

A358 Taunton to Southfields Dualling Scheme

Preliminary Environmental Information Report - Chapter 7 Landscape

> HE551508-ARP-ELS-ZZ-RP-LS-000002 28/09/21

Highways England

Table of contents

			Pages
7	Lands	саре	1
	7.1	Introduction	1
	7.2	Legislative and policy framework	1
	7.3	Assessment methodology	5
	7.4	Assessment assumptions and limitations	12
	7.5	Study area	14
	7.6	Baseline conditions	15
	7.7	Potential impacts	28
	7.8	Design, mitigation and enhancement measures	30
	7.9	Assessment of likely significant effects	34
	7.10	Monitoring	69
	7.11	Summary	69
Abb	oreviatio	ons List	72
Glo	ssary		72
Ref	erences	3	73

Table of Tables

Table 7-1	Relevant NPSNN policies for the landscape and visual assessment	1
Table 7-2	Landscape sensitivity	7
Table 7-3	Landscape magnitude	8
Table 7-4	Visual sensitivity	8
Table 7-5	Visual magnitude	10
Table 7-6	Significance categories and typical descriptions	10
Table 7-7	Significance matrix	10
Table 7-8	Settlements	25
Table 7-9	Representative viewpoints construction	38
Table 7-10	Representative viewpoints year 1	53
Table 7-11	Representative viewpoints year 15	62

7 Landscape

7.1 Introduction

- 7.1.1 This chapter sets out the preliminary environmental information relating to the potential landscape and visual effects likely to arise from the construction and future use of A358 Taunton to Southfields Dualling Scheme (the proposed scheme), following the methodology set out in Design Manual for Roads and Bridges (DMRB) LA 107 *Landscape and visual effects*, revision two) [1].
- 7.1.2 This chapter sets the legislative and policy framework related to landscape character and visual amenity, introduces the methodology to be used for the assessment of effects in the landscape and visual impact assessment, then describes the baseline characteristics and visual resource in the area surrounding the proposed scheme (the study area). Following this, the design, potential mitigation and likely residual effects of the proposed scheme are discussed, along with the limitations of the assessment. Finally, the report sets out suggested monitoring for all likely residual significant effects.
- 7.1.3 Although closely related, landscape and visual effects have been assessed separately. The landscape assessment assesses the likely changes to the features and characteristics of the landscape, while the visual assessment assesses changes to views and the visual amenity experienced by people.
- 7.1.4 The landscape and visual impact assessment (LVIA) have been undertaken in the context of Highways England's scheme vision as set out in section 2.2, Chapter 2.

7.2 Legislative and policy framework

- 7.2.1 As documented in the Preliminary Environmental Information (PEI) Report Chapter 1 Introduction, the primary basis for deciding whether or not to grant a Development Consent Order (DCO) is the *National Policy Statement for National Networks* (NPSNN) [2], which sets out policies to guide how DCO applications will be decided and how the effects of national networks infrastructure should be considered.
- 7.2.2 Table 7-1 identifies the NPSNN policies relevant to the landscape and visual assessment and then specifies where in the chapter information is provided to address the policy.

Relevant NPSNN paragraph reference	Requirements of the NPSNN	Where in the PEI Report chapter is information provided to address this policy
Paragraph 3.5	"Outside the nationally significant infrastructure project regime, Government policy is to bring forward targeted works to address existing environmental problems on the Strategic Road Network and improve the performance of the network. This includes [] respecting and enhancing landscape character".	Throughout landscape assessment and mitigation measures described in this chapter, and presented on the Environmental Mitigation Plans (Figure 7.8).
Paragraph 4.15	The EIA Directive specifically requires an EIA to identify, describe and assess effects on the landscape.	Throughout the landscape baseline and assessment within this chapter.

Table 7-1 Relevant NPSNN policies for the landscape and visual assessment

Relevant NPSNN paragraph reference	Requirements of the NPSNN	Where in the PEI Report chapter is information provided to address this policy
Paragraph 4.34	"there may be opportunities [] to demonstrate good design in terms of siting and design measures relative to existing landscape and historical character and function, landscape permeability, landform and vegetation".	Mitigation measures are described in Chapter 2 'The Project' and this chapter, with specific landscape mitigation described in 7.8.5 below and presented on the Environmental Mitigation Plans (Figure 7.8).
Paragraph 5.36	"the applicant should demonstrate that [] developments will be designed and landscaped to provide green corridors and minimise habitat fragmentation where reasonable".	Within mitigation measures described within Chapter 2 The Project and this chapter in 7.8.8 and presented on the Environmental Mitigation Plans (Figure 7.8).
Paragraph 5.87	"The Secretary of State should be satisfied that all reasonable steps have been taken, and will be taken, to minimise any detrimental impact on amenity from emissions of [] artificial light. This includes the impact of light pollution from artificial light on local amenity [and] intrinsically dark landscapes".	Night light data is presented on Figure 7.6 CPRE Night lights. Night photography from representative viewpoints is presented on Figure 7.9 Viewpoint Photographs. The consideration of light is considered throughout the baseline and assessment within this chapter.
Paragraph 5.144	"The landscape and visual assessment should include reference to any landscape character assessment and associated studies, as a means of assessing landscape impacts relevant to the proposed project. The applicant's assessment should also take account of any relevant policies based on these assessments in local development documents in England".	and assessment. Appendix 7.1 LVIA Policy and Guidance considers relevant policies.
Paragraph 5.145	"The applicant's assessment should include any significant effects during construction of the project and/or the significant effects of the completed development and its operation on landscape components and landscape character (including historic landscape characterisation)".	Significant effects are included within this chapter where appropriate for landscape receptors at construction, year 1, and year 15 in section 7.9 below. Chapter 6 has regard to historic landscape character and the impact of the proposed scheme upon it.
Paragraph 5.146	"The assessment should include the visibility and conspicuousness of the project during construction and of the presence and operation of the project and potential impacts on views and visual amenity. This should include any noise and light pollution effects, including on local amenity, tranquillity and nature conservation".	Significant effects are included within this chapter where appropriate for visual receptors at construction, year 1, and year 15 in section 7.9 below. Tranquillity mapping is presented on Figure 7.5 CPRE Tranquillity. Nature conservation effects are included within Chapter 8 Biodiversity and noise effects

Relevant NPSNN paragraph reference	Requirements of the NPSNN	Where in the PEI Report chapter is information provided to address this policy
		are included within Chapter 11 Noise and vibration.
Paragraph 5.149	"Projects need to be designed carefully, taking account of the potential impact on the landscape. Having regard to siting, operational and other relevant constraints, the aim should be to avoid or minimise harm to the landscape, providing reasonable mitigation where possible and appropriate".	Within mitigation measures described within Chapter 2 The Project and this chapter in section 7.8. below, and presented on the Environmental Mitigation Plans (Figure 7.8).
Paragraph 5.150	"Great weight should be given to conserving landscape and scenic beauty in nationally designated areas. National Parks, the Broads and Areas of Outstanding Natural Beauty have the highest status of protection in relation to landscape and scenic beauty".	Impacts on the landscape character of the Blackdown Hills Area of Outstanding Natural Beauty (AONB) were scoped out within the Scoping Report. The baseline and impacts on views from the Blackdown Hills AONB are described within this chapter.
Paragraph 5.154	"The duty to have regard to the purposes of nationally designated areas also applies when considering applications for projects outside the boundaries of these areas which may have impacts within them. The aim should be to avoid compromising the purposes of designation and such projects should be designed sensitively given the various siting, operational, and other relevant constraints".	Impacts on the landscape character of the Blackdown Hills AONB were scoped out within the Scoping Report. The baseline and impacts on views from the Blackdown Hills AONB are described within this chapter.
Paragraph 5.155	"The fact that a proposed project will be visible from within a designated area should not in itself be a reason for refusing consent".	The baseline and impacts on views from the Blackdown Hills AONB are described within this chapter.
Paragraph 5.160	"Adverse landscape and visual effects may be minimised through appropriate siting of infrastructure, design (including choice of materials), and landscaping schemes, depending on the size and type of proposed project. Materials and designs for infrastructure should always be given careful consideration".	Within mitigation measures described within Chapter 2 The Project and this chapter in section 7.8 and presented on the Environmental Mitigation Plans (Figure 7.8).
Paragraph 5.161	"Depending on the topography of the surrounding terrain and areas of population it may be appropriate to undertake landscaping off-site, although if such landscaping was proposed to be consented by the development consent order, it would have to be included within the order limits for the application. For example, filling in gaps in existing tree and hedge lines would mitigate the impact when viewed from a more distant vista".	Off-site landscaping has been considered, it is described under mitigation measures within this chapter (7.8) and presented on the Environmental Mitigation Plans (Figure 7.8).
Paragraph 5.175	"Where networks of green infrastructure have been identified in development plans, they should normally be protected from development, and, where possible, strengthened by or integrated within it. The value of linear infrastructure and its footprint in supporting biodiversity and ecosystems	strategies have been considered within Appendix 7.1 LVIA Policy and Guidance, and, where appropriate, the

Relevant NPSNN paragraph reference	Requirements of the NPSNN	Where in the PEI Report chapter is information provided to address this policy
	should also be taken into account when assessing the impact on green infrastructure".	considered these within Chapter 2 The Project and this chapter (see 7.8.3; 7.8.10; 7.9.49 and 54) and presented on the Environmental Mitigation Plans (Figure 7.8).
Paragraph 5.180	"Where green infrastructure is affected, applicants should aim to ensure the functionality and connectivity of the green infrastructure network is maintained and any necessary works are undertaken, where possible, to mitigate any adverse impact and, where appropriate, to improve that network and other areas of open space, including appropriate access to new coastal access routes, National Trails and other public rights of way".	Within mitigation measures described within Chapter 2 The Project and this chapter (see 7.8.3; 7.8.10; 7.9.49 and 54), and presented on the Environmental Mitigation Plans (Figure 7.8).
Paragraph 5.183	"Where a project has a sterilising effect on land use there may be scope for this to be mitigated through, for example, using the land for nature conservation or wildlife corridors".	Within mitigation measures described within Chapter 2 The Project and this chapter (7.8), Chapter 8, and presented on the Environmental Mitigation Plans (Figure 7.8).

Legislation

7.2.3 There is no legislation of direct relevance to the landscape and visual assessment scope and methodology.

National planning policy

- 7.2.4 Other relevant national policy, local policy, and supplementary and further guidance has been considered in relation to the landscape and visual impacts and informing proposed mitigation measures.
- 7.2.5 A summary of relevant aspects is provided with in Appendix 7.1 LVIA Policy and Guidance and considers the following documentation:
 - National Planning Policy Framework. [3]
 - South Somerset District Council: Local Plan. [4]
 - Taunton and Deane: Core Strategy. [5]
 - National Design Guide. [6]
 - Highways England: The road to good design. [7]
 - National Infrastructure Commission: The value of design in infrastructure delivery. [8]
 - National Infrastructure Commission: Design Principles for National Infrastructure. [9]
 - Campaign for Better Transport: Roads and the environment. (2018) [10]
 - Landscape Institute: Infrastructure Technical Guidance Note (TGN 04/2020).
 [11]
 - Taunton and Deane: Green Infrastructure Strategy. [12]
 - South Somerset: Environment strategy. [13]

- Natural England National Character Area (NCA) Profiles. [14]
- Blackdown Hills AONB 2019 2024 Management Plan. [15]

7.3 Assessment methodology

- 7.3.1 A preliminary LVIA has been undertaken as part of this PEI Report and is described in this chapter to identify and assess the significance of and the effects of change arising from the proposed scheme upon the landscape as a resource, people's views, and visual. Further assessment will be undertaken as the design develops which will be reported on in the Environmental Statement (ES) which will support the DCO application.
- 7.3.2 The LVIA has followed established national guidance for such assessments identified below:
 - DMRB LA 101 Introduction to environmental assessment. [16]
 - DMRB LA 104 Environmental assessment and monitoring. [17]
 - DMRB LA 107 Landscape and visual effects. [1]
 - Guidelines for Landscape and Visual Impact Assessments (GLVIA). [18]
 - Technical Guidance Note 06/19 Visual Representation of development proposals, Landscape Institute, 2019. [19]
- 7.3.3 GLVIA defines:
 - landscape as a resource: "landscape receptors, including the constituent elements of the landscape, its specific aesthetic or perceptual qualities and the character of the landscape in different areas."
 - visual amenity: "visual receptors, that is, the people who would be affected by changes in views or visual amenity at different places."
- 7.3.4 DMRB LA 107 *Landscape and visual effects* defines landscape character and visual amenity as:
 - Landscape character as "a distinct, recognisable and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse".
 - Visual amenity as "overall enjoyment of a particular area, surroundings, or views in terms of people's activities living, recreating, travelling through, visiting, or working".
- 7.3.5 A summary of the assessment methodology is as follows:
 - Define the purpose and scope of assessment, including the study area.
 - Establish the baseline
 - undertaking a desk-based study
 - undertaking a field study to support the assessment
 - undertaking a Zone of Theoretical Visibility analysis (see section 7.3.17)
 - Identify the receptors classification/description of landscape character types/areas, establishing the visual amenity and view as experienced by people.
 - Identify the potential impacts and assess the identified receptors sensitivity and magnitude of effect to the proposals.
 - Identify and describe the likely significant effects on the receptors (landscape character, visual amenity and views).

- Identify essential mitigation required for landscape integration and visual impact (as set out in Figure 7.8 Environment Mitigation Plan).
- Combine the essential mitigation with the proposed scheme proposals to systematically and transparently assess the level (and significance) of residual landscape and visual effects, by combining the receptor's sensitivity (its susceptibility and value) and the magnitude of effect (a combination of the scale of effect, geographical extent, duration and reversibility).
- Assess the likely significance of residual effects identifying them as either adverse or beneficial.

Baseline

- 7.3.6 Baseline studies have been undertaken to identify important characteristics and receptors for landscape and visual amenity as described in DMRB LA 107 Landscape and visual effects [1]. The landscape and visual baseline have been informed through a combination of desk study, digital analysis, preparation of a Zone of Theoretical Visibility (ZTV), site visits (at winter, day, and night) and discussions with stakeholders including Somerset West and Taunton Council (SWTC), South Somerset District Council (SSDC), Somerset County Council (SCC), Blackdown Hills AONB and Natural England (NE).
- 7.3.7 Third party data sources include local planning policy and landscape guidance, published character studies, designations and datasets from Historic England, NE, Environment Agency (EA), The Countryside Charity (CPRE), Sustrans, and relevant local District authorities.
- 7.3.8 Plans have been produced that illustrate topography and drainage, landscape character and features, visual receptors and visual barriers, tranquillity, and night light. These include maps of:
 - Figure 7.1 Landscape Character and Features
 - Figure 7.2 Topography and Drainage
 - Figure 7.3 Visual Receptors and Visual Barriers
 - Figure 7.4 ZTV and Proposed Viewpoints
 - Figure 7.5 CPRE Tranquillity
 - Figure 7.6 CPRE Night lights
 - Figure 7.7 Initial Tree Constraints
 - Figure 7.9 Viewpoint Photographs

Assessment

7.3.9 Reporting the significance of the landscape's sensitivity to change has included an evaluation of each key landscape element/characteristic affected by the proposed scheme. The significance of the landscape's sensitivity to change shall be informed by its: importance; quality/condition; rarity; value; scale of contribution to the landscape character; and degree to which it can be protected, mitigated, replaced, or substituted. The landscape sensitivity of receptors/resource in the assessment is reported in accordance with the criteria provided in Table 7-2 as adapted from DMRB LA 107 *Landscape and visual effects* [1].

Table 7-2 Landscape sensitivity

Landscape sensitivity (susceptibility and value) of receptor / resource	Typical descriptions
Very high	Landscapes of very high international/national importance and rarity or value with no or very limited ability to accommodate change without substantial loss/gain (i.e. national parks, internationally acclaimed landscapes - UNESCO World Heritage Sites). Landscapes are of a national value contributing to a strong sense of
	place.
	Landscapes of national value very susceptible to large scale road infrastructure projects such as road widening, dual carriageway, overbridges, and junctions without incurring substantial loss/gain.
High	Landscapes of high national value containing distinctive and characteristic features/elements with limited ability to accommodate change without incurring substantial loss/gain (i.e. designated areas, areas of strong sense of place - registered parks and gardens, country parks).
	Landscapes with a limited ability to accommodate large scale road infrastructure, such as road widening, dual carriageway, overbridges, and junctions without undue adverse consequences for landscape character.
	Landscapes of a local or regional value very susceptible to large scale road infrastructure such as road widening, dual carriageway, overbridges, and junctions without incurring substantial loss/gain.
Medium	Landscapes of high local or regional value which are able to accommodate some change (i.e. features worthy of conservation, some sense of place or value through use/perception). Some ability to accommodate large scale road infrastructure, such as road widening, dual carriageway, overbridges, and junctions without undue adverse consequences for landscape character.
	Are of national value but able to accommodate large scale road infrastructure, such as road widening, dual carriageway, overbridges, and junctions without undue adverse consequences for landscape character.
Low	Local landscape areas or receptors of low value with ability to accommodate change (i.e. non-designated or designated areas of local recognition or areas of little sense of place).
	Landscapes are of high local or regional value but able to accommodate large scale road infrastructure, such as road widening, dual carriageway, overbridges, and junctions without undue adverse consequences for landscape character.
Negligible	Landscapes of very low importance and rarity. Landscape is more able to accommodate large scale road infrastructure, such as road widening, dual carriageway, overbridges, and junctions without undue adverse consequences for landscape character.

7.3.10 Assessment of the magnitude of effects on the landscape is reported on a combined judgement of the:

- size and scale of effect
- effects at year 1 (opening year) and year 15 (design year) including summer and winter views
- geographical extent of the area to be affected (ZTV)

- duration of the effect and its reversibility
- 7.3.11 The magnitude of effect (change) has been reported in the assessment in accordance with the criteria provided in Table 7-3 as adapted from DMRB LA 107 *Landscape and visual effects* [1].

Table 7-3Landscape magnitude

Magnitude of effect (change)	Typical descriptions
Major adverse	Total loss or large-scale damage to existing landscape character or distinctive features or elements; and/or addition of new uncharacteristic, conspicuous features or elements (i.e. road infrastructure).
Moderate adverse	Partial loss or noticeable damage to existing landscape character or distinctive features or elements; and/or addition of new uncharacteristic, noticeable features or elements (i.e. road infrastructure).
Minor adverse	Slight loss or damage to existing landscape character of one (maybe more) key features and elements; and/or addition of new uncharacteristic features and elements.
Negligible adverse	Very minor loss, damage, or alteration to existing landscape character of one or more features and elements.
No change	No noticeable alteration or improvement, temporary or permanent, of landscape character of existing features and elements.
Negligible beneficial	Very minor noticeable improvement of character by the restoration of one or more existing features and elements.
Minor beneficial	Slight improvement of landscape character by the restoration of one (maybe more) key existing features and elements; and/or the addition of new characteristic features.
Moderate beneficial	Partial or noticeable improvement of landscape character by restoration of existing features or elements; or addition of new characteristic features or elements or removal of noticeable features or elements.
Major beneficial	Large scale improvement of landscape character to features and elements; and/or addition of new distinctive features or elements, or removal of conspicuous road infrastructure elements.

7.3.12 The visual sensitivity of receptors/resource in the assessment is reported in accordance with the criteria provided in Table 7-4 as adapted from DMRB LA 107 *Landscape and visual effects* [1].

Visual sensitivity (susceptibility and value)	Typical descriptions
Very high	Static views from and to major tourist attractions. Views from and of very important national/international landscapes, cultural/historical sites (e.g. National Parks, UNESCO World Heritage sites).
High	Receptors engaged in specific activities for enjoyment of dark skies. Views by users of nationally important public rights of way (PRoW) / recreational trails (e.g. national trails, long distance footpaths). Views by users of public open spaces for enjoyment of the countryside (e.g. country parks).

Table 7-4Visual sensitivity

Visual sensitivity (susceptibility and value)	Typical descriptions
	Static views from dense residential areas, longer transient views from designated public open space, greens and recreational areas.
	Views from and of rare designated landscapes of national importance. Visual receptors very susceptible to large scale road infrastructure such as road widening, dual carriageway, overbridges, and junctions without incurring substantial loss/gain of visual amenity.
Medium	Static views from less populated residential areas, schools and other institutional buildings and their outdoor areas. Views by outdoor workers.
	Transient views from local/regional areas such as public open space, scenic roads, railways or waterways, users of local/regional designated tourist routes of moderate importance.
	Views from and of landscapes of regional importance, or from users of local PRoW.
	Visual receptors with a limited ability to accommodate large scale road infrastructure, such as road widening, dual carriageway, overbridges, and junctions without undue adverse consequences for visual amenity.
	Views with high value but able to accommodate large scale road infrastructure, such as road widening, dual carriageway, overbridges, and junctions without undue adverse consequences for visual amenity.
Low	Views by users of main roads or passengers in public transport on main arterial routes.
	Views by indoor workers.
	Views by users of recreational/formal sports facilities where the landscape is secondary to enjoyment of the sport.
	Views by users of local public open spaces of limited importance with limited variety or distinctiveness.
	Views of a medium value but able to accommodate large scale road infrastructure, such as road widening, dual carriageway, overbridges, and junctions without undue adverse consequences for visual amenity.
Negligible	Transient views such as from fast moving vehicles.
	Views from industrial area, land awaiting re-development.
	Views from landscapes of no importance with no variety or distinctiveness.
	Views are more able to accommodate large scale road infrastructure, such as road widening, dual carriageway, overbridges, and junctions without undue adverse consequences for visual amenity.

