform to good practice, legislation and regulations? (application) (f) (2,3,4)

#### **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

### **Evidence Requirements (cont)**

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

#### **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Record(s) of pre-work checks and confirmation of: the survey method(a) (1,2,3)
- (2) Record(s) of equipment checks and adjustment (b,c) (2)
- (3) Record(s) of briefings and requests for co-operation (d,e) (1,3,4)
- (4) Records of site checks (f) (2,3,4)

Simulations are not considered to be acceptable for producing evidence for this Element.

#### **Process Evidence**

#### None applicable

### Element 1 (BED3/004.1) Prepare for measured surveys

	ren	orma	nce C	Criteri	ia	Range																
Description of Evidence	a	b	с	d	e	f	1a	1b	2a	2b	2c	3a	3b	3c	3d	3e	4a	4b	4c	4d	4e	4f
					2       0       0       0       0       0         1       1       1       1       1       1         1       1       1       1       1       1         1       1       1       1       1       1         1       1       1       1       1       1         1       1       1       1       1       1         1       1       1       1       1       1         1       1       1       1       1       1         1       1       1       1       1       1         1       1       1       1       1       1         1       1       1       1       1       1         1       1       1       1       1       1         1       1       1       1       1       1       1         1       1       1       1       1       1       1       1         1       1       1       1       1       1       1       1       1       1       1       1       1       1       1       1 <t< td=""><td></td><td></td><td></td><td>2       0       0       0       0       1       10</td></t<> <td>Image: Construction of the sector of the</td> <td>Image: Image: /td> <td>Image: Image: /td> <td>Image: Construction of a location of a lo</td> <td>I       I</td> <td>I       I</td> <td>Image: Sector of the sector</td> <td>Image: Instantion of the transform       Image: Instantion of transform<td>Interpretent of an analysis       I       <thi< td=""><td>Improvide information       I</td><td>a. a. a</td><td>Imprine a relation       I      I       I       I       I       I       I       I       I       I       I       I       I       I       I</td><td>Image: Intersection of the section /td></thi<></td></td>				2       0       0       0       0       1       10	Image: Construction of the sector of the	Image:	Image:	Image: Construction of a location of a lo	I       I	I       I	Image: Sector of the sector	Image: Instantion of the transform       Image: Instantion of transform <td>Interpretent of an analysis       I       <thi< td=""><td>Improvide information       I</td><td>a. a. a</td><td>Imprine a relation       I      I       I       I       I       I       I       I       I       I       I       I       I       I       I</td><td>Image: Intersection of the section /td></thi<></td>	Interpretent of an analysis       I <thi< td=""><td>Improvide information       I</td><td>a. a. a</td><td>Imprine a relation       I      I       I       I       I       I       I       I       I       I       I       I       I       I       I</td><td>Image: Intersection of the section /td></thi<>	Improvide information       I	a. a	Imprine a relation       I      I       I       I       I       I       I       I       I       I       I       I       I       I       I	Image: Intersection of the section

### Element 1 (BED3/004.1) Prepare for measured surveys

		Knowledge	and Unders	standing			Evidence Requirements							
No	Description of Evidence	1	2	3	4	6	1	2	3	4				

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	Date:	

### Element 2 (BED3/O04.2) Carry out measured surveys

#### **Performance Criteria**

#### This involves:

- (a) Conforming to safe working practices when on the site.
- (b) Setting accurate horizontal and vertical controls and recording them.
- (c) Taking accurate observations and measurements using valid methods.
- (d) Changing work procedures and practices to allow for different circumstances and conditions.
- (e) Recording **survey** data clearly and accurately and storing it securely for later analysis.
- (f) Keeping a clear and accurate record of the time spent on the **survey** and of any problems that arise.
- (g) Maintaining the **equipment** in operating condition and storing it securely.
- (h) Restoring areas which have been opened up for access.

#### Range

#### 1 Safe working practices

- (a) personal safety
- (b) equipment and clothing
- (c) safe use of access equipment
- (d) health and safety practice and regulations
- (e) industry codes of practice
- (f) regulations applying to the survey site

### 2 Circumstances and conditions

- (a) climatic variation
- (b) live conditions (eg, buildings and sites in use, roads, railways, runways)
- (c) unforeseen circumstances
- (d) emergency circumstances

#### 3 Equipment

- (a) mechanical
- (b) optical
- (c) electronic

### Element 2 (BED3/004.2) Carry out measured surveys

#### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How do you set and record accurate horizontal and vertical controls? (application) (b) (1,2)
- (2) How do you take accurate observations and measurements? (application)(c) (1,2)
- (3) How do you record and store survey data? (application) (e) (1,2)
- (4) How do you keep a clear and accurate record of the time spent on the survey and of any problems that arise? (application) (f) (1,2)
- (5) How do you conform to **safe working practices** when on the site? (application) (a) (1)
- (6) How do you change work procedures and practices to allow for different **circumstances and conditions**? (application) (d) (1,2)
- (7) How do you restore areas which have been opened up for access (application) (h) (1,2)
- (8) How do you maintain the **equipment** in operating condition and store securely? (application) (g) (3)

### **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

### **Evidence Requirements (cont)**

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

#### **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Survey record(s) and report(s) including: records of controls; observations and measurements; survey data; the time taken; any problems; changes in work practices; restoration of the site (a,b,c,d,e,f,h) (1,2)
- (2) Equipment maintenance record(s) (g) (3)

Simulations are not considered to be acceptable for producing evidence for this Element.

#### **Process Evidence**

(1) Conducted survey(s) including: level of accuracy; safe working practices; setting controls; taking observations and measurements; changing work procedures and practices (a,b,c,d) (1,2)

### Element 2 (BED3/004.2) Carry out measured surveys

		Per	forma	nce	Crite	ria				Range												
No	<b>Description of Evidence</b>	а	b	с	d	e	f	g	h	1a	1b	1c	1d	1e	1f	2a	2b	2c	2d	3a	3b	3c

### Element 2 (BED3/004.2) Carry out measured surveys

		Knowled	ge and Un	derstandir	ng					<b>Evidence Requirements</b>			
No	Description of Evidence	1	2	3	4	5	6	7	8	1	2		

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	Date:	

### Element 3 (BED3/O04.3) Analyse and present measured surveys

#### **Performance Criteria**

#### This involves:

- (a) Collecting together enough **survey information** to allow an accurate analysis to be made.
- (b) Checking and verifying the **survey information**.
- (c) Analysing the **survey information** accurately.
- (d) **Presenting** the **survey information**, the commentary and any support information accurately, clearly and in a format which is suitable for those who need to use it.
- (e) Advising people who will be using the **survey information** on how to interpret it.

#### Range

- 1 Survey information
  - (a) approximate measured
  - (b) detailed measurement of all specified features
  - (c) graphic
- 2 **Presenting** 
  - (a) orally
  - (b) in writing
  - (c) graphically
  - (d) digitally

#### Element 3 (BED3/O04.3) Analyse and present measured surveys

#### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How do you collect together enough **survey information** to allow an accurate analysis to be made? (application) (a) (1)
- (2) How do you check and verify the survey information? (application) (b) (1)
- (3) How and why do you analyse the **survey information**? (analysis) (c) (1)
- (4) How and why do you advise people who will be using the **survey information** on how to interpret it? (synthesis) (e) (1)
- (5) How do you **present** the **survey information**, the commentary and any support information accurately, clearly and in a format which is suitable for those who need to use it? (application) (d) (1,2)

#### **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

#### **Evidence Requirements (cont)**

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

#### **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

(1) Analysis of survey information (all) (1,2)

Simulations are not considered to be acceptable for producing evidence for this Element.

#### **Process Evidence**

- (1) Presentation(s) of survey information, commentary and support information (d,e) (1,2)
- (2) Advice on the interpretation of survey data (e) (1,2)

# UNIT F50L 04 (BED3/004) Plan, Carry Out and Present Measured Surveys

# Element 3 (BED3/004.3) Analyse and present measured surveys

	Performanc	e Criteria				Range										
Description of Evidence	a	b	С	d	e	1a	1b	1c	2a	2b	2c	2d				
	Description of Evidence		Performance CriteriaDescription of EvidenceabImage: Image: I													

# UNIT F50L 04 (BED3/004) Plan, Carry Out and Present Measured Surveys

Element 3 (BED3/O04.3) Analyse and present measured surveys

		Knowledge and	Understanding				<b>Evidence Requi</b>	irements
No	Description of Evidence	1	2	3	4	5	1	2

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	Date:	

This Unit has the following Elements:

Element 1 (BED3/O05.1)	Inspect condition of structures
Element 2 (BED3/005.2)	Prepare condition survey reports and records

#### **Unit Summary**

This Optional Unit is concerned with undertaking condition surveys and presenting your reports.

Element 5.1 is about actually doing the surveys. The 'structure' in the Element title could be a building, a highway, a bridge, a reservoir, or any loadbearing or defensive construction. You must be able to confirm the scope of the work, organise what you need to carry out the survey, obtain the necessary permissions, take the physical measurements and record the results.

Element 5.2 is about collating the results of the survey and presenting them in a report. You must be able to demonstrate your analytical and report-writing skills, and your technical judgement (both quantitative and qualitative).

# Element 1 (BED3/O05.1) Inspect condition of structures

### **Performance Criteria**

### This involves:

- (a) Confirming the objectives and **purpose of the condition survey**.
- (b) Consulting the **condition survey** brief and obtaining the equipment and resources and specialist advice that will be needed.
- (c) Checking and confirming, before starting the **condition survey**, that people who will be affected have given their permission.
- (d) Taking accurate observations and measurements which are necessary for 2 the inspection and recording them clearly, accurately and completely using agreed formats.
- (e) **Recording** the need for further investigations when observations are inconsistent with existing data and expected findings.

