

20 Environmental management

20.1 Introduction

- 20.1.1 The general process for the management of environmental effects on Highways Agency projects is set out in the *Design Manual for Roads and Bridges Volume 11, Section 2, Part 5, HD205/08 and Part 6, HD48/08* (Highways Agency, 2008). More specific advice is provided in the *Interim Advice Note 183/14 Environmental Management Plans (IAN 183/14)* (Highways Agency, 2014). The guidance in *IAN 183/14* takes into consideration *Environmental Management Plans: Practitioner Best Practice Series, Volume 12* (IEMA, 2008) and *BS EN ISO 14001: Environmental Management* (BSI, 1996, as amended).
- 20.1.2 The previous design phases of the scheme have contained optioneering exercises on alternative design options that were informed by environmental assessment as described within *Chapter 4 and Chapter 6*.

20.2 Register of environmental actions and commitments

- 20.2.1 *IAN 183/14* recommends that a register of environmental actions and commitments (REAC) is produced as part of the environmental management process. The REAC underpins the environmental management plan stages described below. It is amended and updated as appropriate as the scheme progresses. The REAC for the A14 Huntingdon to Cambridge improvement scheme is presented in *Appendix 20.1 of the Environmental Statement (ES)*.
- 20.2.2 The REAC brings together the various items of environmental mitigation borne from the environmental assessment process that has informed the *ES*. It would also be informed by planned pre-construction surveys, relevant environmental permits and consents, statements of common ground (SOCGs) and requirements that come from the design consent order (DCO) examination period.
- 20.2.3 The REAC contains mitigation relevant to the residual likely significant effects of the scheme design.

20.3 Environmental management process post environmental statement

- 20.3.1 This is a large scheme and would involve a number of main contractors to deliver. The environmental management process is based on experience of other schemes of a similar scale.
- 20.3.2 A suite of documents has been developed to manage environmental mitigation. The hierarchy of the documents is set out below.

Code of construction practice

- 20.3.3 The code of construction practice (CoCP) sets out a series of proposed measures and standards of work that would be applied by the Highways Agency and its main contractors' throughout the construction period. The purpose of the CoCP is to:

- Provide effective planning, management and control during construction with the aim of controlling potential impacts on people, businesses and the natural and historic environment.
- Provide the mechanisms to engage with the local community and their representatives throughout the construction period.

20.3.4 The CoCP is attached as *Appendix 20.2*. Engagement with stakeholders has informed its development up to the Development Consent Order (DCO) application, and that process would continue during the examination period of the DCO.

Local environmental management plans

20.3.5 At a local level, site specific control measures would be included within local environmental management plans (LEMPs), which would be developed following consultation with the relevant stakeholders.

20.3.6 These would be specific to each main contractor and then broken down by local authority area. The LEMPs would include specific measures relevant to each local authority area, using the topics set out in *sections 6 to 15* of the CoCP.

20.3.7 The LEMPs would build on general environmental requirements identified in the CoCP and would set out how the scheme would adapt and deliver the required environmental and community protection measures within each relevant local authority area.

20.3.8 The Highways Agency/employer's representative and/or its main contractors would engage with the local communities, local authorities and other stakeholders to develop the LEMPs in advance of construction. A template for the LEMPs is included in *Annex 1 of the CoCP*.

Construction environmental management plans

20.3.9 The Highways Agency would require its main contractors to have a construction environmental management plan (CEMP) certified to BS EN ISO14001 *Environmental Management Systems*. (BSI, 2004).

20.3.10 The CEMP would include roles and responsibilities, together with appropriate control measures, training and briefing procedures, risk assessments and monitoring systems to be employed during planning and constructing the works for all relevant topic areas.

20.3.11 The CEMP is a requirement specified within the CoCP. Contractors would be required to plan their works in advance to integrate measures to reduce environmental effects into construction methods so that commitments secured by way of the DCO and contractual requirements are complied with.

