

A303 Amesbury to Berwick Down

TR010025

6.1 Environmental Statement

Chapter 7: Landscape and visual

Volume 6

APFP Regulation 5(2)(a)

Planning Act 2008

Infrastructure Planning (Applications: Prescribed
Forms and Procedure) Regulations 2009

October 2018



7 Landscape and visual

7.1 Introduction and competent expert evidence

- 7.1.1 This chapter assesses the potential landscape and visual effects of the construction and operation of the Scheme. This chapter details the regulatory and policy framework related to landscape and visual matters, summarises the methodology followed for the assessment, and describes the existing environment in the area surrounding the Scheme. Following this, the design, mitigation and residual effects of the Scheme are discussed, along with the limitations of the assessment.
- 7.1.2 This chapter of the ES has been undertaken by competent experts with relevant and appropriate experience. The technical lead for the landscape and visual impact assessment (LVIA) is Richard Hammond and his professional qualifications and experience are summarised in Appendix 1.1.

7.2 Legislative and policy framework

- 7.2.1 As discussed in Chapter 1, the primary basis for deciding whether or not to grant a Development Consent Order (DCO) is the National Policy Statement for National Networks, (NPSNN and Ref 7.1), which, at sections 4 and 5, sets out policies to guide how DCO applications will be decided and how the effects of national networks infrastructure should be considered. Table 7.1 identifies the NPSNN policies relevant to the LVIA and then specifies where in the ES chapter information is provided to address the policy.

Table 7.1: NPSNN policies relevant to LVIA

Relevant NPSNN paragraph reference	Requirement of the National Policy Statement for National Networks (NPSNN)	Where in the ES Chapter is information provided to address this policy.
5.144 (and footnote 102)	The NPSNN references the 'Guidelines for Landscape and Visual Impact Assessment, Third Edition' (GLVIA 3), as well as the need to include reference to any landscape character assessment and associated studies, as a means of assessing landscape impacts relevant to the proposed project and any relevant policies based on these assessments in local development documents in England.	GLVIA 3 has been used for the assessment, along with reference to published landscape character assessments and studies refer to Section 7.3 and Appendix 7.2.
5.149	The NPSNN states: <i>"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."</i>	The Scheme has been designed with regard to the existing landscape and visual context, with measures embedded to avoid or minimise harm, refer to Section 7.8 and the Environmental Masterplan (Figure 2.5 A-O) and Illustrative Cross Sections (Figure 2.5 P-S).

Relevant NPSNN paragraph reference	Requirement of the National Policy Statement for National Networks (NPSNN)	Where in the ES Chapter is information provided to address this policy.
5.150	The NPSNN states that great weight should be given to conserving landscape and scenic beauty in nationally designated areas and that assessments should identify any detrimental effect on the environment, the landscape and recreational opportunities, and the extent to which that could be moderated.	The LVIA study area includes the Cranborne Chase Area of Outstanding Natural Beauty (AONB). The Scheme boundary does not include any National Parks or AONB, but does include the WHS. Refer to Section 7.3, 7.6, 7.9 and Appendix 7.7 and Appendix 7.8.
5.154-1.55	The NPSNN states 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; but that: <i>“The fact that a proposed project will be visible from within a designated area should not in itself be a reason for refusing consent.”</i>	As noted above, the LVIA study area includes the Cranborne Chase AONB and viewpoints from within the AONB have been included in the assessment. Refer to Section 7.3, 7.6, 7.9 and Appendix 7.7 and 7.8.
5.156	The NPSNN states that local landscape designations should not be used in themselves as reasons to refuse consent.	Relevant landscape and visual designations are outlined in Section 7.6.72.
5.157	The NPSNN states: <i>“In taking decisions, the Secretary of State should consider whether the project has been designed carefully, taking account of environmental effects on the landscape and siting, operational and other relevant constraints, to avoid adverse effects on landscape or to minimise harm to the landscape, including by reasonable mitigation.”</i>	The Scheme design has been environmentally led, as set out in Section 7.8, Appendix 7.7 and Appendix 7.8. Refer to the Environmental Masterplan (Figure 2.5 A-O) and Illustrative Cross Sections (Figure 2.5 P-S).
5.158	The NPSNN states: <i>“The Secretary of State will have to judge whether the visual effects on sensitive receptors, such as local residents, and other receptors, such as visitors to the local area, outweigh the benefits of the development.”</i>	The visual assessment identifies a range of receptors, including residents and visitors. Refer to Section 7.9 and Appendix 7.8.

Relevant NPSNN paragraph reference	Requirement of the National Policy Statement for National Networks (NPSNN)	Where in the ES Chapter is information provided to address this policy.
5.160	The NPSNN states: <i>“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.”</i>	The Scheme design has been environmentally led, as set out in Section 7.8, Appendix 7.7 and Appendix 7.8. Refer to the Environmental Masterplan (Figure 2.5 A-O) and Illustrative Cross Sections (Figure 2.5 P-S).
5.84	The NPSNN states: <i>“Where the development is subject to an Environmental Impact Assessment, the applicant should assess any likely significant effects on amenity from emissions of...artificial light and describe these in the Environmental Statement.”</i>	A lighting assessment is included, refer to Sections 7.9.
5.86	The NPSNN advises the applicant to consult the relevant local planning authority about the scope and methodology of the assessment.	Consultation with the local planning authority has been undertaken as part of the LVIA, refer to Section 7.3, Table 7.3 and Appendix 7.2.

7.2.2 In accordance with the National Planning Policy Framework (NPPF) (Ref 7.2), the NPSNN policies relating to the applicant’s assessment are the primary source of policy guidance regarding this assessment. The NPPF was revised in 2018, but the requirements which relate to this assessment have not substantively changed, and the NPSNN remains the primary source of policy guidance.

7.2.3 Other relevant policies have been considered as part of the LVIA where these have informed the identification of receptors and resources and their sensitivity; the assessment methodology; the potential for significant environmental effects; and required mitigation. These policies are set out in Appendix 7.1 and include:

- a) The NPPF – this outlines that the sustainable role of development includes for contributing to protecting and enhancing the natural environment. NPPF section 11 ‘making effective use of land’, states that planning policies and decisions should encourage developments which improve public access to the countryside (para 118). NPPF section 12 ‘achieving well-design places’ states that planning decisions should ensure that developments are visually attractive and sympathetic to local character and history (para 127) and take opportunities for improving the character and quality of an area (para 130).

- b) Planning Practice Guidance (2016) (PPG) (Ref 7.3) Natural Environment, sub-heading Landscape, paragraph 1 supports the use of landscape character assessment as a tool for understanding the character and local distinctiveness of the landscape and identifying the features that give it a sense of place, as a means to informing, planning and managing change. PPG makes reference to Natural England guidance on landscape character assessment.
- c) Wiltshire Core Strategy (2015) (Ref 7.4) – Core Policy 51 Landscape states that development should protect, conserve and where possible enhance landscape character and must not have a harmful impact upon landscape character, while any negative impacts must be mitigated as far as possible through sensitive design and landscape measures. The use of published landscape character assessment is also supported. The supporting policy text notes that the emerging Wiltshire Landscape Strategy will review the need for Special Landscape Areas (SLAs) in Wiltshire and, if necessary, also clarify their special characteristics and boundaries. In the interim the policy states that SLAs will continue to be protected under relevant saved local plan policies. Core Policy 52: Green Infrastructure includes for improving linkages between the natural and historic landscapes of Wiltshire, with Core Policy 59: The Stonehenge, Avebury and Associated Sites World Heritage Site and its setting addressing how the Outstanding Universal Value of the WHS will be sustained.
- d) Saved Policies of the Salisbury District Local Plan (June 2003) (Ref 7.5) – include Saved Policy C6 regarding the quality of design of the landscape, and that the siting and scale of development should be sympathetic with the landscape.

7.2.4 These policies have a common thread of aiming to conserve, enhance and protect the landscape, as well as basing the design of development upon an understanding of the existing landscape context supported by the use of landscape character assessments. Similarly, these policies require that negative impacts must be mitigated by sensitive landscape measures which respond to their context.

7.2.5 The Wiltshire Core Strategy acknowledges that the local SLA, is not of such high quality as the Cranborne Chase and West Wiltshire Downs AONB, but is worthy of being preserved and that only development which is essential to the rural economy or desirable for the enjoyment of its amenities will be permitted, and the location, scale and nature of such development will be carefully controlled in order to conserve the character of the SLA.

7.2.6 There are no village design statements or design guides for Winterbourne Stoke but the Conservation Area Management Plans and Appraisals for Amesbury and Durrington have been reviewed in relation to Landscape and Visual matters.

7.3 Assessment methodology

- 7.3.1 The landscape and visual impact assessment methodology is set out in Appendix 7.2 and draws upon the Guidelines for Landscape and Visual Impact Assessment, Third Edition (GLVIA 3), 2013, (Ref 7.6) and Highways England Interim Advice Note 135/10, 2010, (Ref 7.7).
- 7.3.2 GLVIA 3 and IAN135/10 are complimentary guidance and follow the same requirements of identifying landscape and visual receptors, their sensitivity to the Scheme, the magnitude of impact (change) and the significance of effect, based upon the relationship between the sensitivity of a receptor and the magnitude of impact.
- 7.3.3 For this assessment, GLVIA 3 has been followed for establishing the existing landscape and visual baseline (2017/2018) and the sensitivity of the receptors. This is appropriate as GLVIA 3 is specifically referenced in the NSPNN and reflects current best practice.
- 7.3.4 As set out in GLVIA 3, the landscape assessment identifies the existing physical fabric or individual features of the landscape, including patterns of land use, land cover and aesthetic and perceptual qualities through a series of landscape character types (LCT) or landscape character areas (LCA). These LCT and LCA are then assessed in terms of their landscape value and susceptibility to determine their sensitivity to the Scheme.
- 7.3.5 Assessing landscape value includes factors such as whether the landscape is designated, its condition, recreational activity and cultural association. Assessing landscape susceptibility refers to the ability of the landscape to accommodate the Scheme without undue negative consequences to its baseline.
- 7.3.6 As set out in GLVIA 3, the visual assessment relates to the potential changes to existing views from identified receptors e.g. residents, public rights of way users or motorists (including tourists), as a result of the addition or loss of features to their existing view. The visual receptors are similarly assessed in terms of their visual value and susceptibility to determine their sensitivity to the Scheme.
- 7.3.7 Assessing visual value includes factors such as whether the view is recognised, e.g. via a planning designation or within guidebooks. Visual susceptibility relates to the occupation of those experiencing the view and the extent to which their attention of interest is focused on the view.
- 7.3.8 Both the landscape and visual baseline assessments have been based on desk based reviews and field work, which was undertaken between July 2017 and September 2017 (when the vegetation was in leaf) and between January 2018 and April 2018 (when the vegetation was not in leaf).
- 7.3.9 With the landscape and visual baseline established, IAN 135/10 is then followed for the assessment of the magnitude of impact (change) resulting from the Scheme. This is appropriate as the IAN 135/10 definitions of impact are specific

to highways schemes. IAN 135/10 is also followed in determining the significance of effect from the relationship between the sensitivity of the receptor and the magnitude of impact from the Scheme. This is appropriate, as the IAN 135/10 definitions of significance of effect are specific to highways schemes.

- 7.3.10 The landscape and visual assessment has been undertaken at three stages of the Scheme, specific to GLVIA 3 and IAN135/10 guidance and therefore different to other environmental discipline topics. The assessment is based upon the potential impacts to the existing landscape and visual baseline i.e. 2017 and 2018.
- 7.3.11 The first stage of the assessment is the construction phase, which in line with GLVIA 3 and matters set out in the Scoping Report, includes the location of construction equipment, access and hauls routes; the type of machinery being used and the position and scale and working areas (i.e. cut and fill) and temporary lighting. The construction phase is assessed at winter, when existing vegetation is not in leaf to soften or screen views of the construction activity and therefore represents a worst case assessment scenario.
- 7.3.12 The second stage of the assessment is the first year of the operational phase of the Scheme (year 1), which in line with GLVIA 3 and matters set out in the Scoping Report includes the location, scale and design of buildings or structures, access and traffic movements (including high load routes and diversion scenarios), lighting, signage, traffic lights, boundary treatments and planting. The year 1 assessment assumes that the Scheme planting is low in height and not established. As per the construction phase assessment, the year 1 assessment is undertaken at winter, to represent a worst case assessment scenario.
- 7.3.13 The third stage of the assessment is at the 15th year of the operational phase of the Scheme (year 15). This is based on the same parameters as the year 1 assessment, but with the establishment of the Scheme planting and in summer, such that the planting is taller and in leaf, along with the existing vegetation being in leaf. As such, the Scheme may be less visible, due to softening or screening of views as a result of the planting and existing vegetation being in leaf. The year 15 assessment therefore represents a best case assessment scenario.
- 7.3.14 The LVIA also includes a night time assessment for the construction, operation year 1 and operation year 15 phases and the methodology for this is set out in Appendix 7.2. In summary, the night time assessment uses the same landscape and visual receptors as identified in the 'day-time' LVIA along with reference to published studies. The assessment is based upon identifying the existing sources of lighting and the existing brightness of the night sky within the study area. The potential new sources of light from either the construction or operational phases of the Scheme are identified in terms of glare or upward lighting and a subjective judgement undertaken on the magnitude of impact to the night sky within the study area. The magnitude of impact and significance of

effect criteria for the night time assessment are the same as per the 'day-time' LVIA.

- 7.3.15 Table 7.2, derived from IAN135/10, is used as a guide for establishing the significance of landscape and visual effects, and is based upon the relationship between a receptor's sensitivity and the magnitude of impact. Where professional judgement considers that the assessment should differ from this table, a reasoned justification is provided. A moderate, large or very large significance of effect is considered 'significant', with the remaining categories of slight and neutral considered 'not significant'. Where the significance of effects matrix presented in Table 7.2 allows for two levels of significance (e.g. slight/moderate or large/very large) professional judgement has been used on a case by case basis to determine the appropriate level of significance.

Table 7.2: Landscape and visual significance of effect table

Landscape and Visual Receptor Sensitivity	Magnitude of Impact				
	No Change	Negligible	Minor	Moderate	Major
High	Neutral	Slight	Slight / Moderate	Moderate / Large	Large / Very Large
Medium	Neutral	Neutral / Slight	Slight	Moderate	Moderate / Large
Low	Neutral	Neutral / Slight	Neutral / Slight	Slight	Slight / Moderate

Scoping

- 7.3.16 A preliminary LVIA was included within the Scoping Report (October 2017), and based upon a 5km study area from the centre-line of the Scheme. In summary, the preliminary LVIA included the following steps:
- Field work was undertaken between July 2017 and September 2017, i.e. when the vegetation was in leaf.
 - The LVIA methodology was presented derived from GLVIA 3 and IAN135/10.
 - Relevant policy and published landscape character assessments were defined.
 - Identified landscape receptors included district level published landscape character areas, including those identified within the South Wiltshire and Salisbury District Landscape Character Assessment (2008) (Ref 7.8).
 - Visual receptors identified included:
 - visitors to the Stonehenge Visitor Centre and the Stonehenge monument;

- ii. users of recreational facilities within the study area including permissive open access areas within the World Heritage Site (WHS) and across Parsonage Down National Nature Reserve (NNR); and
 - iii. residential properties within the study area.
- f) The townscape areas of Amesbury, Durrington and Bulford were scoped out as no direct impacts were anticipated, due to the intervening landform, buildings and vegetation, which would screen any future views of the Scheme.
- g) Identified likely adverse impacts during the construction phase included direct changes to landform, removal of vegetation and the introduction of construction equipment, compounds and activity.
- h) Likely beneficial effects during the operational phase included beneficial change to the existing landscape and visual context as a result of sections of the Scheme being in cutting and in tunnel, balanced with adverse effects from additional highways infrastructure and grade separated junctions.

7.3.17 Table 7.3 summarises the consultee responses to the LVIA section of the Scoping Report and where the comments are addressed within this chapter. Where assessment has been undertaken in accordance with the Scoping Opinion point, a response and the relevant ES section is provided; where an alternative approach has been agreed with relevant stakeholders, an explanation is provided. The Scoping Opinion as received is provided in Appendix 4.1.

Table 7.3: LVIA scoping response and replies

Scoping Opinion	Where addressed within the ES
Planning Inspectorate	
<p>Paragraph 6.3.1 of the Scoping Report states that, for the purposes of the report “the term 'landscape' is synonymous with both rural landscapes and urban landscapes or townscapes”, and that Amesbury, Durrington and Bulford are proposed to be scoped out of the assessment.</p> <p>The Inspectorate refers to the ZTV presented in Figure 6.2 of the Scoping Report which relates only to traffic along the A303, and does not consider other activities associated with the Proposed Development, for example the High Load Routes, Countess Junction and other areas of land take within the DCO site boundary in and around Amesbury, Bulford and Ratfyn. In this respect, the Inspectorate does not agree that consideration of temporary (during construction) and permanent landscape effects at these locations can be scoped out on the basis of the justification provided as paragraph 6.3.14.</p>	<p>The LVIA study area has been reviewed and refined, supported by additional ZTVs such that it covers the areas and aspects of the Scheme noted by the Inspectorate. The construction activity and high load routes in operation are included in the assessment and the study area and therefore Amesbury, Bulford and Ratfyn are scoped in to the assessment. Refer to Section 7.3, Section 7.5, Appendix 7.3, 7.7 and 7.8</p>

Scoping Opinion	Where addressed within the ES
<p>The Scoping Report notes that theoretical visibility will be “<i>verified by site visit</i>”. The ES should clearly explain the approach in this regard including the timing of any such site visit and how/if professional judgement has been applied.</p>	<p>The site visits have been informed by ZTV’s and undertaken during winter and summer conditions and Section 7.3 sets out how professional judgement and an assessment process has been undertaken to refine the ZTVs (theoretical visibility), with Section 7.5 setting out the study area. Refer to Appendix 7.3, 7.7 and 7.8</p>
<p>The Scoping Report does not explain how the 5km and 2km study areas have been determined appropriate. The Scoping Report appears to conclude that significant effects beyond these distances are not likely to occur. However, this approach lacks appropriate justification. The Inspectorate considers that visual impacts could occur at an extent beyond 5km from the Proposed Development.</p>	<p>With reference to Appendix 7.3, an initial area of search has been undertaken in excess of the 5km from the Scheme. Section 7.3 and 7.5 and Appendix 7.2 and 7.3 explain why the eventual study area for the LVIA assessment has been chosen.</p>
<p>The ES should include an assessment which identifies the exact locations of viewpoints which are proposed from outside the 5km study area. The Inspectorate requires specific consideration of long-distance views from the Cranborne Chase AONB.</p>	<p>As per the above, viewpoints beyond the 5km are presented in Appendix 7.3. Viewpoints are included from within the Cranborne Chase AONB, with reference to Sections 7.3.22, 7.9 and Appendix 7.3</p>
<p>The Inspectorate requires specific prominence to be paid in the LVIA to the potential for temporary and / or permanent features within the WHS. The assessment should take into account the location of temporary construction compounds, material storage areas and other associated works, in terms of landscape and visual impacts, and their potential effects at the identified viewpoints.</p>	<p>These temporary construction compounds have been included in the assessment process. Refer to sections 7.3 and 7.9, Appendix 7.7 and Appendix 7.8.</p>

