ProQual Level 7 NVQ Diploma in Construction Senior Management

Qualification Specification

Contents

Introduction

The ProQual Level 7 NVQ Diploma in Construction Senior Management qualification provides a nationally recognised qualification for senior managers in the construction industry working in a wide range of job roles.

The awarding body for this qualification is ProQual Awarding Body (www.proqualab.com) and the regulatory body is the Office of Qualifications and Examinations Regulation (Ofqual).

The qualification has been accredited onto the Regulated Qualifications Framework (RQF) and is published on Ofqual's Register of Qualifications.

Qualification Profile

Qualification title	**ProQual Level 7 NVQ Diploma in Construction Senior Management**
Ofqual qualification number	610/4263/8
Level	7
Total qualification time	1690 Hours
Guided learning hours	425 – 515 (Dependent on optional units chosen)
Assessment	Pass or fail Internally assessed and verified by centre staff External quality assurance by ProQual verifiers
Qualification start date	01/08/2024
Qualification end date	

Entry Requirements

There are no formal entry requirements for this qualification.

Centres should carry out an **initial assessment** of candidate skills and knowledge to identify any gaps and help plan the assessment.

Qualification Structure

To achieve the qualification candidates must complete the mandatory units below, plus a selection of optional units. **The total number of optional units chosen must total a minimum of 620 TQT.**

Mandatory Units – Candidates must complete ALL units in this group					
Unit Reference Number	**Unit Title**	**Unit Level**	**GLH**	**TQT**	***CITB Ref No***
R/651/1796	Manage Project Processes in Construction Management	7	100	290	CSnM01v2
T/651/1797	Manage Teams in Construction Management	7	60	160	CSnM02v2
Y/651/1798	Provide Advice, Judgement and Service Ethically in Construction Management	7	60	190	CSnM03v2
L/651/1801	Develop Self and Others in Construction Management	6	30	110	CSnM04v2
M/651/1802	Control Projects in Construction Management	7	100	230	CSnM05v2
R/651/1803	Plan a Construction Organisation's Workforce	7	45	90	CSnM06v2
Optional units – Candidates must complete a minimum of 620 TQT					
Unit Reference Number	**Unit Title**	**Unit Level**	**GLH**	**TQT**	***CITB Ref. No***
T/651/1804	Direct the Management of Design Development and Processes in Construction Management	7	120	220	CSnM08v2
A/651/1806	Prepare and Agree a Project Brief and Outline Programme in Construction Management	7	100	240	CSnM07v2
D/651/1807	Sustainability and Environmental Impact of Developments in Construction Management	7	90	200	CSnM09v2
F/651/1808	Evaluate Sustainable Resources and Requirements for the Whole Lifecycle of a Construction Project	6	90	170	CSnM10v2
H/651/1809	Establish Project Procurement Arrangements in Construction Management	7	70	180	CSnM11v2
L/651/1810	Ensure That Contracts Are Prepared, Negotiated and Agreed in Construction Management	7	70	180	CSnM15v2
M/651/1811	Evaluate and Progress the Resolution of Contractual Disputes in Construction Management	7	70	180	CSnM17v2
R/651/1812	Manage Tendering Processes in Construction Management	6	60	190	CSnM13v2
T/651/1813	Manage the Preparation and Submission of Estimates, Bids and Tenders in Construction Management	7	50	160	CSnM14v2
Y/651/1814	Control Budgets and Contract Payment Entitlement in Construction Management	7	40	110	CSnM16v2
A/651/1815	Manage Marketing and Customer Service in Construction Management	7	40	130	CSnM18v2

D/651/1816	Manage the Handover of the Construction Project in the Workplace	6	40	100	CSnM19v2
F/651/1817	Implement, Monitor and Control Strategic Procurement Systems in Construction Management	7	30	120	CSnM12v2

Centre Requirements

Centres must be approved to offer this qualification. If your centre is not approved please complete and submit form **ProQual Additional Qualification Approval Application**.

Staff
Staff delivering this qualification must be appropriately qualified and/or occupationally competent.

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

Assessors and internal quality assurance verifiers for competence-based units or qualifications will normally need to hold appropriate assessor or internal quality assurance qualifications.

Suitable assessment qualifications may include:

- ProQual Level 3 Certificate in Teaching, Training and Assessment
- ProQual Level 3 Award in Education and Training
- ProQual Level 3 Award in Assessing Competence in the Work Environment
- ProQual Level 3 Award in Assessing Vocational Achievement
- ProQual Level 4 Certificate in Education and Training

Suitable internal verification qualifications may include:

- ProQual Level 4 Award in the Internal QA of Assessment Processes and Practice
- ProQual Level 4 Certificate in Leading the Internal QA of Assessment Processes and Practice

Support for Candidates

Materials produced by centres to support candidates should:

- Enable them to track their achievements as they progress through the learning outcomes and assessment criteria;
- Provide information on where ProQual's policies and procedures can be viewed;
- Provide a means of enabling Internal and External Quality Assurance staff to authenticate evidence

Assessment

This qualification is competence-based, candidates must demonstrate the level of competence described in the units. Assessment is the process of measuring a candidate's skill, knowledge and understanding against the standards set in the qualification.

This qualification must be internally assessed by an appropriately experienced and qualified assessor.

Each candidate is required to produce a portfolio of evidence which demonstrates their achievement of all of the learning outcomes and assessment criteria for each unit.

Evidence can include:

- Observation report by assessor
- Assignments/projects/reports
- Professional discussion
- Witness testimony
- Candidate product
- Worksheets
- Record of oral and written questioning
- Recognition of Prior Learning

Learning outcomes set out what a candidate is expected to know, understand or be able to do.

Assessment criteria specify the standard a candidate must meet to show the learning outcome has been achieved.

Learning outcomes and assessment criteria can be found from page 9.

Additional information for assessment and requirements for unit **endorsements** where relevant is included after all of the learning outcomes and assessment criteria for each unit.

Internal Quality Assurance

An internal quality assurance verifier confirms that assessment decisions made in centres are made by competent and qualified assessors, that they are the result of sound and fair assessment practice and that they are recorded accurately and appropriately.

Adjustments to Assessments

Adjustments to standard assessment arrangements are made on the individual needs of candidates. ProQual's Reasonable Adjustments Policy and Special Consideration Policy sets out the steps to follow when implementing reasonable adjustments and special considerations and the service that ProQual provides for some of these arrangements.

Centres should contact ProQual for further information or queries about the contents of the policy.

Results Enquiries and Appeals

All enquiries relating to assessment or other decisions should be dealt with by centres, with reference to ProQual's Enquiries and Appeals Procedures.

Certification

Candidates who achieve the requirements for this qualification will be awarded:

- A certificate listing all units achieved, and
- A certificate giving the full qualification title -

ProQual Level 7 NVQ Diploma in Construction Senior Management

Claiming certificates

Centres may claim certificates for candidates who have been registered with ProQual and who have successfully achieved the qualification. All certificates will be issued to the centre for successful candidates.

Unit certificates

If a candidate does not achieve all of the units required for a qualification, the centre may claim a unit certificate for the candidate which will list all of the units achieved.

Replacement certificates

If a replacement certificate is required a request must be made to ProQual in writing. Replacement certificates are labelled as such and are only provided when the claim has been authenticated. Refer to the Fee Schedule for details of charges for replacement

Units – Learning Outcomes and Assessment Criteria

Title:	Manage Project Processes in Construction Management
Unit Number:	R/651/1796

Learning Outcomes *The learner will be able to:*		**Assessment Criteria** *The learner can:*	
1	Be able to assess and manage project risks and opportunities.	1.1	Identify and review project information and processes relating to risks and opportunities.
		1.2	Identify and assess the significance and ownership of the risks and opportunities.
		1.3	Select the most effective risk management methods and procedures to manage residual risks that comply with all relevant regulations and guidelines.
		1.4	Identify the activities and resources required to implement the risk management methods.
		1.5	Specify clearly the procedures for implementing the risk management methods and procedures.
		1.6	Implement and maintain the risk management methods and procedures and modify them to meet changed circumstances.
2	Understand how to assess and manage project risks and opportunities.	2.1	Describe how to identify the project information and processes relating to risks and opportunities.
		2.2	Examine how to review project information and processes relating to risks and opportunities.
		2.3	Describe how to identify the significance and ownership of the risks and opportunities.
		2.4	Examine how to assess the significance and ownership of the risks and opportunities.
		2.5	Evaluate how to select the most effective risk management methods and procedures to manage residual risks that comply with all relevant regulations and guidelines.
		2.6	Describe how to identify the activities and resources required to implement the risk management methods.

2	*Cont.*	2.7	Evaluate how to specify clearly the procedures for implementing the risk management methods and procedures.
		2.8	Explain how to implement the risk management methods and procedures.
		2.9	Explain how to maintain the risk management methods and procedures.
		2.10	Explain how to modify the risk management methods and procedures to meet changed circumstances.
3	Be able to develop and maintain systems for managing health, safety and welfare.	3.1	Encourage a culture of health, safety and welfare on the project and identify and recommend opportunities for improving the work environment.
		3.2	Develop and maintain adequate health, safety and welfare policies and systems which meet organisational and statutory requirements.
		3.3	Allocate health, safety and welfare responsibilities, equipment and resources to people which are consistent with organisational and statutory requirements, and the specific project requirements.
		3.4	Develop and implement systems which meet statutory requirements for identifying and reducing hazards and reporting accidents and emergencies and preventing recurrence.
		3.5	Ensure that health, safety and welfare systems are checked regularly, in accordance with organisational and statutory requirements, and identify and record any special site conditions and situations which do not comply with regulations.
4	Understand how to develop and maintain systems for managing health, safety and welfare.	4.1	Explain how to encourage a culture of health, safety and welfare on the project.
		4.2	Describe how to identify opportunities for improving the work environment.
		4.3	Propose how to recommend opportunities for improving the work environment.
		4.4	Propose how to develop adequate health, safety and welfare policies and systems which meet organisational and statutory requirements.

4	*Cont.*	4.5	Explain how to maintain adequate health, safety and welfare policies and systems which meet organisational and statutory requirements.
		4.6	Explain how to allocate health, safety and welfare responsibilities, equipment and resources to people which are consistent with organisational and statutory requirements, and the specific project requirements.
		4.7	Propose how to develop systems which meet statutory requirements for identifying and reducing hazards and reporting accidents and emergencies and preventing recurrence.
		4.8	Explain how to implement systems which meet statutory requirements for identifying and reducing hazards and reporting accidents and emergencies and preventing recurrence.
		4.9	Explain how to ensure that health, safety and welfare systems are checked regularly, in accordance with organisational and statutory requirements.
		4.10	Describe how to identify any special site conditions and situations which do not comply with regulations.
		4.11	Explain how to record any special site conditions and situations which do not comply with regulations.
5	Be able to establish and manage project team activities.	5.1	Prepare a strategy for the project which makes the best use of the capabilities of all project team members.
		5.2	Examine stakeholder needs and intentions from the brief, discuss and clarify them with stakeholder and resolve any issues.
		5.3	Develop clear parameters which will enable the project to meet the requirements of the brief and schedules.
		5.4	Set up arrangements to achieve communication and trust between stakeholder.
		5.5	Set up and agree, with the project team members, appropriate and realistic methods for project development, evaluation, modification, monitoring and updating.

5	*Cont.*	5.6	Identify potential areas needing investigation and agree a realistic timescale and costs with the project team.
		5.7	Motivate, coach and involve project team members to maximise and integrate their contributions to the project development.
		5.8	Monitor the progress of the project team and provide members with feedback on timing, task completion and team processes.
		5.9	Coordinate feedback sessions in a manner which is suitable for the needs and capabilities of the project team and which allows each team member enough time to express their views.
6	Understand how to establish and manage project team activities.	6.1	Explain how to prepare a strategy for the project which makes the best use of the capabilities of all project team members.
		6.2	Explain how to examine stakeholder needs and intentions from the brief.
		6.3	Explain how to discuss stakeholder needs and intentions from the brief.
		6.4	Explain how to clarify stakeholder needs and intentions and resolve any issues.
		6.5	Propose how to develop clear parameters which will enable the project to meet the requirements of the brief and schedules.
		6.6	Propose how to set up arrangements to achieve communication and trust between stakeholder.
		6.7	Propose how to set up with the project team members, appropriate and realistic methods for project development, evaluation, modification, monitoring and updating.
		6.8	Evaluate how to agree with the project team members, appropriate and realistic methods for project development, evaluation, modification, monitoring and updating.
		6.9	Describe how to identify any potential areas needing investigation.

6	*Cont.*	6.10	Evaluate how to agree a realistic timescale and costs with the project team.
		6.11	Propose how to motivate project team members to maximise and integrate their contributions to the project development.
		6.12	Propose how to coach project team members to maximise and integrate their contributions to the project development.
		6.13	Explain how to involve project team members to maximise and integrate their contributions to the project development.
		6.14	Examine how to monitor the progress of the project team.
		6.15	Explain how to provide members with feedback on timing, task completion and team processes.
		6.16	Propose how to coordinate feedback sessions in a manner which is suitable for the needs and capabilities of the project team and which allows each team member enough time to express their views.
7	Be able to implement project organisation and communication systems.	7.1	Identify the organisational and communication needs for the project.
		7.2	Implement systems which are compatible with those used by the client and supply chain and which enable clear and effective management, and administrative and operational controls.
		7.3	Produce information about people's roles and responsibilities, the project, and the organisational structure, and circulate the information to stakeholder.
		7.4	Introduce methods of communicating, reporting, recording and retrieving information between stakeholder which are appropriate to the needs of the project and monitor the methods regularly for effectiveness.
		7.5	Set up systems for recording and providing feedback on the ways in which resources are allocated and used.

7	*Cont.*	7.6	Audit health, safety and welfare systems regularly, in accordance with organisational and statutory requirements, and identify and record any special site conditions and situations which do not comply with regulations and if necessary take responsibility for restoring compliance.
8	Understand how to implement project organisation and communication systems.	8.1	Describe how to identify the organisational and communication needs for the project.
		8.2	Explain how to implement systems which are compatible with those used by the client and supply chain and which enable clear and effective management, and administrative and operational controls.
		8.3	Explain how to produce information about people's roles and responsibilities, the project, and the organisational structure.
		8.4	Explain how to circulate the information about people's roles and responsibilities, the project, and the organisational structure to stakeholder.
		8.5	Propose how to introduce methods of communicating, reporting, recording and retrieving information between stakeholder which are appropriate to the needs of the project.
		8.6	Examine how to monitor the methods of communicating, reporting, recording and retrieving information between stakeholder regularly for effectiveness.
		8.7	Propose how to set up systems for recording and providing feedback on the ways in which resources are allocated and used.
		8.8	Examine how to audit health, safety and welfare systems regularly, in accordance with organisational and statutory requirements.
		8.9	Describe how to identify any special site conditions and situations which do not comply with regulations.
		8.10	Explain how to record any special site conditions and situations.
		8.11	Evaluate how to take responsibility for restoring compliance with regulations where necessary.

