Bridge Inspection Competence and Training Phase 2

Department for Transport

March 2012

Training Manual

Volume 2 – Appendices

Plan Design Enable

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Training Manual

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Approvals

This document requires the following approvals. A signed copy should be placed in the project files.

Name	Signature	Title	Date of Issue	Version
Jessica Moss	Jessica Moss	Author	14/03/12	2.1
Andy Woolley	Andy Woolley	Checker	14/03/12	2.1
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Distribution

This document has been distributed to:

Name	Company	Date of Issue	Version
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Volume 2 – Appendices

Appendix A

Inspector Entry Guidelines

Ref	Category	Guideline Timescale Expected to Achieve Experience Levels	Guideline Minimum No. Inspections (to include the full range of common structure types)	Guideline Entry Qualification Level or equivalent knowledge (see overleaf) in the relevant subject area	Duties/Roles
TI	Trainee Inspector	None	None	2 *(to include maths, English & science)*	
I	Inspector	2-5 years	50-100 (GI's/RI's only)	4	Ability to plan and undertake General Inspections on all structures and Principal Inspections on simple structure types and forms under general/occasional supervision
SI	Senior Inspector	5-10 years	200-500 (GI's/RI's & PI's)	5	Ability to plan and undertake General and Principal Inspections on all structure types/forms and also trained in undertaking some Special Inspection/testing duties with minimal or no supervision

Level	Examples of NQF qualifications	Examples of QCF qualifications
Entry	- Entry level certificates	- Awards, Certificates, and Diplomas at entry level
	- English for Speakers of Other Languages (ESOL)	- Foundation Learning at entry level
	- Skills for Life	- Functional Skills at entry level
	- Functional Skills at entry level (English, maths and ICT)	
1	- GCSEs grades D-G	- BTEC Awards, Certificates, and Diplomas at level 1
	- BTEC Introductory Diplomas and Certificates	- Functional Skills at level 1
	- OCR Nationals	- Foundation Learning Tier pathways
	- Key Skills at level 1	- NVQs at level 1
	- Skills for Life	
	- Functional Skills at Level 1	
2	- GCSEs grades A*-C	- BTEC Awards, Certificates, and Diplomas at level 2
	- Key Skills level 2	- Functional Skills at level 2
	- Skills for Life	- OCR Nationals
	- Functional Skills at Level 1	- NVQs at level 2
3	- A levels	- BTEC Awards, Certificates, and Diplomas at level 3
	- GCE in applied subjects	- BTEC Nationals
	- International Baccalaureate	- OCR Nationals
	- Key Skills level 3	- NVQs at level 3
4	- Certificates of Higher Education	- BTEC Professional Diplomas Certificates and Awards
		- HNCs
		- NVQs at level 4
5	- HNCs and HNDs	- HNDs
	- Other higher diplomas	- BTEC Professional Diplomas, Certificates and Awards
		- NVQs at level 5
6	- National Diploma in Professional Production Skills	- BTEC Advanced Professional Diplomas, Certificates and Awards
	- BTEC Advanced Professional Diplomas, Certificates and Awards	
7	- Diploma in Translation	- BTEC Advanced Professional Diplomas, Certificates and Awards
	- BTEC Advanced Professional Diplomas, Certificates and Awards	
8	- specialist awards	- Award, Certificate and Diploma in strategic direction

Appendix B

Inspection Core Modules Summary

Unit C1 Introduction to Inspections

Introduction

This unit outlines the background to the importance of undertaking inspections. Fundamental to effective management is an inspection regime that provides timely, accurate and appropriately detailed information on asset condition and performance. The overall purpose of inspection, testing and monitoring is to check that structures are safe for use and fit for purpose and to provide the data required to support effective maintenance management and planning.

Ref	Outcome / Skill	Assessment Criteria	I	SI
	The candidate will be able to:			
C1.1	**Explain the Purpose of Inspections**	● be able to outline the importance of undertaking inspections ● be able to explain the terms 'safe for use' and 'fit for purpose'	K	K
C1.2	**Describe the two Inspector Roles, Responsibilities and Competences**	● be able to describe the two inspector roles and their associated responsibilities. ● demonstrate appropriate level of knowledge of the competencies for the different inspector roles ● be able to explain the certification process	K	K
C1.3	**Describe the different Inspection Types**	● be able to explain the different inspection types applicable to the relevant industry ● demonstrate the importance of having an appropriate inspection regime ● demonstrate awareness of the range of different Special Inspections, their function and which factors typically initiate their use.	K	K
C1.4	**Demonstrate knowledge of the relevant structure inspection Codes of Practice**	● demonstrate appropriate knowledge and use of the relevant structure inspection codes of practice and guidance e.g. Inspection Manual for Highway Structures etc.	E	P

Unit C2 Structures Types and Elements / Behaviour of Structures

Introduction

This unit outlines common types of structures, their key elements and materials. It also covers background information and guidance on the fundamentals of structural behaviour, the basic principles of structural mechanics and material properties.