#### Range

- 1 **Purpose of condition survey** 
  - (a) stability
  - (b) purpose
  - (c) value
  - (d) health and safety
  - (e) environmental

### Recording

- (a) written
- (b) graphical
- (c) electronic
- (d) photographic

## Element 1 (BED3/O05.1) Inspect condition of structures

### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How and why do you record the need for further investigations when observations are inconsistent with existing data and expected findings? (analysis) (e) (1)
- (2) What do you identify as the **purpose of the condition survey**? (understanding) (a) (1)
- (3) How do you obtain the equipment and resources and specialist advice that will be needed? (application) (b) (2)
- (4) How do you check, before starting the **condition survey**, that people who will be affected have given their permission? (application) (c) (2)
- (5) How do you take and record accurate observations and measurements which are necessary for the inspection, using agreed formats?(application) (d) (1,2)

## **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

## **Evidence Requirements (cont)**

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

### **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Objectives and purpose of the condition survey (a) (1)
- (2) Record(s) of inspection(s) which include equipment, resources and advice obtained, permissions, observations and measurements, agreed formats (c,d) (1,2)
- (3) Record(s) of further investigation(s) when inconsistencies are evident (e) (1,2)

Simulations are not considered to be acceptable for producing evidence for this Element.

### **Process Evidence**

### None applicable

# Element 1 (BED3/005.1) Inspect condition of structures

		Perform	nance C	riteria			Range								
No	Description of Evidence	a						1b	1c	1d	1e	2a	2b	2c	2d
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# Element 1 (BED3/005.1) Inspect condition of structures

		Knowledge an	nd Understand	ing			Evidence Req	uirements	
No	Description of Evidence	1	2	3	4	5	1	2	3

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	Date:	

## Element 2 (BED3/O05.2) Prepare condition survey reports and records

#### **Performance Criteria**

#### Range

#### This involves:

- (a) Assembling and collating **information** on the condition survey.
- (b) Analysing all relevant evidence and **information** using appropriate methods and techniques and making a summary of condition.
- (c) Preparing a condition survey report which meets the requirement of the brief.
- (d) Explaining clearly where and why inspection and measurement has been possible.
- (e) Answering questions about the condition survey and giving appropriate clarification.
- (f) Maintaining internal records which are clear, accurate and complete and conform to accepted professional and statutory requirements.

- I Information sources
  - (a) photographs
  - (b) maps
  - (c) charts
  - (d) drawings
  - (e) digital data
  - (f) archive records
  - (g) legal documents
  - (h) client records
  - (i) tenants
  - (j) site owners
  - (k) site managers
  - (l) previous owners
  - (m) local authorities
  - (n) statutory authorities
  - (o) public utilities
  - (p) government department consultative bodies (including heritage bodies)

## Element 2 (BED3/O05.2) Prepare condition survey reports and records

#### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How do you maintain internal records? (application) (f) (1)
- (2) How do you assemble and collate **information** on the condition survey? (application) (a) (1)
- (3) How do you answer questions about the condition survey and give appropriate clarification? (application) (e) (1)
- (4) How and why do you analyse all relevant evidence and **information** using appropriate methods and techniques and make summary of condition? (analysis) (b) (1)
- (5) How do you explain clearly where and why inspection and measurement has not been possible? (application) (d) (1)
- (6) How do you prepare a condition survey report? (application) (c) (1)

## **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg(a), and range, eg(1), to which they apply.

### **Evidence Requirements (cont)**

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

#### **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Condition survey records which include evaluations of collated information using appropriate methods and techniques, analysed evidence and reports (all) (1)
- (2) Record(s) of responses to questions (e) (1)
- (3) Internal record(s) (f) (1)

Simulations are not considered to be acceptable for producing evidence for this Element.

#### **Process Evidence**

#### None applicable

# Element 2 (BED3/005.2) Prepare condition survey reports and records

		Per	Performance Criteria     Range       a     b     c     f     1a     1b     1a     1f																				
No	Description of Evidence	a	b	с	d	e	f	1a	1b	1c	1d	1e	1f	1g	1h	1i	1j	1k	11	1m	1n	10	1p
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## Element 2 (BED3/005.2) Prepare condition survey reports and records

		Knowledge	and Unders	standing				Evidence Req	uirements	
No	Description of Evidence	1	2	3	4	5	6	1	2	3

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	Date:	

This Unit has the following Elements:

#### Element 1 (BED3/O06.1) Confirm and carry out tests Element 2 (BED3/O06.2) Present test results

#### **Unit Summary**

This Optional Unit is concerned with carrying out tests and presenting the results.

Element 6.1 is about getting the tests done, and being responsible for them. You must be able to confirm the scope of the work and the methods that you will use, to obtain the necessary permissions, to prepare a plan for the testing, and to carry out the tests to plan and within budget.

Element 6.2 is about presenting the test results and sharing the information. You must be able to process the test result to pull them together into a competent report, and to present the report to the stakeholders.

### Element 1 (BED3/006.1) Confirm and carry out tests

#### **Performance Criteria**

#### This involves:

- (a) Confirming the **objectives** and **purpose** of **testing**.
- (b) Collating existing information and identifying where it meets the **objectives** and **purpose** of the **testing**.
- (c) Confirming relevant test processes and methods.
- (d) Seeking and obtaining **permission** to carry out the **test** from people who might be affected and from any legal authorities who have to be notified.
- (e) Confirming suitable quality assurance standards and **health and safety** requirements.
- (f) Preparing a **plan** for the test and scheduling it to meet the **objectives and purpose** of the test.
- (g) Carrying out and monitoring **tests** and recommending modifications to maintain compliance with **test** requirements.

#### Range

- 1 **Objectives** 
  - (a) geographical
  - (b) structural
  - (c) environmental
  - (d) material

### 2 **Purpose**

- (a) performance
- (b) routine
- (c) contingency
- 3 Test
  - (a) physical
  - (b) condition
  - (c) performance
  - (d) destructive
  - (e) non-destructive
  - (f) qualitative
  - (g) quantitative
- 4 **Processes** 
  - (a) as defined by relevant legislation
  - (b) code of practice as accepted by recognised authorities in the field

### Element 1 (BED3/006.1) Confirm and carry out tests

#### Range (cont)

#### 5 Methods

- (a) visual
- (b) approximate estimated
- (c) detailed assessment of specified features

### 6 Permission from

- (a) client
- (b) site owner and occupiers
- (c) occupiers
- (d) adjoining owners and occupiers
- (e) notifiable authorities

### 7 Health and safety requirements

- (a) personal safety equipment and clothing
- (b) safe use of access equipment (including ladders, tower scaffolds, hydraulic hoists)
- (c) industry codes of practice and regulations
- (d) identified by risk assessments

## 8 Plans — will include

- (a) risk assessment
- (b) arrangements for waste disposal
- (c) dealing with contingencies
- (d) timescale
- (e) budget

# Element 1 (BED3/O06.1) Confirm and carry out tests

### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How and why do you confirm relevant **processes** and **methods**? (evaluation) (c) (1,2,3,4,5)
- (2) How and why do you schedule a **plan** for the test? (analysis) (f) (3,8)
- (3) How and why do you monitor **tests**? (application) (g) (3)
- (4) How and why do you prepare a **plan** for the **test**? (synthesis) (f) (3,8)
- (5) How and why do you recommend modifications to **tests** to maintain compliance with **test** requirements? (synthesis) (g) (3)
- (6) How do you seek and obtain **permission** to carry out the **test** from people who might be affected and from any legal authorities who have to be notified? (application) (d) (3,6)
- (7) How and why do you confirm suitable standards of quality assurance and **health and safety requirements**? (evaluation) (e) (7)
- (8) How do you confirm the **objectives** and **purpose** of the **testing**? (application) (a) (1,2,3)
- (9) How do you collate existing information and identify where it meets the objectives and purpose of testing? (application) (b) (1,2,3)

## **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

## **Evidence Requirements (cont)**

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

## **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Plan(s) for test(s) which include: test processes and methods selected; an estimate of resources; permissions obtained; quality assurance and safety standards (c,d,e,f) (all)
- (2) Record(s) of test monitoring and recommended modifications (g) (3)

Simulations are not considered to be acceptable for producing evidence for this Element.

### **Process Evidence**

None applicable

# Element 1 (BED3/O06.1) Confirm and carry out tests

		Perfe								ige														
No	Description of Evidence	a	b	с	d	e	f	g	1a	1b	1c	1d	2a	2b	2c	3a	3b	3c	3d	3e	3f	3g	4a	4b

# Element 1 (BED3/O06.1) Confirm and carry out tests

		Range	e															
No	Description of Evidence	5a	5b	5c	6a	6b	6с	6d	6e	7a	7b	7c	7d	8a	8b	8c	8d	8e
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## Element 1 (BED3/O06.1) Confirm and carry out tests

		Knowled	lge and U	Evidence Requirements								
No	Description of Evidence	1	2	3	4	5	6	7	8	9	1	2

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	 Date:	

### Element 2 (BED3/O06.2) Present test results

### **Performance Criteria**

#### This involves:

- (a) Collecting and verifying results from tests.
- (b) Processing the results using the most appropriate **methods of analysis** and charting them in a format that will help people to use them.
- (c) Using the test results to produce an accurate report which identifies development constraints, opportunities and feasibility.
- (d) **Presenting** the report including a commentary on the results.