9	Be able to obtain and evaluate project feedback information and make improvements.	9.1	Promote the value of making improvements from feedback throughout the project and encourage stakeholder to collaborate and deliver feedback information.
		9.2	Identify and agree the areas to focus on for making improvements from feedback.
		9.3	Identify and agree valid and reliable methods and sources for obtaining feedback information on projects and for assessing and recommending improvements from feedback.
		9.4	Obtain, investigate and review the feedback information, match it against the original requirements and objectives and summarise both positive and negative factors.
		9.5	Recommend improvements from feedback received and justify the recommendations to decision makers.
		9.6	Classify improvements from feedback which have been agreed and incorporate them accurately into updated procedures and databases.
10	Understand how to obtain and evaluate project feedback information and make improvements.	10.1	Propose how to promote the value of making improvements from feedback throughout the project.
		10.2	Explain how to encourage stakeholder to collaborate and deliver feedback information.
		10.3	Describe how to identify the areas to focus on for making improvements from feedback.
		10.4	Evaluate how to agree the areas to focus on for making improvements from feedback.
		10.5	Describe how to identify valid and reliable methods and sources for obtaining feedback information on projects and for assessing and recommending improvements from feedback.
		10.6	Evaluate how to agree valid and reliable methods and sources for obtaining feedback information on projects and for assessing and recommending improvements from feedback.
		10.7	Explain how to obtain the feedback information.
		10.8	Examine how to investigate the feedback information.

10	*Cont.*	10.9	Examine how to review the feedback information.
		10.10	Propose how to match feedback information against the original requirements and objectives.
		10.11	Explain how to summarise both positive and negative factors from feedback information.
		10.12	Propose how to recommend improvements from feedback received.
		10.13	Evaluate how to justify the recommended improvements from feedback to decision makers.
		10.14	Explain how to classify improvements from feedback which have been agreed.
		10.15	Explain how to incorporate improvements from feedback accurately into updated procedures and databases.

Title:	Manage Project Processes in Construction Management
Additional information about this unit	
Details of relationship between the unit and the relevant national occupational standards or other professional standards of curricula (if appropriate)	The unit sets out the competence and knowledge specification for COSCSM14 in Construction Senior Management.

Assessment requirements or guidance specified by a sector or regulatory body (if appropriate).	The following ranges apply:
	
	Learning Outcomes 1 and 2
	
	• Project information:
	  ○ Environmental.
	  ○ Statutory and legal requirements.
	  ○ Client, user and community requirements.
	  ○ Construction and technical requirements.
	  ○ Site constraints.
	  ○ Finance, procurement and contract.
	  ○ Quality.
	  ○ Cost.
	  ○ Programme.
	
	• Risks:
	  ○ Health, safety and welfare.
	  ○ Site environment.
	  ○ Management and workforce experience.
	  ○ Information management and project stage decision making.
	  ○ Complexity and scope.
	  ○ Consents.
	  ○ Team composition.
	  ○ Project costs.
	  ○ Impact on business.
	  ○ Technical considerations.
	  ○ Programme.
	  ○ Contact form.
	  ○ Availability of resources.
	  ○ Maintenance and communication of information.
	  ○ Innovation.
	  ○ Poor quality.

    - Impact on natural and built environment.
    - Impact of users; public and third parties.
    - Impact on community.
    - Impact of political risk.
    - Resource scarcity.

- Opportunities:
    - Impact on the natural and built environment.
    - Impact of users, public and third parties.
    - Improved quality.
    - Improved procurement.
    - Programme reduction.
    - Specification change.
    - Business benefit.
    - Profitability.
    - Scope reduction.
    - Sustainable development.

- Risk Management Methods and Procedures:
    - Risk identification.
    - Risk assessment.
    - Prevention, reduction and protection.
    - Risk register.

- Resources:
    - People.
    - Materials, plant and equipment.
    - Finance.
    - Time.
    - Specialist services.
    - Utility services.
    - Information.

Learning Outcomes 3 and 4

- Culture of health, safety and welfare:
    - Personal values, attitudes and behaviours.
    - Communicating and passing on information.
    - Accident and incident reporting.
    - Giving and receiving feedback.
    - Situational awareness.

    - Recognising and responding to potential changes.
    - Materials, plant and equipment and their constraints and failure points.

- Organisation and statutory requirements:
    - Construction specific health, safety and welfare regulations.
    - General health, safety and welfare legislation.
    - Recognised industry codes of practice.
    - Organisational procedures.
    - Safety audit.
    - Health and safety plans.

- Equipment and resources:
    - Protective clothing.
    - Protective equipment.
    - First aid activities.
    - Welfare facilities.
    - Storage and security of materials and equipment.
    - Waste management.
    - Firefighting equipment.
    - Provision of health, safety and welfare training
    - Hazard warnings

- Specific project requirements:
    - Contract.
    - Organisational policy.
    - Site, construction, induction and installation operations.
    - Risk assessments.
    - Demolition.
    - Control of nuisance (e.g. noise, dust, transport and waste management).
    - Language.
    - First-aid arrangements.
    - Statutory notices.
    - Accident and incident reporting.

Learning Outcomes 5 and 6

- Project team:
    - Client.
    - Design and development consultants.
    - Potential contractors.
    - Potential contractors and suppliers.
    - Partners in the development programme.
    - Facilities/asset managers.
- Stakeholder:
    - The client.
    - Prospective occupiers/owners.
    - Local community.
    - Regulatory authorities.
    - Government agencies.
    - Facilities/asset managers.
- Requirements of the development brief and schedule:
    - Key decision stages.
    - Objectives and targets.
    - Scheduling and timetabling.
    - Statutory deadlines.
    - Team meetings.
    - Procurement.
    - Concurrent design and construction.
    - Levels of design refinement at key decision stages.
    - Level of risk/confidence.
- Communication:
    - Orally.
    - Written.
    - Electronically.
- Methods for project development, evaluation, modification, monitoring and updating:
    - Responsibilities.
    - Format.
    - Content.
    - Indexing.
    - Distribution
    - Reviewing.
    - Resolving conflicts.

- Revising.
- Quality control/assurance.
- Storage.
- Security.
- Retrieval.
- Statutory approval.
- Integration of data.
- Building Information Modelling.

- Investigation:
  - Documentary search.
  - Investigative research.
  - Site investigation.
  - Consultation with stakeholder**.**
  - Physical/virtual models.
  - Insurance risk/opportunities associated with new technology.
  - Adaptation and mitigation.

Learning Outcomes 7 and 8

- Organisational and communication needs:
  - Site management.
  - Site/head office interface.
  - Contract administration.
  - Health, safety and welfare.
  - Environmental strategy.
  - Common Data Environment (CDE).
  - Team working.
  - Design information management.
  - Building Information Modelling.

- Information about people's roles and responsibilities:
  - Individual job descriptions, responsibilities and competence.
  - Organisation charts.
  - Contractual arrangements.
  - Team.
  - Skills, training and development.

- Stakeholder:
    - Clients.
    - Consultants
    - Contractors.
    - Sub-contractors.
    - Third parties including public.
    - Utility providers.
    - Emergency services.
    - People working on site.
    - Site visitors.
    - Statutory authorities.
    - Off-site manufacturing/suppliers.
    - Facility/asset managers.

- Methods of communicating, reporting, recording and retrieving:
    - Oral.
    - Written.
    - Graphic
    - Electronic.

- Resources:
    - People.
    - Plant and equipment.
    - Materials and components.
    - Sub-contractors
    - Information (digital models, drawings, graphical & non-graphical electronic data files)
    - Work area and facilities.

Learning Outcomes 9 and 10

- Improvements from feedback:
    - Management procedures.
    - Client, design and construction team performance.
    - Working arrangements.
    - Formal and informal communications.
    - Quality assurance and control.
    - Design and technical appraisal.
    - Operational appraisal.
    - Performance in use.

- Energy use.
- Benchmarking.
- Sustainability.
- Post project review.

- Stakeholder:
  - The design team.
  - CDM co-ordinator (or recognised body under the CDM code of practice).
  - Specialist consultants.
  - The client.
  - Contractors.
  - Site inspectorate.
  - Users.
  - Managing agents.
  - Stakeholder.
  - Facility/asset managers.

- Feedback information:
  - Contract documentation.
  - Project documentation.
  - Organisational documentation.
  - Standard communication details.
  - User feedback.
  - Specification amendments.
  - Product information.
  - Government and statutory publications.
  - Research and advisory data.
  - Periodicals and abstracts.

- Methods and sources:
  - Project records and documentation.
  - Building Information Modelling.
  - Application and methodology.
  - Open book accounting.
  - Site inspections.
  - Scientific research and data.
  - Studies of performance in use.
  - Meetings.
  - Questionnaires.

    - Reports.
    - Warranty claims.
    - Post construction evaluation (PCE).
    - Post occupancy evaluation (POE).

- Databases:
    - Manual files.
    - Building Information Model Object library.
    - Model templates.
    - Standard drawings.
    - Specifications.
    - Pro-forma.
    - On-line.
    - Quality Management System.

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

The knowledge and understanding to cover the full range and scope of the learning outcomes and assessment criteria must be assessed through a professional discussion. Project artefacts which could be used to plan or prompt the professional discussion for this unit should include, as a minimum; preparing a strategy for the project using the most appropriate team, identifying the needs of the stakeholder along with the requirements of the brief and schedule.

Other project artefacts might include: reviewing project risks and opportunities, the effects upon the available resources, demonstrating project development, evaluation and monitoring skills, encouraging a culture of health, safety and welfare on the project, the development, implementation and maintenance of systems for health, safety and welfare which meet statutory requirements.

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

Workplace evidence of skills cannot be simulated.

Location of the unit within the subject/sector classification system	5.2 Building and Construction
Availability for use	Shared
Unit guided learning hours	90
Assessment hours	10

Title:	Manage Teams in Construction Management
Unit Number:	T/651/1797

Learning Outcomes *The learner will be able to:*		**Assessment Criteria** *The learner can:*	
1	Be able to formulate a project team.	1.1	Determine project requirements and characterise the necessary type, availability and number of essential team resources.
		1.2	Prepare a plan, in line with project requirements, for sourcing and allocating project team resources, incorporating timescales and cost.
		1.3	Evaluate the plan determining any significant factors that will affect the type, availability and number of team resources.
		1.4	Implement contractual arrangements for the plan in accordance with statutory rules and organisational formalities to obtain team resources.
		1.5	Monitor the quality and reliability of team resources, in line with organisational procedures, and circulate the results to decision makers.
2	Be able to manage working relationships.	2.1	Design systems, in line with a project brief, to inform people about work activities for a project.
		2.2	Plan arrangements, in line with the systems, to manage working relationships with people that promote goodwill, trust and respect.
		2.3	Implement the arrangements, in line with the plan.
		2.4	Monitor the arrangements, in line with organisational procedures, offering advice and help to people about work activities and encouraging questions, requests for clarification and comments.
		2.5	Evaluate with people their objections arising from work activities and suggest alternative proposals to meet the project brief for the degree of change, expenditure and risk involved.

Title:	Manage Teams in Construction Management
Additional information about this unit	

Assessment Requirements	The following ranges apply:
	
	Learning Outcome 1
	
	• Team resources:
	  ○ Management.
	  ○ Technical staff.
	  ○ Specialist sub-contractors.
	  ○ Specialist services.
	  ○ Workforce.
	
	• Significant factors:
	  ○ Location.
	  ○ Cost.
	  ○ Time.
	  ○ Skills, experience and knowledge required and availability.
	  ○ Training and development requirements.
	  ○ Impact of new technology processes and materials on skills.
	  ○ Diversity.
	  ○ Language.
	  ○ Accreditation requirements.
	
	• Rules and formalities:
	  ○ Contractual.
	  ○ Statutory.
	  ○ Recognised industry processes.
	  ○ Organisational processes.
	  ○ Certification of competence.
	
	Learning Outcome 2
	
	• Working relationships:
	  ○ Formal (contractual and statutory).
	  ○ Informal.
	
	• People:
	  ○ Clients and customers.
	  ○ Employers.
	  ○ Employees.
	  ○ Statutory and regulatory bodies.
	  ○ Users and community groups.
	  ○ Contractors.
	  ○ Consultants.
	  ○ Partners.
	  ○ Near neighbours.
	  ○ Occupiers.

    - General public.
    - People with specific access and communication needs.
    - Suppliers of products and services.
    - Government agencies.
    - Non-English speakers.

- Promote goodwill, trust and respect:
    - Demonstrating a duty of care.
    - Ethical relationships.
    - Professional independence.
    - Honouring promises and undertakings.
    - Honest relationships.
    - Constructive relationships.
    - Equal opportunities.
    - Acknowledge diversity.

- Inform, offer advice, present and clarify:
    - Orally.
    - In writing.
    - Using graphics.
    - Electronically.

- Work activities:
    - Proposals and their impact.
    - Progress.
    - Results.
    - Achievements.
    - Potential problems.
    - Risks.
    - Opportunities.

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

The knowledge and understanding to cover the full range and scope of the learning outcomes and assessment criteria must be assessed through a professional discussion. Project artefacts which could be used to plan or prompt the professional discussion for this unit should include, as a minimum, a project plan detailing the required project team resources, timescales and costs. Other project artefacts might include: a professional appointment contract to obtain team resources; a project hierarchy detailing different team roles or a partnering statement to promote positive working relationships supporting goodwill, trust and respect.

	Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. **Workplace evidence of skills cannot be simulated.**
Sector Subject areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	50
Assessment	10

Title:	Provide Advice, Judgement and Service Ethically in Construction Management
Unit Number:	Y/651/1798

Learning Outcomes *The learner will be able to:*		**Assessment Criteria** *The learner can:*	
1	Be able to provide advice on technical construction issues.	1.1	Analyse technical project information to determine construction issues.
		1.2	Critically evaluate the construction issues to justify technical project recommendations.
		1.3	Develop communication methods in line with organisational procedures to disseminate the technical project recommendations to different project stakeholders.
		1.4	Implement arrangements to circulate technical instructions and guidance to project stakeholders based upon the prepared communication methods.
		1.5	Monitor the arrangements, in line with organisational procedures adapting and modifying where appropriate to meet project stakeholders' needs.
2	Be able to resolve complex multifaceted construction problems.	2.1	Prepare a construction appraisal evaluating the validity and completeness of project information, determining any significant gaps.
		2.2	In line with the construction appraisal, formulate specifications for technical work packages to obtain any required additional project information.
		2.3	Analyse the complete project information to determine complex multifaceted construction problems and their potential project consequences.
		2.4	Critically evaluate the potential project consequences in line with industry technical standards determining and justifying project options.
		2.5	Design a technique to appraise the reliability of the project options in line with organisational procedures.
		2.6	Implement the selected options to prioritise final opportunities and solutions to the multifaceted construction problems.

