



# MetroWest+

## Portishead Branch Line (MetroWest Phase 1)

Planning Inspectorate Reference: TR040011

9.3.6 ExA.SoCG-NE.D6.V4 – Statement of Common Ground

Between

- (1) North Somerset District Council; and
- (2) Natural England

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## Abbreviations

AGVMP	Avon Gorge Vegetation Management Plan
CEMP	Construction Environmental Management Plan
DCO	Development Consent Order
EcCoW	Ecological Clerk of Works
ES	Environmental Statement
GCN	Great Crested Newt
HRA	Habitats Regulations Assessment
LONI	Letter of no Impediment
LSE	Likely Significant Effect
IROPI	Imperative Reasons of Overriding Public Interest
PINS	Planning Inspectorate
SAC	Special Area of Conservation
SoCG	Statement of Common Ground
SPA	Special Protection Area
SSSI	Site of Special Scientific Interest

In the text, "Document reference" refers to the DCO document reference number as shown on the documents on the Portishead Branch Line (MetroWest Phase 1) [project page on the PINS website](#).

In cases where a document appears twice and there are two Document reference numbers, (for example, the AGVMP which appears twice as standalone document reference number 8.12 and as ES Appendix 9.11, document 6.25), we have used the Document reference number for the standalone document.

## 1. Introduction

- 1.1 This Statement of Common Ground ("SoCG") has been prepared by North Somerset District Council ("the Applicant") and Natural England to set out the areas of agreement and disagreement between the two parties in relation to the Development Consent Order ("DCO") application for the Portishead Branch Line (MetroWest Phase 1) ("the DCO Scheme") based on consultation to date.
- 1.2 This SoCG comprises an agreement log which has been structured to reflect topics of interest to Natural England in relation to the application for the DCO Scheme. Topic specific matters agreed and not agreed between Natural England and the Applicant are included.

## 2. Scheme overview

- 2.1 The Applicant has applied to the Planning Inspectorate ("PINS") for a DCO to construct the Portishead Branch Line under the Planning Act 2008 ("Application"). The Application was made on 15 November 2019 under reference TR040011 and was accepted for examination on 12 December 2019.
- 2.2 The DCO Scheme will provide an hourly (or hourly plus) railway service between Portishead and Bristol Temple Meads Railway Station, with stops at Portishead, Pill, Parson Street and Bedminster.
- 2.3 The DCO Scheme comprises the Nationally Significant Infrastructure Project ("NSIP") as defined by the Planning Act 2008 ("the 2008 Act") to construct a new railway 5.4km long between Portishead and the village of Pill, and associated works including a new station and car park at Portishead, a refurbished station and new car park at Pill and various works along the existing operational railway line between Pill and Ashton Junction where the DCO Scheme will join the existing railway. Ashton Junction is located close to the railway junction with the Bristol to Exeter Mainline at Parson Street.<sup>1</sup>
- 2.4 The application has been accompanied by an Environmental Statement ("ES") because the DCO Scheme is classified as EIA development in the EIA Regulations 2017<sup>2</sup>.
- 2.5 The application has also been accompanied by a Habitats Regulation Assessment ("HRA") Report on the potential for effects on European sites of nature conservation importance under the Habitats Regulations 2017<sup>3</sup> (document entitled "Report to Inform Habitats Regulations Assessment", Document

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<sup>1</sup> Please refer to Schedule 1 of the DCO (Document 3.1) for more detail.

<sup>2</sup> The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

<sup>3</sup> The Conservation of Habitats and Species Regulations 2017

reference 5.5, Version 03). The Applicant's HRA Report is called a shadow HRA ("sHRA") in the relevant representation from Natural England. To avoid confusion with other DCO application documents in which the term HRA Report is used, this SoCG uses the term HRA Report.

2.6 Since the Examination opened on 19 October 2020, a number of legal and factual developments have occurred that are relevant to the HRA to be undertaken by the Secretary of State. To enable the Examining Authority to have the benefit of full information in preparing its Report on Impacts on European Sites and to assist the Secretary of State and all other stakeholders, the HRA Report (Document reference 5.5, Version 03) has been updated to include all relevant information, including:

2.6.1 Amendments made to the Habitats Regulations 2017 to ensure that habitat and species protection and standards continue to be implemented in the same way or an equivalent way following the exit of the United Kingdom from the EU and the end of the transition period;

2.6.2 The provision of new guidance on 24 February 2021 by Defra on Habitats Regulation Assessment and protecting European sites<sup>4</sup>, derogation notices<sup>5</sup> and the duty to protect, conserve and restore European sites<sup>6</sup>; and

2.6.3 New information and the securing of agreements in respect of matters relevant to the HRA process, such as in respect of the locations for the provision of compensation for the loss of woodland, whitebeams and grassland.

2.7 The HRA Report has been revised to ensure that the information provided relates to the elements that form part of the DCO Scheme including proposed mitigation and compensation measures, that it will assist the Examining Authority in compiling its Report on Impacts on European Sites for the Secretary of State especially in light of the new guidance issued by Defra, and that it will enable the Secretary of State to determine the application in accordance with the Habitats Regulations.

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<sup>4</sup> <https://www.gov.uk/guidance/habitats-regulations-assessments-protecting-a-european-site>

<sup>5</sup> <https://www.gov.uk/government/publications/habitats-regulations-assessment-derogation-notice>

<sup>6</sup> <https://www.gov.uk/guidance/duty-to-protect-protect-restore-european-sites>

### 3. Natural England's role in the DCO Scheme

- 3.1 Natural England is a non-departmental public body established under the Natural Environment and Rural Communities Act 2006. It is the statutory adviser to central government on nature conservation in England and promotes the conservation of England's wildlife and natural features. Natural England's objectives include the promotion of nature conservation, protecting biodiversity, and conserving and enhancing the natural landscape. It also has a social responsibility to improve understanding of the natural environment, promote access to the countryside and open spaces, and help balance society's wider needs for social and economic well-being with the needs of the natural environment.
- 3.2 Natural England's role in the DCO process derives from the 2008 Act and secondary legislation made under it. In addition to its overarching role as government adviser on landscape and nature, it is a prescribed consultee under section 42 of the 2008 Act and a consenting body in respect of protected landscapes.
- 3.3 The ES Chapter 9 Ecology and Biodiversity (Document reference 6.12, Version 03) identifies the statutory and non-statutory sites of nature conservation importance that may be affected by the construction and operation of the DCO scheme. These sites include:
- i. Severn Estuary Special Area of Conservation ("SAC")
  - ii. Severn Estuary Special Protection Area ("SPA") and Ramsar site;
  - iii. Avon Gorge Woodlands SAC and Avon Gorge Site of Special Scientific Interest ("SSSI");
  - iv. North Somerset and Mendip Bats SAC;
  - v. Bath and Bradford-on-Avon Bats SAC;
  - vi. Leigh Woods National Nature Reserve; and
  - vii. Portbury Wharf Nature Reserve.

## **4. Overview of Engagement**

### **4.1 Introduction**

4.1.1 This section briefly summarises the consultation that the Applicant has had with Natural England. For further information on the consultation process please see the Consultation Report (document reference number 5.1).

### **4.2 Pre-application engagement**

4.2.1 The Applicant has engaged with Natural England on the DCO Scheme during the pre-application process, both in terms of informal non-statutory engagement and formal consultation carried out pursuant to Section 42 of the 2008 Act.

4.2.2 The Applicant has had regular and constructive engagement with Natural England throughout the pre-application process on both a formal and an informal basis. The Applicant adopted a multi-stage approach to formal consultation which has allowed the DCO Scheme's proposals to evolve iteratively through the Applicant's consideration and regard for Natural England's input, in keeping with the (former) Department of Communities and Local Government (DCLG) Pre-Application Guidance (2015). This has meant that Natural England's responses meaningfully contributed to the development of the proposals in the DCO Scheme.

The formal consultation was carried out in three main stages:

- i. "Stage 1 Consultation", from 22 June 2015 to 3 August 2015 (pursuant to Section 47 only);
- ii. "Stage 2 Consultation", from 23 October 2017 to 4 December 2017; and
- iii. "Additional Stage 2 Consultation" at several different points following Stage 2 Consultation.

A full account of the Applicant's pre-application engagement with Natural England is contained in the Consultation Report (Document reference 5.1).

### **4.3 Post-application engagement**

4.3.1 Following the submission of the application on 15 November 2019, the Applicant has continued to engage with Natural England and progressed the substantive matters that are recorded in this document.



## 4.4 Overview of key issues raised at s42 stage

### 4.4.1 When formally consulted Natural England raised the following key issues:

- i. It recognised that the DCO Scheme contains opportunities for a positive impact on biodiversity but that the scheme also has the potential to affect features of interest in the Avon Gorge SSSI and Avon Gorge Woodlands SAC
- ii. It agreed that the European sites likely to be affected by the DCO Scheme are the Avon Gorge Woodlands SAC and North Somerset and Mendip Bats SAC.
- iii. Consideration should be given to the following issues in the Avon Gorge Woodlands SAC:
  - Qualifying woodland and grassland features of the SAC
  - The plans should address potential impacts from ash die back and impacts on Schedule 8 plants such as Bristol rock-cress;
  - The draft Avon Gorge Vegetation Management Plan ("AGVMP") was generally supported but further clarification was needed in relation to the extent of vegetation clearance.
- iv. The disused railway line is an important landscape feature for the movement of bats from the North Somerset and Mendip Bats SAC, and further bat survey information is required to determine the DCO Scheme's impact on these bats;

### 4.4.2 The following sections provide detail on the matters raised by Natural England during the course of the DCO Scheme consultation, the actions taken by the Applicant in response, and whether the matter is agreed or remains to be agreed. The discussion relating to the Habitats Regulations are contained in Sections 5 and 6.



## 5. Habitats Regulations Assessment

This section sets out the topics that have arisen through consultation with Natural England as part of the HRA process. This section first looks at the HRA screening process that was undertaken to determine which sites were likely to be affected by the DCO Scheme. Sections 5.2 and 5.3 then go on to consider the impact of the DCO Scheme on each of the two European sites on which the DCO Scheme has the potential for a likely significant effect (LSE): the Avon Gorge Woodlands (AGW) SAC and the North Somerset and Mendip Bats SAC.

### 5.1 HRA screening process

The HRA (Stage 1) screening information considered all European sites within a 10km radius of the scheme, extended to 30km for sites with bats as a qualifying feature. The screening process identified two sites with LSEs as set out in Table 5.1 below.

**Table 5.1 HRA Screening**

HRA Screening	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
5.1.1 European sites with potential for LSE	<p>Natural England agrees that the two sites listed are the only European sites that have the potential to be adversely affected by the DCO Scheme.</p> <p>Natural England is satisfied that the HRA has identified all potential impact pathways for</p>	<p>The Applicant's HRA Stage 1 screening information is presented in the HRA Report which has been appended to the ES at Appendix 9.12 (Document reference 5.5, Version 03). LSEs could not be ruled out for the following European sites:</p> <ul style="list-style-type: none"> <li>• Avon Gorge Woodlands SAC</li> <li>• North Somerset and Mendip Bats SAC</li> </ul>	Agreed

HRA Screening	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
	European sites and their qualifying features.		
5.1.2 European sites that will not be adversely affected by the DCO Scheme	Natural England agreed that the sites listed can be ruled out of the HRA screening process as sites that will not be adversely affected by the DCO Scheme.	<p>The European sites listed below were considered as part of the HRA screening process but it was concluded that there was no potential for LSEs on these sites:</p> <ul style="list-style-type: none"> <li>• Severn Estuary SAC</li> <li>• Severn Estuary SPA</li> <li>• Severn Estuary Ramsar site<sup>7</sup></li> <li>• Chew Valley Lake SPA</li> <li>• Wye Valley Woodlands SAC</li> <li>• Wye Valley and Forest of Dean Bat Sites SAC</li> <li>• Mendip Limestone Grasslands SAC</li> <li>• Bath and Bradford-on-Avon Bats SAC</li> <li>• Mells Valley SAC</li> </ul>	Agreed

<sup>7</sup> In-combination effects were considered for the Severn Estuary SPA and Ramsar site but no LSE was identified either alone or in-combination

HRA Screening	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
<p>5.1.3 No impact pathway between the DCO Scheme and the Severn Estuary SAC</p>	<p>Natural England is satisfied that there is no hydrological connectivity between the DCO Scheme and the Severn Estuary SAC and so no impact pathway. Natural England considers that the Applicant has taken reasonable steps to understand the potential hydrological connectivity between the project and the SAC, including review of historical maps and site inspections, and on the basis of objective information, can justifiably exclude a likely significant effect (LSE).</p>	<p>No hydrological connectivity is present between the DCO Scheme and the SAC qualifying habitat in the Severn Estuary SAC. Information on hydrological linkages between drains, ditches and ponds, including Pond 11 and Ditches 15, 16 and 17, and the qualifying habitat of the Severn Estuary SAC is provided in paragraph 9.6.57 of the ES Chapter 9 (Document reference 6.12, Version 03).</p>	<p>Agreed</p>

## 5.2 Avon Gorge Woodlands SAC

Table 5.2 below gives details of the discussions between the Applicant and Natural England on the Avon Gorge Woodlands SAC and the mitigation measures proposed to avoid and reduce impacts. The table identifies where issues have been resolved or agreed and which issues remain outstanding. A list of the mitigation measures proposed to reduce impacts of the DCO Scheme on the Avon Gorge Woodlands SAC is set out in the Appendix in Table A1.