Scoping Opinion	Where addressed within the ES
<p>The Scoping Report notes that “The guidance is not prescriptive and therefore a tailored approach is required which is flexible and recognises the importance of professional judgement”. Noting the above, the Applicant should clearly present and justify their assessment method(s) in the ES, explaining how IAN 135/10 and the GLVIA3 have both been used to inform the impact assessment. It should be confirmed where professional judgement has been utilised in the assessment.</p> <p>In accordance with the NPSNN, the Applicant should set out within the ES the proposed measures to minimise adverse landscape and visual effects from construction and operational activities, with particular reference to design (including choice of materials) and landscaping schemes.</p>	<p>The LVIA methodology is set out in Section 7.3 and Appendix 7.2. This explains how GLVIA 3 and IAN 135/10 have been used within the LVIA assessment process, along with professional judgement. The proposed measures within the Scheme design to minimise adverse landscape and visual effects are set out in section 7.8.</p>
<p>The assessment in the ES should describe the likely significant effects both prior to mitigation and residually so that it is possible to understand the efficacy of the mitigation proposed. Where mitigation measures are inherent as part of the design, these should be clearly set out in the description of the Proposed Development and cross referred to in the LVIA.</p>	<p>As discussed with the Inspectorate at a post-Scoping Opinion meeting on January 30th 2018, the ES presents the likely residual significant LVIA effects not the pre-mitigated likely significant LVIA effects. The process, as agreed with the Inspectorate, is for potential impacts (outlined in Section 7.7) to be followed by a description of Design, Mitigation and Enhancement Measures, (Section 7.8) and a subsequent assessment of landscape and visual impacts and effects (Section 7.12, Appendix 7.7 and Appendix 7.8).</p>
Natural England	
<p>We are unable to comment in detail on the view point locations. We advise that the views of the Cranborne Chase AONB planning officer are sought as to the choice of viewpoints. It may be appropriate, given the national importance of the AONB to at least consider whether a long distance view from the south side of the Wylde valley (5km away) would be useful. It may also be appropriate to consider whether a view point mid-way between viewpoints 36 and 40 looking just south of east would be useful. Natural England would be glad to discuss this further with the applicant</p>	<p>Meetings have been held with the Cranborne Chase AONB Officer in relation to viewpoints, and locations within the AONB are included in the visual assessment. Refer to Section 7.3.22, Appendix 7.3 and Appendix 7.8.</p>

Scoping Opinion	Where addressed within the ES
We advise that the views of the Cranborne Chase AONB planning officer are sought as to the choice of viewpoints.	Meetings have been held with the Cranborne Chase AONB Officer relating to viewpoints. Refer to Section 7.3.22 and Appendix 7.3 and Appendix 7.8
Historic England (south west office)	
The LVIA should set out how effects on dark skies will be assessed.	A lighting assessment is included with the methodology set out in Section 7.3 and Appendix 7.2. Refer also to Chapter 6 and Appendix 6.1 HIA.
What work has been done to establish these parameters of assessment? The WHS lies within an open, rolling landscape with very long views on clear days. We are concerned that any potential for visual impact beyond 5km is established at this early stage. This comment is also relevant to our concerns about the preservation of dark skies where they exist and contribute to the OUV of the WHS or the setting of a Scheduled Monument.	An initial area of search has been undertaken and is included in Appendix 7.3. This outlines the parameters which have been used to define the LVIA study area. Refer to Chapter 6 and Appendix 6.1 HIA for OUV and setting of a Scheduled Monument.
Our understanding is that no bunds or other earthworks will be constructed within the WHS - can this please be clarified? Such features will impact upon OUV	There are earthworks within the WHS, associated with the retained cutting approach to the western portal and at the eastern portal, along with cutting and embankments for the road between the eastern portal and Countess Roundabout. Refer to Section 7.8, the Environmental Masterplan (Figure 2.5A-O) Illustrative Cross Sections (Figure 2.5P-S) and Chapter 6 and Appendix 6.1 HIA.

Scoping Opinion	Where addressed within the ES
Wiltshire Council	
6.3 Landscape and Visual – This chapter should integrate with the corresponding parts of the HIA for the WHS	The Cultural Heritage and Landscape Teams have worked closely through the design and assessment process; however matters for the HIA are specific to that chapter and are not referenced within the LVIA.

Consultation

- 7.3.18 Engagement has taken place between the LVIA project team, heritage and biodiversity teams and stakeholders throughout the design process. These meetings have allowed the LVIA project team to work closely with stakeholders as the design developed to inform the Scheme design and the Environmental Masterplan (Figures 2.5 A-O).
- 7.3.19 Discussions during 2017 with the National Trust have included agreement of viewpoints within the WHS and along the existing A303, in addition to the viewpoints identified through the statutory consultation process.
- 7.3.20 Meetings with Natural England and Wiltshire Council Landscape Architects were held in January 2018 to discuss the land to the east of Parsonage Down in the context of depositing chalk from the tunnel excavation and re-contouring the material to reflect the existing valley landform, as well as the potential for new chalk grassland.
- 7.3.21 Meetings were held with Wiltshire Council Landscape Architects in February 2018 to discuss the LVIA representative viewpoints within an agreed study area which would be referenced within the LVIA. These meetings also discussed which of the representative viewpoints would be rendered as accurate visual representations (photomontages), to illustrate the Scheme. Discussions during March 2018 and April 2018 also agreed the LVIA methodology set out above in Section 7.3 and Appendix 7.2 and additional detail for classifying landscape and visual value as part of the assessment of a receptors sensitivity.
- 7.3.22 Meetings were held with Cranborne Chase and West Wiltshire AONB Officers in February 2018 to discuss the Scheme. Discussions included that there were no identified viewpoints within the AONB Management Plan from which the Scheme would be visible. Viewpoints and landscape character areas within the AONB have been included within the LVIA, both in terms of the initial area of search to determine the study area and the final assessment. The LVIA has also considered the potential impact to the dark night skies of the AONB.

7.3.23 Public consultation comments received, and their associated responses are provided within the Consultation Report (Application Document 5.1).

7.4 Assessment assumptions and limitations

7.4.1 The LVIA field work and photography have been undertaken from publicly accessible areas i.e. Public Rights of Way (PRoW) or pavements adjacent to residential properties or roads. As viewpoint photography has not been undertaken from private properties, professional judgement has been used to assess the potential effect to these private receptors.

7.4.2 The construction assumptions are set out in ES Chapter 2, with additional LVIA assumptions of:

- a) topsoil stockpiles are 2m in height, the main office compounds and site offices are one storey in height, and the tallest part of the Slurry Treatment Plant (STP) is 20m in height; and
- b) cranes would be used for the construction of the River Till viaduct, implementation of the green bridges, portals, land bridge and Countess Flyover.

7.4.3 The year 1 operational assumptions are set out in ES Chapter 2, with additional LVIA assumptions of:

- a) new tree planting would range in height between 0.4m and 0.8m for whips/transplants and hedgerow planting and 1m to 1.8m in height for trees;
- b) new chalk grassland areas would not have fully established, such that these areas would be largely bare chalk; and
- c) areas returned to agriculture would consist of topsoil with some chalk.

7.4.4 At year 15 summer of operation and with the establishment of the new planting:

- a) trees would range in height between 5m and 7m in height and hedgerows would range in height between 1.2m and 2m. These hedgerow heights reflect existing hedge heights within the Scheme boundary;
- b) the chalk grassland would have established such that overall the grass sward was knitted together, and chalk would not be visible. The exception would be where specific areas of ecological management retained exposed chalk or a thinner sward; and
- c) areas returned to agriculture would be established.

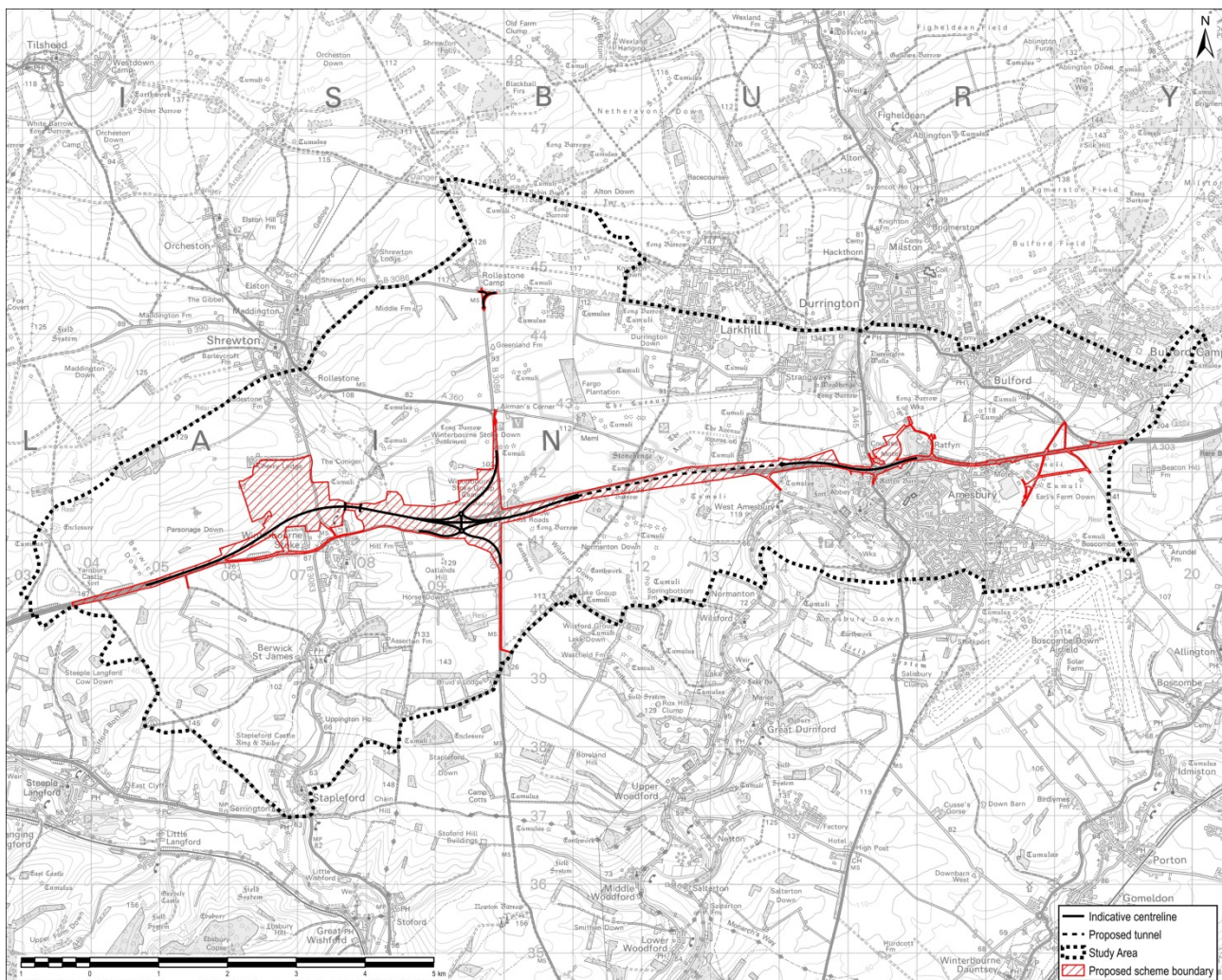
7.4.5 The establishment of the new planting is supported by an outline landscape and ecology management plan and strategy (OLEMP), which is presented at Appendix 8.26.

7.5 Study area

- 7.5.1 The LVIA study area covers the area which the Scheme may influence in a significant manner. The study area has been refined throughout the design process in response to changes to the construction or operational aspects of the Scheme.
- 7.5.2 The process for determining the study area is set out in Appendix 7.3. In summary, a number of Zones of Theoretical Visibility (ZTV) have been modelled to understand the theoretical visibility of the construction and operational phases of the Scheme.
- 7.5.3 The ZTVs identified an area of search extending 9km to the north of the Scheme, covering elevated land between Tilshead, Enford Down and Durrington; 6km to the east of Countess Roundabout, covering elevated landform across Beacon Hill; 7km to the south of the Scheme covering elevated land within the Cranborne Chase and West Wiltshire AONB and 5km to the west of Yarnbury Camp, covering elevated land to the north of Codford St. Mary.
- 7.5.4 Field work was then undertaken across this area of search in winter and summer, to account for changes to the vegetation patterns and their influence on visibility, as well as the varying seasonal conditions. The field work determined that the potential visibility of the Scheme was accurately reflected by the ZTV modelling resulting from the influence of the landform, specifically the ridge lines and valley systems.
- 7.5.5 An initial assessment was then undertaken as to the likelihood for the Scheme to result in significant effects within the area of search. The methodology for the initial assessment was based upon the same sensitivity and magnitude of impact criteria as per the LVIA methodology.
- 7.5.6 Due to the intervening landform, existing vegetation and physical distance from the Scheme boundary, it was concluded that the following areas could be scoped out of the LVIA, to establish a revised study area in comparison to that presented in the Scoping Report:
- a) west of Yarnbury Camp;
 - b) north of Shrewton, Larkhill and Durrington;
 - c) south of Amesbury; and
 - d) south of the River Wylye, including parts of the Cranborne Chase and West Wiltshire AONB.
- 7.5.7 This revised study area was discussed and agreed with Wiltshire Council Landscape Architects at meetings in February 2018 and July 2018. As part of this change to the study area, additional areas have been included within the LVIA, compared to the Scoping Report, in response to the Inspectorate comments regarding the high load routes, Ratfyn and Bulford.

- 7.5.8 With reference to Figure 7.1, the final LVIA study area extends up to 4.5km from the centre line of the Scheme, but is predominantly concentrated within a 2km radius, extending west to east between Yarnbury Camp and Beacon Hill and north to south between Rollestone Camp and the northern part of the Cranborne Chase and West Wiltshire AONB.
- 7.5.9 The extent of the study area is due to the pattern of intervening landform, existing vegetation and settlement patterns substantially reducing the visibility and perception of the Scheme beyond the 2km radius.
- 7.5.10 The study area incorporates all aspects of the construction and operational activity, including the high load routes, as well as the areas of Amesbury, Ratfyn and Bulford. This extent of the study area is considered acceptable to identify any direct landscape change and inter-visibility with the Scheme that may result in significant effects to identified receptors.

Figure 7.1: LVIA study area



7.6 Baseline conditions

Current baseline

7.6.1 With reference to GLVIA 3, the first stage of the LVIA is to establish the baseline landscape and visual conditions within the study area. This information forms the basis to identifying and describing the likely impacts of the Scheme and the resulting effects.

7.6.2 The baseline is set out below via a series of structured headings based upon the varying features and elements within the landscape and includes relevant policy and published landscape character information.

Landform and Watercourses

7.6.3 The study area consists of a complex pattern of rolling landform, resulting in a series of ridge lines, valleys and downland (Figure 7.2).

7.6.4 At the western end of the study area, the landform is elevated and undulating across Berwick Down (up to 150m Above Ordnance Datum (AOD)) and Parsonage Down National Nature Reserve (NNR) (80m AOD), before falling towards Winterbourne Stoke (75m AOD).

7.6.5 To the north of Winterbourne Stoke are a series of valleys. The first is a dry valley at the area east of Parsonage Down, extending between the access lane to Cherry Lodge Farm (110m AOD), Scotland Lodge (105m AOD) and the B3083 and with a valley floor at approximately 80m AOD.

7.6.6 The second valley relates to the River Till, which flows from Shrewton to Winterbourne Stoke, and then onwards to Berwick St James and Stapleford, where it converges with the River Wylfe. The River Till valley landform consists of elevated and undulating sides which form a series of 'spurs' before flattening to a floodplain to the north of the Winterbourne Stoke. The course of the River Till has also been modified to the north of Winterbourne Stoke, to form a short linear section which flows into a culvert under the existing A303.

7.6.7 There are also a series of narrower valleys extending eastwards from the River Till towards the World Heritage Site (WHS), forming a pattern of undulating landform, which rises in height to the west of the A360, via Winterbourne Stoke Hill and Oatlands Hill (approximately 128m AOD).

7.6.8 Within the WHS, the landform is similarly varied, reflecting a number of ridge lines and valleys. From the western edge of the WHS, the landform rises from the Stonehenge Visitor Centre (95m AOD) and Winterbourne Stoke Group (110m AOD) to a localised ridgeline at approximately 120m AOD, before falling eastwards to a dry valley at Stonehenge Bottom (80m AOD). The Stonehenge monument is located within this landscape, at approximately 103m AOD.

7.6.9 Moving east from Stonehenge Bottom the landform rises to form a ridgeline between King Barrow Ridge, Strangways (112m AOD), Stonehenge Cottages

(109m AOD) and Coneybury Hill (114m AOD). From this ridgeline, the landform then falls across the eastern part of the WHS to Amesbury and the River Avon at approximately 70m AOD.

- 7.6.10 The River Avon meanders between Durrington and Bulford with the landform rising gently from the floodplain across these settlements, which are generally above 90m AOD.
 - 7.6.11 In the vicinity of the Countess Roundabout, the River Avon becomes more linear in form, flowing under the existing A303 and to the west of Amesbury, via Amesbury Park. The landform adjacent to this part of the river, across Ratfyn Barrow, consists of steeply rising wooded banks. This pattern of landform is also reflected to the west of Amesbury Park, to the south of the existing A303, where the landform rises across Vespasian's Camp to 90m AOD.
 - 7.6.12 Across the eastern part of Amesbury, there is a ridge extending between Bulford Camp and Boscombe Down Airfield (between 100m AOD and 210m AOD) with localised high points including Beacon Hill at 204m AOD.
- Vegetation pattern including Tree Preservation Orders (TPO)*
- 7.6.13 The study area consists predominantly of large scale open fields and chalk grassland, with isolated blocks of woodland and smaller tree groups, as well as occasional hedgerows, either dividing fields or bordering the road networks.
 - 7.6.14 At the western end of the study area, across Berwick Down, the vegetation pattern includes small rectangular or linear woodland blocks, which vary in age between young plantations and more established mixed woodlands.
 - 7.6.15 Across Parsonage Down NNR there is extensive chalk grassland habitat, with tree belts bordering Scotland Lodge Farm and adjacent to the access lane to Cherry Lodge Farm, as well as farm buildings.
 - 7.6.16 To the north of the Winterbourne Stoke there are intermittent mature trees adjacent to the River Till in contrast to the open character of the River Till floodplain. There is also a mature hedgerow extending from Foredown House, bordering byway WST04. The extent of vegetation within the River Till valley increases gradually towards Shrewton, including mature trees bordering Foredown Barn.
 - 7.6.17 There are also hedgerows bordering the east side of the B3083, byway WSTO6B (to the north of Hill Farm) and dividing the fields to the north east of Hill Farm, between the existing A303 and the access track to Foredown Barn.
 - 7.6.18 The existing A303 is bordered by hedgerows and mature trees to varying extents between Winterbourne Stoke and Longbarrow Roundabout.
 - 7.6.19 A hedgerow borders the west side of the A360, between Longbarrow Roundabout and Airman's Corner, in contrast to the east side of the A360, which is open in character. To the south of Longbarrow Roundabout, there are

mature hedgerows bordering the west side of the road, whilst the east side is more open in character, with the exception of a few individual trees and hedgerows in proximity to Longbarrow Roundabout.

- 7.6.20 Across the WHS, there are a number of woodlands and tree belts, as well as recent planting around the new coach-park to the north of the Stonehenge Visitor Centre. Vegetation includes the Winterbourne Stoke Clump Group, the Diamond and Normanton Gorse woodlands, the Fargo Plantation, and woodland between Long Barrow, Old King Barrow and King Barrow Ridge. There are also similar rectangular woodland groups bordering Larkhill, which consist of evergreen tree species.
- 7.6.21 The Nile Clumps are to the north of the existing A303 and are covered by Tree Preservation Order (TPO) no. 275. The arrangement of the trees allegedly commemorates the Battle of the Nile, via the tree clumps reflecting positions of the warships. However, the planting of the trees predates the battle and a number of the tree groups have been replanted. The location of the Nile Clumps and other TPO's within the study area is illustrated on Figure 7.4.
- 7.6.22 To the south of the Nile Clumps, a linear tree belt extends along the north side of the existing A303 to Countess Roundabout. In proximity to the roundabout, this includes mature beech trees to the south of Countess Farm. These trees have been heavily pruned since the winter field work, removing tree branches to retain just the main tree stems and as such increasing the visibility of the existing A303.
- 7.6.23 At the eastern edge of the WHS, and to the south of the existing A303 is mature woodland within Amesbury Park, which forms part of the Registered Historic Park and Garden (RHPG).
- 7.6.24 Returning to Countess Roundabout, the combination of the woodland in Amesbury Park, the vegetation within the roundabout and between the A303 carriages, and that bordering the existing A303 results in a well wooded character to this part of the study area.
- 7.6.25 Woodland extends to the south of the existing A303, across the River Avon and the Lords Walk. This pattern of riverside vegetation also extends northwards from the existing A303 across the River Avon floodplain between Durrington and Bulford.