3	Be able to provide construction services within an ethical framework.	3.1	Evaluate in line with professional codes of conduct and organisational procedure the limits of own professional expertise.
		3.2	Ensure that offers and contracts are in line with limits of own expertise, professional codes of conduct, organisation policy, statute and regulations; determine and reject those that are illegal, beyond own capabilities, or that may generate conflicts of interest.
		3.3	Plan a system of communication in line with organisation policy, professional code of conduct, statutes and regulations to report instances of unethical behaviour at all organisational levels and to ensure confidentiality of client information.
		3.4	Implement the planned system in line with organisational procedures to encourage ethical behaviour and to empower reporting of unethical behaviour.
		3.5	Critically evaluate project information in line with the system and organisational policy to formulate ethical judgements and advice that balances the needs of the client, has due regard for the environment and sustained management of natural resources, the public interest particularly in terms of health and safety and the well-being of communities and future generations.
		3.6	Monitor the system in line with organisational policy, professional codes of conduct, statutes and regulations to ensure personal decisions and decision of others are made ethically.

Title:	Provide Advice, Judgement and Service Ethically in Construction Management
Additional information about this unit	
Assessment Requirements	The following ranges apply:

Learning Outcome 1

- Purpose:
  - Sharing experience.
  - Issuing instructions.
  - Making judgements.
  - Increasing understanding.
  - Implementing a solution.
  - Dealing with confrontation.
  - Negotiation.

- Present:
  - Orally.
  - In writing.
  - Graphically.
  - Electronically.

- Technical recommendations and judgements include:
  - Realistic estimates of the implications of other options which have been considered.
  - Clear descriptions of the information sources consulted.
  - The analysis techniques applied.
  - The criteria used for making evaluations and reaching justifiable conclusions.

- Project stakeholders receiving information and advice:
  - Peers and other related occupations.
  - Clients and customers.
  - Technical and non-technical team members.
  - Craftspeople and operatives.
  - Senior and junior colleagues.
  - Members of the public.
  - People with individual needs.

Learning Outcome 2

- Information:
  - Project information.
  - Own experience and practice.
  - Manual and electronic information systems (e.g. Libraries, technical journals, databases).
  - Published research.
  - Other colleagues and specialists.
  - Continuing professional development.

- Reflect:
    - Comparison between previous cases and the current situation.
    - The outcomes required.
    - Known and anticipated limitations and opportunities.

Learning Outcome 3

- Conflicts of interest:
    - Actions which may mislead other individuals.
    - Offers which involve the financial interest of the practitioner.
    - Giving unfair advantage to the practitioner's family or friends.
    - As defined by legislation.

- Ethical standards and recognised good practice:
    - Occupational and professional competence.
    - Personal beliefs.
    - Ethical codes of practice and conduct within the occupation, profession, discipline or organisation.
    - National and international statute law.
    - National and international voluntary codes of practice and guidance.

- Systems:
    - Organisational policies.
    - Indemnity insurance.
    - Guarantees.
    - Contract conditions.
    - Bonds.

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

The knowledge and understanding to cover the full range and scope of the learning outcomes and assessment criteria must be assessed through a professional discussion. Project artefacts which could be used to plan or prompt the professional discussion for this unit might include: a feasibility study; scope of works for the appointment of professional consultancy services, professional code of conduct or anti-bribery and anti-corruption policy. As a minimum, the project artefacts will include a project appraisal evaluating the project viability or the case for proceeding with the project, and identifying and comparing various project options using economic appraisal or

	other decision analysis techniques. A professional development action plan and personal development record, documenting and planning learners' professional knowledge, skills and competences will also be required. Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. **Workplace evidence of skills cannot be simulated.**
Sector Subject areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	50
Assessment	10

Title:	Develop Self and Others in Construction Management
Unit Number:	L/651/1801

Learning Outcomes *The learner will be able to:*		**Assessment Criteria** *The learner can:*	
1	Be able to undertake continuing personal development.	1.1	Critically evaluate industry and professional development guidance to determine target standards of competence for own construction occupation.
		1.2	Analyse, with those you report to, own current personal level of performance against the identified target standards of competence for own construction occupation, and record a profile of present competence.
		1.3	Review the profile of present competence to formulate personal development aims and objectives in line with the target standards of competence for own construction occupation and organisation policy.
		1.4	Design a personal development action plan to achieve personal development aims and objectives.
		1.5	Evaluate the resources, training and mentoring required to implement the development action plan in line with organisation policy.
		1.6	Implement the development action plan, in accordance with organisation policy.
		1.7	Monitor the development action plan recording progress and measuring achievement against personal development aims and objectives.
		1.8	Evaluate personal competence yearly with those you report to, in line with organisation policy, changing working circumstances and target standards of competence for own construction occupation; update personal development aims, objectives and personal development action plan.
2	Be able to manage the continued personal development of others.	2.1	Evaluate with team members their personal development needs and objectives in line with latest industry and professional competency standards, organisation policy and procedures.
		2.2	Analyse industry standards and organisation policy to justify a training strategy of learning techniques and methods to meet all team members personal development needs and objectives.

2	*Cont.*	2.3	Plan the allocation of resources and learning opportunities in line with the training strategy, and sources of knowledge and practice available to the organisation.
		2.4	Implement the training strategy, in line with the plan.
		2.5	Monitor the progress of the training strategy, reviewing individual team member's progress towards the fulfilment of personal development needs and objectives in line with organisation procedures.
		2.6	Implement feedback and coaching sessions for individual team members, encouraging team members ongoing engagement to personal development.

Title:	Develop Self and Others in Construction Management

Additional information about this unit

Assessment Requirements

The following ranges apply:

Learning Outcome 1

- Development plan includes:
  - Priorities.
  - Target dates.
  - Development activities.

- Development activities:
  - Formal courses.
  - Research.
  - Work experience.
  - Personal study.
  - Work shadowing/secondment.
  - Mentoring including professional discussions.
  - Developing personal networks.
  - Publications.

- Aims and objectives:
  - Preparation for career development.
  - Intellectual challenge.
  - Need to provide evidence of vocational competence.
  - Compliance with employer and professional requirements.
  - Awareness of development needs.
  - Developing personal networks.

- Personal development:
  - Development of new competence.
  - Maintenance of existing competence.
  - Improvements of existing competence.
  - Commitment to vocational excellence.

- Sources of support and guidance:
  - National/industry bodies.
  - Professional institutions.
  - Education and training providers.
  - In house.
  - National Occupational Standards.
  - Current publications.
  - Benchmarks.
  - Mentoring.

- Standards of competence:
    - Job descriptions and personal specification.
    - Professional institution requirements.
    - National occupational standards.

Learning Outcome 2

- People:
    - Colleagues.
    - Junior colleagues.
    - Trainees and students.
    - Potential entrants to the industry.

- Opportunities and resources:
    - Paid time.
    - Personal time.
    - Office.
    - Site.
    - Collaboration with others.

- Knowledge and practice:
    - Lessons from own experience.
    - Lessons from others experience.
    - Published sources.

- Learning techniques and methods:
    - Attending training and educational programmes.
    - Coaching.
    - Mentoring.
    - Instructing.
    - Agreeing work based learning opportunities.
    - Performance appraisal.
    - Work shadowing/secondments.

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

The knowledge and understanding to cover the full range and scope of the learning outcomes and assessment criteria must be assessed through a professional discussion. Project artefacts which could be used to plan or prompt the professional discussion for this unit might include: a performance appraisal or training and development strategy for a project team. The project artefacts for this unit might be assessed in part with Unit 3. As a minimum, the project artefacts will include a professional development action plan and personal development record,

	documenting and planning learners' professional knowledge, skills and competences. Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. **Workplace evidence of skills cannot be simulated.**
Sector Subject areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	20
Assessment	10

Title:	Control Projects in Construction Management
Unit Number:	M/651/1802

Learning Outcomes *The learner will be able to:*		**Assessment Criteria** *The learner can:*	
1	Be able to control project quality.	1.1	Evaluate best practice guidance, statutory and organisational quality standards to prepare a project quality plan.
		1.2	Develop in line with the project quality plan, a system for the project team to inspect, control and record project quality.
		1.3	Implement the planned system in line with organisational procedures.
		1.4	Monitor the planned system in line with the project quality plan and organisational procedures, ensuring any non-compliance is addressed, and encourage feedback and recommendations for improvements from the project team.
		1.5	Critically evaluate in conjunction with best practice guidance, statutory and organisational quality standards, any improvements and recommendations from the project teams' feedback; capture these improvements by updating the project quality plan and system.
2	Be able to control legal and contractual project compliance.	2.1	Analyse legal, contractual and industry standards to determine project compliance issues.
		2.2	Critically evaluate the project compliance issues with the project information to formulate a plan for corrective action.
		2.3	Design a system, in line with the plan, for corrective action, to ensure that any required legal, contractual and industry standards consents are obtained.
		2.4	Implement the system in line with organisational policy, ensuring the project team are briefed on project compliance issues and the corrective actions required, before project commencement.
		2.5	Monitor the systems, in line with legal, contractual and industry standards, as well as organisational procedures and project information, to determine any changes that may impact on project compliance issues and update the corrective action plan.

3	Be able to control project progress.	3.1	Critically evaluate project information, resources and timescales to prepare a project programme.
		3.2	Plan procedures in line with organisation policy to monitor progress against the project programme and to communicate change to both stakeholders and the project team.
		3.3	Implement the procedures in line with organisation policy.
		3.4	Monitor the project programme in accordance with organisation policy and the procedures, evaluating any progress deviations to determine variations in time and resource.
		3.5	Analyse with the project team the circumstances of any variation, in line with the project information and project programme to determine corrective actions, ensuring such actions minimise as far as is practical, increases in time and resource.
		3.6	Implement correct actions in line with organisational procedures, obtaining agreement from stakeholders and revising the project programme.
4	Be able to control project value and costs.	4.1	Critically evaluate project information, contractual procedures, and the project budget to value engineer project work packages to achieve cost savings without compromising project quality.
		4.2	Analyse project information, work packages and contractual procedures to design a project cost control system to measure, record and disseminate cost and value data to the project team and stakeholders.
		4.3	Implement the project cost control system in line with organisational procedures.
		4.4	Monitor the project cost control system, critically evaluating cost and value data in line with project information, contractual procedures and the project budget to determine any early warnings for cost overruns or opportunities for cost savings.
		4.5	Analyse both the early warnings and opportunities for cost savings with the project team, measuring the work in line with contractual procedures to cost variations, and communicate and agree these with stakeholders.

Title:	Control Projects in Construction Management
Additional information about this unit	
Assessment Requirements	The following ranges apply: **Learning Outcome 1** • Quality standards: o Statutory requirements. o Project specifications. o British Standards. o International Standards. o Codes of practice. o Organisation standards. o Trade advisory guidance and best practice. o Setting out information. o Benchmarks. o Dimensional control checks. o Certification and accreditation of products, systems and personnel. • Project team: o Client. o Workforce. o Contractors. o Consultants. o Subcontractors and suppliers. o Partners in the programme. • Systems: o Inspection and test plans. o Implementing corrective action. o Records. o Project quality plan. o Comparison with standard documentation. o Comparison with manufacturers documentation. o Meetings. o Contractors' reports. o Site inspection reports. o Dimension checks. o Supply chain management. o Audits.

Learning Outcome 2

Legal, contractual and industry standards requirements and responsibilities for:

- Planning approvals and conditions.
- Building regulation.
- Environmental health.
- Health, safety and welfare.
- Environment (e.g. Noise, dust, transport, emissions, waste management).
- Compliance for new products and technologies.
- Certificates & accreditation on products, systems and personnel.
- Fire.
- Utilities.
- Highways.
- Heritage and conservation.
- Ecology.
- Development licenses and building permits.
- Employment practice.
- Community benefits.
- Bylaws.
- Non-statutory guidelines.
- Energy use.
- Insurance.
- Warranties.
- Project activities.
- Security.

- Project team:
  - Client.
  - Workforce.
  - Contractors.
  - Consultants.
  - Subcontractors and suppliers.
  - Partners in the programme.

- Monitoring systems:
  - Inspection and test plans.
  - Implementing corrective action.
  - Records.
  - Audits.
  - Comparison with design requirements.
  - Comparison with standard documentation.
  - Checking manufacturers' documentation.
  - Checking delivery notes.
  - Sampling.
  - Testing.
  - Site inspection reports.
  - Contractors' reports.

- Meetings.
- Dimension checks.
- Supply chain management.

- Corrective action:
  - Instigate contingency action.
  - Restore compliance.
  - Agree waiver.

Learning Outcome 3

- Information:
  - Inspection and testing.
  - Resource records.
  - Site inspection reports.
  - Contractors' reports.
  - Certified payments.
  - Written, graphical and electronic records of actual work against programmed work.
  - Photographs.
  - Meetings.
  - Organisational procedures.
  - Management reports.
  - Benchmarks.
  - Comparison with project requirements.
  - Programmes.
  - Schedule of deliverables.
  - Supply chain management.

- Programmes:
  - Digital timeline model.
  - Bar charts.
  - Flow charts.
  - Network analysis.
  - Critical path.
  - Line of balance.
  - Time chainage.
  - Action lists.
  - Method statements.
  - Check costs.
  - Control systems.
  - As built programme.
  - Project expenditure forecasts.

- Resources:
  - People.
  - Plant and equipment.
  - Materials and components.
  - Finance.
  - Time.
  - Specialist services.

    - Public utility services.
    - Information.

- Project team:
    - Client.
    - Workforce.
    - Consultants.
    - Contractors.
    - Subcontractors and suppliers.
    - Partners in the programme.
    - Facilities/asset manager.

- Deviations:
    - Resource shortages.
    - Design problems and constraints.
    - Industrial disputes.
    - Lack of essential construction information.
    - Construction errors and rework.
    - Weather conditions.
    - Physical constraints.
    - Legal.
    - Environmental.
    - Poor scope definition.
    - Contract variation.
    - Force majeure.

- Quantify:
    - Method study.
    - Work study.
    - Production analysis.
    - Cost implication.

- Corrective action:
    - Restore progress in accordance with agreed programme.
    - Agree new completion dates.
    - Secure additional resources.
    - Alter planned work.

- Stakeholders:
    - The client.
    - Prospective occupiers/owners.
    - Prospective users.
    - Regulatory authorities.
    - Government agencies.
    - Public interest organisations.
    - Public utilities.

Learning Outcome 4

- Project cost control systems:
  - Contractual procedures and meetings.
  - Operational procedures and meetings.
  - Open book accounting.
  - Electronic recording.
  - Project work packages.
  - Early warnings.

- Value and cost data:
  - Materials and quantities.
  - Plant and equipment.
  - People.
  - Sub-contractors.
  - Dayworks.
  - Periodic valuations.
  - Work in progress.
  - Final accounts.
  - Methods of measurement.
  - Retention sums.
  - Forecasts of expenditure.
  - Project budget.
  - Performance information.
  - Indirect costs.
  - Variations.
  - Contract programme and progress.

- Corrective action:
  - Contract programme and progress.
  - Control expenditure to conform with budgets.
  - Agree additional costs.
  - Make a contract claim.
  - Mitigation strategy.

- Project team:
  - Client.
  - Consultants.
  - Contractors.
  - Subcontractors and suppliers.
  - Partners in the programme.
  - Stakeholders.

- Opportunities for cost saving:
  - Increase productivity.
  - Waste reduction and management.
  - Modify project management systems.
  - Resource management and logistics.
  - Applications of new technologies and materials.
  - Energy management.
  - Water.