7.3.13 Reporting on the magnitude of visual effects is informed by the following:

- Scale, nature, and duration of change.
- Distance, screening, direction, and focus of the view.
- Assessment at year 1 (opening year) and year 15 (design year) including summer and winter views.
- Removal of previously implemented mitigation or existing vegetation.
- Whether the receptor is static or moving.
- 7.3.14 The magnitude of visual effect has been reported in the assessment in accordance with the criteria provided in Table 7-5 as adapted from DMRB LA 107 *Landscape and visual effects* [1].

Table 7-5Visual magnitude

Magnitude of effect (change)	Typical descriptions
Major adverse/beneficial	The project, or a part of it, would become the dominant feature or focal point of the view.
Moderate adverse/beneficial	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor.
Minor adverse/beneficial	The project, or a part of it, would be perceptible but not alter the overall balance of features and elements that comprise the existing view.
Negligible adverse/beneficial	Only a very small part of the project work or activity would be discernible or being at such a distance it would form a barely noticeable feature or element of the view.
No change	No part of the project work or activity would be discernible.

7.3.15 The descriptions for significance as outlined in Table 7-6, as adapted from DMRB LA 104 Environmental Assessment and Monitoring [17], has been applied within the LVIA.

Table 7-6 Significance categories and typical descriptions

Significance category	Typical descriptions
Very Large	Effects at this level are material in the decision-making process.
Large	Effects at this level are likely to be material in the decision-making process.
Moderate	Effects at this level can be considered to be material decision-making factors.
Slight	Effects at this level are not material in the decision-making process.
Neutral	No effects or those that are beneath levels of perception, within normal bounds of variation or within the margin of forecasting error.

7.3.16 The significance of effect matrix that has been applied within the LVIA assessment is provided in Table 7-7 as adapted from DMRB LA 104 *Environmental Assessment and Monitoring* [17]. Where the table includes two significance categories, evidence has been be provided to support the reporting of a single significance category.

Table 7-7Significance matrix

Sensitivity	Magnitude					
	No change	Negligible	Minor	Moderate	Major	
Very high	Neutral	Slight	Moderate or Large	Large or Very large	Very large	
High	Neutral	Slight	Slight or Moderate	Moderate or Large	Large or Very large	
Medium	Neutral	Neutral or Slight	Slight	Moderate	Moderate or Large	
Low	Neutral	Neutral or Slight	Neutral or Slight	Slight	Slight or Moderate	

Negligible Neutral	Neutral	Neutral or Slight	Neutral or Slight	Slight
--------------------	---------	-------------------	-------------------	--------

Zone of theoretical visibility

- 7.3.17 As recommended in the GLVIA [18] (section 6.8), a ZTV has been prepared to illustrate the area from which the proposed scheme will theoretically be visual to inform assessment and site work. The ZTV has been calculated on the current vertical alignment of the proposed scheme and associated structures. This illustrates the theoretical extent within which, subject to localised features and characteristics, there may be a visual relationship between landscape and visual receptors and the proposed scheme. Field visits were used to verify the ZTV analysis, assess the visual baseline and identify the optimum location for viewpoints to assess impacts.
- 7.3.18 To prepare the ZTV, topographic data in the form of a digital surface model (DSM) was used at a 2m resolution (one height point captured for each 2m distance) and obtained from Defra [20]. The DSM is produced from the latest survey data and includes heights of objects, such as vehicles, buildings and vegetation, as well as the terrain surface. It has a vertical accuracy of +/-15cm root-mean-square error.
- 7.3.19 Equally-spaced 3D points have been created based on the 3D model of the proposed scheme from which visibility analysis has been conducted. In order to calculate whether a high-sided vehicle on the proposed scheme will be theoretically visible for someone located in the wider landscape, the following parameters were used:
 - 4.5m height added to points generated from the 3D model to represent highsided vehicles.
 - 1.6m height added to surface to represent eye height of the visual receptor (in line with GLVIA guidance [18].
- 7.3.20 There are some gaps within the DSM data across the study area as shown in Figure 7.4 ZTV and Proposed Viewpoints. Where the DSM data is unavailable (and therefore not part of the ZTV analysis) site walkovers enabled the most appropriate viewpoint locations to be identified (all viewpoints are shown in Figure 7.4 ZTV and Proposed Viewpoints).

Photography and visualisation

- 7.3.21 Viewpoints have been proposed at 45 representative locations (Figure 7.4 ZTV and Proposed Viewpoints) based on the output of the ZTV, initial site visits to the study area, and initial discussions with Officers at SWTC, SSDC, NE, and the Blackdown Hills AONB.
- 7.3.22 The viewpoints were agreed in principle individually with Officers at SWTC, NE, and the Blackdown Hills AONB management team through teleconferences and email exchanges. Feedback and suggestions have been incorporated into the assessment resulting from these discussions. Following a teleconference to discuss the findings of our initial site visit and proposed viewpoint locations, no feedback on proposed viewpoints has been received from SSDC at the time of writing, although they noted to us that there is not a Landscape Officer in post.
- 7.3.23 All photography has been taken using a Full Frame Sensor camera with 50 mm Fixed Focal Length Lens mounted on a tripod at a standard consistent height of

1.5 m, regardless of visualisation type, to provide consistency between all viewpoints and visualisations. Photographs have been captured as a single-shot unless the view and position of the proposed scheme is panoramic in nature – in which case multiple single-shot images have been captured in different directions.

- 7.3.24 A proportionate number of representative viewpoints have been identified to undertake during the hours of darkness and for visualisations. Where appropriate, these visualisations will be prepared in the ES to show the year 1 and year 15 scenarios in both summer and winter.
- 7.3.25 Visualisations will be prepared for the ES using verified photography and based on the digital proposed scheme design information. The Accurate Visual Representation Methodology is provided within Appendix 7.4, and will be followed for visualisations produced for the ES. Where photographs have been taken to date from representative viewpoints (during summer, winter, and night) they have followed the methodology in Appendix 7.4 Accurate Visual Representation Methodology according to the proposed visualisation type for that location, in order that they are appropriate for use in the ES.
- 7.3.26 The visualisation and night-photography locations proposed below, were informed by discussions with stakeholders including SWTC, SSDC, SCC, Blackdown Hills AONB, and NE:
 - Viewpoint 2 (Stoke Hill)
 - Viewpoint 5 (Thorn Hill)
 - Viewpoint 7 (south-west of Mattocks Tree Green)
 - Viewpoint 13 (Hatch Green)
 - Viewpoint 27 (Park Barn Lane)
 - Viewpoint 23 (Ashill)
 - Viewpoint 36 (Staple Hill)

Tree survey and Arboricultural Impact Assessment

- 7.3.27 A Tree Survey to British Standard (BS) 5837:2012 is currently being undertaken, this will describe the qualitative and quantitative characteristics of trees within and around the proposed scheme. It will identify the quality of trees within or adjacent to the proposed scheme and set-out the root protection areas of such trees to determine where impacts on trees (particularly high-quality/ancient/veteran) can be avoided or reduced. This report will be published as part of the ES supporting the submission of the DCO.
- 7.3.28 An Arboricultural Impact Assessment will be undertaken to determine which trees can be retained or need to be removed as a result of the proposed scheme, and provide an overview of the quality and value of those trees to be removed, alongside quantitative calculations using the National Tree Map dataset [21].
- 7.3.29 The Tree Survey and Arboricultural Impact Assessment are useful tools which inform the LVIA and appropriate landscape mitigation measures and will be reported in the ES supporting the DCO application.

7.4 Assessment assumptions and limitations

7.4.1 All photography completed and summer photography site survey work has been and will be undertaken from publicly accessible locations and not from private

land or property. Where required, professional judgement has been made to identify impacts for receptors that are not accessible by public means.

- 7.4.2 It would be disproportionate to visit all public right of ways (PRoWs) and visual receptors within the study area. Therefore, the locations for site work and representative viewpoints have been informed by a combination of desk study, ZTV, discussions with stakeholders and site visits. Representative views are used where large numbers of viewpoints cannot be included individually, with similar significance of effect.
- 7.4.3 It is assumed that not all trees within and immediately surrounding the proposed scheme corridor will require individual and fully detailed tree surveys. Tree surveys will:
 - identify trees of high quality and value to assist in design development to avoid impacts
 - inform mitigation by understanding the nature of high-quality specimens that are to be removed
 - provide written descriptions of trees in groups of no distinguishable quality, noting their species, quality, and value
 - provide a quantitative assessment of trees to be removed using the National Tree Map dataset
- 7.4.4 Visualisations will be prepared for the ES using verified photography and based on the digital proposed scheme design information.
- 7.4.5 Field work will be carried out during daylight for summer and winter, with trees in and out of leaf, with a selection of locations visited hours of darkness. The assessment has, therefore, been carried out with a robust understanding of the landscape through the seasons and at different times of the day. Winter viewpoint photography figures present a complete set of baseline views, available for all viewpoints, refer to Figure 7.9 Viewpoint Photographs. Ten viewpoint locations were selected as suitable locations for visualisations of the proposed scheme. From these ten locations verified photography and surveys were carried out to enable visualisation production in assisting the design and mitigation and communicating the appearance of the proposed scheme in those viewpoints within the ES.
- 7.4.6 The preliminary LVIA has been informed by quantitative analysis of tree loss using the National Tree Map dataset [21]. In addition, an understanding of the landscape through field work and the use of Google Earth [22] has enabled a robust assessment to be carried out on the effects on existing vegetation.
- 7.4.7 The construction assumptions are set out in Chapter 2 The Project, with additional LVIA assumptions of:
 - Topsoil stockpiles are up to 2m in height, subsoil and geological stockpiles are 10-15m in height, the main office compounds and site offices are one storey in height.
 - Cranes and piling rigs would be used for the construction and, implementation of the over bridges.
 - Temporary construction lighting would be intermittently used throughout the construction phase for select operations in isolated locations only.
- 7.4.8 At year 1 of operation and with the implementation of the new planting:

- New tree planting would range in height between 0.6m to 0.8m for whips/transplants and hedgerow planting, 3-5m for feathered and standard trees, and 7-10m for extra-heavy standard and semi-mature trees.
- In locations where visual screening is critical, woodland mixes would contain a high percentage of feathered trees with a percentage of larger species to boost this function. Faster growing locally indigenous species would also be included in some mixes that can provide earlier visual screening. These species would then be managed out as the dominant climax species develop in height.
- Species rich grassland/marshy grazing grassland areas would be in the establishment phase, and some areas may not yet have full grassland coverage.
- Areas returned to agriculture would consist of agricultural topsoil.
- Materiality and design of structures would reflect local character where possible.
- 7.4.9 At year 15 of operation and with the establishment of the new planting:
 - With an approximate annual tree and shrub growth likely to be between 0.3-0.5m per year (although this would vary from species to species), trees are likely to range in height between 5m to 9m with the potential for some faster growing species to be taller. The size of growth would vary and is dependent on the size of tree at planting.
 - Hedgerows would reach heights between 1.2m and 2m, to appear a similar height to existing hedges and form that would complement the character of existing field boundaries within the AONB landscape.
 - The species rich grassland and marshy grazing grassland would have established such that, overall, the sward would be successfully integrated. The exception may be where the design intention for specific areas of ecological management would retain exposed limestone or support a thinner sward to create habitat diversity.
- 7.4.10 Areas returned to agriculture would be fully established and in regular use. The worst-case scenarios have been considered for the Landscape and Visual Impact assessment. All Limits of Deviation (LoD) are within the Rochdale Envelope approach. The proposed LoD might lead to negligible changes to the composition of views or incrementally increase or decrease the loss or retention of landscape features immediately adjacent to the proposed scheme within the scope of change. These potential changes are not considered to give rise to any new effects, or to any materially worse adverse or better beneficial landscape or visual effects, from those predicted in the assessment.
- 7.4.11 The assessments will, therefore, take into consideration what can be regarded as a realistic 'worst case' assessment of the impacts associated with the proposed scheme.

7.5 Study area

- 7.5.1 DMRB LA 107 *Landscape and visual effects* [1] notes that the study area should be proportionate to the following factors for landscape effects:
 - The project boundary/construction activity (including compounds and temporary land take).

- The wider landscape setting within which the project/its works has the potential to influence.
- The extent of the area visible by the project.
- The full extent of adjacent or affected landscape receptors of special value (i.e. conservation areas, designated areas) whose setting can be influenced by the project.
- 7.5.2 DMRB LA 107 *Landscape and visual effects* [1] notes that the study area should be proportionate to the following factors for visual effects:
 - The proposed scheme/construction visual footprint (including compounds and temporary land take).
 - The wider visual envelope within which the proposed scheme/ has the potential to influence.
 - The extent of representative viewpoints visible of the proposed scheme/.
 - The extent of adjacent or affected visual receptors and the visual amenity of the area that can be influenced by the proposed scheme/.
- 7.5.3 The study area for both landscape and visual effects is illustrated by the ZTV (see Figure 7.4 ZTV and Proposed Viewpoints).
- 7.5.4 Although the landscape study area covers a wide geographic area, the physical changes to the landscape will take place within the engineering footprint of the proposed scheme only, with the potential to influence the landscape character areas it physically passes through. For any parts of character areas or features beyond the engineering footprint but within the landscape study area, only perceptual changes to landscape character will be considered as there will be no change to the pattern, landform, scale and/or vegetation.

7.6 Baseline conditions

Current baseline

- 7.6.1 The baseline conditions have been considered separately for landscape and visual aspects; the conditions described have been informed through the following methods:
 - Review of reports from previous stages of the proposed scheme
 - Review of national and local planning policy
 - Review of published landscape character assessments
 - Digital mapping and analysis
 - Site visits in January 2021 and March to April 2021
 - Consultation with Officers at SWTC, SSDC, NE, and Blackdown Hills AONB
- 7.6.2 The following figures illustrate the landscape and visual baseline context of the study area:
 - Figure 7.1 Landscape Character and Features
 - Figure 7.2 Topography and Drainage
 - Figure 7.3 Visual Receptors and Visual Barriers
 - Figure 7.4 ZTV and Proposed Viewpoints
 - Figure 7.5 CPRE Tranquillity
 - Figure 7.6 CPRE Night lights
 - Figure 7.7 Initial Tree Constraints
 - Figure 7.9 Viewpoint Photographs

Landscape

- 7.6.3 The proposed scheme passes through three NCAs and near another:
 - NCA 140, Yeovil Scarplands [23], for approximately 1.8km at the southern end of the proposed scheme.
 - NCA 143, Mid Somerset Hills [24], for the majority of the proposed scheme length.
 - NCA 146, Vale of Taunton and Quantock Fringes [25], for approximately 1.6km at the northern end of the proposed scheme.
 - NCA 147, Blackdowns [26], is located outside the proposed scheme engineering footprint, but lies within the study area, situated approximately 1.5km to the south-west at its nearest point.
- 7.6.4 As set out within the A358 Taunton to Southfields Scoping Report in relation to NCAs, the impact of the proposed scheme has been assessed against NCA 143 only. Other NCAs are referenced here to provide wider context on the landscape character of the area.
- 7.6.5 NCA 140 (Yeovill Scarplands) is characterised by a contrast between the scarps and vales present with the flatter Somerset "Levels", with scattered woodlands, small villages. The proposed scheme is located at the south-western tip of the NCA and it is noted within the NCA profile that there are relict open fields in the south-west, contrasting with extensive thick hedgerows with frequent mature to veteran trees elsewhere at this location. Both the A30 and A303 cross the NCA, while the A37 forms the western boundary with NCA 140 (Mid Somerset Hills). The existing A358, as it heads north-west from Southfields Roundabout, lies within this NCA.
- 7.6.6 NCA 143 (Mid Somerset Hills) is formed by several low hills and raised ridges rising out of the Somerset Levels and Moors. They lie between the Blackdowns NCA to the south and the Mendip Hills NCA further to the north and outside the study area. The hills have a distinctive, predominantly pastoral character rich in hedgerows, farms, and small villages, and often with expansive views over the adjacent flat Somerset Levels and Moors. The Blackdown Hills AONB to the south dips into this NCA near Staple Fitzpaine. Ancient woodlands, species-rich hedgerows with trees, and veteran trees create a wooded feel despite there being little woodland cover present. Ash and maple woodlands are present on ridgetops and some of the steeper side slopes. Most settlements present retain a uniformity of building style and material, notably the use of Blue Lias limestone, still being quarried near Somerton, which adds to its sense of place. Disturbance to the NCA includes the A39 and A37 road corridors, with the A358 and A378 running east-west through the southern end of NCA 143.
- 7.6.7 NCA 146 (Vale of Taunton and Quantock Fringes) lies between the Brendon Hills on the edge of Exmoor to the west and the Somerset Levels and Moors to the east. It overlooks the Bristol Channel to the north and the Blackdown Hills AONB to the south and encircles the Quantock Hills AONB. The area is densely settled with a largely dispersed pattern of hamlets and scattered farmsteads often linked by sunken winding lanes. The exceptions to this are the larger towns of Taunton, Wellington, Minehead, Williton and Watchet. Taunton and Wellington lie along the M5 corridor and distant from the proposed scheme; these towns are currently undergoing considerable expansion and development owing to access to, and proximity to, this main transport route, with associated development along the M5 itself.

- 7.6.8 NCA 147 (Blackdowns) extends from south of the M5 at its northern point to the English Channel in the south. Long, dark ridges, deep valleys and dynamic cliffs are the essence of the Blackdowns. The ridges create prominent backdrops when viewed from the wider landscape and offer far-reaching views. Woodland, much of which is of semi-natural origin, dominates the steep valley tops, creating sinuous dark edges to the ridges; some conifer plantations also exist and intrude onto the plateaux. Below the wooded edge, pastoral valleys feature with a medieval field pattern of small, irregular fields bounded by dense species-rich hedgebanks and hedgerow trees, creating an enclosed, tranquil setting. Approximately 78% of NCA 147 is designated as AONB, with 45% of the NCA within the Blackdown Hills AONB situated at the northern end of the area (other AONBs within the NCA, but outside the study area, include East Devon AONB and Dorset AONB). The special qualities of the AONB are described in the Management Plan [15] and include (but not limited to):
 - the elevation and long, panoramic views out from the Blackdown Hills create a sense of detachment from surrounding towns and transport corridors
 - areas of high tranquillity spared many of the intrusions of modern life
 - dark night-time star-filled skies contrasting with the light pollution of the surrounding towns
 - the presence of straight, uninterrupted ridges are evident as a visual backdrop over a wide area
- 7.6.9 In relation to the proposed scheme, the steep slope and wooded ridge at the northern edge of NCA 147 and Blackdown Hills AONB, feature in many distant views looking south from landscape to the north, but result in a limited quantity of views north from the AONB due to the enclosed nature of the woodland. However, the sudden revealing of open panoramic and distant views to the north (from locations such as Staple Hill and Castle Neroche) provide a dramatic change of character and assist with a wider sense of place. The Blackdown Hills is the fifth darkest AONB in England, and allows "*dark, star-filled skies contrasting with the brightness of the surrounding towns is one of the qualities that make the Blackdown Hills AONB such a special place*" [27]. Views of vehicles travelling along the A358 and M5, and Taunton to the north, on lower ground are a feature of distant views to the north and north-east. The elevation of the ridgeline from which they are seen provides a sense of separation and remoteness, although there is some disturbance from background road noise in the area.
- 7.6.10 There are two published local landscape character assessments that provide a baseline for the study area. These are:
 - Taunton Deane Landscape Character Assessment, Taunton Deane Borough Council (now SWTC), 2011 [28].
 - The Landscape of South Somerset, SSDC, 1993 [29].

Taunton Deane Landscape Character Assessment

7.6.11 The proposed scheme will pass through the following local landscape character areas (LLCAs) from the Taunton Deane Landscape Character Assessment: 1a, Vale of Taunton Deane; 4a, Fivehead Farmed and Wooded Vale; and 5a, North Curry.

Vale of Taunton Deane LLCA

- 7.6.12 The LLCA defines much of the central area of the Borough. It stretches from the edges of Wellington in the southwest to the outskirts of the Clay and Peat Moors in the northeast. The low vale is frequently interspersed by the waters of the River Tone and its tributaries and merges seamlessly with the higher landscape of the Farmed and Settled High Vale that surrounds it to the north, south and west. Woodland cover is limited but hedgerow trees (typically oak), punctuating the relatively dense and lush hedgerows, make a valuable contribution to tree cover and character overall. The hedgerows make a significant contribution to the vale by defining the field pattern. Usually occurring on low hedgebanks, the hedges are dominated by elm but also contain a range of woody species including hazel, field maple, holly and blackthorn, hedgerow trees are mainly oak. The mixed hedges give way to hawthorn hedges in areas of more recent field enclosure.
- 7.6.13 Within the vale itself there is a definite sense of separation from the towns. This is largely due to the strong hedgerow network that limits views across the low-lying land. The Quantock Hills AONB (to the north-west of Taunton) and Blackdown Hills AONB (to the south) form a backdrop and sense of containment and enclosure to the vale. Building materials vary across the vale. In the north and west red sandstone is seen in several villages relating to the underlying sandstone geology of the surrounding Quantock Hills and High Vale. In the south and east, stone-built properties are often of Blue or White Lias, reflecting the changing underlying geology moving east towards the Farmed and Wooded (Lias) Vale.
- 7.6.14 Although low-lying and relatively flat in places, the Vale contains (and is adjacent to) several small natural ridges and hills that have a significant influence on the character of the landscape at the local level.
- 7.6.15 Both the A38 and M5 motorway have a visual and aural influence on many parts of the vale and the A358 passes through the area between M5 J25 and West Hatch. The lighting associated with the Taunton Gateway Park & Ride is visible across the landscape to the south. The Nexus 25 development near the Park & Ride and M5 J25 will also influence the future baseline of the local landscape character in proximity to the proposed scheme.
- 7.6.16 The presence of the M5 and major highway infrastructure within the LLCA, and the relatively flat landscape limiting distant views, results in some ability to accommodate further development of this nature. However, the rural qualities away from these routes means it remains susceptible due to the potential change associated with tranquillity and perception of landscape character.
- 7.6.17 The condition of the Vale of Taunton Deane LLCA is described in the published assessment as moderate, with the strength of landscape character varying across the vale and judged to be moderate to strong overall.
- 7.6.18 The LLCA within the study area is assessed as being of medium sensitivity for the purpose of this LVIA. It includes landscape features worthy of conservation which contribute to a sense of place and has some ability to accommodate large scale road infrastructure.