**Table 5.2 Avon Gorge Woodlands SAC**

Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
5.2.1 HRA methodology in respect of the Avon Gorge Woodlands SAC	The assessment of potential environmental effects in relation to designated sites has been thorough and robust	In preparing the HRA Report on the Avon Gorge Woodlands SAC (Document reference 5.5, Version 03) the Applicant has closely followed PINS Advice Note 10 (Habitats Regulations Assessment relevant to Nationally Significant Infrastructure Projects, November 2017)	Agreed
5.2.2 Survey methodology and results in the ES	<p>Natural England is satisfied that the assessment of effects on the Avon Gorge Woodlands SAC undertaken by the Applicant have been thorough and robust.</p> <p>Natural England is satisfied with the overall range of</p>	<p>The methodology adopted by the Applicant in relation to Ecology and Biodiversity is referenced in Chapter 9 of the ES (Document reference 6.12, Version 03).</p> <p>The Applicant has undertaken all relevant surveys to inform the DCO application. Resurveying will take place in the course of discharging requirements and applying for</p>	Agreed

Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
	<p>surveys completed to date and that this has provided adequate baseline information to assess ecological effects for the purposes of the DCO application. Survey work that will be undertaken in the normal course of applying for relevant consents and licences required in connection with DCO Scheme will ensure that up to date information is used and ecological interests are protected.</p>	<p>separate consents and licences. This will ensure that the information is up to date at the time relevant decisions are made and that ecology and biodiversity features are protected.</p>	
<p>5.2.3 Assessment of effects of DCO Scheme on the Avon Gorge Woodlands SAC</p>	<p>Full details of works in the Avon Gorge Woodlands SAC are required.</p>	<p>A full description of the proposed works within the Avon Gorge Woodlands SAC is presented in the ES Chapter 4 (Document reference 6.7) and the HRA Report (Document reference 5.5, Version 03)</p>	<p>Agreed</p>

Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
	NE considers that temporary and permanent works within the Avon Gorge Woodlands SAC have the potential to affect features of SAC interest	Full details of the likely effects of the DCO Scheme on the Avon Gorge Woodlands SAC are given in ES Chapter 9 (Document reference 6.12, Version 03), the HRA Report (Document reference 5.5, Version 03) and the Avon Gorge Vegetation Management Plan ("AGVMP") (Document reference 8.12, Version 03).	Agreed
5.2.4 Vegetation management - general	There is a need to define the extent of vegetation removal.	The likely extent of vegetation clearance under the DCO Scheme is described in ES Chapter 9 (Document reference 6.12, Version 03) and the AGVMP (Document reference 8.12, Version 03).	Agreed
5.2.5 Vegetation management – potential for ash die-back	Natural England is concerned about ash die-back in the Avon Gorge Woodlands SAC. Natural England has strongly indicated that ash clearance should only be considered for H&S reasons. If further ash clearance is needed under Package 1 this further emphasises NE's view that Package 2 is preferable.	The widespread incidence of ash die back disease in the Avon Gorge since 2016 could result in the death of mature ash trees along the railway over the next few years, irrespective of the DCO Scheme. In general, it is not proposed to clear ash unless the purpose is to mitigate safety risks to the railway. Where practical, natural regeneration of ash should be encouraged. Biosecurity measures are proposed as part of the DCO Scheme's vegetation management to avoid the potential spread of ash die-back disease by construction activities.	Agreed



Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
		<p>All of these measures are detailed in the AGVMP (Document reference 8.12, Version 03).</p> <p>If the whitebeam planting Package 1 is taken forward (see 6.1.5-6.1.6 below), it may be necessary to clear some ash on planting sites to benefit the establishment of whitebeams. In this case, the total area of woodland on Network Rail land that would need to be cleared to benefit the establishment of whitebeams would be a maximum of 0.26ha. The total area of the Avon Gorge Woodlands SAC is 151 ha.</p>	
<p>5.2.6 Impact of fencing on Avon Gorge Woodlands SAC</p>	<p>Natural England considers that proposed fencing in the Avon Gorge could have potential landscape and visual impacts and this should be given weight when determining the detailed design and operation of the project.</p> <p>Natural England also considers that safety fencing should have an incidental positive effect in limiting illegal and</p>	<p>The likely impact of the fencing on the Avon Gorge Woodlands SAC has been identified in ES Chapter 11 (Document reference 6.14).</p> <p>Full consideration will be given to the potential landscape and visual impacts of fencing in the Avon Gorge Woodlands SAC at the detailed design stage. Requirement 14 of the DCO requires details of the location, siting and design of all the fencing in the Avon Gorge Woodlands SAC to be approved by the local authority in consultation with Natural England.</p>	<p>Agreed</p>

Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
	<p>sometimes damaging public access to the Avon Gorge Woodlands SAC.</p>	<p>To address visual amenity concerns about the visual impact of the proposed fencing, paladin (mesh) fencing has been proposed to minimise its visual impact.</p> <p>Fencing is required for safety and security reasons, including to prevent trespass, both of which become a greater concern with the introduction of faster, more frequent passenger services. Some of the fencing requirements were de-scoped at outline design to reduce the amount of vegetation clearance required and there is the potential for more fencing to be de-scoped during the detailed design stage of the DCO Scheme (GRIP 5). The installation of fencing will also bring benefits to the grassland and woodland habitats within the Avon Gorge Woodlands SAC in limiting public access and disturbance to the Avon Gorge Woodlands SAC, which is highlighted as a pressure/threat in Natural England's Site Improvement Plan for the Avon Gorge Woodlands SAC (January 2015).</p>	

Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
<p>5.2.7 Impact on rare whitebeam (<i>Sorbus</i>) species</p>	<p>Natural England considers that in relation to <i>Sorbus</i> there could be the potential for long term major adverse impact and there is therefore a need to see that losses are minimised.</p>	<p>Removal or coppicing of rare whitebeam trees in the DCO Scheme have been kept to a minimum. As set out in the HRA Report (Document reference 5.5, Version 03), there will be losses of up to 27 individual rare whitebeam trees. The reasons for the loss of each individual whitebeam is explained more fully in the ES Chapter 9 (Document reference 6.12, Version 03).</p> <p>The AGVMP (see 5.2.9 below) also includes measures to protect rare whitebeam trees during construction:</p> <ul style="list-style-type: none"> <li>• Measures to treat individual specimens of rare whitebeam to avoid removal, coppicing or pruning.</li> <li>• Ecological watching brief and protective fencing of retained trees.</li> </ul> <p>The proposed compensation measures for the unavoidable losses of rare whitebeam trees are described below in section 6.</p>	<p>Agreed</p>

Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
<p>5.2.8 Mitigation during construction</p>	<p>Natural England requested supporting information to show that any locations of sensitivity will be given protection during construction.</p>	<p>A range of mitigation measures has been proposed to minimise the impact of the DCO Scheme on the Avon Gorge Woodlands SAC during construction.</p> <p>These measures include:</p> <ul style="list-style-type: none"> <li>• the presence on site of an EcCoW ("Ecological Clerk of Works")</li> <li>• site briefings and supervised vegetation clearance</li> <li>• site-specific measures such as signage and fencing to avoid damage to sensitive features</li> <li>• a consistent method of demarcation to minimise damage to important and notable ecological features. The method of demarcation will need to be appropriate for both construction and operational input and will need to be developed by an appropriately qualified ecological specialist.</li> <li>• management of arisings to prevent enriched soil and weed growth</li> </ul> <p>These measures are contained in the Master CEMP, which is to be approved under</p>	<p>Agreed (that the proposed measures will satisfactorily mitigate the potential impacts identified)</p>

Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
		Requirement 5 of the DCO, and the AGVMP (Document reference 8.12, Version 03)	
5.2.9 Mitigation: Avon Gorge Vegetation Management Plan (AGVMP)	<p>Natural England supports the range of mitigation measures relating to the Avon Gorge Woodlands SAC in the AGVMP. Natural England will continue to advise the applicant on the AGVMP and will need to agree the final version.</p> <p>Natural England considers that while 10 years is sufficient to cover establishment of habitat, compensatory measures should be enduring. Natural England will seek to work with the Forestry Commission and Network Rail in their plans for management of their respective land interests in the Avon Gorge, following the completion of the AGVMP.</p>	<p>The AGVMP (Document reference 8.12, Version 03) is a comprehensive management plan for vegetation in the Avon Gorge Woodlands SAC and has been prepared having regard to the DCO Scheme. The AGVMP is listed in the Schedule of Mitigation (Document reference 6.31, Version 03).</p> <p>The aims of the AGVMP include:</p> <ul style="list-style-type: none"> <li>• To set out the mitigation, compensation and management measures during the construction of the DCO Scheme through the Avon Gorge Woodlands SAC/SSSI. The aim of the Plan is to describe the mechanisms by which the measures proposed for the DCO Scheme within the Avon Gorge are to be implemented.</li> <li>• To form the basis of an agreement between Natural England, North Somerset Council and</li> </ul>	Agreed (that the proposed measures will satisfactorily mitigate the potential impacts identified)

Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
		<p>Network Rail to maintain and enhance (where possible) the management of woodland and grassland habitats in the Avon Gorge Woodlands SAC.</p> <ul style="list-style-type: none"> <li>To complement the existing Site Management Statement (“SMS”) and Vegetation Management Plan (“VMP”) (Appendix 9.15, DCO Document Reference 6.25) for the operating railway line.</li> </ul> <p>The AGVMP sets out the management and monitoring measures, including timetables, to ensure that the proposed mitigation and compensation is delivered. Requirement 14 (6) and (7) of Schedule 2 to the DCO secures the enforceability of the AGVMP.</p> <p>It has been agreed by all stakeholders that 10 years is an appropriate period of time in which to monitor the measures for which the Applicant will be responsible under the AGVMP. At the end of that period of time, the habitats will be established within the wider Avon Gorge habitat and it is appropriate that the ongoing</p>	

Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
		<p>management is undertaken by the relevant landowners as part of agreements with Natural England.</p> <p>The AGVMP has been developed with reference to Network Rail's Site Management Statement (SMS) 2018-2023 and Vegetation Management Plan (VMP), for the operation of the line.</p>	
5.2.10 Mitigation: invasive species	<p>Natural England recommended treatment and management of invasive species that the DCO Scheme's construction and operation could introduce.</p>	<p>The spread of non-native and invasive plants will be avoided during construction through identification of these species by the EcCoW, tool box talks to make contractors aware of their presence and threat and careful planning of access and use of biosecurity measures when using equipment and machinery to avoid spread of invasive species. These measures will be secured in the Master CEMP, which is to be approved under Requirement 5 of the DCO, and the AGVMP (Document reference 8.12, Version 03).</p> <p>Once the DCO Scheme is operational, maintenance of invasive species in the railway corridor will be managed by Network Rail.</p>	<p>Agreed (that the proposed measures will satisfactorily mitigate the potential impacts identified)</p>

Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
5.2.11 Mitigation: Strategy for management of Quarry Bridge 2 construction site compound	Natural England considers that the use of the quarry floor for storage and a works compound has the potential to affect features of interest in the Avon Gorge Woodlands SAC.	The draft construction methodology and design for the ramp and site compound area by Quarry Bridge 2 are included in Annex C of the AGVMP (Document reference 8.12, Version 03). Proposed mitigation includes the use of limestone hardcore on the ramp and avoiding and protecting rare whitebeam trees by fencing around the construction compound. The underlying grassland vegetation will be protected by use of a geotextile membrane or other measures to protect the ground underneath. The boulders at the entrance to the Quarry and log piles will be temporarily relocated during construction outside the indicative compound area.	Agreed (that the proposed measures will satisfactorily mitigate the potential impacts identified)
5.2.12 Mitigation: Bristol rock-cress conservation strategy and mitigation for other rare grassland species	Natural England pointed out the need to ensure protection and management of Bristol rock-cress and other rare species on cliff faces affected by the DCO Scheme, alongside protection and management of the wider SAC habitat.	The measures to protect and manage impacts on Bristol rock-cress and other rare species on cliff faces are considered in the Bristol rock-cress conservation strategy within Annex K of the AGVMP (Document reference 8.12, Version 03) and listed in the Schedule of Mitigation (Document reference 8.31, Version 03).  The impact on Bristol rock-cress of geotechnical stabilisation works on the rock faces will be	Agreed (that the proposed measures will satisfactorily mitigate the potential impacts identified)



Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
		<p>reduced by avoiding and protecting individual plants from damage during the works by micro siting of works, such as location of rock bolts, away from areas where plants have been recorded if possible. Detailed pre-construction flora surveys of the rock faces will be undertaken to inform the detailed design of rock face geotechnical works. Bristol rock-cress plants adjacent to areas affected by rock works will be clearly labelled and fenced with barrier tape and signage to ensure that they are not adversely affected by the works.</p> <p>All vegetation clearance will be completed under an ecological watching brief by a specialist botanist and will seek to mitigate, and avoid where possible, any impact on rare/notable plants, including Bristol rock-cress. Any Bristol rock-cress plants that cannot be avoided by the works will be marked carefully for transplant. Seed will also be collected. Plants and seed will be reintroduced onto two replanting sites on Network Rail land following completion of the construction works.</p>	

Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
		<p>The ES Chapter 9 (Document reference 6.12, Version 03) sets out the measures proposed at the detailed design stage to mitigate the effects on other rare species and the CG grassland habitat during construction works.</p> <p>Further mitigation measures to avoid impacts on SAC grassland, Bristol rock-cress and other rare or notable plant species on rock faces will be considered during the detailed design stage. Detailed surveys of the rock faces will be undertaken during the detailed design of the geotechnical works and impacts on important habitats and species will be avoided, where possible. (AGVMP Version 03, para 8.1.4, Document reference 8.12)</p> <p>Rare plants present on areas where construction works are not taking place such as the rock faces and the River Avon Tow Path will be fenced off to prevent inadvertent damage.</p> <p>Rare plants such as spring cinquefoil and SAC grassland will be protected from inadvertent damage from vehicular access along the Tow Path by limiting access and installing fencing to</p>	

Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
		prevent accidental damage, as specified in the Master CEMP (Appendix 4.2, Document Reference 8.14, Version 03).	
5.2.13 Decommissioning of the railway	Natural England is not concerned about the decommissioning of the railway in relation to HRA. The railway line through the Avon Gorge Woodland SAC is an existing freight line so it is difficult to envisage any impact pathway that would result from ceasing a passenger service in the future.	The Applicant has not assessed the potential decommissioning of the railway in terms of HRA. Any future developments would be subject to their own assessment and consideration of their specific environmental effects on the Avon Gorge Woodland SAC. A meaningful assessment of the impact of future developments is not feasible at this stage.	Agreed
5.2.14 Conclusion regarding the proposed range of mitigation measures for the Avon Gorge Woodlands SAC	Natural England supports the range of mitigation measures that have been introduced to reduce and limit the effects of the DCO Scheme on the Avon Gorge Woodlands SAC.	<p>A range of mitigation measures has been proposed to avoid and reduce the adverse effects of the DCO Scheme on the Avon Gorge Woodlands SAC as far as possible.</p> <p>In summary, the Applicant's HRA Stage 2: Appropriate Assessment in the HRA Report (Document reference 5.5, Version 03) concludes</p>	Agreed

Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
		<p>that while the impact of the DCO Scheme on the Avon Gorge Woodlands SAC can be minimised, there will be loss of qualifying woodland (0.73ha) and SAC grassland habitats (0.06ha) that cannot be fully mitigated and therefore it cannot be ascertained that the DCO Scheme will not adversely affect the integrity of the Avon Gorge Woodlands SAC.</p> <p>The measures proposed to compensate these losses are described in Section 6 below.</p>	

### 5.3 North Somerset and Mendip Bats SAC

Table 5.3 below gives details of the discussions between the Applicant and Natural England on the North Somerset and Mendip Bats SAC and the mitigation measures proposed to avoid and reduce impacts. The table identifies where issues have been resolved or agreed and which issues remain outstanding. A list of the mitigation measures proposed to reduce impacts of the DCO Scheme on the North Somerset and Mendip Bats SAC is set out in the Appendix Table A2 to this document.

**Table 5.3 North Somerset and Mendip Bats SAC**

North Somerset and Mendip Bats SAC	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
5.3.1 Impact on horseshoe bats in the North Somerset and Mendips Bats SAC	The HRA needs to include the assessment of the impact of works on horseshoe bats in relation to the two bat SACs - the North Somerset and Mendip Bats SAC, and the Bath and Bradford on Avon Bats SAC.	<p>The Applicant's HRA Stage 1 screening information, which is contained within the HRA Report (Document reference 5.5, Version 03), concluded that the DCO Scheme is likely to have indirect effects on bat populations in the North Somerset and Mendip Bats SAC. The LSE has been identified from the DCO Scheme alone and in combination with the Royal Portbury Docks development at Court House Farm.</p> <p>The HRA Stage 1 screening information concluded that the DCO Scheme would have no impact on the bat populations in the Bath and Bradford on Avon Bats SAC.</p>	Agreed

North Somerset and Mendip Bats SAC	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
5.3.2 Impact on different species of bat	<p>Natural England considers that the following points should be taken into account in relation to the impact of the Scheme on bats:</p> <ul style="list-style-type: none"> <li>• separate consideration of impacts on greater horseshoe and lesser horseshoe bats because of their different needs and ecology;</li> <li>• bat surveys are incomplete and are required to determine hibernation sites, the importance of local tunnels, and the likely impacts of development on them.</li> </ul>	<p>Bat surveys have been completed and appended to the ES Chapter 4 at Appendix 9.2 (Document reference 6.25, "Bat Technical Appendix")</p> <p>These surveys have been used to determine the importance of the site to bats and the likely impacts of the DCO Scheme on all species of bats.</p> <p>The bat surveys confirmed the presence of 13 species of bat including the greater horseshoe and lesser horseshoe bats. The impacts on greater and lesser horseshoe bats are considered separately in ES Chapter 9 (Document reference 6.12, Version 03). The HRA Report (Document reference 5.5, Version 02) identified indirect effects on greater and lesser horseshoe bats. However, only the greater horseshoe bats had linkages with the North Somerset and Mendip Bats SAC.</p>	Agreed
5.3.3 Impact of Scheme on the North Somerset and Mendip Bats SAC	<p>The main risks identified arise from vegetation clearance and increased lighting along the disused line and along the freight line at Pill Station.</p>	<p>The potential for impacts on the North Somerset and Mendip Bats SAC arises from the use of habitats within the DCO Scheme boundary for foraging and commuting by bats forming part of the SAC population. Activities associated with the DCO Scheme could affect this usage through</p>	Agreed

North Somerset and Mendip Bats SAC	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
		<p>severance of commuting routes (via direct habitat loss or lighting).</p> <p>The impact of the DCO Scheme on the bat populations from the North Somerset and Mendip Bats SAC is assessed in ES Chapter 9 (Document reference 6.12, Version 03) and the HRA Report (Document reference 5.5, Version 03).</p>	
<p>5.3.4 Mitigation proposed to avoid impacts on the North Somerset and Mendip Bats SAC</p>	<p>Natural England considers that the proposed mitigation has focused on the key risks. Provided the dark vegetated corridor along the disused line can be maintained and enhanced, the lighting levels for the SAC bats will be acceptable and the proposed mitigation measures will be effective and deliverable. Additional planting proposed along that section of the scheme provides further confidence that the dark corridor will be maintained.</p>	<p>A range of measures have been proposed to minimise impact on the bat populations from the North Somerset and Mendip Bats SAC.</p> <p>These measures include:</p> <ul style="list-style-type: none"> <li>• Vegetation to be retained along the disused line as identified in the Railway Landscape Plans (Disused Line) (DCO Document Reference 2.10). Replanting vegetation as detailed in the Railway Landscape Plans (Disused Line), (DCO Document Reference 2.10).</li> <li>• Installation of fencing from adjacent farmland to minimise vegetation loss</li> <li>• Infill planting within land alongside the A369 Portbury Hundred, as detailed in ES</li> </ul>	<p>Agreed</p>

North Somerset and Mendip Bats SAC	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
	<p>Natural England agrees with the Applicant that the additional survey data gathered on bat use at Pill Station shows that bat use at Pill Station is not linked to the North Somerset and Mendip Bats SAC.</p> <p>In respect of the potential for vegetation removal to result in temporary impacts on the dark vegetated corridor from existing light sources, Natural England agrees with the Applicant's conclusion that severance of bat flight lines is unlikely to be caused by light spill from adjacent cargo areas.</p>	<p>Appendix 9.16 (DCO Document Reference 6.25).</p> <p>Further measures are detailed within ES Chapter 9 (Document reference 6.12, Version 03).</p>	
5.3.5 Conclusion regarding effectiveness of proposed mitigation measures	Subject to the identified mitigation being secured, an adverse effect on the integrity of the North Somerset and	In summary, the Applicant's HRA Stage 2: Appropriate Assessment in the HRA Report (Document reference 5.5, Version 03) concludes that taking into account the small numbers of SAC	Agreed



North Somerset and Mendip Bats SAC	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
	Mendip Bats SAC can be avoided.	bats likely to be affected by the DCO Scheme and the proposed mitigation measures outlined above, there will be no adverse effects on the integrity of the North Somerset and Mendip Bats SAC either alone or in combination with other plans.	

## 5.4 Summary of HRA Report Stages 1 and 2 conclusions

Table 5.4 below contains a summary of the conclusions of the HRA Report Stages 1 and 2 on the European sites identified in the screening process and the measures proposed to avoid or reduce adverse effects identified in the assessment.

**Table 5.4 Summary of HRA Report Stages 1 and 2 conclusions**

Summary of HRA conclusions	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
5.4.1 HRA Screening	Natural England agrees with the two European sites identified as having potential for LSE.	There are two European sites with potential for LSE: the Avon Gorge Woodlands SAC and the North Somerset and Mendip Bats SAC.	Agreed
5.4.2 Avon Gorge Woodlands SAC	Natural England agrees with the Applicant's assessment of the impact of the DCO Scheme on the Avon Gorge Woodlands SAC.	While the effects of the DCO Scheme on the Avon Gorge Woodlands SAC have been minimised as far as possible, there will be some loss of SAC woodland and grassland habitats which cannot be fully mitigated. It therefore cannot be ascertained that the DCO Scheme will not adversely affect the integrity of the Avon Gorge Woodlands SAC.	Agreed
5.4.3 North Somerset and Mendip Bats SAC	Natural England agrees with the Applicant's assessment of the impact of the DCO Scheme on	An adverse effect on the integrity of the North Somerset and Mendip Bats SAC can be avoided through the proposed mitigation measures.	Agreed

Summary of HRA conclusions	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
	the North Somerset and Mendip Bats SAC.		

## 6. Habitats Regulations: Compensatory Measures for the Avon Gorge Woodlands SAC

- 6.1 The design of the DCO Scheme has been developed to minimise habitat loss and other adverse impacts on European sites. However, despite the protective measures proposed to avoid adverse effects on the Avon Gorge Woodlands SAC, there will be loss of SAC qualifying woodland and grassland features that cannot be fully mitigated. These losses include 0.73ha of *Tilio-Acerion* woodland, 0.06ha of *Festuco-Brometalia* grassland and the removal or coppicing of up to 27 rare whitebeam trees which are a key species of the SAC qualifying woodland habitat. As a result of these unavoidable losses, it cannot be ascertained that the DCO Scheme will not adversely affect the integrity of the Avon Gorge Woodlands SAC.
- 6.2 Under the Habitats Regulations, where an appropriate assessment concludes that adverse effects on the integrity of a European site cannot be avoided, and the competent authority is satisfied that there are no alternative solutions, the scheme can only be approved where there are imperative reasons of over-riding public interest (IROPI) and necessary compensation measures have been secured.
- 6.3 Table 6.1 below outlines the compensation measures proposed for the Avon Gorge Woodlands SAC that are to be considered if the Secretary of State concludes that there are no alternative solutions and the IROPI test has been satisfied. A list of the compensatory measures proposed to compensate for unavoidable impacts of the DCO Scheme on the Avon Gorge Woodlands SAC is set out in the Appendix Table A3 to this document.