- Recycling/materials.
- Alternative sources and types of materials.
- Reduce plant and labour resource.
- Variations in quality.
- Standardisation.
- Value engineering.
- Apply lean construction principles.
- Design out waste.
- Lean manufacturing principles.
- Offsite construction.

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

The knowledge and understanding to cover the full range and scope of the learning outcomes and assessment criteria must be assessed through a professional discussion. Project artefacts which could be used to plan or prompt the professional discussion for this unit might include: a project regulatory codes and industry standards form, inspection and test plan, change control request register, issue register, project organisation chart, project quality audit plan or a project risk register. As a minimum, the project artefacts will include:

- A project quality plan/strategy, a written plan setting out how quality will be managed on a specific construction project.
- A project programme detailing resource and timescale requirements for project activities.
- A value engineering report evaluating project requirements and desired functionality against cost.
- A cost management plan describing how project costs will be planned, recorded, tracked and controlled on the project.

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

Workplace evidence of skills cannot be simulated.

Sector Subject areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	90
Assessment	10

Title:	Plan a Construction Organisation's Workforce
Unit Number:	R/651/1803

Learning Outcomes *The learner will be able to:*		**Assessment Criteria** *The learner can:*	
1	Be able to plan workforce requirements.	1.1	Examine human resource strategic planning tools to determine specialist expertise for workforce planning.
		1.2	Analyse the organisation's strategic objectives, plans and forecasted future projects, in line with the specialist expertise, to determine issues impacting on workforce requirements.
		1.3	Evaluate the issues to establish workforce requirements.
		1.4	Assess the workforce requirements against current workforce capacity and skill sets to determine any gaps in capability.
		1.5	Evaluate the gaps in capability to formulate a workforce plan.
		1.6	Justify the workforce plan to key decision makers.
2	Be able to manage workforce plans.	2.1	Formulate a system, in line with the workforce plan, to meet an organisation's long-term, medium-term and short-term workforce requirements.
		2.2	Implement the system, in line with organisational and human resource policy.
		2.3	Monitor the system, in line with organisational and human resource policy, to determine employee retention rates and turnover.
		2.4	Evaluate employee retention rates and turnover against historic performance and relevant industry sectors, to determine any employment issues.
		2.5	Evaluate the employment issues, justifying to decision makers improvements to human resource polices and practice.

Title:	Plan a Construction Organisation's Workforce
Additional information about this unit	
Assessment Requirements	The following ranges apply: **Learning Outcome 1** • Human resource strategic planning tools: o Environmental scanning. o Labour turnover. o Exit forecasting. o Succession planning. o Talent management. o 360 degree assessments. o HR competitive analysis. o Individual and corporate learning plans. o Labour supply forecasting. o Retention forecasting. o Strengths, weaknesses, opportunities, threats (SWOT). • The organisation's strategic objectives and plans: o Maintain profitability. o Increase revenue. o Manage costs. o Increase share of market. o Improve reputation. o Broaden product offering. o Improve customer satisfaction. o Innovate. o Reduce waste. o Reduce energy usage. o Quality. o Ensure compliance. o Increase productivity. o Retain the best people and teams. o Corporate values. o Environmental impact. o Efficiency of systems (including information technology). o Understand client's needs. • Workforce issues: o Succession planning. o Flexible working. o Labour demand and supply forecasting. o Recruitment and retention planning. o Skills audit gap analysis. o Talent management. o Multi-skilling.

    - Key performance indicators (KPI).
    - Human Capital Management (HCM).

- Forecasted future projects:
    - Financial plan.
    - Work quantity.
    - Change documents.
    - Contractual commitments.
    - Competition.

- Workforce capacity and skills:
    - Communication.
    - Problem solving.
    - Team working.
    - Creativity and innovation.
    - Technical skills.
    - Advanced IT.
    - Customer service.
    - Professional competence.
    - Staffing levels.
    - Seasonal demand.
    - Project demand.
    - Team capabilities.
    - Work roles.

- Workforce plan:
    - Recruitment plans.
    - Learning and development plans.
    - Retention plans.
    - Succession plans.
    - Project demand.
    - Appraisal and review plans.
    - Skill and competences.
    - Critical job roles and gaps.
    - Leadership.
    - Sustainability.
    - Timescales - short-term, medium-term and long-term.

Learning Outcome 2

- Human resource policy and practice:
    - Law and regulations.
    - Employment policies.
    - Organisation charts.
    - Job descriptions.
    - Performance evaluation.
    - Competency framework.

- Employment issues:
    - Job sharing.

- Retirement.
- Working from home.
- Flexible working hours.
- Maternity and paternity.
- Equality and diversity.
- Dismissal.
- Secondment.
- Whistle blowing.
- Disability.

- Historic and industry sector performance:
  - Sector salary review data.
  - Sector equality and diversity data.
  - Company employee retention data.
  - Company sickness and absentee records.
  - Company recruitment data.

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

The knowledge and understanding to cover the full range and scope of the learning outcomes and assessment criteria must be assessed through a professional discussion. Project artefacts which could be used to plan or prompt the professional discussion for this unit might include: a performance-potential matrix, exit interview, scenario plan, or analysis from a HR dashboard. Another project artefact might be a strategic workforce planning map to show how workforce planning activities align with organisational strategy. As a minimum, the project artefacts will include a workforce plan addressing the gap between an organisation's existing workforce and future human capital requirements.

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

Workplace evidence of skills cannot be simulated.

Sector Subject areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	35
Assessment	10

Title:	Direct the Management of Design Development and Processes in Construction Management
Unit Number:	T/651/1804

Learning Outcomes *The learner will be able to:*		**Assessment Criteria** *The learner can:*	
1	Be able to determine hazards and risks in the design development process.	1.1	Formulate and implement arrangements, in line with organisational policy to ensure that clients are made aware of their obligations under health, safety and welfare legislation, regulations and guidelines with regard to design development.
		1.2	Formulate and implement systems in collaboration with stakeholders, in line with organisational policy to ensure design compliance with health, safety and welfare legislation, regulations and guidelines.
		1.3	Plan systems to ensure that hazards and risks arising from design, construction and final facility operation are determined.
		1.4	Implement systems in line with the plan, legislation, regulations, guidelines and organisational policy.
		1.5	Monitor systems in line with organisational policy to evaluate hazards and the significance of risks on an iterative basis throughout the design development process.
2	Be able to reduce risks in design solutions.	2.1	Plan systems to evaluate project design solutions, in line with health, safety and welfare legislation, regulations and guidelines, to determine, eliminate and/or reduce risks.
		2.2	Implement systems in line with organisational policy during design development, in collaboration with the project team and stakeholders, encouraging a responsible culture of health, safety and welfare, to reduce risk during the design stage.
		2.3	Monitor the systems in line with organisation policy and health, safety and welfare legislation, regulations and guidelines to ensure that design risks are reduced, and any residual risks are documented.
		2.4	Plan and implement systems in line with organisational policy to communicate residual design risk documentation to stakeholders, so that they can comply with their duties under health, safety and welfare legislation, regulations and guidelines.

2	*Cont.*	2.5	Evaluate the systems, implementing reviews and improvement to design solutions in line with organisational policy, where community safety measures have not been given equal priority over project safety measures when reducing risks.
3	Be able to manage the design process.	3.1	Evaluate, with stakeholders, project information in line with organisational policy and procurement systems, to determine project design information requirements.
		3.2	Design systems to prepare project design information for key project stages, that maintain coherence and consistency of all aspects of the project design with overall design concepts.
		3.3	Implement the systems in line with organisational policy.
		3.4	Monitor the systems in line with organisational policy, to ensure that design techniques for investigating, calculating, testing, developing and specifying the design information comply with best practice, codes, standards and regulations.
		3.5	Prepare a strategy for project delivery, in line with the project brief, determined goals and identified matters, that incorporates cost and timelines and makes the best use of the capabilities of all project team members.
		3.6	Formulate and present design information to the project team and stakeholders in line with organisational policy.

Title:	Direct the Management of Design Development and Processes in Construction Management

Additional information about this unit

Assessment Requirements

The following ranges apply:

Learning Outcome 1

- Clients:
  - Customers.
  - Owners.
  - Users.
  - Occupiers.

- Relevant health, safety and welfare regulations and legal framework:
  - Current health, safety and welfare regulations.
  - Construction and building regulations.
  - International law, standards and practice.
  - Contract and procurement.

- Stakeholders:
  - Principal Designer (or recognised body under the CDM Regulations).
  - Other designers.
  - Advisors.
  - Clients.
  - Construction managers.
  - Contractors and specialist contractors.

- Hazards:
  - Working at height.
  - Slips, trips and falls (same height).
  - Debris.
  - Falling or moving objects.
  - Incorrect manual handling.
  - Health issues.
  - Power sources.
  - Hazardous substances.
  - Trapped by something collapsing or overturning.
  - Confined spaces.
  - Fire.
  - Obstructions.
  - Moving vehicles.
  - Water.
  - Lack of security/breaches.
  - Sector or context specific.

- Consequences:
    - Injuring people.
    - Causing ill health.
    - Damaging property.
    - Adversely affecting the natural and built environment.
    - Contravening legislative requirements.
    - Litigation and prosecution.
    - Causing adverse publicity/perception.
    - Working conditions and circumstances, buildability.
    - Alienating workforce/team members.
    - Economic and business factors (positive or negative).
    - Language barriers.

- Operations and individual activities during:
    - Site establishment.
    - Constructing (infrastructure, structure, building fabric, prefabrication, finishes, services and equipment, landscape, temporary works).
    - Using and operating plant and machinery.
    - Cleaning.
    - Maintaining.
    - Altering.
    - Demolition.
    - Commissioning and decommissioning.
    - Refurbishing.
    - Proximity to existing services and obstructions.

- Assess:
    - Likelihood of occurrence.
    - Severity of harm incurred.

- Significance of risks:
    - Common.
    - Generic.
    - Not obvious to a competent contractor or designer.
    - Likely to be difficult to manage effectively.

Learning Outcome 2

- Hazards:
    - Working at height.
    - Slips, trips and falls (same height).
    - Debris.
    - Falling or moving objects.
    - Incorrect manual handling.
    - Health issues.
    - Power sources.

    - Hazardous substances.
    - Trapped by something collapsing or overturning.
    - Confined spaces.
    - Fire.
    - Obstructions.
    - Moving vehicles.
    - Water.
    - Lack of security/breaches.
    - Sector or context specific.

- Developing and modifying design:
    - Identifying project requirements.
    - Planning.
    - Investigation.
    - Verifying competence and resources.
    - Analysis.
    - Identifying interactions.
    - Calculation.
    - Testing.
    - Selecting materials, components and systems.
    - Assessing costs & benefits (including life cycle).
    - Detailing and specifying.
    - Assessing buildability.

- Measures:
    - Control at sources.
    - Cumulative protection.
    - Manage residual risks.

- Risks:
    - Common.
    - Generic.
    - Not obvious to a competent contractor or designer.
    - Likely to be difficult to manage effectively.

- Relevant health and safety regulations and guidelines:
    - Current health, safety and welfare regulations.
    - Construction and building regulations.
    - International law, standards and practice.
    - Codes of practice.
    - Industry guides.

- Other people involved:
    - Contractors.
    - Cleaners.
    - Maintainers.
    - Owners.
    - Users.

- Design documentation:
  - Drawings.
  - Specifications.
  - Models.
  - Calculations.
  - Health and safety plans and files.

Learning Outcome 3

- Stakeholders:
  - The client.
  - Principal designer (or recognised body under the CDM regulations).
  - Consultants.
  - Potential contractors.
  - Potential subcontractors and suppliers.
  - Regulatory authorities.
  - Facilities/asset maintenance managers.
  - Users.
  - General public.
  - Site visitors.

- Project stages:
  - Stage 4 (Design).
  - Stage 5 (Build and Commission).

- Format:
  - In writing.
  - Graphically.
  - Electronically.

- Parts of the overall project design:
  - Location and size.
  - Assembly and construction/installation.
  - Components and systems.
  - Specification.
  - Environmental assessment objectives.

- Maintain coherence and consistency:
  - Visual and spatial.
  - Functional performance.
  - Technical performance.
  - Quality.
  - Requirements of relevant legislation and codes.
  - Obsolescence/design life.
  - Cost.
  - Health and safety.
  - Environmental factors.
  - Sustainability.
  - Buildability/disassembly.
  - Maintenance/operation and use.

- Value management.
- Concurrent design and construction.
- Minimise emissions and waste.
- Energy use (U value calculations, building energy assessment, carbon rating).
- Protect archaeological and historically valuable resources.
- Carbon footprint.
- Grey water usage.
- Risk/confidence in information.

- Techniques:
  - Data research.
  - Comparison with regulations.
  - Specialist guidance and best practice.
  - Relevant previous solutions and feedback.
  - Computer modelling.
  - Building Information Modelling.
  - Calculation.
  - Lifetime impact modelling.
  - Maintain risk register.
  - Performance dynamic modelling.
  - Comparison of costs of new and renewable energy.

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

The knowledge and understanding to cover the full range and scope of the learning outcomes and assessment criteria must be assessed through a professional discussion. Project artefacts which could be used to plan or prompt the professional discussion for this unit might include: risk assessments, risk register, health and safety file, pre-construction information, or construction phase plan. As a minimum, the project artefacts will include a risk management plan detailing how risks will be owned, evaluated, controlled, reviewed and reported upon for a project. A design management plan is also required; this typically encompasses a design responsibility matrix, schedule of necessary drawings and design programme of key dates for information exchange.

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

	Workplace evidence of skills cannot be simulated.
Sector Subject areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	110
Assessment	10

Title:	Prepare and Agree a Project Brief and Outline Programme in Construction Management
Unit Number:	A/651/1806

Learning Outcomes *The learner will be able to:*		**Assessment Criteria** *The learner can:*	
1	Be able to formulate a draft project brief.	1.1	Examine the project information with the project team and stakeholders to formulate stakeholder requirements and project aspirations.
		1.2	Critically evaluate project information, stakeholder requirements and project aspirations, to determine project requirements, risks, significant constraints and opportunities.
		1.3	Formulate project requirements, risks, significant constraints and opportunities to prepare a project brief and in line with organisation procedure agree this with stakeholders.
		1.4	Evaluate the project brief to prepare a preliminary budget and a cost benefit analysis for the project.
		1.5	Examine the cost benefit analysis and budget to determine the cost implications of adopting alternative designs, construction, services and financing arrangements, and in line with organisation procedure communicate to stakeholders.
2	Be able to develop a project outline programme.	2.1	Evaluate the project brief in line with construction industry project stages to prepare an outline project programme.
		2.2	Examine the outline project programme with stakeholders, in line with organisation procedure, agreeing any necessary modifications.
3	Be able to determine project stakeholder requirements.	3.1	Critically evaluate with project stakeholders their goals and priorities, to determine project stakeholder requirements in line with the project information.
		3.2	Analyse the project stakeholder requirements formulating a project risk register to record project constraints and risks.
		3.3	Evaluate the project risk register in line with stakeholder requirements and new regulatory or technological innovations to recommend valid project options.