North Curry Sandstone Ridge LLCA

7.6.19 The LLCA is a relatively prominent landscape – an undulating, clearly defined ridge that raises out of the surrounding Clay and Peat Moors. It is the ridge

landform and its juxtaposition with the contrasting, flat Moors that defines the character of this landscape.

- 7.6.20 It is a relatively narrow ridge extending from the edge of the hamlet of Ash, in the southwest, to the edge of Stathe in the northeast. Although relatively low-lying (the highest point being 57m AOD at Borough Post) there is a notable sense of elevation from the ridge top and from the sloping sides both of which offer views to the much lower, and dramatically flat Clay and Peat Moors and beyond to the Vale of Taunton Deane, to the Quantock Hills AONB and to the Polden Hills.
- 7.6.21 A simple setting of undeveloped agricultural land offers clear and uninterrupted views of this distinctive feature, which is clearly pronounced on the skyline and identifiable over a very wide area of the wider landscape. In many places however, views are highly restricted by high hedge banks and sunken rural lanes. The mixed native species hedgerows form clearly defined irregular-shaped field boundaries. Hedgerow trees, where they occur, make an important contribution due to a landscape absent of woodland cover.
- 7.6.22 The North Curry Sandstone (a green-grey stone) is a consistent building material found in buildings and structures across the ridge, as is red brick, render and clay pan tiles. The A358 and the A378 both cross this landscape but their influence is limited to the south-west corner of the ridge, between Mattock's Tree Hill and Stonyhead Hill. The existing road corridors broadly follow the existing contours, with the A358 rising and falling to the junction with A378 at the top of Mattock's Tree Hill.
- 7.6.23 Mattock's Tree Hill consists of large agricultural fields with a hedgerow and a few hedgerow trees located on higher ground forming the horizon line in distant views from the east and west. There are a number of local cultural associations with Mattock's Tree Hill, described on the Stoke St Mary and District History Group [30].
- 7.6.24 Thorn Hill is a dome-shaped hillock at the south-west end of the ridge, topped by mature broadleaved trees that are bounded by a stone wall, and is a prominent landmark from surrounding areas to the north, west, and south-west. A beacon on the top of Thorn Hill was installed to commemorate the Queen's Golden Jubilee.
- 7.6.25 Thorn Hill (Clump) was identified as Special Landscape Feature under Policy EN11 of t Taunton Deane Local Plan 2004 [31] (currently being updated). This is due to it being particularly important in the wider landscape, and particularly important to the local landscape or setting of a settlement.
- 7.6.26 There are extensive views across the wider landscape from PRoW as they cross Mattock's Tree Hill and Thorn Hill, the nature of existing views are described within the visual baseline of this chapter.
- 7.6.27 The 'Landscape Strategy' section of the published assessment states that "the strategy for this area is to conserve and enhance the simple, small-scale nature, and largely uninterrupted, character of the ridge. The dramatic juxtaposition between the ridge and adjacent Moors should be protected."
- 7.6.28 The presence of the A358 and A378 corridors within the south-west of the LLCA results in some ability to accommodate further development of this nature. However, the nature of the landform and its prominence in the wider landscape means it remains susceptible due to the potential change associated with structures, earthworks, and landscape character.

- 7.6.29 The condition of the North Curry Sandstone Ridge LLCA is described within the published assessment as moderate with the strength of landscape character varying across the vale and judged to be strong overall.
- 7.6.30 The LLCA within the study area is assessed as being of medium sensitivity, with Mattock's Tree Hill and Thorn Hill being places of local landscape or cultural importance, the area evidencing attributes which offer a sense of place and history, and some susceptibility to major highways infrastructure.

Fivehead Farmed and Wooded Vale LLCA

- 7.6.31 The LLCA has a varied elevation from 35m AOD in the east to approximately 200m AOD in the west. The lower lying area of the vale extends beyond the Taunton Deane borough boundary merging with the wider Fivehead Vale landscape, primarily occurring within South Somerset and through which the Fivehead River runs. The area has some notable undulations throughout which change the context and experience throughout the area.
- 7.6.32 The higher area of the vale in the west has a marked sense of elevation and a well-treed character as it gradually merges with the band of adjacent wooded escarpments. Wooded scarps that ascend to the Blackdown Hills AONB form a strong visual backdrop in views looking west from within the LLCA. The higher, western, half of the Vale contains several woodlands containing a mix of broadleaf and coniferous trees, including some semi-natural, and replanted, ancient woodland sites. Hedgerow trees and trees within fields also contribute to a strong impression of a well-treed landscape although in some lower lying areas there are fewer hedgerow trees, creating a more open character.
- 7.6.33 The Blackdown Hills Forest Plan [32] covers the woodlands within and on the boundary this LLCA, describing the area to the south-west on the Blackdown Hills wooded scarp as the 'Neroche complex'. This rich historic landscape was an ancient hunting forest and as a result contain a large proportion of oak dominated Lowland Mixed Deciduous Forest and large amounts of historic wood pasture. The woodlands also contain a large number of significant and veteran trees. The management processes will result in a gradual removal of non-native trees in favour of native species. The overall woodland coverage of the area is therefore assumed to remain equivalent to existing in the future.
- 7.6.34 Blue Lias is widely used as a building material to the east of Taunton and the blue-grey and sometimes honey-coloured (White Lias) stone is prevalent throughout this landscape. There are individual dwellings and farms dispersed across the Vale with settlement clusters at the villages of Staple Fitzpaine and Hatch Beauchamp (both Conservation Areas) as well as hamlets such as West Hatch and Curland. Agricultural land use is predominantly defined by pasture (dairying and stock rearing) with some winter cereals on areas of higher (sometimes flatter) and drier ground.
- 7.6.35 With many hedges embanked, views are often channelled, creating a sense of enclosure when passing through the vale along the rural lanes. Formal, designed landscape character includes the Grade I Listed Building Hatch Court and its Grade II Listed Parks and Gardens to the north-east of Hatch Beauchamp. The park is described as being situated to *"the east, south, and west of the house and is today (2000) in mixed use, with areas in agricultural cultivation being situated to the north-west of the house beyond a footpath and C20 hedge. The park is predominantly pasture and retains scattered specimen trees and ornamental*

groups of trees arranged to frame and emphasise long views to the south and west. There is extensive late C20 planting to the north-west of the house forming an arboretum, with mown grass paths passing between groups of trees" [33]. Part of Hatch Beauchamp is designated as a conservation area [34], with Hatch Park to the west also noted on the Somerset Historic Environment Record [35].

- 7.6.36 Bickenhall Wood is an ancient replanted woodland located to the west of the A358 and north of Bickenhall Lane. Tree Preservation Order (TPO) TD629 Hatch Beauchamp is located in a parcel of land to the north of the A358 and west of Bickenhall Lane. It comprises of two oaks (TD629T1 and TD629T2), for which further detail is provided within Appendix 7.3 Initial Tree Constraints.
- 7.6.37 The A358 passes through the LLCA from just north of Griffin Lane to between Capland Lane and Fivehead River Main Channel 2. The road corridor has a limited influence on the wider character of the LLCA through a combination of woodland, topography, and established roadside planting.
- 7.6.38 The condition of the Fivehead Farmed and Wooded Vale LLCA is described within the published assessment as moderate with the strength of landscape character varying across the vale and judged to be strong overall.
- 7.6.39 The LLCA within the study area is assessed as being of medium sensitivity. It contains some areas and landscape features of national value but has an ability to accommodate large scale road infrastructure due to the nature of topography and presence of wooded areas, subject to the location and design.

Other LLCAs

- 7.6.40 A number of LLCAs from the Taunton Deane Landscape Character Assessment have been scoped out of the landscape assessment due to their position outside of the proposed scheme boundary, the limited intervisibility and in consideration of the existing A358 within the wider landscape context, despite being in the vicinity of the A358 corridor:
 - 2a, The Tone, located to the north of the existing A358 at a lower elevation than the proposed scheme which will be situated to the south of the existing A358. There is little to no landscape relationship with the proposed scheme.
 - 10c, Blackdown Hills Limestone, the northernmost tip of this local landscape character area has some perceptual landscape relationship with the proposed scheme. Much of the character area is situated further south and has no landscape relationship with the proposed scheme. The baseline views and impact upon them from this character area will be considered as part of the visual study where appropriate.
 - 10d, Wrantage, located to the north of the existing A358 at a higher elevation than the existing A358 with inter-visibility reduced and enclosed by woodland, hedgerows, and topographic features. There is little to no landscape relationship with the proposed scheme.

Landscape of South Somerset

7.6.41 The proposed scheme passes through the Lower Lias Foothills and Lowland LLCA within Region 2 (Blackdown Hills Plateau Footslopes and Valleys) of the Landscape of South Somerset Character Assessment [29].

Lower Lias Foothills and Lowland LLCA

- 7.6.42 The LLCA is described as the Lowland Forest, is a rolling low-lying landform derived from the Lower Lias clays and shales. It is cut through by several winding streams, the courses of which are easily picked out in the landscape because of their tree-lined banks of alder, ash, willow, and black poplar. The landform shallows towards the north-east and is more undulating to the south-west.
- 7.6.43 Agricultural fields are predominantly large and in a rectilinear pattern with straight hedges, droves, and roads with hedgerows, including oaks and pines many of which date back to late 19th century enclosures of the area. Older field patterns are present at Windmill Hill and Hastings with irregular boundaries and old oak trees.
- 7.6.44 The Lower Lias Foothills and Lowland LLCA includes 'Jordans' which is not a Registered Park and Garden but is a designed parkland landscape that has been impacted by changes to the A358 previously. "Jordans was originally approached off the old A358 between Taunton and Ilminster. Jordans is now accessed by taking the first turning on the right after the A303/A358 roundabout, signposted to Ilton, and then the next turning right through a wooden field gate along the old A358, which is now blocked off at the far end. The main entrance is through two stone gateposts, which were specially made for Jordans by the local firm of Minsterstone, Ilminster; these are in good condition; and two rusty wrought iron gates, these gates may have been made by the Estate Blacksmith, they are hung on wrought iron piers [...] The parkland of Jordans extends for approximately 100 acres round the area which would in former days have consisted of the house and stables, formal gardens, kitchen gardens and some wooded areas. The land on the Broadway side of the old road was divided and the little River Ding was diverted. The Parkland was affected by the re-routing of the A358 which was built on a higher plane than previously. This caused major problems with the two 19th century weirs; one was buried completely and there has been serious loss of water to the other" [36]. There are a number of prominent mature tree specimens within and around the parkland, visible from the A358.
- 7.6.45 Ashill Wood/Every's Copse is a combination of ancient and semi-natural woodland and ancient replanted woodland, located to the east of the A358 off Park Barn Lane. The watercourses of Fivehead River Main Channel 2 and Venner's Water pass through the area and is heavily tree-lined, providing notable features meandering through the landscape. Away from Jordans and Ashill Wood/Every's Copse there are relatively few woodland blocks within the LLCA.
- 7.6.46 The settlements at Ashill and Windmill Hill are located on areas of higher ground, with the windmill at Windmill Hill being a recognisable feature landscape in many long-distance views from the surrounding area. As the A358 passes north of Ashill, the change in topography is notable with the fields sloping down towards the road then continuing beyond towards Venner's Water.
- 7.6.47 Merryfield Airfield is located outside this LLCA to the east. However, views of aircraft and their presence is a feature, and they have some influence on the tranquillity of the LLCA.
- 7.6.48 The A358 is relatively flat with naturalistic hedgerows and hedgerow trees limiting the influence of passing vehicles, although high-sided vehicles remain visible from the wider landscape. The road is single carriageway, unlit (except around Stewley Lane), and with few signs, with exceptions where the road widens around side

road junctions and on approach to Southfields Roundabout. There is an increase in lighting around Kenny and Ashill along residential streets.

7.6.49 The LLCA within the study area is assessed as being of medium sensitivity, including landscape features worthy of conservation which contribute to a sense of place and has some ability to accommodate large scale road infrastructure.

Ham Hill Plateau, Yeovil Sands Escarpments and Valleys LLCA

- 7.6.50 Part of the proposed scheme boundary (around Southfield Roundabout and A303) is located within this LLCA. Due to the nature of existing features and extent of the proposed scheme boundary within the LLCA, the proposed scheme is unlikely to result in significant impacts on this LLCA.
- 7.6.51 The baseline for that area of the proposed scheme and associated impacts are therefore considered within the assessment as part of Lower Lias Foothills and Lowland LLCA.

Other LLCAs

7.6.52 All other Regions and LLCAs within the Landscape of South Somerset Character Assessment [29] have been scoped out of the landscape assessment due to their distance and lack of landscape relationship to the existing A358 and the proposed scheme.

Trees

- 7.6.53 Through a process of desk-top review, and discussions with Tree Officers at SWTC, SSDC, and SCC, it has been determined that there are four TPOs within the vicinity of the proposed scheme. Three are within the SWTC administrative area and one within the SSDC administrative area. If the TPO trees are in close enough proximity to the proposed scheme boundary, they will be included within the Tree Survey. No other Tree Preservation Orders are present within or adjacent to the proposed scheme. This, however, does not mean there are trees that would be of sufficient quality or value to warrant protection, just that they may not have been under threat to require evaluation and protection.
- 7.6.54 Initial Tree Constraints plans (Figure 7.7 Initial Tree Constraints) have been produced using Bluesky's National Tree Map dataset [21]. The National Tree Map includes the location, height, and canopy/crown extents for trees 3m and above in height (described as having >90% of canopy coverage, increasing to >95% within 50m of buildings). It is created from high resolution aerial photography, accurate terrain and surface data, and colour infrared imagery.
- 7.6.55 Further detail on TPOs, ancient woodland, and veteran trees is provided within Appendix 7.3 Initial Tree Constraints.

Nationally designated areas

7.6.56 There is one nationally designated site located within the study area: the Blackdown Hills AONB which is noted for its dark skies, and which lies within the ZVT. The special qualities of the Blackdown Hills AONB are described in paragraph 7.6.8. As landscape impacts on the Blackdown Hills AONB have been scoped out, potential impacts on these special qualities are covered in views from the AONB, as part of the visual baseline and impact assessment of this LVIA.

- 7.6.57 There is one Grade II registered park and garden within the study area which is located at Hatch (Beauchamp) Court, located approximately 490m east of the proposed scheme. There are two conservation areas located within one kilometre of the proposed scheme at Hatch Beauchamp and Thornfalcon.
- 7.6.58 There are no World Heritage Sites within the study area.
- 7.6.59 Within the study area, there are a large number of ecological and heritage assets which contribute to the character of the landscape. These are described in detail in Chapter 6 Cultural heritage and Chapter 8 Biodiversity.
- 7.6.60 There are seven Ancient Woodland Inventory (AWI) sites located within the 1km study area. These include both ancient semi-natural woodland and ancient replanted woodland. The AWI sites are:
 - Bickenhall Wood
 - Huish Coppice
 - Ashill Wood/Everys Coppice
 - Line Wood
 - Stoke Wood
 - Knowl Wood
 - An unnamed wood, approximately 870m north of the proposed scheme

Visual

- 7.6.61 The visual context of the study area varies throughout due to the nature of the landscape due to topographic features, woodlands, hedgebanks alongside rural roads contrasting with flat landscapes with large open fields and limited hedgerow trees.
- 7.6.62 Residential receptors are situated throughout the study area in a range of situations including small settlements, hamlets, and isolated properties, which includes existing properties fronting directly onto the existing alignment of the A358. Most residential properties within the area have some form of rural outlook due to the low density of built form in the study area making them susceptible to change.
- 7.6.63 Views vary from enclosed woodland walks and agricultural fields, to panoramic views from open fields and ridges. Visual receptors in the study may have reduced susceptibility to change as traffic on the existing A358 is a feature of many existing longer and open views, however but is often filtered to some degree by existing roadside vegetation.
- 7.6.64 Views from the road network away from the existing A358 are generally well enclosed due to their narrow, meandering nature, and well-maintained hedgerows and hedgebanks. More distant views for road users are often limited to glimpses of the wider countryside through field gates or views in the direction of travel on straighter stretches of road. Due to the characteristics of existing views for road users within the study area, road users have been scoped out of the visual assessment.
- 7.6.65 There are two specific viewpoints within the Blackdown Hills AONB with views towards the proposed scheme, at Staple Hill and Castle Neroche [37], where receptors may have high susceptibility to change. From Staple Hill there is an 800 m circular accessible walk from the car park, which includes two views to the north, created through clearance and management of woodland and signposted

for visitors. The views from Staple Hill are almost 180 degrees and include distant views towards Taunton, Fivehead ridge, and beyond. However, susceptibility is mitigated by the baseline low views of traffic moving on the A358 in the distance, primarily with larger and/or light-coloured vehicles visible against the wider rural landscape. From the viewpoint at Castle Neroche the view is directed north towards Taunton, views in the direction of the existing A358 are contained by trees adjacent to the viewpoint in both the winter and summer months.

- 7.6.66 There are extensive networks of public rights of way throughout the area, including marked long-distance walking routes such as the Herepath and East Deane Way, some of these cross or are in close proximity to the existing alignment of the A358. The Herepath is described as a shared cycle and walking bridleway, which forms a loop around Staple Fitzpaine including some of the Blackdown Hills AONB. The Herepath primarily follows a series of off-road tracks through wooded areas including Staple Park Wood, Piddle Wood and Bickenhall wood. The East Deane Way is a long walk wending its way through several villages and countryside to the south and eastern side of Taunton in and around the vale of Taunton Deane and on to Sedgemoor.
- 7.6.67 Descriptions of settlements within the study area are described in Table 7-8.