#### Range

- 1 Methods of analysis
  - (a) comparison with standard test results
  - (b) referenced to accepted principles and practice

## 2 Presenting

- (a) orally
- (b) in writing
- (c) graphically
- (d) electronically

### Element 2 (BED3/O06.2) Present test results

#### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How do you collect together, and verify results from tests? (application)(a) (1)
- (2) How do you use the test findings to produce an accurate report which identifies development constraints, opportunities and feasibility?
   (application) (c) (1,2)
- (3) How do you process the results using the most appropriate methods of analysis and chart the data in a format that will help people to use it? (application) (b) (1,2)
- (4) How do you **present** the report and commentary? (application) (d) (2)

### **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

#### **Evidence Requirements (cont)**

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

#### **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Analysis chart(s) of test data (a,b) (1,2)
- (2) Report(s) of the test findings including constraints, opportunities, feasibility, analyses and commentary (c,d) (1,2)

Simulations are not considered to be acceptable for producing evidence for this Element.

#### **Process Evidence**

(1) Presentation(s) of the data, data analysis and commentary (b,c,d) (1,2)

# Element 2 (BED3/O06.2) Present test results

		Performan	ce Criteria			Range									
No	<b>Description of Evidence</b>	a	b	с	d	1a	1b	2a	2b	2c	2d				

# Element 2 (BED3/006.2) Present test results

		Knowledge and U	nderstanding	Evidence Requirements				
No	Description of Evidence	1	2	4	1	2		

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	Date:	

This Unit has the following Elements:

Element 1 (BED3/O07.1)	Report on regulatory constraints
Element 2 (BED3/007.2)	Prepare applications to secure statutory consents

#### **Unit Summary**

This Optional Unit is concerned with preparing applications to secure statutory consents.

Element 7.1 is about identifying the constraints that may affect the design, and finding ways of satisfying them. To provide the necessary evidence for this Element, you must find out what the constraints are, identify design solutions that satisfy them, and produce a report.

Element 7.2 is about actually preparing the applications. You must be able to show what requirement the relevant authorities seek and the timing thereof, to identify the processes and to gather further information if consent is refused.

## Element 1 (BED3/007.1) Report on regulatory constraints

#### **Performance Criteria**

#### This involves:

- (a) Identifying and confirming project **regulatory** requirements and **constraints.**
- (b) Identifying existing solutions which appear to satisfy the **regulatory constraints** applying to the development.
- (c) Producing reports based on the investigation findings which clearly identify the options available.
- (d) Assembling any supporting data which is relevant to the investigation, but which is not included in the report, storing it safely and indexing it clearly for future reference.

#### Range

### 1 **Regulatory constraints**

- (a) development and use of land
- (b) structures
- (c) buildings and highways
- (d) renewal and clearance
- (e) health, safety and welfare
- (f) transport infrastructure
- (g) environmental sustainability
- (h) conservation
- (i) access (eg, Disability Discrimination Act)

### Element 1 (BED3/007.1) Report on regulatory constraints

#### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) What do you identify as existing solutions? (understanding) (b) (1)
- (2) How do you produce a report based on the investigation findings which clearly identifies the options available? (application) (c) (1)
- (3) How do you assemble, store and index any supporting data which is relevant to the investigation, but which is not included in the report? (application) (d) (1)
- (4) How and why do you identify and confirm project **regulatory** requirements and **constraints**? (synthesis) (a) (1)

### **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

### **Evidence Requirements (cont)**

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

### **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- Report(s) of the investigation findings which identifies the options available and include existing solutions; requirements and constraints (a,b,c) (1)
- (2) Supporting data indexed (d) (1)

Simulations are not considered to be acceptable for producing evidence for this Element.

#### **Process Evidence**

None applicable

# Element 1 (BED3/007.1) Report on regulatory constraints

		Performa	nce Criter	ia		Range								
No	Description of Evidence	a	b	с	d	1a	1b	1c	1d	1e	lf	1g	1h	1i

# Element 1 (BED3/007.1) Report on regulatory constraints

		Knowledge and U	J <b>nderstanding</b>	Evidence Requirements					
No	Description of Evidence	1	2	3	4	1	2		

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	Date:	

## Element 2 (BED3/007.2) Prepare applications to secure statutory consents

#### **Performance Criteria**

#### This involves:

- (a) Checking and confirming with the relevant authorities the requirements, current procedures and likely timescale for **statutory approvals** and other **consents**.
- (b) Forecasting how long the submission and approval of applications for **consent** will take and how this will fit in with the project schedule.
- (c) Preparing and assembling the information that will be needed for the application.
- (d) Preparing and submitting a clear and valid application for the **consent**.
- (e) Gathering and colling further information to develop **alternatives** where **consent** may be refused.

#### Range

### 1 Statutory approvals

- (a) development and use of land
- (b) structures
- (c) buildings and highways
- (d) renewal and clearance
- (e) health, safety and welfare
- (f) transport infrastructure
- (g) environmental sustainability
- (h) conservation
- (i) access (eg, DDA)
- 2 Consents
  - (a) planning
  - (b) building control
  - (c) environmental
  - (d) utilities
- 3 Alternatives
  - (a) amending the brief
  - (b) amending the proposal
  - (c) appealing
  - (d) withdrawing the application

### Element 2 (BED3/007.2) Prepare applications to secure statutory consents

#### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How do you check and confirm with the relevant authorities the requirements, current procedures and likely timescale for **statutory approvals** and other **consents**? (a) (1)
- (2) How do you prepare and assemble the information that will be needed for the application? (application) (c) (2)
- (3) How do you prepare and submit a clear and valid application for the **consent**? (application) (d) (1,2)
- (4) How and why do you forecast how long the submission and approval of applications for **consent** will take and how this will fit in with the project schedule? (analysis) (b) (1,2)
- (5) How and why do you gather and collate further information to develop **alternatives** where **consent** may be refused? (synthesis) (e) (3)

### **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

### **Evidence Requirements (cont)**

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

### **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Record(s) of checks made with authorities about the requirements, current procedures and likely timescale for statutory approvals and other consents (a) (1,2)
- (2) Application(s) for consent, including information provided on request (b,c,d) (2,3)
- (3) Record(s) of alternatives agreed in anticipation of approval being refused(e) (3)

Simulations are not considered to be acceptable for producing evidence for this Element.

### **Process Evidence**

None applicable

# Element 2 (BED3/007.2) Prepare applications to secure statutory consents

		Perf	orman	ice Cr	iteria		Range																
No	Description of Evidence	a	b	с	d	e	1a	1b	1c	1d	1e	1f	1g	1h	1i	2a	2b	2c	2d	3a	3b	3c	3d
												-											
												-											
												-											

### Element 2 (BED3/007.2) Prepare applications to secure statutory consents

		Knowledge an	nd Understand	ing	Evidence Requirements					
No	Description of Evidence	1	2	3	5	1	2	3		

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	Date:	

This Unit has the following Elements:

Element 1 (BED3/O08.1) Prepare drawings Element 2 (BED3/O08.2) Prepare schedules

#### **Unit Summary**

This Optional Unit is concerned with producing drawings and schedules.

Element 8.1 is about producing drawings. You must be able to choose and use the standard drawing conventions, assemble the design information that you need, produce your drawings, have them checked and approved, and keep your registers and records up to date.

Element 8.2 is about producing schedules. You must be able to collect the information that you need, to check its accuracy, to prepare schedules, have them approved, and keep records up to date

# Element 1 (BED3/O08.1) Prepare drawings

### **Performance Criteria**

### This involves:

- (a) Producing **drawings** which are complete, accurate, and comply with the design requirements and are suitable for the **purpose.**
- (b) Selecting **methods and media** which are suitable for the **drawings** required, and which can be produced with the resources and time available.
- (c) Using standard **drawing conventions** and identifying and justifying any deviations from them.
- (d) Clarifying any information to be included which is incomplete and inconsistent and making accurate amendments.
- (e) Keeping **registers and records** of **drawings** which are complete, accurate and up-to-date.
- (f) Obtaining necessary **checks and approvals** for the content and presentation of **drawings**.
- (g) Using methods for producing **drawings** and record keeping consistent with quality assurance procedures.

### Range

### 1 Drawings

- (a) location, assembly, component
- (b) sketches
- (c) working drawings
- (d) presentation drawings
- (e) co-ordination drawings

# 2 **Purpose (of drawing)**

- (a) obtain consents
- (b) procurement
- (c) contract
- (d) production
- (e) record
- (f) presentation
- (g) analysis
- (h) factory manufacture
- (i) site installation
- (j) sub-contract and specialist details

## 3 Methods and media

- (a) manual
- (b) electronic

# 4 Drawing conventions

- (a) detailing standards
- (b) codes of practice
- (c) current industry practice
- (d) methods of coordination (eg, Common Arrangement)

### Element 1 (BED3/O08.1) Prepare drawings

### Range (cont)

## 5 **Registers and records**

- (a) incoming and outgoing drawing and document registers
- (b) records of document approval and revision
- (c) quality assurance documentation

## 6 Checks and approvals cover

- (a) format
- (b) presentation
- (c) accuracy
- (d) technical content
- (e) completeness
- (f) referencing
- (g) cross-referencing and correlation with associated documents
- (h) status

## Element 1 (BED3/008.1) Prepare drawings

### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How do you produce **drawings** which are suitable for **purpose**? (application) (a) (1,2)
- (2) How do you clarify any information to be included which is incomplete and inconsistent, and make accurate amendments? (application) (d) (1)
- (3) How and why do you select **methods and media**? (evaluation) (b) (1,3)
- (4) What do you identify as any deviations from drawing conventions?(understanding) (c) (4)
- (5) How do you use standard **drawing conventions**? (application) (c) (4)
- (6) How and why do you justify any deviations from drawing conventions?(evaluation) (c) (4)
- (7) How and why do you keep registers and records of drawings?(application) (e) (1,5)
- (8) How do you obtain necessary **checks and approvals** for the content and presentation of **drawings**? (application) (f) (1,6)
- (9) How do you use **methods** for production and record keeping which are consistent with quality assurance procedures? (application) (g) (3,4,5,6)

## **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

## **Evidence Requirements (cont)**

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

## **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- Drawing(s) which include selected methods and media, use of conventions which are justified and checks and approvals obtained (a,b,c,e,f,g) (1,2,3,5,6)
- (2) Record(s) of clarification(s) and amendment(s) made (d) (4)
- (3) Register(s) and record(s) (e,g) (5)

Simulations are not considered to be acceptable for producing evidence for this Element.