3	*Cont.*	3.4	Examine the project options with stakeholders in line with organisation procedures, to determine project processes and procedures to formulate a project execution plan.

Title:	Prepare and Agree a Project Brief and Outline Programme in Construction Management

Additional information about this unit

Assessment Requirements

The following ranges apply:

Learning Outcome 1

- Stakeholders:
  - Consultants.
  - The client.
  - The client's financial advisers.
  - Statutory authorities.
  - Principal Designer (or responsible body under CDM regulations).
  - Project managers.
  - Potential contractors.
  - Potential subcontractors and suppliers.
  - Potential investors.
  - Funding agencies.
  - Independent client adviser.
  - User groups.
  - Community groups.
  - Facilities/asset managers.

- Project brief - will consider:
  - The client's requirements.
  - Project stage information requirements.
  - User requirements.
  - Design quality requirements.
  - Ergonomic requirements.
  - Community requirements.
  - Procurement requirements.
  - Physical requirements.
  - Resource requirements.
  - Construction requirements.
  - Legal requirements.
  - Cost requirements.
  - Business opportunities and objectives.
  - Risk factors.
  - Health, safety and welfare requirements.
  - Current and future needs.
  - Energy, water and natural resource management.
  - Compliance with local, regional national development strategies.
  - Building Information Modelling.
  - Insurance risks/opportunities associated with new technologies.
  - Adaptation and mitigation

- Review:
    - Cost benefit analysis.
    - Whole life costing.
    - Value management.
    - Feasibility studies.
    - Elemental cost planning and preliminary project budget.

- Present:
    - Orally.
    - In writing.
    - Graphically.
    - Electronically.

Learning Outcome 2

- Programme:
    - Timetable.
    - Phasing.
    - Integration of data.
    - Interaction between design consultants.
    - Critical path.
    - Key project stages/gate management plan.
    - Interface between design, procurement, construction, operation and end use.
    - Interaction with design approval stages.
    - Interaction with construction programme.
    - Concurrent design and construction.

- Stakeholders:
    - Consultants.
    - The client.
    - The client's financial advisers.
    - Statutory authorities.
    - Principal designer (or responsible body under CDM regulations).
    - Project managers.
    - Potential contractors.
    - Potential subcontractors and suppliers.
    - Potential investors.
    - Funding agencies.
    - Independent client adviser.
    - User groups.
    - Community groups.
    - Facilities/asset managers.

- Project stages:
    - Stage 0 (Strategy)
    - Stage 1 (Brief)
    - Stage 2 (Concept)
    - Stage 3 (Definition)

- Stage 4 (Design)
- Stage 5 (Build and Commission)
- Stage 6 (Handover and Closeout)

- Constraints:
  - Work content.
  - Time duration/sequencing.
  - Resources available.
  - Contingencies.
  - Budget.
  - Site.
  - Risk and valuation.
  - Regulations.

- Expectations:
  - Design quality.
  - Consultation.
  - Timetable.
  - Phasing of design development.
  - Best value.

Learning Outcome 3

- Clarify the project stakeholders' circumstances and requirements by:
  - Reference to standard documentation.
  - Checklists.
  - Client consultation.
  - Questionnaires.
  - Comparative field research.
  - Market research.
  - Identifying options and alternatives.
  - Use of benchmarking tool(s).
  - Digital exchange.

- Processes and procedures:
  - Project Information Plan.
  - Model Delivery Plan.
  - Information management accountabilities.
  - Implementation plans.
  - Capability assessments.
  - Delivery plans.
  - Execution plans.
  - Levels of graphical and non-graphical detail/development.

- Agree:
  - Direct with a client.
  - By negotiation and agreement with partnering team.
  - Facilitation.

- Project stakeholders:
    - Consultants.
    - The client.
    - The client's financial advisers.
    - Statutory authorities.
    - Principal Designer (or responsible body under CDM regulations).
    - Project managers.
    - Potential contractors.
    - Potential subcontractors and suppliers.
    - Potential investors.
    - Funding agencies.
    - Independent client adviser.
    - User groups.
    - Community groups.
    - Facilities/asset managers.

- Goals and priorities:
    - Quantity.
    - Design quality.
    - Time.
    - Use/adaptability/maintenance.
    - Whole life costs.
    - Health, safety and welfare.
    - Sustainability.
    - Economic benefits.
    - Community benefits.
    - Security.
    - Market demands.
    - Changing circumstances.

- Constraints and risks:
    - Cost.
    - Time.
    - Quality.
    - Health and safety.
    - The environment.
    - The client's requirements.
    - System compatibility.
    - System interoperability.
    - Project risk register.

- Present:
    - Orally.
    - In writing.
    - Graphically.
    - Electronically.

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated

	Assessment Strategy for Construction and the Built Environment. The knowledge and understanding to cover the full range and scope of the learning outcomes and assessment criteria must be assessed through a professional discussion. Project artefacts which could be used to plan or prompt the professional discussion for this unit might include: a preliminary construction project budget; cost benefit analysis; risk register conveying commercial, technical, statutory and financial risks and constraints; or an outline construction programme describing the sequence of tasks to be undertaken as part of the project. As a minimum, the project artefacts will include a project brief defining all project requirements, as well as a project execution plan that establishes methods to execute, monitor and control the project. Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. **Workplace evidence of skills cannot be simulated.**
Sector Subject areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	90
Assessment	10

Title:	Sustainability and Environmental Impact of Developments in Construction Management
Unit Number:	D/651/1807

Learning Outcomes *The learner will be able to:*		**Assessment Criteria** *The learner can:*	
1	Be able to appraise the environmental impact of development proposals.	1.1	Examine with stakeholders and experts, codes of practice, legislation and policy documentation to determine the requirements for assessing the environmental impact of development proposals.
		1.2	Evaluate the requirements in line with project information, to determine the criteria and factors to be included within the environmental impact assessment.
		1.3	Plan systems to formulate the relevant environmental data required to examine the development proposal.
		1.4	Implement the systems in line with organisational policy.
		1.5	Analyse the collated environmental data to assess the environmental impact of the selected criteria and factors both individually and in combination.
		1.6	Evaluate the environmental impact assessment in line with project information, to determine potential alternative development and design solution, in order reduce environmental impact, improved environmental quality and increased sustainability.
		1.7	Plan and implement a system to report on the significance of the environmental impact assessment to stakeholders.
2	Be able to establish sustainability requirements.	2.1	Examine project information, codes of practice, legislation and policy documentation to determine development goals and priorities.
		2.2	Evaluate the development goals and priorities to establish the design, function and performance requirements of the potential project.
		2.3	Evaluate the design, function and performance requirements in line with project information, to appraise the economic factors and resources, environmental and ecological factors, and social views that affect the future asset value and sustainability of the potential development.

2	*Cont.*	2.4	Formulate the economic factors and resources, environmental and ecological factors and social views into a development strategy that presents the best balance between the potential asset value and sustainability, and the required project design, function, performance, and return on investment.
		2.5	Plan and implement a system to justify development strategies to decision makers.
3	Be able to establish sustainable resources.	3.1	Examine published literature and consult with authorities to determine the factors that impact on the utilisation and sustainability of renewable resources.
		3.2	Critically evaluate in line with the factors and project information, the technical performance and environmental implications of alternative resources, against the performance of existing finite resources fulfilling a similar function.
		3.3	Evaluate the technical performance and environmental implications to recommend strategies for developing alternative resources that provide positive technical and environmental advantages.
		3.4	Analyse the costs implications of the recommended strategies.
		3.5	Plan and implement a system to justify strategies for developing alternative resources to stakeholders.

Title:	Sustainability and Environmental Impact of Developments in Construction Management

Additional information about this unit

Assessment Requirements

The following ranges apply:

Learning Outcome 1

- Requirements:
  - Social and community obligations.
  - Legal obligations.
  - Current codes of practice.
  - Feasibility.
  - Conditions to be applied to the proposal.
  - Significant environmental issues and effects.
  - Examining alternatives.
  - Proposing appropriate mitigation measures.
  - Environmental organisations and consultees policy documentation.

- Proposals:
  - Individual projects.
  - Strategic policies, plans and proposals.

- Factors:
  - Environmental impact and sustainability.
  - Quantity.
  - Quality (including design).
  - Cost (including whole life costs/return on investment).
  - Time.
  - Social (community use and adaptability).
  - Programme.
  - Transport impact minimisation.

- Criteria:
  - Primary and secondary effects.
  - Positive and negative.
  - Risk and opportunity.
  - Construction, operation and decommissioning stages.
  - Temporary, cumulative and permanent.
  - Short and long term.

- Relevant data:
  - Project baseline information.
  - Survey information.
  - Relevant standards.
  - Relevant legal, regulatory and policy requirements.
  - Historical.

- Project.

- Alternative solutions:
  - Different locations.
  - Different sites.
  - Brownfield development.
  - Different layouts.
  - Extending the use of existing resources.
  - Renewable energy technology.
  - Use of alternative resources.
  - Changes to implementation and phasing.
  - Not carrying out the proposal.

Learning Outcome 2

- Goals and priorities:
  - Quantity.
  - Cost (including whole life costs).
  - Time.
  - Development.
  - Improvement.
  - Use.
  - Maintenance.
  - Low carbon design.
  - Environmental impact and sustainability.
  - Security.
  - Health and safety.
  - Logistics.

- Investigate:
  - Use of benchmarking tools.
  - Insurance risk.
  - Research.
  - Consultancy advice.
  - Regulatory advice.

- Economic factors and resources:
  - Finance.
  - Fiscal policy (including carbon tax/incentives).
  - Water demand/supply/use minimisation.
  - Payback/return on investment.
  - Carbon trading schemes/carbon reduction credits.
  - Climate change levy agreements.
  - Workforce (skills).
  - Raw materials.
  - Manufactured systems and component/modular systems.
  - Energy use/demand minimisation.
  - Water demand/supply/use minimisation.
  - Brownfield development.

- Land use.
- Resource efficient low carbon urban design.
- Market demands and social factors.

- Environmental and ecological factors:
  - Natural resources.
  - Emissions (air, land, water).
  - Waste and recycling.
  - Effluent.
  - Access to environmentally sensitive areas.
  - Effects of climate change.
  - Land use contamination.
  - Carbon use minimisation.
  - Water use.
  - Biodiversity.
  - Renewable energy technology.
  - Protect archaeological and historically valuable resources.
  - Transport impact minimisation.

- Social views:
  - Client.
  - Funders/investors.
  - Workforce.
  - Suppliers.
  - Users.
  - Community (including public and private space).

- Asset value and sustainability:
  - Provide capital growth.
  - Location in relation to a stable economy and community.
  - Saleable revenue.
  - Minimising running costs (environmental and economic).
  - Minimising maintenance.
  - Location in relation to flooding/ground conditions.
  - Energy use/demand minimisation.
  - District heating.

Learning Outcome 3

- Information sources:
  - Desk research of published literature.
  - Commissioned research.
  - Consultation with appropriate authorities.
  - Consultation with colleagues.

- Factors:
  - Nature.
  - Location.
  - Continued availability.
  - Energy use/demand/storage capacity.
  - Climate change impact.
  - Carbon use.
  - Waste.
  - Water use.
  - Biodiversity.

- Utilisation:
  - Historic use.
  - Current use.
  - Anticipated future use.

- Resources:
  - Alternative power generation schemes and implications on design and master planning.
  - Solar, wind, biomass, CHP, photovoltaic, ground source heat pump, air source heat pump, hydrogen; fuel cell).
  - Hydro, wave and tidal power.

- Environmental implications:
  - Social.
  - Cultural.
  - Technical.
  - Economic (including funding/tax incentives).
  - Visual.
  - Political.
  - Legal.

- Present:
  - Oral.
  - Written.
  - Graphically.
  - Electronically.

- Stakeholders:
  - Immediate superiors and managers.
  - Elected representatives.
  - Public servants.
  - Shareholders.

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

	The knowledge and understanding to cover the full range and scope of the learning outcomes and assessment criteria must be assessed through a professional discussion. Project artefacts which could be used to plan or prompt the professional discussion for this unit might include: environmental impact assessment, heritage survey, ecology report, noise survey, air quality report, water quality report, landscape assessment and embodied energy life cycle assessment. As a minimum the project artefacts will include an environment management plan, identifying the key environmental issues across the project and provide strategies and plans to manage them effectively. Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. **Workplace evidence of skills cannot be simulated.**
Sector Subject areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	80
Assessment	10

Title:	Evaluate Sustainable Resources and Requirements for the Whole Lifecycle of a Construction Project
Unit Number:	F/651/1808

Learning Outcomes *The learner will be able to:*		**Assessment Criteria** *The learner can:*	
1	Be able to evaluate project whole life and low carbon costs.	1.1	Confirm energy goals and priorities for the project, both currently and in the future.
		1.2	Confirm assumptions about cost elements, alternative designs, construction, services, financing and use options for the project stage with stakeholders.
		1.3	Review and present the potential whole life costs and low carbon cost of the project from available design and development information.
		1.4	Assess and quantify the whole life costs and low carbon cost implications for the project taking into account the views of experts and project stakeholders.
		1.5	Review the whole life costs and low carbon costs against the project criteria and energy goals and priorities.
		1.6	Summarise and present clearly and accurately the whole life costs and low carbon costs.
		1.7	Discuss the whole life costs and low carbon costs with stakeholders and select and agree the most viable options.
2	Understand how to evaluate project whole life and low carbon costs.	2.1	Explain how to confirm energy goals and priorities for the project, both currently and in the future.
		2.2	Explain how to confirm assumptions about cost elements, alternative designs, construction, services, financing and use options for the project stage with stakeholders.
		2.3	Examine how to review the potential whole life costs and low carbon costs of the project from available design and development information.
		2.4	Explain how to present the potential whole life costs and low carbon costs of the project from available design and development information.

2	*Cont.*	2.5	Examine how to assess and quantify the whole life costs and low carbon costs implications for the project taking into account the views of experts and project stakeholders.
		2.6	Examine how to review the whole life costs and low carbon costs against the project criteria and energy goals and priorities.
		2.7	Explain how to summarise the whole life costs and low carbon costs.
		2.8	Explain how to present the whole life costs and low carbon costs.
		2.9	Explain how to discuss the whole life costs and low carbon costs with stakeholders.
		2.10	Evaluate how to select the most viable options.
		2.11	Evaluate how to agree the most viable options.
3	Be able to assess and provide for the conservation of energy use.	3.1	Review legislative requirements in order to identify the energy use and control criteria relevant to the type of property and systems.
		3.2	Ensure that the information on the property and systems necessary to assess energy use is gathered and recorded.
		3.3	Ensure that solutions which meet the criteria for the type of property and systems are reviewed, calculated and specified.
		3.4	Prescribe commissioning procedures and certification necessary for property and systems.
		3.5	Identify and define any consequent improvements that may be required to meet energy use and control criteria relevant to the type of property and systems.
		3.6	Provide operating and maintenance instructions to users to enable property and systems to be operated in an energy efficient manner.
4	Understand how to assess and provide for the conservation of energy use.	4.1	Examine how to review legislative requirements in order to identify the energy use and control criteria relevant to the type of property and systems.