Settlements	Visual baseline description
Broadway	Existing views within the village are generally contained due to the low-lying nature of the settlement in relation to the A358. Established mature hedgebanks enclose the road and hedgerows bordering fields which limit long distant views. However, St Aldhelm and St Eadburgha church to the east of the main village affords glimpsed views of high sided vehicles on the A358. The view across agricultural fields and over a managed hedgerow east towards the A358 allows partially filtered views of traffic which will be opened further during the winter period.
Ashill	Existing views north east towards the options from Ashill are mostly contained by existing mature vegetation along the A358 and hedgerows lining the road network. A clear view of the road and associated vehicles is afforded from the PRoW which emerges from Crow Lane. Due to the steep topography in this area and the low profile of the A358, the road is not visible from the area closest to the settlement. However, the tops of lorries are visible as the A358 rises slightly to the east. The far-reaching views across Somerset showcases the mature oaks, native woodland, rolling hills and mixed field uses patchworking across the landscape. The change in views of the A358 during winter are not notably different.
Stewley	The village of Stewley is lower lying than the A358 and existing views west towards the road are currently screened by a mature native hedgerow with trees. Enclosed views are characteristic of this area and would be relatively unchanged during the winter period due to the density of the vegetation.
Battens Green	Existing views are available to the north east from Battens Green from residential cottages on Forest Drove over falling land towards the A358. The view north is over agricultural fields bounded by managed native hedgerows with intermittent trees, where glimpsed views of lorries and high sided vehicles on the A358 are available in the middle distance. The view extends long into the distance with rolling hills and mature native trees forming the background. During the winter period, the visibility of the existing road is not meaningfully changed due to the density of vegetation and the distance to the road. From other aspects, far reaching views are interrupted by the topography and enclosing vegetation. Views to the south are inhibited by the rising topography and mature vegetation.
Slough Green	Far reaching long-distance views are available north east across the undulating hills, pastoral land and wooded scarps which are representative of the landscape character

Table 7-8 Settlements

Settlements	Visual baseline description	
	area. The undulating nature of the land and the size of established hedgerows and mature trees limit views and enclose much of the landscape. Where views are open along PRoW expansive areas of the district are visible. The existing A358 is not currently visible in the view in summer or winter.	
Hatch Beauchamp and Hatch Green	Hatch Beauchamp Conservation Area has limited views out towards the surrounding landscape due to the density of housing and mature vegetation bordering roads and buildings. Hatch Green is similarly well enclosed and is positioned lower than the A358. Filtered views of vehicles on the A358 are available through a linear belt of trees and shrubs which border a pastoral field. During winter the visibility of traffic on the road is greater due to the lack of depth in the intervening planting.	
Haydon	Situated to the east of Taunton, Haydon has a mixture of farming, a small number of residential buildings and a golf driving range. The flat nature of the land at this hamlet allows for open views south towards the Blackdown Hills AONB across the surrounding agricultural fields.	
Shoreditch	The small village of Shoreditch is surrounded by a range of small to large pastoral fields. Views north west towards Taunton are screened by the existing M5 vegetated corridor. Densely vegetated roadways and field boundaries limit long distant views; however, a PRoW affords open views across arable fields towards the proposed scheme.	
Taunton Holway	Taunton is predominantly residential to the south east and is bordered by the M5 motorway. The dense urban grain of the settlement limits far reaching views. To the south east the densely vegetated bunds screen middle and long-distance views across the character area. The A358 and M5 are not currently visible past the heavily vegetated corridor along the M5.	
Taunton Staplehay	Situated to the south west of Taunton, Staplehay is a tight linear settlement surrounded by undulating farmland. Views within the settlement are well contained within the narrow lanes and streets. On the outskirts of the development undulating landform and hedgerows restrict many views of the M5 corridor. However glimpsed long-distance views of large vehicles are available through intermittent screening vegetation, from a small number of vantage points and PRoWs which look over the M5.	
Thornfalcon	The small village and civil parish of Thornfalcon is surrounded by medium and large sized arable and pastoral agricultural fields predominantly bounded by hedgerows. Linear belts of trees and clumps of woodland are key visual features and form a short distance visual screen from many aspects within the village. The undulating landform also helps to contain the views from Thornfalcon. Views towards the A358 are limited by undulating landform and intervening vegetation. However, views of traffic on the A358 are afforded from Thorn Hill, a distinctive landscape feature in the local area.	
Ruishton	The small town of Ruishton is relatively well visually contained by the steep topography falling away north east from the A358. The town has a dense grain with views being interrupted by trees and woodland. The town is surrounded by medium sized arable fields. In the southern extents of Ruishton glimpsed views of vehicles on the A358 and the wider landscapes and Henlade to the south. The low-lying nature of the town due to its proximity to the River Tone increases the sense of a visually enclosed landscape.	
Henlade	Due to the low-lying nature of Henlade village views are generally contained. Characteristic wooded scarps to the south limit views to the south and the undulating landform around all other aspects limit distance views. Views of the existing A358 are well screened by existing vegetation and rising ground.	
Ash	The small settlement of Ash is nestled within a valley alongside the defunct Taunton to Chard Railway and adjacent to the A358. Residential properties appear in small clusters, along with light and heavy industry surrounded by arable fields. Middle and long-distance views are restricted in the western portion of the settlement within the valley, due to undulating landform and intervening vegetation. However, the east of the settlement is situated on higher ground adjacent to the A358 with open views across	

Settlements	Visual baseline description			
	the land to the A358 and traffic forms a prominent feature in the short distance for these properties.			
Stoke Hill	The settlement of Stoke Hill comprises small clusters of residences and isolated farmsteads within a steep and heavily wooded rural landscape. Views to the west, north west and south west are heavily restricted by Stoke Wood and to the east Henlade Wood restricts some views. To the north, north east, south, and south east expansive views are available of the gently undulating lowlands, residential receptors, and vegetation from PRoWs. The A358 to the north is well contained within mature screening vegetation and undulating land.			
Netherclay	A sparse settlement comprising isolated farmsteads and small clusters of houses surrounded by a rural landscape, and lying to the north of the Blackdown Hills Downs AONB. Views to the south are restricted by the steep heavily vegetated Blackdown Hills. To the north views comprise middle and long-distance open views of a predominantly flat arable landscape from residences and PRoWs. Views of transportation corridors are not available within these views.			
Rapps	A flat rural landscape comprising arable irregular medium size fields with small clusters of residential properties and farmsteads. Views across the settlement are predominantly short and middle distance in nature and restricted by intervening vegetation along field boundaries and rural lanes. To the west of the settlement glimpsed views of high sided vehicles on the A358 are available in places where the road is not contained with linear screening vegetation.			

- 7.6.68 To understand and communicate the range of views and visual amenity within the study area, and provide a baseline for assessment within the ES, 45 representative viewpoint locations have been proposed (Figure 7.4 ZTV and Proposed Viewpoints) based on the output of the ZTV, initial site visits to the study area, and initial discussions with Officers at Taunton and West Somerset Council, SSDC, NE, and the Blackdown Hills AONB.
- 7.6.69 A description of the baseline condition for each of the 45 representative viewpoints is provided in Appendix 7.2 Visual Baseline with winter, summer, and night-time photographs provided on Figure 7.9 Viewpoint Photographs.

Future baseline

- 7.6.70 The future baseline landscape will be identified and assessed in further detail throughout the Environmental Impact Assessment (EIA). This will be reported into the ES which supports to DCO application.
- 7.6.71 It is noted that there is a prominence of ash trees within the study area. Officers at the local authorities and Blackdown Hills have highlighted the risks to the landscape associated with ash dieback and the resultant impact on hedgerow trees and woodlands, and their contribution to the landscape character of the area. Ash dieback is a disease affecting the UK, and is not as a result of the proposed scheme. However, the design and construction will incorporate actions to minimise the effects of ash dieback. This will include careful specification and sourcing of ash stock for the proposed scheme.
- 7.6.72 Additional development within the study area will include the mixed-use Nexus 25 site, potential development of the former Horlicks site in Ilminster and some small-scale developments within settlement limits of local villages. The effects if these will be incorporated into the baseline assessment or the combined effects assessment in this chapter. This will be reported in the ES which supports the DCO application.

7.6.73 Other considerations for future baseline include the planned forestry operations proposed to occur on the edge of the Blackdown Hills AONB. The assessment will consider the extent to which this may change (widen or enclose) the landscape setting of the AONB, and availability of views in the direction of the proposed scheme.

7.7 **Potential impacts**

7.7.1 This section sets out the sources of landscape and visual impact from the proposed scheme. The impacts from the proposed scheme are considered with embedded, essential mitigation and enhancements included.

Construction impacts

Landscape

- 7.7.2 Sources of potential impact on the landscape resource within the study area during construction include:
 - Permanent removal of trees, hedgerows and other vegetation, both along the online and offline sections of the route of the proposed scheme.
 - Temporary presence and movement of construction machinery used in earthworks, highway and structures construction on the site of construction and haul roads.
 - Temporary presence of HGVs delivering materials and removing waste to and from the compound along the haul road and on the public highway (designated routes).
 - Presence of temporary fencing, compounds (main and satellite), earthworks, and material storage areas.
 - Early establishment of permanent environmental mitigation.
 - Early establishment of permanent flood compensation and drainage features, such as balancing ponds and flood compensation areas.
 - Creation of permanent earthworks, such as the cuttings at Stoke Road and Mattock's Tree Green junction and embankments for overbridges and the Ashill junction.
 - Construction of permanent low embankments along the route of the proposed scheme.
 - Construction of new and replacement permanent structures over local watercourses, such as the river Ding, and for the new junctions at Ashill and Mattock's Tree Green.
 - Construction of permanent revised road arrangements at the Nexus 25 roundabout, and the dedicated left slip onto the A303 at Southfields roundabout.
 - Permanent revision of the northbound on, and southbound off slips for the M5 at junction 25.
 - Construction and use of temporary diversions and altered accesses during construction.
 - Temporary reduction in tranquillity due to daytime and night construction activities and any night-time lighting (including any security lighting at compounds).

<u>Visual</u>

7.7.3 Sources of potential impact on visual amenity during construction include:

- Permanent tree, hedgerow and vegetation removal.
- Temporary presence and movement of construction machinery, and HGVs delivering materials, in views.
- Early establishment of permanent environmental mitigation (principally woodland or hedgerow improvements).
- Early establishment of permanent flood compensation and drainage features, such as balancing ponds and flood compensation areas.
- Creation of permanent earthworks, such as the cuttings at Stoke Road and Mattock's Tree Green junction and embankments for overbridges and the Ashill junction.
- Construction of permanent low embankments along the route of the proposed scheme.
- Construction of new and replacement permanent structures over local watercourses, such as the river Ding, and for the new junctions at Ashill and Mattock's Tree Green.
- Construction of permanent revised road arrangements at the Nexus 25 roundabout.
- Permeant revision of the northbound on, and southbound off slips for the M5 at junction 25.
- Construction and use of temporary diversions and altered accesses during construction.
- Presence of temporary fencing, compounds (main and satellite), earthworks and material storage areas.
- Temporary reduction in tranquillity due to activities and any night-time lighting (including any security lighting at compounds).

Operational impacts

Landscape

- 7.7.4 Sources of potential adverse and beneficial impact on the landscape resource during operation of the proposed scheme include:
 - Tree and vegetation loss when compared to baseline at year 1, as any mitigation planting will be immature.
 - Additional woodland planting incorporated into the proposed scheme to reduce visual impacts and improve landscape integration of the proposed scheme (additional planting to the early planting noted in paragraph 7.7.2).
 - Presence of the widened A358 corridor and increased prominence in the landscape along the online section of the proposed scheme.
 - The presence of the A358 corridor in new landscapes that did not previously have road infrastructure along the offline section of the proposed scheme.
 - The extent, scale, and design of earthworks.
 - The materials and appearance of proposed structures for the works (e.g. junctions, bridges, and retaining walls).
 - Addition or removal of lighting along the A358 corridor.
 - Addition of road signage along the A358 corridor.
 - Any changes to the existing strategic green infrastructure network.
 - Establishment and growth of planting for landscape mitigation and integration (particularly at year 15).

<u>Visual</u>

7.7.5 Sources of potential impact on visual amenity during operation include:

- Tree and vegetation loss when compared to baseline increasing visibility of the A358 (particularly at year 1, as any mitigation planting will be immature).
- Presence of widened A358 corridor and increased prominence of traffic in views.
- Presence of the A358 corridor and associated traffic in some views that did not previously have road infrastructure along the online section, causing dust and visual intrusion.
- The extent, scale, and design of earthworks.
- The materials and appearance of proposed structures for the works (e.g. junctions, bridges, and retaining walls).
- Changes to lighting along the A358 corridor.
- Changes to road signage along the A358 corridor.
- Engineering or environmental features enclosing or changing views towards the Blackdown Hills AONB or other landscape features.
- Establishment of planting for visual mitigation (particularly at year 15).

7.8 Design, mitigation and enhancement measures

- 7.8.1 Environmental assessment and design shall incorporate essential mitigation measures using a hierarchical system as follows:
 - 1 Avoidance and prevention: design and mitigation measures to prevent the effect (e.g. alternative design options or avoidance of environmentally sensitive sites).
 - 2 Reduction: where avoidance is not possible, then mitigation is used to lessen the magnitude or significance of effects.
 - 3 Remediation: where it is not possible to avoid or reduce a significant adverse effect, these are measures to offset the effect.
- 7.8.2 In accordance with DMRB LA 107 *Landscape and visual effects* [1], the landscape design for the A358 will seek to:
 - "to deliver excellence in design quality that responds to the needs of people and places...".
 - to deliver an inclusive, resilient and sustainable design solution."
- 7.8.3 The landscape objectives for the proposed scheme are to:
 - link with local green infrastructure strategies, initiatives, and strategic green infrastructure opportunities
 - consider distant views from the Blackdown Hills AONB (day and night)
 - inform engineering design to avoid or reduce impacts
 - respond to the rural characteristics of the wider landscape
 - reinforce landscape structure perpendicular to, as well as along, the road corridor
 - reinstate vegetation and screening function lost alongside existing road corridor during construction
 - deliver environmental elements/mitigation with multiple functionality
 - design planting and structures to respond to local typologies and characteristics

Embedded mitigation

- 7.8.4 Full details of embedded mitigation proposed for the proposed scheme are presented in Chapter 2 The Project. DMRB LA 104 [17] defines mitigation as set out below:
 - Embedded mitigation: design measures which are integrated into a project for the purpose of minimising environmental effects.
 - Essential mitigation: mitigation critical for the delivery of a project which can be acquired through statutory powers.
- 7.8.5 Specific embedded essential mitigation as it relates to landscape and visual impacts is described below:
 - Revision of proposed access arrangements to Merryfield Airfield and Rapps to avoid potential impacts on Ashill Wood/Every's Copse ancient woodland and nearby mature trees.
 - Positioning Bickenhall Lane overbridge at a location where it has minimised height compared to the surrounding landscape due to the A358 being in cutting.
 - Positioning Village Road overbridge further north to avoid visual impacts on residential properties in close proximity, and landscape impacts on mature hedgerow trees to the south.
 - All bridge structure wing-walls parallel to the road corridor where possible to:
 - avoid prominent wing-walls in views from the wider landscape
 - allow hedgerow planting on approaches to get as close as possible to the A358
 - result in visual narrowing of cuttings at Stoke Road and Mattock's Tree Green
 - minimise the scale of the 'notch' through North Curry Sandstone Ridge LLCA
 - Re-design of property access at Jordans to avoid impacts on mature trees near the existing entrance.
 - Addition of a new PRoW link to the west of the proposed scheme between Nexus 25 roundabout and Stoke Road to retain views towards Stoke Hill and Blackdown Hills AONB without the proposed scheme and passing traffic restricting or interrupting the view.
 - Widening online sections to one side only, where possible, to increase the retention of existing vegetation and its associated screening and landscape functions.

Essential mitigation

- 7.8.6 Essential mitigation is defined as measures required to reduce and if possible offset likely significant adverse environmental effects, in support of the reported significance of effects in the environmental assessment.
- 7.8.7 Landscape mitigation has been proposed with reference to DMRB LD 117 Landscape design [38]. Proposed essential mitigation is presented on Figure 7.8 Environmental Mitigation Plan.
- 7.8.8 The environmental mitigation delivers multiple functions across topics, for example a woodland area to provide habitat creation and visual screening. Landscape mitigation measures proposed include:

- marshy grazing grassland
- roadside grassland
- scrub
- waterbodies and associated plans
- wet woodland and grassland mosaic
- grassland creation with scattered trees
- native species hedgerows
- native species hedgerows with trees
- native species woodland
- species rich (or conservation) grassland
- woodland edge management
- tree planting, gap filling, or enhancement of existing hedgerows away from the immediate scheme footprint.

Construction mitigation

- 7.8.9 The following landscape and visual mitigation measures will be applied during construction through the development of an Environmental Management Plan (EMP) that will be produced for the ES and submitted as part of the DCO application:
 - Keeping a well ordered and tidy site, minimise stockpiles, with delivery of goods on an "as needed" basis.
 - Use appropriate storage of waste materials and nets where required for both storage and transport of light materials, such as paper and cardboard.
 - Vegetate soil storage areas where possible, and where they will be present for more than 6 months.
 - Within temporary works areas, position taller or more visually intrusive elements in lower or less visible areas, or further from visual receptors.
 - Works limited to daylight hours in the most part, with any night works kept to a minimum.
 - Use solid site hoarding around compounds to reduce visibility of construction activities.
 - Minimal, low level and directional lighting should be used for compound security and night works, whilst successfully meeting safety requirements.
 - Works to be in accordance with BS 5837:2012, will seek to retain and protect existing significant trees and blocks of woodland during the construction period in accordance with the actions included in the EMP.
 - Existing trees and vegetation to be retained would be protected during the construction phase based on a pre-agreed Tree Protection Plan and associated drawings, with protective fencing or ground protection provided where deemed necessary, in accordance with BS 5837:2012.
 - Advanced planting of landscape and ecological mitigation areas where no engineering works are required.
 - Treat exposed earthworks with seed mixes as soon as possible to reduce visual prominence prior to final landscape scheme being implemented.
 - Retain vegetation and trees along the western side of the A358, where possible, through refined design of the proposed scheme and considered construction methodologies.
 - Retain notable specimen trees where possible, within or adjacent to the proposed scheme, through local adjustments to earthworks, local roads, and construction methodology.

- Seek to avoid impacts to Ashill Wood/Everys Copse and Bickenhall wood, through understanding the extent of tree root areas and careful siting, detailing, and construction of the proposed access route to Merryfields Airfield.
- Mitigation design is being developed to avoid or reduce the potential for construction impacts to occur within the study area. This would seek to employ best-practice methods. As far as reasonably practicable, mitigation will include the following:
 - Where screening earthworks are proposed, such as bunds, as part of the wider mitigation design strategy, they would be constructed as early as is practicable to provide screening to the construction work.
 insertion of landscape planting of woodland early in the construction period to reduce visual impacts.
 - Develop the layout of compounds, soil storage, and other construction facilities sympathetically within the landscape.
 - Additionally, temporary construction buildings, fencing and facilities would be in appropriate tonal colours to reflect the overall landscape as well as screened in part by solid hoardings.
 - Ensure soil structures are protected where land would be used temporarily, such as for compounds, haul roads, re-grading areas, so that when it is returned to the existing land use, it is in a suitable condition.
 - Establishment of advanced planting for softening and filtering views of the construction and subsequent operational phase, as well as part of the wider visual mitigation if land is not required for other construction activities.

Operational mitigation

- 7.8.10 The following landscape and visual mitigation measures will be applied during operation:
 - Native hedgerows, hedgerows with trees and blocks of planting to respond to the vernacular land cover, enhance green infrastructure networks crossing the A358, and reducing the visibility of the proposed scheme.
 - Use of planting stock from local provenance suppliers.
 - Appropriate grass mixes used on cutting and embankment slopes in locations where tree and shrub planting may not be appropriate or possible.
 - Lighting will be kept to a minimum as required for safety purposes, with lighting proposed on approach to Southfields and Nexus 25 roundabouts only, with none along the mainline, overbridges, and Ashill and Mattock's Tree Green junctions.
 - All lighting columns will be kept to a minimum height at maximum spacing and be directional to minimise effects on properties and the wider night sky.
 - Bridge abutments perpendicular to the A358 to create visual narrowing through cuttings at Stoke Road and Mattock's Tree Hill and allow planting to go as close to the A358 as possible for visual screening and ecological connectivity.
 - Consideration given to colour, texture, and materials of structures and their relationship to the local landscape character.
 - Earthworks designed to reflect the form and characteristics of the surrounding landscape, which may change along the length of the proposed scheme.

- Providing off-site landscape and visual mitigation, such as hedgerow improvements, where it provides benefit to landscape character and/or visual receptors.
- Reduce prominence of A358 on de-trunked sections through decluttering of signage and highway features.

Enhancement

- 7.8.11 Enhancements to the landscape character and visual amenity will be explored prior to the preparation of the ES and could include:
 - Potential repurposing of the de-trunked A358 for local access. The remaining areas of the A358 no longer used as trunk road could be narrowed to improve local walking and cycling routes.
 - Allowing public access to areas of environmental mitigation as education and natural open space.
 - Within the proposed scheme boundary Linking planting typologies and proposals with existing local initiatives and strategies.

7.9 Assessment of likely significant effects

- 7.9.1 This section presents the assessment of likely significant effects on landscape and visual amenity resulting from the construction and operation of the proposed scheme.
- 7.9.2 The assessment of effects takes into account the potential impacts to each receptor following the implementation of embedded and essential mitigation measures to determine the significance of the residual effects.

Construction effects

Landscape

7.9.3 Impacts potentially arising from the proposed scheme are described in detail within the LLCA assessments below.

NCA 143, Mid Somerset Hills

- 7.9.4 For the NCA, the impacts during construction will result in a reduction to tranquillity and loss of some features characteristic to NCA (most notably within North Curry Sandstone Ridge LLCA). However, the impacts to landscape character and features will be limited to the vicinity of the proposed scheme and not impact the wider character. The overall balance and features of the NCA will remain as the baseline condition.
- 7.9.5 This is assessed to be a negligible adverse magnitude of change resulting in a neutral significance of effect.

Vale of Taunton Deane LLCA

- 7.9.6 The majority of the offline section of the proposed scheme passes through the Vale of Taunton Deane LLCA south-east of the M5 junction and through to Ashe. The LLCA also contains a length of the proposed schemed from north of the Somerset Progressive School to just west of Griffin Lane.
- 7.9.7 Impacts within this LLCA during construction include:
- Construction activity taking place at scale within a rural landscape to the east and west of Stoke Road away from the existing A358.
- Earth moving activities associated with the cutting around Stoke Road, low embankment for mainline on approach to Nexus 25, creation of flood compensation areas, Stoke Road overbridge, realignment of Cad Brook, and highway drainage features.
- Vegetation removal will result in the loss of mature field trees to the east and west of Stoke Road, along Thornwater Stream, severance of a block of woodland north of Griffin Lane, a section of the naturalised disused railway corridor to the west of the Somerset Progressive School, and vegetation alongside the existing A358 to the south-east of the Somerset Progressive School.
- 7.9.8 The area to the east and west of Stoke Road experiences the most profound impact, with the proposed scheme bisecting areas of large open fields, bounded by hedgerows with mature hedgerow oaks typical of the area on its approach west towards Taunton. The impacts on this LLCA during construction would be uncharacteristic of the area and influence the perception of character within an area up to 500m of the proposed scheme to the south-west towards Haydon but with no influence on character to the north of the existing A358. The character of the LLCA will change through presence of activity within a generally static landscape, reduction in tranquillity, loss of landscape features, increase of urbanising features in a rural landscape, and change of land use.
- 7.9.9 This is assessed to be a major adverse magnitude of change due to large-scale impact to existing landscape character, including fields, the village of Henlade and settlements between the existing A358 and new offline section, caused by construction works and associated vehicles and deliveries. This is assessed to result in a large adverse significance of effect.

North Curry Sandstone Ridge LLCA

- 7.9.10 The proposed scheme is located across the south-western extent of the North Curry Sandstone Ridge at Mattock's Tree Hill, which typifies much of what characterises this area: an elevated ridge offering a simple setting of undeveloped agricultural land.
- 7.9.11 Impacts within this LLCA during construction include:
 - Construction activity taking place at scale within an elevated rural landscape across the south-western extent of the LLCA.
 - Earth moving activities associated with the cutting for the mainline, slip roads, link into Ashe, and access to nearby properties.
 - Creation of temporary stockpile areas.
 - Vegetation removal will result in the loss of prominent mature field trees at the top of the ridgeline, field boundaries, trees and vegetation at and opposite the entrance to Ashe Farm Caravan and Camping site, and along a section of the existing A358.
- 7.9.12 Notable changes will be experienced to the character of this LLCA. To the southwest of the A378, the impacts on this LLCA during construction will result in wholesale changes to the character of the area and influence the perception of character – at the end of the ridgeline just after it rises out from Ashe. However, to the north-east of the existing A358 the impact on this LLCA diminishes quickly due to the presence of intervening vegetation and buildings limiting perceptual

impacts, with tranquillity impacts limited by the presence of vehicles on the A358 and A378.