### **Process Evidence**

None applicable

# Element 1 (BED3/O08.1) Prepare drawings

		Per	form	ance	Crite	eria			Range																
No	Description of Evidence	a	b	с	d	e	f	g	1a	1b	1c	1d	1e	2a	2b	2c	2d	2e	2f	2g	2h	2i	2j	3a	3b

# Element 1 (BED3/O08.1) Prepare drawings

		Range	(cont)													
No	Description of Evidence	4a	4b	4c	4d	5a	5b	5c	ба	6b	6c	6d	6e	6f	6g	6h

# Element 1 (BED3/008.1) Prepare drawings

		Knowled	ge and Un	derstandi	ng						Evidenc	e Requir	ements
No	Description of Evidence	1	2	3	4	5	6	7	8	9	1	2	3

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	Date:	

# Element 2 (BED3/O08.2) Prepare schedules

### **Performance Criteria**

### This involves:

- (a) Selecting a format for the **schedules** which meets the requirements of the production process, the method of measurement used and the way in which the **schedules will be used**.
- (b) Measuring the dimensions accurately from the source documents and the site according to standard requirements.
- (c) Checking and confirming that the data is complete and referencing the data, correctly, to the specification, drawings, manufacturer's references and other appropriate standards.
- (d) Clarifying any information to be included which is incomplete and inconsistent and making accurate amendments.
- (e) Preparing **schedules** which include descriptions and quantities.
- (f) Selecting **methods and media** which are suitable for the **schedules** required, and which can be produced with the resources and time available.
- (g) Keeping **registers and records** which are complete, accurate and up-to-date.
- (h) Obtaining necessary **checks and approvals** for the content and presentation of **schedules**.
- (i) Using **methods** for production and **record** keeping which are consistent with quality assurance procedures.

### Range

## 1 Schedules

(a) materials, construction elements, components, finishes

## 2 Schedules will be used for

- (a) obtaining consents
- (b) procurement
- (c) contract
- (d) production
- (e) record payments
- (f) presentation

## 3 Methods and media

- (a) manual
- (b) electronic

# 4 Register and records

- (a) incoming and outgoing drawing and document registers
- (b) records of document approval and revision

## 5 Checks and approvals cover

- (a) format
- (b) presentation
- (c) accuracy
- (d) technical content
- (e) completeness
- (f) referencing
- (g) cross-referencing and correlation with associated documents and information
- (h) status

# Element 2 (BED3/O08.2) Prepare schedules

## **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How do you measure the dimensions? (application) (b) (1)
- (2) How do you clarify and make accurate amendments to any information to be included which is incomplete and inconsistent? (application) (d) (1)
- (3) How do you prepare **schedules** which include descriptions and quantities? (application) (e) (2)
- (4) How and why do you select a format for the **schedules** which meets the requirements of the production process, the method of measurement used and the way in which the **schedules will be used**? (evaluation) (a) (1,2)
- (5) How do you use methods for production and **record** keeping? (application) (i) (3,4)
- (6) How and why do you select **methods and media**? (evaluation) (f) (1,3)
- (7) How do you keep complete, accurate and up-to-date **registers and records**? (application) (g) (4)
- (8) How do you reference the data to the specification, drawings, manufacturer's references and other appropriate standards? (application) (c) (5)
- (9) How do you check and confirm that the data is complete? (application)(c) (5)
- (10) How do you obtain **checks and approvals**? (application) (h) (5)

# **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

# **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- Schedule(s) which include data checks, selected format, method of measurement, methods of media, measured dimensions, referencing, calculated quantities and descriptions, checks and approvals (a,b,c,d,e,f,h,i) (1,2,3,5)
- (2) Record(s) of clarification(s) and amendment(s) made (d) (1,4,5)
- (3) Register(s) and record(s) (g,i) (4)

Simulations are not considered to be acceptable for producing evidence for this Element.

# **Process Evidence**

# None applicable

# Element 2 (BED3/O08.2) Prepare schedules

	Per	rfori	nan	ce C	riter	ria				Ra	nge																	
Description of Evidence	а	b	c	d	e	f	g	h	i	1a	2a	2b	2c	2d	2e	2f	3a	3b	4a	4b	5a	5b	5c	5d	5e	5f	5g	5h
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	Description of Evidence						Performance       a       b       c       d       e       f         Description of Evidence       in       in																					

# Element 2 (BED3/O08.2) Prepare schedules

		Knowle	lge and U	U <b>ndersta</b>	nding							Evidenc	e Requir	ements
No	Description of Evidence	1	2	3	4	5	6	7	8	9	10	1	2	3

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	Date:	

This Unit has the following Elements:

Element 1 (BED3/O09.1)Collate and check project documentsElement 2 (BED3/O09.2)Prepare design specifications

### **Unit Summary**

This Optional Unit covers two areas of competence. First it covers implementing systems for controlling the documentary information for design projects. 'Documents' include all project information, whether in electronic or hard copy form. Second, it covers preparing design specifications.

Element 9.1 is about implementing your information system to ensure a successful project. You must be able to assess the status of project documents, collate them, deal with discrepancies, have the documents checked, and keep people informed.

Element 9.2 covers method specifications, identified from standard sources and modified as necessary. These describe how the finished products should be constructed. You must be able to produce specifications based on current information, check and cross-reference them, and have them certified.

# Element 1 (BED3/O09.1) Collate and check project documents

### **Performance Criteria**

## This involves:

- (a) Implementing **systems** for monitoring and controlling the production of **documents**.
- (b) Assessing the status of the **documents** and passing it on to people who need it.
- (c) Collaborating with other members of the project team to achieve integrated project design information.
- (d) Collating **documents** when they have been produced and checking them 2 against the agreed **criteria**.
- (e) Identifying queries, discrepancies and inconsistencies in the information and referring them to other members of the project team.
- (f) Collating late revisions, requirements and additions to the design information and distributing the information promptly.
- (g) Obtaining necessary checks to and approvals of **documents** when they are needed.
- (h) Producing up-to-date and accurate information on progress and circulating it to the people who need the information.

## Range

### 1 Systems

- (a) incoming and outgoing drawing and document registers
- (b) records of document approval and revision
- (c) revision management
- (d) methods of coordination (eg, common arrangement)
- (e) electronic data transfers
- (f) integration of interdisciplinary data

# Documents

- (a) specifications
- (b) drawings
- (c) bills of quantities
- (d) schedules
- (e) health and safety plans

# 3 Criteria

- (a) format
- (b) presentation
- (c) accuracy
- (d) technical content
- (e) completeness
- (f) referencing
- (g) cross referencing and correlation with associated documents
- (h) status

# Element 1 (BED3/O09.1) Collate and check project documents

### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How do you implement systems for monitoring and controlling the production of documents? (application) (a) (1,2)
- (2) How and why do you assess the status of the **documents**? (analysis) (b) (1,2)
- (3) How do you pass on the status of the **documents**? (application) (b) (1,2)
- (4) How do you collaborate with other members of the project team to achieve integrated project design information? (application) (c) (1)
- (5) How do you collate **documents** when they have been produced? (application) (d) (2)
- (6) How and why do you check **documents** against the agreed **criteria**? (evaluation) (d) (2)
- (7) What you identify as queries, discrepancies and inconsistencies in the information? (understanding) (e) (2)
- (8) How do you refer any problems with the information to other members of the project team? (application) (e) (1,2)
- (9) How do you collate late revisions, requirements and additions to the design information and distribute it? (application) (f) (1,2)
- (10) How do you obtain necessary checks and approvals? (application) (g) (1,2)
- (11) How do you produce and circulate information on progress? (application) (h) (1)

# **Evidence Requirements (cont)**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

## **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Record(s) of information which has been obtained, evaluated and assessed (a,b,c) (1,2,3,4)
- (2) Record(s) of collated and checked documents (d) (2)
- (3) Records of queries, discrepancies, revisions, checks and approvals (e,f,g) (1,2,3)
- (4) Record(s) of information given to people (h) (1,2,3)

Simulations are not considered to be acceptable for producing evidence for this Element.