4	*Cont.*	4.2	Explain how to ensure that the information on the property and systems necessary to assess energy use is gathered and recorded.
		4.3	Explain how to ensure that solutions which meet the criteria for the type of property and systems are reviewed, calculated and specified.
		4.4	Evaluate how to prescribe commissioning procedures and certification necessary for property and systems.
		4.5	Describe what to identify as any consequent improvements that may be required to meet energy use and control criteria relevant to the type of property and systems.
		4.6	Evaluate how to define any consequent improvements that may be required to meet energy use and control criteria relevant to the type of property and systems.
		4.7	Explain how to provide operating and maintenance instructions to users to enable property and systems to be operated in an energy efficient manner.

Title:	Evaluate Sustainable Resources and Requirements for the Whole Lifecycle of a Construction Project

Additional information about this unit

Assessment requirements or guidance specified by a sector or regulatory body (if appropriate).

The following ranges apply:

Learning Outcomes 1 and 2

- Energy goals and priorities:
  - Energy sources and infrastructure.
  - Energy consumption.
  - Low carbon targets.
  - Use of renewable resources.
  - Use of non-renewable resources.
  - Energy reduction programmes.
  - Heat recovery and re-use energy efficient technologies.
  - Energy efficient practices.

- Project Stage:
  - Stage 0 (Strategy).
  - Stage 1 (Brief).
  - Stage 2 (Concept).
  - Stage 3 (Definition).

- Stakeholders:
  - The client.
  - Financial advisers.
  - Consultants.
  - Potential contractors.
  - Potential subcontractors and suppliers.
  - Potential investors.
  - Partners in the development programme.
  - Facilities/asset managers.

- Whole life costs and low carbon cost:
  - Energy sources and infrastructure.
  - Design stage.
  - Materials and components (including embodied energy).
  - Construction and installation.

- Energy use.
- Grey water usage.
- Operations/maintenance.
- Adaptation/demolition/decommissioning.

- Assess and quantify:
  - Cost benefit analysis.
  - Whole life.
  - Life cycle costing.
  - Lifetime impact modelling.
  - In-use asset performance.
  - Carbon accounting.
  - Value management feasibility studies.
  - Elemental cost planning.
  - Risk management.
  - Cost effective out-performance of statutory requirements.
  - Decision tools for passive/active systems.
  - Model costs of alternative designs.

- Present:
  - Orally.
  - In writing.
  - Graphically.
  - Electronically.
  - Simulation.

Learning Outcomes 3 and 4

- Criteria
  - Carbon dioxide emissions.
  - Efficiency of construction.
  - Efficiency of building services and installation.
  - u values.
  - Continuity of insulation.
  - Air leakage.

- Property and systems:
    - New development.
    - Existing development.

- Information:
    - Building type.
    - Building size and capacity.
    - Current energy usage.
    - Building fabric.
    - Building heating, lighting and ventilation.

- Gathered and recorded:
    - Design proposals.
    - Measured survey.
    - Condition survey.
    - Energy measurement and assessment tools.

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

The knowledge and understanding to cover the full range and scope of the learning outcomes and assessment criteria must be assessed through a professional discussion. Project artefacts which could be used to plan or prompt the professional discussion for this unit might include: assessing and quantifying the whole life cost and low carbon cost implications for the project. As a minimum, the project artefacts will include a review of the project criteria against the energy goals and priorities, selecting the most viable options including: solutions that meet the energy use and control criteria; prescribing commissioning procedures and certification for the property and systems, identifying improvements required, providing operations and maintenance instructions to users.

A professional development action plan and personal development record, documenting and planning learners' professional knowledge, skills and competences will also be required.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of

	assessment methods as defined in the Consolidated Assessment Strategy. **Workplace evidence of skills cannot be simulated.**
Location of the unit within the subject/sector classification system	5.2 Building and Construction
Availability for use	Shared
Unit guided learning hours	80
Assessment	10

Title:	Establish Project Procurement Arrangements in Construction Management
Unit Number:	

Learning Outcomes *The learner will be able to:*		**Assessment Criteria** *The learner can:*	
1	Be able to formulate procurement strategies.	1.1	Evaluate with stakeholders in line with organisational policy, project information, to determine procurement objectives and criteria.
		1.2	Analyse stakeholders' constraints and legal and industry requirements, in line with the project procurement objectives and criteria, to establish a procurement method.
		1.3	Justify to stakeholders the procurement method for the project, in line with organisational policy.
2	Be able to approve project suppliers.	2.1	Examine with stakeholders the project information and procurement method, to determine selection criteria for suppliers and services.
		2.2	Design a selection procedure, in line with the selection criteria, to assess with stakeholders potential suppliers and services.
		2.3	Implement the selection procedure, in line with organisational policy, inviting potential suppliers and services to submit a statement of capabilities.
		2.4	Critically evaluate the statements of capabilities against the selection criteria to determine a short-list of suppliers and services.
		2.5	Plan and implement interviews with the short-listed potential suppliers and services to critically evaluate their capability to undertake the project against the selection criteria.
		2.6	Appraise the evaluation to select and justify to stakeholders a final list of project suppliers and services.
3	Be able to justify a form of contract.	3.1	Examine project information to determine the project stakeholders.
		3.2	Analyse with the project stakeholders the project information to determine the contract purpose and selection criteria.

3	*Cont.*	3.3	Critically evaluate the contract purpose and selection criteria, in line with legal and industry requirements, to determine a form of contract for the project.
		3.4	Justify the form of contract to project stakeholders.

Title:	Establish Project Procurement Arrangements in Construction Management
Additional information about this unit	
Assessment Requirements	The following ranges apply: **Learning Outcome 1** • Procurement objectives and criteria: o Type and form of contract. o Definition and coverage of required project services. o Alignment of interests and benefits. o Early participation of key suppliers. o Risk allocation. o Integrated project insurance. o Building Information Modelling protocols. o Economic, political and social context. o Funding sources. o Degree of commercial and financial risk. o Agreed payment procedures. o Whole life principles. o Best overall value. o Timescales/sequencing. o Environmental benefits and sustainability. o Community benefits. • Procurement methods: o Managed forms of construction. o Design and build. o Traditional. o Public, Private Partnership. o Prime contracting. o Partnering. o Advisory. o Sole source/single negotiations. o Competitive tendering. o Early contractor involvement. o Service level agreement. • Legal and industry requirements: o Common law. o Contract law. o EU directives on procurement. o Codes of practice and procedures. • Implementation procedures: o Tendering process. o Tender evaluation. o Award recommendation. o Contract award.

Learning Outcome 2

- Stakeholders:
  - The client.
  - The client's financial advisers.
  - Principal designer (or recognised body under the CDM regulations).
  - Design consultants.
  - Potential contractors.
  - Potential subcontractors and suppliers.
  - Facilities/asset managers.
  - Potential investors.
  - Funding agencies.
  - Independent client adviser.
  - User groups.

- Type of project work:
  - Design.
  - Construction.
  - Services.
  - Supply.
  - Operate and maintain.
  - Management.
  - Decommissioning.

- Objectives:
  - Business case for integration.
  - Commitment to multi-discipline partnering (whole supply chain).
  - Minimum on-site construction period.
  - Certainty of completion.
  - Minimum whole life cost.
  - Sustainable solution.
  - Agreed maximum cost.
  - Zero defects.
  - Respect for people (including health, safety, welfare and the environment).
  - Agree quality.
  - Working to budget.
  - Effective work scheduling.
  - Building Information Modelling.
  - Adoption of industry guidance and benchmarking.
  - Sharing knowledge and information.

- Selection criteria:
  - Cost.
  - Quality.
  - Time.
  - Organisational experience.
  - Performance measurement.

    - Health, safety and welfare record.
    - Environmental record.
    - Staff competence and development.
    - Commitment to integration/partnering.
    - Commitment to Building Information Modelling.
    - Social inclusivity record.

- Information:
    - Administration details.
    - Scope of work.
    - Budget.
    - Information required from partners.
    - Selection criteria and weightings.

- Capability:
    - Information modelling.
    - Organisational experience.
    - Performance measurement.
    - Health, safety and welfare record.
    - Environmental record.
    - Staff competence and development.
    - Commitment to integration/partnering.
    - Commitment to BIM capability.
    - Availability of appropriate resources.

Learning Outcome 3

- Stakeholders:
    - The client.
    - The client's financial advisers.
    - Principal Designer (or recognised body under CDM regulations).
    - Design consultants.
    - Potential contractors.
    - Potential subcontractors and suppliers.
    - Facilities/asset managers.
    - Potential investors.
    - Funding agencies.
    - Independent client adviser.
    - User groups.

- Criteria for selecting:
    - Client's needs and requirements.
    - Form of procurement.
    - Degree of risk.
    - Technical complexity.
    - Project partnering.
    - Sector practice.

- Form of contract:
  - Standard.
  - Non-standard.

- Type of project work:
  - Design.
  - Construction.
  - Services.
  - Management.
  - Operate and maintenance.
  - Decommissioning.

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

The knowledge and understanding to cover the full range and scope of the learning outcomes and assessment criteria must be assessed through a professional discussion. Project artefacts which could be used to plan or prompt the professional discussion for this unit might include: business case, contract review report, statement of capability, supplier assessment, approved supplier/qualified bidders list or forms of contract. As a minimum, the project artefacts will include a construction procurement strategy to evaluate the client's objectives against intended payment routes, and how design and construction specific risks are to be allocated such as time, cost and quality.

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

Workplace evidence of skills cannot be simulated.

Sector Subject areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	60
Assessment	10

Title:	Ensure That Contracts Are Prepared, Negotiated and Agreed in Construction Management
Unit Number:	

Learning Outcomes *The learner will be able to:*		**Assessment Criteria** *The learner can:*	
1	Be able to formulate forms of contract.	1.1	Examine project and procurement information to justify the selection of contract documents and a standard form of contract.
		1.2	Appraise the standard form of contract, to determine any amendments to the clauses and contract documents, required in line with project procurement information.
		1.3	Evaluate, after legal advice, the amendments in line with project information, to determine the project implications of adopting non-standard clauses and contract documents.
		1.4	Communicate and justify to stakeholders the project implications and adoption of any non-standard form of contract and clauses, in line with organisational policy.
		1.5	Produce contract particulars and preliminaries to meet stakeholders' requirements in line with the adopted form of contract.
		1.6	Design and implement systems to check that all contract documents, meet statutory requirements, and are approved in line with organisational policy.
		1.7	Evaluate contract documents to determine the obligations of the parties to the contract.
		1.8	Design and implement systems to obtain written proof that parties are able to meet contract obligations, in line with legal requirements and organisational policy.
		1.9	Monitor contract documents to ensure the final contract documents are prepared, checked and executed in line with legal requirements and organisational policy.
2	Be able to negotiate and agree contracts.	2.1	Formulate strategies to negotiate contracts whilst also maintaining good long-term relationships with all the stakeholders.

2	*Cont.*	2.2	Implement strategies to negotiate and agree optimum contract terms, conditions and amendments, in line with organisational policy.
		2.3	Formulate the results of negotiations into contract documents and share with stakeholders, in line with legal requirements and organisational policy.

Title:	Ensure That Contracts Are Prepared, Negotiated and Agreed in Construction Management

Additional information about this unit

Assessment Requirements

The following ranges apply:

Learning Outcome 1 and 2

- Form of contract:
  - Standard.
  - Non-standard.

- Forms of procurement:
  - Competitive tender.
  - Non-competitive.

- Drafted:
  - Allocation of risks and responsibilities.
  - Structure of contract.
  - Key instructions.
  - Legal factors.
  - Business standing orders.
  - Fair and prompt payment arrangements.
  - Intention to create legal relations.
  - Consideration.

- Obligations:
  - Insurances.
  - Bonds.
  - Warranties.
  - Statutory.
  - Financial guarantees.
  - Competence of people.
  - Deliverables.
  - Sub-contractors.
  - Guarantees.

- Amendments:
  - Allocation of risks and responsibilities.
  - Structure of contract.
  - Key instructions.
  - Legal factors.

- Contract documents:
  - Invitation to tender.
  - Forms of tender.
  - Returns procedures.
  - Specifications.
  - Survey reports.
  - Drawings and schedules.

- Bills of quantities/schedules of rates.
- Health and safety plans.
- Scope of services.
- Building Information Modelling (BIM).
- Terms and conditions.

- Legal requirements:
  - Statutes.
  - Regulations.
  - Codes of practice and procedure.
  - Common law.
  - Tort.
  - Civil law.
  - Contract law.

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

The knowledge and understanding to cover the full range and scope of the learning outcomes and assessment criteria must be assessed through a professional discussion. Project artefacts which could be used to plan or prompt the professional discussion for this unit might include: standard forms of contract, contract conditions, preliminaries, performance criteria or warranties. As a minimum, the project artefacts will include a contract review document to evaluate whether all the key areas of the project information have been fully addressed within the contract.

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

Workplace evidence of skills cannot be simulated.

Sector Subject areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	60
Assessment	10

Title:	Evaluate and Progress The Resolution of Contractual Disputes in Construction Management
Unit Number:	M/651/1811

Learning Outcomes *The learner will be able to:*		**Assessment Criteria** *The learner can:*	
1	Be able to evaluate implications for the resolution of disputes.	1.1	Examine information relating to the dispute to determine evidence that will support the case.
		1.2	Evaluate the evidence to ascertain the strengths and weaknesses of the case, formulating in line with organisational policy and legal requirements, a judgement on the likely outcome.
		1.3	Design systems to obtain legal, technical and financial expertise at each stage of the dispute.
		1.4	Implement the systems in line with organisational procedures.
		1.5	Appraise the experts' arguments and the advice, to justify conclusions and recommendations for further action to the parties involved in the dispute.
		1.6	Evaluate the conclusion and recommendations, in line with legal requirements, financial plans and organisational procedures, to determine the implications of proceeding with the case.
		1.7	Appraise the implications, to determine the potential options and risks associated with settling the dispute.
		1.8	Justify an option for settling the dispute that mitigates risk, meets legal requirements, and is likely to be acceptable to all the parties.
		1.9	Implement the option for settling the dispute, in line with legal and organisational procedure, preparing written terms and conditions.
2	Be able to negotiate the resolution of disputes.	2.1	Design and implement a system to share documents and supporting information concerning the dispute, in line with organisational and legal procedures.
		2.2	Evaluate reactions and proposals from opposite parties to the documents and supporting information, and recommend responses.

2	*Cont.*	2.3	Formulate and communicate, in line with organisational and legal procedure, questions based on the recommended responses to test the opposite parties' position and to probe for possible movement.
		2.4	Monitor and evaluate responses to questions, summarising and recording points of agreement and disagreement.
		2.5	Appraise the points of agreement and disagreement to justify to decision makers the acceptance of the best offer.
		2.6	Design and implement a system to draft formal acceptance letters and send them promptly to all parties.