- 7.9.13 The change to landform will result in large-scale damage to existing landscape character and the distinctive ridgeline profile, alongside the addition of new uncharacteristic features due to the change from rural fields to extensive construction activity however limited to the south-western extent of the LLCA.
- 7.9.14 This is assessed to be a moderate adverse magnitude of change, based on the loss and extensive damage to existing landscape character of Mattock's Tree Hill, an asset of local cultural value, and nearby settlements, caused by construction works and associated vehicles and deliveries. This is assessed to result in a moderate adverse significance of effect.

Fivehead Farmed and Wooded Vale LLCA

- 7.9.15 The proposed scheme is located along the existing A358 corridor, with new overbridges proposed at Griffin Lane, Bickenhall Lane, and Village Road (near Capland) extending the proposed scheme into the wider landscape.
- 7.9.16 Impacts within this LLCA during construction include:
 - Construction activity along the A358 and within a rural landscape adjacent to the existing road corridor.
 - Soil storage and compound areas.
 - Earth moving activities associated with the embankments and cuttings along the road corridor and for proposed overbridges.
 - Engineering activities associated with new overbridges at Griffin Lane, Bickenhall Lane, and Village Road (near Capland).
 - Potential loss of TPO trees near Bickenhall Lane (subject to Tree Survey and design development) and mature trees along Fivehead River Main Channel 1.
 - Vegetation and tree removal alongside the existing A358 including impact on the edge of a woodland south of Bickenhall Lane and small copse south of Capland.
- 7.9.17 The loss of vegetation alongside the road corridor would increase the influence of traffic using the existing A358 on the landscape character during the construction phase. Although the change will be notable due to loss of existing features and presence of construction activity, the influence on the wider character and perception of the LLCA will be limited, although overall tranquillity will be reduced.
- 7.9.18 The proposed scheme is designed to avoid impacts on Bickenhall ancient woodland and vegetation along the western side of the A358 to the north.
- 7.9.19 This LLCA is primarily affected by the road widening elements of scheme as the alignment moves south-east so the impact is less significant. However, earthworks associated with the re-configuring of local roads around the Village Road bridge (near Capland) will create elevated embankments to carry a road bridge otherwise atypical of this character area.
- 7.9.20 This is assessed to result in a moderate adverse magnitude of change due to works associated with construction resulting from partial loss to existing landscape character and addition of new uncharacteristic, noticeable features or elements. This is assessed to result in a moderate adverse significance of effect.

Lower Lias Foothills and Lowland LLCA

- 7.9.21 The proposed scheme is located along the existing A358 corridor, with the Stewley Link, Broadway Street link, and the junction and overbridge at Ashill extending the proposed scheme into the wider landscape.
- 7.9.22 Impacts within this LLCA during construction include:
 - Construction activity along the A358 and within a rural landscape adjacent to the existing road corridor.
 - Temporary soil storage and compound areas.
 - Earth moving activities associated with the embankments and cuttings along the road corridor, link roads and for the Ashill junction.
 - Engineering activities associated with new overbridge at Ashill.
 - Vegetation and tree removal alongside the existing A358, particularly between Kenny and Ashill, and south of Rapps.
 - Loss of some high-quality individual hedgerow, field, and parkland trees, particularly between the proposed scheme and Venner's Water, around a pond south of Ashill junction, and at the interface with Jordans park.
- 7.9.23 The loss of vegetation alongside the road corridor would increase the influence of traffic using the existing A358 on the landscape character during the construction phase. Between Venner's Water and the A358 and between Ashill and Rapps, larger scale construction activity will have a greater impact on landscape character within that area of the LLCA. Although the change will be notable due to loss of existing features and presence of construction activity, the influence on the wider character and perception of the LLCA will be limited, although tranquillity will be reduced.
- 7.9.24 The proposed scheme is designed to avoid impacts on Ashill Wood/Every's Copse ancient woodland and vegetation along the western side of the A358 to the north.
- 7.9.25 This LLCA is primarily affected by the road widening elements of scheme as the alignment moves south-east so the impact is less significant. However, earthworks associated with the re-configuring of local roads around the Village Road bridge (near Capland) will create elevated embankments to carry a road bridge otherwise atypical of this character area.
- 7.9.26 This is assessed to result in a moderate adverse magnitude of change due to works associated with construction resulting from partial loss to existing landscape character, loss of distinctive features with some mature tree stock, and addition of new uncharacteristic, noticeable features or elements in the form of the Ashill overbridge and slip-roads. This is assessed to result in a moderate adverse significance of effect.

<u>Visual</u>

7.9.27 A description of the preliminary nature of change and significance of effect during construction from the representative viewpoint locations is provided below in Table 7-9 (locations are shown on Figure 7.4 ZTV and Proposed Viewpoints).

Table 7-9 Representative viewpoints construction

Number	Nature of change	Magnitude of impact	Significance of effect
1	Change in nature of view from rural fields to close proximity views of large-scale construction activity associated with Stoke Road overbridge and earthworks for the cutting, demolition of a property on the skyline at Stoke Road will also be visible. Construction activity would become the dominant feature of the view.	Major adverse	Very large adverse
2	Construction activity would be readily apparent across the view in the middle-ground. Two bungalows would be removed to provide space for the A358. Pastoral fields would be divided by the construction activity, this would result in the loss of hedgerows and hedgerows with trees surrounding arable fields. Construction of the Stoke Road overbridge would cause tree and hedgerow loss around housing and farmsteads. Movement of construction vehicles/machinery would be visible during the period. Although the construction impacts and activity will be prominent features and change the nature of the view, the long distance and panoramic views will still be the dominant feature of the view.	Moderate adverse	Large adverse
3	Taller construction machinery visible in a small part of the view above existing vegetation above existing hedgerows. This will be at a distance and scale that it would form a barely noticeable feature of the view. This impact will be further reduced in summer months with intervening trees and hedgerows in leaf.	Negligible adverse	Slight adverse
4	Change in nature of view from rural fields to close proximity views of large-scale construction activity within the field beyond the first hedgerow in the view. Removal of mature trees from the view in adjacent or nearby fields will be noticeable. Views towards Stoke Hill and the Blackdown Hills AONB would remain in the middle ground and background. The impact will reduce to some degree in summer months due to screening by hedgerows, however construction activity will still be a prominent feature for much of the view. Due to the nature of change and proximity to the receptor, the proposed scheme will become the focal point of the view and detract from the amenity of more distant views.	Major adverse	Very large adverse
5	Hedgerows and hedgerows with trees will be removed resulting in more openness across the landscape in the middle ground of the view. Earthworks and construction activity will be visible across the view, closest just beyond Glebe Cottages and further away towards and past Stoke Road. Movement of construction vehicles/machinery would be visible during the period. In summer months, the impact will remain similar to the nature of the elevated view and position of the proposed scheme within the	Moderate adverse	Large adverse

Number	Nature of change	Magnitude of impact	Significance of effect
	landscape. Existing vegetation and landform will screen views south towards construction activity associated with Mattock's Tree Green junction. Although the construction impacts and activity will be prominent features and change the nature of the view, the long distance and panoramic views will still be the dominant feature of the view.		
6	Construction will change the appearance of agricultural fields in the middle ground of the view, increasing activity and movement. Part of the woodland north of Greenway Lane will be lost, allowing visibility of construction work and vehicles. In summer months, the impact will remain similar due to the nature of the elevated view and position of the proposed scheme within the landscape. Existing vegetation and landform will screen views east towards construction activity associated with Mattock's Tree Green junction. Although the construction impacts and activity will be prominent features and change the nature of the view, the long distance and panoramic views will still be the dominant feature of the view.	Moderate adverse	Moderate adverse
7	The central field within the middle ground of the view will feature large-scale construction activity associated with the cutting, slip roads, and overbridge structure. As the field is already exposed, construction work would be clearly visible from the PRoW. There will be a loss of hedgerows and trees from the ridgeline. In summer months intervening vegetation will screen some construction activity, but a large proportion of the view will remain unchanged from winter. Due to the landform facing the viewpoint and its prominence in the view, construction activity would become the dominant feature or focal point of the view.	Major adverse	Large adverse
8	Trees and hedgerows around the boundary of the field, and nature of topography between the viewpoint and the proposed scheme, will screen construction work, leaving views unaltered from the PRoW.	No change	Neutral
9	Segregation of fields and loss of hedgerows and hedgerow trees will be a noticeable change to the view. Construction activity will be clearly visible across a large proportion of the view. This will include activity associated with the cutting, slip roads, the links to Ashe and nearby properties, and overbridge structure. Due to the landform facing the viewpoint and its prominence in the view, construction activity would become the dominant feature or focal point of the view. The impact will remain similar in summer and winter.	Major adverse	Large adverse

Number	Nature of change	Magnitude of impact	Significance of effect
10	Existing vegetation alongside the A358 will be removed, resulting in increased views of the traffic along the A358. Construction activity will predominantly be on the opposite side of the A358 from this viewpoint and will be associated with widening works. In summer months any vegetation retained alongside the A358 or taller trees to the west will reduce visibility of construction activity. Construction activity will form a noticeable feature or element of the view which is readily apparent to the receptor.	Moderate adverse	Moderate adverse
11	All views towards the construction works will be obscured by landform and existing vegetation.	No change	Neutral
12	Construction activity in small proportion of very distant views located at the current position of the A358 in the view. There would be a small increase in the prominence of the A358 and construction area due to vegetation removal.	Negligible adverse	Slight adverse
13	Removal of hedgerow with trees would open views towards the proposed scheme. A section of an arable field next to A358 would be used to widen the A358. Earthworks, construction vehicles, and activities associated with the Village Road overbridge will be clearly visible, and become the dominant feature, across the view.	Major adverse	Large adverse
14	Trees/hedgerow to the north of the receptor would be removed resulting in views opening to the east. This combined with the flat topography would result in the road and passing traffic becoming a more noticeable feature within the view. Construction activity visible along the highway corridor. Earthworks and construction associated with the Bickenhall Lane overbridge will be noticeable to the north, beyond the existing Bickenhall Lane – the flat nature of the landscape and presence of existing hedgerows limits the influence of this on the overall nature of the view. The impact will remain similar in summer and winter.	Moderate adverse	Moderate adverse
15	Clearance of vegetation along the A358 will expose views towards construction activity and passing traffic. Removal of hedgerow and hedgerow with trees to allow for the reprofiling of ground to create the Village Road overbridge. Changes will be noticeable across the background of the view but will not change the overall balance of features and elements that comprise the existing view. In summer, hedgerow trees along the local road will filter views towards construction activity although it will still be perceptible.	Minor adverse	Slight adverse

Number	Nature of change	Magnitude of impact	Significance of effect
16	Hedgerow with trees will be removed on either side of the existing carriageway opening views towards the construction and passing traffic. Construction associated with Village Road and Bickenhall Lane overbridges will be visible within the background of the view. In summer, intervening hedgerow trees will provide some screening of the proposed scheme. The change will be perceptible but not alter the overall balance of features and elements that comprise the existing view.	Minor adverse	Slight adverse
17	Some views of construction activity will be possible in the background, resulting in very small change to distant elements of the view. In summer, intervening hedgerow trees will provide some screening of the proposed scheme. The change will be perceptible but not alter the overall balance of features and elements that comprise the existing view.	Negligible adverse	Slight adverse
18	Close proximity views towards vegetation clearance opening up views towards vehicles on the A358. Construction activity and earthworks within fields to north of A358 for widening and Stewley Link. Construction activity will become the dominant feature or focal point of the view in summer and winter.	Major adverse	Large adverse
19	Removal of hedgerow and, in some cases, associated trees, to allow for the widening of online section will increase visibility of vehicles on the A358. This will also result in exposed views into the construction site and of any vehicles/activities being used/undertaken during the construction process. Activities associated with the Village Road overbridge will also be visible. The change will take place at the middle to background of the view. This will be perceptible but not alter the overall balance of features and elements that comprise the existing view.	Minor adverse	Slight adverse
20	Construction machinery and earthworks would become a readily apparent feature crossing the background of the view. This will be associated with the A358 widening and the Stewley Link slightly down the slope, visible above the tree line along Venner's Water.	Moderate adverse	Moderate adverse
21	Views of larger construction machinery will be visible between and above trees in small proportions of the background view. Slight increase in prominence of passing vehicles along the A358 in the middle ground of the view due to vegetation removal. The overall nature of the view remains as baseline condition.	Negligible adverse	Slight adverse

Number	Nature of change	Magnitude of impact	Significance of effect
22	Construction activity to widen the A358, create Ashill junction, and the Stewley Link will be clearly visible and become the dominant feature of the view. Over the course of construction, the background view towards trees beyond the A358 will become obscured by earthworks associated with the junction.	Major adverse	Large adverse
23	Hedgerows with trees and tree planting would be removed to alongside the A358 and for the Ashill junction, resulting in exposed views of construction work and vehicles using the A358. The works associated with the junction profiling and overbridge construction will be most prominent, however works associated with Stewley and Broadway Street links will also be visible. Mature field/hedgerow trees between the viewpoint and the A358 will be removed. Activity will take place at a lower elevation to the viewpoint in the middle ground, the foreground of the field and distant views towards Ilton and beyond will remain. The impact will be similar during winter and summer. Overall, construction activity would form a noticeable feature or element of the view which is readily apparent to the receptor.	Moderate adverse	Moderate adverse
24	From ground level, vegetation loss will open views towards construction work activities and vehicles on the A358 within a small part of the background of the view. Views are more likely to affect residents from the top floor windows of houses with construction activity taking place in nearby fields associated with the Ashill junction and Stewley Link. The impact will be similar during winter and summer. Overall, construction activity would form a noticeable feature or element of the view which is readily apparent to the receptor.	Moderate adverse	Moderate adverse
25	Hedgerows and trees along the A358 will be removed to allow space to expand the dual carriageway within the field in the foreground of the view. There will be open views towards the proposed scheme and of vehicles on the A358 for residents, users of the road, and PRoWs. Once established, soil storage areas between the viewpoint and the proposed alignment will screen some construction activity and passing vehicles. Views beyond the A358 to the Blackdown Hills horizon line will remain. The changes will form a noticeable feature or element of the view which is readily apparent to the receptor.	Moderate adverse	Moderate adverse
26	The individual mature oak tree at the centre of the viewpoint photograph will be removed with construction activity extending from the existing A358 to the north side of the tree position. A new entrance to Jordans will be created. There will be open views of construction work and vehicles on the A358, from the PRoW and potential filtered views from the residential property within Jordans park. Impacts will	Major adverse	Large adverse

Number	Nature of change	Magnitude of impact	Significance of effect
	be similar during summer and winter. Construction activity will become the dominant feature focal point of the view.		
27	Construction activity to widen the A358, create Ashill junction, and the Stewley Link will be clearly visible and become the dominant feature of the view. The visibility of traffic on the A358 will be increased. The distant horizon line will remain visible beyond construction activity. Impacts will be similar during summer and winter.	Major adverse	Large adverse
28	Hedgerow with trees alongside the A358 will be removed to widen the corridor resulting in exposed views towards the construction work, passing vehicles on the A358, and any machinery/vehicles being used. The vegetated background of the view beyond will remain. Due to lack of intervening vegetation between the viewpoint and the proposed scheme, the impacts will be similar during summer and winter. The change will be perceptible but not alter the overall balance of features and elements that comprise the existing view.	Minor adverse	Slight adverse
29	Hedgerow with trees alongside the A358 will be removed to widen the corridor resulting in exposed views towards the construction work, passing vehicles on the A358, and any machinery/vehicles being used. The vegetated background of the view beyond will remain. Due to lack of intervening vegetation between the viewpoint and the proposed scheme, the impacts will be similar during summer and winter. The change will be perceptible but not alter the overall balance of features and elements that comprise the existing view.	Minor adverse	Slight adverse
30	Views of larger construction machinery will be visible between intervening trees in small sections across the background view. Slight increase in prominence of passing vehicles along the A358 in the middle ground of the view due to vegetation removal. The overall nature of the view remains as baseline condition.	Negligible adverse	Slight adverse
31	Vegetation to the south of A358 and hedgerow to the north will be removed. Widening and presence of construction activity associated with A358 widening and construction of the Stewley Link will be visible in close proximity within foreground of the view in both summer and winter. Further south there will be more distant views towards construction of the Ashill junction, screened to some extent by landform. Beyond the proposed scheme, views of trees along Venner's Water, the rolling agricultural landscape, and long-distance views will remain. Construction activity will would form a noticeable feature or element of the view which is readily apparent to the receptor.	Moderate adverse	Moderate adverse

Number	Nature of change	Magnitude of impact	Significance of effect
32	The group of three mature field trees will be removed due to construction of the A358 widening, Stewley Link and drainage features (opportunities to retain will be explored through use of Tree Survey and design development in advance of the ES). All roadside vegetation to north of the existing A358 will be removed resulting in loss of positive element of the view and increased prominence of traffic on the A358. Construction of the Stewley Link will take place in the foreground of the view across the fields. Construction activity will become the dominant feature or focal point of the view in both summer and winter.	Major adverse	Large adverse
33	Distant view over and between tree canopies to construction activity in the vicinity of Bickenhall Lane, including vegetation clearance along the A358, slight increase in prominence of passing vehicles, and earthworks associated with the Bickenhall Lane overbridge. Visibility of activity will be reduced slightly in summer months due to leaf cover on intervening trees in the middle ground. From this distance, and with the wider context of the view, construction activity would form a barely noticeable feature or element.	Negligible adverse	Slight adverse
34	Distant view over and between tree canopies to construction activity, including vegetation clearance along the A358 resulting in a slight increase in prominence of passing vehicles. Visibility of activity will be reduced slightly in summer months due to leaf cover on intervening trees in the middle ground. From this distance, and with the wider context of the view, construction activity would form a barely noticeable feature or element.	Negligible adverse	Slight adverse
35	In the background of the view, construction activity will be visible in two locations: the north of Stoke Hill and wood; and at Mattock's Tree Green. Away from these locations, visibility of the proposed scheme will be obscured by intervening landform and vegetation. Due to the elevated nature of the viewpoint and the relative position of the proposed scheme, the impact will be similar during summer and winter months. To the north of Stoke Hill and wood, construction activity will be visible within the distance across the fields associated with the offline section north of Stoke Road. The loss of existing trees and hedgerows will be barely perceptible, however construction movements and areas of broken ground will be perceptible. At Mattock's Tree Green construction activity associated with the new junction and associated earthworks will be perceptible. In combination, the changes to the view will add new elements to a small proportion of the background	Minor adverse	Slight adverse

Number	Nature of change	Magnitude of impact	Significance of effect
	view but not alter the overall balance of features and elements that comprise the existing view.		
36	In the background of the view, construction activity will be visible in two locations: the north of Stoke Hill and wood; and at Mattock's Tree Green. Away from these locations, visibility of the proposed scheme will be obscured by intervening landform and vegetation. Due to the elevated nature of the viewpoint and the relative position of the proposed scheme, the impact will be similar during summer and winter months. To the north of Stoke Hill and wood, construction activity will be visible within the distance across the fields associated with the offline section north of Stoke Road. The loss of existing trees and hedgerows will be barely perceptible; however construction movements and areas of broken ground will be perceptible. At Mattock's Tree Green construction activity associated with the new junction and associated earthworks will be perceptible. In combination, the changes to the view will add new elements to a small proportion of the background view but not alter the overall balance of features and elements that comprise the existing view.	Minor adverse	Slight adverse
37	To the north of Stoke Hill and wood, construction activity will be visible within the distance across the fields associated with the offline section north of Stoke Road. The loss of existing trees and hedgerows will be barely perceptible; however construction movements and areas of broken ground will be perceptible in summer and winter. At Mattock's Tree Green construction activity associated with the new junction and associated earthworks will be perceptible in glimpsed views, more so in the winter than the summer due to vegetation in the foreground. The change to the view will add new elements to a small proportion of the background view but not alter the overall balance of features and elements that comprise the existing view.	Minor adverse	Slight adverse
38	Vegetation removal, construction machinery and earthworks along the A358 further highlight its position within the landscape through increasing the prominence of vehicles on the A358 in the distant view. Construction activity to north of Stoke Hill will be additional change to view where no movement is present in the baseline view, screened to some degree by surrounding vegetation and forms a small proportion of the overall view. The overall nature of the baseline condition would remain.	Negligible adverse	Slight adverse

Number	Nature of change	Magnitude of impact	Significance of effect
39	Construction machinery and earthworks along the A358 further highlight its position within the landscape, with vegetation removal increasing the prominence of vehicles on the A358 in the distant view. The nature of the change will be similar in winter and summer months. The change would be to a small proportion of the overall view and the nature of the baseline condition would remain.	Negligible adverse	Slight adverse
40	Construction machinery and earthworks to north of Stoke Hill will result in a change to the background of the view where there is no movement or vehicles in baseline. Activity would be screened to some degree by surrounding vegetation and forms a small proportion of the overall view. The nature of the change will be similar in winter and summer months. The change will be perceptible but not alter the overall balance of features and elements that comprise the existing view.	Minor adverse	Slight adverse
41	Layers of existing trees and slight variations in topography screen views towards the proposed scheme.	No change	Neutral
42	Vegetation removal along the A358 will increase the visibility of passing traffic. Construction activity will be visible in a small proportion of the view, between foreground hedgerow with trees that provide visual screening. Visibility of construction activity will be reduced by screening effect provided by existing vegetation in the summer months. The change will be perceptible but not alter the overall balance of the features/elements that comprise the existing view.	Minor adverse	Slight adverse
43	Clear view across field towards construction activity within the middle ground of the view beyond the field boundary hedgerow. The photograph illustrates a glimpsed through a field gate which is a glimpsed view for people walking, cycling, or driving along the road. Therefore, the impact will be perceptible but not alter the overall balance of features and elements that comprise the existing view along the road. Distant views towards properties at Henlade and towards the distant hills will remain.	Minor adverse	Slight adverse
44	Top of larger construction machinery visible in a small proportion of the view above existing tree line at location of Village Road overbridge. This will form a barely noticeable feature or element of the view.	Negligible adverse	Slight adverse

Number	Nature of change	Magnitude of impact	Significance of effect
45	View across roadside hedgerow into field containing construction activity associated with A358 widening. Notable impacts include removal of mature hedgerow vegetation within the proposed scheme boundary and presence of earth-moving and vehicles across the view. Removal of vegetation alongside the A358 will increase the visibility of passing traffic. Construction will include the widened A358 and associated drainage features. Construction activity will form a noticeable feature or element of the view which is readily apparent to the receptor.	Moderate adverse	Moderate adverse
View from the road	Construction activity will be visible along the A358 throughout the construction period. This will be a detractor to the existing rural context along the corridor. The removal of vegetation alongside the road corridor will open up views to the wider landscape which, viewed across construction activity, will increase perception of the wider landscape context and create a more varied journey. In most locations, construction activity will be predominantly on a single side of the road, however at junction and overbridge locations the nature of the view will be similar to driving through a construction site with little visual amenity due to activity all around the road corridor. For the majority of the corridor, the change will be a noticeable feature or element of the view which is readily apparent to the receptor.	Moderate adverse	Slight adverse

Operational effects

Landscape

NCA 143, Mid Somerset Hills

- 7.9.28 Impacts from the proposed scheme are described in detail within the LLCA assessments below.
- 7.9.29 For the NCA, the impacts during year 1 will result in a reduction to tranquillity and loss of some features characteristic to NCA (most notably within North Curry Sandstone Ridge LLCA) and addition of overbridge structures along the A358 that are not a feature of the existing character. Impacts to landscape character and features will be limited to the vicinity of the proposed scheme and not impact the wider character. The overall balance and features of the NCA will remain as the baseline condition.
- 7.9.30 This is assessed to be a negligible adverse magnitude of change resulting in a neutral significance of effect at year 1.
- 7.9.31 At year 15, mitigation will be established and further reduce the influence of the proposed scheme on the wider landscape. This is assessed to remain a negligible adverse magnitude of change resulting in a neutral significance of effect at year 1.