Land use

- 7.6.26 The principal land use within the study area is agriculture, with large-scale arable fields interspersed with localised areas of livestock, including a pig farm to the east of Longbarrow Roundabout, and to the south of the existing A303.
- 7.6.27 Farms include Manor Farm in Winterbourne Stoke, with Foredown House to the north of the existing A303 and Foredown Barn within the River Till valley. Hill Farm is in an elevated position at Oatlands Hill.

- 7.6.28 Land use within the WHS includes tourism, with the Stonehenge Visitor Centre and recreation via permissive open access across parts of the WHS and a number of PRow.
- 7.6.29 Larkhill and Bulford are large scale military land uses, located across the north and east of the study area. There are also military facilities adjacent to the Packway at Rollestone Camp, in combination with several large farms and a grain store.
- 7.6.30 Parsonage Down NNR consists of 195ha of chalk grassland, which is publicly accessible and 80ha of improved farmland which is crossed by a permissive path. Cherry Lodge Farm is located to the north of the NNR and includes residential and business uses (Natural England), as well providing temporary space for the Richmond Group, a mental health charity, via a timber building.
- 7.6.31 Scotland Lodge Farm includes a bed and breakfast in the southern part of the grounds, adjacent to the existing A303, as well as external classrooms within the grounds, including within the woodland along the northern edge of the property.
- Settlement*
- 7.6.32 With the exception of Amesbury in the south east of the study area, settlement is small scale and scattered across the study area.
- 7.6.33 The village of Winterbourne Stoke to the south west of the study area is centred on the junction of the existing A303 and Church Street, extending between the B3083 and the River Till. To the north of the existing A303 are a series of terraced properties, Manor Farm (Foredown House), a garage and the Solstice Rest public house.
- 7.6.34 To the south of the existing A303 development within Winterbourne Stoke is clustered between Church Street and Brook Close, but returns to a more linear pattern to the south of Church Street. The southern part of Winterbourne Stoke also consists of larger scale individual period properties.
- 7.6.35 Shrewton is 2km to the north of Winterbourne Stoke and is a larger settlement, consisting a range of contemporary two storey detached properties, bungalows and period properties.
- 7.6.36 Larkhill is located either side of The Packway, with the main concentration of military accommodation and barracks on the north side of this road, with educational land uses on the south side. Residential buildings are predominantly two storey terraced red brick properties.
- 7.6.37 Amesbury is the largest town in the study area and is predominantly a two storey residential settlement, concentrated to the south of the existing A303, with a ribbon pattern of two storey semi-detached properties to the north of Countess Roundabout, adjacent to the A345 (Countess Road). Pedestrian links

between the two parts of the Amesbury are via an underpass below the existing A303.

- 7.6.38 To the south of the existing A303, Amesbury's settlement pattern consists of the high street between Amesbury Abbey and Salisbury Road. Residential, educational and open space land uses extend across the remainder of the settlement, until the eastern and southern edges which consist of large scale built form, associated with Solstice Park and Boscombe Down airfield.
- 7.6.39 Amesbury Abbey and Vespasian's Camp consist of well wooded undulating landform to the west of the Amesbury, and are not publicly accessible. The Lords Walk to the south of the existing A303 provides recreational access to the River Avon, with the landform rising steeply such that residential properties are in an elevated position in this northern edge of Amesbury, relative to the existing A303.
- 7.6.40 There is a Travelodge with associated services on the north side of Countess Roundabout and adjacent to the existing A303. The Travelodge is two storeys in height and consists of red brick and a tiled roof, marking an architectural change to Countess Farm on the opposite side of Countess Road.
- 7.6.41 Durrington extends to the north of Larkhill Road and consists predominantly of two storey semi-detached and bungalow properties. Educational land uses within Avon Valley College are located in the north east part of the settlement pattern.
- 7.6.42 Bulford is to the east of Durrington, on the opposite side of the River Avon. The settlement pattern is smaller in scale than Durrington. Properties are generally two storeys in scale. To the east of Durrington is Durrington Camp, a military barracks consisting of two storey terraced accommodation, extensive hardstanding and larger scale warehouses and depots.
- 7.6.43 Ratfyn, to the east of Countess Roundabout and to the north of the existing A303 consists of a small number of individual farm properties.

Infrastructure

- 7.6.44 The existing A303 is the main road within the study area, consisting of a dual-carriageway at Yarnbury Castle before narrowing to a single-carriageway through Winterbourne Stoke, crossing the River Till (which is culverted) on a small embankment.
- 7.6.45 From Winterbourne Stoke, through the WHS and past the Stones to King Barrow Ridge, the existing A303 remains single-carriageway. The A344 has been partially restored to grassland between Stonehenge Bottom and the Stones.
- 7.6.46 At King Barrow Ridge the road widens again to a dual carriageway, continuing through the eastern part of the WHS to Countess Roundabout, and east of Countess Roundabout towards Beacon Hill.

- 7.6.47 The B3083 (Shrewton Road) crosses the study area between Shrewton and Stapleford, via the A303 and Winterbourne Stoke. The B3083 is largely level with the existing landform, such that it rises and falls across High Down and then follows the valley floor towards Stapleford.
- 7.6.48 The A360 extends broadly north to south through the study area, crossing the A303 at Longbarrow Roundabout, and forming part of the western edge of the WHS. At Airman's Corner, the A360 extends west to Shrewton, with the B3086 continuing northwards from Airman's Corner. Access to the Stonehenge Visitor Centre is via Airman's Corner.
- 7.6.49 The B3086 continues northwards to Rolleston Junction, where it extends west to Shrewton, forming part of The Packway. To the east of Rolleston Junction. The Packway extends through Larkhill to join the A345 to the south of Durrington.
- 7.6.50 The A345 also extends broadly north to south through the study area, crossing the A303 at Countess Roundabout in Amesbury.
- 7.6.51 In the eastern part of the study area, the A3028 connects Durrington Roundabout and Bulford with the A303. In proximity to the A303 the road is also termed Double Hedges, and rises steeply across Bulford Hill to merge with the existing A303.
- 7.6.52 Bulford and Bulford Camp are both linked to the existing A303 by the Salisbury Road and Amesbury Road, both of which cross the A3028. The Salisbury Road joins the A303 via a series of roundabouts situated above the existing A303 to the north of Solstice Park. The Amesbury Road continues to the south of the existing A303, similar to the Allington Track, to the east. The Amesbury Road and Allington Track are linked via a bound road, to the south of the A303, which also crosses a number of tumuli at the junction with the Amesbury Road.
- 7.6.53 In the western part of the study area, telegraph poles cross the fields at the area east of Parsonage Down, continuing through Winterbourne Stoke, via the south side of the existing A303, to the road junction leading to Hill Farm.
- 7.6.54 From Hill Farm, telegraph poles extend south east along the valley floor to Berwick St. James and Stapleford, where the electrical substation is situated adjacent to Over Street.
- 7.6.55 In the eastern part of the study area, there are two electrical sub-stations at Ratfyn, situated in the valley floor, along with a sewage works. Overhead pylons extend from Ratfyn to cross the eastern part of the WHS, in close proximity to the Nile Clumps, before crossing the existing A303, The Avenue and Stonehenge Road, towards Salisbury.

Public Rights of Way (PRoW) and other Access

- 7.6.56 Figure 7.3 illustrates the existing PRoW and permissive open access land and paths within the study area.

- 7.6.57 At the western part of the study area, byways SLAN1 and BSJA4 border Yarnbury Camp and extend to the existing A303. These byways provide access to the open access land across Parsonage Down NNR, which is otherwise restricted in terms of access from the north and south. There is a permissive path between the B3083 and Parsonage Down NNR, located across the area east of Parsonage Down, along the southern edge of Natural England's land holding.
- 7.6.58 To the south of the existing A303, byway SLAN3 crosses Cow Down, along the edge of the Cranborne Chase and West Wiltshire AONB to converge with byways SLAN3, SLAN4 and STAP 5. Also to the south of the existing A303, byways BSJA3 and BSJA3(A) cross Berwick Down to Berwick St. James.
- 7.6.59 To the north of Winterbourne Stoke byway WST03 crosses between the existing A303 and the B3083; byway WST04 crosses between the existing A303 and the B3083, via Manor Farm and the Coniger tumuli, with the northern section of the route reverting to a footpath. Also within the River Till valley is byway WST05, which connects byway WST04 with Foredown Barn and byway WST06B, which continues north towards Shrewton and south to the existing A303.
- 7.6.60 There are several footpaths within Winterbourne Stoke, with footpath WST011 crossing Winterbourne Stoke Hill towards Oatlands Hill, where it converges with byway WST06A. This byway follows an existing track via Druids Head Barn to Stapleford Hill, with the track covered by BSJA10 and restricted byway STAP13. At Chain Hill, restricted byway STAP13 converges with restricted byway STAP8, which continues westwards to Stapleford. Within Stapleford, footpath STAP11 crosses between the A36 and the central part of the village.
- 7.6.61 The WHS is crossed by byway AMES12, which extends between Durrington and Normanton Down, but it is severed by the existing A303. From Normanton Down the byway continues to the A360 via byways WCLA1, BSJA11 and WFOR16.
- 7.6.62 Byway AMES11, which is in part parallel to byway AMES12, extends southwards from the existing A303 and opposite the Stones, to Normanton Down, where the route becomes byway WCLA2. During the field work it was observed that vehicles were parked on byway AMES12.
- 7.6.63 Figure 7.3 also demonstrates the extent of permissive open access land within the WHS, which covers an area to the north of the existing A303, extending between the edge of Fargo plantation and The Cursus, with the exception of the triangular parcel of land which include the Stones.
- 7.6.64 There is also permissive open access land to the south of the existing A303, between the existing road and byway AMES11. The existing A303 therefore severs the existing permissive open access land within the WHS.

- 7.6.65 There are several permissive paths within the WHS, including around Coneybury Hill and byways AMES11 and AMES12 and between the B3086 and Fargo Plantation, via Greenland Farm.
- 7.6.66 There are several bridleways between the eastern edge of the WHS and the A345, to the north of the existing A303, including AMES10, AMES39, AMES9A and AMES37. In contrast, there are no PRow to the south of the existing A303, between the WHS permissive open access land and Amesbury.
- 7.6.67 Within Amesbury, there are a large number of tracks and paths adjacent to the River Avon and as part of the Lords Walk. Bridleway AMES44 crosses the A303 via an overhead footbridge, linking London Road with bridleway AMES35 in Ratfyn. National Cycle Route no.45 also extends to the south west and north east of Amesbury.
- 7.6.68 Bridleway AMES35 continues eastwards from Ratfyn to the Porton Road/A303 roundabout, as well as northwards, to the existing electrical substation, where it joins bridleway AMES6 and footpath AMES7, both of which continue north east to Bulford.
- 7.6.69 At the eastern part of the study area, footpath BULF10 crosses either side of Double Hedges road, with byways BULF12 and AMES2 connecting between Double Hedge road and the existing A303.
- 7.6.70 To the south of the existing A303, byway AMES11 links the existing A303 to Amesbury, with a connection to Solstice Park via footpath AMES29.
- 7.6.71 At the northern part of the study area, byway SHRE27 crosses between The Packway (B3086) and Rolleston Camp. Bridleways SHRE41 and DURR33 are to the immediate north of the Packway, east of the B3086, and broadly follow the alignment of the road.

Designations

- 7.6.72 Figure 7.4 illustrates the two landscape related designations within the study area and which were included within the ZTV. These are:
- Cranborne Chase and West Wiltshire AONB – to the south west of Stapleford. The AONB Management Plan (Ref 7.9) Statement of Significance states what makes the AONB ‘special’. This includes the landscape character, panoramic views and dark skies. The existing A303 (beyond the Scheme boundary) crosses the AONB and the road is noted within the ‘issues and challenges’ section as an ‘exposed transport route’.
 - Special Landscape Area (SLA) – this is a saved policy of the former Salisbury District Council adopted Local Plan (Ref 7.5). The SLA covers the majority of the Scheme boundary and study area, except for Countess Roundabout, Amesbury, Bulford and Larkhill. The policy acknowledges the landscape is not of such high quality as the AONB, but considers it worthy of being preserved and that only development which is essential to the

rural economy or desirable for the enjoyment of its amenities will be permitted, and the location, scale and nature of such development will be carefully controlled in order to conserve the character of the SLA.

7.6.73 With reference to Chapter 6: Cultural Heritage (and HIA Appendix 6.1), Heritage designations include:

- a) Stonehenge, Avebury and Associated Sites WHS covers the study area east of the A360 and B3086 and west of the A345;
- b) Amesbury Abbey, a Grade II* RHPG, to the south of the existing A303, to the south west of Countess Roundabout;
- c) Countess Farm, a cluster of Grade II listed buildings to the north west of Countess Roundabout; and
- d) Conservation Areas at Winterbourne Stoke, Berwick St James, West Amesbury, Amesbury and Bulford.

7.6.74 With reference to Chapter 8: Biodiversity, ecological designations include the River Avon System Special Area of Conservation (SAC) and Site of Special Scientific Interest (SSSI), River Till SSSI, and Parsonage Down NNR, which is a SSSI.

Tranquillity

7.6.75 IAN 135/10 paragraph 2.13 defines tranquillity as:

“the remoteness and sense of isolation, or lack of it, within the landscape, which is often determined by the presence or absence of built development and traffic.”

7.6.76 Figure 7.5 illustrates the existing tranquillity across the study area as mapped by the Campaign to Protect Rural England (CPRE). Whilst the data is from 2007, it demonstrates the tranquillity rating across the study area is generally mid-range, although it decreases in relation to the settlements and parts of the road network, such as on the A360 and at Longbarrow Roundabout.

7.6.77 With reference to Chapter 9 Noise and Vibration, there are five ‘noise important areas (NIA)’, within the study area. NIAs are defined as those areas most exposed to noise. Two of these NIAs are within Winterbourne Stoke due to traffic along the existing A303 and three are in Amesbury, relating to traffic on the A345.

7.6.78 There is a greater sense of tranquillity within the River Till valley than other parts of the study area due to the more enclosed character of the landform. However, in proximity to Winterbourne Stoke vehicles on the existing A303 are visible and audible from within the valley, as well as buildings within the village.

- 7.6.79 There is also a greater sense of tranquillity from PRow across Winterbourne Stoke Hill and within the Cranborne Chase and West Wiltshire AONB, due to the reduced perception of vehicles and settlements, and the panoramic extent of views.
- 7.6.80 The Cranborne Chase tranquillity mapping (within the Cranborne Chase AONB Management Plan) identifies a mid-tier tranquillity rating for the part of the AONB within the study area.
- 7.6.81 Within Winterbourne Stoke, there is a notable contrast in the tranquillity between the southern parts of the village, consisting of narrow lanes and mature vegetation, in contrast to the northern part of the village, adjacent to the existing A303. The volume of traffic is highly visible and audible, and negatively impacts the tranquillity of this part of the village as demonstrated by the NIAs identified above.
- 7.6.82 From within the WHS, the tranquillity also varies, increasing further from the Stonehenge Visitor Centre and existing A303, the latter of which is evidently highly visible and audible from close range locations including the Stones, King Barrow Ridge and Byways AMES 11 and AMES 12.
- 7.6.83 There are also contrasting levels of tranquillity within Amesbury, with higher levels of tranquillity across the Lords Walk due to the extent of vegetation and the River Avon, in contrast to no tranquillity at Countess Roundabout and along the A345, due to audible vehicles.
- 7.6.84 Ultimately there is no true sense of remoteness or sense of isolation within the study area given the agricultural land use, transport routes and settlement patterns. However, from the field work, the tranquillity within Winterbourne Stoke and the WHS is notably impacted upon by the existing A303.

Future baseline

Construction year baseline (2021)

- 7.6.85 The landform across the study area would reflect the existing baseline identified in 2017/2018, remaining a rolling landscape crossed by the River Till and the River Avon valleys.
- 7.6.86 The vegetation pattern would reflect the existing baseline identified in 2017/2018, with a combination of roadside hedgerows and blocks of woodland interspersed across a predominantly open landscape.
- 7.6.87 The agricultural land use would remain, along with tourism within the WHS.
- 7.6.88 The settlement pattern would reflect the existing spatial distribution of Winterbourne Stoke, Amesbury and Larkhill as of 2017/2018. At the time of this assessment and the review of the committed or planned developments within the study area, there would be a number of additional buildings within Amesbury and military areas, beyond the Scheme boundary, including:

- a) 143 properties at south of Archers Gate, Amesbury (ref: 13/06181/OUT).
- b) new facilities at Bulford Garrison (ref: 15/05950/FUL).
- c) 227 properties south west of Bulford Road (ref: 15/04006/FUL and 17/02739/REM).
- d) office buildings and training facilities at Larkhill Garrison (ref: 15/06682/FUL).
- e) 400 dwellings north of The Packway and east of Larkhill (ref: 18/00397/FUL, 17/06370/FUL and 17/03959/FUL).
- f) 45 dwellings north of Clover Lane, Durrington (ref: Wiltshire Housing Site Allocation A14)
- g) 15 dwellings south of Larkhill Road, Durrington (ref: Wiltshire Housing Site Allocation A15).

7.6.89 The A303, A360 and A345 would remain the main road networks, along with Longbarrow Roundabout and Countess Roundabout.

7.6.90 The PRoW networks would reflect the existing baseline as illustrated on Figure 7.3.

7.6.91 The Special Landscape Area and Cranborne Chase and West Wiltshire AONB designation would remain. The AONB is assumed to have achieved its Dark Night Sky status, as this was an objective of the AONB 2014-2019 Management Plan.

7.6.92 The adverse impacts on tranquillity from the A303 would remain within the WHS, as well as the physical severance of recreational access across the A303.

7.6.93 The visual amenity of the identified visual receptors would also remain due to the open character of the landscape and retention of the above features as per the baseline.

Opening year baseline (2026)

7.6.94 The landform across the study area would reflect the existing baseline identified in 2017/2018, remaining a rolling landscape crossed by the River Till and the River Avon valleys.

7.6.95 The vegetation pattern would reflect the existing baseline identified in 2017/2018, with a combination of roadside hedgerows and blocks of woodland interspersed across a predominantly open landscape.

7.6.96 The settlement pattern would reflect the existing spatial distribution of Winterbourne Stoke, Amesbury and Larkhill as well as the incorporation of the additional buildings set out above at 2021. At the time of this assessment and

the review of the committed or planned developments within the study area, the following developments would introduce new buildings within Amesbury:

- a) 975 properties to the south and west of Archers Gate, Amesbury (ref: 15/02530/OUT and S/2012/0497).

7.6.97 The A303, A360 and A345 would remain the main road networks, along with Longbarrow Roundabout and Countess Roundabout. At the time of this assessment and the review of the committed or planned developments within the study area, the following developments would introduce alterations to existing infrastructure beyond the Scheme boundary:

- a) Two additional transmission dishes at the existing Beacon Hill transmitting station, (ref: 14/05426/FUL).

7.6.98 The PRoW networks would reflect the existing baseline as illustrated on Figure 7.3.

7.6.99 The Special Landscape Area and Cranborne Chase and West Wiltshire AONB designation would remain. The AONB would have achieved its Dark Night Sky status.

7.6.100 The adverse impacts on tranquillity from the A303 would remain within the WHS, as well as the physical severance of recreational access across the A303.

7.6.101 The visual amenity of the identified visual receptors would also remain due to the open character of the landscape and retention of the above features as per the baseline.

Published landscape character assessments

7.6.102 The study area is covered by a number of published landscape character assessments, which are undertaken by various organisations at national, county and district scales.

7.6.103 Landscape character assessment is defined within GLVIA 3 as the:

“process of identifying and describing variation in the character of the landscape and using this information to assist in the managing change in the landscape. It seeks to identify and explain the unique combination of elements and features that make a landscape distinctive”.