Title:	Evaluate and Progress The Resolution of Contractual Disputes in Construction Management

Additional information about this unit

Assessment Requirements

The following ranges apply:

Learning Outcome 1

- Dispute - types:
  - Land.
  - Property.
  - Construction.
  - Contracts.
  - Agreements.
  - Third party claims.

- Information which is relevant to the dispute:
  - Contract documents.
  - Correspondence.
  - Instructions.
  - Contract records.
  - Technical reports.
  - Witness testimony.
  - Other evidential material.
  - Expert opinion.

- Expertise and support in:
  - Legal.
  - Technical.
  - Financial.

- Options and processes for settling the dispute:
  - Re-negotiation.
  - Negotiations at higher levels of authority.
  - Mediation, adjudication and arbitration.
  - Formal dispute resolution.
  - Legal action.

Learning Outcome 2

- Dispute - types:
  - Land.
  - Property.
  - Construction.
  - Contracts.
  - Agreements.
  - Third party claims.

- Options and processes for settling the dispute:
  - Re-negotiation.
  - Negotiations at higher levels of authority.

- Mediation, adjudication and arbitration.
- Formal dispute resolution.
- Legal action.

- Reactions and proposals:
  - Positive.
  - Negative.

- Responses:
  - Accepting.
  - Rejecting.
  - Clarifying.
  - Providing additional information.

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

The knowledge and understanding to cover the full range and scope of the learning outcomes and assessment criteria must be assessed through a professional discussion. Project artefacts which could be used to plan or prompt the professional discussion for this unit might include: an expert witness consultancy contract, dispute cost documentation, claim documents, arbitration forms, mediation procedures, settlement agreement or correspondence between the disputing parties. As a minimum, the project artefacts should include a dispute settlement proposal presenting both the options and associated residual risks for resolving the dispute.

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

Workplace evidence of skills cannot be simulated.

Sector Subject areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	60
Assessment	10

Title:	Manage Tendering Processes in Construction Management
Unit Number:	R/651/1812

Learning Outcomes *The learner will be able to:*		**Assessment Criteria** *The learner can:*	
1	Be able to evaluate pre-qualification of tenderers.	1.1	Examine project information, in line with legal, statutory and regulatory requirements, to determine a tendering strategy.
		1.2	Appraise the tendering strategy, in line with the value and size of the contract, to establish how many potential tenderers to invite.
		1.3	Evaluate potential tenderers, in line with the tendering strategy, to determine which could meet the contract specification and conditions.
		1.4	Plan and implement enquiries to potential tenderers, in accordance with regulatory requirements, to obtain evidence about their experience and capability.
		1.5	Evaluate project information, in line with legal, statutory and regulatory requirements, to determine selection criteria to weight and rate performance for the type of work described in the tender.
		1.6	Appraise and rank potential tenderers who respond to the enquires against the selection criteria, in line with the tendering strategy.
		1.7	Justify and agree with decision makers the final list of tenderers, in line with organisational policy.
		1.8	Plan and implement systems to confirm that the selected tenderers are willing to tender, in line with the tendering strategy.
2	Be able to obtain bids and tenders.	2.1	Evaluate project information, statutory regulations and codes of practice, in line with the tendering strategy, to formulate tender information and documents.
		2.2	Plan and implement systems to ensure that tender information and documents are issued to all tenderers, in line with the tendering strategy.
		2.3	Monitor the system, responding to queries from tenderers in line with the tendering strategy.

2	*Cont.*	2.4	Plan and implement systems to ensure records are kept of the tendering process, in line with the tendering strategy and organisational procedure.
3	Be able to analyse successful bids and tenders.	3.1	Plan and implement systems to ensure that the tenders are received and opened, in line with the organisation's procedures and regulatory requirements.
		3.2	Monitor the system, in line with the tender strategy, to ensure sufficient tenders are received to demonstrate adequate competition.
		3.3	Plan and implement systems, in line with the tender strategy and regulatory requirements, to check tenders for any discrepancies, omissions and errors, and to agree amendments with tenderers.
		3.4	Evaluate the tenders against the selection criteria, in line with the tendering strategy, to determine a preferred tender.
		3.5	Plan and implement systems to check that the preferred tenderer can meet the obligations of the contract, in line with the tendering strategy.
		3.6	Justify the preferred tender to the client, in line with organisational policy and the tendering strategy.
		3.7	Plan and implement arrangements, in line with the tendering strategy, to negotiate and agree, subject to contract, any variations, adjustments and corrections with the preferred tenderer.
		3.8	Plan and implement arrangements to accept the preferred tender formally and to notify unsuccessful tenderers.

Title:	Manage Tendering Processes in Construction Management

Additional information about this unit

Assessment Requirements

The following ranges apply:

Learning Outcome 1

- Tendering strategy:
  - Estimate.
  - Open competitive tender.
  - Two stage tender.
  - 'two envelope' tender.
  - Selected list tender.
  - Negotiated.
  - Bid.
  - Design and build.
  - Design, build, finance and operate.
  - Early contractor involvement.

- Tenderers:
  - Contractors.
  - Sub/works/trade contractors.
  - Suppliers.
  - Consultants.

- Regulatory requirements:
  - Compulsory competitive tendering.
  - International.
  - In-house.
  - National.
  - Local.

- Evidence:
  - Documentary.
  - References.
  - Interview.

- Selection criteria:
  - Quality of delivery record.
  - Added value (including past performance).
  - Acceptability of known sub-contracting arrangements and supply chain organisation.
  - Acceptability to client.
  - Financial resources.
  - Credit rating.
  - References from previous clients and bankers.
  - Health, safety and welfare record.
  - Competence of people.
  - Building Information Modelling capability.
  - Systems compatibility.

- Resources (human, materials, facilities).
- Insurance.
- Environmental record.
- Design quality and costing.
- Innovation record.
- Local economic benefit.

Learning Outcome 2

- Tender information and documents:
  - Invitation to tender.
  - Form of tender.
  - Returns procedure.
  - Surveys.
  - Models.
  - Graphical and non-graphical electronic data files.
  - Drawings, schedules and programmes.
  - Bills of quantities.
  - Health, safety and welfare record.
  - Environmental record.
  - Scope of services.
  - Terms and conditions.
  - Schedules of rates.
  - Evaluation criteria and procedures.

- Tenderers:
  - Contractors.
  - Sub/works/trade contractors.
  - Suppliers.
  - Consultants.

- Queries:
  - Errors.
  - Omissions.
  - Ambiguities.

- Amendments:
  - Extension to tender period.
  - Changes resulting from queries.

Learning Outcome 3

- Regulatory requirements:
  - Statutes.
  - Regulations.
  - Codes of practice and procedure.

- Criteria:
  - Quality and delivery record.
  - Technical viability.
  - Financial viability.
  - Timescale.
  - Resources.
  - Cost (budgets, rates).
  - Loading and cash flow.
  - Policies which offer added value.
  - Comparative criteria (benchmarking).
  - Weighting.
  - Organisational policies.
  - Regulatory requirements.
  - Competence of people.
  - Building information modelling capability.
  - Information delivery.
  - Design quality and costing.
  - Community benefits.
  - Best whole life value.
  - Open book accounting.

- Tenderers:
  - Contractors.
  - Sub/works/trade contractors.
  - Suppliers.
  - Consultants.

- Variations, adjustments and corrections:
  - Price.
  - Quantity.
  - Quality.
  - Standards.
  - Logistics.
  - Completion.
  - Maintenance.
  - After sales service.
  - Method of payment.
  - Contract conditions.
  - Scope of service.
  - Terms and conditions.
  - Client amendment.

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

The knowledge and understanding to cover the full range and scope of the learning outcomes and assessment criteria must be assessed through a professional discussion. Project artefacts

	which could be used to plan or prompt the professional discussion for this unit might include: an invitation to tender letter, preliminaries (such as pre-construction information), form of contract, contract conditions, tender pricing document, specification, design drawings, requests for information (RFI), response to tender questions and tender submission documents. As a minimum, the project artefacts will include a tender evaluation document providing a brief history of the tender process and an analysis of each tender submission, including any subsequent post tender negotiations. Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. **Workplace evidence of skills cannot be simulated.**
Sector Subject areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	50
Assessment	10

Title:	Manage The Preparation and Submission Of Estimates, Bids and Tenders in Construction Management
Unit Number:	T/651/1813

Learning Outcomes *The learner will be able to:*		**Assessment Criteria** *The learner can:*	
1	Be able to evaluate estimate, bid and tender enquiry documentation.	1.1	Examine organisational policy, statutory and regulatory requirements with decision makers, to agree criteria for tender enquiry assessment.
		1.2	Plan confidential systems to evaluate tender documents, in line with organisational policy, budgets and tender time limits.
		1.3	Implement systems evaluating the tender documents, against the agreed criteria to appraise whether the organisation is capable of meeting the tender requirements.
		1.4	Appraise the tender documents against the agreed criteria, to establish any points of concern and contractual or legal issues that might affect the project.
		1.5	Plan and implement systems to clarify and agree points of concern, contractual and legal issues with decision makers.
		1.6	Justify to decision makers, in line with the agreed criteria and tender documents, whether to make a bid.
2	Be able to evaluate the resource requirements and costs within an estimate, bid and tender.	2.1	Examine tender requirements and available sources, in line with organisational policy and estimate approach, to formulate a proposed method statement and draft programme.
		2.2	Evaluate that method statement and programme, in line with organisation policy and estimate approach, to determine the resources required to undertake the works.
		2.3	Formulate an overall cost estimate for the enquiry, in line with resources, tender requirements and external factors, ensuring that resource costs are estimated for each item.
		2.4	Justify the overall cost estimate to decision makers in line with organisational policy.

2	*Cont.*	2.5	Formulate and agree with decision makers payment schedules, in line with the overall cost estimate, that will meet the organisation's cash flow requirements.
3	Be able to formulate an estimate, bid and tender offer.	3.1	Examine the tender documentation and requirements, in line with organisational and regulatory requirements, to determine the risks and opportunities involved in a tender offer.
		3.2	Evaluate the risks and opportunities, in line with organisational and regulatory requirements, to formulate alternatives and qualifications to the original tender requirements.
		3.3	Appraise risks and opportunities to determine a profit margin and formulate a payment schedule, in line with the strategy of the organisation and overall cost estimate.
		3.4	Formulate the tender offer information, in accordance with procurement requirements and organisational procedure.
		3.5	Plan and implement systems to confidentially collate and communicate tender offer information to the client and other stakeholders, in line with organisational procedure and regulatory requirements.

Title:	Manage The Preparation and Submission Of Estimates, Bids and Tenders in Construction Management

Additional information about this unit

Assessment Requirements

The following ranges apply:

Learning Outcome 1

- Tender:
  - Contractor.
  - Sub/works/trade contractor.
  - Supply.
  - Consultants.

- Tender requirements:
  - Construction.
  - Installation and maintenance work.
  - Supply of goods and materials.
  - Consultancy services.

- Decision makers:
  - Clients and their agents.
  - Colleagues.
  - Line managers and directors.
  - Specialists - internal or external to organisation.

- Points of concern:
  - Inconsistent with the policy of the organisation.
  - Discrepancies within enquiry information.
  - Tender procedure requirements.
  - Quantitative requirements.
  - Qualitative requirements.
  - Contractual requirements.

- Tender documents:
  - Invitation to tender.
  - Form of tender.
  - Returns procedure.
  - Survey reports.
  - Specifications.
  - Graphical and non-graphical electronic data files.
  - Drawing schedule and programme.
  - Bills of quantities.
  - Health, safety and welfare requirements.
  - Scope of services.
  - Terms and conditions.
  - Schedule of rates.
  - Environmental requirements.
  - Procedures for submitting tenders.
  - Evaluation criteria and procedures.

- Agreed criteria:
  - Change to organisational capability.
  - Financial.
  - Viability of tendering information.
  - Current workload.
  - Type of work.
  - Competence of people.
  - Timescale (tender and contract).
  - Social and political policies.
  - Environmental impact.
  - Location.
  - Potential completion.

- Legal issues:
  - Planning.
  - Health and safety.
  - Environmental.
  - Ownership.
  - Common law rights.
  - European Union requirements.

Learning Outcome 2

- Tender requirements:
  - Construction.
  - Installation and maintenance work.
  - Supply of goods and materials.
  - Consultancy services.
  - Purchasing.
  - Low carbon and resource efficient procurement.
  - Invitation to tender.
  - Form of tender.
  - Technology required.
  - Procedures for submitting tenders.

- Resources:
  - People (in-house & external).
  - Plant and equipment.
  - Materials.
  - Finance.
  - Time.
  - Supply options.

- Available sources:
  - Client brief.
  - Tender enquiry documentation.
  - Site measurements/visits.
  - Survey reports.
  - Scaled drawings.
  - Schedules.
  - Method statements.

    - Programmes.
    - Specialist contractors and suppliers.

- Estimate:
    - Cost based on a quotation.
    - Elemental cost data.
    - Unit cost built up from basic data.
    - Internal and historical cost data.
    - Published cost data.

- Calculate cost:
    - Manual.
    - Electronic.

- External factors:
    - Variations over time.
    - Location.
    - Statutory and contractual requirements.
    - Special working conditions and methods.
    - Resourcing conditions.
    - Competition.

Learning Outcome 3

- Risks and opportunities:
    - Environmental and sustainability.
    - Social.
    - Financial and market fluctuations.
    - Political.
    - Technical.
    - Health and safety.
    - Reputation.
    - Competence of people.

- Tender offer:
    - Contractor.
    - Sub/works/trade contractor.
    - Supply.
    - Consultancy.
    - Purchase.

- Alternatives and qualifications:
    - Specifications and materials.
    - Methods of construction.
    - Services.
    - Time-scales.
    - Supply options.
    - Price offer options.
    - Whole life value.

- Tender requirements:
  - Construction.
  - Installation and maintenance work.
  - Supply of goods and materials.
  - Consultancy services.
  - Delivery.

- Present:
  - Orally.
  - In writing.
  - Graphically.
  - Using computer models.
  - Electronically.

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

The knowledge and understanding to cover the full range and scope of the learning outcomes and assessment criteria must be assessed through a professional discussion. Project artefacts which could be used to plan or prompt the professional discussion for this unit might include: tender questions, tender bid preparation programme, sub-contract estimates, methods of measurement, overall cost estimates, tender risk assessment and tender offer/bid documentation. As a minimum, the project artefacts will include a tender review to assess the relevance and compliance of the proposed bid documentation to the original tender.

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

Workplace evidence of skills cannot be simulated.

Sector Subject areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	40
Assessment	10

Title:	Control Budgets and Contract Payment Entitlement in Construction Management
Unit Number:	Y/651/1814

Learning Outcomes *The learner will be able to:*		**Assessment Criteria** *The learner can:*	
1	Be able to manage budgets.	1.1	Evaluate financial plans in line with organisational policy to formulate cash flows and allocate budgets.
		1.2	Design systems, in line with cash flows, to control budgets and authorise expenditure.
		1.3	Implement the systems in line with organisational procedures.
		1.4	Monitor the systems, in line with organisation procedures and procurement processes, to determine any variances and contingencies.
		1.5	Evaluate the value of variances and contingencies, in line with procurement process and organisational procedures, to justify to decision makers changes to budgets and cash flows.
2	Be able to evaluate entitlement for payment.	2.1	Evaluate contract documents and information sources, in line with procurement processes and organisation procedures, to determine entitlement for payment and to claim additional costs.
		2.2	Design systems to quantify the value of entitlements for payment and additional costs.
		2.3	Implement the systems in line with organisation policy and procurement processes.
		2.4	Evaluate additional costs, in line with contract documentation and procurement processes, to determine liability.
		2.5	Justify to the liable parties and stakeholders the additional cost, negotiating in line with procurement processes any amendments to payment entitlement.
		2.6	Formulate and implement in line with organisational procedures auditable systems to record payments made and received.