Vale of Taunton Deane LLCA

- 7.9.32 Impacts within this LLCA during operation include:
 - New large scale highway infrastructure and associated vehicles within a rural landscape to the east and west of Stoke Road away from the existing A358.
 - Widened A358 between north of the Somerset Progressive School to just west of Griffin Lane.
 - Lighting columns on approach to Nexus roundabout.
 - Change to field/landscape pattern.
 - Changes to landform associated with the cutting around Stoke Road, low embankment for mainline on approach to Nexus 25, creation of flood compensation areas, Stoke Road overbridge, realignment of Cad Brook, and highway drainage features.
 - Presence of the new overbridge structure at Stoke Road.
 - Presence of basin drainage features into the landscape.
 - A more open landscape as a result of loss of mature trees.
 - Proposed vegetation within the environmental mitigation.
 - Reduced tranquillity in the vicinity of the proposed scheme due to additional presence of moving vehicles, presence of urban/highway infrastructure, and presence of road noise.
 - Reduced traffic on the de-trunked A358.
- 7.9.33 Environmental design and mitigation measures within this LLCA include:
 - Reinstatement of hedgerow boundaries where possible.
 - Gap-filling, enhancement, and tree planting within existing hedgerows to strengthen the landscape character of the rural landscape around the proposed scheme.
 - Absence of hedgerow along a length of the proposed scheme to allow views across the wider landscape and adjacent fields.
 - Hedgerow with tree planting to replace mitigate features lost during construction.
 - A riparian corridor around the realigned Cad Brook.
 - Hedgerow planting along the approach to Stoke Road overbridge to recreate the hedge-lined character to the north-east and south-west.
 - Grassland areas around the proposed scheme providing seasonal variation to the landscape and potentially accessible amenity for users of existing and proposed PRoW.
 - Hedgerow, trees, and planting alongside the widened section of the proposed scheme to reinstate the nature of the landscape character along the existing A358.
 - Planting of small woodland blocks to mitigate severance of woodland block north of Griffin Lane, with woodland edge management on the impacted woodland.
- 7.9.34 The proposed scheme will result in the loss of landscape features and addition of uncharacteristic, conspicuous features to the landscape between the east and west of Stoke Road away from the existing A358. The de-trunked A358 would remain and its influence to the north-east of the LCA will be reduced due to the redistribution of traffic on to the new alignment.
- 7.9.35 The widening between north of the Somerset Progressive School to just west of Griffin Lane will increase the prominence of the A358 within the landscape, but

not impact features or change the wider perception of landscape character away from the corridor.

- 7.9.36 The proposed scheme will be a prominent feature in the landscape at year 1 due to the scale of change within the LLCA and immaturity of proposed planting. At year 1 this is assessed to be a major adverse magnitude of change due to large-scale impact to existing landscape character, including fields and the village of Henlade between the existing A358 and new offline section of the proposed scheme, significantly increasing the aural and visual influence of transport features on the landscape. This is assessed to result in a large adverse significance of effect.
- 7.9.37 At year 15 the environmental mitigation will be established and the impacts on landscape character will be reduced within the LLCA, particularly to the east of Stoke Road, and between north of the Somerset Progressive School to just west of Griffin Lane. The mitigation will replace some of the landscape features lost although the maturity of tree planting will not be equivalent to some of the baseline tree stock lost. The influence of the proposed scheme on the wider landscape will be reduced, however the offline section to the west of Stoke Road will still result in adverse impacts on landscape pattern, landform, and tranquility. At year 15 this will result in a moderate adverse magnitude of change due to mitigation treatments helping to reinstate some lost features and partially embed new infrastructure into local landscape character. This is assessed to result in a moderate adverse significance of effect.

North Curry Sandstone Ridge LLCA

- 7.9.38 Impacts within the LLCA during operation include:
 - Creation of a cutting through the ridgeline, and loss of open fields towards ridge.
 - New large scale highway infrastructure and associated vehicles within a rural landscape to the west of the existing A358.
 - Addition of roundabouts and an overbridge structure.
 - New link into Ashe and access to private properties.
 - Reduced traffic on the de-trunked A358.
 - Reduced tranquillity in the vicinity of the proposed scheme due to additional presence of moving vehicles, presence of urban/highway infrastructure, and presence of road noise.
 - Change to field/landscape pattern.
- 7.9.39 Environmental design and mitigation measures within this LLCA include:
 - Reinstatement of hedgerow boundaries where possible.
 - Provision of hedgerow along approaches to the overbridge to recreate a green horizon line.
 - Tree planting within the roundabout to replace lost field/hedgerow trees
 - Scattered tree planting around the slip roads to minimise prominence of cutting slopes and bridge structure.
- 7.9.40 Notable changes will be experienced to the character of this LLCA. To the southwest of the A378, the impacts on this LLCA during year 1 will result in wholesale changes to the character of the area and influence the perception of character – at the end of the ridgeline just after it rises out from Ashe. The design of bridge parapets perpendicular to the road will minimise the notch through the ridgeline

and maintain the perception of higher ground and landform. To the north-east of the existing A358 the impact on this LLCA diminishes quickly due to the presence of intervening vegetation and buildings limiting perceptual impacts, with tranquillity impacts limited by the presence of vehicles on the A358 and A378.

- 7.9.41 The change to landform will result in large-scale damage to existing landscape character and the distinctive ridgeline profile, alongside the addition of new uncharacteristic features due to the change from rural fields to extensive construction activity however limited to the south-western extent of the LLCA. Environmental mitigation will be immature and not function to reduce impacts at year 1.
- 7.9.42 At year 1 the proposed scheme is assessed to be a moderate adverse magnitude of change, based on the loss and extensive damage to existing landscape character of Mattock's Tree Hill, an asset of local cultural value. This is assessed to result in a moderate adverse significance of effect.
- 7.9.43 At year 15 the environmental mitigation will be established and the impacts on landscape character will be reduced within the LLCA, particularly in minimising the perception of the cutting, changes to landform, and appearance of the ridgeline. Hedgerow planting alongside the link into Ashe and local properties will knit them into the landscape in a manner characteristic of the wider landscape. Although the perceptual impacts can be mitigated to some degree, the physical change to topography and presence of large-scale highway infrastructure cannot be mitigated. At year 15 this will result in a moderate adverse magnitude of change due to mitigation treatments helping to reinstate some lost features and partially embed new infrastructure into local landscape character. This is assessed to result in a moderate adverse significance of effect.

Fivehead Vale LLCA

- 7.9.44 Impacts within this LLCA during operation include:
 - Widened A358 corridor.
 - Changes to landform associated with the overbridges at Bickenhall Lane and Village Road (near Capland).
 - Revised local road corridors at Bickenhall Lane and Village Road (near Capland).
 - Presence of overbridge structure at Griffin Lane.
 - A more open landscape as a result of loss of mature trees and roadside vegetation.
 - Proposed vegetation within the environmental mitigation.
- 7.9.45 Environmental design and mitigation measures within this LLCA include:
 - Gap-filling, enhancement, and tree planting within existing hedgerows to strengthen the landscape character of the rural landscape around the proposed scheme.
 - Hedgerow, trees, and planting alongside the widened section of the proposed scheme to reinstate the nature of the landscape character along the A358.
 - Planting of woodland blocks to build on the strategic woodland corridor between fivehead ridge and the Blackdown Hills AONB, including additional woodland/tree planting alongside Bickenhall Wood ancient woodland.
 - Hedgerow with tree planting along approaches to overbridges to minimise impact of earthworks on wider landscape character.

- Woodland edge management on impacted woodland.
- Creation of grassland areas around Village Road overbridge.
- 7.9.46 This LLCA is primarily affected by the road widening elements of the proposed scheme. Widening to the east in the vicinity of Hatch Park will remove an existing bund planted with mature trees, it is anticipated that the outer edge of this tree belt can be retained through design development and construction to limit the influence of the road corridor on the landscape at this location.
- 7.9.47 The embankments and structures associated with Bickenhall Lane and Village Road overbridges are otherwise atypical of this LLCA. At year 1 they will be prominent features in the landscape due to the immaturity of environmental mitigation. However, the impact on the character of the wider landscape will be limited by the screening effects of features in the wider landscape and the presence of the existing A358 within the LLCA.
- 7.9.48 At year 1 the magnitude of change is assessed to be minor adverse due to slight loss or damage to existing landscape character along the A358 and addition of new uncharacteristic features and elements in the form of overbridges and a widened road corridor. This is assessed to result in a slight adverse significance of effect.
- 7.9.49 At year 15 the environmental mitigation will be established and the impacts on landscape character will be reduced within the LLCA, particularly in minimising the perception of the Bickenhall Lane and Village Road overbridges and returning the influence of the A358 corridor on the landscape character closer to the baseline context. Woodland planting and hedgerow improvements will help to strengthen the green infrastructure network through the area, particularly along the woodland corridor between fivehead ridge and the Blackdown Hills AONB. At year 15 this will result in a negligible adverse magnitude of change due to the very minor alteration to the landscape character of the LLCA once mitigation is established. This is assessed to result in a slight adverse significance of effect.

Lower Lias Foothills and Lowland LLCA

- 7.9.50 Impacts within this LLCA during operation include:
 - Widened A358 corridor.
 - Changes to landform associated with the overbridge and slip roads at Ashill junction.
 - Change to extent, and location of local road corridors and vehicle movements through the landscape for new links at Stewley and Broadway Street.
 - A more open landscape as a result of loss of mature trees and roadside vegetation.
 - Lighting on the approach to Southfields roundabout.
 - Proposed vegetation within the environmental mitigation.
- 7.9.51 Environmental design and mitigation measures within this LLCA include:
 - Gap-filling, enhancement, and tree planting within existing hedgerows to strengthen the landscape character of the rural landscape around the proposed scheme, including towards Venner's Water.
 - Hedgerow, trees, and planting alongside the widened section of the proposed scheme to reinstate the nature of the landscape character along the A358.

- Hedgerow planting on both sides of proposed local links to recreate the rural lane character of existing roads away from the A358.
- Planting of woodland blocks to link with the Ashill Wood/Every's Copse ancient woodland and elsewhere to break-up the linear appearance of the A358 from the wider landscape.
- Scattered tree planting around the Ashill overbridge to minimise impact of earthworks and vehicles on wider landscape character.
- 7.9.52 The A358 widening will increase the influence of the road corridor on landscape character, with the divergence of the north and southbound carriageways west of Jordans increasing the footprint of the A358. The local road links at Stewley and Broadway street will contribute further to the creation of a wider corridor of transport infrastructure through the LLCA a corridor of through traffic and a corridor of local lanes. This will reduce the coherence and connectivity of landscape elements of the LLCA to the east and west of the A358 and result in some landlocked parcels of land that have been utilised for environmental mitigation.
- 7.9.53 At year 1 the magnitude of change is assessed to be moderate adverse due to the loss of vegetation along the corridor and addition of two links and an uncharacteristic junction with slip road and overbridge which increases the influence of transport infrastructure on landscape character in this area, as well as reduce the character of connectivity within the landscape. This is assessed to result in a moderate adverse significance of effect.
- 7.9.54 At year 15 the environmental mitigation will be established and the impacts on landscape character will be reduced within the LLCA, particularly in minimising the perception of the Ashill junction and presence of adjacent strategic and local road corridors. The Ashill junction and widened A358 will continue to have an impact on landscape character, however the presence of established hedgerows and combination of planting along both local links and the A358 will reduce the prominence and perception of the corridor away from Ashill junction returning similar to the baseline context. Woodland planting and hedgerow improvements will help to strengthen the green infrastructure network through the area, particularly around Ashill Wood/Every's Copse ancient woodland.
- 7.9.55 At year 15 this will result in a minor adverse magnitude of change due to continued absence of mature trees removed not fully mitigated by their 15-year-old replacements, and presence of the uncharacteristic earthworks and overbridge at Ashill junction. This is assessed to result in a slight adverse significance of effect.

<u>Visual</u>

7.9.56 A description of the preliminary nature of change and significance of effect during year 1 of operation from the representative viewpoint locations is provided in Table 7-10 (locations are shown on Figure 7.4 ZTV and Proposed Viewpoints).

Table 7-10 Representative viewpoints year 1

Number	Nature of change	Magnitude of impact	Significance of effect
1	Demolished property on Stoke Road absent from skyline, replaced with realignment of Stoke Road and associated overbridge at lower elevation. View of vehicles travelling along the A358 emerging from the cutting and moving across the view. Agricultural field replaced with species-rich grassland in the foreground of the view offering continual ground cover and seasonal diversity. Proposed hedgerow with tree planting will be immature but will reinstate the landscape pattern removed during constriction. The views of passing traffic will add movement and result in a change in perception from what was previously a tranquil rural view. Although the proposed scheme will not become the dominant feature of the view from this receptor, it will form a noticeable feature that is readily apparent.	Major adverse	Large adverse
2	The presence of the A358 and associated vehicles will be readily apparent across the view in the middle-ground. Where previously mature field trees were located within the landscape there will be views west along the A358 towards the connection to the Nexus 25 roundabout. Hedgerows and hedgerows with trees will be planted in the vicinity of the A358 and along the realigned River Ding, existing hedgerows away from the A358 will be enhanced through gap filling, tree planting, or widening. The movement of traffic will add a new prominent feature to the view within a relatively static landscape. The impacts will remain similar in both summer and winter. At night moving vehicles between the Nexus 25 roundabout and the Stoke Road overbridge, and the lighting along the A358 on approach to Nexus roundabout, will result in additional lighting within a previously dark area of the landscape. Although the view of the A358 and associated vehicles will be prominent features and adversely change the nature of the view, the long distance and panoramic views will still be the dominant feature of the view.	Moderate adverse	Large adverse
3	Passing high-sided vehicles visible in a small part of the view above existing vegetation above existing hedgerows. This will be at a distance and scale that it would form a perceptible feature of the view. This impact will be further reduced in summer months with intervening trees and hedgerows in leaf.	Minor adverse	Slight adverse
4	Change in nature of view from rural fields to close proximity views of large-scale road corridor and passing vehicles, on transition from cutting to low embankment, within the field beyond the first hedgerow in the view. Absence of mature trees from the view in adjacent or nearby fields will be noticeable. Views towards Stoke Hill and the Blackdown Hills AONB will remain in the middle ground and background. The impact will reduce to some degree in summer months due to screening by hedgerows, however the presence of the road and movement of vehicles will still be a prominent feature for much of the view. Due to the nature of change and proximity to the receptor, the	Major adverse	Very large adverse

Number	Nature of change	Magnitude of impact	Significance of effect
	proposed scheme will become the focal point of the view and detract from the amenity of more distant views. Visibility of the proposed scheme to the west will be reduced in summer months but remain clearly visible to the east.		
5	The proposed scheme infrastructure and vehicle movements will be visible across the view, closest just beyond Glebe Cottages and further away towards and past Stoke Road. This will be further away but more prominent in the view than the existing A358 due to the scale and lack of screening. In summer months, the impact will remain similar to the nature of the elevated view and position of the proposed scheme within the landscape. Existing vegetation and landform will screen views south towards the proposed scheme Mattock's Tree Green junction in summer and winter. At night, the movement of lights on vehicles along the proposed scheme will be a noticeable addition to the view. Although the proposed scheme will be a noticeable feature, views of passing vehicles are a feature of the baseline, and the long distance and panoramic views will still be the dominant feature of the view.	Moderate adverse	Moderate adverse
6	The proposed scheme and vehicles travelling along it will be clearly visible in place of agricultural fields in the middle ground of the view, increasing activity and movement. The prominence of vehicles in the view will be greater compared to the baseline. In summer months, the impact will remain similar due to the nature of the elevated view and position of the proposed scheme within the landscape. At night the position of passing vehicles will be slightly closer to the viewpoint, however the overall nature of the view at night will be similar to baseline. Existing vegetation and landform will screen views east towards the proposed scheme at Mattock's Tree Green junction. Although the proposed scheme will be a perceptible change, it will not alter the overall balance of features and elements that comprise the existing view.	Moderate adverse	Moderate adverse
7	The central field within the middle ground of the view will include the cutting, slip roads, and overbridge structure with clear views of passing vehicles, including over the higher ground. The design of the bridge structure, with the abutments parallel to the road allows earthworks to minimis the visibility of the structure and the cutting. In summer months intervening vegetation will screen some infrastructure and vehicle movements, but a large proportion of the proposed scheme will remain unchanged from winter. At night, the lights of passing vehicles will be a notable new addition to the view. Due to the landform facing the viewpoint and its prominence in the view, the proposed scheme would become the dominant feature or focal point of the view.	Major adverse	Large adverse
8	Trees and hedgerows around the boundary of the field, and nature of topography between the viewpoint and the proposed scheme, will screen views towards the proposed scheme, leaving views unaltered from the PRoW.	No change	Neutral

Number	Nature of change	Magnitude of impact	Significance of effect
9	Segregation of fields and loss of hedgerows and hedgerow trees will be a noticeable change to the view. The proposed scheme, cuttings, slip roads, overbridge, access to local properties, and vehicles will be visible across a large proportion of the view. Due to the landform facing the viewpoint and its prominence in the view, the change will become the dominant feature or focal point of the view. The impact will remain similar in summer and winter.	Major adverse	Large adverse
10	As a result of vegetation removed along the A358 and unestablished environmental mitigation, there will be increased views of the traffic along the A358. The proposed scheme infrastructure will have a minimal impact on the perception of the view. In summer months any vegetation retained alongside the A358 or taller trees to the west will reduce visibility of vehicles on the A358. The increased visibility of vehicles will be perceptible but not alter the overall balance of features and elements that comprise the existing view.	Minor adverse	Slight adverse
11	All views towards scheme will be obscured by landform and existing vegetation.	No change	Neutral
12	Presence of widened road without established environmental mitigation allowing views of passing traffic within small proportion of very distant views located at the current position of the A358 in the view. The change in view between summer and winter will be barely perceptible at the distance between the viewpoint and the section of the proposed scheme that will be visible. This change will be a barely noticeable feature or element of the view.	Negligible adverse	Slight adverse
13	The widening of the A358 into the field will result in clearly visible views of passing vehicles due to absence of established roadside vegetation. The embankment and structure associated with the Village Road overbridge will be clearly visible, and become a prominent feature, across the view. Vehicles crossing the bridge will be visible against the skyline, although this impact will be intermittent as the overbridge will carry local traffic. Due to the lack of intervening vegetation the impacts will be equivalent in summer, winter, and at night. At night the lights on passing vehicles will be clearly visible moving across the view. The proposed scheme will become the dominant feature of the view.	Major adverse	Large adverse
14	The A358 and passing vehicles will be a more noticeable feature within the view. The Bickenhall Lane overbridge will be noticeable to the north, beyond the existing Bickenhall Lane – the flat nature of the landscape and presence of existing hedgerows limits the influence of this on the overall nature of the view. The impact will remain similar in summer, winter, and at night. The nature of change will be equivalent in summer and winter. The increased prominence of the A358 will be a noticeable element of the view which is readily apparent to the receptor, however the overall nature of the baseline view will remain.	Moderate adverse	Moderate adverse