7.6.104 Local planning authorities use their published landscape character assessments as part of their planning policy evidence base and the published assessments often provide specific guidance or recommendations on managing landscape change.

- 7.6.105 The published landscape character assessments are outlined below, with the relevant detail and judgements on sensitivity provided in Appendix 7.4.

Published national landscape character assessments

National Character Area (NCA) 132: Salisbury Plain and West Wiltshire Downs (2013) (Ref 7.10)

- 7.6.106 The study area is covered by NCA 132: Salisbury Plain and West Wiltshire Down, which is characterised as:

“sparsely settled, predominantly agricultural area with a strong sense of remoteness and openness. The dominant element in the landscape – apart from the expansive sky – is the gently rolling chalk downland.”

- 7.6.107 Statements of environmental opportunity for NCA 132 include developing network connectivity (biodiversity); protecting, conserving and sustainably managing the NCA’s landscape, including for enhancing the visitor experience to the WHS and considering the removal or extension of woodland on a case by case basis, including for shielding the WHS from inappropriate development, and extending the scope for recreational access.
- 7.6.108 The A303 is noted by the published study as a busy road and one which intrudes upon tranquillity and dark skies.

Published county landscape character assessments

Wiltshire County Landscape Character Assessment (2005) (Ref 7.11)

- 7.6.109 With reference to Figure 7.6, at the county scale, the study area is covered by the following Landscape Character Types (LCTs) and Landscape Character Areas (LCAs):
- a) LCT 3: High Chalk Plain and LCA 3A: Salisbury Plain and LCA 3B: Salisbury Plain East; and
 - b) LCT 5: Chalk River Valley and LCA 5E: Wylve Valley and LCA 5D: Upper Avon.
- 7.6.110 With reference to Appendix 7.4, key characteristics of the above LCT and LCA include large open rolling fields, military land uses, heritage features, busy transport corridors (e.g. the existing A303) and river valleys.

Published district level landscape character assessments

Salisbury District Landscape Character Assessment (2008) (Ref 7.11)

- 7.6.111 Figure 7.7 illustrates that at the district scale, the study area is covered by the following LCTs and LCAs:

- a) LCT A: Narrow Chalk River Valley, with LCA A1: Till Narrow Chalk River Valley and LCA A2: Upper Avon Narrow Chalk River Valley; and
- b) LCT D: Chalk Downland, with LCA D2: Tilshead Chalk Downland, LCA D3: Larkhill Chalk Downland and D4: Boscombe Down Chalk Downland.

7.6.112 With reference to Appendix 7.4, key characteristics of the above LCT and LCA reflect the county landscape character assessment descriptions.

Salisbury District Settlement Setting Assessment (2008) (Ref 7.12)

7.6.113 Amesbury, Bulford and Durrington are included within these setting assessments, which set out the key landscape character and visual sensitivities of the settlements and recommendations for the development capacity of the landscape around each settlement.

7.6.114 The study notes that the alignment of the principal approach roads into and around the settlements has been influential in determining the distinctiveness of and boundaries to the townscapes.

7.6.115 The study identifies a number of views towards the settlements from the surrounding landscape, for which those relevant to the Scheme are covered by the LVIA representative views.

7.6.116 Countess Roundabout and the existing A303 is part of a green/treed/river valley character area and 'supportive townscape/landscape character'. This is defined by the study as:

"These are areas of townscape / landscape which support the character of the historic cores and areas distinctive to the settlements. They provide the backdrop and ambience and bolster the sense of place of the towns and their approaches."

Published local level character assessments

7.6.117 The WHS Stonehenge and Avebury WHS Management Plan, 2015 (Ref 7.13) identifies the following principal landscape areas which have been used as a basis for the local landscape and townscape character areas identified via the field work:

- a) agricultural downland;
- b) Avon valley, river valley slopes;
- c) Avon valley, water meadows and floodplain;
- d) downland ridgelines;
- e) dry river valleys;
- f) unimproved downland/ military training;

- g) Upper Stonehenge dry valley; and
- h) urban areas.

7.6.118 The WHS Management Plan notes that typically, much of the WHS is an open landscape. The rolling landform, with large fields bounded by fences and long-distance views of plantations, clumps of trees, roads and upstanding archaeological features are noted as the most distinctive characteristics of the downland plateau landscape of the WHS. In contrast to the expansive downland plateau areas, the enclosed and small-scale character of the Avon valley is a notable variation in the character of the WHS. The general absence of hedgerows and buildings is also a notable characteristic.

7.6.119 The WHS Management Plan notes that the setting of the WHS is characterised by a rolling open landscape, which is particularly sensitive to development, stating that:

“At Stonehenge, with the exception of the grassland areas in and around key monuments, the landscape of the WHS is more or less wholly farmed with extensive areas of very large arable fields. There are also limited (but visually prominent) areas of woodland. Principal features of the landscape include the distinctive ridgelines with their concentrations of visible archaeological remains, including the Stones themselves, and dry valleys which cut deeply into the surrounding downland.” (WHS Management Plan paragraph 8.3.2)

7.6.120 The WHS Management Plan identifies the key characteristics of the WHS landscape as:

- *“An open landscape in which the sky dominates;*
- *The undulating landform, with large fields bounded by fences and long distant views of plantations, clumps of trees, roads and upstanding archaeological features being the most distinctive characteristics of the downland plateau landscapes within the WHS;*
- *The general absence of hedgerows and buildings is also a notable feature; and*
- *Enclosed small scale character of the Avon Valley.”*

7.6.121 The landform within the WHS (rolling with a series of ridges and valleys) is also noted as a distinctive feature, with visually prominent ridges and panoramic views from Windmill Hill and valley floors which mark the transitions between the WHS and surrounding landscape types. The modern features of the WHS landscape include intensive military use.

7.6.122 The WHS Management Plan notes that the intrusive elements within the WHS are:

- *“roads and traffic which dominate a number of areas and are visibly and aurally intrusive;*
- *the A344, A303 and A360 at Stonehenge;*
- *the traffic;*
- *the severance between Stonehenge Avenue and Durrington Walls as a result of the A303 and A345; and*
- *buildings at Larkhill and Boscombe Down, the latter of which is noted as being visually prominent.”*

Local landscape character areas defined by field work

7.6.123 Given the large extent of the published character areas, in order to provide a more detailed assessment of the existing landscape character, at a more relevant scale to the Scheme, a number of local landscape and townscape character areas have been identified via field work, as illustrated on Figure 7.8.

7.6.124 The identification of local landscape character areas (LLCA) as part of the assessment process reflects similar local level assessments within the WHS Stonehenge and Avebury WHS Management Plan and the LVIA for the Stonehenge Visitor Centre and A303 Stonehenge Improvement Scheme (2003).

7.6.125 The LLCA directly within the Scheme boundary are listed below, with further detail and judgements on their sensitivity in Appendix 7.5.

- a) North Berwick Down, located in the western part of the study area and to the north of the existing A303;
- b) Parsonage Down Dry Valley, also located in the western part of the study area, adjacent to Parsonage Down NNR and the B3083;
- c) Upper Till Valley Slopes, which extends between the B3083 and the A360, with the exception of the River Till and its floodplain;
- d) Upper Till Floodplain and Meadows, which covers the River Till and its floodplain;
- e) Winterbourne Stoke Dry Valleys, which extends either side of the A360 and to the north of the existing A303;
- f) Oatlands Hill, which covers the area to the south of the existing A303, around Longbarrow Roundabout;

- g) Stonehenge and Normanton Ridges, in the central part of the study area, covering the western part of the WHS, to the north of the existing A303;
- h) Springbottom and Woodford Dry Valleys, in the central part of the study area, covering the western part of the WHS, to the south of the existing A303;
- i) King Barrow and Coneybury Ridge, a ridge line in the eastern part of the WHS;
- j) Countess Farm Dry Valleys, at the eastern part of the WHS, extending to the edge of WHS;
- k) Avon Valley Slopes, which borders the River Avon in the eastern part of the study area;
- l) Avon Valley Floodplain and Meadows, which covers the River Avon in the eastern part of the study area; and
- m) Earl's Farm Downs, which forms part of the eastern edge of the study area, covering land to the east of Amesbury.

7.6.126 The local townscape character areas (LTCA) along with judgements on their sensitivity are set out in Appendix 7.5 and include:

- a) Shrewton and Winterbourne Stoke, in the western part of the study area;
- b) Larkhill and Durrington in the central part of the study area; and
- c) Bulford and Amesbury in the eastern part of the study area.

Visual context

7.6.127 Field work has been undertaken across the study area between July 2017 and April 2018 covering winter and summer months aided by the ZTV (Figure 7.9).

7.6.128 36 representative viewpoints (RV) have been identified to convey the visual context of the study area and likely views of the Scheme (Figure 7.10). The 36 RVs have been agreed with Wiltshire Council and represent a range of close, middle and long distance views from varying receptor groups, including residents, recreational users, motorists and tourists.

7.6.129 Existing winter and summer photographs for the 36 RV are presented in Figure 7.14 to Figure 7.49, with a description of the views provided in Appendix 7.6, along with the sensitivity of the receptors. The following section provides a summary of Appendix 7.6, with reference to the RV.

7.6.130 To the north of the existing A303, around Yarnbury Camp (RV 1 Figure 7.14) and open access land across Parsonage Down NNR (RV 4 Figure 7.17) views extend across the area east of Parsonage Down, to include Stonehenge Visitor

Centre and the Winterbourne Stoke Clump woodland, adjacent to Longbarrow Roundabout. These features are set within the context of long distance panoramic views across the landscape.

- 7.6.131 From within the Cranborne Chase and West Wiltshire AONB (RV 2 Figure 7.15), whilst there are elevated and panoramic views, the ridgeline across Winterbourne Stoke Hill and woodland bordering Hill Farm screen views of the WHS. the area east of Parsonage Down is also screened by the intervening rolling landform, such that only the upper parts of tree canopies adjacent to Cherry Lodge lane are visible.
- 7.6.132 From elevated positions on High Down (RV 6 Figure 7.19) there are views of the agricultural fields across the River Till Valley sides and Fore Down, as well as buildings at Hill Farm. These views also include vehicles on the existing A303, and the roadside hedgerows which demarcate the route of the existing road across the landscape.
- 7.6.133 From along the River Till Valley floor (RV 7 Figure 7.20) views extend to Hill Farm and along the valley floor to buildings in Winterbourne Stoke, and vehicles on the existing A303.
- 7.6.134 Within Winterbourne Stoke there are close range views of vehicles on the existing A303. At the western part of the village, views from properties extend northwards across High Down and the River Till valley sides, to the area east of Parsonage Down and include vehicles on the B3083.
- 7.6.135 From the eastern edge of the village, there are views northwards along the River Till valley floor, which are generally open in character. In summer, when these trees are in leaf, views still remain along the floodplain.
- 7.6.136 There are recreational routes to the south of Winterbourne Stoke, which cross Winterbourne Stoke Hill. From these elevated locations, (RV 9 Figure 7.22) there are open panoramic views northwards across the landscape, including parts of Shrewton and Salisbury Plain and vehicles on the B3083, although the existing A303 is not visible due to the undulating landform. In relation to the Scheme, the area east of Parsonage Down and parts of the River Till Valley are also visible. Due to the elevated location and the generally open character of the landscape, the view remains similar between winter and summer months, albeit with some softening of views of vehicles on the B3083 as a result of the existing roadside hedgerows being in leaf.
- 7.6.137 At Oatlands Hill, the elevated landform enables views across to Longbarrow Roundabout, specifically from Hill Farm Cottages (RV 10 Figure 7.23). There are also close range views of the existing A303 to the north of these properties, as part of a wider view which extends across Fore Down and parts of the River Till Valley. In summer, and with the roadside hedgerows in leaf, close range views of cars on the existing A303 are screened, whilst views of higher sided vehicles remain. Views eastwards from Hill Farm Cottages towards Longbarrow Roundabout remain as per winter views, whereby vehicles are visible on the

existing A303. This is due to the elevated position of the cottages and the orientation of the view, along the existing A303 alignment.

- 7.6.138 From the Stonehenge Visitor Centre (RV 12 Figure 7.25), the intervening ridge lines within the WHS screen views of The Stones and Longbarrow Roundabout. There are long distance views westwards, across arable fields to Parsonage Down NNR, including for the southern part of the area east of Parsonage Down.
- 7.6.139 There are similar long distance views to Parsonage Down NNR from the Winterbourne Stoke Group interpretation panel viewpoint (RV 13 Figure 7.26), at the western edge of the WHS. Similar to views of the A360 and Airman's Corner from the Stonehenge Visitor Centre, existing vehicles, highways signage and lighting columns are also visible in close range views from the interpretation panel. Views remain similar in winter and summer, due to the slightly elevated position of the viewpoint and the open character of the agricultural landscape. With the existing roadside hedgerows in leaf, there is more screening of vehicles.
- 7.6.140 From within the central part of the WHS the Stones are visible from permissive open access land and Byways AMES 11 and AMES 12 (RV 18, RV 19, RV 20, Figure 7.31, Figure 7.32 and Figure 7.33). The Stones are seen in the context of vehicles on the existing A303 on AMES 12 which substantially detract from the scenic quality of the view and the perception of the Stones within an open landscape.
- 7.6.141 To the south of the existing A303, the undulating landform within the WHS and woodland clumps screen views of the Stones from parts of Byway WCLA1 (RV 15 Figure 7.28), such that the focus of the view is the pig farm and vehicles.
- 7.6.142 From King Barrow Ridge (RV 23 Figure 7.36), the elevated position of the view enables the Stones to be seen within a continuous agricultural open landscape due to the reversion of the former A344. However, views of vehicles on the existing A303 and byways detract from the scenic quality of the view and the perception of the Stones within an open landscape
- 7.6.143 From within the eastern part of the WHS, the King Barrow ridge line prevents views of the Stones. The main features of the view are therefore the rolling agricultural landscape, the Nile Clumps, pylons and the mature woodland in Amesbury Park, on the south side of the existing A303 (RV 26 Figure 7.39). Within these views, the existing A303 is generally not visible, as the road is in cutting and given the extent of existing roadside vegetation.
- 7.6.144 There are some partial views of vehicles on the existing A303 from the PRoW, with the vehicles seen in the context of the electricity pylons which cross the eastern part of the WHS and part of the existing A303. These features are also visible from residential properties adjacent to Countess Road (A345), although the existing garden vegetation softens and screens views to varying degrees in the summer.

- 7.6.145 Properties on Countess Road have views east to west, such that existing views of Countess Roundabout are oblique (RV 30 Figure 7.43). The main exception is Countess Farm, to the north west of Countess Roundabout, which has close range views of existing vehicles and signage from the southern elevation of the property. At the time of the summer field work, views of the road are screened by the existing roadside trees.
- 7.6.146 Where visible from properties on Countess Road, the roundabout and vehicles are seen in the context of the lighting columns and traffic signals. Residential properties on the east side of Countess Road, have views eastwards across part of the River Avon valley, consisting of agricultural fields, woodlands and overhead pylons. There are oblique and angled views towards the Travelodge service area and mature vegetation bordering the existing A303.
- 7.6.147 To the south of Countess Roundabout, views from within the grounds of Amesbury Park are limited by the extent of vegetation, although there are some filtered views of vehicles on the existing A303 from Bowles Hatches. There are also views of vehicles from the publicly accessible part of the RHPG, forming part of the Lord's Walk, to the east of the A345, (RV 31 Figure 7.44). Views are possible due to the close proximity of the existing A303, gaps in the existing vegetation and that the existing road is slightly elevated above this part of Lords Walk.
- 7.6.148 The Lord's Walk also crosses the elevated land to the south of the RHPG, adjacent to residential properties in Amesbury. There are largely filtered views of Countess Roundabout due to the extent of existing vegetation, and in summer months the roundabout is not visible.
- 7.6.149 Similarly, for residential properties in Durrington, bordering Larkhill Road (RV 29 7.42), the existing vegetation and intervening landform screens Countess Roundabout, such that the focus of the view is the River Avon valley.
- 7.6.150 From PRoW within the River Avon valley, between Ratfyn and Bulford (RV 32 Figure 7.45), there are close range views of the existing sewage works and electrical sub-stations, as well as residential properties bordering Countess Road and within Durrington. Countess Roundabout is not visible due to the existing vegetation and the ridgelines within the eastern part of the WHS screen any longer distance views.
- 7.6.151 From the road networks and the PRoW to the east of Solstice Park (RV 33 Figure 7.46) the proximity to the existing A303 enables open views of vehicles, seen in the context of large scale buildings within Solstice Park.
- 7.6.152 The A303 and buildings at Solstice Park are visible from elevated locations at the eastern edge of the study area, including Beacon Hill (RV 34 Figure 7.47), but form a very small part of the wider panoramic views. From Beacon Hill, the upper parts of the existing lighting columns at Countess Roundabout are visible, as well as part of the existing A303 within the eastern part of the WHS.

Character of the night sky

- 7.6.153 The LVIA includes a non-measured assessment of the existing lighting and character of the night sky. This is in the context of 'darkness' often being a key characteristic of a rural area, as opposed to a town or urban area.
- 7.6.154 The existing night time lighting and character of the night sky is established through a review of published information and night time field work.
- 7.6.155 Figure 7.50 illustrates CPRE's dark sky mapping. Each pixel shows the level of radiance (night lights) shining up into the night sky. These have been categorised into colour bands to distinguish between different light levels, such that the brightest light levels are represented by the pink, reds and browns, and the darkest levels are represented by the light and dark blues.
- 7.6.156 Figure 7.50 illustrates that the western part of the study area is representative of the darkest skies, reflecting the existing agricultural land use and localised small scale settlement pattern.
- 7.6.157 Approximately 52% of the Cranborne Chase and West Wiltshire Downs AONB is the darkest category of night sky, reflecting the AONB management plan's 'special qualities' and aim to achieve Dark-Sky Reserve status.
- 7.6.158 Shrewton and Winterbourne Stoke, as well as the A360 between Longbarrow and Airman's Corner are brighter areas relative to the surrounding agricultural landscape.
- 7.6.159 Whilst parts of the WHS are within the darker night time lighting levels, increasing lighting levels are consolidated around the existing A303 between the Stones and Amesbury.
- 7.6.160 Brightness levels increase to the south of the existing A303, across Amesbury, with the brightest areas within Solstice Park. The River Avon between Amesbury, Durrington and Bulford, is impacted by the lighting from nearby Amesbury, such that it is a 'mid-tier' level of brightness.
- 7.6.161 From the field work, sources of lighting within the western part of the study area include vehicles on the existing A303 and the villages. There are no street lights along the existing A303 until Winterbourne Stoke and the junction of the existing A303 and the B3083, where there are lighting columns between approximately 10-12m in height on both sides of the junction.
- 7.6.162 At the junction with Church Street, which is also lit by lighting columns, the lighting columns are on the southern side of the road, within the verges between the pavement and residential properties, extending until the highways signage demarcating the change in speed limit within the village.
- 7.6.163 Continuing eastwards, there is no street lighting on the existing A303 until Longbarrow Roundabout, nor adjacent to the road due to the agricultural land use. There is localised lighting from Hill Farm Cottages.

- 7.6.164 At Longbarrow Roundabout, the lighting columns extend around the edge of the existing roundabout and along part of the A360, on the approach to the roundabout. The A360 is unlit adjacent to the WHS, until Airman's Corner, which is similarly lit like Longbarrow Roundabout.
- 7.6.165 Continuing northwards from Airman's Corner, the road network is not lit at Rolleston Corner, nor is The Packway lit between Shrewton and the military land uses at the edge of Larkhill's settlement pattern.
- 7.6.166 Returning to the central part of the WHS, the light sources are limited; due to the agricultural land uses and that the existing A303 is not lit by lighting columns until the approach to Countess Roundabout. Within the WHS the Stonehenge Visitor Centre, with opening hours until 19.00pm, is a light source during winter months. The Stones are not lit at night.
- 7.6.167 At Countess Roundabout the lighting columns are approximately 12m in height and extend northwards along Countess Road (A345) on both sides of the road until the turning to Woodhenge. Lighting columns also extend southwards from Countess Roundabout into Amesbury.
- 7.6.168 The existing A303 remains unlit between Countess Roundabout and Beacon Hill. The main source of lighting is from within Solstice Park, which in combination with Amesbury forms a localised sky glow.
- 7.6.169 The night time field work supports the CPRE mapping, whereby this study area is a predominantly dark landscape as a result of the agricultural land use, although vehicles are a source of glare and the sky glow from the larger settlements is noticeable from the surrounding landscape, including the eastern part of the WHS. Areas such as Longbarrow Roundabout and Countess Roundabout are bright areas due to the existing road lighting.
- 7.6.170 The Institution of Lighting Professionals guidance notes for the reduction of obtrusive light (Ref 7.14) categorises different zones of night time lighting and using this guidance, the majority of the study area is considered to be representative of 'environmental zone E2 Rural locations', being of 'low district lightness'. Amesbury and the other settlements are representative of 'zone E3 Suburban' and 'medium levels of brightness', with Solstice Park representative of 'zone E4 urban' and 'high levels of night time activity'.