Title:	Control Budgets and Contract Payment Entitlement in Construction Management
Additional information about this unit	

Assessment Requirements	The following ranges apply:
	
	Learning Outcome 1
	
	• Budget headings:
	  ○ Income.
	  ○ Employment costs.
	  ○ Capital plant and equipment.
	  ○ Materials.
	  ○ Liabilities.
	  ○ Subcontract costs.
	  ○ Consumables.
	
	• Financial plans:
	  ○ Forecasts.
	  ○ Budgets.
	  ○ Cash flow.
	
	• Cash flow calculations:
	  ○ Income receivable.
	  ○ Expenditure.
	
	• Contingencies:
	  ○ Delays in receivables.
	  ○ Project and contract delays.
	  ○ Interruptions.
	  ○ Risk.
	
	• Variances:
	  ○ Overspend.
	  ○ Underspend.
	
	Learning Outcome 2
	
	• Entitlement - resulting from:
	  ○ Measurement.
	  ○ Valuation of variations.
	  ○ Liability for costs.
	  ○ Loss and expense arising from breaches of contract.
	  ○ Extensions of time.
	  ○ Damages arising from extra-contractual consideration.

- Expert opinion:
  - Legal.
  - Technical.
  - Financial.

- Information sources:
  - Contract provisions.
  - Contract claims for payment.
  - Dimensions and approximations from latest revisions of contract drawings.
  - Records of executed work.
  - Inspections of work in progress.
  - Contract documents.
  - Day work.
  - Agreed contract quantities.
  - Agreed contract rates of payment.
  - Agreed methods of calculation.
  - Variations issued.
  - Contract records.
  - Site records including photographs.
  - Company accounts.

- Costs:
  - Re-work.
  - Additional work.
  - Programme implications.
  - Increased complexity.
  - Logistical implications.

- Analyse:
  - Claimant's analysis.
  - Respondent's analysis.

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

The knowledge and understanding to cover the full range and scope of the learning outcomes and assessment criteria must be assessed through a professional discussion. Project artefacts which could be used to plan or prompt the professional discussion for this unit might include: a construction project budget, cash flow, valuation document, retention calculation, variation order, purchase orders, invoices, provisional sums, contingency cost matrix or claim.

Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of

	assessment methods as defined in the Consolidated Assessment Strategy. **Workplace evidence of skills cannot be simulated.**
Sector Subject areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	30
Assessment	10

Title:	Manage Marketing and Customer Service in Construction Management
Unit Number:	A/651/1815

Learning Outcomes *The learner will be able to:*		**Assessment Criteria** *The learner can:*	
1	Be able to develop new products and services.	1.1	Examine an organisation's operations, determining its strengths and weaknesses to compete in construction markets.
		1.2	Evaluate the strengths and weaknesses, in line with potential target markets, to determine the organisation's opportunities and threats.
		1.3	Analyse opportunities, in line with potential target markets, to determine the demand for new products and services.
		1.4	Justify to stakeholders, in line with business policy, new innovative products and services for development.
		1.5	Plan systems to resource the development of new products and services.
		1.6	Implement systems, in line with plan, using marketing technologies, materials and techniques to develop new products and services.
2	Be able to formulate and implement a marketing strategy.	2.1	Examine customer feedback, the construction market press and news to evaluate the present image and reputation of the organisation.
		2.2	Appraise the organisation's image and reputation to define a client base.
		2.3	Plan and implement an information-gathering system, in line with the client base, to determine potential new business opportunities.
		2.4	Appraise the potential new business opportunities to determine a marketing and promotion strategy to increase market share.
		2.5	Plan, in line with the strategy, marketing and promotion techniques for the organisation.
		2.6	Implement, in line with the plan, the techniques to deliver the marketing and promotion strategy.

2	*Cont.*	2.7	Monitor the impact of the marketing and promotion strategy, determining improvements to increase market presence and penetration.
3	Be able to manage client and customer satisfaction.	3.1	Evaluate market research to determine the type and quality of services required by clients and customers.
		3.2	Formulate, in line with the type and quality of required services, a client and customer service policy for the organisation.
		3.3	Justify the client and customer service policy to decision makers and the workforce.
		3.4	Plan and implement, in line with the policy, a client and customer service system.
		3.5	Monitor the system, in line with organisational procedures, to obtain positive and negative client and customer feedback.
		3.6	Evaluate the feedback, justifying to decision makers and the workforce further actions and recommendations to improve client and customer satisfaction.

Title:	Manage Marketing and Customer Service in Construction Management
Additional information about this unit	
Assessment Requirements	The following ranges apply: **Learning Outcome 1** • The organisation's operations: o New and innovative services, products and processes (benefits and features). o Information management systems. o Customer requirements. o Communications with potential customers and partners. o Legal requirements and statutory legislation. o Past and future negotiations. o Specifications. o Pricing strategy. o Recording systems. o Time schedules. o Quality. o Identification of competitors. o Target markets. o Training. • Strengths and weaknesses: o Market share. o Scope of products and services. o Availability of resources. o Working practices. o Productivity. o Profitability and cost factors. o Corporate values. o Environmental impact. o Energy performance. o Socio-economic factors. o Ability to innovate. o Efficiency of systems (including information technology). o Product life-cycle. o Understanding of client's needs. o Standardisation. o Competence of staff. • Analysis - methods: o Feasibility studies. o Swot (strengths, weaknesses, opportunities and threats) analyses. o Feedback.

- Products and services:
    - Design.
    - Finance.
    - Build.
    - Operate.
    - Research, development and innovation.
    - Technological.
    - Consultation.
    - Advisory.
    - Project management.

- Resources:
    - People (knowledge, training, competence).
    - Plant and equipment.
    - Materials.
    - Sub-contractors and suppliers.
    - Partners.
    - External services.
    - Financial resources.
    - Accommodation.

Learning Outcome 2

- Present image and reputation of the organisation:
    - Market share.
    - Scope of products and services.
    - Availability of resources.
    - Working practices.
    - Productivity.
    - Profitability and cost factors.
    - Corporate values.
    - Environmental impact.
    - Socio-economic factors.

- Information gathering system:
    - Organisation sources.
    - External sources.
    - Customer feedback.
    - Specialists.
    - Market research.

- Marketing and promotion:
    - Branding.
    - Corporate image.
    - Professional networks.
    - Sponsorship.
    - Publications.
    - Samples.
    - Relation with press and media.
    - Advertising policies.

    - Direct and indirect client and customer relations.
    - Presentations.
    - E-commerce.
    - Delivery.

- Potential new business opportunities:
    - Products and services.
    - Developments and projects.
    - Customers and markets.

- Monitoring:
    - Market share.
    - Levels of resource allocation.
    - Profitability.
    - Reputation.
    - Image.

Learning Outcome 3

- Clients and customers:
    - Individuals.
    - External organisations.
    - Departments or teams.

- Client and customer service:
    - Quality.
    - Timescales.
    - Cost.
    - Communication and involvement in decision making.
    - Conduct.
    - Pre-contract.
    - Post-contract.
    - Aftercare.

- Policy:
    - Relationships with clients.
    - Statutory rights and the organisational response.
    - Operational expectations and performance.
    - Policy regarding adherence to current norms of business ethics and practice.
    - Environmental concerns.

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

	The knowledge and understanding to cover the full range and scope of the learning outcomes and assessment criteria must be assessed through a professional discussion. Project artefacts which could be used to plan or prompt the professional discussion for this unit might include: a SWOT analysis, market appraisal, project completion survey, client satisfaction survey, demand analysis, market forecast, company reputation and image analysis or service agreement. As a minimum, the project artefacts should include a marketing strategy identifying and justifying the allocation of company resource towards the development of new products and services. Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. **Workplace evidence of skills cannot be simulated.**
Sector Subject areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	30
Assessment	10

Title:	Manage the Handover of the Construction Project in the Workplace
Unit Number:	D/651/1816

Learning Outcomes *The learner will be able to:*		**Assessment Criteria** *The learner can:*	
1	Confirm project requirements and consult with stakeholders and develop and agree a handover programme.	1.1	Confirm that project requirements have met stakeholder's expectations.
		1.2	Undertake consultation with stakeholders to negotiate handover arrangements.
		1.3	Develop and agree a handover programme.
		1.4	List and describe typical project requirements that must be met for handover purposes.
		1.5	Explain how project requirements for developing handover programmes can be confirmed.
		1.6	Explain ways of consulting with stakeholders when developing and agreeing a handover programme.
		1.7	Give reasons why you need a handover programme.
2	Check that project requirements have been met, or record outstanding work in order to agree and arrange a satisfactory completion.	2.1	Identify work that may need to be completed against the requirements of the project.
		2.2	Note outstanding work, defects or remedial activities that fail to meet project requirements.
		2.3	Agree and organise work activities that can complete outstanding work to ensure that the project requirements have been met.
		2.4	Explain checks that can be made to ensure project requirements are met.
		2.5	Explain how outstanding work, in order to agree and arrange a satisfactory completion, can be recorded.
3	Carry out handover inspections and appropriate tests ensuring they are witnessed by stakeholders and certificated in accordance with current legislation.	3.1	Complete handover inspections and appropriate tests, ensuring they are recorded and witnessed by stakeholders.
		3.2	Undertake commissioning activities and keep records of all certificates issued.
		3.3	Explain how to carry out handover inspections and appropriate tests.

3	*Cont.*	3.4	Describe methods that can be used to ensure that inspections and appropriate tests are witnessed by stakeholders.
		3.5	Explain how to ensure that the appropriate certification is acquired and why handover inspections and certificates are needed.
4	Record stakeholder concerns during inspection and agree any required actions.	4.1	Seek, identify and note stakeholders concerns during handover inspections.
		4.2	Agree actions with stakeholders that will resolve stakeholder concerns raised during handover inspections.
		4.3	Describe methods that can record stakeholders' concerns during inspections.
		4.4	Explain how appropriate actions can be agreed with stakeholders during inspections.
		4.5	Give reasons why stakeholders concerns need to be addressed prior to handover.
5	Ensure that stakeholders' respective responsibilities are accepted and adopted.	5.1	Establish and confirm that stakeholders will accept responsibility on handover for at least three of the following: • Insurance. • Security. • Operations. • Health and safety. • Utility supply. • Environment. • Sustainability.
		5.2	Explain how to ensure that stakeholders accept and adopt responsibilities on handover.
		5.3	Explain why stakeholders need to accept their responsibilities on handover.
6	Assemble and hand over appropriate documentation in accordance with the project.	6.1	Collate and prepare appropriate and relevant documentation for at least one of the following: • Systems. • Services. • Equipment.
		6.2	Arrange for and/or hand over assembled documentation that meets agreed project requirements.

6	*Cont.*	6.3	Explain how appropriate documentation can be assembled in accordance with the project requirements.
		6.4	Describe methods of handing over appropriate documentation.
		6.5	Give reasons why appropriate documentation should be assembled and handed over for the project.

Title:	Manage the Handover of the Construction Project in the Workplace
Additional information about this unit	
Assessment Guidance	This unit must be assessed in a work environment and in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. **Workplace evidence of skills cannot be simulated.**
Sector Subject areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	30
Assessment	10

Title:	Implement, Monitor and Control Strategic Procurement Systems in Construction Management
Unit Number:	F/651/1817

Learning Outcomes *The learner will be able to:*		**Assessment Criteria** *The learner can:*	
1	Be able to formulate and implement procurement systems.	1.1	Plan procurement systems in line with project information, organisational policy and the requirements of data protection legislation.
		1.2	Formulate strategies to negotiate and agree formal contractual arrangements for procurement systems with suppliers and services, in order to establish strategic sourcing partnerships.
		1.3	Implement the strategies, to agree strategic sourcing partnerships in line with organisation policy.
		1.4	Implement procurement systems, in line with the agreed strategic sourcing partnerships and organisational policy.
2	Be able to monitor and control arrangements for strategic sourcing.	2.1	Monitor the performance of suppliers and services, in line with procurement systems and organisational policy.
		2.2	Evaluate supplier and services performance against the agreed strategic sourcing partnership contract documents, quantifying any variation in performance in line with organisational policy.
		2.3	Analyse variations in performance in line with project information and procurement systems, to determine causation and corrective measures.
		2.4	Design systems to inform suppliers and services about variations in performance and the corrective measures required.
		2.5	Implement the systems in line with organisational policy.
		2.6	Design and implement systems to evaluate existing strategic sourcing partnership and procurement systems against alternative supply options, to determine the benefits and advantages of engaging alternative suppliers and services.

Title:	Implement, Monitor and Control Strategic Procurement Systems in Construction Management

Additional information about this unit

Assessment Requirements

The following ranges apply:

Learning Outcome 1

- Systems:
  - Manual.
  - Electronic.
  - Building information modelling (BIM).
  - TQM systems.
  - Design.
  - Commercial.
  - Health and safety.
  - Environmental.
  - Time management.
  - Open book forms linked to outcomes.
  - Agreed payment procedure.

- Stakeholders:
  - The client.
  - The client's financial advisers.
  - Design consultants.
  - Potential contractors.
  - Potential subcontractors and suppliers.
  - Facilities/asset managers.
  - Potential investors.
  - Funding agencies.
  - Independent client adviser.
  - User groups.

Learning Outcome 2

- Monitoring - methods:
  - In-house reporting.
  - Consultant.

- Those who are affected:
  - Suppliers.
  - Users.

This unit must be assessed in a work environment, in accordance with the ConstructionSkills' Consolidated Assessment Strategy for Construction and the Built Environment.

The knowledge and understanding to cover the full range and scope of the learning outcomes and assessment criteria must be

	assessed through a professional discussion. Project artefacts which could be used to plan or prompt the professional discussion for this unit might include: statement of capability, supplier assessment, approved supplier/qualified bidders list, request for information (RFI), request for quotation (RFQ), or request for proposal (RFP). As a minimum, the project artefacts will include a supplier evaluation report to consider the initial and the staged ongoing performance of suppliers and services. Assessors for this unit must have verifiable, current industry experience and a sufficient depth of relevant occupational expertise and knowledge, and must use a combination of assessment methods as defined in the Consolidated Assessment Strategy. **Workplace evidence of skills cannot be simulated.**
Sector Subject areas	5.2 Building and Construction
Availability for use	Shared unit
Unit guided learning hours	20
Assessment	10

ProQual House
Unit 1, Innovation Drive
Newport
Brough
HU15 2GX

Tel: 01430 423822

www.proqualab.com
enquiries@proqualab.com