**Table 6.1 Compensatory measures for the Avon Gorge Woodlands SAC**

Compensatory measures for the Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
<p>6.1.1 Compensation strategy (general approach to compensation)</p>	<p>Natural England considers that the Applicant is taking a thorough approach to considering a suitable package of compensation measures.</p> <p>While all options considered can provide ecological benefit Natural England has also advised that the compensation strategy should be guided by the need to clearly distinguish compensation measures from improvements to ongoing management of the SAC that Network Rail is obliged to carry out. Improvements within the SAC should also avoid harm to existing features of the SAC/SSSI. As such Natural England considers that the strategy should prioritise</p>	<p>Since the DCO application was submitted in November 2019, the compensation proposals have been further developed in consultation with stakeholders. The compensation strategy has considered the following potential compensation measures:</p> <ul style="list-style-type: none"> <li>• improvement of areas of existing qualifying grassland and woodland habitat through positive management on Network Rail land within the Avon Gorge Woodlands SAC</li> <li>• improvement of woodland habitat through positive management on Forestry Commission land adjacent to the Avon Gorge Woodlands SAC.</li> <li>• Planting new whitebeam trees on Network Rail land within the Avon Gorge Woodlands SAC</li> <li>• Planting new whitebeam trees on Forestry Commission land within the Avon Gorge Woodlands SAC</li> </ul>	<p>General approach agreed</p>

Compensatory measures for the Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
	<p>improvements off-site on Forestry Commission land, supplemented by improvements with the SAC where that can be shown to be appropriate in terms of the application of the Habitats Regulations 2017 and the conservation objectives of the SAC.</p>	<p>The HRA Report (Document reference 5.5, Version 03) and AGVMP (Document reference 8.12, Version 03) evaluate two different options for the location of the positive woodland management measures and two options for the location of the whitebeam planting sites (see 6.1.3 – 6.1.8 below). The grassland compensation can only be provided on Network Rail land.</p> <p>An agreement has been secured between the Applicant and the Forestry Commission as a result of which the Applicant can now secure delivery of the positive woodland management measures on Forestry Commission land and the delivery of Package 2 for whitebeam planting ( see 6.1.7 below). Unless the Secretary of State specifies otherwise in determining the DCO application, all positive woodland management measures will be delivered on Forestry Commission land and whitebeam planting Package 2 will be delivered instead of Package 1 (see 6.1.6 below). The Applicant will retain responsibility under the DCO for measures on Forestry Commission land for the duration of the AGVMP.</p>	

Compensatory measures for the Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
		<p>The mechanism for securing the delivery of these measures is through the AGVMP and Requirement 14 of Schedule 2 to the DCO, which requires implementation of the AGVMP. As undertaker, the Applicant will be responsible for ensuring that the AGVMP measures are undertaken, whether by itself or by Network Rail or the Forestry Commission. Under the terms of the agreement reached between the Forestry Commission and the Applicant, the planting and maintenance of whitebeams and the positive woodland management measures will be undertaken by the Forestry Commission, with licences granted to the Applicant to ensure that the AGVMP measures are delivered throughout the duration of the Plan and with provision for step-in rights in the event that the Forestry Commission notifies the Applicant that it does not wish to undertake the positive management measures or the measures are not being undertaken by the Forestry Commission in accordance with the AGVMP. This should provide the Examining Authority and Secretary of State with the necessary degree of confidence that the</p>	

Compensatory measures for the Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
		<p>compensation is secured and will be carried out in accordance with the AGVMP.</p> <p>The compensation proposals on land within Network Rail's ownership will be in addition to the actions that Network Rail must take under Regulation 9 of the Habitats Regulations 2017 as a competent authority with a duty to protect, conserve and restore European sites. Defra guidance on the duty to protect, conserve and restore European sites was published on 24 February 2021 (see paragraph 2.5 above).</p>	
6.1.2 Approach to adaptive compensation	<p>Natural England accepts the adaptive approach being proposed by the Applicant to provide compensation measures. The inclusion of the off-site measures provides confidence that the legal and ecological requirements can be met.</p>	<p>The AGVMP (Document reference 8.12, Version 03) proposes the provision of a larger number of sites and areas of land than are required as compensation through positive management, to allow the most suitable sites and areas to be selected to meet the requirements of compensation arising in respect of the DCO Scheme.</p> <p>The Applicant's approach to compensation allows an 'adaptive approach', enabling the Applicant to</p>	Agreed



Compensatory measures for the Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
		<p>evaluate the agreed compensation site options in combination with compensation measures to be provided by Network Rail through the SMS and VMP, and to deliver a package of compensation measures that it considers will best compensate for the predicted harm to the Avon Gorge Woodlands SAC, in the light of prevailing circumstances.</p> <p>As the agreement between the Applicant and the Forestry Commission has enabled the Applicant to commit to the delivery of the compensation measures preferred by Natural England, which are on Forestry Commission land, the final arrangements under the AGVMP no longer rely on an adaptive approach, subject to the Secretary of State determining otherwise.</p>	
6.1.3 Proposed compensation package (summary)	While Natural England is broadly content that the proposed compensation measures are proportionate and effective in ecological terms, it has highlighted legal and ecological risks associated with some of	The proposed package of all the compensatory measures that could potentially be delivered includes 1.6 ha of positive management on Network Rail land (for woodland and grassland), whitebeam planting sites on Network Rail and Forestry Commission land (see paras 6.1.5-6.1.7 below) as well as positive management of	Agreed

Compensatory measures for the Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
	<p>the measures proposed on Network Rail land and so welcomes the Applicant's development of Package 2 whitebeam planting and off-site compensation measures on Forestry Commission land as an alternative to some of the compensation measures proposed on Network Rail land.</p>	<p>woodland habitat on Forestry Commission land outside of the Avon Gorge Woodlands SAC, as an alternative to the areas identified for positive management of woodland habitat on Network Rail land.</p> <p>It has now been agreed with Natural England that, unless the Secretary of State determines otherwise, the proposed compensation measures will comprise:</p> <ul style="list-style-type: none"> <li>• Grassland compensation (0.15ha) on Network Rail land (see 6.1.9)</li> <li>• Woodland compensation (1.45ha) on Forestry Commission land (see 6.1.8)</li> <li>• Whitebeam planting Package 2 on Network Rail land and Forestry Commission land (see 6.1.7).</li> </ul>	
<p>6.1.4 Proposed compensatory measures in respect of whitebeam: 2:1 ratio</p>	<p>Natural England agrees that the planting of replacement whitebeam saplings is a compensatory measure and that replacing lost whitebeam trees</p>	<p>In order to compensate for the loss of rare whitebeam trees, it is proposed to plant new saplings at a replacement ratio of 2:1 in suitable, agreed locations. Saplings will be planted in an approximate ratio of 2:1 to allow for some that fail</p>	<p>Agreed</p>

Compensatory measures for the Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
	<p>on a 2 for 1 ratio basis is appropriate.</p> <p>Natural England recognises the difficulties encountered in propagating Avon Whitebeam and considers that the Applicant is exhausting all possibilities to maximise the number of these species planted as part of the compensation. Given this, Natural England is satisfied that the compensation package will be as optimal as it can be in terms of species of whitebeam used.</p>	<p>after planting. In total, it is proposed to plant up to 54 whitebeam saplings to compensate for those removed.</p> <p>The programme of whitebeam conservation, including propagation of whitebeam species, is explained in Annex H of the AGVMP (Document reference 8.12, Version 03).</p>	
6.1.5 Proposed compensatory measures in respect of whitebeam: selection of sites for re-planting whitebeam	Natural England is satisfied with the whitebeam planting proposed in whitebeam planting Package 2 but has concerns over the suitability of two of the sites	The original proposals for whitebeam planting were submitted as part of the DCO application (Appendix 9.11 AGVMP, Document Reference 8.12 Version 01). Following consultation with Natural England and a further site visit, the whitebeam	Agreed

Compensatory measures for the Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
	<p>in Whitebeam Planting Package 1: Miles Dock Embankment and Nightingale Valley 1a.</p>	<p>planting proposals were presented as two alternative packages – whitebeam planting Package 1 and whitebeam planting Package 2 only one of which was to be progressed by the Applicant. Both packages are described in detail in a new version of Annex H of the AGVMP (Document Reference 8.12, Version 03).</p> <p>It has now been agreed with Natural England that, unless the Secretary of State determines otherwise, whitebeam planting Package 2 will be delivered. The relevant land has been secured in an agreement with the Forestry Commission.</p> <p>Whitebeam planting Packages 1 and 2 are summarised separately below at 6.1.6 and 6.1.7.</p>	
<p>6.1.6 Proposed compensatory measures in respect of whitebeam sites: whitebeam planting Package 1</p>	<p>Natural England has confirmed that the sites at Nightingale Valley 1b and above Clifton Bridge No. 2 Tunnel are acceptable planting sites for whitebeam (subject to further removal of scrub at the Clifton</p>	<p>Whitebeam planting Package 1 comprises the planting sites on Network Rail land within the SAC proposed when the DCO was first submitted, with subsequent minor modifications to the Clifton Bridge No. 2 Tunnel site, all detailed in Annex H of the AGVMP (Document reference 8.12, Version</p>	<p>Agreed</p>

Compensatory measures for the Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
	<p>Bridge No. 2 Tunnel site) but has concerns over the suitability of Miles Dock Embankment and Nightingale Valley 1a as planting sites. Natural England is satisfied that the SAC qualifying features at the Miles Dock Embankment and Nightingale Valley 1a sites will not be adversely affected but has concerns regarding the potential impact of whitebeam planting on SSSI features within these two planting sites.</p>	<p>03). This Package involves planting new whitebeams at the following sites:</p> <ul style="list-style-type: none"> <li>• Nightingale Valley (sites 1a and 1b)</li> <li>• Miles Dock Embankment</li> <li>• Clifton Bridge No.2 Tunnel</li> </ul> <p>The Applicant considers that Package 1 can deliver compensation that will meet the legal requirements. However, unless the Secretary of State determines otherwise, Package 1 will not be the alternative that is delivered under Requirement 14 of the DCO and the AGVMP.</p>	
<p>6.1.7 Proposed compensatory measures in respect of whitebeam: whitebeam planting Package 2</p>	<p>Natural England is satisfied that Whitebeam Planting Package 2 can deliver compensation that will meet the relevant legal requirements and considers that Whitebeam Planting Package 2 is capable of delivering greater</p>	<p>Whitebeam planting Package 2 involves the planting whitebeam on a new planting site on Forestry Commission land within the SAC and excludes two of the Network Rail sites in whitebeam planting Package 1: Nightingale Valley Site 1a and the Miles Dock Embankment (AGVMP, DCO Document Reference 8.12 Version 03). In</p>	<p>Agreed</p>

Compensatory measures for the Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
	<p>ecological benefits than Whitebeam Planting Package 1.</p>	<p>whitebeam planting Package 2, new whitebeam would be planted at the following sites:</p> <ul style="list-style-type: none"> <li>• Nightingale Valley (site 1b only)</li> <li>• Clifton Bridge No. 2 Tunnel</li> <li>• Red oak plantation site on Forestry Commission land.</li> </ul> <p>The Applicant will deliver whitebeam planting Package 2 unless the Secretary of State determines otherwise.</p>	
<p>6.1.8 Proposed compensation for loss of <i>Tilio-Acerion</i> Woodland</p>	<p>Natural England has advised that the Applicant should carefully consider whether proposed positive habitat management measures within the SAC are over and above that which Network Rail is already legally obliged to carry out under 'normal practice'. Article 6(1) conservation measures are considered to be those detailed in Natural England's SAC Site</p>	<p>The proposed woodland compensation measures involved two options: either positive management and improvement of the condition of the existing <i>Tilio-Acerion</i> woodland on Network Rail land within the Avon Gorge Woodlands SAC or positive management and improvement of currently undesignated woodland habitat on Forestry Commission land adjacent to the SAC.</p> <p>Both woodland compensation proposals are contained in the AGVMP (Document reference 8.12, Version 03). The total area of positive</p>	<p>Agreed</p>

Compensatory measures for the Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
	<p>Improvement Plan for the Avon Gorge Woodlands SAC (January 2015) together with the supplementary advice and, as it develops, Network Rail's SMS and Vegetation Management Plan. The Applicant's Article 6(4) measures should go over and beyond the Article 6(1) measures. The positive management on Forestry Commission land would demonstrate this more clearly as it is outside the SAC.</p>	<p>management of woodland habitat is estimated at 1.45ha which is more than double the area of lost <i>Tilio-Acerion</i> Woodland (0.73ha). In both options, the proposals focus on selective vegetation clearance to benefit rare whitebeam trees and woodland ground flora by reducing competition and shade from other plants particularly non-native species. The measures include:</p> <ul style="list-style-type: none"> <li>• Coppicing of non-whitebeam species and crown-lifting in semi-natural ancient woodland</li> <li>• Clearance of ivy and bramble from secondary woodland habitat</li> <li>• Felling of non-native species including sycamore in secondary woodland</li> <li>• Vegetation clearance around whitebeam trees, particularly invasive non-native species</li> </ul> <p>An agreement has been secured between the Applicant and the Forestry Commission as a result of which the Applicant can now secure delivery of</p>	

Compensatory measures for the Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
		the positive woodland management measures on Forestry Commission land. Unless the Secretary of State specifies otherwise in determining the DCO application, all positive woodland management measures will be delivered on Forestry Commission land.	
6.1.9 Proposed compensation for loss of <i>Festuco-Brometalia</i> Grassland	Need to ensure protection and management of rare species on cliff faces affected by the DCO Scheme.	There will be an overall loss of 0.06ha of SAC qualifying grassland primarily at Quarry Bridge No. 2 as a result of construction activities in this area and also as a result of geo-technical work on rock faces. Other grassland losses are as a result of fencing, telecommunications masts and local re-build of retaining walls. The compensation proposed to offset these losses consists of measures to improve the condition of existing areas of SAC qualifying grassland on Network Rail land. The proposals for positive management of the existing <i>Festuco-Brometalia</i> grassland are contained in Annex G of the AGVMP (Document reference 8.12, Version 03).	Agreed



Compensatory measures for the Avon Gorge Woodlands SAC	Natural England's position	Applicant's position	Status (Agreed/ Not Agreed)
		The total area of positive management within the SAC grassland habitat will be 0.15ha, which is more than double the area of SAC grassland that is to be lost. The proposed positive management measures focus on scrub control and the removal of non-native species including cotoneaster and holm oak.	
6.1.10 Bristol rock-cress strategy and management of other rare species	Need to ensure protection and management of rare species on cliff faces affected by the DCO Scheme.	The proposed Bristol rock-cress conservation strategy is contained in Annex K of the AGVMP (Document reference 8.12, Version 03). Compensatory measures in the strategy include the propagation of new plants from collected seed for subsequent planting in suitable habitat. Following completion of the geotechnical works, Bristol rock-cress will be planted out with a replacement ratio of 2:1	Agreed

## 7. Other matters relevant to Natural England

### 7.1 Non- HRA matters raised by Natural England

The following Table 7.1 sets out the different topics and areas of agreement between Natural England and the Applicant in relation to a number of ecology and biodiversity issues other than HRA matters, such as the Avon Gorge SSSI and protected species.