# **Process Evidence**

None applicable

Element 1 (BED3/009.1) Collate and check project documents

		Per	forn	nanc	e Cr	iteri	a			Ra	nge																	
No	Description of Evidence	a	b	c	d	e	f	g	h	1a	1b	1c	1d	1e	1f	2a	2b	2c	2d	2e	3a	3b	3c	3d	3e	3f	3g	3h
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# Element 1 (BED3/O09.1) Collate and check project documents

		Knowl	edge an	d Under	standin	g							Eviden	ice Requ	iiremen	ts
No	Description of Evidence	1	2	3	4	5	6	7	8	9	10	11	1	2	3	4

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	Date:	

# Element 2 (BED3/009.2) Prepare design specifications

### **Performance Criteria**

### This involves:

- (a) Producing a specification to suit the **project requirements** which is based on identified, current **source information** which has been verified.
- (b) Selecting, and where necessary amending technical clauses from standard sources, which define the quality, type and standard of the materials, components and finished work.
- (c) Checking that the specification is consistent with the currently agreed design and other associated design documentation, and updating it promptly and accurately when the design changes.
- (d) Formatting the specification so that it is referenced and cross-referenced accurately.
- (e) Obtaining necessary **verification** for the content and presentation of specifications.

### Range

# 1 **Project requirement**

- (a) to obtain consents
- (b) procurement
- (c) contract
- (d) production

# 2 Source information

- (a) design information
- (b) statutory regulations
- (c) British and EU Standards
- (d) codes of practice
- (e) technical literature

# 3 Verification

- (a) format
- (b) presentation
- (c) accuracy
- (d) technical content
- (e) completeness
- (f) referencing
- (g) cross-referencing and correlation with associated documents
- (h) status
- (i) current

# Element 2 (BED3/009.2) Prepare design specifications

### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How and why do you produce a specification which is suitable for the **project requirements** (application) (a) (1,2)
- (2) What do you identify as current source information? (understanding)(a) (2)
- (3) How and why do you select and amend technical clauses from standard sources, which define the quality, type and standard of the materials, components and finished work? (evaluation) (b) (2)
- (4) How do you check that the specification is consistent with the current design and other design documentation and update the specification promptly and accurately when the design changes? (application) (c) (1)
- (5) How do you format the **specification**? (application) (c) (1)
- (6) How do you obtain necessary **verification** for the content and presentation of specifications? (application) (e) (1,3)

## **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg(a), and range, eg(1), to which they apply.

## **Evidence Requirements (cont)**

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

## **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

(1) Design specification(s) which includes: purpose; consistency checks; collated sections; identified source information; technical

Simulations are not considered to be acceptable for producing evidence for this Element.

### **Process Evidence**

None applicable

# Element 2 (BED3/009.2) Prepare design specifications

	Perfe	orman	ice Cr	iteria		Ran	ige																
<b>Description of Evidence</b>	a	b	с	d	e	1a	1b	1c	1d	2a	2b	2c	2d	2e	3a	3b	3c	3d	3e	3f	3g	3h	3i
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	Description of Evidence																						

# Element 2 (BED3/009.2) Prepare design specifications

		Knowledge ar	nd Understand	ing				Evidence Requirements
No	Description of Evidence	1	2	3	4	5	6	1

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	Date:	

This Unit has the following Elements:

### Element 1 (BED3/O10.1) Obtain tenders Element 2 (BED3/O10.2) Assess tenders

### **Unit Summary**

This Optional Unit is concerned with obtaining tenders from contractors and subcontractors, and selecting the ones that you wish to action. The words 'estimate', 'bid' and 'tender' are all used in the industry, and are taken here to be synonymous.

Element 10.1 is about preparing the tender documents and sending them out to the bidders. You must be able to find out who will be bidding, prepare the tender documents, send them out, deal with any queries, and keep records up-to-date.

Element 10.2 is about assessing the bids that you receive. You must be able to review the bids, check them for errors, agree any adjustments, and inform the bidders of the results.

## Element 1 (BED3/O10.1) Obtain tenders

### **Performance Criteria**

### This involves:

- (a) Sending tender enquiries to potential **tenderers**, in accordance with contract requirements, and inviting them to provide evidence about their experience, capability and resources.
- (b) Collate responses from potential **tenderers** and confirm and agree tender lists.
- (c) Preparing **tender documents** which meet statutory regulations, codes of practice and the organisations policies.
- (d) Issuing **tender documents** to all the **tenderers** on the agreed list, following the agreed procedures.
- (e) Investigating any errors, omissions and ambiguities which are reported by **tenderers**, amending the **tender documents** to correct them and passing the information to all the **tenderers**.
- (f) Keeping accurate records of **tender documents** issued, feedback, **queries and information** from **tenderers**.

#### Range

2

### 1 Tenderers

- (a) contractors
- (b) sub/works/trade contractors
- (c) suppliers
- (d) consultants

### **Tender documents:**

- (a) invitation to tender
- (b) form of tender
- (c) returns procedure
- (d) surveys
- (e) specifications
- (f) drawings
- (g) schedules
- (h) bills of quantities
- (i) health and safety plans
- (k) scope of services
- (l) terms and conditions
- (m) schedules of rates

Element 1 (BED3/O10.1) Obtain tenders

Range (cont)

## 3 **Queries and information about**

- (a) price
- (b) quantity
- (c) quality
- (d) standards
- (e) carriage and delivery
- (f) completion
- (g) maintenance
- (h) after sales service
- (i) method of payment
- (j) terms of payment
- (k) contract conditions
- (1) survey information
- (m) time
- (n) contractual
- (o) administrative
- (p) technical

## Element 1 (BED3/O10.1) Obtain tenders

### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How and why do you prepare **tender documents**? (application) (c) (1,2)
- (2) How do you issue **tender documents**? (application) (d) (1,2,3)
- (3) How do you amend the **tender documents** to correct any errors, omissions or ambiguities? (application) (e) (1,2)
- (4) How do you keep accurate records of **tender documents** issued, feedback, **queries and information** from **tenderers**? (application) (f) (1,2,3)
- (5) How and why do you send tender enquiries to potential **tenderers** to invite evidence about their experience and capability and resources? (application) (a) (1)
- (6) How and why do you investigate any errors, omissions and ambiguities which are reported by **tenderers**? (analysis) (e) (1,2,3)
- (7) How do you pass on to all the **tenderers** the information given to individual **tenderers**, relating to amendments to **tender documents**? (application) (e) (1,2,3)
- (8) How do you collate responses from potential tenderers and confirm and agree tender lists? (application) (b (1)

## **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

### **Evidence Requirements (cont)**

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

## **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Tender document prepared including enquiries (s) (a) (1,2)
- (2) Record(s) of tender documents issued including amendments and queries (b,c,d,e,f) (all)

Simulations are not considered to be acceptable for producing evidence for this Element.

### **Process Evidence**

None applicable

# Element 1 (BED3/O10.1) Obtain tenders

	Perf	orma	nce (	Criter	ia		Ran	ge														
Description of Evidence	a	b	c	d	e	f	1a	1b	1c	1d	2a	2b	2c	2d	2e	2f	2g	2h	2i	2j	2k	21
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	Description of Evidence					Performance Criteria           Description of Evidence         a         b         c         d         e           Image: Image																

# Element 1 (BED3/O10.1) Obtain tenders

		Range															
No	Description of Evidence	3a	3b	3c	3d	3e	3f	3g	3h	3i	3j	3k	31	3m	3n	30	3p

# Element 1 (BED3/O10.1) Obtain tenders

		Knowle	dge and U	J <b>ndersta</b> r	nding					Evidence Requireme	ents
No	Description of Evidence	1	2	3	4	5	6	7	8	1	2

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	Date:	

## Element 2 (BED3/O10.2) Assess tenders

### **Performance Criteria**

### This involves:

- (a) Storing the tenders received in a secure place and opening them at the agreed date and time in line with the organisation's procedures.
- (b) Reviewing the tenders against the criteria for acceptance, including checking for discrepancies, omissions and errors, and recommending **appropriate action**.
- (c) Agreeing any **variations, adjustments and corrections** with the successful tenderer and confirming them in writing, subject to contract.
- (d) Accepting the successful tender formally and politely notifying tenderers who have been unsuccessful.

### Range

# 1 Appropriate action

- (a) accept for evaluation
- (b) invite clarification or amendment
- (c) reject

### 2 Variations, adjustments and corrections

- (a) price
- (b) quantity
- (c) quality
- (d) time

# Element 2 (BED3/O10.2) Assess tenders

## **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How do you store and open the **tenders** received? (application) (a) (1,2)
- (2) How do you review the tenders, check for any discrepancies, omissions and errors are found and make recommend **appropriate action**? (application) (b) (1)
- (3) How do you notify tenderers who have been unsuccessful, about the result? (application) (d) (1)
- (4) How and why do you accept the successful **tender** formally? (evaluation) (d) (1,2)
- (5) How do you confirm any **variations, adjustments and corrections** in writing, subject to contact? (application) (c) (2)
- (6) How and why do you agree any **variations, adjustments and corrections** with the successful tenderer? (evaluation) (c) (2)

# **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

## **Evidence Requirements (cont)**

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

# **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Evaluation(s) of selected tenders amendments and checks that the successful tenderer and the client can meet the obligations of the contract (a,b,c,d) (1,2)
- (2) Record(s) of negotiations including variations, adjustments and corrections made (d) (4)

Simulations are not considered to be acceptable for producing evidence for this Element.