20.3.12 Further information about CEMPs can be found in *Appendix 20.2*.

20.3.13 Indicative contents of a CEMP are listed in *IAN 183/14*.

Handover environmental management plan

20.3.14 On completion of the scheme construction a handover environmental management plan (HEMP) would be produced by the relevant main contractors in consultation with the Highways Agency and/or the employer's

representative. This would be passed to the organisation responsible for the long term management of the route. The HEMP would be prepared during the construction phase of the scheme.

20.3.15 The HEMP would provide the relevant information on existing and future environmental commitments and objectives in the REAC that would need to be honoured and ongoing actions and risks that need to continue to be managed. The indicative contents of a HEMP are shown in Annex A of IAN 183/14. It would include as built information and other details in a form that can be utilised by the body responsible for long term management so they can update their environmental management plans for the operational phase.

20.3.16 The delivery of the HEMP would be secured by way of contractual responsibility placed by the Highways Agency upon the main contractors, as per the approach detailed below.

20.4 Securing environmental mitigation overview

20.4.1 *Figure 20.1* illustrates where the mechanisms by which mitigation identified within the *ES* would be delivered.

20.4.2 Mitigation would be secured by way of requirements in the DCO that the scheme is undertaken in accordance with:

- the CoCP (which includes detailed provision on mitigation of construction impacts);
- specific mitigation obligations in key topic areas such as landscaping, drainage and contaminated land; and
- the scheme design shown on the plans submitted with the DCO.

20.4.3 Parallel with this, the Highways Agency will place a contractual responsibility on detailed design and construction contractors to comply with the DCO requirements. Discharge of these requirements would be by consent from the Secretary of State, generally following consultation with the relevant planning or environmental authority.

20.4.4 The Highways Agency will also place a more detailed contractual responsibility on detailed design and construction contractors to design and construct the scheme providing the same level of mitigation as the environmental design in *Figure 3.2 of the ES* and the *Register of Environmental Actions and Commitments (Appendix 20.1)*.