Number	Nature of change	Magnitude of impact	Significance of effect
15	The absence of established vegetation along the A358 will expose views towards passing vehicles. The Village Road overbridge will be visible along the road corridor and filtered by hedgerow trees. The design of the structure, with abutments parallel to the A358, will result in screening of vehicles on the A358 for a small section of the view. Changes will be noticeable across the background of the view but will not change the overall balance of features and elements that comprise the existing view. In summer, hedgerow trees along the local road will filter views towards the A358 and overbridge although they will still be perceptible.	Minor adverse	Slight adverse
16	Absence of vegetation alongside the A358 will increase the prominence of passing vehicles in the background of the view. The Village Road overbridge and Bickenhall Lane overbridge will be visible within the background of the view, although barely perceptible at this distance and orientation. In summer, intervening hedgerow trees will provide some screening of the overbridges and A358. The change will be perceptible but not alter the overall balance of features and elements that comprise the existing view.	Minor adverse	Slight adverse
17	The absence of established vegetation alongside the A358 will result in very small change to distant elements of the view. In summer, intervening hedgerow trees will provide some screening of the proposed scheme. The change will be barely noticeable and not alter the overall balance of features and elements that comprise the existing view.	Negligible adverse	Slight adverse
18	Close proximity views towards vehicles travelling on the widened A358. The presence of the Stewley Link will add further change to the view. Views towards strategic and local road infrastructure will become the dominant feature or focal point of the view in summer and winter.	Major adverse	Large adverse
19	Absence of established vegetation alongside the A358 will increase visibility of vehicles in the middle ground of the view. The Village Road overbridge will also be visible in the background although, due to the elevation of the viewpoint, set against the wider landscape beyond and not be a prominent feature of the view. The design of the overbridge structure, with abutments parallel to the A358 means that earthworks, rather than structural elements, will be facing the viewpoint resulting in a more natural appearance. This will be perceptible but not alter the overall balance of features and elements that comprise the existing view in both summer and winter.	Minor adverse	Slight adverse
20	The widened A358 and vehicles travelling along it will be more prominent than the baseline, but in an equivalent position and proportion of the view. The presence of the Stewley Link will also be notable change, slightly down the slope, visible above the tree line along Venner's Water. Due to the position on rising ground above the tree line, the change will be equivalent in both summer and winter.	Moderate adverse	Moderate adverse

Number	Nature of change	Magnitude of impact	Significance of effect
21	The absence of vegetation alongside the A358 will result in a slight increase in prominence of passing vehicles in the middle ground of the view. However, the overall nature of the view remains as baseline condition in both summer and winter.	Negligible adverse	Slight adverse
22	The Ashill junction, and the Stewley Link (with associated vehicles and signage) will be clearly visible and become the dominant feature of the view. The background view towards vehicles on the A358 and trees beyond it will be obscured by earthworks associated with the junction and slip roads. Vehicles using the junction will appear visible on the skyline above the viewpoint elevation. The impacts will be equivalent during summer and winter.	Major adverse	Large adverse
23	The absence of established vegetation around the junction will result in clear views towards vehicles using the A358, Ashill junction, Stewley and Broadway Street link. This will be at a lower elevation to the viewpoint in the middle ground and not against the skyline, the foreground view of the field and distant views towards llton and beyond will remain. The design of the overbridge structure, with the abutments perpendicular to the road, will minimise the visual perception of this as earthworks will screen much of the structure from this viewpoint. The impact will be similar during winter and summer. Overall, the change will form a noticeable feature or element of the view which is readily apparent to the receptor in both summer and winter.	Moderate adverse	Moderate adverse
24	From ground level, vehicles on the A358, slip roads, and overbridge will be visible within a small part of the background of the view. From the top floor windows of houses the middle ground view will include the Ashill junction and Stewley Link. The impact will be similar during winter and summer. Overall, the proposed scheme will form a noticeable feature or element of the view which is readily apparent to the receptor.	Moderate adverse	Moderate adverse
25	There will be open views towards the widened A358 in closer proximity to the viewpoint, including clear views of vehicles on the A358, for residents, users of the road, and PRoWs. Views beyond the A358 to the Blackdown Hills horizon line will remain. The field between Cad Road and A358 will be established with species rich grassland providing some seasonal variation and natural movement within the foreground of the view. The changes will form a noticeable feature or element of the view which is readily apparent to the receptor.	Moderate adverse	Moderate adverse
26	The individual mature oak tree at the centre of the viewpoint photograph will be notably absent from the view. There will be open views towards vehicles on the A358 from the PRoW and filtered views from the residential property within Jordans. Impacts will be similar during summer and winter, except from within the property in Jordans with parkland trees and vegetation screening views in summer. The field between the viewpoint and the A358 will be established with species rich grassland providing some seasonal variation	Major adverse	Large adverse

Number	Nature of change	Magnitude of impact	Significance of effect
	and natural movement within the foreground of the view – reflecting more parkland characteristics than the existing agricultural field. The prominence of passing vehicles will become the dominant feature focal point of the view.		
27	The widened A358, Ashill junction overbridge, earthworks, and slip roads, the Stewley Link, and associated vehicle movements will be clearly visible and become the dominant feature of the foreground and middle ground view in place of the agricultural field. The distant horizon line will remain visible beyond the Ashill junction. Impacts will be similar during summer and winter.	Major adverse	Large adverse
28	Absence of established vegetation resulting in exposed views towards passing vehicles on the A358 and Stewley and Broadway Street link. The vegetated background of the view beyond will remain. Due to lack of intervening vegetation between the viewpoint and the proposed scheme, the impacts will be similar during summer and winter. The change will be perceptible but not alter the overall balance of features and elements that comprise the existing view.	Minor adverse	Slight adverse
29	Absence of established vegetation resulting in exposed views towards passing vehicles on the A358 and Stewley and Broadway Street link. The vegetated background of the view beyond will remain. Due to lack of intervening vegetation between the viewpoint and the proposed scheme, the impacts will be similar during summer and winter. The change will be perceptible but not alter the overall balance of features and elements that comprise the existing view.	Minor adverse	Slight adverse
30	Slight increase in prominence of passing vehicles along the A358 in the middle ground of the view due to absence of established vegetation. The overall nature of the view remains as baseline condition.	Negligible adverse	Slight adverse
31	The A358 will be widened and form a greater presence in the view when viewed from higher ground, the Stewley Link will be visible in the field beyond. To the south-east there will be more distant views towards the Ashill junction, screened to some extent by landform. All aspects of the proposed scheme will remain as visible in both summer and winter. Beyond the proposed scheme, views of trees along Venner's Water, the rolling agricultural landscape, and long- distance views will remain. The increased prominence of highway and local road infrastructure with associated vehicle movements will form noticeable features of the view that are readily apparent to the receptor.	Moderate adverse	Moderate adverse
32	The absence of three mature field trees and vegetation alongside the A358 will be notable. The widened A358 and Stewley Link with associated vehicle movements will become the dominant feature of the view. This will be the case in both summer and winter.	Major adverse	Large adverse

Number	Nature of change	Magnitude of impact	Significance of effect
33	Distant view over and between tree canopies towards the A358, with slight increase in prominence of passing vehicles due to absence of established roadside vegetation. The presence of the Bickenhall Lane overbridge will not result in a discernible change to the view. Visibility of vehicles will be reduced slightly in summer months due to leaf cover on intervening trees in the middle ground. From this distance, and with the wider context of the view, the proposed scheme will form a barely noticeable feature or element.	Negligible adverse	Slight adverse
34	Distant view over and between tree canopies towards A358, absence of established roadside vegetation resulting in a slight increase in prominence of passing vehicles. Visibility of vehicles will be reduced slightly in summer months due to leaf cover on intervening trees in the middle ground. From this distance, and with the wider context of the view, construction activity would form a barely noticeable feature or element.	Negligible adverse	Slight adverse
35	In the background of the view, the proposed scheme will be visible in two locations: the north of Stoke Hill and wood; and at Mattock's Tree Green. Away from these locations, visibility of the proposed scheme will be obscured by intervening landform and vegetation. Due to the elevated nature of the viewpoint and the relative position of the proposed scheme, the impact will be similar during summer and winter months. To the north of Stoke Hill and wood, vehicles will be visible in the distance moving across the fields associated with the offline section north of Stoke Road. At night, the lighting on approach to Nexus roundabout will be a barely perceptible addition to the view, however the lights of vehicles moving along the A358 will be an additional element. This will be a perceptible change to the view. At Mattock's Tree Green the presence of the with the new junction and associated earthworks will be perceptible. At night, the lights of vehicles at the junction will be visible, the prominence of this will be greater but in an equivalent position to the existing lighting at the A358/A378 junction. Passing traffic on the A358 in this location is a feature of the baseline view in both summer and winter and the change will be barely perceptible to the casual observer. In combination, the changes to the view will add new elements to a small proportion of the background view but not alter the overall balance of features and elements that comprise the existing view.	Minor adverse	Slight adverse
36	In the background of the view, the proposed scheme will be visible in two locations: the north of Stoke Hill and wood; and at Mattock's Tree Green. Away from these locations, visibility of the proposed scheme will be obscured by intervening landform and vegetation. Due to the elevated nature of the viewpoint and the relative position of the proposed scheme, the impact will be similar during summer and winter months.	Minor adverse	Slight adverse

Number	Nature of change	Magnitude of impact	Significance of effect
	To the north of Stoke Hill and wood, vehicles will be visible in the distance moving across the fields associated with the offline section north of Stoke Road. At night, the lighting on approach to Nexus roundabout will be a barely perceptible addition to the view, however the lights of vehicles moving along the A358 will be an additional element. This will be a perceptible change to the view. At Mattock's Tree Green the presence of the with the new junction and associated earthworks will be perceptible. At night, the lights of vehicles at the junction will be visible, the prominence of this will be greater but in an equivalent position to the existing lighting at the A358/A378 junction. Passing traffic on the A358 in this location is a feature of the baseline view in both summer and winter and the change will be barely perceptible to the casual observer. In combination, the changes to the view will add new elements to a small proportion of the background view but not alter the overall balance of features and elements that comprise the existing view.		
37	In the background of the view, the proposed scheme will be visible in two locations: the north of Stoke Hill and wood; and at Mattock's Tree Green. Away from these locations, visibility of the proposed scheme will be obscured by intervening landform and vegetation. Due to the elevated nature of the viewpoint and the relative position of the proposed scheme, the impact will be similar during summer and winter months. To the north of Stoke Hill and wood, vehicles will be visible in the distance moving across the fields associated with the offline section north of Stoke Road. At night, the lighting on approach to Nexus roundabout will be a barely perceptible addition to the view, however the lights of vehicles moving along the A358 will be an additional element. This will be a perceptible change to the view. At Mattock's Tree Green the presence of the with the new junction and associated vehicle movements will be perceptible in glimpsed views, more so in the winter than the summer due to vegetation in the foreground. The change to the view will add new elements to a small proportion of the background view but not alter the overall balance of features and elements that comprise the existing view.	Minor adverse	Slight adverse
38	Absence of established vegetation along the A358 further highlights its position within the landscape through increasing the prominence of vehicles in the distant view. Visibility of vehicles on the offline section activity, to the north of Stoke Hill, will be an additional change where no movement is present in the baseline view. However, activity will be screened to some degree by surrounding vegetation and only forms a small proportion of the overall view. The overall nature of the baseline condition would remain in summer and winter.	Negligible adverse	Slight adverse

Number	Nature of change	Magnitude of impact	Significance of effect
39	Absence of established vegetation along the A358 further highlight its position within the landscape, increasing the prominence of vehicles on the A358 in the distant view. The nature of the change will be similar in winter and summer months. The change would be to a small proportion of the overall view and the nature of the baseline condition would remain.	Negligible adverse	Slight adverse
40	Presence of passing vehicles in the view along the A358 to north of Stoke Hill will result in a change to the background of the view where there is no movement or vehicles in baseline. Activity would be screened to some degree by surrounding vegetation and forms a small proportion of the overall view. The nature of the change will be similar in winter and summer months. The change will be perceptible but not alter the overall balance of features and elements that comprise the existing view.	Minor adverse	Slight adverse
41	Layers of existing trees and slight variations in topography screen views towards the proposed scheme.	No change	Neutral
42	Vegetation removal along the A358 will increase the visibility of passing traffic. Construction activity will be visible in a small proportion of the view, between foreground hedgerow with trees that provide visual screening. Visibility of construction activity will be reduced by screening effect provided by existing vegetation in the summer months. The change will be perceptible but not alter the overall balance of the features/elements that comprise the existing view.	Minor adverse	Slight adverse
43	Clear view across field towards traffic on the A358 north of Stoke Road within the middle ground of the view beyond the field boundary hedgerow during summer and winter. The photograph illustrates a glimpsed through a field gate which is a glimpsed view for people walking, cycling, or driving along the road. Therefore, the impact will be perceptible but not alter the overall balance of features and elements that comprise the existing view along the road. Distant views towards properties at Henlade and towards the distant hills will remain.	Minor adverse	Slight adverse
44	Views towards the proposed scheme will be screened by intervening vegetation in both summer and winter.	No change	Neutral
45	View across roadside hedgerow into field containing A358 widening. Absence of mature hedgerow vegetation and vegetation alongside the A358 will increase the visibility of passing traffic and be a loss of existing elements of the view. This will form a noticeable feature or element of the view which is readily apparent to the receptor in both summer and winter.	Moderate adverse	Moderate adverse
View from the road	The widened A358 corridor will be of more consistent appearance along the length of road between Nexus roundabout and Southfields roundabout. The absence of established vegetation alongside the road corridor will allow views to the wider landscape which, will increase perception of the wider landscape context and create a more varied journey.	Moderate beneficial	Slight beneficial

Number	Nature of change	Magnitude of impact	Significance of effect
	The presence of Stoke Road overbridge, Mattock's Tree Green junction, Bickenhall Lane overbridge, Village Road overbridge, and Ashill junction will add new more urban features to the journey. The design of bridge structures, with abutments parallel to the A358 will result in a common appearance to these structures.		
	For the majority of the corridor, the change will be a noticeable feature or element of the view which is readily apparent to the receptor. The increased availability of views across the wider landscape will be beneficial to users.		

7.9.57 A description of the preliminary sensitivity, nature of change and significance of effect during year 15 from the representative viewpoint locations is provided in Table 7-11. To avoid repetition, the descriptions provided under 'nature of change' relate to changes between year 1 and year 15, during which the establishment of environmental mitigation measures occurs. The magnitude of impact and significance of effect reports on the change between baseline and year 15.

Number	Nature of change	Magnitude of impact	Significance of effect
1	Established hedgerow with tree planting alongside the top of the A358 cutting, and within land to the south, will screen and filter the appearance of the infrastructure and integrate it with the landscape. High-sided vehicles will still be visible passing across the view, more prominent in winter than summer months. The proposed scheme will result in a noticeable feature of the view which is readily apparent to the receptor.	Moderate adverse	Large adverse
2	Planted hedgerows with trees along the A358 and surrounding land will reinstate the treed appearance of the land west of Stoke Road, filter visibility of the proposed scheme in some elements of the view and reduce the prominence of passing vehicles. Filtered views of passing vehicles will still be visible beyond or between planting, with the movement of vehicles across the view remaining noticeable although less-so during summer months. At night, mitigation planting will reduce the prominence of lighting on approach to the Nexus roundabout and of vehicles on the A358.	Moderate adverse	Moderate adverse
3	Hedgerow and tree planting will be established and reduce visibility of passing traffic, although filtered views will remain in winter months. This will be a barely noticeable element of the view from this receptor.	Negligible adverse	Neutral

Table 7-11 Representative viewpoints year 15

Number	Nature of change	Magnitude of impact	Significance of effect
4	Hedgerow enhancements to field boundaries and hedgerow with tree planting along the mainline will work to screen views towards passing traffic. There will be filtered views of passing vehicles in winter months, becoming less apparent in summer months. The prominence of the proposed scheme in the view will be much reduced from year 1, although still a readily apparent feature. The presence of Stoke Hill and the Blackdown Hills continue to be a key feature of the view.	Moderate adverse	Moderate adverse
5	Established scrub and hedgerows with trees to the north and north-east of the proposed scheme will screen the infrastructure and some of the vehicles using it. Established mitigation will reduce the prominence and visibility of vehicle lights moving within the view. Screening of passing vehicles will be more effective in summer than winter. The proposed scheme will be perceptible but not alter the overall balance of features and elements that comprise the existing view.	Minor adverse	Slight adverse
6	The hedgerows with trees planting will screen views towards the infrastructure and some of the vehicles. High-sided vehicles will be visible between tree planting. The nature of change in summer and winter will be similar, with visibility of vehicles being of equivalent prominence to the baseline view.	Negligible adverse	Slight adverse
7	Scrub planting and hedgerows with trees will obscure the physical change to landform and screen views of passing traffic. Although high-sided vehicles will still be visible, this is similar to the baseline view. The abutments on the overbridge being parallel to the A358 allows replacement hedgerow planting, to replace the hedgerow lost during construction, to extend across a substantial portion of the view. The wooded characteristic will be a visual change from the baseline view of rising agricultural field; however, it will extend the wooded appearance between Ashe and the north- east of the existing A358.	Minor adverse	Slight adverse
8	As per year 1.	No change	Neutral
9	Established hedgerow planting along the link to local properties, hedgerows with trees alongside the slip road, and scrub planting to the junction will minimise the presence of the proposed scheme infrastructure. There would be filtered views of vehicles over the hedgerows, however, some views of vehicles passing along slip- roads with greater prominence in winter than summer. There will be a greater presence of vegetation within the view than the baseline condition. The change will be perceptible but not alter the overall balance of features and elements that comprise the existing view	Minor adverse	Slight adverse

Number	Nature of change	Magnitude of impact	Significance of effect
10	A belt of woodland planting alongside the widened A358 will effectively restore the baseline condition, although the footprint of the A358 will appear slightly wider in the view. Any difference from the baseline view in the visibility of vehicles on the A358 in both summer and winter, will be barely noticeable.	Negligible adverse	Neutral
11	As per year 1.	No change	Neutral
12	Established environmental mitigation measures, including hedgerow and hedgerow with tree planting, will restore appearance of A358 to that of the baseline condition in both summer and winter.	No change	Neutral
13	Established hedgerow planting along the approaches to the Village Road overbridge will soften its appearance against the skyline. The structure design, with abutments parallel to the A358, will minimise the overbridge appearance in the view and allow hedgerow planting on approach to get as close to the A358 as possible. The tops of vehicles crossing the A358 will be visible beyond the hedgerow. A hedgerow with trees along the A358 will reinstate much of the baseline view as it relates to the passing traffic. The nature of change will be equivalent in summer and winter. The proposed scheme will be perceptible but not alter the overall balance of features and elements that comprise the existing view.	Minor adverse	Slight adverse
14	The structure design, with abutments parallel to the A358, will minimise the Bickenhall Lane overbridge appearance in the view and allow hedgerow planting on approach to get as close to the A358 as possible. Established environmental mitigation measures of hedgerow and tree planting alongside the A358 and Bickenhall Lane will restore much of the view to that of the baseline condition. The nature of change will be equivalent in summer and winter.	Negligible adverse	Neutral
15	Hedgerow and hedgerow with tree planting alongside the A358, approach to Village Road overbridge, and adjacent field boundary will reinstate much of the baseline view. The nature of change will equivalent in summer and winter. The presence of the overbridge and embankments with the realigned local road will be a perceptible change but not alter the overall balance and nature of the view.	Minor adverse	Slight adverse
16	Established environmental mitigation measures will restore the appearance of A358 to that of the baseline condition. Hedgerow planting on approach to the overbridges will integrate them within the view. There will be a barely noticeable change to the view from this location in both summer and winter.	Negligible adverse	Neutral
17	Established environmental mitigation alongside the A358 will restore the baseline condition in summer and winter.	No change	Neutral

Number	Nature of change	Magnitude of impact	Significance of effect
18	Established environmental mitigation measures of planting alongside both the A358 and Stewley Link will contain and filtering views towards traffic on A358. However the scale of change and closer proximity of passing vehicles will remain readily apparent in both summer and winter.	Moderate adverse	Moderate adverse
19	Hedgerow and hedgerow with trees planting will reinstate the baseline view towards the A358 and filter views of cars passing across the overbridge. The nature of change will be equivalent in summer and winter.	Negligible adverse	Slight adverse
20	Hedgerow planting with trees alongside both the Stewley Link and A358 will reduce the prominence of passing traffic. Although high-sided vehicles will remain visible, they will be filtered by tree planting which will be an improvement on the baseline view. Hedgerow enhancement perpendicular to the road will strengthen the landscape pattern and reduce the linearity of the proposed scheme passing across the view. In winter months there will be filtered views towards passing traffic that will be perceptibly slightly more prominent than the baseline condition. The scale of the change from an agricultural field will be notable, although by year 15 the mitigation will integrate the proposed scheme into the view.	Minor adverse	Slight adverse
21	Environmental mitigation measures alongside the A358 will restore the baseline view in both summer and winter.	No change	Neutral
22	The local road from Rapps to the Ashill junction will remain clearly visible, although hedgerow with tree planting will act in the foreground to screen views towards the junction beyond. These filtered views will be further mitigated through tree and hedgerow planting on earthworks. Woodland planting to the north of the junction will screen views towards Stewley Link. The mitigation measures will be effective in mitigating or screening views of the Ashill junction and associated traffic, although the nature of the view will change from agricultural fields to a more wooded character combined with infrastructure associated with the Ashill junction. In winter months, filtered views towards vehicles using the junction will be more prevalent.	Minor adverse	Slight adverse
23	Established environmental mitigation in the form of woodland planting between and along the Stewley and Broadway Street link, alongside hedgerow planting on approach to the overbridge and scrub planting around the junction will mitigate views towards the proposed scheme. The context of the view would be altered with slightly more enclosed views in the middle ground and a more wooded appearance. Although there will be changes to the view, the nature of the view will be equivalent to the baseline context in both summer and winter.	Negligible adverse	Slight adverse