7.7 Potential impacts

- 7.7.1 Mitigation measures being incorporated in the design and construction of the Scheme are set out in Section 7.11. Prior to implementation of the measures, the Scheme has the potential to affect landscape and visual receptors (beneficially or adversely), both during construction and during the Scheme's operation, in the following ways.

Construction

7.7.2 Adverse change to the landscape and visual receptors during the construction phase would result from:

- a) general construction activity and machinery during the 5 year construction period, set within an open and agricultural landscape, as well as within the WHS;
- b) the location and use of the contractor compounds and the Slurry Treatment Plant (STP), as both would contain buildings and other visible structures as well as demarcating a change in land use and character from the existing fields and agricultural practices;
- c) the haul roads within the Scheme boundary, specifically the movement of excavated tunnel material between the tunnelling operations and the STP and temporary crossings of the River Till;
- d) temporary closure of existing PRow;
- e) excavation and re-modelling of surface landform;
- f) removal of existing vegetation, as well as needing temporary topsoil and chalk storage areas; and
- g) temporary lighting to support night time working, hoardings and fencing, as well as the 24 hour operation of the STP.

Operation

7.7.3 Beneficial change to the landscape and visual receptors during the operational phase would result from:

- a) new chalk grassland across the Scheme boundary, once established, specifically at the area east of Parsonage Down;
- b) substantially reducing the volume and visual impact of vehicles passing through Winterbourne Stoke;
- c) removing or downgrading the physical and visual impact of the existing A303 within the WHS, so as to physically and visually reconnect the landscape within the WHS;
- d) removing light sources, including the lighting columns at the existing Longbarrow Roundabout and improving the character of the night sky within the WHS;
- e) improving tranquillity through reduced visual and audible perception of vehicles within the WHS; and

- f) providing additional access routes within Scheme boundary by the new NMU strategy and green bridges, in an area noted by the published landscape studies as being of limited access.

7.7.4 Adverse change to the landscape and visual receptors during the operational phase would result from the:

- a) increase in the extent of the road corridor across the landscape between Berwick Down and the Western Portal, along with the associated highways infrastructure, including directional signage, variable message signs (and associated glare) and concrete retaining walls;
- b) vehicles in elevated positions across the landscape, including across the southern part of the area east of Parsonage Down, the River Till Viaduct and Countess Flyover;
- c) the scale of Longbarrow Junction; and
- d) new structures and massing within the landscape, including Countess Flyover and its reinforced embankments and the River Till Viaduct.

7.8 Design, mitigation and enhancement measures

Design principles

7.8.1 The first stages of the design process established a series of landscape and visual principles in response to the vision of Highways England's 'the road to good design' (Ref 7.15) which requires road networks to:

"reflect in its design the beauty of the natural, built and historic environment through which it passes, and enhancing it where possible."

7.8.2 The Highways England publication identifies 10 design principles; with the 4th design principle being 'fits in context', whereby good road design demonstrates sensitivity to the landscape and builds a legacy for the future.

7.8.3 The landscape and visual principles were therefore based upon the local landscape character areas so as to successfully identify the existing character and integrate the Scheme within the existing landscape. The design principles are outlined below.

Downland Areas

7.8.4 In downland areas the design principles were:

- a) integration of new earthworks into the existing rolling downland landscape by grading out of the embankments and rounding off the top of cuttings, to form an "s" shape to the completed earthworks in order to reflect the existing natural landform;

- b) landscape enhancement through the re-creation of calcareous species rich grassland, as this is a key characteristic of Salisbury Plain and a nationally rare habitat;
- c) integration of new embankments into the landform and return to unrestricted agriculture, where appropriate, so as to reflect the existing land use and landscape pattern and minimise the apparent footprint of the new dual carriageway;
- d) use of false cuttings (bunds) to aid softening views of vehicles, particularly cars;
- e) a planting strategy to respond to the landscape character and management objectives of Parsonage Down NNR; and
- f) enhancing the north to south and east to west NMU links along existing A303 and via 'green bridges', so as to counter the severance to recreational routes and respond positively to the stated landscape guidance for NCA 132.

River Till Valley

7.8.5 In the River Till Valley the design principles were:

- a) minimise the impact on valley sides through careful selection of the crossing point. By using existing elevated landform or 'spurs' within the valley, the embankments could be graded out to give the appearance of a natural valley side;
- b) a viaduct design, rather than a bridge with earthworks within the valley floor, so as to retain the open character of the valley floor, reducing the overall mass of the viaduct and maintaining visual continuity along the valley floor, beneath the viaduct; and
- c) ensuring the height and width of the viaduct minimises shading so as to maintain the grass beneath the viaduct to help maintain visual continuity of the valley floor.

World Heritage Site

7.8.6 In the WHS the design principles were:

- a) Maximising landscape enhancement opportunities resulting from the removal of vehicles on the existing A303;
- b) Maximising non-motorised users (NMU) opportunities within the WHS via 'green bridges', re-use of the existing A303 and connectivity to existing byways;

- c) Avoiding the creation of new upstanding earthworks which would conflict with the inter-relationship of archaeological monuments/features within a rolling open landscape;
- d) Locating new highways associated fencing below the skyline adjacent to the cutting approach to the western portal so as to minimise its visual impact;
- e) Implementing calcareous grassland on cut slopes above the retained cut to minimise visual impact between the existing land uses and the retained cutting;
- f) Minimising lighting and signage within and bordering the WHS; and
- g) Implementing a planting strategy to respect the objectives of the WHS Management Plan.

River Avon Valley

7.8.7 In the River Avon Valley the design principles were:

- a) No land take around the Countess Roundabout to avoid direct impacts on adjacent environmental designations;
- b) No lighting on elevated sections of the Countess Flyover;
- c) Appropriate landscape/townscape response to the roundabout providing improved NMU connectivity north to the south of the Amesbury, compared to the existing underpasses;
- d) Retention of existing highway planting, supplemented by replacement tree planting where possible.

7.8.8 The second stage of the landscape design process was based upon the DMRB Volume 10 Part 2: Environmental Functions (Ref 7.16). This sets out a range of function codes related to the design and management of a highway e.g. visual screening to mitigate against adverse visual impacts. The Environmental Masterplan Drawings (Figures 2.5 A-O) illustrate these detail environmental function codes. The relevant landscape and visual codes are:

- a) EFA – Visual Screening (mitigation against adverse visual impacts);
- b) EFB – Landscape Integration (integrating the highway with the surrounding landscape);
- c) EFC – Enhancing the Built Environment (enhancing the landscape and built elements of the highway to reflect the local townscape or community); and
- d) EFE – Visual Amenity (maintain interest, variety and an acceptable visual appearance for road users and public viewers).

Construction

- 7.8.9 For landscape and visual matters, the construction phase and associated mitigation refers to the construction compounds and activity, machinery and processes to implement the Scheme as set out within the methodology section.
- 7.8.10 Construction mitigation measures are set out in Table 7.4. Specific landscape and visual construction mitigation measures are also described in the OEMP (Appendix 2.2).

Table 7.4: LVIA construction mitigation

ES category	LVIA Mitigation
Embedded	<ul style="list-style-type: none"> • Locating the topsoil and construction compound to the east of the existing B3083 and in a relatively low lying position within the landscape at the base of High Down and to the north of Winterbourne Stoke, beyond the embankment. This aids in reducing the visibility of these elements and the amount of re-profiling which would have to occur were the compound located in a more elevated position. • Locating the STP to the west of the WHS and main contractor compound and below the ridgeline. The positioning of the STP across falling landform also aids with terracing the individual treatment plants to facilitate the movement of water through the operational process. • Locating the main contractor compound to the west of the WHS and enclosing the main contractor compound with topsoil storage so as to soften views from within the surrounding landscape. • Not locating any construction compounds within the WHS. • Ensuring soil structures are protected where land would be used temporarily, such as for compounds, haul roads, re-grading areas, etc. so that when it is returned to the existing land use, it is in a suitable condition. • Locating the topsoil, chalk and contractor compound to the north east of existing services at Countess Roundabout, so as to consolidate this land use around existing services. • Restricting buildings within the main contractor compound to the west of the WHS to one storey in height. • Implementation of the OEMP.

Operation

- 7.8.11 For landscape and visual matters, the operational phase of the Scheme is its finished and usable state, including for structures (i.e. Countess Flyover) and traffic, as set out in the methodology section. The operation phase allows for new planting being present in the landscape (year 1) and its future growth (year 15). These scenarios accord with GLVIA 3 and IAN135/10 assessment guidance.
- 7.8.12 Operation mitigation measures are set out Table 7.5. Specific landscape and visual construction mitigation measures are illustrated on the Environmental Masterplan and Illustrative Cross-Section drawings (Figures 2.5 P-S) and

supported by the Environmental Mitigation Schedule (Appendix 2.1) and OEMP (Appendix 2.2).

Table 7.5: LVIA operation mitigation

ES category	LVIA Mitigation including Environmental Function Codes
Embedded	<ul style="list-style-type: none"> Chalk grassland 1m high bunds at the western end of the Scheme, adjacent to the new carriageway, north and south of the alignment between SLAN3 and Green Bridge One. To include intermittent scrub and trees (EFE, EFB). Re-grading of the earthworks and new chalk grassland to the south and east of Parsonage Down NNR (EFE, EFB). Part removal and re-configuration of the existing A303 up to the western edge of Winterbourne Stoke. The road will be reduced in width and the verges seeded with chalk grassland and intermittent scrub. Removal of the redundant sections of the B3083 and plant native species woodland block on land between the redundant and realigned B3083, including native hedgerow along the western boundary (EFA, EFC). Green Bridge Four within the WHS for landscape integration and visual screening (EFB, EFA). New woodland planting to the north of Scotland Lodge Farm between Green Bridge One and the realigned B3083 underbridge to integrate the Scheme with existing tree belts (EFB). Re-grading of landscape earthworks to sympathetically integrate them within the existing rolling landform to the north of Winterbourne Stoke, in combination with 2m false cutting between Green Bridge One and the realigned B3083, as well as rounding off the top of the deep cutting to reflect the natural rolling landform (EFA, EFB). 2m bund on the B3083 underbridge to connect to the false cutting either side of the bridge for continuation of visual screening (EFA). 3m false cutting and new native hedgerow along south side of the new A303 between the B3083 underbridge and the River Till viaduct (EFA). New woodland planting around the River Till Viaduct abutments (EFB, EFA). River Till viaduct with 1.5m environmental barrier along the south side of the viaduct (EFA). Sympathetic regrading of the earthworks between the River Till viaduct and Longbarrow Junction along the north and south of the new A303, including 2m false cuttings, new native hedgerows to tie in with retained vegetation, return of land to agricultural use and new green bridge (Green Bridge Two) (EFA, EFB). Replacement of existing hedgerow on the western edge of the realigned Byway WST06B, running north-south of Green Bridge Two, as well as along existing field boundary running parallel to the north of the new A303/ Green Bridge 2 (EFB). Single variable message signs rather than overhead gantries across the dual carriageway (EFA). Part removal and reconfiguration of existing A303 west of Longbarrow Junction and Green Bridge Three (EFB). Removal of existing A303 between Longbarrow Junction and the

ES category	LVIA Mitigation including Environmental Function Codes
	<p>WHS, seeded with chalk grassland, including retention or replanting of hedgerow along the northern boundary (EFB).</p> <ul style="list-style-type: none"> • Woodland planting adjacent to Longbarrow Junction in line with the Environmental Masterplan (EFB). • New chalk grassland adjacent to the retained cutting in the western part of the WHS in combination with the rounding off and seeding of the upper one third of the retaining walls (EFB, EFA). • New chalk grassland to the north of the new A303 between Green Bridge Three and the WHS boundary (EFB, EFA). • Native hedgerows adjacent to the Longbarrow junction along the on/off slip-roads, the A360 north and south links and the downgraded Winterbourne Stoke link. Hedgerows to connect to existing vegetation at tie-ins for landscape integration (EFB). • Re-grading of landscape earthworks to sympathetically integrate them within the existing rolling landform adjacent to Longbarrow Junction, including between Green Bridge Three and the edge of the WHS, and along the A360 south link road (EFB). • Removal of redundant sections of A360 on WHS boundary between the existing Longbarrow roundabout and the A360 tie-in, north and south, including retention or replanting of hedgerow along western boundary of broken out A360 (EFB). • Western and eastern portals to be seeded with chalk-grassland. • Breaking out of the redundant A303/ Stonehenge Road within the WHS and chalk grassland seeding and 4m wide restricted byway as set out in Chapter 2 (EFB). • Retained cut at the Nile Clumps to retain these trees (EFB). • Replacement planting around the new drainage basins at Countess Flyover (EFB). • Earthworks and new amenity planting (including semi-mature trees) at Countess Flyover to include earthworks within the centre of the roundabout and at the foot of the retained earth embankment, with low retaining walls, to accommodate all year planting interest (EFA). • New woodland planting around Countess Junction and directly east of Countess Services (EFA). • New chalk grassland and intermittent scrub across the Scheme on the cuttings, embankments, green bridges, cut and cover portal etc., except where alternative landscape treatments are proposed within the Environmental Masterplan (EFB).

7.9 Assessment of effects

7.9.1 The construction phase assessment is based upon winter conditions, when most vegetation is not in leaf and there would be greater visibility of the construction activity compared to summer months. This represents a worst case scenario. The construction phase assessment is based upon the change to the existing landscape and visual baseline as per 2017/2018.

7.9.2 As set out in the methodology, the construction phase assessment includes the location of construction equipment, access and hauls routes, the type of

machinery being used and the position and scale and working areas (i.e. cut and fill) as well as temporary lighting.

- 7.9.3 The operational assessment is undertaken against the existing baseline (2017/2018). As set out in the methodology, the operational phase assessment includes the location, scale and design of buildings or structures, access and traffic movements (including high load routes and diversion scenarios), signage, traffic lights, boundary treatments, planting and lighting.
- 7.9.4 The operational assessment is undertaken at the following phase:
- a) year 1 and during winter, reflecting the above assessment description, when most vegetation is not in leaf and there would be greater visibility of the Scheme compared to summer months. This represents a worst-case scenario; and
 - b) year 15 and during summer, reflecting the above assessment description and when the existing vegetation and proposed planting is in leaf and established, such that it performs a screening or softening function. This represents a best-case scenario.
- 7.9.5 For both the construction and operation phase, effects of moderate, large and very large are considered significant. These effects are summarised at the end of the LVIA chapter, in Table 7.11, Table 7.12 and Table 7.13. Effects of slight and neutral are considered not significant and are included in the LVIA Appendix Assessment tables (Appendix 7.7 and 7.8), along with the significant effects.

Landscape - construction phase (winter)

- 7.9.6 At the western part of the Scheme boundary, across Berwick Down and the area east of Parsonage Down, construction activity would include excavation for the Winterbourne Stoke cutting to depths of 12.5m below existing ground levels, the implementation of Green Bridge One and the formation of the 17m high embankment to the north of Scotland Lodge Farm. This construction activity would last between three to five years.
- 7.9.7 There would be extensive re-grading works across the area east of Parsonage Down as part of the deposition of material from the tunnel excavation. There would also be a haul route between the area east of Parsonage Down to the STP, via the River Till valley floodplain.
- 7.9.8 The construction of the River Till Viaduct would require cranes and tall lifting equipment, as well as the localised re-profiling of the valley sides to create the River Till embankments west and east, and the earthworks around Green Bridge Two. The construction of this part of the Scheme would last up to two years.
- 7.9.9 The STP would be located within the dry valley to the north of Winterbourne Stoke Hill, and to the north of Hill Farm cottages. At 20m in height, the STP

would be larger in scale than agricultural and residential buildings within the surrounding landscape. In contrast, buildings within the main construction compound would be one storey in height (4m). Stockpiled topsoil would also be positioned around the main contractor compound to aid in lessening the perception of these buildings.

- 7.9.10 Both the STP and main construction compound would require localised regrading of landform and vegetation removal, as well as security fencing and new lighting, with the STP in 24 hour operation.
- 7.9.11 Longbarrow Junction would require excavation down to 11m below existing ground levels, with the excavation extending through the western part of the WHS to depths of 8.5m below ground level as part of the cutting approach to the western portal. This excavation would include for the water pipeline beneath the main contractor compound and the western part of the WHS, as well as the electrical cable adjacent to the A360.
- 7.9.12 Tall lifting equipment and cranes would be used for the implementation of Green Bridge Three and the long bridge within the WHS. In addition to the excavation for the Western and Eastern Portals within the WHS, there would also be the construction activity to downgrade the existing A303 into a restricted byway. As part of this excavation within the WHS, there would be fencing to prevent construction workers and machinery toppling into the excavated areas.
- 7.9.13 The extent of earthworks between the Eastern Portal and Countess Roundabout would be less in comparison to that across the western part of the Scheme. The new embankment formations would be up to 1m above ground level, with excavation down to 6m below existing ground level related to the retained cutting.
- 7.9.14 Construction of Countess Flyover would require cranes and tall lifting equipment but would be located predominantly within the existing A303 corridor, and programmed to last four years. The implementation of new signage on the existing A303 and the stopping up of part of the Allington Road and Allington Track would also be located within existing highways boundaries.
- 7.9.15 The excavation for the water pipeline would extend to the north of Countess Services, with the electrical cable aligned with Ratfyn track and connecting to the existing sub-station at Ratfyn.
- 7.9.16 The construction phase would inevitably result in direct change to the existing surface landform between the western end of the Scheme and the portals within the WHS. Impacts would arise from the topsoil stripping, excavation for the sections of cutting, as well as the re-profiling of fields to facilitate the compounds and the STP.
- 7.9.17 Within the WHS, there would not be any impact to the surface landform above the length of bored tunnel. There would be excavation for the Eastern Portal, as well as retained cutting and embankment formation for the approach to the

eastern portal and at Amesbury cutting. The existing A303 within the WHS would be converted to a restricted byway, via the removal of existing surface tarmac, thereby avoiding the need for further changes to landform within this part of the WHS.

- 7.9.18 At Countess Roundabout, the construction of the new drainage basins would utilise existing drainage features and depressions within the ground. As implementation of Countess Flyover and the reinforced embankments would be located within the existing highway, the impacts to the landform would be limited. The contractor compound to the north of Countess Services would require localised re-grading of landform.
- 7.9.19 Existing trees within the Scheme boundary would be retained and protected, where possible, via the measures set out within the OEMP. This includes the Nile Clumps, trees around Scotland Lodge Farm and Cherry Lodge Farm and the Winterbourne Stoke Clump Group.
- 7.9.20 There would be localised removal of existing vegetation within the Scheme boundary at the beginning of the construction phase. With reference to the Arboricultural Impact Assessment Report (Appendix 7.10) and drawings 7A.19 to 7A.24 which identify trees to be removed, or impacted upon, 178 tree groups would be removed from within the Scheme boundary.
- 7.9.21 None of these tree groups are high quality (Category A) trees, with 43 of the tree groups assessed as moderate quality (Category B) and 135 of the tree groups assessed as low quality (Category C).
- 7.9.22 Areas of vegetation removal would include trees alongside the existing A303 close to the western tie-in (approximate chainage 1900), hedgerows adjacent to the B3083 and trees within the River Till floodplain. There would also be vegetation removal from the southern part of the linear hedgerow belt to the west of Longbarrow Roundabout due to facilitating the Scheme. The remainder of the hedgerow belt would be retained and protected during the construction phase, with the main contractor compound and STP offset from the hedgerow. The copse to the north west of Longbarrow Roundabout would also be removed, to facilitate construction activity.
- 7.9.23 There would be vegetation removal within Countess Roundabout and between the existing carriageways to enable the construction of the reinforced embankments and flyover. The reinforced embankments would also result in tree removal up to 5m from the existing A303, between Countess Roundabout and the River Avon.
- 7.9.24 The construction of the drainage basins around Countess Roundabout would result in the removal of trees within the Scheme boundary and within the National Trust Estate, within the southern part of the grounds of Countess Farm.