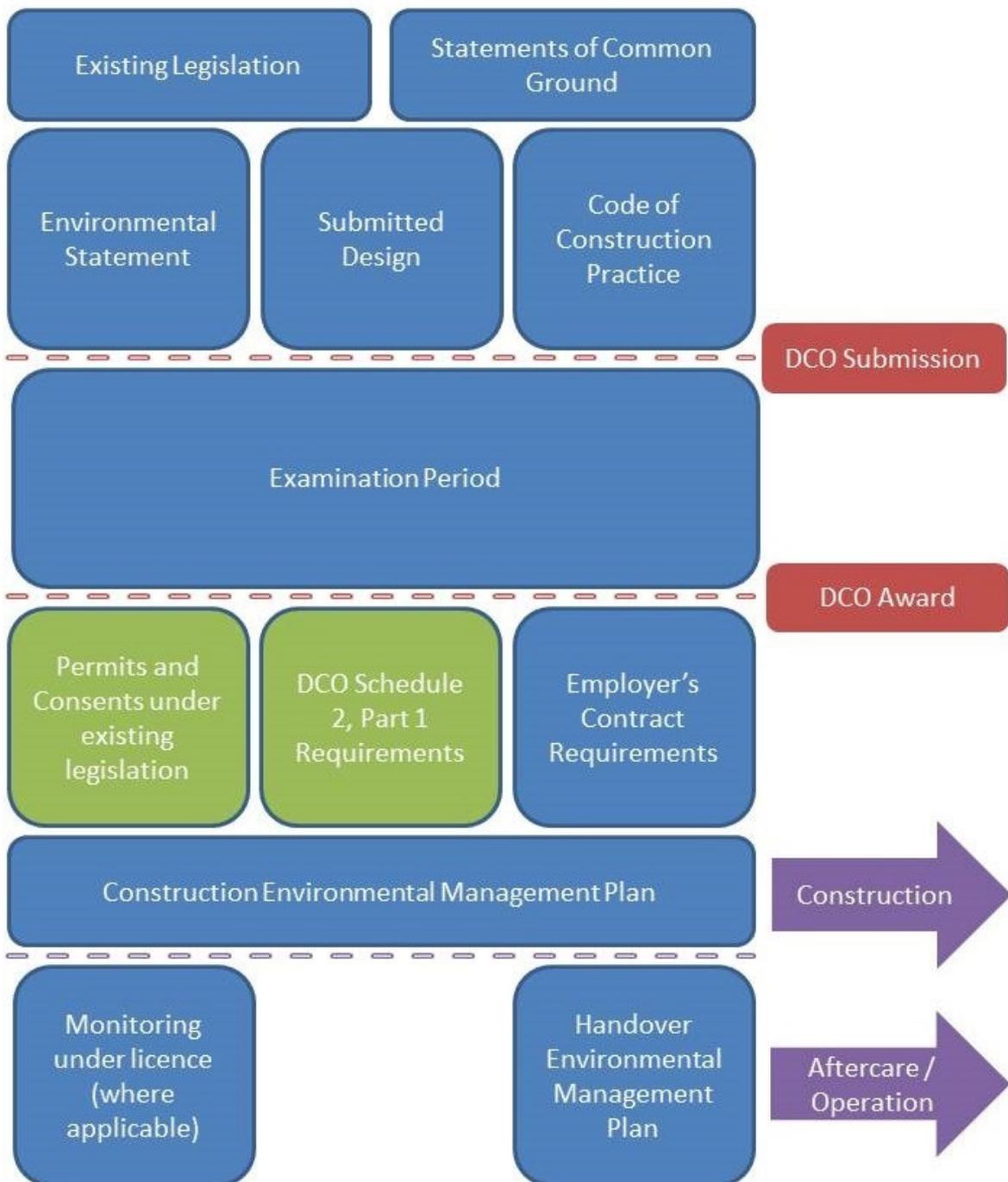
20.4.5 By way of illustration of the environmental management process, a summary sequence of events is provided below using site hoarding as an example piece of mitigation:

- The CoCP explains where hoarding ought to be used within the construction phase, for example site security and public safety around compounds, to protect cultural heritage assets as appropriate, screening for the purposes of noise and vibration.
- With due consideration to commitments made within the REAC, SOCGs and ongoing dialogue with stakeholders as appropriate, the site specific measures relating to the appearance and heights of

security fencing and hoarding to be used would be confirmed in a LEMP in advance of construction.

- The CEMP would identify the process that the contractor would use to ensure that the requirements of the CoCP and LEMP would be met e.g. identify the roles and responsibilities for inspection and maintenance of the hoarding during the construction phase.
- Details of any permanent hoarding to replace construction hoarding would be entered into the HEMP that would be passed on to the incumbent managing agent adopting the site following the completion of the construction phase. The HEMP would contain details of operational inspection and maintenance, as built drawings and any other ongoing commitments.

Figure 20.1: Securing environmental mitigation



Notes:

- Green fill denotes external approval required post DCO award.
- Some documentation would be developed during the Examination Period, such as Local Environment Management Plans.

20.5 Bibliography

British Standards Institution (2004, as amended). BS EN ISO 14001. Environmental Management Systems – specification with guidance for use.

Highways Agency (2008). *Design Manual for Roads and Bridges Volume 11, Section 2, Part 5, HD205/08 and Part 6, HD48/08*. Highways Agency, Scottish Government, Welsh Assembly Government and Department of Regional Development Northern Ireland.

Highways Agency (2014). Interim Advice Note (IAN) 183/14 Environmental Management Plans.

Highways Agency (2010). Interim Advice Note (IAN) 84/10 Environmental Information System.

Institute of Environmental Management and Assessment (IEMA) (2008). Environmental Management Plans. Practitioner Best Practice Series, Volume 12.