**Table 7.1 Non- HRA matters raised by Natural England**

Non-HRA matters	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
7.1.1 Avon Gorge SSSI	<p>Relevant consents/assents will be needed for any operation likely to affect the Avon Gorge SSSI. Full details of the works, including any access arrangements, will be required. Careful consideration needed to ensure no damage to the designated site.</p> <p>Natural England considers that the works to the Quarry Underbridge could result in permanent damage to the features of the SSSI.</p>	<p>The necessary consents/assents for working on SSSI land will be sought from Natural England under section 28 of the Wildlife and Countryside Act 1981. The Applicant has worked closely with Natural England to establish the effects of the DCO Scheme on the SSSI and agree the proposed mitigation measures. Full details of the works proposed to the SSSI are included in the ES Chapter 4 (Document reference 6.25) and in the Construction Strategy. (Document reference 5.4). The notable plant species in the SSSI</p>	<p>Proposed mitigation measures agreed.</p>

Non-HRA matters	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
		<p>are detailed in the Flora Survey, ES Appendix 9.10 (Document reference 6.25) and consideration of the potential impacts on plants and woodland is provided in the ES Chapter 9 (Document reference 6.12, Version 03). Consideration of the potential impacts on the geological interest of the Avon Gorge SSSI is provided in the ES Chapter 10 (Document reference 6.13). Proposed mitigation and compensation measures in respect of the SSSI are contained within the AGVMP (Document reference 8.12, Version 03) and the Schedule of Mitigation (Document reference 6.31, Version 03)</p>	
<p>7.1.2 Protected species licensing: bats and badgers</p>	<p>Natural England has issued Letters of No Impediment ("LONI") for bats and badgers.</p>	<p>The Applicant has sought LONIs to provide reassurance on the likely need for protected species licences for bats and badgers.</p>	<p>Agreed</p>

Non-HRA matters	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
		<p>The Applicant has prepared updated licence applications to inform the examination. Natural England has issued LONIs in respect of these updated applications.</p> <p>The Applicant intends to carry out the following works in relation to bat roosts:</p> <ol style="list-style-type: none"> <li>1. Retain bat roost features at summer and hibernation roost sites where possible. If it is not possible to retain roost features, the Applicant intends to install artificial bat roosts in trees close to Sheepway Bridge, Portbury Dock Road Bridge, Clifton Bridge No. 1 Tunnel, Clifton Bridge No. 2 Tunnel and Sandstone Tunnel.</li> <li>2. Install five artificial bat hibernation roosts on mature trees near the three tunnels</li> </ol>	

Non-HRA matters	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
		<p>through the Avon Gorge to compensate for potential disturbance of crevice-dwelling bats from the tunnels.</p> <p>3. Install a grille at the entrance to The Adit (Cave 7) near Rownham Hill to reduce human disturbance to bats occupying this feature.</p> <p>4. Retain the small structure (derelict store) to the west of Station Road, Sheepway, currently used by horseshoe bats.</p> <p>5. Undertake pre-construction bat surveys of tunnels and exclude bats from the tunnels prior to the start of works through capture and release, one-way crevice exclusion devices and deter roosting by lighting; protect bats that cannot be excluded from tunnel roosts.</p>	

Non-HRA matters	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
<p>7.1.3 Lighting levels at Pill Station</p>	<p>Natural England agrees with the Applicant that the additional survey data gathered on bat use at Pill Station shows that bat use at Pill Station is not linked to the North Somerset and Mendip Bats SAC. Measures to protect bats at Pill Station are not a requirement of HRA, but they are still necessary to protect bats at Pill Station from the effects of artificial lighting and will need to be secured through the DCO.</p> <p>Natural England is satisfied with the proposed lighting levels at Pill Station (less than or equal to 0.5 lux on the northern platform) and that this will be satisfactorily secured through the DCO.</p> <p>Natural England is satisfied that the proposed restriction on artificial lighting is only necessary for 10 years on the basis that in 10</p>	<p>Additional survey data on the use by bats of Pill Station and the disused line were made available in summer 2020 in ES Volume 4 Appendix 9.2 Bat Technical Appendix, Version 02 (Document reference 6.25). There was no evidence for linking bat use of Pill Station with the North Somerset and Mendip Bats SAC bat population. Therefore, a likely significant effect (LSE) with respect to lighting at Pill Station was screened out in Table 7.1 of the HRA Report (Document reference 5.5, Version 03) and it was concluded that no mitigation was required with respect to the HRA.</p> <p>The provision of the screen at Pill Station still forms part of the mitigation described in ES Chapter 9 (Document reference 6.12, Version 03) to mitigate impacts on the bat roost and commuting /</p>	<p>Agreed</p>

Non-HRA matters	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
	<p>years' time, vegetation growth will be such that it will negate the need for other measures to restrict the effects of artificial lighting.</p>	<p>foraging bats at Pill Station. Therefore, no changes have been made to the mitigation proposed as part of the DCO scheme, but as it is not mitigation required with respect to LSE on the European site, these measures have been removed from the HRA Report.</p> <p>Requirement 28 of the DCO requires details to be submitted to demonstrate that the lighting levels on the northern platform of Pill Station will not exceed 0.5 lux as a result of the permanent lighting proposed and the provision of lighting screens to restrict light spill. The approved works must be installed in accordance with the approved details prior to first commercial use and thereafter maintained for ten years to the reasonable satisfaction of the relevant planning authority.</p>	

Non-HRA matters	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
<p>7.1.4 Protected species licensing: Great Crested Newts ("GCN")</p>	<p>Natural England has considered an application by the Applicant for a district level licence (DLL), as an alternative to the site-based traditional licensing for GCN. Natural England has recently issued an Impact Assessment and Conservation Payment Certificate (IACPC) which specifies the value of the conservation payment required to mitigate for GCN within the construction boundary.</p>	<p>As originally drafted, the DCO contained a requirement that made provision for consultation with Natural England on how GCNs were to be protected. In essence, GCN compensation habitat was to have been constructed in accordance with designs and sitings to be approved by Natural England unless Natural England confirmed that this was not required.</p> <p>Following the introduction of district level licensing for GCNs, the Applicant made an application for a DLL to mitigate the impact of the DCO Scheme on GCN.</p> <p>The IACPC issued by Natural England has now been signed and the upfront payment made to enable Natural England and their habitat providers to create the number of ponds required to offset</p>	<p>Agreed</p>



Non-HRA matters	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
		<p>the DCO Scheme. The pond at Work No. 10 has already been constructed by the Applicant in the Portishead Ecology Park and this forms part of the Applicant's contribution to the habitat provision under the DLL.</p> <p>Following the grant of a DCO , the Applicant will submit an application to use DLL based on the DCO and the remaining conservation payment under the scheme agreement will be made. As district level licensing will operate so as to better protect GCN populations through developer contributions to create strategic favourable compensatory habitats offsite of development, its use for the DCO Scheme will mean that the site specific GCN compensatory habitat identified in Chapter 9 of the ES (Document reference 6.12, Version 03) is no</p>	

Non-HRA matters	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
		<p>longer required. Accordingly, the requirement in the original draft of the DCO relating to compensation habitats for GCN (Requirement 34 in the original draft) has been removed from the final version of the DCO.</p>	
<p>7.1.5 Protected species licensing: Schedule 8 wild plants</p>	<p>A draft licence application has not yet been submitted in respect of the removal of protected wild plants listed in Schedule 8 of the Wildlife and Countryside Act (WCA) 1981. However, Natural England is not aware of any reason why a LONI for Schedule 8 wild plants could not be provided if sufficient information is provided by the Applicant as part of a draft licence application.</p>	<p>The Applicant intends to apply for a licence where the removal of Bristol rock-cress (a protected wild plant listed in Schedule 8 of the WCA) is necessary. Further details of the potential removal of Bristol rock-cress are contained in the AGVMP (Document reference 8.12, Version 03).</p>	<p>Agreed</p>
<p>7.1.6 Mitigation in respect of toads at Lodway Farm</p>	<p>Natural England understands that the Applicant, in acknowledging the need to meet its duty to</p>	<p>The Applicant understands that a population of common toads migrates from the region of</p>	

Non-HRA matters	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
	<p>protect biodiversity under the NERC Act, has committed to working with the Pill Toad Patrol to gather further evidence and agree specific avoidance and mitigation measures that will be implemented.</p>	<p>Lodway Farm / The Breaches across the disused railway line and cycle path to the pond north of the railway line (breeding pond 32). Toads migrate in late winter and over early spring during mild (5 or 6 degrees) and generally wet weather, travelling from hibernation sites under scrub and woodland back to their breeding pond. A survey of toads in the area was carried out by the Applicant between 16 February and 12 March 2021.</p> <p>The reptile mitigation strategy has been expanded to include mitigation for amphibians. The draft Reptile and Amphibian Mitigation Strategy includes generic and site specific mitigation for toads. The final Reptile and Amphibian Mitigation Strategy will include any site specific refinements made to mitigation</p>	

Non-HRA matters	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
		<p>proposals arising from the analysis of the toad survey undertaken.</p> <p>Measures undertaken for GCN under DLL will also provide mitigation for all amphibians. The Master CEMP (Document reference 8.14, Version 03) paragraph 6.2.37, also explains reasonable avoidance measures such as habitat manipulation and destructive searches. . In addition, at 6.2.38, the Master CEMP sets out mitigation during construction to reduce the impact of construction activities on toad migrations across the construction sites and haul roads and requires the successful contractor to liaise with the local toad patrol groups.</p>	
7.1.7 Pruning, coppicing and pollarding trees	Natural England has no concerns about the Applicant's proposed amendment of Article 43 to allow	The Applicant has amended Article 43 to allow additional arboricultural practices such as	

Non-HRA matters	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
	pruning, coppicing or pollarding trees or reductions in their height or width.	pruning, coppicing, pollarding or reducing in height or width. Specifically, the Applicant has amended the article to refer to 'BS3998:2010 Tree Work – Recommendations', which covers the range of potential works to trees.	
7.1.8 Other biodiversity interests	Natural England is satisfied that wider biodiversity interests have been assessed thoroughly and suitable measures included to avoid or reduce impacts that have been identified in the environmental statement.	Consideration of the potential impacts of the DCO Scheme on ecology and biodiversity is provided in the ES Chapter 9 (Document reference 6.12, Version 03). Proposed mitigation measures to address impacts on biodiversity are contained within the AGVMP (Document reference 8.12, Version 03), the Master CEMP (Document reference 8.14, Version 03) and the Schedule of Mitigation (document reference 6.31, Version 03).	Agreed

## 7.2 Air Quality

The following Table 7.2 sets out the position of the Applicant and Natural England in relation to the impacts of the DCO Scheme on air quality within the Avon Gorge Woodlands SAC.