Ref	Outcome / Skill	Assessment Criteria	I	SI
	The candidate will be able to demonstrate an appropriate knowledge level of:			
C2.1	**Bridges**	● Demonstrate knowledge of the major bridge elements: Superstructure, Substructure, Safety Elements, Durability Elements and Ancillary Elements. ● Demonstrate knowledge of typical Primary and Secondary deck element types. ● Demonstrate knowledge of bridge types using: span form, construction form and construction material. ● Demonstrate knowledge of water management systems, their function and importance. ● Demonstrate knowledge of utilities, private services, signs and lighting.	E	P
C2.2	**Other Structure Types**	● Demonstrate knowledge of the definition of a culvert and the different types ● Demonstrate knowledge of the definition of a subway and the different types ● Demonstrate knowledge of the definition of a retaining wall and the different forms. ● Demonstrate knowledge of sign/signal gantries and the different types. ● Demonstrate knowledge of the different mast types and functions. ● Demonstrate knowledge of substations, function and type.	E	P
C2.3	**Structural Mechanics**	● Be able to describe the loadings bridges are subjected to. ● Be able to demonstrate knowledge/experience of the loadpath for a structure ● Be able to demonstrate knowledge of modes of failure ● Demonstrate an understanding of materials' responses to loadings ● Demonstrate an understanding of structures' responses to loadings	K	E
C2.4	**Properties of Common Construction Materials**	● Demonstrate an understanding of the properties of the following common primary materials and how they influence the safety, durability and functionality of a specific component and the whole structure: - concrete - reinforced concrete - prestressed concrete (pre-tensioned and post-tensioned) - steel - masonry - timber ● Demonstrate an understanding of the following secondary materials: - asphalt - asbestos	K	E
C2.5	**Properties of Specialist Construction Materials**	● Demonstrate an awareness of the properties of the following materials and how they influence the safety, durability and functionality of a specific component and the whole structure: - wrought iron - cast iron - aluminium and its alloys - advanced composites	A	A

Unit C3 Inspection Process

Introduction

This unit outlines the fundamentals of the inspection process, including scheduling, planning, undertaking, reviewing and interpreting the results. It also includes consideration of environmental impacts, selection of appropriate access equipment and safe working practices. In addition, it highlights the importance of accurate, reliable data capture and storage post the inspection.

Ref	Outcome / Skill	Assessment Criteria	I	SI
	The candidate will be able to demonstrate an appropriate level of knowledge and practical application of:			
C3.1	**Scheduling Groups of Inspections**	● Demonstrate knowledge of relevant documentation which outlines details regarding the frequency of inspections ● Demonstrate understanding of criteria which can constrain or influence schedule, for example, confined spaces, use of MEWPs etc. ● Explain the objectives of each cyclical inspection type ● Demonstrate ability to monitor progress of inspections against schedules ● Demonstrate experience of access requirements, for example, roadspace booking, track possessions, waterways access, major events, etc ● Demonstrate knowledge of the ability to vary frequency of inspections based on a risk based approach	E	P
C3.2	**Planning and Preparing for an Inspection**	● Explain the function and importance of existing structures records and in particular the previous inspection report. ● Demonstrate ability to challenge validity of existing structures records. ● Demonstrate awareness of the importance of the structures current assessed capacity ● Explain what further information may need to be determined from site visit. ● Demonstrate experience of and an appreciation of the importance of method statements, health and safety considerations and risk assessments in relation to undertaking inspections. ● Demonstrate understanding of aspects to be considered in deciding method of access. This may include: consideration of types of access equipment, restrictions/obstructions caused by equipment, lone working, traffic management requirements and routes to be used to and from the site. ● Explain the different type of notifications which may be required prior to gaining access. ● Demonstrate an understanding of the range of equipment which may be utilised to undertake an inspection. Range to include: i) access equipment ii) PPE iii) data recording equipment iv) measuring or inspection equipment ● Demonstrate an understanding of the environmental considerations to be taken into account, for example, asbestos, bats, badgers etc. ● Explain the process for planning any testing which may be required as part of an inspection. ● Outline the key aspects for an inspection method statement. ● Demonstrate knowledge of how to cost undertaking inspections, the procurement of 3rd party support and budgetary constraints.	E	P

C3.3	**Performing Inspections**	● Be able to talk through the practical approach of undertaking an inspection, highlighting the key aspects. ● Explain the reasons and implications of restricted working hours on the process of undertaking an inspection. ● Explain the reasons why 'good housekeeping' whilst on site is imperative and what does it involve. ● Demonstrate knowledge of a range of 'typical' defects for different structure types, e.g. concrete, steel, masonry, cast iron, wrought iron, timber, composites, culverts, retaining walls, gantries etc. ● Demonstrate an understanding of the need to escalate potential safety critical defects ● Demonstrate an understanding of substandard road restraint systems ● Demonstrate an understanding of communication protocols (for example, who is the Principal Contractor etc) and how to set one up	E	P
C3.4	**Recording Inspection Findings**	● Explain the importance of recording the defect accurately in terms of type, location, extent severity and cause. ● Outline different methods used for recording defects. ● Demonstrate knowledge of the prerequisites of a data capture and inspection proforma. ● Be able to explain the importance of 'signing of' an inspection. ● Demonstrate knowledge of the principals of an element condition rating process. ● Explain the level of detail to be recorded depending upon the type of inspection. ● Understand how the accuracy of reporting can affect overall structure condition performance indicators, as well as element condition rating.	E	P
C3.5	**Interpret Inspection Findings**	● Demonstrate knowledge of factors which affect whether a structure is safe for use and/or fit for purpose. ● Be able to identify possible safety critical defects and report them within the prescribed timescales. ● Understanding of the need to utilise existing records to help interpret defects ● Demonstrate knowledge of a the range of maintenance works which are commonly recommended following a detailed inspection ● Demonstrate an awareness of how defects are managed to identify future maintenance works, based on priority and cost.	K	E
C3.6	**Maintenance Planning Process**	● Demonstrate understanding of how the data captured from inspections complements other information held for a structure. ● Explain the importance of up-to-date and comprehensive data on the condition of a structure with respect to its input to maintenance planning. ● Demonstrate an overview of the process (for your relevant industry) for obtaining funding for future maintenance works and how it is value managed. ● Demonstrate knowledge of a bridge management system	K	E

C3.7	**Current Health & Safety and Environmental Obligations**	● Demonstrate understanding of the need to minimise health and safety risks to the public and others who may be affected by the work activities (effective use of method statements and risk assessments) ● Demonstrate understanding of the need to minimise health and safety risks to those actually carrying out the works (effective use of method statements and risk assessments) ● Demonstrate understanding of the need and breadth of personal protective equipment (PPE) utilised for undertaking inspections for safe working. ● Demonstrate understanding and practical experience of managing and applying safe systems of work. ● Demonstrate knowledge of ACoP ● Demonstrate understanding of the need to minimise the impact on the environment, seeking expert advice if necessary to identify and implement appropriate working practices and/or mitigation measures. ● Experience of having dealt with: - utilising access equipment - moving on foot alongside live carriageways - accessing and exiting from traffic management - working at height - working in, on or adjacent to water, railways etc - toxic substances, for example, lead in paint - lone working - night work - confined spaces	E	P
C3.8	**Other Skills**	● Demonstrate basic knowledge of traffic management and relevant reference material, for example, Chapter 8.	A	A

Unit C4 Defects Descriptions and Causes

Introduction

This unit outlines the importance and requirements for describing and categorising defects. Emphasis is placed on principal defects are that are likely to be encountered in concrete structures, steel and steel/concrete composite structures, masonry structures and structures built of other materials.

Ref	Outcome / Skill	Assessment Criteria		I	SI
	The candidate will be able to demonstrate an appropriate knowledge level of:				
C4.1	**Principal Causes of Defects**	● Demonstrate understanding of the principal causes of defects, including: - inadequate structural capacity - substandard clearance etc - naturally occurring damage e.g. scour - accidental or deliberate damage - structural materials deterioration - structural elements functionality e.g. bearings, drainage, expansion joints etc. - failure of water management systems ● Demonstrate understanding of the implications of deterioration ● Demonstrate understanding of issues that cause collapses or structure closures, for example, erosion, scour, bridge strikes etc. ● Demonstrate knowledge of bridge specific defects ● Demonstrate knowledge of culvert specific defects ● Demonstrate knowledge of retaining wall specific defects ● Demonstrate knowledge of sign/sign gantry and mast specific defects ● Demonstrate knowledge of any defects specific to any other structure types relevant to your industry		E	P
C4.2	**Concrete Defects**	● Demonstrate knowledge of defects caused by structural distress ● Demonstrate knowledge of defects arising due to material nature ● Demonstrate knowledge of defects caused by external agents e.g. reinforcement corrosion, thaumasite sulphate attack (TSA) ● Demonstrate knowledge of defects caused by accidental damage or deliberate damage ● Demonstrate knowledge of defects caused by construction errors ● Demonstrate knowledge of defects associated with protective coatings and repair systems ● Demonstrate knowledge of minor defects e.g. defects which generally only affect the visual appearance of the concrete ● Demonstrate knowledge of defects that can occur in prestressed concrete ● Demonstrate knowledge of defects that can occur in post-tensioning systems		E	P

C4.3	**Steel Defects**	● Demonstrate knowledge of defects caused by structural distress ● Demonstrate knowledge of defects arising due to material nature ● Demonstrate knowledge of defects instigated by external agents e.g. bimetallic corrosion ● Demonstrate knowledge of defects caused by accidental damage or deliberate damage ● Demonstrate knowledge of defects arising due to fabrication errors e.g. welds of poor quality etc. ● Demonstrate knowledge of defects associated with protective systems ● Demonstrate knowledge of defects associated with closed members ● Demonstrate knowledge of defects associated with corrugated steel buried structures ● Demonstrate knowledge of defects which affect the whole system, for example, steel beams with jack arches	E	P
C4.4	**Masonry Defects**	● Demonstrate knowledge of defects caused by structural distress ● Demonstrate knowledge of defects arising due to material nature ● Demonstrate knowledge of defects instigated by external agents e.g. frost attack, vegetation, erosion ● Demonstrate knowledge of defects caused by accidental damage or deliberate damage ● Demonstrate knowledge of defects arising due to alterations to masonry structures e.g. concrete saddle etc.	E	P
C4.5	**Defects in Miscellaneous Materials**	● Demonstrate appropriate level of awareness of defects which can occur in other materials, as listed below: - cast iron - wrought iron - aluminium - timber (problems include fixings and preservation against rotting) - advanced composites - wire rope	K	K

Unit C5 Investigation and Testing

Introduction

This unit outlines the background to the range of different testing techniques available. A candidate is required to understand the purpose of undertaking testing, what it involves, the outputs and any other relevant considerations.

Ref	Outcome / Skill	Assessment Criteria	I	SI
	The candidate will be able to demonstrate an appropriate knowledge level of:			
C5.1	**The Testing Process**	● Demonstrate an understanding of the need and purpose of testing, and when does it become appropriate. ● Demonstrate an understanding of the different testing technique categories: - structural arrangement and hidden defects - distortion and movement - material properties - deterioration activity - deterioration rate - deterioration cause or potential ● Explain what is required in developing an effective testing programme. - setting objectives of testing - identification of testing options - appraisal of testing options - monitor and supervise testing - evaluate results and make recommendations for corrective action ● Demonstrate knowledge of investigation processes, for example, trial holes etc. ● Demonstrate awareness of the procurement processes for engaging specialist services	K	K
C5.2	**Common Testing Techniques**	● Demonstrate knowledge of common testing techniques, such as: - delamination survey - cover surveys - half cell potential surveys - strain gauges - carbonation test - chloride / sulfate / alkali content - ultrasonic testing - coring - paint film thickness measurements	K	K

Unit C6 Repair Techniques

Introduction

This unit outlines the importance on understanding the range of repair techniques available.

Ref	Outcome / Skill	Assessment Criteria	I	SI
	The candidate will be able to demonstrate an appropriate knowledge level of:			
C6.1	**Repair Techniques for Concrete Structures**	● Demonstrate knowledge of the principal repair techniques for concrete structures. Knowledge to include (but not limited to): - materials used for repairs (e.g. sprayed concrete, hand-applied cementitious mortars, epoxy resins etc) - methods for inhibiting corrosion (e.g. cathodic protection, impregnation surface treatments etc) - strengthening methods (e.g. steel plate bonding, composite column wrapping etc)	K	K
C6.2	**Repair Techniques for Metal Structures**	● Demonstrate knowledge of the principal repair techniques for metal structures. Knowledge to include (but not limited to): - repairs by plating - member replacement - protective coatings and paints, such as epoxy resins and polyurethanes	K	K
C6.3	**Repair Techniques for Masonry Structures**	● Demonstrate knowledge of the principal repair techniques for masonry structures. Knowledge to include (but not limited to): - repointing/brickwork repairs - sprayed concrete to soffit - retrofitting of reinforcement - anchors (e.g. grouted, radial etc) - concrete saddle / relieving slabs - stitch (short tie bars spanning the crack)	K	K
C6.4	**Repair Techniques for 'Other' Structures e.g. timber**	● Demonstrate knowledge of the principal repair techniques for 'other' structures.	K	K
C6.5	**Importance of Routine Maintenance**	● Demonstrate knowledge of the importance of undertaking Routine Maintenance ● Demonstrate an understanding of the importance of balancing essential:preventative maintenance works.	K	K

Unit C7 General Aptitude

Introduction
This unit outlines the general aptitude skills required by an inspector.

Ref	Outcome / Skill	Assessment Criteria	I	SI
	The candidate will be able to demonstrate ability for:			
C7.1	**Practical Aptitude**	● Be able to demonstrate ability to make sound and prudent judgements ● Demonstrate excellent attention to detail. ● Be able to work to deadlines ● Be able to appreciate one's own capability and scope of knowledge	P	P
C7.2	**Working with people**	● Demonstrate experience of having worked successfully in a team ● Demonstrate experience of having engaged successfully with 3rd parties and general public.	P	P
C7.3	**Communication skills**	● Be able to interpret drawings and reports ● Be able to draw clear sketches ● Be able to write reports ● Be able to communicate verbally in a clear and comprehensive way. ● Be able to demonstrate proficiency in communicating findings from an inspection ● Demonstrate proficiency of IT skills	P	P
C7.4	**Personal skills**	● Demonstrate self-motivation ● Be able to decide and set priorities. ● Be able to take decisions and have confidence to challenge a situation/decision if necessary. ● Demonstrate understanding of knowing one's limitations.	P	P
C7.5	**Obligations of Current Health and Safety Legislation**	● Demonstrate knowledge and understanding of current health and safety legislation obligations. ● Demonstrate a positive attitude towards health and safety ● Demonstrate ability to develop working practices that promote safety and secure the compliance of subordinates. ● Demonstrate knowledge and understanding of the importance of method statements and risk assessments.	P	P
C7.6	**Management / Supervision skills**	● Demonstrate ability to manage and motivate teams. ● Demonstrate ability to advise and present recommendations to Others. ● Identify resources required for an inspection ● Ensure that inspection activity complies with the appropriate contractual and legal requirements.	A	P

Appendix C

Competence Evidence Templates

Unit C1

Introduction to Inspections

Unit C1 – Introduction to Inspections		
C1.1 – Explain the Purpose of Inspections		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate ability to outline the importance of undertaking inspections ● Demonstrate ability to explain the terms 'safe for use' and 'fit for purpose'	**K**
SI	● As for 'I' above	**K**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C1 – Introduction to Inspections		
C1.2 – Describe the two Inspector Roles, Responsibilities and Competencies		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate ability to describe the two Inspector Roles and their associated responsibilities. ● Demonstrate appropriate level of knowledge of the competencies for the different inspector roles ● Demonstrate ability be able to explain the certification process	**K**
SI	● As for 'I' above	**K**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C1 – Introduction to Inspections		
C1.3 – Describe the different Inspection Types		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate ability to explain the different inspection types applicable to the relevant industry ● Demonstrate understanding of the importance of having an appropriate inspection regime ● Demonstrate awareness of the range of different Special Inspections, their function and which factors typically initiate their use.	**K**
SI	● As for 'I' above	**K**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C1 – Introduction to Inspections		
C1.4 – Demonstrate knowledge of the relevant structure inspection Codes of Practice		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate appropriate knowledge and use of the relevant inspection codes of practice and guidance, for example, Inspection Manual for Highway Structures etc.	**E**
SI	● As for 'I' above ● Demonstrate experience of having advised others on the above criteria	**P**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C2

Structures Types and Elements / Behaviour of Structures

Unit C2 – Structures Types and Elements / Behaviour of Structures		
C2.1 – Demonstrate an appropriate knowledge level of Bridges		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate knowledge and experience of the major bridge elements: Superstructure, Substructure, Safety Elements, Durability Elements and Ancillary Elements. ● Demonstrate knowledge and experience of typical Primary and Secondary deck element types. ● Demonstrate knowledge and experience of bridge types using: span form, construction form and construction material ● Demonstrate knowledge and experience of water management systems, their function and importance. ● Demonstrate knowledge of utilities, private services, signs and lighting.	**E**
SI	● As for 'I' above ● Demonstrate experience of having advised others on the above criteria	**P**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C2 – Structures Types and Elements / Behaviour of Structures		
C2.2 – Demonstrate an appropriate knowledge level of Other Structure Types		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate knowledge and experience of the definition of a culvert and the different culvert types ● Demonstrate knowledge and experience of the definition of a subway and the different types ● Demonstrate knowledge and experience of the definition of a retaining wall and the different forms. ● Demonstrate knowledge and experience of sign/signal gantries and the different types. ● Demonstrate knowledge and experience of the different mast types and function. ● Demonstrate knowledge and experience of substations, their function an type	**E**
SI	● As for 'I' above ● Demonstrate experience of having advised others on the above criteria	**P**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C2 – Structures Types and Elements / Behaviour of Structures		
C2.3 – Demonstrate an appropriate knowledge level of Structural Mechanics		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate ability to describe the loadings bridges are subjected to ● Demonstrate knowledge of the loadpath for a structure ● Demonstrate knowledge of modes of failure ● Demonstrate understanding of materials' responses to loadings ● Demonstrate understanding of structures' responses to loadings	**K**
SI	● As for 'I' above but supplemented by practical examples from own experience	**E**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C2 – Structures Types and Elements / Behaviour of Structures		
C2.4 – Demonstrate an appropriate knowledge level and experience of the Properties of Common Construction Materials		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate an understanding of the properties of the following common primary materials and how they influence the safety, durability and functionality of a specific component and/or whole structure: - concrete - reinforced concrete - prestressed concrete (pre-tensioned and post-tensioned) - steel - masonry - timber ● Demonstrate an understanding of the following secondary materials: - asphalt - asbestos	**K**
SI	● As for 'I' above but supplemented by practical examples from own experience	**E**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C2 – Structures Types and Elements / Behaviour of Structures		
C2.5 – Demonstrate an awareness of the Properties of Specialist Construction Materials		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate an awareness of the properties of the following specialist primary materials and how they influence the safety, durability and functionality of a specific component and/or whole structure: - wrought iron - cast iron - aluminium and its alloys - advanced composites	**A**
SI	● As for 'I' above	**A**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C3

Inspection Process

Unit C3 – Inspection Process		
C3.1 – Demonstrate experience of Scheduling Inspections		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate knowledge of relevant documentation which outlines details regarding the frequency of inspections ● Demonstrate understanding of criteria which can constrain or influence schedule, for example, confined spaces, use of MEWPs etc. ● Explain the objectives of each cyclical inspection type ● Demonstrate experience of monitoring progress of inspections against schedules ● Demonstrate experience of access requirements, for example, roadspace booking, track possessions, waterways access, major events etc. ● Demonstrate knowledge of the ability to vary frequency of inspections based on a risk based approach	**E**
SI	● As for 'I' above ● Demonstrate experience of having advised others on the above criteria	**P**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C3 – Inspection Process		
C3.2 – Demonstrate experience of Planning and Preparing for Inspections		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Explain the function and importance of existing structures records and in particular the previous inspection report ● Demonstrate ability to challenge validity of existing structures records ● Demonstrate awareness of the importance of the structure's current assessed capacity ● Explain what further information may be need to be determined from site visit ● Demonstrate experience and appreciation of the importance of method statements, health and safety considerations and risk assessments in relation to undertaking inspections ● Demonstrate understanding of aspects to be considered in deciding method of access. This may include: consideration of types of access equipment, restrictions/obstructions caused by equipment, lone working, traffic management requirements and routes to be used to and from site ● Explain the different types of notifications which may be required prior to gaining access ● Demonstrate an understanding of the range of equipment which may be utilised to undertake an inspection. Range to include: i) access equipment ii PPE iii) data recording equipment iv) measuring or inspection equipment ● Demonstrate an understanding of the environmental considerations to be taken into account, for example, asbestos, bats, badgers etc. ● Explain the process for planning any testing which may be required as part of an inspection ● Outline the key aspects for an inspection method statement ● Demonstrate knowledge of how to cost undertaking inspections, the procurement of 3rd party support and budgetary constraints	**E**
SI	● As for 'I' above ● Demonstrate experience of having advised others on the above criteria	**P**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C3 – Inspection Process		
C3.3 – Demonstrate experience of Performing Inspections		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Be able to talk through the practical approach of undertaking an inspection , highlighting the key aspects ● Explain the reasons and implications of restricted hours on the process of undertaking an inspection ● Demonstrate an understanding of why 'good housekeeping' whilst on site is imperative and what it involves ● Demonstrate knowledge and experience of a range of 'typical' defects for different structure types ● Demonstrate an understanding of the need to escalate potential safety critical defects ● Demonstrate an understanding of substandard road restraint systems ● Demonstrate an understanding of communication protocols (for example, who is the Principal Contractor etc) and how to set one up	**E**
SI	● As for 'I' above ● Demonstrate experience of having advised others on the above criteria	**P**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C3 – Inspection Process		
C3.4 – Demonstrate experience of Recording Inspection Findings		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate understanding of the importance of recording a defect accurately in terms of type, location, extent, severity and cause. ● Outline different methods used for recording defects based one's experience ● Demonstrate knowledge of the prerequisites of a data and inspection proforma ● Demonstrate an understanding of the importance of 'signing off' and inspection ● Demonstrate knowledge of the principals of an element condition rating process ● Demonstrate understanding of the level of detail to be recorded depending upon the type of inspection based one's experience ● Demonstrate understanding of how the accuracy of reporting can affect overall structure condition performance indicators, as well as element condition rating	**E**
SI	● As for 'I' above ● Demonstrate experience of having advised others on the above criteria	**P**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C3 – Inspection Process		
C3.5 – Demonstrate an appropriate knowledge level / experience of Interpreting Inspection Findings		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate knowledge of factors which affect whether a structure is 'safe for use' and/or 'fit for purpose' ● Be able to identify possible safety critical defects and report them within the prescribed timescales. ● Demonstrate understanding of the need to utilise existing records to help interpret defects ● Demonstrate knowledge of the range of maintenance works which are commonly recommended following a detailed inspection ● Demonstrate an awareness of how defects are managed to identify future maintenance works based on priority and cost	**K**
SI	● As for 'I' above but supplemented by practical examples from own experience	**E**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C3 – Inspection Process		
C3.6 – Demonstrate an appropriate knowledge level / experience of the Maintenance Planning Process		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate an understanding of how data captured from inspections complements other information held for a structure ● Demonstrate an awareness of the importance of having up-to-date comprehensive data of the condition of a structure with respect to its input to maintenance planning ● Demonstrate an overview of the process (for your relevant industry) for obtaining funding for maintenance works and how it is value managed ● Demonstrate knowledge of a bridge management system	**K**
SI	● As for 'I' above but supplemented by practical examples from own experience	**E**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C3 – Inspection Process		
C3.7 – Demonstrate experience of complying with obligations of current health and safety legislation		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate understanding of the need to minimise health and safety risks to the public and others who may be affected by the work activities (effective use of method statements and risk assessments) ● Demonstrate understanding of the need to minimise health and safety risks to those actually carrying out the works (effective use of method statements and risk assessments) ● Demonstrate understanding of the need and breadth of personal protective equipment (PPE) utilised for undertaking inspections for safe working. ● Demonstrate understanding and practical experience of managing and applying safe systems of work. ● Demonstrate knowledge of ACoP ● Demonstrate understanding of the need to minimise the impact on the environment, seeking expert advice if necessary to identify and implement appropriate working practices and/or mitigation measures. ● Experience of having dealt with: - utilising access equipment - moving on foot alongside live carriageways - accessing and exiting from traffic management - working at height - working in, on or adjacent to water, railways etc - toxic substances, for example, lead in paint - lone working - night work - confined spaces	**E**
SI	● As for 'I' above ● Demonstrate experience of having advised others on the above criteria	**P**
Knowledge Evidence		

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C3 – Inspection Process		
C3.8 – Demonstrate an awareness of 'Other Skills'		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate awareness of traffic management and relevant reference material , for example, Chapter 8	**A**
SI	● As for 'I' above	**A**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C4

Defects Descriptions and Causes

Unit C4 – Defects Descriptions and Causes		
C4.1 – Demonstrate experience of the Principal Causes of Defects		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate understanding of the principal causes of defects, including: - inadequate structural capacity - substandard clearance etc - naturally occurring damage e.g. scour - accidental or deliberate damage - structural materials deterioration - structural elements functionality e.g. bearings, drainage, expansion joints etc. - failure of water management systems ● Demonstrate understanding of the implications of deterioration ● Demonstrate understanding of the issues that cause collapses or structure closures, for example, erosion, scour, bridge strikes etc. ● Demonstrate knowledge of bridge specific defects ● Demonstrate knowledge of culvert specific defects ● Demonstrate knowledge of retaining wall specific defects ● Demonstrate knowledge of sign/sign gantry specific defects ● Demonstrate knowledge of any defects specific to any other structure types relevant to your industry	**E**
SI	● As for 'I' above ● Demonstrate experience of having advised others on the above criteria	**P**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C4 – Defects Descriptions and Causes		
C4.2 – Demonstrate experience of Concrete Defects		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate knowledge and experience of defects caused by structural distress. ● Demonstrate knowledge and experience of defects arising due to material nature ● Demonstrate knowledge and experience of defects caused by external agents, e.g. reinforcement corrosion, thaumasite sulphate attack (TSA) etc. ● Demonstrate knowledge and experience of defects caused by accidental or deliberate damage ● Demonstrate knowledge and experience of defects caused by construction errors ● Demonstrate knowledge and experience of defects associated with protective coatings and repair systems ● Demonstrate knowledge and experience of minor defects, e.g. defects which generally only affect the visual appearance of the concrete ● Demonstrate knowledge and experience of defects that can occur in prestressed concrete ● Demonstrate knowledge and experience of defects that can occur in post-tensioning systems	**E**
SI	● As for 'I' above ● Demonstrate experience of having advised others on the above criteria	**P**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C4 – Defects Descriptions and Causes		
C4.3 – Demonstrate experience of Steel Defects		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate knowledge and experience of defects caused by structural distress. ● Demonstrate knowledge and experience of defects arising due to material nature ● Demonstrate knowledge and experience of defects instigated by external agents, e.g. bimetallic corrosion ● Demonstrate knowledge and experience of defects caused by accidental or deliberate damage ● Demonstrate knowledge and experience of defects arising due to fabrication errors, e.g. welds of poor quality etc. ● Demonstrate knowledge and experience of defects associated with protective systems ● Demonstrate knowledge and experience of defects associated with closed members ● Demonstrate knowledge and experience of associated with corrugated steel buried structures ● Demonstrate knowledge and experience of defects which can affect the whole system, e.g. steel beams with jack arches	**E**
SI	● As for 'I' above ● Demonstrate experience of having advised others on the above criteria	**P**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C4 – Defects Descriptions and Causes		
C4.4 – Demonstrate experience of Masonry Defects		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate knowledge and experience of defects caused by structural distress. ● Demonstrate knowledge and experience of defects arising due to material nature ● Demonstrate knowledge and experience of defects instigated by external agents, e.g. frost attack, vegetation, erosion etc. ● Demonstrate knowledge and experience of defects caused by accidental or deliberate damage ● Demonstrate knowledge and experience of defects arising due to alterations to masonry structures, e.g. concrete saddle etc.	**E**
SI	● As for 'I' above ● Demonstrate experience of having advised others on the above criteria	**P**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C4 – Defects Descriptions and Causes		
C4.5 – Demonstrate knowledge of Defects in Miscellaneous Materials		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate knowledge of defects which can occur in other materials, as listed below: cast iron wrought iron aluminium timber (problems include fixings and preservation against rotting) advanced composites wire rope	**K**
SI	● As for 'I' above	**K**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C5

Investigation and Testing

Unit C5 – Investigation and Testing		
C5.1 – Demonstrate knowledge of the Testing Process		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate an understanding of the need and purpose of testing and when does it become appropriate. ● Demonstrate an understanding of the different testing technique categories: structural arrangement and hidden defects distortion and movement deterioration activity deterioration rate deterioration cause or potential ● Explain what is required in developing an effective testing programme, such as: setting objectives of testing identification of testing options appraisal of testing options monitor and supervise testing evaluate results and make recommendations for corrective action ● Demonstrate knowledge of investigation processes, e.g. trail holes etc. ● Demonstrate awareness of the procurement processes for engaging specialist services.	**K**
SI	● As for 'I' above	**K**
Knowledge Evidence		

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C5 – Investigation and Testing		
C5.2 – Demonstrate knowledge of Common Testing Techniques		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate knowledge of common testing techniques, such as: Delamination surveys Cover surveys Half cell potential surveys Strain gauges Carbonation test Chloride / sulphate / alkali content test Ultrasonic testing Coring Paint film thickness measurements	**K**
SI	● As for 'I' above	**K**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C6

Repair Techniques

Unit C6 – Repair Techniques		
C6.1 – Demonstrate knowledge of Repair Techniques for Concrete Structures		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate knowledge of the principal repair techniques for concrete structures. Knowledge to include (but not limited to): - materials used for repairs, e.g. sprayed concrete, hand applied cementitious mortars, epoxy resins etc. - methods for inhibiting corrosion, e.g. cathodic protection, impregnation surface treatments etc. - strengthening methods, e.g. steel plate bonding, composite wrapping etc.	**K**
SI	● As for 'I' above	**K**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C6 – Repair Techniques		
C6.2 – Demonstrate knowledge of Repair Techniques for Metal Structures		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate knowledge of the principal repair techniques for metal structures. Knowledge to include (but not limited to): Repairs by plating Member replacement Protective coatings, such as epoxy resins and polyurethanes	**K**
SI	● As for 'I' above	**K**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C6 – Repair Techniques		
C6.3 – Demonstrate knowledge of Repair Techniques for Masonry Structures		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate knowledge of the principal repair techniques for masonry structures. Knowledge to include (but not limited to): Repointing/brickwork repairs Sprayed concrete to soffit Retrofitting reinforcement Anchors, e.g. grouted, radial Concrete saddle / relieving slab Stitch (short tie bars spanning the crack)	**K**
SI	● As for 'I' above	**K**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C6 – Repair Techniques		
C6.4 – Demonstrate knowledge of Repair Techniques for 'Other' Structures e.g. timber		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate knowledge of the principal repair techniques for 'other' structures, e.g. those constructed from timber etc.	**K**
SI	● As for 'I' above	**K**

Knowledge Evidence

		A		**K**
Assessment Level	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

		E		**P**
Assessment Level	Verified by:		Verified by:	
	Date:		Date:	

Unit C6 – Repair Techniques		
C6.5 – Demonstrate knowledge of the Importance of Routine Maintenance		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	● Demonstrate knowledge of the importance of undertaking Routine Maintenance ● Demonstrate an understanding of balancing essential:preventative maintenance works	**K**
SI	● As for 'I' above	**K**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C7

General Aptitude

Unit C7 – General Aptitude		
C7.1 – Demonstrate ability to apply Practical Aptitude		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	Utilising past experience: ● Demonstrate ability to make sound and prudent judgements ● Demonstrate excellent attention to detail ● Ability to work to deadlines ● Ability to appreciate one's own capability and scope of knowledge	**P**
SI	● As for 'I' above	**P**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C7 – General Aptitude		
C7.2 – Demonstrate ability for Working with People		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	Utilising past experience: ● Demonstrate ability to work in a team ● Demonstrate experience of having engaged successfully with 3rd parties and general public	**P**
SI	● As for 'I' above	**P**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C7 – General Aptitude		
C7.3 – Demonstrate Effective Communication Skills		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	Utilising past experience: ● Demonstrate ability to interpret drawings and reports ● Demonstrate ability to draw clear sketches ● Demonstrate ability to write reports ● Demonstrate ability to communicate verbally in a clear and comprehensive way ● Demonstrate proficiency in communicating findings from an inspection ● Demonstrate proficiency in IT skills	**P**
SI	● As for 'I' above	**P**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C7 – General Aptitude		
C7.4 – Demonstrate Effective Personal Skills		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	Utilising past experience: ● Demonstrate self-motivation ● Demonstrate ability to decide and set priorities ● Demonstrate ability to take decisions and to have confidence to challenge a situation/decision if necessary ● Demonstrate understanding of knowing one's limitations	**P**
SI	● As for 'I' above.	**P**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C7 – General Aptitude		
C7.5 – Demonstrate experience of complying with the obligations of Current Health and Safety Legislation		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	Utilising past experience: ● Demonstrate appropriate knowledge and understanding of current health and safety legislation obligations. ● Demonstrate a positive attitude towards health and safety ● Demonstrate ability to develop working practices that promote safety and secure the compliance of subordinates. ● Demonstrate knowledge and understanding of the importance of method statements and risk assessments	**P**
SI	● As for 'I' above.	**P**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Unit C7 – General Aptitude		
C7.6 – Demonstrate Management / Supervision skills		
Inspector Type	**Assessment Criteria**	**Required Achievement Rating**
I	Utilising past experience: ● Demonstrate ability to manage and motivate teams ● Demonstrate ability to advise and present recommendations to others ● Demonstrate ability to identify resources required for an inspection ● Be able to demonstrate ability to ensure that an inspection complies with the appropriate contractual and legal requirements.	**A**
SI	● As for 'I' above	**P**

Knowledge Evidence

Assessment Level		**A**		**K**
	Verified by:		Verified by:	
	Date:		Date:	

Experience Evidence

Assessment Level		**E**		**P**
	Verified by:		Verified by:	
	Date:		Date:	

Appendix D

Example Evidence Sheets

TO BE INSERTED FOLLOWING SCHEME ADMINISTRATOR INPUT

Appendix E

Assessor Guidelines

TO BE INSERTED FOLLOWING SCHEME ADMINISTRATOR INPUT

To include the following information:

- *Process of how to become registered as an Assessor*
- *Details of minimum experience required*
- *Details of 'refresher' training required every 5 years*
- *Guidance on how to assess Competence Evidence Sheets*
- *Examples of text from a 'weak' submission*
- *Examples of text from an 'excellent' submission*
- *Guidance on how to draft feedback to candidates who fail to demonstrate adequate competence in all Core Modules.*
- *Guidance on undertaking appeals*

Appendix F

Training Agreement Application

TO BE INSERTED FOLLOWING SCHEME ADMINISTRATOR INPUT

To include the following information:

- *Name of Candidate*
- *Home Address*
- *Work address and contact details*
- *Confirmation of chosen Inspector Certification Level route*
- *Qualifications*
- *Years of relevant experience*
- *Name of Mentor*

Appendix G

Application for Certification Review

TO BE INSERTED FOLLOWING SCHEME ADMINISTRATOR INPUT

To include the following information:

- *Name of Candidate*
- *Home Address*
- *Work address and contact details*
- *Confirmation of appropriate Inspector Certification Level*
- *Sign-off by Mentor to confirm that the candidate has successfully completed an internal review and have completed their Competence Evidence Sheets (copies to be attached to form)*

Appendix H

CPD Record Template

TO BE INSERTED FOLLOWING SCHEME ADMINISTRATOR INPUT

To include the following information:

- *Name of Candidate*
- *Date of CPD undertaken*
- *CPD description/topic*
- *Form of training*
- *Key aspects learnt*
- *Hours of CPD being claimed*
- *Details of further development required, if appropriate*

.

Appendix I

To-do Checklist for Inspector

TO BE INSERTED FOLLOWING SCHEME ADMINISTRATOR INPUT

To include the following actions:

General Actions

- *Mentor allocated?*
- *Review and capture, as appropriate, relevant previous experience*
- *Inspector Certification Level chosen? I or SI*
- *Training Agreement form completed?*
- *Form submitted to Scheme Administrator?*
- *Familiarisation of Core Modules undertaken?*
- *Programme of quarterly meetings with Mentor drafted?*

Quarterly Meeting Actions

- *Knowledge and experience gained to date recorded on Competence Evidence Sheets?*
- *Sheets submitted to Mentor in advance of the quarterly meeting to allow sufficient time for a thorough review to be undertaken*
- *Capture feedback from meeting*
- *Draft an action plan capturing actions from feedback and further proposed development during the next quarter.*

Appendix J

Inspector Certificate / Senior Inspector Certificate

TO BE INSERTED FOLLOWING SCHEME ADMINISTRATOR INPUT

To include the following information:

- *Name of Candidate*
- *Inspector Certification Level*
- *Date attained*
- *Details of any Specific Modules, if appropriate*
- *Expiry date*

Appendix K

Mentor Allocation Form

TO BE INSERTED FOLLOWING SCHEME ADMINISTRATOR INPUT

To include the following information:

- *Name of proposed Mentor*
- *Name of Company*
- *Address and contact details*
- *Details of relevant experience*
- *Name of Trainee Inspectors to be mentored*

Appendix L

To-do Checklist for Mentor

TO BE INSERTED FOLLOWING SCHEME ADMINISTRATOR INPUT

To include the following actions:

General Actions

- *Start-up meeting undertaken with Trainee Inspector (TI)?*
- *Review TI's relevant previous experience*
- *Assist TI with confirming which Inspector Certification Level is appropriate i.e. I or SI*
- *Training Agreement form completed?*
- *Form submitted to Scheme Administrator?*
- *Ensure TI has familiarised himself with the competences defined in the Core Modules*
- *Programme of quarterly meetings received from TI?*

Quarterly Meeting Actions

- *Review TI's knowledge and experience gained to date on their Competence Evidence Sheets in advance of the quarterly meeting*
- *Provide constructive feedback on the content of the submitted Competence Evidence Sheets*
- *Assist TI with drafting an action plan, capturing actions from the feedback and any proposed development during the next quarter.*

Appendix M

Assessor Review Sheet

TO BE INSERTED FOLLOWING SCHEME ADMINISTRATOR INPUT

Template to be developed following agreement as to the format of the external interview.

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Atkins
Axis Building
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Birmingham
B1 1TF

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