- 7.9.25 There would be adverse impact to the tranquillity within the Scheme boundary due to the machinery and general construction activity, the 24 hour working of the STP, cranes, fencing, compounds and lighting to varying degrees over a five year period, in combination with the existing A303 remaining operational during the construction phase.
- 7.9.26 The Scheme would not adversely impact the tranquillity across the Cranborne Chase and West Wiltshire AONB. This is because of the distance between the AONB and the main construction works and the intervening features, including the existing A303.
- 7.9.27 The above construction impacts, which include changes to landform, vegetation and tranquillity, have been considered in relation to the assessment of landscape receptors as set out in Appendix 7.7. The following section summarises the significance of effect to the identified landscape receptors in relation to these construction impacts.

Effects to Published Landscape Character Areas

- 7.9.28 Due to the very extensive scale of the published character areas in relation to the Scheme and the localised perception and physical change of the Scheme within them, there would not be any significant adverse effects to the published landscape character areas during the construction phase, as outlined in Appendix 7.7.

Effects to LLCA and LTCA defined by field work

- 7.9.29 With reference to the landscape effect tables in Appendix 7.7, the construction impacts to landform, vegetation and tranquillity would result in significant adverse effects to the following LLCA and LTCA:

Table 7.6: Construction effects to LLCA and LTCA

LLCA	Construction Effect
01 - North Berwick Down	Moderate adverse
02 - Parsonage Down Dry Valley	Large adverse
04 - Upper Till Valley Slopes	Large adverse
05 - Upper Till Floodplains and Meadows	Very large adverse
09 - Lesser Cursus and the Packway Ridges	Moderate adverse
10 - Winterbourne Stoke Dry Valleys	Moderate adverse
11 - Oatlands Hill	Large adverse
14 - Stonehenge and Normanton Ridges	Large adverse
15 - Springbottom and Woodford Dry Valleys	Large adverse
18 - King Barrow and Coneybury Ridge	Moderate adverse
20 - Countess Farm Dry Valleys	Moderate adverse
21 - Avon Valley Slopes	Moderate adverse
22 - Avon Valley Floodplain and Meadows	Moderate adverse

LLCA	Construction Effect
LTCA	
02 - Winterbourne Stoke	Moderate adverse

Landscape - operation year 1 (winter)

- 7.9.30 The Scheme would result in contrasting impacts to the study area. There would be an increase in the extent of road between Berwick Down and Longbarrow Junction, due to the new dual carriageway and the former A303 remaining operational, albeit downgraded to a local road.
- 7.9.31 There would also be additional structures within the landscape with the River Till Viaduct, the concrete walls along the cutting approach to the Western portal and the Countess flyover, with its reinforced embankments. Other new highways structures would include variable message signs, additional highways signage, the green bridges and long bridge.
- 7.9.32 The tunnel would physically remove the A303 from the majority of the WHS, as well as substantially reduce the visual presence of vehicles within the WHS. The removal of the existing A303 would enable the physical and visual reconnection of land that is currently severed by the existing A303, as well as restoring the landscape pattern within the WHS. The tunnel would also enable the former A303 to become a restricted byway, increasing the opportunity for recreational access within the WHS.
- 7.9.33 The NMU routes would also enable recreational opportunities between the western-tie in and the WHS, via Winterbourne Stoke. New pedestrian links would also be provided across Countess Roundabout, to replace the existing underpasses.
- 7.9.34 The potential adverse impacts of the new dual carriageway and highways infrastructure would be lessened by the embedded mitigation and landscape design, specifically the completed earthworks, which include false cutting (bunds), new planting and returning land to agriculture, as illustrated on the Environmental Masterplan (Figures 2.5 A-O).
- 7.9.35 Other beneficial aspects of the Scheme are that Longbarrow Junction would not be lit and the existing lighting columns at Longbarrow Roundabout would no longer be present within the landscape. The lighting columns at Countess Roundabout would be replaced with modern equipment, reducing the amount of light spillage in comparison to the existing lighting.
- 7.9.36 The green bridge design would lessen the potential impact of these structures and aid in physically and visually connecting the landscape either side of the dual carriageway.
- 7.9.37 The potential impacts of the high load route and diversion scenario have been considered within the assessment. In landscape terms these scenarios would

reflect the existing character of vehicles on road networks and as stated in Chapter 2 are very infrequent events.

- 7.9.38 The finished state of the completed earthworks would have begun to be integrated into the existing pattern of the rolling landform across the study area, via the grading out of cuttings and rolling tops to the bunds, as well as the completed earthworks reflecting the profile of the existing terrain.
- 7.9.39 At the area east of Parsonage Down, the completed earthworks would reflect the profile of the dry valley landform, falling from Cherry Lodge Lane to a valley floor, before rising as part of the new embankment to the north of the Scotland Lodge Farm.
- 7.9.40 The River Till embankments west and east would reflect the profile of the valley sides, by reflecting a part of the valley system where the existing slopes extend across the floodplain towards the River Till.
- 7.9.41 The completed earthworks around Green Bridge Two cutting would reflect the existing rise in the landform between the River Till and Fore Down, although the earthworks around Green Bridge Two would be higher in the landscape than the existing landform.
- 7.9.42 Where the completed earthworks are seeded with new chalk grassland, the grass would not have established by year 1, such that these areas would mainly consist of exposed chalk.
- 7.9.43 Areas returned to unrestricted agriculture would reflect the existing pattern of the landform, with areas of soil and chalk reflecting the character of existing fields in winter.
- 7.9.44 Within the WHS, the restoration of the surface above the tunnel canopies to chalk grassland would enable landscape connectivity. The long bridge in the western part of the WHS would also reduce the impact of the cutting approach to the western portal, by covering 150m of the retained cut and enabling new physical and visual connectivity. Both these areas, along with that adjacent to the restricted byway and retained cut would be bare chalk at year 1. The landform above the bored tunnel would remain unchanged.
- 7.9.45 However, the impact to the landform within the WHS would be adverse; due to the cutting approach to the western portal and between the eastern portal and Countess Roundabout.
- 7.9.46 With reference to the embedded mitigation section and the Environmental Masterplan (Figures 2.5 A-O), planting would include chalk grassland, trees and hedgerows.
- 7.9.47 There would be new hedgerow planting along the top of the bunds across Longbarrow cutting west and adjacent to Green Bridge Two. This new planting

would offset the reduction from the southern part of the linear hedgerow to the north east of Hill Farm.

- 7.9.48 Within the WHS, the Nile Clumps would remain, having been protected during the construction phase by the measures set out in the OEMP.
- 7.9.49 There would be replacement planting around the new drainage basins at Countess Roundabout and within the grounds of Countess Farm, along with new native and ornamental planting within the roundabout.
- 7.9.50 At year 1 of operation, the new chalk grassland would not have established, requiring a precautionary seven to eight year timeframe for a fully integrated sward. As such that white chalk would be noticeable across the surface of these seeded areas at year 1 of operation.
- 7.9.51 There would be an adverse impact to the tranquillity within the Scheme boundary between the western end of the Scheme and the western part of the WHS. This is due to the dual carriageway, the River Till Viaduct and the increased scale of Longbarrow Junction in comparison to the existing roundabout and A303.
- 7.9.52 The exception to this adverse impact in tranquillity would be at Winterbourne Stoke, where there would be a beneficial impact, due to the removal of the A303 and the visual and audible reduction in vehicles from within the village.
- 7.9.53 Similarly, there would be a beneficial impact to the tranquillity within the WHS above the tunnel due to the visual and audible reduction in vehicles and the reversion of the existing A303 to a restricted byway.
- 7.9.54 The scale and mass of Countess Flyover would reduce the tranquillity at Countess Roundabout. However, with reference to Chapter 9 Noise and Vibration, the noise barrier along the flyover would avoid significant adverse noise effects.
- 7.9.55 The Scheme would not adversely impact the tranquillity across the Cranborne Chase and West Wiltshire AONB as the dual carriageway would be positioned further from the AONB boundary in comparison to the existing A303.
- 7.9.56 The above year 1 operation impacts, which include changes to landform, vegetation and tranquillity, have been considered in relation to the assessment of landscape receptors as set out in Appendix 7.7. The following section summarises the significance of effect to the identified landscape receptors in relation to these year 1 operation impacts.

Effects to Published Landscape Character Areas

- 7.9.57 The Scheme would result in a range of beneficial and adverse impacts to the published character areas. However, the scale of the published landscape character areas in relation to the localised extent of the Scheme would mean that there would not be significant effects at year 1 of operation, as outlined in

Appendix 7.7. The Scheme would retain the key characteristics of the published landscape character areas and respond positively to stated guidance, as summarised below.

National Character Area 132: Salisbury Plain and West Wiltshire Downs (NCA 132)

- 7.9.58 The Scheme responds positively to the NCA Statements of Environmental Opportunity by:
- a) enhancing the WHS landscape through the removal of the existing A303, new landscape connectivity and recreational opportunity;
 - b) developing new network connectivity through the physical reconnection of the landscape within the WHS; and
 - c) protecting, conserving and sustainably managing the WHS landscape, for its value in sense of place improving the tranquillity, as well as for new recreational opportunities, and protecting the NCA's agriculture interest, by returning land to agriculture and extending the benefit and scope for access to nature and other recreation via the NMU routes.
- 7.9.59 The reversion of the existing A303 to a restricted byway is also considered to reflect the stated positive development from the restoration and closure of the A344.

Wiltshire County Landscape Character Types and Areas

- 7.9.60 For LCT 3 High Chalk Plain, the Scheme responds positively to the forces for change within the LCT by providing supporting infrastructure to address visitors to the WHS.
- 7.9.61 The Scheme also responds positively towards the LCT management strategy by reinstating chalk grassland and protecting the sites of historic interest and archaeological features.
- 7.9.62 For LCA 3A: Salisbury Plain West, a sub-set of LCT 3, the Scheme positively addresses the stated restricted access within the LCA, via the new NMU routes, green bridges and reconnection of the landscape within the WHS. The impact to LCA 3A would also be negligible beneficial, and the significance of effect neutral (not significant).

Effects to LLCA and LTCA defined by field work

- 7.9.63 With reference to the landscape effect tables in Appendix 7.7, changes to landform, vegetation and tranquillity would result in significant adverse effects to the following LLCAs and LTCAs.

Table 7.7: Effects to LLCA and LTCA operation year 1

LLCA	Operational Effect Year 1
02 - Parsonage Down Dry Valley	Moderate adverse
04 - Upper Till Valley Slopes	Moderate adverse
05 - Upper Till Floodplains and Meadows	Large adverse
11 - Oatlands Hill	Moderate adverse
14 - Stonehenge and Normanton Ridges	Large beneficial
15 - Springbottom and Woodford Dry Valleys	Large beneficial
17 - Upper Stonehenge Dry Valley	Large beneficial
18 - King Barrow and Coneybury Ridge	Large beneficial
22 - Avon Valley Floodplain and Meadows	Moderate adverse
LTCA	
02 - Winterbourne Stoke	Moderate beneficial

Landscape effects operation year 15 (summer)

- 7.9.64 By year 15, the principal change to the Scheme compared to the year 1 assessment would be from the establishment of the tree and hedgerow planting and the chalk grassland seeding. The establishment of the planting from year 1 of operation is supported by the OLEMP.
- 7.9.65 By year 15, the completed earthworks, in combination with the establishment of chalk grassland and unrestricted agricultural use, would be integrated into the existing landform.
- 7.9.66 This would be most notable across the area east of Parsonage Down, where the establishment of the tree planting would also aid in reducing the scale of the 17m high embankment to the north of Scotland Lodge.
- 7.9.67 Tree planting would also have established on the River Till Viaduct embankments west and east, softening and further integrating these areas of completed earthworks and providing visual screening to highways signage.
- 7.9.68 The scale of Longbarrow Junction and its traffic lights would be lessened by the establishment of the tree planting bordering the junction, along with the extent of hedgerows adjacent to Longbarrow cutting west.
- 7.9.69 The establishment of the chalk grassland adjacent to the cutting approach to the western portal would reduce the perception of the cutting and the transition from the wider landscape to the retained cut.
- 7.9.70 The woodland to the north of Scotland Lodge Farm would provide connectivity along this part of the A303 alignment, with woodland linkages between the area east of Parsonage Down, Scotland Lodge Farm and to the B3083.

- 7.9.71 The establishment of the trees within the River Till floodplain would reflect the existing character of trees adjacent to the river, with the trees on the River Till embankments and adjacent to the B3083 softening views of the variable message signs in these locations.
- 7.9.72 The hedgerow planting adjacent to the realigned A360 north and south and adjacent to the Longbarrow cutting west would reflect the existing character of roadside hedgerows within this part of the landscape. The extent of hedgerow would also mitigate the reduction in the hedgerow belt to the north west of Hill Farm.
- 7.9.73 The trees along the southern edge of Countess Farm, within Countess Roundabout and adjacent to the Countess reinforced embankment east would reflect the existing wooded character of this part of the study area, as well as reducing the visual impact of the flyover and its noise barrier.
- 7.9.74 Across the western part of the Scheme boundary, the establishment of the planting at the area east of Parsonage Down and adjacent to the River Till viaduct, Longbarrow Junction and Countess flyover would aid in reducing the adverse impacts to the tranquillity from the dual carriageway.
- 7.9.75 The beneficial impact to the tranquillity within the WHS would remain at year 15 due to the continued presence of the tunnel and establishment of the chalk grassland.
- 7.9.76 The above year 15 operation impacts, which include changes to landform, vegetation and tranquillity, have been considered in relation to the assessment of landscape receptors as set out in Appendix 7.7. The following section summarises the significance of effect to the identified landscape receptors in relation to these year 15 operation impacts.

Effects to Published Landscape Character Areas Operation Year 15

- 7.9.77 With reference to Appendix 7.7, the beneficial impacts to the published landscape character areas would remain as per the year 1 assessment. This is due to the beneficial impact from the tunnel, long bridge and retained cut within the WHS and the new recreational opportunities across the Scheme boundary.

Effects to LLCA and LTCA defined by field work

- 7.9.78 With reference to the landscape character effect tables in Appendix 7.7, the establishment of the tree planting, chalk grassland and integration of the regraded earthworks would reinforce the beneficial impacts and retain beneficial effects to many of the LLCA and LTCA.
- 7.9.79 The changes to landform and vegetation would also reduce the adverse impacts, such that significant adverse effects would only remain for LLCA 05 - Upper Till Floodplains and Meadows (large adverse), due to the continued presence of the River Till Viaduct.

Visual effects construction (winter)

- 7.9.80 The visual effects are outlined in full in Appendix 7.8 for each of the identified visual receptors (VR).
- 7.9.81 The construction of the NMU routes, regrading and depositing of the excavated material across the area east of Parsonage Down, including for the Esso pipeline, excavation of the Winterbourne Stoke cutting west and formation of the 17m high embankment to the north of Scotland Lodge would be visible from recreational users on byway BSJA4, to the east of Yarnbury Camp, recreational users within Parsonage Down NNR and receptors at Scotland Lodge.
- 7.9.82 There would also be close range views of this construction activity from motorists on the B3083, between Cherry Lodge lane and Winterbourne Stoke, as well as from within the grounds of Cherry Lodge Farm and Scotland Lodge Farm. The construction compound adjacent to the B3083 and construction of the realigned B3083 north and B3083 underbridge would also be visible at close range for these receptors.
- 7.9.83 From recreational routes across the upper parts of the River Till valley, the excavation of Longbarrow cutting west, across Fore Down, would be visible, along with vehicles on the haul routes between the STP and the area east of Parsonage Down. The re-profiling of landform to the north of Hill Farm and the construction and installation of Green Bridge Two would also be visible, along with the upper parts of the STP. Views of this part of the construction phase would form a focal point of the view.
- 7.9.84 From recreational routes across the River Till valley floor, there would be close range views of the formation of the River Till embankment west and east, construction of the River Till viaduct, including cranes, excavation for the River Till cutting west and construction vehicles on the haul routes, and the activity associated with the directional drilling beneath the River Till.
- 7.9.85 For residential properties in the northern part of Winterbourne Stoke, adjacent to the existing A303, the temporary bridge crossing of the River Till, construction vehicles on the haul routes, the formation of the River Till embankments west and east, and the construction of the River Till Viaduct would be a focal point of the view. There would also be views of excavation of the River Till cutting west and deposition of excavated material across the area east of Parsonage Down.
- 7.9.86 To the east of Winterbourne Stoke, recreational routes and residents at Hill Farm, situated on the elevated landform of Oatlands Hill, would primarily have views of the excavation at Longbarrow Junction, the STP and main construction compound. Whilst views from these elevated locations would still extend across the wider landscape, the close proximity of the construction activity, and its five year duration would be a dominant feature in contrast to the open character of the existing fields and the smaller scale of the existing A303.

- 7.9.87 For tourists and visitors at Stonehenge Visitor Centre the construction activity including excavation of the cutting approach to the western portal and removal of Longbarrow Roundabout would not be visible due to the rising landform and intervening vegetation. There would however be views of the upper part of the STP and excavation of the Longbarrow cutting west. The formation of the 17m high embankment to the north of the Scotland Lodge Farm and regrading of land across the southern part of the area east of Parsonage Down would also be visible in the background of the view, although forming a small component of the wider view.
- 7.9.88 For tourists and visitors at the Stones, the main construction compound and excavation of the cutting approach to the western portal would not be visible, due to the rising landform and intervening woodland. Similarly, King Barrow Ridge to the east of the Stones would screen views of the construction activity at the eastern portal and around Countess Roundabout. The upper parts of cranes implementing the long bridge and western portal would be visible, and once vehicles were diverted into the tunnel, the works to downgrade the existing A303 would also be noticeable at close range.
- 7.9.89 At Countess Roundabout, the removal of vegetation, construction of the drainage basins and flyover would be visible from Countess Farm. The close proximity of this construction activity and its duration would therefore form a focal point of the view.
- 7.9.90 Residential properties on the east side of Countess Road, to the north of Countess Services, would have close range views of the contractor compound, site setup and removal of existing vegetation to the north of the existing A303, representing a noticeable change to the view.
- 7.9.91 Also around Countess Roundabout, the removal of vegetation adjacent to the existing A303 and construction of the Countess reinforced embankment would be visible at close range from the northern part of the Lords Walk and in middle distance views from Bowles Hatches within Amesbury Abbey.
- 7.9.92 The above construction impacts have been considered in relation to the assessment of visual receptors as set out in Appendix 7.8.
- 7.9.93 The Scheme would therefore result in significant adverse effects to the following VRs as detailed in Table 7.8 during the construction phase.