## **Process Evidence**

## None applicable

# Element 2 (BED3/O10.2) Assess tenders

	Performa	nce Criter	ia		Range						
Description of Evidence	a	b	с	d	1a	1b	1c	2a	2b	2c	2d
	Description of Evidence			Performance Criteria           Description of Evidence         a         b         c           Image: I							

# Element 2 (BED3/O10.2) Assess tenders

		Knowledge	and Unders	standing				Evidence Requireme	ents
No	Description of Evidence	1	2	3	4	5	6	1	2
			2     3						

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	 Date:	

This Unit has the following Elements:

Element 1 (BED3/011.1)	Evaluate and recommend work methods
Element 2 (BED3/011.2)	Estimate the resource requirements and costs within a tender

### **Unit Summary**

This Optional Unit is concerned with securing contracts with clients to carry out design work for them. The words 'estimate', 'bid' and 'tender' are all used in the industry, and are taken here to be synonymous.

Element 11.1 is about deciding how design function will be carried out. You must be able to get all the information that you need, decide the best way of working, produce a method statement, and agree this with the project team.

Element 11.2 is about deciding how much the design work will cost. You must be produce a working programme, decide what resources are needed, calculate the costs, and discuss them with the project team.

### Element 1 (BED3/O11.1) Evaluate and recommend work methods

### **Performance Criteria**

### This involves:

- (a) Assessing the available **project data** and summarising it to enable decisions on **construction, installation and work methods** to be made.
- (b) Obtaining more information from **relevant sources** in cases where the available **project data** is insufficient.
- (c) Identifying **work methods** which will make the best use of resources and which meet project, statutory and contractual requirements.
- (d) Evaluating the **methods** against relevant **technical** and **project criteria** and recommending the one which best meets the **criteria**.
- (e) Preparing an outline method statement which is accurate, clear, concise and acceptable to all the people involved.

### Range

### 1 Project data

- (a) contractual obligations and scope and scale of works
- (b) specifications
- (c) detailed drawings
- (d) health and safety plans

### 2 Construction, installation and work methods

- (a) sequencing and integration of work operations
- (b) construction and installation techniques
- (c) prefabrication and standardisation
- (d) working conditions (health, safety and welfare)

### 3 Relevant sources

- (a) project team
- (b) regulatory authorities
- (c) technical/trade literature
- (d) standard lists and procedures

# Element 1 (BED3/O11.1) Evaluate and recommend work methods

### Range (cont)

## 4 Technical criteria

- (a) materials and components performance and availability
- (b) health, safety and welfare
- (c) access
- (d) plant and equipment performance and availability
- (e) sustainability
- (f) buildability
- (g) site conditions

## 5 **Project criteria**

- (a) cost/value
- (b) client and user needs
- (c) contract requirements for time, quantity and quality

### Element 1 (BED3/O11.1) Evaluate and recommend work methods

### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How do you summarise **project data**? (application) (a) (1,2)
- (2) How and why do you assess the available **project data**? (analysis) (a) (1,2)
- (3) How and why do you recommend the selected method? (synthesis)(d) (2)
- (4) How and why do you prepare a method statement? (application) (e) (2)
- (5) How do you obtain more information from **relevant sources** in cases where the available **project data** is insufficient? (application) (b) (1,3)
- (6) What do you identify as **work methods** which will make the best use of resources and which meet project, statutory and contractual requirements? (understanding) (c) (2)
- (7) How and why do you evaluate the methods against relevant **technical** and **project criteria** and recommend the method which best meets the **criteria**? (evaluation) (d) (2,4,5)

## **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

## **Evidence Requirements (cont)**

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

## **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Evaluation(s) of work methods which include assessments of project data, information from relevant sources, identified work methods, technical and project criteria (a,b,c,d) (1,2,3,4,5)
- (2) Record(s) of recommended work methods (d) (2)
- (3) Method statement(s) (e) (2)

Simulations are not considered to be acceptable for producing evidence for this Element.

### **Process Evidence**

None applicable

# Element 1 (BED3/O11.1) Evaluate and recommend work methods

		Per Cri	rforn iteria	nanc a	e		Ra	nge																				
No	Description of Evidence	a	b	с	d	e	1a	1b	1c	1d	2a	2b	2c	2d	3a	3b	3c	3d	4a	4b	4c	4d	4e	4f	4g	5a	5b	5c
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# Element 1 (BED3/O11.1) Evaluate and recommend work methods

		Knowledg	ge and Uno	lerstandin	g				Evidence Req	uirements	
No	Description of Evidence	1	2	3	4	5	6	7	1	2	3

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	 Date:	

### Element 2 (BED3/O11.2) Estimate the resource requirements and costs within a tender

### **Performance Criteria**

### This involves:

- (a) Developing a proposed plan of work and draft programme which meet the **tender rules project requirements** and **phasing**.
- (b) **Estimating** what **resources** will be needed, their sources, availability and costs.
- (c) Modifying the cost to take into account any relevant **external factors**.
- (d) Producing the overall estimate of costs and checking that it is complete, accurate and in a form which is suitable for a judgment to be made.
- (e) Explaining and clarifying the tender assumptions to support the projected costs.
- (f) Collating, arranging and submitting tender offer information in accordance with tender instructions.
- (g) Collating together all the tender information, recording it, storing it securely and only passing it on to people who have the authority to receive it.

### Range

### 1 Tender rules

- (a) invitation to tender
- (b) form of tender
- (c) procedures for submitting tenders

### 2 **Project requirements**

- (a) construction
- (b) installation and maintenance work
- (c) supply of goods and materials
- (d) consultancy services
- (e) technology required

## 3 Phasing

- (a) planning
- (b) design
- (c) procurement
- (d) construction

### 4 Estimating

- (a) cost based on a quotation
- (b) unit cost built up from basic data
- (c) internal and historical cost data
- (d) published cost data

Element 2 (BED3/O11.2) Estimate the resource requirements and costs within a tender

### Range (cont)

### 5 **Resources**

- (a) people (in-house, external)
- (b) plant and equipment
- (c) materials
- (d) finance
- (e) time

# 6 External factors

- (a) location
- (b) contractual requirements
- (c) special working conditions and methods
- (d) resourcing conditions

## Element 2 (BED3/O11.2) Estimate the resource requirements and costs within a tender

### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How and why do you develop a proposed plan of work and draft programme which meet the **tender rules** and **project requirements**? (synthesis) (a) (1)
- (2) How do you **estimate** what **resources** will be needed? (application) (b) (2,3)
- (3) How and why do you estimate whether the **resources** needed will be available? (analysis) (b) (5)
- (4) How do you check that the overall **estimate** of costs is complete, accurate and in a form which is suitable for a judgment to be made? (application) (d) (4,5)
- (5) How do you explain and clarify the tender assumptions to support the projected costs? (application) (e) (4,5)
- (6) How and why do you estimate **resource** costs? (analysis) (b) (3,4,5)
- (7) How and why do you produce the overall estimate of costs? (analysis)(d) (4,5)
- (8) How do you collate, arrange and submit tender offer information (application) (f) (4)
- (9) How do you collate together all the tender information? (application) (g) (2,4,5)
- (10) How do you modify the costs to take into account any relevant external factors? (application) (c) (6)

# **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

# **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Method statement(s) and draft programme(s) (a) (1)
- (2) Estimate(s) of costs (b,c,d,e,f) (2,3,4,5,6)
- (3) Payment schedules (g) (3)

Simulations are not considered to be acceptable for producing evidence for this Element.

## **Process Evidence**

None applicable

# Element 2 (BED3/O11.2) Estimate the resource requirements and costs within a tender

		Pe	rfor	ma	nce	Cri	teri	a	Ra	nge	;																						
No	Description of Evidence	a	b	c	d	e	f	g	1a	1b	1c	2a	2b	2c	2d	2e	3a	3b	3c	3d	4a	4b	4c	4d	5a	5b	5c	5d	5e	6a	6b	6c	6d
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# UNIT F50Y 04 (BED3/O11) Prepare Tenders

### Element 2 (BED3/O11.2) Estimate the resource requirements and costs within a tender

		Knowle	dge and U	U <b>ndersta</b> i	nding							Evidenc	e Requir	ements
No	Description of Evidence	1	2	3	4	5	6	7	8	9	10	1	2	3

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	Date:	

This Unit has the following Elements:

Element 1 (BED3/O12.1)	Monitor contract(s) against agreed quality standards
Element 2 (BED3/O12.2)	Monitor contract progress against agreed programmes
Element 3 (BED3/O12.3)	Monitor contract costs and information for certification

#### **Unit Summary**

This Optional Unit applies to designers who go onto site and get involved in monitoring the construction process; it is about ensuring that the work is done properly.

Element 12.1 is about ensuring the quality of the work. You must be able to confirm what quality you want, implement systems for carrying out the work to the agreed standards, deal with contingencies and non-compliance, and gather feedback to identify what can be improved.

Element 12.2 is about working to programme. You must be able to implement systems for monitoring progress, to deal with resource problems, delays and disruptions, and to continually seek ways of improving progress.

Element 12.3 is about controlling costs and organising payments. You must be able to implement cost control systems; deal with variations; identify cost savings; and prepare information for instructions and certificates.

#### Element 1 (BED3/O12.1) Monitor contract(s) against agreed quality standards

#### **Performance Criteria**

#### This involves:

- (a) Identifying **quality standards** from available information and passing them to **people responsible** for their implementation, before they start work.
- (b) Confirming the responsibilities which individuals have for maintaining **quality standards**.
- (c) Implementing **systems** for inspecting and controlling the quality of **work** 2 and recording the outcomes.
- (d) Checking, regularly, that **work** conforms to the design requirements and the specified **quality standards**.
- (e) Identifying **work** which fails to meet the requirements and specified **quality standards** and recommending corrective action.
- (f) Informing **people responsible** about significant variations in **quality standards**, programme and safety implications, and suggesting the decisions which they need to make and actions they need to take.
- (g) Identifying improvements from feedback received and recommending them to **people responsible**.