Number	Nature of change	Magnitude of impact	Significance of effect
24	Mitigation planting around the junction and A358 will have established, resulting in filtered views towards vehicles. The most notable change will be local traffic crossing the Ashill junction overbridge and at the top of slip roads in the middle ground when viewed from upper storey of properties, this will be more notable in the winter months.	Minor adverse	Slight adverse
25	An established woodland block will filter views to the north, and the hedgerow alongside Cad Road will be enhanced to include tree planting, filtering views towards the A358. Alongside the A358, hedgerow with tree planting will be established reinstating the screening effect of the baseline condition in both summer and winter. The changes associated with the A358 infrastructure will form a barely noticeable element of the view.	Negligible adverse	Neutral
26	Hedgerows with trees alongside the A358 will be established and restore the filtered views of passing traffic in both summer and winter. However, the traffic will be at a closer proximity to the viewpoint, due to the proximity and the absence of the prominent mature tree, this will be a perceptible change but not alter the overall balance of the baseline view.	Minor adverse	Slight adverse
27	The mitigation planting will have established, including woodland, trees, and hedgerows in the foreground around and alongside the Stewley Link. This will effectively screen views towards the junction from properties on Park Barn Lane but foreshorten and lose the more open baseline view, this is mitigated to some degree through the use of grassland with scattered trees. From the PRoW woodland planting to the north of the junction will reinstate the nature of views towards passing vehicles, however the embankments position the vehicles above the view and enclose the view. This will result in a noticeable feature which is readily apparent to the receptor.	Moderate adverse	Moderate adverse
28	Established mitigation planting along the Stewley and Broadway Street link and the A358 will have established aiding in screening the road from view and restoring much of the baseline condition in both summer and winter.	Negligible adverse	Neutral
29	Established mitigation planting along the Stewley and Broadway Street link and the A358 will have established aiding in screening the road from view and restoring much of the baseline condition in both summer and winter.	No change	Neutral
30	Mitigation planting will have established restoring the nature of the baseline view from this receptor in both summer and winter.	No change	Neutral

Number	Nature of change	Magnitude of impact	Significance of effect
31	Planting of hedgerows with trees will screen the view of the infrastructure itself, however clear views of passing traffic will remain. This is equivalent to the baseline view. The hedgerows with trees will be a new feature to the view and increase the tree coverage when compared to the baseline. The design will need consideration in detailing to ensure distant views from this viewpoint are not obstructed. In winter months, there will be a discernible increase in the prominence of infrastructure and passing traffic.	Negligible adverse	Slight adverse
32	Established environmental mitigation measures will include hedgerow with tree planting alongside the Stewley Link and the A358. This will restore the appearance of traffic on the A358 to the baseline view and integrate the Stewley Link with the character of the surrounding landscape. the absence of the three mature field trees would not be fully mitigated. The nature of change will be equivalent in summer and winter, resulting in a noticeable change to the view which is readily apparent due to the proximity and nature of change.	Moderate adverse	Moderate adverse
33	Established environmental mitigation in the form of hedgerows and hedgerows with trees alongside the A358 and Bickenhall Lane will restore the nature of the baseline view in both summer and winter.	No change	Neutral
34	Established environmental mitigation in the form of hedgerows and hedgerows with trees alongside the A358 will restore the nature of the baseline view in both summer and winter.	No change	Neutral
35	To the north of Stoke Hill and wood, established environmental mitigation will partially screen vehicles in the distance moving across the fields associated with the offline section north of Stoke Road. At night, established hedgerows and trees along the A358 will screen vehicle lighting, and a woodland block will screen views of some lighting on approach to Nexus roundabout. Vehicles passing in the distance on the A358 is a feature of the wider baseline view and the proposed scheme will result in an incremental, but perceptible, change to that aspect which will be more prominent in winter than summer.	Minor adverse	Slight adverse
36	To the north of Stoke Hill and wood, established environmental mitigation will partially screen vehicles in the distance moving across the fields associated with the offline section north of Stoke Road. At night, established hedgerows and trees along the A358 will screen vehicle lighting, and a woodland block will screen views of some lighting on approach to Nexus roundabout. Vehicles passing in the distance on the A358 is a feature of the wider baseline view and the proposed scheme will result in an incremental, but perceptible, change to that aspect which will be more prominent in winter than summer.	Minor adverse	Slight adverse

Number	Nature of change	Magnitude of impact	Significance of effect
37	To the north of Stoke Hill and wood, established environmental mitigation will partially screen vehicles in the distance moving across the fields associated with the offline section north of Stoke Road. At night, established hedgerows and trees along the A358 will screen vehicle lighting, and a woodland block will screen views of some lighting on approach to Nexus roundabout. Vehicles passing in the distance on the A358 is a feature of the wider baseline view and the proposed scheme will result in an incremental, but perceptible, change to that aspect which will be more prominent in winter than summer.	Minor adverse	Slight adverse
38	Establishment of planting along the A358 will restore the baseline condition south of Stoke Road and further filter passing vehicles to the north of Stoke Road. This will form a barely noticeable element of the view in both summer and winter.	Negligible adverse	Slight adverse
39	Establishment of planting along the A358 will restore the baseline condition in both summer and winter.	No change	Neutral
40	Establishment of planting along the A358 will restore the baseline condition south of Stoke Road and further filter passing vehicles to the north of Stoke Road. This will form a barely noticeable element of the view in both summer and winter.	Negligible adverse	Slight adverse
41	Layers of existing trees and slight variations in topography screen views towards the proposed scheme.	No change	Neutral
42	Proposed mitigation planting would have established restoring much of the baseline condition.	No change	Neutral
43	Established tree, hedgerow, and woodland planting to the south of the proposed scheme will filter views of passing traffic within the middle ground of the view beyond the field boundary hedgerow during summer and winter. This would be a glimpsed view through a field gate and a small change to the overall nature of the view to people walking, cycling, or driving along the road.	Negligible adverse	Neutral
44	Layers of existing trees and slight variations in topography screen views towards the proposed scheme.	No change	Neutral
45	Enhancement of the hedgerow along Capland Lane will assist in screening views into the field and towards the widened A358. Alongside the A358, hedgerow with tree planting will restore views of passing vehicles to equivalent to the baseline condition in both summer and winter. This will be a perceptible change but not alter the overall balance of features and elements that comprise the existing view.	Minor adverse	Slight adverse

Number	Nature of change	Magnitude of impact	Significance of effect
View from the road	The establishment of vegetation alongside the A358 corridor will reinstate a more enclosed feel to the journey which will be equivalent to the baseline situation. The change will be perceptible but not alter the overall balance of features and elements that comprise the existing view in both summer and winter.	Minor adverse	Neutral

7.10 Monitoring

- 7.10.1 DMRB LA 104 *Environmental assessment and monitoring* [17] states that where significant landscape and visual effects have been identified "projects must undertake proportionate monitoring of associated mitigation measures" in accordance with the Infrastructure Planning (Environmental Impact Assessment) Regulations 2017.
- 7.10.2 DMRB LA 107 Landscape and visual effects [1] states in paragraph 4.1 that monitoring "shall determine the effectiveness of delivery of mitigation measures linked to the landscape or screening commitments agreed as part of the assessment process."
- 7.10.3 Proposed planting would be monitored every year for the first three years under a normal establishment phase to ensure successful establishment and then inspected every 2-5 years for the next 12 years, a total of 15 to ensure the landscape mitigation is successful in mitigation significant effects as predicted.
- 7.10.4 It is essential that the proposed planting establish well and are monitored and maintained to ensure it thrives and grows to the desired extent, so that it becomes effective as mitigation during the long-term operation of the new road infrastructure.
- 7.10.5 Full details will be provided in the Landscape and Ecological Management Plan (LEMP) which will be developed and will set out a framework in which the successful establishment of these measures can be managed and ensured. The LEMP will be submitted as part of the ES and in support of the DCO application.

7.11 Summary

- 7.11.1 This LVIA provides information on the landscape and visual baseline conditions between 2020 and 2021 (winter and summer baseline photography was taken). It sets out the methodology used to assess the significant effects of the proposed scheme on landscape character and views, and the visual resources as experienced by people.
- 7.11.2 The greatest long-term landscape and visual effects of the proposed scheme options will be experienced where the proposed scheme deviates from the existing road corridor and where new junctions or overbridges are proposed.
- 7.11.3 There are no significant impacts identified on the Blackdown Hills AONB.

Construction assessment

- 7.11.4 During construction there are likely to be significant effects on the LLCAs that the online section of the proposed scheme passes through due to anticipated extensive removal of roadside vegetation across a large strip of the landscape, and presence of machinery and earthworks operations. These are:
 - Vale of Taunton Deane LLCA (large adverse).
 - North Curry Sandstone Ridge LLCA (moderate adverse).
- 7.11.5 During construction, there are likely to be significant effects on a range of visual receptors in both short and medium distance views. From residential properties located near the engineering footprint, such as those around Henlade and Ashill, and individual properties with clear views across open fields towards existing vegetation alongside the A358 corridor. From public rights of way, there are likely to be significant effects experienced from elevated positions in relatively close proximity to the proposed scheme, such as from Stoke Hill and Thorn Hill, where a length of the proposed scheme will be visible in the middle distance across a large proportion of the view.
- 7.11.6 The significant effects on representative viewpoints during construction are:
 - Two very large adverse (viewpoints 1 and 4).
 - 10 large adverse (viewpoints 2, 5, 7, 9, 13, 18, 22, 26, 27, and 32).
 - Nine moderate adverse (viewpoints 6, 10, 14, 20, 23, 24, 25, 31, and 45).

Operational assessment

- 7.11.7 At year 1 there are likely to remain significant effects on LLCAs that the proposed scheme passes through due to anticipated removal of roadside vegetation across a large strip of the landscape and the exposure of passing traffic and new earthworks and structures to the surrounding landscape. By year 15 the majority of significant landscape effects will be reduced through establishment of landscape mitigation measures. However, it is likely that significant landscape effects will remain due to the offline sections of the proposed scheme within the existing rural landscape and nature of proposed earthworks, junctions and structures for:
 - Vale of Taunton Deane LLCA (large adverse year 1, moderate adverse year 15).
 - North Curry Sandstone Ridge LLCA (moderate adverse year 1 and year 15).
- 7.11.8 At year 1 the likely significant visual effects will be similar to those during construction, due to anticipated removal of roadside vegetation across a large strip of the landscape and the exposure of passing traffic and new earthworks and structures resulting in a prominence of the A358 within views. These likely significant effects also extend to night-time views in year 1 due to the visibility of headlights and scheme lighting in the absence of any established roadside planting.
- 7.11.9 The significant effects on representative viewpoints during year 1 are:
 - One very large adverse (viewpoint 4).
 - 10 large adverse (viewpoints 1, 2, 7, 9, 13, 18, 22, 26, 27, and 32).
 - Nine moderate adverse (viewpoints 5, 6, 14, 20, 23, 24, 25, 31, and 45).

- 7.11.10 By year 15, established environmental mitigation will be effective and restore the visual context for receptors with views towards online widening. Likely significant visual effects will be limited to those residential properties or PRoW: with views towards new elevated structures or junctions and the offline sections of the proposed scheme; in close proximity and facing the online section of the proposed scheme; and users of PRoW around the offline section of the proposed scheme; including from Stoke Hill.
- 7.11.11 The significant effects on representative viewpoints during year 15 are:
 - One large adverse (viewpoint 1).
 - Five moderate adverse (viewpoints 2, 4, 18, 27, and 32).

Abbreviations List

Please refer to PEI Report Chapter 17 Abbreviations.

Glossary

Please refer to PEI Report Chapter 18 Glossary.

References

- [1] Highways England, "Design Manual for Roads and Bridges, LA 107 Landscape and visual effects, Revision 2.," February 2020.
- [2] Department of Transport, "National Policy Statement for National Networks," December 2014. [Online]. Available: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attac hment_data/file/387222/npsnn-print.pdf. [Accessed 29 June 2020].
- [3] Ministry of Housing, Communities and Local Government, "National Planning Policy Framework," February 2019. [Online]. Available: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attac hment_data/file/810197/NPPF_Feb_2019_revised.pdf. [Accessed 30 June 2021].
- [4] South Somerset District Council, "South Somerset Local Plan (2006-2028)," March 2015. [Online]. Available: https://www.southsomerset.gov.uk/media/1250/j-plan_pol-web-site-2018-1-local-plan-local-plan-2006-2028-south_somerset_local_plan_2006-2028_adoption_version_march_2015.pdf . [Accessed 30 June 2021].
- [5] Taunton Deane Borough Council, "Adopted Core Strategy 2011-2028," 2011.
 [Online]. Available: https://www.somersetwestandtaunton.gov.uk/media/1061/adopted-corestrategy-2011-2028.pdf . [Accessed 30 June 2021].
- [6] Ministry of Housing, Communities and Local Government, "National Design Guide," 2021.
- [7] Highways England, "Road to Good Design," 2018.
- [8] National Infrastructure Commission, "The Value of Design in Infrastructure Delivery," 2018.
- [9] National Infrastructure Commission, "Design Principles for National Infrastructure," 2020.
- [10] Campaign for Better Transport, "Roads and the environment," 2018.
- [11] Landscape Institute, "Infrastructure Technical Guidance Note," 2020.
- [12] Taunton Deane Borough Council, "Taunton Deane Green Infrastructure Strategy," August 2009. [Online]. Available: https://www.somersetwestandtaunton.gov.uk/media/1328/taunton-deane-greeninfrastructure-strategy-luc-2009.pdf. [Accessed 30 June 2021].
- [13] South Somerset District Council, "South Somerset Environment Strategy," October 2019. [Online]. Available: https://www.southsomerset.gov.uk/media/2690/environment-strategy-document-3final.pdf. [Accessed 30 June 2021].

- [14] Natural England, "National Character Area profiles: data for local decision making," [Online]. Available: https://www.gov.uk/government/publications/national-characterarea-profiles-data-for-local-decision-making. [Accessed July 2021].
- [15] Blackdown Hills Area of Outstanding Natural Beauty, "2019-2024 Management Plan," [Online]. Available: https://blackdownhillsaonb.org.uk/wpcontent/uploads/2019/06/bhaonb_management_plan_2019-24.pdf. [Accessed July 2021].
- [16] Highways England, "Design Manual for Roads and Bridges, LA 101 Introduction to environmental assessment, Revision 0," 2019.
- [17] Highways England, "Design Manual for Roads and Bridges, LA104 Environmental assessment and monitoring, Revision 1," August 2020. [Online]. Available: https://www.standardsforhighways.co.uk/prod/attachments/0f6e0b6a-d08e-4673-8691-cab564d4a60a?inline=true.
- [18] Landscape Institute and Institute of Environmental Management & Assessment, "Guidelines for Landscape and Visual Impact Assessment, 3rd Edition," 2021.
- [19] Landscape Institute, "Visual Representation of Development Proposals," 2019. [Online]. Available: https://landscapewpstorage01.blob.core.windows.net/wwwlandscapeinstitute-org/2019/09/LI_TGN-06-19_Visual_Representation.pdf. [Accessed 30 June 2021].
- [20] Defra, "Defra Survey Data Download," [Online]. Available: https://environment.data.gov.uk/DefraDataDownload/?Mode=survey. [Accessed January 2021].
- [21] Bluesky International Ltd, "National Tree Map," [Online]. Available: https://www.bluesky-world.com/ntm. [Accessed July 2021].
- [22] Google, "Google Earth," [Online]. Available: https://earth.google.com/web/.
- [23] Natural England, "NCA Profile: 140 Yeovil Scarplands (NE557)," 24 April 2014.
 [Online]. Available: http://publications.naturalengland.org.uk/publication/5731196449325056?category =587130. [Accessed 30 June 2021].
- [24] Natural England, "NCA Profile: 143 Mid Somerset Hills (NE564)," 12 May 2014.
 [Online]. Available: http://publications.naturalengland.org.uk/publication/4718827694718976?category =587130. [Accessed 30 June 2021].
- [25] Natural England, "NCA Profile: 146 Value of Taunton and Quantock Fringes (NE550)," 7 April 2014. [Online]. Available: http://publications.naturalengland.org.uk/publication/6601735426539520?category =587130. [Accessed 30 June 2021].
- [26] Natural England, "NCA Profile: 147 Blackdowns (NE556)," 28 May 2014. [Online]. Available: http://publications.naturalengland.org.uk/publication/5233925605556224?category =587130. [Accessed 30 June 2021].

- [27] Blackdown Hills Area of Outstanding Natural Beauty, "Landscape Night skies," 2018. [Online]. Available: https://blackdownhillsaonb.org.uk/discover/landscape/night-skies/. [Accessed 30 June 2021].
- [28] Taunton Deane Borough Council, "Taunton Deane Landscape Character Assessment," 2011. [Online]. Available: https://www.somersetwestandtaunton.gov.uk/media/1343/taunton-deanelandscape-character-assessment.pdf. [Accessed 30 June 2021].
- [29] South Somerset District Council, "The Landscape of South Somerset: A landscape assessment of the scenery of South Somerset," October 1993. [Online]. Available: https://www.southsomerset.gov.uk/media/1297/j-plan_pol-web-site-2018-planning-webpages-the_landscape_of_south_somerset.pdf. [Accessed 30 June 2021].
- [30] Stoke St Mary and District History Group, "Mattock Tree Hill," [Online]. Available: http://www.stokestmary.org.uk/page59.html. [Accessed July 2021].
- [31] Taunton Deane Borough Council, "Taunton Deane Local Plan," 2004. [Online]. Available: https://www.somersetwestandtaunton.gov.uk/media/1063/tauntondeane-local-plan.pdf. [Accessed July 2021].
- [32] Forestry Commission, "Blackdown Hills Forest Plan 2018-2028," [Online]. Available: https://www.forestryengland.uk/sites/default/files/documents/Blackdown%20Hills% 20Forest%20Plan%202018-28.pdf. [Accessed July 2021].
- [33] Historic England, "Hatch (Beauchamp) Court," May 2004. [Online]. [Accessed July 2021].
- [34] Taunton Deane Borough Council, "Hatch Beauchamp Conservation Area," November 1998. [Online]. Available: https://www.somersetwestandtaunton.gov.uk/media/1649/hatch-beauchamp-caplan.pdf. [Accessed July 2021].
- [35] South West Heritage Trust, "13929: Hatch Park park, Hatch Beauchamp," October 2016. [Online]. Available: https://www.somersetheritage.org.uk/record/13929#. [Accessed July 2021].
- [36] Parks and Gardens, "Jordans," January 2004. [Online]. Available: https://www.parksandgardens.org/places/jordans. [Accessed July 2021].
- [37] Blackdown Hills AONB, "Places to see Viewpoints," 2018. [Online]. Available: https://blackdownhillsaonb.org.uk/location-key/viewpoints/. [Accessed July 2021].
- [38] Highways England, "Design Manual for Roads and Bridges, LA 117 Landscape design, Revision 0," 2020.
- [39] HIghways England, "A385 Taunton to Southfields," 20 May 2021. [Online]. Available: https://highwaysengland.co.uk/our-work/south-west/a358-taunton-tosouthfields/. [Accessed 29 June 2021].
- [40] HM Government, "A Green Future: Our 25 Year Plan to Improve the Environment," 2018. [Online]. Available:

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attac hment_data/file/693158/25-year-environment-plan.pdf . [Accessed 30 June 2021].

- [41] Blackdown Hills Area of Outstanding Natural Beauty, "Planning," 2018. [Online]. Available: https://blackdownhillsaonb.org.uk/our-work/planning/ . [Accessed 30 June 2021].
- [42] Somerset West and Taunton, "West Somerset Local Plan to 2031: Appendix 3 & 4," 2016. [Online]. Available: https://www.somersetwestandtaunton.gov.uk/media/1077/west-somerset-district-local-plan-saved-policies.pdf. [Accessed 30 June 2021].
- [43] West Somerset Council, "Adopted West Somerset Local Plan to 2032," November 2016. [Online]. Available: https://www.somersetwestandtaunton.gov.uk/media/1074/adopted-west-somersetcouncil-local-plan-to-2032-document.pdf. [Accessed 30 June 2021].
- [44] Somerset West and Taunton Council, "Taunton Deane Local Plan," 2004. [Online]. Available: https://www.somersetwestandtaunton.gov.uk/media/1063/tauntondeane-local-plan.pdf . [Accessed 30 June 2021].
- [45] Highways England, "Design Manual for Roads and Bridges, LA 107 Landscape and visual effects, Revision 2," February 2020. [Online]. Available: file:///C:/Users/KRTON/AppData/Local/Microsoft/Windows/INetCache/IE/MSGCI2Y T/LA%20107%20revision%202%20Landscape%20and%20visual%20effectsweb.pdf. [Accessed 30 June 2021].