Table 7.8: Visual effects construction phase

VR	Receptor	Construction Effect
VR 01	Recreational users of Byway BSJA4 to the east of Yarnbury Castle	Moderate adverse
VR 04	Recreational users of Parsonage Down National Nature Reserve	Very Large adverse
VR 04A	Residents in Cherry Lodge	Moderate adverse
VR 04B	Community Groups in Cherry Lodge Grounds	Large adverse

VR	Receptor	Construction Effect
VR 04C	Motorists on Cherry Lodge Lane	Moderate adverse
VR 05	Motorists on the B3083	Moderate adverse
VR 06	Recreational users of PRoW (footpath) WSTO4 across High Down	Large adverse
VR 07	Recreational users of Byway WSTO4 as it crosses the River Till	Large adverse
VR 07A	Foredown Barn	Large adverse
VR 07B	Recreational users of Byway WST 04	Very Large adverse
VR 08	Residents (nos. 1-4) on the eastern side of Winterbourne Stoke and to the south of the existing River Till crossing	Large adverse
VR 08A	Foredown House	Very large adverse
VR 08B	High Down View Residents, including no.1 at the corner of the existing A303 and the B3083, Winterbourne Stoke	Large adverse
VR 08C	Scotland Lodge including the grounds of the property	Large adverse
VR 08D	Residents to the south of the A303 in Winterbourne Stoke including the Manor House	Moderate adverse
VR 09	Recreational users on PRoW (footpath WST011)	Large adverse
VR 10	Recreational users on Byway WST06A, south of Hill Farm Cottages	Large adverse
VR 10A	Hill Farm Cottages nos.1 – 4	Very Large adverse
VR 10B	Recreational users on Restricted Byway BSJA9	Moderate adverse
VR 11	Motorists on the A360 adjacent to Restricted Byway BSJA9	Moderate adverse
VR 12	Tourists and Visitors at the Stonehenge Visitor Centre	Moderate adverse
VR 13	Tourists, visitors and recreational users in WHS at the World Heritage Site interpretation panel	Very large adverse
VR 14	Tourists, visitors and recreational receptors at the Winterbourne Stoke Group within the WHS	Large adverse
VR 15	Recreational users on Byway WCLA1 south east of The Diamond	Large adverse
VR 16	Recreational users on permissive access land close to Normanton Gorse	Large adverse
VR 17	View south west from Byway AMES12 close to the north side of the existing A303	Moderate adverse
VR 22	Visitors, tourists and recreational users at the interpretation panel viewpoint located at the eastern end of The Cursus	Moderate adverse
VR 23	Visitors, tourists, recreational users at the WHS interpretation panel viewpoint where the Avenue crosses King Barrow Ridge	Moderate adverse
VR 25	Recreational users on Bridleway AMES39 and residential properties at Strangways	Moderate adverse

VR	Receptor	Construction Effect
VR 26	Tourists, visitors and recreational users on Bridleway AMES9A	Moderate adverse
VR 28	Visitors, tourists and recreational users at the WHS interpretation panel viewpoint in open access land approximately 100m west of Woodhenge monument	Moderate adverse
VR 30	Motorists on the A345 (Countess Road) at the exit from Countess Services on the north side of Countess Roundabout	Moderate adverse
VR 30A	Countess Farm	Large adverse
VR 30B	Residential properties east of Countess Road	Moderate adverse
VR 31	View north west from the Lord's Walk footpath alongside the River Avon in the north of Amesbury	Large adverse
VR 31B	Bowles Hatches	Moderate adverse
VR 32	View south west from bridleway AMES 6, between Ratfyn and Bulford	Moderate adverse
VR 36	View south east from residential property at Rollestone Junction	Moderate adverse

Visual effects operation year 1 (winter)

- 7.9.94 The effects to visual receptors at year 1 of operation are stated in full in Appendix 7.8.
- 7.9.95 The adverse visual effects are due to the introduction of the dual carriageway and that the completed earthworks would not be fully integrated between Berwick Down and Longbarrow Junction. The beneficial effects would be due to the immediate removal of vehicles from within the WHS as a result of the tunnel, long bridge and retained cutting.
- 7.9.96 At the western edge of the study area, the completed earthworks across the area east of Parsonage Down and bare chalk would be visible at close range from within Parsonage Down NNR and at Cherry Lodge.
- 7.9.97 From byways across the upper parts of the River Till, the completed earthworks between the valley floor and Hill Farm would be visible, along with Green Bridge Two. Whilst reflecting the existing pattern of rising landform from the valley floor, the completed earthworks would not be fully integrated within the valley sides at year 1.
- 7.9.98 For recreational users along the River Till valley floor, the River Till Viaduct would be a focal point of the view, introducing new large scale massing above the receptors line of sight, 10 metres above the valley floor, and in closer proximity in comparison to views of the existing A303 within Winterbourne Stoke and across the valley floor.

- 7.9.99 For residents at the eastern edge of Winterbourne Stoke, there would be a substantial reduction in the number of vehicles within close range views, due to the A303 dual carriageway being to the north of the village. The River Till Viaduct would be noticeable in the middle ground of the view, along with the completed earthworks and variable message sign.
- 7.9.100 For residents in the northern part of Winterbourne Stoke, the completed earthworks of the River Till cutting west and across the area east of Parsonage Down would be visible, along with the variable message sign above the B3083 underbridge. Views of cars on the dual carriageway would be largely screened by the bund along the embankment and solid parapet on the River Till viaduct, although higher sided vehicles would be visible.
- 7.9.101 From Hill Farm Cottages, the A303 dual carriageway would be situated below the residents enabling longer range views across the landscape to remain. Longbarrow Junction would also be situated in a low position within the landscape in relation to the residents, with Green Bridge Three softening the impact of the Longbarrow cutting west by visually linking the landscape across the dual carriageway. Longbarrow Junction, its signage and the completed earthworks would be a noticeable feature due to their scale and closer proximity to Hill Farm Cottages in comparison to Longbarrow Roundabout.
- 7.9.102 For tourists, visitors and recreational users within the central part of the WHS, there would be an immediate beneficial change to the view from the removal of the existing A303 and its vehicles. The long bridge would aid in screening and softening views of vehicles and the retaining walls of the western approach cutting, particularly from more elevated parts of the WHS, including King Barrow Ridge.
- 7.9.103 At the eastern edge of the WHS, and views from bridleway AMES9A, the A303 dual carriageway would be visible as it crosses the dry valley, as it is on embankment, compared to currently being in cutting.
- 7.9.104 For receptors with views of the high load route and diversion scenarios, views of vehicles on these routes are considered to reflect the composition and context of existing views.
- 7.9.105 For residents at Countess Farm, the reinforced embankments and noise barrier of the flyover would be visible due to the removal of vegetation and drainage basins. Whilst vehicles would be visible in a more elevated position on the flyover in comparison to existing views, the noise barrier would provide some screening to the lower sections of vehicles.
- 7.9.106 There would similarly be views of part of reinforced embankments, noise barrier and vehicles at a higher elevation from recreational users on Lords Walks. The increased visibility of the Scheme is due to the removal of vegetation and the drainage basins.

7.9.107 The above year 1 impacts have been considered in relation to the assessment of visual receptors as set out in Appendix 7.8.

7.9.108 The Scheme would therefore result in significant effects to the VRs in Table 7.9 at year 1:

Table 7.9: Visual effects operation year 1

VR	Receptor	Operation Effects Year 1
VR 04	Recreational users of Parsonage Down National Nature Reserve	Moderate adverse
VR 04B	Community Groups in Cherry Lodge Grounds	Moderate adverse
VR 05	Motorists on the B3083	Moderate adverse
VR 06	Recreational users of PRoW (footpath) WSTO4 across High Down	Moderate adverse
VR 07	Recreational users of Byway WST 04	Moderate adverse
VR 07A	Foredown Barn	Moderate adverse
VR 07B	Recreational users of Byway WST 04	Large adverse
VR 08	High Down View Residents, including no.1 at the corner of the existing A303 and the B3083, Winterbourne Stoke	Moderate adverse
VR 08A	Foredown House	Large adverse
VR 08B	High Down View Residents, including no.1 at the corner of the existing A303 and the B3083, Winterbourne Stoke	Moderate adverse
VR 08C	Scotland Lodge including the grounds of the property	Large adverse
VR 09	Recreational users on PRoW (footpath WST011)	Moderate adverse
VR 10	Recreational users on Byway WST06A, south of Hill Farm Cottages	Moderate adverse
VR 10A	Hill Farm Cottages nos.1 – 4	Moderate adverse
VR 10B	Recreational users on Restricted Byway BSJA9	Moderate beneficial
VR 13	Tourists, visitors and recreational users in WHS at the World Heritage Site interpretation panel	Moderate adverse
VR 14	Tourists, visitors and recreational receptors at the Winterbourne Stoke Group within the WHS	Moderate beneficial
VR 15	Recreational users on Byway WCLA1 south east of the Diamond	Moderate beneficial
VR 16	Recreational users on permissive access land close to Normanton Gorse	Moderate beneficial
VR 17	View south west from Byway AMES12 close to the north side of the existing A303	Large beneficial
VR 18	View north east from Byway AMES11 at Normanton Down	Large beneficial
VR 19	Visitors, tourists and recreational users at the WHS interpretation panel viewpoint located to the south of the Stones	Large beneficial
VR 20	Visitors, tourists and recreational users at the WHS interpretation panel located on Byway AMES12 adjacent to the Cursus	Large beneficial

VR	Receptor	Operation Effects Year 1
VR 21	Visitor, tourists and recreational users on the footpath alongside the existing A303, between King Barrow Ridge and Stonehenge Bottom	Large beneficial
VR 22	Visitors, tourists and recreational users at the interpretation panel viewpoint located at the eastern end of The Cursus	Large beneficial
VR 23	Visitors, tourists, recreational users at the WHS interpretation panel viewpoint where the Avenue crosses King Barrow Ridge	Large beneficial
VR 24	Recreational users on the permissive path across Coneybury Hill tumulus	Large beneficial
VR 26	Tourists, visitors and recreational users on Bridleway AMES9A	Moderate adverse
VR 30A	Countess Farm	Large adverse
VR 31	View north west from the Lord's Walk footpath alongside the River Avon in the north of Amesbury	Moderate adverse

Visual effects operation year 15 (summer)

- 7.9.109 The main change to views at year 15 would be from the establishment of the planting and chalk grassland, which would enable the further integration of the completed earthworks within the landscape. With reference to Appendix 7.8, this would reduce the adverse impact of the Scheme and reduce the number of significant adverse effects.
- 7.9.110 The beneficial effects of the tunnel and reduction of views of vehicles for visitors, tourists and recreation users within the WHS would remain, with increased beneficial impacts from the establishment of the chalk grassland adjacent to the restricted byway and cutting approach to the western portal. With reference to Appendix 7.8, beneficial effects would increase to a number of identified visual receptors.
- 7.9.111 At year 15 of operation, a significant adverse effect would remain to receptor VR 07B (recreational users of Byway WST 04). This is due to the River Till Viaduct remaining a noticeable feature within close range views and that new planting would not screen the viaduct, due to retaining the open character of the valley floor.
- 7.9.112 A significant adverse effect would remain to receptor VR 30A (Countess Farm). Whilst the planting would have grown, the upper part of the flyover retaining wall and the noise barrier, along with the upper parts of high sided vehicles would be noticeable above the planting, due to its elevated position.
- 7.9.113 The above year 15 impacts have been considered in relation to the assessment of visual receptors as set out in Appendix 7.8.

- 7.9.114 The Scheme would therefore result in significant adverse effects to the following VRs as detailed in Table 7.10 during the operation phase year 15.

Table 7.10: Visual effects operation year 15

VR	Receptor	Operation Effects Year 15
VR 07B	Recreational users of Byway WST 04	Moderate adverse
VR 10B	Recreational users on Restricted Byway BSJA9	Large beneficial
VR 11	Motorists on the A360 adjacent to Restricted Byway BSJA9	Moderate beneficial
VR 14	Tourists, visitors and recreational receptors at the Winterbourne Stoke Group within the WHS	Large beneficial
VR 15	Recreational users on Byway WCLA1 south east of The Diamond	Large beneficial
VR 16	Recreational users on access land close to Normanton Gorse	Large beneficial
VR 17	View south west from Byway AMES12 close to the north side of the existing A303	Large beneficial
VR 18	View north east from Byway AMES11 at Normanton Down	Large beneficial
VR 19	Visitors, tourists and recreational users at the WHS interpretation panel viewpoint located to the south of the Stones	Large beneficial
VR 20	Visitors, tourists and recreational users at the WHS interpretation panel located on Byway AMES12 adjacent to the Cursus	Large beneficial
VR 21	Visitor, tourists and recreational users on the footpath alongside the existing A303, between King Barrow Ridge and Stonehenge Bottom	Large beneficial
VR 22	Visitors, tourists and recreational users at the interpretation panel viewpoint located at the eastern end of The Cursus	Large beneficial
VR 23	Visitors, tourists, recreational users at the WHS interpretation panel viewpoint where the Avenue crosses King Barrow Ridge	Large beneficial
VR 24	Recreational users on the permissive path across Coneybury Hill tumulus	Large beneficial
VR 30A	Countess Farm	Moderate adverse

Effects to the character of the night sky

Construction Phase

- 7.9.115 The construction phase would introduce additional temporary lighting within the Scheme boundary, as a result of lighting compounds, the STP (24 hour operation) and general working areas in winter months. There would also be lighting from construction vehicles on the haul routes. As stated in the mitigation

section, the CEMP would ensure the lighting design reduced potential glare and upwards or sideways emission of light.

- 7.9.116 In the context of the agricultural landscape this additional lighting would result in increased localised glare and upward light, compared to vehicle lighting on the existing A303.
- 7.9.117 There are few residential receptor locations from which the additional lighting would be perceived. From within Winterbourne Stoke, the existing glare from street lighting would reduce the impact of new lighting within the Till Valley for residents to the south of the existing A303.
- 7.9.118 For Hill Farm, the lighting of the STP would result in a notable light source and the significance adverse effect of this is recorded by the visual assessment of the construction phase for the receptor.
- 7.9.119 Lighting of the contractor compound to the north east of Countess Services would be perceived by residents on the east side of Countess Road, however in the context of existing street lighting and the service, the effect is slight adverse (not significant).
- 7.9.120 Recreational receptors on PRow are assumed not to be using these routes at night. The lighting of the main contractor compound would be perceived from the western edge of the WHS. The impact of the lighting would within the context of glare from vehicles on the A360 and lighting at Longbarrow Roundabout, and therefore the effect is considered slight adverse (not significant).
- 7.9.121 The impact of the construction phase lighting on the character of the night sky is reduced by its proximity to the existing A303 and within Amesbury, which the CPRE dark sky mapping has already identified as areas of brighter night sky than the wider agricultural landscape.
- 7.9.122 Similarly, due to the distance of the main construction compound and STP from the Cranborne Chase and West Wiltshire AONB, the dark skies within this designated landscape are considered not to be impacted.
- 7.9.123 On balanced, the impact to the character of the night sky within the Scheme boundary is assessed as a minor adverse impact due to the slight loss to the darkness of the existing night sky. The effect is assessed as slight adverse (not significant).

Operational Phase

- 7.9.124 Vehicles crossing between Berwick Down and the tunnel would introduce additional lighting via their headlights, in combination with vehicles continuing to use the existing A303 between Winterbourne Stoke and Longbarrow Roundabout.

- 7.9.125 The localised glare from these vehicles across this part of the landscape would be reduced by the dual carriageway being in cutting, the bunds and the establishment of the new planting.
- 7.9.126 Glare from vehicle headlights across the River Till viaduct would also be reduced by the parapet.
- 7.9.127 Other sources of localised glare would be the variable message sign on the B3083 and the River Till viaduct; however the glare would be reduced by the establishment of the new planting. The impact to the night sky across this part of the Scheme is assessed as negligible adverse due to the barely noticeable loss to the darkness of the night sky.
- 7.9.128 From within Winterbourne Stoke there would be a negligible beneficial impact to the local character of the night sky. This is due to the reduction of vehicles on the existing A303 and that any glare from vehicles on the River Till viaduct would be screened by the viaduct's parapet.
- 7.9.129 There would be a substantial reduction in lighting from vehicles within the WHS as they would be largely contained within the tunnel. Whilst Green Bridge Four would be lit during daylight hours, the amount of lighting would be reduced between dusk and dawn. The reduction in glare from vehicle headlights, in combination with the removal of existing lighting at Longbarrow Junction would result in a moderate beneficial (significant) effect to the character of the night sky within the WHS, due to the noticeable reduction in glare.
- 7.9.130 The Countess Flyover would not introduce any additional lighting, such that Scheme would reflect the existing lighting levels within Amesbury. Glare from vehicle headlights on the flyover would also be screened by the noise barrier. The replacement of existing lighting at Countess Roundabout with modern lighting would reduce the light spillage in comparison to the existing lighting.
- 7.9.131 In relation to the dark skies within the Cranborne Chase and West Wiltshire AONB, the alignment of the dual carriageway would be further from the AONB boundary. Sources of light (i.e. vehicles) would therefore be further from the AONB. Any upwards light from Winterbourne Stoke would also have reduced, due to the realignment of the A303. The Scheme would therefore not impact on the existing dark skies above the AONB.

Response to landscape designations and the WHS Management Plan

Special Landscape Area (SLA)

- 7.9.132 The Scheme responds positively to the SLA by improving the enjoyment of the amenities of permissive open access land through removing the existing A303 from within the WHS.

- 7.9.133 This is in combination with improving the opportunities for greater amenity across the SLA by new NMU routes and connectivity across the dual carriageway by the green bridges and long bridge.
- 7.9.134 The potential adverse effects to the landscape have been reduced through the siting and design of Scheme and the use of materials (chalk grassland) which are appropriate to the locality and reflect the key characteristics of the area.
- 7.9.135 The design responds positively in this respect to Saved Policy C6: Special Landscape Area of the Salisbury Local Plan.

Cranborne Chase and West Wiltshire AONB

- 7.9.136 The Scheme would not adversely impact upon the special qualities of panoramic views and dark skies. This is due to the combination of distance from the Scheme and the intervening landform, vegetation and settlement patterns.

WHS Management Plan (refer also to Chapter 7 Cultural Heritage)

- 7.9.137 The Scheme responds positively to the WHS Management Plan.
- 7.9.138 The removal of the existing A303 would enable the landscape character within the WHS to be significantly improved. The tunnel and cutting approach, including the 150m long bridge, would positively address the stated visual and aural intrusion that results from the existing roads and vehicles within the WHS.
- 7.9.139 The depth of the western cutting approach would also enable signage and fencing to be located below the skyline, reducing the perception of highways infrastructure within the landscape.
- 7.9.140 The realignment of the A360 further to the west of the WHS, in combination with the removal of Longbarrow Roundabout would reduce the visual and aural intrusion of vehicles and roads from the Winterbourne Stoke Barrow Group.
- 7.9.141 As identified in the assessment section, the operational phase of the Scheme would result in significant beneficial effects to the landscape character, visual amenity and night sky within the WHS. There would be improved recreational opportunities from the restricted byway and long bridge to complement existing permissive open access.

Future baseline

Construction year baseline (2021)

- 7.9.142 The future baseline schemes relevant to the LVIA which would be present within the landscape at 2021 would not impact upon the landscape and visual assessment findings.
- 7.9.143 This is because the future baseline schemes would be located within residential and military areas, and in landscape terms reflect these existing land uses and the local landscape character areas.

- 7.9.144 In visual terms, the identified residential development in Amesbury, Bulford and Larkhill would not have views of the construction or operation phases of the Scheme, due to the intervening buildings, landform and vegetation.

Opening year baseline (2026)

- 7.9.145 The future baseline schemes relevant to the LVIA which would be present within the landscape at 2026 would not impact upon the landscape and visual assessment findings.
- 7.9.146 This is because the future residential development at Amesbury Gate would be located within a residential area, and in landscape terms would reflect this existing land use and the local townscape character area.
- 7.9.147 In visual terms, the residential development would not have views of the construction or operation phases of the Scheme, due to the intervening buildings, landform and vegetation.