#### Range

#### Quality standards

- (a) project specifications
- (b) European Standards
- (c) Codes of Practice
- (d) organisation standards
- (e) trade advisory guidance and best practice

#### People responsible

- (a) the client
- (b) contractors
- (c) consultants
- (d) sub-contractors
- (e) suppliers

#### 3 Systems

- (a) visual inspection
- (b) comparison with design requirements
- (c) comparison with standard documentation
- (d) checking manufacturers documentation
- (e) checking materials supply
- (f) sampling
- (g) testing
- (h) site inspection reports
- (i) contractors reports
- (j) site meetings
- 4 Work
  - (a) materials and components and their use
  - (b) methods of construction

### Element 1 (BED3/O12.1) Monitor contract(s) against agreed quality standards

#### Knowledge and Understanding

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) What do you identify as **quality standards**? (understanding) (a) (1,4)
- (2) How do you inform **people responsible** about significant variations in **quality standards**, programme and safety implications? (application) (f) (1,2)
- (3) How and why do you suggest the decisions which **people responsible** need to make about significant variations in **quality standards** and the actions they need to take? (synthesis) (f) (1,2)
- (4) How and why do you confirm the responsibilities which individuals have for maintaining quality standards? (evaluation) (b) (1)
- (5) How do you pass quality standards on to people responsible for implementing them before they start work? (application) (a) (1,2)
- (6) What do you identify as improvements from feedback received? (understanding) (g) (2)
- (7) How and why do you recommend improvements to people responsible? (synthesis) (g) (2)
- (8) How and why do you confirm the responsibilities which individuals have for maintaining quality standards? (evaluation) (b) (1,2)
- (9) What do you identify as work which fails to meet the requirements and specified quality standards? (understanding) (e) (1,3,4)
- (10) How do you check that work conforms to the design requirements and the specified quality standard? (application) (d) (1,3,4)
- (11) How do you recommend corrective action where work fails to meet the requirements and specified quality standards? (application) (e) (1,4)
- (12) How and why do you implement systems for inspecting and controlling the quality of work and record the outcomes? (application) (c) (3,4)

### Element 1 (BED3/O12.1) Monitor contract(s) against agreed quality standards

#### **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

### **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Record(s) of identified quality standards and confirmed responsibilities (a,b) (1,2)
- (2) Record(s) of systems for inspection and control which include checks, work failing requirements and corrective action (c,d,e) (1,3,4)
- (3) Record(s) of information referred to others which include(s) significant variations in quality standards, programme and safety implications, decisions needed to be taken and identified improvements from feedback(f,g) (1,2,3,4)

Simulations are not considered to be acceptable for producing evidence for this Element.

### **Process Evidence**

None applicable

## Element 1 (BED3/O12.1) Monitor contract(s) against agreed quality standards

		Per	rfor	man	ce C	rite	ria		Ra	nge																				
No	<b>Description of Evidence</b>	а	b	c	d	e	f	g	1a	1b	1c	1d	1e	2a	2b	2c	2d	2e	3a	3b	3c	3d	3e	3f	3g	3h	3i	3j	4a	4b
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### Element 1 (BED3/O12.1) Monitor contract(s) against agreed quality standards

		Know	ledge a	nd Und	lerstand	ding								Evidence	Requirem	nents
No	Description of Evidence	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	 Date:	

#### Element 2 (BED3/O12.2) Monitor contract progress against agreed programmes

#### **Performance Criteria**

#### This involves:

- (a) Implementing **systems to monitor and record** the progress of the contract against the agreed **programmes**.
- (b) Identifying inadequately and inappropriately specified **resources** and informing **people responsible**.
- (c) Identifying and quantifying any **deviations** from planned progress which have occurred, or which may occur, and which could disrupt the **programme**.
- (d) Investigating the circumstances of any **deviations** thoroughly and recommending appropriate **corrective action**.
- (e) Recommending options which are most likely to minimise increases in cost and time and help the contract progress, and passing these on to **people responsible**.
- (f) Regularly informing **people responsible** about progress, changes to the operational programme and **resource** needs.
- (g) Identifying improvements from feedback received and recommending them to **people responsible**.

#### Range

#### 1 Systems to monitor and record

- (a) visual inspection
- (b) resource records
- (c) site inspection reports
- (d) contractors' reports
- (e) written, graphical and electronic records of actual work against programmed work
- (f) site meetings
- (g) organisational procedures
- (h) comparison with project requirements

#### Programmes

2

- (a) bar charts
- (b) critical path

#### 3 **Resources**

- (a) people
- (b) plant and equipment
- (c) materials and components
- (d) time
- (e) specialist services

#### 4 **People responsible**

- (a) the client
- (b) contractors
- (c) consultants
- (d) sub-contractors
- (e) suppliers

#### Element 2 (BED3/O12.2) Monitor contract progress against agreed programmes

#### Range (cont)

#### 5 **Deviations**

- (a) resource shortages
- (b) design problems and constraints
- (c) lack of essential construction information
- (d) construction errors
- (e) inclement weather
- (f) physical (site) constraints
- (g) environmental
- (h) force majeure

#### 6 Corrective action

- (a) restore progress in accordance with agreed programme
- (b) agree new completion dates
- (c) securing additional resources
- (d) altering planned work

#### Element 2 (BED3/O12.2) Monitor contract progress against agreed programmes

#### Knowledge and Understanding

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How do you implement systems to monitor and record the progress of the contract against the agreed programmes? (application) (a) (1,2)
- (2) What do you identify as inadequately and inappropriately specified resources? (understanding) (b) (3)
- (3) How do you inform **people responsible** about inadequately and inappropriately specified **resources**? (application) (b) (3)
- (4) What do you identify as any **deviations** from planned progress which have occurred, or which may occur, and which could disrupt the **programme**? (understanding) (c) (2,5)
- (5) How and why do you quantify any **deviations** from planned progress? (analysis) (c) (4,5)
- (6) How and why do you investigate the circumstances of any **deviations**? (analysis) (d) (5,6)
- (7) What do you identify as improvements from feedback received? (understanding) (g) (3,6)
- (8) How do you recommend **corrective action**? (application) (d) (6)
- (9) How and why do you recommend options which are most likely to minimise increases in cost and time and help the contract progress? (synthesis) (e) (3,6)
- (10) How and why do you recommend improvements to people responsible? (synthesis) (g) (3,6)
- (11) How do you regularly inform **people responsible** about progress, changes to the operational programme and **resource** needs (application) (f) (2,3,4,5)

#### Element 2 (BED3/O12.2) Monitor contract progress against agreed programmes

#### **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg (a), and range, eg (1), to which they apply.

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

#### **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Progress monitoring and recording system(s) including record(s) which include collected and summarised information (a) (1,2)
- (2) Record(s) of identified and quantified deviation(s) which include investigated inadequate and inappropriate specified resources, specified alternatives and agreed corrective action (b,c,d) (2,3,4,5,6,7)
- (3) Record(s) of information and recommendations about progress passed to decision makers which include options likely to minimise increases in cost and time, changes, resource needs, suggested decisions and improvements from feedback (b,d,e,f,g) (3,6,7)

Simulations are not considered to be acceptable for producing evidence for this Element.

#### **Process Evidence**

None applicable

## Element 2 (BED3/O12.2) Monitor contract progress against agreed programmes

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	Description of Evidence					Performance Criteria         Description of Evidence       a       b       c       d       e         Image: Construction of Evidence         Image: Construction of Evidence       Image: Const																

## Element 2 (BED3/O12.2) Monitor contract progress against agreed programmes

	Range	e															
Description of Evidence	4a	4b	4c	4d	4e	5a	5b	5c	5d	5e	5f	5g	5h	6a	6b	6c	6d
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	Description of Evidence																

### Element 2 (BED3/O12.2) Monitor contract progress against agreed programmes

		Know	ledge a	nd Und	erstand	ding							Evidence R	equirements	
No	Description of Evidence	1	2	3	4	5	6	7	8	9	10	11	1	2	3

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	 Date:	
Internal Verifier:	Date:	

#### Element 3 (BED3/O12.3) Monitor contract costs and information for certification

#### **Performance Criteria**

#### This involves:

- (a) Implementing appropriate contract cost control systems which are able to provide early warning of problems.
- (b) Ensure that accurate **quantities and cost data** is calculated and presented in an agreed format to the **people responsible**.
- (c) Identifying and investigating any variations thoroughly and recommending **appropriate action** with **people responsible**.
- (d) Developing and implementing systems and processes for identifying **opportunities for cost savings** and recommending them to **people responsible**.
- (e) Inspecting and checking work against the **contract requirements**, recording any variations and reviewing for a certification decision to be made.

#### Range

#### 1 Quantities and cost data

- (a) materials
- (b) completed work
- (c) dayworks
- (d) periodic valuations

#### 2 Appropriate action

- (a) agree cost changes
- (b) agree quality changes
- (c) agree programme changes

#### **3 Opportunities for cost saving**

- (a) waste reduction
- (b) resource management and logistics
- (c) applications of new technologies and materials
- (d) recycling/re-using materials
- (e) alternative sources and types of materials
- (f) standardisation

#### 4 **People responsible**

- (a) the client
- (b) contractors
- (c) consultants
- (d) sub-contractors
- (e) suppliers

Element 3 (BED3/O12.3) Monitor contract costs and information for certification

#### Range (cont)

#### **5 Contracts requirements**

- (a) main contract
- (b) sub-contract
- (c) lump sum
- (d) design and construct
- (e) schedule based
- (f) prime cost based
- (g) labour and materials
- (h) labour only
- (i) goods and material supply only
- (j) service contracts

#### Element 3 (BED3/O12.3) Monitor contract costs and information for certification

#### **Knowledge and Understanding**

Established from questioning the candidate or from industry recognised education and training course assessment, which is matched to the Element. A candidate's knowledge and understanding can also be demonstrated through presented performance evidence.