**Table 7.2 Air Quality**

Air quality	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
7.2.1 Air quality: methodology of assessment	The air quality assessment presented in the revised ES Chapter 7 (Document reference 6.10, Version 02) takes account of the risks of air pollution and how this can be managed and reduced.	<p>Air quality is dealt with in ES Chapter 7 (Document reference 6.10, Version 03). Paragraphs 7.6.26 to 7.6.35 consider air quality changes in sensitive ecological areas and mitigation measures are discussed in Section 7.7.</p> <p>An updated version of Chapter 7 of the ES (Version 02) was submitted at Deadline 1 and a further updated version of ES Chapter 7, which is the final version, was submitted at Deadline 6 (Version 03). The HRA Report (Document reference 5.5, Version 03) has also been updated to include the additional air quality baseline data.</p>	Agreed

Air quality	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
		<p>In the revised Chapter 7 of the ES, the traffic model-base year has been updated from 2013 to 2015 to be consistent with TAG Guidance.</p> <p>The number of sensitive receptors have been increased from 61 to 87 and road and rail emissions have been modelled separately and then combined. The significance of operational impacts was repeated at 2021. Baseline nitrogen deposition rates have also been updated to reflect the latest values reported on the Air Pollution Information System (APIS) website.</p>	
<p>7.2.2 Impacts of the DCO Scheme on air quality</p>	<p>Natural England considers that the effect of changes in air quality on the Avon Gorge Woodlands SAC has been adequately considered as part of the Habitats Regulations Assessment.</p> <p>Natural England understands that the predicted nitrogen deposition</p>	<p>The effect of air quality changes in the Avon Gorge Woodlands SAC are considered in the HRA Report in the ES Appendix 9.12 (Document reference 5.5, Version 03).</p> <p>Section 45 of the Master CEMP (Document reference 8.12, Version 03) also sets out</p>	<p>Agreed</p>

Air quality	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
	<p>of a maximum of 0.7kg N Ha identified in the initial air quality assessment has subsequently been revised to 0.1kg n Ha and that the Applicant is providing further explanation to that change.</p> <p>While this still represents an increase for a SAC where critical loads are already exceeded, Natural England considers that the Applicant has provided reasonable justification as to why the effects of the DCO Scheme on air quality would be below the 1% threshold increase, alone and in combination.</p>	<p>measures to be used in construction to mitigate impacts on air quality.</p> <p>ES Chapter 7 (Air Quality and Greenhouse Gases) (Document reference 6.10, Version 03) assesses the operational changes in NOx concentrations, nitrogen deposition and acid deposition, with the details provided in ES Appendix 7.4 (Document reference 6.24, Version 03). ES Chapter 9 (Ecology and Biodiversity) (Document reference 6.12, Version 03) interprets the quality changes in relation to the habitat types within the Avon Gorge Woodlands SAC. While nitrogen deposition is predicted to exceed critical loads, the impact is negligible (less than 1% of the lower critical load threshold) and not significant.</p> <p>It was originally calculated that the DCO Scheme would increase nitrogen deposition within the Avon Gorge Woodlands SAC by an additional 0.7 kg N ha<sup>-1</sup>y<sup>-1</sup>. It is now calculated that the DCO Scheme would increase nitrogen</p>	



Air quality	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
		<p>deposition within the Avon Gorge Woodlands SAC by an additional 0.1 kg N ha<sup>-1</sup>y<sup>-1</sup> and this would be confined to the areas close to the railway.</p> <p>The main reason for the change was due to the revamped model verification, because the base year was changed to 2015 and the rail-based receptors were being overestimated in the original work because model adjustment was derived from road traffic associations. Also, the rail receptors were not subject to long term trends, which is a method to account for constrained evolution of emission standards.</p> <p>The emissions from a diesel train engine are the same as those from a diesel car and are principally nitrogen oxides (NOx), particulate matter (PM), carbon monoxide (CO) and hydrocarbons (HC). The air quality impact assessment has considered NOx and PM, which are the main</p>	

Air quality	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
		<p>emissions that may affect human health, but has not assessed CO and HC.</p> <p>For the ecological assessment, the Applicant has assessed the process contribution of the scheme to NOx concentrations, N deposition and acid deposition. This assessment was shown in the table submitted with the Applicant's comments on Natural England's response to ExQ1 AQ.1.2 at Deadline 3 (Examination references REP3-030 and REP3-031). This assessment has since been included in the latest revised ES Appendix 7.4 (Document reference 6.25, Version 03) and the HRA Report. The process contribution to NOx concentrations, N deposition and acid deposition critical load from the DCO Scheme is below a 1% threshold as stipulated in Natural England's guidance</p>	

Air quality	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
		on the assessment of road traffic emissions under the Habitats Regulations <sup>8</sup> .	

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<sup>8</sup> <http://publications.naturalengland.org.uk/publication/4720542048845824>

### 7.3 Water Quality

The following Table 7.3 sets out the position of the Applicant and Natural England in relation to the impacts of the DCO Scheme on water quality within the Avon Gorge Woodlands SAC.

**Table 7.3 Water Quality**

Water quality	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
7.3.1 Impacts of the DCO Scheme on water quality	Natural England is satisfied that the Applicant has adequately addressed water quality matters relating to ecology in Chapter 17 of the ES (Document reference 6.20).	Water quality is assessed in Chapter 17 of the ES (Document reference 6.20). The ecological status of surface water is covered in paragraphs 17.4.11- 17.4.13. The current and predicted ecology quality of the relevant water bodies is assessed in Table 17.7.	Agreed

## 7.4 Landscape

The following Table 7.4 sets out the position of the Applicant and Natural England in relation to the impacts of the DCO Scheme on landscape within the Avon Gorge Woodlands SAC.

**Table 7.4 Landscape**

<b>Landscape</b>	<b>Natural England position</b>	<b>Applicant position</b>	<b>Status (Agreed/ Not Agreed)</b>
7.4.1 Impacts of the DCO Scheme on landscape	Natural England is satisfied that landscape interests have been assessed thoroughly and suitable measures have been included to avoid or reduce impacts that have been identified in the ES.	The Landscape and Visual Impact Assessment (LVIA) is considered in ES Chapter 11 (Document reference 6.14). Proposed mitigation measures to address impacts on landscape are contained within the AGVMP (Document reference 8.12, Version 03), the Master CEMP (Document reference 8.14, Version 03) and the	Agreed

Landscape	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
		<p>Schedule of Mitigation (Document reference 6.31, Version 03).</p> <p>The LVIA includes an assessment of the potential effects on the NCAs, local landscape character areas and site-specific landscape character areas developed as part of the LVIA at Section 11.6.</p> <p>The methodology used in the LVIA is in line with the methodology set out in the GLVIA 3rd Edition, as explained in Sections 11.1 and 11.3.</p> <p>As noted above at paragraph 5.2.6, full consideration of the landscape impacts of fencing will be considered at the detailed design stage. Requirement 14 of the DCO requires details of the location, siting and design of all the fencing</p>	

Landscape	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
		in the Avon Gorge Woodlands SAC to be approved by the local authority in consultation with Natural England.	

## 8. DCO Requirements relating to Ecology and Biodiversity

8.1 Table 8.1 below sets out a summary of the relevant requirements in the DCO relating to ecology and biodiversity where the subsequent approval of the local planning authority will be required. The following requirements provide that approvals shall be obtained from the relevant planning authority in consultation with Natural England:

- i. Requirement 14 (Avon Gorge Woodlands SAC)
- ii. Requirement 28 (Operational lighting – Pill Station)

The requirements summarised in Table 8.1 are set out in full in Appendix 2.

8.2 As original drafted, the DCO contained a requirement stating that GCN compensation habitat was to be constructed in accordance with designs and sitings approved by Natural England. A DLL for GCN has since been agreed with Natural England (see 7.1.4 above) and this requirement has been removed from the final version of the DCO.



**Table 8.1 : List of Ecology and Biodiversity Requirements in the DCO**

DCO Requirements	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
Requirement 5 Construction Environmental Management Plan ("CEMP")	Natural England is satisfied with this requirement in principle	Stage-specific CEMPs to be approved by the relevant planning authority, prior to commencement of each stage of the authorised development.	Agreed in principle
Requirement 6 Landscaping scheme – disused railway	Natural England is satisfied with this requirement in principle	Written landscaping scheme for Work Nos. 1 and 1A to be submitted for approval by the relevant planning authority prior to commencement of those works. Scheme to include details of measures to limit the impact of the authorised development on the important hedgerow between Work Nos. 1A and 17.	Agreed in principle
Requirement 14 Avon Gorge Woodlands SAC	Natural England is satisfied with this requirement in principle	The authorised development must be carried out in accordance with the AGVMP.  Details of works including foot accesses and steps; GSMR masts,	Agreed in principle

DCO Requirements	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
		<p>antennae and signal equipment; catch fences; works to retaining walls; rock stabilisation works; fencing works and temporary construction compounds to be approved by the relevant planning authority in consultation with Natural England before these works are commenced.</p> <p>Mitigation and compensation works specified in the AGVMP to be carried out in accordance with the timetables set out in the AGVMP. Measures to be managed in accordance with the AGVMP to the satisfaction of the relevant planning authority in consultation with Natural England.</p> <p>Monitoring reports to be provided to the relevant planning authority and Natural England within 12 months following first commercial use and in accordance with the</p>	

DCO Requirements	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
		AGVMP . Thereafter, monitoring reports to be provided as specified in the AGVMP.	
<p>Requirement 24</p> <p>For the protection of bats</p>	<p>Natural England is satisfied with this requirement in principle</p>	<p>The proposed tree planting on the A369 Portbury Hundred to be approved by the relevant planning authority in consultation with the relevant highway authority before the commencement of Works Nos. 1, 1A, 1B, and 1C. the required planting to be maintained for 5 years following completion.</p> <p>Five artificial bat roosts and a grille at the entrance to Adit Cave 7 to be installed to the satisfaction of the relevant planning authority prior to the commencement of the authorised development in the Avon Gorge Woodlands SAC.</p>	<p>Agreed in principle</p>
<p>Requirement 28</p>	<p>Natural England is satisfied with this requirement in principle</p>	<p>Written details of the permanent lighting to be installed in connection with Work No. 22 (Pill</p>	<p>Agreed in principle</p>

DCO Requirements	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
Operational lighting – Pill Station		<p>Station), the measures to minimise light spillage in connect with Work No. 22 and the works to minimise light spill into the arches of the former stepped access to the northern platform to be approved by the relevant planning authority in consultation with Natural England, prior to the commencement of Work No. 22</p> <p>Submitted details to demonstrate that the lighting levels on the northern platform of Pill Station will not exceed 0.5 lux as a result of the permanent lighting proposed and the provision of lighting screens to restrict light spill. Approved works to be maintained for 10 years.</p>	
<p>Requirement 32</p> <p>New bridleway east of M5 Avonmouth Bridge</p>	<p>Natural England is satisfied with this requirement in principle</p>	<p>The siting, design, landscaping and method of construction of the proposed bridleway east of M5 Avonmouth Bridge to be approved</p>	<p>Agreed in principle</p>

DCO Requirements	Natural England position	Applicant position	Status (Agreed/ Not Agreed)
		by the relevant planning authority, prior to the commencement of Work No. 18.	

## 9. Conclusion and Summary of Outstanding Matters

This Statement of Common Ground records that the following matters have been agreed between the Applicant and Natural England:

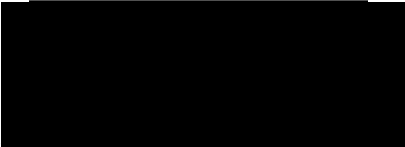
- i. The only European sites that may be affected by the DCO Scheme are the Avon Gorge Woodlands SAC and the North Somerset and Mendip Bats SAC.
- ii. The LSEs of the DCO Scheme on the Avon Gorge Woodlands SAC and the North Somerset and Mendip Bats SAC are agreed.
- iii. The mitigation measures proposed in respect of North Somerset and Mendip Bats SAC will avoid an adverse impact on the integrity of this SAC.
- iv. While the mitigation measures proposed in respect of the Avon Gorge Woodlands SAC will reduce the effects of the DCO Scheme on the SAC, it cannot be ascertained that the DCO Scheme will not adversely affect the integrity of the Avon Gorge Woodlands SAC owing to losses of qualifying grassland and woodland.
- v. The general compensation strategy and 'adaptive' approach to compensation in respect of qualifying woodland in the Avon Gorge Woodlands SAC are agreed.
- vi. Following the conclusion of an agreement between the Applicant and the Secretary of State for Environment, Food and Rural Affairs c/o Forestry Commission in respect of two parcels of land in the Avon Gorge that are managed by the Forestry Commission the measures to be delivered to satisfactorily compensate for adverse effects on the integrity of the Avon Gorge Woodlands SAC (unless the Secretary of State determines otherwise in the grant of a DCO) are described in the Avon Gorge Vegetation Management Plan (Ver 03), secured by Requirement 14 of Schedule 2 to the DCO and comprise:
  - o the planting of 54 whitebeam trees on land within the SAC on two sites owned by Network Rail and one site managed by the Forestry Commission to compensate for the loss by removal or coppicing of up to 27 rare whitebeam trees ("Whitebeam Planting Package 2");
  - o the undertaking of 1.45ha of positive woodland management measures on land managed by the Forestry Commission outside but adjacent to the SAC to compensate for the loss of 0.73ha of *Tilio-Acerion* woodland; and
  - o the undertaking of 0.15ha of positive management of *Festuco-Brometalia* grassland on land owned by NR within the SAC to compensate for the loss of 0.06ha of *Festuco-Brometalia* grassland
- vii. LONIs have been issued by Natural England in respect of licences for bats and badgers on the DCO site.

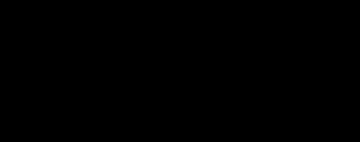
- viii. An application has been made to Natural England for a DLL for GCN. The Impact Assessment and Conservation Payment Certificate (IACPC) has been signed which means the DCO Scheme is now committed to using DLL.
- ix. The general impact on air quality, water quality, landscape and wider biodiversity are agreed and the mitigation measures proposed to address these impacts are agreed to be suitable.

There are no outstanding matters.

**10 Agreement on this Statement of Common Ground**

This Statement of Common Ground has been jointly prepared and agreed by:

Natural England	
<i>Name: Matthew Heard</i>	
<i>Signature:</i>	
<i>Position: Area Manager, Wessex Team</i>	
<i>On behalf of: Natural England</i>	<i>Date: 16 March 2021</i>

The Applicant	
<i>Name: James Willcock</i>	
<i>Signature:</i>	
<i>Position: MetroWest Phase 1 Programme Manager</i>	
<i>On behalf of: North Somerset District Council (the Applicant)</i>	<i>Date: 16 March 2021</i>



## Appendix 1 - Summary of HRA mitigation and compensation measures

**Table A1: Mitigation measures in respect of the Avon Gorge Woodlands SAC**

HRA mitigation measure	Impact to be mitigated	Securing mechanism
<p><u>A1.1 Avon Gorge Vegetation Management Plan</u></p> <p>Implement the Avon Gorge Vegetation Management Plan, which includes a range of measures to reduce and avoid impacts on vegetation as set out at A1.1.1 – A1.1.8 below.</p>	<p>Potential impact on the Avon Gorge Woodlands SAC, including rare woodland and grassland habitats protected under the SAC designation and rare flora, including species of endemic whitebeam.</p> <p>The specific impacts that the DCO Scheme is predicted to have on the Avon Gorge Woodlands SAC are identified and detailed in Annex D of the HRA Report (Document reference 5.5, Version 03).</p>	<p>DCO Requirement 5 (CEMP)</p> <p>DCO Requirement 14 (Avon Gorge Woodlands SAC).</p> <p>The Master CEMP, Chapter 6 Ecology and Biodiversity (page 6-4, paragraph 6.2.19) (Document reference 8.14, Version 03).</p> <p>Avon Gorge Vegetation Management Plan (Document reference 8.12, Version 03).</p>

HRA mitigation measure	Impact to be mitigated	Securing mechanism
A1.1.1 Measures to treat individual specimens of rare whitebeam to avoid removal, coppicing or pruning;	Potential habitat loss and habitat degradation.	
A1.1.2 Ecological watching brief during construction and protective fencing of retained vegetation;	Potential habitat loss and habitat degradation.	
A1.1.3 The presence on site of an EcCoW	Potential habitat loss and habitat degradation.	
A1.1.4 Site briefings and supervised vegetation clearance	Potential habitat loss and habitat degradation.	
A1.1.5 Site-specific measures such as signage and fencing to avoid damage to sensitive features	Potential habitat loss and habitat degradation.	
A1.1.6 A consistent method of demarcation to minimise damage to important and notable ecological features	Potential habitat loss and habitat degradation.	
A1.1.7 Management of arisings to prevent enriched soil and weed growth	Potential habitat degradation.	

HRA mitigation measure	Impact to be mitigated	Securing mechanism
<p>A1.1.8 Biosecurity measures to reduce the spread of non-native and invasive plants.</p>	<p>Potential habitat degradation.</p>	
<p><u>A1.2. Vegetation retention (reduction in fencing)</u></p> <p>There is scope to reduce impacts on vegetation further, for example by reducing the amount of fencing required, which will be considered during detailed design.</p>	<p>Potential habitat loss in the Avon Gorge Woodlands SAC, including impact on rare woodland and grassland habitats protected under the SAC designation and rare flora, including species of endemic whitebeam.</p>	<p>DCO Requirement 14 (Avon Gorge Woodlands SAC).</p>
<p><u>A1.3. Conservation of rare plants</u></p> <p><i>Bristol rock-cress</i>. Reduce the impact of geotechnical stabilisation works on the cliff faces by avoiding individual plants where possible during the works. collecting seed and growing on plants and translocating individual plants and seed.</p> <p>Implement management recommendations for rare plants detailed in the Avon Gorge Vegetation Management Plan including a conservation strategy for <i>Bristol rock-cress</i> and an ecological watching brief by a specialist botanist during construction works.</p>	<p>Potential habitat loss of rare plant species within the Avon Gorge Woodlands SAC.</p>	<p>DCO Requirement 5 (CEMP)</p> <p>DCO Requirement 14 (Avon Gorge Woodlands SAC).</p> <p>The Master CEMP, Chapter 6 Ecology and Biodiversity (page 6-4, paragraph 6.2.19, page 6-20, para 6.4.4) (Document reference 8.14, Version 03).</p> <p>The <i>Bristol rock-cress</i> conservation strategy within the Avon Gorge Vegetation Management Plan (Document reference 8.12, Version 03).</p>

HRA mitigation measure	Impact to be mitigated	Securing mechanism
<p><u>A1.4 Control of Invasive Species</u></p> <p>The spread of non-native and invasive plants will be avoided during construction through identification of these species by the EcCoW, tool box talks to make contractors aware of their presence and threat. Careful planning of access and use of biosecurity measures when using equipment and machinery to avoid spread of invasive species.</p>	<p>Potential habitat degradation through the spread of non-native and invasive species in the Avon Gorge Woodlands SAC during construction.</p>	<p>DCO Requirement 5 (CEMP)</p> <p>DCO Requirement 14 (Avon Gorge Woodlands SAC).</p> <p>Master CEMP, Chapter 6 Ecology and Biodiversity (page 6-20, paragraph 6.2.59 and 6.2.63) (Document reference 8.14, Version 03).</p> <p>Avon Gorge Vegetation Management Plan (section 4.1) (Document reference 8.12, Version 03).</p>
<p><u>A1.5 Measures in the CEMP to reduce indirect impacts from dust and air quality, noise and vibration and water pollution.</u></p> <p>The contractor will have regard to the best practice pollution prevention and control requirements in the Master CEMP (DCO Document Reference 8.14, Version 03) relating to dust and air quality, noise and vibration, and protection of the water environment, to protect ecologically important habitats and species adjacent to the construction site. These measures include:</p>	<p>Potential habitat degradation from dust and air quality, noise and vibration caused by construction works in the Avon Gorge Woodlands SAC, including impacts on rare woodland and grassland habitats protected under the SAC designation and rare flora, including species of endemic whitebeam.</p>	<p>DCO Requirement 5 (CEMP)</p> <p>Master CEMP, Chapter 6 Ecology and Biodiversity (page 6-20, paragraph 6.2.59 and 6.2.63) (Document reference 8.14, Version 03).</p>

HRA mitigation measure	Impact to be mitigated	Securing mechanism
<ul style="list-style-type: none"> <li>• Limit, manage or prevent access to areas adjacent to watercourses and water bodies to prevent physical and water quality impacts on them;</li> <li>• Reduce discharges of stormwater and sediment from construction sites and compounds into watercourses and other water features, implemented through a surface water management plan;</li> <li>• Comply with the necessary consents where works are required in or adjacent to watercourses;</li> <li>• Provide appropriate reporting of water pollution incidents; and</li> </ul> <p>Reduce soil exposure areas and see that surfacing or revegetation of bare areas is undertaken as quickly as possible to reduce potential sediment runoff.</p>		
<p><u>A1.6 Mitigation measures at the Quarry Bridge 2 compound</u></p> <p>The proposed mitigation includes the use of limestone hardcore on the ramp and avoiding and protecting rare whitebeam trees by fencing around the construction compound. The underlying grassland vegetation will be protected by use of a geotextile</p>	<p>Potential habitat loss of <i>Festuco-Brometalia</i> grassland in the Avon Gorge Woodlands SAC.</p>	<p>DCO Requirement 14 (Avon Gorge Woodlands SAC).</p> <p>Annex C of the Avon Gorge Vegetation Management Plan (Quarry Bridge No.2 Draft Construction methodology) (Document reference 8.12, Version 03).</p>

HRA mitigation measure	Impact to be mitigated	Securing mechanism
<p>membrane or other measures to protect the ground underneath. The boulders at the entrance to the Quarry and log piles will be temporarily relocated during construction outside the indicative compound area.</p>		

**Table A2: Mitigation measures in respect of the North Somerset and Mendip Bats SAC**

HRA mitigation measure	Impact to be mitigated	Securing mechanism
<p><u>A2.1. Railway Landscape Plans</u></p> <p>Implement the Railway Landscape Plans (Disused Line), showing vegetation to be retained, vegetation to be removed, and areas to be replanted. Where possible retain planting at least on one side of the disused line to provide a landscape feature and dark corridor for commuting bats.</p>	<p>Potential impact on bats as a qualifying feature of the North Somerset and Mendip Bats SAC, in the form of severance and habitat loss, following vegetation removal along the disused railway.</p>	<p>DCO Requirement 5 (CEMP)</p> <p>DCO Requirement 6 (Landscaping scheme - disused railway)</p> <p>DCO Requirement 24 (For the protection of bats)</p> <p>Master CEMP, Chapter 6 Ecology and Biodiversity (paragraphs 6.2.44) (Document reference 8.14, Version 03).</p> <p>Railway Landscape Plans (disused line) (Document reference 2.10).</p> <p>Environmental Masterplan (Document reference 2.53).</p>
<p><u>A2.2. Planting along Portbury Hundred</u></p> <p>Strengthen planting along the A369 Portbury Hundred (and maintain until established) to</p>	<p>Potential impact on bats as a qualifying feature of the North Somerset and Mendip Bats SAC, in the form of severance and habitat loss.</p>	<p>DCO Requirement 24 (For the protection of bats)</p>

HRA mitigation measure	Impact to be mitigated	Securing mechanism
<p>provide an alternative corridor parallel to and connected with the railway via hedgerows.</p>		<p>Master CEMP, Chapter 6 Ecology and Biodiversity (paragraph 6.2.45) (Document reference 8.14, Version 03).</p> <p>Portbury Hundred Location of Additional Tree Planting (Document reference 2.57)</p>
<p><u>A2.3 Good practice CEMP measures</u></p> <p>Good practice measures in the CEMP to retain and protect existing vegetation along the disused corridor where feasible. If night-time works are required, lighting will be designed, positioned and directed so as not to intrude unnecessarily on bats.</p>	<p>Potential impact on bats as a qualifying feature of the North Somerset and Mendip Bats SAC, in the form of severance, habitat loss, disturbance and killing and/or injury.</p>	<p>DCO Requirement 5 (CEMP)</p> <p>Master CEMP, Chapter 6 Ecology and Biodiversity (sections 3.2 and 6.2) (Document reference 8.14, Version 03).</p>
<p><u>A2.4 Planting monitoring</u></p> <p>Monitor the planting along the A369 Portbury Hundred annually for the first five years after planting. Replace any plants that die within the monitoring period.</p>	<p>Potential impact on bats as a qualifying feature of the North Somerset and Mendip Bats SAC, in the form of severance and habitat loss.</p>	<p>DCO Requirement 5 (CEMP)</p> <p>Master CEMP, Chapter 6 Ecology and Biodiversity (paragraphs 6.4.4) (Document reference 8.14, Version 03).</p>
<p><u>A2.5 M5 Bridleway extension</u></p> <p>Design of the M5 bridleway extension will provide an alternative navigational feature for bats under the M5 motorway. The cycle path will</p>	<p>Potential impact on bats as a qualifying feature of the North Somerset and Mendip Bats SAC, in the form of severance and habitat loss.</p>	<p>DCO Requirement 32 (New bridleway east of M5 Avonmouth Bridge).</p>



HRA mitigation measure	Impact to be mitigated	Securing mechanism
<p>go under the M5 at a location similar to the existing route, but re-aligned more to the east, towards the River Avon.</p>		<p>Master CEMP, Chapter 6 Ecology and Biodiversity (paragraph 6.2.43) (Document reference 8.14, Version 03).</p>
<p><u>A2.6 In-combination effects of Royal Portbury Docks</u></p> <p>In addition to the measures to be undertaken by the Royal Portbury Dock in connection with the planning permission 16/P/1987/F, vegetation will be retained as far as possible and additional woodland planting is proposed to the west of Portbury Dock Road to maintain a dark corridor at this location.</p>	<p>Potential impact on bats as a qualifying feature of the North Somerset and Mendip Bats SAC, in the form of severance and habitat loss.</p>	<p>Requirement 5 (CEMP), DCO Requirement 6 (Landscaping scheme - disused railway)  Requirement 24 (For the protection of bats).  Master CEMP, Chapter 6 Ecology and Biodiversity (pages 6-2 to 6-3, paragraph 6.2.5, 6.2.8 to 6.2.11) (DCO Document Reference 8.14, Version 03)</p>
<p><u>A2.7 Vegetation retention (use of additional land)</u></p> <p>Incorporate additional land into the Order Limits for an off-site haul road between The Portbury Hundred Construction Compound along the southern boundary of the disused railway corridor to Portishead to provide sufficient working space and allow for the retention of valuable vegetation within the disused railway corridor.</p>	<p>Potential impact on bats as a qualifying feature of the North Somerset and Mendip Bats SAC, in the form of severance and habitat loss.</p>	<p>Railway Landscape Plans (Disused Line) (DCO Document Reference 2.10)</p>

HRA mitigation measure	Impact to be mitigated	Securing mechanism
<p><u>A2.8 Fences along disused railway line</u></p> <p>Install/replace fences from adjacent farmland along the disused railway line to reduce loss of vegetation within the disused railway corridor.</p>	<p>Potential impact on bats as a qualifying feature of the North Somerset and Mendip Bats SAC, in the form of severance and habitat loss.</p>	

**Table A3: HRA Compensation measures in respect of the Avon Gorge Woodlands SAC**

HRA Compensation measure	Loss to be compensated	Securing mechanism
<p><u>A3.1. Woodland management</u></p> <p>Positive management of the Avon Gorge Woodlands SAC woodland habitat on land owned by Network Rail, including removal of invasive non-native species over 1.45 ha, approximately twice the area of woodland lost to the DCO Scheme.</p> <p>Alternative sites have been identified on Forestry Commission land outside the SAC. It is intended that an 'adaptive' approach is taken to proposed woodland compensation measures, enabling Natural England to evaluate the compensation site options in combination with conservation measures to be provided by Network Rail and advise the Applicant on the most favourable options. This will enable the implementation of those DCO Scheme compensation areas that will best contribute to achieving, maintaining or improving the favourable conservation status of the Avon Gorge Woodlands SAC in the light of prevailing circumstances.</p>	<p>Loss of qualifying woodland in the Avon Gorge Woodlands SAC</p>	<p>DCO Requirement 5 (CEMP)</p> <p>Master CEMP, Chapter 6 Ecology and Biodiversity (page 6-20, paragraph 6.2.19, 6.4.4) (Document reference 8.14, Version 03).</p> <p>Avon Gorge Vegetation Management Plan (ES Appendix 9.11, Document reference 8.12, Version 03).</p>

HRA Compensation measure	Loss to be compensated	Securing mechanism
<p>Monitoring of areas where positive management undertaken will be carried out for five years post construction during the implementation of the Avon Gorge Vegetation Management Plan ("AGVMP").</p>		
<p><u>A3.2. Grassland management</u></p> <p>Positive management of SAC grassland habitat within Network Rail land, including removal of scrub over 0.15 ha, approximately twice the area of grassland lost to the DCO Scheme.</p> <p>It is intended that an 'adaptive' approach is taken to proposed grassland compensation measures, enabling Natural England to evaluate the compensation site options in combination with conservation measures to be provided by Network Rail and advise the Applicant on the most favourable options. This will enable the implementation of those DCO Scheme compensation areas that will best contribute to achieving, maintaining or improving the favourable conservation status of the Avon Gorge Woodlands SAC in the light of prevailing circumstances.</p>	<p>Loss of qualifying grassland in Avon Gorge Woodlands SAC</p> <p>Loss of rare species of plant in the Avon Gorge Woodlands SAC</p>	<p>DCO Requirement 5 (CEMP)</p> <p>DCO Requirement 14 (Avon Gorge Woodlands SAC).</p> <p>Master CEMP, Chapter 6 Ecology and Biodiversity (page 6-20, paragraph 6.2.19, 6.4.4 (Document reference 8.14, Version 03).</p> <p>Avon Gorge Vegetation Management Plan (ES Appendix 9.11, Document reference 8.12, Version 03).</p>

HRA Compensation measure	Loss to be compensated	Securing mechanism
<p>Monitoring of areas where positive management undertaken will be carried out for five years post construction during the implementation of the Avon Gorge Vegetation Management Plan ("AGVMP").</p> <p>A conservation strategy for Bristol rock-cress is contained in Annex K of the AGVMP. Proposed compensatory measures include the propagation of new plants from collected seed for subsequent planting in suitable habitat. Following completion of the geotechnical works, Bristol rock-cress will be planted out with a replacement ratio of 2:1.</p> <p>The Bristol rock-cress receptor areas will be checked and monitored for nine years post construction.</p>		
<p><u>A3.3. Whitebeam planting.</u></p> <p>Replace whitebeams lost to the DCO Scheme at a 2:1 ratio with saplings grown from seed of whitebeams collected in the Avon Gorge.</p>	<p>Loss of individual whitebeam trees within the Avon Gorge Woodlands SAC</p>	<p>DCO Requirement 5: CEMP</p> <p>DCO Requirement 14: Avon Gorge Woodlands SAC</p> <p>Master CEMP, Chapter 6 Ecology and Biodiversity (page 6-20, paragraph 6.2.19,</p>

HRA Compensation measure	Loss to be compensated	Securing mechanism
Monitoring and management of the planted rare whitebeam trees will be undertaken for ten years post construction.		6.4.4) (Document reference 8.14, Version 03)  Avon Gorge Vegetation Management Plan (ES Appendix 9.11, DCO Document reference 8.12, Version 03).

## Appendix 2 – Schedule of Requirements relating to Ecology and Biodiversity in the DCO

Requirement	Title
Requirement 5	<b>Construction Environmental Management Plan etc.</b>
	<p>5.—(1) A stage of authorised development must not commence until the written Construction Environmental Management Plan (CEMP) for that stage has been approved by the relevant planning authority.</p> <p>(2) The CEMP for a stage must be in accordance with the principles set out in the environmental statement, the Master CEMP, the COCP and the CTMP - Construction Traffic Management Plan.</p> <p>(3) The CEMP for a stage must, where relevant to that stage, in particular include the following—</p> <ul style="list-style-type: none"> <li>(a) an external communications plan;</li> <li>(b) a pollution incident prevention and control plan;</li> <li>(c) a site waste management plan;</li> <li>(d) a construction traffic management plan;</li> <li>(e) a construction workers travel plan;</li> <li>(f) a materials management plan;</li> <li>(g) a plan for storage for reuse of stripped soils within land forming part of haul roads or temporary compounds;</li> <li>(h) a construction flood plan and flood emergency preparedness plan for any construction site and compound located within undefended flood zone 2 or flood zone 3;</li> <li>(i) a surface water management plan;</li> <li>(j) measures for the protection of wildlife;</li> </ul>

Requirement	Title
	<p>(k) a reptile and amphibian mitigation strategy; and</p> <p>(l) nuisance management plans regarding noise and vibration, dust, air pollution and lighting;</p> <p>(4) The construction traffic management plan when required for a stage under sub-paragraph (3) must in particular and where relevant address—</p> <p>(a) construction traffic routes and operational hours;</p> <p>(b) site accesses;</p> <p>(c) the management of junctions to and crossings of the public highway and other public rights of way;</p> <p>(d) the scheduling and timing of abnormal load movements;</p> <p>(e) temporary warning signs;</p> <p>(f) restrictions on vehicle turning movements in to and out of compounds on the A369 Portbury Hundred classified road; and</p> <p>(g) measures to minimise dust and mud.</p> <p>(5) The relevant stage must be carried out in accordance with the COCP and the approved CEMP and construction traffic management plan for that stage;</p> <p>(6) Where a part of the authorised development—</p> <p>is not within a relevant stage or associated development connected with a relevant stage; or</p> <p>does not consist of preparatory activities</p> <p>then that part of the authorised development must be carried out in accordance with the COCP and the Master CEMP.</p>



Requirement	Title
<b>Requirement 6</b>	<b>Landscaping scheme – disused railway</b>
	<p>6.—(1) Work Nos. 1 and 1A must not commence until a written landscaping scheme for those works, prepared in accordance with the principles of the railway landscape plans (disused line), has been submitted to and approved by the relevant planning authority. Works Nos. 1 and 1A must be carried out in accordance with the approved scheme or any variation to the scheme that has been approved by the relevant planning authority.</p> <p>(2) The submitted landscaping scheme must include details of—</p> <ul style="list-style-type: none"> <li>(a) location, number, species, size and planting density of any proposed planting;</li> <li>(b) cultivation, importing of materials and other operations to ensure plant establishment;</li> <li>(c) vegetation to be retained;</li> <li>(d) implementation timetables for all landscaping; and</li> <li>(e) proposals to take account of the presence of trees with trunks of a diameter of 100 millimetres or more and to minimize the loss of such trees.</li> </ul> <p>(3) The written landscaping scheme for Work No. 1A must also contain measures to limit the impacts of the authorised development on the important hedgerow located between Work Nos. 1A and 17 and for the restoration of the important hedgerow following the cessation of use of Work No. 17.</p> <p>Any tree or shrub planted as part of the approved railway landscaping scheme that, within a period of five years after planting, is removed, dies or becomes, in the opinion of the relevant planning authority, seriously damaged or diseased, must be replaced in the first available planting season with a specimen of the same species and size as that originally planted, unless the relevant planning authority gives written consent to any variation.</p>
<b>Requirement 14</b>	<b>Avon Gorge Woodlands SAC</b>
	<p>7.—(1) Any part of the authorised development within the Avon Gorge Woodlands SAC must be carried out in accordance with the Avon Gorge Vegetation Management Plan.</p>

Requirement	Title
	<p>(2) Any part of the authorised development within the Avon Gorge Woodlands SAC consisting of—</p> <ul style="list-style-type: none"> <li>(i) foot accesses and steps;</li> <li>(ii) GSMR masts, antennae and associated equipment boxes;</li> <li>(iii) signal and associated equipment box;</li> <li>(iv) catch fences;</li> <li>(v) works to retaining walls and structures; or</li> <li>(vi) rock stabilization works</li> </ul> <p>must not commence before details of the location, siting and design of the relevant work, together with any required site clearance, working space and lay down areas, have been submitted to and approved by the relevant planning authority in consultation with Natural England. The details submitted for approval must be located within the areas shown for the relevant works on the general arrangement plans. The works must be carried out in accordance with the approved details.</p> <p>(3) Work to remove, install or replace security fencing in the Avon Gorge Woodlands SAC must not commence before details of the location, siting and design of the fencing, together with any required site clearance and working space, have been submitted to and approved by the relevant planning authority in consultation with Natural England. The details submitted for approval must be located within the areas shown for fencing in the habitat impacted by construction works within the Avon Gorge Vegetation Management Plan and any permanent security fencing to be installed must be of a nature substantially in accordance with the details set out in the relevant part of the general arrangement plans and the fencing grades summary. The works must be carried out in accordance with the approved details and the installed fencing thereafter retained unless alternative type fencing is required for railway operational safety reasons.</p> <p>(4) Any temporary works within the Avon Gorge Woodlands SAC consisting of compounds or construction welfare facilities (including the temporary works that are part of Work No. 25) must not commence before the location, siting duration of use and details for the removal of the relevant facility has been approved by the relevant planning authority in consultation with Natural England.</p>

Requirement	Title
	<p>(5) The facilities described in paragraph (4) must be carried out as approved and the relevant facility must at the conclusion of the temporary works be removed to the satisfaction of the relevant planning authority in consultation with Natural England and in accordance with the approved details.</p> <p>(6) The mitigation and compensation measures specified in the Avon Gorge Vegetation Management Plan must be carried out in accordance with the timetables set out in that document. The measures must thereafter be managed in accordance with the Avon Gorge Vegetation Management Plan to the satisfaction of the relevant planning authority in consultation with Natural England.</p> <p>(7) The undertaker must provide monitoring reports to the relevant planning authority and Natural England no later than 12 months following first commercial use in accordance with the provisions of the Avon Gorge Vegetation Management Plan. Thereafter monitoring reports must be provided as specified in the Avon Gorge Vegetation Management Plan.</p>
Requirement 24	For the protection of bats
	<p><b>24.</b>—(1) Work Nos. 1, 1A, 1B and 1C must not commence until written details of the proposed tree planting on the A369 Portbury Hundred classified road have been approved in writing by the relevant planning authority in consultation with the relevant highway authority. The details submitted for approval must accord with the Portbury Hundred location of additional tree planting plans.</p> <p>(2) The proposed tree planting on the A369 Portbury Hundred classified road must be carried out in accordance with the approved details to the reasonable satisfaction of the relevant planning authority in the first planting season after the details have been approved by the relevant planning authority unless the planting has already been carried out to the reasonable satisfaction of the relevant planning authority.</p> <p>(3) The required planting must be maintained to the reasonable satisfaction of the relevant planning authority for five years following completion.</p> <p>(4) No part of the authorised development must commence in the Avon Gorge Woodlands SAC until—</p>

Requirement	Title
	<p>(a) five artificial bat roosts have been installed in the locations shown on sheets 14, 17, 18 and 19 of the environmental master plan; and</p> <p>(b) a grille has been installed at the entrance to the cave known as Adit Cave 7 in the location shown on sheet 19 of the environmental master plan</p> <p>to the satisfaction of the relevant planning authority.</p>
Requirement 28	Operational lighting – Pill Station
	<p><b>28.</b>—(1) Work No. 22 (Pill Station) must not commence until written details of any permanent lighting to be installed in connection with that Work, including measures to minimise light spillage, have been submitted to and approved by the relevant planning authority in consultation with Natural England, both acknowledging the necessity for the lighting to comply with Railway Industry Standards.</p> <p>(2) The submitted details must demonstrate to the reasonable satisfaction of the relevant planning authority that the lighting levels on the northern platform of the former Pill Station will not be above 0.5 lux as a result of the permanent lighting proposed or the provision of lighting screens to restrict light spill on to the northern platform.</p> <p>(3) Work No. 22 must not commence until written details of works to minimise light spill into the arches of the former stepped access to the northern platform of the former Pill Station have been submitted to and approved by the relevant planning authority in consultation with Natural England.</p> <p>The approved works must be installed in accordance with the approved details prior to first commercial use and thereafter maintained to the reasonable satisfaction of the relevant planning authority for ten years.</p>

Requirement	Title
Requirement 32	<b>New bridleway east of M5 Avonmouth Bridge</b>
	<p><b>32.—(1)</b> Work No. 18 must not commence until the siting, design, landscaping and method of construction of the proposed bridleway have been submitted to and approved in writing by the relevant planning authority. The submitted details must adhere to the principles shown on the relevant design drawing.</p> <p>Work No. 18 must thereafter be carried out in accordance with the approved details to the reasonable satisfaction of the relevant planning authority.</p>