Table 7.11: Summary of significant effects – construction

Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
North Berwick Down	Landscape character	High	Partial loss or noticeable damage to existing character or distinctive features and elements and/or the addition of new but uncharacteristic noticeable features and elements	Refer to Section 7.8 of this chapter	Moderate adverse	Moderate adverse
Parsonage Down Dry Valley	Landscape character	Medium	Total loss or large scale damage to existing character or distinctive features and elements, and/or the addition of new but uncharacteristic conspicuous features and elements	Refer to Section 7.8 of this chapter	Major adverse	Large adverse
Upper Till Valley Slopes	Landscape character	Medium	Total loss or large scale damage to existing character or distinctive features and elements, and/or the addition of new but uncharacteristic conspicuous features and elements	Refer to Section 7.8 of this chapter	Major adverse	Large adverse
Upper Till Floodplains and Meadows	Landscape character	High	Total loss or large scale damage to existing character or distinctive features and elements, and/or the addition of new but uncharacteristic conspicuous features and elements	Refer to Section 7.8 of this chapter	Major adverse	Very large adverse
Lesser Cursus and the Packway Ridges	Landscape character	High	Partial loss or noticeable damage to existing character or distinctive features and elements and/or the addition of new but uncharacteristic noticeable features and elements	Refer to Section 7.8 of this chapter	Moderate adverse	Moderate adverse
Winterbourne Stoke Dry Valleys	Landscape character	Medium	Partial loss or noticeable damage to existing character or distinctive features and elements and/or the addition of new but uncharacteristic noticeable features and elements	Refer to Section 7.8 of this chapter	Moderate adverse	Moderate adverse
Oatlands Hill	Landscape character	Medium	Total loss or large scale damage to existing character or distinctive features and elements, and/or the addition of new but uncharacteristic conspicuous features and elements	Refer to Section 7.8 of this chapter	Major adverse	Large adverse

Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
Stonehenge and Normanton Ridges	Landscape character	High	Total loss or large scale damage to existing character or distinctive features and elements, and/or the addition of new but uncharacteristic conspicuous features and elements	Refer to Section 7.8 of this chapter	Major adverse	Large adverse
Springbottom and Woodford Dry Valleys	Landscape character	High	Partial loss or noticeable damage to existing character or distinctive features and elements and/or the addition of new but uncharacteristic noticeable features and elements	Refer to Section 7.8 of this chapter	Moderate adverse	Large adverse
King Barrow and Coneybury Ridge	Landscape character	High	Partial loss or noticeable damage to existing character or distinctive features and elements and/or the addition of new but uncharacteristic noticeable features and elements	Refer to Section 7.8 of this chapter	Moderate adverse	Moderate adverse
Countess Farm Dry Valleys	Landscape character	High	Partial loss or noticeable damage to existing character or distinctive features and elements and/or the addition of new but uncharacteristic noticeable features and elements	Refer to Section 7.8 of this chapter	Moderate adverse	Moderate adverse
Avon Valley Slopes	Landscape character	Medium	Partial loss or noticeable damage to existing character or distinctive features and elements and/or the addition of new but uncharacteristic noticeable features and elements	Refer to Section 7.8 of this chapter	Moderate adverse	Moderate adverse
Avon Valley Floodplains and Meadows	Landscape character	High	Partial loss or noticeable damage to existing character or distinctive features and elements and/or the addition of new but uncharacteristic noticeable features and elements	Refer to Section 7.8 of this chapter	Moderate adverse	Moderate adverse
Winterbourne Stoke	Townscape character	Medium	Partial loss or noticeable damage to existing character or distinctive features and elements and/or the addition of new but uncharacteristic noticeable features and elements	Refer to Section 7.8 of this chapter	Moderate adverse	Moderate adverse

Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
VR 01 Recreational users of Byway BSJA4 to the east of Yarnbury Castle	Visual amenity	High	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse
VR 04 Recreational users of Parsonage Down National Nature Reserve	Visual amenity	High	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Very Large adverse
VR 04A Residents in Cherry Lodge	Visual Amenity	Medium	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse
VR 04B Community Groups in Cherry Lodge Grounds	Visual amenity	Medium	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Large adverse
VR 04C Motorists on Cherry Lodge Lane	Visual amenity	Low	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Moderate adverse
VR 05 Motorists on the B3083	Visual amenity	Low	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Moderate adverse
VR 06 Recreational users of PRoW (footpath) WSTO4 across High Down	Visual amenity	High	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Large adverse

Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
VR 07 Recreational users of Byway WSTO4 as it crosses the River Till	Visual amenity	High	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Large adverse
VR 07A Foredown Barn	Visual amenity	Medium	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Large adverse
VR 07B Recreational users of Byway WST 04	Visual amenity	High	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Very Large adverse
VR 08 Residents (nos. 1-4) on the eastern side of Winterbourne Stoke and to the south of the existing River Till crossing	Visual amenity	High	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Large adverse
VR 08A Foredown House	Visual amenity	High	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Very large adverse
VR 08B High Down View Residents, including no.1 at the corner of the existing A303 and the B3083, Winterbourne Stoke	Visual amenity	High	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Large adverse

Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
VR 08C Scotland Lodge including the grounds of the property	Visual amenity	High	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Large adverse
VR 08D Residents to the south of the A303 in Winterbourne Stoke including the Manor House	Visual amenity	Medium	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse
VR 09 Recreational users on PRow (footpath WST011)	Visual amenity	High	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Large adverse
VR 10 Recreational users on Byway WST06A, south of Hill Farm Cottages	Visual amenity	High	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Large adverse
VR 10A Hill Farm Cottages nos.1 – 4	Visual amenity	High	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Very Large adverse
VR 10B Recreational users on Restricted Byway BSJA9	Visual amenity	High	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse

Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
VR 11 Motorists on the A360 adjacent to Restricted Byway BSJA9	Visual amenity	Low	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Moderate adverse
VR 12 Tourists and Visitors at the Stonehenge Visitor Centre	Visual amenity	High	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse
VR 13 Tourists, visitors and recreational users in WHS at the World Heritage Site interpretation panel	Visual amenity	High	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Very large adverse
VR 14 Tourists, visitors and recreational receptors at the Winterbourne Stoke Group within the WHS	Visual amenity	High	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Large adverse
VR 15 Recreational users on Byway WCLA1 south east of The Diamond	Visual amenity	High	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Large adverse

Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
VR 16 Recreational users on permissive access land close to Normanton Gorse	Visual amenity	High	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Major	Large adverse
VR 17 View south west from Byway AMES12 close to the north side of the existing A303	Visual Amenity	High	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse
VR 22 Visitors, tourists and recreational users at the interpretation panel viewpoint located at the eastern end of The Cursus	Visual amenity	High	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse

Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
VR 23 Visitors, tourists, recreational users at the WHS interpretation panel viewpoint where the Avenue crosses King Barrow Ridge	Visual amenity	High	The project, or a part of it, would be perceptible but not alter the overall balance of features and elements that compromise the existing view	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse
VR 25 Recreational users on Bridleway AMES39 and residential properties at Strangways	Visual amenity	High	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse
VR 26 Tourists, visitors and recreational users on Bridleway AMES9A	Visual amenity	High	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse

Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
VR 28 Visitors, tourists and recreational users at the WHS interpretation panel viewpoint in open access land approximately 100m west of Woodhenge monument	Visual amenity	High	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse
VR 30 Motorists on the A345 (Countess Road) at the exit from Countess Services on the north side of Countess Roundabout	Visual amenity	Low	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Moderate adverse
VR 30A Countess Farm	Visual amenity	High	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Large adverse
VR 30B Residential properties east of Countess Road	Visual amenity	Medium	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse

Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
VR 31 View north west from the Lord's Walk footpath alongside the River Avon in the north of Amesbury	Visual amenity	High	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Large adverse
VR 31B Bowles Hatches	Visual amenity	Medium	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse
VR 32 View south west from AMES 6, between Ratfyn and Bulford	Visual Amenity	Medium	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse
VR 36 View south east from residential property at Rollestone Junction	Visual amenity	Medium	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse

Table 7.12: Summary of significant effects – operation year 1

Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
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Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
Parsonage Down Dry Valley	Landscape character	Medium	Partial loss or noticeable damage to existing character or distinctive features and elements and/or the addition of new but uncharacteristic noticeable features and elements	Refer to Section 7.8 of this chapter	Moderate adverse	Moderate adverse
Upper Till Valley Slopes	Landscape character	Medium	Partial loss or noticeable damage to existing character or distinctive features and elements and/or the addition of new but uncharacteristic noticeable features and elements	Refer to Section 7.8 of this chapter	Moderate adverse	Moderate adverse
Upper Till Floodplains and Meadows	Landscape character	High	Partial loss or noticeable damage to existing character or distinctive features and elements and/or the addition of new but uncharacteristic noticeable features and elements	Refer to Section 7.8 of this chapter	Moderate adverse	Large adverse
Oatlands Hill	Landscape character	Medium	Partial loss or noticeable damage to existing character or distinctive features and elements and/or the addition of new but uncharacteristic noticeable features and elements	Refer to Section 7.8 of this chapter	Moderate adverse	Moderate adverse
Stonehenge and Normanton Ridges	Landscape character	High	Partial or noticeable improvement of character by the restoration of existing features and elements, and/or the removal of uncharacteristic and noticeable features and elements, or by the addition of new characteristic features.	Refer to Section 7.8 of this chapter	Moderate beneficial	Large beneficial
Springbottom and Woodford Dry Valleys	Landscape character	High	Partial or noticeable improvement of character by the restoration of existing features and elements, and/or the removal of uncharacteristic and noticeable features and elements, or by the addition of new characteristic features.	Refer to Section 7.8 of this chapter	Moderate beneficial	Large beneficial
Upper Stonehenge Dry Valley	Landscape character	High	Large scale improvement of character by the restoration of features and elements, and/or the removal of uncharacteristic and conspicuous features and elements, or by the addition of new distinctive features	Refer to Section 7.8 of this chapter	Major beneficial	Large beneficial

Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
King Barrow and Coneybury Ridge	Landscape character	High	Large scale improvement of character by the restoration of features and elements, and/or the removal of uncharacteristic and conspicuous features and elements, or by the addition of new distinctive features	Refer to Section 7.8 of this chapter	Major beneficial	Large beneficial
Avon Valley Floodplains and Meadows	Landscape character	High	Partial loss or noticeable damage to existing character or distinctive features and elements and/or the addition of new but uncharacteristic noticeable features and elements	Refer to Section 7.8 of this chapter	Moderate adverse	Moderate adverse
Winterbourne Stoke	Landscape character	Medium	Partial or noticeable improvement of character by the restoration of existing features and elements, and/or the removal of uncharacteristic and noticeable features and elements, or by the addition of new characteristic features.	Refer to Section 7.8 of this chapter	Moderate beneficial	Moderate beneficial
VR 04 Recreational users of Parsonage Down National Nature Reserve	Visual amenity	High	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse
VR 04B Community Groups in Cherry Lodge Grounds	Visual amenity	Medium	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse
VR 05 Motorists on the B3083	Visual amenity	Low	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Moderate adverse
VR 06 Recreational users of PRoW (footpath) WSTO4 across High Down	Visual amenity	High	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse

Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
VR 07 Recreational users of Byway WST 04	Visual amenity	High	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse
VR 07A Foredown Barn	Visual amenity	Medium	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse
VR 07B Recreational users of Byway WST 04	Visual amenity	High	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Large adverse
VR 08 High Down View Residents, including no.1 at the corner of the existing A303 and the B3083, Winterbourne Stoke	Visual amenity	High	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse
VR 08A Foredown House	Visual amenity	High	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Large adverse
VR 08B High Down View Residents, including no.1 at the corner of the existing A303 and the B3083, Winterbourne Stoke	Visual amenity	High	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse

Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
VR 08C Scotland Lodge including the grounds of the property	Visual amenity	High	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Large adverse
VR 09 Recreational users on PRoW (footpath WST011)	Visual amenity	High	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse
VR 10 Recreational users on Byway WST06A, south of Hill Farm Cottages	Visual amenity	High	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse
VR 10A Hill Farm Cottages nos.1 – 4	Visual amenity	High	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse
VR 10B Recreational users on Restricted Byway BSJA9	Visual amenity	High	The project would cause obvious improvement to the view	Refer to Section 7.8 of this chapter	Moderate	Moderate beneficial
VR 13 Tourists, visitors and recreational users in WHS at the World Heritage Site interpretation panel	Visual amenity	High	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse

Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
VR 14 Tourists, visitors and recreational receptors at the Winterbourne Stoke Group within the WHS	Visual amenity	High	The project would cause obvious improvement to the view	Refer to Section 7.8 of this chapter	Moderate	Moderate beneficial
VR 15 Recreational users on Byway WCLA1 south east of The Diamond	Visual amenity	High	The project would cause obvious improvement to the view	Refer to Section 7.8 of this chapter	Moderate	Moderate beneficial
VR 16 Recreational users on permissive access land close to Normanton Gorse	Visual amenity	Medium	The project would cause obvious improvement to the view	Refer to Section 7.8 of this chapter	Moderate	Moderate beneficial
VR 17 View south west from Byway AMES12 close to the north side of the existing A303	Visual amenity	High	The project would lead to a major improvement in the view	Refer to Section 7.8 of this chapter	Major	Large beneficial
VR 18 View north east from Byway AMES11 at Normanton Down	Visual amenity	High	The project would lead to a major improvement in the view	Refer to Section 7.8 of this chapter	Major	Large beneficial

Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
VR 19 Visitors, tourists and recreational users at the WHS interpretation panel viewpoint located to the south of the Stones	Visual amenity	High	The project would lead to a major improvement in the view	Refer to Section 7.8 of this chapter	Major	Large beneficial
VR 20 Visitors, tourists and recreational users at the WHS interpretation panel located on Byway AMES12 adjacent to the Cursus	Visual amenity	High	The project would lead to a major improvement in the view	Refer to Section 7.8 of this chapter	Major	Large beneficial
VR 21 Visitor, tourists and recreational users on the footpath alongside the existing A303, between King Barrow Ridge and Stonehenge Bottom	Visual amenity	High	The project would lead to a major improvement in the view	Refer to Section 7.8 of this chapter	Moderate	Large beneficial

Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
VR 22 Visitors, tourists and recreational users at the interpretation panel viewpoint located at the eastern end of The Cursus	Visual amenity	High	The project would lead to a major improvement in the view	Refer to Section 7.8 of this chapter	Moderate	Large beneficial
VR 23 Visitors, tourists, recreational users at the WHS interpretation panel viewpoint where the Avenue crosses King Barrow Ridge	Visual amenity	High	The project would lead to a major improvement in the view	Refer to Section 7.8 of this chapter	Moderate	Large beneficial
VR 24 Recreational users on the permissive path across Coneybury Hill tumulus	Visual amenity	High	The project would lead to a major improvement in the view	Refer to Section 7.8 of this chapter	Moderate	Large beneficial
VR 26 Tourists, visitors and recreational users on Bridleway AMES9A	Visual amenity	High	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse

Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
VR 30A Countess Farm	Visual amenity	High	The project, or a part of it, would become the dominant feature or focal point of the view	Refer to Section 7.8 of this chapter	Major	Large adverse
VR 31 View north west from the Lord's Walk footpath alongside the River Avon in the north of Amesbury	Visual amenity	High	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse

Table 7.13: Summary of significant effects – operation year 15

(note, the number of receptors is reduced compared to Table 7.12 and the year 1 assessment, due to the establishment of the planting, the reduced impact and the reduction in significant effects)

Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
Upper Till Floodplains and Meadows	Landscape character	High	Partial loss or noticeable damage to existing character or distinctive features and elements and/or the addition of new but uncharacteristic noticeable features and elements	Refer to Section 7.8 of this chapter	Moderate adverse	Large adverse
Stonehenge and Normanton Ridges	Landscape character	High	Large scale improvement of character by the restoration of features and elements, and/or the removal of uncharacteristic and conspicuous features and elements, or by the addition of new distinctive features	Refer to Section 7.8 of this chapter	Major beneficial	Very Large beneficial
Springbottom and Woodford Dry Valleys	Landscape character	High	Large scale improvement of character by the restoration of features and elements, and/or the removal of uncharacteristic and conspicuous features and elements, or by the addition of new distinctive features	Refer to Section 7.8 of this chapter	Major beneficial	Large beneficial

Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
Upper Stonehenge Dry Valley	Landscape character	High	Partial or noticeable improvement of character by the restoration of existing features and elements, and/or the removal of uncharacteristic and noticeable features and elements, or by the addition of new characteristic features.	Refer to Section 7.8 of this chapter	Moderate beneficial	Large beneficial
King Barrow and Coneybury Ridge	Landscape character	High	Large scale improvement of character by the restoration of features and elements, and/or the removal of uncharacteristic and conspicuous features and elements, or by the addition of new distinctive features	Refer to Section 7.8 of this chapter	Major beneficial	Large beneficial
Winterbourne Stoke	Landscape character	Medium	Large scale improvement of character by the restoration of features and elements, and/or the removal of uncharacteristic and conspicuous features and elements, or by the addition of new distinctive features	Refer to Section 7.8 of this chapter	Major beneficial	Moderate beneficial
VR 07B Recreational users of Byway WST 04	Visual amenity	High	The project, or a part of it, would form a noticeable feature or element of the view which is readily apparent to the receptor	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse
VR 10B Recreational users on Restricted Byway BSJA9	Visual amenity	High	The project would cause obvious improvement to the view	Refer to Section 7.8 of this chapter	Major	Large beneficial
VR 11 Motorists on the A360 adjacent to Restricted Byway BSJA9	Visual amenity	Low	The project would cause obvious improvement to the view	Refer to Section 7.8 of this chapter	Major	Moderate beneficial

Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
VR 14 Tourists, visitors and recreational receptors at the Winterbourne Stoke Group within the WHS	Visual amenity	High	The project would lead to a major improvement in the view	Refer to Section 7.8 of this chapter	Moderate	Large beneficial
VR 15 Recreational users on Byway WCLA1 south east of The Diamond	Visual amenity	High	The project would lead to a major improvement in the view	Refer to Section 7.8 of this chapter	Major	Large beneficial
VR 16 Recreational users on access land close to Normanton Gorse	Visual amenity	High	The project would lead to a major improvement in the view	Refer to Section 7.8 of this chapter	Major	Large beneficial
VR 17 View south west from Byway AMES12 close to the north side of the existing A303	Visual amenity	High	The project would lead to a major improvement in the view	Refer to Section 7.8 of this chapter	Major	Large beneficial
VR 18 View north east from Byway AMES11 at Normanton Down	Visual amenity	High	The project would lead to a major improvement in the view	Refer to Section 7.8 of this chapter	Major	Large beneficial

Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
VR 19 Visitors, tourists and recreational users at the WHS interpretation panel viewpoint located to the south of the Stones	Visual amenity	High	The project would lead to a major improvement in the view	Refer to Section 7.8 of this chapter	Major	Large beneficial
VR 20 Visitors, tourists and recreational users at the WHS interpretation panel located on Byway AMES12 adjacent to the Cursus	Visual amenity	High	The project would lead to a major improvement in the view	Refer to Section 7.8 of this chapter	Major	Large beneficial
VR 21 Visitor, tourists and recreational users on the footpath alongside the existing A303, between King Barrow Ridge and Stonehenge Bottom	Visual amenity	High	The project would lead to a major improvement in the view	Refer to Section 7.8 of this chapter	Major	Large beneficial

Receptor	Attribute	Receptor Sensitivity	Impact	Design and Mitigation Measures	Impact Magnitude	Residual Effect
VR 22 Visitors, tourists and recreational users at the interpretation panel viewpoint located at the eastern end of The Cursus	Visual amenity	High	The project would lead to a major improvement in the view	Refer to Section 7.8 of this chapter	Major	Large beneficial
VR 23 Visitors, tourists, recreational users at the WHS interpretation panel viewpoint where the Avenue crosses King Barrow Ridge	Visual amenity	High	The project would lead to a major improvement in the view	Refer to Section 7.8 of this chapter	Major	Large beneficial
VR 24 Recreational users on the permissive path across Coneybury Hill tumulus	Visual amenity	High	The project would lead to a major improvement in the view	Refer to Section 7.8 of this chapter	Major	Large beneficial
VR 30A Countess Farm	Visual amenity	High	The project, or a part of it, would form a noticeable feature in the view.	Refer to Section 7.8 of this chapter	Moderate	Moderate adverse

7.10 Monitoring

- 7.10.1 There are no landscape and visual significant effects which are considered to require monitoring, either during the construction or operation phase. This is based upon the successful implementation of the OEMP during the construction phase and the OLEMP during the operation phase. On that basis, no monitoring of significant effects is proposed.

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