- (1) How do you implement appropriate contract cost control systems which are able to provide early warning of problems? (application) (a) (1)
- (2) What do you identify as variations in **quantities and cost data**? (understanding) (c) (2)
- (3) How do you ensure that accurate **quantities and cost data is calculated** and passed on? (application) (b) (2)
- (4) How and why do you investigate any variations? (analysis) (c) (2)
- (5) How do you implement systems and processes for identifying **opportunities for cost savings**? (application) (d) (3)
- (6) How do you inspect and check work against contract requirements, record any variations and review for a certification decision? (application) (e) (4,5)
- (7) How and why do you recommend opportunities for cost savings to decision makers? (synthesis) (h) (5)

#### **Evidence Requirements**

Taken as a whole, the evidence must show that the candidate consistently meets all the Performance Criteria, across the ranges for the Element.

References in brackets after items in the Evidence specification refer to the corresponding performance criterion, eg(a), and range, eg(1), to which they apply.

#### **Evidence Requirements (cont)**

There must be workplace evidence against each Performance Criteria. Where the workplace evidence does not cover a whole range, knowledge evidence must be provided to cover the remaining items of range for each relevant performance criterion.

#### **Product Evidence**

The candidate must produce documentary evidence from the workplace covering the following item(s) that are considered to be common and key/critical to demonstrating competence.

- (1) Contract cost control system(s) which include records of quantities and cost data collection and calculations (a,b,c) (1,2)
- (2) Record(s) of system(s) and process(es) for identifying opportunities for cost-savings which have been developed, implemented, costed and recommended (d,e) (3,4,5)

Simulations are not considered to be acceptable for producing evidence for this Element.

#### **Process Evidence**

None applicable

### Element 3 (BED3/O12.3) Monitor contract costs and information for certification

		Perfo	rmanc	e Crite	eria		Rang	e											
No	<b>Description of Evidence</b>	а	b	c	d	e	1a	1b	1c	1d	2a	2b	2c	3a	3b	3c	3d	3e	3f
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### Element 3 (BED3/O12.3) Monitor contract costs and information for certification

		Range	(cont)													
No	Description of Evidence	4a	4b	4c	4d	4e	5a	5b	5c	5d	5e	5f	5g	5h	5i	5j

### Element 3 (BED3/O12.3) Monitor contract costs and information for certification

		Knowledg	Knowledge and Understanding				Evidence Requireme	ents		
No	Description of Evidence	1	2	3	4	5	6	7	1	2

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met.

Candidate:	 Date:	
Assessor:	Date:	
Internal Verifier:	Date:	

# **Glossary of terms**

Advisor	A person who carries out, either singly or in combination, the functions of advising a candidate, collecting evidence of his or her competence on behalf of the assessor and authenticating the work candidates have undertaken. A mentor might also provide witness testimony.
Assessment	The process of generating and collecting evidence of a candidate's performance and judging that evidence against defined criteria.
Assessor	The person designated in a centre to be responsible for collecting evidence of candidates' competence, judging it and recording achievement.
Authentication	The process by which an advisor or assessor confirms that an assessment has been undertaken by a candidate and that all regulations governing the assessment have been observed.
Candidate	The person enrolling for an SQA qualification.
Centre	The college, training organisation or workplace where SQA qualifications are delivered and assessed.
Element of competence	Statements which define the products of learning. The statements describe the activities that the candidate needs to perform in order to achieve the Unit. They contain Performance Criteria and sometimes statements on range and evidence. (see Outcome)
Evidence	materials the candidate has to provide as proof of his or her competence against specified Performance Criteria.
Evidence Requirements	Specify the evidence that must be gathered to show that the candidate has met the standards laid down in the Performance Criteria.
External verifier	The person appointed by the SQA who is responsible for the quality assurance of a centre's provision. An external verifier is often appointed on a subject area basis or for cognate groups of Units.
Instrument of assessment	A means of generating evidence of the candidate's performance.
Internal verifier	The person appointed from within the centre who ensures that assessors apply the standards uniformly and consistently.
Observation	A means of assessment in which the candidate is observed carrying out tasks that reflect the Performance Criteria given in Outcomes.
Outcome	Statement which defines the products of learning. They describe the activities the candidate has to perform to achieve the Unit, and contain Performance Criteria, and, sometimes, statements on range and evidence (see elements of competence).
Performance Criteria	Statements which describe the standard to which candidates must perform the activities which are stated in the Outcome.

Portfolio	A compilation of evidence which can form the basis for assessment. The portfolio is commonly used in SVQ awards and in alternative routes to assessment such as APL and credit transfer.
Product evaluation	A means of assessment which enables the quality of a product produced by the candidate, rather than the process of producing it, to be evaluated.
Range/Scope	A statement in the Unit which specifies the different contexts in which the activities described in the outcome have to be demonstrated. Where they appear, range/scope statements are mandatory.

# Section 4 — Blank recording forms

This section consists of the blank forms referred to in Section 2 for you to photocopy. You may find these useful when compiling your portfolio.

# Portfolio title page

Your name:
Job title:
Name of Employer/ Training Provider/ College:
Their address:
Tel no:
SVQ:
level:
Units submitted for assessment:
Mentor:
(Please provide details of Mentor's experience)
Assessor:
Date:

# Personal profile

Name		
Address		
Postcode		
Tel no	Home:	Work:
Job title		
Description of your current job	Relevant experience	
Previous work experience		
Qualifications and training	C	ontinued overleaf

Qualifications and Training (continued)	
Voluntary work/interests	
Name of Employer/Training Provider/College	
Address	
Postcode	
Tel no	
Type of Business	
Number of Staff	
Structure of organisation (include chart or diagram if available)	

# **Contents checklist**

You might also find it useful to complete the following checklist as you work your way through your portfolio. This will help you to see if you have included all the relevant items. Once you have completed your portfolio, you will be able to use this checklist again as a contents page, by inserting the relevant page or section numbers in the right hand column.

		Completed?	Page/Section number
Title	page for the portfolio		
Perso	nal profile		
•	your own personal details		
•	a brief CV or career profile		
•	description of your job		
•	information about your employer/training provider/ college		
Unit 2	Assessment Plans		
Unit j	progress record		
Comp	bleted Element Achievement Records for each Unit		
•	signed by yourself, your assessor and the internal verifier (where relevant)		
•	Evidence reference numbers included		
Index comp	of evidence (with cross-referencing information leted)		
Evide	nce (with reference numbers)		
•	observation records		
•	details of witnesses (witness testimony sheets)		
•	personal statements		
•	products of performance		

# Index of evidence

## SVQ title and level:

Evidence number	Description of evidence	Included in portfolio (Yes/No) If no, state location	Sampled by the IV (initials and date)

# **Personal statement**

Date	Evidence index number	Details of statement	Links to other evidence (enter numbers)	Units, elements, pcs, and range covered

Candidate signature:

Date: \_\_\_\_\_

# **Observation record**

Unit/Element(s):

Candidate: \_\_\_\_\_ Date of observation: \_\_\_\_\_

Evidence index number:

Skills/activities observed:	PCs and range covered:	

Knowledge and understanding apparent from this observation:

Other Units/elements to which this evidence may contribute:

Assessor comments and feedback to candidate:

I can confirm the candidate's performance was satisfactory.

Assessor's signature: _	Date:	
Candidate's signature: _	Date:	
eunalaute s'signature	- Dute:	

# Witness testimony

SVQ title and level:	
Candidate name:	
Evidence index no:	
Where applicable, evidence no. to which this testimony relates:	Element(s):
Date of evidence:	
Witness name:	
Designation/relationship to candidate:	
Details of testimony:	
I can confirm the candidate's evidence	is authentic and accurate.
Witness signature:	
Name:	
Date:	

Please tick the appropriate box:

## A1/A2 or D32/D33 Award

Familiar with the SVQ standards to which the candidate is working

# Record of questions and candidate's answers

Unit:	Element(s):
Evidence index number:	
Circumstances of assessment:	
List of questions and candidate's responses:	
Q:	
A:	
Q:	
A:	
Q:	
A:	
Q:	
A:	
Q:	
A:	
Assessor's signature:	Date:
	Date:

# UNIT:

## Element

	1			1	1	1	1	1	1	1	1	1			 			<del>.</del>		
No	Description of Evidence																			
																			-	

# UNIT:

## Element

Notes/Comments

The candidate has satisfied the Assessor and Internal Verifier that the performance evidence has been met

Candidate:	Date:	
Assessor:	Date:	
Internal Verifier:	Date:	

#### **Scottish Qualifications Authority**

#### **Portfolio:**

We hope this portfolio was appropriate to your needs. We welcome feedback on our products and services. If you have any comments on this document, please use this form to let us know about them. Thank you.

#### Comments

#### Please return this form to:

Support Materials Scottish Qualifications Authority The Optima Building 58 Robertson Street Glasgow G2 8DQ

#### **Optional information:**

Name:

Organisation: