



**NATIONAL HIGHWAYS SECTOR SCHEMES FOR
QUALITY MANAGEMENT IN HIGHWAY WORKS**

SCHEME 2C

**PARTICULAR REQUIREMENTS FOR THE APPLICATION OF ISO
9001:2015
FOR
ENVIRONMENTAL BARRIERS (STRUCTURAL) FOR
INFRASTRUCTURE WORKS**

**PUBLISHED BY THE SECTOR SCHEME ADVISORY COMMITTEE
FOR ENVIRONMENTAL BARRIERS (STRUCTURAL) (SSACEBS)**

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Document Control

Issue Statement

Issue	Amendments
Issue 3 [9001:2015]	Third Issue This Sector Scheme is one of the series of NHSSs, which are bespoke integrated management schemes within an ISO 9001:2015 framework that have been developed to define particular requirements within BS EN ISO 9001:2015 as it applies to a particular activity/industry within the United Kingdom.

Issue statement 2C – ISO 9001 - 2008

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Issue UKAS 2: November 2005
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Issue UKAS 7: July 2016
Issue 8: April 2017

Issue statement 2C – ISO 9001 - 2015

Issue 1 (9001:2015): April 2017
Issue 2 (9001:2015): June 2017
Issue 3 (9001:2015): February 2018

This Sector Scheme Document (SSD) evolved from SSD2A.

Amendments to Issue 2

Appendix C1 – Flowcharts to achieving skills cards added.

Amendments to Issue 3

Definitions Amended – Removal of Lead Installer

7.1.2 People amended

Appendix C1 – Amended (flowcharts removed and link to current copy provided)

Appendix K1 – Amended (not used)

Appendix O - Amended

Appendix P - Replaced

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Composition of the Sector Scheme Advisory Committee, Exclusion of Liability, Copyright and Selection of Certification Body

Composition of Sector Scheme Advisory Committee

a) Full Members

ADEPT (formerly CSS)
Association of Fencing Industries (AFI) incorporating FCA & EFIA
BSI Lead Certification Body for this scheme
Environmental Noise Barriers Association (ENBA)
Highways England
Lantra
Industry Sector Skills Council
Network Rail
Society of Chief Officers of Transportation in Scotland
Wood Protection Association (WPA)

b) Corresponding Members

Transport Northern Ireland
Transport Scotland
Welsh Government
UKAS accredited Certification Bodies to this scheme
UKAS

Exclusion of Liability

The Sector Scheme Advisory Committee for NHSS2C:

- 1 have and accept no liability whatsoever for any failure of any system or systems assessed under this Sector Scheme Document or for the quality, fitness for purpose, or safety of any product or service which is the subject of such assessment,
- 2 do not provide any representation or warranty as to any aspect of any such system, product or service, and
- 3 hereby expressly exclude all and any liability or responsibility (however alleged to arise) for or in connection with the provision of any service or product or any use of any product, all and any such liability or responsibility attaching exclusively to the producer (or user as the case may be) thereof.

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Selection of Certification Body

It is important to note that due to the specific requirements for assessor competence required by this Sector Scheme a technical expert may be appointed by the Sector Scheme Advisory Committee to assist UKAS in the assessment of Certification Bodies (CB) as described in Appendix G (clause 3.1).

Prospective companies seeking registration under this scheme should ensure that they engage a Certification Body specifically accredited to assess against the requirements of this SSD. Specifiers, consultants, engineers etc. that require confirmation of compliance with the Contract Specification in respect of a supplier or the supply of products/materials should confirm the current status of the quality management system certificate issuer and that specific reference is made to this Sector Scheme on the Certificate of Registration (See Appendix K).

Note: CE marking is a requirement for the manufacture of Road Traffic Noise Reducing Devices (See Appendix B1); this can only be applied following successful evaluation of the factory production control process by a Notified Body. (Notified Bodies are appointed by the relevant authority in a Member State of the European Union and notified to the European Commission. In the UK, the relevant authority for notification under the Constructions Product Regulations (CPR) is the Department for Communities and Local Government (DCLG).

Implementation

Issue 3 [9001:2015]

This document has been produced to supersede the 9001:2015 Issue 2 and 9001:2008 Issue 8, however Issue 8 (or a later updated version – check UKAS website for the latest ISO 9001:2008 version) will continue to have validity until September 2018 when the 2008 version of ISO 9001 will become obsolete.

Note 1: Following publication of the document the organization should implement the changes in time for their surveillance visit or assessment visit by the Certification Body.

Note 2: The Certification Body should assess the organization against the latest edition of the scheme within 14 months of its publication.

Note 3: Where the surveillance/assessment visit of an organization occurs within two months of the publication of a revision, such assessment maybe undertaken against the previous edition subject to compliance with Note 2 above.

Note 4: The NHSS document is date specific; however the organization shall have procedures in place to ensure that the latest version is always available. Organizations should be aware that utilization of internet search engines may result in out of date references being identified/called up.

Introduction

1. This Sector Scheme Document (SSD) relates to the quality management system requirements for NHSS2C for the installation of Environmental Barriers (Structural) (EBS). It sets out to identify common particular requirements of BS EN ISO 9001:2015 for organizations and Certification Bodies engaged in the sector, and the minimum qualifications that an assessor/auditor requires. The document shall be read in conjunction with BS EN ISO 9001:2015.
2. This Sector Scheme is one of the series of National Highway Sector Schemes (NHSSs), which have been developed as bespoke integrated management schemes within an ISO 9001 framework to define BS EN ISO 9001:2015 as it applies to a particular infrastructure related activity/industry within the United Kingdom.
3. This SSD applies to all types of EBS covered by BS EN 14388.
4. Separate Sector Scheme Advisory Committees (SSACs) for each activity within the sector provide advice to UKAS and expert representation is drawn from all sides of industry. Each SSAC reviews BS EN ISO 9001 in relation to the requirements of their particular activity and comes to a consensus on the minimum levels of:
 - Workmanship;
 - Services;
 - Product quality;
 - Testing;
 - Training and competency of personnel;
 - Health, safety and environmental standards that are required of an organization registered under the Sector Scheme.

The requirements above (where applicable) are contained in the individual Sector Scheme Document (SSDs).

5. The individual NHSS technical advisory committees are overseen by the National Highways Sector Scheme Liaison Committee (NHSSLC). This Committee provides a forum for discussion on the effectiveness of the Sector Schemes and co-ordinates developments so that they can be uniformly taken forward by each of the NHSS technical advisory committees. It is also the venue where dialogue with UKAS and the Certification Bodies on the application of the Sector Schemes takes place.
6. This NHSS together with BS EN ISO 9001 is designed to:
 - Provides particular requirements for the industry
 - Identify risks and opportunities
 - Provide an industry benchmark
 - Ensure that all processes are planned
 - Provide a basis for continued improvement
 - Focus on quality as an objective
 - Reduce costs for Client and organization
 - Provide and maintain a properly training and competent workforce
 - Involve all sides of industry in scheme ownership within a partnership framework

- Provide the basis for the technical knowledge and experience that the Certification Body auditors will use in the sector concerned
- Promote confidence in quality management systems through provision of a robust transparent system

7. It should also be noted that NHSSs are mandatory for Highways England contracts and suppliers within the supply chain shall demonstrate compliance with the requirements of BS EN ISO 9001 and this SSD as part of their continual improvement within their BS EN ISO 9001 registration. The use of the Specification for Highway Works as the basic document for procuring highway works by other highway authorities would normally automatically call up compliance with BS EN ISO 9001 and this SSD. Other owners for example e.g. Network Rail may also require their suppliers to comply with this Sector Scheme, as may other authorities.

Note: The Sector Scheme is listed in Appendix A of the Specification for Highway Works and became a mandatory requirement for suppliers working to the unmodified listing of the Sector Scheme in Appendix A of the Specification for Highway Works after the publication of the first issue of this document by UKAS. Separately the document may be called up in specific contracts as necessary.

8. Organizations using this Sector Scheme shall ensure best practice such as specifying any other relevant NHSSs as appropriate to the nature of the work being undertaken e.g. National Highway Sector Scheme No.4 Natural and Conferred Durability of Timber and National Highway Sector Scheme 2B Vehicle Restraint Systems. See Clause 7.4.1 and Appendix B.
9. Where traffic management is required companies should either employ a National Highway Sector Scheme approved company or where applicable have skilled registered traffic management operatives qualified to meet the requirements of NHSS12D relevant to contract requirements and risk assessments. For work carried out on high speed dual carriageways and motorways the organization installing temporary traffic management measures should always be registered to NHSS 12C/B and/or 12C.
10. This NHSS document is date specific, however, the organization should have procedures in place to ensure that the latest version is always available. Organizations should be aware that utilisation of internet search engines may result in out of date references being identified/called up.
11. Scheme Feedback
- 11.1. Any observations or complaints relating to the operation of this document and the scheme should be addressed using the procedures given in Appendices J1, J2 or J3 as appropriate. Appendix J1 is to be used for observations and general queries concerning the document and general feedback. Appendix J2 relates to the assessment process carried out by Certification Bodies. Appendix J3 relates to policing of the scheme.

Note: J1 forms will be responded to at the next meeting of the NHSS committee. If the J1 form contains information that is critical, then exceptionally action can be taken prior to the meeting by the chairperson for instance by arranging an extraordinary meeting of the NHSS advisory committee. The secretary will normally advise the originator of receipt of the J1 document and when the next meeting is expected to be held.

Completed J2 forms should be sent directly to the relevant Certification Body.

Completed J3 forms should be sent to the relevant Highway Authority, Police Authority or HSE as appropriate and indicated on the form.

12. Scheme Contact

Observations or complaints regarding this Sector Scheme should be addressed to:

The Secretary
Sector Scheme Advisory Committee for SSACF
C/o Lantra
Lantra House
Stoneleigh Park
Nr. Coventry, CV8 2LG

E-mail NHSS@lantra.co.uk

13. Following the publication of a revised BS EN ISO 9001, the committees review their documents to ensure alignment with the revised BS EN ISO 9001 to ensure that the SSD does not conflict with the national standard prior to withdrawal of the previous edition of the standard.

This SSD is a live document with the SSEBS meeting 2 to 3 times a year to maintain the currency as appropriate.

Those using the document should always ensure that they have the current version of the document. The SSD may be obtained by visiting the UKAS website www.ukas.com from where the document can be freely downloaded.

Reminders for those using this Scheme

Certification Bodies are accredited by UKAS and the schemes are included in their scope of accreditation. Information on relevant Certification Bodies may be obtained from the UKAS website.

Lantra hosts the schedule of suppliers' register of organizations on their website www.scheduleofsuppliers.co.uk. This is a self-registration list and it is a requirement of this scheme that organizations register their details on this website and keep them up to date.

Certification Bodies will check that the organization is registered on the schedule of suppliers' website together with all relevant information, including a pdf copy of the certification of registration that the Certification Body issues and any other specific documentation to be uploaded specified by this SSD, prior to annual and surveillance visits.

Particular Requirements for the Application of ISO 9001:2015

1. Scope

The International Standard specifies requirements for a quality management system when an organization:

- a) Needs to demonstrate its ability to consistently provide products and services that meet customer and applicable statutory and regulatory requirements, and
- b) Aims to enhance customer satisfaction through the effective application of the system, including processes for improvement of the system and the assurance of conformity to customer and applicable statutory and regulatory requirements.

All the requirements of the International Standard are generic and are intended to be applicable to any organization, regardless of its type or size, or the products and services it provides.

Note 1: In the International Standard, the terms “product” or “service” only apply to products and services intended for, or required by, a customer.

Note 2: Statutory and regulatory requirements can be expressed as legal requirements.

This SSD together with ISO 9001 and other appropriate specification describes the quality management system requirements to be established by organizations providing for the design and/or supply, installation and/or repair of EBS.

The document provides particular requirements in respect of British Standard BS EN ISO 9001:2015 for this industry and shall be read and implemented in compliance with that standard. The SSD is applicable to the part of the organizations within the scope of the defined QMS carrying out works defined in Appendix K & Annex 3.

The SSD shall be referenced on the Certificate of Registration issued by the Certification Body.

Where applicable organizations are also required to be registered to the SSD2B to work on VRS/EBS combined systems.

2. Normative Reference

The following normative documents contain provisions which constitute provisions of BS EN ISO 9001 Quality Management Systems – Requirements:

- BS EN ISO 9000:2015 Quality Management Systems – Fundamentals and vocabulary
- BS EN ISO 9001:2015 Quality Management Systems – Requirements and normative references within it
- BS EN ISO 9004:2009 Quality Management Systems – Managing for the sustained success of an organization. A quality management approach
- NHSS 0 – Guide to the identification, Development Management and Certification of National Highway Sector Schemes

- BS EN 1793:
 - Part 1:1997 Road Traffic Noise Reducing Devices. Test Method for Determining the Acoustic Performance. Intrinsic Characteristics of Sound Absorption
 - Part 1:2012 Road Traffic Noise Reducing Devices. Test Method for Determining the Acoustic Performance. Intrinsic Characteristics of Sound Absorption
 - Part 2:1997 Road Traffic Noise Reducing Devices. Test Method for Determining the Acoustic Performance. Intrinsic Characteristics of Airborne Sound Insulation
 - Part 2:2012 Road Traffic Noise Reducing Devices. Test Method for Determining the Acoustic Performance. Intrinsic Characteristics of Airborne Sound Insulation
 - Part 3:1998 Road Traffic Noise Reducing Devices. Test Method for Determining the Acoustic Performance. Normalized Traffic Noise Spectrum
 - Part 4: 2015 Road Traffic Noise Reducing Devices. Test Method for Determining the Acoustic Performance. Intrinsic characteristics. In situ values of sound diffraction
 - Part 5: 2016 Road traffic noise reducing devices: Test method for determining the acoustic performance. Intrinsic characteristics: In situ values of sound reflection under direct sound field conditions
 - Part 6: 2012 Road traffic noise reducing devices: Test method for determining the acoustic performance. Intrinsic characteristics: In situ values of airborne sound insulation under direct sound field conditions
- BS EN 1794:
 - Part 1:2003 Road traffic noise reducing devices: Non-acoustic performance: Mechanical performance and stability requirements
 - Part 1:2011 Road traffic noise reducing devices: Non-acoustic performance: Mechanical performance and stability requirements
 - Part 2:2003 Road traffic noise reducing devices: Non-acoustic performance: General safety and environmental requirements
 - Part 2:2011 Road traffic noise reducing devices: Non-acoustic performance: General safety and environmental requirements
 - Part 3:2016 Road traffic noise reducing devices: Non-acoustic performance: Reaction to fire: Burning behaviour of noise reducing devices and classification
- BS EN 14388:2005 Road traffic noise reducing devices. Specifications
- BS EN 14388:2015 Road traffic noise reducing devices. Specifications
- BS EN 14389:
 - Part 1:2015 Road traffic noise reducing devices: Procedures for assessing long term performance: Acoustical characteristics
 - Part 2:2004 Road traffic noise reducing devices: Procedures for assessing long term performance: Non-acoustical characteristics
 - Part 2:2015 Road traffic noise reducing devices: Procedures for assessing long term performance: Non-acoustical characteristics

3. Terms, Definitions and Abbreviations

3.1 For the purpose of this Sector Scheme Document the terms and definitions given in ISO9000 apply unless modified in NHSS 0 Part 5 and the list below (where they are in both documents the definitions given below take precedent):

Certificate of Registration:	A certificate issued by a UKAS accredited Certification Body certifying that the holder operates a Quality Management System complying with BS EN ISO 9001: 2015 and this SSD. The Certificate will state the category/ies of work that the holder is competent to supply. Note The Certificate of Registration must identify the NHSS(s) by number as well as by category and sub-category.
Client:	The ultimate body for which the work is being carried out e.g. Highway Authority, which may also be the customer.
Components:	All the necessary elements, including fastenings, which separately and together are necessary to create a EBS system as required by the Contract.
Contract Manager:	The person responsible for the management of the EBS installation. The Contract Manager could be responsible for a number of contracts and is not generally based on site.
Contract Specification:	The technical requirements of the contract agreement, for example the following may apply: i) Manual of Contract Documents for Highway Works: Volume 1: The Specification for Highway Works (Department for Transport) or as specifically required in the contract documents. ii) contract specific appendices iii) the contract drawings
Contract Supervisor:	The person responsible for facilitating the EBS installation. This person could be responsible for a number of contracts and is not necessarily always on site.
CSR:	Construction Skills Register card – issued in Northern Ireland.
Customer:	The body engaging the organization for the purpose of the work described in this NHSS document. The customer may also be the client.
Design and development:	The process of converting the specification into a plan to meet the contract requirements.

Diploma (QCF):	A practical and knowledge based competency assessment qualification which replaces NVQs in England, Wales and Northern Ireland as applicable. SVQs are not affected.
Environmental Barriers (Structural) EBS:	Environmental barriers (structural) covers all types of constructed environmental barriers excluding earth barriers.
FISS/CSCS Smart Card:	Fencing Industry Skills Scheme/Construction Skills Certification Scheme smart card issued by the committee of the FISS/CSCS (see Appendix C). A CSCS card is not an acceptable alternative to the FISS/CSCS card.
Inspection:	an ongoing activity from start (design) to finish (end of life) to ensure that the product meets and continues to meet the required performance. (see Appendix P).
Installation:	The process of assembling, placing in-situ and signing off the finished EBS in accordance with the manufacturer's instructions and the requirements of a contract.
Installer (Blue card)	A person who works under the control of a nominated person/supervisor and is a skilled Installer/repairer and holds a FISS/CSCS Blue card (see Appendix C).
Labourer:	A person who works under the control of a nominated Installer and holds a FISS/CSCS Green card (see Appendix C).
Infrastructure Provider	An organisation that provides the basic facilities, services and installations needed for the functioning of a community or society, such as transportation, security, communications systems, water and power lines, and public institutions including schools, post offices and prisons.
Maintenance:	The process of inspection, assessment and subsequent restoration of an installed EBS to keep it in good condition and working order, to continue to meet the requirements laid out in the manufacturer's documentation and relevant National Standard.
National Vocational Qualification (NVQ):	A vocational qualification approved by the Office of Qualifications and Examinations Regulation (Ofqual).
Organisation	A business that is not registered to ISO9001 for this sector scheme.
Organization:	The business responsible for providing the product and services in accordance with this sector scheme and is registered by a relevant UKAS accredited Certification Body to BS EN ISO 9001 and this document.

Principal Contractor:	The managing contractor with control over the construction phase of a project involving more than 1 contractor. They are appointed in writing by the Client to plan, manage, monitor and co-ordinate the contract including health and safety during this phase to comply with CDM Regulations.
Provider	This term is the preferred term used in ISO 9001:2015 in place of “supplier”, which was used in ISO 9001:2008. The terms are synonymous. This document uses supplier.
Quality:	Assurance of a desired level of service or product. Especially by means of attention to every stage of process of delivery or production. Note: This differs from the ISO9001 document.
Quality Plan:	See ISO9000 2015 and Appendix A (Applies throughout this document.)
Quality Management System:	See ISO9000 2015 clause 3.5.4.
Repair:	The process of replacing broken, damaged, faulty, worn, sub-standard or failed components of an EBS system(s) to ensure the installed system(s) continue to meet the requirements laid out in the manufacturer’s instructions and relevant National Standard. This includes maintaining the surrounding ground to its designed level. The removal and replacement of foundations is not included.
Scottish Vocational Qualification (SVQ):	A vocational qualification approved by the Scottish Qualification Authority (SQA).
“shall”:	The term “shall” indicates a requirement strictly to be followed in order to conform to the standard and from which no deviation is permitted. (See ISO Directives Part 3:1997, Annex E)” (reference “guidance on terminology used in ISO 9001 and ISO 9004”).
“should”:	The term “should” is used in this document to indicate recognised means of meeting the requirements of this standard. An organization can meet these in an equivalent way provided this can be demonstrated to a Conformity Assessment Body (CAB) (Certification Body).
Subcontracting individual (supplier):	Individual/s (sourced from a labour exchange) or directly self-employed person who provide installation service(s) only to the organization and work under the direct supervision and control of the organization. The organization has the responsibility/accountability and must ensure all the Individuals are appropriately trained and qualified in accordance with Appendix C.

Subcontracting teams (supplier):	A registered company that provides specialist team/s of people for distinct activities working under the direct supervision and control of the organization. The organization has the responsibility/accountability and must ensure all the Individuals of the team are appropriately trained and qualified in accordance with Appendix C.
Subcontracting organization (supplier):	A registered national highways sector scheme organization, providing services(s) and/or material(s) to the organization in accordance with their sector scheme registration. The awarding organization has the responsibility/accountability and must ensure all the Individuals of the team are appropriately trained and qualified in accordance with Appendix C.
Subcontracting specialist (supplier):	An Individual or a GD02 (or equivalent) registered consultancy organization providing specialist supervision and/or consultancy services.
Supplier:	See ISO 9000:2015 clause 3.2.5.
Supply:	The sourcing and making available (directly or indirectly) of the necessary materials/products and/or services to the organization to meet the requirements specified in the contract.

3.2 For the purpose of this Sector Scheme Document the abbreviations in NHSS 0 Part 5 shall apply except where listed in the table below:

CB	Certification Body
CSCS	Construction Skills Certification Scheme
DfT	Department for Transport
FISS	Fencing Industry Skills Scheme
HSE	Health & Safety Executive
Lantra	the appointed administrator for services and training, competency assessment and registration as defined in this SSD. In addition, Lantra are an Awarding Body recognised by Ofqual and able to develop regulated training and qualifications
MCHW	Manual of Contract Documents for Highway Works: Volume 1 Specification for Highway Works
NVQ/SVQ	National Vocational Qualification/Scottish Vocational Qualification
OfQual	Office of Qualifications and Examinations regulation
QCF	Qualifications Curriculum Framework
SSD	Sector Scheme Document
SHW	Manual of Contract Documents for Highway Works Volume 1: The Specification for Highway Works (and any subsequent amendments) currently issued by The Stationery Office for Highways England, Transport Scotland, The Welsh Assembly Government and The Department for Regional Development, Northern Ireland. Amendments to the SHW may be published as Interim Amendments Notes (IANs): available at http://www.dft.gov.uk/ha/standards/ians/index.htm
UKAS	United Kingdom Accreditation Service or any equivalent International Accreditation Forum (IAF) Multi-Lateral Agreement (MLA) signatory with a scope which includes this Sector Scheme.
VRS	Vehicle Restraint Systems

4 to 10 Quality Management System Requirements

Particular Requirements ISO 9001:2015

Introduction

This document shall be read in conjunction with the requirements of ISO 9001:2015.

Clause/Paragraph numbers in this section reference appropriate paragraphs of ISO 9001:2015. The requirements of ISO 9001:2015 are deemed to apply unless specific additions are required. Where 'no particular requirements' are recorded under an ISO 9001 clause heading this means that it is not considered necessary to provide a particular requirement for that clause.

The particular requirements given below are to assist in the clarification of the ISO 9001 text for the relevant activity, no inference should be made that ISO 9001 requirements are diluted or deleted because of this particular requirement.

4 Context of the organization

4.1 Understanding the organization and its context

No particular requirement.

4.2 Understanding the needs and expectations of interested parties

Interested parties shall include the Customer, Client and other contractors, and those that interact with or use the Client's infrastructure e.g. the general public including travelling public, emergency services and other relevant organisations and stakeholders.

4.3 Determining the scope of the quality management system

- (i) The organisation shall select those categories detailed in Appendix K (Annex 3 for amplification) for which it is seeking registration. (see also Section 1)
- (ii) Consideration shall be given to outsourced services and how those outsourced services are controlled.

4.4 Quality management system and its processes

4.4.1 The organization shall operate a quality management system to ISO 9001:2015 and this schedule.

4.4.2 The organization shall record their registration to this sector scheme on the Schedule of Suppliers website www.scheduleofsuppliers.co.uk immediately following confirmation of their certification to the sector scheme from the certification body and thereafter check its suitability annually. (See Appendix O for information).

The organization shall notify the Lantra NHSS Schedule of Suppliers if Certification is suspended or withdrawn, (as will the Certification Body).

5 Leadership

5.1 Leadership and commitment

5.1.1 General

The organization's policy document shall include Top Management support for this NHSS.
Note – the term "top management" is defined in ISO 9000:2015 (3.1.1) and variations from the norm may differ for individual organizations.

5.1.2 Customer focus

- (i) Processes for determining customer requirements shall consider the interests of the Client and the product and service end users, e.g. the general public/travelling public and shall be mindful of the Client's interaction with the end users. This will include processes to minimise disruption.
- (ii) Safe working methods shall be documented and any deviation from these methods should be agreed with the Client.

5.2 Policy

5.2.1 Establishing the quality policy

The organization's quality policy statement shall include a statement of commitment to applicable NHSS.

5.2.2 Communicating the quality policy

Management and communication systems shall be maintained to ensure customer requirements are adequately and accurately communicated to staff carrying out the work. The Contract Supervisor is responsible for the Contract.

5.3 Organizational roles, responsibilities and authorities

Where required in the contract agreement, such information as necessary shall be included in a contract specific quality plan, (see Clause 7.5.1 and Appendix A).

6 Planning

6.1 Actions to address risks and opportunities

6.1.1 The organization shall take into account the risks and opportunities relating to this NHSS.

6.1.2 Where required in the contract agreement the supplier shall undertake relevant risk assessments in accordance with the client's standards and processes (for example Highways England's Standard GD04 provides a method for undertaking risk assessment on their network). See also Clause 5.1.2 above.

6.2 Quality objectives and planning to achieve them

6.2.1 No specific particular requirement.

6.2.2 The quality objectives shall include a commitment to meet Customer and Client requirements with respect to this NHSS.

Top management shall ensure that the resources are managed in a sustainable fashion, through the implementation of an on-going resource efficiency plan. This plan should include targets for minimising waste disposal and maximising recycling on site practiced to the satisfaction of customers and other interested parties.

The organization shall commit to improving the environmental performance of the organization, through the consideration of the impact of resources on the environment, the impact of waste on the environment, recycling of waste and use of recycled materials.

6.3 Planning of changes

No specific particular requirement.

7 Support

7.1 Resources

7.1.1 General

No specific particular requirement.

(02/18)7.1.2 People

The persons necessary for the effective implementation of the QMS may include the following:

- Contract Manager
- Inspector
- Contract Supervisor
- Installer
- Labourer

The organization shall ensure that EBS works on site are supervised by an appropriately qualified Supervisor. The EBS works shall be carried out by teams lead by an identified Supervisor or Nominated Person. The composition of operational teams shall be determined by both generic and site specific risk assessment and each role shall be documented in the organization's quality plan.

For work on EBS installations the organization will decide the gang structure but the ratio shall not exceed 2 Labourers to 1 Installer. It is the responsibility of the organization to nominate a Lead Installer on each site.

Note: Gang structure refers to the EBS installation crew only. For example Plant Operators, Banksmen and other occupations are not part of the EBS installation gang but they must be qualified for the activities they are carrying out.

7.1.3 **Infrastructure**

No specific particular requirement.

7.1.4 **Environment for the operation of processes**

No specific particular requirement.

7.1.5 **Monitoring and measuring resources**

7.1.5.1 **General**

The organization's system shall include documented procedures to demonstrate the manner and frequency of the calibration of the measuring and test equipment. See Appendix E for guidance.

7.1.5.2 **Measurement of traceability**

No specific particular requirement.

7.1.6 **Organizational knowledge**

No specific particular requirement.

Note: Reference and legal documents listed in Appendix B are the main documents relevant to this scheme, however it should be noted that the list is only current at the time this version of the scheme document was published. The employer is responsible to ensure that the latest issues of these documents are being used.

7.2 **Competence**

General

The training and assessment of competency of personnel required by this scheme is aimed primarily at technical competence for this scheme's personnel. It is intended to enable/assist and support employees to carry out work in a safe manner however it remains the responsibility of the organization to determine and implement safe systems of work.

Requirements

To assess competence within the organization the following criteria should be considered and evidenced;

Skills

Knowledge

Attitude

Training Experience

The framework for achieving competency shall include the following;

- (i) Organizations shall meet the scheme requirements and ensure all their Installers and team members are registered and working towards relevant qualifications referred to in the FISS/CSCS registration scheme. A copy of the FISS/CSCS booklet, which details all the requirements, is available from the Lantra website <http://www.lantra.co.uk/nhss/fisscscs>. A brief outline of these categories and contact address is detailed in Appendix C.
- (ii) The organization shall create and maintain a record of training and assessment of competence for each employee. Gang ratio will be two Labourers to one Installer.
- (iii) The organization shall create and maintain a register of employees as part of the organization's competency management documented information.
- (iv) Whilst working at highway construction sites employees shall carry a skills registration card that details their qualifications for competency at all times. This card will include an identification photograph and where appropriate the name of the organization.

7.3 Awareness

No specific particular requirement.

7.4 Communication

The relevant quality plan and standard operating procedures shall be communicated to all relevant employees.

The organization shall consider the need for external communications to interested parties (and Communities where applicable) affected by their activities under the scheme.

7.5 Documented information

7.5.1 General

- (i) A quality plan (documented planned arrangements) shall be required. When specified in the contract documents or requested, the organization shall submit a quality plan or alternative document as defined in the Contract Specification for acceptance or approval by the Client, as appropriate, prior to commencement of work (See Section 8 and Appendix A).
- (ii) The organization shall have in place auditable processes to identify publication of relevant new documents/standards and implementation requirements.

7.5.2 Creating and updating

No specific particular requirement.

7.5.3 Control of documented information

7.5.3.1 No specific particular requirement.

7.5.3.2 Control of Documented Information of External Origin

The organization shall have processes in place to ensure that the latest versions of relevant Standards and Documents are available (See Appendix B).

In addition to ISO 9001:2015 requirements the following documented information is typically required to be controlled:

Contract specific documents e.g. drawings, schedules, as listed in the quality plan for a particular scheme.

Control of Records

In addition to the organization's own quality records, the following records shall typically be controlled:

Contract specific records, e.g. risk assessments, as listed in the quality plan see Appendix A.

As part of the Organization's procedures for document control, the following contract specific documents are typically required to be controlled (the list is not exhaustive):

- a) Name and address of Client;
- b) Address of Site;
- c) Means of Access;
- d) Contract Documents;
- e) Length and location of environmental barriers (structural) and position of gates;
- f) Details of environmental barriers (structural) to be used, including the declaration of performance and structural performance.
- g) Information to be supplied to the Customer/Client including any third party certification;
- h) As appropriate specified sample panels shall be produced for acceptance by the customers
- i) Site terrain, subsoil, underground obstructions and voids;
- j) Location and identification of underground and overground services and structures including vehicle restraint systems;
- k) Delivery Programme and storage areas for materials;
- l) Agreed areas of cutting and filling;
- m) Location of buildings, trees, roads, railways, tramways, vehicle restraint systems and other factors likely to affect installation;
- n) other relevant information e.g., foundation design, environmental & aesthetics aspects, other relevant Sector Scheme compliance, materials/products supplier details.

Where certain aspects of the information described above cannot be obtained or is not provided, the fact shall be recorded in writing and a copy given to the Customer.

The record retention, storage and distribution will be agreed with the customer and where specified with the client and documented in the Quality Plan.

8 Operation

8.1 Operational planning and control

- (i) The quality plan shall as a minimum address the topics listed in Appendix A of this schedule and where applicable the requirements contained in the Specification for Highway Works and associated contract documents.

Note: The topics for the content of a QP are given in ISO 10005 and this document; in particular reference should be made to Appendix A of this document and Appendix H of the SHW.

- (ii) The Quality plan may be a largely standard document as indicated in Appendix A of this schedule supplemented by contract specific information.
- (iii) The quality plan should not be considered in isolation. An integrated approach may be taken which links to other relevant plans.

Note 1: Management of the service as a whole is reliant on quality and hence the contract and the quality element cannot be separated, as one cannot function without the other.

Note 2: The quality plan describes the management strategy that sets clear and sustainable performance objectives, delegates' responsibility and establishes lines of communication. The objective being to manage the various management schemes within an overall management scheme within an organization.

Management should ensure that the validation of products demonstrates that they meet the needs and expectations of customers and other interested parties with respect to the:

- Resource efficiency impact of the installation, use, maintenance and disposal of the product, or by-products of the production and maintenance; impact on natural reserves of resources used in the production process including locally sourced materials and/or use of materials with a recycled content, subsequent waste minimization, recycling and where necessary environmentally acceptable disposal of the product or by products of production.
- (iv) The organization shall, in order to reduce the need for waste disposal, minimise the generation and environmental impacts of wastes arising during the contracted works and shall maximise opportunities for the re-use and recovery of wastes. The organization shall document its arrangements for the identification, segregation, handling, storage and disposal of the different types of wastes arising from the contracted works to maximise opportunities for the re-use and recovery of wastes.

8.2 Requirements for products and services

8.2.1 Customer communication

- (i) The quality plan shall identify what and when relevant information is passed on to the Customer and Client (where appropriate). (refer to Appendix A to ensure requirements are listed).

Where required by the contract/ legislation the Customer needs to be informed about the products, i.e. they require detailed information as appropriate regarding materials, components, manufacturing details etc. for the purposes of:

- health and safety requirements
- as-built records for maintenance
- their own monitoring of the effectiveness/performance of the product.

8.2.2 Determining the requirements for products and services

Where required in the contract agreement the provider shall undertake relevant risk assessments in accordance with the client's standards and processes (for example Highways England's Standard GD04 provides a method for undertaking risk assessment on their network). See also 5.1.2

The organization shall define the relevant information e.g. contract or legislative requirement.

Processes for determining customer requirements shall consider the interests of the Client and the product end users, i.e. the general public/travelling public and shall be mindful of the Client's interaction with the end users. This will include processes to minimise disruption to traffic, neighbours and other third parties.

Determination of requirements related to the product should include:

- resource efficiency aspect requirements specified by the Customer;
- resource efficiency aspect requirements not stated by the Customer but necessary for specified or intended use, where known; statutory and regulatory requirements related to the resource efficiency aspects of the product, including as appropriate compliance with European Licensing regulations (e.g. Driver CPC – periodic training).

8.2.3 Review of the requirements for products and services

No specific particular requirement.

8.2.4 Changes to requirement for products and services

No specific particular requirement.

8.3 Design and development of products and services

8.3.1 General

The records of the verification (see sub-clause 8.3.4 Design and Development Controls) processes shall include information to demonstrate compliance with the contract specification, irrespective of whether the customer expressly requests it or not.

For products covered by a harmonised standard, product design is covered through CE Marking. BS EN 14388:2005 provides the route for Environmental Barriers to be CE Marked. It should be noted that although the standard has been withdrawn, the superseding standard has been rejected by European Commission and cannot be used for CE Marking. (See Appendix B1).

8.3.2 Design and development planning

The certification for the organization shall include design as applicable to the organization's scope.

The organization shall take note of the relevant requirements of the Reference Documents as scheduled in Appendix B.

The design and development planning processes shall include:

- site assessment
- site constraints
- design risk assessments/CDM regulations
- structural design
- acoustic design
- foundation design
- fixings design
- installation planning (including manufacturers instructions)

Note: The organization should refer to the relevant European Standards for an appropriate system to meet the contract specific requirements. (see 8.3.1)

Where applicable any design modifications or changes shall be referred back to the product supplier.

8.3.3 Design and development Inputs

Note: Where the contract prescribes levels of acoustic performance they will be designated in accordance with the ratings as detailed Annex 2.

8.3.4 Design and development controls

The organization shall identify within the quality plan the verification and validation processes being adopted to ensure compliance with the contract (specification).

The records of the verification and validation processes shall include information to demonstrate compliance with the contract (specification) irrespective of whether the customer expressly requests it or not.

The organization shall ensure the technical approval process relating to the design is implemented in accordance with the contract requirements.

An example of an Approval in Principle (AIP) form is given in Annex 1.

8.3.5 Design and development outputs

No specific particular requirement.

8.3.6 Design and development changes

No specific particular requirement.

8.4 Control of externally provided processes, products and services

8.4.1 General

No specific particular requirement.

8.4.2 Type and extent of control

Delivery documentation shall be checked to ensure: the materials described are as required both on the order and on the delivery documentation.

8.4.3 Information for external providers

Where specified or requested the organization shall ensure that their supply chains meet the requirements of this scheme, including registration to this scheme.

Purchasing information shall include where appropriate resource efficiency aspects related to the percentage of recycled materials and locally sourced materials to be included.

8.5 Production and service provision

8.5.1 Control of production and service provision

The organization shall identify and plan the supply and installation processes. Examples of conditions, which shall be controlled, include:

- a) an agreed procedure for carrying out emergency repairs including health and safety requirements
- b) where the organization is the Principal Contractor, location and identification of underground and overground services and structures including installed vehicle restraint systems together with the names, addresses and telephone numbers of persons responsible for them and communicated to all interested parties.
- c) when the organization is a sub-contractor (see terms and definitions), the taking of all reasonable steps to ensure this information is available from the main supplier and is suitable to the extent that the organization is satisfied it is safe to carry out the sub-contract works
- d) safe place of work and the provision of temporary traffic management by an appropriate sector scheme registered organization

- e) The organization's system shall include documented procedures to demonstrate the manner and frequency of the calibration of the measuring and test equipment. See Appendix E for guidance.

8.5.2 Identification and traceability

The organization shall implement and maintain documented processes to ensure that retained documents and records can be clearly identified and traced.

Note: CE Marked products should be accompanied by a Declaration of Performance (DoP) which complies with the contract requirements and accompanied by the manufacturers instructions and safety information in easily understood English (UK).

8.5.3 Property belonging to customers or external providers

Where required the Quality Management System shall include a procedure to be applied where material is supplied by the Client.

Supplied product may include the re-use of undamaged components from existing EBS.

8.5.4 Preservation

The organization shall establish and maintain documented procedures for handling, storage, and packaging of all material to ensure that the specified requirements are met.

Systems shall be in place to inspect and maintain all goods returned from site before their subsequent use.

8.5.5 Post-delivery activities

The organization shall supply all documents as detailed in a) to e) of this clause of ISO 9001:2015.

8.5.6 Control of changes

No specific particular requirement.

8.6 Release of products and service

Where required in the contract, the organization shall provide test reports assessed against the relevant parts of BS EN1793 and 1794 by a notified body. The acoustic ratings for sound absorption and airborne sound insulation are given in BS EN1793 Part 1 and Part 2 and are reproduced in Annex 2. (See also Appendix B1)

The certificate shall be accompanied by full details of the EBS system.

8.7 Control of nonconforming outputs

8.7.1 No specific particular requirement.

8.7.2 Any material and /or work not conforming to the specification shall either be reworked to conform to the specification or must formally be accepted in writing by the customer. The materials and/or work shall otherwise be considered as rejected.

9 Performance evaluation

9.1 Monitoring, measurement, analysis and evaluation

9.1.1 General

The organisation shall evaluate the performance effectiveness of their management system in respect of this scheme.

This includes the ongoing impact of this sector activity on other works including congestion and traffic flows.

9.1.2 Customer satisfaction

No specific particular requirement.

9.1.3 Analysis and evaluation

No specific particular requirement.

9.2 Internal audit

9.2.1 No specific particular requirement

9.2.2 Internal audits shall be carried out at sufficient frequency and by a suitable technically competent person/s to ensure a robust assessment of the compliance of the product.

The quality plan shall state the frequency of internal audits. Internal audits of the quality management system against this SSD shall include at least (two visits) a year to specific works sites to check this sector scheme (Where the organization does not have contracts which provide continuous working throughout a full year, visits shall be conducted on a pro-rata basis, but at least one visit per contract must be made).

Internal auditors shall have a working knowledge of activities within this scheme. Internal audits shall be carried out by the nominated quality manager or a designated competent person.

Six monthly office-based audits of administrative procedures shall be carried out.

9.3 Management review

9.3.1 General

The organization shall review the quality management system at least once a year to ensure its continuing suitability and effectiveness to conform to this NHSS.

9.3.2 Management review inputs

No specific particular requirement.

9.3.3 Management review outputs

No specific particular requirement.

10 Improvement

10.1 General

No specific particular requirement.

10.2 Nonconformity and corrective action

No specific particular requirement.

10.3 Continual improvement

The corrective actions and risk assessment processes shall include analysis of incidents and occurrences. Consideration should be given to accident statistics and near miss reporting.

Annex 1: Sample of an Approval in Principle

Approval in Principle

Date:

Contractor's Address

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APPROVAL IN PRINCIPLE

Name of Project

Name of Bridge or Structure *Environmental Barriers (Structural).*

Structure Ref. No. *Give carriageway/chainages for barrier.*

1. HIGHWAY DETAILS

1.1 Type of highway

1.2 Permitted traffic speed

1.3 Existing weight restriction/Environmental Restrictions

Existing weight restrictions - Not applicable.

Environmental restrictions - Contractor to complete.

2. SITE DETAILS

2.1 Obstacles crossed

3. PROPOSED STRUCTURE

3.1 Description of structure

3.2 Structural type

3.3 Foundation type

3.4 Span arrangements

3.5 Articulation arrangements

3.6 Road restraint system type

3.7 Proposed arrangements for maintenance and inspection

3.7.1 Traffic management

3.7.2 Access

3.8 Materials and finishes

3.9 Risks and hazards considered

Construction:

Maintenance:

3.10 Estimated cost of proposed structure together with other structural forms considered and the reasons for their rejection including comparative whole life costs with dates of estimates

3.11 Proposed arrangements for construction

3.11.1 Traffic management

3.11.2 Service diversions

3.11.3 Interface with existing structures

4. DESIGN CRITERIA

4.1 Live loading, Headroom

4.1.1 Loading relating to normal traffic under AW regulations and C&U regulations

4.1.2 Loading relating to General Order Traffic under STGO regulations

4.1.3 Footway or footbridge live loading

4.1.4 Loading relating to Special Order Traffic, provision for exceptional abnormal indivisible loads including location of vehicle track on deck cross-section

4.1.5 Any special loading not covered above

4.1.6 Heavy or high load route requirements and arrangements being made to preserve the route, including any provision for future heavier loads or future widening

4.1.7 Minimum headroom provided

4.1.8 Authorities consulted and any special conditions required

4.2 List of relevant documents from the TAS

4.2.1 Additional relevant Standards

4.3 Proposed departures from Standards given in 4.2 and 4.2.1

4.4 Proposed methods for dealing with aspects not covered by Standards in 4.2 and 4.

5. STRUCTURAL ANALYSIS

5.1 Methods of analysis proposed for superstructure, substructure and foundations

5.2 Description and diagram of idealised structure to be used for analysis

5.3 Assumptions intended for calculation of structural element stiffness

5.4 Proposed earth pressure coefficients (k_a , k_0 or k_p) to be used in the design of earth retaining elements

6. GEOTECHNICAL CONDITIONS

6.1 Acceptance of recommendations of Section 8 of the Geotechnical Report to be used in the design and reasons for any proposed changes

6.2 Geotechnical Report Highway Structure Summary Information (Form C)

6.3 Differential settlement to be allowed for in the design of the structure

6.4 If the Geotechnical Report is not yet available, state when the results are expected and list the sources of information used to justify the preliminary choice of foundations

7. CHECKING

7.1 Proposed Category

Category 1

7.2 If Category 3, name of proposed independent Checker

7.3 Installation proposals or temporary works for which an independent check will be required, listing parts of the structure affected with reasons for recommending an independent check

8. DRAWINGS AND DOCUMENTS

8.1 List of drawings (including numbers) and documents accompanying the submission

9. THE ABOVE IS SUBMITTED FOR ACCEPTANCE

Signed

Name

Design Team Leader

Engineering Qualifications

Fencing Contractor or their designer

Date

10. THE ABOVE IS SUBMITTED FOR ACCEPTANCE

Signed

In the capacity of

Name

Main Contractor

Date

11. THE ABOVE IS AGREED SUBJECT TO THE AMENDMENTS AND CONDITIONS SHOWN BELOW

Signed

Name

Position Held Team Leader (SSR OS TAG)

Engineering Qualifications

TAA

Date

Appendix i): Schedule of Documents Relating to Design of Highway Bridges and Structures

British Standards

Department of Transport Local Government and the Regions (DTLR)

Miscellaneous

The Manual of Contract Documents for Highway Works (MCDHW)

Volume 1: Specification for Highway Works (February 2003)

Volume 2: Notes for Guidance on the Specification for Highway Works (February 2003)

Volume 3: Highway Construction Details (February 2003)

The Design Manual for Roads and Bridges (DMRB)

Bridges and Structures, Advice Notes (BA Series)

Bridges and Structures, Standards (BD Series)

Bridges and Structures, Technical Memoranda (BE Series)

Traffic engineering and Control, Standards (TD Series)

Highways, Advice Notes (HA Series)

Highways, Standards (HD Series)

Appendix ii): Drawings

List of Drawings:

Annex 2: EXTRACTS FROM EN 1793-1 1997 CATEGORISATION FOR SINGLE-NUMBER RATING

EN 1793-1 1997

(normative)

Categorisation of single-number rating

If, in addition to specifying the value of DL_a , there is a need to categorise absorptive performance, then the categories listed in table A.1 shall be used.

Table A.1	
Categories of airborne sound insulation	
Category	DL_R dB
A0	Not determined
A1	< 4
A2	4 to 7
A3	8 to 11
A4	> 11

(Informative)

Guidance note on use of the number rating DL_a

The single-number rating DL_a is most directly relevant to characterising absorptive performance in situations where the sound radiating from the traffic stream reflected from absorptive surface and travels directly to the receiver position without further reflections from surfaces or undergoing diffraction over barriers or obstacles. In more complex situation where multiple reflections occur or where sound waves are diffracted, the original spectrum of the traffic noise will be altered so that the low frequency components may be emphasised at the receiver positions. In these latter conditions it is important to consider the performance of absorptive materials as a function of frequency.

Annex 2 cont

EN 1793-2: 1997

(normative)

Categorisation of single-number rating

If, in addition to specifying the value of DL_R , there is a need to categorise airborne sound insulation, then the categories listed in table A.1 shall be used.

Table A.1	
Categories of airborne sound insulation	
Category	DL_R dB
B0	Not determined
B1	< 15
B2	15 to 24
B3	> 24

(Informative)

Guidance note on use of the number rating DL_R

The single-number rating DL_R is most directly relevant to characterising airborne sound insulation in situations where the sound incident on the barrier is received directly from the traffic stream without this sound having undergone reflections from surfaces or having been diffracted from barrier edges or obstacles. In more complex situations, where multiple reflections occur or where sound waves are diffracted, the original spectrum of the traffic noise will be altered so that the low-frequency components may be emphasised at the barrier surface. In these latter situations, it is important to consider the performance of materials as a function of frequency.

ANNEX 3: Scope of Services Provided by an organization

Ref NHSS2C / ISO 9001 Clause 4.1, 4.3, 8.3 and 8.5

This Annex amplifies the categories provided in Appendix K

Description of Service	Yes “if an organization provides this services”
Product Design, Testing, and Manufacture - This is not covered within this Sector Scheme Document for CE Marked Products	Not Applicable
Determination of barrier characteristics and values Foundation design structural design	Yes but not normally applicable for Installers
Produce performance specification and drawings	Yes applicable for design services
Select products to meet specified performance criteria (supply)	Yes for Installer
Procure materials for incorporation in permanent works (supply)	Yes for Installer
Install barriers and if necessary vehicle restraint systems (planning & install)	Yes for Installer
Verify that a barrier installation complies with customers' requirements Where necessary this will include vehicle restraint systems (install)	Yes for Installer
Assess barrier and make recommendations for refurbishment (inspect)	Yes for Maintainer
Assess damaged barrier & make recommendations for repair (inspect)	Yes for Maintainer
Repair damaged barrier (repair)	Yes for Maintainer
Inspect barrier and produce a report on its condition (Asset Management/Inspection)	Yes for Inspector not necessarily the NHSS2C organization

Appendix A: Requirements for Quality Plans

- 1.1 Definition of the product (or service) to be provided.
- 1.2 The structure of the organization describing the line of command and stating the names of the organization's Manager responsible for the contracted work. Contact details for these staff.
 - details of those responsible for design where applicable
 - the senior manager responsible for the contracted work,
 - the organization's on-site management representative, and
 - the person(s) responsible for signing off the works e.g. Lead Installer or Contract Supervisor
- 1.3 Identification of the procedural content of the organization's quality management system documentation relative to the product and service being provided. A copy of this documented information shall be available and provided to the Customer and/or Client as required or on request.
- 1.4 The control of personnel selection including special requirements for skilled personnel e.g. training of site staff.
- 1.5 The Customer's nominated Quality Manager, project manager and/or other representatives through whom communication is to be made throughout the contract.
- 1.6 Any environmental conditions impacting upon the specified works.
- 1.7 Location of site for the contract and means of access
- 1.8 Specification and/or Contract Documents
 - Site terrain, subsoil, underground obstructions and voids;
 - Location and identification of underground and overground services and structures including vehicle restraint systems;
 - Agreed areas of cutting and filling;
 - Location of buildings, trees, roads, railways, tramways, vehicle restraint systems and other factors likely to affect installation;
 - other relevant information e.g., foundation design, environmental aspects, other relevant Sector Scheme compliance, materials/products supplier details.
 - Where certain aspects of the information described cannot be obtained or is not provided, the fact shall be recorded in writing and a copy given to the Customer.
 - EBS requirements.
 - The quality plan shall include details on the production and control of concrete to comply with the requirements of BS EN 206-1 and BS 8500 part 1.
- 1.9 Extent of the works and the commencement and completion dates of the contract
- 1.10 Details of the work including length and location of EBS and position of gates;
- 1.11 Details of existing materials (as applicable)
- 1.12 Disposition of documented information

2.0 Contract specific information

- 2.1 Details of the contract specific equipment to be used and any certification required to be issued to the Customer/Client.
- 2.2 Name and contact details of Customer/Client contact(s).
- 2.3 Details of the communications required between the organization's staff and the Customer/Client or any other party including Liaison with the Police, the Highway Authority, adjoining landowners and organisations or individuals advising on works affecting Protected Species or their habitats.
- 2.4 Work programme and details of deliverables including method statements.
- 2.5 Details of how the organization shall address health and safety issues, including risk assessment, on a site specific basis, for all activities, including road traffic hazards, environmental hazards, etc. in the works area and those with the potential to impact outside the works area.
- 2.6 Any sub-contract details including details of the sub-contractor's registration to this Sector Scheme and any other relevant Sector Scheme.
- 2.7 Receipt, examination and submission to Client of certificates of registration and test results and origins of materials used including timber source information.*
- 2.8 Selection, storage, handling including delivery programme and storage areas for materials.
- 2.9 Site welfare facilities for staff and reference to relevant Health and Safety Plans and/or Risk Assessments.
- 2.10 Details and control of Quality records.*
- 2.11 Control of non-conforming product. *
- 2.12 Scheme specific resource efficiency plan and requirements, including those of the Customer/Client, statutory and regulatory, and for purchasing of materials for the contract.
- 2.13 Measures required for the minimisation of waste, inclusion of recycled material and the methods for environmentally acceptable disposal of materials as necessary.
- 2.14 Environmental Management Plan, Construction Environmental Management Plan, Operation and Maintenance Plan, Handover Environmental Plan as appropriate.

*Copies of the organization's general procedures covering these items shall be made available for examination by the Client's representative; copies are to be provided when requested.

Reference shall be made to contract specific Appendix 1/24 (See Notes for Guidance on the Specification for Highway Works for sample Appendix) where this is incorporated into the main Contract and Appendix H of the Specification for Highway Works which provides holding points.

NOTES:

1. Where certain aspects of this information cannot be obtained or, is not provided, this fact shall be noted in the quality plan against the appropriate section.
2. See ISO 10005 (Quality management systems – Guidelines for quality plans) for further information
3. Where ready mixed concrete is provided for highway works, in accordance with the requirements of the SHW, it shall meet the requirements for product conformity provided in Appendix B of the SHW. When the supplier proposes to use a different product certification scheme or an organization registered to a different product certification scheme, he shall satisfactorily demonstrate to the Overseeing Organisation that the scheme provides equivalence in accordance with sub-clauses 104.5 and 104.18 of the SHW for the concrete mixing plants supplying to the contract.

Appendix B: Informative Reference Documents

The list of standards and documents below are date specific, however, the organization shall have procedures in place to ensure that the latest version is always available. Organizations should be aware that utilisation of internet search engines may result in out of date references being identified/called up.

Note: The listing is not comprehensive; other documents may be required to fulfil the requirements of the contract. Organizations shall ensure that they have a working knowledge of and access to all the documents including amendments unless stated otherwise in the specification. Statutory requirements have not been included in this Appendix.

The organization shall have access to all relevant reference documents to the context of their organization, for example;

- 1.1 Manual of Contract Documents for Highway Works: Volume 1 Specification for Highway Works (SHW), and amendments
Specification for Highway Works:
Series 0000 Introduction
Series 0100 Preliminaries
Series 300 Fencing
Series 0400 Road Restraint Systems clause 4.11, Pedestrian Parapet and Pedestrian Guardrails
Series 0600 Earthworks
Series 1600 Piling
Series 1700 Structural Concrete
Series 1800 Structural Steelwork
Series 1900 Protection of Steelwork against Corrosion
Series 2400 Brickwork, Blockwork and Stonework
Series 2500 Special Structures [Clause 2504 Environmental Barriers]
Appendix A Quality Management Schemes
Appendix B Product Certification Schemes

<http://www.standardsforhighways.co.uk/ha/standards/mchw/index.htm>

(See note 2)

- 1.2 Manual of Contract Documents for Highway Works – Volume 2 Notes for Guidance on the Specification for Highway Works (NGSHW), and amendments.
Series NG000 Introduction
Series NG100 Preliminaries
Series NG300 Fencing
Series NG2500 Special Structures
<http://www.standardsforhighways.co.uk/ha/standards/mchw/index.htm>

(See note 2)

- 1.3 Manual of Contract Documents for Highway Works – Volume 3 Highway Construction Details Fences, Stiles & Gates – H series
www.standardsforhighways.co.uk/ha/standards/mchw/index.htm
(see note 2)

- 1.4 BS 1722 Part 7 wooden post and rail fences
BS EN 12839 Precast Concrete Products – Elements for Fencing
- 1.5 Railway Infrastructure Specific Documents
Network Rail Company Standards
1.4a.1 RT/CE/C/008 Model Clauses for Specifying Civil Engineering Works
(Section 240 – Fencing and Gates)
1.4b RT/CE/C/030 Lineside Security
1.4c Railway Infrastructure Standards as prepared by other railway authorities as appropriate
- 1.6 National Building Specification Fencing Section Q40
- 1.7 WPA Guidance Note on the handling of treated wood waste
- 1.8 Contract Specific Documents
- 1.9 IAN115 Hard Shoulder Working - can be accessed by the following link
<http://www.standardsforhighways.co.uk/ians/index.htm>
- 1.10 National Highways Sector Scheme No 2B, 5B & 10B Installation of Vehicle Restraint Systems see
website www.ukas.com – publications section.
- 1.11 National Highways Sector Scheme No 4: Natural and Conferred Durability of Timber issued by
UKAS see website www.ukas.com – publications section.
- 1.12 National Highway Sector Scheme No 12A/B & 12C/12D Temporary Traffic Management see
website www.ukas.com – publications section.
- 1.13 Applicable standards and advice notes of the Design Manual for Roads and Bridges published by
the Stationery Office (TSO). Amendments to the SHW may be published as Interim Amendments
Notes (IANs): available at either <http://www.dft.gov.uk/ha/standards/ians/index.htm>
<http://www.dft.gov.uk/ha/standards/dmrb/index.htm>
- 1.14 HA 66 Environmental Barriers : Technical Requirements. (Volume 10, Section 5, Part 2)
- 1.15 HA 65 Design Guide For Environmental Barriers (Volume 10, Section 5, Part 1)
- 1.16 BD2 Technical Approval of Highways Structures (Vol 1 Section 1)
- 1.17 IAN24 Use of temporary safety barriers at road works
- 1.18 IAN44 Interim Requirements for Road Restraint Systems
- 1.19 GD 02 - Quality Management Systems for Highway Design (Design Manual for Roads and Bridges –
Volume 0, Section 2, section 1, Part 1 –
<http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol0/section2.htm>
- 1.20 GD 04 - Standard for safety risk assessment on the strategic road (Design Manual for Roads and
Bridges – Volume 0, Section 2, section 1, Part 1 –
<http://www.standardsforhighways.co.uk/ha/standards/dmrb/vol0/section2.htm>

Note 1: This list of standards and documents include those that are date specific, however, the organization shall have procedures in place to ensure that the latest versions are always available. (See clause 7.5.3.2).

Note 2: Highways England may issue Interim Advice Notes (IANs) as a prelude to inclusion in the MCHW (Vol 1 and 2), the DMRB and/or Chapter 8. Organizations must have auditable processes in place to identify when these documents are issued and their implementation date(s). An index of Interim Advice Notes (IANS) is available on the internet (www.dft.gov.uk/ha/standards/ians/index.htm).

Note 3: Every effort has been made to update web sites, but the committee cannot provide any guarantees that the sites will continue to exist or if they do that they will maintain access to the documents identified above.

Appendix B1: European Standards for Road Traffic Noise Reducing Devices

1. Standards applicable for CE Marking as at January 2017

1.1 BS EN 14388:2005: Harmonised Product Standard

BS EN 14388:2005 is the harmonised standard addressing performance characteristics, test methods, evaluation of conformity and CE marking of road traffic noise barriers. The current legally enforceable edition of the Standard in the UK is BS EN 14388:2005.

1.2 Acoustic Standards (BS EN 1793) parts applicable to the harmonised product standard

BS EN 1793-1:1997
BS EN 1793-2:1997
BS EN 1793-3:1998

Note: Other parts and later versions of the above parts (of BS EN 1793) are not legally enforceable and should not be used for CE Marking purposes

1.3 Non-Acoustic Standards (BS EN 1794) parts applicable to the harmonised product standard

BS EN 1794-1:2003
BS EN 1794-2:2003

Note: Other parts and later versions of the above parts (of BS EN 1794) are not legally enforceable and should not be used for CE Marking purposes.

1.4 Durability Standards

BS EN 14389-2:2004

Note: BSEN 14389-1:2007 is not referenced in the current harmonised product standard, it should be discounted completely. It has since been superseded by BS EN 14389-1:2015.

Note: Other parts and later versions of the above parts (of BS EN 14389) are not legally enforceable and should not be used for CE Marking purposes.

2. Standards NOT applicable for CE Marking as at January 2017

2.1 BS EN 14388:2015: Product Standard:

The 2015 edition of the product standard (published as BSEN 14388:2015 in the UK) includes many new published versions of the test standards. However this version of the product standard has since been rejected by the European Commission's harmonisation assessment and cannot be used for CE Marking of highways noise barrier.

2.2 Other published standards

BS EN 1793-1:2012
BS EN 1793-2:2012
BS EN 1793-4:2015
BS EN 1793-5:2016
BS EN 1793-6:2012
BS EN 1794-1:2011
BS EN 1794-2:2011
BS EN 1794-3:2016
BS EN 14389-1:2015
BS EN 14389-2:2015

Appendix C: Training and Assessment of Competence

1. Training and competency qualifications

The organization shall ensure that their employees shall have undergone suitable training and competency assessment that will cover aspects of the work to be undertaken as follows:

See clause 7.2.2 and the requirements set out in the FISS/CSCS Information Booklet <https://www.lantra.co.uk/nhss/fisscscs>

2. Health and safety

Organizations are reminded of the legal requirements to provide health and safety training for all personnel as appropriate in accordance with the Health and Safety at Work Act 1974.

The training and assessment of competency of personnel required by this scheme is aimed primarily at technical competence in their field of work. It is intended to provide awareness to carry out work in a safe manner; however, it remains the responsibility of the organization to determine and implement safe systems of work.

If they are working adjacent to live highways it is a requirement that personnel pass the specialist test questions for Highway Works included in the CSCS or the ECS Highway Electrical version of the Health & Safety touch screen test.

3. Temporary traffic management

Highways organizations are reminded of the requirements for temporary traffic management on all highways including high speed dual carriageways and motorways.

For work on high-speed dual carriageways and motorways, other than short duration works on hard shoulders or verges, such works shall be carried out by an organization registered to NHSS 12C/B as appropriate.

For works on mobile lane closures NHSS 12C applies.

For works on other roads NHSS 12D applies and organizations need to ensure that they have appropriately skilled personnel to set out the necessary temporary traffic management measures. Guidance is given in Appendix M of NHSS 12D. However for the English strategic road network such measures need to be installed by a 12D registered organization.

4. Fraudulent certificates/cards

ACTION IN THE CASE OF SUSPECT CERTIFICATES/CARDS THE FOLLOWING ADVICE IS GIVEN:

SUGGESTED ACTION BY ORGANIZATION

On being presented with a suspect certificate/card (check logo, print quality, colour, layout, spelling, likeness of photograph):

- Take possession of certificate/card
- Call a member of the body that issued the certificate/card. A member of the team will help you confirm your suspicions or otherwise

If the certificate/card appears to be fraudulent:

- Retain the certificate/card if possible
- Make photocopies of front and back
- Record certificate/cardholder's name and address
- Ask certificate/cardholder where the certificate/card was obtained from
- Call the local police and report the matter
- Refuse access to site (subject to company rules)
- Forward copies of all evidence to the body who issued the certificate/card marked "SUSPECTED FRAUDULENT CERTIFICATE/CARD" with any crime number given by local police.

Note: The body should in the majority of cases fully support any prosecution with technical and factual evidence.

This should help to maintain the integrity of the Highway Sector Schemes.

⁽⁰²¹⁸⁾Appendix C1: Flowcharts to achieve FISS CSCS Smart Cards

A document illustrating flowcharts which provides a route to achieving a FISS CSCS Smart Card is available to download using the following link: <http://www.lantra.co.uk/nhss/fisscscs>

These describe the standard route for employees to achieve a FISS CSCS Smart Card, they do not take account of historical anomalies which are dealt with on a case by case basis by the FISS/CSCS Committee.

Examples of these anomalies include the following:

- Existing gold cardholders who completed a CLSA38X Health & Safety course will have to upgrade to SSSTS or a recognised industry equivalent by Build UK

Appendix D: Example Register of Personnel Attainments

A similar register will be maintained for Installers and Contract Supervisors.

NAME OF ORGANISATION -----

QA CERTIFICATION BODY ----- QA REGISTRATION NUMBER -----

FULL NAME OF LEAD INSTALLER	FISS/CSCS CARD REG NUMBER	IF RELEVANT CATEGORY(IES) OF SYSTEM DESIGNATED TO INSTALL *	REGIST RENEWAL DATE	DATE DESIGNATED BY ORG	NAME AND SIGNATURE OF AUTHORISED MANAGER NAME SIGNATURE	

*State product name

Appendix E: Guidance for the Control of Monitoring and Measuring Equipment

Equipment Title	Purchase Specification	Calibration Control	Calibration Frequency
Steel Tape	EC Class II	Issue control and function check by user	In Use Check †
Fibre Tape	EC Class III	Issue control and function check by user	In Use Check †
Spirit Level			In Use Check ‡
Cable avoidance tools		Service in accordance with manufacturer's instructions	In Use Check
Surveying Equipment		Service in accordance with manufacturers instructions	In Use Check
Foundation Stability Test Equipment		Traceable calibration	Annually and In Use Check

† check to confirm legibility/readability for required dimension.

‡ confirm level reading by reversing the spirit level (daily pre-use check)

Notes

1. The table does not represent an exhaustive list of monitoring and measuring devices and therefore equipment not included but employed by the organization should be calibrated to an acceptable standard and be documented.
2. Records of all equipment in use, their calibration status and calibration or verification checks undertaken shall be implemented and maintained.

Appendix F: Certification Bodies Accredited for this Sector

Information on certification bodies accredited against this scheme can be found on the UKAS website www.ukas.com.

Note 1: Advice on the current accreditation status of certification bodies to assess against this document should be sought from UKAS (Tel 01784 429 000).

Note 2: Certification Bodies interested in being accredited by UKAS for this Sector Scheme should contact UKAS.

Note 3: Organizations currently registered to ISO 9001 with an UKAS (or equivalent) accredited certification body that does hold registration to this Sector Scheme may wish to consider the following option. Continuing to be registered with their existing Certification Body but having the interpretation of the Sector Scheme carried out by and in conjunction with an UKAS accredited certification body for this scheme."

Appendix G: The Role of Certification Bodies and Auditor Qualifications

1. Role of certification bodies

- 1.1. The independent assessment of conformity of organizations to the requirements of ISO 9001:2015 and this SSD rely upon the assessment expertise, competence and capability of accredited certification bodies.
- 1.2. The certification body role is to ensure, through assessment, that organizations have management systems in place which address the enhanced ISO 9001:2015 requirements detailed in this SSD.
- 1.3. Certification bodies shall ensure they are all represented by at least one nominated individual lead certification body (or deputy) who will represent all certification bodies at meetings of this Sector Scheme Advisory Committee. This does not preclude other certification bodies from attending, as appropriate.
- 1.4. Certification bodies shall be represented at the National Highway Sector Scheme Liaison Committee.

2. Certification body accreditation

- 2.1. To ensure consistency and to demonstrate independent capability certification bodies are required to be accredited against the requirements of ISO 17021-1 by the United Kingdom Accreditation Service (UKAS) or an equivalent International Accreditation Forum (IAF) member for assessment and registration of ISO 9001:2015 quality management systems interpreted in accordance with this NHSS or other international management scheme.

3. Assessor and assessment team competence

- 3.1. The certification body must be able to demonstrate to UKAS that it possesses and can maintain the necessary assessor experience and technical understanding of this sector scheme covered in the scope of this Sector Scheme. These assessment areas shall include, but not be limited to the following:
 - i. knowledge, understanding and application of this SSD (See Appendix G1)
 - ii. knowledge of the manufacture and supply within the EBS industry, including the methods and techniques sufficient to understand the processes employed and the controls necessary to ensure delivery of conforming product and services. Typically, this would include knowledge of the product and processes including connections to different systems. (Conveyance of this knowledge to auditing teams will be determined by the certification body and will be audited by UKAS).

- iii. maintenance of demonstrable technical highway engineering background, capable of reading and understanding specifications and drawings, including knowledge of the Specification for Highway Works and design standards requirements for this sector scheme.
 - iv. ability to demonstrate that they have ongoing suitable health and safety training which shall include appreciation of the risks involved in the manufacture, supply, installation, maintenance and repair in the specific aspects of the scheme as appropriate.
 - v. knowledge of constituent components, their properties and the performance of the installed system.
- 3.2. The certification body must also ensure that assessors have sufficient knowledge of health & safety requirements related to working on live highways where appropriate, knowledge of temporary traffic management, working in confined spaces and working at height for assessment of guidance provided on this aspect.
- 3.3. Guidance to Certification Bodies on assessor competence related to this Sector Scheme is given in the certification body guidance document – National Highway Sector Scheme Accreditation, Registration and Assessment Guidance for Certification Bodies – NHSS 0 Part 4.
- 3.4. The certification body is responsible for ensuring that the assessment teams possess demonstrable expertise in the assessment areas detailed above as they relate to the scope of client activities under assessment.
- 3.5. Minimum assessor qualifications and competence for assessment of this NHSS, which may reside in a single individual, or in an assessment team are as follows:
- I. International Register of Certificated Auditors (IRCA) Registered ISO 9001:2015 Lead Auditor qualification or certification body equivalent and demonstrable expertise in leading assessment teams.
 - II. ISO 9001:2015 assessment experience
 - III. technical assessment competence in the categories of EBS systems as described in clause 4.3 of this document.
 - IV. knowledge, understanding and application of this SSD.
 - V. knowledge of the manufacture, supply, installation, maintenance and repair in the EBS industry, including the methods and techniques sufficient to understand the processes employed and the controls necessary to ensure delivery of conforming product. Typically, this would include knowledge of the product and processes including connections to different systems. (Conveyance of this knowledge to auditing teams will be determined by the certification body and will be audited by UKAS).
 - VI. demonstrable technical highway engineering background, capable of reading and understanding specifications and drawings, including knowledge of the Specification for Highway Works and design standards requirements for this sector scheme.

- VII. ability to demonstrate that they have ongoing suitable health and safety training which includes appreciation of the risks involved in the sector scheme activities and associated works.
- VIII. knowledge of constituent components, their properties and the performance of the installed system.

4. Conduct of Assessments

- 4.1. Certification Bodies shall ensure that an adequate proportion (at least a third) of the initial and continuing assessment duration is devoted to assessing operational activities at locations where EBS activities covered by the scope of this Sector Scheme are being undertaken from.
- 4.2. Certification Bodies shall make every endeavour to ensure that during a three year certification cycle there is evidence of assessment of all execution activities covered by the organization's scope of registration. Certification bodies shall undertake surveillance visits at intervals of not greater than one year.

5. Format and Content of Registration Certificates

- 5.1. Certificates of registration issued by Certification Bodies, which include within the scope of registration reference to compliance with this Sector Scheme, shall be in a format and contain the content detailed in Appendix K of this SSD.
- 5.2. The National Highway Sector Scheme Logo shall be included in any Certificate of Registration which has this Sector Scheme detailed in the Scope of Registration. The logo shall only be used and applied in the manner detailed in any conditions of use which may be published from time to time.

6. National Highway Sector Schemes Schedule of Suppliers

- 6.1. Certification Bodies shall monitor the National Highway Sector Schemes Schedule of Suppliers posted at www.scheduleofsuppliers.co.uk to ensure equivalence between their clients registered to this Sector Scheme and the listed organizations.
- 6.2. Certification Bodies shall provide to National Highway Sector Schemes Schedule of Suppliers administrator at Lantra details of registered organizations whose scope of registration against this Sector Scheme has ceased to be applicable within 10 working days of that situation occurring.
- 6.3. Certification Bodies shall audit the organization to ensure that the organization has recorded their NHSS registration on the Lantra Schedule of Suppliers web-based register (See 4.4) and 8.2.1 of this NHSS).

7. Reporting on Sector Scheme Performance

- 7.1. Each Lead certification body shall provide to the Leader of the SSACS a summary report which includes as a minimum:
- i. observations and comments on the implementation and assessment findings related to the Sector Scheme including any omissions or deficiencies in its scope
 - ii. recommendations for improving/clarifying the SSD
 - iii. feedback on deficiencies against contract documentation
 - iv. a list of organizations whose scope of registration includes this Sector Scheme for comparison against the Schedule of Suppliers

Note1: The report shall be available at least a week before each National Highway Sector Scheme Liaison Committee meeting (normally held twice a year), so that it may be considered during the Liaison meeting. This is to be issued to the Chairman of the National Highway Sector Scheme Liaison Committee and the Chairman of this Sector Scheme Committee.

Note 2: the report may be a combined report prepared by the nominated certification body (Lead CB) to provide assurance that confidentiality is maintained.

Appendix G1: Guidance to Assessors' and Other Auditors' Competencies Requirements for National Highway Sector Scheme 2C

Section 1 - General Information

The information contained in this appendix has been collated by the NHSS committee to provide CB assessors with the background information that is considered appropriate for carrying out an assessment against ISO 9001:2015 and these NHSS documents. During the development of the Appendices it was realised that this information would also provide useful guidance for first and second party auditors of the system.

Section 2 – Requirements

Note 1: This section of the guidance is divided in three parts namely 2C, 2B & 2C.

Note 2: Section part 2C has been developed by the sector scheme committee to identify all relevant knowledge of their industry that is pertinent to carrying out an audit.

2A General background to the NHSS 2C

- i. The reasons for development of the National Highway Sector Schemes (NHSS) and this scheme in particular, and for CB assessors, examples of where its absence has caused concern/problems.

This is normally contained in the introduction to the scheme, in this instance the scheme (NHSS2C) was initially developed with industry.

- ii. To whom the scheme applies. See Scope in this NHSS document.
- iii. Contact details of those that can offer scheme specific assistance. (This should be contained in the organization's quality documented information and NHSS documents.
- iv. An overview of the highway infrastructure that the scheme applies to.
- v. The range of contracts that the scheme can apply to. (See scope in section 1 of each NHSS SSD)
- vi. Specific types of works that the scheme applies to. (See Scope [section 1] in this NHSS document and also Appendix L)
- vii. Definitions and terminology which are particular to the scheme. (See section 3 of this NHSS)
- viii. Diagram of routes to competency of personnel (including management, supervisors and other employees etc.) delivering the scheme services

- ix. Information/guidance is contained in clause 7.2.2 and Appendix C of the document, however the organisation's training administrator should have this information available. Assessors should also be aware of training and competency assessment requirements available from the Awarding Body, Lantra Overview of important reference documentation applicable to the scheme. Section 2 and Appendix B of the document provides some information.
- x. Knowledge of relevant international, European and British standards. In particular, those relating to product conformity, type testing and their requirements. Familiarity with SHW especially Series 100 and 400; notes for guidance for the SHW (including when these are updated), the Design Manual for Roads and Bridges and Interim Advice Notes issued by the Highways England.
- v) Relationship with other NHSS such as Landbased and temporary traffic management and their applicability to this scheme.

2B Summary of where the scheme provides particular requirements for sections 4 to 10 of ISO 9001:2015

The summary provides a list of those clauses where interpretation has been provided these are indicated by "Y" in the table.

Section/Clause	Particular requirement Yes/No	Comment/Requirement
4. Context of the organization		
4.1 Understanding the organization and its context	N	Check annually that the organization has determined issues relevant to its purpose and strategic direction and has monitored and reviewed the information. Especially check and seek evidence relating to external context.
4.2 Understanding the needs and expectations of interested parties	Y	Check annually that the organization has determined interested parties, their requirements and is monitoring and reviewing the data. Seek evidence.
4.3 Determining the scope of the quality management system	Y	Check that the organization has reviewed the scope of the relative elements of the latest applicable issue of the NHSS that the organisation considers apt.
4.4 Quality management system and its processes. (4.4.1 & 4.4.2)	Y	Check annually by the CB Auditors and other Auditors the Schedule of Suppliers website to ensure registration and uploaded information is current and valid.
5. Leadership		

Section/Clause	Particular requirement Yes/No	Comment/Requirement
5.1 Leadership and commitment		
5.1.1 General	Y	Check policy documented information includes this NHSS Ensure that policy is being correctly implemented, communicated and understood. Seek evidence
5.1.2 Customer focus	Y	Ensure that the organization has determined all necessary applicable statutory and regulatory requirements for contract compliance. This may include supplementary services such as recycling, final disposal, equipment inspection, licensing requirements for driving (HGV), animal including wildlife handling etc. Ensure customer feedback documents are in place on completion of the contract Seek evidence that organization is meeting and maintaining customer requirements
5.2 Policy		
5.2.1 Establishing the quality policy	Y	Ensure requirements are covered in quality plan and in policy documented information
5.2.2 Communicating the quality policy	Y	Ensure that policy documented information is available as necessary and is being communicated and implemented and understood. Seek evidence.
5.3. Organization roles, responsibilities and authorities	Y	Ensure there is an organization plan which covers responsibility/authority in accordance with the requirements of the SSD. Seek evidence. Ensure that personnel with contract specific responsibilities and authorities have been identified and are recorded. Seek evidence. Ensure that the organization management have appointed a nominated person or persons with the appropriate responsibility and authority. Seek evidence. Ensure that integrity is maintained. Seek evidence
6. Planning		
6.1 Actions to address risks and opportunities. (6.1.1 & 6.1.2)	Y	Check that documented information is in place to address risk and opportunities and is operational.
6.2 Quality objectives and planning to achieve them (6.2.1 & 6.2.2)	Y	Check documented information is in place and meets requirements. Check that quality planning is in place and evaluated. See Appendix A

Section/Clause	Particular requirement Yes/No	Comment/Requirement
6.3 Planning of changes	N	
7. Support		
7.1 Resources		
7.1.1 General	N	Ensure contract/tender review is in place. Review provisions of resources to confirm they are suitable and include providing the defined personnel for contracts
7.1.2 People	Y	See Appendices A, C and D
7.1.3 Infrastructure	N	Review facilities, processes and equipment to confirm they are suitable for the scope of registration.
7.1.4 Environment for the operation of processes	N	In process audit. Checks to include environmental condition records, plant maintenance sheets, access equipment certification and induction records.
7.1.5 Monitoring and measuring resources		
7.1.5.1 General	Y	See Appendix E
7.1.5.2 Measurement Traceability	N	See Appendix E
7.1.6 Organizational knowledge	N	Seek evidence
7.2 Competence	Y	Seek evidence. Review copies of training certificates, qualifications and identity cards and forward looking training plans. Ensure that these are in accordance with the requirements of the sector scheme documents Check sample of identity cards See Appendix C
7.3 Awareness	N	Seek evidence
7.4 Communication	Y	Check internal and external communication processes have been established.
7.5 Documented information		
7.5.1 General	Y	Check processes are in place to ensure that organization maintain up to date information on documented information. See Appendix B
7.5.2 Creating and updating	N	Ensure that all required contract specific documents are in place. Seek evidence
7.5.3 Control of documented information. (7.5.3.1 & 7.5.3.2)	Y	Ensure that all required contract specific documents are in place. Seek evidence Check appropriate processes are in place for the retention and disposition of documented information
8. Operation		

Section/Clause	Particular requirement Yes/No	Comment/Requirement
8.1 Operational planning and control	Y	Check quality plan is in place and complies with 6.1 & 7.5. See Appendix A Check appropriate processes are in place for the retention and disposition of documented information
8.2 Requirements for products and services		
8.2.1 Customer communication	Y	Check effectiveness of communication arrangements
8.2.2 Determining the requirements for products and services	Y	Ensure that the organization has determined all necessary specified statutory and regulatory requirements for contract compliance. This may include supplementary services such as recycling, final disposal, equipment inspection, licensing requirements for driving (HGV), animal including wildlife handling etc. Check the organizations ability to meet defined contract requirements
8.2.3 Review of the requirements for products and services. (8.2.3.1 & 8.2.3.2)	N	Ensure contract tender review is in place with an appropriate timescale and assessment of availability of resources.
8.2.4 Changes to requirements for products and services	N	Seek evidence
8.3 Design and development of products and services		
8.3.1 General	Y	Check that contract/tender review is in place
8.3.2 Design and development planning	Y	
8.3.3 Design and development inputs	Y	
8.3.4 design and development controls	Y	
8.3.5 Design and development outputs	N	
8.3.6 Design and development changes	N	
8.4 Control of externally provided processes, products and services		
8.4.1 General	Y	Check that documented information is in place for externally provided product and services to meet specified requirements.
8.4.2 Type and extent of control	Y	Check that documented information is in place. Seek evidence of effective controls.
8.4.3 Information for external providers	Y	Check that purchasing requests are adequate
8.5 Production and service provision		

Section/Clause	Particular requirement Yes/No	Comment/Requirement
8.5.1 Control of production and service provision	Y	Check as part of in process audit Refer to Appendix E
8.5.2 Identification and traceability	Y	Cover during procedure review and seek evidence that relevant documented information is in place.
8.5.3 Property belonging to customers or external providers	Y	Check that documented information is in place.
8.5.4 Preservation	Y	Check process. Seek evidence as appropriate
8.5.5 Post-delivery activities	Y	
8.5.6 Control of changes	N	Check documented information is in place
8.6 Release of products and service	Y	Check that monitoring and measuring process documentation has been implemented in line with the current contract specification. Check the processes for determining traceability of authorised persons releasing products and/or services. Seek evidence.
8.7 Control of nonconforming process outputs, products and services. (8.7.1 & 8.7.2)	Y	Ensure processes are in place and has been implemented in line with contract specification. Check documented information.
9. Performance evaluation		
9.1 Monitoring, measurement, analysis and evaluation		
9.1.1 General	Y	Check planned results Check that monitoring and measuring process documentation has been implemented in line with the current contract specification. Seek evidence. Review copy of annual management review. Ensure this contains continuous improvements to the relevant sector scheme
9.1.2 Customer satisfaction	N	Check that organization is meeting customer requirements.
9.1.3 Analysis and evaluation	N	Check processes are achieving planned results Check analysis of data has provided information to demonstrate effectiveness of QMS and evaluation of continued improvement
9.2 Internal audit (9.2.1 & 9.2.2)	Y	Check internal audits are being carried out and ensure corrective actions have been made.
9.3 Management review		
9.3.1 General	Y	Review minutes of management review. Ensure this contains reference to the relevant sector scheme.

Section/Clause	Particular requirement Yes/No	Comment/Requirement
9.3.2 Management review inputs	N	
9.3.3 Management review outputs	N	Check that the output and actions are considered by top management at regular intervals
10. Improvement		
10.1 General	N	Check effectiveness of improvement
10.2 Nonconformity and corrective action (10.2.1 & 10.2.2)	N	Check that documented information is in place and operational.
10.3 Continual improvement	Y	

2C Overview of this NHSS in terms of industry requirements and working practices

In addition to an assessor/auditor having a general appreciation of the requirements and processes required by ISO 9001:2015 (latest issue), a CB assessor or internal auditor should be aware of the following when completing an audit: -

- C1 - Safe Working Practices
- C2 – Training, qualifications and assessment of competency
- C3 - Maintain equipment
- C4 - Public protection
- C5 - Environment
- C6 - Testing/inspection/workmanship
- C7 - Health and Safety
- C8 – Equal Opportunities

C1 Safe Working Practices

- Correct Personal Protective Equipment Worn
- Equipment approved and suitable for use
- Personnel to be fully aware of their H&S obligations
- Must be able to read and understand their job sheet, risk assessment etc.; understand English
- Method Statements/work procedures
- Risk Assessment.
- Induction card/skills card.
- Vehicles/loads are inspected and drivers are qualified
- Site visit including assessment of installation (if possible) and techniques verified
- Awareness of relevant H&S requirements as applicable to this scheme
- Aware of current best practice including temporary traffic management measures (including site arrangements)

C2 Training, Qualifications and Assessment of Competence

- Have achieved appropriate training appropriately certificated
- Have been assessed as competent within their scope of works (e.g. scheme specific assessment/N/SVQ)
- Been inducted on specific equipment (by employer) or if appropriate (i.e. under training) is supervised by a qualified person
- Aware of and understand the relevant requirements of this NHSS
- Aware of and understand the provisions for implementation of training in this NHSS
- Been inducted on site specific H&S issues. (Daily if necessary)
- Hold the relevant skills card

C3 Maintain Equipment

- Relevant personnel are aware of LOLER and PUWER requirements
- Maintenance checklists are available and have been completed on a daily basis

C4 Public Protection

- Personnel are aware of the need to protect public during installation operations
 - Relevant personnel have been trained to carry out a visual site risk assessment to ensure that the public will not be put at risk during installation/maintenance operations
 - Where appropriate relevant personnel are aware of the HATO role
 - Personnel have identification
 - The organization(company) has a complaints procedure in place
- (Note: Public in this instance includes personnel employed by the customer/client)

C5 Environment

Auditors should be sufficiently competent to make general observations on the effectiveness of the organization's provisions in respect of the environment and in particular management of waste and its reduction.

C6 Inspection/Testing/Workmanship

Auditors should be aware of the importance of inspection and testing of the product and have knowledge of the relevant tests and the information provided by the tests.

C7 Health and Safety

Auditors should be aware of the Health and Safety at Work etc. Act 1974 and associated Health and Safety Legislation, as it applies to this sector scheme and customer H&S requirements.

C8 Equal Opportunities

Assessors/auditors should be aware of and understand the need for effective diversity management, including the implementation of equal opportunities and avoidance of disability discrimination as it applies during the provision of services. Assessors/auditors should understand what is involved and how it can be encapsulated in company procedures.

Appendix H: Organization Acceptance and Guidelines for New Entrants

1.0 Organization Acceptance

- 1.1 For work carried out on roads managed by Highways England, Welsh Government, Transport Scotland and Transport Northern Ireland, only those organizations holding a valid Certificate of Registration for work within the scope of this SSD will be accepted as complying with Clause 104 and Appendix A of the Specification for Highway Works.
- 1.2 For work carried out by other highway authorities and infrastructure providers acceptance of the organization will depend on the requirements of the contract.

2.0 Guidelines for New Entrants - Requirements

- 2.1 Organizations must have the required experienced and qualified NHSS2C personnel and management who meet the requirements of this Sector Scheme. Organizations will need to demonstrate that their equipment and systems meet the requirements of this Sector Scheme.
- 2.2 Organizations must have applied for registration with a certification body that is accredited by UKAS to audit against this Sector Scheme. Organizations will have to demonstrate that they have been audited for office based and site based activities. Where organizations are unable to demonstrate site based activities the certification body may provide a transitional certificate valid for one year only which can be validated to a full certificate following assessment of site based activities.
- 2.3 The organization shall record their registration to this sector scheme on the Schedule of Suppliers website <http://www.scheduleofsuppliers.co.uk/> upon receipt of the certificate issued by their certification body to confirm their registration and thereafter check its suitability annually.

3.0 Trade Associations

- 3.1 Association of Fencing Industries (AFI), 19 Omega Business Village, Thurston Road, Northallerton, DL6 2NJ
- 3.2 Environmental Noise Barriers Association (ENBA), 19 Omega Business Village, Thurston Road, Northallerton, DL6 2NJ

Appendix J1: Feedback to Committee Chairperson

Any observations or feedback *relating to the content of this document or the process described* herein should be addressed (using the form below) to:

Committee Chairman
Sector Scheme Advisory Committee for 2C
C/o Lantra
Stoneleigh Park
Nr. Coventry
Warwickshire
CV8 2LG

Issue Identified:

Suggested Action:

Name:
organization:
Address:

Contact details:

Date:

Note: J1 forms will be sent on receipt by Lantra to the scheme chairmen for consideration. In many instances, J1 forms can be responded to without the need for them to be considered by an NHSS committee, those requiring a more detailed response will be dealt with at the next meeting of the committee as part of the review of the document. . If the J1 form contains information that is critical, then exceptionally action can be taken prior to the meeting by the chairperson for instance by arranging an extraordinary meeting of the NHSS advisory committee. The secretary will normally advise the originator of receipt of the J1 document and when the next meeting is expected to be held.

Appendix J2: Feedback to Certification Bodies and/or Notified Bodies

Feedback relating to certification matters including alleged deficiencies in the product provided under this scheme should in the first instance be taken up with the organization. In the event that the matter cannot be satisfactorily resolved written complaints should be made to the organization's certification body and/or notified body as appropriate, detailing the problem identified.

(a) Issue Identified:

(b) Organization's Details:

Name:

Address:

Feedback

(c) Organization raising feedback / issue

Name:

Organization:

Address:

Date:

Signed:

Appendix J3: Feedback to Client Bodies on Policing of National Highway Sector Scheme Registration

Feedback relating to policing of National Highway Sector Schemes registration matters in respect of alleged contractual mismanagement/oversights or alleged omissions in contract requirements by client organisations, their management agents or principle contractors where contracts can be or may have been awarded to organisations not registered to this National Highway Sector Scheme, or where contracts are alleged to have omitted requirements for compliance with this National Highway Sector Scheme should be referred back to the client body through an independent third party e.g. a trade association. Details of the alleged mismanagement or omission should as a minimum include the following details.

- a) Contract identified

- b)
 - i) Details of omission in contract or

 - ii) organization Identified as being awarded the contract or

 - iii) Both i) and ii) above

- c) Organization raising feedback / issue
Name:
Organization:
Contact details (Address, email address, telephone etc)

- d) Date: Signed:

Highways England Roads/Contracts – Route for Feedback

Feedback should be sent by email to Standards_Enquiries@highwaysengland.co.uk

Other Highway Authorities and Clients

Feedback should be sent back to the relevant project manager or head of division responsible for the contract works. Such information or relevant contact details may be available on that highway authority's or client's web-site.

Health and Safety Executive

Advice about reporting a complaint about the application of the health and safety recommendations related to a specific incident is available at <http://www.hse.gov.uk/contact/workplace-complaints.htm>

Appendix K: The Interpretation of Certificates Issued by Certification Bodies

Certification Bodies (CB) issue Certificates of Registration (CoR) in a variety of styles as suits their particular house style. They may consist of a single CoR containing all the requisite information or the CoR may be a standard certificate with appendices or addendum attached providing the full scope of certification (services) and the location(s) where these services are offered by an organization. In the latter case, the CoR refers to the relevant appendices or addenda, which form an integral part of the certificate.

A valid National Highway Sector Scheme (NHSS) CoR is only issued by a CB accredited by UKAS against the relevant NHSS (See Appendix F of this document) or by another recognised equivalent accreditation body.

As a minimum a valid CoR will contain the following information:

- The scope of registration including specific registration to ISO 9001:2015 and this NHSS including the scheme title e.g. National Highway Sector Scheme NHSS2C
- The identification of each and every location to which the CoR is applicable.
- The services/product offered by the organization at each location identified on the CoR for NHSS2C for the described activity and any applicable categories with associated typical sub-categories where relevant.
- Logos for the NHSS, UKAS (or equivalent) and the CB.
- The name and address(es) of the organization
- The validity of the certificate (3 years for ISO 9001*)
- A unique reference number/code
- The signature of a relevant CB official with his name and title

*Note where an organization has an extension to scope to include for this NHSS, the expiry date of the certificate remains as 3 years after their initial assessment/or triennial assessment and not 3 years after obtaining the extension to their certificate i.e. the validity of the certificate will not be reset following their NHSS assessment.

Current categories are:

Activity	Primary Categories	Secondary Categories
Environmental Barriers	Design	Foundation Structural Acoustic
	Supply	
	Install	Planning Installation
	Maintenance	Inspection Repair

⁽⁰²¹⁸⁾**Appendix K1: Sample Skills Card**

Not Used

Appendix L: Guidance for Clients

1 General

It is recommended that Clients acknowledge the requirements of this sector scheme as a contract requirement.

This guidance is primarily of relevance to Clients and their supervisory staff.

2. Specific Guidance

- 2.1. The NHSS for this scheme was originally conceived as a document for use by Clients to specify the minimum standards for quality, training and competence of organizations used by them to carry out EBS works.
- 2.2. The implementation of the NHSS and development of training and competency requirements is intended to provide:
 - i. A competent workforce able to carry out EBS works.
 - ii. Requirements to evaluate risks and develop processes associated with EBS works and the production of an associated comprehensive quality plan for each contract.
- 2.3. It is necessary for the Client to ensure that all those involved in carrying out the EBS works are appropriately trained, skilled and competent, whether or not they are directly employed. The training and assessment of competency schemes described in this SSD are designed to cater for the range of skills within the overall process of this scheme.
- 2.4. Clients and Customers that require confirmation of compliance with the Contract Specification in respect of the supply of services, products or materials should confirm that the quality management system certificate issuer is accredited by UKAS or equivalent and that specific reference is made to relevant NHSS on certificates. (See Appendices F and K respectively)
- 2.5. For the NHSS to achieve its objectives it is essential that Clients, either directly or via the agents and individuals they employ, ensure that the requirements of this document are complied with. This includes ensuring that sub-contractors employed directly or indirectly, are registered to the NHSS. Supervisory staff must be instructed to carry out spot checks of identification cards.
- 2.6. The Schedule of Suppliers Management Team have established and manage a schedule of registered companies that have been registered to National Highways Sector Schemes; free access to the schedule is obtained by logging on to the Lantra website www.scheduleofsuppliers.co.uk. However, it should be noted that only those companies that register on the schedule are listed. Clients should contact Lantra Awards by email at sales@lantra.co.uk to ascertain/check the status of company if it is not listed on the schedule.

2.7. Client checklist:

Pre Contract Award		
1.	Is the organisation listed on the schedule of suppliers website?	
2.	Is there an ISO 9001 certificate present?	
3.	Does the ISO 9001 certificate cover NHSS 2C	
4.	Is the Certification Body that issued the certificate accredited by UKAS for ISO9001?	
5.	Is the Certification Body that issued the certificate accredited by UKAS for assessments to NHSS 2C	
6.	If the answer to 4 or 5 is No – is the accrediting body equivalent to UKAS?	
7.	Does the scope of works of the ISO 9001 certificate, including NHSS 2C cover the actual works intended to be carried out under the contract?	
Post Contract Award		
8.	Confirm validity of skills / registration cards (skills and in date) of personnel.	
9.	Assess ongoing performance of the organization (including sub-contractors) in relation to the scope of the works.	
10.	Is there an audit or surveillance visit report from the Certification Body?	
11.	If the answer to 10 is No – then is it due?	
12.	If the answer to 10 is Yes – are there any action points outstanding which should have been completed within six months?	
13.	Is the scope of the works within the competency scope of the employees?	
14.	Is the organisation intending to sub-contract any of the works?	

If the answer to 10 is Yes – repeat Question 1 – 14 for that organisation, if necessary replacing NHSS 2C by the relevant NHSS (i.e. including NHSS 2C and also other NHSS's e.g. for other services such as Temporary Traffic Management.

Timber Preservation (Informative)

Timber preservation is specified in BS 8417 Preservation of wood - Code of practice in terms of penetration and retention of preservative. MCHW Series 300 calls up BS 8417 for timber preservation.

BS 8417 offers three options for service life – 15, 30 and 60 year desired service life (DSL) – and MCHW Series 300 requires treatment to the 30-year DSL specification. A revised version of BS 8417 was published in May 2014 (designation 2011 + A1: 2014) and the standard now requires, for 30 year DSL, penetration of any exposed heartwood faces of all timber to be used in ground contact (e.g. fence posts). The standard itself should be consulted for full details of the changes and the new requirements.

Heartwood cannot easily be penetrated sufficiently to meet the 30-year DSL requirement without additional processing and incising has been adopted by some UK treaters as the preferred method for this. It should be understood, however, that the requirement is not to use a process such as incising but to achieve the penetration defined in the standard within the contractual quality limit.

If round posts with a complete sapwood ring are supplied and there is no exposed heartwood the standard requires only the sapwood to be penetrated to the extent set out in BS 8417. For round pine posts therefore, and for round posts made from other species whose sapwood can be penetrated without additional processing, contractors should not be looking for evidence of additional processing such as incising.

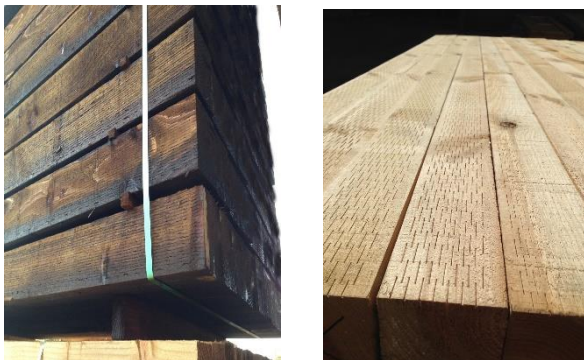
These changes do not apply to timber treated with creosote for which the penetration requirement remains unchanged from the 2011 version of the standard.

Contractors installing timber fencing whose materials were subject to contract dated after May 2014 should find that timber to be installed in ground contact has been treated in accordance with the 2014 version of BS 8417 and, if sawn posts are to be installed, may have been incised before treatment. Such timber should be supplied by a treater whose ISO 9001 certificate includes NHSS 4 treatment in its scope.

The accompanying illustrations show what to look for if incising has been used. Note that incising patterns do vary between incising machines and the way they are set up but in all cases the treater should have checked that the penetration requirements have been met.

Where timber is used it shall be controlled and records made to allow for the timber source to be identified. This shall be used to demonstrate that sustainable sources have been used. Delivery documentation shall be checked to ensure: the materials described are as required both on the order and on the delivery documentation.

Note that incising patterns do vary between incising machines and the way they are set up but in all cases the treater should have checked that the penetration requirements have been met.



3 Road Death Investigation

Attention is drawn to the ACPO and the Scottish Police Road Death Investigation Manuals, which indicates that in the advent of a collision or other road incident particularly one where there has been a fatality, the police may ask the relevant highway authority to provide information on the state of the road.

In respect of this National Highway Sector Scheme information that is likely to be sought includes the following:

- a) High level general policy statements
- b) Specific local maintenance policies and standards
- c) Authority procedures
- d) Works records including the results of any test carried out
- e) The quality of systems for traffic management
- f) Skidding resistance testing

An Authority may be required to present data to the Police at short notice in case of a fatality on the network. It should ensure that it has, or can obtain, the relevant information from the Contractor.

Highways England have produced Interim Advice Note 166 which provides guidance on road death investigations.

4 Corporate Manslaughter and Corporate Homicide Act 2007

Advice from HSE regarding corporate manslaughter and corporate homicide is available on the HSE web-site, the following extract has been copied from the HSE web-site.

“The Corporate Manslaughter and Corporate Homicide Act 2007 is a landmark in law. For the first time, companies and organisations can be found guilty of corporate manslaughter as a result of serious management failures resulting in a gross breach of a duty of care.

The Act, which came into force on 6 April 2008, clarifies the criminal liabilities of companies including large organisations where serious failures in the management of health and safety result in a fatality.

- The Ministry of Justice leads on the Act and more information is available on its Corporate Manslaughter and Corporate Homicide Act 2007 webpage.

HSE welcomes and supports the Act. Although the new offence is not part of health and safety law, it will introduce an important new element in the corporate management of health and safety.

Prosecutions will be of the corporate body and not individuals, but the liability of directors, board members or other individuals under health and safety law or general criminal law, will be unaffected and the corporate body itself and individuals can still be prosecuted for separate health and safety offences.

The Act also largely removes the Crown immunity that applied to the previous common law corporate manslaughter offence. This is welcome, and consistent with Government and HSE policy to secure the eventual removal of Crown immunity for health and safety offences.

The Act provides a number of specific exemptions that cover public policy decisions and the exercise of core public functions.

Companies and organisations should keep their health and safety management systems under review, in particular, the way in which their activities are managed and organised by senior management. The Institute of Directors and HSE have published guidance for directors on their responsibilities for health and safety. ‘Leading health and safety at work: leadership actions for directors and board members’ (INDG417).

For specific questions about the act and guidance:

- Ministry of Justice

For health and safety information and answers to specific health and safety questions contact HSE Infoline:

- HSE Infoline”

Crossing the carriageway

HSE guidance note CIS 53 is available and provides guidance on crossing the carriageway including temporary traffic management personnel.

From the 1st January 2015 Highway's England instructed their suppliers that their personnel shall not cross carriageways.

It is recommended that other Highway Authority Clients consider the risk to personnel crossing the highway on a site specific basis.

Temporary Traffic Management

Where appropriate, it is recommended that Clients acknowledge the requirements of Sector Scheme Document 12D in conjunction with this Sector Scheme Document.

This guidance is primarily of relevance to Clients and their supervisory staff.

- 1 It is necessary for the Client to ensure that all those involved in Temporary Traffic Management operations are appropriately trained and skilled, whether or not they are directly employed. The modular training scheme described in Sector Scheme Document 12D is designed to cater for the various alternative situations, ranging from the employment of a lone worker cutting hedges to a Temporary Traffic Management contractor for a major highway contract.
- 2 The Client must always ensure that a detailed risk assessment for the specific site has been undertaken and incorporates an assessment of traffic conditions as described in Sector Scheme Document 12D Annex Form 1 to Appendix A. In instances where a non-registered organisation is employed it will be appropriate for the Client, or his agent for the Works design, to carry out a preliminary risk assessment.
- 3 Specific attention is drawn to Sector Scheme Document 12D Appendix M which states that it is not intended that Organizations registered to NHSS Sector Scheme Document 2C where TTM is required should also be registered to NHSS12D.
- 4 Lantra have established a schedule of registered Organizations that have been registered to National Highways Sector Schemes free access to the schedule is obtained by logging on to the Schedule of Suppliers website <http://www.scheduleofsuppliers.co.uk/>.

Appendix M: Guidance for organizations

Not used

Appendix N: Guidance on the Relationship between this NHSS and other NHSS's

Not used

(02/18) Appendix O: How to Register on the Schedule of Suppliers

Lantra hosts the register of organizations on their website <http://www.scheduleofsuppliers.co.uk/>. This is a self-registration list and it is a requirement of this scheme that organizations register their details on this website and keep them up to date; Certification Bodies will check that the organization is registered on the website together with all relevant information, including a pdf copy of the certification of registration that the Certification Body issues and any other specific documentation to be uploaded specified by this SSD, prior to annual and surveillance visits

The process for registering on the Schedule of Suppliers can be found in the user guide which is available to download using the following link: <https://www.scheduleofsuppliers.co.uk/node/61>

Lantra will check that the relevant document(s) have been uploaded (see note 1) and that the registration details (see note 2) have been filled in. Once complete the information will be published and appear on the Schedule of Suppliers website and will be searchable.

Note 1: It is the responsibility of companies registering on the site to enter their own details and data which would then be checked by certification bodies during any subsequent company audit. Lantra do not check the content of the records going onto the site and accept no liability for the information being entered. However, Lantra will continue to check that your company ISO certificate (also HERS certificate if registering for NHSS 8) has been uploaded before approving the registration.

Note 2: Your certification body Assessor should check your entry prior to each surveillance or assessment visit to you to ensure that you have recorded your registration and the details are correct.

Note 3: You should review/update your registration (It is recommended that this done annually).

Note 4: Where work is contracted to a public body (e.g. a local highway authority acting for example as a "Contracting Authority"), or where there is a business restriction in place limiting the extent where a local highway authority operates, the NHSS registered organization (highway authority) when completing their registration should under the section "Business Summary" state that "Works carried out are only within the area of the [highway] Authority for in-house requirements only" or as a "Service provider to", and under the section for "Business Description" provide the statement "Local Government trading account" or similar text. In this instance it would not be appropriate for the NHSS registered organization to complete the section "What areas do you cover?".

Note 5: Any queries should be sent to the SoS team at scheduleofsuppliers@lantra.co.uk

(02/18) Appendix P: Inspection of EB Systems

Inspection is an ongoing activity from start (design) to finish (end of life of the product) to ensure that it meets and continues to meet the required performance. It includes at least the following activities

- Validation and verification of the design
- Implementation of the design (including the quality plan)
- Inspection of the finished installed system(s) prior to handover
- Routine inspection during serviceable life
- Inspection after damage
- Inspection after replacement or repair

An inspection report should be completed at the end of each inspection and should include where applicable recommendations for reinstatement of the asset. As appropriate the reports should be included on the asset register and in the CDM file.

Note: Due consideration needs to be given for safe systems of working for both the inspection and subsequent follow up work.

Validation and verification of the Design

The design work carried out in respect of identifying the height, acoustic properties and the positioning of the noise reducing device (barrier) (NRD) will normally have been determined by a specialist consultant. Within a design contract the client would normally require that the consultant has included the validation and verification process as part of his quality plan including the qualifications of those preparing and checking the design. This element of the design process is unlikely to form part of the installation organisation's services or contract but foundation design for NRD may well form part of the installation contract.

The essential requirements/essential characteristics of the noise reducing device panel, including structural elements of the individual units as given in Annex ZA of the harmonised standard (EN 14388, currently the 2005 version) will have been determined by the manufacturer of the noise reducing barrier and declared in their Declaration of Performance (DoP). (Determination of required structural noise barrier post, i.e. size and length is covered in the design element below.) The validation and verification of this process forms part of the responsibilities allocated under the Construction Products Regulations to a notified laboratory. Again, this element of the design process may not fall within the responsibilities of the installer of noise reducing barriers, unless that organization happens to be the manufacturer of an applicable noise reducing barrier.

The Main Contractor/Client should check, complete and issue a Materials Approved Form (MAF) to the installers. (This should cover DoP check with cross reference to compliance with EN 1793 (Acoustic), EN 1794 (Mechanical) and EN 14388:2005 against which the DoP is made.) (Additionally, design checks should be made to ensure an allowance has been made for a suitable airtight seal between the post/panel interface and between the bottom of the noise panel and surrounding ground.) (Also checks to be made that the acoustic panels supplied match the actual panels tested in EN 1793 & EN 1794 with regards to component dimensions, acoustic seals and materials used to include any treatments required to achieve the listed durability and ongoing performance of the system).

The element of design that an installer provides is:

a) Determination of foundations and post sizes (if applicable) and lengths required to support the load transmitted from the noise reducing barrier, including the wind loading applicable to the location of the barrier and any other loadings identified in the contract. The work may be sub-contracted to a structural design organization or designed in-house, for both situations compliance with GD02 shall be demonstrated, additionally the organization shall demonstrate that any person involved with the designing of the foundations and any associated structural design is suitably experienced and competent. The process for validating and verifying the design shall be identified in the quality plan including any work carried out by a sub contracted design organization. (See Annex 1).

b) **The implementation of the design** includes the method statement for carrying out the installation work, the installation instructions provided by the manufacturer of the noise reducing barrier and any necessary inspection checks during the installation. Such checks may include but are not limited to:

- Foundations and their design
- Inspection of posts for conformity with the design. (CE Marked & supplied by NHSS 20 supplier (Steel) & NHSS 19A (Paint Systems))
- Corrosion protection application in accordance with contractual and specification requirements
- Panel fixings
- Anchorages installed to the correct depth to foundations or other fixtures e.g. permanent VRS
- Panel conforms to the design requirements and are undamaged
- Provision of inspection reports e.g. to BS EN 10204 for metallic products carried out by a competent person
- Setting out
- Material checks
- Installation of posts (verticality etc)
- Installation of panels
- Acoustic seals allowed for
- Any Environmental considerations
- Finishing work including any test/acceptance criteria

These checks shall form part of the organization's quality plan and should be included in the CDM Regulations file.

Inspection of the finished installed system(s) prior to handover

Inspection of the finished installed noise barrier shall be carried out by competent person(s) identified in the quality plan. Such person(s) shall not include the installer of the finished product. The inspection may be carried out jointly in conjunction with the customer/client. The final inspection report shall form part of the documentation required to be retained under the CDM Regulations and shall be signed by the inspector(s). The report should form part of the client's asset register.

Any agreed as built changes including transitions and terminals shall be included in the report. Non conformities need to be identified and corrective actions taken should be included in the report. The manufacturer's maintenance requirements/instructions shall form part of the inspection report as an annex.

The following list provides some of the items that may require checking, reference should be made to the manufacturer's installation manual for a list of checks relevant to their product.

- Are the construction drawings the latest revision?
- Materials Approved Form (MAF) approved
- Setting out checked and correct
- Posts checked for damages and are as per specification (correct sizes for Standard, Next & End Conditions)
- Erect posts, check position and plumb of posts
- Anti-vibration washers installed on all base plated post systems (where required)
- Bolts (greased) tightened to the correct torque
- Plastic caps installed on all bolt heads and nuts (where required)
- Acoustic panels correctly installed for line and level with seals in place and under compression
- Final check of line and level of completed system
- Final check for accidental damages to paint finishes and panels
- Grout bolt pockets and finish as per contract drawing/specification

Ongoing maintenance and repair inspection

This element of inspection is unlikely to be carried out by the original installation organization, but shall form part of the ongoing routine care and asset management of the noise reducing barrier. The organization carrying out routine inspection/maintenance and repair and replacement of damaged noise reducing barriers, including the acoustic seals, shall be registered to this scheme or use an organization that is registered to this scheme and is competent to inspect the installation. (Check any warranty issues if works carried out by others).

Maintenance should be carried out as per the manufacturer's instructions at the intervals recommended and should be carried out by a competent person(s). A report of each maintenance inspection shall be prepared and form part of the documentation required under CDM regulations and as necessary a copy shall be provided to the client for inclusion in their asset register.

Similar inspections shall be carried out following damage and after any replacement or repair of the noise reducing barrier. Reports shall form part of the documentation required under CDM regulations and as necessary a copy shall be provided to the client for inclusion in their asset register.

End of Life of the Product

Special consideration should be given to the removal of the product at the end of its life including waste management and recycling. Any activity shall be conducted by a competent, qualified person for each activity they are performing especially demolition.

Note: Where possible inspection of acoustic characteristics should be carried out by an inspection body or laboratory accredited by UKAS as appropriate. Inspections made by an inspector registered with the Bridge Inspector Certification Scheme (BICS) is unlikely to be appropriate as the scheme deals with structural aspects of NRD asset and not the acoustic performance of the NRD.

Example ITR Template:

Project:	
ITR Number:	
ITP Ref:	
Location:	
RAMS Ref:	
DRWs Nos.	

[Company Logo Here]

Ref	Description	[Company Name]		Client Verification		Remarks (Cross ref any NCR or similar)
		Initial	Date	Initial	Date	
1	Are the construction drawings the latest revision?					
2	MAF approved					MAF No.....
3	Setting out checked and correct					
4	Posts checked for damages and are as per specification.					
5	Erect posts, Check position and plumb of posts.					
6	Anti-vibration washers installed on all base & clamp plates.					
7	Bolts greased tighten to the right torque of : A4 80 = 557Nm A4 70 = 418Nm					
8	Plastic Caps installed on all bolt Heads & Nuts					
9	All wires installed and tensioned (conform to BS 7818:1995 and EN 1317)					
10	Rubber Grommets fitted to all posts.					
11	Install Louvres as per design, Louvre clamps tightened to a torque of 98 Nm					
12	Final Check of line and level					
13	Final check for accidental damages to paint finishes & louvres					
14	Grout Bolt pockets and finish as per Contract Drawing/specification					

Remarks:

For and on behalf of [Contractor Name]		For and on behalf of Client	
Signed:		Signed:	
Date		Date	